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RE: 2021 Butte Priority Soils Operable Unit (BPSOU) Draft Groundwater Monitoring Data Summary Report. Consent Decree- Civil Action No. CV 89-039-BU-SHE

Agency Representatives:

I am writing to you on behalf of Atlantic Richfield Company to submit the Silver Bow Creek/Butte Area NPL Site BPSOU Draft 2021 Groundwater Monitoring Data Summary Report for your review and approval. The report summarizes interim site-wide groundwater monitoring conducted in 2021. The report and appendices may be downloaded at the following link:

2021 BPSOU Groundwater Data Summary Report

If you have any questions or comments, please call me at (406) 723-1834.

Sincerely,

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Draft

Butte Priority Soils Operable Unit
Silver Bow Creek/Butte Area NPL Site

Draft 2021 Groundwater Monitoring
Data Summary Report
January 2021 - December 2021

Prepared for:

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317 Anaconda Road
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Prepared by:

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April 2022

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ABBREVIATIONS AND ACRONYMS

ARAR	Applicable Relevant and Appropriate Requirements
BMFOU	Butte Mine Flooding Operable Unit
BPSOU	Butte Priority Soils Operable Unit
BRW	Butte Reduction Works
BTC	Blacktail Creek
BTL	Butte Treatment Lagoons
CFRSSI	Clark Fork River Superfund Site Investigations
COC	Constituent of Concern
DM/DVP	Data Management/Data Validation Plan
DO	Dissolved Oxygen
DOJ	Montana Department of Justice
DQA	Data Quality Assessment
DQO	Data Quality Objectives
DSR	Data Summary Report
EPA	Environmental Protection Agency
FB	Field Blank
LAO	Lower Area One
MBMG	Montana Bureau of Mines and Geology
O&M	Operations and Maintenance
ORP	Oxidation Reduction Potential
POC	Point of Compliance
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Project Plan
RG	Remediation Goal
ROD	Record of Decision
RODA	Record of Decision Amendment
SBC	Silver Bow Creek
SC	Specific Conductivity
SOP	Standard Operating Procedure
TI	Technical Impracticability
TREC	TREC, Inc.
uSBC	upper Silver Bow Creek

1.0 INTRODUCTION

This Data Summary Report (DSR) presents the results of groundwater sampling and analysis performed within the Butte Priority Soils Operable Unit (BPSOU) during 2021. Groundwater monitoring was performed by TREC, Inc. (TREC) on behalf of Atlantic Richfield Company, in general compliance with the *Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP)* (2021 BPSOU GW QAPP) (Atlantic Richfield, 2021).

The following information is included in this report:

- Description of field methods;
- Locations of sampling sites and sampling methods;
- Laboratory analytical results;
- Field parameter measurements associated with sample collection;
- Manual water level measurements;
- Hydrographs of continuous water level measurements;
- Data quality assessment;
- Data validation checklists;
- Raw data including laboratory analytical data and continuous water level data.

Original field notebooks and data sheets for 2021 monitoring discussed in this DSR are located at TREC's field office in Butte, MT.

1.1 Investigative Objectives

The BPSOU Record of Decision (ROD) (USEPA, 2006b) requires long-term groundwater monitoring be implemented for the alluvial aquifer, "*…to ensure that ground water capture systems are effective; to determine that contaminated ground water is not leaving the* [Technical Impracticability] *TI zone or discharging to surface water"* to the extent that the ground water remedy is not protective of surface water*; "to provide additional information as necessary on the movement, quality, and quantity* [of] *ground water; and to provide data for review of the ground water remedy.*"

The 2021 BPSOU GW QAPP established a basis for monitoring activities and data utilization to meet the monitoring objectives specified in the ROD and the 2020 Record of Decision Amendment (RODA) (USEPA, 2020a). Data collected under the QAPP must be of sufficient quality to assess performance of groundwater capture systems. A primary objective of the QAPP was to ensure that ROD/RODA specified performance standards are being met at Point of Compliance (POC) wells. Table 1 presents the performance standards. Per an Agency concurrence letter dated October 22, 2019, POC well BPS07-05A was exempted from meeting the arsenic standard.

Table 1. ROD/RODA Groundwater Standards

Contaminant of Concern	Standard[1] (Dissolved mg/L)
Arsenic[2]	0.010
Cadmium	0.0050
Copper	1.3
Lead	0.015
Mercury	0.0020
Zinc	2.0

[1]Standards apply to wells outside of the TI Zone
[2]BPS07-05A is excluded from compliance with the arsenic standard

1.2 Data Quality Objectives and Assessment

The data quality objective (DQO) process, defined in the 2021 BPSOU GW QAPP, is used to establish performance or acceptance criteria, which serve as the basis for designing a plan for collecting data of sufficient quality and quantity to support the goals of the study. Each step of the DQO process defines criteria that will be used to establish the final data collection design following the Guidance on Systematic Planning Using the Data Quality Objectives Process (USEPA, 2006a).

With the exceptions noted in Section 4.0, all site-wide 2021 groundwater monitoring was completed as planned and all analytical data were assessed as usable. COC concentrations at POC wells were within ROD/RODA specified performance standards. Potentiometric surface maps indicate that groundwater capture systems are working as intended.

2.0 BACKGROUND / SITE DESCRIPTION

The BPSOU covers approximately five square miles and includes the town of Walkerville, along with a large portion of the city of Butte. The BPSOU is largely urban and contains residential neighborhoods, schools, parks, and commercial and industrial areas. Silver Bow Creek (SBC), a small stream that runs through the base of the BPSOU, was designated a Superfund site by the Environmental Protection Agency (EPA) in September 1983. In 1987, the site was expanded to include the Butte area. Both alluvial and bedrock aquifers are present in the Butte area, with the bedrock aquifer being characterized and monitored under the Butte Mine Flooding Operable Unit (BMFOU), and the alluvial aquifer falling under the BPSOU. The alluvial aquifer has been impacted by past mining activities, as well as infiltration from mine waste. Groundwater COCs are arsenic, cadmium, copper, lead, mercury, and zinc.

2.1 Water Quality Monitoring Network

The site-wide interim groundwater monitoring program consists of collecting water quality samples at the monitoring network specified in Table 2 and displayed on Figure 1. The groundwater quality monitoring network is designed to meet the first two objectives specified in Section 1.1 and provide the basis for developing a long-term monitoring network. At the time the 2006 ROD was issued, the monitoring network was divided into the following five areas:

- Alluvial Aquifer TI Zone;
- BPSOU Subdrain Capture System;
- Area between BPSOU Subdrain Capture system and Lower Area One (LAO) Capture Systems;
- Lower Area One Capture System; and
- Colorado Smelter Repository Area.

2.1.1 Alluvial Aquifer TI Zone

The Selected Remedy requires groundwater capture and treatment to prevent the spread of contaminant plumes and to prevent the discharge of contaminated groundwater into Blacktail Creek (BTC) and SBC in concentrations that would adversely impact surface water quality. There are 14 wells in the Alluvial Aquifer TI Zone network, all of which are POC wells and scheduled for semi-annual sampling. These POC wells aid in determining if contaminant plumes are migrating outside the established TI Zone. The TI Zone is presented on Figure 1. The POC wells are listed in Table 2 along with relevant information for each monitoring location, including water level measurement frequency, water quality sampling frequency, location, and aquifer penetration.

2.1.2 BPSOU Subdrain Capture System

The purpose of the BPSOU Subdrain Capture System Network is to evaluate and ensure that the groundwater capture system in the eastern portion of the BPSOU is working as intended. Water levels, including nested well pairs, are used to determine whether contaminated groundwater in the shallow and deeper portions of the aquifer is flowing toward, or being captured by, the subdrain. Water quality data is used to map contaminant plumes and aid in evaluating the risk of plume migration beyond the TI Zone. Water level data collected along the BPSOU subdrain aids in evaluating the effectiveness of the subdrain and changes in the effectiveness. Table 2 lists the BPSOU Subdrain Capture System Network wells and relevant information for each monitoring location.

The BPSOU Subdrain Capture System Network currently includes 66 wells and 5 subdrain manholes, for a total of 71 water quality sites. Three wells are sampled on a 5-year cycle, 63 wells are scheduled for semi-annual sampling, and the 5 manholes are scheduled for annual sampling. In 2018 seven wells in the original network were abandoned as part of the Montana Department of Justice (DOJ) Parrot Tailings removal effort, so they are not represented in Table 2 (water quality) or Table 3 (water levels).

2.1.3 Area between BPSOU Subdrain Capture System and LAO Groundwater Capture Systems

The stream reach between the BPSOU Subdrain Capture System and LAO Capture System has been identified as an area of interest for evaluating groundwater inflow. Interactions between groundwater and surface water in this area are not yet fully understood, and one of the monitoring goals is to better understand potential interactions. Water level data, including nested well pairs, are used to determine horizontal and vertical gradients along with hydraulic gradients with respect

to the stream. Water quality data are also used to identify the potential for groundwater to degrade surface water quality.

In 2021, there were 26 wells in the Area between Capture Systems network. Of these wells, 25 are scheduled for semi-annual sampling, while one well is sampled on a 5-year basis. Table 2 lists the Area Between Groundwater Capture Zones Network wells and relevant information for each monitoring location.

2.1.4 Lower Area One Capture System

There are 15 monitoring wells within the LAO Capture System water quality network, with 8 of these wells being at the west end of the system. Eight wells in the LAO Capture System network are scheduled for semi-annual sampling, while the remaining 7 are sampled on a 5-year cycle. Water level data, including nested well pairs, are used to determine horizontal and vertical gradients along with determining hydraulic gradients with respect to the stream and hydraulic controls associated with the LAO Capture System (e.g., hydraulic control channel, lagoon cells). Table 2 lists the LAO Capture System Monitoring Network wells and relevant information for each monitoring location.

2.1.5 Colorado Smelter Repository Area

The Colorado Smelter Repository Area includes 2 wells, MW-G-96 and MW-H-96, and these wells are monitored for water level only. The purpose of monitoring these wells is to ensure that there is adequate separation between repository waste and groundwater.

2.2 Water Level Monitoring Network

The BPSOU site-wide interim groundwater level monitoring network includes 230 sites, specifically, 179 wells, 5 subdrain manholes, 35 surface water sites, 10 Butte Treatment Lagoon (BTL) surface water cells, and one Butte Reduction Works (BRW) surface water cell. The water level monitoring network is spread among the 5 areas described above. Since site-wide monitoring began in December 2007, changes have been made to the water level monitoring network as wells were drilled and/or abandoned, surface water stations were added, and conditions on the ground created additional areas of interest. Overall, the water level monitoring network has expanded since December 2007.

Manual water level measurements are made at all sites monthly, while 69 wells, 2 manholes, 1 BRW cell, and 2 surface water sites are equipped with continual recorders. Twelve of the groundwater continual recorder sites are maintained by the Montana Bureau of Mines and Geology (MBMG) and record hourly measurements. The remaining continual recorder sites are maintained by TREC on behalf of Atlantic Richfield and record 15-minute data. The groundwater level monitoring network is provided in Table 3, and Table 4 lists the continual level monitoring network maintained by TREC.

Groundwater level monitoring is coordinated with BMFOU water level monitoring; in that, an attempt is made to conduct monthly water level measurements in similar time frames to avoid duplicative efforts.

3.0 SUMMARY OF SAMPLING ACTIVITIES

Groundwater monitoring, including sample collection and water level measurement, was conducted throughout 2021 at the sites detailed in Table 2 (water quality) and Table 3 (water levels). These tables specify the sampling and water level measurement frequencies for each monitoring site. Figure 1 displays the BPSOU interim site-wide groundwater monitoring network. Spring groundwater sampling occurred April 22 through May 11 and Fall sampling occurred September 23 through October 7. All groundwater samples were analyzed by Pace Analytical Services of Minneapolis, MN. Water level monitoring was conducted January through December 2021. All groundwater monitoring activities were performed in accordance with Clark Fork River Superfund Site Investigation (CFRSSI) and TREC standard operating procedures (SOPs) and are detailed in the 2021 BPSOU GW QAPP. Refer to Section 4.0 for a list of deviations from the 2021 BPSOU GW QAPP.

3.1 Water Quality Monitoring Methods

Of the 110 wells scheduled for semi-annual sampling, 108 were sampled in April/May 2021 and 108 wells were also sampled in September/October 2021. The 5 subdrain manholes were sampled in May 2021. FP98-3 was not sampled in 2021 because it was dry and BPS11-10A was not sampled in 2021 because it was inaccessible. Refer to Section 4.0 for additional details. The next round of 5-year sampling is scheduled for 2023, so no 5-year wells were sampled in 2021. Semi-annual groundwater samples were laboratory analyzed for dissolved arsenic, cadmium, copper, lead, mercury, and zinc. Measured field parameters included temperature, pH, specific conductivity (SC), dissolved oxygen (DO), and oxidation-reduction potential (ORP).

The field sample identification scheme consists of letters to identify the sample type, followed by a 4-digit number to identify the sample number. The sample number is followed by 6 digits representing the monitoring date. The following is an example of a field sample identification.

Sample Code:		**GW0025-050421**
GW	=	Groundwater sample
0025	=	Sample number 25
050421	=	Monitoring date of 05/04/2021

3.2 Water Level Monitoring Methods

In 2021, TREC measured water levels in 165 wells, 5 manholes, 35 surface water sites, 10 BTL cell locations, and 1 BRW cell location monthly. Monthly water levels were measured in 14 additional wells by MBMG under BMFOU monitoring throughout 2021. The MBMG data was transmitted to TREC, eliminating duplicative efforts. Refer to Section 4.0 for any deviations pertaining to water level measurements.

3.3 Continual Water Level Measurements

Throughout 2021, TREC monitored water level on a continual basis in 57 wells, 2 BPSOU subdrain manholes, 1 BRW cell, and 2 surface water stations under the BPSOU interim site-wide groundwater monitoring program. Continual water level is recorded in an additional 6 wells under

both BPSOU interim site-wide monitoring and BMFOU groundwater monitoring. Thus, MBMG maintains these 6 recorders to eliminate duplicative efforts. MBMG monitors continual water level in an additional 6 wells under BMFOU only. Refer to Section 4.0 for any deviations pertaining to continual water level measurements.

Over the years, transducers have been added to the water level monitoring network for a variety of reasons. Numerous transducers were deployed in January 2010 to monitor drawdown during the BPSOU subdrain pump test. In February 2010, additional transducers were installed in wells and piezometers near the BPSOU subdrain vault in preparation for the subdrain isolation study. In late 2010, several transducers were installed in surface water sites and select wells, to accommodate the Butte Reduction Works (BRW) groundwater manipulation study. In December 2011, transducers were installed in two BRW area wells to assess the impact on groundwater, if any, from SBC culvert removal. Although the majority of the studies which the transducer deployments were originally associated with have been completed, most of the study transducers remain in place.

3.4 Water Quality Results

Spring 2021 site-wide semi-annual groundwater sampling commenced on April 22 and continued through May 11. Aside from FP98-3 and BPS11-10A, all wells in the BPSOU semi-annual site-wide network, along with the 5 BPSOU subdrain manholes, were sampled. Pioneer Technical Services collected the subdrain samples on May 11 on behalf of TREC. The spring sample count was: 113 natural samples, 8 duplicate samples, and 8 field blank (FB) samples, for a total of 129 samples. Each sample was analyzed for dissolved arsenic, cadmium, copper, lead, mercury, and zinc, for a total of 774 analyses. Field parameters measured at each sampling site were temperature, pH, SC, DO, and ORP. Water level was measured immediately prior to beginning the purge process and again immediately after sample collection.

Fall 2021 site-wide semi-annual groundwater sampling commenced on September 23 and was completed on October 7. All wells in the site-wide semi-annual network other than BPS11-10A and FP98-3 were sampled. FP98-3 was dry and BPS11-10A was damaged and inaccessible. In the fall, 108 natural samples, 7 field duplicates, and 7 FBs were collected for a total of 122 samples. Laboratory analysis in the fall was identical to spring analysis; thus, 732 analyses were completed. Fall field parameter measurements were also identical to spring field measurements.

Groundwater analytical data from the spring and fall sampling events are presented in Table 5a, while field measured data are provided in Table 5b. COC concentrations for each site are presented spatially in Figure 2 through Figure 7 (Spring) and Figure 8 through Figure 13 (Fall). Groundwater sampling field forms for 2021 sampling are provided in Appendix A. Refer to Section 4.0 for deviations related to water quality monitoring.

*3.4.1 **Water Quality Data Assessment***

Data quality assessment (DQA) is performed to determine whether the DQOs identified in the 2021 BPSOU GW QAPP were satisfied. The DQA process is outlined in the CFRSSI Data Management/Data Validation Plan (DM/DVP) (ARCO, 1992b and 2000a) and is discussed in greater detail in Appendix B. Data validation was completed by TREC and included data review, statistical testing, verifying assumptions, and assigning data to utilization categories. The three

data utilization categories described in the DM/DVP are enforcement quality data, screening quality data, and rejected data. Enforcement quality data meet all quality assurance/quality control (QA/QC) and documentation requirements. Screening quality data do not meet all applicable QA/QC requirements and/or documentation requirements. Rejected data are unusable due to inappropriate sampling, analysis, or documentation procedures.

Water quality samples collected in 2021 generated 1,506 analytical data points, with 1,326 of these being natural sample data points, 90 being field duplicate data points, and 90 being FB data points. All analytical data points were validated following the procedures in TREC's *Data Validation Guidelines for Inorganic Chemistry* (TREC, 2021). TREC's guidelines align with EPA's *National Functional Guidelines for Inorganic Superfund Data Review* (USEPA, 2020b). Of the 1,326 natural sample data points generated, 1,260 were assigned enforcement quality, 66 were given screening quality, and none were rejected. Two wells were not sampled in the spring, and two wells were not sampled in the fall. Thus, of the 1,350 anticipated analyses, 1,326 were completed, resulting in 98% analytical completeness, which meets the 95% completeness goal specified in the QAPP. Given the lengthy period of record for BPSOU groundwater quality and the spatial density of the water quality and water level networks, the project DQOs were not affected by the omission of the wells not sampled in the spring and fall. A full data quality assessment of 2021 analytical data is provided in Appendix B. Because four wells were not sampled, four sets of field parameters (20 data points) were not collected. Of the 1,125 anticipated field measured data points, 1,105 were collected. Overall (analytical and field) sampling completeness was 98%.

3.5 Water Level Results

Table 6 presents 2021 BPSOU site-wide water levels. Throughout 2021, there were instances when wells could not be accessed because they were encased in ice; however, these wells were checked monthly. Damage to wells, active construction occurring in close proximity to water level monitoring sites, or other safety concerns occasionally prevented access for water level monitoring, but an attempt was made to monitor all sites every month. Completeness for 2021 water level monitoring was 98%.

The internal casings on five wells (BMW-03A, CT SW-4, FP98-4, GS-08, and GS-28) were trimmed in November 2021 because the wells had heaved which encumbered placing the steel caps on the wells. Although the casings of the five wells were trimmed in November 2021, a re-survey did not occur until early 2022. Thus, the depth to water measurements reported in the November and December water level sheets were adjusted by adding the trimmed length onto the actual depth to water measurement. For example, the BMW-03A December measured depth to water was 3.72 feet, the trimmed length was 0.72 feet, so the reported depth to water was 4.44 feet. Monthly water level sheets are provided in Appendix A.

Figure 1 presents the September 2021 potentiometric surface. Potentiometric maps generated over the past years indicate there is limited variability in flow direction from month to month. Figure 1 indicates that the presence of Berkeley Pit creates a groundwater "divide", which appears in the upper right corner of the potentiometric map. The divide is located near well AMW-20 and represents the uppermost location in which the aquifer underlying uSBC is sourced. Potentiometric contours show that groundwater gradients from the divide to the BPSOU subdrain vault are directed towards the subdrain. From the BPSOU subdrain vault to the start of the LAO capture

system, groundwater gradients are directed towards SBC. Throughout the length of the LAO capture system, groundwater gradients are directed towards the north side of SBC.

3.5.1 Continual Water Level Results

Appendix C presents hydrographs of sites equipped with continual recording devices maintained by TREC. The majority of these continual records were complete; however, there are interruptions in some records. Raw data associated with the hydrographs is provided in Appendix D. Refer to Section 4.0 for deviations pertaining to continual water level records.

3.6 Operation and Maintenance Activities

There were times in 2021 that BPSOU operation and maintenance (O&M) may have impacted water level data. In addition to BPSOU O&M, fluctuating discharge from the BMFOU Pilot Project appears to have impacted water levels in select wells throughout the year. Subdrain jetting which occurred in January, June and October was observed to affect water levels near the subdrain. A long-term pump test was conducted in the Diggings East area in March. Well drilling and subsequent development in the Diggings East area occurred in August, while drawdown and pump tests were conducted at the drilled wells in September. Dewatering for Parrott Tailings removal occurred from April through the end of 2021. Irrigation problems at the Chamber of Commerce occurred from June through July. Discharge from Silver Lake line to the HCC occurred in December. A chronology of activities observed throughout 2021 that potentially affected well data is provided in Table 7.

4.0 DEVIATIONS FROM THE QAPP

The following deviations from the 2021 BPSOU GW QAPP occurred in 2021:

4.1 Water Levels

- Several sites were not monitored for water levels at times because the casings were blocked by ice or safety concerns limited access.
- Two wells and one surface water site were not monitored the full year because of safety concerns. MW2-CGSB3 was monitored only in January, and both BRW-04B and staff gage RLP-W were monitored only January through June.
- Staff gage RLP-W fell over in April, thus water levels were not obtained for this site in the remaining months that it was monitored.
- BPS11-10A was struck by a vehicle in August 2020 and the casing was bent to the extent that the water level tape could not be lowered down the well and the transducer could not be retrieved. As a result, water levels were not measured in this well from August 2020 through December 2021, the continual record ends in late August 2020, and the well was not sampled in 2021. There are several wells screened at similar depths within 700 feet of BPS11-10A; thus, the lack of data for this well does not impact the project DQOs.

4.2 Continuous Water Levels

- Several continual level sites had small data gaps, that could not be seen on the hydrographs. These were due to downloading the transducer data, performing transducer maintenance, and not starting the new log in time for the next 15-minute interval.
- Several sites have estimated data due to multiple contractors monitoring the same well and not replacing the transducers in the proper positions. These sites include:
  - AMC-23, AMC-24, BPS07-21, BPS07-21C, BPS07-25, BPS11-10B, FP98-7, GS-13A, MF-07, MH-MSD113, MH-MSD116, MSD-01B and MSD-02A.
- AMC-24B: A data loss occurred from 3/31/21 at 14:14 to 4/19/21 at 12:10; the data was corrupt so recovery of it was impossible. The transducer was replaced on 4/19/21.
- AMW-01A: The transducer was out of the water from 6/7/21 at 15:28 to 8/26/21 at 10:10 and again from 11/24/21 at 00:00 to 11/29/21 at 14:15. This was likely due to Parrott Tailings dewatering. Rocky Mountain Contractors hit a water line while horizontal drilling in the Civic Center parking lot on 12/6/21, causing a significant increase in the AMW-01A water level. The well was recovering from excessive inflow through the rest of 2021.
- AMW-13A: A data loss occurred from 5/27/21 at 10:22 to 6/16/21 at 10:05, data was downloaded by an unknown entity. From 6/22/21 to 7/28/21, the water level increased due to irrigation problems at the Chamber of Commerce.
- AMW-13C: The transducer was not restarted following the April download, resulting in a data loss from 4/19/21 at 14:04 to 5/27/21 at 10:04.
- BPS07-08A: A data loss occurred from 5/27/21 at 12:04 to 7/27/21 at 09:55. Data retrieval was unsuccessful, and the transducer was replaced on 7/27/21.
- BPS07-11A: The transducer was out of the water from 6/17/21 at 11:02 to 8/18/21 at 03:52 due to a combination of inadequate direct read cable length and dewatering for Intermountain Construction Services construction nearby. The cable length was increased on 8/18/21.
- BPS07-21: Hydrograph is not complete, the well was frozen, and the continuous logger could not be removed to be downloaded. The data ends on 12/20/2021 at14:00.
- BPS07-21B: The transducer was not restarted following the October download, resulting in a data loss from 10/27/21 at 13:30 to 12/1/21 at 14:52.
- BPS07-22C: A data loss occurred from 6/30/21 at 11:22 to 7/30/21 at 09:18. Data retrieval was unsuccessful, and the transducer was replaced on 7/30/21.
- BPS07-22R: The transducer was out of the water from 6/4/21 at 12:18 to 7/28/21 at 11:29, as a result of installing a direct read cable of inadequate length.
- GS-08R: A data loss occurred from 5/27/21 at 15:40 to 8/26/21 at 15:04. The transducer was sent in for repairs, but data retrieval was not possible due to water entering the transducer and corrupting the data. The transducer was replaced on 8/26/21.
- GS-26: Suspect data from 12/14/21 at 13:30 to 12/27/21 at 11:45. A data loss occurred from 12/27/21 at 11:45 through the end of 2021; data was corrupt from equipment malfunction.
- GS-46S: A data loss occurred from 9/28/21 at 11:00 to 10/1/21 at 15:00. MBMG monitors this well, thus the reason for the data gap is unknown.

- MF-08: The transducer was not restarted following the October monthly water level download, resulting in a data loss from 10/27/21 at 13:37 to 11/3/21 at 14:00.

4.3 Water Quality

- AMW-20 is located within the active mine property; therefore, MBMG has sampled this well on TREC's behalf in previous years and did so again in 2021.
- Monitoring well FP98-3 was dry during both sampling events, thus it was not sampled in 2021. FP98-3 is typically dry throughout the year, so the dry conditions in 2021 are representative of past water quality sampling events.
- BPS11-10A was not sampled in 2021. This well was struck by a vehicle in August 2020 and the casing was bent to the extent that tubing cannot pass the casing. There are several wells screened at similar depths within 700 feet of BPS11-10A; thus, the lack of water quality data for this well does not impact the project DQOs.

4.3.1 Spring

- One sample, GW0088-050621 at AMW-01A, was collected before three well volumes could be purged and before parameters could stabilize due to the well being pumped dry on two consecutive days. Poor recharge is typical at this well and that was likely exacerbated by nearby dewatering.
- One sample, GW0079-050321 collected at AMC-23B, was not field filtered due to low flow. A raw sample was collected and brought back to the field lab to filter.

4.3.2 Fall

- One sample, GW0001-092321 at AMW-13, was collected before field parameters stabilized due to the well beginning to be pumped dry after three hours of purging.
- Parameters at monitoring wells BMW-03A and BMW-03B were not recorded over the first two casing volumes.
- Two samples, GW0049-092721 at AMC-13 and GW0109-100421 at AMC-23B, were unable to be filtered at the well due to low flow. A raw sample was collected and brought back to the field lab to filter.
- GS-46D the pump could only be lowered to 35.7 ft. below the measuring point, but the middle of the water column was at 44.5 ft below the measuring point.

5.0 SUMMARY

Throughout 2021, water levels were measured at sites within the BPSOU interim site-wide water level monitoring network each month. This includes 165 wells, 5 manholes, 35 surface water sites, 1 BRW cell, and 10 BTL cells monitored by TREC, and 14 wells monitored by MBMG under BMFOU. Continual water level measurements were recorded by TREC at 62 sites within the network and at 6 additional sites by MBMG.

Water quality samples were collected at 113 groundwater sites between April 22 and May 11, and at 108 groundwater sites between September 23 and October 7. One well, FP98-3 was dry during both Spring and Fall sampling. BPS11-10A could not be sampled in 2021 because of extensive damage to the casing. Aside from these omissions, all water quality data was collected and DQO's were satisfied.

6.0 REFERENCES

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TABLES

Table 1. ROD/RODA Groundwater Standards

Table 2. BPSOU 2021 Groundwater Monitoring Network – Water Quality

Table 3. BPSOU 2021 Groundwater Monitoring Network – Water Levels

Table 4. BPSOU 2021 Continual Water Level Monitoring Network

Table 5a. BPSOU 2021 Groundwater Monitoring Water Quality Results – Dissolved Metals

Table 5b. BPSOU 2021 Groundwater Monitoring Water Quality Results – Field

Table 6. BPSOU 2021 Groundwater Elevations

Table 7. Operations and Maintenance – Observed Well Effects

Table 1. ROD/RODA Groundwater Standards

Contaminant of Concern	Standard [1] (Dissolved mg/L)
Arsenic[2]	0.010
Cadmium	0.0050
Copper	1.3
Lead	0.015
Mercury	0.0020
Zinc	2.0

Table 2. BPSOU 2021 Groundwater Monitoring Network - Water Quality

Well ID	Easting (ft)	Northing (ft)	Measuring Point (ft amsl)	Multi/Single Depth	Water Level Frequency	Chemistry Frequency	Location	Screened Interval (ft)	Aquifer	Comment
Point of Compliance (POC) Wells										
AMW-13	1198109.21	650633.10	5454.99	Multiple	Continuous	Semi-Annual	Visitor Center	5-15	Alluvium	
AMW-13B	1198101.02	650648.42	5454.97	Multiple	Continuous	Semi-Annual	Visitor Center	26-35	Alluvium	
AMW-13B2	1198104.51	650653.86	5456.12	Multiple	Monthly	Semi-Annual	Visitor Center	41-46	Alluvium	
AMW-13C	1198095.00	650657.30	5454.17	Multiple	Continuous	Semi-Annual	Visitor Center	72-82	Alluvium	
BPS07-01A	1203623.03	651666.82	5479.33	Multiple	Monthly	Semi-Annual	Clark Park	13-23	Alluvium	
BPS07-01B	1203623.38	651679.74	5479.18	Multiple	Monthly	Semi-Annual	Clark Park	29-39	Alluvium	
BPS07-05A[1]	1201799.84	649886.89	5463.12	Multiple	Monthly	Semi-Annual	Southwest of Clark Park	25-35	Alluvium	
BPS07-05B	1201788.65	649887.39	5462.50	Multiple	Monthly	Semi-Annual	Southwest of Clark Park	69-79	Alluvium	
BPS07-16A	1200085.64	650004.05	5456.26	Multiple	Monthly	Semi-Annual	Majors and Nevada Streets	10-20	Alluvium	
BPS07-16B	1200086.26	650019.68	5456.53	Multiple	Monthly	Semi-Annual	Majors and Nevada Streets	30-40	Alluvium	
BPS11-11A1	1199028.43	650425.25	5451.90	Multiple	Monthly	Semi-Annual	Southeast corner of KOA	9-14	Alluvium	
BPS11-11A2	1199021.53	650418.03	5451.92	Multiple	Monthly	Semi-Annual	Southeast corner of KOA	23.5-33.5	Alluvium	
BPS11-11B	1199021.25	650423.62	5452.06	Multiple	Monthly	Semi-Annual	Southeast corner of KOA	63-73	Alluvium	
BPS11-11C	1199028.61	650418.85	5451.65	Multiple	Monthly	Semi-Annual	Southeast corner of KOA	141-151	Alluvium	
BPSOU Subdrain Capture System										
AMC-12	1203350.12	653445.14	5483.93	Single	Monthly	Semi-Annual	East of Parrot Tailings	35-45	Alluvium	
AMC-13	1203026.63	652054.00	5479.72	Single	Monthly	Semi-Annual	Clark Park	47-55	Alluvium	
AMC-23B	1198903.75	651526.71	5452.88	Multiple	Monthly	Semi-Annual	East of Kaw Ave, north of BPSOU Subdrain	97-107	Alluvium	
AMC-24	1198981.74	650908.24	5456.29	Multiple	Continuous	Semi-Annual	East of Kaw Ave, south of BPSOU Subdrain	13-23	Alluvium	MBMG Continuous WL

Table 2. BPSOU 2021 Groundwater Monitoring Network - Water Quality

Well ID	Easting (ft)	Northing (ft)	Measuring Point (ft amsl)	Multi/Single Depth	Water Level Frequency	Chemistry Frequency	Location	Screened Interval (ft)	Aquifer	Comment
AMC-24B	1198991.33	650911.36	5455.95	Multiple	Continuous	Semi-Annual	East of Kaw Ave, south of BPSOU Subdrain	39-49	Alluvium	
AMC-24C	1198984.00	650920.10	5454.63	Multiple	Continuous	Semi-Annual	East of Kaw Ave, south of BPSOU Subdrain	71-81	Alluvium	
AMW-01A	1201806.63	653285.10	5469.49	Multiple	Continuous	Semi-Annual	Civic Center	3-13	Alluvium	
AMW-01B	1201821.65	653300.93	5469.60	Multiple	Continuous	Semi-Annual	Civic Center	33-43	Alluvium	
AMW-01C	1201813.77	653292.62	5469.60	Multiple	Continuous	Semi-Annual	Civic Center	87-97	Alluvium	
AMW-08	1203321.25	654315.14	5500.25	Single	Monthly	Semi-Annual	Shields Ave., North of Parrot tailings	30-45	Waste/Alluvium	Scheduled to be abandoned.
AMW-11	1197599.51	650816.81	5449.60	Single	Monthly	5 - Year	South of George, W of Chamber of Commerce	4-14	Alluvium	
AMW-12	1200738.80	651119.45	5464.82	Single	Monthly	Semi-Annual	Utah St	7-22	Alluvium	
AMW-20	1204162.12	654737.04	5491.56	Single	Continuous	Semi-Annual	MRI, Ecology Ponds	24-39	Alluvium	Monitored by MBMG
BPS07-03A	1198230.63	651153.04	5452.69	Single	Continuous	Semi-Annual	Southeast of Pump Vault	9-19	Alluvium	
BPS07-07	1197529.13	651175.82	5448.51	Single	Continuous	Semi-Annual	BPSOU Subdrain Vault Area, W of Vault	7-17	Alluvium	
BPS07-11A	1202374.92	652882.17	5473.00	Multiple	Continuous	Semi-Annual	Between Parrot Tailings & Clark Park	14-24	Alluvium	
BPS07-11B	1202363.34	652882.70	5472.78	Multiple	Continuous	Semi-Annual	Between Parrot Tailings & Clark Park	35-45	Alluvium	
BPS07-21	1197903.44	651092.08	5457.29	Multiple	Continuous	Semi-Annual	BPSOU Subdrain Vault Area, SE of Vault	13-23	Alluvium	
BPS07-21B	1197902.91	651101.47	5456.61	Multiple	Continuous	Semi-Annual	BPSOU Subdrain Vault Area, SE of Vault	36-46	Alluvium	
BPS07-21C	1197908.20	651098.03	5456.94	Multiple	Continuous	Semi-Annual	BPSOU Subdrain Vault Area, SE of Vault	65-80	Alluvium	

Table 2. BPSOU 2021 Groundwater Monitoring Network - Water Quality

Well ID	Easting (ft)	Northing (ft)	Measuring Point (ft amsl)	Multi/Single Depth	Water Level Frequency	Chemistry Frequency	Location	Screened Interval (ft)	Aquifer	Comment
BPS07-22B	1197819.72	651283.60	5451.45	Multiple	Continuous	Semi-Annual	BPSOU Subdrain Vault Area, NE of Vault	21-31	Alluvium	
BPS07-22C	1197817.10	651291.22	5451.24	Multiple	Continuous	Semi-Annual	BPSOU Subdrain Vault Area, NE of Vault	89-99	Alluvium	
BPS07-22R	1197812.39	651285.02	5451.39	Multiple	Continuous	Semi-Annual	BPSOU Subdrain Vault Area, NE of Vault	4-14	Tailings/Alluvium	
BPS07-23	1197539.74	651326.38	5450.83	Single	Continuous	Semi-Annual	BPSOU Subdrain Vault Area, NW of Vault	7-17	Alluvium	
BPS07-24	1199800.19	651380.30	5456.13	Single	Continuous	Semi-Annual	Diggings East	60-70	Alluvium	
BPS11-10A	1198834.70	651083.58	5456.10	Multiple	Continuous	Semi-Annual	SE Corner Kaw and George Streets	10.5-20.5	Alluvium	
BPS11-10B	1198828.24	651083.02	5455.75	Multiple	Continuous	Semi-Annual	SE Corner Kaw and George Streets	36-46	Alluvium	
BPS11-10C	1198830.83	651077.65	5455.91	Multiple	Continuous	Semi-Annual	SE Corner Kaw and George Streets	110-120	Alluvium	
BPS11-13B	1199360.63	650787.52	5459.98	Single	Monthly	Semi-Annual	Diggings East, East of AMC-24	43-53	Alluvium	
BPS11-14A	1199858.66	651156.02	5457.11	Multiple	Monthly	Semi-Annual	Diggings East, SE of MF-10	17-22	Alluvium	
BPS11-14B	1199860.85	651148.52	5457.02	Multiple	Monthly	Semi-Annual	Diggings East, SE of MF-10	60-65	Alluvium	
BPS11-17C	1200805.66	652442.30	5461.64	Single	Monthly	Semi-Annual	Casey St. at MSD, near MF-07	56-66	Alluvium	
BPS11-18B	1201018.92	652457.57	5463.59	Multiple	Monthly	Semi-Annual	Casey St. east of BPSOU Subdrain	36-46	Alluvium	
BPS11-18C	1201022.06	652461.18	5463.72	Multiple	Monthly	Semi-Annual	Casey St. east of BPSOU Subdrain	55-65	Alluvium	
BPS11-19A2	1198941.73	650608.89	5449.98	Multiple	Monthly	Semi-Annual	KOA, north of BPS11-11 well group	33-43	Alluvium	
BPS11-19B	1198940.87	650603.02	5449.98	Multiple	Monthly	Semi-Annual	KOA, north of BPS11-11 well group	52-67	Alluvium	

Table 2. BPSOU 2021 Groundwater Monitoring Network - Water Quality

Well ID	Easting (ft)	Northing (ft)	Measuring Point (ft amsl)	Multi/Single Depth	Water Level Frequency	Chemistry Frequency	Location	Screened Interval (ft)	Aquifer	Comment
BT-98-02	1200254.43	650476.15	5461.01	Multiple	Monthly	Semi-Annual	Cobban St, near Wyoming	14-19	Alluvium	
BT-98-02B	1200136.18	650484.20	5459.20	Multiple	Monthly	Semi-Annual	Cobban St, near Nevada	29-39	Alluvium	
GS-08R	1200387.64	651630.75	5463.56	Multiple	Continuous	Semi-Annual	Diggings East	168-178	Alluvium	
GS-09R	1200383.54	651638.44	5463.46	Multiple	Continuous	Semi-Annual	Diggings East	49-59	Alluvium	
GS-11R	1200392.40	651637.80	5463.39	Multiple	Continuous	Semi-Annual	Diggings East	8-18	Alluvium	
GS-28	1198607.15	650317.45	5450.44	Single	Monthly	5 - Year	South of KOA next to BTC	6-11	Alluvium	
GS-30D	1200331.53	651783.14	5460.25	Multiple	Continuous	Semi-Annual	Diggings East	29-39	Alluvium	
GS-30S	1200332.60	651778.78	5460.81	Multiple	Continuous	Semi-Annual	Diggings East	14-20	Alluvium	
GS-31D	1200400.37	651284.18	5456.02	Multiple	Monthly	Semi-Annual	Diggings East	29-39	Alluvium	
GS-31S	1200397.37	651287.03	5455.92	Multiple	Continuous	Semi-Annual	Diggings East	15-20	Alluvium	
GS-32D	1200208.19	651936.94	5454.95	Multiple	Continuous	Semi-Annual	Northside Tailings	27-37	Alluvium	
GS-32S	1200205.06	651939.33	5454.49	Multiple	Continuous	Semi-Annual	Northside Tailings	Shallow	Alluvium	No log, total depth = 18.4 ft.
GS-40R	1203900.82	654152.35	5485.61	Single	Monthly	Semi-Annual	Continental and Texas	52-62	Alluvium	
GS-44D	1203257.03	652518.10	5482.63	Multiple	Continuous	Semi-Annual	Clark Park	50-60	Alluvium	MBMG Continuous WL
GS-44S	1203244.27	652515.25	5482.60	Multiple	Continuous	Semi-Annual	Clark Park	20-25	Alluvium	MBMG Continuous WL
GS-46D	1204594.55	652828.63	5490.40	Multiple	Continuous	Semi-Annual	East of Clark Park	51-61	Alluvium	MBMG Continuous WL
GS-46S	1204593.29	652819.61	5490.48	Multiple	Continuous	Semi-Annual	East of Clark Park	25-30	Alluvium	MBMG Continuous WL
MF-07	1200839.99	652461.32	5463.13	Single	Continuous	Semi-Annual	Casey St. at BPSOU Subdrain	13-18	Alluvium	
MF-08	1199558.75	651492.48	5453.86	Single	Continuous	Semi-Annual	Delaware St. at BPSOU Subdrain	9-14	Alluvium	
MF-09	1200554.69	651543.07	5461.60	Single	Monthly	Semi-Annual	Diggings East	11-16	Alluvium	
MF-10	1199601.25	651174.66	5456.48	Single	Continuous	Semi-Annual	Diggings East	12-17	Alluvium	
MF-11	1201144.01	651754.15	5463.60	Multiple	Monthly	Semi-Annual	Oregon and George	10-15	Alluvium	

Table 2. BPSOU 2021 Groundwater Monitoring Network - Water Quality

Well ID	Easting (ft)	Northing (ft)	Measuring Point (ft amsl)	Multi/Single Depth	Water Level Frequency	Chemistry Frequency	Location	Screened Interval (ft)	Aquifer	Comment
MSD-01A	1201703.78	652751.16	5467.41	Multiple	Continuous	5 - year	Olympia and Warren Avenues	6-16	Alluvium	
MSD-01B	1201713.58	652771.35	5467.21	Multiple	Continuous	Semi-Annual	Olympia and Warren Avenues	40-45	Alluvium	
MSD-01C	1201711.88	652766.04	5467.31	Multiple	Continuous	Semi-Annual	Olympia and Warren Avenues	110-115	Alluvium	
MSD-02A	1201167.94	652538.92	5462.58	Multiple	Continuous	Semi-Annual	Casey St. at BPSOU Subdrain	4-14	Alluvium	
MSD-02B	1201168.06	652542.21	5465.55	Multiple	Continuous	Semi-Annual	Casey St. at BPSOU Subdrain	35-45	Alluvium	
MSD-03	1200702.84	651964.12	5461.30	Single	Monthly	Semi-Annual	NE of Diggings	40-50	Alluvium	
MSD-04	1201143.89	651764.54	5463.63	Multiple	Monthly	Semi-Annual	Oregon and George	45-55	Alluvium	
MSD-05	1200320.35	651780.39	5461.28	Multiple	Monthly	Semi-Annual	Diggings East	50-55	Alluvium	
MH-MSD106	1197905.45	651208.71	5442.67		Monthly	Annual	BPSOU Subdrain Capture System		Drain Rock	
MH-MSD108	1198781.11	651266.63	5445.55		Monthly	Annual	BPSOU Subdrain Capture System		Drain Rock	
MH-MSD110	1199848.94	651504.02	5449.75		Monthly	Annual	BPSOU Subdrain Capture System		Drain Rock	
MH-MSD113	1200906.38	652414.03	5455.75		Continuous	Annual	BPSOU Subdrain Capture System		Drain Rock	
MH-MSD116	1201857.26	653235.97	5459.93		Continuous	Annual	BPSOU Subdrain Capture System		Drain Rock	
Area Between Groundwater Capture Zones										
AMW-02	1196999.20	651600.33	5452.54	Single	Continuous	Semi-Annual	Buffalo Gulch - Mouth	10-20	Alluvium	
BPS07-08A	1196286.30	651929.32	5450.47	Single	Continuous	Semi-Annual	Montana St., north of SBC	8-17	Alluvium	
BPS07-13A	1196257.93	651644.07	5463.58	Multiple	Monthly	Semi-Annual	BSB Asphalt Plant	20-30	Alluvium	
BPS07-13B	1196252.70	651647.09	5464.70	Multiple	Monthly	Semi-Annual	BSB Asphalt Plant	38-43	Alluvium	
BPS07-14A	1195646.00	651801.25	5459.52	Single	Monthly	Semi-Annual	BSB Asphalt Plant	15-25	Waste/Slag	
BPS07-15A	1195953.51	651691.02	5459.33	Single	Monthly	Semi-Annual	BSB Asphalt Plant	15-35	Waste/Slag	
BPS07-25	1195699.87	651930.29	5449.08	Single	Continuous	Semi-Annual	BRW-near slag wall	15-25	Alluvium	

Table 2. BPSOU 2021 Groundwater Monitoring Network - Water Quality

Well ID	Easting (ft)	Northing (ft)	Measuring Point (ft amsl)	Multi/Single Depth	Water Level Frequency	Chemistry Frequency	Location	Screened Interval (ft)	Aquifer	Comment
BPS11-01	1196519.82	652032.37	5450.08	Single	Monthly	Semi-Annual	Montana St., north of SBC	15-25	Alluvium	
BPS11-02	1196542.27	651688.16	5447.27	Single	Monthly	Semi-Annual	Montana St., north of SBC	19-29	Alluvium	
BPS11-03	1197338.96	651577.36	5447.98	Single	Monthly	Semi-Annual	West of vault, south of RR bed	16-26	Alluvium	
BPS11-04	1197357.49	650891.75	5452.09	Single	Monthly	Semi-Annual	West of Visitors Center, SW of Blacktail Creek	44-54	Alluvium	
BPS11-05A1	1196512.37	651319.58	5449.38	Multiple	Monthly	Semi-Annual	BSB Asphalt Plant	6-11	Alluvium	
BPS11-05A2	1196521.57	651322.72	5449.46	Multiple	Monthly	Semi-Annual	BSB Asphalt Plant	23-28	Alluvium	
BPS11-06	1196042.04	651447.56	5452.05	Single	Monthly	Semi-Annual	BSB Asphalt Plant	19-29	Alluvium	
BPS11-07	1195871.59	652017.09	5455.46	Single	Continuous	Semi-Annual	East of BRW, north of SBC	26-36	Alluvium	
BPS11-08	1196084.17	652318.31	5456.82	Single	Monthly	Semi-Annual	East of BRW, north of SBC	13-23	Alluvium	
BPS11-09	1197015.15	651018.77	5448.20	Single	Monthly	Semi-Annual	George St, west of Visitor's Center	24-34	Alluvium	
BPS11-12A	1197056.64	650631.21	5452.35	Single	Monthly	Semi-Annual	SW of BPSOU Subdrain Vault, south of George St and BPS11-09	24-34	Alluvium	
BPS11-15	1196666.00	650420.89	5453.52	Single	Monthly	Semi-Annual	Montana St, at I-90 westbound exit ramp	27-37	Alluvium	
BPS11-16	1196698.91	650110.41	5455.88	Single	Monthly	Semi-Annual	Montana St, at I-90 eastbound entrance ramp	63-73	Alluvium	
BPSPZ-07	1197256.00	651803.20	5440.37	Single	WQ Only	5 - Year	Base of Buffalo Gulch	6-16	Alluvium	
FP98-1	1195210.87	651477.17	5442.51	Multiple	Monthly	Semi-Annual	LAO, SBC floodplain	4-6	Alluvium	
FP98-1B	1195275.85	651510.42	5461.32	Multiple	Monthly	Semi-Annual	LAO, SBC floodplain	37-47	Alluvium	
FP98-2	1195030.65	651577.81	5441.49	Single	Monthly	Semi-Annual	LAO, SBC floodplain	5-15	Alluvium	
FP98-3	1195161.74	651126.85	5445.89	Single	Monthly	Semi-Annual	LAO, SBC floodplain	3-5	Alluvium	
GS-13A	1195561.75	651974.41	5443.81	Single	Continuous	Semi-Annual	East end BRW	12.5-14	Alluvium	

Table 2. BPSOU 2021 Groundwater Monitoring Network - Water Quality

Well ID	Easting (ft)	Northing (ft)	Measuring Point (ft amsl)	Multi/Single Depth	Water Level Frequency	Chemistry Frequency	Location	Screened Interval (ft)	Aquifer	Comment
LAO Capture System Monitoring Network										
BMW-03A	1190747.07	651983.43	5422.80	Multiple	Continuous	Semi-Annual	LAO, SBC floodplain	14.5-19	Weathered Bedrock	
BMW-03B	1190742.86	651999.05	5423.19	Multiple	Continuous	Semi-Annual	LAO, SBC floodplain	36-50	Bedrock	
BMW-04B	1190818.50	652117.04	5423.50	Single	Monthly	5 - Year	West end LAO	28-38	Bedrock	
BMW-06B	1190865.38	652470.53	5430.35	Single	Continuous	5 - Year	West end HCC	59-79	Bedrock	
BPS07-17A	1190554.33	652094.41	5429.62	Multiple	Continuous	Semi-Annual	West end HCC	9-19	Alluvium	
BPS07-18A	1190449.98	652112.47	5430.10	Multiple	Continuous	Semi-Annual	West end HCC	9-19	Alluvium	
BPS07-18B	1190433.80	652115.36	5430.32	Multiple	Continuous	Semi-Annual	West end HCC	32-42	Bedrock	
CT NW-3	1190875.69	652414.56	5429.82	Single	Continuous	5 - Year	West end HCC	9-14	Alluvium	
FP98-4	1194513.33	651067.43	5441.50	Single	Monthly	5 - Year	LAO, SBC Floodplain	5-15	Alluvium	
FP98-5	1194489.87	651316.64	5439.44	Single	Monthly	5 - Year	LAO, SBC Floodplain	5-15	Alluvium	
FP98-6	1191612.29	651621.71	5429.83	Single	Continuous	Semi-Annual	LAO, SBC Floodplain	5-15	Alluvium	
FP98-7	1191595.27	651420.13	5432.13	Single	Continuous	5 - Year	LAO, SBC Floodplain	5-15	Alluvium	
GS-26	1190772.52	652249.24	5422.79	Multiple	Continuous	5 - Year	West end HCC	10-15	Alluvium	
HCA-B1	1190745.01	652241.64	5427.49	Multiple	Continuous	Semi-Annual	West end HCC	40-50	Bedrock	
HCA-B2	1190557.49	652105.11	5429.96	Multiple	Continuous	Semi-Annual	West end HCC	25-35	Bedrock	

[1]BPS07-05A arsenic concentration excluded for POC purposes

Table 3. BPSOU 2021 Groundwater Monitoring Network - Water Levels

Well ID	Easting (ft)	Northing (ft)	Measuring Point (ft amsl)	Frequency	Location	Screened Interval (ft)	Aquifer	Comment
AMC-06	1205161.09	654385.06	5493.83	Continuous	East of Parrot Tailings	53-63	Alluvium	Monitored by MBMG
AMC-12	1203350.12	653445.14	5483.93	Continuous	East of Parrot Tailings	35-45	Alluvium	Monitored by MBMG
AMC-13	1203026.63	652054.00	5479.72	Monthly	Clark Park	47-55	Alluvium	Monitored by MBMG
AMC-23	1198900.93	651533.24	5452.52	Continuous	East of Kaw Ave., north of BPSOU Subdrain	19-29	Alluvium	Monitored by MBMG
AMC-23B	1198903.75	651526.71	5452.88	Monthly	East of Kaw Ave., north of BPSOU Subdrain	97-107	Weathered Bedrock	
AMC-24	1198981.74	650908.24	5456.29	Continuous	East of Kaw Ave., south of BPSOU Subdrain	13-23	Alluvium	Level monitored by MBMG, MBMG responsible for continuous monitoring.
AMC-24B	1198991.33	650911.36	5455.95	Continuous	East of Kaw Ave., south of BPSOU Subdrain	39-49	Alluvium	
AMC-24C	1198984.00	650920.10	5454.63	Continuous	East of Kaw Ave., south of BPSOU Subdrain	71-81	Alluvium	
AMW-01A	1201806.63	653285.10	5469.49	Continuous	Civic Center	3-13	Alluvium	
AMW-01B	1201821.65	653300.93	5469.60	Continuous	Civic Center	33-43	Alluvium	
AMW-01C	1201813.77	653292.62	5469.60	Continuous	Civic Center	87-97	Alluvium	
AMW-02	1196999.20	651600.32	5452.54	Continuous	Buffalo Gulch - Mouth	10-20	Alluvium	
AMW-08	1203321.25	654315.14	5500.25	Monthly	Shields Ave., North of Parrot tailings	30-45	Waste/Alluvium	Monitored by MBMG Scheduled to be abandoned.
AMW-11	1197599.51	650816.81	5449.60	Monthly	West of Visitors Center	4-14	Alluvium	
AMW-12	1200738.80	651119.45	5464.82	Monthly	Utah St	7-22	Alluvium	
AMW-13	1198109.21	650633.10	5454.99	Continuous	Visitor Center	5-15	Alluvium	
AMW-13B	1198101.02	650648.42	5454.97	Continuous	Visitor Center	26-35	Alluvium	
AMW-13B2	1198104.51	650653.86	5456.12	Monthly	Visitor Center	41-46	Alluvium	
AMW-13C	1198095.00	650657.30	5454.17	Continuous	Visitor Center	72-82	Alluvium	
AMW-20	1204162.12	654737.04	5491.56	Continuous	MRI, Ecology Ponds	24-39	Alluvium	Monitored by MBMG
BMF96-02	1196120.24	652792.29	5477.61	Continuous	Community Health Center	149-169	Bedrock	Monitored by MBMG
BMF96-03	1197301.04	652749.96	5472.02	Continuous	BSB Health Department	145-165	Bedrock	Monitored by MBMG
BMF96-04	1198386.04	653202.73	5493.56	Continuous	Charlie Judd Park	167-187	Bedrock	Monitored by MBMG
BMW-01A	1192708.51	650962.24	5434.40	Monthly	LAO, SBC floodplain	22-32	Alluvium	
BMW-01B	1192725.08	650961.76	5433.62	Monthly	LAO, SBC floodplain	39-59	Alluvium	
BMW-01C	1192722.87	650976.61	5434.60	Monthly	LAO, SBC floodplain			Monitored as courtesy to MDEQ since Jan '10, no well log

Table 3. BPSOU 2021 Groundwater Monitoring Network - Water Levels

Well ID	Easting (ft)	Northing (ft)	Measuring Point (ft amsl)	Frequency	Location	Screened Interval (ft)	Aquifer	Comment
BMW-02A	1191161.21	651944.37	5427.69	Monthly	LAO	13.5-19	Alluvium	
BMW-02B	1191145.43	651939.95	5427.31	Monthly	LAO	45-55	Bedrock	
BMW-02D	1191156.14	651912.62	5427.14	Monthly	LAO	186-196	Bedrock	
BMW-03A	1190747.07	651983.43	5422.80	Continuous	LAO, SBC floodplain	14.5-19	Bedrock	
BMW-03B	1190742.86	651999.05	5423.19	Continuous	LAO, SBC floodplain	36-50	Bedrock	
BMW-04B	1190818.50	652117.04	5423.50	Monthly	LAO	28-38	Bedrock	
BMW-05A	1191763.28	651119.09	5439.29	Monthly	South of LAO/SBC	5-8	Alluvium	
BMW-05B	1191741.67	651127.15	5440.45	Monthly	South of LAO/SBC	38-58	Bedrock	
BMW-06B	1190865.38	652470.53	5430.35	Continuous	West end LAO	59-79	Bedrock	
BMW-08A	1194702.45	652063.17	5447.71	Monthly	BRW	5-11	Alluvium	
BMW-09A	1193534.81	651143.19	5436.47	Monthly	LAO, SBC floodplain	16-26	Alluvium	
BMW-09B	1193537.71	651136.63	5436.18	Monthly	LAO, SBC floodplain	44-54	Weathered Bedrock	
BMW-11B	1192280.53	652255.55	5435.54	Monthly	North of LAO/Centennial Ave.	55-75	Weathered Bedrock	
BMW-13B	1192899.90	651414.76	5432.98	Monthly	LAO	45-65	Bedrock	
BPS07-01A	1203623.03	651666.82	5479.33	Monthly	Clark Park	13-23	Alluvium	
BPS07-01B	1203623.38	651679.74	5479.18	Monthly	Clark Park	29-39	Alluvium	
BPS07-03A	1198230.63	651153.04	5452.69	Continuous	Southeast of Pump Vault	9-19	Alluvium	
BPS07-05A	1201799.84	649886.89	5463.12	Monthly	Southwest of Clark Park	25-35	Alluvium	
BPS07-05B	1201788.65	649887.39	5462.50	Monthly	Southwest of Clark Park	69-79	Alluvium	
BPS07-07	1197529.13	651175.82	5448.51	Continuous	BPSOU Subdrain Vault Area, W of Vault	7-17	Alluvium	
BPS07-08A	1196286.30	651929.32	5450.47	Continuous	Montana St., north of SBC	8-17	Alluvium	
BPS07-11A	1202374.92	652882.17	5473.00	Continuous	Between Parrot Tailings & Clark Park	14-24	Alluvium	
BPS07-11B	1202363.34	652882.70	5472.78	Continuous	Between Parrot Tailings & Clark Park	35-45	Alluvium	
BPS07-13A	1196257.93	651644.07	5463.58	Monthly	BSB Asphalt Plant	20-30	Alluvium	
BPS07-13B	1196252.70	651647.09	5464.70	Monthly	BSB Asphalt Plant	38-43		
BPS07-14A	1195646.00	651801.25	5459.52	Monthly	BSB Asphalt Plant	15-25	Waste/Slag	
BPS07-15A	1195953.51	651691.02	5459.33	Monthly	BSB Asphalt Plant	15-35	Waste/Slag	

Table 3. BPSOU 2021 Groundwater Monitoring Network - Water Levels

Well ID	Easting (ft)	Northing (ft)	Measuring Point (ft amsl)	Frequency	Location	Screened Interval (ft)	Aquifer	Comment
BPS07-16A	1200085.64	650004.05	5456.26	Monthly	Majors and Nevada Streets	10-20	Alluvium	
BPS07-16B	1200086.26	650019.68	5456.53	Monthly	Majors and Nevada Streets	30-40	Alluvium	
BPS07-17A	1190554.33	652094.41	5429.62	Continuous	West end LAO	9-19	Alluvium	
BPS07-18A	1190449.98	652112.47	5430.10	Continuous	West end LAO	9-19	Alluvium	
BPS07-18B	1190433.80	652115.36	5430.32	Continuous	West end LAO	32-42	Bedrock	
BPS07-21	1197903.44	651092.08	5457.29	Continuous	BPSOU Subdrain Vault Area, SE of Vault	13-23	Alluvium	
BPS07-21B	1197902.91	651101.47	5456.61	Continuous	BPSOU Subdrain Vault Area, SE of Vault	36-46	Alluvium	
BPS07-21C	1197908.20	651098.03	5456.94	Continuous	BPSOU Subdrain Vault Area, SE of Vault	65-80	Alluvium	
BPS07-22	1197909.17	651263.57	5451.57	Monthly	BPSOU Subdrain Vault Area, SE of Vault	6-16	Alluvium	
BPS07-22B	1197819.72	651283.60	5451.45	Continuous	BPSOU Subdrain Vault Area, NE of Vault	21-31	Alluvium	
BPS07-22C	1197817.10	651291.22	5451.24	Continuous	BPSOU Subdrain Vault Area, NE of Vault	89-99	Alluvium	
BPS07-22R	1197812.39	651285.02	5451.39	Continuous	BPSOU Subdrain Vault Area, NE of Vault	4-14	Waste/Alluvium	
BPS07-23	1197539.74	651326.38	5450.83	Continuous	BPSOU Subdrain Vault Area, NW of Vault	7-17	Alluvium	
BPS07-24	1199800.19	651380.30	5456.13	Continuous	Diggings East	60-70	Alluvium	
BPS07-25	1195699.87	651930.29	5449.08	Continuous	BRW-near slag wall	15-25	Alluvium	
BPS11-01	1196519.82	652032.37	5450.08	Monthly	Montana St., north of SBC	15-25	Alluvium	
BPS11-02	1196542.27	651688.16	5447.27	Monthly	Montana St., north of SBC	19-29	Alluvium	
BPS11-03	1197338.96	651577.36	5447.98	Monthly	West of vault, south of RR bed	16-26	Alluvium	
BPS11-04	1197357.49	650891.75	5452.09	Monthly	West of Visitors Center, SW of Blacktail Creek	44-54	Alluvium	
BPS11-05A1	1196512.37	651319.58	5449.38	Monthly	BSB Asphalt Plant	6-11	Alluvium	
BPS11-05A2	1196521.57	651322.72	5449.46	Monthly	BSB Asphalt Plant	23-28	Alluvium	
BPS11-06	1196042.03	651447.56	5452.05	Monthly	BSB Asphalt Plant	19-29	Alluvium	

Table 3. BPSOU 2021 Groundwater Monitoring Network - Water Levels

Well ID	Easting (ft)	Northing (ft)	Measuring Point (ft amsl)	Frequency	Location	Screened Interval (ft)	Aquifer	Comment
BPS11-07	1195871.59	652017.09	5455.46	Continuous	East of BRW, north of SBC	26-36	Alluvium/Weathered Bedrock	
BPS11-08	1196084.17	652318.31	5456.82	Monthly	East of BRW, north of SBC	13-23	Weathered Bedrock	
BPS11-09	1197015.15	651018.77	5448.20	Monthly	George St, west of Visitor's Center	24-34	Alluvium	
BPS11-10A	1198834.70	651083.58	5456.10	Continuous	SE Corner Kaw and George Streets	10.5-20.5	Alluvium	
BPS11-10B	1198828.24	651083.02	5455.75	Continuous	SE Corner Kaw and George Streets	36-46	Alluvium	
BPS11-10C	1198830.83	651077.65	5455.91	Continuous	SE Corner Kaw and George Streets	110-120	Alluvium	
BPS11-11A1	1199028.43	650425.25	5451.90	Monthly	Southeast corner of KOA	9-14	Alluvium	
BPS11-11A2	1199021.53	650418.03	5451.92	Monthly	Southeast corner of KOA	23.5-33.5	Alluvium	
BPS11-11B	1199021.25	650423.62	5452.06	Monthly	Southeast corner of KOA	63-73	Alluvium	
BPS11-11C	1199028.61	650418.85	5451.65	Monthly	Southeast corner of KOA	141-151	Alluvium	
BPS11-12A	1197056.64	650631.21	5452.35	Monthly	SW of BPSOU Subdrain Vault, south of George St & BPS11-09	24-34	Alluvium	
BPS11-13B	1199360.63	650787.52	5459.98	Monthly	Diggings East, East of AMC-24	43-53	Alluvium	
BPS11-14A	1199858.66	651156.02	5457.11	Monthly	Diggings East, SE of MF-10	17-22	Alluvium	
BPS11-14B	1199860.85	651148.52	5457.02	Monthly	Diggings East, SE of MF-10	60-65	Alluvium	
BPS11-15	1196666.00	650420.89	5453.52	Monthly	Montana St, at I-90 eastbound entrance ramp	27-37	Alluvium	
BPS11-16	1196698.91	650110.41	5455.88	Monthly	Montana St, at I-90 westbound exit ramp	63-73	Alluvium	
BPS11-17C	1200805.66	652442.30	5461.64	Monthly	Casey St. at BPSOU Subdrain, near MF-07	56-66	Alluvium	
BPS11-18B	1201018.92	652457.57	5463.59	Monthly	Casey St. east of BPSOU Subdrain	36-46	Alluvium	
BPS11-18C	1201022.06	652461.18	5463.72	Monthly	Casey St. east of BPSOU Subdrain	55-65	Alluvium	

Table 3. BPSOU 2021 Groundwater Monitoring Network - Water Levels

Well ID	Easting (ft)	Northing (ft)	Measuring Point (ft amsl)	Frequency	Location	Screened Interval (ft)	Aquifer	Comment
BPS11-19A2	1198941.73	650608.89	5449.98	Monthly	KOA, north of BPS11-11 well group	33-43	Alluvium	
BPS11-19B	1198940.87	650603.02	5449.98	Monthly	KOA, north of BPS11-11 well group	52-67	Alluvium	
BT-98-02	1200254.43	650476.15	5461.01	Monthly	Cobban St, near Wyoming	14-19	Alluvium	
BT-98-02B	1200136.18	650484.20	5459.20	Monthly	Cobban St, near Nevada	29-39	Alluvium	
CT NE-2	1192181.07	652292.01	5436.50	Monthly	North of LAO/Centennial Ave.	15-20	Weathered Bedrock	
CT NW-3	1190875.69	652414.56	5429.82	Continuous	West end of LAO	9-14	Alluvium	
CT NW-4	1190925.34	652298.35	5426.35	Monthly	West end of LAO	10-20	Alluvium	
CT S-2	1192063.70	651030.94	5440.11	Monthly	South of LAO/SBC	25-28	Alluvium	
CT S-5	1191254.12	651410.96	5441.44	Monthly	South of LAO/SBC	16-23	Alluvium	
CT SW-4	1190818.11	651950.59	5424.02	Monthly	LAO, SBC floodplain	19-28	Alluvium	
CT-84-01	1193702.57	651695.69	5444.77	Monthly	LAO, east of Metro Sewer	11-16	Alluvium	
CT-94-1	1192381.39	651130.75	5432.05	Monthly	LAO, SBC floodplain	11-24	Alluvium	
FP98-1	1195207.80	651474.25	5442.51	Monthly	BRW, SBC floodplain	4-6	Alluvium	
FP98-1B	1195275.85	651510.42	5461.32	Monthly	BRW, SBC floodplain	37-47	Alluvium	
FP98-2	1195030.65	651577.81	5441.49	Monthly	BRW, SBC floodplain	5-15	Alluvium	
FP98-3	1195161.74	651126.85	5445.89	Monthly	BRW, SBC floodplain	3-5	Alluvium	
FP98-4	1194512.23	651062.99	5441.50	Monthly	BRW, SBC floodplain	5-15	Alluvium	
FP98-5	1194489.87	651316.64	5439.44	Monthly	BRW, SBC floodplain	5-15	Alluvium	
FP98-6	1191612.29	651621.71	5429.83	Continuous	LAO, SBC floodplain	5-15	Alluvium	
FP98-7	1191595.27	651420.13	5432.13	Continuous	LAO, SBC floodplain	5-15	Alluvium	
FP98-8	1191051.41	651664.24	5430.77	Monthly	LAO, SBC floodplain	2-4	Alluvium	No well log
FP98-9	1191127.93	651848.04	5426.98	Monthly	LAO, SBC floodplain	5-15	Alluvium	
GS-08	1200371.05	651618.73	5461.57	Monthly	Diggings East	127-145	Alluvium	MBMG responsible for continuous monitoring
GS-08R	1200387.64	651630.75	5463.56	Continuous	Diggings East	168-178	Alluvium	
GS-09	1200378.85	651614.20	5461.92	Monthly	Diggings East	61-76	Alluvium	MBMG responsible for continuous monitoring
GS-09R	1200383.54	651638.44	5463.46	Continuous	Diggings East	49-59	Alluvium	
GS-11	1200372.68	651610.43	5461.63	Monthly	Diggings East	8-18	Alluvium	MBMG responsible for continuous monitoring

Table 3. BPSOU 2021 Groundwater Monitoring Network - Water Levels

Well ID	Easting (ft)	Northing (ft)	Measuring Point (ft amsl)	Frequency	Location	Screened Interval (ft)	Aquifer	Comment
GS-11R	1200392.40	651637.80	5463.39	Continuous	Diggings East	8-18	Alluvium	
GS-12	1194639.22	651905.13	5446.91	Monthly	BRW	19-29	Alluvium	
GS-13A	1195561.75	651974.41	5443.81	Continuous	East end BRW	12.5-14	Alluvium	
GS-13B	1195542.63	651978.13	5441.89	Monthly	East end BRW	24-32	Alluvium	
GS-17DR	1194113.84	651319.22	5444.18	Monthly	LAO edge of HCC	20-30	Alluvium	
GS-18R	1193548.92	651008.44	5436.78	Monthly	LAO, SBC floodplain	5-15	Alluvium	
GS-19	1194388.23	651485.11	5445.99	Monthly	BRW	14-19	Alluvium	
GS-20	1194568.24	652213.18	5454.88	Monthly	BRW	18-23	Alluvium	
GS-22	1192836.87	650753.30	5440.17	Monthly	South of LAO/SBC	5-15	Alluvium	
GS-23	1191657.15	651200.90	5441.36	Monthly	South of LAO/SBC	15-19	Alluvium	
GS-25	1192708.45	651658.59	5432.05	Monthly	LAO near HCC	5-10	Alluvium	
GS-25C	1192726.41	651650.09	5433.75	Monthly	LAO near HCC	84-94	Weathered Bedrock	
GS-25D	1192714.75	651670.29	5432.95	Monthly	LAO near HCC	166-176	Bedrock	
GS-26	1190772.52	652249.24	5422.79	Continuous	West end HCC	10-15	Alluvium	
GS-28	1198607.15	650317.44	5450.45	Monthly	South of KOA	6-11	Alluvium	
GS-29D	1196893.68	651275.12	5448.00	Continuous	George St. and Montana St.	177-187	Bedrock	
GS-29SR	1196900.37	651277.68	5448.85	Monthly	George St. and Montana St.	14-24	Alluvium	
GS-30D	1200331.53	651783.14	5460.25	Continuous	Diggings East	29-39	Alluvium	
GS-30S	1200332.60	651778.78	5460.81	Continuous	Diggings East	14-20	Alluvium	
GS-31D	1200400.37	651284.18	5456.02	Monthly	Diggings East	29-39	Alluvium	
GS-31S	1200397.37	651287.03	5455.92	Continuous	Diggings East	15-20	Alluvium	
GS-32D	1200208.19	651936.94	5454.95	Continuous	Northside Tailings	27-37	Alluvium	
GS-32S	1200205.06	651939.33	5454.49	Continuous	Northside Tailings	Shallow	Alluvium	
GS-34D	1193374.75	651348.12	5438.42	Monthly	LAO near HCC	21-31	Alluvium	Monitored as courtesy to MDEQ since Jan '10
GS-34S	1193377.72	651341.78	5437.59	Monthly	LAO near HCC	12-17	Alluvium	
GS-40R	1203900.82	654152.35	5485.61	Monthly	Continental and Texas	52-62	Alluvium	
GS-42D	1202216.48	653584.55	5475.54	Monthly	BSB Road Maintenance Shop	47-57	Alluvium	Monthly through March, Abandoned - Parrot Tailings

Table 3. BPSOU 2021 Groundwater Monitoring Network - Water Levels

Well ID	Easting (ft)	Northing (ft)	Measuring Point (ft amsl)	Frequency	Location	Screened Interval (ft)	Aquifer	Comment
GS-42S	1202212.67	653593.57	5475.68	Monthly	BSB Road Maintenance Shop	13-18	Alluvium	Monthly through March, Abandoned - Parrot Tailings
GS-44D	1203257.03	652518.10	5482.63	Continuous	Clark Park	50-60	Alluvium	Monitored by MBMG
GS-44S	1203244.27	652515.25	5482.60	Continuous	Clark Park	20-25	Alluvium	Monitored by MBMG
GS-46D	1204594.55	652828.63	5490.40	Continuous	East of Clark Park	51-61	Alluvium	Monitored by MBMG
GS-46S	1204593.29	652819.61	5490.48	Continuous	East of Clark Park	25-30	Alluvium	Monitored by MBMG
GW-06R	1192715.55	651250.10	5435.38	Monthly	LAO, SBC floodplain	10-20	Alluvium	
HCA-B1	1190745.01	652241.64	5427.49	Continuous	West end of LAO	40-50	Bedrock	
HCA-B2	1190557.49	652105.11	5429.96	Continuous	West end of LAO	25-35	Bedrock	
HCA-MG1	1194628.42	652219.46	5460.99	Monthly	BRW	6-11	Alluvium	
HCA-MG3	1194778.68	652262.56	5460.35	Monthly	BRW		Alluvium	No well log
M-01	1192749.22	651948.73	5433.52	Monthly	BSB sewer treatment plant	5-8	Waste/Alluvium	
M-03-87	1193441.69	650907.58	5441.61	Monthly	North of Montana Pole	5-15	Alluvium	
MF-01	1196922.01	651209.99	5447.66	Monthly	George St. and Montana St.		Alluvium	No well log. MBMG responsible for continuous monitoring.
MF-03	1198486.69	651631.50	5452.99	Monthly	East of Kaw Ave., north of BPSOU Subdrain	13-18	Alluvium	
MF-05	1200865.51	653019.18	5471.50	Monthly	Northside Tailings	12-17	Alluvium	
MF-07	1200839.99	652461.32	5463.13	Continuous	Casey St. at BPSOU Subdrain	13-18	Alluvium	
MF-08	1199558.75	651492.48	5453.86	Continuous	Delaware St. at BPSOU Subdrain	9-14	Alluvium	
MF-09	1200554.69	651543.07	5461.60	Monthly	Diggings East	11-16	Alluvium	
MF-10	1199601.25	651174.66	5456.48	Continuous	Diggings East	12-17	Alluvium	
MF-11	1201144.01	651754.15	5463.60	Monthly	Oregon and George	10-15	Alluvium	
MSD-01A	1201703.78	652751.16	5467.41	Continuous	Olympia and Warren Avenues	6-16	Alluvium	
MSD-01B	1201713.58	652771.35	5467.21	Continuous	Olympia and Warren Avenues	40-45	Alluvium	
MSD-01C	1201711.88	652766.04	5467.31	Continuous	Olympia and Warren Avenues	110-115	Alluvium	
MSD-02A	1201167.94	652538.92	5462.58	Continuous	Casey St. at BPSOU Subdrain	4-14	Alluvium	

Table 3. BPSOU 2021 Groundwater Monitoring Network - Water Levels

Well ID	Easting (ft)	Northing (ft)	Measuring Point (ft amsl)	Frequency	Location	Screened Interval (ft)	Aquifer	Comment
MSD-02B	1201168.06	652542.21	5465.55	Continuous	Casey St. at BPSOU Subdrain	35-45	Alluvium	
MSD-03	1200702.84	651964.12	5461.30	Monthly	NE of Diggings	40-50	Alluvium	
MSD-04	1201143.89	651764.54	5463.63	Monthly	Oregon and George	45-55	Alluvium	
MSD-05	1200320.35	651780.39	5461.28	Monthly	Diggings East	50-55	Alluvium	
MW2-CGSB3	1197967.08	652301.88	5467.89	Monthly	Front St and Kaw Avenue	17-27	Alluvium	Replaced MW3-CGSB4
MW-G-96	1193255.17	649618.96	5480.05	Monthly	East of CO Smelter Repository	19-29	Alluvium	
MW-H-96	1193198.14	650026.30	5462.71	Monthly	NE of CO Smelter Repository	17-27	Alluvium	
A1, A2, and A3 cell water levels				Monthly	LAO		Surface Water	
B1 and B3 cell water levels				Monthly	LAO		Surface Water	
C1 and C3 cell water levels				Monthly	LAO		Surface Water	
D2, D3 and D4 cell water levels				Monthly	LAO		Surface Water	
BRW-00	1195013.05	651764.72	5436.89	Continuous	BRW		Surface Water	
BPSOU subdrain manholes				Monthly	BPSOU Subdrain		Subdrain	2 manholes of the 5 monitored have continuous WL monitoring
HCC staff gages				Monthly	LAO		Surface Water	
SBC, BTC staff gages				Monthly	Site Wide		Surface Water	
BPSOU subdrain channel staff gages				Monthly	BPSOU Subdrain channel		Surface Water	
RLP-W	1190510.84	652245.25	5424.62	Monthly	West end of LAO		Surface Water	
Wetland Staff gages				Monthly	Site Wide, east of Montana St, south of George St		Surface Water	

Table 4. BPSOU 2021 Continual Water Level Monitoring Network

Site	Date Record Begins	Date Record Ends (if applicable)	Comment
AMC-24B	1/22/2010		
AMC-24C	7/19/2010		
AMW-01A	2/22/2010		
AMW-01B	7/9/2009		
AMW-01C	1/22/2010		
AMW-02	2/26/2010		
AMW-13	8/13/2010		
AMW-13B	8/13/2010		
AMW-13C	7/19/2010		
BMW-03A	2/8/2012		
BMW-03B	2/22/2012		
BMW-06B	2/22/2012		
BPS07-03A	4/1/2008		
BPS07-07	2/19/2010		
BPS07-08A	11/18/2010		
BPS07-11A	1/22/2010		
BPS07-11B	1/22/2010		
BPS07-17A	2/22/2012		
BPS07-18A	2/22/2012		
BPS07-18B	2/22/2012		
BPS07-21	2/24/2010		
BPS07-21B	2/4/2010		
BPS07-21C	8/16/2010		
BPS07-22R	2/23/2012		
BPS07-22B	2/23/2012		
BPS07-22C	2/23/2012		
BPS07-23	2/22/2010		
BPS07-24	8/16/2010		
BPS07-25	10/18/2010		
BPS11-07	12/14/2011		
BPS11-10A	2/23/2012	8/27/2020	8/27/20 last data point, well damaged and transducer cannot be removed, so record ends until the well is repaired and transducer can be removed and data retrieved
BPS11-10B	3/27/2012		
BPS11-10C	2/23/2012		
BRW-00 OS	1/6/2011		
CT NW-3	2/22/2012		
FP98-6	2/23/2012		
FP98-7	2/23/2012		
GS-08R	2/23/2012		
GS-09R	2/23/2012		
GS-11R	2/23/2012		
GS-13A	2/22/2012		
GS-26	2/22/2012		
GS-29D	7/19/2010		
GS-30D	1/22/2010		

Table 4. BPSOU 2021 Continual Water Level Monitoring Network

Site	Date Record Begins	Date Record Ends (if applicable)	Comment
GS-30S	1/22/2010		
GS-31S	2/23/2012		
GS-32D	1/22/2010		
GS-32S	1/22/2010		
HCA-B1	3/6/2012		
HCA-B2	2/22/2012		
MF-07	4/1/2008		
MF-08	11/19/2009		
MF-10	2/26/2010		
MHMSD-113	11/20/2009		Replaced MSDCL-04
MHMSD-116	11/19/2009		
MSD-01A	1/22/2010		
MSD-01B	11/19/2009		
MSD-01C	1/22/2010		
MSD-02A	1/22/2010		
MSD-02B	11/19/2009		
SS-05.7	1/22/2010		Removed December 2018 for maintenance and reinstalled April 30th 2019.
SS-05.9	12/1/2010 7/18/2013	5/30/2012	Removed December 2018 for maintenance and reinstalled April 30th 2019.

Table 5a. BPSOU 2021 Groundwater Monitoring Water Quality Results - Dissolved Metals

Location	SDG	Field Sample ID	Lab Sample ID	Monitoring Date	Sample Type	AB	AsDis (mg/L)	Lab Q	Val Q	DV Code	Status	CdDis (mg/L)	Lab Q	Val Q	DV Code	Status	CuDis (mg/L)	Lab Q	Val Q	DV Code	Status
AMC-12	10559096	GW0087-050421	10559096047	2021-05-04	FG	B	0.00037	J			E	0.081				E	1.6				E
AMC-12	10583409	GW0114-100521	10583409001	2021-10-05	FG	B	0.0004	J			E	0.11				E	2.2	P6			E
AMC-13	10558077	GW0002-042221	10558077002	2021-04-22	FG	B	0.00076				E	0.000037	J			E	0.00043	U			E
AMC-13	10581942	GW0049-092721	10581942002	2021-09-27	FG	B	0.00063				E	0.000029	J			E	0.0005	U			E
AMC-23B	10559096	GW0079-050321	10559096039	2021-05-03	FG	B	0.0094				E	0.01				E	0.0011				E
AMC-23B	10582497	GW0109-100421	10582497017	2021-10-04	FG	B	0.01				E	0.011				E	0.0057				E
AMC-24	10558077	GW0010-042721	10558077010	2021-04-27	FG	B	0.0041				E	0.0005				E	0.001		UJ	FB	S
AMC-24	10581942	GW0059-092921	10581942012	2021-09-29	FG	B	0.00095				E	0.0017				E	0.0022				E
AMC-24B	10558077	GW0009-042621	10558077009	2021-04-26	FG	B	0.0043				E	0.006				E	0.14				E
AMC-24B	10581942	GW0060-093021	10581942013	2021-09-30	FG	B	0.0041				E	0.0054				E	0.13				E
AMC-24C	10558077	GW0011-042721	10558077011	2021-04-27	FG	B	0.007				E	0.0038				E	0.056				E
AMC-24C	10581942	GW0061-092821	10581942014	2021-09-28	FG	B	0.0066				E	0.0036				E	0.052				E
AMW-01A	10560315	GW0088-050621	10560315009	2021-05-06	FG	B	0.0067				E	0.000067	J			E	0.0024				E
AMW-01A	10583409	GW0118-100721	10583409005	2021-10-07	FG	B	0.0075				E	0.021				E	0.04				E
AMW-01B	10560318	GW0121-050721	10560318027	2021-05-07	FG	B	0.0013				E	1.2				E	77.1				E
AMW-01B	10583409	GW0119-092421	10583409006	2021-09-24	FG	B	0.0018				E	1.2				E	82.6				E
AMW-01C	10559096	GW0093-050421	10559096052	2021-05-04	FG	B	0.0082				E	0.12				E	5.8				E
AMW-01C	10583409	GW0120-100521	10583409007	2021-10-05	FG	B	0.0082				E	0.13				E	6.3				E
AMW-02	10558077	GW0032-042721	10558077032	2021-04-27	FG-N	B	0.014				E	0.0048				E	0.0088				E
AMW-02	10558077	GW0033-042721	10558077033	2021-04-27	FG-D	B	0.014					0.0045					0.0081				
AMW-02	10581934	GW0037-092921	10581934012	2021-09-29	FG	B	0.0062				E	0.0077				E	0.011				E
AMW-08	10560315	GW0122-050721	10560315001	2021-05-07	FG-N	B	0.034				E	0.089				E	3.4		J	FD	S
AMW-08	10560315	GW0123-050721	10560315002	2021-05-07	FG-D	B	0.034					0.088					2.7		J	FD	
AMW-08	10583409	GW0115-100521	10583409002	2021-10-05	FG-N	B	0.023				E	0.065				E	1.7				E
AMW-08	10583409	GW0116-100521	10583409003	2021-10-05	FG-D	B	0.024					0.069					1.8				
AMW-12	10558077	GW0001-042221	10558077001	2021-04-22	FG	B	0.0043				E	0.00013				E	0.0025		J+	FB	S
AMW-12	10581942	GW0048-092721	10581942001	2021-09-27	FG	B	0.0036				E	0.00012				E	0.0027				E
AMW-13	10560318	GW0095-050521	10560318001	2021-05-05	FG	B	0.0099				E	0.0012				E	0.0021	U			E
AMW-13	10580635	GW0001-092321	10580635001	2021-09-23	FG	B	0.0028				E	0.0021				E	0.0092				E
AMW-13B	10560318	GW0096-050521	10560318002	2021-05-05	FG	B	0.0032				E	0.00026	J			E	0.0021	U			E
AMW-13B	10580635	GW0002-092321	10580635002	2021-09-23	FG	B	0.0041				E	0.00027				E	0.0015				E
AMW-13B2	10560318	GW0097-050521	10560318003	2021-05-05	FG	B	0.004				E	0.00039	J			E	0.0021	U			E
AMW-13B2	10580635	GW0003-092321	10580635003	2021-09-23	FG	B	0.0051				E	0.00048				E	0.0024				E
AMW-13C	10560318	GW0098-050521	10560318004	2021-05-05	FG	B	0.0049				E	0.0016				E	0.0021	U			E
AMW-13C	10580635	GW0004-092321	10580635004	2021-09-23	FG	B	0.006				E	0.0019				E	0.00076	J			E
AMW-20	10559096	GW0078-043021	10559096038	2021-04-30	FG	B	0.00058				E	0.11				E	5.1				E
AMW-20	10583409	GW0108-100721	10583409010	2021-10-07	FG	B	0.00064				E	0.044				E	2.5				E
BMW-03A	10559096	GW0094-050321	10559096053	2021-05-03	FG	B	0.063				E	0.00003	U			E	0.00043	U			E
BMW-03A	10581934	GW0031-092721	10581934006	2021-09-27	FG	B	0.092				E	0.000016	U			E	0.0005	U			E
BMW-03B	10558077	GW0027-042221	10558077027	2021-04-22	FG	B	0.0057				E	0.00014				E	0.00044	J			E
BMW-03B	10581934	GW0032-092721	10581934007	2021-09-27	FG	B	0.0061				E	0.00012				E	0.0005	U			E
BPS07-01A	10560318	GW0099-050621	10560318005	2021-05-06	FG	B	0.0026				E	0.00015	U			E	0.0021	U			E
BPS07-01A	10580635	GW0017-092421	10580635017	2021-09-24	FG	B	0.0031				E	0.000019	J			E	0.0013				E
BPS07-01B	10560318	GW0100-050621	10560318006	2021-05-06	FG	B	0.0012	J			E	0.00015	U			E	0.0021	U			E
BPS07-01B	10580635	GW0018-092421	10580635018	2021-09-24	FG	B	0.0014				E	0.0001				E	0.0016				E
BPS07-03A	10558077	GW0019-042721	10558077019	2021-04-27	FG	B	0.00069				E	0.00021				E	0.0019		J+	FB	S
BPS07-03A	10581942	GW0067-093021	10581942020	2021-09-30	FG	B	0.00069				E	0.00022				E	0.0015				E
BPS07-05A	10560318	GW0101-050621	10560318007	2021-05-06	FG	B	0.0084				E	0.00015	U			E	0.0021	U			E
BPS07-05A	10580635	GW0016-092421	10580635016	2021-09-24	FG	B	0.011				E	0.000039	J			E	0.002				E
BPS07-05B	10560318	GW0102-050621	10560318008	2021-05-06	FG	B	0.0007	U			E	0.00015	U			E	0.0021	U			E
BPS07-05B	10580635	GW0015-092421	10580635015	2021-09-24	FG	B	0.00051				E	0.0001				E	0.00053	J			E
BPS07-07	10558077	GW0020-042721	10558077020	2021-04-27	FG	B	0.0078				E	0.000064	J			E	0.0017		J+	FB	S
BPS07-07	10581942	GW0068-093021	10581942021	2021-09-30	FG	B	0.0076				E	0.00008				E	0.0014				E

See Table B3 for laboratory and validation qualifer and code definitions

Table 5a. BPSOU 2021 Groundwater Monitoring Water Quality Results - Dissolved Metals

Location	SDG	Field Sample ID	Lab Sample ID	Monitoring Date	Sample Type	AB	HgDis (mg/L)	Lab Q	Val Q	DV Code	Status	PbDis (mg/L)	Lab Q	Val Q	DV Code	Status	ZnDis (mg/L)	Lab Q	Val Q	DV Code	Status
AMC-12	10559096	GW0087-050421	10559096047	2021-05-04	FG	B	0.000045	U,MD			E	0.00061		J	FD	S	22.8				E
AMC-12	10583409	GW0114-100521	10583409001	2021-10-05	FG	B	0.000045	U			E	0.00064				E	28.5	P6			E
AMC-13	10558077	GW0002-042221	10558077002	2021-04-22	FG	B	0.000007	J			E	0.000043	U			E	0.044		J+	FB	S
AMC-13	10581942	GW0049-092721	10581942002	2021-09-27	FG	B	0.000045	U			E	0.000028	U			E	0.037				E
AMC-23B	10559096	GW0079-050321	10559096039	2021-05-03	FG	B	0.000045	U,MD			E	0.00017		J	FD	S	0.8				E
AMC-23B	10582497	GW0109-100421	10582497017	2021-10-04	FG	B	0.000045	U			E	0.00022				E	0.91				E
AMC-24	10558077	GW0010-042721	10558077010	2021-04-27	FG	B	0.000007	J			E	0.000043	U			E	0.47				E
AMC-24	10581942	GW0059-092921	10581942012	2021-09-29	FG	B	0.000045	U			E	0.000089	J			E	0.82				E
AMC-24B	10558077	GW0009-042621	10558077009	2021-04-26	FG	B	0.000013				E	0.000043	U			E	1.1				E
AMC-24B	10581942	GW0060-093021	10581942013	2021-09-30	FG	B	0.000045	U			E	0.000068	J			E	1.3				E
AMC-24C	10558077	GW0011-042721	10558077011	2021-04-27	FG	B	0.000007	J			E	0.000043	U			E	0.43				E
AMC-24C	10581942	GW0061-092821	10581942014	2021-09-28	FG	B	0.000045	U			E	0.00003	J			E	0.39				E
AMW-01A	10560315	GW0088-050621	10560315009	2021-05-06	FG	B	0.000045	U,MD			E	0.0002				E	0.026				E
AMW-01A	10583409	GW0118-100721	10583409005	2021-10-07	FG	B	0.000045	U			E	0.001				E	3.8				E
AMW-01B	10560318	GW0121-050721	10560318027	2021-05-07	FG	B	0.000045	U			E	0.0044				E	183				E
AMW-01B	10583409	GW0119-092421	10583409006	2021-09-24	FG	B	0.000045	U			E	0.0065				E	199				E
AMW-01C	10559096	GW0093-050421	10559096052	2021-05-04	FG	B	0.000045	U,MD			E	0.000059	J	J	FD	S	30.6				E
AMW-01C	10583409	GW0120-100521	10583409007	2021-10-05	FG	B	0.000045	U			E	0.000064	J			E	29.7				E
AMW-02	10558077	GW0032-042721	10558077032	2021-04-27	FG-N	B	0.000023				E	0.00089				E	1				E
AMW-02	10558077	GW0033-042721	10558077033	2021-04-27	FG-D	B	0.000019					0.00079					0.98				
AMW-02	10581934	GW0037-092921	10581934012	2021-09-29	FG	B	0.000045	U			E	0.00066				E	3.2	P6			E
AMW-08	10560315	GW0122-050721	10560315001	2021-05-07	FG-N	B	0.000045	U,MD			E	0.013				E	525		J	FD	S
AMW-08	10560315	GW0123-050721	10560315002	2021-05-07	FG-D	B	0.000045	U,MD				0.013					415		J	FD	
AMW-08	10583409	GW0115-100521	10583409002	2021-10-05	FG-N	B	0.000045	U			E	0.015				E	374				E
AMW-08	10583409	GW0116-100521	10583409003	2021-10-05	FG-D	B	0.000045	U				0.015					431				
AMW-12	10558077	GW0001-042221	10558077001	2021-04-22	FG	B	0.0000045	U			E	0.00014				E	0.0032	J	UJ	FB	S
AMW-12	10581942	GW0048-092721	10581942001	2021-09-27	FG	B	0.000045	U			E	0.000055	J			E	0.0026	J			E
AMW-13	10560318	GW0095-050521	10560318001	2021-05-05	FG	B	0.000045	U,MD			E	0.00043	J			E	0.35				E
AMW-13	10580635	GW0001-092321	10580635001	2021-09-23	FG	B	0.0000047	U			E	0.000067	J			E	0.59				E
AMW-13B	10560318	GW0096-050521	10560318002	2021-05-05	FG	B	0.000045	U,MD			E	0.00022	U			E	0.021	J			E
AMW-13B	10580635	GW0002-092321	10580635002	2021-09-23	FG	B	0.0000047	U			E	0.000028	U			E	0.024				E
AMW-13B2	10560318	GW0097-050521	10560318003	2021-05-05	FG	B	0.000045	U,MD			E	0.00022	U			E	0.038				E
AMW-13B2	10580635	GW0003-092321	10580635003	2021-09-23	FG	B	0.0000047	U			E	0.000028	U			E	0.046				E
AMW-13C	10560318	GW0098-050521	10560318004	2021-05-05	FG	B	0.000045	U,MD			E	0.00022	U			E	0.14				E
AMW-13C	10580635	GW0004-092321	10580635004	2021-09-23	FG	B	0.0000047	U			E	0.000028	U			E	0.16				E
AMW-20	10559096	GW0078-043021	10559096038	2021-04-30	FG	B	0.000045	U,MD			E	0.00036		J	FD	S	25.5				E
AMW-20	10583409	GW0108-100721	10583409010	2021-10-07	FG	B	0.000045	U			E	0.00029				E	10.1				E
BMW-03A	10559096	GW0094-050321	10559096053	2021-05-03	FG	B	0.000045	U,MD			E	0.0001		J	FD	S	0.78				E
BMW-03A	10581934	GW0031-092721	10581934006	2021-09-27	FG	B	0.000045	U			E	0.00013				E	0.99				E
BMW-03B	10558077	GW0027-042221	10558077027	2021-04-22	FG	B	0.0000045	U			E	0.000043	U			E	0.01				E
BMW-03B	10581934	GW0032-092721	10581934007	2021-09-27	FG	B	0.000045	U			E	0.000028	U			E	0.017				E
BPS07-01A	10560318	GW0099-050621	10560318005	2021-05-06	FG	B	0.000045	U,MD			E	0.00022	U			E	0.011	U			E
BPS07-01A	10580635	GW0017-092421	10580635017	2021-09-24	FG	B	0.0000047	U			E	0.000043	J	UJ	FB	S	0.002	U			E
BPS07-01B	10560318	GW0100-050621	10560318006	2021-05-06	FG	B	0.000045	U,MD			E	0.00022	U			E	0.043				E
BPS07-01B	10580635	GW0018-092421	10580635018	2021-09-24	FG	B	0.0000047	U			E	0.000039	J	UJ	FB	S	0.045				E
BPS07-03A	10558077	GW0019-042721	10558077019	2021-04-27	FG	B	0.0000045	U			E	0.000043	U			E	0.058				E
BPS07-03A	10581942	GW0067-093021	10581942020	2021-09-30	FG	B	0.000045	U			E	0.000046	J			E	0.051				E
BPS07-05A	10560318	GW0101-050621	10560318007	2021-05-06	FG	B	0.000045	U,MD			E	0.00022	U			E	0.011	U			E
BPS07-05A	10580635	GW0016-092421	10580635016	2021-09-24	FG	B	0.0000047	U			E	0.000033	J			E	0.002	U			E
BPS07-05B	10560318	GW0102-050621	10560318008	2021-05-06	FG	B	0.000045	U,MD			E	0.00022	U			E	0.011	U			E
BPS07-05B	10580635	GW0015-092421	10580635015	2021-09-24	FG	B	0.0000047	U			E	0.000028	U			E	0.0035	J			E
BPS07-07	10558077	GW0020-042721	10558077020	2021-04-27	FG	B	0.0000045	U			E	0.00005	J			E	0.025		J+	FB	S
BPS07-07	10581942	GW0068-093021	10581942021	2021-09-30	FG	B	0.000045	U			E	0.00022				E	0.022				E

See Table B3 for laboratory and validation qualifer and code definitions

Table 5a. BPSOU 2021 Groundwater Monitoring Water Quality Results - Dissolved Metals

Location	SDG	Field Sample ID	Lab Sample ID	Monitoring Date	Sample Type	AB	AsDis (mg/L)	Lab Q	Val Q	DV Code	Status	CdDis (mg/L)	Lab Q	Val Q	DV Code	Status	CuDis (mg/L)	Lab Q	Val Q	DV Code	Status
BPS07-08A	10558077	GW0035-042621	10558077035	2021-04-26	FG	B	0.045				E	0.0062				E	0.13				E
BPS07-08A	10581934	GW0038-092821	10581934013	2021-09-28	FG	B	0.021				E	0.0079				E	0.076				E
BPS07-11A	10559096	GW0072-042921	10559096032	2021-04-29	FG	B	0.00056				E	0.02				E	0.15				E
BPS07-11A	10582497	GW0104-100121	10582497013	2021-10-01	FG	B	0.00052				E	0.025				E	0.28				E
BPS07-11B	10559096	GW0073-042921	10559096033	2021-04-29	FG	B	0.00051				E	0.093				E	0.82				E
BPS07-11B	10582497	GW0105-100121	10582497014	2021-10-01	FG	B	0.00052				E	0.086				E	0.72				E
BPS07-13A	10559096	GW0042-042821	10559096002	2021-04-28	FG	B	0.047				E	0.028				E	0.82				E
BPS07-13A	10582495	GW0070-093021	10582495001	2021-09-30	FG	B	0.05				E	0.034				E	1				E
BPS07-13B	10559096	GW0043-042821	10559096003	2021-04-28	FG	B	0.03				E	0.0016				E	0.0045		J+	FB	S
BPS07-13B	10582495	GW0071-093021	10582495002	2021-09-30	FG	B	0.033				E	0.0013				E	0.0045				E
BPS07-14A	10559096	GW0045-042821	10559096005	2021-04-28	FG	B	0.028				E	0.0023				E	0.025				E
BPS07-14A	10582495	GW0073-093021	10582495004	2021-09-30	FG	B	0.032				E	0.0026				E	0.014				E
BPS07-15A	10559096	GW0044-042821	10559096004	2021-04-28	FG	B	0.41				E	0.0016				E	0.011				E
BPS07-15A	10582495	GW0072-093021	10582495003	2021-09-30	FG	B	0.3				E	0.0032				E	0.014				E
BPS07-16A	10560318	GW0103-050621	10560318009	2021-05-06	FG-N	B	0.0007	U			E	0.0019				E	0.0027	J			E
BPS07-16A	10560318	GW0104-050621	10560318010	2021-05-06	FG-D	B	0.0007	U				0.002					0.0028	J			
BPS07-16A	10580635	GW0005-092421	10580635005	2021-09-24	FG	B	0.00097				E	0.0019				E	0.0032				E
BPS07-16B	10560318	GW0106-050621	10560318012	2021-05-06	FG	B	0.0013	J			E	0.00023	J			E	0.0021	U			E
BPS07-16B	10580635	GW0006-092421	10580635006	2021-09-24	FG	B	0.0015				E	0.00027				E	0.0005	U			E
BPS07-17A	10558077	GW0023-042221	10558077023	2021-04-22	FG	B	0.072				E	0.0063				E	0.11				E
BPS07-17A	10581934	GW0028-092721	10581934003	2021-09-27	FG	B	0.085				E	0.0074				E	0.078				E
BPS07-18A	10558077	GW0021-042221	10558077021	2021-04-22	FG	B	0.23				E	0.000082				E	0.0012				E
BPS07-18A	10581934	GW0026-092721	10581934001	2021-09-27	FG	B	0.22				E	0.000087				E	0.0012				E
BPS07-18B	10558077	GW0022-042221	10558077022	2021-04-22	FG	B	0.27				E	0.00003	U			E	0.00067	J			E
BPS07-18B	10581934	GW0027-092721	10581934002	2021-09-27	FG	B	0.25				E	0.000041	J			E	0.00066	J			E
BPS07-21	10559096	GW0061-042821	10559096021	2021-04-28	FG	B	0.35				E	0.000046	J			E	0.00043	U			E
BPS07-21	10581942	GW0069-093021	10581942022	2021-09-30	FG	B	0.6				E	0.00012				E	0.0021				E
BPS07-21B	10559096	GW0062-042821	10559096022	2021-04-28	FG	B	0.0062				E	0.0019				E	0.0016				E
BPS07-21B	10582497	GW0092-093021	10582497001	2021-09-30	FG	B	0.0074				E	0.0022				E	0.0014				E
BPS07-21C	10559096	GW0063-042821	10559096023	2021-04-28	FG	B	0.0059				E	0.0014				E	0.00043	U			E
BPS07-21C	10582497	GW0093-093021	10582497002	2021-09-30	FG	B	0.0066				E	0.0023				E	0.0005	U			E
BPS07-22B	10559096	GW0064-042821	10559096024	2021-04-28	FG	B	0.0034				E	0.0025				E	0.014				E
BPS07-22B	10582497	GW0094-100121	10582497003	2021-10-01	FG	B	0.0036				E	0.0029				E	0.016				E
BPS07-22C	10559096	GW0065-042821	10559096025	2021-04-28	FG	B	0.0084				E	0.00023				E	0.00043	U			E
BPS07-22C	10582497	GW0095-100121	10582497004	2021-10-01	FG	B	0.0097				E	0.00026				E	0.0005	U			E
BPS07-22R	10559096	GW0066-042821	10559096026	2021-04-28	FG	B	0.018				E	0.00003	U			E	0.00043	U			E
BPS07-22R	10582497	GW0096-100121	10582497005	2021-10-01	FG	B	0.0084				E	0.000016	U			E	0.00056	J			E
BPS07-23	10559096	GW0067-042921	10559096027	2021-04-29	FG	B	0.14				E	0.000041	J			E	0.0033				E
BPS07-23	10582497	GW0097-100121	10582497006	2021-10-01	FG	B	0.088				E	0.000016	U			E	0.0005	U			E
BPS07-24	10559096	GW0071-042921	10559096031	2021-04-29	FG	B	0.009				E	0.017				E	0.76				E
BPS07-24	10582497	GW0103-100121	10582497012	2021-10-01	FG	B	0.01				E	0.017				E	0.81				E
BPS07-25	10558077	GW0030-042321	10558077030	2021-04-23	FG	B	0.021				E	0.0033				E	0.078				E
BPS07-25	10581934	GW0035-092821	10581934010	2021-09-28	FG	B	0.023				E	0.0034				E	0.082				E
BPS11-01	10558077	GW0036-042621	10558077036	2021-04-26	FG	B	0.049				E	0.00026				E	0.0014				E
BPS11-01	10581934	GW0039-092921	10581934014	2021-09-29	FG-N	B	0.061				E	0.00041				E	0.0014				E
BPS11-01	10581934	GW0040-092921	10581934015	2021-09-29	FG-D	B	0.06					0.00036					0.0013				
BPS11-02	10558077	GW0037-042621	10558077037	2021-04-26	FG	B	0.0038				E	0.0023				E	0.0062				E
BPS11-02	10581934	GW0042-092921	10581934017	2021-09-29	FG	B	0.0032				E	0.0021				E	0.0062				E
BPS11-03	10560318	GW0120-050621	10560318026	2021-05-06	FG	B	0.0053				E	0.0078				E	0.0095				E
BPS11-03	10581942	GW0050-092421	10581942003	2021-09-24	FG	B	0.0043				E	0.0067				E	0.0076				E
BPS11-04	10558077	GW0003-042221	10558077003	2021-04-22	FG	B	0.022				E	0.0004				E	0.00043	U			E
BPS11-04	10581942	GW0051-092721	10581942004	2021-09-27	FG	B	0.021				E	0.0003				E	0.0005	U			E
BPS11-05A1	10558077	GW0040-042721	10558077040	2021-04-27	FG	B	0.035				E	0.0023				E	0.081				E

See Table B3 for laboratory and validation qualifer and code definitions

Table 5a. BPSOU 2021 Groundwater Monitoring Water Quality Results - Dissolved Metals

Location	SDG	Field Sample ID	Lab Sample ID	Monitoring Date	Sample Type	AB	HgDis (mg/L)	Lab Q	Val Q	DV Code	Status	PbDis (mg/L)	Lab Q	Val Q	DV Code	Status	ZnDis (mg/L)	Lab Q	Val Q	DV Code	Status
BPS07-08A	10558077	GW0035-042621	10558077035	2021-04-26	FG	B	0.0000045	U			E	0.0001				E	0.29				E
BPS07-08A	10581934	GW0038-092821	10581934013	2021-09-28	FG	B	0.000045	U			E	0.00013				E	0.19				E
BPS07-11A	10559096	GW0072-042921	10559096032	2021-04-29	FG	B	0.000045	U,MD			E	0.000043	U			E	2.4				E
BPS07-11A	10582497	GW0104-100121	10582497013	2021-10-01	FG	B	0.000045	U			E	0.000029	J			E	3.4	P6			E
BPS07-11B	10559096	GW0073-042921	10559096033	2021-04-29	FG	B	0.000045	U,MD			E	0.0023				E	22.7				E
BPS07-11B	10582497	GW0105-100121	10582497014	2021-10-01	FG	B	0.000045	U			E	0.002				E	19.6				E
BPS07-13A	10559096	GW0042-042821	10559096002	2021-04-28	FG	B	0.000045	U,MD			E	0.00011		J	FD	S	3.3				E
BPS07-13A	10582495	GW0070-093021	10582495001	2021-09-30	FG	B	0.000045	U			E	0.0002				E	3.4				E
BPS07-13B	10559096	GW0043-042821	10559096003	2021-04-28	FG	B	0.000045	U,MD			E	0.000055	J	J	FD	S	0.1				E
BPS07-13B	10582495	GW0071-093021	10582495002	2021-09-30	FG	B	0.000045	U			E	0.000048	J			E	0.092				E
BPS07-14A	10559096	GW0045-042821	10559096005	2021-04-28	FG	B	0.000045	U,MD			E	0.0016		J	FD	S	5.3				E
BPS07-14A	10582495	GW0073-093021	10582495004	2021-09-30	FG	B	0.000045	U			E	0.0027				E	3.8				E
BPS07-15A	10559096	GW0044-042821	10559096004	2021-04-28	FG	B	0.000045	U,MD			E	0.000043	U	UJ	FD	S	0.18				E
BPS07-15A	10582495	GW0072-093021	10582495003	2021-09-30	FG	B	0.000045	U			E	0.000071	J			E	0.31				E
BPS07-16A	10560318	GW0103-050621	10560318009	2021-05-06	FG-N	B	0.000045	U,MD			E	0.00022	U			E	0.63				E
BPS07-16A	10560318	GW0104-050621	10560318010	2021-05-06	FG-D	B	0.000045	U,MD				0.00022	U				0.66				
BPS07-16A	10580635	GW0005-092421	10580635005	2021-09-24	FG	B	0.0000047	U			E	0.000028	U			E	0.62				E
BPS07-16B	10560318	GW0106-050621	10560318012	2021-05-06	FG	B	0.000045	U,MD			E	0.00022	U			E	0.011	U			E
BPS07-16B	10580635	GW0006-092421	10580635006	2021-09-24	FG	B	0.0000047	U			E	0.000028	U			E	0.0082				E
BPS07-17A	10558077	GW0023-042221	10558077023	2021-04-22	FG	B	0.0000045	U			E	0.0019				E	2.6				E
BPS07-17A	10581934	GW0028-092721	10581934003	2021-09-27	FG	B	0.000045	U			E	0.00036				E	2.7				E
BPS07-18A	10558077	GW0021-042221	10558077021	2021-04-22	FG	B	0.0000045	U			E	0.0004				E	1.2				E
BPS07-18A	10581934	GW0026-092721	10581934001	2021-09-27	FG	B	0.000045	U			E	0.00024				E	1.4	P6			E
BPS07-18B	10558077	GW0022-042221	10558077022	2021-04-22	FG	B	0.0000045	U			E	0.000075	J			E	8.2				E
BPS07-18B	10581934	GW0027-092721	10581934002	2021-09-27	FG	B	0.000045	U			E	0.00011				E	8.7				E
BPS07-21	10559096	GW0061-042821	10559096021	2021-04-28	FG	B	0.000045	U,MD			E	0.00044				E	0.21				E
BPS07-21	10581942	GW0069-093021	10581942022	2021-09-30	FG	B	0.000045	U			E	0.0014				E	0.3				E
BPS07-21B	10559096	GW0062-042821	10559096022	2021-04-28	FG	B	0.000045	U,MD			E	0.00006	J			E	0.17				E
BPS07-21B	10582497	GW0092-093021	10582497001	2021-09-30	FG	B	0.000045	U			E	0.000035	J			E	0.19				E
BPS07-21C	10559096	GW0063-042821	10559096023	2021-04-28	FG	B	0.000045	U,MD			E	0.000043	U			E	0.18				E
BPS07-21C	10582497	GW0093-093021	10582497002	2021-09-30	FG	B	0.000045	U			E	0.000095	J			E	0.19				E
BPS07-22B	10559096	GW0064-042821	10559096024	2021-04-28	FG	B	0.000045	U,MD			E	0.000043	U			E	0.24				E
BPS07-22B	10582497	GW0094-100121	10582497003	2021-10-01	FG	B	0.000045	U			E	0.000028	U			E	0.27				E
BPS07-22C	10559096	GW0065-042821	10559096025	2021-04-28	FG	B	0.000045	U,MD			E	0.000043	U			E	0.019				E
BPS07-22C	10582497	GW0095-100121	10582497004	2021-10-01	FG	B	0.000045	U			E	0.000028	U			E	0.021				E
BPS07-22R	10559096	GW0066-042821	10559096026	2021-04-28	FG	B	0.000045	U,MD			E	0.000046	J			E	0.0028	J			E
BPS07-22R	10582497	GW0096-100121	10582497005	2021-10-01	FG	B	0.000045	U			E	0.000099	J			E	0.0021	J			E
BPS07-23	10559096	GW0067-042921	10559096027	2021-04-29	FG	B	0.000045	U,MD			E	0.00078				E	0.033				E
BPS07-23	10582497	GW0097-100121	10582497006	2021-10-01	FG	B	0.000045	U			E	0.0002				E	0.023				E
BPS07-24	10559096	GW0071-042921	10559096031	2021-04-29	FG	B	0.000045	U,MD			E	0.000043	U			E	4				E
BPS07-24	10582497	GW0103-100121	10582497012	2021-10-01	FG	B	0.000045	U			E	0.000028	U			E	4.1				E
BPS07-25	10558077	GW0030-042321	10558077030	2021-04-23	FG	B	0.0000045	U			E	0.000064	J			E	0.4				E
BPS07-25	10581934	GW0035-092821	10581934010	2021-09-28	FG	B	0.000045	U			E	0.00037				E	0.4				E
BPS11-01	10558077	GW0036-042621	10558077036	2021-04-26	FG	B	0.0000045	U			E	0.000065	J			E	0.004	J			E
BPS11-01	10581934	GW0039-092921	10581934014	2021-09-29	FG-N	B	0.000045	U			E	0.000088	J			E	0.0035	J			E
BPS11-01	10581934	GW0040-092921	10581934015	2021-09-29	FG-D	B	0.000045	U				0.000089	J				0.0036	J			
BPS11-02	10558077	GW0037-042621	10558077037	2021-04-26	FG	B	0.0000045	U			E	0.000043	U			E	0.15				E
BPS11-02	10581934	GW0042-092921	10581934017	2021-09-29	FG	B	0.000045	U			E	0.00005	J			E	0.13				E
BPS11-03	10560318	GW0120-050621	10560318026	2021-05-06	FG	B	0.000045	U			E	0.000054	J			E	0.79	P6			E
BPS11-03	10581942	GW0050-092421	10581942003	2021-09-24	FG	B	0.000045	U			E	0.000037	J			E	0.7				E
BPS11-04	10558077	GW0003-042221	10558077003	2021-04-22	FG	B	0.000007	J			E	0.000043	U			E	0.026		J+	FB	S
BPS11-04	10581942	GW0051-092721	10581942004	2021-09-27	FG	B	0.000045	U			E	0.000028	U			E	0.019				E
BPS11-05A1	10558077	GW0040-042721	10558077040	2021-04-27	FG	B	0.0000045	U			E	0.00014				E	0.92				E

See Table B3 for laboratory and validation qualifer and code definitions

Table 5a. BPSOU 2021 Groundwater Monitoring Water Quality Results - Dissolved Metals

Location	SDG	Field Sample ID	Lab Sample ID	Monitoring Date	Sample Type	AB	AsDis (mg/L)	Lab Q	Val Q	DV Code	Status	CdDis (mg/L)	Lab Q	Val Q	DV Code	Status	CuDis (mg/L)	Lab Q	Val Q	DV Code	Status
BPS11-05A1	10581934	GW0045-092921	10581934020	2021-09-29	FG	B	0.055				E	0.0028				E	0.094				E
BPS11-05A2	10558077	GW0026-042721	10558077026	2021-04-27	FG	B	0.0034				E	0.00071				E	0.0013				E
BPS11-05A2	10581934	GW0046-092921	10581934021	2021-09-29	FG	B	0.0034				E	0.00082				E	0.0012				E
BPS11-06	10559096	GW0041-042821	10559096001	2021-04-28	FG	B	0.11				E	0.0026				E	0.056				E
BPS11-06	10581934	GW0047-092921	10581934022	2021-09-29	FG	B	0.11				E	0.0027				E	0.052				E
BPS11-07	10558077	GW0038-042621	10558077038	2021-04-26	FG	B	0.023				E	0.0016				E	0.004				E
BPS11-07	10581934	GW0043-092921	10581934018	2021-09-29	FG	B	0.022				E	0.0016				E	0.0039				E
BPS11-08	10558077	GW0039-042721	10558077039	2021-04-27	FG	B	0.0014				E	0.000056	J			E	0.00087	J			E
BPS11-08	10581934	GW0044-092921	10581934019	2021-09-29	FG	B	0.0011				E	0.000063	J			E	0.00062	J			E
BPS11-09	10558077	GW0004-042221	10558077004	2021-04-22	FG	B	0.0051				E	0.00036				E	0.0014		J+	FB	S
BPS11-09	10581942	GW0052-092721	10581942005	2021-09-27	FG	B	0.0045				E	0.00034				E	0.0013				E
BPS11-10B	10559096	GW0074-043021	10559096034	2021-04-30	FG-N	B	0.0061				E	0.0076				E	0.18				E
BPS11-10B	10559096	GW0075-043021	10559096035	2021-04-30	FG-D	B	0.006					0.0072					0.17				
BPS11-10B	10582497	GW0106-100421	10582497015	2021-10-04	FG	B	0.0065				E	0.0083				E	0.18				E
BPS11-10C	10559096	GW0077-043021	10559096037	2021-04-30	FG	B	0.0032				E	0.0019				E	0.00095	J			E
BPS11-10C	10582497	GW0107-100421	10582497016	2021-10-04	FG	B	0.0034				E	0.0021				E	0.0011				E
BPS11-11A1	10560318	GW0109-050521	10560318015	2021-05-05	FG	B	0.0021	J			E	0.0012				E	0.0024	J			E
BPS11-11A1	10580635	GW0007-092421	10580635007	2021-09-24	FG	B	0.0036				E	0.0018				E	0.0051				E
BPS11-11A2	10560318	GW0110-050521	10560318016	2021-05-05	FG	B	0.0019				E	0.00041				E	0.00043	U			E
BPS11-11A2	10580635	GW0008-092421	10580635008	2021-09-24	FG-N	B	0.0019				E	0.00041				E	0.0005	U			E
BPS11-11A2	10580635	GW0009-092421	10580635009	2021-09-24	FG-D	B	0.0019					0.00041					0.00088	J			
BPS11-11B	10560318	GW0111-050521	10560318017	2021-05-05	FG	B	0.0032				E	0.0024				E	0.011				E
BPS11-11B	10580635	GW0011-092421	10580635011	2021-09-24	FG	B	0.0031				E	0.0024				E	0.01				E
BPS11-11C	10560318	GW0112-050521	10560318018	2021-05-05	FG	B	0.003				E	0.0004				E	0.00043	U			E
BPS11-11C	10580635	GW0012-092421	10580635012	2021-09-24	FG	B	0.0027				E	0.00038				E	0.0005	U			E
BPS11-12A	10560318	GW0115-050621	10560318021	2021-05-06	FG	B	0.0029				E	0.00039	B			E	0.0021				E
BPS11-12A	10580635	GW0023-092421	10580635023	2021-09-24	FG	B	0.0036				E	0.00039				E	0.0025				E
BPS11-13B	10559096	GW0068-042921	10559096028	2021-04-29	FG	B	0.0016				E	0.0031				E	0.03				E
BPS11-13B	10582497	GW0098-100121	10582497007	2021-10-01	FG-N	B	0.0019				E	0.0035				E	0.033				E
BPS11-13B	10582497	GW0099-100121	10582497008	2021-10-01	FG-D	B	0.0019					0.0035					0.034				
BPS11-14A	10559096	GW0069-042921	10559096029	2021-04-29	FG	B	0.0011				E	0.00024				E	0.0024				E
BPS11-14A	10582497	GW0101-100121	10582497010	2021-10-01	FG	B	0.0012				E	0.00027				E	0.0024				E
BPS11-14B	10559096	GW0070-042921	10559096030	2021-04-29	FG	B	0.0021				E	0.011				E	0.23				E
BPS11-14B	10582497	GW0102-100121	10582497011	2021-10-01	FG	B	0.0023				E	0.012				E	0.25				E
BPS11-15	10560318	GW0107-050621	10560318013	2021-05-06	FG	B	0.0014	J			E	0.00015	U			E	0.0021	U			E
BPS11-15	10580635	GW0019-092421	10580635019	2021-09-24	FG	B	0.0018				E	0.00016				E	0.00089	J			E
BPS11-16	10560318	GW0108-050621	10560318014	2021-05-06	FG	B	0.003				E	0.00016	J			E	0.0021	U			E
BPS11-16	10580635	GW0020-092421	10580635020	2021-09-24	FG-N	B	0.0039				E	0.00021				E	0.00051	J			E
BPS11-16	10580635	GW0021-092421	10580635021	2021-09-24	FG-D	B	0.0037					0.0002					0.0005	U			
BPS11-17C	10559096	GW0080-050321	10559096040	2021-05-03	FG	B	0.0052				E	0.0098				E	0.7				E
BPS11-17C	10582497	GW0110-100421	10582497018	2021-10-04	FG	B	0.0057				E	0.01				E	0.78				E
BPS11-18B	10559096	GW0049-042921	10559096009	2021-04-29	FG	B	0.0016				E	0.87				E	22.4				E
BPS11-18B	10582497	GW0112-100421	10582497020	2021-10-04	FG	B	0.0016				E	0.79				E	21.8				E
BPS11-18C	10559096	GW0050-042921	10559096010	2021-04-29	FG	B	0.0033				E	0.09				E	5				E
BPS11-18C	10582497	GW0113-100421	10582497021	2021-10-04	FG	B	0.0039				E	0.1				E	5				E
BPS11-19A2	10560318	GW0113-050621	10560318019	2021-05-06	FG	B	0.0017				E	0.00055				E	0.001				E
BPS11-19A2	10580635	GW0013-092421	10580635013	2021-09-24	FG	B	0.0016				E	0.00052				E	0.00076	J			E
BPS11-19B	10560318	GW0114-050621	10560318020	2021-05-06	FG	B	0.0046				E	0.0028				E	0.04				E
BPS11-19B	10580635	GW0014-092421	10580635014	2021-09-24	FG	B	0.005				E	0.004				E	0.041				E
BT-98-02	10560318	GW0116-050621	10560318022	2021-05-06	FG-N	B	0.00078				E	0.0082				E	0.006				E
BT-98-02	10560318	GW0117-050621	10560318023	2021-05-06	FG-D	B	0.00084					0.0093					0.007				
BT-98-02	10580635	GW0025-092421	10580635025	2021-09-24	FG	B	0.00095				E	0.0089				E	0.0069				E
BT-98-02B	10560318	GW0119-050621	10560318025	2021-05-06	FG	B	0.00084				E	0.0011				E	0.001				E

See Table B3 for laboratory and validation qualifer and code definitions

Table 5a. BPSOU 2021 Groundwater Monitoring Water Quality Results - Dissolved Metals

Location	SDG	Field Sample ID	Lab Sample ID	Monitoring Date	Sample Type	AB	HgDis (mg/L)	Lab Q	Val Q	DV Code	Status	PbDis (mg/L)	Lab Q	Val Q	DV Code	Status	ZnDis (mg/L)	Lab Q	Val Q	DV Code	Status
BPS11-05A1	10581934	GW0045-092921	10581934020	2021-09-29	FG	B	0.000045	U			E	0.00028				E	0.94				E
BPS11-05A2	10558077	GW0026-042721	10558077026	2021-04-27	FG	B	0.0000045	U			E	0.000043	U			E	0.077				E
BPS11-05A2	10581934	GW0046-092921	10581934021	2021-09-29	FG	B	0.000045	U			E	0.000028	U			E	0.079				E
BPS11-06	10559096	GW0041-042821	10559096001	2021-04-28	FG	B	0.000045	U,MD			E	0.000043	U	UJ	FD	S	0.25				E
BPS11-06	10581934	GW0047-092921	10581934022	2021-09-29	FG	B	0.000045	U			E	0.000028	U			E	0.23				E
BPS11-07	10558077	GW0038-042621	10558077038	2021-04-26	FG	B	0.0000045	U			E	0.000064	J			E	0.13				E
BPS11-07	10581934	GW0043-092921	10581934018	2021-09-29	FG	B	0.000045	U			E	0.000074	J			E	0.13				E
BPS11-08	10558077	GW0039-042721	10558077039	2021-04-27	FG	B	0.0000045	U			E	0.000068	J			E	0.027				E
BPS11-08	10581934	GW0044-092921	10581934019	2021-09-29	FG	B	0.000045	U			E	0.000063	J			E	0.019				E
BPS11-09	10558077	GW0004-042221	10558077004	2021-04-22	FG	B	0.000008	J			E	0.000043	U			E	0.047				E
BPS11-09	10581942	GW0052-092721	10581942005	2021-09-27	FG	B	0.000045	U			E	0.000033	J			E	0.042				E
BPS11-10B	10559096	GW0074-043021	10559096034	2021-04-30	FG-N	B	0.000045	U,MD			E	0.000054	J			E	1.3				E
BPS11-10B	10559096	GW0075-043021	10559096035	2021-04-30	FG-D	B	0.000045	U,MD				0.000059	J				1.1				
BPS11-10B	10582497	GW0106-100421	10582497015	2021-10-04	FG	B	0.000045	U			E	0.000083	J			E	1.3				E
BPS11-10C	10559096	GW0077-043021	10559096037	2021-04-30	FG	B	0.000045	U,MD			E	0.000043	U	UJ	FD	S	0.14				E
BPS11-10C	10582497	GW0107-100421	10582497016	2021-10-04	FG	B	0.000045	U			E	0.000028	U			E	0.16				E
BPS11-11A1	10560318	GW0109-050521	10560318015	2021-05-05	FG	B	0.000045	U,MD			E	0.00022	U			E	0.088				E
BPS11-11A1	10580635	GW0007-092421	10580635007	2021-09-24	FG	B	0.0000047	U			E	0.00012				E	0.12				E
BPS11-11A2	10560318	GW0110-050521	10560318016	2021-05-05	FG	B	0.000045	U			E	0.000043	U			E	0.016				E
BPS11-11A2	10580635	GW0008-092421	10580635008	2021-09-24	FG-N	B	0.0000047	U			E	0.000028	U			E	0.016				E
BPS11-11A2	10580635	GW0009-092421	10580635009	2021-09-24	FG-D	B	0.0000047	U				0.00012					0.017				
BPS11-11B	10560318	GW0111-050521	10560318017	2021-05-05	FG	B	0.000045	U,MD			E	0.000097	J			E	0.19		J+	CRQL	S
BPS11-11B	10580635	GW0011-092421	10580635011	2021-09-24	FG	B	0.0000047	U			E	0.000068	J			E	0.18				E
BPS11-11C	10560318	GW0112-050521	10560318018	2021-05-05	FG	B	0.000045	U,MD			E	0.000043	U			E	0.015				E
BPS11-11C	10580635	GW0012-092421	10580635012	2021-09-24	FG	B	0.0000047	U			E	0.000041	J			E	0.014				E
BPS11-12A	10560318	GW0115-050621	10560318021	2021-05-06	FG	B	0.000045	U,MD			E	0.000043	U			E	0.02				E
BPS11-12A	10580635	GW0023-092421	10580635023	2021-09-24	FG	B	0.0000047	U			E	0.000028	U			E	0.024				E
BPS11-13B	10559096	GW0068-042921	10559096028	2021-04-29	FG	B	0.000045	U,MD			E	0.000043	U			E	0.44				E
BPS11-13B	10582497	GW0098-100121	10582497007	2021-10-01	FG-N	B	0.000045	U			E	0.000028	U			E	0.48				E
BPS11-13B	10582497	GW0099-100121	10582497008	2021-10-01	FG-D	B	0.000045	U				0.00006	J				0.53				
BPS11-14A	10559096	GW0069-042921	10559096029	2021-04-29	FG	B	0.000045	U,MD			E	0.000043	U			E	0.017				E
BPS11-14A	10582497	GW0101-100121	10582497010	2021-10-01	FG	B	0.000045	U			E	0.000028	U			E	0.02				E
BPS11-14B	10559096	GW0070-042921	10559096030	2021-04-29	FG	B	0.000045	U,MD			E	0.00011				E	2.4				E
BPS11-14B	10582497	GW0102-100121	10582497011	2021-10-01	FG	B	0.000045	U			E	0.00008	J			E	2.9				E
BPS11-15	10560318	GW0107-050621	10560318013	2021-05-06	FG	B	0.000045	U,MD			E	0.00022	U			E	0.011	U			E
BPS11-15	10580635	GW0019-092421	10580635019	2021-09-24	FG	B	0.0000047	U			E	0.000034	J	UJ	FB	S	0.0076				E
BPS11-16	10560318	GW0108-050621	10560318014	2021-05-06	FG	B	0.000045	U,MD			E	0.00022	U			E	0.011	U			E
BPS11-16	10580635	GW0020-092421	10580635020	2021-09-24	FG-N	B	0.0000047	U			E	0.000042	J	UJ	FB	S	0.0077				E
BPS11-16	10580635	GW0021-092421	10580635021	2021-09-24	FG-D	B	0.0000047	U				0.000045	J	UJ	FB		0.0069				
BPS11-17C	10559096	GW0080-050321	10559096040	2021-05-03	FG	B	0.000045	U,MD			E	0.000045	J	J	FD	S	1.8				E
BPS11-17C	10582497	GW0110-100421	10582497018	2021-10-04	FG	B	0.000045	U			E	0.000033	J			E	2.1				E
BPS11-18B	10559096	GW0049-042921	10559096009	2021-04-29	FG	B	0.000045	U,MD			E	0.019		J	FD	S	217				E
BPS11-18B	10582497	GW0112-100421	10582497020	2021-10-04	FG	B	0.000045	U			E	0.017				E	219				E
BPS11-18C	10559096	GW0050-042921	10559096010	2021-04-29	FG	B	0.000045	U,MD			E	0.00034		J	FD	S	31.1				E
BPS11-18C	10582497	GW0113-100421	10582497021	2021-10-04	FG	B	0.000045	U			E	0.00034				E	31.8				E
BPS11-19A2	10560318	GW0113-050621	10560318019	2021-05-06	FG	B	0.000045	U,MD			E	0.000043	U			E	0.07				E
BPS11-19A2	10580635	GW0013-092421	10580635013	2021-09-24	FG	B	0.0000047	U			E	0.000034	J			E	0.068				E
BPS11-19B	10560318	GW0114-050621	10560318020	2021-05-06	FG	B	0.000045	U,MD			E	0.000043	U			E	0.34				E
BPS11-19B	10580635	GW0014-092421	10580635014	2021-09-24	FG	B	0.0000047	U			E	0.00012				E	0.41				E
BT-98-02	10560318	GW0116-050621	10560318022	2021-05-06	FG-N	B	0.000045	U			E	0.000043	U			E	2.7				E
BT-98-02	10560318	GW0117-050621	10560318023	2021-05-06	FG-D	B	0.000045	U				0.000043	U				3				
BT-98-02	10580635	GW0025-092421	10580635025	2021-09-24	FG	B	0.0000047	U			E	0.00008	J	UJ	FB	S	2.7	P6			E
BT-98-02B	10560318	GW0119-050621	10560318025	2021-05-06	FG	B	0.000045	U			E	0.000043	U			E	0.054				E

See Table B3 for laboratory and validation qualifer and code definitions

Table 5a. BPSOU 2021 Groundwater Monitoring Water Quality Results - Dissolved Metals

Location	SDG	Field Sample ID	Lab Sample ID	Monitoring Date	Sample Type	AB	AsDis (mg/L)	Lab Q	Val Q	DV Code	Status	CdDis (mg/L)	Lab Q	Val Q	DV Code	Status	CuDis (mg/L)	Lab Q	Val Q	DV Code	Status
BT-98-02B	10580635	GW0024-092421	10580635024	2021-09-24	FG	B	0.0008				E	0.0012				E	0.0012				E
FP98-1	10559096	GW0047-042821	10559096007	2021-04-28	FG	B	0.4				E	0.059				E	0.7				E
FP98-1	10582495	GW0077-100421	10582495008	2021-10-04	FG	B	0.31				E	0.031				E	0.079				E
FP98-1B	10559096	GW0046-042821	10559096006	2021-04-28	FG	B	0.0012				E	0.0061				E	0.003		J+	FB	S
FP98-1B	10582495	GW0074-093021	10582495005	2021-09-30	FG-N	B	0.0012				E	0.0053				E	0.0033				E
FP98-1B	10582495	GW0075-093021	10582495006	2021-09-30	FG-D	B	0.0013					0.0056					0.0031				
FP98-2	10558077	GW0029-042321	10558077029	2021-04-23	FG	B	0.0016				E	0.023				E	0.0032				E
FP98-2	10581934	GW0034-092821	10581934009	2021-09-28	FG	B	0.0019				E	0.024				E	0.003				E
FP98-6	10558077	GW0028-042321	10558077028	2021-04-23	FG	B	0.24				E	0.0026				E	0.0015				E
FP98-6	10581934	GW0033-092821	10581934008	2021-09-28	FG	B	0.35				E	0.0028				E	0.0016				E
GS-08R	10559096	GW0056-043021	10559096016	2021-04-30	FG	B	0.0022				E	0.0028				E	0.0017		J+	FB	S
GS-08R	10582495	GW0084-100421	10582495015	2021-10-04	FG	B	0.0024				E	0.003				E	0.0012				E
GS-09R	10559096	GW0057-043021	10559096017	2021-04-30	FG	B	0.003				E	0.19				E	15.7				E
GS-09R	10582495	GW0085-100121	10582495016	2021-10-01	FG	B	0.0031				E	0.17				E	16.2				E
GS-11R	10559096	GW0081-050321	10559096041	2021-05-03	FG	B	0.00099				E	0.66	P6			E	31.4	P6			E
GS-11R	10582495	GW0086-100121	10582495017	2021-10-01	FG	B	0.00089				E	0.97				E	41.2				E
GS-13A	10558077	GW0031-042321	10558077031	2021-04-23	FG	B	0.02				E	0.0086				E	0.12				E
GS-13A	10581934	GW0036-092821	10581934011	2021-09-28	FG	B	0.022				E	0.0094				E	0.18				E
GS-30D	10559096	GW0051-042921	10559096011	2021-04-29	FG	B	0.0028				E	0.032				E	2.2	P6			E
GS-30D	10582495	GW0078-100121	10582495009	2021-10-01	FG	B	0.0031				E	0.033				E	2.3				E
GS-30S	10559096	GW0052-042921	10559096012	2021-04-29	FG	B	0.013				E	0.00003	U			E	0.0028		J+	FB	S
GS-30S	10582495	GW0079-100121	10582495010	2021-10-01	FG	B	0.013				E	0.000016	U			E	0.0005	U			E
GS-31D	10558077	GW0012-042721	10558077012	2021-04-27	FG	B	0.0013				E	0.001				E	0.0028		J+	FB	S
GS-31D	10581942	GW0062-092821	10581942015	2021-09-28	FG	B	0.0012				E	0.00093				E	0.0024				E
GS-31S	10558077	GW0013-042721	10558077013	2021-04-27	FG	B	0.0021				E	0.00028				E	0.0022		J+	FB	S
GS-31S	10581942	GW0063-092821	10581942016	2021-09-28	FG	B	0.0023				E	0.00035				E	0.0022				E
GS-32D	10559096	GW0054-042921	10559096014	2021-04-29	FG	B	0.0046				E	0.024				E	0.62				E
GS-32D	10582495	GW0081-100121	10582495012	2021-10-01	FG	B	0.0053				E	0.025				E	0.79				E
GS-32S	10559096	GW0055-042921	10559096015	2021-04-29	FG	B	0.0034				E	0.017				E	0.7				E
GS-32S	10582495	GW0082-100121	10582495013	2021-10-01	FG	B	0.0034				E	0.017				E	0.2				E
GS-40R	10559096	GW0058-050321	10559096018	2021-05-03	FG-N	B	0.00069				E	0.12				E	0.19				E
GS-40R	10559096	GW0059-050321	10559096019	2021-05-03	FG-D	B	0.00076					0.12					0.2				
GS-40R	10582495	GW0083-100421	10582495014	2021-10-04	FG	B	0.00078				E	0.12				E	0.19				E
GS-44D	10558077	GW0014-042721	10558077014	2021-04-27	FG	B	0.0009				E	0.028				E	1.1				E
GS-44D	10581942	GW0064-092821	10581942017	2021-09-28	FG	B	0.00092				E	0.027				E	1.4				E
GS-44S	10558077	GW0015-042721	10558077015	2021-04-27	FG	B	0.00025	J			E	0.023				E	0.92				E
GS-44S	10581942	GW0065-092821	10581942018	2021-09-28	FG	B	0.00036	J			E	0.012				E	0.36				E
GS-46D	10558077	GW0005-042321	10558077005	2021-04-23	FG	B	0.00065				E	0.00049				E	0.0076		J+	FB	S
GS-46D	10581942	GW0053-092821	10581942006	2021-09-28	FG	B	0.00059				E	0.00045				E	0.0059				E
GS-46S	10558077	GW0006-042321	10558077006	2021-04-23	FG	B	0.0016				E	0.0018				E	0.01				E
GS-46S	10581942	GW0054-092821	10581942007	2021-09-28	FG	B	0.0019				E	0.0011				E	0.0075				E
GWQC	10558077	GW0018-042821	10558077018	2021-04-28	FB	B	0.00014	U				0.00003	U				0.00089	J			
GWQC	10558077	GW0034-042721	10558077034	2021-04-27	FB	B	0.00014	U				0.00003	U				0.00043	U			
GWQC	10559096	GW0076-043021	10559096036	2021-04-30	FB	B	0.00014	U				0.00003	U				0.00043	U			
GWQC	10559096	GW0060-050321	10559096020	2021-05-03	FB	B	0.00014	U				0.00003	U				0.00097	J			
GWQC	10559096	GW0091-050421	10559096050	2021-05-04	FB	B	0.00014	U				0.00003	U				0.00045	J			
GWQC	10560318	GW0105-050621	10560318011	2021-05-06	FB	B	0.0007	U				0.00015	U				0.0021	U			
GWQC	10560318	GW0118-050621	10560318024	2021-05-06	FB	B	0.00014	U				0.00003	U				0.00043	U			
GWQC	10560315	GW0124-050721	10560315003	2021-05-07	FB	B	0.00014	U				0.00003	U				0.00052	J			
GWQC	10580635	GW0010-092421	10580635010	2021-09-24	FB	B	0.000083	U				0.000016	U				0.0005	U			
GWQC	10580635	GW0022-092421	10580635022	2021-09-24	FB	B	0.000083	U				0.000016	U				0.0005	U			
GWQC	10581934	GW0041-092921	10581934016	2021-09-29	FB	B	0.000083	U				0.000016	U				0.0005	U			
GWQC	10581942	GW0057-092821	10581942010	2021-09-28	FB	B	0.000083	U				0.00002	J				0.0005	U			

See Table B3 for laboratory and validation qualifer and code definitions

Table 5a. BPSOU 2021 Groundwater Monitoring Water Quality Results - Dissolved Metals

Location	SDG	Field Sample ID	Lab Sample ID	Monitoring Date	Sample Type	AB	HgDis (mg/L)	Lab Q	Val Q	DV Code	Status	PbDis (mg/L)	Lab Q	Val Q	DV Code	Status	ZnDis (mg/L)	Lab Q	Val Q	DV Code	Status
BT-98-02B	10580635	GW0024-092421	10580635024	2021-09-24	FG	B	0.0000047	U			E	0.000028	U			E	0.054				E
FP98-1	10559096	GW0047-042821	10559096007	2021-04-28	FG	B	0.0011				E	0.000043	U	UJ	FD	S	43.8				E
FP98-1	10582495	GW0077-100421	10582495008	2021-10-04	FG	B	0.000045	U			E	0.000071	J			E	18.8				E
FP98-1B	10559096	GW0046-042821	10559096006	2021-04-28	FG	B	0.000045	U,MD			E	0.000043	U	UJ	FD	S	0.51				E
FP98-1B	10582495	GW0074-093021	10582495005	2021-09-30	FG-N	B	0.000045	U			E	0.000057	J			E	0.58	P6			E
FP98-1B	10582495	GW0075-093021	10582495006	2021-09-30	FG-D	B	0.000045	U				0.000043	J				0.55				
FP98-2	10558077	GW0029-042321	10558077029	2021-04-23	FG	B	0.0000045	U			E	0.000043	U			E	1.1				E
FP98-2	10581934	GW0034-092821	10581934009	2021-09-28	FG	B	0.000045	U			E	0.000028	U			E	1.3				E
FP98-6	10558077	GW0028-042321	10558077028	2021-04-23	FG	B	0.0000045	U			E	0.00019				E	0.91				E
FP98-6	10581934	GW0033-092821	10581934008	2021-09-28	FG	B	0.000045	U			E	0.00032				E	0.9				E
GS-08R	10559096	GW0056-043021	10559096016	2021-04-30	FG	B	0.000045	U,MD			E	0.000044	J	J	FD	S	0.091				E
GS-08R	10582495	GW0084-100421	10582495015	2021-10-04	FG	B	0.000045	U			E	0.000052	J			E	0.1				E
GS-09R	10559096	GW0057-043021	10559096017	2021-04-30	FG	B	0.00012	J,1M			E	0.000089	J	J	FD	S	68.2				E
GS-09R	10582495	GW0085-100121	10582495016	2021-10-01	FG	B	0.00009	J			E	0.000031	J			E	70.3				E
GS-11R	10559096	GW0081-050321	10559096041	2021-05-03	FG	B	0.000045	U,MD			E	0.33		J	FD	S	110	P6			E
GS-11R	10582495	GW0086-100121	10582495017	2021-10-01	FG	B	0.000045	U			E	0.69				E	151				E
GS-13A	10558077	GW0031-042321	10558077031	2021-04-23	FG	B	0.0014				E	0.018				E	1.4	P6			E
GS-13A	10581934	GW0036-092821	10581934011	2021-09-28	FG	B	0.002				E	0.014				E	1.5	P6			E
GS-30D	10559096	GW0051-042921	10559096011	2021-04-29	FG	B	0.000045	U,MD			E	0.000079	J	J	FD	S	7.8	P6			E
GS-30D	10582495	GW0078-100121	10582495009	2021-10-01	FG	B	0.000045	U			E	0.000091	J			E	8.3				E
GS-30S	10559096	GW0052-042921	10559096012	2021-04-29	FG	B	0.000045	U,MD			E	0.000043	U	UJ	FD	S	0.0023	J	UJ	FB	S
GS-30S	10582495	GW0079-100121	10582495010	2021-10-01	FG	B	0.000045	U			E	0.000028	U			E	0.002	U			E
GS-31D	10558077	GW0012-042721	10558077012	2021-04-27	FG	B	0.00001				E	0.000043	U			E	0.088				E
GS-31D	10581942	GW0062-092821	10581942015	2021-09-28	FG	B	0.000045	U			E	0.000028	U			E	0.08				E
GS-31S	10558077	GW0013-042721	10558077013	2021-04-27	FG	B	0.000008	J			E	0.000043	U			E	0.0048	J	UJ	FB	S
GS-31S	10581942	GW0063-092821	10581942016	2021-09-28	FG	B	0.000045	U			E	0.00014				E	0.0034	J			E
GS-32D	10559096	GW0054-042921	10559096014	2021-04-29	FG	B	0.000045	U,MD			E	0.000043	U	UJ	FD	S	5.4				E
GS-32D	10582495	GW0081-100121	10582495012	2021-10-01	FG	B	0.000045	U			E	0.00023				E	6.6				E
GS-32S	10559096	GW0055-042921	10559096015	2021-04-29	FG	B	0.000045	U,MD			E	0.00016		J	FD	S	3				E
GS-32S	10582495	GW0082-100121	10582495013	2021-10-01	FG	B	0.000045	U			E	0.000043	J			E	3.2				E
GS-40R	10559096	GW0058-050321	10559096018	2021-05-03	FG-N	B	0.000045	U,MD			E	0.0012		J	FD	S	49.3				E
GS-40R	10559096	GW0059-050321	10559096019	2021-05-03	FG-D	B	0.000045	U,MD				0.0041		J	FD		49.4				
GS-40R	10582495	GW0083-100421	10582495014	2021-10-04	FG	B	0.000045	U			E	0.0013				E	50.7				E
GS-44D	10558077	GW0014-042721	10558077014	2021-04-27	FG	B	0.000008	J			E	0.00011				E	6.1				E
GS-44D	10581942	GW0064-092821	10581942017	2021-09-28	FG	B	0.000045	U			E	0.000066	J			E	7.5				E
GS-44S	10558077	GW0015-042721	10558077015	2021-04-27	FG	B	0.0000045	U			E	0.000043	U			E	5.9				E
GS-44S	10581942	GW0065-092821	10581942018	2021-09-28	FG	B	0.000045	U			E	0.000045	J			E	3.5				E
GS-46D	10558077	GW0005-042321	10558077005	2021-04-23	FG	B	0.000007	J			E	0.000043	U			E	0.15				E
GS-46D	10581942	GW0053-092821	10581942006	2021-09-28	FG	B	0.000045	U			E	0.000028	U			E	0.15				E
GS-46S	10558077	GW0006-042321	10558077006	2021-04-23	FG	B	0.000008	J			E	0.000043	U			E	0.26				E
GS-46S	10581942	GW0054-092821	10581942007	2021-09-28	FG	B	0.000045	U			E	0.00012				E	0.15				E
GWQC	10558077	GW0018-042821	10558077018	2021-04-28	FB	B	0.0000045	U				0.000043	U				0.0044	J			
GWQC	10558077	GW0034-042721	10558077034	2021-04-27	FB	B	0.0000045	U				0.000043	U				0.0023	U			
GWQC	10559096	GW0076-043021	10559096036	2021-04-30	FB	B	0.000045	U,MD				0.000043	U				0.0023	U			
GWQC	10559096	GW0060-050321	10559096020	2021-05-03	FB	B	0.000045	U,MD				0.000043	U				0.007				
GWQC	10559096	GW0091-050421	10559096050	2021-05-04	FB	B	0.000045	U,MD				0.000043	U				0.0023	U			
GWQC	10560318	GW0105-050621	10560318011	2021-05-06	FB	B	0.000045	U,MD				0.00022	U				0.011	U			
GWQC	10560318	GW0118-050621	10560318024	2021-05-06	FB	B	0.000045	U				0.000043	U				0.0023	U			
GWQC	10560315	GW0124-050721	10560315003	2021-05-07	FB	B	0.000045	U,MD				0.000043	U				0.0023	U			
GWQC	10580635	GW0010-092421	10580635010	2021-09-24	FB	B	0.0000047	U				0.000028	U				0.002	U			
GWQC	10580635	GW0022-092421	10580635022	2021-09-24	FB	B	0.0000047	U				0.000058	J				0.002	U			
GWQC	10581934	GW0041-092921	10581934016	2021-09-29	FB	B	0.000045	U				0.000028	U				0.002	U			
GWQC	10581942	GW0057-092821	10581942010	2021-09-28	FB	B	0.000045	U				0.000035	J				0.002	U			

See Table B3 for laboratory and validation qualifer and code definitions

Table 5a. BPSOU 2021 Groundwater Monitoring Water Quality Results - Dissolved Metals

Location	SDG	Field Sample ID	Lab Sample ID	Monitoring Date	Sample Type	AB	AsDis (mg/L)	Lab Q	Val Q	DV Code	Status	CdDis (mg/L)	Lab Q	Val Q	DV Code	Status	CuDis (mg/L)	Lab Q	Val Q	DV Code	Status
GWQC	10582495	GW0076-093021	10582495007	2021-09-30	FB	B	0.000083	U				0.000016	U				0.0005	U			
GWQC	10582497	GW0100-100121	10582497009	2021-10-01	FB	B	0.000083	U				0.000016	U				0.0005	U			
GWQC	10583409	GW0117-100521	10583409004	2021-10-05	FB	B	0.000083	U				0.000016	J				0.0025				
HCA-B1	10558077	GW0025-042221	10558077025	2021-04-22	FG	B	0.001				E	0.039				E	1.6				E
HCA-B1	10581934	GW0030-092721	10581934005	2021-09-27	FG	B	0.0011				E	0.036				E	1.6				E
HCA-B2	10558077	GW0024-042221	10558077024	2021-04-22	FG	B	0.05				E	0.00003	U			E	0.00072	J			E
HCA-B2	10581934	GW0029-092721	10581934004	2021-09-27	FG	B	0.051				E	0.000016	U			E	0.0005	U			E
MF-07	10559096	GW0048-042921	10559096008	2021-04-29	FG	B	0.003				E	0.021				E	0.085				E
MF-07	10582497	GW0111-100421	10582497019	2021-10-04	FG	B	0.0038				E	0.027				E	0.1				E
MF-08	10559096	GW0083-050321	10559096043	2021-05-03	FG	B	0.00069				E	0.0079				E	0.045				E
MF-08	10582495	GW0088-100121	10582495019	2021-10-01	FG	B	0.00076				E	0.0083				E	0.044				E
MF-09	10558077	GW0016-042821	10558077016	2021-04-28	FG-N	B	0.0029				E	0.082				E	0.64				E
MF-09	10558077	GW0017-042821	10558077017	2021-04-28	FG-D	B	0.003					0.084					0.67				
MF-09	10581942	GW0066-092821	10581942019	2021-09-28	FG	B	0.003				E	0.036				E	0.33				E
MF-10	10559096	GW0082-050321	10559096042	2021-05-03	FG	B	0.025				E	0.0045				E	0.086				E
MF-10	10582495	GW0087-100521	10582495018	2021-10-05	FG	B	0.021				E	0.0038				E	0.1				E
MF-11	10558077	GW0007-042321	10558077007	2021-04-23	FG	B	0.0043				E	0.00071				E	0.0048		J+	FB	S
MF-11	10581942	GW0055-092821	10581942008	2021-09-28	FG-N	B	0.0047				E	0.00073				E	0.0056				E
MF-11	10581942	GW0056-092821	10581942009	2021-09-28	FG-D	B	0.0044					0.0007					0.0052				
MH-MSD106	10560315	GW0125-051121	10560315004	2021-05-11	FG	B	0.0039				E	0.03				E	1.9	P6	J	FD	S
MH-MSD108	10560315	GW0126-051121	10560315005	2021-05-11	FG	B	0.0036				E	0.052				E	3.5		J	FD	S
MH-MSD110	10560315	GW0127-051121	10560315006	2021-05-11	FG	B	0.0088				E	0.13				E	11		J	FD	S
MH-MSD113	10560315	GW0128-051121	10560315007	2021-05-11	FG	B	0.016				E	0.16				E	13.4		J	FD	S
MH-MSD116	10560315	GW0129-051121	10560315008	2021-05-11	FG	B	0.019				E	0.8				E	46		J	FD	S
MSD-01B	10559096	GW0085-050421	10559096045	2021-05-04	FG	B	0.00092				E	0.081				E	0.57				E
MSD-01B	10582495	GW0089-100521	10582495020	2021-10-05	FG	B	0.00081				E	0.099				E	0.69				E
MSD-01C	10559096	GW0086-050421	10559096046	2021-05-04	FG	B	0.00072				E	0.1				E	0.81				E
MSD-01C	10582495	GW0090-100521	10582495021	2021-10-05	FG	B	0.00097				E	0.086				E	0.56				E
MSD-02A	10559096	GW0089-050421	10559096048	2021-05-04	FG-N	B	0.0013				E	0.062				E	0.23				E
MSD-02A	10559096	GW0090-050421	10559096049	2021-05-04	FG-D	B	0.0013					0.061					0.23				
MSD-02A	10583409	GW0121-100621	10583409008	2021-10-06	FG	B	0.0014				E	0.04				E	0.15				E
MSD-02B	10559096	GW0092-050421	10559096051	2021-05-04	FG	B	0.0018				E	1	P6			E	35.3	P6			E
MSD-02B	10583409	GW0122-100621	10583409009	2021-10-06	FG	B	0.002				E	1				E	34.3				E
MSD-03	10559096	GW0084-050321	10559096044	2021-05-03	FG	B	0.0021				E	0.072				E	1.9				E
MSD-03	10582495	GW0091-100521	10582495022	2021-10-05	FG	B	0.0022				E	0.081				E	2.1				E
MSD-04	10558077	GW0008-042321	10558077008	2021-04-23	FG	B	0.0011				E	0.0033				E	0.0034		J+	FB	S
MSD-04	10581942	GW0058-092821	10581942011	2021-09-28	FG	B	0.0012				E	0.0029				E	0.0032				E
MSD-05	10559096	GW0053-042921	10559096013	2021-04-29	FG	B	0.0037				E	0.12				E	11.8				E
MSD-05	10582495	GW0080-100121	10582495011	2021-10-01	FG	B	0.004				E	0.12				E	12.7	P6			E

Table 5a. BPSOU 2021 Groundwater Monitoring Water Quality Results - Dissolved Metals

Location	SDG	Field Sample ID	Lab Sample ID	Monitoring Date	Sample Type	AB	HgDis (mg/L)	Lab Q	Val Q	DV Code	Status	PbDis (mg/L)	Lab Q	Val Q	DV Code	Status	ZnDis (mg/L)	Lab Q	Val Q	DV Code	Status
GWQC	10582495	GW0076-093021	10582495007	2021-09-30	FB	B	0.000045	U				0.000028	U				0.002	U			
GWQC	10582497	GW0100-100121	10582497009	2021-10-01	FB	B	0.000045	U				0.000028	U				0.002	U			
GWQC	10583409	GW0117-100521	10583409004	2021-10-05	FB	B	0.000045	U				0.000028	U				0.003	J			
HCA-B1	10558077	GW0025-042221	10558077025	2021-04-22	FG	B	0.0000045	U			E	0.0011				E	18.3				E
HCA-B1	10581934	GW0030-092721	10581934005	2021-09-27	FG	B	0.000045	U			E	0.0013				E	20.5				E
HCA-B2	10558077	GW0024-042221	10558077024	2021-04-22	FG	B	0.0000045	U			E	0.000053	J			E	1.6	P6			E
HCA-B2	10581934	GW0029-092721	10581934004	2021-09-27	FG	B	0.000045	U			E	0.000028	U			E	1.6				E
MF-07	10559096	GW0048-042921	10559096008	2021-04-29	FG	B	0.000045	U,MD			E	0.000073	J	J	FD	S	7.9				E
MF-07	10582497	GW0111-100421	10582497019	2021-10-04	FG	B	0.000045	U			E	0.000056	J			E	9				E
MF-08	10559096	GW0083-050321	10559096043	2021-05-03	FG	B	0.000045	U,MD			E	0.0013		J	FD	S	1.3				E
MF-08	10582495	GW0088-100121	10582495019	2021-10-01	FG	B	0.000045	U			E	0.0011				E	1.4	P6			E
MF-09	10558077	GW0016-042821	10558077016	2021-04-28	FG-N	B	0.000015				E	0.0037				E	9.1				E
MF-09	10558077	GW0017-042821	10558077017	2021-04-28	FG-D	B	0.000014					0.0038					9.1				
MF-09	10581942	GW0066-092821	10581942019	2021-09-28	FG	B	0.000053	J			E	0.0051				E	4				E
MF-10	10559096	GW0082-050321	10559096042	2021-05-03	FG	B	0.000045	U,MD			E	0.00048		J	FD	S	19.1				E
MF-10	10582495	GW0087-100521	10582495018	2021-10-05	FG	B	0.000045	U			E	0.00023				E	23.7				E
MF-11	10558077	GW0007-042321	10558077007	2021-04-23	FG	B	0.000007	J			E	0.000043	U			E	0.099				E
MF-11	10581942	GW0055-092821	10581942008	2021-09-28	FG-N	B	0.000045	U			E	0.000044	J			E	0.085				E
MF-11	10581942	GW0056-092821	10581942009	2021-09-28	FG-D	B	0.000045	U				0.000047	J				0.078				
MH-MSD106	10560315	GW0125-051121	10560315004	2021-05-11	FG	B	0.000045	U,MD			E	0.0003				E	6.6	P6			E
MH-MSD108	10560315	GW0126-051121	10560315005	2021-05-11	FG	B	0.000045	U,MD			E	0.00083				E	11.5				E
MH-MSD110	10560315	GW0127-051121	10560315006	2021-05-11	FG	B	0.000045	U,MD			E	0.0059				E	31.7				E
MH-MSD113	10560315	GW0128-051121	10560315007	2021-05-11	FG	B	0.000045	U,MD			E	0.013				E	40				E
MH-MSD116	10560315	GW0129-051121	10560315008	2021-05-11	FG	B	0.000045	U,MD			E	0.064				E	169				E
MSD-01B	10559096	GW0085-050421	10559096045	2021-05-04	FG	B	0.000045	U,MD			E	0.00058		J	FD	S	26.6				E
MSD-01B	10582495	GW0089-100521	10582495020	2021-10-05	FG	B	0.000045	U			E	0.0065				E	43.7				E
MSD-01C	10559096	GW0086-050421	10559096046	2021-05-04	FG	B	0.000045	U,MD			E	0.007		J	FD	S	49.6				E
MSD-01C	10582495	GW0090-100521	10582495021	2021-10-05	FG	B	0.000045	U			E	0.0006				E	23.6				E
MSD-02A	10559096	GW0089-050421	10559096048	2021-05-04	FG-N	B	0.000045	U,MD			E	0.0016		J	FD	S	9.5				E
MSD-02A	10559096	GW0090-050421	10559096049	2021-05-04	FG-D	B	0.000045	U,MD				0.00089		J	FD		9.7				
MSD-02A	10583409	GW0121-100621	10583409008	2021-10-06	FG	B	0.000045	U			E	0.00084				E	6.4				E
MSD-02B	10559096	GW0092-050421	10559096051	2021-05-04	FG	B	0.000045	U,MD			E	0.012		J	FD	S	198	P6			E
MSD-02B	10583409	GW0122-100621	10583409009	2021-10-06	FG	B	0.000045	U			E	0.011				E	214				E
MSD-03	10559096	GW0084-050321	10559096044	2021-05-03	FG	B	0.000045	U,MD			E	0.0047		J	FD	S	25.5				E
MSD-03	10582495	GW0091-100521	10582495022	2021-10-05	FG	B	0.000045	U			E	0.0045				E	25.1				E
MSD-04	10558077	GW0008-042321	10558077008	2021-04-23	FG	B	0.000011				E	0.000043	U			E	0.18				E
MSD-04	10581942	GW0058-092821	10581942011	2021-09-28	FG	B	0.000045	U			E	0.000046	J			E	0.15				E
MSD-05	10559096	GW0053-042921	10559096013	2021-04-29	FG	B	0.00008	J,1M			E	0.00013		J	FD	S	41.2				E
MSD-05	10582495	GW0080-100121	10582495011	2021-10-01	FG	B	0.000066	J			E	0.000047	J			E	42	P6			E

See Table B3 for laboratory and validation qualifer and code definitions

Table 5b. BPSOU 2021 Groundwater Monitoring Water Quality Results - Field

Location	Field Sample ID	Monitoring Date	Sample Type	Cond (uS/cm)	DO (mg/L)	Post-Sample DTW (ft)	ORP (mV)	pH (SU)	Water Temp (ºF)
AMC-12	GW0087-050421	2021-05-04	FG	1299	0.07	24.49	93	5.63	9.2
AMC-12	GW0114-100521	2021-10-05	FG	1371	0.38	24.80	114	5.45	9.3
AMC-13	GW0002-042221	2021-04-22	FG	585	0.52	31.57	-80	6.56	9.9
AMC-13	GW0049-092721	2021-09-27	FG	561	1.26	30.91	-53	6.50	9.9
AMC-23B	GW0079-050321	2021-05-03	FG	1252	1.62	94.45	418	6.75	10.3
AMC-23B	GW0109-100421	2021-10-04	FG	1241	1.88	71.12	213	6.68	11.7
AMC-24	GW0010-042721	2021-04-27	FG	599	4.13	23.35	-22	6.73	12.6
AMC-24	GW0059-092921	2021-09-29	FG	527	1.01	19.87	37	6.49	10.4
AMC-24B	GW0009-042621	2021-04-26	FG	1288	2.27	10.27	220	6.40	9.5
AMC-24B	GW0060-093021	2021-09-30	FG	1280	2.05	10.61	189	6.33	10.3
AMC-24C	GW0011-042721	2021-04-27	FG	1119	1.22	10.69	174	6.48	9.7
AMC-24C	GW0061-092821	2021-09-28	FG	1094	1.51	10.66	206	6.54	9.7
AMW-01A	GW0088-050621	2021-05-06	FG	1103	1.90	12.70	323	6.50	10.80
AMW-01A	GW0118-100721	2021-10-07	FG	2379	1.40	12.89	135	5.70	12
AMW-01B	GW0121-050721	2021-05-07	FG	3915	0.22	12.31	158	4.21	12
AMW-01B	GW0119-092421	2021-09-24	FG	4298	0.23	12.09	483	4.34	11.9
AMW-01C	GW0093-050421	2021-05-04	FG	2849	0.14	16.12	261	5.47	11.5
AMW-01C	GW0120-100521	2021-10-05	FG	2631	0.68	16.06	240	5.38	11.6
AMW-02	GW0033-042721	2021-04-27	FG-D	1572	8.10	16.91	39	7.03	7.7
AMW-02	GW0032-042721	2021-04-27	FG-N	1572	8.10	16.91	39	7.03	7.7
AMW-02	GW0037-092921	2021-09-29	FG	1802	5.50	13.37	150	6.97	8.2
AMW-08	GW0123-050721	2021-05-07	FG-D	6309	1.01	42.40	247	4.61	11.1
AMW-08	GW0122-050721	2021-05-07	FG-N	6309	1.01	42.40	247	4.61	11.1
AMW-08	GW0116-100521	2021-10-05	FG-D	4085	1.63	45.53	223	4.18	11.7
AMW-08	GW0115-100521	2021-10-05	FG-N	4085	1.63	45.53	223	4.18	11.7
AMW-12	GW0001-042221	2021-04-22	FG	550	5.68	20.45	196	7.36	8.2
AMW-12	GW0048-092721	2021-09-27	FG	598	5.36	18.35	163	7.10	9.5
AMW-13	GW0095-050521	2021-05-05	FG	1898	2.18	16.70	68	6.76	8.6
AMW-13	GW0001-092321	2021-09-23	FG	1556	1.34	15.53	40	6.60	13.7
AMW-13B	GW0096-050521	2021-05-05	FG	294	2.10	10.45	172	7.42	9.8
AMW-13B	GW0002-092321	2021-09-23	FG	295	2.19	10.78	55	7.23	9.4
AMW-13B2	GW0097-050521	2021-05-05	FG	309	2.18	11.84	209	7.35	9.8
AMW-13B2	GW0003-092321	2021-09-23	FG	302	2.30	11.98	79	7.24	9.7
AMW-13C	GW0098-050521	2021-05-05	FG	644	0.76	11.25	248	6.82	10.1
AMW-13C	GW0004-092321	2021-09-23	FG	643	0.64	11.74	108	6.72	10.1
AMW-20	GW0078-043021	2021-04-30	FG	1963	1.11		444	4.56	9.85
AMW-20	GW0108-100721	2021-10-07	FG	1976			459	4.93	9.47
BMW-03A	GW0094-050321	2021-05-03	FG	777	0.35	6.56	-35	6.65	4.3

Table 5b. BPSOU 2021 Groundwater Monitoring Water Quality Results - Field

Location	Field Sample ID	Monitoring Date	Sample Type	Cond (uS/cm)	DO (mg/L)	Post-Sample DTW (ft)	ORP (mV)	pH (SU)	Water Temp (°F)
BMW-03A	GW0031-092721	2021-09-27	FG	782	0.28	9.05	-51	6.48	9
BMW-03B	GW0027-042221	2021-04-22	FG	2532	0.16	6.12	63	6.73	7.4
BMW-03B	GW0032-092721	2021-09-27	FG	2491	0.06	6.00	32	6.74	7.5
BPS07-01A	GW0099-050621	2021-05-06	FG	522	7.61	19.45	275	7.42	9
BPS07-01A	GW0017-092421	2021-09-24	FG	532	5.82	19.09	198	7.05	9.6
BPS07-01B	GW0100-050621	2021-05-06	FG	408	6.54	19.48	278	7.35	9.6
BPS07-01B	GW0018-092421	2021-09-24	FG	415	6.26	18.84	205	7.04	9.5
BPS07-03A	GW0019-042721	2021-04-27	FG	284	0.78	10.37	24	7.08	10.3
BPS07-03A	GW0067-093021	2021-09-30	FG	302	0.95	10.65	172	7.02	10.4
BPS07-05A	GW0101-050621	2021-05-06	FG	326	7.16	11.91	272	7.83	7.8
BPS07-05A	GW0016-092421	2021-09-24	FG	352	6.81	9.88	195	7.37	13.7
BPS07-05B	GW0102-050621	2021-05-06	FG	446	7.80	9.63	295	7.01	10.2
BPS07-05B	GW0015-092421	2021-09-24	FG	453	6.96	9.55	167	6.64	10.1
BPS07-07	GW0020-042721	2021-04-27	FG	262	0.59	10.32	17	6.78	8.9
BPS07-07	GW0068-093021	2021-09-30	FG	279	0.72	5.51	24	6.64	10.5
BPS07-08A	GW0035-042621	2021-04-26	FG	4324	3.30	10.34	70	7.00	8.8
BPS07-08A	GW0038-092821	2021-09-28	FG	4538	0.21	10.74	176	6.39	12.1
BPS07-11A	GW0072-042921	2021-04-29	FG	555	1.26	15.44	295	5.28	9.8
BPS07-11A	GW0104-100121	2021-10-01	FG	348	3.34	15.04	252	5.26	10.2
BPS07-11B	GW0073-042921	2021-04-29	FG	1705	0.16	14.73	222	5.04	10.1
BPS07-11B	GW0105-100121	2021-10-01	FG	1347	0.60	14.60	196	5.02	10
BPS07-13A	GW0042-042821	2021-04-28	FG	6081	0.88	23.50	76	6.69	9.3
BPS07-13A	GW0070-093021	2021-09-30	FG	6569	2.48	23.65	117	6.66	9.6
BPS07-13B	GW0043-042821	2021-04-28	FG	2999	0.66	24.36	52	6.86	9.6
BPS07-13B	GW0071-093021	2021-09-30	FG	3058	0.89	24.70	150	6.92	9.4
BPS07-14A	GW0045-042821	2021-04-28	FG	1074	1.54	20.65	12	7.04	8.5
BPS07-14A	GW0073-093021	2021-09-30	FG	1092	0.27	21.09	37	6.99	9.6
BPS07-16A	GW0104-050621	2021-05-06	FG-D	393	3.24	7.61	288	6.73	7
BPS07-15A	GW0044-042821	2021-04-28	FG	1444	1.13	19.81	46	7.00	9.4
BPS07-15A	GW0072-093021	2021-09-30	FG	1942	1.05	20.21	101	6.75	9.5
BPS07-16A	GW0103-050621	2021-05-06	FG-N	393	3.24	7.61	288	6.73	7
BPS07-16A	GW0005-092421	2021-09-24	FG	419	1.26	7.68	169	6.33	13.7
BPS07-16B	GW0106-050621	2021-05-06	FG	233	4.33	7.70	270	7.64	10.6
BPS07-16B	GW0006-092421	2021-09-24	FG	247	4.49	7.75	153	7.19	10.4
BPS07-17A	GW0023-042221	2021-04-22	FG	1108	3.30	12.46	54	6.09	7.7
BPS07-17A	GW0028-092721	2021-09-27	FG	1079	0.19	13.28	59	6.02	10.6
BPS07-18A	GW0021-042221	2021-04-22	FG	1577	12.10	14.01	31	6.51	6.2
BPS07-18A	GW0026-092721	2021-09-27	FG	1562	4.44	13.30	-22	6.32	9.2

Table 5b. BPSOU 2021 Groundwater Monitoring Water Quality Results - Field

Location	Field Sample ID	Monitoring Date	Sample Type	Cond (uS/cm)	DO (mg/L)	Post-Sample DTW (ft)	ORP (mV)	pH (SU)	Water Temp (°F)
BPS07-18B	GW0022-042221	2021-04-22	FG	1237	6.90	13.09	22	6.50	8.1
BPS07-18B	GW0027-092721	2021-09-27	FG	1276	0.17	13.66	-26	6.36	8.1
BPS07-21	GW0061-042821	2021-04-28	FG	2604	0.75	14.36	-104	6.85	9.7
BPS07-21	GW0069-093021	2021-09-30	FG	2524	2.69	14.53	-114	6.75	11.1
BPS07-21B	GW0062-042821	2021-04-28	FG	423	2.43	13.78	116	6.92	9.7
BPS07-21B	GW0092-093021	2021-09-30	FG	430	2.47	13.65	112	6.89	9.7
BPS07-21C	GW0063-042821	2021-04-28	FG	747	0.63	12.99	8	6.80	10.1
BPS07-21C	GW0093-093021	2021-09-30	FG	755	0.72	13.17	89	6.78	10.3
BPS07-22B	GW0064-042821	2021-04-28	FG	717	0.60	8.50	141	6.64	8.5
BPS07-22B	GW0094-100121	2021-10-01	FG	736	2.16	8.77	200	6.44	8.2
BPS07-22C	GW0065-042821	2021-04-28	FG	757	0.55	12.31	113	6.99	9.8
BPS07-22C	GW0095-100121	2021-10-01	FG	764	0.89	11.27	179	6.88	9.4
BPS07-22R	GW0066-042821	2021-04-28	FG	914	1.72	9.20	-97	7.01	6.3
BPS07-22R	GW0096-100121	2021-10-01	FG	618	0.32	10.37	-93	6.76	10.2
BPS07-23	GW0067-042921	2021-04-29	FG	1376	0.86	8.17	-82	7.14	5.8
BPS07-23	GW0097-100121	2021-10-01	FG	1094	1.58	8.41	-63	6.85	10.4
BPS07-24	GW0071-042921	2021-04-29	FG	2203	1.00	8.43	274	6.49	9.6
BPS11-01	GW0040-092921	2021-09-29	FG-D	1228	0.16	9.59	-57	7.56	10.9
BPS07-24	GW0103-100121	2021-10-01	FG	1967	1.51	8.64	216	6.40	9.7
BPS07-25	GW0030-042321	2021-04-23	FG	1963	0.17	10.77	130	7.21	9.5
BPS07-25	GW0035-092821	2021-09-28	FG	1997	0.22	11.02	126	7.14	9.6
BPS11-01	GW0036-042621	2021-04-26	FG	1465	1.00	9.21	38	7.65	10.9
BPS11-01	GW0039-092921	2021-09-29	FG-N	1228	0.16	9.59	-57	7.56	10.9
BPS11-02	GW0037-042621	2021-04-26	FG	1284	9.60	8.65	44	7.13	9.4
BPS11-02	GW0042-092921	2021-09-29	FG	1293	0.37	9.24	16	7.10	9.1
BPS11-03	GW0120-050621	2021-05-06	FG	1289	0.19	5.15	40	7.14	7.1
BPS11-03	GW0050-092421	2021-09-24	FG	1452	0.20	5.25	424	7.60	8
BPS11-04	GW0003-042221	2021-04-22	FG	509	1.52	11.68	2	7.67	8.9
BPS11-04	GW0051-092721	2021-09-27	FG	504	1.67	11.25	35	7.56	9.1
BPS11-05A1[1]	GW0040-042721	2021-04-27	FG	1209	see footnote	7.83	48	6.84	5.6
BPS11-05A1	GW0045-092921	2021-09-29	FG	1314	0.32	8.21	95	6.68	12.7
BPS11-05A2	GW0026-042721	2021-04-27	FG	405	3.48	8.00	34	7.25	9.3
BPS11-05A2	GW0046-092921	2021-09-29	FG	454	3.06	8.36	105	7.11	8.8
BPS11-06	GW0041-042821	2021-04-28	FG	532	3.98	11.34	62	7.22	8.6
BPS11-06	GW0047-092921	2021-09-29	FG	539	3.34	11.68	123	7.16	9.8
BPS11-07	GW0038-042621	2021-04-26	FG	1408	1.10	16.31	41	7.22	10.2
BPS11-07	GW0043-092921	2021-09-29	FG	1421	0.22	16.55	72	7.18	10
BPS11-10B	GW0075-043021	2021-04-30	FG-D	1288	2.29	12.05	601	6.47	9.4

Table 5b. BPSOU 2021 Groundwater Monitoring Water Quality Results - Field

Location	Field Sample ID	Monitoring Date	Sample Type	Cond (uS/cm)	DO (mg/L)	Post-Sample DTW (ft)	ORP (mV)	pH (SU)	Water Temp (°F)
BPS11-08	GW0039-042721	2021-04-27	FG	730	11.90	16.90	36	7.23	8.3
BPS11-08	GW0044-092921	2021-09-29	FG	701	4.58	19.19	90	7.12	11.9
BPS11-09	GW0004-042221	2021-04-22	FG	379	6.78	5.32	36	7.50	8.9
BPS11-09	GW0052-092721	2021-09-27	FG	385	4.41	5.64	81	7.37	8.8
BPS11-10B	GW0074-043021	2021-04-30	FG-N	1288	2.29	12.05	601	6.47	9.4
BPS11-10B	GW0106-100421	2021-10-04	FG	1274	1.84	12.17	267	6.54	9.7
BPS11-10C	GW0077-043021	2021-04-30	FG	1021	1.82	13.81	544	6.78	10.2
BPS11-11A2	GW0009-092421	2021-09-24	FG-D	331	1.70	6.02	154	7.12	10.1
BPS11-10C	GW0107-100421	2021-10-04	FG	1023	1.73	12.32	240	6.68	10.3
BPS11-11A1	GW0109-050521	2021-05-05	FG	317	1.04	6.00	39	7.04	8.8
BPS11-11A1	GW0007-092421	2021-09-24	FG	326	1.04	6.19	162	6.79	11.8
BPS11-11A2	GW0110-050521	2021-05-05	FG	330	1.46	5.86	44	7.33	10.4
BPS11-11A2	GW0008-092421	2021-09-24	FG-N	331	1.70	6.02	154	7.12	10.1
BPS11-11B	GW0111-050521	2021-05-05	FG	913	1.98	6.41	59	6.69	10.6
BPS11-11B	GW0011-092421	2021-09-24	FG	924	2.14	7.26	183	6.52	10.5
BPS11-11C	GW0112-050521	2021-05-05	FG	870	0.14	14.70	50	6.97	11.4
BPS11-13B	GW0099-100121	2021-10-01	FG-D	1264	2.54	13.47	159	6.51	9.7
BPS11-11C	GW0012-092421	2021-09-24	FG	880	0.20	14.92	72	6.84	11.4
BPS11-12A	GW0115-050621	2021-05-06	FG	512	4.73	8.54	60	7.12	9.7
BPS11-12A	GW0023-092421	2021-09-24	FG	461	4.67	8.97	231	7.08	9.7
BPS11-13B	GW0068-042921	2021-04-29	FG	1344	2.35	13.32	237	6.44	9.6
BPS11-13B	GW0098-100121	2021-10-01	FG-N	1264	2.54	13.47	159	6.51	9.7
BPS11-14A	GW0069-042921	2021-04-29	FG	647	0.65	9.38	257	6.72	8.4
BPS11-14A	GW0101-100121	2021-10-01	FG	613	1.17	9.59	145	6.76	9.5
BPS11-14B	GW0070-042921	2021-04-29	FG	2013	0.25	12.15	276	6.28	9.6
BPS11-16	GW0021-092421	2021-09-24	FG-D	481	4.73	11.58	211	7.31	10.5
BPS11-14B	GW0102-100121	2021-10-01	FG	1855	1.31	11.75	199	6.24	9.9
BPS11-15	GW0107-050621	2021-05-06	FG	587	5.08	9.73	298	7.55	10.3
BPS11-15	GW0019-092421	2021-09-24	FG	648	4.45	10.18	205	7.12	10.1
BPS11-16	GW0108-050621	2021-05-06	FG	460	4.88	11.02	294	7.72	10.5
BPS11-16	GW0020-092421	2021-09-24	FG-N	481	4.73	11.58	211	7.31	10.5
BPS11-17C	GW0080-050321	2021-05-03	FG	2145	0.53	10.52	418	6.45	9.6
BPS11-17C	GW0110-100421	2021-10-04	FG	1922	0.71	10.34	293	6.26	9.7
BPS11-18B	GW0049-042921	2021-04-29	FG	4221	0.18	10.25	129	4.11	10.3
BPS11-18B	GW0112-100421	2021-10-04	FG	3260	0.62	10.60	218	4.29	10.6
BPS11-18C	GW0050-042921	2021-04-29	FG	1894	0.15	10.08	112	5.52	10.6
BPS11-18C	GW0113-100421	2021-10-04	FG	1762	0.66	10.14	214	5.63	10.9
BT-98-02	GW0117-050621	2021-05-06	FG-D	410	0.88	11.49	61	5.79	8.6

Table 5b. BPSOU 2021 Groundwater Monitoring Water Quality Results - Field

Location	Field Sample ID	Monitoring Date	Sample Type	Cond (uS/cm)	DO (mg/L)	Post-Sample DTW (ft)	ORP (mV)	pH (SU)	Water Temp (°F)
BPS11-19A2	GW0113-050621	2021-05-06	FG	456	4.82	4.33	65	6.66	9.9
BPS11-19A2	GW0013-092421	2021-09-24	FG	465	5.13	4.50	153	6.62	9.7
BPS11-19B	GW0114-050621	2021-05-06	FG	92	2.17	4.39	77	6.48	10.3
BPS11-19B	GW0014-092421	2021-09-24	FG	923	2.06	4.24	163	6.48	10.3
BT-98-02	GW0116-050621	2021-05-06	FG-N	410	0.88	11.49	61	5.79	8.6
BT-98-02	GW0025-092421	2021-09-24	FG	399	4.02	11.63	261	5.67	11.7
BT-98-02B	GW0119-050621	2021-05-06	FG	577	5.26	9.95	41	6.49	10.3
BT-98-02B	GW0024-092421	2021-09-24	FG	564	5.62	10.11	253	6.39	10.1
FP98-1	GW0047-042821	2021-04-28	FG	3582	6.37	7.37	57	6.36	8
FP98-1	GW0077-100421	2021-10-04	FG	3061	5.32	7.45	119	6.59	14.1
FP98-1B	GW0046-042821	2021-04-28	FG	687	0.17	23.90	25	6.87	10.1
FP98-1B	GW0074-093021	2021-09-30	FG-N	684	0.87	24.28	116	6.86	9.4
FP98-2	GW0029-042321	2021-04-23	FG	783	1.49	5.97	64	6.96	6.8
FP98-2	GW0034-092821	2021-09-28	FG	769	0.19	6.44	95	6.78	10.6
FP98-6	GW0028-042321	2021-04-23	FG	873	0.48	8.16	65	6.63	4.6
FP98-6	GW0033-092821	2021-09-28	FG	909	0.32	8.43	74	6.40	10.6
GS-08R	GW0056-043021	2021-04-30	FG	1405	1.08	17.87	56	6.51	10.8
GS-08R	GW0084-100421	2021-10-04	FG	1207	1.08	17.82	132	6.63	10.6
GS-09R	GW0057-043021	2021-04-30	FG	3800	0.22	13.58	136	5.22	10.1
GS-09R	GW0085-100121	2021-10-01	FG	3252	0.12	13.79	184	5.44	10
GS-11R	GW0081-050321	2021-05-03	FG	2255	0.79	13.52	151	5.77	11.8
GS-11R	GW0086-100121	2021-10-01	FG	2245	1.56	15.50	186	5.87	11.1
GS-13A	GW0031-042321	2021-04-23	FG	1815	8.16	10.15	109	7.21	7.3
GS-13A	GW0036-092821	2021-09-28	FG	1990	1.57	11.14	126	7.07	9.7
GS-30D	GW0051-042921	2021-04-29	FG	2790	0.16	11.25	102	5.71	9.9
GS-30D	GW0078-100121	2021-10-01	FG	2850	0.23	11.41	189	5.76	9.6
GS-40R	GW0059-050321	2021-05-03	FG-D	2690	0.18	25.36	97	5.20	9.6
GS-30S	GW0052-042921	2021-04-29	FG	1531	0.19	14.70	22	6.38	9.1
GS-30S	GW0079-100121	2021-10-01	FG	1622	0.14	14.80	-29	6.43	9.2
GS-31D	GW0012-042721	2021-04-27	FG	864	0.44	6.35	181	6.28	9.5
GS-31D	GW0062-092821	2021-09-28	FG	848	1.20	6.53	184	6.33	9.3
GS-31S	GW0013-042721	2021-04-27	FG	575	2.61	6.77	155	6.95	7.4
GS-31S	GW0063-092821	2021-09-28	FG	552	2.80	6.94	163	6.92	10
GS-32D	GW0054-042921	2021-04-29	FG	2499	0.91	7.41	66	6.10	7.7
GS-32D	GW0081-100121	2021-10-01	FG	2514	0.86	6.64	188	6.20	7.5
GWQC	GW0018-042821	2021-04-28	FB						
GWQC	GW0034-042721	2021-04-27	FB						
GWQC	GW0076-043021	2021-04-30	FB						

Table 5b. BPSOU 2021 Groundwater Monitoring Water Quality Results - Field

Location	Field Sample ID	Monitoring Date	Sample Type	Cond (uS/cm)	DO (mg/L)	Post-Sample DTW (ft)	ORP (mV)	pH (SU)	Water Temp (°F)
GWQC	GW0060-050321	2021-05-03	FB						
GWQC	GW0091-050421	2021-05-04	FB						
GWQC	GW0105-050621	2021-05-06	FB						
GWQC	GW0118-050621	2021-05-06	FB						
GWQC	GW0124-050721	2021-05-07	FB						
GWQC	GW0010-092421	2021-09-24	FB						
GWQC	GW0022-092421	2021-09-24	FB						
GWQC	GW0041-092921	2021-09-29	FB						
GWQC	GW0057-092821	2021-09-28	FB						
GWQC	GW0100-100121	2021-10-01	FB						
GS-32S	GW0055-042921	2021-04-29	FG	1649	0.23	6.86	66	6.18	6.8
GS-32S	GW0082-100121	2021-10-01	FG	1682	0.08	6.18	182	6.20	7.5
GS-40R	GW0058-050321	2021-05-03	FG-N	2690	0.18	25.36	97	5.20	9.6
FP98-1B	GW0075-093021	2021-09-30	FG-D	684	0.87	24.28	116	6.86	9.4
GWQC	GW0076-093021	2021-09-30	FB						
GS-40R	GW0083-100421	2021-10-04	FG	2443	0.12	25.37	118	5.51	9.7
GS-44D	GW0014-042721	2021-04-27	FG	390	0.25	24.28	268	5.43	9.8
GS-44D	GW0064-092821	2021-09-28	FG	384	1.58	24.08	262	5.46	9.8
GS-44S	GW0015-042721	2021-04-27	FG	386	4.64	23.75	283	5.16	9.6
GS-44S	GW0065-092821	2021-09-28	FG	293	6.83	22.80	261	5.73	9.8
GS-46D	GW0005-042321	2021-04-23	FG	487	5.44	28.70	138	6.67	10.1
GS-46D	GW0053-092821	2021-09-28	FG	510	5.14	28.54	67	6.53	10.3
GS-46S	GW0006-042321	2021-04-23	FG	616	7.73	28.77	134	7.04	10.3
GS-46S	GW0054-092821	2021-09-28	FG	534	6.61	28.46	120	7.09	10.8
GWQC	GW0117-100521	2021-10-05	FB						
HCA-B1	GW0025-042221	2021-04-22	FG	1530	0.34	8.44	112	5.62	9
HCA-B1	GW0030-092721	2021-09-27	FG	1522	0.10	8.76	174	5.58	8.9
HCA-B2	GW0024-042221	2021-04-22	FG	1230	0.99	11.76	46	6.24	8.8
HCA-B2	GW0029-092721	2021-09-27	FG	1275	0.11	12.02	42	6.20	9.1
MF-07	GW0048-042921	2021-04-29	FG	1597	1.14	10.92	65	6.23	7
MF-07	GW0111-100421	2021-10-04	FG	1682	0.84	11.26	266	6.30	12.9
MF-08	GW0083-050321	2021-05-03	FG	1894	0.16	7.86	89	6.21	7.6
MF-08	GW0088-100121	2021-10-01	FG	1653	0.13	7.63	181	6.39	9.6
MF-09	GW0016-042821	2021-04-28	FG-N	1259	0.31	12.00	214	6.56	7.6
MF-09	GW0017-042821	2021-04-28	FG-D	1259	0.31	12.00	214	6.56	7.6
MF-09	GW0066-092821	2021-09-28	FG	1145	1.89	12.05	140	6.47	10
MF-10	GW0082-050321	2021-05-03	FG	654	0.90	11.32	69	6.33	7.9
MF-10	GW0087-100521	2021-10-05	FG	599	2.70	11.24	115	6.38	11.1

Table 5b. BPSOU 2021 Groundwater Monitoring Water Quality Results - Field

Location	Field Sample ID	Monitoring Date	Sample Type	Cond (uS/cm)	DO (mg/L)	Post-Sample DTW (ft)	ORP (mV)	pH (SU)	Water Temp (ºF)
MF-11	GW0007-042321	2021-04-23	FG	770	2.78	10.19	75	7.02	7.2
MF-11	GW0055-092821	2021-09-28	FG-N	930	1.78	10.07	37	6.90	11
MF-11	GW0056-092821	2021-09-28	FG-D	930	1.78	10.07	37	6.90	11
MH-MSD106	GW0125-051121	2021-05-11	FG	788	1.84		88	6.26	8.9
MH-MSD108	GW0126-051121	2021-05-11	FG	1054	2.52		95	6.04	9.2
MH-MSD110	GW0127-051121	2021-05-11	FG	1398	3.30		111	5.78	8.9
MH-MSD113	GW0128-051121	2021-05-11	FG	1646	1.79		115	5.64	10.3
MH-MSD116	GW0129-051121	2021-05-11	FG	2911	0.19			4.69	9.9
MSD-01B	GW0085-050421	2021-05-04	FG	2609	0.12	10.64	102	5.17	10.3
MSD-01B	GW0089-100521	2021-10-05	FG	2427	0.06	10.57	138	5.18	11.1
MSD-01C	GW0086-050421	2021-05-04	FG	3148	0.06	11.78	84	6.01	10.4
MSD-01C	GW0090-100521	2021-10-05	FG	3072	0.05	12.07	106	5.95	10.5
MSD-02A	GW0089-050421	2021-05-04	FG-N	812	4.22	10.31	367	4.96	8
MSD-02A	GW0090-050421	2021-05-04	FG-D	812	4.22	10.31	367	4.96	8
MSD-02A	GW0121-100621	2021-10-06	FG	628	2.56	10.42	215	5.33	12.6
MSD-02B	GW0092-050421	2021-05-04	FG	4348	0.34	11.40	360	4.35	10.1
MSD-02B	GW0122-100621	2021-10-06	FG	3534	1.08	11.36	232	4.22	10.3
MSD-03	GW0084-050321	2021-05-03	FG	2843	0.15	8.83	113	5.47	10.5
MSD-03	GW0091-100521	2021-10-05	FG	2602	0.19	9.24	170	5.70	10.6
MSD-04	GW0008-042321	2021-04-23	FG	875	0.81	10.44	154	6.36	9.2
MSD-04	GW0058-092821	2021-09-28	FG	804	1.24	10.51	131	6.34	9.2
MSD-05	GW0053-042921	2021-04-29	FG	2890	0.11	14.13	105	5.52	10
MSD-05	GW0080-100121	2021-10-01	FG	2946	0.11	14.31	113	5.63	9.8

[1]DO was inadvertently measured as 24.6%. A mg/L reading was not recorded.

Table 6. BPSOU 2021 Groundwater Elevations

Location	Monitoring Date	MP Elev (NAVD88 ft)	DTW or Stage Reading (ft)	WL Elev (NAVD88 ft)	Aquifer	Notes
A1	2021-01-27	5400.00	26.51	5426.51	BTL SW Cell	
A1	2021-02-26	5400.00	26.56	5426.56	BTL SW Cell	
A1	2021-03-30	5400.00	26.56	5426.56	BTL SW Cell	
A1	2021-04-20	5400.00	26.53	5426.53	BTL SW Cell	
A1	2021-05-28	5400.00	26.57	5426.57	BTL SW Cell	
A1	2021-06-28	5400.00	26.56	5426.56	BTL SW Cell	
A1	2021-07-27	5400.00	26.57	5426.57	BTL SW Cell	
A1	2021-08-26	5400.00	26.59	5426.59	BTL SW Cell	
A1	2021-09-21	5400.00	26.53	5426.53	BTL SW Cell	
A1	2021-10-28	5400.00	26.56	5426.56	BTL SW Cell	
A1	2021-11-30	5400.00	26.50	5426.50	BTL SW Cell	
A1	2021-12-21	5400.00	26.50	5426.50	BTL SW Cell	
A2	2021-01-27	5400.00	26.14	5426.14	BTL SW Cell	
A2	2021-02-26	5400.00	26.22	5426.22	BTL SW Cell	
A2	2021-03-30	5400.00	26.21	5426.21	BTL SW Cell	
A2	2021-04-20	5400.00	26.16	5426.16	BTL SW Cell	
A2	2021-05-28	5400.00	26.16	5426.16	BTL SW Cell	
A2	2021-06-28	5400.00	26.15	5426.15	BTL SW Cell	
A2	2021-07-27	5400.00	26.16	5426.16	BTL SW Cell	
A2	2021-08-26	5400.00	26.21	5426.21	BTL SW Cell	
A2	2021-09-21	5400.00	26.17	5426.17	BTL SW Cell	
A2	2021-10-28	5400.00	26.20	5426.20	BTL SW Cell	
A2	2021-11-30	5400.00	26.19	5426.19	BTL SW Cell	
A2	2021-12-21	5400.00	26.17	5426.17	BTL SW Cell	
A3	2021-01-27	5400.00	25.04	5425.04	BTL SW Cell	
A3	2021-02-26	5400.00	25.07	5425.07	BTL SW Cell	
A3	2021-03-30	5400.00	25.07	5425.07	BTL SW Cell	
A3	2021-04-20	5400.00	25.03	5425.03	BTL SW Cell	
A3	2021-05-28	5400.00	25.01	5425.01	BTL SW Cell	
A3	2021-06-28	5400.00	25.00	5425.00	BTL SW Cell	
A3	2021-07-27	5400.00	25.02	5425.02	BTL SW Cell	
A3	2021-08-26	5400.00	25.07	5425.07	BTL SW Cell	
A3	2021-09-21	5400.00	25.03	5425.03	BTL SW Cell	
A3	2021-10-28	5400.00	25.06	5425.06	BTL SW Cell	
A3	2021-11-30	5400.00	25.04	5425.04	BTL SW Cell	
A3	2021-12-21	5400.00	25.03	5425.03	BTL SW Cell	
AMC-23B	2021-01-27	5452.88	7.35	5445.53	Alluvium	
AMC-23B	2021-02-25	5452.88	7.36	5445.52	Alluvium	
AMC-23B	2021-03-31	5452.88	7.11	5445.77	Alluvium	
AMC-23B	2021-04-20	5452.88	7.13	5445.75	Alluvium	
AMC-23B	2021-05-27	5452.88	6.90	5445.98	Alluvium	
AMC-23B	2021-06-29	5452.88	7.43	5445.45	Alluvium	
AMC-23B	2021-07-27	5452.88	7.46	5445.42	Alluvium	
AMC-23B	2021-08-26	5452.88	7.15	5445.73	Alluvium	
AMC-23B	2021-09-22	5452.88	7.35	5445.53	Alluvium	
AMC-23B	2021-10-27	5452.88	7.23	5445.65	Alluvium	
AMC-23B	2021-11-29	5452.88	7.34	5445.54	Alluvium	
AMC-23B	2021-12-20	5452.88	7.35	5445.53	Alluvium	
AMC-24B	2021-01-28	5455.94	10.57	5445.37	Alluvium	
AMC-24B	2021-02-25	5455.94	10.59	5445.35	Alluvium	
AMC-24B	2021-03-31	5455.94	10.37	5445.57	Alluvium	
AMC-24B	2021-04-19	5455.94	10.39	5445.55	Alluvium	
AMC-24B	2021-05-27	5455.94	10.02	5445.92	Alluvium	
AMC-24B	2021-06-29	5455.94	10.77	5445.17	Alluvium	
AMC-24B	2021-07-27	5455.94	10.72	5445.22	Alluvium	
AMC-24B	2021-08-26	5455.94	10.44	5445.50	Alluvium	
AMC-24B	2021-09-22	5455.94	10.58	5445.36	Alluvium	
AMC-24B	2021-10-27	5455.94	10.40	5445.54	Alluvium	
AMC-24B	2021-11-30	5455.94	10.54	5445.40	Alluvium	
AMC-24B	2021-12-20	5455.94	10.54	5445.40	Alluvium	
AMC-24C	2021-01-28	5454.63	9.08	5445.55	Alluvium	
AMC-24C	2021-02-25	5454.63	9.10	5445.53	Alluvium	
AMC-24C	2021-03-31	5454.63	8.92	5445.71	Alluvium	
AMC-24C	2021-04-19	5454.63	8.89	5445.74	Alluvium	
AMC-24C	2021-05-27	5454.63	8.70	5445.93	Alluvium	
AMC-24C	2021-06-29	5454.63	9.28	5445.35	Alluvium	
AMC-24C	2021-07-27	5454.63	9.31	5445.32	Alluvium	
AMC-24C	2021-08-26	5454.63	9.58	5445.05	Alluvium	Observed DTW is suspect, continuous recorder indicates value to be approximately 9.06 ft.
AMC-24C	2021-09-22	5454.63	9.19	5445.44	Alluvium	
AMC-24C	2021-10-27	5454.63	9.02	5445.61	Alluvium	
AMC-24C	2021-11-30	5454.63	9.14	5445.49	Alluvium	
AMC-24C	2021-12-20	5454.63	9.14	5445.49	Alluvium	
AMW-01A	2021-01-27	5469.49	12.45	5457.04	Alluvium	
AMW-01A	2021-02-25	5469.49			Alluvium	Could not measure:Wells under snow pile and basketball tournament at civic center.
AMW-01A	2021-03-31	5469.49	12.29	5457.20	Alluvium	
AMW-01A	2021-04-19	5469.49	12.43	5457.06	Alluvium	
AMW-01A	2021-05-27	5469.49	12.00	5457.49	Alluvium	
AMW-01A	2021-06-29	5469.49	12.00	5457.49	Alluvium	

Table 6. BPSOU 2021 Groundwater Elevations

Location	Monitoring Date	MP Elev (NAVD88 ft)	DTW or Stage Reading (ft)	WL Elev (NAVD88 ft)	Aquifer	Notes
AMW-01A	2021-07-27	5469.49	11.82	5457.67	Alluvium	
AMW-01A	2021-08-26	5469.49	11.65	5457.84	Alluvium	Observed DTW is suspect, continuous recorder indicates level at 11.75 ft.
AMW-01A	2021-09-22	5469.49	11.86	5457.63	Alluvium	
AMW-01A	2021-10-27	5469.49	12.39	5457.10	Alluvium	
AMW-01A	2021-11-29	5469.49	12.61	5456.88	Alluvium	
AMW-01A	2021-12-21	5469.49	12.46	5457.03	Alluvium	
AMW-01B	2021-01-27	5469.60	11.95	5457.65	Alluvium	
AMW-01B	2021-02-25	5469.60			Alluvium	Could not measure:wells under snow pile and basketball tournament at Civc Center
AMW-01B	2021-03-31	5469.60	12.17	5457.43	Alluvium	
AMW-01B	2021-04-19	5469.60	12.15	5457.45	Alluvium	
AMW-01B	2021-05-27	5469.60	12.03	5457.57	Alluvium	
AMW-01B	2021-06-29	5469.60	12.00	5457.60	Alluvium	
AMW-01B	2021-07-27	5469.60	11.98	5457.62	Alluvium	
AMW-01B	2021-08-26	5469.60	11.82	5457.78	Alluvium	
AMW-01B	2021-09-22	5469.60	11.91	5457.69	Alluvium	
AMW-01B	2021-10-27	5469.60	12.30	5457.30	Alluvium	
AMW-01B	2021-11-29	5469.60	12.52	5457.08	Alluvium	11/30 - DTW=12.51 ft
AMW-01B	2021-12-21	5469.60	12.63	5456.97	Alluvium	
AMW-01C	2021-01-27	5469.60	11.50	5458.10	Alluvium	
AMW-01C	2021-02-25	5469.60			Alluvium	Could not measure: well under snow pile and basketball tournament at the Civic center
AMW-01C	2021-03-31	5469.60	11.80	5457.80	Alluvium	
AMW-01C	2021-04-19	5469.60	12.86	5456.74	Alluvium	Observed DTW is suspect, continuous recorder indicates level to be 11.86 ft.
AMW-01C	2021-05-27	5469.60	11.81	5457.79	Alluvium	
AMW-01C	2021-06-29	5469.60	11.85	5457.75	Alluvium	
AMW-01C	2021-07-27	5469.60	11.90	5457.70	Alluvium	
AMW-01C	2021-08-26	5469.60	11.78	5457.82	Alluvium	
AMW-01C	2021-09-22	5469.60	11.74	5457.86	Alluvium	Observed level is suspect, continuous recorder indicates level to be 11.88 ft.
AMW-01C	2021-10-27	5469.60	12.11	5457.49	Alluvium	
AMW-01C	2021-11-29	5469.60	12.28	5457.32	Alluvium	
AMW-01C	2021-12-21	5469.60	12.43	5457.17	Alluvium	
AMW-02	2021-01-28	5452.54	10.65	5441.89	Alluvium	12.5 ft line to ducer
AMW-02	2021-02-25	5452.54	10.65	5441.89	Alluvium	
AMW-02	2021-03-30	5452.54	10.13	5442.41	Alluvium	
AMW-02	2021-04-19	5452.54	10.25	5442.29	Alluvium	
AMW-02	2021-05-27	5452.54	10.08	5442.46	Alluvium	
AMW-02	2021-06-29	5452.54	10.39	5442.15	Alluvium	
AMW-02	2021-07-26	5452.54	10.44	5442.10	Alluvium	
AMW-02	2021-08-26	5452.54	10.21	5442.33	Alluvium	
AMW-02	2021-09-21	5452.54	10.41	5442.13	Alluvium	
AMW-02	2021-10-27	5452.54	10.47	5442.07	Alluvium	
AMW-02	2021-11-29	5452.54	10.55	5441.99	Alluvium	
AMW-02	2021-12-20	5452.54	10.57	5441.97	Alluvium	
AMW-11	2021-01-28	5449.60	6.51	5443.09	Alluvium	
AMW-11	2021-02-26	5449.60	6.46	5443.14	Alluvium	
AMW-11	2021-03-31	5449.60	6.10	5443.50	Alluvium	
AMW-11	2021-04-19	5449.60	6.00	5443.60	Alluvium	
AMW-11	2021-05-27	5449.60	5.84	5443.76	Alluvium	
AMW-11	2021-06-30	5449.60	6.32	5443.28	Alluvium	
AMW-11	2021-07-26	5449.60	6.33	5443.27	Alluvium	
AMW-11	2021-08-27	5449.60	6.30	5443.30	Alluvium	
AMW-11	2021-09-22	5449.60	6.33	5443.27	Alluvium	
AMW-11	2021-10-27	5449.60	6.26	5443.34	Alluvium	
AMW-11	2021-11-30	5449.60	6.33	5443.27	Alluvium	
AMW-11	2021-12-20	5449.60	6.33	5443.27	Alluvium	
AMW-12	2021-01-28	5464.82	13.61	5451.21	Alluvium	
AMW-12	2021-02-26	5464.82	13.78	5451.04	Alluvium	
AMW-12	2021-03-31	5464.82	13.60	5451.22	Alluvium	
AMW-12	2021-04-19	5464.82	13.61	5451.21	Alluvium	
AMW-12	2021-05-27	5464.82	13.46	5451.36	Alluvium	
AMW-12	2021-06-29	5464.82	13.79	5451.03	Alluvium	
AMW-12	2021-07-27	5464.82	13.61	5451.21	Alluvium	
AMW-12	2021-08-26	5464.82	13.41	5451.41	Alluvium	
AMW-12	2021-09-22	5464.82	13.63	5451.19	Alluvium	
AMW-12	2021-10-27	5464.82	13.70	5451.12	Alluvium	
AMW-12	2021-11-30	5464.82	13.79	5451.03	Alluvium	
AMW-12	2021-12-20	5464.82	13.89	5450.93	Alluvium	
AMW-13	2021-01-28	5454.99	11.49	5443.50	Alluvium	
AMW-13	2021-02-26	5454.99	11.57	5443.42	Alluvium	
AMW-13	2021-03-31	5454.99	11.32	5443.67	Alluvium	
AMW-13	2021-04-19	5454.99	11.33	5443.66	Alluvium	
AMW-13	2021-05-27	5454.99	11.30	5443.69	Alluvium	
AMW-13	2021-06-30	5454.99	10.69	5444.30	Alluvium	
AMW-13	2021-07-26	5454.99	10.49	5444.50	Alluvium	
AMW-13	2021-08-26	5454.99	11.15	5443.84	Alluvium	
AMW-13	2021-09-22	5454.99	11.42	5443.57	Alluvium	
AMW-13	2021-10-27	5454.99	11.59	5443.40	Alluvium	

Table 6. BPSOU 2021 Groundwater Elevations

Location	Monitoring Date	MP Elev (NAVD88 ft)	DTW or Stage Reading (ft)	WL Elev (NAVD88 ft)	Aquifer	Notes
AMW-13	2021-11-30	5454.99	11.69	5443.30	Alluvium	
AMW-13	2021-12-20	5454.99	11.73	5443.26	Alluvium	
AMW-13B	2021-01-28	5454.97	10.56	5444.41	Alluvium	
AMW-13B	2021-02-26	5454.97	10.61	5444.36	Alluvium	
AMW-13B	2021-03-31	5454.97	10.35	5444.62	Alluvium	
AMW-13B	2021-04-19	5454.97	10.36	5444.61	Alluvium	
AMW-13B	2021-05-27	5454.97	10.08	5444.89	Alluvium	
AMW-13B	2021-06-30	5454.97	10.75	5444.22	Alluvium	
AMW-13B	2021-07-26	5454.97	10.69	5444.28	Alluvium	
AMW-13B	2021-08-26	5454.97	10.49	5444.48	Alluvium	
AMW-13B	2021-09-22	5454.97	10.58	5444.39	Alluvium	
AMW-13B	2021-10-27	5454.97	10.38	5444.59	Alluvium	
AMW-13B	2021-11-30	5454.97	10.53	5444.44	Alluvium	
AMW-13B	2021-12-20	5454.97	10.52	5444.45	Alluvium	
AMW-13B2	2021-01-28	5456.12	11.71	5444.41	Undef-S&G	
AMW-13B2	2021-02-26	5456.12	11.75	5444.37	Undef-S&G	
AMW-13B2	2021-03-31	5456.12	11.50	5444.62	Undef-S&G	
AMW-13B2	2021-04-19	5456.12	11.49	5444.63	Undef-S&G	
AMW-13B2	2021-05-27	5456.12	11.22	5444.90	Undef-S&G	
AMW-13B2	2021-06-30	5456.12	11.88	5444.24	Undef-S&G	
AMW-13B2	2021-07-26	5456.12	11.83	5444.29	Undef-S&G	
AMW-13B2	2021-08-26	5456.12	11.61	5444.51	Undef-S&G	
AMW-13B2	2021-09-22	5456.12	11.79	5444.33	Undef-S&G	
AMW-13B2	2021-10-27	5456.12	11.52	5444.60	Undef-S&G	
AMW-13B2	2021-11-30	5456.12	11.68	5444.44	Undef-S&G	
AMW-13B2	2021-12-20	5456.12	11.65	5444.47	Undef-S&G	
AMW-13C	2021-01-28	5454.17	9.71	5444.46	Alluvium	
AMW-13C	2021-02-26	5454.17	9.71	5444.46	Alluvium	
AMW-13C	2021-03-31	5454.17	9.49	5444.68	Alluvium	
AMW-13C	2021-04-19	5454.17	9.49	5444.68	Alluvium	
AMW-13C	2021-05-27	5454.17	9.33	5444.84	Alluvium	
AMW-13C	2021-06-30	5454.17	9.85	5444.32	Alluvium	
AMW-13C	2021-07-26	5454.17	9.89	5444.28	Alluvium	
AMW-13C	2021-08-26	5454.17	9.71	5444.46	Alluvium	
AMW-13C	2021-09-22	5454.17	9.82	5444.35	Alluvium	
AMW-13C	2021-10-27	5454.17	9.64	5444.53	Alluvium	
AMW-13C	2021-11-30	5454.17	9.74	5444.43	Alluvium	
AMW-13C	2021-12-20	5454.17	9.75	5444.42	Alluvium	
B1	2021-01-27	5400.00	26.46	5426.46	BTL SW Cell	
B1	2021-02-26	5400.00	26.47	5426.47	BTL SW Cell	
B1	2021-03-30	5400.00	26.51	5426.51	BTL SW Cell	
B1	2021-04-20	5400.00	26.61	5426.61	BTL SW Cell	
B1	2021-05-28	5400.00	26.64	5426.64	BTL SW Cell	
B1	2021-06-28	5400.00	26.62	5426.62	BTL SW Cell	
B1	2021-07-27	5400.00	26.64	5426.64	BTL SW Cell	
B1	2021-08-26	5400.00	26.68	5426.68	BTL SW Cell	
B1	2021-09-21	5400.00	26.62	5426.62	BTL SW Cell	
B1	2021-10-28	5400.00	26.61	5426.61	BTL SW Cell	
B1	2021-11-30	5400.00	26.63	5426.63	BTL SW Cell	
B1	2021-12-21	5400.00	26.58	5426.58	BTL SW Cell	
B3	2021-01-27	5400.00	26.28	5426.28	BTL SW Cell	
B3	2021-02-26	5400.00	26.33	5426.33	BTL SW Cell	
B3	2021-03-30	5400.00	26.35	5426.35	BTL SW Cell	
B3	2021-04-20	5400.00	26.33	5426.33	BTL SW Cell	
B3	2021-05-28	5400.00	26.44	5426.44	BTL SW Cell	
B3	2021-06-28	5400.00	26.63	5426.63	BTL SW Cell	
B3	2021-07-27	5400.00	26.61	5426.61	BTL SW Cell	
B3	2021-08-26	5400.00	26.58	5426.58	BTL SW Cell	
B3	2021-09-21	5400.00	26.35	5426.35	BTL SW Cell	
B3	2021-10-28	5400.00	26.30	5426.30	BTL SW Cell	
B3	2021-11-30	5400.00	26.24	5426.24	BTL SW Cell	
B3	2021-12-21	5400.00	26.22	5426.22	BTL SW Cell	
BMW-01A	2021-01-27	5434.40			Weathered Bedrock	Frozen at 3.83 ft
BMW-01A	2021-02-25	5434.40			Weathered Bedrock	Frozen at 4.46 ft.
BMW-01A	2021-03-30	5434.40			Weathered Bedrock	Ice at 4.34 ft
BMW-01A	2021-04-19	5434.40	3.95	5430.45	Weathered Bedrock	
BMW-01A	2021-05-27	5434.40	3.88	5430.52	Weathered Bedrock	
BMW-01A	2021-06-29	5434.40	4.03	5430.37	Weathered Bedrock	
BMW-01A	2021-07-26	5434.40	4.14	5430.26	Weathered Bedrock	
BMW-01A	2021-08-26	5434.40	3.93	5430.47	Weathered Bedrock	
BMW-01A	2021-09-21	5434.40	4.13	5430.27	Weathered Bedrock	
BMW-01A	2021-10-27	5434.40	4.26	5430.14	Weathered Bedrock	
BMW-01A	2021-11-29	5434.40	4.36	5430.04	Weathered Bedrock	
BMW-01A	2021-12-20	5434.40	4.45	5429.95	Weathered Bedrock	
BMW-01B	2021-01-27	5433.62			Bedrock	Frozen at 3.55 ft
BMW-01B	2021-02-25	5433.62			Bedrock	Frozen at 3.55 ft.
BMW-01B	2021-03-30	5433.62			Bedrock	Ice at 3.51 ft
BMW-01B	2021-04-19	5433.62			Bedrock	Ice at 3.07 ft.
BMW-01B	2021-05-27	5433.62	3.01	5430.61	Bedrock	
BMW-01B	2021-06-29	5433.62	3.20	5430.42	Bedrock	

Table 6. BPSOU 2021 Groundwater Elevations

Location	Monitoring Date	MP Elev (NAVD88 ft)	DTW or Stage Reading (ft)	WL Elev (NAVD88 ft)	Aquifer	Notes
BMW-01B	2021-07-26	5433.62	3.30	5430.32	Bedrock	
BMW-01B	2021-08-26	5433.62	3.08	5430.54	Bedrock	
BMW-01B	2021-09-21	5433.62	3.28	5430.34	Bedrock	
BMW-01B	2021-10-27	5433.62	3.44	5430.18	Bedrock	
BMW-01B	2021-11-29	5433.62	3.50	5430.12	Bedrock	
BMW-01B	2021-12-20	5433.62	3.60	5430.02	Bedrock	
BMW-01C	2021-01-27	5434.60	4.82	5429.78	Alluvium	
BMW-01C	2021-02-25	5434.60	4.73	5429.87	Alluvium	
BMW-01C	2021-03-30	5434.60			Alluvium	Ice at 4.10 ft
BMW-01C	2021-04-19	5434.60			Alluvium	Ice at 4.13 ft.
BMW-01C	2021-05-27	5434.60	3.85	5430.75	Alluvium	
BMW-01C	2021-06-29	5434.60	4.42	5430.18	Alluvium	
BMW-01C	2021-07-26	5434.60	4.61	5429.99	Alluvium	
BMW-01C	2021-08-26	5434.60	4.65	5429.95	Alluvium	
BMW-01C	2021-09-21	5434.60	4.64	5429.96	Alluvium	
BMW-01C	2021-10-27	5434.60	4.70	5429.90	Alluvium	
BMW-01C	2021-11-29	5434.60	4.76	5429.84	Alluvium	
BMW-01C	2021-12-20	5434.60	4.80	5429.80	Alluvium	
BMW-02A	2021-01-27	5427.69	6.81	5420.88	Alluvium	
BMW-02A	2021-02-26	5427.69	6.87	5420.82	Alluvium	
BMW-02A	2021-03-31	5427.69	6.76	5420.93	Alluvium	
BMW-02A	2021-04-20	5427.69	6.74	5420.95	Alluvium	
BMW-02A	2021-05-28	5427.69	6.72	5420.97	Alluvium	
BMW-02A	2021-06-30	5427.69	6.71	5420.98	Alluvium	
BMW-02A	2021-07-26	5427.69	6.71	5420.98	Alluvium	
BMW-02A	2021-08-27	5427.69	6.73	5420.96	Alluvium	
BMW-02A	2021-09-22	5427.69	6.75	5420.94	Alluvium	
BMW-02A	2021-10-28	5427.69	6.78	5420.91	Alluvium	
BMW-02A	2021-11-30	5427.69	6.79	5420.90	Alluvium	
BMW-02A	2021-12-20	5427.69	6.80	5420.89	Alluvium	
BMW-02B	2021-01-27	5427.31	6.47	5420.84	Bedrock	
BMW-02B	2021-02-26	5427.31	6.46	5420.85	Bedrock	
BMW-02B	2021-03-31	5427.31	6.40	5420.91	Bedrock	
BMW-02B	2021-04-20	5427.31	6.34	5420.97	Bedrock	
BMW-02B	2021-05-28	5427.31	6.26	5421.05	Bedrock	
BMW-02B	2021-06-30	5427.31	6.29	5421.02	Bedrock	
BMW-02B	2021-07-26	5427.31	6.30	5421.01	Bedrock	
BMW-02B	2021-08-27	5427.31	6.34	5420.97	Bedrock	
BMW-02B	2021-09-22	5427.31	6.37	5420.94	Bedrock	
BMW-02B	2021-10-28	5427.31	6.41	5420.90	Bedrock	
BMW-02B	2021-11-30	5427.31	6.42	5420.89	Bedrock	
BMW-02B	2021-12-20	5427.31	6.44	5420.87	Bedrock	
BMW-02D	2021-01-27	5427.14	5.65	5421.49	Bedrock	
BMW-02D	2021-02-26	5427.14	5.77	5421.37	Bedrock	
BMW-02D	2021-03-31	5427.14	5.65	5421.49	Bedrock	
BMW-02D	2021-04-20	5427.14	5.56	5421.58	Bedrock	
BMW-02D	2021-05-28	5427.14	5.45	5421.69	Bedrock	
BMW-02D	2021-06-30	5427.14	5.50	5421.64	Bedrock	
BMW-02D	2021-07-26	5427.14	5.54	5421.60	Bedrock	
BMW-02D	2021-08-27	5427.14	5.59	5421.55	Bedrock	
BMW-02D	2021-09-22	5427.14	5.66	5421.48	Bedrock	
BMW-02D	2021-10-28	5427.14	5.58	5421.56	Bedrock	
BMW-02D	2021-11-30	5427.14	5.76	5421.38	Bedrock	
BMW-02D	2021-12-20	5427.14	5.68	5421.46	Bedrock	
BMW-03A	2021-01-27	5422.80			Alluvium	Frozen at 4.21 ft
BMW-03A	2021-02-26	5422.80			Alluvium	Frozen at 4.3 ft.
BMW-03A	2021-03-30	5422.80			Alluvium	Frozen at 4.26 ft.
BMW-03A	2021-04-20	5422.80			Alluvium	Frozen at 4.24 ft.
BMW-03A	2021-05-28	5422.80	3.88	5418.92	Alluvium	
BMW-03A	2021-06-29	5422.80	4.37	5418.43	Alluvium	
BMW-03A	2021-07-27	5422.80	4.49	5418.31	Alluvium	
BMW-03A	2021-08-27	5422.80	4.34	5418.46	Alluvium	
BMW-03A	2021-09-22	5422.80	4.41	5418.39	Alluvium	
BMW-03A	2021-10-28	5422.80	4.35	5418.45	Alluvium	
BMW-03A	2021-11-30	5422.80	4.42	5418.38	Alluvium	PVC casing was trimmed 0.72 ft on 11/5/21 and not yet re-surveyed. Actual dtw was 3.7 ft. DTW was adjusted by trimmed length (3.7+0.72).
BMW-03A	2021-12-20	5422.80	4.44	5418.36	Alluvium	PVC casing was trimmed 0.72 ft. on 11/5/21 and not yet re-surveyed. Actual DTW was 3.72 ft. DTW was adjusted by trimmed length (3.72+0.72).
BMW-03B	2021-01-27	5423.19	4.21	5418.98	Bedrock	
BMW-03B	2021-02-26	5423.19	4.17	5419.02	Bedrock	
BMW-03B	2021-03-30	5423.19	3.92	5419.27	Bedrock	Observed dTW is suspect, continuous recorder indicates the level to be approximately 3.97 ft.
BMW-03B	2021-04-20	5423.19	3.93	5419.26	Bedrock	
BMW-03B	2021-05-28	5423.19	3.78	5419.41	Bedrock	
BMW-03B	2021-06-29	5423.19	4.05	5419.14	Bedrock	
BMW-03B	2021-07-27	5423.19	4.16	5419.03	Bedrock	
BMW-03B	2021-08-27	5423.19	4.12	5419.07	Bedrock	
BMW-03B	2021-09-22	5423.19	4.18	5419.01	Bedrock	
BMW-03B	2021-10-28	5423.19	4.19	5419.00	Bedrock	

Table 6. BPSOU 2021 Groundwater Elevations

Location	Monitoring Date	MP Elev (NAVD88 ft)	DTW or Stage Reading (ft)	WL Elev (NAVD88 ft)	Aquifer	Notes
BMW-03B	2021-11-30	5423.19	4.19	5419.00	Bedrock	
BMW-03B	2021-12-20	5423.19	4.25	5418.94	Bedrock	
BMW-04B	2021-01-27	5423.50	4.59	5418.91	Bedrock	
BMW-04B	2021-02-26	5423.50	4.58	5418.92	Bedrock	
BMW-04B	2021-03-30	5423.50	4.41	5419.09	Bedrock	
BMW-04B	2021-04-20	5423.50	4.38	5419.12	Bedrock	
BMW-04B	2021-05-28	5423.50	4.17	5419.33	Bedrock	
BMW-04B	2021-06-29	5423.50	4.81	5418.69	Bedrock	
BMW-04B	2021-07-27	5423.50			Bedrock	No longer access due to safety concerns.
BMW-04B	2021-09-21	5423.50			Bedrock	Cannot access due to safety concerns.
BMW-04B	2021-10-28	5423.50			Bedrock	Cannot access due to safety concerns
BMW-04B	2021-11-30	5423.50			Bedrock	Cannot access due to safety concerns
BMW-04B	2021-12-20	5423.50			Bedrock	Cannot access due to safety concerns.
BMW-05A	2021-01-27	5439.29	8.04	5431.25	Alluvium	Slushy but not frozen
BMW-05A	2021-02-25	5439.29	8.04	5431.25	Alluvium	
BMW-05A	2021-03-30	5439.29	8.05	5431.24	Alluvium	
BMW-05A	2021-04-19	5439.29	8.06	5431.23	Alluvium	
BMW-05A	2021-05-27	5439.29	8.07	5431.22	Alluvium	
BMW-05A	2021-06-29	5439.29	8.11	5431.18	Alluvium	
BMW-05A	2021-07-26	5439.29	8.14	5431.15	Alluvium	
BMW-05A	2021-08-26	5439.29			Alluvium	Dry
BMW-05A	2021-09-21	5439.29	8.09	5431.20	Alluvium	
BMW-05A	2021-10-27	5439.29	8.08	5431.21	Alluvium	
BMW-05A	2021-11-29	5439.29	8.07	5431.22	Alluvium	
BMW-05A	2021-12-20	5439.29	8.08	5431.21	Alluvium	
BMW-05B	2021-01-27	5439.07	12.79	5426.28	Bedrock	
BMW-05B	2021-02-25	5439.07	12.77	5426.30	Bedrock	
BMW-05B	2021-03-30	5439.07	12.35	5426.72	Bedrock	
BMW-05B	2021-04-19	5439.07	12.33	5426.74	Bedrock	
BMW-05B	2021-05-27	5439.07	12.22	5426.85	Bedrock	
BMW-05B	2021-06-29	5439.07	12.61	5426.46	Bedrock	
BMW-05B	2021-07-26	5439.07	12.89	5426.18	Bedrock	
BMW-05B	2021-08-26	5439.07	12.84	5426.23	Bedrock	
BMW-05B	2021-09-21	5439.07	12.94	5426.13	Bedrock	
BMW-05B	2021-10-27	5439.07	12.93	5426.14	Bedrock	
BMW-05B	2021-11-29	5439.07	12.95	5426.12	Bedrock	
BMW-05B	2021-12-20	5439.07	13.03	5426.04	Bedrock	
BMW-06B	2021-01-27	5430.35	10.13	5420.22	Bedrock	
BMW-06B	2021-02-26	5430.35	10.16	5420.19	Bedrock	
BMW-06B	2021-03-30	5430.35	10.00	5420.35	Bedrock	
BMW-06B	2021-04-20	5430.35	9.98	5420.37	Bedrock	
BMW-06B	2021-05-28	5430.35	9.98	5420.37	Bedrock	
BMW-06B	2021-06-29	5430.35	10.05	5420.30	Bedrock	
BMW-06B	2021-07-26	5430.35	10.12	5420.23	Bedrock	
BMW-06B	2021-08-27	5430.35	10.04	5420.31	Bedrock	
BMW-06B	2021-09-21	5430.35	10.10	5420.25	Bedrock	
BMW-06B	2021-10-28	5430.35	10.16	5420.19	Bedrock	
BMW-06B	2021-11-30	5430.35	10.19	5420.16	Bedrock	
BMW-06B	2021-12-20	5430.35	10.22	5420.13	Bedrock	
BMW-08A	2021-01-27	5447.71			Alluvium	Cap frozen could not access
BMW-08A	2021-02-26	5447.71			Alluvium	Frozen cap
BMW-08A	2021-03-30	5447.71			Alluvium	Mud at 11.25 ft
BMW-08A	2021-04-20	5447.71			Alluvium	Dry at 11.23 ft.
BMW-08A	2021-05-27	5447.71			Alluvium	Dry at 11.23 ft.
BMW-08A	2021-06-30	5447.71			Alluvium	Dry at 11.23 ft
BMW-08A	2021-07-27	5447.71			Alluvium	Dry at 11.23 ft
BMW-08A	2021-08-26	5447.71	10.27	5437.44	Alluvium	
BMW-08A	2021-09-21	5447.71	12.00	5435.71	Alluvium	
BMW-08A	2021-10-28	5447.71	11.68	5436.03	Alluvium	
BMW-08A	2021-11-30	5447.71			Alluvium	
BMW-08A	2021-12-20	5447.71	11.72	5435.99	Alluvium	
BMW-09A	2021-01-27	5436.47	6.04	5430.43	Alluvium	
BMW-09A	2021-02-26	5436.47	5.91	5430.56	Alluvium	
BMW-09A	2021-03-30	5436.47	5.52	5430.95	Alluvium	
BMW-09A	2021-04-19	5436.47	5.41	5431.06	Alluvium	
BMW-09A	2021-05-27	5436.47	5.28	5431.19	Alluvium	
BMW-09A	2021-06-29	5436.47	6.07	5430.40	Alluvium	
BMW-09A	2021-07-26	5436.47	6.08	5430.39	Alluvium	
BMW-09A	2021-08-26	5436.47	5.88	5430.59	Alluvium	
BMW-09A	2021-09-21	5436.47	5.97	5430.50	Alluvium	
BMW-09A	2021-10-27	5436.47	5.81	5430.66	Alluvium	
BMW-09A	2021-11-29	5436.47	5.81	5430.66	Alluvium	
BMW-09A	2021-12-20	5436.47	5.97	5430.50	Alluvium	
BMW-09B	2021-01-27	5436.18	5.76	5430.42	Bedrock	
BMW-09B	2021-02-26	5436.18	5.71	5430.47	Bedrock	
BMW-09B	2021-03-30	5436.18	5.35	5430.83	Bedrock	
BMW-09B	2021-04-19	5436.18	5.49	5430.69	Bedrock	
BMW-09B	2021-05-27	5436.18	5.33	5430.85	Bedrock	
BMW-09B	2021-06-29	5436.18	5.60	5430.58	Bedrock	
BMW-09B	2021-07-26	5436.18	5.67	5430.51	Bedrock	

Table 6. BPSOU 2021 Groundwater Elevations

Location	Monitoring Date	MP Elev (NAVD88 ft)	DTW or Stage Reading (ft)	WL Elev (NAVD88 ft)	Aquifer	Notes
BMW-09B	2021-08-26	5436.18	5.51	5430.67	Bedrock	
BMW-09B	2021-09-21	5436.18	5.62	5430.56	Bedrock	
BMW-09B	2021-10-27	5436.18	5.51	5430.67	Bedrock	
BMW-09B	2021-11-29	5436.18	5.66	5430.52	Bedrock	
BMW-09B	2021-12-20	5436.18	5.74	5430.44	Bedrock	
BMW-11B	2021-01-28	5435.54	10.58	5424.96	Bedrock	
BMW-11B	2021-02-25	5435.54	10.58	5424.96	Bedrock	
BMW-11B	2021-03-30	5435.54	10.37	5425.17	Bedrock	
BMW-11B	2021-04-19	5435.54	10.45	5425.09	Bedrock	
BMW-11B	2021-05-27	5435.54	10.33	5425.21	Bedrock	
BMW-11B	2021-06-29	5435.54	10.43	5425.11	Bedrock	
BMW-11B	2021-07-26	5435.54	10.45	5425.09	Bedrock	
BMW-11B	2021-08-26	5435.54	10.34	5425.20	Bedrock	
BMW-11B	2021-09-21	5435.54	10.43	5425.11	Bedrock	
BMW-11B	2021-10-27	5435.54	10.50	5425.04	Bedrock	
BMW-11B	2021-11-29	5435.54	10.57	5424.97	Bedrock	
BMW-11B	2021-12-20	5435.54	10.59	5424.95	Bedrock	
BMW-13B	2021-01-27	5432.98	4.49	5428.49	Alluvium	
BMW-13B	2021-02-26	5432.98	4.42	5428.56	Alluvium	
BMW-13B	2021-03-31	5432.98	4.20	5428.78	Alluvium	
BMW-13B	2021-04-20	5432.98	4.23	5428.75	Alluvium	
BMW-13B	2021-05-27	5432.98	4.13	5428.85	Alluvium	
BMW-13B	2021-06-30	5432.98	4.32	5428.66	Alluvium	
BMW-13B	2021-07-26	5432.98	4.30	5428.68	Alluvium	
BMW-13B	2021-08-26	5432.98	4.21	5428.77	Alluvium	
BMW-13B	2021-09-21	5432.98	4.31	5428.67	Alluvium	
BMW-13B	2021-10-28	5432.98	4.06	5428.92	Alluvium	
BMW-13B	2021-11-30	5432.98	4.45	5428.53	Alluvium	
BMW-13B	2021-12-20	5432.98	4.51	5428.47	Alluvium	
BPS07-01A	2021-01-27	5479.33	19.08	5460.25	Alluvium	
BPS07-01A	2021-02-25	5479.33	19.27	5460.06	Alluvium	
BPS07-01A	2021-03-31	5479.33	19.44	5459.89	Alluvium	
BPS07-01A	2021-04-19	5479.33	19.44	5459.89	Alluvium	
BPS07-01A	2021-05-27	5479.33	19.48	5459.85	Alluvium	
BPS07-01A	2021-06-29	5479.33	19.35	5459.98	Alluvium	
BPS07-01A	2021-07-27	5479.33	19.11	5460.22	Alluvium	
BPS07-01A	2021-08-26	5479.33	18.90	5460.43	Alluvium	
BPS07-01A	2021-09-22	5479.33	18.80	5460.53	Alluvium	
BPS07-01A	2021-10-27	5479.33	19.07	5460.26	Alluvium	
BPS07-01A	2021-11-29	5479.33	19.34	5459.99	Alluvium	
BPS07-01A	2021-12-20	5479.33	19.55	5459.78	Alluvium	
BPS07-01B	2021-01-27	5479.18	18.95	5460.23	Alluvium	
BPS07-01B	2021-02-25	5479.18	19.13	5460.05	Alluvium	
BPS07-01B	2021-03-31	5479.18	19.32	5459.86	Alluvium	
BPS07-01B	2021-04-19	5479.18	19.31	5459.87	Alluvium	
BPS07-01B	2021-05-27	5479.18	19.38	5459.80	Alluvium	
BPS07-01B	2021-06-29	5479.18	19.24	5459.94	Alluvium	
BPS07-01B	2021-07-27	5479.18	19.00	5460.18	Alluvium	
BPS07-01B	2021-08-26	5479.18	18.75	5460.43	Alluvium	
BPS07-01B	2021-09-22	5479.18	18.70	5460.48	Alluvium	
BPS07-01B	2021-10-27	5479.18	18.96	5460.22	Alluvium	
BPS07-01B	2021-11-29	5479.18	19.25	5459.93	Alluvium	
BPS07-01B	2021-12-20	5479.18	19.40	5459.78	Alluvium	
BPS07-03A	2021-01-28	5452.69	10.23	5442.46	Alluvium	
BPS07-03A	2021-02-26	5452.69	10.52	5442.17	Alluvium	
BPS07-03A	2021-03-31	5452.69	10.15	5442.54	Alluvium	
BPS07-03A	2021-04-19	5452.69	10.21	5442.48	Alluvium	
BPS07-03A	2021-05-27	5452.69	9.52	5443.17	Alluvium	
BPS07-03A	2021-06-30	5452.69	10.80	5441.89	Alluvium	Observed DTW is suspect, continuous recorder indicates the level to be 10.60 ft.
BPS07-03A	2021-08-26	5452.69	10.16	5442.53	Alluvium	
BPS07-03A	2021-09-22	5452.69	10.32	5442.37	Alluvium	
BPS07-03A	2021-10-27	5452.69	9.87	5442.82	Alluvium	
BPS07-03A	2021-11-30	5452.69	10.23	5442.46	Alluvium	
BPS07-03A	2021-12-20	5452.69	10.21	5442.48	Alluvium	
BPS07-05A	2021-01-28	5463.12	10.03	5453.09	Alluvium	
BPS07-05A	2021-02-26	5463.12	10.25	5452.87	Alluvium	
BPS07-05A	2021-03-31	5463.12	10.02	5453.10	Alluvium	
BPS07-05A	2021-04-19	5463.12	9.95	5453.17	Alluvium	
BPS07-05A	2021-05-27	5463.12	9.75	5453.37	Alluvium	
BPS07-05A	2021-06-29	5463.12	9.26	5453.86	Alluvium	
BPS07-05A	2021-07-27	5463.12	9.32	5453.80	Alluvium	
BPS07-05A	2021-08-26	5463.12	9.27	5453.85	Alluvium	
BPS07-05A	2021-09-22	5463.12	9.48	5453.64	Alluvium	
BPS07-05A	2021-10-27	5463.12	9.83	5453.29	Alluvium	
BPS07-05A	2021-11-30	5463.12	10.00	5453.12	Alluvium	
BPS07-05A	2021-12-20	5463.12	10.16	5452.96	Alluvium	
BPS07-05B	2021-01-28	5462.50	9.40	5453.10	Alluvium	
BPS07-05B	2021-02-26	5462.50	9.51	5452.99	Alluvium	
BPS07-05B	2021-03-31	5462.50			Alluvium	Frozen

Table 6. BPSOU 2021 Groundwater Elevations

Location	Monitoring Date	MP Elev (NAVD88 ft)	DTW or Stage Reading (ft)	WL Elev (NAVD88 ft)	Aquifer	Notes
BPS07-05B	2021-04-19	5462.50	9.41	5453.09	Alluvium	
BPS07-05B	2021-05-27	5462.50	9.34	5453.16	Alluvium	
BPS07-05B	2021-06-29	5462.50	9.51	5452.99	Alluvium	
BPS07-05B	2021-07-27	5462.50	9.52	5452.98	Alluvium	
BPS07-05B	2021-08-26	5462.50	9.36	5453.14	Alluvium	
BPS07-05B	2021-09-22	5462.50	9.43	5453.07	Alluvium	
BPS07-05B	2021-10-27	5462.50	9.44	5453.06	Alluvium	
BPS07-05B	2021-11-30	5462.50	9.55	5452.95	Alluvium	
BPS07-05B	2021-12-20	5462.50	9.66	5452.84	Alluvium	
BPS07-07	2021-01-28	5448.51	5.57	5442.94	Alluvium	
BPS07-07	2021-02-26	5448.51	5.60	5442.91	Alluvium	
BPS07-07	2021-03-31	5448.51	5.25	5443.26	Alluvium	
BPS07-07	2021-04-19	5448.51	5.26	5443.25	Alluvium	
BPS07-07	2021-05-27	5448.51	5.08	5443.43	Alluvium	
BPS07-07	2021-06-30	5448.51	5.56	5442.95	Alluvium	
BPS07-07	2021-07-27	5448.51	5.64	5442.87	Alluvium	
BPS07-07	2021-08-27	5448.51	5.48	5443.03	Alluvium	
BPS07-07	2021-09-22	5448.51	5.44	5443.07	Alluvium	
BPS07-07	2021-10-27	5448.51	5.39	5443.12	Alluvium	
BPS07-07	2021-11-30	5448.51	5.62	5442.89	Alluvium	
BPS07-07	2021-12-20	5448.51	5.51	5443.00	Alluvium	
BPS07-08A	2021-01-27	5450.46	10.32	5440.14	Alluvium	
BPS07-08A	2021-02-25	5450.46	10.35	5440.11	Alluvium	
BPS07-08A	2021-03-30	5450.46	9.71	5440.75	Alluvium	
BPS07-08A	2021-04-19	5450.46	9.96	5440.50	Alluvium	
BPS07-08A	2021-05-27	5450.46	9.84	5440.62	Alluvium	
BPS07-08A	2021-06-29	5450.46	10.11	5440.35	Alluvium	
BPS07-08A	2021-07-26	5450.46	10.09	5440.37	Alluvium	
BPS07-08A	2021-08-26	5450.46	10.00	5440.46	Alluvium	
BPS07-08A	2021-09-21	5450.46	10.16	5440.30	Alluvium	
BPS07-08A	2021-10-27	5450.46	10.27	5440.19	Alluvium	
BPS07-08A	2021-11-29	5450.46	10.33	5440.13	Alluvium	
BPS07-08A	2021-12-20	5450.46	10.33	5440.13	Alluvium	
BPS07-11A	2021-01-27	5473.00	14.61	5458.39	Alluvium	
BPS07-11A	2021-02-25	5473.00	14.77	5458.23	Alluvium	
BPS07-11A	2021-03-31	5473.00	14.69	5458.31	Alluvium	
BPS07-11A	2021-04-19	5473.00	14.61	5458.39	Alluvium	
BPS07-11A	2021-05-27	5473.00	14.50	5458.50	Alluvium	
BPS07-11A	2021-06-29	5473.00	14.10	5458.90	Alluvium	
BPS07-11A	2021-07-27	5473.00	14.09	5458.91	Alluvium	
BPS07-11A	2021-08-26	5473.00	13.72	5459.28	Alluvium	
BPS07-11A	2021-09-22	5473.00	13.94	5459.06	Alluvium	
BPS07-11A	2021-10-27	5473.00	14.63	5458.37	Alluvium	
BPS07-11A	2021-11-30	5473.00	14.97	5458.03	Alluvium	
BPS07-11A	2021-12-20	5473.00	15.10	5457.90	Alluvium	
BPS07-11B	2021-01-27	5472.78	14.25	5458.53	Alluvium	
BPS07-11B	2021-02-25	5472.78	14.38	5458.40	Alluvium	
BPS07-11B	2021-03-31	5472.78	14.54	5458.24	Alluvium	
BPS07-11B	2021-04-19	5472.78	14.51	5458.27	Alluvium	
BPS07-11B	2021-05-27	5472.78	14.45	5458.33	Alluvium	
BPS07-11B	2021-06-29	5472.78	14.35	5458.43	Alluvium	
BPS07-11B	2021-07-27	5472.78	14.39	5458.39	Alluvium	Observed DTW is suspect, continuous recorder indicates value to be 14.33 ft.
BPS07-11B	2021-08-26	5472.78	14.15	5458.63	Alluvium	
BPS07-11B	2021-09-22	5472.78	14.24	5458.54	Alluvium	
BPS07-11B	2021-10-27	5472.78	14.55	5458.23	Alluvium	
BPS07-11B	2021-11-30	5472.78	14.80	5457.98	Alluvium	
BPS07-11B	2021-12-20	5472.78	14.92	5457.86	Alluvium	
BPS07-13A	2021-01-27	5463.58	23.68	5439.90	Alluvium	
BPS07-13A	2021-02-25	5463.58	23.69	5439.89	Alluvium	
BPS07-13A	2021-03-30	5463.58	23.35	5440.23	Alluvium	
BPS07-13A	2021-04-19	5463.58	23.45	5440.13	Alluvium	
BPS07-13A	2021-05-27	5463.58	23.33	5440.25	Alluvium	
BPS07-13A	2021-06-29	5463.58	23.60	5439.98	Alluvium	
BPS07-13A	2021-07-26	5463.58	23.65	5439.93	Alluvium	
BPS07-13A	2021-08-26	5463.58	23.52	5440.06	Alluvium	
BPS07-13A	2021-09-21	5463.58	23.57	5440.01	Alluvium	
BPS07-13A	2021-10-27	5463.58	23.63	5439.95	Alluvium	
BPS07-13A	2021-11-29	5463.58	23.66	5439.92	Alluvium	
BPS07-13A	2021-12-20	5463.58	23.68	5439.90	Alluvium	
BPS07-13B	2021-01-27	5464.70	24.53	5440.17	Alluvium	
BPS07-13B	2021-02-25	5464.70	24.54	5440.16	Alluvium	
BPS07-13B	2021-03-30	5464.70	24.09	5440.61	Alluvium	
BPS07-13B	2021-04-19	5464.70	24.21	5440.49	Alluvium	
BPS07-13B	2021-05-27	5464.70	24.11	5440.59	Alluvium	
BPS07-13B	2021-06-29	5464.70	24.38	5440.32	Alluvium	
BPS07-13B	2021-07-26	5464.70	24.46	5440.24	Alluvium	
BPS07-13B	2021-08-26	5464.70	24.31	5440.39	Alluvium	
BPS07-13B	2021-09-21	5464.70	24.44	5440.26	Alluvium	
BPS07-13B	2021-10-27	5464.70	24.45	5440.25	Alluvium	

Table 6. BPSOU 2021 Groundwater Elevations

Location	Monitoring Date	MP Elev (NAVD88 ft)	DTW or Stage Reading (ft)	WL Elev (NAVD88 ft)	Aquifer	Notes
BPS07-13B	2021-11-29	5464.70	24.50	5440.20	Alluvium	
BPS07-13B	2021-12-20	5464.70	24.52	5440.18	Alluvium	
BPS07-14A	2021-01-27	5459.52	20.85	5438.67	Alluvium	
BPS07-14A	2021-02-25	5459.52			Alluvium	Frozen at 1.6 feet
BPS07-14A	2021-03-30	5459.52	20.52	5439.00	Alluvium	
BPS07-14A	2021-04-19	5459.52	20.54	5438.98	Alluvium	
BPS07-14A	2021-05-27	5459.52	20.54	5438.98	Alluvium	
BPS07-14A	2021-06-29	5459.52	20.75	5438.77	Alluvium	
BPS07-14A	2021-07-26	5459.52	20.88	5438.64	Alluvium	
BPS07-14A	2021-08-26	5459.52	20.68	5438.84	Alluvium	
BPS07-14A	2021-09-21	5459.52	20.80	5438.72	Alluvium	
BPS07-14A	2021-10-27	5459.52	20.80	5438.72	Alluvium	
BPS07-14A	2021-11-29	5459.52	20.85	5438.67	Alluvium	
BPS07-14A	2021-12-20	5459.52	20.89	5438.63	Alluvium	
BPS07-15A	2021-01-27	5459.33	19.67	5439.66	Alluvium	
BPS07-15A	2021-02-25	5459.33	19.69	5439.64	Alluvium	
BPS07-15A	2021-03-30	5459.33	19.30	5440.03	Alluvium	
BPS07-15A	2021-04-19	5459.33	19.39	5439.94	Alluvium	
BPS07-15A	2021-05-27	5459.33	19.35	5439.98	Alluvium	
BPS07-15A	2021-06-29	5459.33	19.58	5439.75	Alluvium	
BPS07-15A	2021-07-26	5459.33	19.69	5439.64	Alluvium	
BPS07-15A	2021-08-26	5459.33	19.50	5439.83	Alluvium	
BPS07-15A	2021-09-21	5459.33	19.65	5439.68	Alluvium	
BPS07-15A	2021-10-27	5459.33	19.69	5439.64	Alluvium	
BPS07-15A	2021-11-29	5459.33	19.71	5439.62	Alluvium	
BPS07-15A	2021-12-20	5459.33	19.72	5439.61	Alluvium	
BPS07-16A	2021-01-28	5456.26	7.45	5448.81	Alluvium	
BPS07-16A	2021-02-26	5456.26	7.51	5448.75	Alluvium	
BPS07-16A	2021-03-31	5456.26	7.40	5448.86	Alluvium	
BPS07-16A	2021-04-19	5456.26	7.43	5448.83	Alluvium	
BPS07-16A	2021-05-27	5456.26	7.36	5448.90	Alluvium	
BPS07-16A	2021-06-29	5456.26	7.61	5448.65	Alluvium	
BPS07-16A	2021-07-27	5456.26	7.65	5448.61	Alluvium	
BPS07-16A	2021-08-26	5456.26	7.50	5448.76	Alluvium	
BPS07-16A	2021-09-22	5456.26	7.58	5448.68	Alluvium	
BPS07-16A	2021-10-27	5456.26	7.53	5448.73	Alluvium	
BPS07-16A	2021-11-30	5456.26	7.58	5448.68	Alluvium	
BPS07-16A	2021-12-20	5456.26	7.60	5448.66	Alluvium	
BPS07-16B	2021-01-28	5456.53	7.31	5449.22	Alluvium	
BPS07-16B	2021-02-26	5456.53	7.38	5449.15	Alluvium	
BPS07-16B	2021-03-31	5456.53	7.27	5449.26	Alluvium	
BPS07-16B	2021-04-19	5456.53	7.28	5449.25	Alluvium	
BPS07-16B	2021-05-27	5456.53	7.23	5449.30	Alluvium	
BPS07-16B	2021-06-29	5456.53	7.52	5449.01	Alluvium	
BPS07-16B	2021-07-27	5456.53	7.56	5448.97	Alluvium	
BPS07-16B	2021-08-26	5456.53	7.40	5449.13	Alluvium	
BPS07-16B	2021-09-22	5456.53	7.47	5449.06	Alluvium	
BPS07-16B	2021-10-27	5456.53	7.41	5449.12	Alluvium	
BPS07-16B	2021-11-30	5456.53	7.47	5449.06	Alluvium	
BPS07-16B	2021-12-20	5456.53	7.49	5449.04	Alluvium	
BPS07-17A	2021-01-27	5429.62	10.88	5418.74	Alluvium	
BPS07-17A	2021-02-26	5429.62	10.88	5418.74	Alluvium	
BPS07-17A	2021-03-30	5429.62	10.61	5419.01	Alluvium	
BPS07-17A	2021-04-20	5429.62	10.57	5419.05	Alluvium	
BPS07-17A	2021-05-28	5429.62	10.54	5419.08	Alluvium	
BPS07-17A	2021-06-29	5429.62	10.69	5418.93	Alluvium	
BPS07-17A	2021-07-27	5429.62	10.84	5418.78	Alluvium	
BPS07-17A	2021-08-27	5429.62	10.76	5418.86	Alluvium	
BPS07-17A	2021-09-21	5429.62	10.85	5418.77	Alluvium	
BPS07-17A	2021-10-28	5429.62	10.90	5418.72	Alluvium	
BPS07-17A	2021-11-30	5429.62	10.91	5418.71	Alluvium	
BPS07-17A	2021-12-20	5429.62	10.97	5418.65	Alluvium	
BPS07-18A	2021-01-27	5430.10	12.12	5417.98	Alluvium	
BPS07-18A	2021-02-26	5430.10	12.15	5417.95	Alluvium	
BPS07-18A	2021-03-30	5430.10	11.90	5418.20	Alluvium	
BPS07-18A	2021-04-20	5430.10	11.89	5418.21	Alluvium	
BPS07-18A	2021-05-28	5430.10	11.80	5418.30	Alluvium	
BPS07-18A	2021-06-29	5430.10	11.97	5418.13	Alluvium	
BPS07-18A	2021-07-27	5430.10	12.07	5418.03	Alluvium	
BPS07-18A	2021-08-27	5430.10	12.03	5418.07	Alluvium	
BPS07-18A	2021-09-21	5430.10	12.12	5417.98	Alluvium	
BPS07-18A	2021-10-28	5430.10	12.13	5417.97	Alluvium	
BPS07-18A	2021-11-30	5430.10	12.18	5417.92	Alluvium	
BPS07-18A	2021-12-20	5430.10	12.19	5417.91	Alluvium	
BPS07-18B	2021-01-27	5430.32	12.77	5417.55	Alluvium	
BPS07-18B	2021-02-26	5430.32	12.80	5417.52	Alluvium	
BPS07-18B	2021-03-30	5430.32	12.57	5417.75	Alluvium	
BPS07-18B	2021-04-20	5430.32	12.55	5417.77	Alluvium	
BPS07-18B	2021-05-28	5430.32	12.46	5417.86	Alluvium	
BPS07-18B	2021-06-29	5430.32	12.61	5417.71	Alluvium	

Table 6. BPSOU 2021 Groundwater Elevations

Location	Monitoring Date	MP Elev (NAVD88 ft)	DTW or Stage Reading (ft)	WL Elev (NAVD88 ft)	Aquifer	Notes
BPS07-18B	2021-07-27	5430.32	12.72	5417.60	Alluvium	
BPS07-18B	2021-08-27	5430.32	12.65	5417.67	Alluvium	
BPS07-18B	2021-09-21	5430.32	12.75	5417.57	Alluvium	
BPS07-18B	2021-10-28	5430.32	12.76	5417.56	Alluvium	
BPS07-18B	2021-11-30	5430.32	12.83	5417.49	Alluvium	
BPS07-18B	2021-12-20	5430.32	12.83	5417.49	Alluvium	
BPS07-21	2021-01-28	5457.29	14.64	5442.65	Alluvium	
BPS07-21	2021-02-26	5457.29			Alluvium	Under ice cannot access
BPS07-21	2021-03-31	5457.29			Alluvium	Frozen
BPS07-21	2021-04-19	5457.29			Alluvium	Frozen
BPS07-21	2021-05-27	5457.29	14.18	5443.11	Alluvium	
BPS07-21	2021-06-30	5457.29	14.46	5442.83	Alluvium	
BPS07-21	2021-07-27	5457.29	14.01	5443.28	Alluvium	
BPS07-21	2021-08-26	5457.29	14.12	5443.17	Alluvium	
BPS07-21	2021-09-22	5457.29	14.26	5443.03	Alluvium	
BPS07-21	2021-10-27	5457.29	14.41	5442.88	Alluvium	
BPS07-21	2021-11-30	5457.29	14.55	5442.74	Alluvium	
BPS07-21	2021-12-20	5457.29	14.51	5442.78	Alluvium	
BPS07-21B	2021-01-28	5456.61	13.46	5443.15	Alluvium	
BPS07-21B	2021-02-26	5456.61			Alluvium	Under ice cannot access
BPS07-21B	2021-03-31	5456.61	13.24	5443.37	Alluvium	
BPS07-21B	2021-04-19	5456.61	13.27	5443.34	Alluvium	
BPS07-21B	2021-05-27	5456.61	12.85	5443.76	Alluvium	
BPS07-21B	2021-06-30	5456.61	13.64	5442.97	Alluvium	
BPS07-21B	2021-07-26	5456.61	13.54	5443.07	Alluvium	
BPS07-21B	2021-08-26	5456.61	13.33	5443.28	Alluvium	
BPS07-21B	2021-09-22	5456.61	13.44	5443.17	Alluvium	
BPS07-21B	2021-10-27	5456.61	13.20	5443.41	Alluvium	
BPS07-21B	2021-11-30	5456.61	13.44	5443.17	Alluvium	
BPS07-21B	2021-12-20	5456.61	13.40	5443.21	Alluvium	
BPS07-21C	2021-01-28	5456.94	12.72	5444.22	Alluvium	
BPS07-21C	2021-02-26	5456.94	12.74	5444.20	Alluvium	
BPS07-21C	2021-03-31	5456.94	12.44	5444.50	Alluvium	
BPS07-21C	2021-04-19	5456.94	12.44	5444.50	Alluvium	
BPS07-21C	2021-05-27	5456.94	12.21	5444.73	Alluvium	
BPS07-21C	2021-06-30	5456.94	12.80	5444.14	Alluvium	
BPS07-21C	2021-07-26	5456.94	12.80	5444.14	Alluvium	
BPS07-21C	2021-08-26	5456.94	12.58	5444.36	Alluvium	
BPS07-21C	2021-09-22	5456.94	12.72	5444.22	Alluvium	
BPS07-21C	2021-10-27	5456.94	12.56	5444.38	Alluvium	
BPS07-21C	2021-11-30	5456.94	12.69	5444.25	Alluvium	
BPS07-21C	2021-12-20	5456.94	12.69	5444.25	Alluvium	
BPS07-22	2021-01-28	5451.57	9.99	5441.58	Alluvium	
BPS07-22	2021-02-26	5451.57	9.96	5441.61	Alluvium	
BPS07-22	2021-03-31	5451.57	9.38	5442.19	Alluvium	
BPS07-22	2021-04-19	5451.57	9.41	5442.16	Alluvium	
BPS07-22	2021-05-27	5451.57	9.21	5442.36	Alluvium	
BPS07-22	2021-06-30	5451.57	9.90	5441.67	Alluvium	
BPS07-22	2021-07-26	5451.57	9.90	5441.67	Alluvium	
BPS07-22	2021-08-27	5451.57	9.81	5441.76	Alluvium	
BPS07-22	2021-09-22	5451.57	9.67	5441.90	Alluvium	
BPS07-22	2021-10-27	5451.57	9.54	5442.03	Alluvium	
BPS07-22	2021-11-30	5451.57	9.83	5441.74	Alluvium	
BPS07-22	2021-12-20	5451.57	9.75	5441.82	Alluvium	
BPS07-22B	2021-01-28	5451.45	8.54	5442.91	Alluvium	
BPS07-22B	2021-02-26	5451.45	8.66	5442.79	Alluvium	
BPS07-22B	2021-03-31	5451.45	8.24	5443.21	Alluvium	
BPS07-22B	2021-04-19	5451.45	8.28	5443.17	Alluvium	
BPS07-22B	2021-05-27	5451.45	7.90	5443.55	Alluvium	
BPS07-22B	2021-06-30	5451.45	8.65	5442.80	Alluvium	
BPS07-22B	2021-07-26	5451.45	8.59	5442.86	Alluvium	
BPS07-22B	2021-08-26	5451.45	8.31	5443.14	Alluvium	
BPS07-22B	2021-09-22	5451.45	8.43	5443.02	Alluvium	
BPS07-22B	2021-10-27	5451.45	8.30	5443.15	Alluvium	
BPS07-22B	2021-11-30	5451.45	8.52	5442.93	Alluvium	
BPS07-22B	2021-12-20	5451.45	8.48	5442.97	Alluvium	
BPS07-22C	2021-01-28	5451.24	7.38	5443.86	Alluvium	
BPS07-22C	2021-02-26	5451.24	7.31	5443.93	Alluvium	
BPS07-22C	2021-03-31	5451.24	6.99	5444.25	Alluvium	
BPS07-22C	2021-04-19	5451.24	7.00	5444.24	Alluvium	
BPS07-22C	2021-05-27	5451.24	6.82	5444.42	Alluvium	
BPS07-22C	2021-06-30	5451.24	7.35	5443.89	Alluvium	
BPS07-22C	2021-07-26	5451.24	7.33	5443.91	Alluvium	
BPS07-22C	2021-08-26	5451.24	7.06	5444.18	Alluvium	
BPS07-22C	2021-09-22	5451.24	7.21	5444.03	Alluvium	
BPS07-22C	2021-10-27	5451.24	7.14	5444.10	Alluvium	
BPS07-22C	2021-11-30	5451.24	7.28	5443.96	Alluvium	
BPS07-22C	2021-12-20	5451.24	7.30	5443.94	Alluvium	
BPS07-22R	2021-01-28	5451.39	9.38	5442.01	Alluvium	
BPS07-22R	2021-02-26	5451.39	9.34	5442.05	Alluvium	

Table 6. BPSOU 2021 Groundwater Elevations

Location	Monitoring Date	MP Elev (NAVD88 ft)	DTW or Stage Reading (ft)	WL Elev (NAVD88 ft)	Aquifer	Notes
BPS07-22R	2021-03-31	5451.39	8.86	5442.53	Alluvium	
BPS07-22R	2021-04-19	5451.39	8.87	5442.52	Alluvium	
BPS07-22R	2021-05-27	5451.39	8.70	5442.69	Alluvium	
BPS07-22R	2021-06-30	5451.39	9.31	5442.08	Alluvium	
BPS07-22R	2021-07-27	5451.39	9.33	5442.06	Alluvium	
BPS07-22R	2021-08-26	5451.39	9.11	5442.28	Alluvium	
BPS07-22R	2021-09-22	5451.39	9.12	5442.27	Alluvium	
BPS07-22R	2021-10-27	5451.39	9.05	5442.34	Alluvium	
BPS07-22R	2021-11-30	5451.39	9.26	5442.13	Alluvium	
BPS07-22R	2021-12-20	5451.39	9.24	5442.15	Alluvium	
BPS07-23	2021-01-28	5450.83	8.70	5442.13	Alluvium	
BPS07-23	2021-02-26	5450.83	8.74	5442.09	Alluvium	
BPS07-23	2021-03-31	5450.83	8.25	5442.58	Alluvium	
BPS07-23	2021-04-19	5450.83	8.22	5442.61	Alluvium	
BPS07-23	2021-05-27	5450.83	8.05	5442.78	Alluvium	
BPS07-23	2021-06-30	5450.83	8.71	5442.12	Alluvium	
BPS07-23	2021-07-27	5450.83	8.75	5442.08	Alluvium	
BPS07-23	2021-08-26	5450.83	8.52	5442.31	Alluvium	
BPS07-23	2021-09-22	5450.83	8.42	5442.41	Alluvium	
BPS07-23	2021-10-27	5450.83	8.40	5442.43	Alluvium	
BPS07-23	2021-11-30	5450.83	8.71	5442.12	Alluvium	
BPS07-23	2021-12-20	5450.83	8.60	5442.23	Alluvium	
BPS07-24	2021-01-28	5456.13	7.92	5448.21	Alluvium	
BPS07-24	2021-02-25	5456.13	8.07	5448.06	Alluvium	
BPS07-24	2021-03-31	5456.13	7.92	5448.21	Alluvium	
BPS07-24	2021-04-19	5456.13	7.92	5448.21	Alluvium	
BPS07-24	2021-05-27	5456.13	7.71	5448.42	Alluvium	
BPS07-24	2021-06-29	5456.13	8.17	5447.96	Alluvium	
BPS07-24	2021-07-27	5456.13	9.12	5447.01	Alluvium	Observed DTW is suspect, measured from top of steel casing not top of PVC. DTW should be approximately 8.24 ft.
BPS07-24	2021-08-26	5456.13	8.02	5448.11	Alluvium	
BPS07-24	2021-09-22	5456.13	8.14	5447.99	Alluvium	
BPS07-24	2021-10-27	5456.13	8.08	5448.05	Alluvium	
BPS07-24	2021-11-30	5456.13	8.17	5447.96	Alluvium	
BPS07-24	2021-12-20	5456.13	8.19	5447.94	Alluvium	
BPS07-25	2021-01-27	5449.08	10.84	5438.24	Alluvium	
BPS07-25	2021-02-26	5449.08	10.85	5438.23	Alluvium	
BPS07-25	2021-03-30	5449.08	10.51	5438.57	Alluvium	
BPS07-25	2021-04-20	5449.08	10.58	5438.50	Alluvium	
BPS07-25	2021-05-27	5449.08	10.52	5438.56	Alluvium	
BPS07-25	2021-06-30	5449.08	10.76	5438.32	Alluvium	
BPS07-25	2021-07-27	5449.08	10.84	5438.24	Alluvium	
BPS07-25	2021-08-27	5449.08	10.60	5438.48	Alluvium	
BPS07-25	2021-09-22	5449.08	11.67	5437.41	Alluvium	Observed DTW measurement is suspect, should be 10.74 ft. Assume well was measured from top of steel casing instead of top of PVC as the difference between the measuring points is documented at 0.90 ft.
BPS07-25	2021-10-28	5449.08	10.81	5438.27	Alluvium	From pvc.
BPS07-25	2021-11-30	5449.08	10.86	5438.22	Alluvium	
BPS07-25	2021-12-20	5449.08	10.83	5438.25	Alluvium	
BPS11-01	2021-01-27	5450.08			Alluvium	Frozen no access
BPS11-01	2021-03-30	5450.08	8.62	5441.46	Alluvium	
BPS11-01	2021-04-19	5450.08	9.01	5441.07	Alluvium	
BPS11-01	2021-05-27	5450.08	8.88	5441.20	Alluvium	
BPS11-01	2021-06-29	5450.08	9.12	5440.96	Alluvium	
BPS11-01	2021-07-26	5450.08	9.20	5440.88	Alluvium	
BPS11-01	2021-08-26	5450.08	8.99	5441.09	Alluvium	
BPS11-01	2021-09-21	5450.08	9.19	5440.89	Alluvium	
BPS11-01	2021-10-27	5450.08	9.32	5440.76	Alluvium	
BPS11-01	2021-11-29	5450.08	9.37	5440.71	Alluvium	
BPS11-01	2021-12-20	5450.08	9.40	5440.68	Alluvium	
BPS11-02	2021-01-27	5447.27			Alluvium	Well cap frozen over. Cannot access.
BPS11-02	2021-02-25	5447.27			Alluvium	Frozen inside no access
BPS11-02	2021-03-30	5447.27	5.84	5441.43	Alluvium	
BPS11-02	2021-04-19	5447.27	6.03	5441.24	Alluvium	
BPS11-02	2021-05-27	5447.27	5.92	5441.35	Alluvium	
BPS11-02	2021-06-29	5447.27	6.20	5441.07	Alluvium	
BPS11-02	2021-07-26	5447.27	6.21	5441.06	Alluvium	
BPS11-02	2021-08-26	5447.27	6.12	5441.15	Alluvium	
BPS11-02	2021-09-21	5447.27	6.24	5441.03	Alluvium	
BPS11-02	2021-10-27	5447.27	6.25	5441.02	Alluvium	
BPS11-02	2021-11-29	5447.27	6.33	5440.94	Alluvium	
BPS11-02	2021-12-20	5447.27	6.35	5440.92	Alluvium	
BPS11-03	2021-01-28	5447.98	5.52	5442.46	Alluvium	
BPS11-03	2021-02-26	5447.98	5.49	5442.49	Alluvium	
BPS11-03	2021-03-31	5447.98	5.00	5442.98	Alluvium	
BPS11-03	2021-04-19	5447.98	5.07	5442.91	Alluvium	
BPS11-03	2021-05-27	5447.98	4.81	5443.17	Alluvium	
BPS11-03	2021-06-30	5447.98	5.32	5442.66	Alluvium	
BPS11-03	2021-07-26	5447.98	5.34	5442.64	Alluvium	
BPS11-03	2021-08-26	5447.98	5.02	5442.96	Alluvium	

Table 6. BPSOU 2021 Groundwater Elevations

Location	Monitoring Date	MP Elev (NAVD88 ft)	DTW or Stage Reading (ft)	WL Elev (NAVD88 ft)	Aquifer	Notes
BPS11-03	2021-09-22	5447.98	5.20	5442.78	Alluvium	
BPS11-03	2021-10-27	5447.98	5.26	5442.72	Alluvium	
BPS11-03	2021-11-30	5447.98	5.44	5442.54	Alluvium	
BPS11-03	2021-12-20	5447.98	5.41	5442.57	Alluvium	
BPS11-04	2021-01-28	5452.09	8.44	5443.65	Alluvium	
BPS11-04	2021-02-26	5452.09	8.46	5443.63	Alluvium	
BPS11-04	2021-03-31	5452.09	8.12	5443.97	Alluvium	
BPS11-04	2021-04-19	5452.09	8.16	5443.93	Alluvium	
BPS11-04	2021-05-27	5452.09	8.05	5444.04	Alluvium	
BPS11-04	2021-06-30	5452.09	8.51	5443.58	Alluvium	
BPS11-04	2021-07-26	5452.09	8.56	5443.53	Alluvium	
BPS11-04	2021-08-27	5452.09	8.46	5443.63	Alluvium	
BPS11-04	2021-09-22	5452.09	8.47	5443.62	Alluvium	
BPS11-04	2021-10-27	5452.09	8.39	5443.70	Alluvium	
BPS11-04	2021-11-30	5452.09	8.51	5443.58	Alluvium	
BPS11-04	2021-12-20	5452.09	8.57	5443.52	Alluvium	
BPS11-05A1	2021-01-27	5449.38	8.05	5441.33	Alluvium	Lid hinge almost broken
BPS11-05A1	2021-02-25	5449.38	8.05	5441.33	Alluvium	
BPS11-05A1	2021-03-30	5449.38	7.69	5441.69	Alluvium	
BPS11-05A1	2021-04-19	5449.38	7.76	5441.62	Alluvium	
BPS11-05A1	2021-05-27	5449.38	7.71	5441.67	Alluvium	
BPS11-05A1	2021-06-29	5449.38	7.99	5441.39	Alluvium	
BPS11-05A1	2021-07-26	5449.38	8.09	5441.29	Alluvium	
BPS11-05A1	2021-08-26	5449.38	7.91	5441.47	Alluvium	
BPS11-05A1	2021-09-21	5449.38	8.09	5441.29	Alluvium	
BPS11-05A1	2021-10-27	5449.38	8.07	5441.31	Alluvium	
BPS11-05A1	2021-11-29	5449.38	8.16	5441.22	Alluvium	
BPS11-05A1	2021-12-20	5449.38	8.03	5441.35	Alluvium	
BPS11-05A2	2021-01-27	5449.46	8.19	5441.27	Alluvium	Lid hinge almost broken
BPS11-05A2	2021-02-25	5449.46	8.18	5441.28	Alluvium	
BPS11-05A2	2021-03-30	5449.46	7.83	5441.63	Alluvium	
BPS11-05A2	2021-04-19	5449.46	7.86	5441.60	Alluvium	
BPS11-05A2	2021-05-27	5449.46	7.83	5441.63	Alluvium	
BPS11-05A2	2021-06-29	5449.46	8.11	5441.35	Alluvium	
BPS11-05A2	2021-07-26	5449.46	8.20	5441.26	Alluvium	
BPS11-05A2	2021-08-26	5449.46	8.07	5441.39	Alluvium	
BPS11-05A2	2021-09-21	5449.46	8.18	5441.28	Alluvium	
BPS11-05A2	2021-10-27	5449.46	8.15	5441.31	Alluvium	
BPS11-05A2	2021-11-29	5449.46	8.25	5441.21	Alluvium	
BPS11-05A2	2021-12-20	5449.46	8.11	5441.35	Alluvium	
BPS11-06	2021-01-27	5452.05	11.56	5440.49	Alluvium	
BPS11-06	2021-02-25	5452.05	11.56	5440.49	Alluvium	
BPS11-06	2021-03-30	5452.05	11.18	5440.87	Alluvium	
BPS11-06	2021-04-19	5452.05	11.25	5440.80	Alluvium	
BPS11-06	2021-05-27	5452.05	11.19	5440.86	Alluvium	
BPS11-06	2021-06-29	5452.05	11.49	5440.56	Alluvium	
BPS11-06	2021-07-26	5452.05	11.60	5440.45	Alluvium	
BPS11-06	2021-08-26	5452.05	11.42	5440.63	Alluvium	
BPS11-06	2021-09-21	5452.05	11.57	5440.48	Alluvium	
BPS11-06	2021-10-27	5452.05	11.54	5440.51	Alluvium	
BPS11-06	2021-11-29	5452.05	11.63	5440.42	Alluvium	
BPS11-06	2021-12-20	5452.05	11.56	5440.49	Alluvium	
BPS11-07	2021-01-28	5455.46	16.45	5439.01	Alluvium	
BPS11-07	2021-02-25	5455.46	16.46	5439.00	Alluvium	
BPS11-07	2021-03-30	5455.46	16.01	5439.45	Alluvium	
BPS11-07	2021-04-19	5455.46	15.12	5440.34	Alluvium	Observed DTW is suspect, continuous recorder indicates level is 16.12 ft.
BPS11-07	2021-05-27	5455.46	16.06	5439.40	Alluvium	
BPS11-07	2021-06-29	5455.46	16.29	5439.17	Alluvium	
BPS11-07	2021-07-26	5455.46	16.38	5439.08	Alluvium	
BPS11-07	2021-08-26	5455.46	16.17	5439.29	Alluvium	
BPS11-07	2021-09-21	5455.46	16.30	5439.16	Alluvium	
BPS11-07	2021-10-27	5455.46	16.41	5439.05	Alluvium	
BPS11-07	2021-11-29	5455.46	16.47	5438.99	Alluvium	
BPS11-07	2021-12-20	5455.46	16.45	5439.01	Alluvium	
BPS11-08	2021-01-28	5456.82	15.17	5441.65	Alluvium	
BPS11-08	2021-02-25	5456.82	15.20	5441.62	Alluvium	
BPS11-08	2021-03-30	5456.82	14.68	5442.14	Alluvium	
BPS11-08	2021-04-19	5456.82	14.62	5442.20	Alluvium	
BPS11-08	2021-05-27	5456.82	14.44	5442.38	Alluvium	
BPS11-08	2021-06-29	5456.82	14.49	5442.33	Alluvium	
BPS11-08	2021-07-26	5456.82	14.73	5442.09	Alluvium	
BPS11-08	2021-08-26	5456.82	14.45	5442.37	Alluvium	
BPS11-08	2021-09-21	5456.82	14.79	5442.03	Alluvium	
BPS11-08	2021-10-27	5456.82	15.05	5441.77	Alluvium	
BPS11-08	2021-11-29	5456.82	15.18	5441.64	Alluvium	
BPS11-08	2021-12-20	5456.82	15.23	5441.59	Alluvium	
BPS11-09	2021-01-28	5448.20	5.29	5442.91	Alluvium	
BPS11-09	2021-02-26	5448.20	5.32	5442.88	Alluvium	
BPS11-09	2021-03-31	5448.20	5.02	5443.18	Alluvium	

Table 6. BPSOU 2021 Groundwater Elevations

Location	Monitoring Date	MP Elev (NAVD88 ft)	DTW or Stage Reading (ft)	WL Elev (NAVD88 ft)	Aquifer	Notes
BPS11-09	2021-04-19	5448.20	5.00	5443.20	Alluvium	
BPS11-09	2021-05-27	5448.20	4.92	5443.28	Alluvium	
BPS11-09	2021-06-30	5448.20	5.34	5442.86	Alluvium	
BPS11-09	2021-07-26	5448.20	5.44	5442.76	Alluvium	
BPS11-09	2021-08-27	5448.20	5.30	5442.90	Alluvium	
BPS11-09	2021-09-22	5448.20	5.36	5442.84	Alluvium	
BPS11-09	2021-10-27	5448.20	5.33	5442.87	Alluvium	
BPS11-09	2021-11-30	5448.20	5.42	5442.78	Alluvium	
BPS11-09	2021-12-20	5448.20	5.36	5442.84	Alluvium	
BPS11-10A	2021-01-28	5456.10			Alluvium	Obstructed
BPS11-10A	2021-02-25	5456.10			Alluvium	Damaged, can’t access
BPS11-10A	2021-03-31	5456.10			Alluvium	Damaged
BPS11-10A	2021-04-19	5456.10			Alluvium	Well is compromised, can't measure level.
BPS11-10A	2021-05-27	5456.10			Alluvium	Well compromised
BPS11-10A	2021-07-27	5456.10			Alluvium	Well damaged, unable to access.
BPS11-10A	2021-08-26	5456.10			Alluvium	Could not measure, well compromised.
BPS11-10A	2021-09-22	5456.10			Alluvium	Could not measure, well compromised.
BPS11-10A	2021-10-27	5456.10			Alluvium	Well not measured, well damaged
BPS11-10A	2021-11-30	5456.10			Alluvium	well not measured, well damaged.
BPS11-10A	2021-12-20	5456.10			Alluvium	Well cannot be measured due to damage.
BPS11-10B	2021-01-28	5455.75	11.98	5443.77	Alluvium	
BPS11-10B	2021-02-25	5455.75	11.88	5443.87	Alluvium	
BPS11-10B	2021-03-31	5455.75	11.58	5444.17	Alluvium	
BPS11-10B	2021-04-19	5455.75	11.64	5444.11	Alluvium	
BPS11-10B	2021-05-27	5455.75	11.02	5444.73	Alluvium	
BPS11-10B	2021-06-29	5455.75	12.11	5443.64	Alluvium	
BPS11-10B	2021-07-27	5455.75	11.99	5443.76	Alluvium	
BPS11-10B	2021-08-26	5455.75	11.62	5444.13	Alluvium	
BPS11-10B	2021-09-22	5455.75	11.81	5443.94	Alluvium	
BPS11-10B	2021-10-27	5455.75	11.51	5444.24	Alluvium	
BPS11-10B	2021-11-30	5455.75	11.76	5443.99	Alluvium	
BPS11-10B	2021-12-20	5455.75	11.74	5444.01	Alluvium	
BPS11-10C	2021-01-28	5455.91	9.66	5446.25	Alluvium	
BPS11-10C	2021-02-25	5455.91	9.64	5446.27	Alluvium	
BPS11-10C	2021-03-31	5455.91	9.44	5446.47	Alluvium	
BPS11-10C	2021-04-19	5455.91	9.43	5446.48	Alluvium	
BPS11-10C	2021-05-27	5455.91	9.25	5446.66	Alluvium	
BPS11-10C	2021-06-29	5455.91	9.79	5446.12	Alluvium	
BPS11-10C	2021-07-27	5455.91	9.84	5446.07	Alluvium	
BPS11-10C	2021-08-26	5455.91	9.58	5446.33	Alluvium	
BPS11-10C	2021-09-22	5455.91	9.72	5446.19	Alluvium	
BPS11-10C	2021-10-27	5455.91	9.57	5446.34	Alluvium	
BPS11-10C	2021-11-30	5455.91	9.67	5446.24	Alluvium	
BPS11-10C	2021-12-20	5455.91	9.67	5446.24	Alluvium	
BPS11-11A1	2021-01-28	5451.90	5.85	5446.05	Alluvium	
BPS11-11A1	2021-02-25	5451.90	5.82	5446.08	Alluvium	
BPS11-11A1	2021-03-31	5451.90	5.69	5446.21	Alluvium	
BPS11-11A1	2021-04-19	5451.90	5.69	5446.21	Alluvium	
BPS11-11A1	2021-05-27	5451.90	5.62	5446.28	Alluvium	
BPS11-11A1	2021-06-29	5451.90	6.00	5445.90	Alluvium	
BPS11-11A1	2021-07-27	5451.90	6.02	5445.88	Alluvium	
BPS11-11A1	2021-08-26	5451.90	5.78	5446.12	Alluvium	
BPS11-11A1	2021-09-22	5451.90	5.90	5446.00	Alluvium	
BPS11-11A1	2021-10-27	5451.90	5.78	5446.12	Alluvium	
BPS11-11A1	2021-11-30	5451.90	5.86	5446.04	Alluvium	
BPS11-11A1	2021-12-20	5451.90	5.89	5446.01	Alluvium	
BPS11-11A2	2021-01-28	5451.92	5.80	5446.12	Alluvium	
BPS11-11A2	2021-02-25	5451.92	5.77	5446.15	Alluvium	
BPS11-11A2	2021-03-31	5451.92	5.65	5446.27	Alluvium	
BPS11-11A2	2021-04-19	5451.92	5.65	5446.27	Alluvium	
BPS11-11A2	2021-05-27	5451.92	5.57	5446.35	Alluvium	
BPS11-11A2	2021-06-29	5451.92	5.97	5445.95	Alluvium	
BPS11-11A2	2021-07-27	5451.92	5.99	5445.93	Alluvium	
BPS11-11A2	2021-08-26	5451.92	5.75	5446.17	Alluvium	
BPS11-11A2	2021-09-22	5451.92	5.85	5446.07	Alluvium	
BPS11-11A2	2021-10-27	5451.92	5.73	5446.19	Alluvium	
BPS11-11A2	2021-11-30	5451.92	5.82	5446.10	Alluvium	
BPS11-11A2	2021-12-20	5451.92	5.80	5446.12	Alluvium	
BPS11-11B	2021-01-28	5452.06	4.37	5447.69	Alluvium	
BPS11-11B	2021-02-25	5452.06	4.39	5447.67	Alluvium	
BPS11-11B	2021-03-31	5452.06	4.24	5447.82	Alluvium	
BPS11-11B	2021-04-19	5452.06	4.20	5447.86	Alluvium	
BPS11-11B	2021-05-27	5452.06	3.83	5448.23	Alluvium	
BPS11-11B	2021-06-29	5452.06	4.58	5447.48	Alluvium	
BPS11-11B	2021-07-27	5452.06	4.64	5447.42	Alluvium	
BPS11-11B	2021-08-26	5452.06	4.40	5447.66	Alluvium	
BPS11-11B	2021-09-22	5452.06	4.54	5447.52	Alluvium	
BPS11-11B	2021-10-27	5452.06	4.38	5447.68	Alluvium	
BPS11-11B	2021-11-30	5452.06	4.46	5447.60	Alluvium	
BPS11-11B	2021-12-20	5452.06	4.46	5447.60	Alluvium	

Table 6. BPSOU 2021 Groundwater Elevations

Location	Monitoring Date	MP Elev (NAVD88 ft)	DTW or Stage Reading (ft)	WL Elev (NAVD88 ft)	Aquifer	Notes
BPS11-11C	2021-01-28	5451.65	4.11	5447.54	Alluvium	
BPS11-11C	2021-02-25	5451.65	4.15	5447.50	Alluvium	
BPS11-11C	2021-03-31	5451.65	3.93	5447.72	Alluvium	
BPS11-11C	2021-04-19	5451.65	3.90	5447.75	Alluvium	
BPS11-11C	2021-05-27	5451.65	4.12	5447.53	Alluvium	
BPS11-11C	2021-06-29	5451.65	4.28	5447.37	Alluvium	
BPS11-11C	2021-07-27	5451.65	4.37	5447.28	Alluvium	
BPS11-11C	2021-08-26	5451.65	4.15	5447.50	Alluvium	
BPS11-11C	2021-09-22	5451.65	4.30	5447.35	Alluvium	
BPS11-11C	2021-10-27	5451.65	4.13	5447.52	Alluvium	
BPS11-11C	2021-11-30	5451.65	4.19	5447.46	Alluvium	
BPS11-11C	2021-12-20	5451.65	4.20	5447.45	Alluvium	
BPS11-12A	2021-01-28	5452.35	8.69	5443.66	Alluvium	
BPS11-12A	2021-02-26	5452.35	8.68	5443.67	Alluvium	
BPS11-12A	2021-03-31	5452.35	8.42	5443.93	Alluvium	
BPS11-12A	2021-04-19	5452.35	8.40	5443.95	Alluvium	
BPS11-12A	2021-05-27	5452.35	8.43	5443.92	Alluvium	
BPS11-12A	2021-06-30	5452.35	8.78	5443.57	Alluvium	
BPS11-12A	2021-07-26	5452.35			Alluvium	Could not access due to electrical construction at site.
BPS11-12A	2021-08-27	5452.35	8.77	5443.58	Alluvium	
BPS11-12A	2021-09-22	5452.35	8.85	5443.50	Alluvium	
BPS11-12A	2021-10-27	5452.35	8.78	5443.57	Alluvium	
BPS11-12A	2021-11-30	5452.35	8.80	5443.55	Alluvium	
BPS11-12A	2021-12-20	5452.35	8.79	5443.56	Alluvium	
BPS11-13B	2021-01-28	5459.98	13.08	5446.90	Alluvium	
BPS11-13B	2021-02-26	5459.98	13.20	5446.78	Alluvium	
BPS11-13B	2021-03-31	5459.98	13.01	5446.97	Alluvium	
BPS11-13B	2021-04-19	5459.98	13.04	5446.94	Alluvium	
BPS11-13B	2021-05-27	5459.98	12.85	5447.13	Alluvium	
BPS11-13B	2021-06-29	5459.98	13.33	5446.65	Alluvium	
BPS11-13B	2021-07-27	5459.98	13.34	5446.64	Alluvium	
BPS11-13B	2021-08-26	5459.98	13.12	5446.86	Alluvium	
BPS11-13B	2021-09-22	5459.98	13.20	5446.78	Alluvium	
BPS11-13B	2021-10-27	5459.98	13.13	5446.85	Alluvium	
BPS11-13B	2021-11-30	5459.98	13.19	5446.79	Alluvium	
BPS11-13B	2021-12-20	5459.98	13.22	5446.76	Alluvium	
BPS11-14A	2021-01-28	5457.11	9.03	5448.08	Alluvium	
BPS11-14A	2021-02-25	5457.11	9.32	5447.79	Alluvium	
BPS11-14A	2021-03-31	5457.11	9.13	5447.98	Alluvium	
BPS11-14A	2021-04-19	5457.11	9.14	5447.97	Alluvium	
BPS11-14A	2021-05-27	5457.11	8.96	5448.15	Alluvium	
BPS11-14A	2021-06-29	5457.11	9.36	5447.75	Alluvium	
BPS11-14A	2021-07-27	5457.11	9.40	5447.71	Alluvium	
BPS11-14A	2021-08-26	5457.11	9.20	5447.91	Alluvium	
BPS11-14A	2021-09-22	5457.11	9.31	5447.80	Alluvium	
BPS11-14A	2021-10-27	5457.11	9.29	5447.82	Alluvium	
BPS11-14A	2021-11-30	5457.11	9.36	5447.75	Alluvium	
BPS11-14A	2021-12-20	5457.11	9.36	5447.75	Alluvium	
BPS11-14B	2021-01-28	5457.02	8.65	5448.37	Alluvium	
BPS11-14B	2021-02-25	5457.02	8.96	5448.06	Alluvium	
BPS11-14B	2021-03-31	5457.02	8.76	5448.26	Alluvium	
BPS11-14B	2021-04-19	5457.02	8.77	5448.25	Alluvium	
BPS11-14B	2021-05-27	5457.02	8.60	5448.42	Alluvium	
BPS11-14B	2021-06-29	5457.02	9.00	5448.02	Alluvium	
BPS11-14B	2021-07-27	5457.02	9.05	5447.97	Alluvium	
BPS11-14B	2021-08-26	5457.02	8.85	5448.17	Alluvium	
BPS11-14B	2021-09-22	5457.02	8.96	5448.06	Alluvium	
BPS11-14B	2021-10-27	5457.02	8.92	5448.10	Alluvium	
BPS11-14B	2021-11-30	5457.02	8.98	5448.04	Alluvium	
BPS11-14B	2021-12-20	5457.02	9.02	5448.00	Alluvium	
BPS11-15	2021-01-27	5453.52	9.86	5443.66	Alluvium	
BPS11-15	2021-02-25	5453.52	9.84	5443.68	Alluvium	
BPS11-15	2021-03-30	5453.52	9.58	5443.94	Alluvium	
BPS11-15	2021-04-19	5453.52	9.59	5443.93	Alluvium	
BPS11-15	2021-05-27	5453.52	9.68	5443.84	Alluvium	
BPS11-15	2021-06-29	5453.52	9.94	5443.58	Alluvium	
BPS11-15	2021-07-26	5453.52	10.05	5443.47	Alluvium	
BPS11-15	2021-08-26	5453.52	10.00	5443.52	Alluvium	
BPS11-15	2021-09-21	5453.52	10.08	5443.44	Alluvium	
BPS11-15	2021-10-27	5453.52	9.97	5443.55	Alluvium	
BPS11-15	2021-11-29	5453.52	9.99	5443.53	Alluvium	
BPS11-15	2021-12-20	5453.52	9.96	5443.56	Alluvium	
BPS11-16	2021-01-27	5455.88	10.58	5445.30	Alluvium	
BPS11-16	2021-02-25	5455.88	10.61	5445.27	Alluvium	
BPS11-16	2021-03-30	5455.88	10.35	5445.53	Alluvium	
BPS11-16	2021-04-19	5455.88	10.35	5445.53	Alluvium	
BPS11-16	2021-05-27	5455.88	10.51	5445.37	Alluvium	
BPS11-16	2021-06-29	5455.88	10.82	5445.06	Alluvium	
BPS11-16	2021-07-26	5455.88	11.07	5444.81	Alluvium	
BPS11-16	2021-08-26	5455.88	10.91	5444.97	Alluvium	

Table 6. BPSOU 2021 Groundwater Elevations

Location	Monitoring Date	MP Elev (NAVD88 ft)	DTW or Stage Reading (ft)	WL Elev (NAVD88 ft)	Aquifer	Notes
BPS11-16	2021-09-21	5455.88	11.01	5444.87	Alluvium	
BPS11-16	2021-10-27	5455.88	10.80	5445.08	Alluvium	
BPS11-16	2021-11-29	5455.88	10.79	5445.09	Alluvium	
BPS11-16	2021-12-20	5455.88	10.80	5445.08	Alluvium	
BPS11-17C	2021-01-27	5461.64	7.81	5453.83	Alluvium	
BPS11-17C	2021-02-25	5461.64	7.99	5453.65	Alluvium	
BPS11-17C	2021-03-31	5461.64	7.85	5453.79	Alluvium	
BPS11-17C	2021-04-20	5461.64	7.86	5453.78	Alluvium	
BPS11-17C	2021-05-27	5461.64	7.73	5453.91	Alluvium	
BPS11-17C	2021-06-29	5461.64	7.95	5453.69	Alluvium	
BPS11-17C	2021-07-27	5461.64	8.02	5453.62	Alluvium	
BPS11-17C	2021-08-26	5461.64	7.90	5453.74	Alluvium	
BPS11-17C	2021-09-22	5461.64	7.99	5453.65	Alluvium	
BPS11-17C	2021-10-27	5461.64	8.13	5453.51	Alluvium	
BPS11-17C	2021-11-29	5461.64	8.23	5453.41	Alluvium	
BPS11-17C	2021-12-20	5461.64	8.28	5453.36	Alluvium	
BPS11-18B	2021-01-27	5463.59	9.75	5453.84	Alluvium	
BPS11-18B	2021-02-25	5463.59			Alluvium	Frozen
BPS11-18B	2021-03-31	5463.59	9.69	5453.90	Alluvium	
BPS11-18B	2021-04-20	5463.59	9.75	5453.84	Alluvium	
BPS11-18B	2021-05-27	5463.59	9.61	5453.98	Alluvium	
BPS11-18B	2021-06-29	5463.59	9.80	5453.79	Alluvium	
BPS11-18B	2021-07-27	5463.59	9.83	5453.76	Alluvium	
BPS11-18B	2021-08-26	5463.59	9.70	5453.89	Alluvium	
BPS11-18B	2021-09-22	5463.59	9.78	5453.81	Alluvium	
BPS11-18B	2021-10-27	5463.59	9.99	5453.60	Alluvium	
BPS11-18B	2021-11-29	5463.59	10.11	5453.48	Alluvium	
BPS11-18B	2021-12-20	5463.59	10.15	5453.44	Alluvium	
BPS11-18C	2021-01-27	5463.72	9.69	5454.03	Alluvium	
BPS11-18C	2021-02-25	5463.72			Alluvium	Frozen
BPS11-18C	2021-03-31	5463.72	9.77	5453.95	Alluvium	
BPS11-18C	2021-04-20	5463.72	9.79	5453.93	Alluvium	
BPS11-18C	2021-05-27	5463.72	9.65	5454.07	Alluvium	
BPS11-18C	2021-06-29	5463.72	9.83	5453.89	Alluvium	
BPS11-18C	2021-07-27	5463.72	9.85	5453.87	Alluvium	
BPS11-18C	2021-08-26	5463.72	9.75	5453.97	Alluvium	
BPS11-18C	2021-09-22	5463.72	9.82	5453.90	Alluvium	
BPS11-18C	2021-10-27	5463.72	9.97	5453.75	Alluvium	
BPS11-18C	2021-11-29	5463.72	10.09	5453.63	Alluvium	
BPS11-18C	2021-12-20	5463.72	10.17	5453.55	Alluvium	
BPS11-19A2	2021-01-28	5449.98	4.24	5445.74	Alluvium	
BPS11-19A2	2021-02-26	5449.98			Alluvium	Frozen
BPS11-19A2	2021-03-31	5449.98	4.09	5445.89	Alluvium	
BPS11-19A2	2021-04-19	5449.98	4.08	5445.90	Alluvium	
BPS11-19A2	2021-05-27	5449.98	3.87	5446.11	Alluvium	
BPS11-19A2	2021-06-29	5449.98	4.43	5445.55	Alluvium	
BPS11-19A2	2021-07-27	5449.98	4.40	5445.58	Alluvium	
BPS11-19A2	2021-08-26	5449.98	4.14	5445.84	Alluvium	
BPS11-19A2	2021-09-22	5449.98	4.29	5445.69	Alluvium	
BPS11-19A2	2021-10-27	5449.98	4.13	5445.85	Alluvium	
BPS11-19A2	2021-11-30	5449.98	4.25	5445.73	Alluvium	
BPS11-19A2	2021-12-20	5449.98	4.21	5445.77	Alluvium	
BPS11-19B	2021-01-28	5449.98	2.65	5447.33	Alluvium	
BPS11-19B	2021-02-26	5449.98			Alluvium	Frozen
BPS11-19B	2021-03-31	5449.98	2.53	5447.45	Alluvium	
BPS11-19B	2021-04-19	5449.98	2.51	5447.47	Alluvium	
BPS11-19B	2021-05-27	5449.98	2.38	5447.60	Alluvium	
BPS11-19B	2021-06-29	5449.98	2.89	5447.09	Alluvium	
BPS11-19B	2021-07-27	5449.98	2.92	5447.06	Alluvium	
BPS11-19B	2021-08-26	5449.98	2.70	5447.28	Alluvium	
BPS11-19B	2021-09-22	5449.98	2.83	5447.15	Alluvium	
BPS11-19B	2021-10-27	5449.98	2.70	5447.28	Alluvium	
BPS11-19B	2021-11-30	5449.98	2.75	5447.23	Alluvium	
BPS11-19B	2021-12-20	5449.98	2.75	5447.23	Alluvium	
BRW-00 OS	2021-01-27	5443.65	10.32	5433.33	BRW SW Ponds	
BRW-00 OS	2021-02-26	5443.65	10.36	5433.29	BRW SW Ponds	
BRW-00 OS	2021-03-30	5443.65	10.34	5433.31	BRW SW Ponds	
BRW-00 OS	2021-04-20	5443.65	10.29	5433.36	BRW SW Ponds	
BRW-00 OS	2021-05-27	5443.65	10.27	5433.38	BRW SW Ponds	
BRW-00 OS	2021-06-30	5443.65	10.29	5433.36	BRW SW Ponds	
BRW-00 OS	2021-07-27	5443.65	10.33	5433.32	BRW SW Ponds	
BRW-00 OS	2021-08-26	5443.65	10.24	5433.41	BRW SW Ponds	
BRW-00 OS	2021-09-22	5443.65	10.30	5433.35	BRW SW Ponds	
BRW-00 OS	2021-10-28	5443.65	10.32	5433.33	BRW SW Ponds	From new MP
BRW-00 OS	2021-11-30	5443.65	10.33	5433.32	BRW SW Ponds	
BRW-00 OS	2021-12-20	5443.65	10.34	5433.31	BRW SW Ponds	
BT-98-02	2021-01-28	5461.01	11.40	5449.61	Alluvium	
BT-98-02	2021-02-26	5461.01	11.53	5449.48	Alluvium	
BT-98-02	2021-03-31	5461.01	11.38	5449.63	Alluvium	
BT-98-02	2021-04-19	5461.01	11.41	5449.60	Alluvium	

Table 6. BPSOU 2021 Groundwater Elevations

Location	Monitoring Date	MP Elev (NAVD88 ft)	DTW or Stage Reading (ft)	WL Elev (NAVD88 ft)	Aquifer	Notes
BT-98-02	2021-05-27	5461.01	11.29	5449.72	Alluvium	
BT-98-02	2021-06-29	5461.01	11.57	5449.44	Alluvium	
BT-98-02	2021-07-27	5461.01	11.61	5449.40	Alluvium	
BT-98-02	2021-08-26	5461.01	11.45	5449.56	Alluvium	
BT-98-02	2021-09-22	5461.01	11.57	5449.44	Alluvium	
BT-98-02	2021-10-27	5461.01	11.52	5449.49	Alluvium	
BT-98-02	2021-11-30	5461.01	11.58	5449.43	Alluvium	
BT-98-02	2021-12-20	5461.01	11.65	5449.36	Alluvium	
BT-98-02B	2021-01-28	5459.20	9.79	5449.41	Alluvium	
BT-98-02B	2021-02-26	5459.20	9.91	5449.29	Alluvium	
BT-98-02B	2021-03-31	5459.20	9.73	5449.47	Alluvium	
BT-98-02B	2021-04-19	5459.20	9.76	5449.44	Alluvium	
BT-98-02B	2021-05-27	5459.20	9.66	5449.54	Alluvium	
BT-98-02B	2021-06-29	5459.20	9.95	5449.25	Alluvium	
BT-98-02B	2021-07-27	5459.20	10.01	5449.19	Alluvium	
BT-98-02B	2021-08-26	5459.20	9.83	5449.37	Alluvium	
BT-98-02B	2021-09-22	5459.20	9.93	5449.27	Alluvium	
BT-98-02B	2021-10-27	5459.20	9.86	5449.34	Alluvium	
BT-98-02B	2021-11-30	5459.20	9.94	5449.26	Alluvium	
BT-98-02B	2021-12-20	5459.20	10.00	5449.20	Alluvium	
C1	2021-01-27	5400.00	26.39	5426.39	BTL SW Cell	
C1	2021-02-26	5400.00	26.47	5426.47	BTL SW Cell	
C1	2021-03-30	5400.00	26.49	5426.49	BTL SW Cell	
C1	2021-04-20	5400.00	26.45	5426.45	BTL SW Cell	
C1	2021-05-28	5400.00	26.46	5426.46	BTL SW Cell	
C1	2021-06-28	5400.00	26.41	5426.41	BTL SW Cell	
C1	2021-07-27	5400.00	26.41	5426.41	BTL SW Cell	
C1	2021-08-26	5400.00	26.48	5426.48	BTL SW Cell	
C1	2021-09-21	5400.00	26.41	5426.41	BTL SW Cell	
C1	2021-10-28	5400.00	26.41	5426.41	BTL SW Cell	
C1	2021-11-30	5400.00	26.45	5426.45	BTL SW Cell	
C1	2021-12-21	5400.00	26.37	5426.37	BTL SW Cell	
C3	2021-01-27	5400.00	26.33	5426.33	BTL SW Cell	
C3	2021-02-26	5400.00	26.35	5426.35	BTL SW Cell	
C3	2021-03-30	5400.00	26.34	5426.34	BTL SW Cell	
C3	2021-04-20	5400.00	26.30	5426.30	BTL SW Cell	
C3	2021-05-28	5400.00	26.34	5426.34	BTL SW Cell	
C3	2021-06-28	5400.00	26.34	5426.34	BTL SW Cell	
C3	2021-07-27	5400.00	26.36	5426.36	BTL SW Cell	
C3	2021-08-26	5400.00	26.28	5426.28	BTL SW Cell	
C3	2021-09-21	5400.00	26.34	5426.34	BTL SW Cell	
C3	2021-10-28	5400.00	26.40	5426.40	BTL SW Cell	
C3	2021-11-30	5400.00	26.43	5426.43	BTL SW Cell	
C3	2021-12-21	5400.00	26.40	5426.40	BTL SW Cell	
CT NE-2	2021-01-28	5436.50			Alluvium	Dry at 11.04 ft
CT NE-2	2021-02-25	5436.50			Alluvium	Dry at 10.96 ft.
CT NE-2	2021-03-30	5436.50			Alluvium	Dry at 10.92 ft
CT NE-2	2021-04-19	5436.50			Alluvium	Dry at 10.92 ft.
CT NE-2	2021-05-27	5436.50			Alluvium	Dry at 11.05 ft.
CT NE-2	2021-06-29	5436.50			Alluvium	Dry at 11.05 ft
CT NE-2	2021-07-26	5436.50			Alluvium	Dry at 11.05 ft.
CT NE-2	2021-08-26	5436.50			Alluvium	Dry at 11.05 ft.
CT NE-2	2021-09-21	5436.50			Alluvium	Dry at 11.05 ft.
CT NE-2	2021-10-27	5436.50			Alluvium	Dry at 11.05 ft
CT NE-2	2021-11-29	5436.50			Alluvium	Dry at 11.05 ft
CT NE-2	2021-12-20	5436.50			Alluvium	Dry
CT NW-3	2021-01-27	5429.82	9.59	5420.23	Alluvium	
CT NW-3	2021-02-26	5429.82	9.66	5420.16	Alluvium	
CT NW-3	2021-03-30	5429.82	9.49	5420.33	Alluvium	
CT NW-3	2021-04-20	5429.82	9.46	5420.36	Alluvium	
CT NW-3	2021-05-28	5429.82	9.46	5420.36	Alluvium	
CT NW-3	2021-06-29	5429.82	9.51	5420.31	Alluvium	
CT NW-3	2021-07-26	5429.82	9.56	5420.26	Alluvium	
CT NW-3	2021-08-27	5429.82	9.50	5420.32	Alluvium	
CT NW-3	2021-09-21	5429.82	9.53	5420.29	Alluvium	
CT NW-3	2021-10-28	5429.82	9.61	5420.21	Alluvium	
CT NW-3	2021-11-30	5429.82	9.64	5420.18	Alluvium	
CT NW-3	2021-12-20	5429.82	9.67	5420.15	Alluvium	
CT NW-4	2021-01-27	5426.35	6.39	5419.96	Alluvium	
CT NW-4	2021-02-26	5426.35	6.36	5419.99	Alluvium	
CT NW-4	2021-03-31	5426.35	6.33	5420.02	Alluvium	
CT NW-4	2021-04-20	5426.35	6.33	5420.02	Alluvium	
CT NW-4	2021-05-28	5426.35	6.33	5420.02	Alluvium	
CT NW-4	2021-06-30	5426.35	6.35	5420.00	Alluvium	
CT NW-4	2021-07-27	5426.35	6.37	5419.98	Alluvium	
CT NW-4	2021-08-26	5426.35	6.30	5420.05	Alluvium	
CT NW-4	2021-09-21	5426.35	6.30	5420.05	Alluvium	
CT NW-4	2021-10-27	5426.35	6.35	5420.00	Alluvium	
CT NW-4	2021-11-30	5426.35	6.41	5419.94	Alluvium	
CT NW-4	2021-12-20	5426.35	6.93	5419.42	Alluvium	

Table 6. BPSOU 2021 Groundwater Elevations

Location	Monitoring Date	MP Elev (NAVD88 ft)	DTW or Stage Reading (ft)	WL Elev (NAVD88 ft)	Aquifer	Notes
CT S-2	2021-01-27	5440.11	13.00	5427.11	Alluvium	
CT S-2	2021-02-25	5440.11	13.01	5427.10	Alluvium	
CT S-2	2021-03-30	5440.11	12.46	5427.65	Alluvium	
CT S-2	2021-04-19	5440.11	12.52	5427.59	Alluvium	
CT S-2	2021-05-27	5440.11	12.48	5427.63	Alluvium	
CT S-2	2021-06-29	5440.11	12.70	5427.41	Alluvium	
CT S-2	2021-07-26	5440.11	12.93	5427.18	Alluvium	
CT S-2	2021-08-26	5440.11	12.83	5427.28	Alluvium	
CT S-2	2021-09-21	5440.11	12.93	5427.18	Alluvium	
CT S-2	2021-10-27	5440.11	13.00	5427.11	Alluvium	
CT S-2	2021-11-29	5440.11	12.97	5427.14	Alluvium	
CT S-2	2021-12-20	5440.11	13.04	5427.07	Alluvium	
CT S-5	2021-01-27	5441.44	13.66	5427.78	Weathered Bedrock	
CT S-5	2021-02-25	5441.44	13.69	5427.75	Weathered Bedrock	
CT S-5	2021-03-30	5441.44	13.33	5428.11	Weathered Bedrock	
CT S-5	2021-04-19	5441.44	13.29	5428.15	Weathered Bedrock	
CT S-5	2021-05-27	5441.44	13.38	5428.06	Weathered Bedrock	
CT S-5	2021-06-29	5441.44	13.66	5427.78	Weathered Bedrock	
CT S-5	2021-07-26	5441.44	13.91	5427.53	Weathered Bedrock	
CT S-5	2021-08-26	5441.44	13.86	5427.58	Weathered Bedrock	
CT S-5	2021-09-21	5441.44	14.02	5427.42	Weathered Bedrock	
CT S-5	2021-10-27	5441.44	13.95	5427.49	Weathered Bedrock	
CT S-5	2021-11-29	5441.44	14.03	5427.41	Weathered Bedrock	
CT S-5	2021-12-20	5441.44	14.07	5427.37	Weathered Bedrock	
CT SW-4	2021-01-27	5424.02	4.78	5419.24	Alluvium	
CT SW-4	2021-02-26	5424.02	4.71	5419.31	Alluvium	
CT SW-4	2021-03-30	5424.02	4.42	5419.60	Alluvium	
CT SW-4	2021-04-20	5424.02	4.40	5419.62	Alluvium	
CT SW-4	2021-05-28	5424.02	4.36	5419.66	Alluvium	
CT SW-4	2021-06-30	5424.02	4.80	5419.22	Alluvium	
CT SW-4	2021-07-27	5424.02	4.93	5419.09	Alluvium	
CT SW-4	2021-08-27	5424.02	4.77	5419.25	Alluvium	
CT SW-4	2021-09-22	5424.02	4.85	5419.17	Alluvium	
CT SW-4	2021-10-28	5424.02	4.79	5419.23	Alluvium	
CT SW-4	2021-11-30	5424.02	4.81	5419.21	Alluvium	PVC casing was trimmed 0.35 ft on 11/5/21 and not yet re-surveyed. Actual dtw was 4.46 ft. DTW was adjusted by trimmed length (4.46+0.35).
CT SW-4	2021-12-20	5424.02	4.81	5419.21	Alluvium	PVC casing was trimmed 0.35 ft. on 11/5/21 and not yet re-surveyed. Actual DTW was 4.46 ft. DTW was adjusted by trimmed length (4.46+0.35).
CT-84-01	2021-01-27	5444.77	15.54	5429.23	Alluvium	
CT-84-01	2021-02-26	5444.77	15.57	5429.20	Alluvium	
CT-84-01	2021-03-31	5444.77	15.54	5429.23	Alluvium	
CT-84-01	2021-04-20	5444.77	15.48	5429.29	Alluvium	
CT-84-01	2021-05-27	5444.77	15.48	5429.29	Alluvium	
CT-84-01	2021-06-30	5444.77	15.46	5429.31	Alluvium	
CT-84-01	2021-07-27	5444.77	15.47	5429.30	Alluvium	
CT-84-01	2021-08-26	5444.77	15.49	5429.28	Alluvium	
CT-84-01	2021-09-21	5444.77	15.45	5429.32	Alluvium	
CT-84-01	2021-10-28	5444.77	15.49	5429.28	Alluvium	
CT-84-01	2021-11-30	5444.77	15.49	5429.28	Alluvium	
CT-84-01	2021-12-20	5444.77	15.51	5429.26	Alluvium	
CT-94-1	2021-01-27	5432.05	3.89	5428.16	Alluvium	
CT-94-1	2021-02-26	5432.05	3.79	5428.26	Alluvium	
CT-94-1	2021-03-30	5432.05			Alluvium	Frozen at 3.31 ft
CT-94-1	2021-04-20	5432.05	3.46	5428.59	Alluvium	
CT-94-1	2021-05-28	5432.05	3.40	5428.65	Alluvium	
CT-94-1	2021-06-30	5432.05	3.53	5428.52	Alluvium	
CT-94-1	2021-07-27	5432.05	3.63	5428.42	Alluvium	
CT-94-1	2021-08-27	5432.05	3.43	5428.62	Alluvium	
CT-94-1	2021-09-22	5432.05	3.57	5428.48	Alluvium	
CT-94-1	2021-10-28	5432.05	3.71	5428.34	Alluvium	
CT-94-1	2021-11-30	5432.05	3.78	5428.27	Alluvium	
CT-94-1	2021-12-20	5432.05	3.84	5428.21	Alluvium	
D2	2021-01-27	5400.00	22.29	5422.29	BTL SW Cell	
D2	2021-02-26	5400.00	22.27	5422.27	BTL SW Cell	
D2	2021-03-30	5400.00	22.29	5422.29	BTL SW Cell	
D2	2021-04-20	5400.00	22.29	5422.29	BTL SW Cell	
D2	2021-05-28	5400.00	22.27	5422.27	BTL SW Cell	
D2	2021-06-28	5400.00	22.28	5422.28	BTL SW Cell	
D2	2021-07-27	5400.00	22.29	5422.29	BTL SW Cell	
D2	2021-08-26	5400.00	22.27	5422.27	BTL SW Cell	
D2	2021-09-21	5400.00	22.36	5422.36	BTL SW Cell	
D2	2021-10-28	5400.00	22.34	5422.34	BTL SW Cell	
D2	2021-11-30	5400.00	22.38	5422.38	BTL SW Cell	
D2	2021-12-21	5400.00	22.37	5422.37	BTL SW Cell	
D3	2021-01-27	5400.00	21.06	5421.06	BTL SW Cell	
D3	2021-02-26	5400.00	21.06	5421.06	BTL SW Cell	
D3	2021-03-30	5400.00	21.08	5421.08	BTL SW Cell	
D3	2021-04-20	5400.00	21.09	5421.09	BTL SW Cell	
D3	2021-05-28	5400.00	20.02	5420.02	BTL SW Cell	

Table 6. BPSOU 2021 Groundwater Elevations

Location	Monitoring Date	MP Elev (NAVD88 ft)	DTW or Stage Reading (ft)	WL Elev (NAVD88 ft)	Aquifer	Notes
D3	2021-06-28	5400.00	20.02	5420.02	BTL SW Cell	
D3	2021-07-27	5400.00	21.11	5421.11	BTL SW Cell	
D3	2021-08-26	5400.00	21.11	5421.11	BTL SW Cell	
D3	2021-09-21	5400.00	21.11	5421.11	BTL SW Cell	
D3	2021-10-28	5400.00	21.10	5421.10	BTL SW Cell	
D3	2021-11-30	5400.00	21.09	5421.09	BTL SW Cell	
D3	2021-12-21	5400.00	21.09	5421.09	BTL SW Cell	
D4	2021-01-27	5400.00	18.06	5418.06	BTL SW Cell	
D4	2021-02-26	5400.00	18.05	5418.05	BTL SW Cell	
D4	2021-03-30	5400.00	18.04	5418.04	BTL SW Cell	
D4	2021-04-20	5400.00	18.12	5418.12	BTL SW Cell	
D4	2021-05-28	5400.00	18.45	5418.45	BTL SW Cell	
D4	2021-06-28	5400.00	18.21	5418.21	BTL SW Cell	
D4	2021-07-27	5400.00	18.27	5418.27	BTL SW Cell	
D4	2021-08-26	5400.00	18.27	5418.27	BTL SW Cell	
D4	2021-09-21	5400.00	18.30	5418.30	BTL SW Cell	
D4	2021-10-28	5400.00	18.30	5418.30	BTL SW Cell	
D4	2021-11-30	5400.00	18.25	5418.25	BTL SW Cell	
D4	2021-12-21	5400.00	18.21	5418.21	BTL SW Cell	
FP98-1	2021-01-27	5442.51	6.54	5435.97	Alluvium	
FP98-1	2021-02-25	5442.51	6.51	5436.00	Alluvium	
FP98-1	2021-03-30	5442.51	6.12	5436.39	Alluvium	
FP98-1	2021-04-19	5442.51	6.14	5436.37	Alluvium	
FP98-1	2021-05-27	5442.51	6.04	5436.47	Alluvium	
FP98-1	2021-06-29	5442.51	6.62	5435.89	Alluvium	
FP98-1	2021-07-26	5442.51	6.65	5435.86	Alluvium	
FP98-1	2021-08-26	5442.51	6.46	5436.05	Alluvium	
FP98-1	2021-09-21	5442.51	6.54	5435.97	Alluvium	
FP98-1	2021-10-27	5442.51	6.45	5436.06	Alluvium	
FP98-1	2021-11-29	5442.51	6.42	5436.09	Alluvium	
FP98-1	2021-12-20	5442.51	6.48	5436.03	Alluvium	
FP98-1B	2021-01-27	5461.32	23.98	5437.34	Alluvium	
FP98-1B	2021-02-25	5461.32	23.96	5437.36	Alluvium	
FP98-1B	2021-03-30	5461.32	23.66	5437.66	Alluvium	
FP98-1B	2021-04-19	5461.32	23.72	5437.60	Alluvium	
FP98-1B	2021-05-27	5461.32	23.66	5437.66	Alluvium	
FP98-1B	2021-06-29	5461.32	23.95	5437.37	Alluvium	
FP98-1B	2021-07-26	5461.32	24.06	5437.26	Alluvium	
FP98-1B	2021-08-26	5461.32	23.84	5437.48	Alluvium	Value obtained from PTS
FP98-1B	2021-09-21	5461.32	23.98	5437.34	Alluvium	
FP98-1B	2021-10-27	5461.32	23.97	5437.35	Alluvium	
FP98-1B	2021-11-29	5461.32	24.00	5437.32	Alluvium	
FP98-1B	2021-12-20	5461.32	24.01	5437.31	Alluvium	
FP98-2	2021-01-27	5441.48	6.10	5435.38	Alluvium	
FP98-2	2021-02-26	5441.48	6.08	5435.40	Alluvium	
FP98-2	2021-04-20	5441.48	5.86	5435.62	Alluvium	
FP98-2	2021-05-27	5441.48	5.80	5435.68	Alluvium	
FP98-2	2021-06-30	5441.48	6.05	5435.43	Alluvium	
FP98-2	2021-07-27	5441.48	6.09	5435.39	Alluvium	
FP98-2	2021-08-27	5441.48	5.84	5435.64	Alluvium	
FP98-2	2021-09-22	5441.48	5.94	5435.54	Alluvium	
FP98-2	2021-10-28	5441.48	5.98	5435.50	Alluvium	
FP98-2	2021-11-30	5441.48	6.05	5435.43	Alluvium	
FP98-2	2021-12-20	5441.48	6.08	5435.40	Alluvium	
FP98-3	2021-01-27	5445.89			Alluvium	Dry at 6.88 ft
FP98-3	2021-02-25	5445.89			Alluvium	Dry at 6.89 ft.
FP98-3	2021-03-30	5445.89			Alluvium	Dry at 6.90 ft
FP98-3	2021-04-19	5445.89			Alluvium	Dry at 6.90 ft.
FP98-3	2021-05-27	5445.89			Alluvium	Dry at 6.88 ft.
FP98-3	2021-06-29	5445.89			Alluvium	Dry at 6.88 ft
FP98-3	2021-07-26	5445.89			Alluvium	Dry at 6.89 ft.
FP98-3	2021-08-26	5445.89			Alluvium	Dry at 6.89 ft.
FP98-3	2021-09-21	5445.89			Alluvium	Dry at 6.89 ft.
FP98-3	2021-10-27	5445.89			Alluvium	Dry at 6.89 ft
FP98-3	2021-11-29	5445.89			Alluvium	Dry at 6.90 ft
FP98-3	2021-12-20	5445.89			Alluvium	Dry at 6.90 ft.
FP98-4	2021-01-27	5441.50			Alluvium	Dry or frozen at 7.47 ft
FP98-4	2021-02-25	5441.50			Alluvium	Dry or frozen at 7.34 ft.
FP98-4	2021-03-30	5441.50			Alluvium	Dry at 7.18 ft
FP98-4	2021-04-19	5441.50	7.36	5434.14	Alluvium	
FP98-4	2021-05-27	5441.50	7.27	5434.23	Alluvium	
FP98-4	2021-06-29	5441.50	7.74	5433.76	Alluvium	
FP98-4	2021-07-26	5441.50	7.94	5433.56	Alluvium	
FP98-4	2021-08-26	5441.50	7.69	5433.81	Alluvium	
FP98-4	2021-09-21	5441.50	7.81	5433.69	Alluvium	
FP98-4	2021-10-27	5441.50	7.81	5433.69	Alluvium	
FP98-4	2021-11-29	5441.50	7.61	5433.89	Alluvium	PVC casing was trimmed 3.34 ft on 11/5/21 and not yet re-surveyed. Actual dtw was 4.27 ft. DTW was adjusted by trimmed length (4.27+3.34).

Table 6. BPSOU 2021 Groundwater Elevations

Location	Monitoring Date	MP Elev (NAVD88 ft)	DTW or Stage Reading (ft)	WL Elev (NAVD88 ft)	Aquifer	Notes
FP98-4	2021-12-20	5441.50	7.67	5433.83	Alluvium	PVC casing was trimmed 3.34 ft. on 11/5/21 and not yet re-surveyed. Actual DTW was 4.33 ft. DTW was adjusted by trimmed length (4.33+3.34).
FP98-5	2021-01-27	5439.44	5.84	5433.60	Alluvium	
FP98-5	2021-02-26	5439.44	5.81	5433.63	Alluvium	
FP98-5	2021-04-20	5439.44	5.61	5433.83	Alluvium	
FP98-5	2021-05-27	5439.44	5.52	5433.92	Alluvium	
FP98-5	2021-06-30	5439.44	5.81	5433.63	Alluvium	
FP98-5	2021-07-27	5439.44	5.57	5433.87	Alluvium	
FP98-5	2021-08-27	5439.44	5.66	5433.78	Alluvium	
FP98-5	2021-09-22	5439.44	5.72	5433.72	Alluvium	
FP98-5	2021-10-28	5439.44	5.72	5433.72	Alluvium	
FP98-5	2021-11-30	5439.44	5.78	5433.66	Alluvium	
FP98-5	2021-12-20	5439.44	5.86	5433.58	Alluvium	
FP98-6	2021-01-27	5429.83	5.95	5423.88	Alluvium	
FP98-6	2021-02-26	5429.83	5.86	5423.97	Alluvium	
FP98-6	2021-03-30	5429.83	5.74	5424.09	Alluvium	
FP98-6	2021-04-20	5429.83	5.69	5424.14	Alluvium	
FP98-6	2021-05-28	5429.83	5.64	5424.19	Alluvium	
FP98-6	2021-06-30	5429.83	5.89	5423.94	Alluvium	
FP98-6	2021-07-27	5429.83	6.00	5423.83	Alluvium	
FP98-6	2021-08-27	5429.83	5.93	5423.90	Alluvium	
FP98-6	2021-09-22	5429.83	5.96	5423.87	Alluvium	
FP98-6	2021-10-28	5429.83	5.98	5423.85	Alluvium	
FP98-6	2021-11-30	5429.83	5.96	5423.87	Alluvium	
FP98-6	2021-12-20	5429.83	6.03	5423.80	Alluvium	
FP98-7	2021-01-27	5432.13	7.03	5425.10	Alluvium	
FP98-7	2021-02-25	5432.13	7.01	5425.12	Alluvium	
FP98-7	2021-03-30	5432.13	6.68	5425.45	Alluvium	
FP98-7	2021-04-19	5432.13	6.63	5425.50	Alluvium	
FP98-7	2021-05-27	5432.13	6.52	5425.61	Alluvium	
FP98-7	2021-06-29	5432.13	6.94	5425.19	Alluvium	
FP98-7	2021-07-26	5432.13	7.17	5424.96	Alluvium	
FP98-7	2021-08-26	5432.13	7.10	5425.03	Alluvium	
FP98-7	2021-09-21	5432.13	7.19	5424.94	Alluvium	
FP98-7	2021-10-27	5432.13	7.17	5424.96	Alluvium	
FP98-7	2021-11-29	5432.13	7.16	5424.97	Alluvium	
FP98-7	2021-12-20	5432.13	7.23	5424.90	Alluvium	
FP98-8	2021-01-27	5430.77			Alluvium	Dry at 6.45 ft
FP98-8	2021-02-25	5430.77			Alluvium	Dry at 6.43 ft.
FP98-8	2021-03-30	5430.77			Alluvium	Dry at 6.42 ft
FP98-8	2021-04-19	5430.77			Alluvium	Dry at 6.45 ft.
FP98-8	2021-05-27	5430.77	6.45	5424.32	Alluvium	Small bit of moisture at bottom.
FP98-8	2021-06-29	5430.77			Alluvium	Dry at 6.46 ft
FP98-8	2021-07-26	5430.77			Alluvium	Dry at 6.42 ft.
FP98-8	2021-08-26	5430.77			Alluvium	Dry at 6.45 ft.
FP98-8	2021-09-21	5430.77			Alluvium	Dry at 6.45 ft.
FP98-8	2021-10-27	5430.77			Alluvium	Dry at 6.45 ft
FP98-8	2021-11-29	5430.77			Alluvium	Dry at 6.45 ft
FP98-8	2021-12-20	5430.77			Alluvium	Dry at 6.45 ft.
FP98-9	2021-01-27	5426.98	5.48	5421.50	Alluvium	
FP98-9	2021-02-26	5426.98	5.40	5421.58	Alluvium	
FP98-9	2021-03-31	5426.98	5.23	5421.75	Alluvium	
FP98-9	2021-04-20	5426.98	5.10	5421.88	Alluvium	
FP98-9	2021-05-28	5426.98	5.06	5421.92	Alluvium	
FP98-9	2021-06-30	5426.98	5.37	5421.61	Alluvium	
FP98-9	2021-07-27	5426.98	5.43	5421.55	Alluvium	
FP98-9	2021-08-27	5426.98	5.37	5421.61	Alluvium	
FP98-9	2021-09-22	5426.98	5.45	5421.53	Alluvium	
FP98-9	2021-10-28	5426.98	5.45	5421.53	Alluvium	
FP98-9	2021-11-30	5426.98	5.42	5421.56	Alluvium	
FP98-9	2021-12-20	5426.98	5.47	5421.51	Alluvium	
GS-08	2021-01-28	5461.56	11.00	5450.56	Alluvium	
GS-08	2021-02-25	5461.56	11.23	5450.33	Alluvium	
GS-08	2021-03-31	5461.56	11.11	5450.45	Alluvium	
GS-08	2021-04-19	5461.56	11.11	5450.45	Alluvium	
GS-08	2021-05-27	5461.56	10.97	5450.59	Alluvium	
GS-08	2021-06-29	5461.56	11.35	5450.21	Alluvium	
GS-08	2021-07-27	5461.56	11.42	5450.14	Alluvium	
GS-08	2021-08-26	5461.56	11.25	5450.31	Alluvium	
GS-08	2021-09-22	5461.56	11.35	5450.21	Alluvium	
GS-08	2021-10-27	5461.56	11.32	5450.24	Alluvium	
GS-08	2021-11-30	5461.56	11.42	5450.14	Alluvium	PVC casing was trimmed 0.26 ft on 11/5/21 and not yet re-surveyed. Actual dtw was 11.16 ft. DTW was adjusted by trimmed length (11.16+0.26).
GS-08	2021-12-20	5461.56	11.23	5450.33	Alluvium	PVC casing was trimmed 0.26 ft. on 11/5/21 and not yet re-surveyed. Actual DTW was 11.23 ft. DTW was adjusted by trimmed length (11.23+0.26).
GS-08R	2021-01-28	5463.56	13.13	5450.43	Alluvium	
GS-08R	2021-02-25	5463.56	13.30	5450.26	Alluvium	
GS-08R	2021-03-31	5463.56	13.21	5450.35	Alluvium	

Table 6. BPSOU 2021 Groundwater Elevations

Location	Monitoring Date	MP Elev (NAVD88 ft)	DTW or Stage Reading (ft)	WL Elev (NAVD88 ft)	Aquifer	Notes
GS-08R	2021-04-19	5463.56	13.20	5450.36	Alluvium	
GS-08R	2021-05-27	5463.56	13.10	5450.46	Alluvium	
GS-08R	2021-06-29	5463.56	13.46	5450.10	Alluvium	
GS-08R	2021-07-27	5463.56	13.53	5450.03	Alluvium	
GS-08R	2021-08-26	5463.56	13.35	5450.21	Alluvium	
GS-08R	2021-09-22	5463.56	13.45	5450.11	Alluvium	
GS-08R	2021-10-27	5463.56	13.41	5450.15	Alluvium	
GS-08R	2021-11-30	5463.56	13.46	5450.10	Alluvium	
GS-08R	2021-12-20	5463.56	13.50	5450.06	Alluvium	
GS-09	2021-01-28	5461.92	11.58	5450.34	Alluvium	
GS-09	2021-02-25	5461.92	11.42	5450.50	Alluvium	
GS-09	2021-03-31	5461.92	11.26	5450.66	Alluvium	
GS-09	2021-04-19	5461.92	11.27	5450.65	Alluvium	
GS-09	2021-05-27	5461.92	11.11	5450.81	Alluvium	
GS-09	2021-06-29	5461.92	11.42	5450.50	Alluvium	
GS-09	2021-07-27	5461.92	11.47	5450.45	Alluvium	
GS-09	2021-08-26	5461.92	11.35	5450.57	Alluvium	
GS-09	2021-09-22	5461.92	11.52	5450.40	Alluvium	
GS-09	2021-10-27	5461.92	11.45	5450.47	Alluvium	
GS-09	2021-11-30	5461.92	11.53	5450.39	Alluvium	
GS-09	2021-12-20	5461.92	11.60	5450.32	Alluvium	
GS-09R	2021-01-28	5463.46	13.19	5450.27	Alluvium	
GS-09R	2021-02-25	5463.46	13.35	5450.11	Alluvium	
GS-09R	2021-03-31	5463.46	13.19	5450.27	Alluvium	
GS-09R	2021-04-19	5463.46	13.21	5450.25	Alluvium	
GS-09R	2021-05-27	5463.46	13.03	5450.43	Alluvium	
GS-09R	2021-06-29	5463.46	13.36	5450.10	Alluvium	
GS-09R	2021-07-27	5463.46	13.41	5450.05	Alluvium	
GS-09R	2021-08-26	5463.46	13.25	5450.21	Alluvium	
GS-09R	2021-09-22	5463.46	13.33	5450.13	Alluvium	
GS-09R	2021-10-27	5463.46	13.37	5450.09	Alluvium	
GS-09R	2021-11-30	5463.46	13.45	5450.01	Alluvium	
GS-09R	2021-12-20	5463.46	13.50	5449.96	Alluvium	
GS-10D	2021-03-31	5481.16			Alluvium	Obstructed
GS-11	2021-01-28	5461.63	11.16	5450.47	Alluvium	
GS-11	2021-02-25	5461.63	11.75	5449.88	Alluvium	
GS-11	2021-03-31	5461.63	11.26	5450.37	Alluvium	
GS-11	2021-04-19	5461.63	11.29	5450.34	Alluvium	
GS-11	2021-05-27	5461.63	11.42	5450.21	Alluvium	
GS-11	2021-06-29	5461.63	11.50	5450.13	Alluvium	
GS-11	2021-07-27	5461.63	11.61	5450.02	Alluvium	
GS-11	2021-08-26	5461.63	11.35	5450.28	Alluvium	
GS-11	2021-09-22	5461.63	11.41	5450.22	Alluvium	
GS-11	2021-10-27	5461.63	11.72	5449.91	Alluvium	
GS-11	2021-11-30	5461.63	11.87	5449.76	Alluvium	
GS-11	2021-12-20	5461.63	11.97	5449.66	Alluvium	
GS-11R	2021-01-28	5463.39	13.25	5450.14	Alluvium	
GS-11R	2021-02-25	5463.39	13.46	5449.93	Alluvium	
GS-11R	2021-03-31	5463.39	12.95	5450.44	Alluvium	
GS-11R	2021-04-19	5463.39	12.99	5450.40	Alluvium	Observed DTW is suspect, continuous recorder indicates level to be 12.91 ft.
GS-11R	2021-05-27	5463.39	13.11	5450.28	Alluvium	
GS-11R	2021-06-29	5463.39	13.20	5450.19	Alluvium	
GS-11R	2021-07-27	5463.39	13.31	5450.08	Alluvium	
GS-11R	2021-08-26	5463.39	13.15	5450.24	Alluvium	
GS-11R	2021-09-22	5463.39	13.21	5450.18	Alluvium	
GS-11R	2021-10-27	5463.39	13.44	5449.95	Alluvium	
GS-11R	2021-11-30	5463.39	13.61	5449.78	Alluvium	
GS-11R	2021-12-20	5463.39	13.71	5449.68	Alluvium	
GS-12	2021-01-27	5445.42	9.30	5436.12	Alluvium	
GS-12	2021-02-26	5445.42			Alluvium	Frozen cap
GS-12	2021-03-30	5445.42			Alluvium	Obstructed at 8.9 ft
GS-12	2021-04-20	5445.42	9.18	5436.24	Alluvium	
GS-12	2021-05-27	5445.42	9.03	5436.39	Alluvium	
GS-12	2021-06-30	5445.42	9.57	5435.85	Alluvium	
GS-12	2021-07-27	5445.42	9.98	5435.44	Alluvium	
GS-12	2021-08-26	5445.42	9.53	5435.89	Alluvium	
GS-12	2021-09-21	5445.42	9.78	5435.64	Alluvium	
GS-12	2021-10-28	5445.42	10.54	5434.88	Alluvium	
GS-12	2021-11-30	5445.42			Alluvium	Dry
GS-12	2021-12-20	5445.42			Alluvium	Unable to locate due to snowy conditions.
GS-13A	2021-01-27	5443.81	7.03	5436.78	Alluvium	
GS-13A	2021-02-26	5443.81	7.26	5436.55	Alluvium	
GS-13A	2021-03-30	5443.81	6.77	5437.04	Alluvium	
GS-13A	2021-04-20	5443.81	6.93	5436.88	Alluvium	Observed DTW is suspect, continuous recorder indicates level to be 6.80 ft.
GS-13A	2021-05-27	5443.81	6.84	5436.97	Alluvium	
GS-13A	2021-06-30	5443.81	7.01	5436.80	Alluvium	
GS-13A	2021-07-27	5443.81	7.03	5436.78	Alluvium	
GS-13A	2021-08-27	5443.81	6.88	5436.93	Alluvium	

Table 6. BPSOU 2021 Groundwater Elevations

Location	Monitoring Date	MP Elev (NAVD88 ft)	DTW or Stage Reading (ft)	WL Elev (NAVD88 ft)	Aquifer	Notes
GS-13A	2021-09-22	5443.81	6.99	5436.82	Alluvium	
GS-13A	2021-10-28	5443.81	7.08	5436.73	Alluvium	
GS-13A	2021-11-30	5443.81	7.14	5436.67	Alluvium	
GS-13A	2021-12-20	5443.81	7.09	5436.72	Alluvium	
GS-13B	2021-01-27	5441.89	4.88	5437.01	Alluvium	
GS-13B	2021-02-26	5441.89	4.89	5437.00	Alluvium	
GS-13B	2021-03-30	5441.89	4.60	5437.29	Alluvium	
GS-13B	2021-04-20	5441.89	4.64	5437.25	Alluvium	
GS-13B	2021-05-27	5441.89	4.60	5437.29	Alluvium	
GS-13B	2021-06-30	5441.89	4.78	5437.11	Alluvium	
GS-13B	2021-07-27	5441.89	4.84	5437.05	Alluvium	
GS-13B	2021-08-27	5441.89	4.63	5437.26	Alluvium	
GS-13B	2021-09-22	5441.89	4.73	5437.16	Alluvium	
GS-13B	2021-10-28	5441.89	4.79	5437.10	Alluvium	
GS-13B	2021-11-30	5441.89	4.85	5437.04	Alluvium	
GS-13B	2021-12-20	5441.89	4.86	5437.03	Alluvium	
GS-17DR	2021-01-27	5444.18	12.10	5432.08	Alluvium	
GS-17DR	2021-02-26	5444.18	12.06	5432.12	Alluvium	
GS-17DR	2021-04-20	5444.18	11.80	5432.38	Alluvium	
GS-17DR	2021-05-27	5444.18	11.69	5432.49	Alluvium	
GS-17DR	2021-06-30	5444.18	11.99	5432.19	Alluvium	
GS-17DR	2021-07-27	5444.18	12.08	5432.10	Alluvium	
GS-17DR	2021-08-27	5444.18	11.85	5432.33	Alluvium	
GS-17DR	2021-09-22	5444.18	11.92	5432.26	Alluvium	
GS-17DR	2021-10-28	5444.18	11.88	5432.30	Alluvium	
GS-17DR	2021-11-30	5444.18	12.03	5432.15	Alluvium	
GS-17DR	2021-12-20	5444.18	12.09	5432.09	Alluvium	
GS-18R	2021-01-27	5436.78	6.84	5429.94	Alluvium	
GS-18R	2021-02-26	5436.78	6.81	5429.97	Alluvium	
GS-18R	2021-03-30	5436.78	6.34	5430.44	Alluvium	
GS-18R	2021-04-19	5436.78	6.52	5430.26	Alluvium	
GS-18R	2021-05-27	5436.78	6.36	5430.42	Alluvium	
GS-18R	2021-06-29	5436.78	6.67	5430.11	Alluvium	
GS-18R	2021-07-26	5436.78	6.77	5430.01	Alluvium	
GS-18R	2021-08-26	5436.78	6.58	5430.20	Alluvium	
GS-18R	2021-09-21	5436.78	6.68	5430.10	Alluvium	
GS-18R	2021-10-27	5436.78	6.62	5430.16	Alluvium	
GS-18R	2021-11-29	5436.78	6.71	5430.07	Alluvium	
GS-18R	2021-12-20	5436.78	6.78	5430.00	Alluvium	
GS-19	2021-01-27	5445.98	10.15	5435.83	Alluvium	
GS-19	2021-02-26	5445.98			Alluvium	Frozen
GS-19	2021-03-31	5445.98	9.95	5436.03	Alluvium	
GS-19	2021-04-20	5445.98	9.93	5436.05	Alluvium	
GS-19	2021-06-02	5445.98	9.83	5436.15	Alluvium	
GS-19	2021-06-30	5445.98	10.05	5435.93	Alluvium	
GS-19	2021-07-27	5445.98	10.14	5435.84	Alluvium	
GS-19	2021-08-26	5445.98	9.93	5436.05	Alluvium	
GS-19	2021-09-21	5445.98	9.95	5436.03	Alluvium	
GS-19	2021-10-28	5445.98	9.98	5436.00	Alluvium	
GS-19	2021-11-30	5445.98	10.04	5435.94	Alluvium	
GS-19	2021-12-20	5445.98	10.11	5435.87	Alluvium	
GS-20	2021-01-27	5454.88	15.16	5439.72	Alluvium	
GS-20	2021-02-26	5454.88	15.89	5438.99	Alluvium	
GS-20	2021-03-30	5454.88	11.79	5443.09	Alluvium	
GS-20	2021-04-20	5454.88	12.85	5442.03	Alluvium	
GS-20	2021-05-27	5454.88	14.51	5440.37	Alluvium	
GS-20	2021-06-30	5454.88	13.69	5441.19	Alluvium	
GS-20	2021-07-27	5454.88	13.35	5441.53	Alluvium	
GS-20	2021-08-26	5454.88	8.60	5446.28	Alluvium	
GS-20	2021-09-21	5454.88	11.04	5443.84	Alluvium	
GS-20	2021-10-28	5454.88	12.97	5441.91	Alluvium	
GS-20	2021-11-30	5454.88	13.75	5441.13	Alluvium	
GS-20	2021-12-20	5454.88	13.70	5441.18	Alluvium	
GS-22	2021-01-27	5440.17	9.16	5431.01	Alluvium	
GS-22	2021-02-25	5440.17	9.12	5431.05	Alluvium	
GS-22	2021-03-30	5440.17	8.42	5431.75	Alluvium	
GS-22	2021-04-19	5440.17	8.55	5431.62	Alluvium	
GS-22	2021-05-27	5440.17	8.57	5431.60	Alluvium	
GS-22	2021-06-29	5440.17	8.73	5431.44	Alluvium	
GS-22	2021-07-26	5440.17	8.88	5431.29	Alluvium	
GS-22	2021-08-26	5440.17	8.70	5431.47	Alluvium	
GS-22	2021-09-21	5440.17	8.87	5431.30	Alluvium	
GS-22	2021-10-27	5440.17	9.06	5431.11	Alluvium	
GS-22	2021-11-29	5440.17	9.14	5431.03	Alluvium	
GS-22	2021-12-20	5440.17	9.22	5430.95	Alluvium	
GS-23	2021-01-27	5441.36	15.17	5426.19	Alluvium	
GS-23	2021-02-25	5441.36	15.16	5426.20	Alluvium	
GS-23	2021-03-30	5441.36	14.73	5426.63	Alluvium	
GS-23	2021-04-19	5441.36	14.70	5426.66	Alluvium	
GS-23	2021-05-27	5441.36	14.61	5426.75	Alluvium	

Table 6. BPSOU 2021 Groundwater Elevations

Location	Monitoring Date	MP Elev (NAVD88 ft)	DTW or Stage Reading (ft)	WL Elev (NAVD88 ft)	Aquifer	Notes
GS-23	2021-06-29	5441.36	15.02	5426.34	Alluvium	
GS-23	2021-07-26	5441.36	15.30	5426.06	Alluvium	
GS-23	2021-08-26	5441.36	15.28	5426.08	Alluvium	
GS-23	2021-09-21	5441.36	15.34	5426.02	Alluvium	
GS-23	2021-10-27	5441.36	15.31	5426.05	Alluvium	
GS-23	2021-11-29	5441.36	15.35	5426.01	Alluvium	
GS-23	2021-12-20	5441.36	15.41	5425.95	Alluvium	
GS-25	2021-01-27	5432.05	5.19	5426.86	Alluvium	
GS-25	2021-02-26	5432.05	5.20	5426.85	Alluvium	
GS-25	2021-03-31	5432.05	5.10	5426.95	Alluvium	
GS-25	2021-04-20	5432.05	5.11	5426.94	Alluvium	
GS-25	2021-05-27	5432.05	5.00	5427.05	Alluvium	
GS-25	2021-06-30	5432.05	5.08	5426.97	Alluvium	
GS-25	2021-07-26	5432.05	5.02	5427.03	Alluvium	
GS-25	2021-08-26	5432.05	4.94	5427.11	Alluvium	
GS-25	2021-09-21	5432.05	5.00	5427.05	Alluvium	
GS-25	2021-10-28	5432.05	5.01	5427.04	Alluvium	
GS-25	2021-11-30	5432.05	5.15	5426.90	Alluvium	
GS-25	2021-12-20	5432.05	5.18	5426.87	Alluvium	
GS-25C	2021-01-27	5433.75	6.29	5427.46	Bedrock	
GS-25C	2021-02-26	5433.75	6.34	5427.41	Bedrock	
GS-25C	2021-03-31	5433.75	5.98	5427.77	Bedrock	
GS-25C	2021-04-20	5433.75	6.20	5427.55	Bedrock	
GS-25C	2021-05-27	5433.75	6.04	5427.71	Bedrock	
GS-25C	2021-06-30	5433.75	6.18	5427.57	Bedrock	
GS-25C	2021-07-26	5433.75	6.10	5427.65	Bedrock	
GS-25C	2021-08-26	5433.75	6.02	5427.73	Bedrock	
GS-25C	2021-09-21	5433.75	6.18	5427.57	Bedrock	
GS-25C	2021-10-28	5433.75	6.14	5427.61	Bedrock	
GS-25C	2021-11-30	5433.75	6.35	5427.40	Bedrock	
GS-25C	2021-12-20	5433.75	6.34	5427.41	Bedrock	
GS-25D	2021-01-27	5432.95	5.58	5427.37	Bedrock	
GS-25D	2021-02-26	5432.95	5.49	5427.46	Bedrock	
GS-25D	2021-03-31	5432.95	5.44	5427.51	Bedrock	
GS-25D	2021-04-20	5432.95	5.44	5427.51	Bedrock	
GS-25D	2021-05-27	5432.95	5.34	5427.61	Bedrock	
GS-25D	2021-06-30	5432.95	5.43	5427.52	Bedrock	
GS-25D	2021-07-26	5432.95	5.39	5427.56	Bedrock	
GS-25D	2021-08-26	5432.95	5.29	5427.66	Bedrock	
GS-25D	2021-09-21	5432.95	5.42	5427.53	Bedrock	
GS-25D	2021-10-28	5432.95	5.31	5427.64	Bedrock	
GS-25D	2021-11-30	5432.95	5.55	5427.40	Bedrock	
GS-25D	2021-12-20	5432.95	5.62	5427.33	Bedrock	
GS-26	2021-01-27	5422.79			Alluvium	Frozen at 3.09 ft
GS-26	2021-02-26	5422.79			Alluvium	Frozen at 3.09 ft.
GS-26	2021-03-30	5422.79	3.01	5419.78	Alluvium	
GS-26	2021-04-20	5422.79	2.98	5419.81	Alluvium	
GS-26	2021-05-28	5422.79	2.97	5419.82	Alluvium	
GS-26	2021-06-29	5422.79	3.08	5419.71	Alluvium	
GS-26	2021-07-27	5422.79	3.14	5419.65	Alluvium	
GS-26	2021-08-27	5422.79	3.09	5419.70	Alluvium	
GS-26	2021-09-21	5422.79	3.12	5419.67	Alluvium	
GS-26	2021-10-28	5422.79	3.22	5419.57	Alluvium	
GS-26	2021-11-30	5422.79	3.19	5419.60	Alluvium	
GS-26	2021-12-20	5422.79	3.26	5419.53	Alluvium	
GS-28	2021-01-28	5450.44	5.57	5444.87	Alluvium	
GS-28	2021-02-26	5450.44	5.49	5444.95	Alluvium	
GS-28	2021-03-30	5450.44	4.93	5445.51	Alluvium	
GS-28	2021-04-20	5450.44	4.98	5445.46	Alluvium	
GS-28	2021-05-28	5450.44	5.08	5445.36	Alluvium	
GS-28	2021-06-28	5450.44	5.55	5444.89	Alluvium	
GS-28	2021-07-27	5450.44	5.73	5444.71	Alluvium	
GS-28	2021-08-26	5450.44	5.42	5445.02	Alluvium	
GS-28	2021-09-21	5450.44	5.57	5444.87	Alluvium	
GS-28	2021-10-28	5450.44	5.39	5445.05	Alluvium	
GS-28	2021-11-30	5450.44	5.45	5444.99	Alluvium	PVC casing was trimmed 0.33 ft on 11/5/21 and not yet re-surveyed. Actual dtw was 5.12 ft. DTW was adjusted by trimmed length (5.12+0.33).
GS-28	2021-12-21	5450.44	5.51	5444.93	Alluvium	PVC casing was trimmed 0.33 ft. on 11/5/21 and not yet re-surveyed. Actual DTW was 5.18 ft. DTW was adjusted by trimmed length (5.18+0.33).
GS-29D	2021-01-28	5448.00	7.48	5440.52	Bedrock	
GS-29D	2021-02-26	5448.00	6.83	5441.17	Bedrock	
GS-29D	2021-03-31	5448.00	6.21	5441.79	Bedrock	Observed DTW is suspect, continuous recorder indicates the level to be approximately 6.29 ft.
GS-29D	2021-04-19	5448.00	6.06	5441.94	Bedrock	
GS-29D	2021-05-27	5448.00	5.80	5442.20	Bedrock	
GS-29D	2021-06-30	5448.00	5.72	5442.28	Bedrock	
GS-29D	2021-07-26	5448.00	5.72	5442.28	Bedrock	
GS-29D	2021-08-27	5448.00	5.70	5442.30	Bedrock	
GS-29D	2021-09-22	5448.00	5.68	5442.32	Bedrock	

Table 6. BPSOU 2021 Groundwater Elevations

Location	Monitoring Date	MP Elev (NAVD88 ft)	DTW or Stage Reading (ft)	WL Elev (NAVD88 ft)	Aquifer	Notes
GS-29D	2021-10-27	5448.00	5.73	5442.27	Bedrock	
GS-29D	2021-11-30	5448.00	5.73	5442.27	Bedrock	
GS-29D	2021-12-20	5448.00	5.76	5442.24	Bedrock	
GS-29SR	2021-01-28	5448.85	6.64	5442.21	Alluvium	
GS-29SR	2021-02-26	5448.85	6.75	5442.10	Alluvium	
GS-29SR	2021-03-31	5448.85	6.37	5442.48	Alluvium	
GS-29SR	2021-04-19	5448.85	6.34	5442.51	Alluvium	
GS-29SR	2021-05-27	5448.85	6.25	5442.60	Alluvium	
GS-29SR	2021-06-30	5448.85	6.61	5442.24	Alluvium	
GS-29SR	2021-07-26	5448.85	6.64	5442.21	Alluvium	
GS-29SR	2021-08-27	5448.85	6.51	5442.34	Alluvium	
GS-29SR	2021-09-22	5448.85	6.55	5442.30	Alluvium	
GS-29SR	2021-10-27	5448.85	6.57	5442.28	Alluvium	
GS-29SR	2021-11-30	5448.85	6.80	5442.05	Alluvium	
GS-29SR	2021-12-20	5448.85	6.71	5442.14	Alluvium	
GS-30D	2021-01-28	5460.25	10.46	5449.79	Alluvium	
GS-30D	2021-02-26	5460.25	10.64	5449.61	Alluvium	
GS-30D	2021-03-31	5460.25	10.42	5449.83	Alluvium	
GS-30D	2021-04-19	5460.25	10.44	5449.81	Alluvium	
GS-30D	2021-05-27	5460.25	10.26	5449.99	Alluvium	
GS-30D	2021-06-29	5460.25	10.62	5449.63	Alluvium	
GS-30D	2021-07-27	5460.25	10.68	5449.57	Alluvium	
GS-30D	2021-08-26	5460.25	10.50	5449.75	Alluvium	
GS-30D	2021-09-22	5460.25	10.61	5449.64	Alluvium	
GS-30D	2021-10-27	5460.25	10.65	5449.60	Alluvium	
GS-30D	2021-11-30	5460.25	10.72	5449.53	Alluvium	
GS-30D	2021-12-20	5460.25	10.76	5449.49	Alluvium	
GS-30S	2021-01-28	5460.81	10.64	5450.17	Alluvium	
GS-30S	2021-02-26	5460.81	10.98	5449.83	Alluvium	
GS-30S	2021-03-31	5460.81	10.62	5450.19	Alluvium	
GS-30S	2021-04-19	5460.81	10.70	5450.11	Alluvium	
GS-30S	2021-05-27	5460.81	10.53	5450.28	Alluvium	
GS-30S	2021-06-29	5460.81	10.53	5450.28	Alluvium	Level is suspect, continuous recorder indicates level at 10.83 ft.
GS-30S	2021-07-27	5460.81	10.80	5450.01	Alluvium	
GS-30S	2021-08-26	5460.81	10.57	5450.24	Alluvium	
GS-30S	2021-09-22	5460.81	10.72	5450.09	Alluvium	
GS-30S	2021-10-27	5460.81	10.83	5449.98	Alluvium	
GS-30S	2021-11-30	5460.81	11.01	5449.80	Alluvium	
GS-30S	2021-12-20	5460.81	11.09	5449.72	Alluvium	
GS-31D	2021-01-28	5456.02	5.89	5450.13	Alluvium	
GS-31D	2021-02-25	5456.02	6.03	5449.99	Alluvium	
GS-31D	2021-03-31	5456.02	5.96	5450.06	Alluvium	
GS-31D	2021-04-19	5456.02	5.96	5450.06	Alluvium	
GS-31D	2021-05-27	5456.02	5.83	5450.19	Alluvium	
GS-31D	2021-06-29	5456.02	6.08	5449.94	Alluvium	
GS-31D	2021-07-27	5456.02	6.15	5449.87	Alluvium	
GS-31D	2021-08-26	5456.02	5.95	5450.07	Alluvium	
GS-31D	2021-09-22	5456.02	6.08	5449.94	Alluvium	
GS-31D	2021-10-27	5456.02	6.10	5449.92	Alluvium	
GS-31D	2021-11-30	5456.02	6.19	5449.83	Alluvium	
GS-31D	2021-12-20	5456.02	6.23	5449.79	Alluvium	
GS-31S	2021-01-28	5455.92	5.89	5450.03	Alluvium	
GS-31S	2021-02-25	5455.92	6.11	5449.81	Alluvium	
GS-31S	2021-03-31	5455.92	5.90	5450.02	Alluvium	
GS-31S	2021-04-19	5455.92	5.91	5450.01	Alluvium	
GS-31S	2021-05-27	5455.92	5.80	5450.12	Alluvium	
GS-31S	2021-06-29	5455.92	6.03	5449.89	Alluvium	
GS-31S	2021-07-27	5455.92	6.11	5449.81	Alluvium	
GS-31S	2021-08-26	5455.92	5.87	5450.05	Alluvium	
GS-31S	2021-09-22	5455.92	6.05	5449.87	Alluvium	
GS-31S	2021-10-27	5455.92	6.09	5449.83	Alluvium	
GS-31S	2021-11-30	5455.92	6.17	5449.75	Alluvium	
GS-31S	2021-12-20	5455.92	6.20	5449.72	Alluvium	Observed DTW is suspect, measured from top of PVC, not top of steel casing. Difference between top of PVC and top of steel casing is 0.56 ft.
GS-32D	2021-01-27	5454.95	4.98	5449.97	Alluvium	
GS-32D	2021-02-25	5454.95	4.66	5450.29	Alluvium	
GS-32D	2021-03-31	5454.95	4.44	5450.51	Alluvium	
GS-32D	2021-04-20	5454.95	5.27	5449.68	Alluvium	Value suspect, measured from TOS instead of PVC corrected to 4.45 ft.
GS-32D	2021-05-27	5454.95	4.26	5450.69	Alluvium	
GS-32D	2021-06-29	5454.95	4.70	5450.25	Alluvium	
GS-32D	2021-07-27	5454.95	4.80	5450.15	Alluvium	
GS-32D	2021-08-26	5454.95	4.65	5450.30	Alluvium	
GS-32D	2021-09-22	5454.95	4.75	5450.20	Alluvium	
GS-32D	2021-10-27	5454.95	4.78	5450.17	Alluvium	
GS-32D	2021-11-30	5454.95	4.83	5450.12	Alluvium	
GS-32D	2021-12-20	5454.95	4.81	5450.14	Alluvium	
GS-32S	2021-01-27	5454.48	4.75	5449.73	Alluvium	
GS-32S	2021-02-25	5454.48	5.26	5449.22	Alluvium	

Table 6. BPSOU 2021 Groundwater Elevations

Location	Monitoring Date	MP Elev (NAVD88 ft)	DTW or Stage Reading (ft)	WL Elev (NAVD88 ft)	Aquifer	Notes
GS-32S	2021-03-31	5454.48	4.99	5449.49	Alluvium	
GS-32S	2021-04-20	5454.48	5.05	5449.43	Alluvium	
GS-32S	2021-05-27	5454.48	4.76	5449.72	Alluvium	
GS-32S	2021-06-29	5454.48	5.37	5449.11	Alluvium	
GS-32S	2021-07-27	5454.48	5.51	5448.97	Alluvium	
GS-32S	2021-08-26	5454.48	5.30	5449.18	Alluvium	
GS-32S	2021-09-22	5454.48	5.43	5449.05	Alluvium	
GS-32S	2021-10-27	5454.48	5.43	5449.05	Alluvium	
GS-32S	2021-11-30	5454.48	5.46	5449.02	Alluvium	
GS-32S	2021-12-20	5454.48	5.47	5449.01	Alluvium	
GS-34D	2021-01-27	5438.42	8.81	5429.61	Alluvium	
GS-34D	2021-02-26	5438.42	8.76	5429.66	Alluvium	
GS-34D	2021-03-31	5438.42	8.49	5429.93	Alluvium	
GS-34D	2021-04-20	5438.42	8.54	5429.88	Alluvium	
GS-34D	2021-05-27	5438.42	8.40	5430.02	Alluvium	
GS-34D	2021-06-30	5438.42	8.62	5429.80	Alluvium	
GS-34D	2021-07-27	5438.42	8.65	5429.77	Alluvium	
GS-34D	2021-08-26	5438.42	8.49	5429.93	Alluvium	
GS-34D	2021-09-21	5438.42	8.60	5429.82	Alluvium	
GS-34D	2021-10-28	5438.42	8.18	5430.24	Alluvium	
GS-34D	2021-11-30	5438.42	8.70	5429.72	Alluvium	
GS-34D	2021-12-20	5438.42	8.80	5429.62	Alluvium	
GS-34S	2021-01-27	5437.59	7.93	5429.66	Alluvium	
GS-34S	2021-02-26	5437.59	7.90	5429.69	Alluvium	
GS-34S	2021-03-31	5437.59	7.61	5429.98	Alluvium	
GS-34S	2021-04-20	5437.59	7.66	5429.93	Alluvium	
GS-34S	2021-05-27	5437.59	7.53	5430.06	Alluvium	
GS-34S	2021-06-30	5437.59	7.75	5429.84	Alluvium	
GS-34S	2021-07-27	5437.59	7.77	5429.82	Alluvium	
GS-34S	2021-08-26	5437.59	7.62	5429.97	Alluvium	
GS-34S	2021-09-21	5437.59	7.73	5429.86	Alluvium	
GS-34S	2021-10-28	5437.59	7.32	5430.27	Alluvium	
GS-34S	2021-11-30	5437.59	7.83	5429.76	Alluvium	
GS-34S	2021-12-20	5437.59	7.93	5429.66	Alluvium	
GS-40R	2021-01-27	5485.61	24.55	5461.06	Alluvium	
GS-40R	2021-02-25	5485.61	24.68	5460.93	Alluvium	
GS-40R	2021-03-31	5485.61	24.93	5460.68	Alluvium	
GS-40R	2021-04-19	5485.61	25.07	5460.54	Alluvium	
GS-40R	2021-05-27	5485.61	25.15	5460.46	Alluvium	
GS-40R	2021-06-29	5485.61	26.58	5459.03	Alluvium	
GS-40R	2021-07-27	5485.61	26.50	5459.11	Alluvium	Measurement is suspect, adjacent well measured by mistake.
GS-40R	2021-08-26	5485.61	25.10	5460.51	Alluvium	
GS-40R	2021-09-22	5485.61	25.11	5460.50	Alluvium	
GS-40R	2021-10-27	5485.61	25.30	5460.31	Alluvium	
GS-40R	2021-11-29	5485.61	25.21	5460.40	Alluvium	
GS-40R	2021-12-20	5485.61	25.57	5460.04	Alluvium	
GS-42D	2021-01-27	5475.54	16.32	5459.22	Alluvium	
GS-42D	2021-02-25	5475.54	16.41	5459.13	Alluvium	
GS-42D	2021-03-31	5475.54			Alluvium	Abandoned 3/2021 due to Parrot Removal
GS-42S	2021-01-27	5475.68	16.26	5459.42	Alluvium	
GS-42S	2021-02-25	5475.68	16.36	5459.32	Alluvium	
GS-42S	2021-03-31	5475.68			Alluvium	Abandoned 3/2021 due to Parrot Removal
GW-06R	2021-01-27	5435.38	7.59	5427.79	Alluvium	
GW-06R	2021-02-26	5435.38	7.52	5427.86	Alluvium	
GW-06R	2021-03-30	5435.38	7.29	5428.09	Alluvium	
GW-06R	2021-04-20	5435.38	7.34	5428.04	Alluvium	
GW-06R	2021-05-27	5435.38	7.30	5428.08	Alluvium	
GW-06R	2021-06-30	5435.38	7.47	5427.91	Alluvium	
GW-06R	2021-07-27	5435.38	7.50	5427.88	Alluvium	
GW-06R	2021-08-27	5435.38	7.36	5428.02	Alluvium	
GW-06R	2021-09-22	5435.38	7.47	5427.91	Alluvium	
GW-06R	2021-10-28	5435.38	7.44	5427.94	Alluvium	
GW-06R	2021-11-30	5435.38	7.57	5427.81	Alluvium	
GW-06R	2021-12-20	5435.38	7.61	5427.77	Alluvium	
HCA-B1	2021-01-27	5427.49	8.33	5419.16	Bedrock	
HCA-B1	2021-02-26	5427.49	8.32	5419.17	Bedrock	
HCA-B1	2021-03-30	5427.49	8.13	5419.36	Bedrock	
HCA-B1	2021-04-20	5427.49	8.09	5419.40	Bedrock	
HCA-B1	2021-05-28	5427.49	7.97	5419.52	Bedrock	
HCA-B1	2021-06-29	5427.49	8.16	5419.33	Bedrock	
HCA-B1	2021-07-27	5427.49	8.26	5419.23	Bedrock	
HCA-B1	2021-08-27	5427.49	8.22	5419.27	Bedrock	
HCA-B1	2021-09-21	5427.49	8.26	5419.23	Bedrock	
HCA-B1	2021-10-28	5427.49	8.32	5419.17	Bedrock	
HCA-B1	2021-11-30	5427.49	8.32	5419.17	Bedrock	
HCA-B1	2021-12-20	5427.49	8.39	5419.10	Bedrock	
HCA-B2	2021-01-27	5429.96	11.25	5418.71	Bedrock	
HCA-B2	2021-02-26	5429.96	11.26	5418.70	Bedrock	
HCA-B2	2021-03-30	5429.96	11.00	5418.96	Bedrock	
HCA-B2	2021-04-20	5429.96	10.96	5419.00	Bedrock	

Table 6. BPSOU 2021 Groundwater Elevations

Location	Monitoring Date	MP Elev (NAVD88 ft)	DTW or Stage Reading (ft)	WL Elev (NAVD88 ft)	Aquifer	Notes
HCA-B2	2021-05-28	5429.96	10.90	5419.06	Bedrock	
HCA-B2	2021-06-29	5429.96	11.06	5418.90	Bedrock	
HCA-B2	2021-07-27	5429.96	11.22	5418.74	Bedrock	
HCA-B2	2021-08-27	5429.96	11.15	5418.81	Bedrock	
HCA-B2	2021-09-21	5429.96	11.22	5418.74	Bedrock	
HCA-B2	2021-10-28	5429.96	11.27	5418.69	Bedrock	
HCA-B2	2021-11-30	5429.96	11.28	5418.68	Bedrock	
HCA-B2	2021-12-20	5429.96	11.35	5418.61	Bedrock	
HCA-MG1	2021-01-27	5460.98	22.94	5438.04	Alluvium	
HCA-MG1	2021-02-26	5460.98	23.32	5437.66	Alluvium	
HCA-MG1	2021-03-30	5460.98	21.11	5439.87	Alluvium	
HCA-MG1	2021-04-20	5460.98	21.34	5439.64	Alluvium	
HCA-MG1	2021-05-27	5460.98	22.64	5438.34	Alluvium	
HCA-MG1	2021-06-30	5460.98	22.24	5438.74	Alluvium	
HCA-MG1	2021-07-27	5460.98	22.08	5438.90	Alluvium	
HCA-MG1	2021-08-26	5460.98	16.16	5444.82	Alluvium	
HCA-MG1	2021-09-21	5460.98	18.74	5442.24	Alluvium	
HCA-MG1	2021-10-28	5460.98	21.08	5439.90	Alluvium	
HCA-MG1	2021-11-30	5460.98	21.96	5439.02	Alluvium	
HCA-MG1	2021-12-20	5460.98	22.17	5438.81	Alluvium	
HCA-MG3	2021-01-27	5460.35	21.56	5438.79	Alluvium	
HCA-MG3	2021-02-26	5460.35	21.89	5438.46	Alluvium	
HCA-MG3	2021-03-30	5460.35	20.42	5439.93	Alluvium	
HCA-MG3	2021-04-20	5460.35	20.40	5439.95	Alluvium	
HCA-MG3	2021-05-27	5460.35	21.34	5439.01	Alluvium	
HCA-MG3	2021-06-30	5460.35	21.12	5439.23	Alluvium	
HCA-MG3	2021-07-27	5460.35	21.04	5439.31	Alluvium	
HCA-MG3	2021-08-26	5460.35	15.40	5444.95	Alluvium	
HCA-MG3	2021-09-21	5460.35	18.00	5442.35	Alluvium	
HCA-MG3	2021-10-28	5460.35	20.15	5440.20	Alluvium	
HCA-MG3	2021-11-30	5460.35	20.86	5439.49	Alluvium	
HCA-MG3	2021-12-20	5460.35	21.09	5439.26	Alluvium	
HCC-01	2021-01-27	5430.36	0.69	5431.05	BTL Sys	
HCC-01	2021-02-26	5430.36	0.71	5431.07	BTL Sys	
HCC-01	2021-03-30	5430.36	0.71	5431.07	BTL Sys	
HCC-01	2021-04-20	5430.36	0.71	5431.07	BTL Sys	
HCC-01	2021-05-28	5430.36	0.71	5431.07	BTL Sys	
HCC-01	2021-06-28	5430.36	0.72	5431.08	BTL Sys	
HCC-01	2021-07-27	5430.36	0.69	5431.05	BTL Sys	
HCC-01	2021-08-26	5430.36	0.70	5431.06	BTL Sys	
HCC-01	2021-09-21	5430.36	0.69	5431.05	BTL Sys	
HCC-01	2021-10-28	5430.36	0.68	5431.04	BTL Sys	
HCC-01	2021-11-30	5430.36	0.67	5431.03	BTL Sys	
HCC-01	2021-12-21	5430.36	0.68	5431.04	BTL Sys	
HCC-01A	2021-01-27	5414.46			BTL Sys	Dry
HCC-01A	2021-02-26	5414.46			BTL Sys	Frozen
HCC-01A	2021-03-30	5414.46	0.43	5414.89	BTL Sys	
HCC-01A	2021-04-20	5414.46	14.54	5429.00	BTL Sys	
HCC-01A	2021-05-28	5414.46	14.45	5428.91	BTL Sys	
HCC-01A	2021-06-28	5414.46	14.44	5428.90	BTL Sys	
HCC-01A	2021-07-27	5414.46	14.42	5428.88	BTL Sys	
HCC-01A	2021-08-26	5414.46	14.46	5428.92	BTL Sys	
HCC-01A	2021-09-21	5414.46	14.47	5428.93	BTL Sys	
HCC-01A	2021-10-28	5414.46	14.44	5428.90	BTL Sys	
HCC-01A	2021-11-30	5414.46	14.42	5428.88	BTL Sys	
HCC-01A	2021-12-21	5414.46	14.38	5428.84	BTL Sys	
HCC-01B	2021-01-27	5427.22			BTL Sys	Dry
HCC-01B	2021-02-26	5427.22			BTL Sys	Frozen
HCC-01B	2021-03-30	5427.22			BTL Sys	Frozen
HCC-01B	2021-04-20	5427.22	1.03	5428.25	BTL Sys	
HCC-01B	2021-05-28	5427.22	0.81	5428.03	BTL Sys	
HCC-01B	2021-06-28	5427.22	0.84	5428.06	BTL Sys	
HCC-01B	2021-07-27	5427.22	0.82	5428.04	BTL Sys	
HCC-01B	2021-08-26	5427.22	0.85	5428.07	BTL Sys	
HCC-01B	2021-09-21	5427.22	0.83	5428.05	BTL Sys	
HCC-01B	2021-10-28	5427.22	0.86	5428.08	BTL Sys	
HCC-01B	2021-11-30	5427.22	0.88	5428.10	BTL Sys	
HCC-01B	2021-12-21	5427.22			BTL Sys	Dry, excavation done in HCC earlier in month.
HCC-02A	2021-01-27	5421.15	6.22	5427.37	BTL Sys	
HCC-02A	2021-02-26	5421.15	6.30	5427.45	BTL Sys	
HCC-02A	2021-03-30	5421.15	6.23	5427.38	BTL Sys	
HCC-02A	2021-04-20	5421.15	6.22	5427.37	BTL Sys	
HCC-02A	2021-05-28	5421.15	6.24	5427.39	BTL Sys	
HCC-02A	2021-06-28	5421.15	6.22	5427.37	BTL Sys	
HCC-02A	2021-07-27	5421.15	6.22	5427.37	BTL Sys	Plus or minus 0.01 ft.
HCC-02A	2021-08-26	5421.15	6.23	5427.38	BTL Sys	
HCC-02A	2021-09-21	5421.15	6.22	5427.37	BTL Sys	
HCC-02A	2021-10-28	5421.15	6.22	5427.37	BTL Sys	
HCC-02A	2021-11-30	5421.15	6.20	5427.35	BTL Sys	
HCC-02A	2021-12-21	5421.15	6.26	5427.41	BTL Sys	

Table 6. BPSOU 2021 Groundwater Elevations

Location	Monitoring Date	MP Elev (NAVD88 ft)	DTW or Stage Reading (ft)	WL Elev (NAVD88 ft)	Aquifer	Notes
HCC-03	2021-01-27	5425.11			BTL Sys	Dry
HCC-03	2021-02-26	5425.11			BTL Sys	Dry
HCC-03	2021-03-30	5425.11			BTL Sys	Dry
HCC-03	2021-04-20	5425.11			BTL Sys	Dry
HCC-03	2021-05-28	5425.11			BTL Sys	Dry
HCC-03	2021-06-28	5425.11			BTL Sys	Dry
HCC-03	2021-07-27	5425.11			BTL Sys	Dry
HCC-03	2021-08-26	5425.11			BTL Sys	Dry
HCC-03	2021-09-21	5425.11			BTL Sys	Dry
HCC-03	2021-10-28	5425.11			BTL Sys	Dry
HCC-03	2021-11-30	5425.11			BTL Sys	Dry
HCC-03	2021-12-21	5425.11			BTL Sys	Dry
HCC-03A	2021-01-27	5422.61	1.56	5424.17	BTL Sys	
HCC-03A	2021-02-26	5422.61	1.58	5424.19	BTL Sys	
HCC-03A	2021-03-30	5422.61	1.58	5424.19	BTL Sys	
HCC-03A	2021-04-20	5422.61	1.62	5424.23	BTL Sys	
HCC-03A	2021-05-28	5422.61	1.63	5424.24	BTL Sys	
HCC-03A	2021-06-28	5422.61	2.63	5425.24	BTL Sys	
HCC-03A	2021-07-27	5422.61	1.60	5424.21	BTL Sys	
HCC-03A	2021-08-26	5422.61	1.65	5424.26	BTL Sys	
HCC-03A	2021-09-21	5422.61	1.64	5424.25	BTL Sys	
HCC-03A	2021-10-28	5422.61	1.61	5424.22	BTL Sys	
HCC-03A	2021-11-30	5422.61	1.55	5424.16	BTL Sys	
HCC-03A	2021-12-21	5422.61	1.60	5424.21	BTL Sys	
HCC-04	2021-01-27	5421.99	2.07	5424.06	BTL Sys	
HCC-04	2021-02-26	5421.99	2.08	5424.07	BTL Sys	
HCC-04	2021-03-30	5421.99	2.09	5424.08	BTL Sys	
HCC-04	2021-04-20	5421.99	2.10	5424.09	BTL Sys	
HCC-04	2021-05-28	5421.99	2.10	5424.09	BTL Sys	
HCC-04	2021-06-28	5421.99	2.10	5424.09	BTL Sys	
HCC-04	2021-07-27	5421.99	2.10	5424.09	BTL Sys	
HCC-04	2021-08-26	5421.99	2.11	5424.10	BTL Sys	
HCC-04	2021-09-21	5421.99	2.12	5424.11	BTL Sys	
HCC-04	2021-10-28	5421.99	2.12	5424.11	BTL Sys	
HCC-04	2021-11-30	5421.99	2.10	5424.09	BTL Sys	
HCC-04	2021-12-21	5421.99	2.12	5424.11	BTL Sys	
HCC-04A	2021-01-27	5411.83	10.86	5422.69	BTL Sys	
HCC-04A	2021-02-26	5411.83	10.87	5422.70	BTL Sys	
HCC-04A	2021-03-30	5411.83	10.87	5422.70	BTL Sys	
HCC-04A	2021-04-20	5411.83	10.88	5422.71	BTL Sys	
HCC-04A	2021-05-28	5411.83	10.88	5422.71	BTL Sys	
HCC-04A	2021-06-28	5411.83	10.92	5422.75	BTL Sys	
HCC-04A	2021-07-27	5411.83	9.08	5420.91	BTL Sys	Plus or minus 0.01 ft.
HCC-04A	2021-08-26	5411.83	10.95	5422.78	BTL Sys	
HCC-04A	2021-09-21	5411.83	10.95	5422.78	BTL Sys	
HCC-04A	2021-10-28	5411.83	10.90	5422.73	BTL Sys	
HCC-04A	2021-11-30	5411.83	10.85	5422.68	BTL Sys	
HCC-04A	2021-12-21	5411.83	10.86	5422.69	BTL Sys	
HCC-05	2021-01-27	5421.09			BTL Sys	Dry
HCC-05	2021-02-26	5421.09			BTL Sys	Dry
HCC-05	2021-03-30	5421.09			BTL Sys	Dry
HCC-05	2021-04-20	5421.09			BTL Sys	Dry
HCC-05	2021-05-28	5421.09			BTL Sys	Dry
HCC-05	2021-06-28	5421.09			BTL Sys	Dry
HCC-05	2021-07-27	5421.09			BTL Sys	Dry
HCC-05	2021-08-26	5421.09			BTL Sys	Dry
HCC-05	2021-09-21	5421.09			BTL Sys	Dry
HCC-05	2021-10-28	5421.09			BTL Sys	Dry
HCC-05	2021-11-30	5421.09			BTL Sys	Dry
HCC-05	2021-12-21	5421.09			BTL Sys	Dry
HCC-05A	2021-01-27	5409.39	10.93	5420.32	BTL Sys	
HCC-05A	2021-02-26	5409.39	10.90	5420.29	BTL Sys	
HCC-05A	2021-03-30	5409.39	10.93	5420.32	BTL Sys	
HCC-05A	2021-04-20	5409.39	10.94	5420.33	BTL Sys	
HCC-05A	2021-05-28	5409.39	10.95	5420.34	BTL Sys	
HCC-05A	2021-06-28	5409.39	10.99	5420.38	BTL Sys	
HCC-05A	2021-07-27	5409.39	10.95	5420.34	BTL Sys	
HCC-05A	2021-08-26	5409.39	11.01	5420.40	BTL Sys	
HCC-05A	2021-09-21	5409.39	11.02	5420.41	BTL Sys	
HCC-05A	2021-10-28	5409.39	11.00	5420.39	BTL Sys	
HCC-05A	2021-11-30	5409.39	10.94	5420.33	BTL Sys	
HCC-05A	2021-12-21	5409.39	10.92	5420.31	BTL Sys	
HCC-06	2021-01-27	5419.31	0.72	5420.03	BTL Sys	
HCC-06	2021-02-26	5419.31			BTL Sys	Frozen
HCC-06	2021-03-30	5419.31			BTL Sys	Frozen at 0.75 ft.
HCC-06	2021-04-20	5419.31	0.70	5420.01	BTL Sys	
HCC-06	2021-05-28	5419.31	0.69	5420.00	BTL Sys	
HCC-06	2021-06-28	5419.31	0.72	5420.03	BTL Sys	
HCC-06	2021-07-27	5419.31	0.68	5419.99	BTL Sys	
HCC-06	2021-08-26	5419.31	0.77	5420.08	BTL Sys	

Table 6. BPSOU 2021 Groundwater Elevations

Location	Monitoring Date	MP Elev (NAVD88 ft)	DTW or Stage Reading (ft)	WL Elev (NAVD88 ft)	Aquifer	Notes
HCC-06	2021-09-21	5419.31	0.78	5420.09	BTL Sys	
HCC-06	2021-10-28	5419.31	0.72	5420.03	BTL Sys	
HCC-06	2021-11-30	5419.31	0.78	5420.09	BTL Sys	
HCC-06	2021-12-21	5419.31	0.76	5420.07	BTL Sys	
HCC-06A	2021-01-27	5409.01	11.02	5420.03	BTL Sys	
HCC-06A	2021-02-26	5409.01	11.01	5420.02	BTL Sys	
HCC-06A	2021-03-30	5409.01	11.00	5420.01	BTL Sys	
HCC-06A	2021-04-20	5409.01	11.04	5420.05	BTL Sys	
HCC-06A	2021-05-28	5409.01	11.03	5420.04	BTL Sys	
HCC-06A	2021-06-28	5409.01	11.08	5420.09	BTL Sys	
HCC-06A	2021-07-27	5409.01	11.06	5420.07	BTL Sys	
HCC-06A	2021-08-26	5409.01	11.12	5420.13	BTL Sys	
HCC-06A	2021-09-21	5409.01	11.12	5420.13	BTL Sys	
HCC-06A	2021-10-28	5409.01	11.10	5420.11	BTL Sys	
HCC-06A	2021-11-30	5409.01	11.01	5420.02	BTL Sys	
HCC-06A	2021-12-21	5409.01	11.01	5420.02	BTL Sys	
HCC-07	2021-01-27	5417.66	2.16	5419.82	BTL Sys	
HCC-07	2021-02-26	5417.66			BTL Sys	Couldn't access safely due to snow and ice.
HCC-07	2021-03-30	5417.66	2.19	5419.85	BTL Sys	
HCC-07	2021-04-20	5417.66	2.25	5419.91	BTL Sys	
HCC-07	2021-05-28	5417.66	2.20	5419.86	BTL Sys	
HCC-07	2021-06-28	5417.66	2.28	5419.94	BTL Sys	
HCC-07	2021-07-27	5417.66	2.10	5419.76	BTL Sys	
HCC-07	2021-08-26	5417.66	2.15	5419.81	BTL Sys	
HCC-07	2021-09-21	5417.66	2.15	5419.81	BTL Sys	
HCC-07	2021-10-28	5417.66	2.14	5419.80	BTL Sys	
HCC-07	2021-11-30	5417.66	2.11	5419.77	BTL Sys	
HCC-07	2021-12-21	5417.66	2.14	5419.80	BTL Sys	
M-01	2021-01-28	5433.52	6.58	5426.94	Alluvium	
M-01	2021-02-25	5433.52	6.54	5426.98	Alluvium	
M-01	2021-03-30	5433.52	6.53	5426.99	Alluvium	
M-01	2021-04-19	5433.52	6.58	5426.94	Alluvium	
M-01	2021-05-27	5433.52	6.19	5427.33	Alluvium	
M-01	2021-06-29	5433.52	6.38	5427.14	Alluvium	
M-01	2021-07-26	5433.52	6.37	5427.15	Alluvium	
M-01	2021-08-26	5433.52	6.47	5427.05	Alluvium	
M-01	2021-09-21	5433.52	6.41	5427.11	Alluvium	
M-01	2021-10-27	5433.52	6.38	5427.14	Alluvium	
M-01	2021-11-29	5433.52	6.57	5426.95	Alluvium	
M-01	2021-12-20	5433.52	6.61	5426.91	Alluvium	
M-03-87	2021-01-27	5441.61	10.70	5430.91	Alluvium	Double checked measurement
M-03-87	2021-02-25	5441.61	10.73	5430.88	Alluvium	
M-03-87	2021-03-30	5441.61	10.01	5431.60	Alluvium	
M-03-87	2021-04-19	5441.61	9.93	5431.68	Alluvium	
M-03-87	2021-05-27	5441.61	9.74	5431.87	Alluvium	
M-03-87	2021-06-29	5441.61	9.84	5431.77	Alluvium	
M-03-87	2021-07-26	5441.61	9.92	5431.69	Alluvium	
M-03-87	2021-08-26	5441.61	9.86	5431.75	Alluvium	
M-03-87	2021-09-21	5441.61	9.96	5431.65	Alluvium	
M-03-87	2021-10-27	5441.61	9.94	5431.67	Alluvium	
M-03-87	2021-11-29	5441.61	10.03	5431.58	Alluvium	
M-03-87	2021-12-20	5441.61	10.09	5431.52	Alluvium	
MF-01	2021-01-28	5447.66	5.36	5442.30	Alluvium	
MF-01	2021-02-26	5447.66	5.40	5442.26	Alluvium	
MF-01	2021-03-31	5447.66	5.08	5442.58	Alluvium	Broken pvc in well
MF-01	2021-04-19	5447.66	5.05	5442.61	Alluvium	
MF-01	2021-05-27	5447.66	4.98	5442.68	Alluvium	
MF-01	2021-06-30	5447.66	5.32	5442.34	Alluvium	
MF-01	2021-07-26	5447.66	5.39	5442.27	Alluvium	
MF-01	2021-08-27	5447.66	5.23	5442.43	Alluvium	
MF-01	2021-09-22	5447.66	5.28	5442.38	Alluvium	
MF-01	2021-10-27	5447.66	5.29	5442.37	Alluvium	
MF-01	2021-11-30	5447.66	5.44	5442.22	Alluvium	
MF-01	2021-12-20	5447.66	5.37	5442.29	Alluvium	
MF-03	2021-01-27	5452.99	9.76	5443.23	Alluvium	
MF-03	2021-02-25	5452.99	9.68	5443.31	Alluvium	
MF-03	2021-03-31	5452.99	9.17	5443.82	Alluvium	
MF-03	2021-04-20	5452.99	9.22	5443.77	Alluvium	
MF-03	2021-05-27	5452.99	8.84	5444.15	Alluvium	
MF-03	2021-06-29	5452.99	9.55	5443.44	Alluvium	
MF-03	2021-07-27	5452.99	9.59	5443.40	Alluvium	
MF-03	2021-08-26	5452.99	9.13	5443.86	Alluvium	
MF-03	2021-09-22	5452.99	9.44	5443.55	Alluvium	
MF-03	2021-10-27	5452.99	9.36	5443.63	Alluvium	
MF-03	2021-11-29	5452.99	9.50	5443.49	Alluvium	
MF-03	2021-12-20	5452.99	9.47	5443.52	Alluvium	
MF-05	2021-01-27	5471.50			Alluvium	Dry at 15.45 ft
MF-05	2021-02-25	5471.50			Alluvium	Dry at 15.0 ft
MF-05	2021-03-31	5471.50			Alluvium	Dry at 15.35 ft
MF-05	2021-04-19	5471.50			Alluvium	Dry at 15.35 ft

Table 6. BPSOU 2021 Groundwater Elevations

Location	Monitoring Date	MP Elev (NAVD88 ft)	DTW or Stage Reading (ft)	WL Elev (NAVD88 ft)	Aquifer	Notes
MF-05	2021-05-27	5471.50			Alluvium	Dry at 15.45 ft.
MF-05	2021-06-29	5471.50			Alluvium	Dry at 15.45 ft
MF-05	2021-07-27	5471.50			Alluvium	Could not access.
MF-05	2021-09-22	5471.50			Alluvium	Dry at 15.39 ft.
MF-05	2021-10-27	5471.50			Alluvium	Dry at 15.45 ft.
MF-05	2021-11-29	5471.50			Alluvium	Dry
MF-05	2021-12-20	5471.50			Alluvium	Dry
MF-07	2021-01-27	5463.13	10.59	5452.54	Alluvium	
MF-07	2021-02-25	5463.13	10.50	5452.63	Alluvium	
MF-07	2021-03-31	5463.13	10.27	5452.86	Alluvium	
MF-07	2021-04-20	5463.13	10.34	5452.79	Alluvium	
MF-07	2021-05-27	5463.13	10.07	5453.06	Alluvium	
MF-07	2021-06-29	5463.13	10.69	5452.44	Alluvium	
MF-07	2021-07-27	5463.13	10.75	5452.38	Alluvium	Observed DTW is suspect, continuous recorder indicates value to be 10.92 ft.
MF-07	2021-08-26	5463.13	10.55	5452.58	Alluvium	
MF-07	2021-09-22	5463.13	10.67	5452.46	Alluvium	
MF-07	2021-10-27	5463.13	10.86	5452.27	Alluvium	
MF-07	2021-11-30	5463.13	10.85	5452.28	Alluvium	
MF-07	2021-12-20	5463.13	10.86	5452.27	Alluvium	
MF-08	2021-01-27	5453.86	6.79	5447.07	Alluvium	
MF-08	2021-02-25	5453.86	7.61	5446.25	Alluvium	
MF-08	2021-03-31	5453.86	7.33	5446.53	Alluvium	
MF-08	2021-04-20	5453.86	7.35	5446.51	Alluvium	
MF-08	2021-05-27	5453.86	7.02	5446.84	Alluvium	
MF-08	2021-06-29	5453.86	7.63	5446.23	Alluvium	
MF-08	2021-07-27	5453.86	7.65	5446.21	Alluvium	
MF-08	2021-08-26	5453.86	7.41	5446.45	Alluvium	
MF-08	2021-09-22	5453.86	7.54	5446.32	Alluvium	
MF-08	2021-10-27	5453.86	7.54	5446.32	Alluvium	Direct read did not work.
MF-08	2021-11-30	5453.86	7.60	5446.26	Alluvium	
MF-08	2021-12-20	5453.86	7.60	5446.26	Alluvium	
MF-09	2021-01-28	5461.60	11.06	5450.54	Alluvium	
MF-09	2021-02-25	5461.60	11.19	5450.41	Alluvium	
MF-09	2021-03-31	5461.60	10.76	5450.84	Alluvium	
MF-09	2021-04-19	5461.60	10.86	5450.74	Alluvium	
MF-09	2021-05-27	5461.60	10.93	5450.67	Alluvium	
MF-09	2021-06-29	5461.60	11.02	5450.58	Alluvium	
MF-09	2021-07-27	5461.60	11.11	5450.49	Alluvium	
MF-09	2021-08-26	5461.60	10.86	5450.74	Alluvium	
MF-09	2021-09-22	5461.60	11.00	5450.60	Alluvium	
MF-09	2021-10-27	5461.60	11.21	5450.39	Alluvium	
MF-09	2021-11-30	5461.60	11.30	5450.30	Alluvium	
MF-09	2021-12-20	5461.60	11.37	5450.23	Alluvium	
MF-10	2021-01-28	5456.48	9.20	5447.28	Alluvium	
MF-10	2021-02-25	5456.48	9.53	5446.95	Alluvium	
MF-10	2021-03-31	5456.48	9.20	5447.28	Alluvium	
MF-10	2021-04-19	5456.48	9.19	5447.29	Alluvium	
MF-10	2021-05-27	5456.48	9.13	5447.35	Alluvium	
MF-10	2021-06-29	5456.48	9.37	5447.11	Alluvium	
MF-10	2021-07-27	5456.48	9.49	5446.99	Alluvium	
MF-10	2021-08-26	5456.48	9.42	5447.06	Alluvium	
MF-10	2021-09-22	5456.48	9.51	5446.97	Alluvium	
MF-10	2021-10-27	5456.48	9.50	5446.98	Alluvium	Unable to download, transducer didn’t connect
MF-10	2021-11-30	5456.48	9.55	5446.93	Alluvium	
MF-10	2021-12-20	5456.48	9.58	5446.90	Alluvium	
MF-11	2021-01-28	5463.60	9.45	5454.15	Alluvium	
MF-11	2021-02-26	5463.60	9.59	5454.01	Alluvium	
MF-11	2021-03-31	5463.60	9.37	5454.23	Alluvium	
MF-11	2021-04-19	5463.60	9.41	5454.19	Alluvium	
MF-11	2021-05-27	5463.60	9.18	5454.42	Alluvium	
MF-11	2021-06-29	5463.60	9.20	5454.40	Alluvium	
MF-11	2021-07-27	5463.60	9.28	5454.32	Alluvium	
MF-11	2021-08-26	5463.60	9.20	5454.40	Alluvium	
MF-11	2021-09-22	5463.60	9.31	5454.29	Alluvium	
MF-11	2021-10-27	5463.60	9.48	5454.12	Alluvium	
MF-11	2021-11-30	5463.60	9.63	5453.97	Alluvium	
MF-11	2021-12-20	5463.60	9.74	5453.86	Alluvium	
MH-MSD106	2021-01-27	5442.67	4.23	5438.44	MSD Sub-drain	
MH-MSD106	2021-02-25	5442.67			MSD Sub-drain	Frozen
MH-MSD106	2021-03-31	5442.67	3.50	5439.17	MSD Sub-drain	
MH-MSD106	2021-04-20	5442.67	3.52	5439.15	MSD Sub-drain	
MH-MSD106	2021-05-27	5442.67	2.70	5439.97	MSD Sub-drain	
MH-MSD106	2021-06-30	5442.67	3.35	5439.32	MSD Sub-drain	
MH-MSD106	2021-07-27	5442.67	3.35	5439.32	MSD Sub-drain	
MH-MSD106	2021-08-26	5442.67	3.13	5439.54	MSD Sub-drain	
MH-MSD106	2021-09-22	5442.67	3.24	5439.43	MSD Sub-drain	
MH-MSD106	2021-10-27	5442.67	2.05	5440.62	MSD Sub-drain	
MH-MSD106	2021-11-30	5442.67	2.85	5439.82	MSD Sub-drain	
MH-MSD106	2021-12-20	5442.67	2.81	5439.86	MSD Sub-drain	

Table 6. BPSOU 2021 Groundwater Elevations

Location	Monitoring Date	MP Elev (NAVD88 ft)	DTW or Stage Reading (ft)	WL Elev (NAVD88 ft)	Aquifer	Notes
MH-MSD108	2021-01-27	5445.55	5.49	5440.06	MSD Sub-drain	
MH-MSD108	2021-02-25	5445.55			MSD Sub-drain	Frozen
MH-MSD108	2021-03-31	5445.55	4.18	5441.37	MSD Sub-drain	
MH-MSD108	2021-04-20	5445.55	4.20	5441.35	MSD Sub-drain	
MH-MSD108	2021-05-27	5445.55	2.64	5442.91	MSD Sub-drain	
MH-MSD108	2021-06-30	5445.55	5.23	5440.32	MSD Sub-drain	
MH-MSD108	2021-07-27	5445.55	4.83	5440.72	MSD Sub-drain	
MH-MSD108	2021-08-26	5445.55	4.15	5441.40	MSD Sub-drain	
MH-MSD108	2021-09-22	5445.55	4.45	5441.10	MSD Sub-drain	
MH-MSD108	2021-10-27	5445.55	4.05	5441.50	MSD Sub-drain	
MH-MSD108	2021-11-30	5445.55	4.40	5441.15	MSD Sub-drain	
MH-MSD108	2021-12-20	5445.55	4.35	5441.20	MSD Sub-drain	
MH-MSD110	2021-01-27	5449.75	1.85	5447.90	MSD Sub-drain	
MH-MSD110	2021-02-25	5449.75			MSD Sub-drain	Frozen
MH-MSD110	2021-03-31	5449.75	5.69	5444.06	MSD Sub-drain	
MH-MSD110	2021-04-20	5449.75	5.69	5444.06	MSD Sub-drain	
MH-MSD110	2021-05-27	5449.75	5.55	5444.20	MSD Sub-drain	
MH-MSD110	2021-06-30	5449.75	5.65	5444.10	MSD Sub-drain	
MH-MSD110	2021-07-27	5449.75	5.67	5444.08	MSD Sub-drain	
MH-MSD110	2021-08-26	5449.75	5.59	5444.16	MSD Sub-drain	
MH-MSD110	2021-09-22	5449.75	5.60	5444.15	MSD Sub-drain	
MH-MSD110	2021-10-27	5449.75	5.66	5444.09	MSD Sub-drain	
MH-MSD110	2021-11-30	5449.75	5.67	5444.08	MSD Sub-drain	
MH-MSD110	2021-12-20	5449.75	5.66	5444.09	MSD Sub-drain	
MH-MSD113	2021-01-27	5455.75	5.66	5450.09	MSD Sub-drain	
MH-MSD113	2021-02-25	5455.75			MSD Sub-drain	Frozen
MH-MSD113	2021-03-31	5455.75	5.69	5450.06	MSD Sub-drain	
MH-MSD113	2021-04-20	5455.75	5.62	5450.13	MSD Sub-drain	
MH-MSD113	2021-05-27	5455.75	5.50	5450.25	MSD Sub-drain	
MH-MSD113	2021-06-30	5455.75	5.77	5449.98	MSD Sub-drain	
MH-MSD113	2021-07-27	5455.75	5.72	5450.03	MSD Sub-drain	
MH-MSD113	2021-08-26	5455.75	5.67	5450.08	MSD Sub-drain	
MH-MSD113	2021-09-22	5455.75	5.71	5450.04	MSD Sub-drain	
MH-MSD113	2021-10-27	5455.75	5.76	5449.99	MSD Sub-drain	
MH-MSD113	2021-11-30	5455.75	5.74	5450.01	MSD Sub-drain	
MH-MSD113	2021-12-20	5455.75	5.72	5450.03	MSD Sub-drain	
MH-MSD116	2021-01-27	5459.93	4.48	5455.45	MSD Sub-drain	
MH-MSD116	2021-02-25	5459.93			MSD Sub-drain	Under water
MH-MSD116	2021-03-31	5459.93	4.47	5455.46	MSD Sub-drain	Replaced transducer cord
MH-MSD116	2021-04-19	5459.93	4.30	5455.63	MSD Sub-drain	
MH-MSD116	2021-05-27	5459.93	3.70	5456.23	MSD Sub-drain	
MH-MSD116	2021-06-30	5459.93	3.40	5456.53	MSD Sub-drain	
MH-MSD116	2021-07-27	5459.93	3.11	5456.82	MSD Sub-drain	Observed DTW is suspect, continuous recorder indicates value to be approximately 3.03 ft.
MH-MSD116	2021-08-26	5459.93	2.98	5456.95	MSD Sub-drain	
MH-MSD116	2021-09-22	5459.93	3.00	5456.93	MSD Sub-drain	
MH-MSD116	2021-10-27	5459.93	3.83	5456.10	MSD Sub-drain	
MH-MSD116	2021-11-30	5459.93	4.03	5455.90	MSD Sub-drain	
MH-MSD116	2021-12-21	5459.93	4.17	5455.76	MSD Sub-drain	
MSD-01A	2021-01-27	5467.41	11.02	5456.39	Alluvium	
MSD-01A	2021-02-25	5467.41			Alluvium	Frozen
MSD-01A	2021-03-31	5467.41	11.06	5456.35	Alluvium	
MSD-01A	2021-04-19	5467.41	11.05	5456.36	Alluvium	
MSD-01A	2021-05-27	5467.41	10.91	5456.50	Alluvium	
MSD-01A	2021-06-29	5467.41	10.81	5456.60	Alluvium	
MSD-01A	2021-07-27	5467.41	10.96	5456.45	Alluvium	
MSD-01A	2021-08-26	5467.41	10.72	5456.69	Alluvium	
MSD-01A	2021-09-22	5467.41	10.84	5456.57	Alluvium	
MSD-01A	2021-10-27	5467.41	11.12	5456.29	Alluvium	
MSD-01A	2021-11-29	5467.41	11.29	5456.12	Alluvium	
MSD-01A	2021-12-20	5467.41	11.40	5456.01	Alluvium	
MSD-01B	2021-01-27	5467.21	10.44	5456.77	Alluvium	
MSD-01B	2021-02-25	5467.21			Alluvium	Frozen
MSD-01B	2021-03-31	5467.21	10.58	5456.63	Alluvium	
MSD-01B	2021-04-19	5467.21	10.55	5456.66	Alluvium	
MSD-01B	2021-05-27	5467.21	10.43	5456.78	Alluvium	
MSD-01B	2021-06-29	5467.21	10.40	5456.81	Alluvium	
MSD-01B	2021-07-27	5467.21	10.38	5456.83	Alluvium	
MSD-01B	2021-08-26	5467.21	10.24	5456.97	Alluvium	
MSD-01B	2021-09-22	5467.21	10.33	5456.88	Alluvium	
MSD-01B	2021-10-27	5467.21	10.63	5456.58	Alluvium	
MSD-01B	2021-11-29	5467.21	10.83	5456.38	Alluvium	
MSD-01B	2021-12-20	5467.21	10.92	5456.29	Alluvium	
MSD-01C	2021-01-27	5467.31	10.88	5456.43	Alluvium	
MSD-01C	2021-02-25	5467.31	11.03	5456.28	Alluvium	
MSD-01C	2021-03-31	5467.31	11.10	5456.21	Alluvium	
MSD-01C	2021-04-19	5467.31	11.09	5456.22	Alluvium	
MSD-01C	2021-05-27	5467.31	11.03	5456.28	Alluvium	
MSD-01C	2021-06-29	5467.31	11.11	5456.20	Alluvium	
MSD-01C	2021-07-27	5467.31	11.13	5456.18	Alluvium	

Table 6. BPSOU 2021 Groundwater Elevations

Location	Monitoring Date	MP Elev (NAVD88 ft)	DTW or Stage Reading (ft)	WL Elev (NAVD88 ft)	Aquifer	Notes
MSD-01C	2021-08-26	5467.31	10.98	5456.33	Alluvium	
MSD-01C	2021-09-22	5467.31	11.06	5456.25	Alluvium	
MSD-01C	2021-10-27	5467.31	11.25	5456.06	Alluvium	Direct read didn't work.
MSD-01C	2021-11-29	5467.31	11.38	5455.93	Alluvium	
MSD-01C	2021-12-20	5467.31	11.48	5455.83	Alluvium	
MSD-02A	2021-01-27	5462.58	8.71	5453.87	Alluvium	
MSD-02A	2021-02-25	5462.58	8.64	5453.94	Alluvium	
MSD-02A	2021-03-31	5462.58	8.51	5454.07	Alluvium	
MSD-02A	2021-04-20	5462.58	8.44	5454.14	Alluvium	
MSD-02A	2021-05-27	5462.58	8.26	5454.32	Alluvium	
MSD-02A	2021-06-29	5462.58	8.71	5453.87	Alluvium	
MSD-02A	2021-07-27	5462.58	8.65	5453.93	Alluvium	Observed DTW is suspect, continuous recorder indicates value to be 8.70 ft.
MSD-02A	2021-08-26	5462.58	8.42	5454.16	Alluvium	
MSD-02A	2021-09-22	5462.58	8.45	5454.13	Alluvium	
MSD-02A	2021-10-27	5462.58	8.86	5453.72	Alluvium	
MSD-02A	2021-11-30	5462.58	8.95	5453.63	Alluvium	
MSD-02A	2021-12-20	5462.58	8.95	5453.63	Alluvium	
MSD-02B	2021-01-27	5465.55	10.90	5454.65	Alluvium	
MSD-02B	2021-02-25	5465.55	11.02	5454.53	Alluvium	
MSD-02B	2021-03-31	5465.55	10.92	5454.63	Alluvium	
MSD-02B	2021-04-20	5465.55	10.90	5454.65	Alluvium	
MSD-02B	2021-05-27	5465.55	10.78	5454.77	Alluvium	
MSD-02B	2021-06-29	5465.55	10.90	5454.65	Alluvium	
MSD-02B	2021-07-27	5465.55	10.94	5454.61	Alluvium	
MSD-02B	2021-08-26	5465.55	10.70	5454.85	Alluvium	Observed DTW is suspect, continuous recorder indicates value to be approximately 10.80 ft.
MSD-02B	2021-09-22	5465.55	10.91	5454.64	Alluvium	
MSD-02B	2021-10-27	5465.55	11.10	5454.45	Alluvium	
MSD-02B	2021-11-30	5465.55	11.22	5454.33	Alluvium	
MSD-02B	2021-12-20	5465.55	11.30	5454.25	Alluvium	
MSD-03	2021-01-28	5461.30	8.67	5452.63	Alluvium	
MSD-03	2021-02-26	5461.30	8.80	5452.50	Alluvium	
MSD-03	2021-03-31	5461.30	8.65	5452.65	Alluvium	
MSD-03	2021-04-19	5461.30	8.67	5452.63	Alluvium	
MSD-03	2021-05-27	5461.30	8.50	5452.80	Alluvium	
MSD-03	2021-06-29	5461.30	8.73	5452.57	Alluvium	
MSD-03	2021-07-27	5461.30	8.79	5452.51	Alluvium	
MSD-03	2021-08-26	5461.30	8.64	5452.66	Alluvium	
MSD-03	2021-09-22	5461.30	8.72	5452.58	Alluvium	
MSD-03	2021-10-27	5461.30	8.84	5452.46	Alluvium	
MSD-03	2021-11-30	5461.30	8.94	5452.36	Alluvium	
MSD-03	2021-12-20	5461.30	9.01	5452.29	Alluvium	
MSD-04	2021-01-28	5463.63	9.98	5453.65	Bedrock	
MSD-04	2021-02-26	5463.63	10.12	5453.51	Bedrock	
MSD-04	2021-03-31	5463.63	9.97	5453.66	Bedrock	
MSD-04	2021-04-19	5463.63	9.97	5453.66	Bedrock	
MSD-04	2021-05-27	5463.63	9.82	5453.81	Bedrock	
MSD-04	2021-06-29	5463.63	9.96	5453.67	Bedrock	
MSD-04	2021-07-27	5463.63	9.99	5453.64	Bedrock	
MSD-04	2021-08-26	5463.63	9.86	5453.77	Bedrock	
MSD-04	2021-09-22	5463.63	9.96	5453.67	Bedrock	
MSD-04	2021-10-27	5463.63	10.08	5453.55	Bedrock	
MSD-04	2021-11-30	5463.63	10.20	5453.43	Bedrock	
MSD-04	2021-12-20	5463.63	10.29	5453.34	Bedrock	
MSD-05	2021-01-28	5461.28	10.64	5450.64	Undef	
MSD-05	2021-02-26	5461.28	10.81	5450.47	Undef	
MSD-05	2021-03-31	5461.28	10.62	5450.66	Undef	
MSD-05	2021-04-19	5461.28	10.62	5450.66	Undef	
MSD-05	2021-05-27	5461.28	10.48	5450.80	Undef	
MSD-05	2021-06-29	5461.28	10.80	5450.48	Undef	
MSD-05	2021-07-27	5461.28	10.86	5450.42	Undef	
MSD-05	2021-08-26	5461.28	10.70	5450.58	Undef	
MSD-05	2021-09-22	5461.28	10.79	5450.49	Undef	
MSD-05	2021-10-27	5461.28	10.83	5450.45	Undef	
MSD-05	2021-11-30	5461.28	10.91	5450.37	Undef	
MSD-05	2021-12-20	5461.28	10.98	5450.30	Undef	
MSD-3A	2021-01-27	5444.36			uSBC	Dry
MSD-3A	2021-02-26	5444.36			uSBC	Dry channel is snow covered.
MSD-3A	2021-03-30	5444.36			uSBC	Dry
MSD-3A	2021-04-20	5444.36			uSBC	Dry
MSD-3A	2021-05-28	5444.36			uSBC	Dry
MSD-3A	2021-06-28	5444.36			uSBC	Dry at 0.14 ft
MSD-3A	2021-07-27	5444.36			uSBC	Channel is dry.
MSD-3A	2021-08-26	5444.36			uSBC	Dry at 0.14 ft.
MSD-3A	2021-09-21	5444.36			uSBC	Dry at 0.14 ft.
MSD-3A	2021-10-28	5444.36			uSBC	Dry at 0.04 ft
MSD-3A	2021-11-30	5444.36			uSBC	Dry
MSD-3A	2021-12-21	5444.36			uSBC	Dry
MSD-HAB	2021-01-27	5459.31			uSBC	Frozen at 2.04 feet

Table 6. BPSOU 2021 Groundwater Elevations

Location	Monitoring Date	MP Elev (NAVD88 ft)	DTW or Stage Reading (ft)	WL Elev (NAVD88 ft)	Aquifer	Notes
MSD-HAB	2021-02-26	5459.31			uSBC	Dry
MSD-HAB	2021-03-30	5459.31	0.99	5460.30	uSBC	
MSD-HAB	2021-04-20	5459.31	0.96	5460.27	uSBC	
MSD-HAB	2021-05-28	5459.31	0.98	5460.29	uSBC	
MSD-HAB	2021-06-28	5459.31	0.69	5460.00	uSBC	
MSD-HAB	2021-07-27	5459.31	0.78	5460.09	uSBC	
MSD-HAB	2021-08-26	5459.31	0.80	5460.11	uSBC	
MSD-HAB	2021-09-21	5459.31			uSBC	Dry at 0.68 ft.
MSD-HAB	2021-10-28	5459.31			uSBC	Dry at 0.68 ft
MSD-HAB	2021-11-30	5459.31			uSBC	Dry
MSD-HAB	2021-12-21	5459.31			uSBC	Dry
MSDSG-02	2021-01-28	5444.37			BTC WL	Frozen at 1.64 feet
MSDSG-02	2021-02-26	5444.37	1.84	5446.21	BTC WL	
MSDSG-02	2021-03-30	5444.37			BTC WL	Ice at 1.52 ft
MSDSG-02	2021-04-20	5444.37	1.58	5445.95	BTC WL	
MSDSG-02	2021-05-28	5444.37	1.56	5445.93	BTC WL	
MSDSG-02	2021-06-28	5444.37	1.31	5445.68	BTC WL	
MSDSG-02	2021-07-27	5444.37	1.30	5445.67	BTC WL	
MSDSG-02	2021-08-26	5444.37	1.45	5445.82	BTC WL	
MSDSG-02	2021-09-21	5444.37	1.48	5445.85	BTC WL	
MSDSG-02	2021-10-28	5444.37	1.49	5445.86	BTC WL	
MSDSG-02	2021-11-30	5444.37	1.48	5445.85	BTC WL	Ice
MSDSG-02	2021-12-21	5444.37			BTC WL	Frozen @ 1.5 ft.
MSDSG-03	2021-01-27	5444.24			BTC WL	Frozen at 2.34 feet.
MSDSG-03	2021-02-26	5444.24			BTC WL	Frozen at 2.81 ft.
MSDSG-03	2021-03-30	5444.24			BTC WL	Ice at 2.10 ft
MSDSG-03	2021-04-20	5444.24	1.98	5446.22	BTC WL	
MSDSG-03	2021-05-28	5444.24	2.04	5446.28	BTC WL	
MSDSG-03	2021-06-28	5444.24	1.89	5446.13	BTC WL	
MSDSG-03	2021-07-27	5444.24	1.86	5446.10	BTC WL	
MSDSG-03	2021-08-26	5444.24	1.93	5446.17	BTC WL	
MSDSG-03	2021-09-21	5444.24	1.97	5446.21	BTC WL	
MSDSG-03	2021-10-28	5444.24	1.98	5446.22	BTC WL	
MSDSG-03	2021-11-30	5444.24	2.04	5446.28	BTC WL	Ice.
MSDSG-03	2021-12-21	5444.24			BTC WL	Frozen at 2.16 ft.
MSDSG-04	2021-01-27	5445.86			BTC WL	Frozen at 2.46 feet
MSDSG-04	2021-02-26	5445.86	2.44	5448.30	BTC WL	
MSDSG-04	2021-03-30	5445.86			BTC WL	Ice at 2.48 ft
MSDSG-04	2021-04-20	5445.86	2.60	5448.46	BTC WL	
MSDSG-04	2021-05-28	5445.86	2.41	5448.27	BTC WL	
MSDSG-04	2021-06-28	5445.86	2.36	5448.22	BTC WL	
MSDSG-04	2021-07-27	5445.86	2.30	5448.16	BTC WL	
MSDSG-04	2021-08-26	5445.86	2.42	5448.28	BTC WL	
MSDSG-04	2021-09-21	5445.86	2.42	5448.28	BTC WL	
MSDSG-04	2021-10-28	5445.86	2.61	5448.47	BTC WL	
MSDSG-04	2021-11-30	5445.86	2.62	5448.48	BTC WL	Ice on top of water
MSDSG-04	2021-12-21	5445.86			BTC WL	Frozen at 2.62 ft.
MSDSG-05	2021-01-27	5441.98	1.70	5443.68	BTC WL	
MSDSG-05	2021-02-26	5441.98	1.68	5443.66	BTC WL	
MSDSG-05	2021-03-30	5441.98	1.88	5443.86	BTC WL	
MSDSG-05	2021-04-20	5441.98	1.88	5443.86	BTC WL	
MSDSG-05	2021-05-28	5441.98	1.95	5443.93	BTC WL	
MSDSG-05	2021-06-28	5441.98	1.66	5443.64	BTC WL	
MSDSG-05	2021-07-27	5441.98	1.78	5443.76	BTC WL	
MSDSG-05	2021-08-26	5441.98	2.08	5444.06	BTC WL	
MSDSG-05	2021-09-21	5441.98	2.02	5444.00	BTC WL	
MSDSG-05	2021-10-28	5441.98	1.99	5443.97	BTC WL	
MSDSG-05	2021-11-30	5441.98	1.94	5443.92	BTC WL	
MSDSG-05	2021-12-21	5441.98	1.85	5443.83	BTC WL	
MW2-CGSB3	2021-01-27	5467.88	22.93	5444.95	Alluvium	
MW2-CGSB3	2021-03-31	5467.88			Alluvium	Did not check this location per safety.
MW2-CGSB3	2021-04-20	5467.88			Alluvium	Did not check this location per safety
MW2-CGSB3	2021-05-27	5467.88			Alluvium	Not checked due to safety concerns.
MW2-CGSB3	2021-07-27	5467.88			Alluvium	Did not measure due to safety concerns.
MW2-CGSB3	2021-09-22	5467.88			Alluvium	Cannot access safely.
MW2-CGSB3	2021-10-27	5467.88			Alluvium	Cannot safely access
MW2-CGSB3	2021-11-30	5467.88			Alluvium	Cannot safely access.
MW2-CGSB3	2021-12-20	5467.88			Alluvium	Cannot access due to safety concerns.
MW-G-96	2021-01-27	5480.05	19.22	5460.83	Alluvium	
MW-G-96	2021-02-25	5480.05	19.71	5460.34	Alluvium	
MW-G-96	2021-03-30	5480.05	19.54	5460.51	Alluvium	
MW-G-96	2021-04-19	5480.05	19.44	5460.61	Alluvium	
MW-G-96	2021-05-27	5480.05	18.94	5461.11	Alluvium	
MW-G-96	2021-06-29	5480.05	18.11	5461.94	Alluvium	
MW-G-96	2021-07-26	5480.05	17.64	5462.41	Alluvium	
MW-G-96	2021-08-26	5480.05	17.44	5462.61	Alluvium	
MW-G-96	2021-09-21	5480.05	18.03	5462.02	Alluvium	
MW-G-96	2021-10-27	5480.05	19.13	5460.92	Alluvium	
MW-G-96	2021-11-29	5480.05	19.95	5460.10	Alluvium	
MW-G-96	2021-12-20	5480.05	20.24	5459.81	Alluvium	

Table 6. BPSOU 2021 Groundwater Elevations

Location	Monitoring Date	MP Elev (NAVD88 ft)	DTW or Stage Reading (ft)	WL Elev (NAVD88 ft)	Aquifer	Notes
MW-H-96	2021-01-27	5462.71	21.17	5441.54	Alluvium	
MW-H-96	2021-02-25	5462.71	21.35	5441.36	Alluvium	
MW-H-96	2021-03-30	5462.71	21.21	5441.50	Alluvium	
MW-H-96	2021-04-19	5462.71	21.11	5441.60	Alluvium	
MW-H-96	2021-05-27	5462.71	21.08	5441.63	Alluvium	
MW-H-96	2021-06-29	5462.71	20.92	5441.79	Alluvium	
MW-H-96	2021-07-26	5462.71	20.93	5441.78	Alluvium	
MW-H-96	2021-08-26	5462.71	20.97	5441.74	Alluvium	
MW-H-96	2021-09-21	5462.71	21.03	5441.68	Alluvium	
MW-H-96	2021-10-27	5462.71	21.27	5441.44	Alluvium	
MW-H-96	2021-11-29	5462.71	21.49	5441.22	Alluvium	
MW-H-96	2021-12-20	5462.71	21.60	5441.11	Alluvium	
RLP-W	2021-01-27	5424.62			SW	Frozen at 1.14 feet
RLP-W	2021-02-26	5424.62			SW	Frozen
RLP-W	2021-03-30	5424.62			SW	Frozen at 2.75 ft
RLP-W	2021-04-20	5424.62			SW	SG has fallen over.
RLP-W	2021-05-28	5424.62			SW	SG has fallen over
RLP-W	2021-06-28	5424.62			SW	SG has fallen over
RLP-W	2021-07-27	5424.62			SW	Did not check due to safety concerns.
RLP-W	2021-09-21	5424.62			SW	Cannot access due to safety concerns.
RLP-W	2021-10-28	5424.62			SW	Cannot access due to safety concerns
RLP-W	2021-11-30	5424.62			SW	Cannot access due to safety concerns
RLP-W	2021-12-21	5424.62			SW	Cannot access due to safety concerns.
SBC Sed B-8	2021-01-27	5438.14	0.99	5439.13	SBC	
SBC Sed B-8	2021-02-26	5438.14	0.95	5439.09	SBC	
SBC Sed B-8	2021-03-30	5438.14	1.18	5439.32	SBC	
SBC Sed B-8	2021-04-20	5438.14	1.20	5439.34	SBC	
SBC Sed B-8	2021-05-28	5438.14	1.27	5439.41	SBC	Plus or minus 0.01 ft.
SBC Sed B-8	2021-06-28	5438.14	0.99	5439.13	SBC	
SBC Sed B-8	2021-07-27	5438.14	0.98	5439.12	SBC	
SBC Sed B-8	2021-08-26	5438.14	1.04	5439.18	SBC	Plus or minus 0.01 ft.
SBC Sed B-8	2021-09-21	5438.14	0.98	5439.12	SBC	
SBC Sed B-8	2021-10-28	5438.14	1.08	5439.22	SBC	
SBC Sed B-8	2021-11-30	5438.14	0.74	5438.88	SBC	
SBC Sed B-8	2021-12-21	5438.14	1.00	5439.14	SBC	
SS-01	2021-01-27	5451.88	1.08	5452.96	BTC	
SS-01	2021-02-26	5451.88	1.09	5452.97	BTC	
SS-01	2021-03-30	5451.88	1.39	5453.27	BTC	
SS-01	2021-04-20	5451.88	1.36	5453.24	BTC	
SS-01	2021-05-28	5451.88	1.53	5453.41	BTC	
SS-01	2021-06-28	5451.88	1.01	5452.89	BTC	
SS-01	2021-07-27	5451.88	1.09	5452.97	BTC	
SS-01	2021-08-26	5451.88	1.34	5453.22	BTC	
SS-01	2021-09-21	5451.88	1.44	5453.32	BTC	
SS-01	2021-10-28	5451.88	1.48	5453.36	BTC	
SS-01	2021-11-30	5451.88	1.35	5453.23	BTC	
SS-01	2021-12-21	5451.88	1.24	5453.12	BTC	
SS-01.35	2021-01-27	5443.71	4.87	5448.58	BTC	
SS-01.35	2021-02-26	5443.71	4.86	5448.57	BTC	
SS-01.35	2021-03-30	5443.71	5.00	5448.71	BTC	
SS-01.35	2021-04-20	5443.71	4.98	5448.69	BTC	
SS-01.35	2021-05-28	5443.71	5.07	5448.78	BTC	
SS-01.35	2021-06-28	5443.71	4.78	5448.49	BTC	
SS-01.35	2021-07-27	5443.71	4.71	5448.42	BTC	
SS-01.35	2021-08-26	5443.71	4.88	5448.59	BTC	
SS-01.35	2021-09-21	5443.71	4.88	5448.59	BTC	
SS-01.35	2021-10-28	5443.71	5.44	5449.15	BTC	
SS-01.35	2021-11-30	5443.71	5.10	5448.81	BTC	
SS-01.35	2021-12-21	5443.71	4.86	5448.57	BTC	
SS-04	2021-01-27	5441.22	0.94	5442.16	BTC	
SS-04	2021-02-26	5441.22	0.88	5442.10	BTC	
SS-04	2021-03-30	5441.22	1.14	5442.36	BTC	
SS-04	2021-04-20	5441.22	1.16	5442.38	BTC	
SS-04	2021-05-28	5441.22	1.26	5442.48	BTC	
SS-04	2021-06-28	5441.22	0.98	5442.20	BTC	
SS-04	2021-07-27	5441.22	1.02	5442.24	BTC	
SS-04	2021-08-26	5441.22	1.04	5442.26	BTC	
SS-04	2021-09-21	5441.22	1.00	5442.22	BTC	
SS-04	2021-10-28	5441.22	1.08	5442.30	BTC	
SS-04	2021-11-30	5441.22	0.84	5442.06	BTC	
SS-04	2021-12-21	5441.22	0.94	5442.16	BTC	
SS-05	2021-01-27	5440.53	0.72	5441.25	SBC	
SS-05	2021-02-26	5440.53	0.84	5441.37	SBC	
SS-05	2021-03-30	5440.53	1.00	5441.53	SBC	
SS-05	2021-04-20	5440.53	1.00	5441.53	SBC	
SS-05	2021-05-28	5440.53	1.08	5441.61	SBC	
SS-05	2021-06-28	5440.53	0.81	5441.34	SBC	
SS-05	2021-07-27	5440.53	0.75	5441.28	SBC	
SS-05	2021-08-26	5440.53	0.83	5441.36	SBC	Plus or minus 0.01 ft.
SS-05	2021-09-21	5440.53	0.65	5441.18	SBC	Plus or minus 0.01 ft.

Table 6. BPSOU 2021 Groundwater Elevations

Location	Monitoring Date	MP Elev (NAVD88 ft)	DTW or Stage Reading (ft)	WL Elev (NAVD88 ft)	Aquifer	Notes
SS-05	2021-10-28	5440.53	0.86	5441.39	SBC	
SS-05	2021-11-30	5440.53	0.50	5441.03	SBC	
SS-05	2021-12-21	5440.53	0.84	5441.37	SBC	
SS-05.6	2021-01-27	5437.51	0.74	5438.25	SBC	
SS-05.6	2021-02-26	5437.51	0.70	5438.21	SBC	Plus or minus 0.01 ft.
SS-05.6	2021-03-30	5437.51	0.80	5438.31	SBC	
SS-05.6	2021-04-20	5437.51	0.91	5438.42	SBC	
SS-05.6	2021-05-28	5437.51	0.98	5438.49	SBC	
SS-05.6	2021-06-28	5437.51	0.77	5438.28	SBC	
SS-05.6	2021-07-27	5437.51	0.87	5438.38	SBC	
SS-05.6	2021-08-26	5437.51	0.91	5438.42	SBC	
SS-05.6	2021-09-21	5437.51	0.94	5438.45	SBC	
SS-05.6	2021-10-28	5437.51	0.97	5438.48	SBC	
SS-05.6	2021-11-30	5437.51	0.57	5438.08	SBC	
SS-05.6	2021-12-21	5437.51	0.79	5438.30	SBC	
SS-05.7	2021-01-27	5437.37	0.95	5438.32	SBC	
SS-05.7	2021-02-26	5437.37	0.89	5438.26	SBC	
SS-05.7	2021-03-30	5437.37	0.96	5438.33	SBC	
SS-05.7	2021-04-20	5437.37	1.06	5438.43	SBC	
SS-05.7	2021-05-28	5437.37	1.14	5438.51	SBC	
SS-05.7	2021-06-28	5437.37	0.93	5438.30	SBC	
SS-05.7	2021-07-27	5437.37	0.98	5438.35	SBC	
SS-05.7	2021-08-26	5437.37	1.08	5438.45	SBC	
SS-05.7	2021-09-21	5437.37	1.00	5438.37	SBC	
SS-05.7	2021-10-28	5437.37	1.11	5438.48	SBC	
SS-05.7	2021-11-30	5437.37	0.74	5438.11	SBC	
SS-05.7	2021-12-21	5437.37	1.00	5438.37	SBC	
SS-05.9R1	2021-01-27	5437.45	0.88	5438.33	SBC	
SS-05.9R1	2021-02-26	5437.45	0.80	5438.25	SBC	
SS-05.9R1	2021-03-30	5437.45	0.91	5438.36	SBC	
SS-05.9R1	2021-04-20	5437.45	1.00	5438.45	SBC	
SS-05.9R1	2021-05-28	5437.45	1.05	5438.50	SBC	
SS-05.9R1	2021-06-28	5437.45	0.83	5438.28	SBC	
SS-05.9R1	2021-07-27	5437.45	0.87	5438.32	SBC	
SS-05.9R1	2021-08-26	5437.45	0.95	5438.40	SBC	
SS-05.9R1	2021-09-21	5437.45	0.95	5438.40	SBC	
SS-05.9R1	2021-10-28	5437.45	0.96	5438.41	SBC	
SS-05.9R1	2021-11-30	5437.45	0.65	5438.10	SBC	
SS-05.9R1	2021-12-21	5437.45	0.88	5438.33	SBC	
SS-05A	2021-01-27	5436.44	0.67	5437.11	SBC	
SS-05A	2021-02-26	5436.44	0.51	5436.95	SBC	
SS-05A	2021-03-30	5436.44	0.76	5437.20	SBC	
SS-05A	2021-04-20	5436.44	0.91	5437.35	SBC	
SS-05A	2021-05-28	5436.44	0.99	5437.43	SBC	
SS-05A	2021-06-28	5436.44	0.67	5437.11	SBC	
SS-05A	2021-07-27	5436.44	0.63	5437.07	SBC	
SS-05A	2021-08-26	5436.44	0.75	5437.19	SBC	Plus or minus 0.01 ft.
SS-05A	2021-09-21	5436.44	0.80	5437.24	SBC	
SS-05A	2021-10-28	5436.44	0.79	5437.23	SBC	Plus or minus 0.01 ft.
SS-05A	2021-11-30	5436.44	0.41	5436.85	SBC	
SS-05A	2021-12-21	5436.44	0.73	5437.17	SBC	
SS-05B	2021-01-27	5434.96	1.50	5436.46	SBC	
SS-05B	2021-02-26	5434.96	1.17	5436.13	SBC	
SS-05B	2021-03-30	5434.96	1.62	5436.58	SBC	level misread without the 1 ft mark.
SS-05B	2021-04-20	5434.96	1.72	5436.68	SBC	
SS-05B	2021-05-28	5434.96	1.80	5436.76	SBC	
SS-05B	2021-06-28	5434.96	1.49	5436.45	SBC	Plus or minus 0.01 ft.
SS-05B	2021-07-27	5434.96	0.45	5435.41	SBC	SG reading is suspect, continuous recorder indicates level of water to be approximately 1.44 ft.
SS-05B	2021-08-26	5434.96	1.56	5436.52	SBC	
SS-05B	2021-09-21	5434.96	1.60	5436.56	SBC	
SS-05B	2021-10-28	5434.96	1.58	5436.54	SBC	
SS-05B	2021-11-30	5434.96	1.21	5436.17	SBC	
SS-05B	2021-12-21	5434.96	1.54	5436.50	SBC	
SS-06A	2021-01-27	5430.98	0.46	5431.44	SBC	
SS-06A	2021-02-26	5430.98	0.18	5431.16	SBC	
SS-06A	2021-03-30	5430.98	0.60	5431.58	SBC	Plus or minus 0.01 ft.
SS-06A	2021-04-20	5430.98	0.62	5431.60	SBC	
SS-06A	2021-05-28	5430.98	0.70	5431.68	SBC	
SS-06A	2021-06-28	5430.98	0.45	5431.43	SBC	
SS-06A	2021-07-27	5430.98	0.37	5431.35	SBC	Plus or minus 0.01 ft.
SS-06A	2021-08-26	5430.98	0.48	5431.46	SBC	Plus or minus 0.01 ft.
SS-06A	2021-09-21	5430.98	0.48	5431.46	SBC	
SS-06A	2021-10-28	5430.98	0.53	5431.51	SBC	Plus or minus 0.01 ft.
SS-06A	2021-11-30	5430.98	0.22	5431.20	SBC	
SS-06A	2021-12-21	5430.98	0.48	5431.46	SBC	Plus or minus 0.02 ft.
SS-06F	2021-01-27	5419.90	0.66	5420.56	SBC	
SS-06F	2021-02-26	5419.90	0.41	5420.31	SBC	
SS-06F	2021-03-30	5419.90	0.80	5420.70	SBC	Plus or minus 0.01 ft.
SS-06F	2021-04-20	5419.90	0.78	5420.68	SBC	

Table 6. BPSOU 2021 Groundwater Elevations

Location	Monitoring Date	MP Elev (NAVD88 ft)	DTW or Stage Reading (ft)	WL Elev (NAVD88 ft)	Aquifer	Notes
SS-06F	2021-05-28	5419.90	0.90	5420.80	SBC	
SS-06F	2021-06-28	5419.90	0.64	5420.54	SBC	Plus or minus 0.01 ft.
SS-06F	2021-07-27	5419.90	0.56	5420.46	SBC	
SS-06F	2021-08-26	5419.90	0.65	5420.55	SBC	
SS-06F	2021-09-21	5419.90	0.62	5420.52	SBC	
SS-06F	2021-10-28	5419.90	0.68	5420.58	SBC	
SS-06F	2021-11-30	5419.90	0.41	5420.31	SBC	
SS-06F	2021-12-21	5419.90	0.54	5420.44	SBC	
SS-06GR2	2021-01-27	5417.54	0.45	5417.99	SBC	Plus or minus 0.01 ft.
SS-06GR2	2021-02-26	5417.54	0.29	5417.83	SBC	
SS-06GR2	2021-04-20	5417.54	0.57	5418.11	SBC	
SS-06GR2	2021-05-28	5417.54	0.62	5418.16	SBC	Plus or minus 0.02 ft.
SS-06GR2	2021-06-28	5417.54	0.45	5417.99	SBC	
SS-06GR2	2021-07-27	5417.54	0.40	5417.94	SBC	
SS-06GR2	2021-08-26	5417.54	0.47	5418.01	SBC	
SS-06GR2	2021-09-21	5417.54	0.44	5417.98	SBC	Plus or minus 0.01 ft.
SS-06GR2	2021-10-28	5417.54	0.48	5418.02	SBC	
SS-06GR2	2021-11-30	5417.54	0.30	5417.84	SBC	
SS-06GR2	2021-12-21	5417.54	0.41	5417.95	SBC	
SS-06H	2021-01-27	5416.58	0.80	5417.38	SBC	
SS-06H	2021-02-26	5416.58	0.60	5417.18	SBC	
SS-06H	2021-03-30	5416.58	0.94	5417.52	SBC	
SS-06H	2021-04-20	5416.58	0.95	5417.53	SBC	
SS-06H	2021-05-28	5416.58	1.03	5417.61	SBC	Plus or minus 0.01 ft.
SS-06H	2021-06-28	5416.58	0.84	5417.42	SBC	
SS-06H	2021-07-27	5416.58	0.77	5417.35	SBC	
SS-06H	2021-08-26	5416.58	0.82	5417.40	SBC	
SS-06H	2021-09-21	5416.58	0.79	5417.37	SBC	
SS-06H	2021-10-28	5416.58	0.85	5417.43	SBC	
SS-06H	2021-11-30	5416.58	0.59	5417.17	SBC	
SS-06H	2021-12-21	5416.58	0.72	5417.30	SBC	
SS-07	2021-01-27	5415.14	1.64	5416.78	SBC	
SS-07	2021-02-26	5415.14	1.45	5416.59	SBC	
SS-07	2021-03-30	5415.14	1.76	5416.90	SBC	
SS-07	2021-04-20	5415.14	1.78	5416.92	SBC	
SS-07	2021-05-28	5415.14	1.91	5417.05	SBC	
SS-07	2021-06-28	5415.14	1.78	5416.92	SBC	
SS-07	2021-07-27	5415.14	1.74	5416.88	SBC	
SS-07	2021-08-26	5415.14	1.74	5416.88	SBC	
SS-07	2021-09-21	5415.14	1.64	5416.78	SBC	
SS-07	2021-10-28	5415.14	1.70	5416.84	SBC	
SS-07	2021-11-30	5415.14	1.48	5416.62	SBC	
SS-07	2021-12-21	5415.14	1.58	5416.72	SBC	

Table 7. Operations and Maintenance - Observed Well Effects

Start Date or Observation Date	End Date or Observation Date	Potentially Affected Continuously Recording Site(s)	Event
01/01/21	12/31/21	AMC-24B, AMC-24C, AMW-02, AMW-13A, AMW-13B, AMW-13C, BMW-03A, BMW-03B, BPS07-03A, BPS07-07, BPS07-17A, BPS07-18A, BPS07-18B, BPS07-21, BPS07-21B, BPS07-21C, BPS07-22B, BPS07-22C, BPS07-22R, BPS07-23, BPS07-24, BPS11-10B, BPS11-10C, GS-08R, GS-30D, GS-32S, HCA-B1, SS-05.7, SS-05.9R1	Intermittent BMFOU discharge affected the hydrograph throughout the year.
01/28/21	01/28/21	BRW-00	Pioneer Technical Services operator switched flow from HCC to BRW during intermittent jetting of the BPSOU subdrain on 01/28/21.
01/28/21	01/28/21	AMC-24B, BPS07-03A, BPS07-21B, BPS07-21C, BPS07-22B, BPS07-24, BPS11-10B, BPS11-10C, GS-09R, GS-30D, GS-30S, GS-31S, GS-32D, GS-32S, HCA-B1, MF-08, MF-10, MSD-02B	Intermittent jetting of the BPSOU subdrain by Pioneer Technical Services.
03/02/21	03/11/21	BPS07-24, GS-08R, GS-09R, GS-30D, GS-30S, GS-31S, GS-32D, GS-32S, MF-08, MF-10	Pioneer Technical Services conducting long-term pump testing in Diggings East.
04/2021	12/31/21	AMW-01A, AMW-01B, AMW-01C, BPS07-11A, BPS07-11B	Intermountain Construction Services dewatering for Parrott Tailings removal.
06/15/21	06/17/21	AMC-24B, AMW-13B, BPS07-03A, BPS07-07, BPS07-21B, BPS07-21C, BPS07-22B, BPS07-24, BPS11-10B, GS-30D, GS-30S, GS-32D, GS-32S, MF-07, MF-08, MH-MSD113, MH-MSD116, MSD-02A, MSD-02B	Intermittent jetting of the BPSOU subdrain by Pioneer Technical Services.
06/21/21	07/26/21	AMW-013A	Irrigation problems at the Chamber of Commerce.
08/25/21	08/27/21	AMC-24B, BPS07-21B, BPS11-10B	Pioneer Technical Services drilling/ developing production well in Diggings East.
09/20/21	09/21/21	AMC-24B, AMC-24C, AMW-13B, AMW-13C, BPS07-03A, BPS07-07, BPS07-21B, BPS07-21C, BPS07-22B, BPS07-22C, BPS07-24, BPS11-10B, BPS11-10C, MF-08, MF-10	Pioneer Technical Services conducting step drawdown test in Diggings East.
10/12/21	10/14/21	AMC-24B, AMW-01A, AMW-01B, AMW-13B, BPS07-03A, BPS07-07, BPS07-21B, BPS07-21C, BPS07-22B, BPS07-22R, BPS07-24, BPS11-10B, GS-30D, GS-30S, GS-32D, GS-32S, MF-07, MF-08, MF-10, MH-MSD113, MH-MSD116, MSD-02A	Intermittent jetting of the BPSOU subdrain by Pioneer Technical Services.
12/14/21	12/14/21	BMW-06B, CT NW-3	BSB discharging water from Silver Lake line to HCC.

FIGURES

BPSOU 2021 GW DSR Figures

Figure 1. BPSOU Data Summary Report Groundwater Monitoring Network
Figure 2. BPSOU Water Quality – Spring 2021 – Arsenic Concentrations
Figure 3. BPSOU Water Quality – Spring 2021 – Cadmium Concentrations
Figure 4. BPSOU Water Quality – Spring 2021 – Copper Concentrations
Figure 5. BPSOU Water Quality – Spring 2021 – Mercury Concentrations
Figure 6. BPSOU Water Quality – Spring 2021 – Lead Concentrations
Figure 7. BPSOU Water Quality – Spring 2021 – Zinc Concentrations
Figure 8. BPSOU Water Quality – Fall 2021 – Arsenic Concentrations
Figure 9. BPSOU Water Quality – Fall 2021 – Cadmium Concentrations
Figure 10. BPSOU Water Quality – Fall 2021 – Copper Concentrations
Figure 11. BPSOU Water Quality – Fall 2021 – Mercury Concentrations
Figure 12. BPSOU Water Quality – Fall 2021 – Lead Concentrations
Figure 13. BPSOU Water Quality – Fall 2021 – Zinc Concentrations

APPENDICES

Appendix A – Field Notes

Appendix B – Data Quality Assessment

Appendix C – BPSOU Continual Groundwater Level Records

Appendix D – Raw Data

Appendix A: Field Notes

BPSOU 2021 GW DSR Appendix A

Butte Priority Soils Operable Unit (BPSOU)
Silver Bow Creek/Butte Area NPL Site

Appendix A: Ground Water Sampling Field Forms

Draft Data Summary Report
January 2021 – December 2021

Atlantic Richfield

April 2022

SPRING CALIBRATION FORMS

Project
Butte

Calibrator
☐ Alice Drew-Davies ☐ Caleb Arbaugh ☐ Joe Moodry ☑ Dalen Longfield ☐ Mat Erickson ☐ Kirsten Vose ☐ Tina Donovan ☐ Matt Kilsdonk ☐ Michele Bay ☐ Nate Beinemann

Equipment Choose the equipment being calibrated
YSI Pro Plus 1

Serial Equipment Serial Number
18G100335

Date
04/22/2021 08:05

Needed:
Minimum of two point calibration to be performed for pH:
pH 7.00 and pH 4.00 used for groundwater sampling
pH 7.00 and pH 10.00 used for surface water sampling

Specific Conductance (SC) calibration for surface water is 1413 uS/cm and for groundwater 1413 uS/cm

Geotech ORP solution 220 mV at 25 °C 232 mV at 5 °C 230 mV at 10 °C

Source Groundwater or Surface water
GW

pH Calibration Points 2 or 3-pt calibration
2

pH Calibration

Parameter	Std. Standard	Ini. Initial Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
pH (su)	7.00	7.04	15.5	OGH457	08/22/2022
pH (su)	4.00	4.0	15.5	OGI001	09/22/2022

Final pH Never pH 7
4.01

Other Parameter

Parameter	Std. Standard	Ini. Initial Reading	Final Final Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
SC (uS/cm)	1413.0	1419.0	1413.0	15.6	OGI1054	09/22/2021
ORP (mV)	227.0	243.2	227.0	15.5	1GC453	12/22/2021

Dissolved Oxygen (DO)

Project
Butte

Calibrator
☐ Alice Drew-Davies ☐ Caleb Arbaugh ☐ Joe Moodry ☐ Dalen Longfield ☐ Mat Erickson ☐ Kirsten Vose ☐ Tina Donovan ☐ Matt Kilsdonk ☐ Michele Bay ☑ Nate Beinemann

Equipment Choose the equipment being calibrated
YSI Pro Plus 1

Serial Equipment Serial Number
19B100186 Rental

Date
04/22/2021 07:46

Needed:
Minimum of two point calibration to be performed for pH:
pH 7.00 and pH 4.00 used for groundwater sampling
pH 7.00 and pH 10.00 used for surface water sampling

Specific Conductance (SC) calibration for surface water is 1413 uS/cm and for groundwater 1413 uS/cm

Geotech ORP solution 220 mV at 25 °C 232 mV at 5 °C 230 mV at 10 °C

Source Groundwater or Surface water
GW

pH Calibration Points 2 or 3-pt calibration
2

pH Calibration

Parameter	**Std.** Standard	**Ini.** Initial Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
pH (su)	7.00	7.01	15.7	OGH457	08/22/2022
pH (su)	4.00	4.05	15.6	OGI001	09/22/2022

Final pH Never pH 7
4.01

Other Parameter

Parameter	**Std.** Standard	**Ini.** Initial Reading	**Final** Final Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
SC (uS/cm)	1413.0	1413.0	1414.0	15.6	OGI1054	09/22/2021
ORP (mV)	220.0	220.0	227.0	15.4	1GC543	12/22/2021

Dissolved Oxygen (DO)

DO is saturated to Percentage
77.8

at DO Barometric pressure from meter (mmHg)
616.1

Elevation Calibrated
5400

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Project
Butte

Calibrator
☐ Alice Drew-Davies ☐ Caleb Arbaugh ☑ Joe Moodry ☐ Dalen Longfield ☐ Mat Erickson ☐ Kirsten Vose ☐ Tina Donovan ☐ Matt Kilsdonk ☐ Michele Bay ☐ Nate Beinemann

Equipment Choose the equipment being calibrated
YSI Pro Plus 1

Serial Equipment Serial Number
18G100335

Date
04/23/2021 08:57

Needed:
Minimum of two point calibration to be performed for pH:
pH 7.00 and pH 4.00 used for groundwater sampling
pH 7.00 and pH 10.00 used for surface water sampling

Specific Conductance (SC) calibration for surface water is 1413 uS/cm and for groundwater 1413 uS/cm

Geotech ORP solution 220 mV at 25 °C 232 mV at 5 °C 230 mV at 10 °C

Source Groundwater or Surface water
GW

pH Calibration Points 2 or 3-pt calibration
2

pH Calibration

Parameter	Std. Standard	Ini. Initial Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
pH (su)	7.00	7.11	15.5	0GH457	08/23/2022
pH (su)	4.00	4.04	15.4	0GI001	09/23/2022

Other Parameter

Parameter	Std. Standard	Ini. Initial Reading	Final Final Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
SC (uS/cm)	1413.0	1414.0	141.0	15.5	0GI1054	09/23/2021
ORP (mV)	227.0	227.5	226.0	15.5	1GC543	12/23/2021

Dissolved Oxygen (DO)

DO is saturated to Percentage
81.3

at DO Barometric pressure from meter (mmHg)
618.6

Elevation Calibrated
5400

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Project
Butte

Calibrator
☐ Alice Drew-Davies ☐ Caleb Arbaugh ☐ Joe Moodry ☐ Dalen Longfield ☐ Mat Erickson ☐ Kirsten Vose ☐ Tina Donovan ☐ Matt Kilsdonk ☐ Michele Bay ☑ Nate Beinemann

Equipment Choose the equipment being calibrated
YSI Rental

Serial Equipment Serial Number
19B100186

Date
04/23/2021 07:37

Source Groundwater or Surface water
GW

pH Calibration Points 2 or 3-pt calibration
2

pH Calibration

Parameter	**Std.** Standard	**Ini.** Initial Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
pH (su)	7.00	6.96	16.8	OGH457	08/23/2022
pH (su)	4.00	4.03	15.5	OGI001	09/23/2022

Final pH Never pH 7
3.99

Other Parameter

Parameter	**Std.** Standard	**Ini.** Initial Reading	**Final** Final Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
SC (uS/cm)	1413.0	1413.0	1414.0	15.5	OGI054	09/23/2021
ORP (mV)	220.0	220.0	222.4	15.2	1GC543	12/23/2021

Dissolved Oxygen (DO)

DO is saturated to Percentage
92.2

at DO Barometric pressure from meter (mmHg)
619.1

Elevation Calibrated
5400

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Project

Butte

Calibrator

☐ Alice Drew-Davies ☐ Caleb Arbaugh ☐ Joe Moodry ☐ Dalen Longfield
☐ Mat Erickson ☑ Kirsten Vose ☐ Tina Donovan ☐ Matt Kilsdonk
☐ Michele Bay ☐ Nate Beinemann

Equipment
Choose the equipment being calibrated

YSI Pro Plus 1

Serial
Equipment Serial Number

18G100335

Date

04/26/2021 09:48

Needed:
Minimum of two point calibration to be performed for pH:
pH 7.00 and pH 4.00 used for groundwater sampling
pH 7.00 and pH 10.00 used for surface water sampling

Specific Conductance (SC) calibration for surface water is 1413 uS/cm and for groundwater 1413 uS/cm

Geotech ORP solution 220 mV at 25 °C 232 mV at 5 °C 230 mV at 10 °C

Source
Groundwater or Surface water

GW

pH Calibration Points
2 or 3-pt calibration

2

pH Calibration

Parameter	**Std.** Standard	**Ini.** Initial Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
pH (su)	7.00	6.98	15.6	OGH457	08/26/2022
pH (su)	4.00	3.97	15.6	OGI001	09/26/2022

Final pH
Never pH 7

4.00

Other Parameter

Parameter	**Std.** Standard	**Ini.** Initial Reading	**Final** Final Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
SC (uS/cm)	1413.0	1397.0	1413.0	15.3	OGI1054	09/26/2021
ORP (mV)	227.0	226.0	227.0	15.2	1GC543	12/26/2021

Dissolved Oxygen (DO)

DO is saturated to Percentage
80.1

at DO Barometric pressure from meter (mmHg)
613.8

Elevation Calibrated
5400

Additional Comments Or site notes
Daley calibrated, observed by Mat E

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Project

Butte

Calibrator

☐ Alice Drew-Davies ☐ Caleb Arbaugh ☐ Joe Moodry ☐ Dalen Longfield
☐ Mat Erickson ☑ Kirsten Vose ☐ Tina Donovan ☐ Matt Kilsdonk
☐ Michele Bay ☐ Nate Beinemann

Equipment
Choose the equipment being calibrated

YSI Rental

Serial
Equipment Serial Number

19B100186

Date

04/26/2021 09:48

Source
Groundwater or Surface water

GW

pH Calibration Points
2 or 3-pt calibration

2

pH Calibration

Parameter	**Std.** Standard	**Ini.** Initial Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
pH (su)	7.00	6.99	15.6	0GH457	08/26/2022
pH (su)	4.00	4.03	15.6	0GI001	09/26/2022

Final pH
Never pH 7

4.00

Other Parameter

Parameter	**Std.** Standard	**Ini.** Initial Reading	**Final** Final Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
SC (uS/cm)	1413.0	1412.0	1414.0	15.5	0GI1054	09/26/2021
ORP (mV)	227.0	223.7	227.0	15.2	0GC541	12/26/2021

Dissolved Oxygen (DO)

DO is saturated to
Percentage

76.1

at
DO Barometric pressure from meter (mmHg)

614.3

Elevation Calibrated
5400

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Project
Butte

Calibrator			
☐ Alice Drew-Davies	☐ Caleb Arbaugh	☑ Joe Moodry	☐ Dalen Longfield
☐ Mat Erickson	☐ Kirsten Vose	☐ Tina Donovan	☐ Matt Kilsdonk
☐ Michele Bay	☐ Nate Beinemann		

Equipment Choose the equipment being calibrated
YSI Pro Plus 1

Serial Equipment Serial Number
18G100335

Date
04/27/2021 08:36

Needed:
Minimum of two point calibration to be performed for pH:
pH 7.00 and pH 4.00 used for groundwater sampling
pH 7.00 and pH 10.00 used for surface water sampling

Specific Conductance (SC) calibration for surface water is 1413 uS/cm and for groundwater 1413 uS/cm

Geotech ORP solution 220 mV at 25 °C 232 mV at 5 °C 230 mV at 10 °C

Source Groundwater or Surface water
GW

pH Calibration Points 2 or 3-pt calibration
2

pH Calibration

Parameter	Std. Standard	Ini. Initial Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
pH (su)	7.00	7.04	15.6	OGH457	08/27/2022
pH (su)	4.00	4.05	15.6	OGI001	09/27/2022

Final pH Never pH 7
4.02

Other Parameter

Parameter	Std. Standard	Ini. Initial Reading	Final Final Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
SC (uS/cm)	1413.0	1410.0	1411.1	15.4	OGI1054	09/27/2021
ORP (mV)	227.0	227.0	227.0	15.3	1GC543	12/27/2021

Dissolved Oxygen (DO)

DO is saturated to Percentage
82.4

at DO Barometric pressure from meter (mmHg)
620.0

Elevation Calibrated
5400

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Project

Butte

Calibrator

☐ Alice Drew-Davies ☐ Caleb Arbaugh ☐ Joe Moodry ☐ Dalen Longfield
☐ Mat Erickson ☐ Kirsten Vose ☐ Tina Donovan ☐ Matt Kilsdonk
☐ Michele Bay ☑ Nate Beinemann

Equipment
Choose the equipment being calibrated

YSI Rental

Serial
Equipment Serial Number

0

Date

04/27/2021 07:53

Source
Groundwater or Surface water

GW

pH Calibration Points
2 or 3-pt calibration

2

pH Calibration

Parameter	**Std.** Standard	**Ini.** Initial Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
pH (su)	7.00	7.06	15.9	OGH457	08/27/2022
pH (su)	4.00	3.97	15.7	OGI001	09/27/2022

Final pH
Never pH 7

4.01

Other Parameter

Parameter	**Std.** Standard	**Ini.** Initial Reading	**Final** Final Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
SC (uS/cm)	1413.0	1413.0	1419.0	15.5	OGI1054	09/27/2021
ORP (mV)	220.0	220.0	220.3	15.6	1GC543	12/27/2021

Dissolved Oxygen (DO)

DO is saturated to
Percentage

86.3

at
DO Barometric pressure from meter (mmHg)

620.1

Elevation Calibrated
5400

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Project
Butte

Calibrator			
☐ Alice Drew-Davies	☐ Caleb Arbaugh	☑ Joe Moodry	☐ Dalen Longfield
☐ Mat Erickson	☐ Kirsten Vose	☐ Tina Donovan	☐ Matt Kilsdonk
☐ Michele Bay	☐ Nate Beinemann		

Equipment Choose the equipment being calibrated
YSI Pro Plus 1

Serial Equipment Serial Number
18G100335

Date
04/28/2021 08:40

Needed:
Minimum of two point calibration to be performed for pH:
pH 7.00 and pH 4.00 used for groundwater sampling
pH 7.00 and pH 10.00 used for surface water sampling

Specific Conductance (SC) calibration for surface water is 1413 uS/cm and for groundwater 1413 uS/cm

Geotech ORP solution 220 mV at 25 °C 232 mV at 5 °C 230 mV at 10 °C

Source Groundwater or Surface water
GW

pH Calibration Points 2 or 3-pt calibration
2

pH Calibration

Parameter	Std. Standard	Ini. Initial Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
pH (su)	7.00	6.94	16.1	OGH457	08/28/2022
pH (su)	4.00	3.97	16.2	OGI001	09/28/2022

Final pH Never pH 7
3.97

Other Parameter

Parameter	Std. Standard	Ini. Initial Reading	Final Final Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
SC (uS/cm)	1413.0	1405.0	1413.0	16.0	OGI1054	09/28/2021
ORP (mV)	227.0	227.1	227.1	15.6	IGC543	12/28/2021

Dissolved Oxygen (DO)

DO is saturated to Percentage
82.0

at DO Barometric pressure from meter (mmHg)
624.8

Elevation Calibrated
5400

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Project
Butte

Calibrator
☐ Alice Drew-Davies ☐ Caleb Arbaugh ☐ Joe Moodry ☐ Dalen Longfield ☐ Mat Erickson ☐ Kirsten Vose ☐ Tina Donovan ☐ Matt Kilsdonk ☐ Michele Bay ☑ Nate Beinemann

Equipment Choose the equipment being calibrated
YSI Rental

Serial Equipment Serial Number
19B100186

Date
04/28/2021 07:45

Source Groundwater or Surface water
GW

pH Calibration Points 2 or 3-pt calibration
2

pH Calibration

Parameter	**Std.** Standard	**Ini.** Initial Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
pH (su)	7.00	7.03	16.0	OGH457	08/28/2022
pH (su)	4.00	4.02	16.0	OGI001	09/28/2022

Final pH Never pH 7
4.01

Other Parameter

Parameter	**Std.** Standard	**Ini.** Initial Reading	**Final** Final Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
SC (uS/cm)	1413.0	1413.0	1414.0	15.9	OGI1054	09/28/2021
ORP (mV)	220.0	220.0	222.1	15.7	IGC543	12/28/2021

Dissolved Oxygen (DO)

DO is saturated to Percentage
78.6

at DO Barometric pressure from meter (mmHg)
625.1

Elevation Calibrated
5400

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Calibrator

- [ ] Alice Drew-Davies
- [ ] Caleb Arbaugh
- [ ] Joe Moodry
- [ ] Dalen Longfield
- [ ] Mat Erickson
- [x] Kirsten Vose
- [ ] Tina Donovan
- [ ] Matt Kilsdonk
- [ ] Michele Bay
- [ ] Nate Beinemann

Equipment
Choose the equipment being calibrated

Hach 2100P Turbidimeter

Serial
Equipment Serial Number

08070C030485

Date

04/29/2021 13:08

Note:
The confirmed reading should be what the equipment actually reads for the standard.

For 2100P, this requires completing the calibration and then running all 4 standards back through the instrument.

Turbidimeter

Standard	Confirmed Reading
0.1	0.1
20.0	21.2
100.0	102.0
800.0	791.0

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Calibrator
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Equipment Choose the equipment being calibrated
YSI Pro Plus 1

Serial Equipment Serial Number
18G100335

Date
04/29/2021 08:40

Needed:
Minimum of two point calibration to be performed for pH:
pH 7.00 and pH 4.00 used for groundwater sampling
pH 7.00 and pH 10.00 used for surface water sampling

Specific Conductance (SC) calibration for surface water is 1413 uS/cm and for groundwater 1413 uS/cm

Geotech ORP solution 220 mV at 25 °C 232 mV at 5 °C 230 mV at 10 °C

Source Groundwater or Surface water
GW

pH Calibration Points 2 or 3-pt calibration
2

pH Calibration

Parameter	Std. Standard	Ini. Initial Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
pH (su)	7.00	6.99	17.1	OGH457	08/29/2022
pH (su)	4.00	3.97	17.0	OGI001	09/29/2022

Other Parameter

Parameter	Std. Standard	Ini. Initial Reading	Final Final Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
SC (uS/cm)	1413.0	1417.0	1413.0	17.0	OGI1054	09/29/2021
ORP (mV)	227.0	225.1	226.0	16.7	1GC543	12/29/2021

Dissolved Oxygen (DO)

DO is saturated to Percentage
83.4

at DO Barometric pressure from meter (mmHg)
628.4

Elevation Calibrated
5400

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Project
Butte

Calibrator
☐ Alice Drew-Davies ☐ Caleb Arbaugh ☑ Joe Moodry ☐ Dalen Longfield ☐ Mat Erickson ☐ Kirsten Vose ☐ Tina Donovan ☐ Matt Kilsdonk ☐ Michele Bay ☐ Nate Beinemann

Equipment Choose the equipment being calibrated
YSI Pro Plus 1

Serial Equipment Serial Number
18G100335

Date
04/29/2021 08:40

Needed:
Minimum of two point calibration to be performed for pH:
pH 7.00 and pH 4.00 used for groundwater sampling
pH 7.00 and pH 10.00 used for surface water sampling

Specific Conductance (SC) calibration for surface water is 1413 uS/cm and for groundwater 1413 uS/cm

Geotech ORP solution 220 mV at 25 °C 232 mV at 5 °C 230 mV at 10 °C

Source Groundwater or Surface water
GW

pH Calibration Points 2 or 3-pt calibration
2

pH Calibration

Parameter	Std. Standard	Ini. Initial Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
pH (su)	7.00	6.99	17.1	OGH457	08/29/2022
pH (su)	4.00	3.97	17.0	OGI001	09/29/2022

Other Parameter

Parameter	Std. Standard	Ini. Initial Reading	Final Final Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
SC (uS/cm)	1413.0	1417.0	1413.0	17.0	OGI1054	09/29/2021
ORP (mV)		225.1	226.0	16.7	1GC543	12/29/2021

Dissolved Oxygen (DO)

DO is saturated to Percentage
83.4

at DO Barometric pressure from meter (mmHg)
628.4

Elevation Calibrated
5400

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Project
Butte

Calibrator			
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☐ Mat Erickson	☑ Kirsten Vose	☐ Tina Donovan	☐ Matt Kilsdonk
☐ Michele Bay	☐ Nate Beinemann		

Equipment Choose the equipment being calibrated
YSI Pro Plus 2

Serial Equipment Serial Number
12F100666

Date
04/29/2021 13:04

Needed:
Minimum of two point calibration to be performed for pH:
pH 7.00 and pH 4.00 used for groundwater sampling
pH 7.00 and pH 10.00 used for surface water sampling

Specific Conductance (SC) calibration for surface water is 1413 uS/cm and for groundwater 1413 uS/cm

Geotech ORP solution 220 mV at 25 °C 232 mV at 5 °C 230 mV at 10 °C

Source Groundwater or Surface water
SW

pH Calibration Points 2 or 3-pt calibration
2

pH Calibration

Parameter	Std. Standard	Ini. Initial Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
pH (su)	7.00	7.13	16.6	0GH457	08/29/2022
pH (su)	10.00	10.2	16.6	0GA1107	09/29/2022

Final pH Never pH 7
10.11

Other Parameter

Parameter	Std. Standard	Ini. Initial Reading	Final Final Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
SC (uS/cm)	1413.0	1421.0	1413.0	16.7	0GI1054	09/29/2021
ORP (mV)	226.0	242.3	226.0	16.7	1GC543	12/29/2021

Dissolved Oxygen (DO)

DO is saturated to Percentage
82.2

at DO Barometric pressure from meter (mmHg)
629.8

Elevation Calibrated
5400

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Calibrator			
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☐ Mat Erickson	☐ Kirsten Vose	☐ Tina Donovan	☐ Matt Kilsdonk
☐ Michele Bay	☑ Nate Beinemann		

Equipment Choose the equipment being calibrated
YSI Rental

Serial Equipment Serial Number
19B100186

Date
04/29/2021 07:42

Source Groundwater or Surface water
GW

pH Calibration Points 2 or 3-pt calibration
2

pH Calibration

Parameter	**Std.** Standard	**Ini.** Initial Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
pH (su)	7.00	6.96	16.8	OGH457	08/29/2022
pH (su)	4.00	4.04	16.8	OGI001	09/29/2022

Final pH Never pH 7
4.04

Other Parameter

Parameter	**Std.** Standard	**Ini.** Initial Reading	**Final** Final Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
SC (uS/cm)	1413.0	1413.0	1411.0	16.7	OGI1054	09/29/2021
ORP (mV)	220.0	220.0	222.9	16.7	1GC543	12/29/2021

Dissolved Oxygen (DO)

DO is saturated to Percentage
77.8

at DO Barometric pressure from meter (mmHg)
620.6

Elevation Calibrated
5400

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Calibrator				
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☐ Mat Erickson	☐ Kirsten Vose	☐ Tina Donovan	☐ Matt Kilsdonk	
☐ Michele Bay	☐ Nate Beinemann			

Equipment Choose the equipment being calibrated
YSI Pro Plus 1

Serial Equipment Serial Number
18G100335

Date
04/30/2021 08:53

Needed:
Minimum of two point calibration to be performed for pH:
pH 7.00 and pH 4.00 used for groundwater sampling
pH 7.00 and pH 10.00 used for surface water sampling

Specific Conductance (SC) calibration for surface water is 1413 uS/cm and for groundwater 1413 uS/cm

Geotech ORP solution 220 mV at 25 °C 232 mV at 5 °C 230 mV at 10 °C

Source Groundwater or Surface water
GW

pH Calibration Points 2 or 3-pt calibration
2

pH Calibration

Parameter	Std. Standard	Ini. Initial Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
pH (su)	7.00	7.03	17.1	OGH457	08/30/2022
pH (su)	4.00	4.03	17.0	OGI001	09/30/2022

Final pH Never pH 7
4.04

Other Parameter

Parameter	Std. Standard	Ini. Initial Reading	Final Final Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
SC (uS/cm)	1413.0	1419.0	1413.0	17.0	OGI1054	09/30/2021
ORP (mV)	227.0	212.0	225.0	16.9	1GB847	11/30/2021

Dissolved Oxygen (DO)

DO is saturated to Percentage
82.0

at DO Barometric pressure from meter (mmHg)
624.8

Elevation Calibrated
5400

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Calibrator
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Equipment Choose the equipment being calibrated
YSI Rental

Serial Equipment Serial Number
19B100186

Date
04/30/2021 07:43

Source Groundwater or Surface water
GW

pH Calibration Points 2 or 3-pt calibration
2

pH Calibration

Parameter	**Std.** Standard	**Ini.** Initial Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
pH (su)	7.00	7.01	11.8	OGH457	08/28/2022
pH (su)	4.00	4.09	15.6	OGI001	09/30/2022

Final pH Never pH 7
4.07

Other Parameter

Parameter	**Std.** Standard	**Ini.** Initial Reading	**Final** Final Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
SC (uS/cm)	1413.0	1413.0	1412.0	16.6	OGI1054	09/30/2021
ORP (mV)	220.0	220.0	218.9	16.6	1GB847	11/30/2021

Dissolved Oxygen (DO)

DO is saturated to Percentage
88.0

at DO Barometric pressure from meter (mmHg)
625.1

Elevation Calibrated
5400

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Calibrator
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Equipment Choose the equipment being calibrated
YSI Rental

Serial Equipment Serial Number
19B100186

Date
05/03/2021 07:42

Source Groundwater or Surface water
GW

pH Calibration Points 2 or 3-pt calibration
2

pH Calibration

Parameter	**Std.** Standard	**Ini.** Initial Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
pH (su)	7.00	7.02	15.8	OGH457	08/03/2022
pH (su)	4.00	4.02	15.7	OGI001	09/03/2022

Final pH Never pH 7
3.99

Other Parameter

Parameter	**Std.** Standard	**Ini.** Initial Reading	**Final** Final Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
SC (uS/cm)	1413.0	1413.0	1409.0	16.1	OGI1054	09/03/2021
ORP (mV)		220.0	219.6	16.1	1GB847	11/03/2021

Dissolved Oxygen (DO)

DO is saturated to Percentage
82.2

at DO Barometric pressure from meter (mmHg)
623.7

Elevation Calibrated
5400

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Calibrator			
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☐ Mat Erickson	☐ Kirsten Vose	☐ Tina Donovan	☐ Matt Kilsdonk
☐ Michele Bay	☐ Nate Beinemann		

Equipment Choose the equipment being calibrated
YSI Pro Plus 1

Serial Equipment Serial Number
18G100335

Date
05/04/2021 08:36

Needed:
Minimum of two point calibration to be performed for pH:
pH 7.00 and pH 4.00 used for groundwater sampling
pH 7.00 and pH 10.00 used for surface water sampling

Specific Conductance (SC) calibration for surface water is 1413 uS/cm and for groundwater 1413 uS/cm

Geotech ORP solution 220 mV at 25 °C 232 mV at 5 °C 230 mV at 10 °C

Source Groundwater or Surface water
GW

pH Calibration Points 2 or 3-pt calibration
2

pH Calibration

Parameter	Std. Standard	Ini. Initial Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
pH (su)	7.00	7.06	16.3	OGH457	08/04/2022
pH (su)	4.00	4.02	16.1	OGI001	09/04/2022

Final pH Never pH 7
4.04

Other Parameter

Parameter	Std. Standard	Ini. Initial Reading	Final Final Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
SC (uS/cm)	1413.0	1413.0	1414.0	16.1	OGI1054	
ORP (mV)	227.0	226.1	226.1	16.1	1GB847	

Dissolved Oxygen (DO)

DO is saturated to Percentage
80.8

at DO Barometric pressure from meter (mmHg)
622.0

Elevation Calibrated
5400

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Calibrator

- [ ] Alice Drew-Davies
- [ ] Caleb Arbaugh
- [ ] Joe Moodry
- [x] Dalen Longfield
- [ ] Mat Erickson
- [ ] Kirsten Vose
- [ ] Tina Donovan
- [ ] Matt Kilsdonk
- [ ] Michele Bay
- [ ] Nate Beinemann

Equipment
Choose the equipment being calibrated

YSI Pro Plus 2

Serial
Equipment Serial Number

12F100666

Date

05/04/2021 08:30

Needed:
Minimum of two point calibration to be performed for pH:
pH 7.00 and pH 4.00 used for groundwater sampling
pH 7.00 and pH 10.00 used for surface water sampling

Specific Conductance (SC) calibration for surface water is 1413 uS/cm and for groundwater 1413 uS/cm

Geotech ORP solution 220 mV at 25 °C 232 mV at 5 °C 230 mV at 10 °C

Source
Groundwater or Surface water

SW

pH Calibration Points
2 or 3-pt calibration

3

pH Calibration

Parameter	**Std.** Standard	**Ini.** Initial Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
pH (su)	7.00	7.0	16.1	OGH457	08/04/2022
pH (su)	4.00	3.95	16.0	OGI001	09/04/2022
pH (su)	10.00	10.09	15.9	OGA1107	01/04/2022

Final pH
Never pH 7

10.10

Other Parameter

Parameter	**Std.** Standard	**Ini.** Initial Reading	**Final** Final Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
SC (uS/cm)	447.0					
ORP (mV)						

Dissolved Oxygen (DO)

Elevation Calibrated
5400

Additional Comments Or site notes
Only calibrated pH for signature pH calibration at 6G

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Calibrator			
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☐ Mat Erickson	☐ Kirsten Vose	☐ Tina Donovan	☐ Matt Kilsdonk
☑ Michele Bay	☐ Nate Beinemann		

Equipment Choose the equipment being calibrated
YSI Rental

Serial Equipment Serial Number
0

Date
05/04/2021 08:24

Source Groundwater or Surface water
GW

pH Calibration Points 2 or 3-pt calibration
2

pH Calibration

Parameter	Std. Standard	Ini. Initial Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
pH (su)	7.00	7.04	16.0	0GH457	08/04/2022
pH (su)	4.00	3.71	16.0	0GI001	09/04/2022

Final pH Never pH 7
3.71

Other Parameter

Parameter	Std. Standard	Ini. Initial Reading	Final Final Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
SC (uS/cm)	1413.0	1412.0	1412.0	15.8	0GI1054	09/04/2021
ORP (mV)	227.0	226.3	227.0	15.7	1GB847	11/04/2021

Dissolved Oxygen (DO)

DO is saturated to Percentage
83.5

at DO Barometric pressure from meter (mmHg)
622.6

Elevation Calibrated
5400

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Calibrator

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- [ ] Caleb Arbaugh
- [x] Joe Moodry
- [ ] Dalen Longfield
- [ ] Mat Erickson
- [ ] Kirsten Vose
- [ ] Tina Donovan
- [ ] Matt Kilsdonk
- [ ] Michele Bay
- [ ] Nate Beinemann

Equipment
Choose the equipment being calibrated

Hach 2100P Turbidimeter

Serial
Equipment Serial Number

08070C030485

Date

05/05/2021 09:52

Note:
The confirmed reading should be what the equipment actually reads for the standard.

For 2100P, this requires completing the calibration and then running all 4 standards back through the instrument.

Turbidimeter

Standard	Confirmed Reading
0.1	0.06
20.0	20.7
100.0	101.0
800.0	804.0

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Calibrator

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- [ ] Caleb Arbaugh
- [x] Joe Moodry
- [ ] Dalen Longfield
- [ ] Mat Erickson
- [ ] Kirsten Vose
- [ ] Tina Donovan
- [ ] Matt Kilsdonk
- [ ] Michele Bay
- [ ] Nate Beinemann

Equipment

Choose the equipment being calibrated

Hach 2100Q Turbidimeter

Serial

Equipment Serial Number

16030C048305

Date

05/05/2021 09:53

Note:

The confirmed reading should be what the equipment actually reads for the standard.

For 2100Q, the equipment will display the actually reading as you step through calibration. A summary is also displayed at the end.

After calibrating, confirm that the 20 NTU std reads correctly by setting it into the equipment as selecting "read".

Turbidimeter

Standard	Confirmed Reading
20.0	19.9
100.0	100.0
800.0	821.0
20.0	20.5

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Project
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Calibrator			
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☐ Mat Erickson	☐ Kirsten Vose	☐ Tina Donovan	☐ Matt Kilsdonk
☐ Michele Bay	☐ Nate Beinemann		

Equipment Choose the equipment being calibrated
YSI Pro Plus 1

Serial Equipment Serial Number
18G100335

Date
05/05/2021 11:27

Needed:
Minimum of two point calibration to be performed for pH:
pH 7.00 and pH 4.00 used for groundwater sampling
pH 7.00 and pH 10.00 used for surface water sampling

Specific Conductance (SC) calibration for surface water is 1413 uS/cm and for groundwater 1413 uS/cm

Geotech ORP solution 220 mV at 25 °C 232 mV at 5 °C 230 mV at 10 °C

Source Groundwater or Surface water
GW

pH Calibration Points 2 or 3-pt calibration
2

pH Calibration

Parameter	Std. Standard	Ini. Initial Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
pH (su)	7.00	7.08	15.7	OGH457	08/05/2022
pH (su)	4.00	4.05	15.8	OGI001	09/05/2022

Final pH Never pH 7
4.01

Other Parameter

Parameter	Std. Standard	Ini. Initial Reading	Final Final Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
SC (uS/cm)	1413.0	1412.0	1415.0	15.9	OGI1054	09/05/2021
ORP (mV)	227.0	227.9	227.0	15.1	1GB847	11/05/2021

Dissolved Oxygen (DO)

DO is saturated to Percentage
83.0

at DO Barometric pressure from meter (mmHg)
626.3

Elevation Calibrated
5400

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Project

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Calibrator

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- [ ] Caleb Arbaugh
- [ ] Joe Moodry
- [ ] Dalen Longfield
- [ ] Mat Erickson
- [ ] Kirsten Vose
- [ ] Tina Donovan
- [ ] Matt Kilsdonk
- [x] Michele Bay
- [ ] Nate Beinemann

Equipment
Choose the equipment being calibrated

YSI Rental

Serial
Equipment Serial Number

19B100186

Date

05/05/2021 08:49

Source
Groundwater or Surface water

GW

pH Calibration Points
2 or 3-pt calibration

2

pH Calibration

Parameter	Std. Standard	Ini. Initial Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
pH (su)	7.00	7.0	15.5	OGH457	
pH (su)	4.00	4.0	15.5	OGI001	

Final pH
Never pH 7

3.99

Other Parameter

Parameter	Std. Standard	Ini. Initial Reading	Final Final Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
SC (uS/cm)	1413.0	1422.0	1411.0	15.3	OGI054	09/21/2021
ORP (mV)	220.0	229.5	227.0	15.0	1GB847	11/21/2021

Dissolved Oxygen (DO)

DO is saturated to
Percentage

79.9

at
DO Barometric pressure from meter (mmHg)

626.8

Elevation Calibrated
5400

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Calibrator

- [ ] Alice Drew-Davies
- [ ] Caleb Arbaugh
- [ ] Joe Moodry
- [ ] Dalen Longfield
- [ ] Mat Erickson
- [ ] Kirsten Vose
- [ ] Tina Donovan
- [ ] Matt Kilsdonk
- [ ] Michele Bay
- [x] Nate Beinemann

Equipment
Choose the equipment being calibrated

Hach 2100P Turbidimeter

Serial
Equipment Serial Number

08070C030485

Date

05/06/2021 08:48

Note:
The confirmed reading should be what the equipment actually reads for the standard.

For 2100P, this requires completing the calibration and then running all 4 standards back through the instrument.

Turbidimeter

Standard	Confirmed Reading
0.1	0.11
20.0	20.3
100.0	99.7
800.0	794.0

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Butte

Calibrator			
☐ Alice Drew-Davies	☐ Caleb Arbaugh	☐ Joe Moodry	☐ Dalen Longfield
☐ Mat Erickson	☐ Kirsten Vose	☐ Tina Donovan	☐ Matt Kilsdonk
☐ Michele Bay	☑ Nate Beinemann		

Equipment Choose the equipment being calibrated
Hach 2100Q Turbidimeter

Serial Equipment Serial Number
16030C048305

Date
05/06/2021 09:08

Note:
The confirmed reading should be what the equipment actually reads for the standard.

For 2100Q, the equipment will display the actually reading as you step through calibration. A summary is also displayed at the end.

After calibrating, confirm that the 20 NTU std reads correctly by setting it into the equipment as selecting "read".

Turbidimeter

Standard	Confirmed Reading
20.0	20.2
100.0	99.9
800.0	799.0
20.0	21.6

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Project
Butte

Calibrator			
☐ Alice Drew-Davies	☐ Caleb Arbaugh	☐ Joe Moodry	☐ Dalen Longfield
☐ Mat Erickson	☐ Kirsten Vose	☐ Tina Donovan	☐ Matt Kilsdonk
☐ Michele Bay	☑ Nate Beinemann		

Equipment Choose the equipment being calibrated
YSI Pro Plus 1

Serial Equipment Serial Number
18G100335

Date
05/06/2021 08:09

Needed:
Minimum of two point calibration to be performed for pH:
pH 7.00 and pH 4.00 used for groundwater sampling
pH 7.00 and pH 10.00 used for surface water sampling

Specific Conductance (SC) calibration for surface water is 1413 uS/cm and for groundwater 1413 uS/cm

Geotech ORP solution 220 mV at 25 °C 232 mV at 5 °C 230 mV at 10 °C

Source Groundwater or Surface water
GW

pH Calibration Points 2 or 3-pt calibration
2

pH Calibration

Parameter	Std. Standard	Ini. Initial Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
pH (su)	7.00	6.99	16.4	OGH457	08/06/2022
pH (su)	4.00	4.02	15.9	OGI001	09/06/2022

Final pH Never pH 7
4.03

Other Parameter

Parameter	Std. Standard	Ini. Initial Reading	Final Final Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
SC (uS/cm)	1413.0	1413.0	1414.0	15.9	OGI1054	05/06/2021
ORP (mV)	220.0	220.0	223.5	15.9	1GC543	12/06/2021

Dissolved Oxygen (DO)

DO is saturated to Percentage
82.0

at DO Barometric pressure from meter (mmHg)
625.3

Elevation Calibrated
5400

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Project
Butte

Calibrator
☐ Alice Drew-Davies ☐ Caleb Arbaugh ☐ Joe Moodry ☐ Dalen Longfield ☐ Mat Erickson ☐ Kirsten Vose ☐ Tina Donovan ☐ Matt Kilsdonk ☐ Michele Bay ☑ Nate Beinemann

Equipment Choose the equipment being calibrated
YSI Rental

Serial Equipment Serial Number
19B100186

Date
05/06/2021 08:11

Source Groundwater or Surface water
GW

pH Calibration Points 2 or 3-pt calibration
2

pH Calibration

Parameter	**Std.** Standard	**Ini.** Initial Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
pH (su)	7.00	7.04	16.4	OGH457	08/06/2022
pH (su)	4.00	4.02	16.3	OGI001	09/06/2022

Final pH Never pH 7
3.99

Other Parameter

Parameter	**Std.** Standard	**Ini.** Initial Reading	**Final** Final Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
SC (uS/cm)	1413.0	1400.0	1413.0	16.0	OGI1054	09/01/2021
ORP (mV)	220.0	237.7	228.0	16.3	1GC543	12/01/2021

Dissolved Oxygen (DO)

DO is saturated to Percentage
83.8

at DO Barometric pressure from meter (mmHg)
625.5

Elevation Calibrated
5400

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Project

Butte

Calibrator

- [ ] Alice Drew-Davies
- [ ] Caleb Arbaugh
- [ ] Joe Moodry
- [ ] Dalen Longfield
- [ ] Mat Erickson
- [ ] Kirsten Vose
- [ ] Tina Donovan
- [ ] Matt Kilsdonk
- [x] Michele Bay
- [ ] Nate Beinemann

Equipment
Choose the equipment being calibrated

Hach 2100P Turbidimeter

Serial
Equipment Serial Number

08070C030485

Date

05/07/2021 08:24

Note:
The confirmed reading should be what the equipment actually reads for the standard.

For 2100P, this requires completing the calibration and then running all 4 standards back through the instrument.

Turbidimeter

Standard	Confirmed Reading
0.1	0.1
20.0	20.8
100.0	101.0
800.0	787.0

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Project
Butte

Calibrator			
☐ Alice Drew-Davies	☐ Caleb Arbaugh	☐ Joe Moodry	☐ Dalen Longfield
☐ Mat Erickson	☐ Kirsten Vose	☐ Tina Donovan	☐ Matt Kilsdonk
☐ Michele Bay	☑ Nate Beinemann		

Equipment Choose the equipment being calibrated
YSI Pro Plus 1

Serial Equipment Serial Number
18G100335

Date
05/07/2021 07:39

Needed:
Minimum of two point calibration to be performed for pH:
pH 7.00 and pH 4.00 used for groundwater sampling
pH 7.00 and pH 10.00 used for surface water sampling

Specific Conductance (SC) calibration for surface water is 1413 uS/cm and for groundwater 1413 uS/cm

Geotech ORP solution 220 mV at 25 °C 232 mV at 5 °C 230 mV at 10 °C

Source Groundwater or Surface water
GW

pH Calibration Points 2 or 3-pt calibration
2

pH Calibration

Parameter	Std. Standard	Ini. Initial Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
pH (su)	7.00	7.01	17.2	OGH457	08/07/2022
pH (su)	4.00	4.07	17.1	OGI001	09/07/2022

Other Parameter

Parameter	Std. Standard	Ini. Initial Reading	Final Final Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
SC (uS/cm)	1413.0	1413.0	1416.0	16.9	OGI1054	09/07/2021
ORP (mV)	220.0	220.0	224.3	16.1	1GC543	12/07/2021

Dissolved Oxygen (DO)

DO is saturated to Percentage
81.5

at DO Barometric pressure from meter (mmHg)
618.8

Elevation Calibrated
5400

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Project
Butte

Calibrator			
☐ Alice Drew-Davies	☐ Caleb Arbaugh	☐ Joe Moodry	☐ Dalen Longfield
☐ Mat Erickson	☐ Kirsten Vose	☐ Tina Donovan	☐ Matt Kilsdonk
☑ Michele Bay	☐ Nate Beinemann		

Equipment Choose the equipment being calibrated
YSI Rental

Serial Equipment Serial Number
19B100186

Date
05/07/2021 08:25

Source Groundwater or Surface water
GW

pH Calibration Points 2 or 3-pt calibration
2

pH Calibration

Parameter	**Std.** Standard	**Ini.** Initial Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
pH (su)	7.00	7.0	17.2	OGH457	08/01/2022
pH (su)	4.00	4.0	3.99	OGI001	09/01/2022

Final pH Never pH 7
3.99

Other Parameter

Parameter	**Std.** Standard	**Ini.** Initial Reading	**Final** Final Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
SC (uS/cm)	1413.0	1416.0	1413.0	17.3	OGH457	09/01/2021
ORP (mV)	220.0	225.0	225.0	17.3	1GC543	12/01/2021

Dissolved Oxygen (DO)

DO is saturated to Percentage
81.5

at DO Barometric pressure from meter (mmHg)
619.3

Elevation Calibrated
5400

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DO is saturated to Percentage
77.1

at DO Barometric pressure from meter (mmHg)
615.9

Elevation Calibrated
5400

Additional Comments Or site notes
Changed DO probe cap and cleaned

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FALL CALIBRATION FORMS

Project
Butte

Calibrator				
☐ Alice Drew-Davies	☐ Caleb Arbaugh	☐ Joe Moodry	☑ Dalen Longfield	
☐ Mat Erickson	☐ Kirsten Vose	☐ Tina Donovan	☐ Matt Kilsdonk	
☐ Michele Bay	☐ Nate Beinemann			

Equipment Choose the equipment being calibrated
Hach 2100Q Turbidimeter

Serial Equipment Serial Number
16030C048305

Date
09/23/2021 09:47

Note:
The confirmed reading should be what the equipment actually reads for the standard.

For 2100Q, the equipment will display the actually reading as you step through calibration. A summary is also displayed at the end.

After calibrating, confirm that the 20 NTU std reads correctly by setting it into the equipment as selecting "read".

Turbidimeter

Standard	Confirmed Reading
20.0	19.8
100.0	101.0
800.0	803.0
20.0	19.9

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Project
Butte

Calibrator

- [ ] Alice Drew-Davies
- [ ] Caleb Arbaugh
- [ ] Joe Moodry
- [ ] Dalen Longfield
- [ ] Mat Erickson
- [ ] Kirsten Vose
- [ ] Tina Donovan
- [ ] Matt Kilsdonk
- [x] Michele Bay
- [ ] Nate Beinemann

Equipment Choose the equipment being calibrated
YSI Pro Plus 2

Serial Equipment Serial Number
12F100666

Date
09/23/2021 09:06

Needed:

Minimum of two point calibration to be performed for pH:
pH 7.00 and pH 4.00 used for groundwater sampling
pH 7.00 and pH 10.00 used for surface water sampling

Specific Conductance (SC) calibration for surface water is 1413 uS/cm and for groundwater 1413 uS/cm

Geotech ORP solution 220 mV at 25 °C 232 mV at 5 °C 230 mV at 10 °C

Source Groundwater or Surface water
GW

pH Calibration Points 2 or 3-pt calibration
2

pH Calibration

Parameter	Std. Standard	Ini. Initial Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
pH (su)	7.00	7.1	18.4	1GG427	07/23/2023
pH (su)	4.00	3.98	18.7	1GC1084	03/23/2023

Final pH Never pH 7
3.96

Other Parameter

Parameter	Std. Standard	Ini. Initial Reading	Final Final Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
SC (uS/cm)	1413.0	1406.0	1408.0	18.8	1GC305	03/23/2022
ORP (mV)	224.0	224.8		18.8	1GG802	04/23/2022

Dissolved Oxygen (DO)

DO is saturated to Percentage
79.2

at DO Barometric pressure from meter (mmHg)
628.3

Elevation Calibrated
5400

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Project

Butte

Calibrator

- [ ] Alice Drew-Davies
- [ ] Caleb Arbaugh
- [ ] Joe Moodry
- [x] Dalen Longfield
- [ ] Mat Erickson
- [ ] Kirsten Vose
- [ ] Tina Donovan
- [ ] Matt Kilsdonk
- [ ] Michele Bay
- [ ] Nate Beinemann

Equipment
Choose the equipment being calibrated

Hach 2100P Turbidimeter

Serial
Equipment Serial Number

08070C030485

Date

09/24/2021 09:25

Note:
The confirmed reading should be what the equipment actually reads for the standard.

For 2100P, this requires completing the calibration and then running all 4 standards back through the instrument.

Turbidimeter

Standard	Confirmed Reading
0.1	0.03
20.0	20.1
100.0	102.0
800.0	806.0

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Project
Butte

Calibrator			
☐ Alice Drew-Davies	☐ Caleb Arbaugh	☐ Joe Moodry	☐ Dalen Longfield
☐ Mat Erickson	☐ Kirsten Vose	☐ Tina Donovan	☐ Matt Kilsdonk
☑ Michele Bay	☐ Nate Beinemann		

Equipment Choose the equipment being calibrated
YSI Pro Plus 1

Serial Equipment Serial Number
18G100335

Date
09/24/2021 08:20

Needed:
Minimum of two point calibration to be performed for pH:
pH 7.00 and pH 4.00 used for groundwater sampling
pH 7.00 and pH 10.00 used for surface water sampling

Specific Conductance (SC) calibration for surface water is 1413 uS/cm and for groundwater 1413 uS/cm

Geotech ORP solution 220 mV at 25 °C 232 mV at 5 °C 230 mV at 10 °C

Source Groundwater or Surface water
GW

pH Calibration Points 2 or 3-pt calibration
2

pH Calibration

Parameter	Std. Standard	Ini. Initial Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
pH (su)	7.00	7.12	19.2	1GG427	07/24/2023
pH (su)	4.00	4.14	19.2	1GC1084	03/24/2023

Final pH Never pH 7
4.00

Other Parameter

Parameter	Std. Standard	Ini. Initial Reading	Final Final Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
SC (uS/cm)	1413.0	1385.0	1414.0	19.0	1GC035	03/24/2022
ORP (mV)	224.0	223.1	224.0	19.0	1GG802	04/24/2022

Dissolved Oxygen (DO)

DO is saturated to Percentage
93.4

at DO Barometric pressure from meter (mmHg)
627.6

Elevation Calibrated
5400

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Project
Butte

Calibrator

☐ Alice Drew-Davies ☐ Caleb Arbaugh ☐ Joe Moodry ☐ Dalen Longfield
☐ Mat Erickson ☐ Kirsten Vose ☐ Tina Donovan ☐ Matt Kilsdonk
☑ Michele Bay ☐ Nate Beinemann

Equipment Choose the equipment being calibrated
YSI Pro Plus 1

Serial Equipment Serial Number
18G100335

Date
09/27/2021 08:18

Needed:
Minimum of two point calibration to be performed for pH:
pH 7.00 and pH 4.00 used for groundwater sampling
pH 7.00 and pH 10.00 used for surface water sampling

Specific Conductance (SC) calibration for surface water is 1413 uS/cm and for groundwater 1413 uS/cm

Geotech ORP solution 220 mV at 25 °C 232 mV at 5 °C 230 mV at 10 °C

Source Groundwater or Surface water
GW

pH Calibration Points 2 or 3-pt calibration
2

pH Calibration

Parameter	Std. Standard	Ini. Initial Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
pH (su)	7.00	6.97	19.4	1GG427	07/27/2023
pH (su)	4.00	3.97	19.4	1GC1084	03/27/2023

Final pH Never pH 7
4.00

Other Parameter

Parameter	Std. Standard	Ini. Initial Reading	Final Final Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
SC (uS/cm)	1413.0	1412.0	1414.0	19.1	1GC035	03/27/2022
ORP (mV)	224.0	223.5	224.1	19.2	1GG802	04/27/2022

Dissolved Oxygen (DO)

DO is saturated to Percentage
81.2

at DO Barometric pressure from meter (mmHg)
620.1

Elevation Calibrated
5400

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Project
Butte

Equipment Choose the equipment being calibrated
YSI Pro Plus 2

Serial Equipment Serial Number
12F100666

Date
09/27/2021 09:10

Needed:
Minimum of two point calibration to be performed for pH:
pH 7.00 and pH 4.00 used for groundwater sampling
pH 7.00 and pH 10.00 used for surface water sampling

Specific Conductance (SC) calibration for surface water is 1413 uS/cm and for groundwater 1413 uS/cm

Geotech ORP solution 220 mV at 25 °C 232 mV at 5 °C 230 mV at 10 °C

Source Groundwater or Surface water
GW

pH Calibration Points 2 or 3-pt calibration
2

pH Calibration

Parameter	Std. Standard	Ini. Initial Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
pH (su)	7.00	7.04	18.7	1GG427	07/27/2023
pH (su)	4.00	4.01	18.9	1GC1084	03/27/2023

Final pH Never pH 7
4.00

Other Parameter

Parameter	Std. Standard	Ini. Initial Reading	Final Final Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
SC (uS/cm)	1413.0	1419.0	1413.0	18.5	1GC035	03/27/2022
ORP (mV)	224.0	219.0	222.0	18.4	1GG802	04/27/2022

Dissolved Oxygen (DO)

DO is saturated to Percentage
83.6

at DO Barometric pressure from meter (mmHg)
622.1

Elevation Calibrated
5400

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Project
Butte

Calibrator			
☐ Alice Drew-Davies	☐ Caleb Arbaugh	☐ Joe Moodry	☐ Dalen Longfield
☐ Mat Erickson	☐ Kirsten Vose	☐ Tina Donovan	☐ Matt Kilsdonk
☑ Michele Bay	☐ Nate Beinemann		

Equipment Choose the equipment being calibrated
YSI Pro Plus 1

Serial Equipment Serial Number
18G100335

Date
09/28/2021 08:05

Needed:
Minimum of two point calibration to be performed for pH:
pH 7.00 and pH 4.00 used for groundwater sampling
pH 7.00 and pH 10.00 used for surface water sampling

Specific Conductance (SC) calibration for surface water is 1413 uS/cm and for groundwater 1413 uS/cm

Geotech ORP solution 220 mV at 25 °C 232 mV at 5 °C 230 mV at 10 °C

Source Groundwater or Surface water
GW

pH Calibration Points 2 or 3-pt calibration
2

pH Calibration

Parameter	Std. Standard	Ini. Initial Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
pH (su)	7.00	7.01	20.0	1GG427	07/28/2023
pH (su)	4.00	4.01	19.9	1GC1084	03/28/2023

Final pH Never pH 7
4.00

Other Parameter

Parameter	Std. Standard	Ini. Initial Reading	Final Final Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
SC (uS/cm)	1413.0	1417.0	1414.0	19.4	1GC035	03/28/2022
ORP (mV)	224.0	223.7	224.1	19.3	1GG802	04/28/2022

Dissolved Oxygen (DO)

DO is saturated to Percentage
82.0

at DO Barometric pressure from meter (mmHg)
615.3

Elevation Calibrated
5400

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Project
Butte

Calibrator
☐ Alice Drew-Davies ☐ Caleb Arbaugh ☐ Joe Moodry ☑ Dalen Longfield ☐ Mat Erickson ☐ Kirsten Vose ☐ Tina Donovan ☐ Matt Kilsdonk ☐ Michele Bay ☐ Nate Beinemann

Equipment Choose the equipment being calibrated
YSI Pro Plus 2

Serial Equipment Serial Number
12F100666

Date
09/28/2021 09:07

Needed:
Minimum of two point calibration to be performed for pH:
pH 7.00 and pH 4.00 used for groundwater sampling
pH 7.00 and pH 10.00 used for surface water sampling

Specific Conductance (SC) calibration for surface water is 1413 uS/cm and for groundwater 1413 uS/cm

Geotech ORP solution 220 mV at 25 °C 232 mV at 5 °C 230 mV at 10 °C

Source Groundwater or Surface water
GW

pH Calibration Points 2 or 3-pt calibration
2

pH Calibration

Parameter	Std. Standard	Ini. Initial Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
pH (su)	7.00	7.04	19.6	1gg427	07/28/2023
pH (su)	4.00	4.03	19.4	1gc035	03/28/2022

Final pH Never pH 7
4.01

Other Parameter

Parameter	Std. Standard	Ini. Initial Reading	Final Final Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
SC (uS/cm)	1413.0	1411.0	1402.0	19.0	1gc1084	03/28/2023
ORP (mV)	224.0	223.0	222.9	19.4	1GG802	04/28/2022

Dissolved Oxygen (DO)

DO is saturated to Percentage
78.7

at DO Barometric pressure from meter (mmHg)
617.7

Elevation Calibrated
5400

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Project
Butte

Calibrator
☐ Alice Drew-Davies ☐ Caleb Arbaugh ☐ Joe Moodry ☐ Dalen Longfield ☐ Mat Erickson ☑ Kirsten Vose ☐ Tina Donovan ☐ Matt Kilsdonk ☐ Michele Bay ☐ Nate Beinemann

Equipment Choose the equipment being calibrated
YSI Pro Plus 1

Serial Equipment Serial Number
18G100335

Date
09/29/2021 07:33

Needed:
Minimum of two point calibration to be performed for pH:
pH 7.00 and pH 4.00 used for groundwater sampling
pH 7.00 and pH 10.00 used for surface water sampling

Specific Conductance (SC) calibration for surface water is 1413 uS/cm and for groundwater 1413 uS/cm

Geotech ORP solution 220 mV at 25 °C 232 mV at 5 °C 230 mV at 10 °C

Source Groundwater or Surface water
GW

pH Calibration Points 2 or 3-pt calibration
2

pH Calibration

Parameter	**Std.** Standard	**Ini.** Initial Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
pH (su)	7.00	7.03	18.4	1GG427	07/29/2023
pH (su)	4.00	3.98	18.2	1GC1084	03/29/2023

Final pH Never pH 7
4.00

Other Parameter

Parameter	**Std.** Standard	**Ini.** Initial Reading	**Final** Final Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
SC (uS/cm)	1413.0	1408.0	1414.0	18.0	1GC035	03/29/2022
ORP (mV)	225.0	226.1	225.0	18.1	1GG802	04/29/2022

Dissolved Oxygen (DO)

DO is saturated to Percentage
82.1

at DO Barometric pressure from meter (mmHg)
624.2

Elevation Calibrated
5400

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Project
Butte

Calibrator
☐ Alice Drew-Davies ☐ Caleb Arbaugh ☐ Joe Moodry ☐ Dalen Longfield ☐ Mat Erickson ☑ Kirsten Vose ☐ Tina Donovan ☐ Matt Kilsdonk ☐ Michele Bay ☐ Nate Beinemann

Equipment Choose the equipment being calibrated
YSI Pro Plus 2

Serial Equipment Serial Number
12F100666

Date
09/29/2021 06:43

Needed:
Minimum of two point calibration to be performed for pH:
pH 7.00 and pH 4.00 used for groundwater sampling
pH 7.00 and pH 10.00 used for surface water sampling

Specific Conductance (SC) calibration for surface water is 1413 uS/cm and for groundwater 1413 uS/cm

Geotech ORP solution 220 mV at 25 °C 232 mV at 5 °C 230 mV at 10 °C

Source Groundwater or Surface water
SW

pH Calibration Points 2 or 3-pt calibration
3

pH Calibration

Parameter	Std. Standard	Ini. Initial Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
pH (su)	7.00	7.04	18.1	1GG447	07/29/2023
pH (su)	4.00	4.02	18.1	1GC1084	03/29/2023
pH (su)	10.00	10.09	18.0	1GA422	01/29/2023

Final pH Never pH 7
10.09

Other Parameter

Parameter	Std. Standard	Ini. Initial Reading	Final Final Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
SC (uS/cm)	1413.0	1406.0	1413.0	17.9	1GC035	03/29/2022
ORP (mV)	224.0	226.0	223.8	18.0	1GG802	04/29/2022

Dissolved Oxygen (DO)

DO is saturated to Percentage
85.2

at DO Barometric pressure from meter (mmHg)
626.3

Elevation Calibrated
5400

Additional Comments Or site notes
Why SI is calibrated with three-point calibration so that groundwater team can use it after substrate sample collection.

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Project
Butte

Calibrator
☐ Alice Drew-Davies ☐ Caleb Arbaugh ☐ Joe Moodry ☑ Dalen Longfield ☐ Mat Erickson ☐ Kirsten Vose ☐ Tina Donovan ☐ Matt Kilsdonk ☐ Michele Bay ☐ Nate Beinemann

Equipment Choose the equipment being calibrated
YSI Pro Plus 2

Serial Equipment Serial Number
12F100666

Date
09/29/2021 08:58

Needed:
Minimum of two point calibration to be performed for pH:
pH 7.00 and pH 4.00 used for groundwater sampling
pH 7.00 and pH 10.00 used for surface water sampling

Specific Conductance (SC) calibration for surface water is 1413 uS/cm and for groundwater 1413 uS/cm

Geotech ORP solution 220 mV at 25 °C 232 mV at 5 °C 230 mV at 10 °C

Source Groundwater or Surface water
GW

pH Calibration Points 2 or 3-pt calibration
2

pH Calibration

Parameter	Std. Standard	Ini. Initial Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
pH (su)	7.00	7.04	18.1	1GG447	07/29/2023
pH (su)	4.00	4.02	18.1	1GC1084	03/29/2023

Final pH Never pH 7
4.01

Other Parameter

Parameter	Std. Standard	Ini. Initial Reading	Final Final Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
SC (uS/cm)	1413.0	1406.0	1413.0	18.0	1GC035	03/29/2022
ORP (mV)	224.0	226.0	222.0	18.0	1GG802	04/29/2022

Dissolved Oxygen (DO)

DO is saturated to Percentage
85.2

at DO Barometric pressure from meter (mmHg)
626.3

Elevation Calibrated
5400

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Project

Butte

Calibrator

- [ ] Alice Drew-Davies
- [ ] Caleb Arbaugh
- [ ] Joe Moodry
- [ ] Dalen Longfield
- [ ] Mat Erickson
- [x] Kirsten Vose
- [ ] Tina Donovan
- [ ] Matt Kilsdonk
- [ ] Michele Bay
- [ ] Nate Beinemann

Equipment
Choose the equipment being calibrated

Hach 2100P Turbidimeter

Serial
Equipment Serial Number

08070C030485

Date

09/30/2021 06:16

Note:
The confirmed reading should be what the equipment actually reads for the standard.

For 2100P, this requires completing the calibration and then running all 4 standards back through the instrument.

Turbidimeter

Standard	Confirmed Reading
0.1	0.11
20.0	20.0
100.0	102.0
800.0	803.0

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Project
Butte

Calibrator
☐ Alice Drew-Davies ☐ Caleb Arbaugh ☐ Joe Moodry ☐ Dalen Longfield ☐ Mat Erickson ☑ Kirsten Vose ☐ Tina Donovan ☐ Matt Kilsdonk ☐ Michele Bay ☐ Nate Beinemann

Equipment Choose the equipment being calibrated
YSI Pro Plus 1

Serial Equipment Serial Number
18G100335

Date
09/30/2021 09:33

Needed:
Minimum of two point calibration to be performed for pH:
pH 7.00 and pH 4.00 used for groundwater sampling
pH 7.00 and pH 10.00 used for surface water sampling

Specific Conductance (SC) calibration for surface water is 1413 uS/cm and for groundwater 1413 uS/cm

Geotech ORP solution 220 mV at 25 °C 232 mV at 5 °C 230 mV at 10 °C

Source Groundwater or Surface water
GW

pH Calibration Points 2 or 3-pt calibration
2

pH Calibration

Parameter	**Std.** Standard	**Ini.** Initial Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
pH (su)	7.00	7.04	17.3	1GG427	07/30/2023
pH (su)	4.00	4.02	17.2	1GC1084	03/30/2023

Final pH Never pH 7
4.00

Other Parameter

Parameter	**Std.** Standard	**Ini.** Initial Reading	**Final** Final Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
SC (uS/cm)	1413.0	1387.0	1418.0	17.0	1GC035	03/30/2022
ORP (mV)	225.0	227.0	225.0	17.0	1GG802	04/30/2022

Dissolved Oxygen (DO)

DO is saturated to Percentage
84.4

at DO Barometric pressure from meter (mmHg)
628.0

Elevation Calibrated
5400

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Project
Butte

Calibrator
☐ Alice Drew-Davies ☐ Caleb Arbaugh ☐ Joe Moodry ☑ Dalen Longfield ☐ Mat Erickson ☐ Kirsten Vose ☐ Tina Donovan ☐ Matt Kilsdonk ☐ Michele Bay ☐ Nate Beinemann

Equipment Choose the equipment being calibrated
YSI Pro Plus 2

Serial Equipment Serial Number
12F100666

Date
09/30/2021 09:56

Needed:
Minimum of two point calibration to be performed for pH:
pH 7.00 and pH 4.00 used for groundwater sampling
pH 7.00 and pH 10.00 used for surface water sampling

Specific Conductance (SC) calibration for surface water is 1413 uS/cm and for groundwater 1413 uS/cm

Geotech ORP solution 220 mV at 25 °C 232 mV at 5 °C 230 mV at 10 °C

Source Groundwater or Surface water
GW

pH Calibration Points 2 or 3-pt calibration
2

pH Calibration

Parameter	Std. Standard	Ini. Initial Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
pH (su)	7.00	7.1	16.0	1gg427	08/30/2023
pH (su)	4.00	4.02	16.6	1gc1084	

Final pH Never pH 7
4.02

Other Parameter

Parameter	Std. Standard	Ini. Initial Reading	Final Final Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
SC (uS/cm)	1413.0	1423.0	1427.0	16.4	1gc035	03/30/2022
ORP (mV)	225.0	229.0	228.6	16.6	1gg802	04/30/2022

Dissolved Oxygen (DO)

DO is saturated to Percentage
82.1

at DO Barometric pressure from meter (mmHg)
630.2

Elevation Calibrated
5400

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Project
Butte

Calibrator
☐ Alice Drew-Davies ☐ Caleb Arbaugh ☐ Joe Moodry ☐ Dalen Longfield ☐ Mat Erickson ☑ Kirsten Vose ☐ Tina Donovan ☐ Matt Kilsdonk ☐ Michele Bay ☐ Nate Beinemann

Equipment Choose the equipment being calibrated
YSI Pro Plus 1

Serial Equipment Serial Number
18G100335

Date
10/01/2021 08:16

Needed:
Minimum of two point calibration to be performed for pH:
pH 7.00 and pH 4.00 used for groundwater sampling
pH 7.00 and pH 10.00 used for surface water sampling

Specific Conductance (SC) calibration for surface water is 1413 uS/cm and for groundwater 1413 uS/cm

Geotech ORP solution 220 mV at 25 °C 232 mV at 5 °C 230 mV at 10 °C

Source Groundwater or Surface water
GW

pH Calibration Points 2 or 3-pt calibration
2

pH Calibration

Parameter	Std. Standard	Ini. Initial Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
pH (su)	7.00	7.02	17.8	1GG427	07/01/2023
pH (su)	4.00	3.98	17.7	1GC1084	03/01/2023

Final pH Never pH 7
4.00

Other Parameter

Parameter	Std. Standard	Ini. Initial Reading	Final Final Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
SC (uS/cm)	1413.0	1414.0	1413.0	17.6	1GC035	03/01/2022
ORP (mV)	225.0	223.6	225.1	17.7	1GG802	04/01/2022

Dissolved Oxygen (DO)

DO is saturated to Percentage
83.1

at DO Barometric pressure from meter (mmHg)
626.2

Elevation Calibrated
5400

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Project
Butte

Calibrator
☐ Alice Drew-Davies ☐ Caleb Arbaugh ☐ Joe Moodry ☑ Dalen Longfield ☐ Mat Erickson ☐ Kirsten Vose ☐ Tina Donovan ☐ Matt Kilsdonk ☐ Michele Bay ☐ Nate Beinemann

Equipment Choose the equipment being calibrated
YSI Pro Plus 2

Serial Equipment Serial Number
12F100666

Date
10/01/2021 08:50

Needed:

Minimum of two point calibration to be performed for pH:
pH 7.00 and pH 4.00 used for groundwater sampling
pH 7.00 and pH 10.00 used for surface water sampling

Specific Conductance (SC) calibration for surface water is 1413 uS/cm and for groundwater 1413 uS/cm

Geotech ORP solution 220 mV at 25 °C 232 mV at 5 °C 230 mV at 10 °C

Source Groundwater or Surface water
GW

pH Calibration Points 2 or 3-pt calibration
2

pH Calibration

Parameter	Std. Standard	Ini. Initial Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
pH (su)	7.00	7.04	17.3	1gg427	07/01/2023
pH (su)	4.00	4.04	17.0	1gc1084	03/01/2023

Final pH Never pH 7
3.99

Other Parameter

Parameter	Std. Standard	Ini. Initial Reading	Final Final Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
SC (uS/cm)	1413.0	1421.0	1416.0	16.5	1gc035	03/01/2022
ORP (mV)	225.0	243.0	233.8	16.4	1gg802	04/01/2022

Dissolved Oxygen (DO)

DO is saturated to Percentage
84.3

at DO Barometric pressure from meter (mmHg)
628.6

Elevation Calibrated
5400

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Project
Butte

Calibrator
☐ Alice Drew-Davies ☐ Caleb Arbaugh ☐ Joe Moodry ☐ Dalen Longfield ☐ Mat Erickson ☑ Kirsten Vose ☐ Tina Donovan ☐ Matt Kilsdonk ☐ Michele Bay ☐ Nate Beinemann

Equipment Choose the equipment being calibrated
YSI Pro Plus 1

Serial Equipment Serial Number
18G100335

Date
10/04/2021 08:13

Needed:
Minimum of two point calibration to be performed for pH:
pH 7.00 and pH 4.00 used for groundwater sampling
pH 7.00 and pH 10.00 used for surface water sampling

Specific Conductance (SC) calibration for surface water is 1413 uS/cm and for groundwater 1413 uS/cm

Geotech ORP solution 220 mV at 25 °C 232 mV at 5 °C 230 mV at 10 °C

Source Groundwater or Surface water
GW

pH Calibration Points 2 or 3-pt calibration
2

pH Calibration

Parameter	**Std.** Standard	**Ini.** Initial Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
pH (su)	7.00	7.05	17.7	1GG427	07/04/2023
pH (su)	4.00	4.03	17.9	1GC1084	03/04/2023

Final pH Never pH 7
4.00

Other Parameter

Parameter	**Std.** Standard	**Ini.** Initial Reading	**Final** Final Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
SC (uS/cm)	1413.0	1416.0	1413.0	17.5	1GC035	03/04/2022
ORP (mV)	225.0	224.4	225.0	17.8	1GG802	04/04/2022

Dissolved Oxygen (DO)

DO is saturated to Percentage
81.2

at DO Barometric pressure from meter (mmHg)
624.2

Elevation Calibrated
5400

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Project
Butte

Calibrator
☐ Alice Drew-Davies ☐ Caleb Arbaugh ☐ Joe Moodry ☐ Dalen Longfield ☐ Mat Erickson ☑ Kirsten Vose ☐ Tina Donovan ☐ Matt Kilsdonk ☐ Michele Bay ☐ Nate Beinemann

Equipment Choose the equipment being calibrated
YSI Pro Plus 1

Serial Equipment Serial Number
18G100335

Date
10/05/2021 08:19

Needed:
Minimum of two point calibration to be performed for pH:
pH 7.00 and pH 4.00 used for groundwater sampling
pH 7.00 and pH 10.00 used for surface water sampling

Specific Conductance (SC) calibration for surface water is 1413 uS/cm and for groundwater 1413 uS/cm

Geotech ORP solution 220 mV at 25 °C 232 mV at 5 °C 230 mV at 10 °C

Source Groundwater or Surface water
GW

pH Calibration Points 2 or 3-pt calibration
2

pH Calibration

Parameter	**Std.** Standard	**Ini.** Initial Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
pH (su)	7.00	7.03	19.0	1GG427	07/05/2023
pH (su)	4.00	3.99	18.8	1GC1084	03/05/2023

Final pH Never pH 7
4.00

Other Parameter

Parameter	**Std.** Standard	**Ini.** Initial Reading	**Final** Final Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
SC (uS/cm)	1413.0	1411.0	1415.0	18.3	1GH317	08/05/2022
ORP (mV)	224.0	223.6	224.0	18.7	1GG802	04/05/2022

Dissolved Oxygen (DO)

DO is saturated to Percentage
82.6

at DO Barometric pressure from meter (mmHg)
622.3

Elevation Calibrated
5400

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Project

Butte

Calibrator

☐ Alice Drew-Davies ☐ Caleb Arbaugh ☐ Joe Moodry ☑ Dalen Longfield
☐ Mat Erickson ☐ Kirsten Vose ☐ Tina Donovan ☐ Matt Kilsdonk
☐ Michele Bay ☐ Nate Beinemann

Equipment
Choose the equipment being calibrated

YSI Pro Plus 2

Serial
Equipment Serial Number

12F100666

Date

10/05/2021 09:00

Needed:
Minimum of two point calibration to be performed for pH:
pH 7.00 and pH 4.00 used for groundwater sampling
pH 7.00 and pH 10.00 used for surface water sampling

Specific Conductance (SC) calibration for surface water is 1413 uS/cm and for groundwater 1413 uS/cm

Geotech ORP solution 220 mV at 25 °C 232 mV at 5 °C 230 mV at 10 °C

Source
Groundwater or Surface water

GW

pH Calibration Points
2 or 3-pt calibration

2

pH Calibration

Parameter	**Std.** Standard	**Ini.** Initial Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
pH (su)	7.00	7.03	16.8	1gg427	07/05/2023
pH (su)	4.00	4.0	17.2	1gc1084	10/05/2021

Final pH
Never pH 7

4.00

Other Parameter

Parameter	**Std.** Standard	**Ini.** Initial Reading	**Final** Final Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
SC (uS/cm)	1413.0	1428.0	1430.0	16.7	1gc035	03/05/2022
ORP (mV)					1gg802	04/05/2022

Dissolved Oxygen (DO)

DO is saturated to Percentage
81.6

at DO Barometric pressure from meter (mmHg)
626.4

Elevation Calibrated
5400

Additional Comments Or site notes
These calibrations were done on 10/4/21

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Project

Butte

Calibrator

☐ Alice Drew-Davies ☐ Caleb Arbaugh ☐ Joe Moodry ☑ Dalen Longfield
☐ Mat Erickson ☐ Kirsten Vose ☐ Tina Donovan ☐ Matt Kilsdonk
☐ Michele Bay ☐ Nate Beinemann

Equipment
Choose the equipment being calibrated

YSI Pro Plus 2

Serial
Equipment Serial Number

12F100666

Date

10/05/2021 09:17

Needed:
Minimum of two point calibration to be performed for pH:
pH 7.00 and pH 4.00 used for groundwater sampling
pH 7.00 and pH 10.00 used for surface water sampling

Specific Conductance (SC) calibration for surface water is 1413 uS/cm and for groundwater 1413 uS/cm

Geotech ORP solution 220 mV at 25 °C 232 mV at 5 °C 230 mV at 10 °C

Source
Groundwater or Surface water

GW

pH Calibration Points
2 or 3-pt calibration

2

pH Calibration

Parameter	**Std.** Standard	**Ini.** Initial Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
pH (su)	7.00	7.04	18.6	1gg427	07/05/2023
pH (su)	4.00	4.02	18.2	1gc1084	03/05/2023

Final pH
Never pH 7

4.03

Other Parameter

Parameter	**Std.** Standard	**Ini.** Initial Reading	**Final** Final Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
SC (uS/cm)	1413.0	1385.0	1414.0	18.3	1gh317	08/05/2022
ORP (mV)	220.0	225.2	219.7	18.2	1gg802	04/05/2022

Dissolved Oxygen (DO)

DO is saturated to Percentage
77.3

at DO Barometric pressure from meter (mmHg)
631.7

Elevation Calibrated
5400

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Project
Butte

Calibrator
☐ Alice Drew-Davies ☐ Caleb Arbaugh ☐ Joe Moodry ☐ Dalen Longfield ☐ Mat Erickson ☑ Kirsten Vose ☐ Tina Donovan ☐ Matt Kilsdonk ☐ Michele Bay ☐ Nate Beinemann

Equipment Choose the equipment being calibrated
YSI Pro Plus 1

Serial Equipment Serial Number
18G100335

Date
10/06/2021 09:42

Needed:
Minimum of two point calibration to be performed for pH:
pH 7.00 and pH 4.00 used for groundwater sampling
pH 7.00 and pH 10.00 used for surface water sampling

Specific Conductance (SC) calibration for surface water is 1413 uS/cm and for groundwater 1413 uS/cm

Geotech ORP solution 220 mV at 25 °C 232 mV at 5 °C 230 mV at 10 °C

Source Groundwater or Surface water
GW

pH Calibration Points 2 or 3-pt calibration
2

pH Calibration

Parameter	**Std.** Standard	**Ini.** Initial Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
pH (su)	7.00	7.03	19.2	1GG427	07/06/2023
pH (su)	4.00	4.01	19.2	1GC1084	03/06/2023

Final pH Never pH 7
4.00

Other Parameter

Parameter	**Std.** Standard	**Ini.** Initial Reading	**Final** Final Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
SC (uS/cm)	1413.0	1389.0	1413.0	19.3	1GH317	08/06/2022
ORP (mV)	224.0	223.6	223.9	19.3	1GG802	04/06/2022

Dissolved Oxygen (DO)

DO is saturated to Percentage
81.0

at DO Barometric pressure from meter (mmHg)
619.8

Elevation Calibrated
5400

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Project

Butte

Calibrator

☐ Alice Drew-Davies ☐ Caleb Arbaugh ☐ Joe Moodry ☐ Dalen Longfield
☐ Mat Erickson ☑ Kirsten Vose ☐ Tina Donovan ☐ Matt Kilsdonk
☐ Michele Bay ☐ Nate Beinemann

Equipment
Choose the equipment being calibrated

YSI Pro Plus 1

Serial
Equipment Serial Number

18G100335

Date

10/07/2021 11:23

Needed:
Minimum of two point calibration to be performed for pH:
pH 7.00 and pH 4.00 used for groundwater sampling
pH 7.00 and pH 10.00 used for surface water sampling

Specific Conductance (SC) calibration for surface water is 1413 uS/cm and for groundwater 1413 uS/cm

Geotech ORP solution 220 mV at 25 °C 232 mV at 5 °C 230 mV at 10 °C

Source
Groundwater or Surface water

SW

pH Calibration Points
2 or 3-pt calibration

3

pH Calibration

Parameter	**Std.** Standard	**Ini.** Initial Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
pH (su)	7.00	7.03	18.4	1GG427	07/07/2023
pH (su)	4.00	4.0	18.8	1GG441	07/07/2023
pH (su)	10.00	10.06	18.0	1GA422	01/07/2023

Final pH
Never pH 7

10.03

Other Parameter

Parameter	**Std.** Standard	**Ini.** Initial Reading	**Final** Final Reading	**°C** Temperature °C	**Lot#** Lot Number	**Exp** Expiration
SC (uS/cm)						
ORP (mV)						

Dissolved Oxygen (DO)

Elevation Calibrated
5400

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Project
Butte

Calibrator			
☐ Alice Drew-Davies	☐ Caleb Arbaugh	☐ Joe Moodry	☐ Dalen Longfield
☐ Mat Erickson	☑ Kirsten Vose	☐ Tina Donovan	☐ Matt Kilsdonk
☐ Michele Bay	☐ Nate Beinemann		

Equipment Choose the equipment being calibrated
YSI Pro Plus 1

Serial Equipment Serial Number
18G100335

Date
10/07/2021 08:35

Needed:
Minimum of two point calibration to be performed for pH:
pH 7.00 and pH 4.00 used for groundwater sampling
pH 7.00 and pH 10.00 used for surface water sampling

Specific Conductance (SC) calibration for surface water is 1413 uS/cm and for groundwater 1413 uS/cm

Geotech ORP solution 220 mV at 25 °C 232 mV at 5 °C 230 mV at 10 °C

Source Groundwater or Surface water
GW

pH Calibration Points 2 or 3-pt calibration
2

pH Calibration

Parameter	Std. Standard	Ini. Initial Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
pH (su)	7.00	7.02	19.0	1GG427	07/07/2023
pH (su)	4.00	3.99	18.6	1GC1084	03/07/2023

Final pH Never pH 7
4.00

Other Parameter

Parameter	Std. Standard	Ini. Initial Reading	Final Final Reading	°C Temperature °C	Lot# Lot Number	Exp Expiration
SC (uS/cm)	1413.0	1419.0	1414.0	19.1	1GH317	08/07/2022
ORP (mV)	224.0	223.7	224.0	19.0	1GG802	04/07/2022

Dissolved Oxygen (DO)

DO is saturated to Percentage
82.4

at DO Barometric pressure from meter (mmHg)
622.3

Elevation Calibrated
5400

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SPRING FIELD FORMS

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**AMC-12**	**Sketch**	No
Date	5/4/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	14:00	MDT	Mostly Cloudy	50	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*49.0*	*6*	23.99	25.01	110.23	36.50

	Time	DTW (ft)				
Start Purging	14:10	23.99			**Purge Rate (GPM)**	1.0
Grab Sample	15:40		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	15:42	24.49			**Total Purge Volume (gal)**	118.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0087-050421	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
14:11	1.0	10.6	9.2	1046.0	6.4	100.3	
14:21	11.0	10.2	3.2	1027.0	6.5	79.9	
14:32	22.0	9.9	2.9	1050.0	6.4	78.5	
14:42	32.0	9.3	2.8	1291.0	5.8	94.7	
14:50	40.0	9.7	.2	1281.0	5.8	108.4	
15:00	55.0	9.2	.1	1287.0	5.7	93.1	
15:10	70.0	9.2	.1	1287.0	5.7	91.4	
15:20	85.0	9.3	.2	1290.0	5.7	91.6	
15:30	100.0	9.1	.1	1296.0	5.6	92.5	
15:40	115.0	9.2	.1	1299.0	5.6	93.0	
15:30							

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**AMC-13**	**Sketch**	No
Date	4/22/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Joel Arbaugh,Other Staff	11:06	MDT	Mostly Cloudy	39	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*57.7*	*6*	21.33	36.37	160.30	39.52

	Time	DTW (ft)				
Start Purging	11:20	21.33			**Purge Rate (GPM)**	2.0
Grab Sample	13:46		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	13:47	31.57			**Total Purge Volume (gal)**	163.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0002-042221	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
11:21	2.0	9.0	2.0	416.5	8.5	-268.0	
11:41	25.0	9.0	.4	415.5	8.6	-318.5	
12:01	38.0	9.0	.9	415.6	8.7	-316.9	
12:21	78.0	9.1	.4	487.0	7.7	-203.9	
12:41	95.0	9.4	1.2	571.3	6.8	-98.7	
13:01	117.0	9.4	.9	583.8	6.6	-80.9	
13:06	127.0	9.4	.7	583.5	6.6	-82.9	
13:20	137.0	9.4	.7	583.6	6.6	-70.2	
13:30	147.0	9.7	.5	583.8	6.6	-77.7	
13:40	157.0	9.8	.6	584.8	6.6	-78.6	
13:45	162.0	9.9	.5	585.0	6.6	-79.6	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Purge rate had many fluctuations see logbook GW#7 page 68 for details

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**AMC-23B**	**Sketch**	No
Date	5/3/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Other Staff	9:47	MDT	Partly Cloudy	34	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*137.0*	*2*	7.13	129.87	63.60	72.07

	Time	DTW (ft)				
Start Purging	10:12	7.13			**Purge Rate (GPM)**	2.0
Grab Sample	11:54		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	11:56	94.45			**Total Purge Volume (gal)**	65.8

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0079-050321	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:13	2.0	9.2	5.3	1225.0	6.8	439.8	
10:16	8.0	8.9	3.6	1229.0	6.8	445.1	
10:20	15.0	8.4	2.5	1228.0	6.8	446.9	
10:24	18.5	9.2	2.4	1222.0	6.8	444.3	
10:28	19.5	9.7	2.8	1228.0	6.8	444.5	
10:32	23.5	9.7	2.1	1225.0	6.8	443.0	
10:36	27.5	9.9	2.0	1235.0	6.8	441.4	
10:40	29.5	9.9	1.9	1238.0	6.8	441.3	
10:44	31.5	10.0	1.9	1246.0	6.8	439.5	
10:56	37.5	10.2	1.8	1249.0	6.8	435.9	
11:08	43.5	10.3	1.9	1252.0	6.8	432.3	
11:22	50.5	10.3	1.8	1251.0	6.8	427.6	
11:34	56.5	10.4	1.8	1251.0	6.8	424.2	
11:46	62.5	10.4	1.9	1252.0	6.8	418.6	
11:50	63.8	10.3	1.9	1252.0	6.8	418.3	
11:54	65.1	10.3	1.6	1252.0	6.8	417.5	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample unable to be filtered at well due to low flow. Unfiltered sample taken back to lab to be filtered with GroPump

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**AMC-24**	**Sketch**	No
Date	4/27/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Other Staff	10:04	MDT	Sunny	38	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
Peristaltic	*28.0*	*6*	10.76	17.24	75.98	19.38

	Time	DTW (ft)				
Start Purging	10:17	10.76			**Purge Rate (GPM)**	.8
Grab Sample	11:52		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Turbid
Stop Purging (DTW just prior)	11:52	23.35			**Total Purge Volume (gal)**	40.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0010-042721	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:19	1.6	8.2	.5	607.8	6.7	-19.2	
10:29	9.6	8.0	.4	608.0	6.7	47.3	
10:39	17.6	8.0	.7	605.9	6.7	-47.5	
10:49	24.1	8.5	1.6	595.3	6.7	-27.0	
10:59	28.1	8.8	2.9	591.8	6.7	-17.6	
11:09	30.6	9.3	2.9	590.8	6.7	-11.5	
11:19	32.1	9.2	3.4	593.5	6.7	-14.7	
11:29	34.6	9.2	6.0	591.4	6.7	-10.3	
11:39	37.1	10.6	4.6	592.7	6.7	-17.8	
11:52	40.0	12.6	4.1	598.7	6.7	-22.2	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Well pumped dry 26april21 at approx 35 gal. Pump truck in the vicinity drawing from well on the 26th. Returned on the 27th, pumped 40 gallons and sampled.

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**AMC-24B**	**Sketch**	No
Date	4/26/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Other Staff	11:29	MDT	Partly Cloudy	41	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
Peristaltic	*51.9*	*2*	10.25	41.65	20.40	31.08

	Time	DTW (ft)				
Start Purging	11:50	10.25			**Purge Rate (GPM)**	.3
Grab Sample	13:41		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	13:41	10.27			**Total Purge Volume (gal)**	22.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0009-042621	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
11:54	1.0	9.5	2.9	1154.0	6.5	240.6	
12:06	3.0	9.5	2.6	1246.0	6.5	230.7	
12:17	5.0	9.2	2.1	1272.0	6.5	228.4	
12:28	7.0	9.3	2.1	1276.0	6.4	224.0	
12:40	9.0	9.6	1.9	1283.0	6.5	218.8	
12:55	12.0	9.5	2.0	1288.0	6.4	224.4	
13:05	14.0	9.5	2.4	1293.0	6.4	224.5	
13:15	16.0	9.2	2.2	1288.0	6.4	222.8	
13:20	17.0	9.2	2.5	1300.0	6.5	224.5	
13:25	18.0	9.4	2.3	1300.0	6.4	223.6	
13:30	19.0	9.3	2.2	1296.0	6.4	223.1	
13:35	20.0	9.5	2.4	1288.0	6.4	221.2	
13:40	21.0	9.5	2.3	1288.0	6.4	219.7	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**AMC-24C**	**Sketch**	No
Date	4/27/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Other Staff	11:41	MDT	Sunny	46	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*82.3*	*2*	8.86	73.44	35.96	45.58

	Time	DTW (ft)				
Start Purging	12:12	8.86			**Purge Rate (GPM)**	2.0
Grab Sample	12:31		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	12:32	10.69			**Total Purge Volume (gal)**	38.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0011-042721	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
12:14	4.0	9.5	1.2	1115.0	6.5	170.7	
12:16	8.0	9.6	1.1	1117.0	6.5	176.0	
12:18	12.0	9.7	1.0	1119.0	6.5	175.6	
12:20	16.0	9.7	1.0	1118.0	6.5	175.0	
12:22	20.0	9.7	1.0	1116.0	6.5	174.6	
12:24	24.0	9.7	1.0	1116.0	6.5	174.3	
12:26	28.0	9.7	1.0	1113.0	6.5	174.2	
12:28	32.0	9.7	1.5	1113.0	6.5	174.2	
12:30	36.0	9.7	1.2	1119.0	6.5	173.9	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**AMW-01A**	**Sketch**	No
Date	5/4/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Other Staff	9:47	MDT	Mostly Cloudy	43	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*14.0*	*4*	12.39	1.61	3.15	13.20

	Time	DTW (ft)				
Start Purging	10:03	12.39			**Purge Rate (GPM)**	.3
Grab Sample			**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	
Stop Purging (DTW just prior)					**Total Purge Volume (gal)**	

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0088-050621	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:08	.3	9.4	3.0	1192.0	6.4	320.2	

Stabilization reached?	No

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	
SOP Deviation	
Additional remarks	Due to dewatering activities in the area of the parrot tailings Well was dry, unable to sample at this time

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**AMW-01B**	**Sketch**	No
Date	5/7/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
	10:55	MDT	Mostly Cloudy	55	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*45.0*	*4*	12.15	32.85	64.35	28.58

	Time	DTW (ft)				
Start Purging	11:11	12.15			**Purge Rate (GPM)**	2.0
Grab Sample	11:45		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	11:48	12.31			**Total Purge Volume (gal)**	70.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0121-050721	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
11:12	2.0	13.1	4.8	2508.0	5.9	156.8	1.9
11:17	12.0	12.0	.3	3915.0	4.3	157.2	.8
11:22	22.0	12.0	.2	3918.0	4.2	155.7	.7
11:27	32.0	12.0	.2	3916.0	4.2	154.6	.3
11:32	42.0	12.1	.1	3908.0	4.2	157.5	.1
11:37	52.0	12.0	.1	3909.0	4.2	158.0	.1
11:42	62.0	12.0	.1	3916.0	4.2	157.8	.0
11:44	66.0	12.0	.2	3915.0	4.2	157.8	.2

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Extra samples taken for PTS. Alk, TDS, SO4-,Cl-, diss metals, and turbidity field readings. Diss metals taken at 11:46

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**AMW-01C**	**Sketch**	No
Date	5/4/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Other Staff	12:57	MDT	Overcast	43	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*115.0*	*4*	11.88	103.12	202.00	63.44

	Time	DTW (ft)				
Start Purging	13:08	11.88			**Purge Rate (GPM)**	22.0
Grab Sample	14:51		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	14:52	16.12			**Total Purge Volume (gal)**	218.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0093-050421	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
13:10	4.0	12.0	5.3	2785.0	5.5	243.8	
13:25	34.0	11.5	.2	2816.0	5.5	242.2	
13:40	64.0	11.4	.2	2854.6	5.5	246.4	
13:50	94.0	11.4	.1	2840.0	5.5	249.6	
14:05	124.0	11.4	.1	2834.0	5.5	253.7	
14:20	154.0	11.4	.1	2838.0	5.5	257.4	
14:35	184.0	11.4	.1	2844.0	5.5	259.6	
14:50	214.0	11.5	.1	2849.0	5.5	261.1	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**AMW-02**	**Sketch**	No
Date	4/27/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	9:37	MDT	Sunny	26	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
Peristaltic	*23.1*	*4*	10.25	12.85	25.17	16.68

	Time	DTW (ft)				
Start Purging	10:21	10.25			**Purge Rate (GPM)**	.5
Grab Sample	11:23		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	tart and at time c
Stop Purging (DTW just prior)	11:25	16.91			**Total Purge Volume (gal)**	31.5

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0032-042721	1	FG-N	250	Yes	HNO3	Dissolved metals
GW0033-042721	1	FG-D	250	Yes	HNO3	Dissolved metals
GW0034-042721	1	ECB/FB	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:26	2.5	7.4	6.6	1289.0	7.1	47.3	
10:31	5.0	7.2	6.0	1482.0	7.0	38.3	
10:39	9.0	7.3	4.7	1648.0	7.0	39.5	
10:46	12.5	7.5	9.6	1646.0	7.0	39.8	
10:51	15.0	7.6	16.9	1616.0	7.0	40.3	
10:56	17.5	7.6	17.2	1656.0	7.0	40.2	
11:02	20.0	7.6	17.4	1604.0	7.0	40.1	
11:07	22.5	7.6	11.4	1603.0	7.0	39.8	
11:12	25.0	7.7	8.9	1570.0	7.0	39.7	
11:17	27.5	7.7	8.0	1571.0	7.0	39.3	
11:22	30.0	7.7	8.1	1572.0	7.0	39.3	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**AMW-08**	**Sketch**	No
Date	5/7/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Other Staff	10:01	MDT	Mostly Cloudy	55	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*46.0*	*4*	39.68	6.32	12.38	42.84

	Time	DTW (ft)				
Start Purging	10:56	39.68			**Purge Rate (GPM)**	1.0
Grab Sample	11:18		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	11:21	42.40			**Total Purge Volume (gal)**	22.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0122-050721	1	FG-N	250	Yes	HNO3	Dissolved metals
GW0123-050721	1	FG-D	250	Yes	HNO3	Dissolved metals
GW0124-050721	1	ECB/FB	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:57	1.0	11.6	4.2	6175.0	4.4	269.7	
10:58	2.0	10.8	3.1	6377.0	4.4	269.2	
10:59	3.0	10.9	2.4	6427.0	4.4	267.6	
11:01	5.0	11.0	1.6	6414.0	4.4	264.7	
11:03	7.0	10.8	1.3	6403.0	4.4	261.4	
11:05	9.0	10.9	1.1	6434.0	4.5	256.0	
11:06	10.0	11.0	1.1	6425.0	4.5	254.8	
11:07	11.0	11.0	1.2	6411.0	4.6	254.1	
11:08	12.0	11.1	1.1	6393.0	4.6	252.9	
11:09	13.0	11.0	1.1	6376.0	4.6	252.0	
11:10	14.0	11.1	1.1	6365.0	4.6	251.3	
11:11	15.0	11.1	1.1	6354.0	4.6	250.1	
11:12	16.0	11.1	1.1	6339.0	4.6	249.2	
11:13	17.0	11.0	1.1	6316.0	4.6	248.8	
11:15	19.0	11.0	1.1	6309.0	4.6	247.9	
11:16	20.0	11.1	1.0	6309.0	4.6	247.0	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Blank time=12:16

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**AMW-12**	**Sketch**	No
Date	4/22/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Joel Arbaugh,Other Staff	9:54	MDT	Overcast	34	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*24.5*	*4*	13.59	10.91	21.37	19.05

	Time	DTW (ft)				
Start Purging	10:25	13.59			**Purge Rate (GPM)**	2.0
Grab Sample	10:40		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	10:41	20.45			**Total Purge Volume (gal)**	25.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0001-042221	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:25	2.0	7.7	9.9	592.7	8.1	214.4	
10:27	6.0	7.6	6.7	608.0	7.5	202.9	
10:29	10.0	7.5	5.8	637.8	7.4	216.5	
10:30	12.0	7.6	5.6	622.1	7.3	215.9	
10:31	14.0	7.7	5.6	621.6	7.3	212.8	
10:32	16.0	7.8	5.7	614.2	7.3	209.4	
10:34	18.0	8.0	6.7	561.6	7.4	202.6	
10:36	20.0	8.1	5.4	572.2	7.3	199.3	
10:37	21.0	8.1	5.6	563.1	7.4	197.9	
10:38	22.0	8.1	5.7	554.1	7.4	196.8	
10:39	23.0	8.2	5.7	550.1	7.4	196.0	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site AMW-13 **Sketch** No

Date 5/5/2021 **Photographs** No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Other Staff	13:28	MDT	Partly Cloudy	55	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
Peristaltic	*16.8*	*4*	11.30	5.50	10.77	14.05

	Time	DTW (ft)				
Start Purging	13:38	11.30			**Purge Rate (GPM)**	.3
Grab Sample	14:45		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	14:46	16.70			**Total Purge Volume (gal)**	13.3

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0095-050521	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
13:40	.5	7.8	2.9	1709.0	6.8	350.4	
13:44	1.5	7.8	.9	1741.0	6.8	305.2	
13:48	2.5	7.8	.7	1776.0	6.8	271.4	
13:52	3.5	7.8	.5	1839.0	6.8	242.5	
13:56	4.5	7.8	.5	1861.0	6.8	211.8	
14:00	5.5	7.9	.5	1847.0	6.8	191.2	
14:04	6.5	8.1	.5	1637.0	6.8	173.2	
14:08	7.5	8.1	.5	1547.0	6.8	160.6	
14:16	9.5	8.3	1.1	1667.0	6.8	135.7	
14:18	9.9	8.4	.9	1382.0	6.9	126.6	
14:21	10.5	8.8	2.4	1561.0	7.0	121.1	
14:25	10.9	8.7	3.0	1712.0	6.8	117.2	
14:33	11.7	8.5	2.3	1851.0	6.8	93.6	
14:37	12.4	8.5	2.3	1878.0	6.8	83.3	
14:39	12.6	8.6	2.3	1886.0	6.8	78.4	
14:40	12.7	8.6	2.3	1892.0	6.7	75.1	
14:42	12.9	8.6	2.2	1898.0	6.8	67.7	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**AMW-13B**	**Sketch**	No
Date	5/5/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Other Staff	14:55	MDT	Partly Cloudy	58	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*40.0*	*2*	10.41	29.59	14.49	25.21

	Time	DTW (ft)				
Start Purging	15:06	10.41			**Purge Rate (GPM)**	2.0
Grab Sample	15:18		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	15:21	10.45			**Total Purge Volume (gal)**	25.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0096-050521	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
15:06	1.0	10.2	5.2	297.0	7.6	159.2	18.4
15:08	3.0	9.8	3.0	295.6	7.4	162.5	9.8
15:09	5.0	9.8	2.6	295.1	7.4	163.4	3.4
15:10	7.0	9.8	2.4	294.9	7.4	164.5	2.6
15:12	9.0	9.7	2.3	294.9	7.4	165.7	1.9
15:13	11.0	9.8	2.2	294.7	7.4	166.9	1.1
15:14	13.0	9.7	2.2	294.8	7.4	168.6	1.3
15:15	15.0	9.7	2.2	294.5	7.4	170.2	1.7
15:17	17.0	9.8	2.1	294.3	7.4	171.6	.9

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	One raw bottle for PTS 1 filtered HN03 for pts

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site AMW-13B2 **Sketch** No

Date 5/5/2021 **Photographs** No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Other Staff	15:32	MDT	Partly Cloudy	58	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*49.0*	*2*	11.56	37.44	18.33	30.28

	Time	DTW (ft)				
Start Purging	15:37	11.56			**Purge Rate (GPM)**	2.0
Grab Sample	15:49		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	15:52	11.84			**Total Purge Volume (gal)**	28.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0097-050521	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
15:38	2.0	9.8	6.4	303.4	7.4	208.2	1.2
15:40	4.0	9.8	4.8	304.7	7.3	208.2	.9
15:41	6.0	9.8	3.3	306.2	7.4	207.8	.4
15:42	8.0	9.8	2.7	306.9	7.4	207.5	.6
15:43	10.0	9.8	2.5	307.4	7.4	207.6	.1
15:44	12.0	9.8	2.4	307.7	7.4	207.8	.2
15:45	14.0	9.8	2.4	307.9	7.4	208.1	.7
15:46	16.0	9.8	2.3	308.3	7.4	208.3	.2
15:47	18.0	9.8	2.2	308.4	7.4	208.7	.0
15:48	20.0	9.8	2.2	308.8	7.4	209.1	.1

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Collected one raw 1 L bottle and one filtered HNO3, for pts

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**AMW-13C**	**Sketch**	No
Date	5/5/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
	15:55	MDT	Sunny	60	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*82.0*	*2*	9.52	72.48	35.49	45.76

	Time	DTW (ft)				
Start Purging	16:11	9.52			**Purge Rate (GPM)**	2.0
Grab Sample	16:31		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	16:33	11.25			**Total Purge Volume (gal)**	44.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0098-050521	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
16:12	2.0	9.9	4.4	643.8	6.9	256.6	.1
16:14	6.0	10.0	1.8	645.6	6.9	255.2	.8
16:16	10.0	10.1	1.1	643.1	6.9	253.0	1.7
16:18	14.0	10.1	1.0	643.4	6.8	251.6	.7
16:20	18.0	10.1	.9	643.4	6.8	250.5	.4
16:22	22.0	10.1	.9	643.8	6.8	249.7	.5
16:24	26.0	10.1	.8	643.1	6.9	249.0	.2
16:26	30.0	10.1	.8	643.7	6.8	248.4	.2
16:28	34.0	10.1	.8	643.3	6.8	247.9	.3
16:30	38.0	10.1	.8	644.3	6.8	247.5	.1

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Filled 1 liter raw and 250ml hno3 for pts

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**AMW-20**	**Sketch**	No
Date	4/30/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Other Staff	10:26	MDT	Sunny	64	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
	42.0	*4*	29.56	12.44	24.37	35.78

	Time	DTW (ft)				
Start Purging	10:42	29.56			**Purge Rate (GPM)**	1.0
Grab Sample	11:17		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	11:17				**Total Purge Volume (gal)**	22.3

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0078-043021	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:42	3.0	10.3	.3	1735.0	4.4	529.0	
10:50	11.0	9.8	1.8	1831.0	4.6	517.0	
10:55	16.0	9.8	3.0	1903.0	4.6	468.0	
10:56	17.0						
11:10							
11:12	18.5	10.1	1.0	1946.0	4.6	453.0	
11:17	22.3	9.9	1.1	1963.0	4.6	444.0	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	MBMG sampled well. Well pumped dry at 10:56 restarted at 11:10, finished at 11:17. Purge rate started at 1 gpm, ended at .75 gpm.

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BMW-03A**	**Sketch**	No
Date	5/3/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Other Staff	14:11	MDT	Sunny	50	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
Peristaltic	*19.0*	*4*	3.98	15.02	29.42	11.49

	Time	DTW (ft)				
Start Purging	14:25	3.98			**Purge Rate (GPM)**	.4
Grab Sample	15:55		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	15:56	6.56			**Total Purge Volume (gal)**	30.5

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0094-050321	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
14:28	1.0	3.5	4.5	773.6	6.6	161.3	
14:34	3.0	3.7	1.1	783.8	6.7	116.7	
14:40	5.0	3.7	.7	780.6	6.7	82.1	
14:46	7.0	3.9	.6	780.3	6.7	49.8	
14:52	9.0	4.0	.6	779.5	6.7	27.0	
14:58	11.0	4.1	.5	779.5	6.7	8.0	
15:04	13.0	4.2	.5	774.9	6.7	-1.4	
15:10	15.0	4.2	.4	776.9	6.6	-11.4	
15:16	17.0	4.3	.4	776.4	6.6	-15.8	
15:22	19.0	4.2	.4	776.4	6.7	-19.7	
15:28	21.0	4.2	.4	777.3	6.7	-23.0	
15:34	23.0	4.3	.4	778.3	6.6	-26.7	
15:40	25.0	4.3	.4	777.3	6.7	-28.2	
15:46	27.0	4.3	.3	774.3	6.6	-33.3	
15:52	29.0	4.3	.3	772.1	6.6	-34.6	
15:55	30.0	4.3	.4	776.8	6.7	-34.6	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BMW-03B**	**Sketch**	No
Date	4/22/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	14:15	MDT	Mostly Cloudy	35	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
	47.8	*4*	3.92	43.88	85.95	25.86

	Time	DTW (ft)				
Start Purging	15:00	3.92			**Purge Rate (GPM)**	2.0
Grab Sample	15:47		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	ɔid at start, clear a
Stop Purging (DTW just prior)	15:48	6.12			**Total Purge Volume (gal)**	96.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0027-042221	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
15:02	4.0	6.7	1.0	2489.0	6.6	82.2	
15:07	14.0	7.3	.4	2524.0	6.7	76.6	
15:12	24.0	7.4	.2	2526.0	6.7	73.0	
15:26	52.0	7.4	.2	2531.0	6.7	67.8	
15:31	62.0	7.6	.6	2531.0	6.7	66.5	
15:36	72.0	7.4	.2	2532.0	6.7	65.5	
15:41	82.0	7.4	.2	2531.0	6.7	64.4	
15:44	88.0	7.4	.2	2532.0	6.7	63.6	
15:45	90.0	7.4	.2	2532.0	6.7	63.4	
15:46	92.0	7.4	.2	2532.0	6.7	63.4	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS07-01A**	**Sketch**	No
Date	5/6/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Other Staff	10:50	MDT	Sunny	55	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*23.0*	*2*	19.45	3.55	1.74	21.23

	Time	DTW (ft)				
Start Purging	11:11	19.45			**Purge Rate (GPM)**	2.0
Grab Sample	11:18		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	11:19				**Total Purge Volume (gal)**	14.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0099-050621	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
11:12	2.0	9.0	9.4	533.5	7.4	276.4	
11:13	4.0	8.9	8.4	530.1	7.4	275.8	
11:14	6.0	8.9	8.0	526.6	7.4	275.3	
11:15	8.0	8.9	7.9	524.7	7.4	275.1	
11:16	10.0	9.0	7.7	522.1	7.4	274.9	
11:17	12.0	9.0	7.6	521.9	7.4	274.6	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	Yes
SOP Deviation	Collected DTW final after stopping pump. Pump obstructed well , not able to get WL tape passed it.
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS07-01B**	**Sketch**	No
Date	5/6/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Other Staff	11:25	MDT	Sunny	56	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*40.0*	*2*	19.37	20.63	10.10	29.69

	Time	DTW (ft)				
Start Purging	11:37	19.37			**Purge Rate (GPM)**	2.0
Grab Sample	11:47		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	art of purge, clear
Stop Purging (DTW just prior)	11:48	19.48			**Total Purge Volume (gal)**	20.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0100-050621	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
11:38	2.0	9.6	7.9	413.1	7.1	287.4	
11:39	4.0	9.6	7.3	410.9	7.2	284.6	
11:40	6.0	9.5	7.0	410.3	7.3	282.6	
11:41	8.0	9.6	6.9	410.2	7.3	281.5	
11:42	10.0	9.6	6.7	409.1	7.3	279.8	
11:43	12.0	9.6	6.7	408.6	7.4	278.5	
11:44	14.0	9.6	6.6	408.8	7.4	277.9	
11:45	16.0	9.6	6.6	408.6	7.4	277.6	
11:46	18.0	9.6	6.5	408.1	7.4	277.5	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BPS07-03A**	**Sketch**	No
Date	4/27/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	15:40	MDT	Sunny	46	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*20.4*	*2*	10.09	10.31	5.05	15.25

	Time	DTW (ft)				
Start Purging	15:58	10.09			**Purge Rate (GPM)**	2.0
Grab Sample	16:08		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Slightly turbid
Stop Purging (DTW just prior)	16:09	10.37			**Total Purge Volume (gal)**	22.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0019-042721	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
16:00	4.0	10.3	1.1	276.6	7.2	23.2	
16:01	6.0	10.3	1.0	276.5	7.2	23.3	
16:02	8.0	10.2	.9	276.4	7.1	23.2	
16:03	10.0	10.3	.9	276.6	7.1	23.6	
16:04	12.0	10.3	.8	283.3	7.1	23.8	
16:05	14.0	10.3	.8	283.3	7.1	24.0	
16:06	16.0	10.3	.8	283.4	7.1	24.2	
16:07	18.0	10.3	.8	283.5	7.1	24.3	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Transducer pulled out while sampling

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS07-05A**	**Sketch**	No
Date	5/6/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Other Staff	12:12	MDT	Sunny	58	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*18.5*	*2*	9.98	8.52	4.17	14.24

	Time	DTW (ft)				
Start Purging	12:27	9.98			**Purge Rate (GPM)**	2.0
Grab Sample	12:37		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	d at start, clear at
Stop Purging (DTW just prior)	12:37	11.91			**Total Purge Volume (gal)**	20.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0101-050621	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
12:28	2.0	7.7	8.5	827.0	7.7	283.1	
12:29	4.0	7.6	7.5	339.8	7.8	279.1	
12:31	8.0	7.7	7.3	334.2	7.8	277.2	
12:32	10.0	7.7	7.2	331.9	7.8	275.7	
12:33	12.0	7.7	7.2	329.9	7.8	274.9	
12:34	14.0	7.8	7.2	326.5	7.8	272.9	
12:35	16.0	7.8	7.2	325.9	7.8	272.2	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS07-05B**	**Sketch**	No
Date	5/6/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Other Staff	12:41	MDT	Sunny	60	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*80.0*	*2*	9.45	70.55	34.55	44.73

	Time	DTW (ft)				
Start Purging	12:49	9.45			**Purge Rate (GPM)**	2.0
Grab Sample	13:09		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	13:10	9.63			**Total Purge Volume (gal)**	40.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0102-050621	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
12:50	2.0	10.2	7.9	449.5	7.0	294.8	
12:52	6.0	10.2	7.8	451.9	7.0	293.0	
12:54	10.0	10.2	7.8	448.2	7.0	292.2	
12:59	20.0	10.2	7.8	447.5	7.0	292.9	
13:04	30.0	10.2	7.8	446.7	7.0	293.9	
13:05	32.0	10.2	7.8	446.1	7.0	294.0	
13:06	34.0	10.2	7.8	446.4	7.0	294.2	
13:07	36.0	10.2	7.8	446.4	7.0	294.4	
13:08	38.0	10.2	7.8	446.3	7.0	294.5	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BPS07-07**	**Sketch**	No
Date	4/27/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	16:30	MDT	Sunny	46	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
Peristaltic	*15.0*	*0.75*	5.30	9.70	0.67	10.15

	Time	DTW (ft)				
Start Purging	17:08	5.30			**Purge Rate (GPM)**	.3
Grab Sample	17:19		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	17:20	10.32			**Total Purge Volume (gal)**	3.5

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0020-042721	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
17:10	.5	9.3	.9	267.3	7.0	19.0	
17:12	1.0	9.1	.6	264.3	6.8	17.7	
17:13	1.3	9.1	.5	262.1	6.8	16.3	
17:14	1.5	9.0	.5	262.7	6.8	16.9	
17:15	1.8	8.9	.6	262.4	6.8	17.1	
17:16	2.0	8.9	.6	262.3	6.8	17.2	
17:17	2.3	8.9	.6	262.1	6.8	17.1	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BPS07-08A**	**Sketch**	No
Date	4/26/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Mathew Erickson	14:26	MDT	Partly Cloudy	47	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*20.0*	*2*	9.96	10.04	4.92	14.98

	Time	DTW (ft)				
Start Purging	14:36	9.96			**Purge Rate (GPM)**	2.0
Grab Sample	14:48		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	14:49	10.34			**Total Purge Volume (gal)**	26.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0035-042621	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
14:39	6.0	8.6	22.7	4138.0	6.9	73.2	
14:43	14.0	8.7	5.7	4286.0	7.0	71.0	
14:44	16.0	8.8	4.6	4307.0	7.0	70.3	
14:45	18.0	8.8	3.9	4316.0	7.0	69.9	
14:46	20.0	8.8	3.3	4324.0	7.0	69.5	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BPS07-11A**	**Sketch**	No
Date	4/29/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Other Staff	13:50	MDT	Sunny	64	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*24.0*	*2*	14.57	9.43	4.62	19.29

	Time	DTW (ft)				
Start Purging	13:56	14.57			**Purge Rate (GPM)**	2.0
Grab Sample	14:04		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	14:04	15.44			**Total Purge Volume (gal)**	16.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0072-042921	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
13:57	2.0	10.0	2.9	888.0	5.8	292.7	
13:58	4.0	10.0	1.9	829.0	5.4	292.8	
13:59	6.0	9.8	1.6	749.0	5.4	293.0	
14:00	8.0	9.8	1.5	673.0	5.4	294.0	
14:01	10.0	9.8	1.4	597.4	5.3	293.7	
14:02	12.0	9.8	1.3	578.3	5.3	295.1	
14:03	14.0	9.8	1.3	555.4	5.3	295.1	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BPS07-11B**	**Sketch**	No
Date	4/29/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Other Staff	14:13	MDT	Sunny	64	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*45.0*	*2*	14.49	30.51	14.94	29.75

	Time	DTW (ft)				
Start Purging	14:14	14.49			**Purge Rate (GPM)**	2.0
Grab Sample	14:23		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	14:23	14.73			**Total Purge Volume (gal)**	18.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0073-042921	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
14:15	2.0	10.2	.4	1776.0	5.1	259.1	
14:17	6.0	10.1	.2	1765.0	5.1	241.0	
14:18	8.0	10.1	.2	1749.0	5.0	237.2	
14:19	10.0	10.1	.2	1733.0	5.0	233.2	
14:20	12.0	10.1	.2	1777.0	5.1	228.7	
14:21	14.0	10.1	.1	1683.0	5.0	225.0	
14:22	16.0	10.1	.2	1705.0	5.0	222.2	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BPS07-13A**	**Sketch**	No
Date	4/28/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	9:52	MDT	Overcast	45	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*25.5*	*2*	23.45	2.05	1.00	24.48

	Time	DTW (ft)				
Start Purging	10:01	23.45			**Purge Rate (GPM)**	2.0
Grab Sample	10:29		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	ear at sample tim
Stop Purging (DTW just prior)	10:30	23.50			**Total Purge Volume (gal)**	43.5

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0042-042821	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:02	1.5	11.1	8.8	211.8	7.8	29.9	
10:04	4.5	10.6	6.6	2588.0	7.1	57.8	
10:05	6.0	10.1	5.3	4190.0	6.7	67.7	
10:07	9.0	9.8	2.4	5200.0	6.7	72.8	
10:09	12.0	9.7	1.2	5627.0	6.6	73.1	
10:10	13.5	9.7	1.0	5746.0	6.7	73.1	
10:11	15.0	9.7	.9	5829.0	6.7	73.0	
10:12	16.5	9.6	.9	5885.0	6.7	72.8	
10:14	19.5	9.6	.9	5950.0	6.7	72.8	
10:16	22.5	9.6	.9	6001.0	6.7	73.4	
10:18	25.5	9.6	.9	6029.0	6.7	73.9	
10:19	27.0	9.6	.9	6040.0	6.7	74.2	
10:20	28.5	9.6	.9	6050.0	6.7	74.6	
10:21	30.0	9.6	1.0	6064.0	6.7	74.9	
10:22	31.5	9.5	1.0	6069.0	6.7	74.9	
10:23	33.0	9.5	1.0	6070.0	6.7	74.8	
10:24	34.5	9.6	.9	6071.0	6.7	74.9	
10:25	36.0	9.5	.9	6079.0	6.7	75.0	
10:26	37.5	9.3	.9	6080.0	6.7	75.2	
10:27	39.0	9.3	.9	6081.0	6.7	75.5	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Transducer pulled out while purging/sampling

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BPS07-13B**	**Sketch**	No
Date	4/28/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	10:40	MDT	Partly Cloudy	45	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*40.0*	*2*	24.21	15.79	7.73	32.11

	Time	DTW (ft)				
Start Purging	10:44	24.21			**Purge Rate (GPM)**	1.0
Grab Sample	11:05		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	11:06	24.36			**Total Purge Volume (gal)**	22.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0043-042821	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:47	3.0	9.5	.7	2724.0	7.0	64.4	
10:49	5.0	9.5	.7	2920.0	6.9	62.0	
10:51	7.0	9.5	.7	2957.0	6.9	59.4	
10:53	9.0	9.5	.7	2975.0	6.9	57.4	
10:56	12.0	9.5	.7	2988.0	6.9	55.6	
10:58	14.0	9.5	.7	2999.0	6.9	54.5	
11:00	16.0	9.5	.7	2998.0	6.9	53.8	
11:01	17.0	9.6	.7	2999.0	6.9	53.3	
11:02	18.0	9.6	.7	2996.0	6.9	52.9	
11:03	19.0	9.5	.7	2999.0	6.9	52.4	
11:04	20.0	9.6	.7	2999.0	6.9	52.3	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BPS07-14A**	**Sketch**	No
Date	4/28/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	13:13	MDT	Windy	44	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*27.0*	*2*	20.54	6.46	3.16	23.77

	Time	DTW (ft)				
Start Purging	13:33	20.54			**Purge Rate (GPM)**	1.5
Grab Sample	13:49		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	, slightly turbid a
Stop Purging (DTW just prior)	13:51	20.65			**Total Purge Volume (gal)**	24.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0045-042821	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
13:35	3.0	8.6	5.2	1083.0	7.0	7.5	
13:37	6.0	8.6	3.9	1088.0	7.0	9.4	
13:39	9.0	8.5	2.8	1085.0	7.1	10.8	
13:41	12.0	8.6	2.2	1080.0	7.0	12.1	
13:43	15.0	8.5	1.9	1077.0	7.0	12.0	
13:45	18.0	8.5	1.8	1075.0	7.0	12.1	
13:47	21.0	8.6	1.6	1074.0	7.0	12.0	
13:48	22.5	8.5	1.5	1074.0	7.0	12.0	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BPS07-15A**	**Sketch**	No
Date	4/28/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	11:28	MDT	Windy	47	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*35.7*	*2*	19.40	16.30	7.98	27.55

	Time	DTW (ft)				
Start Purging	11:37	19.40			**Purge Rate (GPM)**	1.5
Grab Sample	11:51		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	d slightly turbid a
Stop Purging (DTW just prior)	11:52	19.81			**Total Purge Volume (gal)**	22.5

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0044-042821	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
11:38	1.5	9.5	3.1	1496.0	7.1	50.5	
11:39	3.0	9.4	2.3	1491.0	7.0	47.9	
11:41	6.0	9.4	1.9	1476.0	7.0	47.2	
11:43	9.0	9.4	1.6	1460.0	7.0	47.0	
11:45	12.0	9.4	1.3	1448.0	7.0	46.7	
11:47	15.0	9.4	1.2	1443.0	7.0	46.2	
11:48	16.5	9.4	1.2	1442.0	7.0	46.1	
11:49	18.0	9.4	1.2	1443.0	7.0	45.9	
11:50	19.5	9.4	1.1	1444.0	7.0	45.5	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS07-16A**	**Sketch**	No
Date	5/6/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Other Staff	13:26	MDT	Sunny	58	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*18.0*	*2*	7.45	10.55	5.17	12.73

	Time	DTW (ft)				
Start Purging	13:45	7.45			**Purge Rate (GPM)**	2.0
Grab Sample	13:53		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	13:57	7.61			**Total Purge Volume (gal)**	16.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0103-050621	1	FG-N	250	Yes	HNO3	Dissolved metals
GW0104-050621	1	FG-D	250	Yes	HNO3	Dissolved metals
GW0105-050621	1	ECB/FB	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
13:46	2.0	7.3	4.4	407.4	6.7	300.4	5.2
13:47	4.0	7.1	3.6	402.1	6.7	296.4	3.8
13:48	6.0	7.1	3.3	397.8	6.7	292.0	3.2
13:50	10.0	7.0	3.2	395.1	6.7	289.1	1.5
13:51	12.0	7.0	3.2	394.4	6.7	288.1	1.4
13:52	14.0	7.0	3.2	393.4	6.7	287.9	1.7

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Also collected samples for PTS. Blank time = 14:10

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS07-16B**	**Sketch**	No
Date	5/6/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Other Staff	14:17	MDT	Sunny	58	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*37.4*	*2*	7.36	30.04	14.71	22.38

	Time	DTW (ft)				
Start Purging	14:23	7.36			**Purge Rate (GPM)**	2.0
Grab Sample	14:37		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	14:40	7.70			**Total Purge Volume (gal)**	28.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0106-050621	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
14:24	2.0	10.6	7.8	232.4	7.5	281.2	10.6
14:26	6.0	10.6	5.9	232.5	7.5	279.8	29.9
14:27	8.0	10.6	5.3	232.2	7.5	278.6	11.5
14:28	10.0	10.6	4.8	232.6	7.6	276.5	6.2
14:30	14.0	10.6	4.5	232.6	7.6	273.8	5.4
14:32	18.0	10.6	4.4	232.8	7.6	271.9	3.4
14:33	20.0	10.6	4.4	233.1	7.6	270.3	3.7
14:34	22.0	10.6	4.3	232.9	7.6	269.9	2.1
14:35	24.0	10.6	4.3	233.0	7.6	269.7	2.0

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Collected samples for PTS also

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BPS07-17A**	**Sketch**	No
Date	4/22/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Mathew Erickson,Other Staff	11:21	MDT	Partly Cloudy	27	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*20.5*	*2*	10.56	9.89	4.84	15.51

	Time	DTW (ft)				
Start Purging	11:31	10.56			**Purge Rate (GPM)**	2.0
Grab Sample	11:42		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	ge at start, clear a
Stop Purging (DTW just prior)	11:43	12.46			**Total Purge Volume (gal)**	22.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0023-042221	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
11:32	2.0	8.1	20.7	1017.0	6.2	20.1	
11:33	4.0	7.7	11.1	1069.0	6.1	21.4	
11:35	8.0	7.6	5.4	1111.0	6.1	42.5	
11:37	10.0	7.6	3.9	1110.0	6.1	47.0	
11:39	14.0	7.7	3.0	1109.0	6.1	53.1	
11:40	16.0	7.7	3.2	1108.0	6.1	53.6	
11:41	18.0	7.7	3.3	1108.0	6.1	53.8	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BPS07-18A**	**Sketch**	No
Date	4/22/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Mathew Erickson,Other Staff	9:36	MDT	Mostly Cloudy	25	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*20.0*	*2*	11.84	8.16	4.00	15.92

	Time	DTW (ft)				
Start Purging	10:25	11.84			**Purge Rate (GPM)**	2.0
Grab Sample	10:33		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Turbid throughou
Stop Purging (DTW just prior)	10:36	14.01			**Total Purge Volume (gal)**	22.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0021-042221	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:26	2.0	5.7	.9	1577.0	6.5	16.4	
10:27	4.0	5.8	7.2	1576.0	6.5	11.7	
10:29	8.0	6.2	12.1	1577.0	6.5	26.3	
10:30	10.0	6.2	11.9	1577.0	6.5	30.6	
10:32	14.0	6.2	11.5	1577.0	6.5	30.9	
10:33	16.0	6.2	12.1	1577.0	6.5	30.6	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BPS07-18B**	**Sketch**	No
Date	4/22/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Mathew Erickson,Other Staff	10:42	MDT	Mostly Cloudy	25	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*41.5*	*2*	12.57	28.93	14.17	27.04

	Time	DTW (ft)				
Start Purging	10:54	12.57			**Purge Rate (GPM)**	2.0
Grab Sample	11:04		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Slightly turbid
Stop Purging (DTW just prior)	11:05	13.09			**Total Purge Volume (gal)**	24.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0022-042221	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:55	2.0	7.5	14.0	1063.0	6.5	12.5	
10:56	4.0	7.8	9.1	1166.0	6.5	18.9	
10:57	6.0	7.9	8.0	1198.0	6.5	19.9	
10:59	10.0	8.0	6.9	1231.0	6.6	21.0	
11:00	12.0	8.1	7.9	1236.0	6.5	21.4	
11:02	16.0	8.1	8.0	1236.0	6.5	21.6	
11:03	18.0	8.1	6.9	1237.0	6.5	21.8	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BPS07-21**	**Sketch**	No
Date	4/28/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Other Staff	10:31	MDT	Windy	49	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
Peristaltic	*23.0*	*0.75*	14.35	8.65	0.60	18.68

	Time	DTW (ft)				
Start Purging	10:49	14.35			**Purge Rate (GPM)**	.1
Grab Sample	11:40		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear at sample
Stop Purging (DTW just prior)	11:41	14.36			**Total Purge Volume (gal)**	5.2

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0061-042821	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:59	1.0	9.5	2.7	2511.0	6.9	-93.7	
11:09	2.0	9.6	.9	2555.0	6.9	-99.5	
11:19	3.0	9.7	.8	2575.0	6.9	-101.6	
11:29	4.0	9.7	.7	2599.0	6.9	-103.2	
11:39	5.0	9.7	.8	2604.0	6.9	-103.6	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BPS07-21B**	**Sketch**	No
Date	4/28/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Other Staff	11:55	MDT	Partly Cloudy	55	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*47.0*	*2*	13.20	33.80	16.55	30.10

	Time	DTW (ft)				
Start Purging	12:02	13.20			**Purge Rate (GPM)**	2.0
Grab Sample	12:16		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	12:17	13.78			**Total Purge Volume (gal)**	26.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0062-042821	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
12:04	2.0	9.6	2.1	588.2	7.0	87.8	
12:08	10.0	9.7	2.3	467.8	6.9	102.8	
12:10	12.0	9.7	2.3	449.0	6.9	107.7	
12:13	18.0	9.7	2.4	429.5	6.9	113.8	
12:14	20.0	9.7	2.4	426.1	6.9	115.0	
12:15	22.0	9.7	2.4	422.8	6.9	115.9	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BPS07-21C**	**Sketch**	No
Date	4/28/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Other Staff	12:25	MDT	Partly Cloudy	55	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*87.0*	*2*	12.41	74.59	36.53	49.71

	Time	DTW (ft)				
Start Purging	12:45	12.41			**Purge Rate (GPM)**	2.0
Grab Sample	13:04		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	13:05	12.99			**Total Purge Volume (gal)**	40.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
12:47	4.0	10.1	.8	664.0	6.8	-62.3	
12:50	10.0	10.1	.6	743.0	6.8	-22.0	
12:53	16.0	10.1	.6	744.0	6.8	-14.6	
12:57	24.0	10.1	.8	746.0	6.8	-5.1	
12:59	28.0	10.1	.7	747.0	6.8	-1.0	
13:00	30.0	10.1	.7	747.0	6.8	.7	
13:01	32.0	10.1	.7	747.0	6.8	3.4	
13:02	34.0	10.1	.7	747.0	6.8	6.0	
13:03	36.0	10.1	.6	747.0	6.8	7.9	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BPS07-22B**	**Sketch**	No
Date	4/28/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Other Staff	13:59	MDT	Partly Cloudy	55	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*31.0*	*2*	8.22	22.78	11.16	19.61

	Time	DTW (ft)				
Start Purging	14:06	8.22			**Purge Rate (GPM)**	2.0
Grab Sample	14:14		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	14:15	8.50			**Total Purge Volume (gal)**	18.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0064-042821	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
14:08	4.0	8.5	1.1	719.4	6.7	120.9	
14:09	6.0	8.5	.9	719.3	6.7	124.7	
14:10	8.0	8.5	.8	718.8	6.7	128.8	
14:11	10.0	8.5	.8	718.3	6.6	132.4	
14:12	12.0	8.5	.7	718.2	6.6	137.8	
14:13	14.0	8.5	.6	717.2	6.6	141.0	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BPS07-22C**	**Sketch**	No
Date	4/28/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Other Staff	14:21	MDT	Partly Cloudy	55	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*99.0*	*2*	7.01	91.99	45.05	53.01

	Time	DTW (ft)				
Start Purging	14:29	7.01			**Purge Rate (GPM)**	2.0
Grab Sample	14:55		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	14:55	12.31			**Total Purge Volume (gal)**	52.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0065-042821	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
14:30	2.0	9.5	4.1	745.0	7.0	123.9	
14:34	10.0	9.5	1.4	759.0	7.0	117.3	
14:38	18.0	9.7	.7	757.0	7.0	114.3	
14:42	26.0	9.8	.7	755.0	7.0	113.2	
14:46	34.0	9.8	.6	756.0	7.0	112.8	
14:50	42.0	9.7	.6	756.0	7.0	112.7	
14:54	50.0	9.8	.6	757.0	7.0	113.0	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BPS07-22R**	**Sketch**	No
Date	4/28/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Other Staff	15:03	MDT	Partly Cloudy	55	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*14.0*	*2*	8.82	5.18	2.54	11.41

	Time	DTW (ft)				
Start Purging	15:08	8.82			**Purge Rate (GPM)**	2.0
Grab Sample	15:15		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	15:17	9.20			**Total Purge Volume (gal)**	20.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0066-042821	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
15:09	2.0	6.8	.9	719.0	7.0	-57.6	
15:10	4.0	6.3	1.0	725.2	7.0	-78.5	
15:11	6.0	6.5	.9	744.3	7.0	-84.0	
15:11	8.0	6.5	1.1	762.4	7.0	-88.6	
15:12	10.0	6.5	1.4	799.0	7.0	-90.9	
15:13	12.0	6.5	1.6	865.0	7.0	-94.2	
15:14	14.0	6.3	1.7	914.0	7.0	-96.9	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Had to pull pump to determine final fluid level

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BPS07-23**	**Sketch**	No
Date	4/29/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Other Staff	15:05	MDT	Sunny	62	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
Peristaltic	*16.0*	*0.75*	8.15	7.85	0.54	12.08

	Time	DTW (ft)				
Start Purging	15:17	8.15			**Purge Rate (GPM)**	.2
Grab Sample	15:28		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	15:28	8.17			**Total Purge Volume (gal)**	1.7

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0067-042921	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
15:21	.6	6.0	1.0	1269.0	7.1	-64.1	
15:23	.9	6.1	.8	1305.0	7.1	-68.9	
15:24	1.1	5.8	.9	1333.0	7.1	-74.0	
15:25	1.2	5.8	.9	1366.0	7.1	-79.5	
15:26	1.4	5.8	.9	1376.0	7.1	-81.6	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BPS07-24**	**Sketch**	No
Date	4/29/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Other Staff	12:38	MDT	Sunny	54	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*71.0*	*2*	7.95	63.05	30.88	39.48

	Time	DTW (ft)				
Start Purging	12:47	7.95			**Purge Rate (GPM)**	2.0
Grab Sample	13:04		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	13:05	8.43			**Total Purge Volume (gal)**	34.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0071-042921	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
12:48	2.0	9.3	2.6	2119.0	6.8	269.9	
12:50	6.0	9.5	1.4	2191.0	6.6	277.6	
12:52	10.0	9.5	1.2	2199.0	6.5	278.8	
12:54	14.0	9.5	1.1	2199.0	6.5	278.6	
12:56	18.0	9.5	1.1	2198.0	6.5	278.0	
12:58	22.0	9.6	1.0	2195.0	6.5	277.1	
13:00	26.0	9.6	1.0	2199.0	6.5	276.2	
13:02	30.0	9.5	1.0	2198.0	6.5	275.2	
13:04	32.0	9.6	1.0	2203.0	6.5	274.4	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BPS07-25**	**Sketch**	No
Date	4/23/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	12:21	MDT		27	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*25.5*	*2*	10.60	14.90	7.30	18.05

	Time	DTW (ft)				
Start Purging	12:28	10.60			**Purge Rate (GPM)**	2.0
Grab Sample	12:41		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	of purge, clear at
Stop Purging (DTW just prior)	12:42	10.77			**Total Purge Volume (gal)**	28.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0030-042321	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
12:30	4.0	9.5	2.8	1970.0	7.2	128.0	
12:32	8.0	9.5	.5	1968.0	7.2	128.3	
12:36	16.0	9.5	.2	1965.0	7.2	129.4	
12:37	18.0	9.5	.2	1964.0	7.2	129.7	
12:38	20.0	9.5	.2	1964.0	7.2	129.9	
12:39	22.0	9.5	.2	1963.0	7.2	130.0	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BPS11-01**	**Sketch**	No
Date	4/26/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Mathew Erickson	15:15	MDT	Partly Cloudy	47	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*25.0*	*2*	8.99	16.01	7.84	17.00

	Time	DTW (ft)				
Start Purging	15:19	8.99			**Purge Rate (GPM)**	2.0
Grab Sample	15:31		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	15:32	9.21			**Total Purge Volume (gal)**	24.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0036-042621	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
15:21	4.0	10.6	9.6	2164.0	7.2	44.1	
15:22	6.0	10.8	4.3	1781.0	7.4	40.6	
15:23	8.0	10.8	2.7	1625.0	7.5	38.4	
15:24	10.0	10.9	1.9	1566.0	7.6	37.5	
15:25	12.0	10.9	1.6	1520.0	7.5	36.9	
15:26	14.0	10.9	1.4	1494.0	7.6	37.0	
15:27	16.0	10.9	1.4	1481.0	7.6	37.4	
15:28	18.0	10.9	1.1	1475.0	7.6	37.8	
15:29	20.0	10.9	1.0	1465.0	7.7	38.1	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BPS11-02**	**Sketch**	No
Date	4/26/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Mathew Erickson	15:51	MDT	Partly Cloudy	47	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*29.0*	*2*	6.03	22.97	11.25	17.52

	Time	DTW (ft)				
Start Purging	15:57	6.03			**Purge Rate (GPM)**	2.0
Grab Sample	16:08		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	16:11	8.65			**Total Purge Volume (gal)**	28.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0037-042621	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
15:59	4.0	9.3	17.2	1275.0	7.1	42.4	
16:01	8.0	9.3	14.0	1287.0	7.2	44.0	
16:03	12.0	9.4	12.3	1287.0	7.1	44.2	
16:05	16.0	9.4	11.1	1285.0	7.1	44.1	
16:07	20.0	9.4	9.6	1284.0	7.1	44.0	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS11-03**	**Sketch**	No
Date	5/6/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	14:56	MDT	Sunny	70	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
Peristaltic	*29.0*	*2*	5.09	23.91	11.71	17.05

	Time	DTW (ft)				
Start Purging	15:44	5.09			**Purge Rate (GPM)**	.3
Grab Sample	16:40		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	16:42	5.15			**Total Purge Volume (gal)**	14.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0120-050621	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
15:48	1.0	6.7	.4	1301.0	7.1	10.4	3.1
15:57	3.3	7.0	.2	1296.0	7.1	31.3	1.0
16:06	5.5	7.0	.1	1292.0	7.1	36.8	2.1
16:15	7.8	7.0	.2	1287.0	7.1	38.4	2.4
16:24	10.0	7.1	.2	1277.0	7.2	36.0	3.4
16:33	12.3	7.1	.2	1289.0	7.1	39.7	1.7

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Extra samples taken for PTS. Dissolved metals, Alk, so4-, cl-, TDS and turbidity field readings. Samples taken at 16:40

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BPS11-04**	**Sketch**	No
Date	4/22/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Joel Arbaugh	14:27	MDT	Overcast	41	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*56.0*	*2*	8.15	47.85	23.43	32.08

	Time	DTW (ft)				
Start Purging	14:37	8.15			**Purge Rate (GPM)**	2.0
Grab Sample	14:56		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	14:57	11.68			**Total Purge Volume (gal)**	40.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0003-042221	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
14:38	1.0	8.4	3.5	452.3	9.1	-5.2	
14:40	5.0	8.7	2.3	461.2	7.8	-14.8	
14:42	9.0	8.9	1.9	482.6	7.7	-11.1	
14:44	13.0	8.9	1.8	495.0	7.7	-7.2	
14:46	17.0	8.9	1.7	500.7	7.7	-4.5	
14:47	19.0	8.9	1.7	502.6	7.7	-3.2	
14:48	21.0	8.9	1.6	504.4	7.7	-2.0	
14:49	23.0	8.9	1.6	504.8	7.7	-1.4	
14:50	25.0	8.9	1.6	505.7	7.7	-1.1	
14:51	27.0	8.9	1.6	506.6	7.7	-.8	
14:52	29.0	8.9	1.6	507.6	7.7	-.3	
14:53	31.0	8.9	1.6	507.9	7.7	.4	
14:54	33.0	8.9	1.5	508.6	7.7	1.0	
14:55	35.0	8.9	1.5	508.6	7.7	1.6	
14:56	37.0	8.9	1.5	508.5	7.7	1.9	
14:57	39.0	8.9	1.5	509.4	7.7	2.0	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BPS11-05A1**	**Sketch**	No
Date	4/27/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	13:53	MDT	Sunny	48	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
	12.0	*2*	7.75	4.25	2.08	9.88

	Time	DTW (ft)				
Start Purging	14:02	7.75			**Purge Rate (GPM)**	2.0
Grab Sample	14:10		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	14:11	7.83			**Total Purge Volume (gal)**	18.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0040-042721	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B`00`86

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
14:03	2.0	5.7	34.1	1207.0	6.8	41.3	
14:04	4.0	5.5	29.8	1209.0	6.8	42.7	
14:05	6.0	5.5	26.8	1210.0	6.8	44.7	
14:07	10.0	5.5	24.2	1209.0	6.8	46.9	
14:08	12.0	5.6	24.9	1208.0	6.8	47.3	
14:09	14.0	5.6	24.6	1209.0	6.8	47.5	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BPS11-05A2**	**Sketch**	No
Date	4/27/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	14:19	MDT	Sunny	49	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
	28.0	*2*	7.86	20.14	9.86	17.93

	Time	DTW (ft)				
Start Purging	14:23	7.86			**Purge Rate (GPM)**	2.0
Grab Sample	14:33		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	14:35	8.00			**Total Purge Volume (gal)**	26.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0026-042721	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
14:24	2.0	9.1	3.6	405.2	7.4	33.6	
14:26	6.0	9.2	3.2	405.2	7.4	34.3	
14:28	10.0	9.3	3.5	405.2	7.2	34.6	
14:29	12.0	9.3	3.5	405.2	7.2	34.2	
14:30	14.0	9.3	3.5	405.0	7.3	34.3	
14:31	16.0	9.3	3.5	404.9	7.2	34.3	
14:32	18.0	9.3	3.5	404.6	7.3	34.3	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BPS11-06**	**Sketch**	No
Date	4/28/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	9:09	MDT		45	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*29.0*	*2*	11.25	17.75	8.69	20.13

	Time	DTW (ft)				
Start Purging	9:21	11.25			**Purge Rate (GPM)**	2.0
Grab Sample	9:31		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	9:35	11.34			**Total Purge Volume (gal)**	28.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0041-042821	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
9:23	4.0	8.4	5.8	531.1	7.1	58.8	
9:24	6.0	8.5	4.7	531.6	7.2	60.9	
9:25	8.0	8.5	4.4	531.4	7.2	61.6	
9:26	10.0	8.6	4.2	531.1	7.2	62.0	
9:27	12.0	8.6	4.1	531.3	7.2	62.2	
9:28	14.0	8.6	4.0	531.3	7.2	62.3	
9:29	16.0	8.6	4.0	531.4	7.2	62.3	
9:30	18.0	8.6	4.0	531.5	7.2	62.3	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Extra bottle collected for MS/MSD

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BPS11-07**	**Sketch**	No
Date	4/26/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Mathew Erickson	16:33	MDT	Partly Cloudy	44	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*37.0*	*2*	16.15	20.85	10.21	26.58

	Time	DTW (ft)				
Start Purging	16:37	16.15			**Purge Rate (GPM)**	2.0
Grab Sample	16:48		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	16:49	16.31			**Total Purge Volume (gal)**	24.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0038-042621	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
16:39	4.0	10.1	4.5	1409.0	7.3	41.5	
16:41	8.0	10.2	2.1	1408.0	7.2	40.9	
16:43	12.0	10.2	1.7	1408.0	7.2	40.9	
16:45	16.0	10.2	1.2	1409.0	7.2	40.8	
16:47	20.0	10.2	1.1	1408.0	7.2	40.8	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BPS11-08**	**Sketch**	No
Date	4/27/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	12:20	MDT	Sunny	30	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*23.9*	*2*	14.61	9.29	4.55	19.26

	Time	DTW (ft)				
Start Purging	12:29	14.61			**Purge Rate (GPM)**	2.0
Grab Sample	12:39		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	12:40	16.90			**Total Purge Volume (gal)**	22.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0039-042721	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
12:31	4.0	8.2	10.5	766.0	7.3	35.5	
12:32	6.0	8.2	7.8	769.0	7.3	35.7	
12:33	8.0	8.2	9.1	750.0	7.2	35.9	
12:34	10.0	8.2	9.6	739.0	7.2	36.0	
12:35	12.0	8.2	10.2	733.8	7.2	36.2	
12:36	14.0	8.2	11.2	730.9	7.2	36.3	
12:37	16.0	8.3	11.8	729.3	7.2	36.3	
12:38	18.0	8.3	11.9	729.8	7.2	36.2	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BPS11-09**	**Sketch**	No
Date	4/22/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Joel Arbaugh	15:21	MDT	Overcast	41	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*35.0*	*2*	5.02	29.98	14.68	20.01

	Time	DTW (ft)				
Start Purging	15:27	5.02			**Purge Rate (GPM)**	2.0
Grab Sample	15:38		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	15:39	5.32			**Total Purge Volume (gal)**	24.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0004-042221	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
15:28	2.0	8.7	11.4	365.9	7.6	-2.6	
15:30	6.0	8.8	8.0	376.2	7.5	10.1	
15:31	8.0	8.8	7.7	377.6	7.5	14.8	
15:32	10.0	8.9	7.4	378.3	7.5	19.1	
15:33	12.0	8.9	7.3	378.5	7.5	23.5	
15:34	14.0	8.9	7.1	378.5	7.5	27.0	
15:35	16.0	8.9	7.0	387.6	7.5	30.2	
15:36	18.0	8.9	6.9	378.8	7.5	32.7	
15:37	20.0	8.9	6.8	378.6	7.5	35.0	
15:38	22.0	8.9	6.8	378.6	7.5	35.5	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Took extra sample for MSMSD

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BPS11-10B**	**Sketch**	No
Date	4/30/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Other Staff	10:19	MDT	Sunny	62	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*48.0*	*2*	11.58	36.42	17.84	29.79

	Time	DTW (ft)				
Start Purging	11:04	11.58			**Purge Rate (GPM)**	2.0
Grab Sample	11:15		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	11:16	12.05			**Total Purge Volume (gal)**	24.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0074-043021	1	FG-N	250	Yes	HNO3	Dissolved metals
GW0075-043021	1	FG-D	250	Yes	HNO3	Dissolved metals
GW0076-043021	1	ECB/FB	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
11:06	4.0	9.4	6.0	1278.0	6.5	615.5	
11:08	8.0	9.4	2.7	1285.0	6.5	614.3	
11:10	12.0	9.4	2.4	1287.0	6.5	610.3	
11:12	16.0	9.4	2.3	1287.0	6.5	605.8	
11:14	20.0	9.4	2.3	1288.0	6.5	600.9	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Blank time 1127

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BPS11-10C**	**Sketch**	No
Date	4/30/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Other Staff	11:35	MDT	Sunny	69	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*120.0*	*2*	9.40	110.60	54.16	64.70

	Time	DTW (ft)				
Start Purging	11:45	9.40			**Purge Rate (GPM)**	2.0
Grab Sample	12:13		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	12:15	13.81			**Total Purge Volume (gal)**	58.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0077-043021	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
11:46	2.0	9.9	3.2	1023.0	6.9	590.2	
11:49	8.0	10.0	2.6	1023.0	6.9	587.1	
11:52	14.0	10.1	2.0	1022.0	6.9	580.6	
11:55	20.0	10.2	2.0	1021.0	6.8	573.3	
11:58	24.0	10.2	1.9	1020.0	6.5	568.1	
12:01	30.0	10.2	1.8	1021.0	6.7	562.8	
12:03	34.0	10.2	1.8	1021.0	6.8	559.0	
12:05	38.0	10.2	1.8	1022.0	6.8	556.2	
12:07	42.0	10.2	1.9	1023.0	6.8	552.6	
12:09	46.0	10.2	1.9	1022.0	6.8	549.4	
12:11	50.0	10.2	1.9	1022.0	6.8	546.3	
12:13	54.0	10.2	1.8	1021.0	6.8	543.5	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Filled two bottles one for lab QC MS/MSD

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS11-11A1**	**Sketch**	No
Date	5/5/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	11:49	MDT	Partly Cloudy	50	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*15.0*	*2*	5.76	9.24	4.52	10.38

	Time	DTW (ft)				
Start Purging	12:13	5.76			**Purge Rate (GPM)**	2.0
Grab Sample	12:23		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	12:24	6.00			**Total Purge Volume (gal)**	19.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0109-050521	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
12:14	1.0	9.6	2.0	316.3	7.3	51.2	
12:15	3.0	8.7	1.4	316.0	7.2	50.0	
12:16	5.0	8.7	1.3	315.6	7.0	47.9	
12:17	7.0	8.8	1.2	316.1	7.0	44.7	
12:18	9.0	8.8	1.2	316.3	7.0	43.3	
12:23	19.0	8.8	1.0	317.1	7.0	39.0	1.0

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Extra samples grabbed for PTS for raw metals, dissolved metals, and turbidity. Only one NTU reading taken. Raw sample taken at 12:21.

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS11-11A2**	**Sketch**	No
Date	5/5/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	12:39	MDT	Sunny	52	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*35.0*	*2*	5.72	29.28	14.34	20.36

	Time	DTW (ft)				
Start Purging	12:47	5.72			**Purge Rate (GPM)**	2.0
Grab Sample	12:58		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	12:59	5.86			**Total Purge Volume (gal)**	21.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0110-050521	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
12:47	1.0	10.1	3.9	323.8	7.3	41.0	
12:49	3.0	10.4	2.3	329.5	7.3	42.9	.8
12:50	5.0	10.4	1.8	329.5	7.4	43.0	
12:51	7.0	10.4	1.6	329.5	7.3	43.2	.5
12:53	11.0	10.5	1.5	329.8	7.3	43.4	.5
12:55	15.0	10.4	1.5	329.5	7.3	44.3	.7

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Extra samples grabbed for OTS for turbidity , raw metals, and dissolved metals. Not required. Use second dissolved metals bottle for lab QC, grabbed at 12:58.

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS11-11B**	**Sketch**	No
Date	5/5/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	13:06	MDT	Sunny	55	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*76.0*	*2*	4.27	71.73	35.13	40.14

	Time	DTW (ft)				
Start Purging	13:26	4.27			**Purge Rate (GPM)**	2.0
Grab Sample	13:46		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	ear some mica fla
Stop Purging (DTW just prior)	13:48	6.41			**Total Purge Volume (gal)**	41.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0111-050521	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
13:26	1.0	10.6	3.3	915.0	7.0	50.8	.2
13:29	7.0	10.5	2.1	918.0	6.9	53.2	5.5
13:32	13.0	10.6	2.0	917.0	6.7	54.7	1.4
13:35	19.0	10.6	2.0	918.0	6.7	55.7	.8
13:38	25.0	10.6	2.0	918.0	6.7	56.6	.5
13:41	31.0	10.6	2.0	918.0	6.7	58.0	.5
13:44	37.0	10.6	2.0	913.0	6.7	59.2	.8

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Extra samples grabbed for PTS raw metals, dissolved metals, and turbidity. Raw metals sample taken at 13:45.

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS11-11C**	**Sketch**	No
Date	5/5/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
	13:50	MDT	Sunny	55	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*151.0*	*2*	3.95	147.05	72.01	77.48

	Time	DTW (ft)				
Start Purging	14:37	3.95			**Purge Rate (GPM)**	2.0
Grab Sample	15:17		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	15:18	14.70			**Total Purge Volume (gal)**	82.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0112-050521	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
14:39	4.0	10.7	1.2	870.0	7.0	54.6	
14:44	14.0	11.2	.4	882.0	6.9	52.4	2.7
14:49	24.0	11.3	.2	891.0	7.0	51.8	1.4
14:53	34.0	11.4	.1	884.0	7.0	51.4	1.0
14:58	44.0	11.4	.2	879.0	7.0	51.4	2.3
15:03	54.0	11.4	.2	875.0	7.0	50.6	1.6
15:08	64.0	11.4	.3	873.0	7.0	50.5	.8
15:14	76.0	11.4	.1	870.0	7.0	49.8	1.2

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Grabbed extra samples for PTS for raw metals dissolved metals and turbidity

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS11-12A**	**Sketch**	No
Date	5/6/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	11:30	MDT	Sunny	60	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*35.0*	*2*	8.44	26.56	13.01	21.72

	Time	DTW (ft)				
Start Purging	11:42	8.44			**Purge Rate (GPM)**	2.0
Grab Sample	11:49		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	11:50	8.54			**Total Purge Volume (gal)**	15.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0115-050621	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
11:42	1.0	9.7	6.4	520.7	7.3	60.2	
11:43	3.0	9.6	5.4	528.7	7.2	61.3	
11:44	5.0	9.6	5.1	515.3	7.2	61.3	
11:45	7.0	9.7	4.9	515.0	7.1	60.3	
11:46	9.0	9.7	4.8	514.9	7.1	59.3	
11:47	11.0	9.7	4.8	514.0	7.1	58.7	
11:48	13.0	9.7	4.8	513.8	7.1	59.2	
11:49	15.0	9.7	4.7	511.6	7.1	59.6	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BPS11-13B**	**Sketch**	No
Date	4/29/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Other Staff	10:41	MDT	Overcast	50	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*54.0*	*2*	13.01	40.99	20.07	33.51

	Time	DTW (ft)				
Start Purging	11:05	13.01			**Purge Rate (GPM)**	2.0
Grab Sample	11:19		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	11:20	13.32			**Total Purge Volume (gal)**	30.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0068-042921	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
11:06	2.0	9.6	4.2	1344.0	6.5	213.5	
11:09	8.0	9.6	3.3	1345.0	6.5	220.8	
11:12	14.0	9.6	2.6	1345.0	6.4	228.7	
11:15	20.0	9.6	2.4	1345.0	6.4	233.2	
11:18	26.0	9.6	2.4	1344.0	6.4	236.5	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BPS11-14A**	**Sketch**	No
Date	4/29/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Other Staff	11:45	MDT	Partly Cloudy	54	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*22.0*	*2*	9.13	12.87	6.30	15.57

	Time	DTW (ft)				
Start Purging	11:51	9.13			**Purge Rate (GPM)**	
Grab Sample	11:57		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	11:58	9.38			**Total Purge Volume (gal)**	15.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0069-042921	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
11:51	1.0	8.9	4.8	654.5	6.8	264.0	
11:52	3.0	8.4	1.3	661.8	6.7	265.0	
11:53	5.0	8.4	.9	654.3	6.7	262.7	
11:54	7.0	8.4	.7	650.4	6.7	260.7	
11:55	9.0	8.4	.6	648.2	6.7	258.9	
11:56	11.0	8.4	.7	647.4	6.7	257.3	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BPS11-14B**	**Sketch**	No
Date	4/29/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Other Staff	12:00	MDT	Sunny	52	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*65.0*	*2*	8.78	56.22	27.53	36.89

	Time	DTW (ft)				
Start Purging	12:09	8.78			**Purge Rate (GPM)**	2.0
Grab Sample	12:24		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	12:26	12.15			**Total Purge Volume (gal)**	34.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0070-042921	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
12:11	4.0	9.5	2.8	2009.0	6.3	283.1	
12:13	8.0	9.6	.7	2008.0	6.3	282.3	
12:15	12.0	9.6	.4	2010.0	6.3	280.6	
12:17	16.0	9.6	.3	2011.0	6.3	279.0	
12:19	20.0	9.6	.3	2012.0	6.3	277.6	
12:21	24.0	9.6	.3	2013.0	6.3	276.5	
12:23	28.0	9.6	.3	2013.0	6.3	275.5	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS11-15**	**Sketch**	No
Date	5/6/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Other Staff	15:25	MDT	Sunny	60	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*37.0*	*2*	9.62	27.38	13.41	23.31

	Time	DTW (ft)				
Start Purging	15:35	9.62			**Purge Rate (GPM)**	2.0
Grab Sample	15:46		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	15:47	9.73			**Total Purge Volume (gal)**	22.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0107-050621	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
15:37	4.0	10.3	6.1	596.8	7.5	307.8	
15:38	6.0	10.3	5.4	597.6	7.5	305.2	
15:40	10.0	10.3	5.2	590.1	7.5	302.2	
15:41	12.0	10.3	5.1	587.3	7.5	300.0	
15:43	16.0	10.3	5.1	586.8	7.5	298.2	
15:44	18.0	10.3	5.1	586.8	7.6	297.8	
15:45	20.0	10.3	5.1	587.0	7.6	297.6	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS11-16**	**Sketch**	No
Date	5/6/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Other Staff	15:58	MDT	Sunny	65	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*73.0*	*2*	10.36	62.64	30.68	41.68

	Time	DTW (ft)				
Start Purging	16:09	10.36			**Purge Rate (GPM)**	2.0
Grab Sample	16:27		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	16:28	11.02			**Total Purge Volume (gal)**	36.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0108-050621	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
16:11	4.0	10.5	5.5	331.2	7.6	301.4	
16:13	8.0	10.5	5.2	383.9	7.6	299.2	
16:15	12.0	10.5	5.1	408.3	7.7	297.7	
16:17	16.0	10.5	5.0	434.5	7.7	295.2	
16:19	20.0	10.5	5.0	443.2	7.7	294.5	
16:21	24.0	10.5	5.0	450.7	7.7	294.1	
16:23	28.0	10.5	4.9	456.1	7.7	293.9	
16:25	32.0	10.5	4.9	459.0	7.7	294.0	
16:26	34.0	10.5	4.9	460.1	7.7	294.0	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BPS11-17C**	**Sketch**	No
Date	5/3/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Other Staff	12:26	MDT	Partly Cloudy	46	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*66.0*	*2*	7.87	58.13	28.47	36.94

	Time	DTW (ft)				
Start Purging	12:31	7.87			**Purge Rate (GPM)**	2.0
Grab Sample	12:46		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	12:48	10.52			**Total Purge Volume (gal)**	36.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0080-050321	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
12:33	4.0	9.6	7.5	2147.0	6.5	417.4	
12:35	8.0	9.6	2.1	2130.0	6.4	419.6	
12:36	12.0	9.6	1.3	2129.0	6.4	420.2	
12:38	16.0	9.6	1.0	2141.0	6.4	420.5	
12:40	20.0	9.6	.8	2148.0	6.4	420.5	
12:42	24.0	9.6	.7	2149.0	6.4	420.1	
12:45	30.0	9.6	.6	2144.0	6.5	419.2	
12:46	32.0	9.6	.5	2145.0	6.5	418.1	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BPS11-18B**	**Sketch**	No
Date	4/29/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	10:14	MDT	Overcast	45	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*46.6*	*2*	9.76	36.84	18.04	28.18

	Time	DTW (ft)				
Start Purging	10:24	9.76			**Purge Rate (GPM)**	1.8
Grab Sample	10:37		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	10:39	10.25			**Total Purge Volume (gal)**	22.8

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0049-042921	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:27	5.3	10.3	.4	4209.0	4.2	122.2	
10:29	8.8	10.3	.2	4222.0	4.2	125.4	
10:31	12.3	10.3	.2	4223.0	4.1	127.0	
10:33	15.8	10.3	.2	4221.0	4.1	127.7	
10:34	17.5	10.3	.2	4222.0	4.1	128.1	
10:35	19.3	10.3	.2	4221.0	4.1	128.7	
10:36	21.0	10.3	.2	4221.0	4.1	128.9	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**BPS11-18C**	**Sketch**	No
Date	4/29/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	10:42	MDT	Overcast	45	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*66.0*	*2*	9.78	56.22	27.53	37.89

	Time	DTW (ft)				
Start Purging	10:47	9.78			**Purge Rate (GPM)**	1.8
Grab Sample	11:05		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	11:06	10.08			**Total Purge Volume (gal)**	31.5

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0050-042921	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:48	1.8	10.5	7.5	1780.0	5.5	121.0	
10:50	5.3	10.5	.6	1796.0	5.5	119.8	
10:52	8.8	10.6	.3	1880.0	5.5	118.1	
10:55	14.0	10.6	.2	1913.0	5.5	115.5	
10:58	19.3	10.6	.2	1900.0	5.5	113.8	
11:00	22.8	10.6	.2	1889.0	5.5	113.0	
11:01	24.5	10.6	.1	1892.0	5.5	112.6	
11:02	26.3	10.6	.2	1893.0	5.5	112.3	
11:03	28.0	10.6	.2	1894.0	5.5	111.9	
11:04	29.8	10.6	.2	1894.0	5.5	111.7	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS11-19A2**	**Sketch**	No
Date	5/6/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	9:47	MDT	Sunny	52	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*43.6*	*2*	4.13	39.47	19.33	23.87

	Time	DTW (ft)				
Start Purging	10:08	4.13			**Purge Rate (GPM)**	2.0
Grab Sample	10:20		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	10:21	4.33			**Total Purge Volume (gal)**	24.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0113-050621	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:09	2.0	10.2	12.2	403.5	7.1	69.4	
10:10	4.0	9.9	6.8	449.3	6.9	72.8	
10:12	8.0	9.9	5.8	454.8	6.7	72.9	
10:14	12.0	9.9	5.2	456.9	6.7	69.4	
10:16	16.0	9.9	5.0	456.4	6.7	67.4	
10:18	20.0	9.9	4.8	456.0	6.7	65.0	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS11-19B**	**Sketch**	No
Date	5/6/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk	10:24	MDT	Sunny	55	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*68.4*	*2*	2.58	65.82	32.23	35.49

	Time	DTW (ft)				
Start Purging	10:37	2.58			**Purge Rate (GPM)**	2.0
Grab Sample	10:56		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Turbid
Stop Purging (DTW just prior)	10:57	4.39			**Total Purge Volume (gal)**	36.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0114-050621	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:38	2.0	10.4	5.0	194.4	7.3	59.8	
10:40	6.0	10.4	5.2	889.0	6.5	72.0	
10:42	10.0	10.2	4.2	913.0	6.5	73.1	
10:44	14.0	10.2	3.6	918.0	6.5	74.6	
10:46	18.0	10.2	3.3	918.0	6.5	75.8	
10:48	20.0	10.3	3.1	919.0	6.5	76.3	
10:50	24.0	10.2	2.9	922.0	6.5	76.5	
10:52	28.0	10.2	2.8	921.0	6.5	76.6	
10:54	32.0	10.3	2.4	921.0	6.5	76.8	
10:56	36.0	10.3	2.2	92.0	6.5	76.9	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BT-98-02**	**Sketch**	No
Date	5/6/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	12:12	MDT	Sunny	65	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*20.2*	*4*	11.43	8.77	17.18	15.82

	Time	DTW (ft)				
Start Purging	12:23	11.43			**Purge Rate (GPM)**	2.0
Grab Sample	12:33		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	12:35	11.49			**Total Purge Volume (gal)**	22.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0116-050621	1	FG-N	250	Yes	HNO3	Dissolved metals
GW0117-050621	1	FG-D	250	Yes	HNO3	Dissolved metals
GW0119-050621	1	ECB/FB	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
12:24	2.0	8.7	5.0	402.5	6.0	58.0	
12:25	4.0	8.6	2.2	405.9	5.8	59.3	
12:26	6.0	8.6	1.8	406.5	5.8	59.6	
12:28	10.0	8.7	1.1	408.2	5.8	59.9	
12:30	14.0	8.6	.9	409.1	5.8	61.7	
12:31	16.0	8.6	.9	409.7	5.8	61.1	
12:32	18.0	8.6	.9	409.9	5.8	60.5	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	FB taken at 12:56

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BT-98-02B**	**Sketch**	No
Date	5/6/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	13:06	MDT	Sunny	65	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*45.0*	*2*	9.78	35.22	17.25	27.39

	Time	DTW (ft)				
Start Purging	13:55	9.78			**Purge Rate (GPM)**	2.0
Grab Sample	14:13		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	14:14	9.95			**Total Purge Volume (gal)**	33.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0119-050621	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
13:56	1.0	11.5	9.4	518.6	7.1	53.2	
13:58	5.0	10.3	5.9	575.3	6.6	48.9	
13:59	7.0	10.3	5.8	574.9	6.6	47.9	
14:01	11.0	10.3	5.5	577.3	6.5	46.7	
14:03	15.0	10.3	5.4	578.0	6.5	44.1	
14:05	19.0	10.3	5.4	577.0	6.5	42.4	
14:07	21.0	10.3	5.3	577.0	6.5	41.2	
14:09	23.0	10.3	5.3	576.7	6.5	40.9	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**FP98-1**	**Sketch**	No
Date	4/28/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	15:07	MDT	Windy	45	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
Peristaltic	*7.5*	*2*	6.16	1.34	0.66	6.83

	Time	DTW (ft)				
Start Purging	15:38	6.16			**Purge Rate (GPM)**	.1
Grab Sample	16:34		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	16:38	7.37			**Total Purge Volume (gal)**	7.4

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0047-042821	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
15:45	.9	7.9	6.8	1736.0	6.8	74.6	
15:47	1.1	8.0	5.6	3330.0	6.7	71.5	
15:49	1.4	8.2	5.0	3344.0	6.7	72.9	
15:52	1.8	8.0	4.0	3355.0	6.6	73.4	
15:57	2.4	7.8	4.4	3364.0	6.8	74.2	
16:01	2.9	7.8	4.7	3388.0	6.5	71.1	
16:06	3.5	7.9	4.9	3415.0	6.6	66.0	
16:09	3.9	7.9	5.1	3448.0	6.7	62.5	
16:15	4.6	7.9	6.0	3505.0	6.5	59.2	
16:18	5.4	7.8	5.9	3521.0	6.5	58.2	
16:20	5.6	7.8	6.0	3539.0	6.4	57.6	
16:25	6.3	7.9	6.3	3565.0	6.4	57.0	
16:26	6.4	7.9	6.3	3570.0	6.4	56.9	
16:27	6.5	7.9	6.3	3575.0	6.4	56.9	
16:29	6.8	8.0	6.4	3580.0	6.4	57.0	
16:30	6.9	8.0	6.4	3582.0	6.4	57.0	
16:31	7.0	8.0	6.4	3582.0	6.4	57.1	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**FP98-1B**	**Sketch**	No
Date	4/28/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	14:09	MDT		44	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*47.0*	*2*	23.72	23.28	11.40	35.36

	Time	DTW (ft)				
Start Purging	14:22	23.72			**Purge Rate (GPM)**	1.5
Grab Sample	14:42		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	14:45	23.90			**Total Purge Volume (gal)**	30.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0046-042821	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
14:24	3.0	10.2	.4	678.6	7.0	6.1	
14:26	6.0	10.1	.2	680.1	6.9	6.7	
14:28	9.0	10.1	.2	681.7	6.9	8.7	
14:30	12.0	10.1	.2	682.7	6.9	20.7	
14:32	15.0	10.1	.2	683.5	6.9	22.9	
14:34	18.0	10.1	.2	684.4	6.9	23.6	
14:36	21.0	10.1	.2	685.1	6.9	24.2	
14:38	24.0	10.1	.2	685.5	6.9	24.4	
14:40	27.0	10.1	.2	686.1	6.9	24.7	
14:41	28.5	10.1	.2	686.5	6.9	24.8	
14:42	30.0	10.1	.2	686.6	6.9	24.9	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**FP98-2**	**Sketch**	No
Date	4/23/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	10:20	MDT		26	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*18.0*	*4*	5.87	12.13	23.76	11.94

	Time	DTW (ft)				
Start Purging	10:27	5.87			**Purge Rate (GPM)**	2.0
Grab Sample	10:45		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	of purge, clear at
Stop Purging (DTW just prior)	10:46	5.97			**Total Purge Volume (gal)**	38.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0029-042321	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B10086

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:28	4.0	5.7	2.4	783.0	7.0	73.4	
10:31	10.0	6.1	2.1	791.0	7.0	70.7	
10:33	14.0	6.4	1.9	791.0	7.0	67.9	
10:35	18.0	6.6	1.8	790.0	7.0	66.5	
10:38	24.0	6.7	1.7	785.0	7.0	64.3	
10:40	28.0	6.8	1.6	784.0	7.0	64.0	
10:42	30.0	6.8	1.5	783.0	7.0	63.9	
10:44	34.0	6.8	1.5	783.0	7.0	63.7	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**FP98-6**	**Sketch**	No
Date	4/23/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	9:12	MDT	Overcast	25	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*17.2*	*4*	5.69	11.51	22.55	11.45

	Time	DTW (ft)				
Start Purging	9:30	5.69			**Purge Rate (GPM)**	2.0
Grab Sample	9:45		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	9:46	8.16			**Total Purge Volume (gal)**	32.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0028-042321	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
9:32	4.0	4.1	1.2	893.0	6.6	93.5	
9:34	8.0	4.4	.7	877.0	6.6	77.7	
9:36	12.0	4.5	.6	873.0	6.6	72.0	
9:38	16.0	4.6	.5	872.0	6.6	69.1	
9:40	20.0	4.6	.6	872.0	6.6	66.4	
9:42	24.0	4.6	.5	873.0	6.6	65.9	
9:43	26.0	4.6	.5	872.0	6.6	65.1	
9:44	28.0	4.6	.5	873.0	6.6	65.0	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**GS-08R**	**Sketch**	No
Date	4/30/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	10:15	MDT	Sunny	55	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*178.0*	*2*	13.19	164.81	80.71	95.60

	Time	DTW (ft)				
Start Purging	10:32	13.19			**Purge Rate (GPM)**	2.0
Grab Sample	11:18		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	11:19	17.87			**Total Purge Volume (gal)**	92.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0056-043021	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:34	4.0	10.2	1.0	1416.0	6.6	62.0	
10:36	8.0	10.4	.8	1416.0	6.5	62.1	
10:43	22.0	10.7	.9	1412.0	6.5	61.6	
10:48	32.0	10.7	1.0	1406.0	6.5	58.2	
10:53	42.0	10.7	1.0	1411.0	6.5	57.3	
10:58	52.0	10.7	1.1	1409.0	6.5	56.7	
11:03	62.0	10.7	1.1	1405.0	6.5	56.9	
11:09	74.0	10.7	1.1	1405.0	6.5	56.4	
11:11	78.0	10.7	1.1	1404.0	6.5	56.4	
11:13	82.0	10.7	1.1	1404.0	6.5	56.5	
11:16	88.0	10.8	1.1	1405.0	6.5	56.3	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**GS-09R**	**Sketch**	No
Date	4/30/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	11:33	MDT	Sunny	56	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*59.0*	*2*	13.18	45.82	22.44	36.09

	Time	DTW (ft)				
Start Purging	12:23	13.18			**Purge Rate (GPM)**	1.8
Grab Sample	12:44		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	12:46	13.58			**Total Purge Volume (gal)**	36.8

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0057-043021	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
12:26	5.3	10.0	1.6	3818.0	5.2	137.9	
12:29	10.5	10.1	.8	3809.0	5.2	138.3	
12:31	14.0	10.1	.6	3800.0	5.2	138.2	
12:37	24.5	10.1	.3	3802.0	5.2	137.1	
12:39	28.0	10.1	.3	3800.0	5.2	136.8	
12:40	29.8	10.1	.3	3798.0	5.2	136.7	
12:41	31.5	10.1	.2	3801.0	5.2	136.5	
12:42	33.3	10.1	.2	3800.0	5.2	136.4	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**GS-11R**	**Sketch**	No
Date	5/3/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	11:40	MDT	Sunny	50	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*19.0*	*2*	13.05	5.95	2.91	16.03

	Time	DTW (ft)				
Start Purging	12:03	13.05			**Purge Rate (GPM)**	.3
Grab Sample	12:26		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	12:28	13.52			**Total Purge Volume (gal)**	3.8

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0081-050321	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
12:05	.5	9.0	2.0	2253.0	5.7	153.7	
12:06	.8	8.9	2.1	2261.0	5.7	154.2	
12:07	1.0	9.0	1.8	2257.0	5.8	152.0	
12:08	1.3	8.9	1.8	2253.0	5.8	150.8	
12:10	1.8	9.1	1.9	2241.0	5.8	148.2	
12:15	2.4	11.1	2.1	2236.0	5.8	151.3	
12:17	2.6	11.4	2.3	2234.0	5.8	150.5	
12:19	2.9	11.4	1.7	2242.0	5.8	149.5	
12:20	3.0	11.6	1.1	2250.0	5.8	149.3	
12:22	3.3	11.8	.9	2254.0	5.8	150.5	
12:23	3.4	11.8	.8	2255.0	5.8	150.7	
12:24	3.5	11.8	.8	2255.0	5.8	151.0	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Extra bottle collected for MS/MSD lab QC. Had to readjust purge rate at 12:10 as we were pulling too many bubbles. Pinched tubing down to 0.125 gal./ min

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**GS-13A**	**Sketch**	No
Date	4/23/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	11:08	MDT	Partly Cloudy	27	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
Peristaltic	*13.8*	*4*	6.92	6.88	13.48	10.36

	Time	DTW (ft)				
Start Purging	12:00	6.92			**Purge Rate (GPM)**	.2
Grab Sample	13:35		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	13:37	10.15			**Total Purge Volume (gal)**	18.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0031-042321	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
12:14	2.7	5.9	.6	1529.0	7.2	82.2	
13:01	11.4	7.9	8.0	1769.0	7.3	118.6	
13:11	13.3	7.7	7.9	1781.0	7.3	113.9	
13:14	13.9	7.0	7.6	1793.0	7.2	108.4	
13:27	16.3	7.0	7.7	1814.0	7.2	108.5	
13:30	16.9	7.3	8.1	1814.0	7.2	108.5	
13:33	17.5	7.3	8.2	1815.0	7.2	108.6	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Used a large battery to maintain consistent purge rate, turned peristaltic pump to low to avoid purging well dry and/or create bubbles in purge line.

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**GS-30D**	**Sketch**	No
Date	4/29/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	11:45	MDT	Partly Cloudy	47	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*39.8*	*2*	10.43	29.37	14.38	25.12

	Time	DTW (ft)				
Start Purging	11:58	10.43			**Purge Rate (GPM)**	1.8
Grab Sample	12:17		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	12:19	11.25			**Total Purge Volume (gal)**	33.3

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0051-042921	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
11:59	1.8	9.8	.4	2773.0	5.7	114.6	
12:01	5.3	9.8	.3	2770.0	5.7	112.7	
12:04	10.5	9.8	.2	2777.0	5.7	108.3	
12:08	17.5	9.8	.2	2783.0	5.7	105.9	
12:10	21.0	9.8	.2	2786.0	5.7	104.4	
12:12	24.5	9.8	.2	2788.0	5.7	103.4	
12:14	28.0	9.8	.2	2789.0	5.7	102.9	
12:15	29.8	9.8	.2	2790.0	5.7	102.4	
12:16	31.5	9.9	.2	2790.0	5.7	102.1	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**GS-30S**	**Sketch**	No
Date	4/29/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	12:21	MDT	Partly Cloudy	47	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*22.8*	*2*	10.69	12.11	5.93	16.75

	Time	DTW (ft)				
Start Purging	12:26	10.69			**Purge Rate (GPM)**	1.8
Grab Sample	12:41		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	tart, clear at time
Stop Purging (DTW just prior)	12:42	14.70			**Total Purge Volume (gal)**	26.3

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0052-042921	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
12:29	5.3	9.1	1.7	1525.0	6.3	49.4	
12:30	7.0	9.1	.8	1525.0	6.3	46.3	
12:31	8.8	9.1	.5	1528.0	6.4	43.6	
12:32	10.5	9.1	.4	1530.0	6.4	40.4	
12:33	12.3	9.1	.3	1530.0	6.4	37.2	
12:35	15.8	9.1	.2	1530.0	6.4	32.5	
12:36	17.5	9.1	.2	1531.0	6.4	28.9	
12:37	19.3	9.1	.2	1532.0	6.4	26.2	
12:38	21.0	9.1	.2	1531.0	6.4	22.3	
12:39	22.8	9.1	.2	1531.0	6.4	22.1	
12:40	24.5	9.1	.2	1531.0	6.4	21.9	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**GS-31D**	**Sketch**	No
Date	4/27/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Other Staff	13:20	MDT	Sunny	49	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*41.2*	*2*	5.94	35.26	17.27	23.57

	Time	DTW (ft)				
Start Purging	13:30	5.94			**Purge Rate (GPM)**	2.0
Grab Sample	13:41		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	13:42	6.35			**Total Purge Volume (gal)**	22.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0012-042721	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
13:31	2.0	9.5	2.2	860.0	6.3	188.2	
13:34	8.0	9.5	1.6	860.0	6.3	186.5	
13:35	10.0	9.5	1.0	863.0	6.3	183.7	
13:36	12.0	9.5	.7	861.0	6.3	182.6	
13:37	14.0	9.5	.6	862.0	6.3	181.4	
13:38	16.0	9.5	.5	861.0	6.3	180.9	
13:39	18.0	9.5	.4	864.0	6.3	180.5	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**GS-31S**	**Sketch**	No
Date	4/27/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Other Staff	13:48	MDT	Sunny	48	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*20.4*	*2*	5.90	14.50	7.10	13.15

	Time	DTW (ft)				
Start Purging	13:56	5.90			**Purge Rate (GPM)**	2.0
Grab Sample	14:04		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Turbid metallic
Stop Purging (DTW just prior)	14:05	6.77			**Total Purge Volume (gal)**	16.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0013-042721	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
13:57		7.6	2.6	723.5	6.9	170.1	
13:58	2.0	7.3	2.4	651.6	6.9	164.9	
13:59	4.0	7.3	2.4	629.0	6.9	162.4	
14:00	6.0	7.3	2.5	609.8	6.9	159.8	
14:01	8.0	7.4	2.5	595.3	6.9	158.3	
14:02	10.0	7.4	2.6	584.3	6.9	156.4	
14:03	12.0	7.4	2.6	575.2	7.0	154.9	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**GS-32D**	**Sketch**	No
Date	4/29/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	14:23	MDT	Sunny	65	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*42.1*	*2*	5.25	36.85	18.05	23.68

	Time	DTW (ft)				
Start Purging	14:33	5.25			**Purge Rate (GPM)**	1.8
Grab Sample	14:50		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	14:52	7.41			**Total Purge Volume (gal)**	29.8

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0054-042921	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
14:35	3.5	7.7	2.8	2529.0	6.1	64.1	
14:37	7.0	7.7	1.5	2532.0	6.1	63.0	
14:40	12.3	7.7	1.1	2523.0	6.1	63.9	
14:43	17.5	7.7	1.0	2514.0	6.1	64.9	
14:45	21.0	7.7	1.0	2511.0	6.1	65.3	
14:47	24.5	7.7	.9	2504.0	6.1	65.7	
14:48	26.3	7.7	.9	2501.0	6.1	65.9	
14:49	28.0	7.7	.9	2500.0	6.1	66.0	
14:50	29.8	7.7	.9	2499.0	6.1	66.2	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**GS-32S**	**Sketch**	No
Date	4/29/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	14:54	MDT	Sunny	65	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*18.4*	*6*	5.05	13.35	58.84	11.73

	Time	DTW (ft)				
Start Purging	14:59	5.05			**Purge Rate (GPM)**	1.8
Grab Sample	15:41		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	ge at start, slight
Stop Purging (DTW just prior)	15:43	6.86			**Total Purge Volume (gal)**	68.3

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0055-042921	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
15:02	5.3	4.8	1.1	1221.0	6.4	61.9	
15:06	12.3	5.4	.9	1294.0	6.2	72.5	
15:11	21.0	6.0	.7	1559.0	6.1	75.5	
15:18	33.3	6.5	.4	1647.0	6.1	74.4	
15:20	36.8	6.6	.3	1663.0	6.2	72.9	
15:22	40.3	6.6	.3	1667.0	6.2	71.7	
15:25	43.8	6.7	.2	1667.0	6.2	70.4	
15:28	49.0	6.7	.2	1665.0	6.2	69.4	
15:32	52.5	6.7	.8	1659.0	6.2	67.4	
15:34	56.0	6.8	.3	1657.0	6.2	66.8	
15:36	59.5	6.7	.3	1653.0	6.2	66.5	
15:37	61.3	6.8	.3	1649.0	6.2	66.3	
15:38	63.0	6.8	.2	1649.0	6.2	66.0	
15:39	64.8	6.8	.2	1649.0	6.2	65.9	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**GS-40R**	**Sketch**	No
Date	5/3/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	9:46	MDT	Partly Cloudy	37	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*64.4*	*2*	25.14	39.26	19.23	44.77

	Time	DTW (ft)				
Start Purging	9:59	25.14			**Purge Rate (GPM)**	1.5
Grab Sample	10:17		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	10:20	25.36			**Total Purge Volume (gal)**	27.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0058-050321	1	FG-N	250	Yes	HNO3	Dissolved metals
GW0059-050321	1	FG-D	250	Yes	HNO3	Dissolved metals
GW0060-050321	1	ECB/FB	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:00	1.5	9.0	1.7	2340.0	5.4	93.6	
10:02	4.5	9.4	1.0	2548.0	5.2	99.5	
10:04	7.5	9.5	.5	2592.0	5.2	99.6	
10:06	10.5	9.5	.4	2623.0	5.2	99.9	
10:08	13.5	9.5	.3	2647.0	5.2	99.7	
10:10	16.5	9.5	.3	2657.0	5.2	99.3	
10:13	21.0	9.6	.2	2682.0	5.2	97.7	
10:14	22.5	9.6	.2	2687.0	5.2	97.3	
10:15	24.0	9.6	.2	2689.0	5.2	97.1	
10:16	25.5	9.6	.2	2690.0	5.2	96.9	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**GS-44D**	**Sketch**	No
Date	4/27/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Other Staff	14:53	MDT	Sunny	55	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*64.0*	*2*	23.54	40.46	19.81	43.77

	Time	DTW (ft)				
Start Purging	15:15	23.54			**Purge Rate (GPM)**	2.0
Grab Sample	15:26		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	15:27	24.28			**Total Purge Volume (gal)**	21.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0014-042721	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
15:16	2.0	10.0	2.2	387.0	5.2	259.5	
15:17	4.0	10.0	1.1	389.0	5.3	259.8	
15:18	6.0	10.0	.8	389.5	5.3	260.6	
15:19	8.0	10.0	.6	390.2	5.4	261.7	
15:20	10.0	9.8	.4	390.2	5.4	263.0	
15:21	12.0	9.8	.4	390.1	5.4	264.3	
15:22	14.0	9.8	.3	390.0	5.4	265.0	
15:23	16.0	9.8	.3	389.9	5.4	266.6	
15:24	18.0	9.8	.3	389.7	5.4	267.5	
15:25	20.0	9.8	.3	389.8	5.4	268.2	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**GS-44S**	**Sketch**	No
Date	4/27/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Other Staff	15:38	MDT	Sunny	52	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*30.0*	*2*	22.85	7.15	3.50	26.43

	Time	DTW (ft)				
Start Purging	15:45	22.85			**Purge Rate (GPM)**	2.0
Grab Sample	15:52		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	15:54	23.75			**Total Purge Volume (gal)**	16.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0015-042721	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
15:46		10.2	7.1	399.6	5.2	267.5	
15:47	2.0	9.5	6.3	396.9	5.2	270.9	
15:48	4.0	9.5	5.7	393.0	5.2	273.2	
15:49	6.0	9.5	5.3	389.6	5.2	276.9	
15:50	8.0	9.5	5.3	388.2	5.2	279.8	
15:51	10.0	9.6	4.6	386.1	5.2	283.1	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**GS-46D**	**Sketch**	No
Date	4/23/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Mathew Erickson,Other Staff	10:05	MDT	Overcast	30	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*60.4*	*2*	28.69	31.71	15.53	44.55

	Time	DTW (ft)				
Start Purging	10:27	28.69			**Purge Rate (GPM)**	1.5
Grab Sample	11:04		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	11:05	28.70			**Total Purge Volume (gal)**	33.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0005-042321	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:45	3.0	10.1	5.0	492.2	6.7	-7.0	
10:51	12.0	10.1	5.2	490.2	6.7	67.9	
10:57	21.0	10.1	5.3	488.1	6.7	127.4	
11:01	27.0	10.1	5.4	487.2	6.7	135.3	
11:03	30.0	10.1	5.4	486.6	6.7	138.4	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	Yes
SOP Deviation	Deviation from SOP. Obstruction in casing. Pump at 36 ft, not 44.55 ft.
Additional remarks	YSI read zeroes . Powered off and on then got values. Stopped pump at 3 gal 1029. Restarted at 1045.

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**GS-46S**	**Sketch**	No
Date	4/23/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Mathew Erickson,Other Staff	11:11	MDT	Overcast	30	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*31.3*	*2*	28.77	2.53	1.24	30.04

	Time	DTW (ft)				
Start Purging	11:20	28.77			**Purge Rate (GPM)**	2.0
Grab Sample	11:25		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Turbid
Stop Purging (DTW just prior)	11:27	28.77			**Total Purge Volume (gal)**	14.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0006-042321	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
11:21	2.0	10.2	8.3	580.6	7.2	124.9	
11:22	4.0	10.2	7.9	602.9	7.1	130.7	
11:24	8.0	10.3	7.7	615.5	7.0	133.8	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**HCA-B1**	**Sketch**	No
Date	4/22/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	13:00	MDT	Mostly Cloudy	35	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*50.1*	*4*	8.07	42.03	82.33	29.09

	Time	DTW (ft)				
Start Purging	13:12	8.07			**Purge Rate (GPM)**	2.0
Grab Sample	13:56		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	13:56	8.44			**Total Purge Volume (gal)**	98.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0025-042221	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
13:15	6.0	8.6	2.9	1554.0	5.8	92.3	
13:17	10.0	8.7	2.8	1555.0	5.7	96.0	
13:27	30.0	9.0	.4	1571.0	5.6	106.3	
13:30	36.0	9.0	.3	1572.0	5.6	107.0	
13:34	44.0	9.0	.3	1566.0	5.6	106.5	
13:38	52.0	9.0	.3	1560.0	5.6	107.7	
13:43	72.0	9.0	.6	1654.0	5.6	110.8	
13:48	82.0	9.0	.5	1549.0	5.6	110.7	
13:51	88.0	9.0	.4	1533.0	5.6	111.0	
13:53	92.0	9.0	.4	1530.0	5.6	111.7	
13:55	96.0	9.0	.3	1530.0	5.6	111.7	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**HCA-B2**	**Sketch**	No
Date	4/22/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Mathew Erickson,Other Staff	11:47	MDT	Partly Cloudy	27	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*37.2*	*4*	11.25	25.95	50.83	24.23

	Time	DTW (ft)				
Start Purging	11:51	11.25			**Purge Rate (GPM)**	2.0
Grab Sample	12:24		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	d at start, clear at
Stop Purging (DTW just prior)	12:26	11.76			**Total Purge Volume (gal)**	68.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0024-042221	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
11:56	10.0	8.6	13.7	1168.0	6.3	52.2	
11:58	14.0	8.6	1.0	1198.0	6.3	52.0	
12:00	18.0	8.7	4.8	1223.0	6.3	51.5	
12:05	28.0	8.7	3.2	1233.0	6.2	50.7	
12:15	48.0	8.8	1.8	1232.0	6.3	48.1	
12:17	52.0	8.8	1.6	1233.0	6.2	47.3	
12:20	58.0	8.8	1.7	1230.0	6.2	46.8	
12:22	62.0	8.8	1.0	1230.0	6.2	46.2	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	+ extra sample for MS/MSD

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**MF-07**	**Sketch**	No
Date	4/29/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	9:34	MDT	Overcast	46	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*18.0*	*4*	10.34	7.66	15.00	14.17

	Time	DTW (ft)				
Start Purging	9:47	10.34			**Purge Rate (GPM)**	2.0
Grab Sample	9:59		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	10:01	10.92			**Total Purge Volume (gal)**	24.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0048-042921	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
9:48	2.0	7.5	5.4	1551.0	6.2	61.0	
9:50	6.0	7.0	2.3	1584.0	6.2	60.2	
9:51	8.0	7.0	1.9	1587.0	6.2	61.1	
9:52	10.0	7.0	1.9	1590.0	6.2	62.5	
9:54	14.0	7.0	1.6	1593.0	6.2	64.0	
9:56	18.0	7.0	1.3	1595.0	6.2	65.0	
9:57	20.0	7.0	1.2	1596.0	6.2	65.2	
9:58	22.0	7.0	1.2	1597.0	6.2	65.3	
9:59	24.0	7.0	1.1	1597.0	6.2	65.3	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**MF-08**	**Sketch**	No
Date	5/3/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	14:35	MDT	Sunny	53	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*14.4*	*4*	7.34	7.06	13.83	10.87

	Time	DTW (ft)				
Start Purging	14:40	7.34			**Purge Rate (GPM)**	1.8
Grab Sample	14:51		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	14:53	7.86			**Total Purge Volume (gal)**	19.3

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0083-050321	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
14:42	3.5	7.0	1.1	1902.0	6.4	94.9	
14:44	7.0	7.5	.3	1919.0	6.3	93.5	
14:46	10.5	7.5	.2	1893.0	6.2	91.0	
14:48	14.0	7.6	.2	1895.0	6.2	90.8	
14:49	15.8	7.5	.2	1894.0	6.2	89.9	
14:50	17.5	7.6	.2	1894.0	6.2	89.4	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**MF-09**	**Sketch**	No
Date	4/28/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Other Staff	9:05	MDT	Partly Cloudy	46	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*15.4*	*4*	10.90	4.50	8.81	13.15

	Time	DTW (ft)				
Start Purging	9:15	10.90			**Purge Rate (GPM)**	2.0
Grab Sample	9:35		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	9:36	12.00			**Total Purge Volume (gal)**	42.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0016-042821	1	FG-N	250	Yes	HNO3	Dissolved metals
GW0017-042821	1	FG-D	250	Yes	HNO3	Dissolved metals
GW0018-042821	1	ECB/FB	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
9:15	1.0	7.9	6.9	1227.0	5.8	531.0	
9:16	3.0	7.6	5.9	1229.0	6.2	516.6	
9:17	5.0	7.6	5.4	1233.0	6.4	502.8	
9:18	7.0	7.6	5.1	1239.0	6.4	489.2	
9:19	9.0	7.6	5.3	1246.0	6.5	477.8	
9:20	11.0	7.6	5.3	1245.0	6.5	466.4	
9:21	13.0	7.6	5.1	1250.0	6.5	450.0	
9:22	15.0	7.6	4.9	1254.0	6.5	435.0	
9:23	17.0	7.6	4.8	1250.0	6.5	418.0	
9:24	19.0	7.6	2.0	1250.0	6.5	367.2	
9:25	21.0	7.6	1.9	1255.0	6.5	342.1	
9:26	23.0	7.6	1.2	1257.0	6.6	328.6	
9:27	25.0	7.6	.5	1254.0	6.6	311.3	
9:28	27.0	7.6	.4	1256.0	6.6	292.1	
9:29	29.0	7.6	.4	1256.0	6.6	275.4	
9:30	31.0	7.6	.4	1259.0	6.6	260.4	
9:31	33.0	7.6	.3	1265.0	6.6	245.8	
9:32	35.0	7.6	.3	1258.0	6.6	233.0	
9:33	37.0	7.6	.3	1257.0	6.6	222.3	
9:34	39.0	7.6	.3	1259.0	6.6	213.7	

Stabilization reached?	No

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	Yes
SOP Deviation	Well continued to trend downwards on DO and ORP. Did not achieve range within 10 mv of ORP
Additional remarks	Took samples at 39 gallons although ORP continued to trend downwards. Blank time = 0949

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**MF-10**	**Sketch**	No
Date	5/3/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	12:40	MDT	Sunny	48	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
Peristaltic	*17.0*	*4*	9.23	7.77	15.22	13.12

	Time	DTW (ft)				
Start Purging	13:08	9.23			**Purge Rate (GPM)**	.3
Grab Sample	14:15		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	tart of purge, less
Stop Purging (DTW just prior)	14:16	11.32			**Total Purge Volume (gal)**	16.8

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0082-050321	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
13:10	.5	6.4	3.1	702.5	6.2	107.2	
13:13	1.3	6.5	2.0	749.8	6.1	97.4	
13:18	2.5	7.1	1.5	804.0	6.2	86.1	
13:24	4.0	7.6	.5	698.1	6.3	77.4	
13:31	5.8	7.8	.6	673.6	6.3	73.6	
13:37	7.3	7.9	.5	665.9	6.3	71.8	
13:43	8.8	7.9	.5	663.4	6.3	70.3	
13:48	10.0	7.9	.8	660.9	6.4	70.3	
13:53	11.3	7.9	.9	658.6	6.3	70.1	
13:59	12.8	8.0	.9	655.5	6.3	69.8	
14:03	13.8	7.9	.9	654.4	6.3	69.6	
14:08	15.0	7.9	.9	653.6	6.3	69.3	
14:10	15.5	7.9	.9	653.7	6.3	69.5	
14:12	16.0	7.9	.9	653.9	6.3	69.5	
14:13	16.3	7.9	.9	653.8	6.3	69.4	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**MF-11**	**Sketch**	No
Date	4/23/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Mathew Erickson,Other Staff	11:54	MDT	Sunny	32	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*13.8*	*4*	9.40	4.40	8.62	11.60

	Time	DTW (ft)				
Start Purging	12:05	9.40			**Purge Rate (GPM)**	2.0
Grab Sample	12:16		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Slightly turbid
Stop Purging (DTW just prior)	12:17	10.19			**Total Purge Volume (gal)**	24.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0007-042321	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
12:11	12.0	7.1	2.6	810.0	7.0	87.2	
12:14	18.0	7.2	2.8	774.0	7.0	76.4	
12:15	20.0	7.2	2.8	770.0	7.0	75.3	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**MH-MSD106**	**Sketch**	No
Date	5/11/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Other Staff	9:30	MDT			

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
Peristaltic			8.61			

	Time	DTW (ft)				
Start Purging	9:38	8.61			**Purge Rate (GPM)**	
Grab Sample	9:58		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	
Stop Purging (DTW just prior)					**Total Purge Volume (gal)**	

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0125-051121	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
9:42		8.9	2.2	799.0	6.2	103.0	
9:45		8.8	2.0	792.0	6.2	96.6	
9:48		8.7	1.9	788.0	6.2	92.6	
9:51		8.8	1.9	789.0	6.2	89.5	
9:54		8.8	1.9	787.0	6.3	88.7	
9:57		8.9	1.8	788.0	6.3	88.4	7.0

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Extra bottle for lab QC

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**MH-MSD108**	**Sketch**	No
Date	5/11/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Other Staff	10:10	MDT			

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
Peristaltic			4.19			

	Time	DTW (ft)				
Start Purging	10:14	4.19			**Purge Rate (GPM)**	
Grab Sample	10:35		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	
Stop Purging (DTW just prior)					**Total Purge Volume (gal)**	

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0126-051121	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:20		8.9	2.7	1050.0	6.0	95.9	
10:23		8.9	2.6	1049.0	6.0	95.6	
10:26		9.0	2.6	1049.0	6.0	95.2	
10:29		9.1	2.6	1050.0	6.0	95.1	
10:31		9.2	2.5	1054.0	6.0	94.9	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**MH-MSD110**	**Sketch**	No
Date	5/11/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Other Staff	10:44	MDT			

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
Peristaltic			5.62			

	Time	DTW (ft)				
Start Purging	10:47	5.62			**Purge Rate (GPM)**	
Grab Sample	11:05		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	
Stop Purging (DTW just prior)					**Total Purge Volume (gal)**	

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0127-051121	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:50		8.6	3.5	1397.0	5.7	108.9	
10:53		8.5	3.4	1392.0	5.8	109.4	
10:56		8.5	3.3	1390.0	5.8	110.2	
10:59		8.7	3.3	1392.0	5.8	110.8	
11:02		8.9	3.3	1398.0	5.8	110.9	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**MH-MSD113**	**Sketch**	No
Date	5/11/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Other Staff	11:17	MDT			

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
Peristaltic			5.61			

	Time	DTW (ft)				
Start Purging	11:20	5.61			**Purge Rate (GPM)**	
Grab Sample	11:36		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	
Stop Purging (DTW just prior)					**Total Purge Volume (gal)**	

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0128-051121	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
11:25		10.5	1.8	1661.0	5.6	114.9	
11:28		10.2	1.8	1642.0	5.6	115.1	
11:31		10.3	1.8	1644.0	5.6	115.0	
11:34		10.3	1.8	1646.0	5.6	114.8	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**MH-MSD116**	**Sketch**	No
Date	5/11/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Other Staff	11:50	MDT			

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
Peristaltic						

	Time	DTW (ft)				
Start Purging	11:54				**Purge Rate (GPM)**	
Grab Sample	12:18		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	
Stop Purging (DTW just prior)					**Total Purge Volume (gal)**	

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0129-051121	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
12:00		9.7	1.0	2904.0	4.7		
12:03		9.5	.6	2888.0	4.7		
12:06		9.3	.2	2875.0	4.7		
12:09		9.7	.2	2897.0	4.7		
12:12		9.9	.2	2913.0	4.7		
12:15		9.9	.2	2911.0	4.7		

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**MSD-01B**	**Sketch**	No
Date	5/4/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	12:40	MDT	Mostly Cloudy	48	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*44.3*	*4*	10.55	33.75	66.11	27.43

	Time	DTW (ft)				
Start Purging	12:56	10.55			**Purge Rate (GPM)**	1.8
Grab Sample	13:37		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	13:38	10.64			**Total Purge Volume (gal)**	73.8

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0085-050421	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
12:57	1.8	13.1	8.3	669.0	7.3	94.4	
13:01	8.8	9.7	4.7	1587.0	6.5	102.5	
13:05	15.8	10.3	.3	2262.0	5.3	109.2	
13:09	22.8	10.4	.2	2268.0	5.2	107.4	
13:13	29.8	10.5	.3	2354.0	5.2	106.1	
13:17	36.8	10.5	.2	2492.0	5.2	106.2	
13:21	43.8	10.5	.2	2529.0	5.2	105.3	
13:25	50.8	10.6	.1	2595.0	5.2	104.5	
13:29	57.8	10.4	.1	2604.0	5.2	103.3	
13:33	64.8	10.3	.1	2607.0	5.2	102.6	
13:37	71.8	10.3	.1	2609.0	5.2	102.3	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**MSD-01C**	**Sketch**	No
Date	5/4/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	10:26	MDT	Mostly Cloudy	45	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*115.0*	*4*	11.12	103.88	203.49	63.06

	Time	DTW (ft)				
Start Purging	10:42	11.12			**Purge Rate (GPM)**	2.0
Grab Sample	12:30		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	12:31	11.78			**Total Purge Volume (gal)**	224.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0086-050421	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:44	2.0	10.5	5.9	2150.0	5.5	117.3	
10:56	26.0	10.4	.8	3018.0	5.8	110.2	
11:08	50.0	10.4	.3	3107.0	6.0	101.0	
11:21	76.0	10.4	.6	3104.0	6.0	97.0	
11:33	100.0	10.4	.1	3108.0	6.0	94.4	
11:45	124.0	10.5	.1	3109.0	6.0	92.2	
11:58	150.0	10.5	.1	3117.0	6.0	89.3	
12:10	174.0	10.5	.1	3117.0	6.1	87.1	
12:18	198.0	10.4	.1	3130.0	6.0	85.6	
12:26	214.0	10.4	.1	3133.0	6.0	84.4	
12:30	222.0	10.4	.1	3148.0	6.0	84.0	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**MSD-02A**	**Sketch**	No
Date	5/4/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Other Staff	10:26	MDT	Overcast	40	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*14.0*	*2*	8.44	5.56	2.72	11.22

	Time	DTW (ft)				
Start Purging	10:39	8.44			**Purge Rate (GPM)**	2.0
Grab Sample	10:46		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	10:46	10.31			**Total Purge Volume (gal)**	10.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0089-050421	1	FG-N	250	Yes	HNO3	Dissolved metals
GW0090-050421	1	FG-D	250	Yes	HNO3	Dissolved metals
GW0091-050421	1	ECB/FB	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:40	2.0	5.2	5.0	794.0	5.3	362.2	
10:41	4.0	8.1	4.0	803.0	5.3	363.1	
10:42	5.0	8.0	4.1	811.0	5.3	365.0	
10:44	7.0	8.0	4.2	812.0	5.4	366.0	
10:44	8.0	8.0	4.2	812.0	5.0	367.0	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Blank occurred at 1101

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**MSD-02B**	**Sketch**	No
Date	5/4/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Other Staff	11:11	MDT	Overcast	40	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*47.9*	*2*	10.92	36.98	18.11	29.41

	Time	DTW (ft)				
Start Purging	11:17	10.92			**Purge Rate (GPM)**	2.0
Grab Sample	11:27		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	11:28	11.40			**Total Purge Volume (gal)**	22.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0092-050421	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
11:18	2.0	10.0	.6	4281.0	4.3	397.0	
11:20	6.0	10.1	.7	4317.0	4.3	386.2	
11:22	10.0	10.1	.4	4345.0	4.3	375.1	
11:24	14.0	10.1	.4	4330.0	4.4	366.5	
11:26	18.0	10.1	.3	4348.0	4.4	360.0	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**MSD-03**	**Sketch**	No
Date	5/3/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	15:54	MDT	Sunny	54	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*50.4*	*2*	8.68	41.72	20.43	29.54

	Time	DTW (ft)				
Start Purging	16:02	8.68			**Purge Rate (GPM)**	1.5
Grab Sample	16:20		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	16:21	8.83			**Total Purge Volume (gal)**	27.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0084-050321	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
16:03	1.5	10.9	1.1	2473.0	5.6	111.8	
16:05	4.5	10.5	.3	2742.0	5.5	113.3	
16:07	7.5	10.5	.2	2764.0	5.5	113.5	
16:09	10.5	10.5	.2	2779.0	5.5	113.7	
16:11	13.5	10.5	.2	2786.0	5.5	113.3	
16:12	15.0	10.5	.2	2795.0	5.5	113.1	
16:14	18.0	10.5	.2	2815.0	5.5	113.0	
16:16	21.0	10.5	.2	2829.0	5.5	112.9	
16:17	22.5	10.5	.2	2842.0	5.5	112.7	
16:18	24.0	10.5	.2	2843.0	5.5	112.6	
16:19	25.5	10.5	.2	2843.0	5.5	112.5	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**MSD-04**	**Sketch**	No
Date	4/23/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Daniel Cass,Mathew Erickson,Other Staff	12:24	MDT	Sunny	36	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*55.0*	*2*	10.00	45.00	22.04	32.50

	Time	DTW (ft)				
Start Purging	12:28	10.00			**Purge Rate (GPM)**	2.0
Grab Sample	12:44		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	12:45	10.44			**Total Purge Volume (gal)**	28.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0008-042321	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
12:30	4.0	9.2	.2	867.0	6.4	144.2	
12:32	8.0	9.2	.2	874.0	6.4	146.9	
12:36	16.0	9.2	.2	875.0	6.4	150.9	
12:38	18.0	9.2	.4	875.0	6.4	151.7	
12:40	20.0	9.2	1.4	875.0	6.3	152.9	
12:42	22.0	9.2	.8	875.0	6.4	154.2	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU * GW MONITORING - Field Sample Data Sheet**

Site	**MSD-05**	**Sketch**	No
Date	4/29/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Matt Kilsdonk,Other Staff	12:49	MDT	Partly Cloudy	47	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*57.4*	*2*	10.63	46.77	22.90	34.02

	Time	DTW (ft)				
Start Purging	13:02	10.63			**Purge Rate (GPM)**	1.8
Grab Sample	13:19		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	13:21	14.13			**Total Purge Volume (gal)**	29.8

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0053-042921	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	19B100186

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
13:03	1.8	9.9	.7	2836.0	5.6	85.9	
13:06	7.0	10.0	.2	2902.0	5.5	87.5	
13:09	12.3	10.0	.2	2897.0	5.5	97.9	
13:12	17.5	10.0	.1	2894.0	5.5	102.1	
13:14	21.0	10.0	.1	2891.0	5.5	103.3	
13:16	24.5	10.0	.1	2890.0	5.5	104.7	
13:17	26.3	10.0	.1	2889.0	5.5	105.0	
13:18	28.0	10.0	.1	2890.0	5.5	105.1	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

FALL FIELD FORMS

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**AMC-12**	**Sketch**	No
Date	10/5/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	9:41	MDT	Haze	51	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*49.0*	*6*	23.99	25.01	110.23	36.50

	Time	DTW (ft)				
Start Purging	9:54	23.99			**Purge Rate (GPM)**	2.0
Grab Sample	11:20		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	clear at time of s
Stop Purging (DTW just prior)	11:22	24.80			**Total Purge Volume (gal)**	132.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0114-100521	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
9:57	6.0	9.0	8.9	1085.0	6.2	29.1	
10:12	36.0	9.1	.8	1429.0	5.6	135.4	
10:24	54.0	9.2	.5	1396.0	5.5	140.9	
10:36	72.0	9.2	.5	1383.0	5.5	136.0	
10:42	78.0	9.2	.5	1381.0	5.5	136.0	
10:48	84.0	9.3	.4	1376.0	5.5	133.0	
10:52	90.0	9.2	.4	1370.0	5.5	128.2	
10:56	96.0	9.2	.4	1374.0	5.5	122.6	
11:00	102.0	9.2	.4	1377.0	5.5	118.0	
11:04	108.0	9.2	.4	1375.0	5.5	114.7	
11:08	114.0	9.2	.4	1373.0	5.5	114.7	
11:12	120.0	9.2	.4	1373.0	5.5	114.8	
11:16	126.0	9.3	.4	1371.0	5.5	114.3	
11:20	132.0	9.3	.4	1371.0	5.5	114.3	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	1014 purge rate is at 1.50 GPM 1037 purge rate is at 1.00 GPM.

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet						
Site	**AMC-13**				**Sketch**	No
Date	9/27/2021				**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	11:22	MDT	Sunny	66	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*57.7*	*6*	21.02	36.68	161.66	39.36

	Time	DTW (ft)				
Start Purging	11:32	21.02			**Purge Rate (GPM)**	1.0
Grab Sample	14:25		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	from clear to da
Stop Purging (DTW just prior)	14:31	30.91			**Total Purge Volume (gal)**	173.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0049-092721	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
11:34	2.0	9.3	3.0	465.5	8.2	-219.9	
12:26	54.0	9.4	.3	466.3	8.3	-303.1	
13:22	110.0	9.7	.3	560.2	6.6	-27.5	
13:29	117.0	9.7	.2	560.4	6.6	-43.3	
13:38	126.0	9.8	1.6	561.2	6.5	-48.8	
13:47	135.0	9.8	1.4	561.2	6.5	-51.3	
13:56	144.0	9.8	1.5	561.1	6.5	-51.8	
14:05	153.0	9.9	1.3	561.3	6.5	-52.5	
14:14	162.0	9.9	1.3	561.3	6.5	-52.9	
14:23	171.0	9.9	1.3	561.0	6.5	-53.4	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Due to battery dying and not able to pump water through filter. Pulled raw 1L sample in field, took to lab on ice and filtered in lab. Sample collected by Kirsten Vose and Matt Kilsdonk.

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**AMC-23B**	**Sketch**	No
Date	10/4/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	13:34	MDT	Sunny	74	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*137.0*	*2*	7.36	129.64	63.49	72.18

	Time	DTW (ft)				
Start Purging	13:41	7.36			**Purge Rate (GPM)**	2.0
Grab Sample	15:34		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	ear at sample tim
Stop Purging (DTW just prior)	15:37	71.12			**Total Purge Volume (gal)**	67.5

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0109-100421	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
13:42	2.0	9.9	13.2	1179.0	6.9	246.6	
13:47	12.0	9.7	2.2	1185.0	6.7	242.9	
13:52	16.5	10.8	2.1	1192.0	6.7	238.9	
13:59	20.0	10.9	2.0	1202.0	6.8	234.8	
14:09	25.0	11.1	1.6	1213.0	6.7	232.2	
14:43	42.0	11.5	1.6	1238.0	6.7	223.5	
14:51	46.0	11.6	1.6	1240.0	6.7	222.2	
14:59	50.0	11.6	1.7	1239.0	6.7	221.0	
15:07	54.0	11.5	1.8	1240.0	6.7	218.8	
15:15	58.0	11.6	2.1	1240.0	6.7	217.3	
15:23	62.0	11.6	2.0	1241.0	6.7	214.9	
15:31	66.0	11.7	1.9	1241.0	6.7	212.7	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	Yes
SOP Deviation	Final DTW was taken after stop purge, could not get DTW with pump in well.
Additional remarks	1357 - moved pumped down ~2 ft, purge rate is now 0.50 GPM 1402 - moved pump down, new depth to pump is 85.0 ft, due to water surges

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet						
Site	**AMC-24**				**Sketch**	No
Date	9/29/2021				**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	9:28	MDT	Sunny	34	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
Peristaltic	*28.0*	*6*	10.96	17.04	75.10	19.48

	Time	DTW (ft)				
Start Purging	10:01	10.96			**Purge Rate (GPM)**	.8
Grab Sample	16:42		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	is clear at sampl
Stop Purging (DTW just prior)	16:44	19.87			**Total Purge Volume (gal)**	90.8

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0059-092921	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:04	2.3	8.6	3.3	546.7	7.0	-67.5	
10:30	21.8	9.2	.6	528.8	7.2	-109.3	
10:45	25.5	9.0	.9	536.7	6.9	-34.1	
11:18	33.8	9.3	1.9	535.1	6.7	-3.1	
11:38	38.8	9.8	1.8	533.7	6.7	11.6	
11:53	43.8	10.0	1.5	533.4	6.6	15.5	
12:20	50.5	9.3	1.8	531.1	6.6	19.6	
12:40	55.5	9.7	2.2	532.4	6.7	10.3	
13:00	60.5	9.8	2.8	531.3	6.6	19.9	
13:20	65.5	10.2	3.0	530.8	6.6	26.8	
14:00	70.5	10.3	2.5	528.3	6.6	37.7	
14:40	75.5	10.5	1.6	527.9	6.5	43.8	
15:20	80.5	10.6	1.2	527.5	6.5	42.7	
16:00	85.5	10.7	1.2	527.3	6.5	39.0	
16:40	90.5	10.4	1.0	526.9	6.5	37.2	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	At 1030 moved pump down ~6" and pinched down tubing due to pulling up air bubbles, 1032 new purge rate = 0.25 GPM. 1200 confirmed that purge rate was still 0.25 GPM.

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet						
Site	**AMC-24B**				**Sketch**	No
Date	9/30/2021				**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	10:21	MDT	Sunny	43	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
Peristaltic	*51.9*	*2*	10.59	41.31	20.23	31.25

	Time	DTW (ft)				
Start Purging	10:34	10.59			**Purge Rate (GPM)**	.1
Grab Sample	13:24		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	tart of purge.wat
Stop Purging (DTW just prior)	13:25	10.61			**Total Purge Volume (gal)**	21.3

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0060-093021	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:35	.1	9.5	1.8	1059.0	6.7	-7.0	
11:30	7.0	9.9	2.4	1277.0	6.3	181.2	
12:26	14.0	10.1	2.3	1277.0	6.3	185.3	
12:42	16.0	10.2	2.3	1271.0	6.3	186.1	
12:58	18.0	10.2	2.2	1279.0	6.3	187.4	
13:14	20.0	10.2	2.1	1281.0	6.3	188.1	
13:22	21.0	10.3	2.1	1280.0	6.3	188.6	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Samples by Kirsten Vose and Matt Kilsdonk.

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet						
Site	**AMC-24C**				**Sketch**	No
Date	9/28/2021				**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	13:59	MDT	Mostly Cloudy	53	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*82.3*	*2*	9.17	73.13	35.81	45.74

	Time	DTW (ft)				
Start Purging	14:11	9.17			**Purge Rate (GPM)**	2.0
Grab Sample	14:30		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	clear at time of s
Stop Purging (DTW just prior)	14:31	10.66			**Total Purge Volume (gal)**	38.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0061-092821	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
14:12	2.0	11.1	12.8	877.0	6.9	177.8	
14:17	12.0	10.7	4.7	918.0	6.8	182.0	
14:23	24.0	9.8	1.3	1090.0	6.6	203.3	
14:24	26.0	9.8	1.2	1091.0	6.6	204.2	
14:25	28.0	9.7	1.3	1092.0	6.6	205.0	
14:26	30.0	9.7	1.3	1092.0	6.6	205.5	
14:27	32.0	9.7	1.4	1093.0	6.6	205.9	
14:28	34.0	9.7	1.4	1093.0	6.6	206.2	
14:29	36.0	9.7	1.5	1094.0	6.5	206.3	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Raining and windy at time of sample. Sample collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**AMW-01A**	**Sketch**	No
Date	10/7/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	9:46	MDT	Smoke	74	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
Peristaltic	*14.0*	*4*	11.86	2.14	4.19	12.93

	Time	DTW (ft)				
Start Purging	13:38	11.86			**Purge Rate (GPM)**	.2
Grab Sample	9:46		**Sampled w/in 24 hrs of purging?**	Yes	**Water Color**	
Stop Purging (DTW just prior)	9:48	12.89			**Total Purge Volume (gal)**	

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0118-100721	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
13:39	.2	13.0	2.3	1810.0	5.7	150.8	
13:42	.8	12.8	1.5	1745.0	5.8	139.8	
13:45	1.4	12.8	1.1	1765.0	5.8	142.5	
12:00	2.3	13.2	1.7	1939.0	5.9	161.0	
12:01	2.3	13.5	2.2	1916.0	5.8	156.2	
12:02	2.4	13.2	2.2	1940.0	5.8	152.7	
12:03	2.4	13.1	2.3	1920.0	5.8	153.2	
12:04	2.5	13.1	3.9	1896.0	5.8	158.8	
12:05	2.5	13.4	5.6	1887.0	5.7	160.5	
12:07	2.6	13.9	4.8	1882.0	5.8	160.7	
12:09	2.7	13.3	3.7	1920.0	5.8	150.8	
12:12	2.9	13.3	3.1	1958.0	5.8	145.6	
12:17	3.1	13.0	2.3	2025.0	5.8	136.6	
12:24	3.5	13.1	1.9	2162.0	5.7	128.4	
9:41	3.7	11.7	2.3	2327.0	5.7	166.7	
9:42	3.8	11.9	1.3	2365.0	5.6	143.4	
9:43	3.9	12.0	1.3	2374.0	5.7	139.1	
9:44	4.1	12.0	1.4	2379.0	5.7	135.1	

Stabilization reached?	No

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	Yes
SOP Deviation	Parameters did not stabilize. Pumped well dry two days in a row. Got to 3 well volumes and pulled sample.
Additional remarks	No sample collected. Well pumped dry, will come back tomorrow 10/6/21.

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**AMW-01B**	**Sketch**	No
Date	9/24/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Other Staff	11:02	MDT	Sunny	55	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*45.0*	*4*	11.95	33.05	64.74	28.47

	Time	DTW (ft)				
Start Purging	11:18	11.95			**Purge Rate (GPM)**	1.3
Grab Sample	11:44		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	
Stop Purging (DTW just prior)	11:44	12.09			**Total Purge Volume (gal)**	32.5

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0119-092421	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
11:30	15.0	11.9	.2	4374.0	4.4	496.1	1.0
11:33	18.8	11.9	.2	4349.0	4.3	492.2	.8
11:36	22.5	11.9	.2	4293.0	4.4	488.2	.9
11:39	26.3	11.9	.2	4316.0	4.3	485.6	.8
11:42	30.0	11.9	.2	4298.0	4.3	483.1	.9

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample collected by PTS

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**AMW-01C**	**Sketch**	No
Date	10/5/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	13:53	MDT	Smoke	74	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*115.0*	*4*	12.00	103.00	201.76	63.50

	Time	DTW (ft)				
Start Purging	14:29	12.00			**Purge Rate (GPM)**	2.0
Grab Sample	16:13		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	clear at time of s
Stop Purging (DTW just prior)	16:13	16.06			**Total Purge Volume (gal)**	208.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0120-100521	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
14:31	4.0	12.1	1.8	2671.0	5.5	215.7	
15:02	66.0	11.7	.7	2679.0	5.4	231.9	
15:19	100.0	11.7	.8	2649.0	5.4	234.7	
15:36	134.0	11.7	.7	2633.0	5.4	236.9	
15:41	144.0	11.7	.7	2627.0	5.4	237.1	
15:46	154.0	11.7	.6	2629.0	5.4	237.8	
15:51	164.0	11.6	.6	2629.0	5.4	238.3	
15:56	174.0	11.7	.7	2632.0	5.4	238.9	
16:01	184.0	11.6	.7	2628.0	5.4	239.4	
16:06	194.0	11.6	.7	2627.0	5.4	239.8	
16:11	204.0	11.6	.7	2631.0	5.4	240.0	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**AMW-02**	**Sketch**	No
Date	9/29/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	16:03	MDT	Sunny	65	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
Peristaltic	*23.1*	*4*	10.47	12.63	24.74	16.79

	Time	DTW (ft)				
Start Purging	16:20	10.47			**Purge Rate (GPM)**	.8
Grab Sample	17:08		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	17:14	13.37			**Total Purge Volume (gal)**	38.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0037-092921	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
16:24	4.0	8.4	5.2	1425.0	7.1	150.5	
16:34	11.5	8.5	5.3	1455.0	7.0	149.1	
16:44	19.0	8.3	5.2	1639.0	7.0	150.1	
16:48	22.0	8.2	5.2	1656.0	7.0	150.3	
16:52	26.0	8.3	5.0	1726.0	7.0	150.6	
16:54	27.5	8.2	4.8	1720.0	7.0	149.9	
16:56	29.0	8.2	5.0	1747.0	7.0	150.6	
16:58	30.5	8.2	5.0	1728.0	7.0	150.1	
17:00	32.0	8.2	4.9	1792.0	7.0	150.8	
17:02	33.5	8.2	5.2	1797.0	7.0	150.0	
17:04	35.0	8.2	5.5	1788.0	7.0	150.3	
17:06	36.5	8.2	5.4	1796.0	7.0	150.4	
17:08	38.0	8.2	5.5	1802.0	7.0	150.4	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sampling Team: Longfield, Moodry

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**AMW-08**	**Sketch**	No
Date	10/5/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	12:21	MDT	Haze	68	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*46.0*	*4*	43.98	2.02	3.96	44.99

	Time	DTW (ft)				
Start Purging	12:32	43.98			**Purge Rate (GPM)**	.5
Grab Sample	12:45		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	ellow color at sam
Stop Purging (DTW just prior)	12:48	45.53			**Total Purge Volume (gal)**	6.5

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0115-100521	1	FG-N	250	Yes	HNO3	Dissolved metals
GW0116-100521	1	FG-D	250	Yes	HNO3	Dissolved metals
GW0117-100521	1	ECB/FB	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
12:33	.5	13.0	2.2	4093.0	4.4	236.8	
12:34	1.0	13.0	3.2	4062.0	4.2	225.6	
12:35	1.5	12.1	3.5	4005.0	4.1	229.1	
12:36	2.0	11.7	2.3	3925.0	4.0	233.6	
12:37	2.5	11.6	2.1	3891.0	4.1	236.6	
12:38	3.0	11.7	2.1	3890.0	4.1	235.7	
12:39	3.5	11.7	1.9	3939.0	4.1	232.8	
12:40	4.0	11.7	1.7	3997.0	4.2	230.3	
12:41	4.5	11.7	1.7	4054.0	4.2	227.1	
12:42	5.0	11.7	1.6	4085.0	4.2	223.3	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Blank time = 1304 Samples collected on all dirt site with minimal wind. Dust has chance to affect samples.

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet						
Site	**AMW-12**				**Sketch**	No
Date	9/27/2021				**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	9:58	MDT	Sunny	55	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*24.5*	*4*	13.64	10.86	21.27	19.07

	Time	DTW (ft)				
Start Purging	10:27	13.64			**Purge Rate (GPM)**	1.0
Grab Sample	10:49		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	clear at time of s
Stop Purging (DTW just prior)	10:52	18.35			**Total Purge Volume (gal)**	22.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0048-092721	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:29	2.0	10.7	6.4	571.5	7.1	179.8	
10:34	7.0	10.3	5.3	622.7	7.0	175.2	
10:41	14.0	9.7	4.9	597.5	7.0	169.5	
10:43	16.0	9.6	4.9	598.5	7.0	168.1	
10:45	18.0	9.6	5.3	597.3	7.1	166.4	
10:47	20.0	9.5	5.3	597.7	7.1	164.7	
10:49	22.0	9.5	5.4	597.8	7.1	163.1	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Samples collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet						
Site	**AMW-13**				**Sketch**	No
Date	9/23/2021				**Photographs**	No
Personnel	**Arrival Time**	**Time Unit**	**Weather Conditions**	**Air Temp (°F)**		
Dalen Longfield,Joe Moodry,Matt Kilsdonk	11:26	MDT	Overcast	52		

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
Peristaltic	*16.8*	*4*	11.44	5.36	10.50	14.12

	Time	DTW (ft)				
Start Purging	11:50	11.44			**Purge Rate (GPM)**	.2
Grab Sample	14:10		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	14:16	15.53			**Total Purge Volume (gal)**	14.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0001-092321	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
11:50	.6	11.6	1.2	1524.0	6.6	-12.5	3.2
12:00	2.3	12.6	3.8	1521.0	6.6	-20.5	3.3
12:10	4.0	13.1	1.2	1427.0	6.6	-20.6	3.7
12:22	6.0	12.9	.6	1464.0	6.6	-13.3	9.8
12:30	7.4	12.5	.4	1453.0	6.6	-10.6	3.4
12:35	8.2	12.2	.4	1427.0	6.6	-13.8	4.1
12:40	9.0	11.7	.4	1374.0	6.7	-24.3	28.3
12:51	10.0	12.3	2.2	1362.0	6.7	-35.2	2.1
12:58	10.4	12.4	1.3	1418.0	6.7	-34.0	.9
13:00	10.6	12.4	1.1	1449.0	6.7	27.2	.6
13:05	10.8	12.6	1.0	1468.0	6.7	-21.0	.7
13:10	11.0	12.7	.9	1482.0	6.6	-17.6	.6
13:15	11.3	12.9	1.1	1495.0	6.6	-10.3	.8
13:20	11.5	13.0	1.1	1500.0	6.6	-5.3	.6
13:26	11.8	13.1	1.1	1508.0	6.6	-.9	
13:40	12.5	13.3	1.2	1525.0	6.6	13.6	
13:50	13.0	13.4	1.3	1538.0	6.6	23.7	
14:00	13.5	13.4	1.3	1550.0	6.6	32.8	
14:10	14.0	13.7	1.3	1556.0	6.6	40.3	.6

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	Yes
SOP Deviation	Field parameters did not stabilize but collected sample because well was beginning to pump dry.
Additional remarks	Sample Team: Kilsdonk, Moodry, Longfield

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet					
Site	**AMW-13B**				**Sketch** No
Date	9/23/2021				**Photographs** No
Personnel	**Arrival Time**	**Time Unit**	**Weather Conditions**	**Air Temp (°F)**	
Dalen Longfield,Joe Moodry,Matt Kilsdonk	14:23	MDT	Overcast	64	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*40.0*	*2*	10.61	29.39	14.39	25.31

	Time	DTW (ft)				
Start Purging	14:36	10.61			**Purge Rate (GPM)**	1.0
Grab Sample	14:51		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	14:58	10.78			**Total Purge Volume (gal)**	15.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0002-092321	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
14:38	2.0	9.7	2.4	314.2	7.6	-21.2	.2
14:40	4.0	9.6	2.2	296.6	7.4	11.3	.4
14:42	6.0	9.5	2.2	296.1	7.3	30.0	.6
14:44	8.0	9.5	2.2	295.6	7.3	38.9	.6
14:46	10.0	9.5	2.2	295.6	7.3	46.4	.6
14:48	12.0	9.4	2.2	294.8	7.3	50.6	.3
14:51	15.0	9.4	2.2	294.5	7.2	55.1	.5

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Kilsdonk, Moodry, Longfield

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet					
Site	**AMW-13B2**				**Sketch** No
Date	9/23/2021				**Photographs** No
Personnel	**Arrival Time**	**Time Unit**	**Weather Conditions**	**Air Temp (°F)**	
Dalen Longfield,Joe Moodry,Matt Kilsdonk	15:06	MDT	Partly Cloudy	65	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*49.0*	*2*	11.77	37.23	18.23	30.39

	Time	DTW (ft)				
Start Purging	15:13	11.77			**Purge Rate (GPM)**	2.0
Grab Sample	15:23		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	15:29	11.98			**Total Purge Volume (gal)**	20.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0003-092321	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
15:15	4.0	9.7	5.0	301.5	7.2	76.9	.5
15:17	8.0	9.7	2.8	302.2	7.2	78.0	.4
15:19	12.0	9.7	2.4	302.8	7.2	77.8	.4
15:21	16.0	9.7	2.2	301.9	7.3	77.6	.2
15:23	20.0	9.7	2.3	302.2	7.2	79.1	.3

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Kilsdonk, Moodry, Longfield

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet					
Site	**AMW-13C**				**Sketch** No
Date	9/23/2021				**Photographs** No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Joe Moodry,Matt Kilsdonk	15:41	MDT	Partly Cloudy	65	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*82.0*	*2*	9.84	72.16	35.34	45.92

	Time	DTW (ft)				
Start Purging	16:02	9.84			**Purge Rate (GPM)**	2.0
Grab Sample	16:25		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear at sample
Stop Purging (DTW just prior)	16:31	11.74			**Total Purge Volume (gal)**	42.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0004-092321	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
16:02							
16:04	4.0	10.1	.6	641.9	6.9	111.5	.3
16:06	8.0	10.1	.6	642.8	6.9	111.0	.9
16:08	12.0	10.1	.6	641.7	6.8	109.3	1.0
16:10	18.0	10.1	.6	641.6	6.8	108.9	.8
16:14	24.0	10.1	.6	642.7	6.8	107.9	.3
16:16	30.0	10.1	.6	642.2	6.7	107.5	.5
16:17	32.0	10.1	.6	642.1	6.7	107.6	1.0
16:18	34.0	10.1	.6	641.4	6.7	107.7	.3
16:19	36.0	10.1	.6	642.8	6.7	107.5	.8
16:21	40.0	10.1	.7	642.7	6.7	107.5	.7
16:22	42.0	10.1	.6	642.6	6.7	107.5	.7

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Kilsdonk, Moodry, Longfield

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**AMW-20**	**Sketch**	No
Date	10/7/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Other Staff	13:38	MDT			

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
	42.0	*4*	29.49	12.51	24.51	35.74

	Time	DTW (ft)				
Start Purging	13:55	29.49			**Purge Rate (GPM)**	1.0
Grab Sample	14:30		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	clear
Stop Purging (DTW just prior)	14:30				**Total Purge Volume (gal)**	20.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0114-100721	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
13:55	3.0	9.8		1802.0	4.9	454.0	
14:03	8.0	9.4		1914.0	5.0	471.0	
14:08	13.0	9.6		1940.0	5.0	471.0	
14:25	15.0	10.6		1949.0	5.0	470.0	
14:30	20.0	9.5		1976.0	4.9	459.0	

Stabilization reached?	No

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	Yes
SOP Deviation	Well ran dry, pump turned off to allow recovery: 13 gal purged 20 gallons purged, sampled to avoid well running dry again
Additional remarks	Sample collected by Connie Thomson with MBMG.

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BMW-03A**	**Sketch**	No
Date	9/27/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	15:24	MDT	Sunny	81	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
Peristaltic	*19.0*	*4*	4.39	14.61	28.62	11.70

	Time	DTW (ft)				
Start Purging	15:48	4.39			**Purge Rate (GPM)**	.8
Grab Sample	16:30		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	16:35	9.05			**Total Purge Volume (gal)**	31.3

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0031-092721	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
16:14	19.5	9.1	.5	780.0	6.5	-46.9	
16:18	22.5	9.1	.4	780.0	6.5	-47.3	
16:23	26.3	9.1	.4	780.0	6.5	-48.6	
16:26	28.3	9.0	.3	783.0	6.5	-50.7	
16:27	29.0	9.0	.3	783.0	6.5	-50.7	
16:28	29.8	9.0	.2	783.0	6.5	-51.1	
16:30	31.3	9.0	.3	782.0	6.5	-51.1	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	Yes
SOP Deviation	Parameters were not recorded at appropriate intervals. First two casing volumes, no parameters were recorded.
Additional remarks	Sample Team: Longfield, Moodry

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BMW-03B**	**Sketch**	No
Date	9/27/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	16:40	MDT	Sunny	82	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*47.8*	*4*	4.16	43.64	85.48	25.98

	Time	DTW (ft)				
Start Purging	16:45	4.16			**Purge Rate (GPM)**	2.0
Grab Sample	17:28		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	17:31	6.00			**Total Purge Volume (gal)**	86.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0032-092721	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
17:00	30.0	7.6	.1	2488.0	6.7	34.4	
17:08	46.0	7.5	.0	2488.0	6.7	35.9	
17:15	60.0	7.5	.1	2488.0	6.7	35.1	
17:21	72.0	7.5	.1	2497.0	6.7	34.4	
17:25	80.0	7.4	.1	2491.0	6.7	32.7	
17:28	86.0	7.5	.1	2491.0	6.7	31.6	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	Yes
SOP Deviation	Parameters were not recorded at regular intervals. First two casing volumes, no parameters were recorded.
Additional remarks	Sample Team: Longfield, Moodry

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet					
Site	**BPS07-01A**				**Sketch** No
Date	9/24/2021				**Photographs** No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	15:32	MDT	Sunny	71	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*23.0*	*2*	18.81	4.19	2.05	20.91

	Time	DTW (ft)				
Start Purging	15:39	18.81			**Purge Rate (GPM)**	1.0
Grab Sample	15:46		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	r clear at sample
Stop Purging (DTW just prior)	15:47	19.09			**Total Purge Volume (gal)**	7.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0017-092421	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
15:41	2.0	13.7	7.8	2.0	7.5	179.8	
15:42	3.0	10.0	6.6	535.9	7.2	200.3	
15:43	4.0	9.6	5.9	532.5	7.1	199.8	
15:44	5.0	9.6	5.8	532.0	7.1	198.8	
15:45	6.0	9.6	5.8	532.2	7.1	198.0	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Samples collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet					
Site	**BPS07-01B**			**Sketch**	No
Date	9/24/2021			**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	15:03	MDT	Sunny	69	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*40.0*	*2*	18.71	21.29	10.43	29.36

	Time	DTW (ft)				
Start Purging	15:21	18.71			**Purge Rate (GPM)**	2.0
Grab Sample	15:28		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	tly turbid at time
Stop Purging (DTW just prior)	15:29	18.84			**Total Purge Volume (gal)**	14.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0018-092421	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
15:22	2.0	9.6	6.9	402.5	7.4	204.8	
15:23	4.0	9.5	6.4	412.3	7.3	205.3	
15:24	6.0	9.5	6.3	413.7	7.1	205.2	
15:25	8.0	9.5	6.3	414.2	7.1	205.1	
15:26	10.0	9.5	6.3	414.6	7.1	204.8	
15:27	12.0	9.5	6.3	414.9	7.0	204.6	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet					
Site	**BPS07-03A**				**Sketch** No
Date	9/30/2021				**Photographs** No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	14:02	MDT	Sunny	63	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*20.4*	*2*	10.32	10.08	4.94	15.36

	Time	DTW (ft)				
Start Purging	14:10	10.32			**Purge Rate (GPM)**	1.0
Grab Sample	14:17		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	clear at time of s
Stop Purging (DTW just prior)	14:18	10.65			**Total Purge Volume (gal)**	7.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0067-093021	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
14:11	1.0	15.1	5.6	319.0	7.7	173.0	
14:11	1.5	13.8	3.1	318.3	7.4	172.5	
14:12	2.0	11.0	2.1	304.9	7.3	173.1	
14:13	3.0	10.5	1.2	302.0	7.1	173.9	
14:14	4.0	10.4	1.1	301.7	7.1	172.7	
14:14	4.5	10.4	1.0	301.5	7.1	172.4	
14:15	5.0	10.4	1.0	301.5	7.0	172.5	
14:15	5.5	10.4	1.0	301.6	7.0	172.0	
14:16	6.0	10.4	1.0	301.5	7.0	171.6	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet					
Site	**BPS07-05A**			**Sketch**	No
Date	9/24/2021			**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Alice Drew-Davies,Joe Moodry	16:31	MDT	Sunny	70	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*18.5*	*2*	9.47	9.03	4.42	13.99

	Time	DTW (ft)				
Start Purging	16:33	9.47			**Purge Rate (GPM)**	.5
Grab Sample	16:43		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	ear at sample tim
Stop Purging (DTW just prior)	16:44	9.88			**Total Purge Volume (gal)**	5.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0016-092421	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
16:37	2.0	14.0	7.1	357.3	7.6	196.8	
16:39	3.0	13.8	6.9	355.0	7.5	197.7	
16:41	4.0	13.7	6.8	354.3	7.4	196.4	
16:42	4.5	13.7	6.8	353.5	7.4	196.1	
16:43	5.0	13.7	6.8	352.0	7.4	195.2	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sampled by Joe and Alice

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet					
Site	**BPS07-05B**				**Sketch** No
Date	9/24/2021				**Photographs** No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Alice Drew-Davies,Joe Moodry	15:59	MDT	Sunny	72	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*80.0*	*2*	9.43	70.57	34.56	44.72

	Time	DTW (ft)				
Start Purging	16:15	9.43			**Purge Rate (GPM)**	2.0
Grab Sample	16:35		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear / clean
Stop Purging (DTW just prior)	16:36	9.55			**Total Purge Volume (gal)**	36.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0015-092421	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
16:17	4.0	10.1	7.9	458.4	6.8	171.1	
16:19	8.0	10.1	7.6	456.7	6.7	169.3	
16:21	12.0	10.1	7.6	455.8	6.7	169.2	
16:24	18.0	10.1	7.4	453.7	6.7	168.5	
16:27	24.0	10.1	7.4	452.9	6.6	167.8	
16:28	26.0	10.1	7.5	452.9	6.6	167.6	
16:29	28.0	10.1	7.4	452.9	6.6	167.6	
16:30	30.0	10.1	7.4	452.8	6.6	167.5	
16:31	32.0	10.1	7.4	452.7	6.6	167.1	
16:32	34.0	10.1	7.1	452.8	6.6	167.1	
16:33	36.0	10.1	7.0	452.9	6.6	166.6	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Joe and Alice sampled

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet					
Site	**BPS07-07**			**Sketch**	No
Date	9/30/2021			**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	14:39	MDT	Sunny	64	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
Peristaltic	*15.0*	*0.75*	5.51	9.49	0.65	10.26

	Time	DTW (ft)				
Start Purging	14:47	5.51			**Purge Rate (GPM)**	.1
Grab Sample	14:54		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	ear at sample tim
Stop Purging (DTW just prior)	14:55	5.51			**Total Purge Volume (gal)**	.9

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0068-093021	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
14:48	.1	11.1	1.6	286.1	6.9	91.6	
14:49	.3	10.6	1.0	280.7	6.8	63.7	
14:50	.4	10.7	.9	280.6	6.7	48.3	
14:51	.5	10.6	.7	280.5	6.7	37.6	
14:52	.6	10.6	.7	278.9	6.7	29.6	
14:53	.8	10.5	.7	278.9	6.6	23.6	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	DTW final taken after stop purge, due to small well casing.

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS07-08A**	**Sketch**	No
Date	9/28/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	16:30	MDT	Light Rain	46	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*20.0*	*2*	10.23	9.77	4.78	15.12

	Time	DTW (ft)				
Start Purging	16:41	10.23			**Purge Rate (GPM)**	2.0
Grab Sample	16:54		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	16:57	10.74			**Total Purge Volume (gal)**	26.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0038-092821	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
16:43	4.0	12.2	1.1	4522.0	7.0	178.6	
16:44	6.0	12.2	.7	4539.0	6.9	178.0	
16:45	8.0	12.1	.7	4549.0	6.9	177.5	
16:46	10.0	12.1	.6	4552.0	6.9	177.4	
16:47	12.0	12.1	.4	4554.0	6.9	177.0	
16:48	14.0	12.1	.3	4551.0	6.9	176.8	
16:49	16.0	12.1	.3	4551.0	6.9	176.7	
16:50	18.0	12.1	.2	4547.0	6.9	176.6	
16:51	20.0	12.1	.2	4545.0	6.9	176.5	
16:52	22.0	12.1	.2	4539.0	6.9	176.4	
16:53	24.0	12.1	.2	4537.0	6.4	176.2	
16:54	26.0	12.1	.2	4538.0	6.4	176.1	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Longfield, Moodry

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS07-11A**	**Sketch**	No
Date	10/1/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	15:17	MDT	Mostly Cloudy	66	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*24.0*	*2*	14.17	9.83	4.81	19.09

	Time	DTW (ft)				
Start Purging	15:28	14.17			**Purge Rate (GPM)**	2.0
Grab Sample	15:32		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	clear at time of s
Stop Purging (DTW just prior)	15:34	15.04			**Total Purge Volume (gal)**	7.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0104-100121	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
15:29	1.0	12.5	5.0	306.5	6.3	244.9	
15:29	2.0	10.9	3.7	313.6	5.8	247.8	
15:30	3.0	10.4	3.0	322.5	5.6	248.4	
15:30	4.0	10.3	2.8	330.9	5.5	249.3	
15:31	5.0	10.2	3.2	339.6	5.4	250.5	
15:31	6.0	10.2	3.5	343.5	5.3	251.2	
15:32	7.0	10.2	3.3	348.4	5.3	252.1	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS07-11B**	**Sketch**	No
Date	10/1/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	15:39	MDT	Mostly Cloudy	65	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*45.0*	*2*	14.32	30.68	15.02	29.66

	Time	DTW (ft)				
Start Purging	15:43	14.32			**Purge Rate (GPM)**	2.0
Grab Sample	15:52		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	clear at time of s
Stop Purging (DTW just prior)	15:54	14.60			**Total Purge Volume (gal)**	18.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0105-100121	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
15:44	2.0	10.0	2.2	1434.0	5.1	214.8	
15:45	4.0	9.9	1.0	1423.0	5.1	210.0	
15:46	6.0	10.0	.6	1397.0	5.1	205.3	
15:47	8.0	10.0	.6	1372.0	5.1	203.1	
15:48	10.0	10.0	.6	1362.0	5.0	200.4	
15:49	12.0	10.0	.7	1360.0	5.0	198.4	
15:50	14.0	10.0	.6	1348.0	5.0	196.9	
15:51	16.0	10.0	.6	1347.0	5.0	195.6	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS07-13A**	**Sketch**	No
Date	9/30/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	10:57	MDT	Sunny	55	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*25.5*	*2*	23.63	1.87	0.92	24.57

	Time	DTW (ft)				
Start Purging	11:12	23.63			**Purge Rate (GPM)**	2.0
Grab Sample	11:33		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	11:39	23.65			**Total Purge Volume (gal)**	38.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0070-093021	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
11:15	6.0	9.6	2.7	6438.0	6.6	138.1	
11:19	14.0	9.6	2.5	6513.0	6.6	123.6	
11:21	18.0	9.6	2.6	6534.0	6.6	121.0	
11:23	22.0	9.6	2.5	6561.0	6.6	119.1	
11:25	26.0	9.6	2.4	6587.0	6.6	117.5	
11:27	30.0	9.6	2.5	6594.0	6.7	117.3	
11:29	34.0	9.6	2.5	6574.0	6.7	117.4	
11:31	36.0	9.6	2.5	6568.0	6.7	117.4	
11:33	38.0	9.6	2.5	6569.0	6.7	117.1	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Longfield, Moodry Had to pull pump to record water level, well was extremely sensitive making it difficult to record water level

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS07-13B**	**Sketch**	No
Date	9/30/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	11:53	MDT	Sunny	60	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*40.0*	*2*	24.43	15.57	7.62	32.22

	Time	DTW (ft)				
Start Purging	12:08	24.43			**Purge Rate (GPM)**	2.0
Grab Sample	12:20		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	12:27	24.70			**Total Purge Volume (gal)**	24.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0071-093021	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
12:09	2.0	9.4	3.4	3047.0	7.1	152.1	
12:12	8.0	9.4	1.2	3060.0	7.0	151.3	
12:14	12.0	9.4	1.0	3057.0	6.9	150.4	
12:17	18.0	9.4	.9	3057.0	6.9	150.3	
12:18	20.0	9.4	.9	3056.0	6.9	150.1	
12:19	22.0	9.4	.9	3060.0	6.9	149.9	
12:20	24.0	9.4	.9	3058.0	6.9	149.7	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Longfield, Moodry

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS07-14A**	**Sketch**	No
Date	9/30/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	13:45	MDT	Sunny	65	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*27.0*	*2*	20.81	6.19	3.03	23.91

	Time	DTW (ft)				
Start Purging	13:55	20.81			**Purge Rate (GPM)**	2.0
Grab Sample	14:07		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	14:11	21.09			**Total Purge Volume (gal)**	24.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0073-093021	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
13:56	2.0	11.2	2.8	1050.0	7.2	120.1	
13:58	6.0	9.7	.6	1095.0	7.0	87.1	
14:02	14.0	9.6	.4	1098.0	7.0	53.3	
14:03	16.0	9.6	.3	1097.0	7.0	48.1	
14:05	20.0	9.6	.3	1095.0	7.0	41.9	
14:06	22.0	9.6	.3	1093.0	7.0	36.6	
14:07	24.0	9.6	.3	1092.0	7.0	36.6	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Longfield, Moodry

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS07-15A**	**Sketch**	No
Date	9/30/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	12:48	MDT	Sunny	65	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*35.7*	*2*	19.68	16.02	7.85	27.69

	Time	DTW (ft)				
Start Purging	12:59	19.68			**Purge Rate (GPM)**	2.0
Grab Sample	13:09		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	ır with metallic fla
Stop Purging (DTW just prior)	13:14	20.21			**Total Purge Volume (gal)**	20.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0072-093021	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
13:00	2.0	9.5	1.5	1959.0	6.8	148.3	
13:02	6.0	9.5	1.2	1950.0	6.8	131.6	
13:06	14.0	9.5	1.1	1945.0	6.8	114.8	
13:07	16.0	9.4	1.1	1943.0	6.8	108.3	
13:08	18.0	9.5	1.1	1942.0	6.8	103.6	
13:09	20.0	9.5	1.1	1942.0	6.8	101.1	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Longfield, Moodry

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet					
Site	**BPS07-16A**				**Sketch** No
Date	9/24/2021				**Photographs** No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Alice Drew-Davies,Dalen Longfield,Joe Moodry	15:19	MDT	Sunny	77	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*18.0*	*2*	7.57	10.43	5.11	12.79

	Time	DTW (ft)				
Start Purging	15:27	7.57			**Purge Rate (GPM)**	2.0
Grab Sample	15:37		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	15:42	7.68			**Total Purge Volume (gal)**	20.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0005-092421	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
15:29	4.0	13.6	1.4	427.0	6.5	170.2	.6
15:31	8.0	13.7	1.2	423.0	6.4	170.1	.6
15:33	12.0	13.7	1.3	421.5	6.3	170.1	.3
15:35	16.0	13.7	1.3	419.8	6.3	170.5	.2
15:37	20.0	13.7	1.3	419.3	6.3	168.9	.2

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Longfield, Moodry, Drew Davies

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet					
Site	**BPS07-16B**				**Sketch** No
Date	9/24/2021				**Photographs** No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Alice Drew-Davies,Dalen Longfield,Joe Moodry	14:55	MDT	Sunny	74	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*37.4*	*2*	7.46	29.94	14.66	22.43

	Time	DTW (ft)				
Start Purging	14:58	7.46			**Purge Rate (GPM)**	2.0
Grab Sample	15:12		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	15:17	7.75			**Total Purge Volume (gal)**	28.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0006-092421	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
15:00	4.0	10.5	4.6	243.8	7.6	152.6	7.9
15:02	8.0	10.5	4.5	244.7	7.4	153.0	1.8
15:04	12.0	10.5	4.6	244.9	7.2	155.0	1.3
15:06	16.0	10.4	4.4	246.0	7.2	153.5	.9
15:08	20.0	10.4	4.3	246.3	7.2	154.0	.6
15:10	24.0	10.5	4.5	246.6	7.2	153.9	.6
15:12	28.0	10.4	4.5	246.6	7.2	153.4	.5

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Longfield, Moodry, Drew Davies

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS07-17A**	**Sketch**	No
Date	9/27/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	11:46	MDT	Sunny	58	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*20.5*	*2*	10.84	9.61	4.71	15.65

	Time	DTW (ft)				
Start Purging	11:54	10.84			**Purge Rate (GPM)**	2.0
Grab Sample	12:11		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	12:14	13.28			**Total Purge Volume (gal)**	34.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0028-092721	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
11:56	4.0	10.9	2.7	1086.0	6.3	65.4	
11:58	8.0	10.7	.6	1084.0	6.1	68.0	
12:00	12.0	10.7	.3	1082.0	6.1	66.8	
12:02	16.0	10.6	.2	1081.0	6.0	65.0	
12:08	28.0	10.6	.2	1079.0	6.0	60.4	
12:09	30.0	10.6	.2	1079.0	6.0	60.1	
12:10	32.0	10.6	.2	1079.0	6.0	59.4	
12:11	34.0	10.6	.2	1079.0	6.0	59.0	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Longfield, Moodry

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS07-18A**	**Sketch**	No
Date	9/27/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	10:12	MDT	Sunny	50	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*20.0*	*2*	12.12	7.88	3.86	16.06

	Time	DTW (ft)				
Start Purging	10:27	12.12			**Purge Rate (GPM)**	2.0
Grab Sample	10:43		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	10:47	13.30			**Total Purge Volume (gal)**	32.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0026-092721	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:29	4.0	9.2	1.4	1571.0	6.2	-15.3	
10:31	8.0	9.2	2.2	1564.0	6.2	-20.1	
10:33	12.0	9.2	2.2	1568.0	6.2	-19.3	
10:35	16.0	9.2	2.1	1565.0	6.2	-18.9	
10:37	20.0	9.2	2.2	1563.0	6.3	-19.6	
10:38	22.0	9.2	2.2	1563.0	6.3	-20.0	
10:39	24.0	9.2	2.3	1562.0	6.3	-20.5	
10:40	26.0	9.2	2.7	1564.0	6.3	-21.1	
10:41	28.0	9.2	3.5	1563.0	6.3	-21.4	
10:42	30.0	9.2	4.0	1562.0	6.3	-21.5	
10:43	32.0	9.2	4.4	1562.0	6.3	-21.5	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Longfield, Moodry

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS07-18B**	**Sketch**	No
Date	9/27/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	10:57	MDT	Sunny	55	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*41.5*	*2*	12.80	28.70	14.05	27.15

	Time	DTW (ft)				
Start Purging	11:09	12.80			**Purge Rate (GPM)**	2.0
Grab Sample	11:25		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	11:28	13.66			**Total Purge Volume (gal)**	32.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0027-092721	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
11:11	4.0	8.1	.4	1308.0	6.4	-20.9	
11:13	8.0	8.1	.6	1298.0	6.3	-21.3	
11:15	12.0	8.1	.2	1293.0	6.3	-23.0	
11:17	16.0	8.1	.2	1290.0	6.3	-24.2	
11:20	22.0	8.1	.2	1285.0	6.4	-25.3	
11:22	26.0	8.1	.2	1281.0	6.4	-25.8	
11:23	28.0	8.1	.2	1279.0	6.4	-26.0	
11:24	30.0	8.1	.2	1277.0	6.4	-26.0	
11:25	32.0	8.1	.2	1276.0	6.4	-26.1	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Longfield, Moodry

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet					
Site	**BPS07-21**			**Sketch**	No
Date	9/30/2021			**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	15:23	MDT	Sunny	65	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
Peristaltic	*23.0*	*0.75*	14.37	8.63	0.59	18.69

	Time	DTW (ft)				
Start Purging	15:33	14.37			**Purge Rate (GPM)**	.1
Grab Sample	15:40		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	ar at time of sam
Stop Purging (DTW just prior)	15:41	14.53			**Total Purge Volume (gal)**	.9

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0069-093021	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
15:34	.1	13.9	5.4	2584.0	6.7	-53.9	
15:35	.3	11.7	2.3	2540.0	6.7	-97.3	
15:36	.4	11.4	5.2	2528.0	6.7	-107.3	
15:37	.5	11.3	3.7	2513.0	6.7	-112.8	
15:38	.6	11.2	3.0	2520.0	6.7	-113.5	
15:39	.8	11.1	2.7	2524.0	6.8	-114.2	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Final DTW taken after stop purge due to small well casing. Sample collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS07-21B**	**Sketch**	No
Date	9/30/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	16:20	MDT	Sunny	67	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*47.0*	*2*	13.45	33.55	16.43	30.23

	Time	DTW (ft)				
Start Purging	16:27	13.45			**Purge Rate (GPM)**	1.0
Grab Sample	16:50		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	ear at sample tim
Stop Purging (DTW just prior)	16:52	13.65			**Total Purge Volume (gal)**	23.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0092-093021	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
16:28	1.0	13.9	13.4	485.0	7.4	95.8	
16:32	5.5	12.9	4.1	494.5	7.0	102.4	
16:37	10.0	11.6	3.8	489.9	6.9	102.5	
16:39	12.0	11.2	3.7	485.6	6.9	103.0	
16:41	14.0	10.9	3.5	483.2	6.9	103.7	
16:43	16.0	10.8	3.5	482.3	6.9	104.2	
16:44	17.0	9.8	2.8	455.8	6.9	105.8	
16:46	19.0	9.7	2.5	439.2	6.9	108.6	
16:48	21.0	9.7	2.5	433.6	6.9	110.6	
16:50	23.0	9.7	2.5	430.3	6.9	111.8	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS07-21C**	**Sketch**	No
Date	9/30/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	16:31	MDT	Sunny	67	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*87.0*	*2*	12.72	74.28	36.38	49.86

	Time	DTW (ft)				
Start Purging	16:53	12.72			**Purge Rate (GPM)**	1.0
Grab Sample	17:30		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	clear at time of sa
Stop Purging (DTW just prior)	17:31	13.17			**Total Purge Volume (gal)**	37.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0093-093021	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
16:57	4.0	10.8	1.8	684.0	6.9	44.7	
17:06	13.0	10.4	.6	756.0	6.8	56.3	
17:18	25.0	10.3	.7	755.0	6.8	81.2	
17:20	27.0	10.3	.7	754.0	6.8	83.1	
17:22	29.0	10.3	.7	755.0	6.8	85.0	
17:24	31.0	10.3	.7	755.0	6.8	85.8	
17:26	33.0	10.3	.7	755.0	6.8	86.9	
17:28	35.0	10.3	.7	755.0	6.8	88.0	
17:30	37.0	10.3	.7	755.0	6.8	89.4	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS07-22B**	**Sketch**	No
Date	10/1/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	9:24	MDT	Partly Cloudy	42	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*31.0*	*2*	8.49	22.51	11.02	19.75

	Time	DTW (ft)				
Start Purging	9:29	8.49			**Purge Rate (GPM)**	2.0
Grab Sample	9:35		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	ar at time of sam
Stop Purging (DTW just prior)	9:36	8.77			**Total Purge Volume (gal)**	12.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0094-100121	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
9:30	2.0	9.8	7.6	391.1	6.8	157.9	
9:31	4.0	8.3	5.0	710.3	6.6	178.8	
9:32	6.0	8.2	3.3	729.5	6.5	188.8	
9:33	8.0	8.2	2.8	737.0	6.5	193.5	
9:34	10.0	8.2	2.4	737.0	6.5	197.2	
9:35	12.0	8.2	2.2	736.0	6.4	199.8	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS07-22C**	**Sketch**	No
Date	10/1/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	9:39	MDT	Partly Cloudy	43	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*99.0*	*2*	7.29	91.71	44.91	53.15

	Time	DTW (ft)				
Start Purging	9:44	7.29			**Purge Rate (GPM)**	2.0
Grab Sample	10:09		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	r clear at sample
Stop Purging (DTW just prior)	10:10	11.27			**Total Purge Volume (gal)**	50.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0095-100121	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
9:45	2.0	9.4	6.4	477.4	6.7	192.7	
9:50	12.0	9.3	.7	767.0	6.8	184.6	
9:52	16.0	9.4	.7	766.0	6.8	183.5	
9:59	30.0	9.4	.8	764.0	6.9	181.1	
10:01	34.0	9.4	.8	764.0	6.9	180.6	
10:03	38.0	9.4	.9	764.0	6.9	180.0	
10:05	42.0	9.4	.9	764.0	6.9	179.5	
10:07	46.0	9.4	.9	764.0	6.9	178.9	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS07-22R**	**Sketch**	No
Date	10/1/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	9:54	MDT	Partly Cloudy	44	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*14.0*	*2*	9.14	4.86	2.38	11.57

	Time	DTW (ft)				
Start Purging	10:13	9.14			**Purge Rate (GPM)**	1.0
Grab Sample	10:18		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	r clear at sample
Stop Purging (DTW just prior)	10:19	10.37			**Total Purge Volume (gal)**	5.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0096-100121	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:13	.5	9.9	5.9	517.9	6.9	75.6	
10:15	2.0	10.1	6.0	592.7	6.7	-1.8	
10:16	3.0	10.2	.8	599.5	6.7	-55.5	
10:16	3.5	10.3	.4	614.0	6.7	-75.9	
10:17	4.0	10.3	.4	615.3	6.8	-84.8	
10:17	4.5	10.2	.3	618.2	6.8	-92.9	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS07-23**	**Sketch**	No
Date	10/1/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	10:37	MDT	Partly Cloudy	48	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
Peristaltic	*16.0*	*0.75*	8.41	7.59	0.52	12.21

	Time	DTW (ft)				
Start Purging	10:48	8.41			**Purge Rate (GPM)**	.1
Grab Sample	10:54		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	turbid at time of
Stop Purging (DTW just prior)	10:56	8.41			**Total Purge Volume (gal)**	.8

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0097-100121	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:48	.1	11.6	9.3	499.9	7.1	30.5	
10:49	.1	11.0	2.1	1063.0	6.9	-19.3	
10:50	.3	10.4	.9	1075.0	6.9	-42.0	
10:51	.4	10.4	.7	1083.0	6.8	-52.3	
10:52	.5	10.4	1.0	1087.0	6.8	-57.7	
10:53	.6	10.4	1.6	1094.0	6.9	-62.6	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	Yes
SOP Deviation	Had to stop purge before getting the final DTW due to small well casing.
Additional remarks	Sample collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS07-24**	**Sketch**	No
Date	10/1/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	14:08	MDT	Partly Cloudy	65	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*71.0*	*2*	8.15	62.85	30.78	39.58

	Time	DTW (ft)				
Start Purging	14:15	8.15			**Purge Rate (GPM)**	2.0
Grab Sample	14:31		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	clear at time of s
Stop Purging (DTW just prior)	14:32	8.64			**Total Purge Volume (gal)**	32.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0103-100121	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
14:16	2.0	9.6	2.3	1937.0	6.7	210.2	
14:20	10.0	9.7	1.5	1956.0	6.5	216.0	
14:23	16.0	9.7	2.1	1956.0	6.4	216.4	
14:25	20.0	9.7	1.8	1959.0	6.4	216.5	
14:26	22.0	9.7	1.6	1961.0	6.4	216.5	
14:27	24.0	9.7	1.6	1963.0	6.4	216.5	
14:28	26.0	9.7	1.6	1963.0	6.4	216.4	
14:29	28.0	9.7	1.5	1964.0	6.4	216.5	
14:30	30.0	9.7	1.5	1966.0	6.4	216.5	
14:31	32.0	9.7	1.5	1967.0	6.4	216.4	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS07-25**	**Sketch**	No
Date	9/28/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	11:58	MDT	Overcast	50	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*25.5*	*2*	10.78	14.72	7.21	18.14

	Time	DTW (ft)				
Start Purging	12:08	10.78			**Purge Rate (GPM)**	2.0
Grab Sample	12:16		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	12:20	11.02			**Total Purge Volume (gal)**	16.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0035-092821	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
12:09	2.0	9.7	1.4	1995.0	7.2	124.5	
12:10	4.0	9.6	.7	2004.0	7.2	124.7	
12:11	6.0	9.6	.4	2000.0	7.2	125.2	
12:12	8.0	9.6	.4	2000.0	7.2	125.2	
12:13	10.0	9.6	.3	1998.0	7.2	125.4	
12:14	12.0	9.6	.3	1997.0	7.1	125.6	
12:15	14.0	9.6	.2	1996.0	7.2	125.8	
12:16	16.0	9.6	.2	1997.0	7.1	126.0	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Longfield, Moodry

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS11-01**	**Sketch**	No
Date	9/29/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	9:18	MDT	Sunny	52	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*25.0*	*2*	9.27	15.73	7.70	17.14

	Time	DTW (ft)				
Start Purging	9:29	9.27			**Purge Rate (GPM)**	2.0
Grab Sample	9:50		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	9:53	9.59			**Total Purge Volume (gal)**	44.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0039-092921	1	FG-N	250	Yes	HNO3	Dissolved metals
GW0040-092921	1	FG-D	250	Yes	HNO3	Dissolved metals
GW0041-092921	1	ECB/FB	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
9:30	4.0	10.9	2.2	1953.0	7.0	30.1	
9:33	10.0	10.9	1.0	1404.0	7.3	-10.8	
9:34	12.0	10.9	.9	1363.0	7.3	-23.2	
9:37	18.0	10.9	.5	1273.0	7.5	-50.0	
9:41	26.0	10.9	.4	1245.0	7.5	-55.2	
9:42	28.0	10.9	.4	1240.0	7.5	-56.0	
9:45	34.0	10.9	.3	1232.0	7.6	-56.7	
9:46	36.0	10.9	.3	1230.0	7.6	-57.0	
9:47	38.0	10.9	.2	1230.0	7.6	-57.2	
9:48	40.0	10.9	.2	1228.0	7.6	-57.2	
9:49	42.0	10.9	.2	1227.0	7.6	-57.2	
9:50	44.0	10.9	.2	1228.0	7.6	-57.2	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Longfield, Moodry Blank time is 10:10

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS11-02**	**Sketch**	No
Date	9/29/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	10:21	MDT	Sunny	55	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*29.0*	*2*	6.28	22.72	11.13	17.64

	Time	DTW (ft)				
Start Purging	10:31	6.28			**Purge Rate (GPM)**	2.0
Grab Sample	10:42		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	10:45	9.24			**Total Purge Volume (gal)**	22.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0042-092921	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:33	4.0	9.4	3.2	1273.0	7.2	22.6	
10:34	6.0	9.2	1.3	1298.0	7.2	-11.8	
10:36	10.0	9.1	.8	1305.0	7.1	-4.1	
10:37	12.0	9.1	.6	1308.0	7.1		
10:38	14.0	9.0	.6	1288.0	7.1	3.0	
10:39	16.0	9.1	.5	1289.0	7.1	6.9	
10:40	18.0	9.1	.4	1290.0	7.1	9.5	
10:41	20.0	9.1	.4	1292.0	7.1	12.3	
10:42	22.0	9.1	.4	1293.0	7.1	16.1	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Longfield, Moodry

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet					
Site	**BPS11-03**				**Sketch** No
Date	9/24/2021				**Photographs** No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Other Staff	14:04	MDT	Sunny	70	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
Peristaltic	*29.0*	*2*	5.23	23.77	11.64	17.12

	Time	DTW (ft)				
Start Purging	13:33	5.23			**Purge Rate (GPM)**	.1
Grab Sample	14:04		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	
Stop Purging (DTW just prior)	14:04	5.25			**Total Purge Volume (gal)**	3.9

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0050-092421	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Rental	

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
13:51	2.3	8.2	.2	1458.0	7.5	439.4	.2
13:54	2.6	8.1	.2	1457.0	7.6	436.6	.4
13:57	3.0	8.0	.2	1455.0	7.6	431.5	.2
14:00	3.4	8.0	.2	1455.0	7.6	427.4	.2
14:03	3.8	8.0	.2	1452.0	7.6	423.7	.3

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample collected by PTS. Pump off and sample collection time are the same.

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet						
Site	**BPS11-04**				**Sketch**	No
Date	9/27/2021				**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	15:31	MDT	Sunny	80	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*56.0*	*2*	8.46	47.54	23.28	32.23

	Time	DTW (ft)				
Start Purging	15:37	8.46			**Purge Rate (GPM)**	2.0
Grab Sample	15:50		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	ar at time of sam
Stop Purging (DTW just prior)	15:51	11.25			**Total Purge Volume (gal)**	26.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0051-092721	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
15:38	2.0	9.5	5.5	463.7	7.6	21.5	
15:41	8.0	9.1	2.8	467.7	7.6	24.0	
15:45	16.0	9.1	1.9	492.6	7.6	30.4	
15:46	18.0	9.1	1.8	496.6	7.6	32.1	
15:47	20.0	9.1	1.8	499.7	7.6	32.9	
15:48	22.0	9.1	1.7	500.7	7.6	33.8	
15:49	24.0	9.1	1.7	503.7	7.6	34.7	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS11-05A1**	**Sketch**	No
Date	9/29/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	13:53	MDT	Sunny	60	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*12.0*	*2*	8.08	3.92	1.92	10.04

	Time	DTW (ft)				
Start Purging	13:58	8.08			**Purge Rate (GPM)**	2.0
Grab Sample	14:08		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	14:11	8.21			**Total Purge Volume (gal)**	20.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0045-092921	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
14:01	6.0	12.8	1.3	1302.0	6.7	116.5	
14:03	10.0	12.7	.6	1309.0	6.7	109.8	
14:04	12.0	12.7	.4	1312.0	6.7	104.8	
14:05	14.0	12.7	.4	1313.0	6.7	103.4	
14:06	16.0	12.7	.4	1313.0	6.7	101.0	
14:07	18.0	12.7	.4	1314.0	6.7	98.5	
14:08	20.0	12.7	.3	1314.0	6.7	95.1	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Longfield, Moodry

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS11-05A2**	**Sketch**	No
Date	9/29/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	14:18	MDT	Sunny	60	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*28.0*	*2*	8.18	19.82	9.71	18.09

	Time	DTW (ft)				
Start Purging	14:20	8.18			**Purge Rate (GPM)**	2.0
Grab Sample	14:31		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	14:35	8.36			**Total Purge Volume (gal)**	22.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0046-092921	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
14:23	6.0	8.8	3.8	454.7	7.3	100.0	
14:24	8.0	8.9	3.6	454.5	7.2	101.0	
14:25	10.0	8.9	3.5	454.3	7.2	101.4	
14:26	12.0	8.8	3.3	454.2	7.2	102.3	
14:27	14.0	8.8	3.2	454.1	7.1	103.2	
14:29	18.0	8.8	3.1	453.9	7.1	104.2	
14:30	20.0	8.8	3.1	453.8	7.1	104.4	
14:31	22.0	8.8	3.1	453.7	7.1	104.6	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Longfield, Moodry

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS11-06**	**Sketch**	No
Date	9/29/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	14:46	MDT	Sunny	60	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*29.0*	*2*	11.57	17.43	8.54	20.29

	Time	DTW (ft)				
Start Purging	14:56	11.57			**Purge Rate (GPM)**	2.0
Grab Sample	15:12		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	15:15	11.68			**Total Purge Volume (gal)**	28.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0047-092921	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
14:58	4.0	10.0	4.1	537.2	7.2	19.7	
15:00	8.0	9.9	3.7	533.9	7.2	120.1	
15:02	12.0	9.9	3.5	533.6	7.2	120.4	
15:03	14.0	9.8	3.5	534.7	7.2	121.2	
15:08	24.0	9.8	3.4	538.0	7.2	122.2	
15:09	22.0	9.8	3.4	538.4	7.2	122.3	
15:11	26.0	9.8	3.4	538.6	7.2	122.8	
15:12	28.0	9.8	3.3	538.6	7.2	122.8	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Longfield, Moodry

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS11-07**	**Sketch**	No
Date	9/29/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	11:14	MDT	Sunny	58	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*37.0*	*2*	16.37	20.63	10.10	26.69

	Time	DTW (ft)				
Start Purging	11:21	16.37			**Purge Rate (GPM)**	2.0
Grab Sample	11:28		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	11:31	16.55			**Total Purge Volume (gal)**	14.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0043-092921	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
11:22	2.0	10.0	.9	1418.0	7.2	72.6	
11:24	6.0	10.0	.6	1418.0	7.2	72.3	
11:25	8.0	10.0	.3	1420.0	7.2	71.8	
11:26	10.0	10.0	.3	1420.0	7.2	71.6	
11:27	12.0	10.0	.3	1420.0	7.2	71.7	
11:28	14.0	10.0	.2	1421.0	7.2	71.8	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Teams: Longfield, Moodry

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS11-08**	**Sketch**	No
Date	9/29/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	12:04	MDT	Sunny	68	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*23.9*	*2*	14.88	9.02	4.42	19.39

	Time	DTW (ft)				
Start Purging	12:08	14.88			**Purge Rate (GPM)**	2.0
Grab Sample	12:28		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	12:30	19.19			**Total Purge Volume (gal)**	40.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0044-092921	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
12:11	6.0	12.0	2.8	773.0	7.3	82.1	
12:13	10.0	11.5	2.4	787.0	7.2	82.4	
12:14	12.0	11.6	3.6	743.0	7.2	82.8	
12:15	14.0	11.7	4.1	730.0	7.2	83.2	
12:16	16.0	11.6	4.3	740.0	7.2	83.5	
12:17	18.0	11.3	3.9	761.0	7.2	84.1	
12:22	28.0	11.8	4.5	707.0	7.2	86.4	
12:24	32.0	11.8	4.7	704.0	7.1	87.2	
12:25	34.0	11.8	4.7	702.0	7.1	88.2	
12:26	36.0	11.9	4.6	701.0	7.1	88.6	
12:27	38.0	11.9	4.6	702.0	7.1	89.2	
12:28	40.0	11.9	4.6	701.0	7.1	89.7	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Longfield, Moodry

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet						
Site	**BPS11-09**				**Sketch**	No
Date	9/27/2021				**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	16:06	MDT	Sunny	80	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*35.0*	*2*	5.37	29.63	14.51	20.19

	Time	DTW (ft)				
Start Purging	16:11	5.37			**Purge Rate (GPM)**	2.0
Grab Sample	16:21		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	clear at time of s
Stop Purging (DTW just prior)	16:22	5.64			**Total Purge Volume (gal)**	20.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0052-092721	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
16:12	2.0	9.5	6.5	389.6	7.5	72.2	
16:16	10.0	8.8	4.8	386.9	7.5	73.9	
16:17	12.0	8.8	4.7	386.4	7.5	76.7	
16:18	14.0	8.8	4.5	386.0	7.4	78.4	
16:19	16.0	8.8	4.5	385.9	7.4	80.3	
16:20	18.0	8.8	4.4	385.1	7.4	81.3	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS11-10B**	**Sketch**	No
Date	10/4/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	11:56	MDT	Sunny	68	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*48.0*	*2*	11.80	36.20	17.73	29.90

	Time	DTW (ft)				
Start Purging	12:05	11.80			**Purge Rate (GPM)**	2.0
Grab Sample	12:16		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	ar at time of sam
Stop Purging (DTW just prior)	12:17	12.17			**Total Purge Volume (gal)**	22.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0106-100421	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
12:07	4.0	10.6	8.3	1229.0	7.2	249.9	
12:08	6.0	9.7	4.8	1285.0	7.0	255.5	
12:09	8.0	9.7	2.2	1286.0	6.9	257.6	
12:10	10.0	9.6	1.9	1281.0	6.8	261.5	
12:11	12.0	9.6	1.9	1282.0	6.7	263.7	
12:12	14.0	9.6	1.9	1281.0	6.6	264.9	
12:13	16.0	9.7	1.9	1278.0	6.6	265.7	
12:14	18.0	9.7	1.9	1276.0	6.6	266.2	
12:15	20.0	9.7	1.8	1274.0	6.5	266.6	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS11-10C**	**Sketch**	No
Date	10/4/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	12:21	MDT	Sunny	69	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*120.0*	*2*	9.73	110.27	54.00	64.87

	Time	DTW (ft)				
Start Purging	12:28	9.73			**Purge Rate (GPM)**	2.0
Grab Sample	12:57		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	clear at time of s
Stop Purging (DTW just prior)	12:57	12.32			**Total Purge Volume (gal)**	58.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0107-100421	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
12:29	2.0	10.6	3.9	975.0	6.7	253.2	
12:33	10.0	10.1	1.7	1024.0	6.8	250.9	
12:37	18.0	10.2	1.7	1024.0	6.7	248.0	
12:41	26.0	10.3	1.7	1023.0	6.7	245.8	
12:46	36.0	10.3	1.7	1023.0	6.7	243.1	
12:48	40.0	10.3	1.7	1023.0	6.7	242.4	
12:50	44.0	10.3	1.7	1023.0	6.7	241.5	
12:52	48.0	10.3	1.7	1024.0	6.7	241.1	
12:54	52.0	10.3	1.7	1024.0	6.7	240.4	
12:55	54.0	10.3	1.7	1023.0	6.7	240.0	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet					
Site	**BPS11-11A1**				**Sketch** No
Date	9/24/2021				**Photographs** No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Alice Drew-Davies,Dalen Longfield,Joe Moodry	10:40	MDT	Sunny	55	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*15.0*	*2*	5.89	9.11	4.46	10.45

	Time	DTW (ft)				
Start Purging	10:44	5.89			**Purge Rate (GPM)**	2.0
Grab Sample	10:54		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	10:59	6.19			**Total Purge Volume (gal)**	12.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0007-092421	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:46	4.0	11.8	.9	327.0	6.8	165.9	.2
10:48	6.0	11.8	1.1	324.6	6.8	164.4	.7
10:50	8.0	11.8	1.1	324.5	6.8	163.5	.1
10:52	10.0	11.8	1.0	325.6	6.8	163.0	.2
10:54	12.0	11.8	1.0	325.6	6.8	162.4	.1

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Alice, Joe, and Dalen sampled.

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet					
Site	**BPS11-11A2**				**Sketch** No
Date	9/24/2021				**Photographs** No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Alice Drew-Davies,Dalen Longfield,Joe Moodry	11:02	MDT	Sunny	55	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*35.0*	*2*	5.85	29.15	14.28	20.43

	Time	DTW (ft)				
Start Purging	11:13	5.85			**Purge Rate (GPM)**	2.0
Grab Sample	11:22		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	11:27	6.02			**Total Purge Volume (gal)**	18.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0008-092421	1	FG-N	250	Yes	HNO3	Dissolved metals
GW0009-092421	1	FG-D	250	Yes	HNO3	Dissolved metals
GW0010-092421	1	ECB/FB	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
11:15	4.0	10.2	1.7	330.3	7.1	154.9	
11:18	10.0	10.2	1.7	330.9	7.1	154.5	
11:19	12.0	10.2	1.7	330.8	7.1	154.1	
11:20	14.0	10.2	1.7	330.9	7.1	153.9	
11:22	18.0	10.1	1.7	330.9	7.1	153.6	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Blank time 11:51. Alice, Dalen, Joe sampled.

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet					
Site	**BPS11-11B**				**Sketch** No
Date	9/24/2021				**Photographs** No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Alice Drew-Davies,Dalen Longfield,Joe Moodry	9:59	MDT	Sunny	55	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*76.0*	*2*	4.54	71.46	34.99	40.27

	Time	DTW (ft)				
Start Purging	10:11	4.54			**Purge Rate (GPM)**	2.0
Grab Sample	10:29		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	10:35	7.26			**Total Purge Volume (gal)**	36.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0011-092421	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:13	4.0	10.5	2.5	926.0	6.7	178.6	7.7
10:17	12.0	10.5	2.3	925.0	6.6	184.2	2.2
10:22	22.0	10.5	2.1	925.0	6.5	184.8	.6
10:25	28.0	10.6	2.1	924.0	6.5	182.4	.6
10:29	36.0	10.5	2.1	924.0	6.5	182.5	.3

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Longfield, Moodry, Drew-Davies

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet					
Site	**BPS11-11C**				**Sketch** No
Date	9/24/2021				**Photographs** No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Alice Drew-Davies,Dalen Longfield,Joe Moodry	11:54	MDT	Sunny	60	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*151.0*	*2*	4.31	146.69	71.84	77.66

	Time	DTW (ft)				
Start Purging	12:22	4.31			**Purge Rate (GPM)**	2.0
Grab Sample	12:58		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	13:07	14.92			**Total Purge Volume (gal)**	72.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0012-092421	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
12:24	4.0	10.8	.7	877.0	7.2	233.9	.6
12:30	16.0	11.2	.2	894.0	6.9	61.5	.6
12:33	22.0	11.3	.0	898.0	6.9	65.2	.8
12:38	32.0	11.3	.3	890.0	6.8	67.8	.5
12:42	40.0	11.4	.2	888.0	6.8	68.7	.5
12:48	52.0	11.3	.2	883.0	6.8	68.2	.5
12:58	72.0	11.4	.2	880.0	6.8	71.8	.2

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Longfield, Moodry, Drew Davies

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet					
Site	**BPS11-12A**				**Sketch** No
Date	9/24/2021				**Photographs** No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	11:51	MDT	Sunny	60	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*35.0*	*2*	8.88	26.12	12.79	21.94

	Time	DTW (ft)				
Start Purging	11:56	8.88			**Purge Rate (GPM)**	2.0
Grab Sample	12:07		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	clear at time of s
Stop Purging (DTW just prior)	12:08	8.97			**Total Purge Volume (gal)**	22.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0023-092421	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
11:57	2.0	9.9	7.3	406.8	7.3	233.4	
11:59	6.0	9.7	5.3	431.2	7.2	231.4	
12:01	10.0	9.7	4.9	443.2	7.1	230.5	
12:02	12.0	9.7	4.8	448.8	7.1	232.0	
12:03	14.0	9.7	4.8	456.9	7.1	232.5	
12:04	16.0	9.7	4.7	460.4	7.1	231.8	
12:05	18.0	9.7	4.7	460.0	7.1	231.1	
12:06	20.0	9.7	4.7	461.4	7.1	230.5	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Samples collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS11-13B**	**Sketch**	No
Date	10/1/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	12:25	MDT	Partly Cloudy	60	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*54.0*	*2*	13.20	40.80	19.98	33.60

	Time	DTW (ft)				
Start Purging	12:31	13.20			**Purge Rate (GPM)**	2.0
Grab Sample	12:43		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	clear at time of s
Stop Purging (DTW just prior)	12:44	13.47			**Total Purge Volume (gal)**	24.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0098-100121	1	FG-N	250	Yes	HNO3	Dissolved metals
GW0099-100121	1	FG-D	250	Yes	HNO3	Dissolved metals
GW0100-100121	1	ECB/FB	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
12:32	2.0	9.9	5.7	1221.0	7.2	115.0	
12:34	6.0	9.7	3.3	1258.0	6.8	130.7	
12:37	12.0	9.7	2.7	1262.0	6.6	143.9	
12:38	14.0	9.7	2.7	1262.0	6.6	147.9	
12:39	16.0	9.7	2.6	1263.0	6.6	153.4	
12:40	18.0	9.7	2.6	1263.0	6.5	156.0	
12:41	20.0	9.8	2.6	1264.0	6.5	158.1	
12:42	22.0	9.7	2.5	1264.0	6.5	159.4	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Blank time = 1259 Samples collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS11-14A**	**Sketch**	No
Date	10/1/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	13:15	MDT	Partly Cloudy	63	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*22.0*	*2*	9.30	12.70	6.22	15.65

	Time	DTW (ft)				
Start Purging	13:21	9.30			**Purge Rate (GPM)**	2.0
Grab Sample	13:26		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	htly turbid at tim
Stop Purging (DTW just prior)	13:27	9.59			**Total Purge Volume (gal)**	10.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0101-100121	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
13:22	.5	17.4	8.3	240.5	7.5	135.5	
13:22	2.0	10.9	5.3	604.1	7.1	145.5	
13:23	4.0	9.5	3.2	620.5	6.9	146.0	
13:24	5.0	9.5	2.6	618.4	6.8	145.8	
13:24	6.0	9.5	1.8	616.1	6.8	145.5	
13:25	7.0	9.5	1.4	614.3	6.8	145.0	
13:25	8.0	9.5	1.2	612.9	6.8	144.8	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS11-14B**	**Sketch**	No
Date	10/1/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	13:31	MDT	Partly Cloudy	63	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*65.0*	*2*	8.97	56.03	27.44	36.99

	Time	DTW (ft)				
Start Purging	13:38	8.97			**Purge Rate (GPM)**	2.0
Grab Sample	13:52		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	clear at time of s
Stop Purging (DTW just prior)	13:53	11.75			**Total Purge Volume (gal)**	28.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0102-100121	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
13:39	2.0	9.5	.5	1821.0	6.5	189.0	
13:42	8.0	9.8	.3	1842.0	6.3	197.1	
13:43	10.0	9.8	.3	1844.0	6.3	197.6	
13:47	18.0	9.8	.3	1849.0	6.3	198.7	
13:48	20.0	9.8	.3	1851.0	6.3	198.8	
13:49	22.0	9.8	.5	1852.0	6.3	198.8	
13:50	24.0	9.8	.9	1853.0	6.3	198.7	
13:51	26.0	9.8	1.4	1854.0	6.2	198.7	
13:52	28.0	9.9	1.3	1855.0	6.2	198.8	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet					
Site	**BPS11-15**				**Sketch** No
Date	9/24/2021				**Photographs** No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	14:08	MDT	Sunny	67	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*37.0*	*2*	10.08	26.92	13.18	23.54

	Time	DTW (ft)				
Start Purging	14:14	10.08			**Purge Rate (GPM)**	2.0
Grab Sample	14:24		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	r clear at sample
Stop Purging (DTW just prior)	14:25	10.18			**Total Purge Volume (gal)**	20.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0019-092421	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
14:14		16.4	25.2	270.5	8.0	197.9	
14:17	6.0	10.1	5.7	658.9	7.2	208.8	
14:20	12.0	10.1	4.8	656.6	7.2	207.2	
14:21	14.0	10.1	4.6	654.7	7.1	206.6	
14:22	16.0	10.1	4.5	655.6	7.1	205.9	
14:23	18.0	10.1	4.5	650.6	7.1	205.4	
14:24	20.0	10.1	4.5	648.4	7.1	205.2	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet					
Site	**BPS11-16**				**Sketch** No
Date	9/24/2021				**Photographs** No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	12:41	MDT	Sunny	62	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*73.0*	*2*	11.03	61.97	30.35	42.02

	Time	DTW (ft)				
Start Purging	12:53	11.03			**Purge Rate (GPM)**	2.0
Grab Sample	13:13		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	ater clear at samp
Stop Purging (DTW just prior)	13:15	11.58			**Total Purge Volume (gal)**	40.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0020-092421	1	FG-N	250	Yes	HNO3	Dissolved metals
GW0021-092421	1	FG-D	250	Yes	HNO3	Dissolved metals
GW0023-092421	1	ECB/FB	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
12:54	2.0	10.3	6.7	322.9	7.5	234.1	
12:59	12.0	10.6	5.5	398.6	7.4	225.7	
13:04	22.0	10.5	4.8	455.3	7.3	219.7	
13:06	26.0	10.5	4.8	463.2	7.3	218.3	
13:08	30.0	10.5	4.8	472.9	7.3	215.4	
13:09	32.0	10.5	4.8	474.7	7.3	214.3	
13:10	34.0	10.5	4.8	482.0	7.3	213.8	
13:12	38.0	10.5	4.7	480.0	7.3	211.9	
13:13	40.0	10.5	4.7	480.8	7.3	210.9	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Blank time = 13:35 Samples by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS11-17C**	**Sketch**	No
Date	10/4/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	9:43	MDT	Sunny	46	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*66.0*	*2*	8.05	57.95	28.38	37.03

	Time	DTW (ft)				
Start Purging	10:19	8.05			**Purge Rate (GPM)**	2.0
Grab Sample	10:35		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	ar at time of samp
Stop Purging (DTW just prior)	10:36	10.34			**Total Purge Volume (gal)**	32.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0110-100421	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:20	2.0	9.5	2.4	1895.0	6.3	236.4	
10:23	8.0	9.6	2.5	1908.0	6.2	291.8	
10:26	14.0	9.7	.9	1917.0	6.2	294.5	
10:28	18.0	9.7	.7	1920.0	6.2	294.4	
10:29	20.0	9.7	.7	1919.0	6.2	294.3	
10:30	22.0	9.7	.7	1920.0	6.3	294.0	
10:31	24.0	9.7	.7	1921.0	6.3	293.7	
10:32	26.0	9.7	.7	1921.0	6.3	293.4	
10:33	28.0	9.7	.7	1921.0	6.3	293.0	
10:34	30.0	9.7	.7	1922.0	6.3	292.7	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS11-18B**	**Sketch**	No
Date	10/4/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	16:00	MDT	Sunny	76	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*46.6*	*2*	9.84	36.76	18.00	28.22

	Time	DTW (ft)				
Start Purging	16:08	9.84			**Purge Rate (GPM)**	2.0
Grab Sample	16:19		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	clear at time of s
Stop Purging (DTW just prior)	16:21	10.60			**Total Purge Volume (gal)**	22.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0112-100421	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
16:09	2.0	12.0	3.5	3299.0	5.7	182.4	
16:10	4.0	10.7	1.5	3302.0	4.7	209.5	
16:11	6.0	10.6	1.6	3273.0	4.5	216.8	
16:12	8.0	10.6	1.4	3264.0	4.5	218.8	
16:13	10.0	10.6	.9	3256.0	4.4	219.5	
16:14	12.0	10.6	.8	3256.0	4.3	219.6	
16:15	14.0	10.6	.7	3254.0	4.3	219.3	
16:16	16.0	10.6	.6	3257.0	4.3	218.8	
16:17	18.0	10.6	.6	3260.0	4.3	218.1	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**BPS11-18C**	**Sketch**	No
Date	10/4/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	16:14	MDT	Snow	76	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*66.0*	*2*	9.85	56.15	27.50	37.93

	Time	DTW (ft)				
Start Purging	16:25	9.85			**Purge Rate (GPM)**	2.0
Grab Sample	16:40		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	s clear at time of
Stop Purging (DTW just prior)	16:40	10.14			**Total Purge Volume (gal)**	30.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0113-100421	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
16:26	2.0	11.0	1.8	1629.0	5.5	188.1	
16:29	8.0	10.9	.6	1737.0	5.6	200.4	
16:30	10.0	10.9	.6	1794.0	5.6	203.4	
16:34	18.0	10.8	.6	1778.0	5.6	209.0	
16:35	20.0	10.9	.6	1766.0	5.6	210.2	
16:36	22.0	10.9	.6	1769.0	5.6	211.1	
16:37	24.0	10.9	.6	1768.0	5.6	212.2	
16:38	26.0	10.9	.6	1759.0	5.6	213.0	
16:39	28.0	10.9	.7	1762.0	5.6	214.1	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet					
Site	**BPS11-19A2**				**Sketch** No
Date	9/24/2021				**Photographs** No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Alice Drew-Davies,Dalen Longfield,Joe Moodry	14:14	MDT	Sunny	72	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*43.6*	*2*	4.27	39.33	19.26	23.94

	Time	DTW (ft)				
Start Purging	14:15	4.27			**Purge Rate (GPM)**	2.0
Grab Sample	14:28		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	14:33	4.50			**Total Purge Volume (gal)**	26.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0013-092421	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
14:17	4.0	9.7	5.6	470.9	6.9	152.8	
14:22	14.0	9.7	5.3	466.6	6.6	156.0	
14:24	18.0	9.7	5.2	465.0	6.6	155.1	
14:26	22.0	9.7	5.2	465.2	6.6	153.9	
14:28	26.0	9.7	5.1	465.3	6.6	153.2	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Longfield, Moodry, Drew Davies

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet						
Site	**BPS11-19B**				**Sketch**	No
Date	9/24/2021				**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Alice Drew-Davies,Dalen Longfield,Joe Moodry	13:29	MDT	Sunny	64	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*68.4*	*2*	2.84	65.56	32.11	35.62

	Time	DTW (ft)				
Start Purging	13:49	2.84			**Purge Rate (GPM)**	2.0
Grab Sample	14:06		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Slightly Turbid
Stop Purging (DTW just prior)	14:08	4.24			**Total Purge Volume (gal)**	34.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0014-092421	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
13:52	6.0	10.3	6.5	923.0	6.8	149.5	
13:55	12.0	10.3	2.2	924.0	6.6	163.8	
13:59	20.0	10.3	2.1	924.0	6.5	166.6	
14:02	26.0	10.3	2.1	924.0	6.5	164.6	
14:06	34.0	10.3	2.1	923.0	6.5	162.7	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Teams: Longfield, Moodry, Drew Davies

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet					
Site	**BT-98-02B**				**Sketch** No
Date	9/24/2021				**Photographs** No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	11:10	MDT	Sunny	55	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*45.0*	*2*	9.93	35.07	17.17	27.47

	Time	DTW (ft)				
Start Purging	11:17	9.93			**Purge Rate (GPM)**	2.0
Grab Sample	11:30		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Water is Clear
Stop Purging (DTW just prior)	11:31	10.11			**Total Purge Volume (gal)**	24.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0024-092421	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
11:18	2.0	10.2	6.3	572.1	6.8	255.0	
11:22	8.0	10.1	5.7	568.0	6.4	258.7	
11:25	14.0	10.1	5.6	566.1	6.4	256.2	
11:26	16.0	10.1	5.6	565.5	6.4	255.4	
11:27	18.0	10.1	5.6	565.1	6.4	254.6	
11:28	20.0	10.1	5.6	564.9	6.4	254.0	
11:29	22.0	10.1	5.6	564.4	6.4	253.4	
11:30	24.0	10.1	5.6	563.7	6.4	252.8	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet					
Site	**BT-98-02**				**Sketch** No
Date	9/24/2021				**Photographs** No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	10:16	MDT	Sunny	50	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*20.2*	*4*	11.56	8.64	16.92	15.88

	Time	DTW (ft)				
Start Purging	10:34	11.56			**Purge Rate (GPM)**	2.0
Grab Sample	10:48		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Water is clear
Stop Purging (DTW just prior)	10:49	11.63			**Total Purge Volume (gal)**	26.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0025-092421	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:35	2.0	12.4	3.4	395.7	6.2	222.4	
10:38	8.0	11.6	6.5	399.3	5.6	247.0	
10:41	12.0	11.7	5.2	399.6	5.6	254.6	
10:42	14.0	11.7	5.1	339.4	5.6	255.5	
10:43	16.0	11.7	4.9	399.4	5.6	257.1	
10:44	18.0	11.7	4.6	399.3	5.6	258.0	
10:45	20.0	11.7	4.5	399.1	5.7	259.8	
10:46	22.0	11.7	4.2	398.9	5.7	260.1	
10:47	24.0	11.7	4.0	398.9	5.7	261.1	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Samples collected by Kirsten Vose and Matt Kilsdonk.

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**FP98-1**	**Sketch**	No
Date	10/4/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	11:48	MDT	Sunny	64	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
Peristaltic	*7.5*	*2*	6.48	1.02	0.50	6.99

	Time	DTW (ft)				
Start Purging	12:40	6.48			**Purge Rate (GPM)**	.1
Grab Sample	12:59		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	13:06	7.45			**Total Purge Volume (gal)**	1.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0077-100421	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
12:41	.1	12.8	1.6	2965.0	6.5	126.7	
12:42	.1	14.5	5.6	2937.0	6.6	125.2	
12:44	.2	14.5	5.3	3059.0	6.6	125.5	
12:45	.3	14.4	5.1	3055.0	6.6	125.6	
12:47	.4	14.3	5.1	3060.0	6.6	125.4	
12:49	.5	14.3	5.0	3084.0	6.6	125.3	
12:50	.5	14.2	5.1	3074.0	6.6	125.1	
12:51	.6	14.1	5.1	3067.0	6.6	125.0	
12:53	.7	14.0	5.2	3090.0	6.6	124.5	
12:54	.7	14.1	5.3	3091.0	6.6	124.4	
12:55	.8	14.1	5.1	3082.0	6.6	124.1	
12:56	.8	14.1	5.2	3068.0	6.6	123.2	
12:57	.9	14.1	5.2	3078.0	6.6	120.6	
12:59	1.0	14.1	5.3	3061.0	6.6	119.0	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Longfield, Moodry Some tubing was exposed to sun before reaching flow cell possibly increasing temps

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**FP98-1B**	**Sketch**	No
Date	9/30/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	14:30	MDT	Sunny	65	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*47.0*	*2*	23.97	23.03	11.28	35.49

	Time	DTW (ft)				
Start Purging	14:55	23.97			**Purge Rate (GPM)**	2.0
Grab Sample	15:06		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	15:11	24.28			**Total Purge Volume (gal)**	24.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0074-093021	1	FG-N	250	Yes	HNO3	Dissolved metals
GW0075-093021	1	FG-D	250	Yes	HNO3	Dissolved metals
GW0076-093021	1	ECB/FB	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
14:56	2.0	9.4	4.4	684.3	7.2	113.0	
14:58	6.0	9.4	1.4	681.8	7.1	113.5	
15:01	12.0	9.4	1.0	682.2	6.9	115.2	
15:02	14.0	9.4	.9	682.5	6.9	115.7	
15:03	16.0	9.4	.9	683.1	6.9	115.9	
15:04	18.0	9.4	.9	683.3	6.9	116.0	
15:05	20.0	9.4	.9	683.8	6.9	116.0	
15:06	22.0	9.4	.8	683.7	6.9	115.9	
15:06	24.0	9.4	.9	683.8	6.9	115.7	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Longfield, Moodry Blank Time: 1530

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**FP98-2**	**Sketch**	No
Date	9/28/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	11:13	MDT	Overcast	50	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*18.0*	*4*	5.96	12.04	23.58	11.98

	Time	DTW (ft)				
Start Purging	11:22	5.96			**Purge Rate (GPM)**	2.0
Grab Sample	11:36		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	11:39	6.44			**Total Purge Volume (gal)**	28.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0034-092821	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
11:23	2.0	11.0	.6	783.0	6.8	90.4	
11:25	6.0	10.7	.4	779.0	6.8	91.6	
11:27	10.0	10.7	.3	775.0	6.8	92.2	
11:30	16.0	10.6	.2	772.0	6.8	93.5	
11:33	22.0	10.6	.1	769.0	6.8	93.8	
11:34	24.0	10.6	.2	769.0	6.8	94.0	
11:35	26.0	10.6	.1	769.0	6.8	94.4	
11:36	28.0	10.6	.2	769.0	6.8	94.7	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Longfield, Moodry

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**FP98-6**	**Sketch**	No
Date	9/28/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	10:21	MDT	Overcast	55	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*17.2*	*4*	5.97	11.23	22.00	11.59

	Time	DTW (ft)				
Start Purging	10:38	5.97			**Purge Rate (GPM)**	2.0
Grab Sample	10:52		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	10:55	8.43			**Total Purge Volume (gal)**	28.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0033-092821	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:39	2.0	11.6	.3	947.0	6.3	132.6	
10:42	8.0	11.0	.2	915.0	6.3	107.9	
10:45	14.0	11.0	.4	911.0	6.4	93.8	
10:47	18.0	10.8	.3	909.0	6.4	87.2	
10:48	20.0	10.7	.3	909.0	6.4	83.8	
10:49	22.0	10.6	.3	909.0	6.4	81.2	
10:50	24.0	10.6	.3	909.0	6.4	78.9	
10:51	26.0	10.6	.3	909.0	6.4	76.1	
10:52	28.0	10.6	.3	909.0	6.4	74.1	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Longfield, Moodry

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**GS-08R**	**Sketch**	No
Date	10/4/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	9:36	MDT	Sunny	46	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*178.0*	*2*	13.46	164.54	80.58	95.73

	Time	DTW (ft)				
Start Purging	9:50	13.46			**Purge Rate (GPM)**	2.0
Grab Sample	10:36		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	10:43	17.82			**Total Purge Volume (gal)**	82.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0084-100421	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
9:51	2.0	10.0	1.9	1186.0	6.5	114.7	
9:56	12.0	10.4	1.1	1205.0	6.5	127.0	
10:01	22.0	10.5	1.3	1209.0	6.5	129.4	
10:06	32.0	10.6	1.3	1208.0	6.6	130.9	
10:11	42.0	10.6	1.2	1207.0	6.6	131.5	
10:17	44.0	10.6	1.1	1206.0	6.6	131.8	
10:20	50.0	10.6	1.1	1207.0	6.6	131.8	
10:25	60.0	10.6	1.2	1207.0	6.6	131.9	
10:30	70.0	10.6	1.1	1207.0	6.6	132.0	
10:31	72.0	10.6	1.1	1208.0	6.6	131.9	
10:32	74.0	10.6	1.1	1208.0	6.6	131.9	
10:33	76.0	10.6	1.1	1208.0	6.6	131.9	
10:34	78.0	10.6	1.1	1207.0	6.6	131.9	
10:36	82.0	10.6	1.1	1207.0	6.6	131.9	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Longfield, Moodry

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**GS-09R**	**Sketch**	No
Date	10/1/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	11:45	MDT	Sunny	50	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*59.0*	*2*	13.38	45.62	22.34	36.19

	Time	DTW (ft)				
Start Purging	11:58	13.38			**Purge Rate (GPM)**	2.0
Grab Sample	12:11		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	12:15	13.79			**Total Purge Volume (gal)**	26.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0085-100121	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
11:59	2.0	9.7	1.8	3210.0	5.5	189.0	
12:01	6.0	9.9	.6	3252.0	5.5	186.7	
12:03	10.0	10.0	.3	3253.0	5.5	185.6	
12:05	14.0	10.0	.2	3253.0	5.5	184.8	
12:07	18.0	10.0	.2	3253.0	5.4	184.4	
12:08	20.0	10.0	.2	3252.0	5.4	184.1	
12:10	24.0	10.0	.1	3252.0	5.4	183.1	
12:11	26.0	10.0	.1	3252.0	5.4	183.6	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Longfield, Moodry

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**GS-11R**	**Sketch**	No
Date	10/1/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	12:25	MDT	Sunny	55	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*19.0*	*2*	13.29	5.71	2.80	16.15

	Time	DTW (ft)				
Start Purging	12:41	13.29			**Purge Rate (GPM)**	1.0
Grab Sample	12:46		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	12:50	15.50			**Total Purge Volume (gal)**	5.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0086-100121	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
12:42	1.0	11.1	1.8	2254.0	5.9	185.0	
12:43	2.0	11.1	1.7	2250.0	5.9	185.2	
12:44	3.0	11.1	1.7	2249.0	5.9	185.4	
12:45	4.0	11.1	1.7	2248.0	5.9	185.7	
12:46	5.0	11.1	1.6	2245.0	5.9	186.1	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Longfield, Moodry Had to pinch pump back

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**GS-13A**	**Sketch**	No
Date	9/28/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	14:06	MDT	Overcast	52	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
Peristaltic	*13.8*	*4*	7.00	6.80	13.32	10.40

	Time	DTW (ft)				
Start Purging	14:33	7.00			**Purge Rate (GPM)**	.2
Grab Sample	15:53		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	15:57	11.14			**Total Purge Volume (gal)**	16.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0036-092821	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
14:47	2.8	10.2	1.8	1664.0	7.3	145.5	
14:54	4.2	10.0	1.6	1756.0	7.2	145.0	
15:01	5.6	9.8	1.3	1825.0	7.1	138.8	
15:12	7.8	9.5	1.5	1906.0	7.1	133.0	
15:17	8.8	9.5	1.5	1929.0	7.1	131.6	
15:22	9.8	9.6	1.5	1952.0	7.1	129.8	
15:27	10.8	9.6	1.5	1965.0	7.1	129.0	
15:28	11.0	9.6	1.5	1963.0	7.1	128.8	
15:33	12.0	9.6	1.5	1974.0	7.1	128.3	
15:38	13.0	9.6	1.5	1984.0	7.1	127.8	
15:40	13.4	9.6	1.6	1984.0	7.1	127.4	
15:41	13.6	9.6	1.5	1987.0	7.1	127.2	
15:43	14.0	9.6	1.5	1990.0	7.1	126.8	
15:46	14.6	9.7	1.5	1992.0	7.1	126.5	
15:49	15.2	9.7	1.5	1991.0	7.1	126.2	
15:51	15.6	9.7	1.6	1990.0	7.1	126.0	
15:53	16.0	9.7	1.6	1990.0	7.1	126.0	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Longfield, Moodry

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**GS-30D**	**Sketch**	No
Date	10/1/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	9:57	MDT	Sunny	45	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*39.8*	*2*	10.64	29.16	14.28	25.22

	Time	DTW (ft)				
Start Purging	10:11	10.64			**Purge Rate (GPM)**	2.0
Grab Sample	10:22		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	10:25	11.41			**Total Purge Volume (gal)**	24.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0078-100121	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:11	.3	9.4	4.2	2729.0	6.0	187.3	
10:13	4.0	9.6	.8	2834.0	5.8	188.8	
10:15	8.0	9.6	.7	2838.0	5.7	189.0	
10:16	10.0	9.6	.7	2840.0	5.7	189.1	
10:17	12.0	9.6	.5	2843.0	5.7	189.1	
10:18	14.0	9.6	.3	2846.0	5.8	189.1	
10:19	16.0	9.6	.3	2848.0	5.8	189.1	
10:20	20.0	9.6	.3	2849.0	5.8	189.2	
10:21	22.0	9.6	.2	2850.0	5.8	189.1	
10:22	24.0	9.6	.2	2850.0	5.8	189.1	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Longfield, Moodry

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**GS-30S**	**Sketch**	No
Date	10/1/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	10:30	MDT	Sunny	45	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*22.8*	*2*	10.76	12.04	5.90	16.78

	Time	DTW (ft)				
Start Purging	10:32	10.76			**Purge Rate (GPM)**	2.0
Grab Sample	10:45		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	10:48	14.80			**Total Purge Volume (gal)**	26.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0079-100121	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:33	2.0	9.6	.7	1593.0	6.3	148.0	
10:35	6.0	9.4	.2	1616.0	6.4	72.6	
10:37	10.0	9.2	.2	1622.0	6.4	32.8	
10:39	14.0	9.2	.2	1622.0	6.4	5.3	
10:41	18.0	9.2	.2	1623.0	6.4	-11.5	
10:42	20.0	9.2	.1	1622.0	6.4	-18.5	
10:43	22.0	9.2	.1	1623.0	6.4	-23.0	
10:44	24.0	9.2	.1	1622.0	6.4	-26.2	
10:45	26.0	9.2	.1	1622.0	6.4	-28.8	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Longfield, Moodry

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet					
Site	**GS-31D**				**Sketch** No
Date	9/28/2021				**Photographs** No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	14:49	MDT	Light Rain	49	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*41.2*	*2*	6.08	35.12	17.20	23.64

	Time	DTW (ft)				
Start Purging	14:58	6.08			**Purge Rate (GPM)**	2.0
Grab Sample	15:11		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	ar at time of sam
Stop Purging (DTW just prior)	15:12	6.53			**Total Purge Volume (gal)**	24.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0062-092821	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
14:59	2.0	9.2	7.5	719.0	7.1	189.0	
15:02	6.0	9.3	1.2	850.0	6.5	191.7	
15:05	12.0	9.3	1.5	851.0	6.4	187.8	
15:06	14.0	9.3	1.4	851.0	6.4	186.9	
15:07	16.0	9.3	1.3	850.0	6.4	186.2	
15:08	18.0	9.3	1.3	850.0	6.4	185.6	
15:09	20.0	9.3	1.2	850.0	6.3	184.8	
15:10	22.0	9.3	1.2	848.0	6.3	184.3	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	At time of sample it was raining and windy. Sample collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet					
Site	**GS-31S**				**Sketch** No
Date	9/28/2021				**Photographs** No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	15:14	MDT	Light Rain	47	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*20.4*	*2*	6.08	14.32	7.01	13.24

	Time	DTW (ft)				
Start Purging	15:18	6.08			**Purge Rate (GPM)**	2.0
Grab Sample	15:25		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	s clear at time of
Stop Purging (DTW just prior)	15:27	6.94			**Total Purge Volume (gal)**	14.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0063-092821	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
15:19	2.0	10.7	3.7	749.0	6.6	179.4	
15:20	4.0	10.1	2.5	701.0	6.8	170.1	
15:21	6.0	10.0	2.6	602.5	6.9	166.6	
15:22	8.0	10.0	2.7	580.6	6.9	165.1	
15:23	10.0	10.0	2.8	566.4	6.9	163.5	
15:24	12.0	10.0	2.8	552.0	6.9	162.8	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Wind and rain at time of sample collection Sample collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**GS-32D**	**Sketch**	No
Date	10/1/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	14:03	MDT	Sunny	55	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*42.1*	*2*	4.75	37.35	18.29	23.43

	Time	DTW (ft)				
Start Purging	14:13	4.75			**Purge Rate (GPM)**	2.0
Grab Sample	14:32		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	14:34	6.64			**Total Purge Volume (gal)**	38.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0081-100121	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
14:15	4.0	7.6	1.6	2563.0	6.3	188.7	
14:17	8.0	7.5	1.4	2563.0	6.3	189.0	
14:18	10.0	7.5	1.3	2558.0	6.3	189.2	
14:20	14.0	7.5	1.1	2550.0	6.2	189.3	
14:22	18.0	7.5	1.1	2543.0	6.2	189.2	
14:23	20.0	7.5	1.0	2534.0	6.2	189.0	
14:25	24.0	7.5	1.0	2526.0	6.2	188.7	
14:30	34.0	7.5	.9	2516.0	6.2	187.8	
14:31	36.0	7.5	.9	2515.0	6.2	187.7	
14:32	38.0	7.5	.9	2514.0	6.2	187.6	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Longfield, Moodry

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**GS-32S**	**Sketch**	No
Date	10/1/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	14:37	MDT	Sunny	58	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*18.4*	*6*	5.58	12.82	56.50	11.99

	Time	DTW (ft)				
Start Purging	14:41	5.58			**Purge Rate (GPM)**	2.0
Grab Sample	15:20		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Slightly turbid
Stop Purging (DTW just prior)	15:22	6.18			**Total Purge Volume (gal)**	70.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0082-100121	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
14:42	2.0	9.4	.5	1754.0	6.4	185.7	
14:43	4.0	9.4	.6	1768.0	6.3	185.6	
14:46	10.0	8.9	.6	1745.0	6.2	186.1	
14:51	20.0	7.8	.2	1719.0	6.2	186.7	
14:56	30.0	7.5	.2	1706.0	6.2	186.0	
15:01	40.0	7.5	10.0	1702.0	6.2	184.7	
15:06	50.0	7.4	.1	1693.0	6.2	183.5	
15:11	60.0	7.5	.1	1687.0	6.2	182.7	
15:12	62.0	7.4	.1	1686.0	6.2	182.6	
15:13	64.0	7.4	.1	1685.0	6.2	182.5	
15:14	66.0	7.4	.1	1684.0	6.2	182.3	
15:15	68.0	7.5	.1	1682.0	6.2	181.9	
15:16	70.0	7.5	.1	1682.0	6.2	181.9	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Longfield, Moodry

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**GS-40R**	**Sketch**	No
Date	10/4/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	14:31	MDT	Sunny	75	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*64.4*	*2*	25.13	39.27	19.23	44.77

	Time	DTW (ft)				
Start Purging	14:40	25.13			**Purge Rate (GPM)**	2.0
Grab Sample	14:57		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	15:00	25.37			**Total Purge Volume (gal)**	34.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0083-100421	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
14:41	2.0	9.7	4.1	2326.0	5.9	140.0	
14:43	6.0	9.7	.8	2354.0	5.7	137.4	
14:45	10.0	9.7	.5	2368.0	5.6	136.2	
14:47	14.0	9.7	.3	2393.0	5.6	133.5	
14:48	16.0	9.7	.3	2396.0	5.5	131.8	
14:49	18.0	9.7	.2	2403.0	5.5	130.1	
14:50	20.0	9.7	.2	2412.0	5.5	129.1	
14:51	22.0	9.7	.2	2416.0	5.5	127.2	
14:52	24.0	9.7	.2	2427.0	5.5	125.9	
14:53	26.0	9.7	.2	2430.0	5.5	124.9	
14:54	28.0	9.7	.2	2436.0	5.5	123.1	
14:55	30.0	9.7	.1	2439.0	5.5	121.8	
14:56	32.0	9.7	.1	2442.0	5.5	119.5	
14:57	34.0	9.7	.1	2443.0	5.5	118.1	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Longfield, Moodry

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet						
Site	**GS-44D**				**Sketch**	No
Date	9/28/2021				**Photographs**	No
Personnel	**Arrival Time**	**Time Unit**	**Weather Conditions**	**Air Temp (°F)**		
Kirsten Vose,Matt Kilsdonk	16:16	MDT	Light Rain	45		

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*64.0*	*2*	23.27	40.73	19.95	43.64

	Time	DTW (ft)				
Start Purging	16:25	23.27			**Purge Rate (GPM)**	2.0
Grab Sample	16:37		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	ar at time of sam
Stop Purging (DTW just prior)	16:39	24.08			**Total Purge Volume (gal)**	24.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0064-092821	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
16:26	2.0	9.4	38.2	356.1	6.8	239.0	
16:29	8.0	9.8	2.7	385.3	5.6	255.1	
16:32	14.0	9.8	1.8	384.4	5.5	257.6	
16:33	16.0	9.8	1.7	384.0	5.5	258.5	
16:34	18.0	9.8	1.7	384.0	5.5	259.2	
16:35	20.0	9.8	1.6	383.7	5.5	260.0	
16:36	22.0	9.8	1.7	383.6	5.5	260.7	
16:37	24.0	9.8	1.6	383.5	5.5	261.5	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet						
Site	**GS-44S**				**Sketch**	No
Date	9/28/2021				**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	16:42	MDT	Overcast	44	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*30.0*	*2*	22.38	7.62	3.73	26.19

	Time	DTW (ft)				
Start Purging	16:49	22.38			**Purge Rate (GPM)**	1.0
Grab Sample	16:55		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	. Water clear at t
Stop Purging (DTW just prior)	16:56	22.80			**Total Purge Volume (gal)**	6.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0065-092821	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
16:50	1.0	9.7	6.4	304.2	5.9	262.8	
16:51	2.0	9.8	6.8	300.4	5.9	262.4	
16:52	3.0	9.8	6.9	294.4	5.8	261.3	
16:52	3.5	9.8	6.8	293.0	5.8	261.1	
16:53	4.0	9.8	6.8	292.2	5.7	261.0	
16:54	5.0	9.8	6.8	292.6	5.7	260.9	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet						
Site	**GS-46D**				**Sketch**	No
Date	9/28/2021				**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	10:18	MDT	Overcast	49	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*60.4*	*2*	28.50	31.90	15.62	44.45

	Time	DTW (ft)				
Start Purging	10:34	28.50			**Purge Rate (GPM)**	2.0
Grab Sample	10:46		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	strongly of sulfur
Stop Purging (DTW just prior)	10:49	28.54			**Total Purge Volume (gal)**	24.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0053-092821	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:35	2.0	10.9	5.7	431.8	7.1	19.3	
10:37	6.0	10.3	5.2	501.8	6.8	16.6	
10:39	10.0	10.2	5.2	507.6	6.6	27.0	
10:40	12.0	10.3	5.2	508.5	6.6	33.8	
10:41	14.0	10.3	5.2	509.0	6.5	41.2	
10:42	16.0	10.3	5.2	509.4	6.5	47.8	
10:43	18.0	10.3	5.1	509.2	6.5	54.2	
10:44	20.0	10.3	5.2	509.5	6.5	59.5	
10:45	22.0	10.3	5.1	509.9	6.5	67.2	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	Yes
SOP Deviation	Could not set pump at 44.45', could only get pump to 35.75' in the well. Unable to get a DTW while purge is happening and pump still in well. DTW taken after stop of purge and pump was removed from
Additional remarks	Sample collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet						
Site	**GS-46S**				**Sketch**	No
Date	9/28/2021				**Photographs**	No
Personnel	**Arrival Time**	**Time Unit**	**Weather Conditions**	**Air Temp (°F)**		
Kirsten Vose,Matt Kilsdonk	10:53	MDT	Overcast	49		

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*31.3*	*2*	28.45	2.85	1.40	29.88

	Time	DTW (ft)				
Start Purging	10:57	28.45			**Purge Rate (GPM)**	2.0
Grab Sample	11:07		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	ear at sample tim
Stop Purging (DTW just prior)	11:10	28.46			**Total Purge Volume (gal)**	2.5

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0054-092821	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:58	.3	12.4	8.6	385.1	7.0	103.6	
11:00	.8	10.8	8.4	519.2	7.1	113.9	
11:03	1.5	10.8	8.0	527.4	7.1	117.4	
11:04	1.8	10.8	7.3	529.6	7.1	118.6	
11:05	2.0	10.8	6.9	531.3	7.1	119.4	
11:06	2.3	10.8	6.6	533.5	7.1	120.1	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**HCA-B1**	**Sketch**	No
Date	9/27/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	14:12	MDT	Sunny	78	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*50.1*	*4*	8.23	41.87	82.02	29.17

	Time	DTW (ft)				
Start Purging	14:24	8.23			**Purge Rate (GPM)**	2.0
Grab Sample	15:05		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	15:08	8.76			**Total Purge Volume (gal)**	82.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0030-092721	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
14:26	4.0	9.0	.5	1457.0	5.7	165.2	
14:36	24.0	8.9	.2	1520.0	5.5	181.8	
14:43	38.0	8.9	.2	1526.0	5.6	182.4	
14:50	52.0	8.9	.2	1531.0	5.6	181.1	
14:55	62.0	8.9	.1	1526.0	5.6	177.2	
15:00	72.0	8.9	.1	1526.0	5.6	176.0	
15:02	76.0	8.9	.1	1522.0	5.6	174.9	
15:03	78.0	8.9	.1	1521.0	5.6	174.6	
15:04	80.0	8.9	.1	1521.0	5.6	174.6	
15:05	82.0	8.9	.1	1522.0	5.6	173.9	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Longfield, Moodry

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**HCA-B2**	**Sketch**	No
Date	9/27/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	12:18	MDT	Sunny	65	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*37.2*	*4*	11.58	25.62	50.19	24.39

	Time	DTW (ft)				
Start Purging	12:29	11.58			**Purge Rate (GPM)**	2.0
Grab Sample	12:55		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	13:00	12.02			**Total Purge Volume (gal)**	52.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0029-092721	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
12:31	4.0	9.6	.3	1117.0	6.2	73.4	
12:34	10.0	9.2	.2	1255.0	6.2	62.5	
12:37	16.0	9.2	.1	1301.0	6.2	57.6	
12:43	28.0	9.2	.1	1279.0	6.2	53.2	
12:45	32.0	9.1	.1	1274.0	6.2	52.1	
12:47	36.0	9.1	.1	1280.0	6.2	50.5	
12:49	40.0	9.1	.1	1271.0	6.2	49.3	
12:51	44.0	9.1	.1	1272.0	6.2	48.0	
12:53	48.0	9.1	.1	1274.0	6.2	45.6	
12:55	52.0	9.1	.1	1275.0	6.2	42.2	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Longfield, Moodry

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**MF-07**	**Sketch**	No
Date	10/4/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	10:59	MDT	Sunny	56	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*18.0*	*4*	10.73	7.27	14.24	14.37

	Time	DTW (ft)				
Start Purging	11:26	10.73			**Purge Rate (GPM)**	2.0
Grab Sample	11:36		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	ear at sample tim
Stop Purging (DTW just prior)	11:37	11.26			**Total Purge Volume (gal)**	20.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0111-100421	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
11:27	2.0	13.2	2.4	1622.0	6.5	276.1	
11:28	4.0	13.1	2.3	1654.0	6.4	275.0	
11:29	6.0	13.0	1.5	1667.0	6.4	273.1	
11:30	8.0	13.0	1.2	1673.0	6.3	271.6	
11:31	10.0	13.0	1.0	1676.0	6.3	270.2	
11:32	12.0	12.9	.9	1678.0	6.3	269.0	
11:33	14.0	12.9	.9	1679.0	6.3	268.0	
11:34	16.0	12.9	.9	1680.0	6.3	267.0	
11:35	18.0	12.9	.8	1682.0	6.3	266.0	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**MF-08**	**Sketch**	No
Date	10/1/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	15:33	MDT	Overcast	58	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*14.4*	*4*	7.55	6.85	13.42	10.98

	Time	DTW (ft)				
Start Purging	15:43	7.55			**Purge Rate (GPM)**	1.0
Grab Sample	16:01		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	16:06	7.63			**Total Purge Volume (gal)**	18.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0088-100121	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
15:44	1.0	10.9	1.0	1737.0	6.6	184.6	
15:45	2.0	10.1	.4	1726.0	6.5	184.4	
15:47	4.0	9.8	.4	1703.0	6.5	182.4	
15:48	5.0	9.7	.3	1691.0	6.4	193.8	
15:50	7.0	9.7	.2	1680.0	6.4	183.2	
15:53	10.0	9.6	.2	1665.0	6.4	182.3	
15:57	14.0	9.6	.2	1658.0	6.4	181.2	
15:58	15.0	9.6	.1	1656.0	6.4	181.0	
15:59	16.0	9.6	.1	1655.0	6.4	180.9	
16:00	17.0	9.6	.1	1654.0	6.4	180.7	
16:01	18.0	9.6	.1	1653.0	6.4	180.5	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Longfield, Moodry

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet						
Site	**MF-09**				**Sketch**	No
Date	9/28/2021				**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	17:17	MDT	Light Rain	45	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*15.4*	*4*	11.10	4.30	8.42	13.25

	Time	DTW (ft)				
Start Purging	17:23	11.10			**Purge Rate (GPM)**	2.0
Grab Sample	17:30		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	r clear at sample
Stop Purging (DTW just prior)	17:31	12.05			**Total Purge Volume (gal)**	14.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0066-092821	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
17:24	2.0	10.1	5.2	971.0	6.5	254.7	
17:25	4.0	10.0	3.2	1051.0	6.4	228.1	
17:26	6.0	10.0	2.6	1093.0	6.4	186.9	
17:27	8.0	10.1	2.3	1115.0	6.5	164.8	
17:28	10.0	10.0	2.1	1135.0	6.5	149.3	
17:29	12.0	10.0	1.9	1145.0	6.5	139.8	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**MF-10**	**Sketch**	No
Date	10/5/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	13:58	MDT	Sunny	82	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
Peristaltic	*17.0*	*4*	9.54	7.46	14.61	13.27

	Time	DTW (ft)				
Start Purging	14:15	9.54			**Purge Rate (GPM)**	.8
Grab Sample	14:48		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	at first clear by tl
Stop Purging (DTW just prior)	14:52	11.24			**Total Purge Volume (gal)**	25.5

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0087-100521	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
14:15		13.8	1.5	918.0	6.0	177.0	
14:22	5.3	12.8	1.7	901.0	6.0	161.5	
14:24	6.8	12.8	4.3	895.0	6.2	151.3	
14:28	9.8	11.9	2.0	831.0	6.2	141.7	
14:32	12.8	11.6	2.3	698.0	6.3	132.6	
14:35	15.0	11.6	2.4	656.0	6.3	127.3	
14:36	15.8	11.5	2.5	646.0	6.3	125.3	
14:37	16.5	11.5	2.2	642.1	6.3	124.4	
14:38	17.3	11.4	2.5	630.9	6.3	123.5	
14:39	18.0	11.4	2.5	622.9	6.3	121.5	
14:43	21.8	11.3	2.6	609.8	6.4	118.0	
14:44	22.5	11.2	2.6	606.0	6.4	117.5	
14:45	23.3	11.2	2.6	603.6	6.4	117.0	
14:46	24.0	11.2	2.7	599.8	6.4	116.9	
14:47	24.8	11.2	2.7	597.6	6.4	116.1	
14:48	25.5	11.1	2.7	598.6	6.4	115.0	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet					
Site	**MF-11**				**Sketch** No
Date	9/28/2021				**Photographs** No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	11:31	MDT	Overcast	52	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*13.8*	*4*	9.35	4.45	8.72	11.58

	Time	DTW (ft)				
Start Purging	11:37	9.35			**Purge Rate (GPM)**	2.0
Grab Sample	11:44		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	htly turbid at tim
Stop Purging (DTW just prior)	11:45	10.07			**Total Purge Volume (gal)**	14.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0055-092821	1	FG-N	250	Yes	HNO3	Dissolved metals
GW0056-092821	1	FG-D	250	Yes	HNO3	Dissolved metals
GW0057-092821	1	ECB/FB	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
11:38	2.0	12.8	6.8	664.0	7.2	108.0	
11:39	4.0	11.3	2.0	1012.0	7.0	28.5	
11:40	6.0	11.1	1.3	961.0	6.9	31.5	
11:41	8.0	11.0	1.5	937.0	6.9	34.8	
11:42	10.0	11.0	1.6	929.0	6.9	36.6	
11:43	12.0	11.0	1.8	930.0	6.9	36.9	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Blank time: 1157 Sample collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**MSD-01B**	**Sketch**	No
Date	10/5/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	12:07	MDT	Sunny	72	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*44.3*	*4*	10.43	33.87	66.35	27.37

	Time	DTW (ft)				
Start Purging	12:12	10.43			**Purge Rate (GPM)**	2.0
Grab Sample	12:47		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	12:52	10.57			**Total Purge Volume (gal)**	70.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0089-100521	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
12:12		12.3	2.8	2011.0	5.6	157.9	
12:17	10.0	10.9	.2	2058.0	5.3	153.5	
12:22	20.0	10.9	.2	2158.0	5.2	151.0	
12:27	30.0	11.0	.1	2292.0	5.2	147.7	
12:32	40.0	11.0	.1	2414.0	5.2	144.6	
12:37	50.0	11.1	.1	2422.0	5.2	141.9	
12:42	60.0	11.1	.1	2427.0	5.2	139.6	
12:43	62.0	11.1	.1	2431.0	5.2	139.3	
12:44	64.0	11.1	.1	2429.0	5.2	138.8	
12:45	66.0	11.1	.1	2428.0	5.2	138.4	
12:46	68.0	11.1	.1	2428.0	5.2	138.0	
12:47	70.0	11.1	.1	2427.0	5.2	137.5	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**MSD-01C**	**Sketch**	No
Date	10/5/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	10:03	MDT	Sunny	53	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*115.0*	*4*	11.13	103.87	203.47	63.07

	Time	DTW (ft)				
Start Purging	10:12	11.13			**Purge Rate (GPM)**	2.0
Grab Sample	11:56		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	11:58	12.07			**Total Purge Volume (gal)**	208.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0090-100521	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:13	2.0	10.6	1.4	2020.0	5.5	197.2	
10:18	12.0	10.6	.2	2484.0	5.4	186.1	
10:28	32.0	10.4	.3	3007.0	5.7	169.5	
10:38	52.0	10.4	.1	3000.0	5.8	156.3	
10:48	72.0	10.4	.1	3003.0	5.9	143.9	
10:58	92.0	10.5	.2	3007.0	5.9	135.0	
11:08	112.0	10.5	.2	3009.0	5.9	131.4	
11:18	132.0	10.5	.2	3009.0	5.9	128.9	
11:27	150.0	10.5	.2	3024.0	5.9	127.0	
11:32	160.0	10.5	.1	3036.0	5.9	122.7	
11:37	170.0	10.5	.1	3041.0	5.9	116.5	
11:42	180.0	10.5	.1	3045.0	5.9	113.9	
11:47	190.0	10.5	.1	3055.0	5.9	111.0	
11:52	200.0	10.5	.1	3068.0	5.9	108.6	
11:54	204.0	10.5	.0	3070.0	5.9	107.3	
11:56	208.0	10.5	.1	3072.0	6.0	106.2	
					12.1		

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Longfield, Moodry

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**MSD-02A**	**Sketch**	No
Date	10/6/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	13:01	MDT	Partly Cloudy	67	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*14.0*	*2*	8.53	5.47	2.68	11.27

	Time	DTW (ft)				
Start Purging	13:08	8.53			**Purge Rate (GPM)**	1.0
Grab Sample	13:12		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	ar at time of samp
Stop Purging (DTW just prior)	13:13	10.42			**Total Purge Volume (gal)**	4.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0121-100621	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
13:09	1.0	19.1	6.1	296.1	6.2	187.2	
13:09	1.5	18.3	5.6	413.0	5.7	203.8	
13:10	2.0	13.8	4.5	627.8	5.5	211.7	
13:10	2.5	13.2	3.8	636.2	5.4	212.8	
13:11	3.0	12.8	3.4	633.0	5.4	213.7	
13:11	3.5	12.7	3.0	630.3	5.4	214.1	
13:12	4.0	12.6	2.6	628.2	5.3	215.1	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	Yes
SOP Deviation	DTWfinal taken after stop purge. Could not get water level tape down past pump.
Additional remarks	Sample collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**MSD-02B**	**Sketch**	No
Date	10/6/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	13:18	MDT	Partly Cloudy	67	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*47.9*	*2*	10.99	36.91	18.08	29.45

	Time	DTW (ft)				
Start Purging	13:22	10.99			**Purge Rate (GPM)**	2.0
Grab Sample	13:33		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	ar at time of samp
Stop Purging (DTW just prior)	13:34	11.36			**Total Purge Volume (gal)**	22.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0122-100621	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
13:23	2.0	10.7	2.7	3345.0	4.3	246.8	
13:25	6.0	10.3	1.4	3427.0	4.2	244.1	
13:28	12.0	10.3	1.2	3480.0	4.2	239.4	
13:29	14.0	10.3	1.2	3504.0	4.2	236.7	
13:30	16.0	10.3	1.2	3512.0	4.2	235.6	
13:31	18.0	10.3	1.1	3522.0	4.2	234.2	
13:32	20.0	10.3	1.1	3534.0	4.2	232.4	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**MSD-03**	**Sketch**	No
Date	10/5/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	15:12	MDT	Partly Cloudy	78	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*50.4*	*2*	8.78	41.62	20.38	29.59

	Time	DTW (ft)				
Start Purging	15:17	8.78			**Purge Rate (GPM)**	2.0
Grab Sample	15:30		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	15:32	9.24			**Total Purge Volume (gal)**	26.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0091-100521	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
15:17		10.9	2.4	2314.0	5.9	177.6	
15:20	6.0	10.7	.6	2512.0	5.8	175.6	
15:23	12.0	10.6	.3	2564.0	5.7	173.4	
15:25	16.0	10.5	.3	2569.0	5.7	172.3	
15:26	18.0	10.6	.2	2575.0	5.7	171.5	
15:27	20.0	10.6	.2	2585.0	5.7	171.1	
15:28	22.0	10.6	.2	2590.0	5.7	170.8	
15:29	24.0	10.6	.2	2597.0	5.7	170.0	
15:30	26.0	10.6	.2	2602.0	5.7	169.5	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	
SOP Deviation	
Additional remarks	Team, Longfield and Moodry

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet						
Site	**MSD-04**				**Sketch**	No
Date	9/28/2021				**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Kirsten Vose,Matt Kilsdonk	12:01	MDT	Mostly Cloudy	52	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*55.0*	*2*	9.99	45.01	22.04	32.50

	Time	DTW (ft)				
Start Purging	12:05	9.99			**Purge Rate (GPM)**	2.0
Grab Sample	12:17		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	r clear at sample
Stop Purging (DTW just prior)	12:18	10.51			**Total Purge Volume (gal)**	24.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0058-092821	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 1	18G100335

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
12:06	2.0	9.6	5.2	671.7	6.9	51.1	
12:09	8.0	9.2	1.5	797.0	6.4	99.4	
12:12	14.0	9.2	1.3	804.0	6.4	117.3	
12:13	16.0	9.2	1.3	805.0	6.4	119.9	
12:14	18.0	9.2	1.3	805.0	6.4	123.5	
12:15	20.0	9.2	1.3	805.0	6.4	126.7	
12:16	22.0	9.2	1.3	805.0	6.3	129.4	
12:17	24.0	9.2	1.2	804.0	6.3	131.4	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample collected by Kirsten Vose and Matt Kilsdonk

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

BPSOU *** GW MONITORING - Field Sample Data Sheet

Site	**MSD-05**	**Sketch**	No
Date	10/1/2021	**Photographs**	No

Personnel	Arrival Time	Time Unit	Weather Conditions	Air Temp (°F)	
Dalen Longfield,Joe Moodry	10:52	MDT	Sunny	45	

Purge Data

Purge Method	Well Depth (ft)	Casing Diameter (in)	Start DTW (ft)	Column Head (ft)	3 Well Volumes (gal)	Depth to Pump (ft)
12V Submersible	*57.4*	*2*	10.82	46.58	22.81	34.11

	Time	DTW (ft)				
Start Purging	10:55	10.82			**Purge Rate (GPM)**	2.0
Grab Sample	11:09		**Sampled w/in 24 hrs of purging?**	Not Purged Dry	**Water Color**	Clear
Stop Purging (DTW just prior)	11:14	14.31			**Total Purge Volume (gal)**	28.0

If well purged dry: Did DTW meet recovery timing and percentage?	Not Applicable

(80% initial in < 24 hrs, record all dtw measurements with date/times in field book) If no, then declare sample event "dry".

Sample Data

Sample ID	Containers	Sample Type	Volume (mL)	Filtered	Pres.	Analysis Requested
GW0080-100121	1	FG	250	Yes	HNO3	Dissolved metals

Field Equipment

Equipment	S/N
YSI Pro Plus 2	12F100666

Field Parameters

Time	Purge Volume	Temp (°C)	D.O. (mg/L)	S.C. (µS/cm)	pH (s.u.)	ORP (mV)	Turbidity (NTU)
10:56	2.0	9.7	.4	2960.0	5.7	65.5	
10:59	8.0	9.8	.1	2959.0	5.6	85.1	
11:03	16.0	9.8	.1	2950.0	5.6	99.5	
11:04	18.0	9.8	.1	2949.0	5.6	101.9	
11:06	22.0	9.8	.1	2947.0	5.6	106.8	
11:07	24.0	9.8	.1	2946.0	5.6	109.7	
11:09	28.0	9.8	.1	2946.0	5.6	112.5	

Stabilization reached?	Yes

(pH within 0.1 su, sc within 10% µS/cm, orp within 10 mV)

Final Field Remarks

Any Deviation from SOPs?	No
SOP Deviation	
Additional remarks	Sample Team: Longfield, Moodry

Additonal DTW's when transducer requires recalibration

Time	DTW (ft)	Time	DTW (ft)

SPRING CHAIN of CUSTODIES

Laboratory Management Program (LaMP) Chain of Custody Record
Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater
Req Due Date (mm/dd/yy):
Rush TAT Yes ____ No X
BP/RM Facility No: BPSOU Ground Water Monitoring
Lab Work Order Number:

Lab Name: Pace Analytical Services	BP/ARC Facility Address:	Consultant/Contractor:	TREC / Env. West / Woodard & Curran
Lab Address: 1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:	Consultant/Contractor Project No:	0231348.00-002-0002
Lab PM: Shawn Davis	Lead Regulatory Agency:	Address:	1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone: 612-607-1700	California Global ID No.:	Consultant/Contractor PM:	Scott Bradshaw
Lab Shipping Accnt: 9860-0221-9	Enfos Proposal No: D014Y-0038 (2021)	Phone: Email:	sbradshaw@woodardcurran.com
Lab Bottle Order No:	Accounting Mode: Provision ___10__ OOC-BU _____ OOC-RM _____	Send/Submit EDD to:	lab.enfosdoc@bp.com bpsoudata@woodardcurran.com
Other Info: WR 879585 (2021)	Stage 3_Define (30) Activity 123 Interim Measures	Invoice To:	BP-RM ___X___ BP-Other _____

BP/RM PM: Josh Bryson	Sample Details / Requested Analyses	Report Type & QC Level
PM Phone: 406-723-1834		Limited (Standard) Package ___X
PM Email: josh.bryson@bp.com		Limited Plus Package ____
		Full Package ____

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Filt	Pres	Analysis: As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1 LL Dissolved	Comments
	GW0001-042221	4/22/2021	10:40	GW				G	1			X	1
	GW0002-042221	4/22/2021	13:46	GW				G	1			X	2
	GW0003-042221	4/22/2021	14:56	GW				G	1			X	3
	GW0004-042221	4/22/2021	15:38	GW				G	2			X	Use for lab QC 4
	GW0005-042321	4/23/2021	11:04	GW				G	1			X	5
	GW0006-042321	4/23/2021	11:25	GW				G	1			X	6
	GW0007-042321	4/23/2021	12:16	GW				G	1			X	7

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Nathaniel Beinemann						
Sampler's Company: TREC	TREC	4/29/21	10:00	-Pace	04/30/21	1530
Ship Method: Fed Ex Ship Date: 4/29/2021						
Shipment Tracking No:						

Special Instructions: LL Mercury

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 1.7, 2.3 °F/C | Trip Blank: Yes (No) | MS/MSD Sample Submitted: Yes / No

BP LaMP Soil/H2O COC July 2018

WO# : 10558077

10558077

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Laboratory Management Program (LaMP) Chain of Custody Record
Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater

Req Due Date (mm/dd/yy): _____ Rush TAT Yes _____ No X

BP/RM Facility No: BPSOU Ground Water Monitoring

Lab Work Order Number: _____

Lab Name: Pace Analytical Services	BP/ARC Facility Address:	Consultant/Contractor:	TREC / Env. West / Woodard & Curran
Lab Address: 1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:	Consultant/Contractor Project No:	0231348.00-002-0002
Lab PM: Shawn Davis	Lead Regulatory Agency:	Address:	1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone: 612-607-1700	California Global ID No.:	Consultant/Contractor PM:	Scott Bradshaw
Lab Shipping Accnt: 9860-0221-9	Enfos Proposal No: D014Y-0038 (2021)	Phone:	Email: sbradshaw@woodardcurran.com
Lab Bottle Order No:	Accounting Mode: Provision ___10__ OOC-BU _____ OOC-RM _____	Send/Submit EDD to:	lab.enfosdoc@bp bpsoudata@woodardcurran.com
Other Info: WR 879585 (2021)	Stage 3_Define (30) Activity 123 Interim Measures	Invoice To:	BP-RM ___X___ BP-Other _____
BP/RM PM: Josh Bryson			
PM Phone: 406-723-1834			
PM Email: josh.bryson@bp.com			

Report Type & QC Level

Limited (Standard) Package ___X

Limited Plus Package ____

Full Package ____

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Sample Details: Filt	Sample Details: Pres	Requested Analyses: Analysis — As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1 LL Dissolved	Comments
	GW0008-042321	4/23/2021	12:44	GW				G	1			x	8
	GW0009-042621	4/26/2021	13:41	GW				G	1			x	9
	GW0010-042721	4/27/2021	11:52	GW				G	1			x	10
	GW0011-042721	4/27/2021	12:31	GW				G	1			x	11
	GW0012-042721	4/27/2021	13:41	GW				G	1			x	12
	GW0013-042721	4/27/2021	14:04	GW				G	1			x	13
	GW0014-042721	4/27/2021	15:26	GW				G	1			x	14

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Nathaniel Beinemann						
Sampler's Company: TREC	TREC	4/29/21	10:00			
Ship Method: Fed Ex Ship Date: 4/29/2021						
Shipment Tracking No:						

Special Instructions: LL Mercury

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: _____ °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

17, 2, 3

BP LaMP Soil/H2O COC July 2018

Proprietary and Confidential
Property of BP and its Affiliates

Laboratory Management Program (LaMP) Chain of Custody Record
Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater

Req Due Date (mm/dd/yy): _____ Rush TAT Yes _____ No X

BP/RM Facility No: BPSOU Ground Water Monitoring

Lab Work Order Number: _____

Lab Name: Pace Analytical Services	BP/ARC Facility Address:	Consultant/Contractor:	TREC / Env. West / Woodard & Curran
Lab Address: 1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:	Consultant/Contractor Project No:	0231348.00-002-0002
Lab PM: Shawn Davis	Lead Regulatory Agency:	Address:	1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone: 612-607-1700	California Global ID No.:	Consultant/Contractor PM:	Scott Bradshaw
Lab Shipping Accnt: 9860-0221-9	Enfos Proposal No: D014Y-0038 (2021)	Phone:	Email: sbradshaw@woodardcurran.com
Lab Bottle Order No:	Accounting Mode: Provision ___10__ OOC-BU _____ OOC-RM _____	Send/Submit EDD to:	lab.enfosdoc@bp bpsoudata@woodardcurran.com
Other Info: WR 879585 (2021)	Stage 3_Define (30) Activity 123 Interim Measures	Invoice To:	BP-RM ___X___ BP-Other _____
BP/RM PM: Josh Bryson			
PM Phone: 406-723-1834			
PM Email: josh.bryson@bp.com			

Report Type & QC Level: Limited (Standard) Package ___X; Limited Plus Package ____; Full Package ____

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Filt	Pres	Analysis: As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1 LL Dissolved	Comments
	GW0015-042721	4/27/2021	15:52	GW				G	1		X	X	15
	GW0016-042821	4/28/2021	9:35	GW				G	1		X	X	16
	GW0017-042821	4/28/2021	9:35	GW				G	1		X	X	17
	GW0018-042821	4/28/2021	9:49	GW				G	1		X	X	18
	GW0019-042721	4/27/2021	16:08	GW				G	1		X	X	19
	GW0020-042721	4/27/2021	17:19	GW				G	1		X	X	20
	GW0021-042221	4/22/2021	10:33	GW				G	1		X	X	21

Sampler's Name: Nathaniel Beinemann	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: TREC	TREC	4/29/21	10:00			
Ship Method: Fed Ex Ship Date: 4/29/2021						
Shipment Tracking No:						

Special Instructions: LL Mercury

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes No | Cooler Temp on Receipt: _____ °F/C | Trip Blank: Yes No | MS/MSD Sample Submitted: Yes / No

17, 2.3

Proprietary and Confidential
Property of BP and its Affiliates

Laboratory Management Program (LaMP) Chain of Custody Record
Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater

Req Due Date (mm/dd/yy): _____ Rush TAT Yes _____ No X

BP/RM Facility No: BPSOU Ground Water Monitoring

Lab Work Order Number: _____

Lab Name: Pace Analytical Services	BP/ARC Facility Address:	Consultant/Contractor:	TREC / Env. West / Woodard & Curran
Lab Address: 1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:	Consultant/Contractor Project No:	0231348.00-002-0002
Lab PM: Shawn Davis	Lead Regulatory Agency:	Address:	1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone: 612-607-1700	California Global ID No.:	Consultant/Contractor PM:	Scott Bradshaw
Lab Shipping Accnt: 9860-0221-9	Enfos Proposal No: D014Y-0038 (2021)	Phone:	Email: sbradshaw@woodardcurran.com
Lab Bottle Order No:	Accounting Mode: Provision ___10__ OOC-BU _____ OOC-RM _____	Send/Submit EDD to:	lab.enfosdoc@bp bpsoudata@woodardcurran.com
Other Info: WR 879585 (2021)	Stage 3_Define (30) Activity 123 Interim Measures	Invoice To:	BP-RM ___X___ BP-Other _____
BP/RM PM: Josh Bryson			
PM Phone: 406-723-1834			
PM Email: josh.bryson@bp.com			

Report Type & QC Level: Limited (Standard) Package ___X; Limited Plus Package ____; Full Package ____

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Filt	Pres	Analysis: As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D), Metals EPA 200.8 Mercury EPA 245.1 LL Dissolved	Comments
	GW0022-042221	4/22/2021	11:04	GW				G	1		x	x	22
	GW0023-042221	4/22/2021	11:42	GW				G	1		x	x	23
	GW0024-042221	4/22/2021	12:24	GW				G	2		x	x	Use for lab QC 24
	GW0025-042221	4/22/2021	13:56	GW				G	1		x	x	25
	GW0026-042721	4/27/2021	14:33	GW				G	1		x	x	26
	GW0027-042221	4/22/2021	15:47	GW				G	1		x	x	27
	GW0028-042321	4/23/2021	9:45	GW				G	1		x	x	28

Sampler's Name: Nathaniel Beinemann	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: TREC	TREC	4/29/21	10:00			
Ship Method: Fed Ex Ship Date: 4/29/2021						
Shipment Tracking No:						

Special Instructions: LL Mercury

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: _____ °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

BP LaMP Soil/H2O COC July 2018

17, 2.3

Proprietary and Confidential
Property of BP and its Affiliates

Laboratory Management Program (LaMP) Chain of Custody Record
Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater

Req Due Date (mm/dd/yy): _____ Rush TAT Yes _____ No X

BP/RM Facility No: BPSOU Ground Water Monitoring

Lab Work Order Number: _____

Lab Name: Pace Analytical Services	BP/ARC Facility Address:	Consultant/Contractor:	TREC / Env. West / Woodard & Curran
Lab Address: 1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:	Consultant/Contractor Project No:	0231348.00-002-0002
Lab PM: Shawn Davis	Lead Regulatory Agency:	Address:	1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone: 612-607-1700	California Global ID No.:	Consultant/Contractor PM:	Scott Bradshaw
Lab Shipping Accnt: 9860-0221-9	Enfos Proposal No: D014Y-0038 (2021)	Phone:	Email: sbradshaw@woodardcurran.com
Lab Bottle Order No:	Accounting Mode: Provision ___10__ OOC-BU _____ OOC-RM _____	Send/Submit EDD to:	lab.enfosdoc@bp.com, bpsoudata@woodardcurran.com
Other Info: WR 879585 (2021)	Stage 3_Define (30) Activity 123 Interim Measures	Invoice To:	BP-RM ___X___ BP-Other _____
BP/RM PM: Josh Bryson			
PM Phone: 406-723-1834			
PM Email: josh.bryson@bp.com			

Report Type & QC Level

Limited (Standard) Package ___X

Limited Plus Package ____

Full Package ____

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Sample Details / Requested Analyses: Filt	Pres	Analysis: As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1 LL Dissolved	Comments
	GW0029-042321	4/23/2021	10:45	GW				G	1		x	x	29
	GW0030-042321	4/23/2021	12:41	GW				G	1		x	x	30
	GW0031-042321	4/23/2021	13:35	GW				G	1		x	x	31
	GW0032-042721	4/27/2021	11:23	GW				G	1		x	x	32
	GW0033-042721	4/27/2021	11:23	GW				G	1		x	x	33
	GW0034-042721	4/27/2021	11:46	GW				G	1		x	x	34
	GW0035-042621	4/26/2021	14:48	GW				G	1		x	x	35

Sampler's Name: Nathaniel Beinemann	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date / Time
Sampler's Company: TREC	TREC	4/29/21	10:00		
Ship Method: Fed Ex Ship Date: 4/29/2021					
Shipment Tracking No:					

Special Instructions: LL Mercury

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: _____ °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

BP LaMP Soil/H2O COC July 2018

17, 2.3

Proprietary and Confidential
Property of BP and its Affiliates

Laboratory Management Program (LaMP) Chain of Custody Record
Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater

Req Due Date (mm/dd/yy): _____ Rush TAT Yes _____ No X

BP/RM Facility No: BPSOU Ground Water Monitoring

Lab Work Order Number: _____

Lab Name: Pace Analytical Services	BP/ARC Facility Address:	Consultant/Contractor:	TREC / Env. West / Woodard & Curran
Lab Address: 1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:	Consultant/Contractor Project No:	0231348.00-002-0002
Lab PM: Shawn Davis	Lead Regulatory Agency:	Address:	1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone: 612-607-1700	California Global ID No.:	Consultant/Contractor PM:	Scott Bradshaw
Lab Shipping Accnt: 9860-0221-9	Enfos Proposal No: D014Y-0038 (2021)	Phone: Email:	sbradshaw@woodardcurran.com
Lab Bottle Order No:	Accounting Mode: Provision ___10__ OOC-BU _____ OOC-RM _____	Send/Submit EDD to:	lab.enfosdoc@bp.com, bpsoudata@woodardcurran.com
Other Info: WR 879585 (2021)	Stage 3_Define (30) Activity 123 Interim Measures	Invoice To:	BP-RM ___X___ BP-Other _____

BP/RM PM: Josh Bryson	
PM Phone: 406-723-1834	
PM Email: josh.bryson@bp.com	

Report Type & QC Level

Limited (Standard) Package ___X

Limited Plus Package ____

Full Package ____

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Sample Details / Requested Analyses: Filt	Pres	Analysis: As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1 LL Dissolved	Comments
	GW0036-042621	4/26/2021	15:31	GW				G	1		x	x	36
	GW0037-042621	4/26/2021	16:08	GW				G	1		x	x	37
	GW0038-042621	4/26/2021	16:48	GW				G	1		x	x	38
	GW0039-042721	4/27/2021	12:39	GW				G	1		x	x	39
	GW0040-042721	4/27/2021	14:10	GW				G	1		x	x	40

Sampler's Name: Nathaniel Beinemann	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: TREC	TREC	4/29/21	10:00			
Ship Method: Fed Ex Ship Date: 4/29/2021						
Shipment Tracking No:						

Special Instructions: LL Mercury

THIS LINE - LAB USE ONLY: Custody Seals In Place: (Yes) No | Temp Blank: (Yes) No | Cooler Temp on Receipt: _____ °F/C | Trip Blank: Yes / (No) | MS/MSD Sample Submitted: (Yes) / No

BP LaMP Soil/H2O COC July 2018

17.2.3

Proprietary and Confidential
Property of BP and its Affiliates

Laboratory Management Program (LaMP) Chain of Custody Record
Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater
Req Due Date (mm/dd/yy):
Rush TAT Yes ____ No X
BP/RM Facility No: BPSOU Ground Water Monitoring
Lab Work Order Number:

Lab Name:	Pace Analytical Services	BP/ARC Facility Address:		Consultant/Contractor:	TREC / Env. West / Woodard & Curran
Lab Address:	1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:		Consultant/Contractor Project No:	0231348.00-002-0002
Lab PM:	Shawn Davis	Lead Regulatory Agency:		Address:	1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone:	612-607-1700	California Global ID No.:		Consultant/Contractor PM:	Scott Bradshaw
Lab Shipping Accnt:	9860-0221-9	Enfos Proposal No:	D014Y-0038 (2021)	Phone: / Email:	sbradshaw@woodardcurran.com
Lab Bottle Order No:		Accounting Mode:	Provision ___10__ OOC-BU _____ OOC-RM _____	Send/Submit EDD to:	lab.enfosdoc@bp.com bpsoudata@woodardcurran.com
Other Info:	WR 879585 (2021)	Stage	3_Define (30) Activity 123 Interim Measures	Invoice To:	BP-RM ___X___ BP-Other _____

BP/RM PM: Josh Bryson

PM Phone: 406-723-1834

PM Email: josh.bryson@bp.com

Report Type & QC Level

Limited (Standard) Package ___X
Limited Plus Package ____
Full Package ____

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Filt	Pres	Analysis: As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1 LL Dissolved	Comments
	GW0041-042821	2021-04-28	9:31	GW				G	2		x	x	Use for lab QC (MS/MSD)
	GW0042-042821	2021-04-28	10:29	GW				G	1			x	
	GW0043-042821	2021-04-28	11:05	GW				G	1			x	
	GW0044-042821	2021-04-28	11:51	GW				G	1			x	
	GW0045-042821	2021-04-28	13:49	GW				G	1			x	
	GW0046-042821	2021-04-28	14:42	GW				G	1			x	
	GW0047-042821	2021-04-28	16:34	GW				G	1			x	

Sampler's Name:	Mat Erickson	**Relinquished By / Affiliation**	**Date**	**Time**	**Accepted By / Affiliation** / **Date** / **Time**
Sampler's Company:	TREC	TREC	6/24/21	12:00	
Ship Method:	Fed Ex Ship Date: 5/6/2021				
Shipment Tracking No:	7868 6225 1023				

Special Instructions: LL Mercury Revised COC due to samples being labeled wrong,samples affected are GW0089-050421 - GW0093-050421

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: _____°F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

Proprietary and Confidential
Property of BP and its Affiliates

Laboratory Management Program (LaMP) Chain of Custody Record
Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater

Req Due Date (mm/dd/yy): _____ Rush TAT Yes _____ No X

BP/RM Facility No: BPSOU Ground Water Monitoring

Lab Work Order Number: _____

Lab Name: Pace Analytical Services	BP/ARC Facility Address:	Consultant/Contractor:	TREC / Env. West / Woodard & Curran
Lab Address: 1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:	Consultant/Contractor Project No:	0231348.00-002-0002
Lab PM: Shawn Davis	Lead Regulatory Agency:	Address:	1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone: 612-607-1700	California Global ID No.:	Consultant/Contractor PM:	Scott Bradshaw
Lab Shipping Accnt: 9860-0221-9	Enfos Proposal No: D014Y-0038 (2021)	Phone:	Email: sbradshaw@woodardcurran.com
Lab Bottle Order No:	Accounting Mode: Provision __10__ OOC-BU _____ OOC-RM _____	Send/Submit EDD to:	lab.enfosdoc@bp bpsoudata@woodardcurran.com
Other Info: WR 879585 (2021)	Stage 3_Define (30) Activity 123 Interim Measures	Invoice To:	BP-RM __X__ BP-Other _____
BP/RM PM: Josh Bryson	**Sample Details**	**Requested Analyses**	**Report Type & QC Level**
			Limited (Standard) Package __X
PM Phone: 406-723-1834		Filt: X	Limited Plus Package ____
PM Email: josh.bryson@bp.com		Pres: X	Full Package ____

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Analysis: As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1 LL Dissolved	Comments
	GW0048-042921	2021-04-29	9:59	GW				G	1	X	
	GW0049-042921	2021-04-29	10:37	GW				G	1	X	
	GW0050-042921	2021-04-29	11:05	GW				G	1	X	
	GW0051-042921	2021-04-29	12:17	GW				G	1	X	
	GW0052-042921	2021-04-29	12:41	GW				G	1	X	
	GW0053-042921	2021-04-29	13:19	GW				G	1	X	
	GW0054-042921	2021-04-29	14:50	GW				G	1	X	

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Mat Erickson						
Sampler's Company: TREC	TREC	5/6/21	14:00			
Ship Method: Fed Ex Ship Date: 5/6/2021						
Shipment Tracking No: 7868 6225 1023						

Special Instructions: LL Mercury Revised COC due to samples being labeled wrong,samples affected are GW0089-050421 - GW0093-050421

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: _____°F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

BP LaMP Soil/H2O COC July 2018

Proprietary and Confidential
Property of BP and its Affiliates

Laboratory Management Program (LaMP) Chain of Custody Record

Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater

Req Due Date (mm/dd/yy): _____ Rush TAT Yes _____ No X

BP/RM Facility No: BPSOU Ground Water Monitoring

Lab Work Order Number: _____

Lab Name: Pace Analytical Services	BP/ARC Facility Address:	Consultant/Contractor:	TREC / Env. West / Woodard & Curran
Lab Address: 1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:	Consultant/Contractor Project No:	0231348.00-002-0002
Lab PM: Shawn Davis	Lead Regulatory Agency:	Address:	1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone: 612-607-1700	California Global ID No.:	Consultant/Contractor PM:	Scott Bradshaw
Lab Shipping Accnt: 9860-0221-9	Enfos Proposal No: D014Y-0038 (2021)	Phone:	Email: sbradshaw@woodardcurran.com
Lab Bottle Order No:	Accounting Mode: Provision 10 OOC-BU _____ OOC-RM _____	Send/Submit EDD to:	lab.enfosdoc@bp bpsoudata@woodardcurran.com
Other Info: WR 879585 (2021)	Stage 3_Define (30) Activity 123 Interim Measures	Invoice To:	BP-RM X BP-Other _____

BP/RM PM: Josh Bryson

PM Phone: 406-723-1834

PM Email: josh.bryson@bp.com

Report Type & QC Level

Limited (Standard) Package X

Limited Plus Package _____

Full Package _____

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Filt	Pres	Analysis: As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1 LL Dissolved	Comments
	GW0055-042921	2021-04-29	15:41	GW				G	1			X	
	GW0056-043021	2021-04-30	11:18	GW				G	1			X	
	GW0057-043021	2021-04-30	12:44	GW				G	1			X	
	GW0058-050321	2021-05-03	10:17	GW				G	1			X	
	GW0059-050321	2021-05-03	10:17	GW				G	1			X	
	GW0060-050321	2021-05-03	10:48	GW				G	1			X	
	GW0061-042821	2021-04-28	11:40	GW				G	1			X	

Sampler's Name: Mat Erickson	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: TREC	TREC	5/6/21	14:00			
Ship Method: Fed Ex Ship Date: 5/6/2021						
Shipment Tracking No: 7868 6225 1023						

Special Instructions: LL Mercury Revised COC due to samples being labeled wrong,samples affected are GW0089-050421 - GW0093-050421

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: _____ °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

BP LaMP Soil/H2O COC July 2018

Proprietary and Confidential
Property of BP and its Affiliates

Laboratory Management Program (LaMP) Chain of Custody Record

Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater

Req Due Date (mm/dd/yy): _____ Rush TAT Yes _____ No X

BP/RM Facility No: BPSOU Ground Water Monitoring

Lab Work Order Number: _____

Lab Name: Pace Analytical Services	BP/ARC Facility Address:	Consultant/Contractor:	TREC / Env. West / Woodard & Curran
Lab Address: 1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:	Consultant/Contractor Project No:	0231348.00-002-0002
Lab PM: Shawn Davis	Lead Regulatory Agency:	Address:	1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone: 612-607-1700	California Global ID No.:	Consultant/Contractor PM:	Scott Bradshaw
Lab Shipping Accnt: 9860-0221-9	Enfos Proposal No: D014Y-0038 (2021)	Phone: Email:	sbradshaw@woodardcurran.com
Lab Bottle Order No:	Accounting Mode: Provision __10__ OOC-BU _____ OOC-RM _____	Send/Submit EDD to:	lab.enfosdoc@bp bpsoudata@woodardcurran.com
Other Info: WR 879585 (2021)	Stage 3_Define (30) Activity 123 Interim Measures	Invoice To:	BP-RM __X__ BP-Other _____

BP/RM PM: Josh Bryson

PM Phone: 406-723-1834

PM Email: josh.bryson@bp.com

Sample Details | **Requested Analyses** | **Report Type & QC Level**

Limited (Standard) Package __X

Limited Plus Package ____

Full Package ____

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Analysis: Filt	Analysis: Pres	Analysis: As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1 LL Dissolved	Comments
	GW0062-042821	2021-04-28	12:16	GW				G	1			X	
	GW0063-042821	2021-04-28	13:04	GW				G	1			X	
	GW0064-042821	2021-04-28	14:14	GW				G	1			X	
	GW0065-042821	2021-04-28	14:55	GW				G	1			X	
	GW0066-042821	2021-04-28	15:15	GW				G	1			X	
	GW0067-042921	2021-04-29	15:28	GW				G	1			X	
	GW0068-042921	2021-04-29	11:19	GW				G	1			X	

Sampler's Name: Mat Erickson	**Relinquished By / Affiliation**	**Date**	**Time**	**Accepted By / Affiliation**	**Date** / **Time**
Sampler's Company: TREC	TREC	5/6/21	14:00		
Ship Method: Fed Ex Ship Date: 5/6/2021					
Shipment Tracking No: 7868 6225 1023					

Special Instructions: LL Mercury Revised COC due to samples being labeled wrong,samples affected are GW0089-050421 - GW0093-050421

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: _____°F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

Proprietary and Confidential
Property of BP and its Affiliates

Laboratory Management Program (LaMP) Chain of Custody Record

Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater

Req Due Date (mm/dd/yy): _____ Rush TAT Yes _____ No X

BP/RM Facility No: BPSOU Ground Water Monitoring

Lab Work Order Number: _____

Lab Name:	Pace Analytical Services	BP/ARC Facility Address:		Consultant/Contractor:	TREC / Env. West / Woodard & Curran
Lab Address:	1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:		Consultant/Contractor Project No:	0231348.00-002-0002
Lab PM:	Shawn Davis	Lead Regulatory Agency:		Address:	1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone:	612-607-1700	California Global ID No.:		Consultant/Contractor PM:	Scott Bradshaw
Lab Shipping Accnt:	9860-0221-9	Enfos Proposal No:	D014Y-0038 (2021)	Phone: / Email:	sbradshaw@woodardcurran.com
Lab Bottle Order No:		Accounting Mode:	Provision 10 OOC-BU _____ OOC-RM _____	Send/Submit EDD to:	lab.enfosdoc@bp bpsoudata@woodardcurran.com
Other Info:	WR 879585 (2021)	Stage	3_Define (30) Activity 123 Interim Measures	Invoice To:	BP-RM X BP-Other _____

BP/RM PM:	Josh Bryson	**Sample Details**	**Requested Analyses**
PM Phone:	406-723-1834		
PM Email:	josh.bryson@bp.com		

Report Type & QC Level

Limited (Standard) Package X

Limited Plus Package _____

Full Package _____

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Analysis: Filt	Analysis: Pres	Analysis: As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1 LL Dissolved	Comments
	GW0069-042921	2021-04-29	11:57	GW				G	1			x	
	GW0070-042921	2021-04-29	12:24	GW				G	1			x	
	GW0071-042921	2021-04-29	13:04	GW				G	1			x	
	GW0072-042921	2021-04-29	14:04	GW				G	1			x	
	GW0073-042921	2021-04-29	14:23	GW				G	1			x	
	GW0074-043021	2021-04-30	11:15	GW				G	1			x	
	GW0075-043021	2021-04-30	11:15	GW				G	1			x	

Sampler's Name:	Mat Erickson	**Relinquished By / Affiliation**	**Date**	**Time**	**Accepted By / Affiliation**	**Date**	**Time**
Sampler's Company:	TREC	TREC	5/6/21	14:00			
Ship Method:	Fed Ex Ship Date: 5/6/2021						
Shipment Tracking No:	7868 6225 1023						

Special Instructions: LL Mercury Revised COC due to samples being labeled wrong,samples affected are GW0089-050421 - GW0093-050421

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: _____ °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

Proprietary and Confidential
Property of BP and its Affiliates

Laboratory Management Program (LaMP) Chain of Custody Record

Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater

Req Due Date (mm/dd/yy): _____ Rush TAT Yes _____ No X

BP/RM Facility No: BPSOU Ground Water Monitoring

Lab Work Order Number: _____

Lab Name: Pace Analytical Services	BP/ARC Facility Address:	Consultant/Contractor:	TREC / Env. West / Woodard & Curran
Lab Address: 1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:	Consultant/Contractor Project No:	0231348.00-002-0002
Lab PM: Shawn Davis	Lead Regulatory Agency:	Address:	1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone: 612-607-1700	California Global ID No.:	Consultant/Contractor PM:	Scott Bradshaw
Lab Shipping Acct: 9860-0221-9	Enfos Proposal No: D014Y-0038 (2021)	Phone:	Email: sbradshaw@woodardcurran.com
Lab Bottle Order No:	Accounting Mode: Provision __10__ OOC-BU _____ OOC-RM _____	Send/Submit EDD to:	lab.enfosdoc@bp bpsoudata@woodardcurran.com
Other Info: WR 879585 (2021)	Stage 3_Define (30) Activity 123 Interim Measures	Invoice To:	BP-RM __X__ BP-Other _____
BP/RM PM: Josh Bryson			
PM Phone: 406-723-1834			
PM Email: josh.bryson@bp.com			

Report Type & QC Level

Limited (Standard) Package __X

Limited Plus Package ____

Full Package ____

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Analysis: Filt	Analysis: Pres	Analysis: As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1 LL Dissolved	Comments
	GW0076-043021	2021-04-30	11:27	GW				G	1			x	
	GW0077-043021	2021-04-30	12:13	GW				G	2			x	Use for lab QC (MS/MSD)
	GW0078-043021	2021-04-30	11:17	GW				G	1			x	
	GW0079-050321	2021-05-03	11:54	GW				G	1			x	
	GW0080-050321	2021-05-03	12:46	GW				G	1			x	
	GW0081-050321	2021-05-03	12:26	GW				G	2			x	Use for lab QC (MS/MSD)
	GW0082-050321	2021-05-03	14:15	GW				G	1			x	

Sampler's Name: Mat Erickson	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: TREC	TREC	5/6/21	14:00			
Ship Method: Fed Ex Ship Date: 5/6/2021						
Shipment Tracking No: 7868 6225 1023						

Special Instructions: LL Mercury Revised COC due to samples being labeled wrong,samples affected are GW0089-050421 - GW0093-050421

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: _____ °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

BP LaMP Soil/H2O COC July 2018

Proprietary and Confidential
Property of BP and its Affiliates

Laboratory Management Program (LaMP) Chain of Custody Record

Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater

Req Due Date (mm/dd/yy): _____ Rush TAT Yes _____ No X

BP/RM Facility No: BPSOU Ground Water Monitoring

Lab Work Order Number: _____

Lab Name: Pace Analytical Services	BP/ARC Facility Address:	Consultant/Contractor:	TREC / Env. West / Woodard & Curran
Lab Address: 1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:	Consultant/Contractor Project No:	0231348.00-002-0002
Lab PM: Shawn Davis	Lead Regulatory Agency:	Address:	1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone: 612-607-1700	California Global ID No.:	Consultant/Contractor PM:	Scott Bradshaw
Lab Shipping Accnt: 9860-0221-9	Enfos Proposal No: D014Y-0038 (2021)	Phone:	Email: sbradshaw@woodardcurran.com
Lab Bottle Order No:	Accounting Mode: Provision __10__ OOC-BU _____ OOC-RM _____	Send/Submit EDD to:	lab.enfosdoc@bp bpsoudata@woodardcurran.com
Other Info: WR 879585 (2021)	Stage 3_Define (30) Activity 123 Interim Measures	Invoice To:	BP-RM __X__ BP-Other _____
BP/RM PM: Josh Bryson	**Sample Details**	**Requested Analyses**	**Report Type & QC Level**
			Limited (Standard) Package __X
PM Phone: 406-723-1834			Limited Plus Package ____
PM Email: josh.bryson@bp.com			Full Package ____

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Filt	Pres	Analysis: As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1 LL Dissolved	Comments
	GW0083-050321	2021-05-03	14:51	GW				G	1		X	X	
	GW0084-050321	2021-05-03	16:20	GW				G	1		X	X	
	GW0085-050421	2021-05-04	13:37	GW				G	1		X	X	
	GW0086-050421	2021-05-04	12:30	GW				G	1		X	X	
	GW0087-050421	2021-05-04	15:40	GW				G	1		X	X	
	GW0089-050421	2021-05-04	10:46	GW				G	1		X	X	
	GW0090-050421	2021-05-04	10:46	GW				G	1		X	X	

Sampler's Name: Mat Erickson	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: TREC	TREC	5/6/21	14:00			
Ship Method: Fed Ex Ship Date: 5/6/2021						
Shipment Tracking No: 7868 6225 1023						

Special Instructions: LL Mercury Revised COC due to samples being labeled wrong,samples affected are GW0089-050421 - GW0093-050421

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: _____°F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

Proprietary and Confidential
Property of BP and its Affiliates

Laboratory Management Program (LaMP) Chain of Custody Record
Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater

Req Due Date (mm/dd/yy): _____ Rush TAT Yes _____ No X

BP/RM Facility No: BPSOU Ground Water Monitoring

Lab Work Order Number: _____

Lab Name: Pace Analytical Services	BP/ARC Facility Address:	Consultant/Contractor:	TREC / Env. West / Woodard & Curran
Lab Address: 1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:	Consultant/Contractor Project No:	0231348.00-002-0002
Lab PM: Shawn Davis	Lead Regulatory Agency:	Address:	1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone: 612-607-1700	California Global ID No.:	Consultant/Contractor PM:	Scott Bradshaw
Lab Shipping Accnt: 9860-0221-9	Enfos Proposal No: D014Y-0038 (2021)	Phone:	Email: sbradshaw@woodardcurran.com
Lab Bottle Order No:	Accounting Mode: Provision ___10__ OOC-BU _____ OOC-RM _____	Send/Submit EDD to:	lab.enfosdoc@bp bpsoudata@woodardcurran.com
Other Info: WR 879585 (2021)	Stage 3_Define (30) Activity 123 Interim Measures	Invoice To:	BP-RM ___X___ BP-Other _____
BP/RM PM: Josh Bryson			
PM Phone: 406-723-1834			
PM Email: josh.bryson@bp.com			

Report Type & QC Level: Limited (Standard) Package ___X; Limited Plus Package ____; Full Package ____

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Filt	Pres	Analysis: As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1 LL Dissolved	Comments
	GW0091-050421	2021-05-04	11:01	GW				G	1			X	
	GW0092-050421	2021-05-04	11:27	GW				G	1			X	
	GW0093-050421	2021-05-04	14:51	GW				G	1			X	
	GW0094-050321	2021-05-03	15:55	GW				G	1			X	

Sampler's Name: Mat Erickson	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: TREC	TREC	5/6/21	14:00			
Ship Method: Fed Ex Ship Date: 5/6/2021						
Shipment Tracking No: 7868 6225 1023						

Special Instructions: LL Mercury Revised COC due to samples being labeled wrong,samples affected are GW0089-050421 - GW0093-050421

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: _____ °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

BP LaMP Soil/H2O COC July 2018

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Property of BP and its Affiliates

WO# : 10560318

10560318

Laboratory Management Program (LaMP) Chain of Custody Record
Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater

Req Due Date (mm/dd/yy): _____ Rush TAT Yes _____ No X

BP/RM Facility No: BPSOU Ground Water Monitoring

Lab Work Order Number: _____

Lab Name: Pace Analytical Services	BP/ARC Facility Address:	Consultant/Contractor:	TREC / Env. West / Woodard & Curran
Lab Address: 1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:	Consultant/Contractor Project No:	0231348.00-002-0002
Lab PM: Shawn Davis	Lead Regulatory Agency:	Address:	1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone: 612-607-1700	California Global ID No.:	Consultant/Contractor PM:	Scott Bradshaw
Lab Shipping Accnt: 9860-0221-9	Enfos Proposal No: D014Y-0038 (2021)	Phone: Email:	sbradshaw@woodardcurran.com
Lab Bottle Order No:	Accounting Mode: Provision 10 OOC-BU _____ OOC-RM _____	Send/Submit EDD to:	lab.enfosdoc@bp.com bpsoudata@woodardcurran.com
Other Info: WR 879585 (2021)	Stage 3_Define (30) Activity 123 Interim Measures	Invoice To:	BP-RM X BP-Other _____

BP/RM PM: Josh Bryson

PM Phone: 406-723-1834

PM Email: josh.bryson@bp.com

Report Type & QC Level

Limited (Standard) Package ____

Limited Plus Package ____

Full Package X

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Filt	Pres	Analysis: As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1 LL Dissolved	Comments
	GW0095-050521	2021-05-05	14:45	GW				G	1			x	Use for lab QC (MS/MSD) 1
	GW0096-050521	2021-05-05	15:18	GW				G	1			x	2
	GW0097-050521	2021-05-05	15:49	GW				G	1			x	3
	GW0098-050521	2021-05-05	16:31	GW				G	1			x	4
	GW0099-050621	2021-05-06	11:18	GW				G	1			x	5
	GW0100-050621	2021-05-06	11:47	GW				G	1			x	6
	GW0101-050621	2021-05-06	12:37	GW				G	1			x	7

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Mat Erickson						
Sampler's Company: TREC	TREC	5/13/21	12:00	Kayman / Pace	5-14-21	0850
Ship Method: Fed Ex Ship Date: 5/13/2021						
Shipment Tracking No:						

Special Instructions: LL Mercury **Level Four Data Package**

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 0.5 °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

BP LaMP Soil/H2O COC July 2018

Proprietary and Confidential
Property of BP and its Affiliates

Laboratory Management Program (LaMP) Chain of Custody Record
Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater

Req Due Date (mm/dd/yy): _____ Rush TAT Yes _____ No X

BP/RM Facility No: BPSOU Ground Water Monitoring

Lab Work Order Number: _____

Lab Name: Pace Analytical Services	BP/ARC Facility Address:	Consultant/Contractor:	TREC / Env. West / Woodard & Curran
Lab Address: 1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:	Consultant/Contractor Project No:	0231348.00-002-0002
Lab PM: Shawn Davis	Lead Regulatory Agency:	Address:	1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone: 612-607-1700	California Global ID No.:	Consultant/Contractor PM:	Scott Bradshaw
Lab Shipping Accnt: 9860-0221-9	Enfos Proposal No: D014Y-0038 (2021)	Phone:	Email: sbradshaw@woodardcurran.com
Lab Bottle Order No:	Accounting Mode: Provision ___10__ OOC-BU _____ OOC-RM _____	Send/Submit EDD to:	lab.enfosdoc@bp bpsoudata@woodardcurran.com
Other Info: WR 879585 (2021)	Stage 3_Define (30) Activity 123 Interim Measures	Invoice To:	BP-RM ___X___ BP-Other _____
BP/RM PM: Josh Bryson			
PM Phone: 406-723-1834			
PM Email: josh.bryson@bp.com			

Report Type & QC Level: Limited (Standard) Package ____ Limited Plus Package ____ Full Package ~~X~~

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Filt	Pres	Analysis: As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1 LL Dissolved	Comments
	GW0102-050621	2021-05-06	13:09	GW				G	1			x	8
	GW0103-050621	2021-05-06	13:53	GW				G	1			x	9
	GW0104-050621	2021-05-06	13:53	GW				G	1			x	10
	GW0105-050621	2021-05-06	14:10	GW				G	1			x	11
	GW0106-050621	2021-05-06	14:37	GW				G	1			x	12
	GW0107-050621	2021-05-06	15:46	GW				G	1			x	13
	GW0108-050621	2021-05-06	16:27	GW				G	1			x	14

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Mat Erickson						
Sampler's Company: TREC	TREC	5/13/21	12:00	Meagan S / Pace	5-14-21	0850
Ship Method: Fed Ex Ship Date: 5/13/2021						
Shipment Tracking No:						

Special Instructions: LL Mercury Level Four Data Package

THIS LINE - LAB USE ONLY: Custody Seals In Place: (Yes) No | Temp Blank: (Yes) / No | Cooler Temp on Receipt: 0.5 °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: (Yes) / No

Proprietary and Confidential
Property of BP and its Affiliates

Laboratory Management Program (LaMP) Chain of Custody Record
Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater

Req Due Date (mm/dd/yy): _____ Rush TAT Yes _____ No X

BP/RM Facility No: BPSOU Ground Water Monitoring

Lab Work Order Number: _____

Lab Name: Pace Analytical Services	BP/ARC Facility Address:	Consultant/Contractor:	TREC / Env. West / Woodard & Curran
Lab Address: 1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:	Consultant/Contractor Project No:	0231348.00-002-0002
Lab PM: Shawn Davis	Lead Regulatory Agency:	Address:	1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone: 612-607-1700	California Global ID No.:	Consultant/Contractor PM:	Scott Bradshaw
Lab Shipping Accnt: 9860-0221-9	Enfos Proposal No: D014Y-0038 (2021)	Phone:	Email: sbradshaw@woodardcurran.com
Lab Bottle Order No:	Accounting Mode: Provision ___10__ OOC-BU _____ OOC-RM _____	Send/Submit EDD to:	lab.enfosdoc@bp bpsoudata@woodardcurran.com
Other Info: WR 879585 (2021)	Stage 3_Define (30) Activity 123 Interim Measures	Invoice To:	BP-RM ___X___ BP-Other _____
BP/RM PM: Josh Bryson			
PM Phone: 406-723-1834			
PM Email: josh.bryson@bp.com			

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Filt	Pres	Analysis: As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1 LL Dissolved	Comments
	GW0109-050521	2021-05-05	12:23	GW				G	1		X	X	15
	GW0110-050521	2021-05-05	12:58	GW				G	2		X	X	Use for lab QC 16
	GW0111-050521	2021-05-05	13:46	GW				G	1		X	X	17
	GW0112-050521	2021-05-05	15:17	GW				G	1		X	X	18
	GW0113-050621	2021-05-06	10:20	GW				G	1		X	X	19
	GW0114-050621	2021-05-06	10:56	GW				G	1		X	X	20
	GW0115-050621	2021-05-06	11:49	GW				G	1		X	X	21

Report Type & QC Level: Limited (Standard) Package ____ Limited Plus Package ____ Full Package —X

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Mat Erickson						
Sampler's Company: TREC	TREC	5/13/21	12:00	[signature]	5/14/21	0850
Ship Method: Fed Ex Ship Date: 5/13/2021						
Shipment Tracking No:						

Special Instructions: LL Mercury Level Four Data Package

THIS LINE - LAB USE ONLY: Custody Seals In Place (Yes) No | Temp Blank: (Yes) / No | Cooler Temp on Receipt: 0.3 °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted (Yes) No

Proprietary and Confidential
Property of BP and its Affiliates

Laboratory Management Program (LaMP) Chain of Custody Record
Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater

Req Due Date (mm/dd/yy): _____ Rush TAT Yes _____ No X

BP/RM Facility No: BPSOU Ground Water Monitoring

Lab Work Order Number: _____

Lab Name: Pace Analytical Services	BP/ARC Facility Address:	Consultant/Contractor:	TREC / Env. West / Woodard & Curran
Lab Address: 1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:	Consultant/Contractor Project No:	0231348.00-002-0002
Lab PM: Shawn Davis	Lead Regulatory Agency:	Address:	1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone: 612-607-1700	California Global ID No.:	Consultant/Contractor PM:	Scott Bradshaw
Lab Shipping Accnt: 9860-0221-9	Enfos Proposal No: D014Y-0038 (2021)	Phone:	Email: sbradshaw@woodardcurran.com
Lab Bottle Order No:	Accounting Mode: Provision 10 OOC-BU _____ OOC-RM _____	Send/Submit EDD to:	lab.enfosdoc@bp bpsoudata@woodardcurran.com
Other Info: WR 879585 (2021)	Stage 3_Define (30) Activity 123 Interim Measures	Invoice To:	BP-RM X BP-Other _____
BP/RM PM: Josh Bryson			
PM Phone: 406-723-1834			
PM Email: josh.bryson@bp.com			

Report Type & QC Level: Limited (Standard) Package ____ Limited Plus Package ____ Full Package —X

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Analysis: As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1 LL Dissolved (Filt)	(Pres)	Comments
	GW0116-050621	2021-05-06	12:33	GW				G	1	x		21 22
	GW0117-050621	2021-05-06	12:33	GW				G	1	x		23
	GW0118-050621	2021-05-06	12:56	GW				G	1	x		24
	GW0119-050621	2021-05-06	14:13	GW				G	1	x		25
	GW0120-050621	2021-05-06	16:40	GW				G	1	x		26
	GW0121-050721	2021-05-07	11:45	GW				G	1	x		27

Sampler's Name: Mat Erickson	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: TREC	TREC	5/13/21	12:00		5-14-21	0850
Ship Method: Fed Ex Ship Date: 5/13/2021						
Shipment Tracking No:						

Special Instructions: LL Mercury Level Four Data Package

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 0.5 °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

Proprietary and Confidential
Property of BP and its Affiliates

WO# : 10560315

10560315

Laboratory Management Program (LaMP) Chain of Custody Record
Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater

Req Due Date (mm/dd/yy): _____ Rush TAT Yes _____ No X

BP/RM Facility No: BPSOU Ground Water Monitoring

Lab Work Order Number: _____

Lab Name: Pace Analytical Services	BP/ARC Facility Address:	Consultant/Contractor:	TREC / Env. West / Woodard & Curran
Lab Address: 1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:	Consultant/Contractor Project No:	0231348.00-002-0002
Lab PM: Shawn Davis	Lead Regulatory Agency:	Address:	1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone: 612-607-1700	California Global ID No.:	Consultant/Contractor PM:	Scott Bradshaw
Lab Shipping Accnt: 9860-0221-9	Enfos Proposal No: D014Y-0038 (2021)	Phone: Email:	sbradshaw@woodardcurran.com
Lab Bottle Order No:	Accounting Mode: Provision 10 OOC-BU _____ OOC-RM _____	Send/Submit EDD to:	lab.enfosdoc@bp.com bpsoudata@woodardcurran.com
Other Info: WR 879585 (2021)	Stage 3_Define (30) Activity 123 Interim Measures	Invoice To:	BP-RM X BP-Other _____

BP/RM PM: Josh Bryson

PM Phone: 406-723-1834

PM Email: josh.bryson@bp.com

Report Type & QC Level

Limited (Standard) Package X

Limited Plus Package _____

Full Package _____

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Filt	Pres	Analysis: As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1 LL Dissolved	Comments
	GW0122-050721	2021-05-07	11:18	GW				G	1			x	1
	GW0123-050721	2021-05-07	11:18	GW				G	1			x	2
	GW0124-050721	2021-05-07	12:16	GW				G	1			x	3
	GW0125-051121	2021-05-11	9:58	GW				G	2			x	Use for lab QC 4
	GW0126-051121	2021-05-11	10:35	GW				G	1			x	5
	GW0127-051121	2021-05-11	11:05	GW				G	1			x	6
	GW0128-051121	2021-05-11	11:36	GW				G	1			x	7

Sampler's Name: Mat Erickson

Sampler's Company: TREC

Ship Method: Fed Ex Ship Date: 5/13/2021

Shipment Tracking No:

Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
TREC	5/13/21	11:00	Maggie S / Pace	5-14-21	0850

Special Instructions: LL Mercury

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 3.3 °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

BP LaMP Soil/H2O COC July 2018

Proprietary and Confidential
Property of BP and its Affiliates

Laboratory Management Program (LaMP) Chain of Custody Record
Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater

Req Due Date (mm/dd/yy): _____ Rush TAT Yes _____ No X

BP/RM Facility No: BPSOU Ground Water Monitoring

Lab Work Order Number: _____

Lab Name: Pace Analytical Services	BP/ARC Facility Address:	Consultant/Contractor:	TREC / Env. West / Woodard & Curran
Lab Address: 1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:	Consultant/Contractor Project No:	0231348.00-002-0002
Lab PM: Shawn Davis	Lead Regulatory Agency:	Address:	1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone: 612-607-1700	California Global ID No.:	Consultant/Contractor PM:	Scott Bradshaw
Lab Shipping Accnt: 9860-0221-9	Enfos Proposal No: D014Y-0038 (2021)	Phone:	Email: sbradshaw@woodardcurran.com
Lab Bottle Order No:	Accounting Mode: Provision ___10__ OOC-BU _____ OOC-RM _____	Send/Submit EDD to:	lab.enfosdoc@bp bpsoudata@woodardcurran.com
Other Info: WR 879585 (2021)	Stage 3_Define (30) Activity 123 Interim Measures	Invoice To:	BP-RM ___X___ BP-Other _____
BP/RM PM: Josh Bryson			
PM Phone: 406-723-1834			
PM Email: josh.bryson@bp.com			

Report Type & QC Level

Limited (Standard) Package ___X

Limited Plus Package ____

Full Package ——

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Analysis: Filt	Analysis: Pres	Analysis: As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1 LL Dissolved	Comments
	GW0129-051121	2021-05-11	12:18	GW				G	1		X	X	8
	GW0088-050621	2021-05-06	10:18	GW				G	1		X	X	9

Sampler's Name: Mat Erickson

Sampler's Company: TREC

Ship Method: Fed Ex **Ship Date:** 5/13/2021

Shipment Tracking No:

Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
TREC	5/13/21	11:00	Kayan S / Pace	5-14-21	0850

Special Instructions: LL Mercury

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 3.3 °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

BP LaMP Soil/H2O COC July 2018

Proprietary and Confidential
Property of BP and its Affiliates

FALL CHAIN of CUSTODIES

WO# : 10580635

10580635

Laboratory Management Program (LaMP) Chain of Custody Record
Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater

Req Due Date (mm/dd/yy): _____ Rush TAT Yes ____ No X

BP/RM Facility No: BPSOU Ground Water Monitoring

Lab Work Order Number: _____

Lab Name: Pace Analytical Services	BP/ARC Facility Address:	Consultant/Contractor:	TREC / Env. West / Woodard & Curran
Lab Address: 1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:	Consultant/Contractor Project No:	0231348.00-002-0002
Lab PM: Shawn Davis	Lead Regulatory Agency:	Address:	1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone: 612-607-1700	California Global ID No.:	Consultant/Contractor PM:	Scott Bradshaw
Lab Shipping Accnt: 9860-0221-9	Enfos Proposal No: D014Y-0038 (2021)	Phone:	Email: sbradshaw@woodardcurran.com
Lab Bottle Order No:	Accounting Mode: Provision __10__ OOC-BU ____ OOC-RM ____	Send/Submit EDD to:	lab.enfosdoc@bp.com bpsoudata@woodardcurran.com
Other Info: WR 879585 (2021)	Stage 3_Define (30) Activity 123 Interim Measures	Invoice To:	BP-RM __X__ BP-Other _____
BP/RM PM: Josh Bryson	**Sample Details**	**Requested Analyses**	**Report Type & QC Level**
PM Phone: 406-723-1834			Limited (Standard) Package ____
PM Email: josh.bryson@bp.com			Limited Plus Package ____
			Full Package —X

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Filt	Pres	Analysis: As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1 LL Dissolved	Comments
	GW0001-092321	09/23/21	14:10	GW				G	1			X	OC1
	GW0002-092321	09/23/21	14:51	GW				G	1			X	002
	GW0003-092321	09/23/21	15:23	GW				G	1			X	003
	GW0004-092321	09/23/21	16:25	GW				G	1			X	004
	GW0005-092421	09/24/21	15:37	GW				G	1			X	005
	GW0006-092421	09/24/21	15:12	GW				G	1			X	006
	GW0007-092421	09/24/21	10:54	GW				G	1			X	007

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Mat Erickson						
Sampler's Company: TREC	TREC	9/27/21	14:30		9/28/21	850
Ship Method: Fed Ex Ship Date: 9/27/2021						
Shipment Tracking No:						

Special Instructions: LL Mercury

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 3.6 °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

MLR 9-28-21

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bp rm Laboratory Management Program (LaMP) Chain of Custody Record

Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater

Req Due Date (mm/dd/yy): _____ Rush TAT Yes _____ No X

BP/RM Facility No: BPSOU Ground Water Monitoring

Lab Work Order Number: _____

Lab Name:	Pace Analytical Services	BP/ARC Facility Address:		Consultant/Contractor:	TREC / Env. West / Woodard & Curran
Lab Address:	1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:		Consultant/Contractor Project No:	0231348.00-002-0002
Lab PM:	Shawn Davis	Lead Regulatory Agency:		Address:	1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone:	612-607-1700	California Global ID No.:		Consultant/Contractor PM:	Scott Bradshaw
Lab Shipping Accnt:	9860-0221-9	Enfos Proposal No:	D014Y-0038 (2021)	Phone: / Email:	sbradshaw@woodardcurran.com
Lab Bottle Order No:		Accounting Mode:	Provision 10 OOC-BU _____ OOC-RM _____	Send/Submit EDD to:	lab.enfosdoc@bp bpsoudata@woodardcurran.com
Other Info:	WR 879585 (2021)	Stage	3_Define (30) Activity 123 Interim Measures	Invoice To:	BP-RM X BP-Other _____

BP/RM PM:	Josh Bryson
PM Phone:	406-723-1834
PM Email:	josh.bryson@bp.com

Report Type & QC Level

Limited (Standard) Package ____

Limited Plus Package ____

Full Package X

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Filt	Pres	Analysis: As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D), Metals EPA 200.8 Mercury EPA 245.1 LL Dissolved	Comments
	GW0008-092421	09/24/21	11:22	GW				G	1			x	Use for MS/MSD 008
	GW0009-092421	09/24/21	11:22	GW				G	1			x	009
	GW0010-092421	09/24/21	11:51	GW				G	1			x	010
	GW0011-092421	09/24/21	10:29	GW				G	1			x	011
	GW0012-092421	09/24/21	12:58	GW				G	1			x	012
	GW0013-092421	09/24/21	14:28	GW				G	1			x	013
	GW0014-092421	09/24/21	14:06	GW				G	1			x	014

Sampler's Name:	Mat Erickson	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company:	TREC	TREC	9/27/21	14:30		9/28/21	850
Ship Method:	Fed Ex Ship Date: 9/27/2021						
Shipment Tracking No:							

Special Instructions: LL Mercury

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 3.6 °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

Proprietary and Confidential
Property of BP and its Affiliates

Laboratory Management Program (LaMP) Chain of Custody Record
Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater

Req Due Date (mm/dd/yy): _____ Rush TAT Yes _____ No X

BP/RM Facility No: BPSOU Ground Water Monitoring

Lab Work Order Number: _____

Lab Name:	Pace Analytical Services	BP/ARC Facility Address:		Consultant/Contractor:	TREC / Env. West / Woodard & Curran
Lab Address:	1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:		Consultant/Contractor Project No:	0231348.00-002-0002
Lab PM:	Shawn Davis	Lead Regulatory Agency:		Address:	1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone:	612-607-1700	California Global ID No.:		Consultant/Contractor PM:	Scott Bradshaw
Lab Shipping Accnt:	9860-0221-9	Enfos Proposal No:	D014Y-0038 (2021)	Phone:	Email: sbradshaw@woodardcurran.com
Lab Bottle Order No:		Accounting Mode:	Provision 10 OOC-BU _____ OOC-RM _____	Send/Submit EDD to:	lab.enfosdoc@bp bpsoudata@woodardcurran.com
Other Info:	WR 879585 (2021)	Stage	3_Define (30) Activity 123 Interim Measures	Invoice To:	BP-RM X BP-Other _____

BP/RM PM:	Josh Bryson	**Sample Details**	**Requested Analyses**
PM Phone:	406-723-1834		
PM Email:	josh.bryson@bp.com		

Report Type & QC Level

Limited (Standard) Package ____

Limited Plus Package ____

Full Package X

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Filt	Pres	Analysis: As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1 LL Dissolved	Comments
	GW0015-092421	09/24/21	16:35	GW				G	1		X	X	015
	GW0016-092421	09/24/21	16:43	GW				G	1		X	X	Use for MS/MSD 016
	GW0017-092421	09/24/21	15:46	GW				G	1		X	X	017
	GW0018-092421	09/24/21	15:28	GW				G	1		X	X	018
	GW0019-092421	09/24/21	14:24	GW				G	1		X	X	019
	GW0020-092421	09/24/21	13:13	GW				G	1		X	X	020
	GW0021-092421	09/24/21	13:13	GW				G	1		X	X	021

Sampler's Name:	Mat Erickson	**Relinquished By / Affiliation**	**Date**	**Time**	**Accepted By / Affiliation**	**Date**	**Time**
Sampler's Company:	TREC	TREC	9/27/21	14:30	Matt M Pace	9/28/21	830
Ship Method:	Fed Ex Ship Date: 9/27/2021						
Shipment Tracking No:							

Special Instructions: LL Mercury

THIS LINE - LAB USE ONLY: Custody Seals In Place: (Yes) / No | Temp Blank: (Yes) / No | Cooler Temp on Receipt: 3.6 °F/C | Trip Blank: Yes / (No) | MS/MSD Sample Submitted: (Yes) / No

BP LaMP Soil/H2O COC July 2018

Proprietary and Confidential
Property of BP and its Affiliates

Laboratory Management Program (LaMP) Chain of Custody Record
Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater

Req Due Date (mm/dd/yy): _____ Rush TAT Yes _____ No X

BP/RM Facility No: BPSOU Ground Water Monitoring

Lab Work Order Number: _____

Lab Name: Pace Analytical Services	BP/ARC Facility Address:	Consultant/Contractor:	TREC / Env. West / Woodard & Curran
Lab Address: 1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:	Consultant/Contractor Project No:	0231348.00-002-0002
Lab PM: Shawn Davis	Lead Regulatory Agency:	Address:	1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone: 612-607-1700	California Global ID No.:	Consultant/Contractor PM:	Scott Bradshaw
Lab Shipping Accnt: 9860-0221-9	Enfos Proposal No: D014Y-0038 (2021)	Phone:	Email: sbradshaw@woodardcurran.com
Lab Bottle Order No:	Accounting Mode: Provision 10 OOC-BU _____ OOC-RM _____	Send/Submit EDD to:	lab.enfosdoc@bp bpsoudata@woodardcurran.com
Other Info: WR 879585 (2021)	Stage 3_Define (30) Activity 123 Interim Measures	Invoice To:	BP-RM X BP-Other _____

BP/RM PM: Josh Bryson

PM Phone: 406-723-1834

PM Email: josh.bryson@bp.com

Report Type & QC Level

Limited (Standard) Package ____

Limited Plus Package ____

Full Package —X

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Filt	Pres	Analysis: As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1 LL Dissolved	Comments
	GW0022-092421	09/24/21	13:35	GW				G	1			X	022
	GW0023-092421	09/24/21	12:07	GW				G	1			X	023
	GW0024-092421	09/24/21	11:30	GW				G	1			X	024
	GW0025-092421	09/24/21	10:48	GW				G	1			X	Use for MS/MSD 025

Sampler's Name: Mat Erickson	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: TREC	TREC	9/27/21	14:30		9/28/21	800
Ship Method: Fed Ex Ship Date: 9/27/2021						
Shipment Tracking No:						

Special Instructions: LL Mercury

THIS LINE - LAB USE ONLY: Custody Seals In Place: (Yes) / No | Temp Blank: Yes / (No) | Cooler Temp on Receipt: 3.6 °F/C | Trip Blank: Yes / (No) | MS/MSD Sample Submitted: (Yes) / No

BP LaMP Soil/H2O COC July 2018

Proprietary and Confidential
Property of BP and its Affiliates

Laboratory Management Program (LaMP) Chain of Custody Record
Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater

BP/RM Facility No: BPSOU Ground Water Monitoring

Req Due Date (mm/dd/yy): _____ Rush TAT Yes _____ No X

Lab Work Order Number: _____

Lab Name: Pace Analytical Services	BP/ARC Facility Address:	Consultant/Contractor:	TREC / Env. West / Woodard & Curran
Lab Address: 1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:	Consultant/Contractor Project No:	0231348.00-002-0002
Lab PM: Shawn Davis	Lead Regulatory Agency:	Address:	1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone: 612-607-1700	California Global ID No.:	Consultant/Contractor PM:	Scott Bradshaw
Lab Shipping Accnt: 9860-0221-9	Enfos Proposal No: D014Y-0038 (2021)	Phone: Email:	sbradshaw@woodardcurran.com
Lab Bottle Order No:	Accounting Mode: Provision __10__ OOC-BU _____ OOC-RM _____	Send/Submit EDD to:	lab.enfosdoc@bp.com bpsoudata@woodardcurran.com
Other Info: WR 879585 (2021)	Stage 3_Define (30) Activity 123 Interim Measures	Invoice To:	BP-RM __X__ BP-Other _____

BP/RM PM: Josh Bryson

PM Phone: 406-723-1834

PM Email: josh.bryson@bp.com

Sample Details | **Requested Analyses** | **Report Type & QC Level**

Report Type & QC Level: Limited (Standard) Package __X__ ; Limited Plus Package ____ ; Full Package ____

WO# : 10581934

10581934

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Analysis: Filt	Pres	As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1 LL Dissolved	Use for MS/MSD
	GW0026-092721	9/27/2021	10:43	GW				G	2		X	X	001
	GW0027-092721	9/27/2021	11:25	GW				G	1			X	002
	GW0028-092721	9/27/2021	12:11	GW				G	1			X	003
	GW0029-092721	9/27/2021	12:55	GW				G	1			X	004
	GW0030-092721	9/27/2021	15:05	GW				G	1			X	005
	GW0031-092721	9/27/2021	16:30	GW				G	1			X	006
	GW0032-092721	9/27/2021	17:28	GW				G	1			X	007

Sampler's Name: Alice Drew Davies

Sampler's Company: TREC

Ship Method: Fed Ex Ship Date: 10/4/2021

Shipment Tracking No:

Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Alice Davies TREC	10/4/21	12:00	of Pace	10/5/21	~~1445~~ 1023 CT 10/6/21

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: (Yes) / No | Temp Blank: (Yes) / No | Cooler Temp on Receipt: 4.1 °F/C | Trip Blank: Yes / (No) | MS/MSD Sample Submitted: (Yes) / No

BP LaMP Soil/H2O COC July 2018

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Laboratory Management Program (LaMP) Chain of Custody Record
Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater

Req Due Date (mm/dd/yy): _____ Rush TAT Yes _____ No X

BP/RM Facility No: BPSOU Ground Water Monitoring

Lab Work Order Number: _____

Lab Name: Pace Analytical Services	BP/ARC Facility Address:	Consultant/Contractor:	TREC / Env. West / Woodard & Curran
Lab Address: 1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:	Consultant/Contractor Project No:	0231348.00-002-0002
Lab PM: Shawn Davis	Lead Regulatory Agency:	Address:	1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone: 612-607-1700	California Global ID No.:	Consultant/Contractor PM:	Scott Bradshaw
Lab Shipping Accnt: 9860-0221-9	Enfos Proposal No: D014Y-0038 (2021)	Phone: Email:	sbradshaw@woodardcurran.com
Lab Bottle Order No:	Accounting Mode: Provision ___10__ OOC-BU _____ OOC-RM _____	Send/Submit EDD to:	lab.enfosdoc@bp bpsoudata@woodardcurran.com
Other Info: WR 879585 (2021)	Stage 3_Define (30) Activity 123 Interim Measures	Invoice To:	BP-RM ___X___ BP-Other _____

BP/RM PM: Josh Bryson	**Sample Details**	**Requested Analyses**
PM Phone: 406-723-1834		Report Type & QC Level: Limited (Standard) Package ___X; Limited Plus Package ____; Full Package ____
PM Email: josh.bryson@bp.com		

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Analysis: Filt	Analysis: Pres	Analysis: As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1 LL Dissolved	Comments	
	GW0033-092821	9/28/2021	10:52	GW				G	1			x		008
	GW0034-092821	9/28/2021	11:36	GW				G	1			x		009
	GW0035-092821	9/28/2021	12:16	GW				G	1			x		010
	GW0036-092821	9/28/2021	15:53	GW				G	1			x		011
	GW0037-092921	9/29/2021	17:08	GW				G	2			x	Use for MS/MSD	012
	GW0038-092821	9/28/2021	16:54	GW				G	1			x		013
	GW0039-092921	9/29/2021	9:50	GW				G	1			x		014

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Alice Drew Davies						
Sampler's Company: TREC	TREC	10/4/21	12:00		10/5/21	1025
Ship Method: Fed Ex Ship Date: 10/4/2021						
Shipment Tracking No:						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: (Yes) / No | Temp Blank: (Yes) / No | Cooler Temp on Receipt: 4.1 °F/C | Trip Blank: Yes / (No) | MS/MSD Sample Submitted: (Yes) / No

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Laboratory Management Program (LaMP) Chain of Custody Record

Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater

Req Due Date (mm/dd/yy): _____ Rush TAT Yes _____ No X

BP/RM Facility No: BPSOU Ground Water Monitoring

Lab Work Order Number: _____

Lab Name: Pace Analytical Services	BP/ARC Facility Address:	Consultant/Contractor:	TREC / Env. West / Woodard & Curran
Lab Address: 1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:	Consultant/Contractor Project No:	0231348.00-002-0002
Lab PM: Shawn Davis	Lead Regulatory Agency:	Address:	1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone: 612-607-1700	California Global ID No.:	Consultant/Contractor PM:	Scott Bradshaw
Lab Shipping Accnt: 9860-0221-9	Enfos Proposal No: D014Y-0038 (2021)	Phone:	Email: sbradshaw@woodardcurran.com
Lab Bottle Order No:	Accounting Mode: Provision ___10___ OOC-BU _____ OOC-RM _____	Send/Submit EDD to:	lab.enfosdoc@bp bpsoudata@woodardcurran.com
Other Info: WR 879585 (2021)	Stage 3_Define (30) Activity 123 Interim Measures	Invoice To:	BP-RM ___X___ BP-Other _____
BP/RM PM: Josh Bryson			
PM Phone: 406-723-1834			
PM Email: josh.bryson@bp.com			

Report Type & QC Level

Limited (Standard) Package ___X

Limited Plus Package ____

Full Package ____

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Filt	Pres	Analysis: As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1 LL Dissolved	Comments
	GW0040-092921	9/29/2021	9:50	GW				G	1		X	X	015
	GW0041-092921	9/29/2021	10:10	GW				G	1		X	X	016
	GW0042-092921	9/29/2021	10:42	GW				G	1		X	X	017
	GW0043-092921	9/29/2021	11:28	GW				G	1		X	X	018
	GW0044-092921	9/29/2021	12:28	GW				G	1		X	X	019
	GW0045-092921	9/29/2021	14:08	GW				G	1		X	X	020
	GW0046-092921	9/29/2021	14:31	GW				G	1		X	X	021

Sampler's Name: Alice Drew Davies	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: TREC	TREC	10/4/21	12:00		10/5/21	1025
Ship Method: Fed Ex Ship Date: 10/4/2021						
Shipment Tracking No:						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 4.1 °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

BP LaMP Soil/H2O COC July 2018

Proprietary and Confidential
Property of BP and its Affiliates

Laboratory Management Program (LaMP) Chain of Custody Record

Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater

Req Due Date (mm/dd/yy): _____ Rush TAT Yes _____ No X

BP/RM Facility No: BPSOU Ground Water Monitoring

Lab Work Order Number: _____

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Lab Address: 1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:	Consultant/Contractor Project No:	0231348.00-002-0002
Lab PM: Shawn Davis	Lead Regulatory Agency:	Address:	1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone: 612-607-1700	California Global ID No.:	Consultant/Contractor PM:	Scott Bradshaw
Lab Shipping Accnt: 9860-0221-9	Enfos Proposal No: D014Y-0038 (2021)	Phone: Email:	sbradshaw@woodardcurran.com
Lab Bottle Order No:	Accounting Mode: Provision __10__ OOC-BU _____ OOC-RM _____	Send/Submit EDD to:	lab.enfosdoc@bp bpsoudata@woodardcurran.com
Other Info: WR 879585 (2021)	Stage 3_Define (30) Activity 123 Interim Measures	Invoice To:	BP-RM __X__ BP-Other _____

BP/RM PM: Josh Bryson

PM Phone: 406-723-1834

PM Email: josh.bryson@bp.com

Sample Details | **Requested Analyses** | **Report Type & QC Level**

Limited (Standard) Package __X

Limited Plus Package ____

Full Package ——

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Filt	Pres	Analysis: As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1 LL Dissolved	Comments
	GW0047-092921	9/29/2021	15:12	GW				G	1		X	X	022

Sampler's Name: Alice Drew Davies	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: TREC	TREC	10/4/21	12:00	cf pace	10/5/21	1025
Ship Method: Fed Ex Ship Date: 10/4/2021						
Shipment Tracking No:						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 4.1 °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

BP LaMP Soil/H2O COC July 2018

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Property of BP and its Affiliates

Laboratory Management Program (LaMP) Chain of Custody Record
Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater

Req Due Date (mm/dd/yy): _____ Rush TAT Yes _____ No X

BP/RM Facility No: BPSOU Ground Water Monitoring

Lab Work Order Number: _____

Lab Name: Pace Analytical Services	BP/ARC Facility Address:	Consultant/Contractor: TREC / Env. West / Woodard & Curran
Lab Address: 1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:	Consultant/Contractor Project No: 0231348.00-002-0002
Lab PM: Shawn Davis	Lead Regulatory Agency:	Address: 1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone: 612-607-1700	California Global ID No.:	Consultant/Contractor PM: Scott Bradshaw
Lab Shipping Accnt: 9860-0221-9	Enfos Proposal No: D014Y-0038 (2021)	Phone: Email: sbradshaw@woodardcurran.com
Lab Bottle Order No:	Accounting Mode: Provision ___10__ OOC-BU _____ OOC-RM _____	Send/Submit EDD to: lab.enfosdoc@bp.com bpsoudata@woodardcurran.com
Other Info: WR 879585 (2021)	Stage 3_Define (30) Activity 123 Interim Measures	Invoice To: BP-RM ___X___ BP-Other _____
BP/RM PM: Josh Bryson	**Sample Details**	**Requested Analyses**
PM Phone: 406-723-1834		
PM Email: josh.bryson@bp.com		

Report Type & QC Level

Limited (Standard) Package ___X

Limited Plus Package ____

Full Package ____

WO# : 10581942

10581942

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Filt	Pres	Analysis: As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1 LL Dissolved	Use for MS/MSD
	GW0048-092721	9/27/2021	10:49	GW				G	2		X	X	001
	GW0049-092721	9/27/2021	14:25	GW				G	1		X	X	002
	GW0050-092421	9/24/2021	14:04	GW				G	1		X	X	003
	GW0051-092721	9/27/2021	15:50	GW				G	1		X	X	004
	GW0052-092721	9/27/2021	16:21	GW				G	1		X	X	005
	GW0053-092821	9/28/2021	10:46	GW				G	1		X	X	006
	GW0054-092821	9/28/2021	11:07	GW				G	1		X	X	007

Sampler's Name: Alice Drew-Davies	**Relinquished By / Affiliation**	**Date**	**Time**	**Accepted By / Affiliation**	**Date**	**Time**
Sampler's Company: TREC	[signature] TREC	10/4/21	12:00	[signature] Pace	10/5/21	1025
Ship Method: Fed Ex Ship Date: 10/4/2021						
Shipment Tracking No:						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: (Yes) / No | Temp Blank: (Yes) / No | Cooler Temp on Receipt: 4.1 °F/C | Trip Blank: Yes / (No) | MS/MSD Sample Submitted: (Yes) / No

Proprietary and Confidential
Property of BP and its Affiliates

Laboratory Management Program (LaMP) Chain of Custody Record

Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater

Req Due Date (mm/dd/yy): _____ Rush TAT Yes ____ No X

BP/RM Facility No: BPSOU Ground Water Monitoring

Lab Work Order Number: _____

Lab Name: Pace Analytical Services	BP/ARC Facility Address:	Consultant/Contractor:	TREC / Env. West / Woodard & Curran
Lab Address: 1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:	Consultant/Contractor Project No:	0231348.00-002-0002
Lab PM: Shawn Davis	Lead Regulatory Agency:	Address:	1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone: 612-607-1700	California Global ID No.:	Consultant/Contractor PM:	Scott Bradshaw
Lab Shipping Accnt: 9860-0221-9	Enfos Proposal No: D014Y-0038 (2021)	Phone:	Email: sbradshaw@woodardcurran.com
Lab Bottle Order No:	Accounting Mode: Provision ___10__ OOC-BU _____ OOC-RM _____	Send/Submit EDD to:	lab.enfosdoc@bp.com; bpsoudata@woodardcurran.com
Other Info: WR 879585 (2021)	Stage 3_Define (30) Activity 123 Interim Measures	Invoice To:	BP-RM ___X___ BP-Other _____
BP/RM PM: Josh Bryson			
PM Phone: 406-723-1834			
PM Email: josh.bryson@bp.com			

Report Type & QC Level

Limited (Standard) Package ___X

Limited Plus Package ____

Full Package ____

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Filt	Pres	Analysis: As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1 LL Dissolved	Comments	
	GW0055-092821	9/28/2021	11:44	GW				G	1			x		008
	GW0056-092821	9/28/2021	11:44	GW				G	1			x		009
	GW0057-092821	9/28/2021	11:57	GW				G	1			x		010
	GW0058-092821	9/28/2021	12:17	GW				G	1			x		011
	GW0059-092921	9/29/2021	16:42	GW				G	1			x		012
	GW0060-093021	9/30/2021	13:24	GW				G	1			x		013
	GW0061-092821	9/28/2021	14:30	GW				G	2			x	Use for MS/MSD	014

Sampler's Name: Alice Drew-Davies	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: TREC	Alice Drew-Davies TREC	10/4/21	12:00	Pace	10/5/21	1025
Ship Method: Fed Ex Ship Date: 10/4/2021						
Shipment Tracking No:						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: (Yes) / No | Temp Blank: (Yes) No | Cooler Temp on Receipt: 4.1 °F/C | Trip Blank: Yes (No) | MS/MSD Sample Submitted: (Yes) No

Proprietary and Confidential
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Laboratory Management Program (LaMP) Chain of Custody Record
Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater

Req Due Date (mm/dd/yy): _____ Rush TAT Yes ____ No X

BP/RM Facility No: BPSOU Ground Water Monitoring

Lab Work Order Number: _____

Lab Name: Pace Analytical Services	BP/ARC Facility Address:	Consultant/Contractor:	TREC / Env. West / Woodard & Curran
Lab Address: 1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:	Consultant/Contractor Project No:	0231348.00-002-0002
Lab PM: Shawn Davis	Lead Regulatory Agency:	Address:	1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone: 612-607-1700	California Global ID No.:	Consultant/Contractor PM:	Scott Bradshaw
Lab Shipping Accnt: 9860-0221-9	Enfos Proposal No: D014Y-0038 (2021)	Phone:	Email: sbradshaw@woodardcurran.com
Lab Bottle Order No:	Accounting Mode: Provision __10__ OOC-BU ____ OOC-RM ____	Send/Submit EDD to:	lab.enfosdoc@bp bpsoudata@woodardcurran.com
Other Info: WR 879585 (2021)	Stage 3_Define (30) Activity 123 Interim Measures	Invoice To:	BP-RM __X__ BP-Other _____

BP/RM PM: Josh Bryson

PM Phone: 406-723-1834

PM Email: josh.bryson@bp.com

Report Type & QC Level

Limited (Standard) Package __X

Limited Plus Package ____

Full Package ____

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Filt	Pres	Analysis: As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1 Lt. Dissolved	Comments
	GW0062-092821	9/28/2021	15:11	GW				G	1		X	X	015
	GW0063-092821	9/28/2021	15:25	GW				G	1		X	X	016
	GW0064-092821	9/28/2021	16:37	GW				G	1		X	X	017
	GW0065-092821	9/28/2021	16:55	GW				G	1		X	X	018
	GW0066-092821	9/28/2021	17:30	GW				G	1		X	X	019
	GW0067-093021	9/30/2021	14:17	GW				G	1		X	X	020
	GW0068-093021	9/30/2021	14:54	GW				G	1		X	X	021

Sampler's Name: Alice Drew-Davies	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: TREC	[signature] TREC	10/4/21	12:00	[signature] Pace	10/5/21	1025
Ship Method: Fed Ex Ship Date: 10/4/2021						
Shipment Tracking No:						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: (Yes) / No | Temp Blank: (Yes) / No | Cooler Temp on Receipt: 4.1 °F/C | Trip Blank: Yes / (No) | MS/MSD Sample Submitted: (Yes) / No

BP LaMP Soil/H2O COC July 2018

Proprietary and Confidential
Property of BP and its Affiliates

Laboratory Management Program (LaMP) Chain of Custody Record
Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater

Req Due Date (mm/dd/yy): _____ Rush TAT Yes _____ No X

BP/RM Facility No: BPSOU Ground Water Monitoring

Lab Work Order Number: _____

Lab Name: Pace Analytical Services	BP/ARC Facility Address:	Consultant/Contractor:	TREC / Env. West / Woodard & Curran
Lab Address: 1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:	Consultant/Contractor Project No:	0231348.00-002-0002
Lab PM: Shawn Davis	Lead Regulatory Agency:	Address:	1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone: 612-607-1700	California Global ID No.:	Consultant/Contractor PM:	Scott Bradshaw
Lab Shipping Accnt: 9860-0221-9	Enfos Proposal No: D014Y-0038 (2021)	Phone:	Email: sbradshaw@woodardcurran.com
Lab Bottle Order No:	Accounting Mode: Provision ___10__ OOC-BU _____ OOC-RM _____	Send/Submit EDD to:	lab.enfosdoc@bp; bpsoudata@woodardcurran.com
Other Info: WR 879585 (2021)	Stage 3_Define (30) Activity 123 Interim Measures	Invoice To:	BP-RM ___X___ BP-Other _____

BP/RM PM: Josh Bryson	Sample Details	Requested Analyses
PM Phone: 406-723-1834		Report Type & QC Level
PM Email: josh.bryson@bp.com		Limited (Standard) Package ___X Limited Plus Package ____ Full Package ____

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Filt	Pres	Analysis: As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1 LL Dissolved	Comments
	GW0069-093021	9/30/2021	15:40	GW				G	1			X	022

Sampler's Name: Alice Drew-Davies	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: TREC	TREC	10/4/21	12:00	UPS pure	10/5/21	1025
Ship Method: Fed Ex Ship Date: 10/4/2021						
Shipment Tracking No:						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: (Yes) / No | Temp Blank: (Yes) / No | Cooler Temp on Receipt: 4.1 °F/C | Trip Blank: Yes / (No) | MS/MSD Sample Submitted: (Yes) / No

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Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater

Req Due Date (mm/dd/yy): _____ Rush TAT Yes _____ No X

BP/RM Facility No: BPSOU Ground Water Monitoring

Lab Work Order Number: _____

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Lab Address: 1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:	Consultant/Contractor Project No:	0231348.00-002-0002
Lab PM: Shawn Davis	Lead Regulatory Agency:	Address:	1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone: 612-607-1700	California Global ID No.:	Consultant/Contractor PM:	Scott Bradshaw
Lab Shipping Accnt: 9860-0221-9	Enfos Proposal No: D014Y-0038 (2021)	Phone: Email:	sbradshaw@woodardcurran.com
Lab Bottle Order No:	Accounting Mode: Provision __10__ OOC-BU _____ OOC-RM _____	Send/Submit EDD to:	lab.enfosdoc@bp.com bpsoudata@woodardcurran.com
Other Info: WR 879585 (2021)	Stage 3_Define (30) Activity 123 Interim Measures	Invoice To:	BP-RM X BP-Other _____

BP/RM PM: Josh Bryson

PM Phone: 406-723-1834

PM Email: josh.bryson@bp.com

Report Type & QC Level

Limited (Standard) Package X

Limited Plus Package ____

Full Package ____

WO# : 10582495

10582495

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Filt	Pres	Analysis: As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1 LL Dissolved	
	GW0070-093021	9/30/2021	11:33	GW				G	1			X	001
	GW0071-093021	9/30/2021	12:20	GW				G	1			X	002
	GW0072-093021	9/30/2021	13:09	GW				G	1			X	003
	GW0073-093021	9/30/2021	14:07	GW				G	1			X	004
	GW0074-093021	9/30/2021	15:06	GW				G	2			X	005 Use for MS/MSD
	GW0075-093021	9/30/2021	15:06	GW				G	1			X	006
	GW0076-093021	9/30/2021	15:30	GW				G	1			X	007

Sampler's Name: Alice Drew Davies

Sampler's Company: TREC

Ship Method: Fed Ex Ship Date: 10/7/2021

Shipment Tracking No:

Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
TREC	10/7/21	12:00		10/8/21	850

Special Instructions: ~~LL Mercury~~ AOP

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 2.9 °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

BP LaMP Soil/H2O COC July 2018

Proprietary and Confidential
Property of BP and its Affiliates

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Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater

Req Due Date (mm/dd/yy): _____ Rush TAT Yes _____ No X

BP/RM Facility No: BPSOU Ground Water Monitoring

Lab Work Order Number: _____

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Lab Address: 1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:	Consultant/Contractor Project No:	0231348.00-002-0002
Lab PM: Shawn Davis	Lead Regulatory Agency:	Address:	1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone: 612-607-1700	California Global ID No.:	Consultant/Contractor PM:	Scott Bradshaw
Lab Shipping Accnt: 9860-0221-9	Enfos Proposal No: D014Y-0038 (2021)	Phone:	Email: sbradshaw@woodardcurran.com
Lab Bottle Order No:	Accounting Mode: Provision ___10__ OOC-BU _____ OOC-RM _____	Send/Submit EDD to:	lab.enfosdoc@bp bpsoudata@woodardcurran.com
Other Info: WR 879585 (2021)	Stage 3_Define (30) Activity 123 Interim Measures	Invoice To:	BP-RM ___X___ BP-Other _____

BP/RM PM: Josh Bryson

PM Phone: 406-723-1834

PM Email: josh.bryson@bp.com

Sample Details | **Requested Analyses** | **Report Type & QC Level**

Limited (Standard) Package ___X

Limited Plus Package ____

Full Package ____

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Filt	Pres	Analysis: As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1 LL Dissolved	Comments
	GW0077-100421	10/4/2021	12:59	GW				G	1			x	GW8
	GW0078-100121	10/1/2021	10:22	GW				G	1			x	GW9
	GW0079-100121	10/1/2021	10:45	GW				G	1			x	GW6
	GW0080-100121	10/1/2021	11:09	GW				G	1			x	GW1
	GW0081-100121	10/1/2021	14:32	GW				G	1			x	GW2
	GW0082-100121	10/1/2021	15:20	GW				G	1			x	GW3
	GW0083-100421	10/4/2021	14:57	GW				G	1			x	GW4

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Alice Drew Davies						
Sampler's Company: TREC	TREC	10/7/21	12:00		10/8/21	0850
Ship Method: Fed Ex Ship Date: 10/7/2021						
Shipment Tracking No:						

Special Instructions: ~~LL Mercury~~ APP

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 2.7 °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

BP LaMP Soil/H2O COC July 2018

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Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater

Req Due Date (mm/dd/yy): _____ Rush TAT Yes _____ No X

BP/RM Facility No: BPSOU Ground Water Monitoring

Lab Work Order Number: _____

Lab Name: Pace Analytical Services	BP/ARC Facility Address:	Consultant/Contractor:	TREC / Env. West / Woodard & Curran
Lab Address: 1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:	Consultant/Contractor Project No:	0231348.00-002-0002
Lab PM: Shawn Davis	Lead Regulatory Agency:	Address:	1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone: 612-607-1700	California Global ID No.:	Consultant/Contractor PM:	Scott Bradshaw
Lab Shipping Accnt: 9860-0221-9	Enfos Proposal No: D014Y-0038 (2021)	Phone:	Email: sbradshaw@woodardcurran.com
Lab Bottle Order No:	Accounting Mode: Provision ___10__ OOC-BU _____ OOC-RM _____	Send/Submit EDD to:	lab.enfosdoc@bp bpsoudata@woodardcurran.com
Other Info: WR 879585 (2021)	Stage 3_Define (30) Activity 123 Interim Measures	Invoice To:	BP-RM ___X___ BP-Other _____
BP/RM PM: Josh Bryson			
PM Phone: 406-723-1834			
PM Email: josh.bryson@bp.com			

Report Type & QC Level

Limited (Standard) Package ___X

Limited Plus Package ____

Full Package ——

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Filt	Pres	Analysis: As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1 LL Dissolved	Comments
	GW0084-100421	10/4/2021	10:36	GW				G	1			x	015
	GW0085-100121	10/1/2021	12:11	GW				G	1			x	016
	GW0086-100121	10/1/2021	12:46	GW				G	1			x	017
	GW0087-100521	10/5/2021	14:48	GW				G	1			x	018
	GW0088-100121	10/1/2021	16:01	GW				G	2			x	Use for MS/MSD 019
	GW0089-100521	10/5/2021	12:47	GW				G	1			x	020
	GW0090-100521	10/5/2021	11:56	GW				G	1			x	021

Sampler's Name: Alice Drew Davies	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: TREC	Alice Drew TREC	10/7/21	12:00	Upace	10/8/21	0850
Ship Method: Fed Ex Ship Date: 10/7/2021						
Shipment Tracking No:						

Special Instructions: ~~LL Mercury~~ ADD

THIS LINE - LAB USE ONLY: Custody Seals In Place: (Yes) / No | Temp Blank: (Yes) / No | Cooler Temp on Receipt: 2.7 °F/C | Trip Blank: Yes / (No) | MS/MSD Sample Submitted: (Yes) / No

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Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater

Req Due Date (mm/dd/yy): _____ Rush TAT Yes _____ No X

BP/RM Facility No: BPSOU Ground Water Monitoring

Lab Work Order Number: _____

Lab Name: Pace Analytical Services	BP/ARC Facility Address:	Consultant/Contractor:	TREC / Env. West / Woodard & Curran
Lab Address: 1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:	Consultant/Contractor Project No:	0231348.00-002-0002
Lab PM: Shawn Davis	Lead Regulatory Agency:	Address:	1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone: 612-607-1700	California Global ID No.:	Consultant/Contractor PM:	Scott Bradshaw
Lab Shipping Accnt: 9860-0221-9	Enfos Proposal No: D014Y-0038 (2021)	Phone:	Email: sbradshaw@woodardcurran.com
Lab Bottle Order No:	Accounting Mode: Provision ___10__ OOC-BU _____ OOC-RM _____	Send/Submit EDD to:	lab.enfosdoc@bp bpsoudata@woodardcurran.com
Other Info: WR 879585 (2021)	Stage 3_Define (30) Activity 123 Interim Measures	Invoice To:	BP-RM ___X___ BP-Other _____
BP/RM PM: Josh Bryson			
PM Phone: 406-723-1834			
PM Email: josh.bryson@bp.com			

Report Type & QC Level

Limited (Standard) Package ___X

Limited Plus Package ____

Full Package ——

Sample Details / **Requested Analyses**

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Filt	Pres	Analysis: As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1 LL Dissolved	Comments
	GW0091-100521	10/5/2021	15:30	GW				G	1			X	122

Sampler's Name: Alice Drew Davies	**Relinquished By / Affiliation**	**Date**	**Time**	**Accepted By / Affiliation**	**Date**	**Time**
Sampler's Company: TREC	TREC	10/7/21	12:00	Pace	10/8/21	0850
Ship Method: Fed Ex Ship Date: 10/7/2021						
Shipment Tracking No:						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: (Yes) / No | Temp Blank: (Yes) / No | Cooler Temp on Receipt: 2.7 °F/C | Trip Blank: Yes / (No) | MS/MSD Sample Submitted: (Yes) / No

BP LaMP Soil/H2O COC July 2018

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Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater

Req Due Date (mm/dd/yy): _____ Rush TAT Yes _____ No X

BP/RM Facility No: BPSOU Ground Water Monitoring

Lab Work Order Number: _____

Lab Name:	Pace Analytical Services	BP/ARC Facility Address:	Consultant/Contractor: TREC / Env. West / Woodard & Curran
Lab Address:	1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:	Consultant/Contractor Project No: 0231348.00-002-0002
Lab PM:	Shawn Davis	Lead Regulatory Agency:	Address: 1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone:	612-607-1700	California Global ID No.:	Consultant/Contractor PM: Scott Bradshaw
Lab Shipping Accnt:	9860-0221-9	Enfos Proposal No: D014Y-0038 (2021)	Phone: Email: sbradshaw@woodardcurran.com
Lab Bottle Order No:		Accounting Mode: Provision ___10__ OOC-BU _____ OOC-RM _____	Send/Submit EDD to: lab.enfosdoc@bp.com bpsoudata@woodardcurran.com
Other Info:	WR 879585 (2021)	Stage 3_Define (30) Activity 123 Interim Measures	Invoice To: BP-RM ___X___ BP-Other _____

BP/RM PM:	Josh Bryson	
PM Phone:	406-723-1834	
PM Email:	josh.bryson@bp.com	

Report Type & QC Level

Limited (Standard) Package ___X

Limited Plus Package ____

Full Package ____

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Analysis	As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1 LL Dissolved	Comments
										Filt	X	
										Pres	X	
	GW0092-093021	9/30/2021	16:50	GW				G	2		X	Use for MS/MSD
	GW0093-093021	9/30/2021	17:30	GW				G	1		X	
	GW0094-100121	10/1/2021	9:35	GW				G	1		X	
	GW0095-100121	10/1/2021	10:09	GW				G	1		X	
	GW0096-100121	10/1/2021	10:18	GW				G	1		X	
	GW0097-100121	10/1/2021	10:54	GW				G	1		X	
	GW0098-100121	10/1/2021	12:43	GW				G	1		X	

Sampler's Name:	Alice Drew Davies	**Relinquished By / Affiliation**	**Date**	**Time**	**Accepted By / Affiliation**	**Date**	**Time**
Sampler's Company:	TREC	TREC	10/6/21	12:00			
Ship Method:	Fed Ex Ship Date: 10/6/2021						
Shipment Tracking No:							

Special Instructions: LL Mercury

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: _____°F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

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Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater

Req Due Date (mm/dd/yy): _____ Rush TAT Yes ____ No X

BP/RM Facility No: BPSOU Ground Water Monitoring

Lab Work Order Number: _____

Lab Name:	Pace Analytical Services	BP/ARC Facility Address:		Consultant/Contractor:	TREC / Env. West / Woodard & Curran
Lab Address:	1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:		Consultant/Contractor Project No:	0231348.00-002-0002
Lab PM:	Shawn Davis	Lead Regulatory Agency:		Address:	1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone:	612-607-1700	California Global ID No.:		Consultant/Contractor PM:	Scott Bradshaw
Lab Shipping Accnt:	9860-0221-9	Enfos Proposal No:	D014Y-0038 (2021)	Phone: / Email:	sbradshaw@woodardcurran.com
Lab Bottle Order No:		Accounting Mode:	Provision ___10__ OOC-BU _____ OOC-RM _____	Send/Submit EDD to:	lab.enfosdoc@bp bpsoudata@woodardcurran.com
Other Info:	WR 879585 (2021)	Stage	3_Define (30) Activity 123 Interim Measures	Invoice To:	BP-RM ___X___ BP-Other _____

BP/RM PM:	Josh Bryson	
PM Phone:	406-723-1834	
PM Email:	josh.bryson@bp.com	

Sample Details | **Requested Analyses** | **Report Type & QC Level**

Limited (Standard) Package ___X
Limited Plus Package ____
Full Package ____

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Analysis	As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1 LL Dissolved	Comments
				Filt							X	
				Pres							X	
	GW0099-100121	10/1/2021	12:43	GW				G	1		X	
	GW0100-100121	10/1/2021	12:59	GW				G	1		X	
	GW0101-100121	10/1/2021	13:26	GW				G	1		X	
	GW0102-100121	10/1/2021	13:52	GW				G	1		X	
	GW0103-100121	10/1/2021	14:31	GW				G	1		X	
	GW0104-100121	10/1/2021	15:32	GW				G	2		X	Use for MS/MSD
	GW0105-100121	10/1/2021	15:52	GW				G	1		X	

Sampler's Name:	Alice Drew Davies	**Relinquished By / Affiliation**	**Date**	**Time**	**Accepted By / Affiliation**	**Date**	**Time**
Sampler's Company:	TREC	TREC	10/6/21	12:00			
Ship Method:	Fed Ex Ship Date: 10/6/2021						
Shipment Tracking No:							

Special Instructions: LL Mercury

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: _____°F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

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Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater

Req Due Date (mm/dd/yy): _____ Rush TAT Yes ____ No X

BP/RM Facility No: BPSOU Ground Water Monitoring

Lab Work Order Number: _____

Lab Name: Pace Analytical Services	BP/ARC Facility Address:	Consultant/Contractor:	TREC / Env. West / Woodard & Curran
Lab Address: 1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:	Consultant/Contractor Project No:	0231348.00-002-0002
Lab PM: Shawn Davis	Lead Regulatory Agency:	Address:	1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone: 612-607-1700	California Global ID No.:	Consultant/Contractor PM:	Scott Bradshaw
Lab Shipping Accnt: 9860-0221-9	Enfos Proposal No: D014Y-0038 (2021)	Phone: Email:	sbradshaw@woodardcurran.com
Lab Bottle Order No:	Accounting Mode: Provision ___10__ OOC-BU _____ OOC-RM _____	Send/Submit EDD to:	lab.enfosdoc@bp bpsoudata@woodardcurran.com
Other Info: WR 879585 (2021)	Stage 3_Define (30) Activity 123 Interim Measures	Invoice To:	BP-RM ___X___ BP-Other _____

BP/RM PM: Josh Bryson	**Sample Details**	**Requested Analyses**
PM Phone: 406-723-1834		Limited (Standard) Package ___X
PM Email: josh.bryson@bp.com		Limited Plus Package ____
		Full Package ——

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Analysis	As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1 LL Dissolved													Comments
										Filt	X													
										Pres	X													
	GW0106-100421	10/4/2021	12:16	GW				G	1		X													
	GW0107-100421	10/4/2021	12:57	GW				G	1		X													
	GW0109-100421	10/4/2021	15:34	GW				G	1		X													
	GW0110-100421	10/4/2021	10:35	GW				G	1		X													
	GW0111-100421	10/4/2021	11:36	GW				G	1		X													
	GW0112-100421	10/4/2021	16:19	GW				G	1		X													
	GW0113-100421	10/4/2021	16:40	GW				G	1		X													

Sampler's Name: Alice Drew Davies	**Relinquished By / Affiliation**	**Date**	**Time**	**Accepted By / Affiliation**	**Date**	**Time**
Sampler's Company: TREC	TREC	10/6/21	12:00			
Ship Method: Fed Ex Ship Date: 10/6/2021						
Shipment Tracking No:						

Special Instructions: LL Mercury

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: _____°F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

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Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater
Req Due Date (mm/dd/yy): _____ Rush TAT Yes _____ No X
BP/RM Facility No: BPSOU Ground Water Monitoring
Lab Work Order Number: _____

Lab Name: Pace Analytical Services	BP/ARC Facility Address:	Consultant/Contractor: TREC / Env. West / Woodard & Curran
Lab Address: 1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:	Consultant/Contractor Project No: 0231348.00-002-0002
Lab PM: Shawn Davis	Lead Regulatory Agency:	Address: 1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone: 612-607-1700	California Global ID No.:	Consultant/Contractor PM: Scott Bradshaw
Lab Shipping Accnt: 9860-0221-9	Enfos Proposal No: D014Y-0038 (2021)	Phone: Email: sbradshaw@woodardcurran.com
Lab Bottle Order No:	Accounting Mode: Provision 10 OOC-BU _____ OOC-RM _____	Send/Submit EDD to: lab.enfosdoc@bp.com bpsoudata@woodardcurran.com
Other Info: WR 879585 (2021)	Stage 3_Define (30) Activity 123 Interim Measures	Invoice To: BP-RM X BP-Other _____
BP/RM PM: Josh Bryson	**Sample Details**	**Requested Analyses**
PM Phone: 406-723-1834		
PM Email: josh.bryson@bp.com		

Report Type & QC Level
Limited (Standard) Package X
Limited Plus Package ____
Full Package ____

WO# : 10583409

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Filt	Pres	Analysis: As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1	Report Type & QC Level
001	GW0114-100521	10/5/2021	11:20	GW				G	2			X	Use for MS/MSD
002	GW0115-100521	10/5/2021	12:45	GW				G	1			X	
003	GW0116-100521	10/5/2021	12:45	GW				G	1			X	
004	GW0117-100521	10/5/2021	13:04	GW				G	1			X	
005	GW0118-100721	10/7/2021	09:46	GW				G	1			X	
006	GW0119-092421	9/24/2021	11:44	GW				G	1			X	
007	GW0120-100521	10/5/2021	16:13	GW				G	1			X	

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Alice Drew Davies						
Sampler's Company: TREC	TREC	10/14/21	12:00	PACE	10/15/21	850
Ship Method: Fed Ex Ship Date: 10/14/2021						
Shipment Tracking No:						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 0.1 °F C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

BP LaMP Soil/H2O COC July 2018

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Soil, Sediment and Groundwater Samples

BP Site Node Path: BP > USA > MT > SILVER BOW > Butte Priority Soils > PMPv4>BPS Groundwater

Req Due Date (mm/dd/yy): _____ Rush TAT Yes _____ No X

BP/RM Facility No: BPSOU Ground Water Monitoring

Lab Work Order Number: _____

Lab Name: Pace Analytical Services	BP/ARC Facility Address:	Consultant/Contractor:	TREC / Env. West / Woodard & Curran
Lab Address: 1700 Elm St. SE; Minneapolis, MN 55414-2485	City, State, ZIP Code:	Consultant/Contractor Project No:	0231348.00-002-0002
Lab PM: Shawn Davis	Lead Regulatory Agency:	Address:	1800 W. Koch, Suite 6; Bozeman, MT 59715
Lab Phone: 612-607-1700	California Global ID No.:	Consultant/Contractor PM:	Scott Bradshaw
Lab Shipping Accnt: 9860-0221-9	Enfos Proposal No: D014Y-0038 (2021)	Phone:	Email: sbradshaw@woodardcurran.com
Lab Bottle Order No:	Accounting Mode: Provision 10 OOC-BU _____ OOC-RM _____	Send/Submit EDD to:	lab.enfosdoc@bp bpsoudata@woodardcurran.com
Other Info: WR 879585 (2021)	Stage 3_Define (30) Activity 123 Interim Measures	Invoice To:	BP-RM X BP-Other _____

BP/RM PM: Josh Bryson

PM Phone: 406-723-1834

PM Email: josh.bryson@bp.com

Report Type & QC Level

Limited (Standard) Package X

Limited Plus Package ____

Full Package ____

Lab No.	Sample Description	Date	Time	Field Matrix	Start Depth	End Depth	Depth Unit	Grab (G) or Composite (C)	Total Number of Containers	Filt	Pres	Analysis: As(D), Cd(D), Cu(D), Hg (D), Pb(D), Zn(D) Metals EPA 200.8 Mercury EPA 245.1	Comments
001	GW0121-100621	10/6/2021	13:12	GW				G	1		X	X	
002	GW0122-100621	10/6/2021	13:33	GW				G	1		X	X	
010	GW0108-100721	10/7/2021	14:30	GW				G	1		X	X	

Sampler's Name: Alice Drew Davies	**Relinquished By / Affiliation**	**Date**	**Time**	**Accepted By / Affiliation**	**Date** / **Time**
Sampler's Company: TREC	TREC	10/14/21	12:00	PACE	10/15/21 853
Ship Method: Fed Ex Ship Date: 10/14/2021					
Shipment Tracking No:					

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 0.1 °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

BP LaMP Soil/H2O COC July 2018

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Appendix B: Data Quality Assessment

BPSOU 2021 GW DSR Appendix B

Butte Priority Soils Operable Unit (BPSOU)
Silver Bow Creek/Butte Area Site

Appendix B: Data Quality Assessment

Draft Data Summary Report
Groundwater Data
January 2021 – December 2021

Atlantic Richfield

2022

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LIST OF ATTACHMENTS

Attachment A: Analytical and Field Data Validation Checklists

Attachment B: Level A/B Checklists

ABBREVIATIONS AND ACRONYMS

BMFOU	Butte Mine Flooding Operable Unit
BPSOU	Butte Priority Soils Operable Unit
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CFRSSI	Clark Fork River Superfund Site Investigation
CLP	Contract Laboratory Program
COC	Contaminant of Concern
CRDL	Contract Required Detection Limit
DI	Deionized Water
DM/DV	Data Management/Data Validation
DQA	Data Quality Assessment
DQO	Data Quality Objectives
DSR	Data Summary Report
DV	Data Validation
FB	Field Blank
FD	Field Duplicate
GW	Groundwater
HT	Holding Time
ICB	Initial Calibration Blank
ICV	Initial Calibration Verification
LAP	Laboratory Analytical Plan
LCS	Laboratory Control Sample
MB	Method Blank
MBMG	Montana Bureau of Mines and Geology
MDL	Method Detection Limit
MI	Matrix Interference
MTDEQ	Montana Department of Environmental Quality
MS/MSD	Matrix Spike/Matrix Spike Duplicate
PARCCS	Precision, Accuracy, Representativeness, Completeness, Comparability, and Sensitivity
POC	Point of Compliance
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Project Plan
RL	Reporting Limit
RPD	Relative Percent Difference
SD	Serial Dilution
SDG	Sample Delivery Group
SOP	Standard Operating Procedure
SRM	Standard Reference Materials
TI	Technical Impracticability
TREC	TREC, Inc.
USEPA	United States Environmental Protection Agency

1.0 INTRODUCTION

The *Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP)* (Atlantic Richfield, 2021) states that data must meet certain criteria to achieve the Data Quality Objectives (DQOs) for BPSOU groundwater monitoring. The DQOs of the collection effort are that any data collected during the interim monitoring period must be of sufficient quality to:

- Ensure that groundwater performance standards are being met at Point of Compliance (POC) wells;
- Ensure that upward trends are not occurring in Contaminant of Concern (COC) concentrations in wells outside of the Technical Impracticability (TI) zone;
- Ensure that groundwater is not discharging to surface water in quantities that lead to exceedances of surface water Applicable Relevant and Appropriate Requirements (ARARs).

So that data are of the quality required, groundwater monitoring activities are performed in accordance with the following Clark Fork River Superfund Site Investigations (CFRSSI) regional control documents:

- CFRSSI Laboratory Analytical Protocol (LAP) (ARCO, 1992a);
- CFRSSI Data Management/Data Validation Plan (DM/DVP) Addendum (ARCO, 2000a);
- CFRSSI Standard Operating Procedures (SOP) (ARCO, 1992c); and
- CFRSSI Pilot Data Summary Report for Organic and Inorganic Data Addendum (ARCO, 2000b).

The regional control documents have been approved by the United States Environmental Protection Agency (USEPA) and are used to guide the collection, reduction, quality determination and reporting of data during BPSOU groundwater monitoring. Data validation and reporting procedures are outlined in the contractor specific Data Validation Guidelines for Inorganic Chemistry, (TREC, Inc., 2021) (TREC DV Guidelines). This is a dynamic document, incorporating CFRSSI regional control documents (as listed above) and EPA Contract Laboratory Program (CLP) National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2020). The Montana Department of Environmental Quality (MTDEQ) Data Validation Guidelines for Evaluating Analytical Data (MTDEQ, 2010) is used as a supplement to aid the data reviewer in determining data usability.

All collection and preparation of samples, as well as calibration of field instruments, were completed in accordance with applicable CFRSSI SOPs, TREC SOPs, and manufacturer's instructions.

Table B1. Groundwater Sampling Standard Operating Procedures

Reference Number	Title	Originating Organization
G-4	Field Logbook/Photographs	ARCO
G-5	Sample Packaging and Shipping	ARCO
G-6	Field Quality Control Samples	ARCO

Reference Number	Title	Originating Organization
G-7	Sample Custody	ARCO
SOP-GW-01	Groundwater Level Measurement, Rev. 3, January 2019	TREC, Inc.
SOP-GW-02	Groundwater Sampling of Monitoring Wells with Submersible Pump, Rev. 4, April 2020	TREC, Inc.
SOP-GW-03	Groundwater Sampling of Monitoring Wells with Geotech or ISCO Peristaltic Pump, Grundfos Pump, and Geotech Bladder Pump, Rev. 4, April 2020	TREC, Inc.
SOP-H-01	Water Sampling Equipment Decontamination, Rev. 3, April 2020	TREC, Inc.
SOP-H-02	Downloading Transducers, Rev. 1, February 2018	TREC, Inc.
SOP-H-05	Calibrate YSI Professional Plus Multi-Meter, Rev. 3, January 2019	TREC, Inc.
SOP-H-07	Transducer Compensation and File Submittal, Rev. 1, July 2018	TREC, Inc.
SOP-H-08	Deployment of Groundwater Level Monitoring Equipment, Rev. 1, April 2020	TREC, Inc.
SOP-SW-06	Read Staff Gage, Rev. 2, January 22, 2018	TREC, Inc.

Below is a list of sample delivery groups (SDGs) submitted to the lab and the date ranges the samples were collected:

- 10558077: 4/22/2021, 4/23/2021, 4/26/2021-4/28/2021
- 10559096: 4/28/2021-4/30/2021, 5/3/2021, 5/4/2021
- 10560318: 5/5/2021-5/7/2021
- 10560315: 5/6/2021, 5/7/2021, 5/11/2021
- 10580635: 9/23/2021, 9/24/2021
- 10581934: 9/27/2021-9/29/2021
- 10581942: 9/24/2021, 9/27/2021-9/30/2021
- 10582495: 9/30/2021, 10/1/2021, 10/4/2021, 10/5/2021
- 10582497: 9/30/2021, 10/1/2021, 10/4/2021
- 10583409: 9/24/2021, 10/5/2021-10/7/2021

2.0 DATA QUALITY ASSURANCE/QUALITY CONTROL

Data Quality Assurance/Quality Control (QA/QC) incorporates field and laboratory procedures which determine the error introduced into sampling and analyses procedures by personnel and equipment.

2.1 Field Quality Control

Required field quality control consisted of field duplicate samples and field blank samples collected at a frequency of one duplicate and one blank for every 20 natural samples. Natural, duplicate, and blank samples were submitted in single SDGs to the laboratory. Analysis for duplicate and blank samples was identical to requested analysis for the associated natural samples. Inter-laboratory splits and standard reference material (SRM) samples were not identified for collection under the BPSOU GW QAPP.

2.2 Laboratory Quality Control

Pace Analytical Services of Minneapolis, Minnesota was contracted to analyze groundwater samples. To confirm that laboratory analyses and QA/QC procedures were performed per laboratory contract agreements, data validation was performed on 100% of data packages received. SDGs which contained samples from POC wells (10560318and10580635) underwent Level2b validation; thus, full data packages were received for these SDGs. Samples from all other wells underwent Level 2a validation, so Limited data packages were received for the remaining SDGs. Data validation procedures used criteria outlined in the TREC DV Guidelines.

3.0 DATA QUALITY ASSESSMENT

Data quality assessment (DQA) was performed to determine if the data quality objectives (DQO) identified in the 2021 BPSOU GW QAPP have been satisfied. The DQA process is outlined in USEPA Guidance on Systematic Planning using the Data Quality Objectives Process (USEPA, 2006).

Laboratory analyses and QA/QC procedures were validated, and qualifiers were applied as appropriate. To review data for completeness and assign Level A/B review status, field logbook documentation, field forms, and sample chain of custody forms were reviewed. The sampling team was also available for questioning when clarification was needed. Next, data precision, accuracy, representativeness, completeness, comparability, and sensitivity (PARCCS) were reviewed, and qualifiers were applied to data where necessary. Based upon the DQA process, data were assigned to one of three data utilization categories: enforcement quality, screening quality, and rejected (unusable) quality. Enforcement quality (unrestricted use) data result from, and were supported by, rigorous sampling and analysis protocols. Screening quality data did not meet applicable sampling or analytical QA/QC and/or documentation requirements. Unusable data result from inadequate sampling, analysis, and/or documentation procedures. Analytical and field validation checklists are provided as Attachment A.

Groundwater analytical results are presented in Table B2, and each result includes any associated laboratory qualifier, validation qualifier, and validation code, as well as the data usability code. Definitions of qualifiers and codes are provided in Table B3. Note that only natural sample results receive a useability code.

Table B2. BPSOU 2021 Groundwater Results – Dissolved Metals (see Tables Section)

Table B3. Laboratory and Validation Qualifier and Code Definitions (see Tables Section)

3.1 Level A/B

Level A/B review was applied to sample collection and documentation records, ensuring CFRSSI and TREC SOPs were observed. The data were assessed using the screening checklist provided in the CFRSSI Pilot Data Summary Report Addendum (ARCO, 2000b). A data utilization category was then assigned based on completed data validation reports and Level A/B assessment. All samples met Level B screening checklist criteria, and these are presented in the Level A/B Checklists which are Attachment B of this data quality assessment report.

3.2 Precision

Precision is the level of agreement among repeated measurements of the same characteristic. There are two general forms of uncertainty. The first is the random error component of the data collection

process. The second is inherent stochastic variability, which cannot be eliminated but can be described.

Field precision is assessed by collecting and analyzing field duplicate samples, while laboratory precision is assessed by laboratory duplicate samples. Precision is evaluated by calculating variance between the samples. Variance for both laboratory and field duplicates was calculated as relative percent difference (RPD). For analytical results ≥5X the reporting limit (RL), precision is assessed by the RPD between the natural and duplicate sample results. Acceptable precision for both field and laboratory duplicates is RPDs ≤ 20%. For analytical results <5X the RL, acceptable precision is a difference between the natural and duplicate sample result (delta) ≤ the RL.

3.2.1 Laboratory and Field Duplicates

Laboratory analytical precision was evaluated by analyzing matrix spike/matrix spike duplicate (MS/MSD) samples, and then calculating the RPD for corresponding results. If laboratory precision is not met, associated sample results are qualified, assigned a validation code of "RPD", and natural samples are assigned screening status. However, as Table B4 shows, all laboratory duplicates met precision criteria. Note that Table B4, and all summary tables in this appendix, contain counts only for natural samples.

Table B5d contains results and acceptance criteria for laboratory QC samples, including MS/MSD samples.

Groundwater field duplicate results, as well as corresponding RPD/delta values are presented in Table B5a. Field duplicate precision results were within acceptance criteria for 96% of groundwater field duplicates. Four field duplicate results did not meet precision criteria. Forty associated natural sample results were qualified for field precision, assigned a data validation code of "FD", and given screening quality. Affected analyses were dissolved copper, lead, and zinc.

Table B4. Quantity of Individual Analyses Flagged for Laboratory and Field Precision

Monitoring Type	# RPD	#FD	Total	%RPD	% FD
Groundwater	0	40	1326	0%	3.0%

Table B5a. BPSOU 2021 Groundwater Data Quality Assessment – Field Duplicates (see Tables Section)

Table B5d. BPSOU 2021 Groundwater Data Quality Assessment – Laboratory QC Samples (see Tables Section)

3.2.2 Serial Dilution Percent Differences

Serial dilutions samples assess matrix interference, but the assessment parameter is a percent difference between the original sample concentration and the dilution corrected serial dilution result. Thus, the serial dilution sample could also be considered a precision measurement. No samples exceeded the serial dilution percent difference criteria, thus no results were assigned a data validation code "SD." Refer to Section 3.3.5 for additional details.

3.3 Accuracy

Accuracy is the degree of difference between the measured or calculated value and the true value. It is a measure of the bias or systematic error of the entire data collection process. The QAPP does not require submittal of SRM samples, thus field accuracy was evaluated by use of FB samples only. For Limited data packages, laboratory accuracy was based on analysis of method blanks (MB), matrix spike and matrix spike duplicate (MS/MSD) samples, and laboratory control samples. For Full data packages, laboratory accuracy is based on the results of initial calibration blanks (ICB), continuing calibration blanks (CCB), method blanks (MB), the percent difference for serial dilutions (SD), as well as percent recoveries of calibrations (ICV/CCV), the contract required detection limit (CRDL) check, interference check samples (ICS), laboratory control samples (LCS), MS/MSDs, and the intensity of internal standards relative to the intensity of that standard in the laboratory blank (%RI), as applicable to the analytical method. These criteria are reviewed by the laboratory, and again by the validator.

Table B5d contains results for laboratory MB, LCS, MS, and MSD samples, as well as recoveries for LCS, MS, and MSDs and acceptance criteria. Additional laboratory calibration and QC samples results are not provided in Table B5d, but Full data packages for SDGs 10560318 and 10580635 are provided in Appendix D. These packages include all laboratory calibration and QC sample results.

Proper sample handling, including correct preservation and analysis within method holding times, also affects accuracy.

3.3.1 Sample Preservation and Holding Time

The laboratory deliverable was reviewed to ensure all samples were properly preserved and analyzed within the method-specific technical holding time. During 2021, no samples exceeded the holding times, thus no results were assigned a data validation code "HT" (Table B6).

Table B5b presents holding times for all groundwater laboratory analyses.

Table B6. Quantity of Individual Analyses Flagged for Holding Time Exceedances

Monitoring Type	# HT screening quality	# HT unusable	Total	%HT
Groundwater	0	0	1326	0%

Table B5b. BPSOU 2021 Groundwater Data Quality Assessment – Holding Time (See Tables section)

As Table B7 shows, all 2021 BPSOU groundwater samples were received at the laboratory in compliance with pH and temperature requirements.

Table B7. Quantity of Individual Analyses Flagged for Improper Preservation

Monitoring Type	# IP screening quality	# IP unusable	Total	%IP
Groundwater	0	0	1326	0%

3.3.2 Blanks

Laboratory MBs and FBs were analyzed to assess artifacts introduced during sampling, transport and/or analysis that may affect the accuracy of the data. In addition, initial calibration blanks (ICBs), and continuing calibration blanks (CCBs) are used by the lab to verify that sample concentrations are accurately measured by the analytical instrument throughout the analytical run. Although ICBs and CCBs are completed for all analyses, their results are reported only in Limited Plus or Full data packages; thus, they were assessed only for two SDGs. Although limited packages do not contain ICB and CCB results, the project narratives did not indicate any problems with these laboratory calibration samples.

Laboratory and field blanks are assessed according to the rules in Table B8 which is reproduced from the TREC DV Guidelines. Because MDLs are calculated statistically, results within one standard deviation of the MDL should be considered non-detects. Laboratory data packages do not include the standard deviations derived from MDL studies, thus an Agency approved alternative approach is to consider detections ≤ 1.5X MDL as being within acceptance criteria.

Table B8. Blank Assessment Guidelines

Lab Blank Result	Sample Results	Action for Samples
≥ MDL, but ≤ 1.5x MDL	Non-detect (< MDL)	No action
	> MDL, but ≤ RL	No action
	> RL	No action
> 1.5x MDL	Non-detect (< MDL)	No action
	≥ MDL, but ≤ RL	Qualify results as estimated non-detect (UJ)
	> RL, but ≤ 10x blank	Qualify results as estimated high (J+)
	>10x blank value	No action
> RL	See action above for 1.5x MDL value. If any sample results are > MDL and < 10x the blank value, note in the Data Validation Summary that the laboratory failed to re-digest (if applicable) and reanalyze the affected samples. Reanalysis is not required for sample results < MDL or > 10X the blank detection.	
≤ (-RL)	Non-detect (< MDL)	Qualify results as estimated (UJ)
	Detect <10x RL	Qualify results as estimated low (J-)

Professional judgement was used in assigning data validation codes in cases that both the FB and MB had detections >1.5x the MDL. This judgement was based on the magnitude of the FB detection compared to the magnitude of the MB detection.

3.3.2.1 Field Blanks

Groundwater field blanks were prepared by pumping deionized (DI) water through the same apparatus that was used for sample collection into new laboratory bottles. Prior to groundwater field blank collection, the sampling pump and tubing were decontaminated following protocols similar to those used between wells.

Table B5c lists results for all groundwater FBs. Acceptable results (≤ 1.5X the MDL) were obtained for 93% of FB analyses. After assessing associated results according to the rules in Table B8, 25

natural sample results (and 1 field duplicate results) were qualified for FB detections. These results were qualified as estimated non-detect or estimated high, assigned an "FB" data validation code, and natural sample results were given screening quality. Affected analyses were dissolved copper, lead, and zinc. **Table B9** summarizes FB qualifications.

Table B9. Quantity of Individual Analyses Flagged for Field Blank Detections

Monitoring Type	# FB	Total	%FB
Groundwater	25	1326	1.9%

Table B5c. BPSOU 2021 Groundwater Data Quality Assessment – Field Blanks (See Tables Section)

3.3.3.2 Laboratory Blanks

Laboratory blanks include ICBs, CCBs, and MBs. Acceptable laboratory blank results include those ≤ 1.5X the MDL. One laboratory MB was >1.5X the zinc MDL; however, all associated dilution corrected (result/dilution factor) dissolved zinc results were >10 the MB result. Copper was detected in one CCB at a concentration > 1.5X the MDL, but the only sample bracketed by this CCB and in-control CCBs had a non-detect copper result. Therefore, as reflected in Table B10, no data were qualified based on laboratory blank detections.

Table B5d contains laboratory MB results but does not include ICB and CCB results. Laboratory data packages which do contain ICB and CCB results are provided in Appendix D.

Table B10. Quantity of Individual Analyses Flagged for Method Blank Detections

Monitoring Type	# MB, ICB, CCB	Total	%MB, ICB, CCB
Groundwater	0	1326	0%

3.3.3 Matrix Spike/Matrix Spike Duplicate

If laboratory MS/MSD recoveries failed to fall within acceptable limits, corresponding sample results were qualified as estimated, assigned an "MS" validation code, and natural sample results were assigned screening quality. All MS/MSD recoveries were within acceptance criteria, as Table B11 shows.

Table B11. Quantity of Individual Analyses Flagged for MS/MSD Recovery

Monitoring Type	# MS screening quality	# MS unusable	Total
Groundwater	0	0	1326

3.3.4 Laboratory Control Sample

LCSs were analyzed for every batch of 20 or fewer samples. All LCS recoveries were within acceptance criteria, as Table B12 shows.

Table B12. Quantity of Individual Analyses Flagged for LCS Recovery

Monitoring Type	# LCS	Total	% LCS
Groundwater	0	1326	0%

3.3.5 Serial Dilution Samples

If SD percent differences were not within acceptance criteria, corresponding sample results were qualified as estimated, given an "SD" validation code, and assigned screening quality. As Table B13 show, no natural sample results were qualified for SD percent difference.

Table B13. Quantity of Individual Analyses Flagged for SD Percent Difference

Monitoring Type	# SD	Total	% SD
Groundwater	0	1326	0

3.3.6 Remaining Laboratory Calibration and QC Samples

As Table B14 shows, no data were qualified based on laboratory ICV, CCV, ICS, and internal standards recoveries. CCVs that did not meet acceptance criteria did occur, but either the CCV recovery was high and any associated result was non-detect, or no project samples were bracketed by the out-of-control CCVs. All ICS and %RIs were within acceptance criteria. One CRDL recovery exceeded acceptance criteria. The single corresponding zinc result was qualified as estimated high, given a "CRQL" validation code, and assigned screening quality.

Table B14. Quantity of Individual Analyses Qualified for Additional Laboratory Calibration and QC Sample Results

Laboratory Calibration or QC Sample	# Qualified Analyses	# Associated Analyses	% Qualified Analyses
ICV/CCV	0	264	0%
ICS	0	264	0%
CRDL	1	264	0.4%
% RI	0	264	0%

3.4 Representativeness

This parameter was achieved through informed selection of sampling sites; election of testing parameters and methods which adequately define and characterize the extent of possible contamination and meet the required parameter reporting limits; proper gathering and handling of samples to avoid interference and prevent contamination and loss; and collection of enough samples to allow characterization. Representativeness was a consideration employed during identification of sample locations and will be considered before revising the BPSOU site-wide groundwater network. The collected data is believed to be representative of groundwater conditions in the BPSOU.

3.5 Completeness

Completeness is a measure of the amount of usable data obtained from a measurement system compared to the amount expected to be obtained under normal conditions. Those data which were

validated and need no qualification (enforcement quality data) or were qualified as estimated data (screening quality data), are considered usable. Rejected data are not considered usable.

Groundwater monitoring completeness can be assessed by comparing the number of analyses completed and not rejected, to the number of analyses which should have been completed. One site, FP98-3, was not sampled in 2021 because it was dry throughout the year, which is typical of this well. BPS11-10A was not sampled in 2021 because it was inaccessible. BPS11-10A was struck by a vehicle in 2020 and the casing was bent to the extent that tubing could not be passed down the casing. There are several wells within 700 feet of BPS11-10A which are completed at similar depths; thus, the omission of the BPS11-10A samples did not impact the project data quality objectives. Had all wells been sampled as scheduled, 225 natural samples would have been collected, generating 1,350 natural sample analytical data points and 1125 natural sample field measured parameters. With 221 natural samples collected, 1326 analytical data points and 1105 field parameter measurements were produced. None of the data points were rejected; thus, analytical and overall completeness for 2021 BPSOU groundwater sampling is 98%.

3.6 Comparability

Consistency in the acquisition, handling and analysis of samples is necessary for comparing results. Where appropriate, the results of analyses obtained were compared with the results obtained in previous studies. Sample locations, techniques, and parameters consistent with previous studies and use of standard USEPA analytical methods were used to ensure comparability of results with previous BPSOU site-wide groundwater investigations.

3.7 Sensitivity

Sensitivity refers to the capability to quantify an analyte at a given concentration, and this parameter is associated with the instrument detection limits, method detection limits, and the project reporting limits. The desired analytical sensitivity are method detection limits less than the applicable water quality standards specified in Montana Circular DEQ-7, Montana Numeric Water Quality Standards (May 2017). Analytical data met the desired level of sensitivity.

3.8 Data Usability

Three data utilization categories are described in the DM/DV Plan and include: enforcement quality data, screening quality data, and unusable data. Enforcement quality data meet all QA/QC and documentation requirements. Screening quality data do not meet the applicable QA/QC requirements and/or documentation requirements. Unusable data may result from inappropriate sampling, analysis, or documentation procedures. Enforcement or screening quality data are utilized for evaluation of groundwater quality.

251 samples were collected for a total of 1,506 groundwater analyses in 2021, all of which underwent data validation. In the validation process, only the natural sample results received a quality status. Of the 1,326 natural sample results, 1,260 were assigned enforcement quality and 66 were assigned screening quality. All sample results collected are considered usable for evaluating site conditions.

4.0 DATA ASSESSMENT SUMMARY

The quality of data was evaluated based on laboratory and field QC analyses. Data validation and data assessment were performed by TREC, Inc., located in Butte, Montana, in conformance with

TREC's 2021 data validation guidelines, which aligns with the general guidelines in EPA's 2020 National Functional Guidelines for Inorganic Superfund Methods Data Review. Field and laboratory data validation checklists and Level A/B assessment were completed in conformance with the CFRSSI Data Management/Data Validation Plan.

Laboratory analyses and QA/QC procedures were validated, and qualifiers were applied as appropriate. To review data for completeness and assign Level A/B review status, field logbook documentation, field forms, and sample chain of custody forms were reviewed. The sampling team was also available for questioning when clarification was needed. Next, data precision, accuracy, representativeness, completeness, comparability, and sensitivity were reviewed, and qualifiers were applied to data where necessary. Finally, analytical data were tabulated and identified as being of either enforcement, screening, or rejected quality and the project data quality was found to be 98% for completeness and 100% for usability of the data produced.

There was a total of 1,326 primary sample groundwater data points assessed for 2021 BPSOU groundwater sampling. Of the 1,326 data points, 1,260 met enforcement quality, 66 met screening quality, and none were rejected. Field blank detections alone accounted for 25 screening level data points. 40 data points received screening quality for field duplicate precision, and one data point received screening quality for a laboratory CRDL standard which did not meet recovery criteria. All 1326 natural sample data points met Level B status.

1. The 1,260 natural sample data points (95% of the total) that were assessed and met enforcement quality standards were categorized as definitive data with unrestricted use. They were supported by rigorous sampling and analyses protocols.
2. The 66 natural sample data points (5% of the total) that were assessed and met screening quality standards were categorized as data whose associated numerical values were estimated.

Copies of sample chain of custodies, field quality control checklists, laboratory validation checklists, and Level A/B Screening checklists associated with the data presented in this report are attached. Field sample forms are provided as Appendix A of the Data Summary Report (DSR). Laboratory reports are provided in Appendix D. Field books are maintained at TREC's Butte, Montana office.

5.0 REFERENCES

ARCO, 1992a. Clark Fork River Superfund Site Investigations Laboratory Analytical Protocol, April 1992.

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USEPA, 2011. Butte Priority Soils Operable Unit Revised Interim Ground Water Monitoring Plan Silver Bow Creek/Butte Area NPL Site, July 2011.

MTDEQ, 2010. Montana Department of Environmental Quality Data Validation Guidelines for Evaluating Analytical Data, August 5, 2010.

MTDEQ, 2017. Montana Department of Environmental Quality Circular DEQ-7 Montana Numeric Water Quality Standards, May, 2017.

TREC, Inc. 2021. Data Validation Guidelines for Inorganic Chemistry. November 2021.

Tables

Table B2. BPSOU 2021 Groundwater Monitoring Water Quality Results - Dissolved Metals

Location	SDG	Field Sample ID	Lab Sample ID	Monitoring Date	Sample Type	AB	AsDis (mg/L)	MDL (mg/L)	Lab Q	Val Q	DV Code	Status	CdDis (mg/L)	MDL (mg/L)	Lab Q	Val Q	DV Code	Status	CuDis (mg/L)	MDL (mg/L)	Lab Q	Val Q	DV Code	Status
AMW-12	10558077	GW0001-042221	10558077001	4/22/2021	FG	B	0.0043	0.00014				E	0.00013	0.00003				E	0.0025	0.00043		J+	FB	S
AMC-13	10558077	GW0002-042221	10558077002	4/22/2021	FG	B	0.00076	0.00014				E	0.000037	0.00003	J			E	0.00043	0.00043	U			E
BPS11-04	10558077	GW0003-042221	10558077003	4/22/2021	FG	B	0.022	0.00014				E	0.0004	0.00003				E	0.00043	0.00043	U			E
BPS11-09	10558077	GW0004-042221	10558077004	4/22/2021	FG	B	0.0051	0.00014				E	0.00036	0.00003				E	0.0014	0.00043		J+	FB	S
GS-46D	10558077	GW0005-042321	10558077005	4/23/2021	FG	B	0.00065	0.00014				E	0.00049	0.00003				E	0.0076	0.00043		J+	FB	S
GS-46S	10558077	GW0006-042321	10558077006	4/23/2021	FG	B	0.0016	0.00014				E	0.0018	0.00003				E	0.01	0.00043				E
MF-11	10558077	GW0007-042321	10558077007	4/23/2021	FG	B	0.0043	0.00014				E	0.00071	0.00003				E	0.0048	0.00043		J+	FB	S
MSD-04	10558077	GW0008-042321	10558077008	4/23/2021	FG	B	0.0011	0.00014				E	0.0033	0.00003				E	0.0034	0.00043		J+	FB	S
AMC-24B	10558077	GW0009-042621	10558077009	4/26/2021	FG	B	0.0043	0.00014				E	0.006	0.00003				E	0.14	0.00043				E
AMC-24	10558077	GW0010-042721	10558077010	4/27/2021	FG	B	0.0041	0.00014				E	0.0005	0.00003				E	0.001	0.00043		UJ	FB	S
AMC-24C	10558077	GW0011-042721	10558077011	4/27/2021	FG	B	0.007	0.00014				E	0.0038	0.00003				E	0.056	0.00043				E
GS-31D	10558077	GW0012-042721	10558077012	4/27/2021	FG	B	0.0013	0.00014				E	0.001	0.00003				E	0.0028	0.00043		J+	FB	S
GS-31S	10558077	GW0013-042721	10558077013	4/27/2021	FG	B	0.0021	0.00014				E	0.00028	0.00003				E	0.0022	0.00043		J+	FB	S
GS-44D	10558077	GW0014-042721	10558077014	4/27/2021	FG	B	0.0009	0.00014				E	0.028	0.00003				E	1.1	0.043				E
GS-44S	10558077	GW0015-042721	10558077015	4/27/2021	FG	B	0.00025	0.00014	J			E	0.023	0.00003				E	0.92	0.043				E
MF-09	10558077	GW0016-042821	10558077016	4/28/2021	FG-N	B	0.0029	0.00014				E	0.082	0.00003				E	0.64	0.00043				E
MF-09	10558077	GW0017-042821	10558077017	4/28/2021	FG-D	B	0.003	0.00014					0.084	0.00003					0.67	0.00043				
GWQC	10558077	GW0018-042821	10558077018	4/28/2021	FB	B	0.00014	0.00014	U				0.00003	0.00003	U				0.00089	0.00043	J			
BPS07-03A	10558077	GW0019-042721	10558077019	4/27/2021	FG	B	0.00069	0.00014				E	0.00021	0.00003				E	0.0019	0.00043		J+	FB	S
BPS07-07	10558077	GW0020-042721	10558077020	4/27/2021	FG	B	0.0078	0.00014				E	0.000064	0.00003	J			E	0.0017	0.00043		J+	FB	S
BPS07-18A	10558077	GW0021-042221	10558077021	4/22/2021	FG	B	0.23	0.00014				E	0.000082	0.00003				E	0.0012	0.00043				E
BPS07-18B	10558077	GW0022-042221	10558077022	4/22/2021	FG	B	0.27	0.00014				E	0.00003	0.00003	U			E	0.00067	0.00043	J			E
BPS07-17A	10558077	GW0023-042221	10558077023	4/22/2021	FG	B	0.072	0.00014				E	0.0063	0.00003				E	0.11	0.00043				E
HCA-B2	10558077	GW0024-042221	10558077024	4/22/2021	FG	B	0.05	0.00014				E	0.00003	0.00003	U			E	0.00072	0.00043	J			E
HCA-B1	10558077	GW0025-042221	10558077025	4/22/2021	FG	B	0.001	0.00014				E	0.039	0.00003				E	1.6	0.021				E
BPS11-05A2	10558077	GW0026-042721	10558077026	4/27/2021	FG	B	0.0034	0.00014				E	0.00071	0.00003				E	0.0013	0.00043				E
BMW-03B	10558077	GW0027-042221	10558077027	4/22/2021	FG	B	0.0057	0.00014				E	0.00014	0.00003				E	0.00044	0.00043	J			E
FP98-6	10558077	GW0028-042321	10558077028	4/23/2021	FG	B	0.24	0.00014				E	0.0026	0.00003				E	0.0015	0.00043				E
FP98-2	10558077	GW0029-042321	10558077029	4/23/2021	FG	B	0.0016	0.00014				E	0.023	0.00003				E	0.0032	0.00043				E
BPS07-25	10558077	GW0030-042321	10558077030	4/23/2021	FG	B	0.021	0.00014				E	0.0033	0.00003				E	0.078	0.00043				E
GS-13A	10558077	GW0031-042321	10558077031	4/23/2021	FG	B	0.02	0.00014				E	0.0086	0.00003				E	0.12	0.00043				E
AMW-02	10558077	GW0032-042721	10558077032	4/27/2021	FG-N	B	0.014	0.00014				E	0.0048	0.00003				E	0.0088	0.00043				E
AMW-02	10558077	GW0033-042721	10558077033	4/27/2021	FG-D	B	0.014	0.00014					0.0045	0.00003					0.0081	0.00043				
GWQC	10558077	GW0034-042721	10558077034	4/27/2021	FB	B	0.00014	0.00014	U				0.00003	0.00003	U				0.00043	0.00043	U			
BPS07-08A	10558077	GW0035-042621	10558077035	4/26/2021	FG	B	0.045	0.00014				E	0.0062	0.00003				E	0.13	0.00043				E
BPS11-01	10558077	GW0036-042621	10558077036	4/26/2021	FG	B	0.049	0.00014				E	0.00026	0.00003				E	0.0014	0.00043				E
BPS11-02	10558077	GW0037-042621	10558077037	4/26/2021	FG	B	0.0038	0.00014				E	0.0023	0.00003				E	0.0062	0.00043				E
BPS11-07	10558077	GW0038-042621	10558077038	4/26/2021	FG	B	0.023	0.00014				E	0.0016	0.00003				E	0.004	0.00043				E
BPS11-08	10558077	GW0039-042721	10558077039	4/27/2021	FG	B	0.0014	0.00014				E	0.000056	0.00003	J			E	0.00087	0.00043	J			E
BPS11-05A1	10558077	GW0040-042721	10558077040	4/27/2021	FG	B	0.035	0.00014				E	0.0023	0.00003				E	0.081	0.00043				E
BPS11-06	10559096	GW0041-042821	10559096001	4/28/2021	FG	B	0.11	0.00014				E	0.0026	0.00003				E	0.056	0.00043				E
BPS07-13A	10559096	GW0042-042821	10559096002	4/28/2021	FG	B	0.047	0.00014				E	0.028	0.00003				E	0.82	0.0086				E
BPS07-13B	10559096	GW0043-042821	10559096003	4/28/2021	FG	B	0.03	0.00014				E	0.0016	0.00003				E	0.0045	0.00043		J+	FB	S
BPS07-15A	10559096	GW0044-042821	10559096004	4/28/2021	FG	B	0.41	0.00014				E	0.0016	0.00003				E	0.011	0.00043				E
BPS07-14A	10559096	GW0045-042821	10559096005	4/28/2021	FG	B	0.028	0.00014				E	0.0023	0.00003				E	0.025	0.00043				E
FP98-1B	10559096	GW0046-042821	10559096006	4/28/2021	FG	B	0.0012	0.00014				E	0.0061	0.00003				E	0.003	0.00043		J+	FB	S
FP98-1	10559096	GW0047-042821	10559096007	4/28/2021	FG	B	0.4	0.00014				E	0.059	0.00003				E	0.7	0.043				E
MF-07	10559096	GW0048-042921	10559096008	4/29/2021	FG	B	0.003	0.00014				E	0.021	0.00003				E	0.085	0.00043				E
BPS11-18B	10559096	GW0049-042921	10559096009	4/29/2021	FG	B	0.0016	0.00014				E	0.87	0.015				E	22.4	0.21				E
BPS11-18C	10559096	GW0050-042921	10559096010	4/29/2021	FG	B	0.0033	0.00014				E	0.09	0.00003				E	5	0.043				E
GS-30D	10559096	GW0051-042921	10559096011	4/29/2021	FG	B	0.0028	0.00014				E	0.032	0.00003				E	2.2	0.043	P6			E

See Table B3 for laboratory and validation qualifer and code definitions

Table B2. BPSOU 2021 Groundwater Monitoring Water Quality Results - Dissolved Metals

Location	SDG	Field Sample ID	Lab Sample ID	Monitoring Date	Sample Type	AB	HgDis (mg/L)	MDL (mg/L)	Lab Q	Val Q	DV Code	Status	PbDis (mg/L)	MDL (mg/L)	Lab Q	Val Q	DV Code	Status	ZnDis (mg/L)	MDL (mg/L)	Lab Q	Val Q	DV Code	Status
AMW-12	10558077	GW0001-042221	10558077001	4/22/2021	FG	B	0.0000045	0.0000045	U			E	0.00014	0.000043				E	0.0032	0.0023	J	UJ	FB	S
AMC-13	10558077	GW0002-042221	10558077002	4/22/2021	FG	B	0.000007	0.0000045	J			E	0.000043	0.000043	U			E	0.044	0.0023		J+	FB	S
BPS11-04	10558077	GW0003-042221	10558077003	4/22/2021	FG	B	0.000007	0.0000045	J			E	0.000043	0.000043	U			E	0.026	0.0023		J+	FB	S
BPS11-09	10558077	GW0004-042221	10558077004	4/22/2021	FG	B	0.000008	0.0000045	J			E	0.000043	0.000043	U			E	0.047	0.0023				E
GS-46D	10558077	GW0005-042321	10558077005	4/23/2021	FG	B	0.000007	0.0000045	J			E	0.000043	0.000043	U			E	0.15	0.0023				E
GS-46S	10558077	GW0006-042321	10558077006	4/23/2021	FG	B	0.000008	0.0000045	J			E	0.000043	0.000043	U			E	0.26	0.0023				E
MF-11	10558077	GW0007-042321	10558077007	4/23/2021	FG	B	0.000007	0.0000045	J			E	0.000043	0.000043	U			E	0.099	0.0023				E
MSD-04	10558077	GW0008-042321	10558077008	4/23/2021	FG	B	0.000011	0.0000045				E	0.000043	0.000043	U			E	0.18	0.0023				E
AMC-24B	10558077	GW0009-042621	10558077009	4/26/2021	FG	B	0.000013	0.0000045				E	0.000043	0.000043	U			E	1.1	0.023				E
AMC-24	10558077	GW0010-042721	10558077010	4/27/2021	FG	B	0.000007	0.0000045	J			E	0.000043	0.000043	U			E	0.47	0.0023				E
AMC-24C	10558077	GW0011-042721	10558077011	4/27/2021	FG	B	0.000007	0.0000045	J			E	0.000043	0.000043	U			E	0.43	0.0023				E
GS-31D	10558077	GW0012-042721	10558077012	4/27/2021	FG	B	0.00001	0.0000045				E	0.000043	0.000043	U			E	0.088	0.0023				E
GS-31S	10558077	GW0013-042721	10558077013	4/27/2021	FG	B	0.000008	0.0000045	J			E	0.000043	0.000043	U			E	0.0048	0.0023	J	UJ	FB	S
GS-44D	10558077	GW0014-042721	10558077014	4/27/2021	FG	B	0.000008	0.0000045	J			E	0.00011	0.000043				E	6.1	0.23				E
GS-44S	10558077	GW0015-042721	10558077015	4/27/2021	FG	B	0.0000045	0.0000045	U			E	0.000043	0.000043	U			E	5.9	0.23				E
MF-09	10558077	GW0016-042821	10558077016	4/28/2021	FG-N	B	0.000015	0.0000045				E	0.0037	0.000043				E	9.1	0.23				E
MF-09	10558077	GW0017-042821	10558077017	4/28/2021	FG-D	B	0.000014	0.0000045					0.0038	0.000043					9.1	0.23				
GWQC	10558077	GW0018-042821	10558077018	4/28/2021	FB	B	0.0000045	0.0000045	U				0.000043	0.000043	U				0.0044	0.0023	J			
BPS07-03A	10558077	GW0019-042721	10558077019	4/27/2021	FG	B	0.0000045	0.0000045	U			E	0.000043	0.000043	U			E	0.058	0.0023				E
BPS07-07	10558077	GW0020-042721	10558077020	4/27/2021	FG	B	0.0000045	0.0000045	U			E	0.00005	0.000043	J			E	0.025	0.0023		J+	FB	S
BPS07-18A	10558077	GW0021-042221	10558077021	4/22/2021	FG	B	0.0000045	0.0000045	U			E	0.0004	0.000043				E	1.2	0.023				E
BPS07-18B	10558077	GW0022-042221	10558077022	4/22/2021	FG	B	0.0000045	0.0000045	U			E	0.000075	0.000043	J			E	8.2	0.23				E
BPS07-17A	10558077	GW0023-042221	10558077023	4/22/2021	FG	B	0.0000045	0.0000045	U			E	0.0019	0.000043				E	2.6	0.023				E
HCA-B2	10558077	GW0024-042221	10558077024	4/22/2021	FG	B	0.0000045	0.0000045	U			E	0.000053	0.000043	J			E	1.6	0.23	P6			E
HCA-B1	10558077	GW0025-042221	10558077025	4/22/2021	FG	B	0.0000045	0.0000045	U			E	0.0011	0.000043				E	18.3	0.11				E
BPS11-05A2	10558077	GW0026-042721	10558077026	4/27/2021	FG	B	0.0000045	0.0000045	U			E	0.000043	0.000043	U			E	0.077	0.0023				E
BMW-03B	10558077	GW0027-042221	10558077027	4/22/2021	FG	B	0.0000045	0.0000045	U			E	0.000043	0.000043	U			E	0.01	0.0023				E
FP98-6	10558077	GW0028-042321	10558077028	4/23/2021	FG	B	0.0000045	0.0000045	U			E	0.00019	0.000043				E	0.91	0.023				E
FP98-2	10558077	GW0029-042321	10558077029	4/23/2021	FG	B	0.0000045	0.0000045	U			E	0.000043	0.000043	U			E	1.1	0.023				E
BPS07-25	10558077	GW0030-042321	10558077030	4/23/2021	FG	B	0.0000045	0.0000045	U			E	0.000064	0.000043	J			E	0.4	0.0023				E
GS-13A	10558077	GW0031-042321	10558077031	4/23/2021	FG	B	0.0014	0.000045				E	0.018	0.000043				E	1.4	0.023	P6			E
AMW-02	10558077	GW0032-042721	10558077032	4/27/2021	FG-N	B	0.000023	0.0000045				E	0.00089	0.000043				E	1	0.023				E
AMW-02	10558077	GW0033-042721	10558077033	4/27/2021	FG-D	B	0.000019	0.0000045					0.00079	0.000043					0.98	0.023				
GWQC	10558077	GW0034-042721	10558077034	4/27/2021	FB	B	0.0000045	0.0000045	U				0.000043	0.000043	U				0.0023	0.0023	U			
BPS07-08A	10558077	GW0035-042621	10558077035	4/26/2021	FG	B	0.0000045	0.0000045	U			E	0.0001	0.000043				E	0.29	0.0023				E
BPS11-01	10558077	GW0036-042621	10558077036	4/26/2021	FG	B	0.0000045	0.0000045	U			E	0.000065	0.000043	J			E	0.004	0.0023	J			E
BPS11-02	10558077	GW0037-042621	10558077037	4/26/2021	FG	B	0.0000045	0.0000045	U			E	0.000043	0.000043	U			E	0.15	0.0023				E
BPS11-07	10558077	GW0038-042621	10558077038	4/26/2021	FG	B	0.0000045	0.0000045	U			E	0.000064	0.000043	J			E	0.13	0.0023				E
BPS11-08	10558077	GW0039-042721	10558077039	4/27/2021	FG	B	0.0000045	0.0000045	U			E	0.000068	0.000043	J			E	0.027	0.0023				E
BPS11-05A1	10558077	GW0040-042721	10558077040	4/27/2021	FG	B	0.0000045	0.0000045	U			E	0.00014	0.000043				E	0.92	0.023				E
BPS11-06	10559096	GW0041-042821	10559096001	4/28/2021	FG	B	0.000045	0.000045	U,MD			E	0.000043	0.000043	U	UJ	FD	S	0.25	0.0023				E
BPS07-13A	10559096	GW0042-042821	10559096002	4/28/2021	FG	B	0.000045	0.000045	U,MD			E	0.00011	0.000043		J	FD	S	3.3	0.046				E
BPS07-13B	10559096	GW0043-042821	10559096003	4/28/2021	FG	B	0.000045	0.000045	U,MD			E	0.000055	0.000043	J	J	FD	S	0.1	0.0023				E
BPS07-15A	10559096	GW0044-042821	10559096004	4/28/2021	FG	B	0.000045	0.000045	U,MD			E	0.000043	0.000043	U	UJ	FD	S	0.18	0.0023				E
BPS07-14A	10559096	GW0045-042821	10559096005	4/28/2021	FG	B	0.000045	0.000045	U,MD			E	0.0016	0.000043		J	FD	S	5.3	0.046				E
FP98-1B	10559096	GW0046-042821	10559096006	4/28/2021	FG	B	0.000045	0.000045	U,MD			E	0.000043	0.000043	U	UJ	FD	S	0.51	0.046				E
FP98-1	10559096	GW0047-042821	10559096007	4/28/2021	FG	B	0.0011	0.000045				E	0.000043	0.000043	U	UJ	FD	S	43.8	0.23				E
MF-07	10559096	GW0048-042921	10559096008	4/29/2021	FG	B	0.000045	0.000045	U,MD			E	0.000073	0.000043	J	J	FD	S	7.9	0.046				E
BPS11-18B	10559096	GW0049-042921	10559096009	4/29/2021	FG	B	0.000045	0.000045	U,MD			E	0.019	0.000043		J	FD	S	217	1.1				E
BPS11-18C	10559096	GW0050-042921	10559096010	4/29/2021	FG	B	0.000045	0.000045	U,MD			E	0.00034	0.000043		J	FD	S	31.1	0.23				E
GS-30D	10559096	GW0051-042921	10559096011	4/29/2021	FG	B	0.000045	0.000045	U,MD			E	0.000079	0.000043	J	J	FD	S	7.8	0.23	P6			E

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Table B2. BPSOU 2021 Groundwater Monitoring Water Quality Results - Dissolved Metals

Location	SDG	Field Sample ID	Lab Sample ID	Monitoring Date	Sample Type	AB	AsDis (mg/L)	MDL (mg/L)	Lab Q	Val Q	DV Code	Status	CdDis (mg/L)	MDL (mg/L)	Lab Q	Val Q	DV Code	Status	CuDis (mg/L)	MDL (mg/L)	Lab Q	Val Q	DV Code	Status
GS-30S	10559096	GW0052-042921	10559096012	4/29/2021	FG	B	0.013	0.00014				E	0.00003	0.00003	U			E	0.0028	0.00043		J+	FB	S
MSD-05	10559096	GW0053-042921	10559096013	4/29/2021	FG	B	0.0037	0.00014				E	0.12	0.00003				E	11.8	0.043				E
GS-32D	10559096	GW0054-042921	10559096014	4/29/2021	FG	B	0.0046	0.00014				E	0.024	0.00003				E	0.62	0.0086				E
GS-32S	10559096	GW0055-042921	10559096015	4/29/2021	FG	B	0.0034	0.00014				E	0.017	0.00003				E	0.7	0.0086				E
GS-08R	10559096	GW0056-043021	10559096016	4/30/2021	FG	B	0.0022	0.00014				E	0.0028	0.00003				E	0.0017	0.00043		J+	FB	S
GS-09R	10559096	GW0057-043021	10559096017	4/30/2021	FG	B	0.003	0.00014				E	0.19	0.00003				E	15.7	0.11				E
BPS07-21	10559096	GW0061-042821	10559096021	4/28/2021	FG	B	0.35	0.00014				E	0.000046	0.00003	J			E	0.00043	0.00043	U			E
BPS07-21B	10559096	GW0062-042821	10559096022	4/28/2021	FG	B	0.0062	0.00014				E	0.0019	0.00003				E	0.0016	0.00043				E
BPS07-21C	10559096	GW0063-042821	10559096023	4/28/2021	FG	B	0.0059	0.00014				E	0.0014	0.00003				E	0.00043	0.00043	U			E
BPS07-22B	10559096	GW0064-042821	10559096024	4/28/2021	FG	B	0.0034	0.00014				E	0.0025	0.00003				E	0.014	0.00043				E
BPS07-22C	10559096	GW0065-042821	10559096025	4/28/2021	FG	B	0.0084	0.00014				E	0.00023	0.00003				E	0.00043	0.00043	U			E
BPS07-22R	10559096	GW0066-042821	10559096026	4/28/2021	FG	B	0.018	0.00014				E	0.00003	0.00003	U			E	0.00043	0.00043	U			E
BPS07-23	10559096	GW0067-042921	10559096027	4/29/2021	FG	B	0.14	0.00014				E	0.000041	0.00003	J			E	0.0033	0.00043				E
BPS11-13B	10559096	GW0068-042921	10559096028	4/29/2021	FG	B	0.0016	0.00014				E	0.0031	0.00003				E	0.03	0.00043				E
BPS11-14A	10559096	GW0069-042921	10559096029	4/29/2021	FG	B	0.0011	0.00014				E	0.00024	0.00003				E	0.0024	0.00043				E
BPS11-14B	10559096	GW0070-042921	10559096030	4/29/2021	FG	B	0.0021	0.00014				E	0.011	0.00003				E	0.23	0.00043				E
BPS07-24	10559096	GW0071-042921	10559096031	4/29/2021	FG	B	0.009	0.00014				E	0.017	0.00003				E	0.76	0.0086				E
BPS07-11A	10559096	GW0072-042921	10559096032	4/29/2021	FG	B	0.00056	0.00014				E	0.02	0.00003				E	0.15	0.00043				E
BPS07-11B	10559096	GW0073-042921	10559096033	4/29/2021	FG	B	0.00051	0.00014				E	0.093	0.00003				E	0.82	0.043				E
BPS11-10B	10559096	GW0074-043021	10559096034	4/30/2021	FG-N	B	0.0061	0.00014				E	0.0076	0.00003				E	0.18	0.00043				E
BPS11-10B	10559096	GW0075-043021	10559096035	4/30/2021	FG-D	B	0.006	0.00014					0.0072	0.00003					0.17	0.00043				
GWQC	10559096	GW0076-043021	10559096036	4/30/2021	FB	B	0.00014	0.00014	U				0.00003	0.00003	U				0.00043	0.00043	U			
BPS11-10C	10559096	GW0077-043021	10559096037	4/30/2021	FG	B	0.0032	0.00014				E	0.0019	0.00003				E	0.00095	0.00043	J			E
AMW-20	10559096	GW0078-043021	10559096038	4/30/2021	FG	B	0.00058	0.00014				E	0.11	0.00003				E	5.1	0.043				E
GS-40R	10559096	GW0058-050321	10559096018	5/3/2021	FG-N	B	0.00069	0.00014				E	0.12	0.00003				E	0.19	0.00043				E
GS-40R	10559096	GW0059-050321	10559096019	5/3/2021	FG-D	B	0.00076	0.00014					0.12	0.00003					0.2	0.00043				
GWQC	10559096	GW0060-050321	10559096020	5/3/2021	FB	B	0.00014	0.00014	U				0.00003	0.00003	U				0.00097	0.00043	J			
AMC-23B	10559096	GW0079-050321	10559096039	5/3/2021	FG	B	0.0094	0.00014				E	0.01	0.00003				E	0.0011	0.00043				E
BPS11-17C	10559096	GW0080-050321	10559096040	5/3/2021	FG	B	0.0052	0.00014				E	0.0098	0.00003				E	0.7	0.0086				E
GS-11R	10559096	GW0081-050321	10559096041	5/3/2021	FG	B	0.00099	0.00014				E	0.66	0.015	P6			E	31.4	0.21	P6			E
MF-10	10559096	GW0082-050321	10559096042	5/3/2021	FG	B	0.025	0.00014				E	0.0045	0.00003				E	0.086	0.00043				E
MF-08	10559096	GW0083-050321	10559096043	5/3/2021	FG	B	0.00069	0.00014				E	0.0079	0.00003				E	0.045	0.00043				E
MSD-03	10559096	GW0084-050321	10559096044	5/3/2021	FG	B	0.0021	0.00014				E	0.072	0.00003				E	1.9	0.043				E
MSD-01B	10559096	GW0085-050421	10559096045	5/4/2021	FG	B	0.00092	0.00014				E	0.081	0.00003				E	0.57	0.043				E
MSD-01C	10559096	GW0086-050421	10559096046	5/4/2021	FG	B	0.00072	0.00014				E	0.1	0.00003				E	0.81	0.11				E
AMC-12	10559096	GW0087-050421	10559096047	5/4/2021	FG	B	0.00037	0.00014	J			E	0.081	0.00003				E	1.6	0.043				E
AMW-01A	10560315	GW0088-050621	10560315009	5/6/2021	FG	B	0.0067	0.00014				E	0.000067	0.00003	J			E	0.0024	0.00043				E
MSD-02A	10559096	GW0089-050421	10559096048	5/4/2021	FG-N	B	0.0013	0.00014				E	0.062	0.00003				E	0.23	0.00043				E
MSD-02A	10559096	GW0090-050421	10559096049	5/4/2021	FG-D	B	0.0013	0.00014					0.061	0.00003					0.23	0.00043				
GWQC	10559096	GW0091-050421	10559096050	5/4/2021	FB	B	0.00014	0.00014	U				0.00003	0.00003	U				0.00045	0.00043	J			
MSD-02B	10559096	GW0092-050421	10559096051	5/4/2021	FG	B	0.0018	0.00014				E	1	0.015	P6			E	35.3	0.21	P6			E
AMW-01C	10559096	GW0093-050421	10559096052	5/4/2021	FG	B	0.0082	0.00014				E	0.12	0.00003				E	5.8	0.043				E
BMW-03A	10559096	GW0094-050321	10559096053	5/3/2021	FG	B	0.063	0.00014				E	0.00003	0.00003	U			E	0.00043	0.00043	U			E
AMW-13	10560318	GW0095-050521	10560318001	5/5/2021	FG	B	0.0099	0.0007				E	0.0012	0.00015				E	0.0021	0.0021	U			E
AMW-13B	10560318	GW0096-050521	10560318002	5/5/2021	FG	B	0.0032	0.0007				E	0.00026	0.00015	J			E	0.0021	0.0021	U			E
AMW-13B2	10560318	GW0097-050521	10560318003	5/5/2021	FG	B	0.004	0.0007				E	0.00039	0.00015	J			E	0.0021	0.0021	U			E
AMW-13C	10560318	GW0098-050521	10560318004	5/5/2021	FG	B	0.0049	0.0007				E	0.0016	0.00015				E	0.0021	0.0021	U			E
BPS07-01A	10560318	GW0099-050621	10560318005	5/6/2021	FG	B	0.0026	0.0007				E	0.00015	0.00015	U			E	0.0021	0.0021	U			E
BPS07-01B	10560318	GW0100-050621	10560318006	5/6/2021	FG	B	0.0012	0.0007	J			E	0.00015	0.00015	U			E	0.0021	0.0021	U			E
BPS07-05A	10560318	GW0101-050621	10560318007	5/6/2021	FG	B	0.0084	0.0007				E	0.00015	0.00015	U			E	0.0021	0.0021	U			E
BPS07-05B	10560318	GW0102-050621	10560318008	5/6/2021	FG	B	0.0007	0.0007	U			E	0.00015	0.00015	U			E	0.0021	0.0021	U			E

See Table B3 for laboratory and validation qualifer and code definitions

Table B2. BPSOU 2021 Groundwater Monitoring Water Quality Results - Dissolved Metals

Location	SDG	Field Sample ID	Lab Sample ID	Monitoring Date	Sample Type	AB	HgDis (mg/L)	MDL (mg/L)	Lab Q	Val Q	DV Code	Status	PbDis (mg/L)	MDL (mg/L)	Lab Q	Val Q	DV Code	Status	ZnDis (mg/L)	MDL (mg/L)	Lab Q	Val Q	DV Code	Status
GS-30S	10559096	GW0052-042921	10559096012	4/29/2021	FG	B	0.000045	0.000045	U,MD			E	0.000043	0.000043	U	UJ	FD	S	0.0023	0.0023	J	UJ	FB	S
MSD-05	10559096	GW0053-042921	10559096013	4/29/2021	FG	B	0.00008	0.000045	J,1M			E	0.00013	0.000043		J	FD	S	41.2	0.23				E
GS-32D	10559096	GW0054-042921	10559096014	4/29/2021	FG	B	0.000045	0.000045	U,MD			E	0.000043	0.000043	U	UJ	FD	S	5.4	0.046				E
GS-32S	10559096	GW0055-042921	10559096015	4/29/2021	FG	B	0.000045	0.000045	U,MD			E	0.00016	0.000043		J	FD	S	3	0.046				E
GS-08R	10559096	GW0056-043021	10559096016	4/30/2021	FG	B	0.000045	0.000045	U,MD			E	0.000044	0.000043	J	J	FD	S	0.091	0.0023				E
GS-09R	10559096	GW0057-043021	10559096017	4/30/2021	FG	B	0.00012	0.000045	J,1M			E	0.000089	0.000043	J	J	FD	S	68.2	0.57				E
BPS07-21	10559096	GW0061-042821	10559096021	4/28/2021	FG	B	0.000045	0.000045	U,MD			E	0.00044	0.000043				E	0.21	0.0023				E
BPS07-21B	10559096	GW0062-042821	10559096022	4/28/2021	FG	B	0.000045	0.000045	U,MD			E	0.00006	0.000043	J			E	0.17	0.0023				E
BPS07-21C	10559096	GW0063-042821	10559096023	4/28/2021	FG	B	0.000045	0.000045	U,MD			E	0.000043	0.000043	U			E	0.18	0.0023				E
BPS07-22B	10559096	GW0064-042821	10559096024	4/28/2021	FG	B	0.000045	0.000045	U,MD			E	0.000043	0.000043	U			E	0.24	0.0023				E
BPS07-22C	10559096	GW0065-042821	10559096025	4/28/2021	FG	B	0.000045	0.000045	U,MD			E	0.000043	0.000043	U			E	0.019	0.0023				E
BPS07-22R	10559096	GW0066-042821	10559096026	4/28/2021	FG	B	0.000045	0.000045	U,MD			E	0.000046	0.000043	J			E	0.0028	0.0023	J			E
BPS07-23	10559096	GW0067-042921	10559096027	4/29/2021	FG	B	0.000045	0.000045	U,MD			E	0.00078	0.000043				E	0.033	0.0023				E
BPS11-13B	10559096	GW0068-042921	10559096028	4/29/2021	FG	B	0.000045	0.000045	U,MD			E	0.000043	0.000043	U			E	0.44	0.0023				E
BPS11-14A	10559096	GW0069-042921	10559096029	4/29/2021	FG	B	0.000045	0.000045	U,MD			E	0.000043	0.000043	U			E	0.017	0.0023				E
BPS11-14B	10559096	GW0070-042921	10559096030	4/29/2021	FG	B	0.000045	0.000045	U,MD			E	0.00011	0.000043				E	2.4	0.046				E
BPS07-24	10559096	GW0071-042921	10559096031	4/29/2021	FG	B	0.000045	0.000045	U,MD			E	0.000043	0.000043	U			E	4	0.046				E
BPS07-11A	10559096	GW0072-042921	10559096032	4/29/2021	FG	B	0.000045	0.000045	U,MD			E	0.000043	0.000043	U			E	2.4	0.046				E
BPS07-11B	10559096	GW0073-042921	10559096033	4/29/2021	FG	B	0.000045	0.000045	U,MD			E	0.0023	0.000043				E	22.7	0.23				E
BPS11-10B	10559096	GW0074-043021	10559096034	4/30/2021	FG-N	B	0.000045	0.000045	U,MD			E	0.000054	0.000043	J			E	1.3	0.046				E
BPS11-10B	10559096	GW0075-043021	10559096035	4/30/2021	FG-D	B	0.000045	0.000045	U,MD				0.000059	0.000043	J				1.1	0.046				
GWQC	10559096	GW0076-043021	10559096036	4/30/2021	FB	B	0.000045	0.000045	U,MD				0.000043	0.000043	U				0.0023	0.0023	U			
BPS11-10C	10559096	GW0077-043021	10559096037	4/30/2021	FG	B	0.000045	0.000045	U,MD			E	0.000043	0.000043	U	UJ	FD	S	0.14	0.0023				E
AMW-20	10559096	GW0078-043021	10559096038	4/30/2021	FG	B	0.000045	0.000045	U,MD			E	0.00036	0.000043		J	FD	S	25.5	0.23				E
GS-40R	10559096	GW0058-050321	10559096018	5/3/2021	FG-N	B	0.000045	0.000045	U,MD			E	0.0012	0.000043		J	FD	S	49.3	0.57				E
GS-40R	10559096	GW0059-050321	10559096019	5/3/2021	FG-D	B	0.000045	0.000045	U,MD				0.0041	0.000043		J	FD		49.4	0.57				
GWQC	10559096	GW0060-050321	10559096020	5/3/2021	FB	B	0.000045	0.000045	U,MD				0.000043	0.000043	U				0.007	0.0023				
AMC-23B	10559096	GW0079-050321	10559096039	5/3/2021	FG	B	0.000045	0.000045	U,MD			E	0.00017	0.000043		J	FD	S	0.8	0.046				E
BPS11-17C	10559096	GW0080-050321	10559096040	5/3/2021	FG	B	0.000045	0.000045	U,MD			E	0.000045	0.000043	J	J	FD	S	1.8	0.046				E
GS-11R	10559096	GW0081-050321	10559096041	5/3/2021	FG	B	0.000045	0.000045	U,MD			E	0.33	0.000043		J	FD	S	110	1.1	P6			E
MF-10	10559096	GW0082-050321	10559096042	5/3/2021	FG	B	0.000045	0.000045	U,MD			E	0.00048	0.000043		J	FD	S	19.1	0.23				E
MF-08	10559096	GW0083-050321	10559096043	5/3/2021	FG	B	0.000045	0.000045	U,MD			E	0.0013	0.000043		J	FD	S	1.3	0.046				E
MSD-03	10559096	GW0084-050321	10559096044	5/3/2021	FG	B	0.000045	0.000045	U,MD			E	0.0047	0.000043		J	FD	S	25.5	0.23				E
MSD-01B	10559096	GW0085-050421	10559096045	5/4/2021	FG	B	0.000045	0.000045	U,MD			E	0.00058	0.000043		J	FD	S	26.6	0.23				E
MSD-01C	10559096	GW0086-050421	10559096046	5/4/2021	FG	B	0.000045	0.000045	U,MD			E	0.007	0.000043		J	FD	S	49.6	0.57				E
AMC-12	10559096	GW0087-050421	10559096047	5/4/2021	FG	B	0.000045	0.000045	U,MD			E	0.00061	0.000043		J	FD	S	22.8	0.23				E
AMW-01A	10560315	GW0088-050621	10560315009	5/6/2021	FG	B	0.000045	0.000045	U,MD			E	0.0002	0.000043				E	0.026	0.0023				E
MSD-02A	10559096	GW0089-050421	10559096048	5/4/2021	FG-N	B	0.000045	0.000045	U,MD			E	0.0016	0.000043		J	FD	S	9.5	0.23				E
MSD-02A	10559096	GW0090-050421	10559096049	5/4/2021	FG-D	B	0.000045	0.000045	U,MD				0.00089	0.000043		J	FD		9.7	0.23				
GWQC	10559096	GW0091-050421	10559096050	5/4/2021	FB	B	0.000045	0.000045	U,MD				0.000043	0.000043	U				0.0023	0.0023	U			
MSD-02B	10559096	GW0092-050421	10559096051	5/4/2021	FG	B	0.000045	0.000045	U,MD			E	0.012	0.000043		J	FD	S	198	2.3	P6			E
AMW-01C	10559096	GW0093-050421	10559096052	5/4/2021	FG	B	0.000045	0.000045	U,MD			E	0.000059	0.000043	J	J	FD	S	30.6	0.23				E
BMW-03A	10559096	GW0094-050321	10559096053	5/3/2021	FG	B	0.000045	0.000045	U,MD			E	0.0001	0.000043		J	FD	S	0.78	0.046				E
AMW-13	10560318	GW0095-050521	10560318001	5/5/2021	FG	B	0.000045	0.000045	U,MD			E	0.00043	0.00022	J			E	0.35	0.011				E
AMW-13B	10560318	GW0096-050521	10560318002	5/5/2021	FG	B	0.000045	0.000045	U,MD			E	0.00022	0.00022	U			E	0.021	0.011	J			E
AMW-13B2	10560318	GW0097-050521	10560318003	5/5/2021	FG	B	0.000045	0.000045	U,MD			E	0.00022	0.00022	U			E	0.038	0.011				E
AMW-13C	10560318	GW0098-050521	10560318004	5/5/2021	FG	B	0.000045	0.000045	U,MD			E	0.00022	0.00022	U			E	0.14	0.011				E
BPS07-01A	10560318	GW0099-050621	10560318005	5/6/2021	FG	B	0.000045	0.000045	U,MD			E	0.00022	0.00022	U			E	0.011	0.011	U			E
BPS07-01B	10560318	GW0100-050621	10560318006	5/6/2021	FG	B	0.000045	0.000045	U,MD			E	0.00022	0.00022	U			E	0.043	0.011				E
BPS07-05A	10560318	GW0101-050621	10560318007	5/6/2021	FG	B	0.000045	0.000045	U,MD			E	0.00022	0.00022	U			E	0.011	0.011	U			E
BPS07-05B	10560318	GW0102-050621	10560318008	5/6/2021	FG	B	0.000045	0.000045	U,MD			E	0.00022	0.00022	U			E	0.011	0.011	U			E

See Table B3 for laboratory and validation qualifer and code definitions

Table B2. BPSOU 2021 Groundwater Monitoring Water Quality Results - Dissolved Metals

Location	SDG	Field Sample ID	Lab Sample ID	Monitoring Date	Sample Type	AB	AsDis (mg/L)	MDL (mg/L)	Lab Q	Val Q	DV Code	Status	CdDis (mg/L)	MDL (mg/L)	Lab Q	Val Q	DV Code	Status	CuDis (mg/L)	MDL (mg/L)	Lab Q	Val Q	DV Code	Status
BPS07-16A	10560318	GW0103-050621	10560318009	5/6/2021	FG-N	B	0.0007	0.0007	U			E	0.0019	0.00015				E	0.0027	0.0021	J			E
BPS07-16A	10560318	GW0104-050621	10560318010	5/6/2021	FG-D	B	0.0007	0.0007	U				0.002	0.00015					0.0028	0.0021	J			
GWQC	10560318	GW0105-050621	10560318011	5/6/2021	FB	B	0.0007	0.0007	U				0.00015	0.00015	U				0.0021	0.0021	U			
BPS07-16B	10560318	GW0106-050621	10560318012	5/6/2021	FG	B	0.0013	0.0007	J			E	0.00023	0.00015	J			E	0.0021	0.0021	U			E
BPS11-15	10560318	GW0107-050621	10560318013	5/6/2021	FG	B	0.0014	0.0007	J			E	0.00015	0.00015	U			E	0.0021	0.0021	U			E
BPS11-16	10560318	GW0108-050621	10560318014	5/6/2021	FG	B	0.003	0.0007				E	0.00016	0.00015	J			E	0.0021	0.0021	U			E
BPS11-11A1	10560318	GW0109-050521	10560318015	5/5/2021	FG	B	0.0021	0.0007	J			E	0.0012	0.00015				E	0.0024	0.0021	J			E
BPS11-11A2	10560318	GW0110-050521	10560318016	5/5/2021	FG	B	0.0019	0.00014				E	0.00041	0.00003				E	0.00043	0.00043	U			E
BPS11-11B	10560318	GW0111-050521	10560318017	5/5/2021	FG	B	0.0032	0.00014				E	0.0024	0.00003				E	0.011	0.0021				E
BPS11-11C	10560318	GW0112-050521	10560318018	5/5/2021	FG	B	0.003	0.00014				E	0.0004	0.00003				E	0.00043	0.00043	U			E
BPS11-19A2	10560318	GW0113-050621	10560318019	5/6/2021	FG	B	0.0017	0.00014				E	0.00055	0.00003				E	0.001	0.00043				E
BPS11-19B	10560318	GW0114-050621	10560318020	5/6/2021	FG	B	0.0046	0.00014				E	0.0028	0.00003				E	0.04	0.0043				E
BPS11-12A	10560318	GW0115-050621	10560318021	5/6/2021	FG	B	0.0029	0.00014				E	0.00039	0.00003	B			E	0.0021	0.00043				E
BT-98-02	10560318	GW0116-050621	10560318022	5/6/2021	FG-N	B	0.00078	0.00014				E	0.0082	0.00003				E	0.006	0.00043				E
BT-98-02	10560318	GW0117-050621	10560318023	5/6/2021	FG-D	B	0.00084	0.00014					0.0093	0.00003					0.007	0.00043				
GWQC	10560318	GW0118-050621	10560318024	5/6/2021	FB	B	0.00014	0.00014	U				0.00003	0.00003	U				0.00043	0.00043	U			
BT-98-02B	10560318	GW0119-050621	10560318025	5/6/2021	FG	B	0.00084	0.00014				E	0.0011	0.00003				E	0.001	0.00043				E
BPS11-03	10560318	GW0120-050621	10560318026	5/6/2021	FG	B	0.0053	0.00014				E	0.0078	0.00003				E	0.0095	0.0021				E
AMW-01B	10560318	GW0121-050721	10560318027	5/7/2021	FG	B	0.0013	0.00014				E	1.2	0.03				E	77.1	0.43				E
AMW-08	10560315	GW0122-050721	10560315001	5/7/2021	FG-N	B	0.034	0.0007				E	0.089	0.00015				E	3.4	0.21		J	FD	S
AMW-08	10560315	GW0123-050721	10560315002	5/7/2021	FG-D	B	0.034	0.0007					0.088	0.00015					2.7	0.21		J	FD	
GWQC	10560315	GW0124-050721	10560315003	5/7/2021	FB	B	0.00014	0.00014	U				0.00003	0.00003	U				0.00052	0.00043	J			
MH-MSD106	10560315	GW0125-051121	10560315004	5/11/2021	FG	B	0.0039	0.00014				E	0.03	0.00003				E	1.9	0.043	P6	J	FD	S
MH-MSD108	10560315	GW0126-051121	10560315005	5/11/2021	FG	B	0.0036	0.00014				E	0.052	0.00003				E	3.5	0.0086		J	FD	S
MH-MSD110	10560315	GW0127-051121	10560315006	5/11/2021	FG	B	0.0088	0.00014				E	0.13	0.00003				E	11	0.21		J	FD	S
MH-MSD113	10560315	GW0128-051121	10560315007	5/11/2021	FG	B	0.016	0.00014				E	0.16	0.00003				E	13.4	0.21		J	FD	S
MH-MSD116	10560315	GW0129-051121	10560315008	5/11/2021	FG	B	0.019	0.0007				E	0.8	0.00015				E	46	0.21		J	FD	S
AMW-13	10580635	GW0001-092321	10580635001	9/23/2021	FG	B	0.0028	0.000083				E	0.0021	0.000016				E	0.0092	0.0005				E
AMW-13B	10580635	GW0002-092321	10580635002	9/23/2021	FG	B	0.0041	0.000083				E	0.00027	0.000016				E	0.0015	0.0005				E
AMW-13B2	10580635	GW0003-092321	10580635003	9/23/2021	FG	B	0.0051	0.000083				E	0.00048	0.000016				E	0.0024	0.0005				E
AMW-13C	10580635	GW0004-092321	10580635004	9/23/2021	FG	B	0.006	0.000083				E	0.0019	0.000016				E	0.00076	0.0005	J			E
BPS07-16A	10580635	GW0005-092421	10580635005	9/24/2021	FG	B	0.00097	0.000083				E	0.0019	0.000016				E	0.0032	0.0005				E
BPS07-16B	10580635	GW0006-092421	10580635006	9/24/2021	FG	B	0.0015	0.000083				E	0.00027	0.000016				E	0.0005	0.0005	U			E
BPS11-11A1	10580635	GW0007-092421	10580635007	9/24/2021	FG	B	0.0036	0.000083				E	0.0018	0.000016				E	0.0051	0.0005				E
BPS11-11A2	10580635	GW0008-092421	10580635008	9/24/2021	FG-N	B	0.0019	0.000083				E	0.00041	0.000016				E	0.0005	0.0005	U			E
BPS11-11A2	10580635	GW0009-092421	10580635009	9/24/2021	FG-D	B	0.0019	0.000083					0.00041	0.000016					0.00088	0.0005	J			
GWQC	10580635	GW0010-092421	10580635010	9/24/2021	FB	B	0.000083	0.000083	U				0.000016	0.000016	U				0.0005	0.0005	U			
BPS11-11B	10580635	GW0011-092421	10580635011	9/24/2021	FG	B	0.0031	0.000083				E	0.0024	0.000016				E	0.01	0.0005				E
BPS11-11C	10580635	GW0012-092421	10580635012	9/24/2021	FG	B	0.0027	0.000083				E	0.00038	0.000016				E	0.0005	0.0005	U			E
BPS11-19A2	10580635	GW0013-092421	10580635013	9/24/2021	FG	B	0.0016	0.000083				E	0.00052	0.000016				E	0.00076	0.0005	J			E
BPS11-19B	10580635	GW0014-092421	10580635014	9/24/2021	FG	B	0.005	0.000083				E	0.004	0.000016				E	0.041	0.0005				E
BPS07-05B	10580635	GW0015-092421	10580635015	9/24/2021	FG	B	0.00051	0.000083				E	0.0001	0.000016				E	0.00053	0.0005	J			E
BPS07-05A	10580635	GW0016-092421	10580635016	9/24/2021	FG	B	0.011	0.000083				E	0.000039	0.000016	J			E	0.002	0.0005				E
BPS07-01A	10580635	GW0017-092421	10580635017	9/24/2021	FG	B	0.0031	0.000083				E	0.000019	0.000016	J			E	0.0013	0.0005				E
BPS07-01B	10580635	GW0018-092421	10580635018	9/24/2021	FG	B	0.0014	0.000083				E	0.0001	0.000016				E	0.0016	0.0005				E
BPS11-15	10580635	GW0019-092421	10580635019	9/24/2021	FG	B	0.0018	0.000083				E	0.00016	0.000016				E	0.00089	0.0005	J			E
BPS11-16	10580635	GW0020-092421	10580635020	9/24/2021	FG-N	B	0.0039	0.000083				E	0.00021	0.000016				E	0.00051	0.0005	J			E
BPS11-16	10580635	GW0021-092421	10580635021	9/24/2021	FG-D	B	0.0037	0.000083					0.0002	0.000016					0.0005	0.0005	U			
GWQC	10580635	GW0022-092421	10580635022	9/24/2021	FB	B	0.000083	0.000083	U				0.000016	0.000016	U				0.0005	0.0005	U			
BPS11-12A	10580635	GW0023-092421	10580635023	9/24/2021	FG	B	0.0036	0.000083				E	0.00039	0.000016				E	0.0025	0.0005				E
BT-98-02B	10580635	GW0024-092421	10580635024	9/24/2021	FG	B	0.0008	0.000083				E	0.0012	0.000016				E	0.0012	0.0005				E

See Table B3 for laboratory and validation qualifer and code definitions

Table B2. BPSOU 2021 Groundwater Monitoring Water Quality Results - Dissolved Metals

Location	SDG	Field Sample ID	Lab Sample ID	Monitoring Date	Sample Type	AB	HgDis (mg/L)	MDL (mg/L)	Lab Q	Val Q	DV Code	Status	PbDis (mg/L)	MDL (mg/L)	Lab Q	Val Q	DV Code	Status	ZnDis (mg/L)	MDL (mg/L)	Lab Q	Val Q	DV Code	Status
BPS07-16A	10560318	GW0103-050621	10560318009	5/6/2021	FG-N	B	0.000045	0.000045	U,MD			E	0.00022	0.00022	U			E	0.63	0.011				E
BPS07-16A	10560318	GW0104-050621	10560318010	5/6/2021	FG-D	B	0.000045	0.000045	U,MD				0.00022	0.00022	U				0.66	0.011				
GWQC	10560318	GW0105-050621	10560318011	5/6/2021	FB	B	0.000045	0.000045	U,MD				0.00022	0.00022	U				0.011	0.011	U			
BPS07-16B	10560318	GW0106-050621	10560318012	5/6/2021	FG	B	0.000045	0.000045	U,MD			E	0.00022	0.00022	U			E	0.011	0.011	U			E
BPS11-15	10560318	GW0107-050621	10560318013	5/6/2021	FG	B	0.000045	0.000045	U,MD			E	0.00022	0.00022	U			E	0.011	0.011	U			E
BPS11-16	10560318	GW0108-050621	10560318014	5/6/2021	FG	B	0.000045	0.000045	U,MD			E	0.00022	0.00022	U			E	0.011	0.011	U			E
BPS11-11A1	10560318	GW0109-050521	10560318015	5/5/2021	FG	B	0.000045	0.000045	U,MD			E	0.00022	0.00022	U			E	0.088	0.011				E
BPS11-11A2	10560318	GW0110-050521	10560318016	5/5/2021	FG	B	0.000045	0.000045	U			E	0.000043	0.000043	U			E	0.016	0.0023				E
BPS11-11B	10560318	GW0111-050521	10560318017	5/5/2021	FG	B	0.000045	0.000045	U,MD			E	0.000097	0.000043	J			E	0.19	0.0023		J+	CRQL	S
BPS11-11C	10560318	GW0112-050521	10560318018	5/5/2021	FG	B	0.000045	0.000045	U,MD			E	0.000043	0.000043	U			E	0.015	0.0023				E
BPS11-19A2	10560318	GW0113-050621	10560318019	5/6/2021	FG	B	0.000045	0.000045	U,MD			E	0.000043	0.000043	U			E	0.07	0.0023				E
BPS11-19B	10560318	GW0114-050621	10560318020	5/6/2021	FG	B	0.000045	0.000045	U,MD			E	0.000043	0.000043	U			E	0.34	0.023				E
BPS11-12A	10560318	GW0115-050621	10560318021	5/6/2021	FG	B	0.000045	0.000045	U,MD			E	0.000043	0.000043	U			E	0.02	0.0023				E
BT-98-02	10560318	GW0116-050621	10560318022	5/6/2021	FG-N	B	0.000045	0.000045	U			E	0.000043	0.000043	U			E	2.7	0.023				E
BT-98-02	10560318	GW0117-050621	10560318023	5/6/2021	FG-D	B	0.000045	0.000045	U				0.000043	0.000043	U				3	0.023				
GWQC	10560318	GW0118-050621	10560318024	5/6/2021	FB	B	0.000045	0.000045	U				0.000043	0.000043	U				0.0023	0.0023	U			
BT-98-02B	10560318	GW0119-050621	10560318025	5/6/2021	FG	B	0.000045	0.000045	U			E	0.000043	0.000043	U			E	0.054	0.0023				E
BPS11-03	10560318	GW0120-050621	10560318026	5/6/2021	FG	B	0.000045	0.000045	U			E	0.000054	0.000043	J			E	0.79	0.011	P6			E
AMW-01B	10560318	GW0121-050721	10560318027	5/7/2021	FG	B	0.000045	0.000045	U			E	0.0044	0.000043				E	183	2.3				E
AMW-08	10560315	GW0122-050721	10560315001	5/7/2021	FG-N	B	0.000045	0.000045	U,MD			E	0.013	0.00022				E	525	11.4		J	FD	S
AMW-08	10560315	GW0123-050721	10560315002	5/7/2021	FG-D	B	0.000045	0.000045	U,MD				0.013	0.00022					415	11.4		J	FD	
GWQC	10560315	GW0124-050721	10560315003	5/7/2021	FB	B	0.000045	0.000045	U,MD				0.000043	0.000043	U				0.0023	0.0023	U			
MH-MSD106	10560315	GW0125-051121	10560315004	5/11/2021	FG	B	0.000045	0.000045	U,MD			E	0.0003	0.000043				E	6.6	0.23	P6			E
MH-MSD108	10560315	GW0126-051121	10560315005	5/11/2021	FG	B	0.000045	0.000045	U,MD			E	0.00083	0.000043				E	11.5	0.23				E
MH-MSD110	10560315	GW0127-051121	10560315006	5/11/2021	FG	B	0.000045	0.000045	U,MD			E	0.0059	0.000043				E	31.7	1.1				E
MH-MSD113	10560315	GW0128-051121	10560315007	5/11/2021	FG	B	0.000045	0.000045	U,MD			E	0.013	0.000043				E	40	1.1				E
MH-MSD116	10560315	GW0129-051121	10560315008	5/11/2021	FG	B	0.000045	0.000045	U,MD			E	0.064	0.00022				E	169	1.1				E
AMW-13	10580635	GW0001-092321	10580635001	9/23/2021	FG	B	0.0000047	0.0000047	U			E	0.000067	0.000028	J			E	0.59	0.039				E
AMW-13B	10580635	GW0002-092321	10580635002	9/23/2021	FG	B	0.0000047	0.0000047	U			E	0.000028	0.000028	U			E	0.024	0.002				E
AMW-13B2	10580635	GW0003-092321	10580635003	9/23/2021	FG	B	0.0000047	0.0000047	U			E	0.000028	0.000028	U			E	0.046	0.002				E
AMW-13C	10580635	GW0004-092321	10580635004	9/23/2021	FG	B	0.0000047	0.0000047	U			E	0.000028	0.000028	U			E	0.16	0.002				E
BPS07-16A	10580635	GW0005-092421	10580635005	9/24/2021	FG	B	0.0000047	0.0000047	U			E	0.000028	0.000028	U			E	0.62	0.039				E
BPS07-16B	10580635	GW0006-092421	10580635006	9/24/2021	FG	B	0.0000047	0.0000047	U			E	0.000028	0.000028	U			E	0.0082	0.002				E
BPS11-11A1	10580635	GW0007-092421	10580635007	9/24/2021	FG	B	0.0000047	0.0000047	U			E	0.00012	0.000028				E	0.12	0.002				E
BPS11-11A2	10580635	GW0008-092421	10580635008	9/24/2021	FG-N	B	0.0000047	0.0000047	U			E	0.000028	0.000028	U			E	0.016	0.002				E
BPS11-11A2	10580635	GW0009-092421	10580635009	9/24/2021	FG-D	B	0.0000047	0.0000047	U				0.00012	0.000028					0.017	0.002				
GWQC	10580635	GW0010-092421	10580635010	9/24/2021	FB	B	0.0000047	0.0000047	U				0.000028	0.000028	U				0.002	0.002	U			
BPS11-11B	10580635	GW0011-092421	10580635011	9/24/2021	FG	B	0.0000047	0.0000047	U			E	0.000068	0.000028	J			E	0.18	0.002				E
BPS11-11C	10580635	GW0012-092421	10580635012	9/24/2021	FG	B	0.0000047	0.0000047	U			E	0.000041	0.000028	J			E	0.014	0.002				E
BPS11-19A2	10580635	GW0013-092421	10580635013	9/24/2021	FG	B	0.0000047	0.0000047	U			E	0.000034	0.000028	J			E	0.068	0.002				E
BPS11-19B	10580635	GW0014-092421	10580635014	9/24/2021	FG	B	0.0000047	0.0000047	U			E	0.00012	0.000028				E	0.41	0.002				E
BPS07-05B	10580635	GW0015-092421	10580635015	9/24/2021	FG	B	0.0000047	0.0000047	U			E	0.000028	0.000028	U			E	0.0035	0.002	J			E
BPS07-05A	10580635	GW0016-092421	10580635016	9/24/2021	FG	B	0.0000047	0.0000047	U			E	0.000033	0.000028	J			E	0.002	0.002	U			E
BPS07-01A	10580635	GW0017-092421	10580635017	9/24/2021	FG	B	0.0000047	0.0000047	U			E	0.000043	0.000028	J	UJ	FB	S	0.002	0.002	U			E
BPS07-01B	10580635	GW0018-092421	10580635018	9/24/2021	FG	B	0.0000047	0.0000047	U			E	0.000039	0.000028	J	UJ	FB	S	0.045	0.002				E
BPS11-15	10580635	GW0019-092421	10580635019	9/24/2021	FG	B	0.0000047	0.0000047	U			E	0.000034	0.000028	J	UJ	FB	S	0.0076	0.002				E
BPS11-16	10580635	GW0020-092421	10580635020	9/24/2021	FG-N	B	0.0000047	0.0000047	U			E	0.000042	0.000028	J	UJ	FB	S	0.0077	0.002				E
BPS11-16	10580635	GW0021-092421	10580635021	9/24/2021	FG-D	B	0.0000047	0.0000047	U				0.000045	0.000028	J	UJ	FB		0.0069	0.002				
GWQC	10580635	GW0022-092421	10580635022	9/24/2021	FB	B	0.0000047	0.0000047	U				0.000058	0.000028	J				0.002	0.002	U			
BPS11-12A	10580635	GW0023-092421	10580635023	9/24/2021	FG	B	0.0000047	0.0000047	U			E	0.000028	0.000028	U			E	0.024	0.002				E
BT-98-02B	10580635	GW0024-092421	10580635024	9/24/2021	FG	B	0.0000047	0.0000047	U			E	0.000028	0.000028	U			E	0.054	0.002				E

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Table B2. BPSOU 2021 Groundwater Monitoring Water Quality Results - Dissolved Metals

Location	SDG	Field Sample ID	Lab Sample ID	Monitoring Date	Sample Type	AB	AsDis (mg/L)	MDL (mg/L)	Lab Q	Val Q	DV Code	Status	CdDis (mg/L)	MDL (mg/L)	Lab Q	Val Q	DV Code	Status	CuDis (mg/L)	MDL (mg/L)	Lab Q	Val Q	DV Code	Status
BT-98-02	10580635	GW0025-092421	10580635025	9/24/2021	FG	B	0.00095	0.000083				E	0.0089	0.000016				E	0.0069	0.0005				E
BPS07-18A	10581934	GW0026-092721	10581934001	9/27/2021	FG	B	0.22	0.000083				E	0.000087	0.000016				E	0.0012	0.0005				E
BPS07-18B	10581934	GW0027-092721	10581934002	9/27/2021	FG	B	0.25	0.000083				E	0.000041	0.000016	J			E	0.00066	0.0005	J			E
BPS07-17A	10581934	GW0028-092721	10581934003	9/27/2021	FG	B	0.085	0.000083				E	0.0074	0.000016				E	0.078	0.0005				E
HCA-B2	10581934	GW0029-092721	10581934004	9/27/2021	FG	B	0.051	0.000083				E	0.000016	0.000016	U			E	0.0005	0.0005	U			E
HCA-B1	10581934	GW0030-092721	10581934005	9/27/2021	FG	B	0.0011	0.000083				E	0.036	0.000016				E	1.6	0.005				E
BMW-03A	10581934	GW0031-092721	10581934006	9/27/2021	FG	B	0.092	0.000083				E	0.000016	0.000016	U			E	0.0005	0.0005	U			E
BMW-03B	10581934	GW0032-092721	10581934007	9/27/2021	FG	B	0.0061	0.000083				E	0.00012	0.000016				E	0.0005	0.0005	U			E
FP98-6	10581934	GW0033-092821	10581934008	9/28/2021	FG	B	0.35	0.000083				E	0.0028	0.000016				E	0.0016	0.0005				E
FP98-2	10581934	GW0034-092821	10581934009	9/28/2021	FG	B	0.0019	0.000083				E	0.024	0.000016				E	0.003	0.0005				E
BPS07-25	10581934	GW0035-092821	10581934010	9/28/2021	FG	B	0.023	0.000083				E	0.0034	0.000016				E	0.082	0.0005				E
GS-13A	10581934	GW0036-092821	10581934011	9/28/2021	FG	B	0.022	0.000083				E	0.0094	0.000016				E	0.18	0.0005				E
AMW-02	10581934	GW0037-092921	10581934012	9/29/2021	FG	B	0.0062	0.000083				E	0.0077	0.000016				E	0.011	0.0005				E
BPS07-08A	10581934	GW0038-092821	10581934013	9/28/2021	FG	B	0.021	0.000083				E	0.0079	0.000016				E	0.076	0.0005				E
BPS11-01	10581934	GW0039-092921	10581934014	9/29/2021	FG-N	B	0.061	0.000083				E	0.00041	0.000016				E	0.0014	0.0005				E
BPS11-01	10581934	GW0040-092921	10581934015	9/29/2021	FG-D	B	0.06	0.000083					0.00036	0.000016					0.0013	0.0005				
GWQC	10581934	GW0041-092921	10581934016	9/29/2021	FB	B	0.000083	0.000083	U				0.000016	0.000016	U				0.0005	0.0005	U			
BPS11-02	10581934	GW0042-092921	10581934017	9/29/2021	FG	B	0.0032	0.000083				E	0.0021	0.000016				E	0.0062	0.0005				E
BPS11-07	10581934	GW0043-092921	10581934018	9/29/2021	FG	B	0.022	0.000083				E	0.0016	0.000016				E	0.0039	0.0005				E
BPS11-08	10581934	GW0044-092921	10581934019	9/29/2021	FG	B	0.0011	0.000083				E	0.000063	0.000016	J			E	0.00062	0.0005	J			E
BPS11-05A1	10581934	GW0045-092921	10581934020	9/29/2021	FG	B	0.055	0.000083				E	0.0028	0.000016				E	0.094	0.0005				E
BPS11-05A2	10581934	GW0046-092921	10581934021	9/29/2021	FG	B	0.0034	0.000083				E	0.00082	0.000016				E	0.0012	0.0005				E
BPS11-06	10581934	GW0047-092921	10581934022	9/29/2021	FG	B	0.11	0.000083				E	0.0027	0.000016				E	0.052	0.0005				E
AMW-12	10581942	GW0048-092721	10581942001	9/27/2021	FG	B	0.0036	0.000083				E	0.00012	0.000016				E	0.0027	0.0005				E
AMC-13	10581942	GW0049-092721	10581942002	9/27/2021	FG	B	0.00063	0.000083				E	0.000029	0.000016	J			E	0.0005	0.0005	U			E
BPS11-03	10581942	GW0050-092421	10581942003	9/24/2021	FG	B	0.0043	0.000083				E	0.0067	0.000016				E	0.0076	0.0005				E
BPS11-04	10581942	GW0051-092721	10581942004	9/27/2021	FG	B	0.021	0.000083				E	0.0003	0.000016				E	0.0005	0.0005	U			E
BPS11-09	10581942	GW0052-092721	10581942005	9/27/2021	FG	B	0.0045	0.000083				E	0.00034	0.000016				E	0.0013	0.0005				E
GS-46D	10581942	GW0053-092821	10581942006	9/28/2021	FG	B	0.00059	0.000083				E	0.00045	0.000016				E	0.0059	0.0005				E
GS-46S	10581942	GW0054-092821	10581942007	9/28/2021	FG	B	0.0019	0.000083				E	0.0011	0.000016				E	0.0075	0.0005				E
MF-11	10581942	GW0055-092821	10581942008	9/28/2021	FG-N	B	0.0047	0.000083				E	0.00073	0.000016				E	0.0056	0.0005				E
MF-11	10581942	GW0056-092821	10581942009	9/28/2021	FG-D	B	0.0044	0.000083					0.0007	0.000016					0.0052	0.0005				
GWQC	10581942	GW0057-092821	10581942010	9/28/2021	FB	B	0.000083	0.000083	U				0.00002	0.000016	J				0.0005	0.0005	U			
MSD-04	10581942	GW0058-092821	10581942011	9/28/2021	FG	B	0.0012	0.000083				E	0.0029	0.000016				E	0.0032	0.0005				E
AMC-24	10581942	GW0059-092921	10581942012	9/29/2021	FG	B	0.00095	0.000083				E	0.0017	0.000016				E	0.0022	0.0005				E
AMC-24B	10581942	GW0060-093021	10581942013	9/30/2021	FG	B	0.0041	0.000083				E	0.0054	0.000016				E	0.13	0.0005				E
AMC-24C	10581942	GW0061-092821	10581942014	9/28/2021	FG	B	0.0066	0.000083				E	0.0036	0.000016				E	0.052	0.0005				E
GS-31D	10581942	GW0062-092821	10581942015	9/28/2021	FG	B	0.0012	0.000083				E	0.00093	0.000016				E	0.0024	0.0005				E
GS-31S	10581942	GW0063-092821	10581942016	9/28/2021	FG	B	0.0023	0.000083				E	0.00035	0.000016				E	0.0022	0.0005				E
GS-44D	10581942	GW0064-092821	10581942017	9/28/2021	FG	B	0.00092	0.000083				E	0.027	0.000016				E	1.4	0.01				E
GS-44S	10581942	GW0065-092821	10581942018	9/28/2021	FG	B	0.00036	0.000083	J			E	0.012	0.000016				E	0.36	0.0005				E
MF-09	10581942	GW0066-092821	10581942019	9/28/2021	FG	B	0.003	0.000083				E	0.036	0.000016				E	0.33	0.0005				E
BPS07-03A	10581942	GW0067-093021	10581942020	9/30/2021	FG	B	0.00069	0.000083				E	0.00022	0.000016				E	0.0015	0.0005				E
BPS07-07	10581942	GW0068-093021	10581942021	9/30/2021	FG	B	0.0076	0.000083				E	0.00008	0.000016				E	0.0014	0.0005				E
BPS07-21	10581942	GW0069-093021	10581942022	9/30/2021	FG	B	0.6	0.0017				E	0.00012	0.000016				E	0.0021	0.0005				E
BPS07-13A	10582495	GW0070-093021	10582495001	9/30/2021	FG	B	0.05	0.000083				E	0.034	0.000016				E	1	0.05				E
BPS07-13B	10582495	GW0071-093021	10582495002	9/30/2021	FG	B	0.033	0.000083				E	0.0013	0.000016				E	0.0045	0.0005				E
BPS07-15A	10582495	GW0072-093021	10582495003	9/30/2021	FG	B	0.3	0.000083				E	0.0032	0.000016				E	0.014	0.0005				E
BPS07-14A	10582495	GW0073-093021	10582495004	9/30/2021	FG	B	0.032	0.000083				E	0.0026	0.000016				E	0.014	0.0005				E
FP98-1B	10582495	GW0074-093021	10582495005	9/30/2021	FG-N	B	0.0012	0.000083				E	0.0053	0.000016				E	0.0033	0.0005				E
FP98-1B	10582495	GW0075-093021	10582495006	9/30/2021	FG-D	B	0.0013	0.000083					0.0056	0.000016					0.0031	0.0005				

See Table B3 for laboratory and validation qualifer and code definitions

Table B2. BPSOU 2021 Groundwater Monitoring Water Quality Results - Dissolved Metals

Location	SDG	Field Sample ID	Lab Sample ID	Monitoring Date	Sample Type	AB	HgDis (mg/L)	MDL (mg/L)	Lab Q	Val Q	DV Code	Status	PbDis (mg/L)	MDL (mg/L)	Lab Q	Val Q	DV Code	Status	ZnDis (mg/L)	MDL (mg/L)	Lab Q	Val Q	DV Code	Status
BT-98-02	10580635	GW0025-092421	10580635025	9/24/2021	FG	B	0.0000047	0.0000047	U			E	0.00008	0.000028	J	UJ	FB	S	2.7	0.02	P6			E
BPS07-18A	10581934	GW0026-092721	10581934001	9/27/2021	FG	B	0.000045	0.000045	U			E	0.00024	0.000028				E	1.4	0.02	P6			E
BPS07-18B	10581934	GW0027-092721	10581934002	9/27/2021	FG	B	0.000045	0.000045	U			E	0.00011	0.000028				E	8.7	0.039				E
BPS07-17A	10581934	GW0028-092721	10581934003	9/27/2021	FG	B	0.000045	0.000045	U			E	0.00036	0.000028				E	2.7	0.02				E
HCA-B2	10581934	GW0029-092721	10581934004	9/27/2021	FG	B	0.000045	0.000045	U			E	0.000028	0.000028	U			E	1.6	0.02				E
HCA-B1	10581934	GW0030-092721	10581934005	9/27/2021	FG	B	0.000045	0.000045	U			E	0.0013	0.000028				E	20.5	0.2				E
BMW-03A	10581934	GW0031-092721	10581934006	9/27/2021	FG	B	0.000045	0.000045	U			E	0.00013	0.000028				E	0.99	0.02				E
BMW-03B	10581934	GW0032-092721	10581934007	9/27/2021	FG	B	0.000045	0.000045	U			E	0.000028	0.000028	U			E	0.017	0.002				E
FP98-6	10581934	GW0033-092821	10581934008	9/28/2021	FG	B	0.000045	0.000045	U			E	0.00032	0.000028				E	0.9	0.002				E
FP98-2	10581934	GW0034-092821	10581934009	9/28/2021	FG	B	0.000045	0.000045	U			E	0.000028	0.000028	U			E	1.3	0.02				E
BPS07-25	10581934	GW0035-092821	10581934010	9/28/2021	FG	B	0.000045	0.000045	U			E	0.00037	0.000028				E	0.4	0.002				E
GS-13A	10581934	GW0036-092821	10581934011	9/28/2021	FG	B	0.002	0.000045				E	0.014	0.000028				E	1.5	0.02	P6			E
AMW-02	10581934	GW0037-092921	10581934012	9/29/2021	FG	B	0.000045	0.000045	U			E	0.00066	0.000028				E	3.2	0.039	P6			E
BPS07-08A	10581934	GW0038-092821	10581934013	9/28/2021	FG	B	0.000045	0.000045	U			E	0.00013	0.000028				E	0.19	0.002				E
BPS11-01	10581934	GW0039-092921	10581934014	9/29/2021	FG-N	B	0.000045	0.000045	U			E	0.000088	0.000028	J			E	0.0035	0.002	J			E
BPS11-01	10581934	GW0040-092921	10581934015	9/29/2021	FG-D	B	0.000045	0.000045	U				0.000089	0.000028	J				0.0036	0.002	J			
GWQC	10581934	GW0041-092921	10581934016	9/29/2021	FB	B	0.000045	0.000045	U				0.000028	0.000028	U				0.002	0.002	U			
BPS11-02	10581934	GW0042-092921	10581934017	9/29/2021	FG	B	0.000045	0.000045	U			E	0.00005	0.000028	J			E	0.13	0.002				E
BPS11-07	10581934	GW0043-092921	10581934018	9/29/2021	FG	B	0.000045	0.000045	U			E	0.000074	0.000028	J			E	0.13	0.002				E
BPS11-08	10581934	GW0044-092921	10581934019	9/29/2021	FG	B	0.000045	0.000045	U			E	0.000063	0.000028	J			E	0.019	0.002				E
BPS11-05A1	10581934	GW0045-092921	10581934020	9/29/2021	FG	B	0.000045	0.000045	U			E	0.00028	0.000028				E	0.94	0.02				E
BPS11-05A2	10581934	GW0046-092921	10581934021	9/29/2021	FG	B	0.000045	0.000045	U			E	0.000028	0.000028	U			E	0.079	0.002				E
BPS11-06	10581934	GW0047-092921	10581934022	9/29/2021	FG	B	0.000045	0.000045	U			E	0.000028	0.000028	U			E	0.23	0.002				E
AMW-12	10581942	GW0048-092721	10581942001	9/27/2021	FG	B	0.000045	0.000045	U			E	0.000055	0.000028	J			E	0.0026	0.002	J			E
AMC-13	10581942	GW0049-092721	10581942002	9/27/2021	FG	B	0.000045	0.000045	U			E	0.000028	0.000028	U			E	0.037	0.002				E
BPS11-03	10581942	GW0050-092421	10581942003	9/24/2021	FG	B	0.000045	0.000045	U			E	0.000037	0.000028	J			E	0.7	0.0098				E
BPS11-04	10581942	GW0051-092721	10581942004	9/27/2021	FG	B	0.000045	0.000045	U			E	0.000028	0.000028	U			E	0.019	0.002				E
BPS11-09	10581942	GW0052-092721	10581942005	9/27/2021	FG	B	0.000045	0.000045	U			E	0.000033	0.000028	J			E	0.042	0.002				E
GS-46D	10581942	GW0053-092821	10581942006	9/28/2021	FG	B	0.000045	0.000045	U			E	0.000028	0.000028	U			E	0.15	0.002				E
GS-46S	10581942	GW0054-092821	10581942007	9/28/2021	FG	B	0.000045	0.000045	U			E	0.00012	0.000028				E	0.15	0.002				E
MF-11	10581942	GW0055-092821	10581942008	9/28/2021	FG-N	B	0.000045	0.000045	U			E	0.000044	0.000028	J			E	0.085	0.002				E
MF-11	10581942	GW0056-092821	10581942009	9/28/2021	FG-D	B	0.000045	0.000045	U				0.000047	0.000028	J				0.078	0.002				
GWQC	10581942	GW0057-092821	10581942010	9/28/2021	FB	B	0.000045	0.000045	U				0.000035	0.000028	J				0.002	0.002	U			
MSD-04	10581942	GW0058-092821	10581942011	9/28/2021	FG	B	0.000045	0.000045	U			E	0.000046	0.000028	J			E	0.15	0.002				E
AMC-24	10581942	GW0059-092921	10581942012	9/29/2021	FG	B	0.000045	0.000045	U			E	0.000089	0.000028	J			E	0.82	0.0098				E
AMC-24B	10581942	GW0060-093021	10581942013	9/30/2021	FG	B	0.000045	0.000045	U			E	0.000068	0.000028	J			E	1.3	0.0098				E
AMC-24C	10581942	GW0061-092821	10581942014	9/28/2021	FG	B	0.000045	0.000045	U			E	0.00003	0.000028	J			E	0.39	0.002				E
GS-31D	10581942	GW0062-092821	10581942015	9/28/2021	FG	B	0.000045	0.000045	U			E	0.000028	0.000028	U			E	0.08	0.002				E
GS-31S	10581942	GW0063-092821	10581942016	9/28/2021	FG	B	0.000045	0.000045	U			E	0.00014	0.000028				E	0.0034	0.002	J			E
GS-44D	10581942	GW0064-092821	10581942017	9/28/2021	FG	B	0.000045	0.000045	U			E	0.000066	0.000028	J			E	7.5	0.039				E
GS-44S	10581942	GW0065-092821	10581942018	9/28/2021	FG	B	0.000045	0.000045	U			E	0.000045	0.000028	J			E	3.5	0.039				E
MF-09	10581942	GW0066-092821	10581942019	9/28/2021	FG	B	0.000053	0.000045	J			E	0.0051	0.000028				E	4	0.039				E
BPS07-03A	10581942	GW0067-093021	10581942020	9/30/2021	FG	B	0.000045	0.000045	U			E	0.000046	0.000028	J			E	0.051	0.002				E
BPS07-07	10581942	GW0068-093021	10581942021	9/30/2021	FG	B	0.000045	0.000045	U			E	0.00022	0.000028				E	0.022	0.002				E
BPS07-21	10581942	GW0069-093021	10581942022	9/30/2021	FG	B	0.000045	0.000045	U			E	0.0014	0.000028				E	0.3	0.002				E
BPS07-13A	10582495	GW0070-093021	10582495001	9/30/2021	FG	B	0.000045	0.000045	U			E	0.0002	0.000028				E	3.4	0.2				E
BPS07-13B	10582495	GW0071-093021	10582495002	9/30/2021	FG	B	0.000045	0.000045	U			E	0.000048	0.000028	J			E	0.092	0.002				E
BPS07-15A	10582495	GW0072-093021	10582495003	9/30/2021	FG	B	0.000045	0.000045	U			E	0.000071	0.000028	J			E	0.31	0.002				E
BPS07-14A	10582495	GW0073-093021	10582495004	9/30/2021	FG	B	0.000045	0.000045	U			E	0.0027	0.000028				E	3.8	0.2				E
FP98-1B	10582495	GW0074-093021	10582495005	9/30/2021	FG-N	B	0.000045	0.000045	U			E	0.000057	0.000028	J			E	0.58	0.039	P6			E
FP98-1B	10582495	GW0075-093021	10582495006	9/30/2021	FG-D	B	0.000045	0.000045	U				0.000043	0.000028	J				0.55	0.039				

See Table B3 for laboratory and validation qualifer and code definitions

Table B2. BPSOU 2021 Groundwater Monitoring Water Quality Results - Dissolved Metals

Location	SDG	Field Sample ID	Lab Sample ID	Monitoring Date	Sample Type	AB	AsDis (mg/L)	MDL (mg/L)	Lab Q	Val Q	DV Code	Status	CdDis (mg/L)	MDL (mg/L)	Lab Q	Val Q	DV Code	Status	CuDis (mg/L)	MDL (mg/L)	Lab Q	Val Q	DV Code	Status
GWQC	10582495	GW0076-093021	10582495007	9/30/2021	FB	B	0.000083	0.000083	U				0.000016	0.000016	U				0.0005	0.0005	U			
BPS07-21B	10582497	GW0092-093021	10582497001	9/30/2021	FG	B	0.0074	0.000083				E	0.0022	0.000016				E	0.0014	0.0005				E
BPS07-21C	10582497	GW0093-093021	10582497002	9/30/2021	FG	B	0.0066	0.000083				E	0.0023	0.000016				E	0.0005	0.0005	U			E
AMW-01B	10583409	GW0119-092421	10583409006	9/24/2021	FG	B	0.0018	0.000083				E	1.2	0.008				E	82.6	0.25				E
FP98-1	10582495	GW0077-100421	10582495008	10/4/2021	FG	B	0.31	0.000083				E	0.031	0.000016				E	0.079	0.0005				E
GS-30D	10582495	GW0078-100121	10582495009	10/1/2021	FG	B	0.0031	0.000083				E	0.033	0.000016				E	2.3	0.05				E
GS-30S	10582495	GW0079-100121	10582495010	10/1/2021	FG	B	0.013	0.000083				E	0.000016	0.000016	U			E	0.0005	0.0005	U			E
MSD-05	10582495	GW0080-100121	10582495011	10/1/2021	FG	B	0.004	0.000083				E	0.12	0.000016				E	12.7	0.05	P6			E
GS-32D	10582495	GW0081-100121	10582495012	10/1/2021	FG	B	0.0053	0.000083				E	0.025	0.000016				E	0.79	0.01				E
GS-32S	10582495	GW0082-100121	10582495013	10/1/2021	FG	B	0.0034	0.000083				E	0.017	0.000016				E	0.2	0.0005				E
GS-40R	10582495	GW0083-100421	10582495014	10/4/2021	FG	B	0.00078	0.000083				E	0.12	0.000016				E	0.19	0.0005				E
GS-08R	10582495	GW0084-100421	10582495015	10/4/2021	FG	B	0.0024	0.000083				E	0.003	0.000016				E	0.0012	0.0005				E
GS-09R	10582495	GW0085-100121	10582495016	10/1/2021	FG	B	0.0031	0.000083				E	0.17	0.000016				E	16.2	0.12				E
GS-11R	10582495	GW0086-100121	10582495017	10/1/2021	FG	B	0.00089	0.000083				E	0.97	0.008				E	41.2	0.25				E
MF-10	10582495	GW0087-100521	10582495018	10/5/2021	FG	B	0.021	0.000083				E	0.0038	0.000016				E	0.1	0.0005				E
MF-08	10582495	GW0088-100121	10582495019	10/1/2021	FG	B	0.00076	0.000083				E	0.0083	0.000016				E	0.044	0.0005				E
MSD-01B	10582495	GW0089-100521	10582495020	10/5/2021	FG	B	0.00081	0.000083				E	0.099	0.000016				E	0.69	0.05				E
MSD-01C	10582495	GW0090-100521	10582495021	10/5/2021	FG	B	0.00097	0.000083				E	0.086	0.000016				E	0.56	0.05				E
MSD-03	10582495	GW0091-100521	10582495022	10/5/2021	FG	B	0.0022	0.000083				E	0.081	0.000016				E	2.1	0.05				E
BPS07-22B	10582497	GW0094-100121	10582497003	10/1/2021	FG	B	0.0036	0.000083				E	0.0029	0.000016				E	0.016	0.0005				E
BPS07-22C	10582497	GW0095-100121	10582497004	10/1/2021	FG	B	0.0097	0.000083				E	0.00026	0.000016				E	0.0005	0.0005	U			E
BPS07-22R	10582497	GW0096-100121	10582497005	10/1/2021	FG	B	0.0084	0.000083				E	0.000016	0.000016	U			E	0.00056	0.0005	J			E
BPS07-23	10582497	GW0097-100121	10582497006	10/1/2021	FG	B	0.088	0.000083				E	0.000016	0.000016	U			E	0.0005	0.0005	U			E
BPS11-13B	10582497	GW0098-100121	10582497007	10/1/2021	FG-N	B	0.0019	0.000083				E	0.0035	0.000016				E	0.033	0.0005				E
BPS11-13B	10582497	GW0099-100121	10582497008	10/1/2021	FG-D	B	0.0019	0.000083					0.0035	0.000016					0.034	0.0005				
GWQC	10582497	GW0100-100121	10582497009	10/1/2021	FB	B	0.000083	0.000083	U				0.000016	0.000016	U				0.0005	0.0005	U			
BPS11-14A	10582497	GW0101-100121	10582497010	10/1/2021	FG	B	0.0012	0.000083				E	0.00027	0.000016				E	0.0024	0.0005				E
BPS11-14B	10582497	GW0102-100121	10582497011	10/1/2021	FG	B	0.0023	0.000083				E	0.012	0.000016				E	0.25	0.0005				E
BPS07-24	10582497	GW0103-100121	10582497012	10/1/2021	FG	B	0.01	0.000083				E	0.017	0.000016				E	0.81	0.01				E
BPS07-11A	10582497	GW0104-100121	10582497013	10/1/2021	FG	B	0.00052	0.000083				E	0.025	0.000016				E	0.28	0.0005				E
BPS07-11B	10582497	GW0105-100121	10582497014	10/1/2021	FG	B	0.00052	0.000083				E	0.086	0.000016				E	0.72	0.05				E
BPS11-10B	10582497	GW0106-100421	10582497015	10/4/2021	FG	B	0.0065	0.000083				E	0.0083	0.000016				E	0.18	0.0005				E
BPS11-10C	10582497	GW0107-100421	10582497016	10/4/2021	FG	B	0.0034	0.000083				E	0.0021	0.000016				E	0.0011	0.0005				E
AMW-20	10583409	GW0108-100721	10583409010	10/7/2021	FG	B	0.00064	0.000083				E	0.044	0.000016				E	2.5	0.05				E
AMC-23B	10582497	GW0109-100421	10582497017	10/4/2021	FG	B	0.01	0.000083				E	0.011	0.000016				E	0.0057	0.0005				E
BPS11-17C	10582497	GW0110-100421	10582497018	10/4/2021	FG	B	0.0057	0.000083				E	0.01	0.000016				E	0.78	0.01				E
MF-07	10582497	GW0111-100421	10582497019	10/4/2021	FG	B	0.0038	0.000083				E	0.027	0.000016				E	0.1	0.0005				E
BPS11-18B	10582497	GW0112-100421	10582497020	10/4/2021	FG	B	0.0016	0.000083				E	0.79	0.008				E	21.8	0.25				E
BPS11-18C	10582497	GW0113-100421	10582497021	10/4/2021	FG	B	0.0039	0.000083				E	0.1	0.000016				E	5	0.05				E
AMC-12	10583409	GW0114-100521	10583409001	10/5/2021	FG	B	0.0004	0.000083	J			E	0.11	0.000016				E	2.2	0.05	P6			E
AMW-08	10583409	GW0115-100521	10583409002	10/5/2021	FG-N	B	0.023	0.00041				E	0.065	0.00008				E	1.7	0.12				E
AMW-08	10583409	GW0116-100521	10583409003	10/5/2021	FG-D	B	0.024	0.00041					0.069	0.00008					1.8	0.12				
GWQC	10583409	GW0117-100521	10583409004	10/5/2021	FB	B	0.000083	0.000083	U				0.000016	0.000016	J				0.0025	0.0005				
AMW-01A	10583409	GW0118-100721	10583409005	10/7/2021	FG	B	0.0075	0.000083				E	0.021	0.000016				E	0.04	0.0005				E
AMW-01C	10583409	GW0120-100521	10583409007	10/5/2021	FG	B	0.0082	0.000083				E	0.13	0.000016				E	6.3	0.05				E
MSD-02A	10583409	GW0121-100621	10583409008	10/6/2021	FG	B	0.0014	0.000083				E	0.04	0.000016				E	0.15	0.0005				E
MSD-02B	10583409	GW0122-100621	10583409009	10/6/2021	FG	B	0.002	0.000083				E	1	0.004				E	34.3	0.12				E

See Table B3 for laboratory and validation qualifer and code definitions

Table B2. BPSOU 2021 Groundwater Monitoring Water Quality Results - Dissolved Metals

Location	SDG	Field Sample ID	Lab Sample ID	Monitoring Date	Sample Type	AB	HgDis (mg/L)	MDL (mg/L)	Lab Q	Val Q	DV Code	Status	PbDis (mg/L)	MDL (mg/L)	Lab Q	Val Q	DV Code	Status	ZnDis (mg/L)	MDL (mg/L)	Lab Q	Val Q	DV Code	Status
GWQC	10582495	GW0076-093021	10582495007	9/30/2021	FB	B	0.000045	0.000045	U				0.000028	0.000028	U				0.002	0.002	U			
BPS07-21B	10582497	GW0092-093021	10582497001	9/30/2021	FG	B	0.000045	0.000045	U			E	0.000035	0.000028	J			E	0.19	0.002				E
BPS07-21C	10582497	GW0093-093021	10582497002	9/30/2021	FG	B	0.000045	0.000045	U			E	0.000095	0.000028	J			E	0.19	0.002				E
AMW-01B	10583409	GW0119-092421	10583409006	9/24/2021	FG	B	0.000045	0.000045	U			E	0.0065	0.000028				E	199	0.98				E
FP98-1	10582495	GW0077-100421	10582495008	10/4/2021	FG	B	0.000045	0.000045	U			E	0.000071	0.000028	J			E	18.8	0.2				E
GS-30D	10582495	GW0078-100121	10582495009	10/1/2021	FG	B	0.000045	0.000045	U			E	0.000091	0.000028	J			E	8.3	0.2				E
GS-30S	10582495	GW0079-100121	10582495010	10/1/2021	FG	B	0.000045	0.000045	U			E	0.000028	0.000028	U			E	0.002	0.002	U			E
MSD-05	10582495	GW0080-100121	10582495011	10/1/2021	FG	B	0.000066	0.000045	J			E	0.000047	0.000028	J			E	42	0.98	P6			E
GS-32D	10582495	GW0081-100121	10582495012	10/1/2021	FG	B	0.000045	0.000045	U			E	0.00023	0.000028				E	6.6	0.039				E
GS-32S	10582495	GW0082-100121	10582495013	10/1/2021	FG	B	0.000045	0.000045	U			E	0.000043	0.000028	J			E	3.2	0.039				E
GS-40R	10582495	GW0083-100421	10582495014	10/4/2021	FG	B	0.000045	0.000045	U			E	0.0013	0.000028				E	50.7	0.49				E
GS-08R	10582495	GW0084-100421	10582495015	10/4/2021	FG	B	0.000045	0.000045	U			E	0.000052	0.000028	J			E	0.1	0.002				E
GS-09R	10582495	GW0085-100121	10582495016	10/1/2021	FG	B	0.00009	0.000045	J			E	0.000031	0.000028	J			E	70.3	0.49				E
GS-11R	10582495	GW0086-100121	10582495017	10/1/2021	FG	B	0.000045	0.000045	U			E	0.69	0.014				E	151	0.98				E
MF-10	10582495	GW0087-100521	10582495018	10/5/2021	FG	B	0.000045	0.000045	U			E	0.00023	0.000028				E	23.7	0.2				E
MF-08	10582495	GW0088-100121	10582495019	10/1/2021	FG	B	0.000045	0.000045	U			E	0.0011	0.000028				E	1.4	0.039	P6			E
MSD-01B	10582495	GW0089-100521	10582495020	10/5/2021	FG	B	0.000045	0.000045	U			E	0.0065	0.000028				E	43.7	0.2				E
MSD-01C	10582495	GW0090-100521	10582495021	10/5/2021	FG	B	0.000045	0.000045	U			E	0.0006	0.000028				E	23.6	0.2				E
MSD-03	10582495	GW0091-100521	10582495022	10/5/2021	FG	B	0.000045	0.000045	U			E	0.0045	0.000028				E	25.1	0.2				E
BPS07-22B	10582497	GW0094-100121	10582497003	10/1/2021	FG	B	0.000045	0.000045	U			E	0.000028	0.000028	U			E	0.27	0.002				E
BPS07-22C	10582497	GW0095-100121	10582497004	10/1/2021	FG	B	0.000045	0.000045	U			E	0.000028	0.000028	U			E	0.021	0.002				E
BPS07-22R	10582497	GW0096-100121	10582497005	10/1/2021	FG	B	0.000045	0.000045	U			E	0.000099	0.000028	J			E	0.0021	0.002	J			E
BPS07-23	10582497	GW0097-100121	10582497006	10/1/2021	FG	B	0.000045	0.000045	U			E	0.0002	0.000028				E	0.023	0.002				E
BPS11-13B	10582497	GW0098-100121	10582497007	10/1/2021	FG-N	B	0.000045	0.000045	U			E	0.000028	0.000028	U			E	0.48	0.039				E
BPS11-13B	10582497	GW0099-100121	10582497008	10/1/2021	FG-D	B	0.000045	0.000045	U				0.00006	0.000028	J				0.53	0.039				
GWQC	10582497	GW0100-100121	10582497009	10/1/2021	FB	B	0.000045	0.000045	U				0.000028	0.000028	U				0.002	0.002	U			
BPS11-14A	10582497	GW0101-100121	10582497010	10/1/2021	FG	B	0.000045	0.000045	U			E	0.000028	0.000028	U			E	0.02	0.002				E
BPS11-14B	10582497	GW0102-100121	10582497011	10/1/2021	FG	B	0.000045	0.000045	U			E	0.00008	0.000028	J			E	2.9	0.039				E
BPS07-24	10582497	GW0103-100121	10582497012	10/1/2021	FG	B	0.000045	0.000045	U			E	0.000028	0.000028	U			E	4.1	0.039				E
BPS07-11A	10582497	GW0104-100121	10582497013	10/1/2021	FG	B	0.000045	0.000045	U			E	0.000029	0.000028	J			E	3.4	0.039	P6			E
BPS07-11B	10582497	GW0105-100121	10582497014	10/1/2021	FG	B	0.000045	0.000045	U			E	0.002	0.000028				E	19.6	0.2				E
BPS11-10B	10582497	GW0106-100421	10582497015	10/4/2021	FG	B	0.000045	0.000045	U			E	0.000083	0.000028	J			E	1.3	0.039				E
BPS11-10C	10582497	GW0107-100421	10582497016	10/4/2021	FG	B	0.000045	0.000045	U			E	0.000028	0.000028	U			E	0.16	0.002				E
AMW-20	10583409	GW0108-100721	10583409010	10/7/2021	FG	B	0.000045	0.000045	U			E	0.00029	0.000028				E	10.1	0.2				E
AMC-23B	10582497	GW0109-100421	10582497017	10/4/2021	FG	B	0.000045	0.000045	U			E	0.00022	0.000028				E	0.91	0.039				E
BPS11-17C	10582497	GW0110-100421	10582497018	10/4/2021	FG	B	0.000045	0.000045	U			E	0.000033	0.000028	J			E	2.1	0.039				E
MF-07	10582497	GW0111-100421	10582497019	10/4/2021	FG	B	0.000045	0.000045	U			E	0.000056	0.000028	J			E	9	0.2				E
BPS11-18B	10582497	GW0112-100421	10582497020	10/4/2021	FG	B	0.000045	0.000045	U			E	0.017	0.000028				E	219	0.98				E
BPS11-18C	10582497	GW0113-100421	10582497021	10/4/2021	FG	B	0.000045	0.000045	U			E	0.00034	0.000028				E	31.8	0.2				E
AMC-12	10583409	GW0114-100521	10583409001	10/5/2021	FG	B	0.000045	0.000045	U			E	0.00064	0.000028				E	28.5	0.2	P6			E
AMW-08	10583409	GW0115-100521	10583409002	10/5/2021	FG-N	B	0.000045	0.000045	U			E	0.015	0.00014				E	374	9.8				E
AMW-08	10583409	GW0116-100521	10583409003	10/5/2021	FG-D	B	0.000045	0.000045	U				0.015	0.00014					431	9.8				
GWQC	10583409	GW0117-100521	10583409004	10/5/2021	FB	B	0.000045	0.000045	U				0.000028	0.000028	U				0.003	0.002	J			
AMW-01A	10583409	GW0118-100721	10583409005	10/7/2021	FG	B	0.000045	0.000045	U			E	0.001	0.000028				E	3.8	0.039				E
AMW-01C	10583409	GW0120-100521	10583409007	10/5/2021	FG	B	0.000045	0.000045	U			E	0.000064	0.000028	J			E	29.7	0.2				E
MSD-02A	10583409	GW0121-100621	10583409008	10/6/2021	FG	B	0.000045	0.000045	U			E	0.00084	0.000028				E	6.4	0.039				E
MSD-02B	10583409	GW0122-100621	10583409009	10/6/2021	FG	B	0.000045	0.000045	U			E	0.011	0.000028				E	214	9.8				E

See Table B3 for laboratory and validation qualifer and code definitions

Table B3. Definitions of Data Flags, Data Qualifiers and Status Assessments

	Laboratory Flags[a]
1M	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
AB	Analyte was detected in an associated instrument blank.
AD	Analyte was detected in the method blank at a concentration greater than 2.2 times the MDL.
B	Analyte was detected in the associated method blank.
B0	Analyte was detected in an associated blank at a concentration greater than the MDL.
BC	The same analyte was detected in an associated blank at a concentration above 1/2 the reporting limit but below the laboratory reporting limit.
BH	Analyte was detected in an instrument blank. The result may be biased high.
BL	Analyte was detected in an instrument blank at a negative value. The result may be biased low.
C0	Result confirmed by second analysis.
C1	Result could not be confirmed by second analysis.
C7	Analyte is a possible laboratory contaminant (not present in method blank).
C8	Result may be biased high due to carryover from previously analyzed sample.
C9	Common Laboratory Contaminant.
CC	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The result may be biased.
CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
CL	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased low.
CR	The dissolved metal result was greater than the total metal result for this element. Results were confirmed by reanalysis.
CU	The continuing calibration for this analyte is above Pace Analytical acceptance limits. Analyte was not detected above the reporting limit in any of the associated samples.
D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
D4	Sample was diluted due to the presence of high levels of target analytes.
D6	The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.
D7	The sample and/or duplicate results for this parameter are less than the reporting limit, calculations are based on estimated values and may be statistically unreliable
D8	The sample and duplicate results for this parameter are less than 5 times the reporting limit, the RPD may not be statistically valid.
D9	Dissolved result is greater than the total. Data is within laboratory control limits.
E	Analyte concentration exceeded the calibration range. The reported result is estimated.
F5	The recovery of the analyte in the CRDL standard (also known as the reporting limit verification) did not meet the acceptance criteria.
FS	The sample was filtered in the laboratory prior to analysis.
H1	Analysis conducted outside the recognized method holding time.
H2	Extraction or preparation was conducted outside of the recognized method holding time.
H3	Sample was received or analysis requested beyond the recognized method holding time.
H4	Sample re-extracted and analyzed outside of EPA method holding time.
H5	Reanalysis conducted in excess of EPA method holding time. Results confirm original analysis performed in hold time.
H7	Re-extraction or re-analysis could not be performed within method holding time.
IC	The initial calibration for this compound was outside of method control limits. The result is estimated.
IH	This analyte exceeded secondary source verification criteria high for the initial calibration. The reported results should be considered an estimated value.
IL	This analyte exceeded secondary source verification criteria low for the initial calibration. The reported results should be considered an estimated value.
IO	The internal standard response was outside the laboratory acceptance limits confirmed by reanalysis. The results reported are from the most QC compliant analysis.
IR	The internal standard recovery associated with this result exceeds the upper control limit. The reported result should be considered an estimated value.
IS	The internal standard response is below criteria. Results may be biased high.
IU	The internal standard recoveries associated with this sample exceed the upper control limit. The reported results should be considered estimated values.
J	Analyte detected below reporting limit, therefore result is an estimate
L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results may be biased high.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
L3	Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
L5	LCS recovery exceeded QC limits. Batch accepted based on matrix spike recovery within LCS limits.
LS	Analyte recovery in the laboratory control sample (LCS) was outside QC limits for one or more of the constituent analytes used in the calculated result.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
M2	Matrix spike recovery was below QC limits due to sample dilution. Data acceptance based on laboratory control sample (LCS) recovery.
M3	Matrix spike recovery was outside laboratory control limits due to matrix interferences.
M4	A matrix spike/matrix spike duplicate was not performed for this batch due to sample dilution.
M6	Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.
MA	Result determined by method of standard addition.
MD	The analyte was not detected at or above the Method Detection Limit.
MH	Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

Table B3. Definitions of Data Flags, Data Qualifiers and Status Assessments

ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
MS	Analyte recovery in the matrix spike was outside QC limits for one or more of the constituent analytes used in the calculated result.
N	Tentatively identified compound (TIC) based on mass spectral library search
P4	Sample field preservation does not meet EPA or method recommendations for this analysis.
P5	The EPA or method required sample preservation degrades this compound, therefore acceptable recoveries may not be achieved in sample matrix spikes.
P6	Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.
P7	This spike was performed as a post digestion spike.
P8	Analyte was detected in the method blank. All associated samples had concentrations of at least ten times greater than the blank or were below the reporting limit.
PI	The precision between the sample and the duplicate sample exceeded laboratory control limits.
R1	RPD value was outside control limits.
R2	RPD value was outside control limits due to matrix interference
R3	RPD value was outside control limits due to uncertainty of values at or near the PRL.
RS	The RPD value in one of the constituent analytes was outside the control limits.
SD	The serial dilution and the original analysis did not agree within ±10%. The concentration is estimated due to a suspected chemical or physical interference.
TP	The samples were received outside of required temperature range. Analysis was completed upon client approval.
TV	Analysis conducted outside EPA method holding time. Results may be biased low.
TW	Dissolved result is greater than the total. Data is within laboratory control limits, however the RPD between the total and dissolved result is >20%.
W	Non-detect results are reported on a wet weight basis.
Z2	Analyte present in the associated method blank above the detection limit.
REV_X	Revision X - This report replaces the Month, DD, YYYY report. This project was revised on Month, DD, YYYY <REASON>. (Lab city, State)
SubCert	This report contains data that were produced by a subcontracted laboratory certified for the fields of testing performed.
TO	Samples requiring thermal preservation were received outside of recommended temperature limits of 0-6 degrees Celsius.
TP	Samples were received outside of required temperature range. Analysis was completed upon client approval.
TQ	Samples were received outside of required temperature range of 0-6 degrees Celsius. The samples were received from the field on ice.
C0	Results confirmed by second analysis.
IQ	The internal standard recoveries associated with this sample exceed the lower control limit. The reported results should be considered estimated values.
IU	The internal standard recoveries associated with this sample exceed the upper control limit. The reported results should be considered estimated values.
sb	Client sample ID on container did not match COC; client was notified.
sd	date - Added 3ml HNO3 to Metals bottle prior to analysis. pH <2.
se	Sample collection dates and times were not present on the sample containers.
sf	Sample collection dates and times were not listed on the COC.
sg	Sample collection time on containers does not match COC; client was notified.
sh	The sampler's name and signature were not listed on the COC.
sl	Sample was received outside the recognized method holding time; client notified and approved.
sm	A Chain of Custody was not received with samples; client was contacted.
	Data Validation Qualifiers[b]
U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.
	Data Validation Descriptors[c]
AB	Did not meet level A/B criteria
CC	Correlation coefficient less than 0.995 for instrument calibration
CCV	Continuing calibration verification outside limits
CCB	Continuing calibration blank contamination
COM	Not comparable to historical data
CQ	No calibration performed
CRQL	Contract required quantitation limit standard recovery outside quality control limits
DNR	Do not report. An alternate, acceptable result is available.
ECR	Reported concentration exceeds instrument calibration range
FB	Field blank contamination
FD	Field duplicate RPD outside limits
HT	Holding time exceeded
ICB	Initial calibration blank contamination
ICS	Interference check standard recovery outside limits
ICV	Initial calibration verification outside limits
IP	Incorrect sample preservation
IS	Internal standard recovery outside limits

Table B3. Definitions of Data Flags, Data Qualifiers and Status Assessments

LCS	Lab control spike recovery is outside quality control limits
MB	Method blank contamination
MI	Matrix interference with analyte quantitation
MDL	Non-detect at MDL value
MS	Matrix spike recovery is outside quality control limits
RB	Equipment rinse blank contamination
RL	Laboratory detected result below reporting limit
RPD	Duplicate sample relative percent difference exceeds QC limits
SD	ICP serial dilution percent difference outside QC limits
SIC	Sample integrity compromised
SUR	Surrogate recovery is outside QC limits
TB	Trip blank contamination
TIC	Compound was tentatively identified by GC/MS search
	CFRSSI Status[d]
E	Enforcement quality data are data with unrestricted use, meet Level A/B criteria, and are NOT qualified during the data validation process
S	Screening quality data are data whose associated values are estimated or meet only Level A criteria
R	Unusable data are data whose associated numerical values are so questionable it is recommended that they not be used
	Level A/B Screening Results[d]
A	Meets only Level A Screening criteria, but does not meet Level B Screening criteria, including proper techniques
B	Meets both Level A and Level B criteria, including field replicates and proper documentation

[a] Assigned by Pace Analytical Services, Inc.

[b] Adapted from US EPA 2017. Laboratory Data Validation National Functional Guidelines for Inorganic Data Review; EPA, January, 2017)

[c] Assigned by TREC, Inc. during data validation

[d] Defined in Clark Fork River Superfund Site Investigations Data Management/Data Validation Plan; ARCO, May 1992)

Table B5a. BPSOU 2021 Groundwater Data Quality Assessment - Field Duplicates

Location	Monitoring Date	Natural Field ID	Natural Lab ID	SDG	Parameter	Unit	Natural Value	Natural MDL	Natural RL	Duplicate Field ID	Duplicate Lab ID	Duplicate Value	Duplicate MDL	Duplicate RL	RPD %	Δ (<5X RL)
AMW-02	2021-04-27	GW0032-042721	10558077032	10558077	PbDis	mg/L	0.00089	0.000043	0.0001	GW0033-042721	10558077033	0.00079	0.000043	0.0001	11.9	
AMW-02	2021-04-27	GW0032-042721	10558077032	10558077	AsDis	mg/L	0.014	0.00014	0.0005	GW0033-042721	10558077033	0.014	0.00014	0.0005	0	
AMW-02	2021-04-27	GW0032-042721	10558077032	10558077	CdDis	mg/L	0.0048	0.00003	0.00008	GW0033-042721	10558077033	0.0045	0.00003	0.00008	6.45	
AMW-02	2021-04-27	GW0032-042721	10558077032	10558077	CuDis	mg/L	0.0088	0.00043	0.001	GW0033-042721	10558077033	0.0081	0.00043	0.001	8.28	
AMW-02	2021-04-27	GW0032-042721	10558077032	10558077	ZnDis	mg/L	1	0.023	0.05	GW0033-042721	10558077033	0.98	0.023	0.05	2.02	
AMW-02	2021-04-27	GW0032-042721	10558077032	10558077	HgDis	mg/L	0.000023	0.0000045	0.00001	GW0033-042721	10558077033	0.000019	0.0000045	0.00001	19.05	0.000004
MF-09	2021-04-28	GW0016-042821	10558077016	10558077	PbDis	mg/L	0.0037	0.000043	0.0001	GW0017-042821	10558077017	0.0038	0.000043	0.0001	2.67	
MF-09	2021-04-28	GW0016-042821	10558077016	10558077	AsDis	mg/L	0.0029	0.00014	0.0005	GW0017-042821	10558077017	0.003	0.00014	0.0005	3.39	
MF-09	2021-04-28	GW0016-042821	10558077016	10558077	CdDis	mg/L	0.082	0.00003	0.00008	GW0017-042821	10558077017	0.084	0.00003	0.00008	2.41	
MF-09	2021-04-28	GW0016-042821	10558077016	10558077	CuDis	mg/L	0.64	0.00043	0.001	GW0017-042821	10558077017	0.67	0.00043	0.001	4.58	
MF-09	2021-04-28	GW0016-042821	10558077016	10558077	ZnDis	mg/L	9.1	0.23	0.5	GW0017-042821	10558077017	9.1	0.23	0.5	0	
MF-09	2021-04-28	GW0016-042821	10558077016	10558077	HgDis	mg/L	0.000015	0.0000045	0.00001	GW0017-042821	10558077017	0.000014	0.0000045	0.00001	6.9	0.000001
BPS11-10B	2021-04-30	GW0074-043021	10559096034	10559096	PbDis	mg/L	0.000054	0.000043	0.0001	GW0075-043021	10559096035	0.000059	0.000043	0.0001	8.85	0.000005
BPS11-10B	2021-04-30	GW0074-043021	10559096034	10559096	AsDis	mg/L	0.0061	0.00014	0.0005	GW0075-043021	10559096035	0.006	0.00014	0.0005	1.65	
BPS11-10B	2021-04-30	GW0074-043021	10559096034	10559096	CdDis	mg/L	0.0076	0.00003	0.00008	GW0075-043021	10559096035	0.0072	0.00003	0.00008	5.41	
BPS11-10B	2021-04-30	GW0074-043021	10559096034	10559096	CuDis	mg/L	0.18	0.00043	0.001	GW0075-043021	10559096035	0.17	0.00043	0.001	5.71	
BPS11-10B	2021-04-30	GW0074-043021	10559096034	10559096	ZnDis	mg/L	1.3	0.046	0.1	GW0075-043021	10559096035	1.1	0.046	0.1	16.67	
BPS11-10B	2021-04-30	GW0074-043021	10559096034	10559096	HgDis	mg/L	0.000045	0.000045	0.0002	GW0075-043021	10559096035	0.000045	0.000045	0.0002	0	0
GS-40R	2021-05-03	GW0058-050321	10559096018	10559096	PbDis	mg/L	0.0012	0.000043	0.0001	GW0059-050321	10559096019	0.0041	0.000043	0.0001	109.43	
GS-40R	2021-05-03	GW0058-050321	10559096018	10559096	AsDis	mg/L	0.00069	0.00014	0.0005	GW0059-050321	10559096019	0.00076	0.00014	0.0005	9.66	7E-05
GS-40R	2021-05-03	GW0058-050321	10559096018	10559096	CdDis	mg/L	0.12	0.00003	0.00008	GW0059-050321	10559096019	0.12	0.00003	0.00008	0	
GS-40R	2021-05-03	GW0058-050321	10559096018	10559096	CuDis	mg/L	0.19	0.00043	0.001	GW0059-050321	10559096019	0.2	0.00043	0.001	5.13	
GS-40R	2021-05-03	GW0058-050321	10559096018	10559096	ZnDis	mg/L	49.3	0.57	1.2	GW0059-050321	10559096019	49.4	0.57	1.2	0.2	
GS-40R	2021-05-03	GW0058-050321	10559096018	10559096	HgDis	mg/L	0.000045	0.000045	0.0002	GW0059-050321	10559096019	0.000045	0.000045	0.0002	0	0
MSD-02A	2021-05-04	GW0089-050421	10559096048	10559096	PbDis	mg/L	0.0016	0.000043	0.0001	GW0090-050421	10559096049	0.00089	0.000043	0.0001	57.03	
MSD-02A	2021-05-04	GW0089-050421	10559096048	10559096	AsDis	mg/L	0.0013	0.00014	0.0005	GW0090-050421	10559096049	0.0013	0.00014	0.0005	0	0
MSD-02A	2021-05-04	GW0089-050421	10559096048	10559096	CdDis	mg/L	0.062	0.00003	0.00008	GW0090-050421	10559096049	0.061	0.00003	0.00008	1.63	
MSD-02A	2021-05-04	GW0089-050421	10559096048	10559096	CuDis	mg/L	0.23	0.00043	0.001	GW0090-050421	10559096049	0.23	0.00043	0.001	0	
MSD-02A	2021-05-04	GW0089-050421	10559096048	10559096	ZnDis	mg/L	9.5	0.23	0.5	GW0090-050421	10559096049	9.7	0.23	0.5	2.08	
MSD-02A	2021-05-04	GW0089-050421	10559096048	10559096	HgDis	mg/L	0.000045	0.000045	0.0002	GW0090-050421	10559096049	0.000045	0.000045	0.0002	0	0
BPS07-16A	2021-05-06	GW0103-050621	10560318009	10560318	PbDis	mg/L	0.00022	0.00022	0.0005	GW0104-050621	10560318010	0.00022	0.00022	0.0005	0	0
BPS07-16A	2021-05-06	GW0103-050621	10560318009	10560318	AsDis	mg/L	0.0007	0.0007	0.0025	GW0104-050621	10560318010	0.0007	0.0007	0.0025	0	0
BPS07-16A	2021-05-06	GW0103-050621	10560318009	10560318	CdDis	mg/L	0.0019	0.00015	0.0004	GW0104-050621	10560318010	0.002	0.00015	0.0004	5.13	0.0001
BPS07-16A	2021-05-06	GW0103-050621	10560318009	10560318	CuDis	mg/L	0.0027	0.0021	0.005	GW0104-050621	10560318010	0.0028	0.0021	0.005	3.64	1E-04
BPS07-16A	2021-05-06	GW0103-050621	10560318009	10560318	ZnDis	mg/L	0.63	0.011	0.025	GW0104-050621	10560318010	0.66	0.011	0.025	4.65	
BPS07-16A	2021-05-06	GW0103-050621	10560318009	10560318	HgDis	mg/L	0.000045	0.000045	0.0002	GW0104-050621	10560318010	0.000045	0.000045	0.0002	0	0
BT-98-02	2021-05-06	GW0116-050621	10560318022	10560318	PbDis	mg/L	0.000043	0.000043	0.0001	GW0117-050621	10560318023	0.000043	0.000043	0.0001	0	0
BT-98-02	2021-05-06	GW0116-050621	10560318022	10560318	AsDis	mg/L	0.00078	0.00014	0.0005	GW0117-050621	10560318023	0.00084	0.00014	0.0005	7.41	0.00006
BT-98-02	2021-05-06	GW0116-050621	10560318022	10560318	CdDis	mg/L	0.0082	0.00003	0.00008	GW0117-050621	10560318023	0.0093	0.00003	0.00008	12.57	
BT-98-02	2021-05-06	GW0116-050621	10560318022	10560318	CuDis	mg/L	0.006	0.00043	0.001	GW0117-050621	10560318023	0.007	0.00043	0.001	15.38	
BT-98-02	2021-05-06	GW0116-050621	10560318022	10560318	ZnDis	mg/L	2.7	0.023	0.05	GW0117-050621	10560318023	3	0.023	0.05	10.53	
BT-98-02	2021-05-06	GW0116-050621	10560318022	10560318	HgDis	mg/L	0.000045	0.000045	0.0002	GW0117-050621	10560318023	0.000045	0.000045	0.0002	0	0
AMW-08	2021-05-07	GW0122-050721	10560315001	10560315	PbDis	mg/L	0.013	0.00022	0.0005	GW0123-050721	10560315002	0.013	0.00022	0.0005	0	
AMW-08	2021-05-07	GW0122-050721	10560315001	10560315	AsDis	mg/L	0.034	0.0007	0.0025	GW0123-050721	10560315002	0.034	0.0007	0.0025	0	
AMW-08	2021-05-07	GW0122-050721	10560315001	10560315	CdDis	mg/L	0.089	0.00015	0.0004	GW0123-050721	10560315002	0.088	0.00015	0.0004	1.13	
AMW-08	2021-05-07	GW0122-050721	10560315001	10560315	CuDis	mg/L	3.4	0.21	0.5	GW0123-050721	10560315002	2.7	0.21	0.5	22.95	
AMW-08	2021-05-07	GW0122-050721	10560315001	10560315	ZnDis	mg/L	525	11.4	25	GW0123-050721	10560315002	415	11.4	25	23.4	
AMW-08	2021-05-07	GW0122-050721	10560315001	10560315	HgDis	mg/L	0.000045	0.000045	0.0002	GW0123-050721	10560315002	0.000045	0.000045	0.0002	0	0

Highlighted cells indicate field precision outside of criteria

Table B5a. BPSOU 2021 Groundwater Data Quality Assessment - Field Duplicates

Location	Monitoring Date	Natural Field ID	Natural Lab ID	SDG	Parameter	Unit	Natural Value	Natural MDL	Natural RL	Duplicate Field ID	Duplicate Lab ID	Duplicate Value	Duplicate MDL	Duplicate RL	RPD %	Δ (<5X RL)
BPS11-11A2	2021-09-24	GW0008-092421	10580635008	10580635	PbDis	mg/L	0.000028	0.000028	0.0001	GW0009-092421	10580635009	0.00012	0.000028	0.0001	124.32	0.000092
BPS11-11A2	2021-09-24	GW0008-092421	10580635008	10580635	AsDis	mg/L	0.0019	0.000083	0.0005	GW0009-092421	10580635009	0.0019	0.000083	0.0005	0	0
BPS11-11A2	2021-09-24	GW0008-092421	10580635008	10580635	CdDis	mg/L	0.00041	0.000016	0.00008	GW0009-092421	10580635009	0.00041	0.000016	0.00008	0	
BPS11-11A2	2021-09-24	GW0008-092421	10580635008	10580635	CuDis	mg/L	0.0005	0.0005	0.001	GW0009-092421	10580635009	0.00088	0.0005	0.001	55.07	0.00038
BPS11-11A2	2021-09-24	GW0008-092421	10580635008	10580635	ZnDis	mg/L	0.016	0.002	0.005	GW0009-092421	10580635009	0.017	0.002	0.005	6.06	0.001
BPS11-11A2	2021-09-24	GW0008-092421	10580635008	10580635	HgDis	mg/L	0.0000047	0.0000047	0.00001	GW0009-092421	10580635009	0.0000047	0.0000047	0.00001	0	0
BPS11-16	2021-09-24	GW0020-092421	10580635020	10580635	PbDis	mg/L	0.000042	0.000028	0.0001	GW0021-092421	10580635021	0.000045	0.000028	0.0001	6.9	3E-06
BPS11-16	2021-09-24	GW0020-092421	10580635020	10580635	AsDis	mg/L	0.0039	0.000083	0.0005	GW0021-092421	10580635021	0.0037	0.000083	0.0005	5.26	
BPS11-16	2021-09-24	GW0020-092421	10580635020	10580635	CdDis	mg/L	0.00021	0.000016	0.00008	GW0021-092421	10580635021	0.0002	0.000016	0.00008	4.88	0.00001
BPS11-16	2021-09-24	GW0020-092421	10580635020	10580635	CuDis	mg/L	0.00051	0.0005	0.001	GW0021-092421	10580635021	0.0005	0.0005	0.001	1.98	0.00001
BPS11-16	2021-09-24	GW0020-092421	10580635020	10580635	ZnDis	mg/L	0.0077	0.002	0.005	GW0021-092421	10580635021	0.0069	0.002	0.005	10.96	0.0008
BPS11-16	2021-09-24	GW0020-092421	10580635020	10580635	HgDis	mg/L	0.0000047	0.0000047	0.00001	GW0021-092421	10580635021	0.0000047	0.0000047	0.00001	0	0
MF-11	2021-09-28	GW0055-092821	10581942008	10581942	PbDis	mg/L	0.000044	0.000028	0.0001	GW0056-092821	10581942009	0.000047	0.000028	0.0001	6.59	0.000003
MF-11	2021-09-28	GW0055-092821	10581942008	10581942	AsDis	mg/L	0.0047	0.000083	0.0005	GW0056-092821	10581942009	0.0044	0.000083	0.0005	6.59	
MF-11	2021-09-28	GW0055-092821	10581942008	10581942	CdDis	mg/L	0.00073	0.000016	0.00008	GW0056-092821	10581942009	0.0007	0.000016	0.00008	4.2	
MF-11	2021-09-28	GW0055-092821	10581942008	10581942	CuDis	mg/L	0.0056	0.0005	0.001	GW0056-092821	10581942009	0.0052	0.0005	0.001	7.41	
MF-11	2021-09-28	GW0055-092821	10581942008	10581942	ZnDis	mg/L	0.085	0.002	0.005	GW0056-092821	10581942009	0.078	0.002	0.005	8.59	
MF-11	2021-09-28	GW0055-092821	10581942008	10581942	HgDis	mg/L	0.000045	0.000045	0.0002	GW0056-092821	10581942009	0.000045	0.000045	0.0002	0	0
BPS11-01	2021-09-29	GW0039-092921	10581934014	10581934	PbDis	mg/L	0.000088	0.000028	0.0001	GW0040-092921	10581934015	0.000089	0.000028	0.0001	1.13	1E-06
BPS11-01	2021-09-29	GW0039-092921	10581934014	10581934	AsDis	mg/L	0.061	0.000083	0.0005	GW0040-092921	10581934015	0.06	0.000083	0.0005	1.65	
BPS11-01	2021-09-29	GW0039-092921	10581934014	10581934	CdDis	mg/L	0.00041	0.000016	0.00008	GW0040-092921	10581934015	0.00036	0.000016	0.00008	12.99	0.00005
BPS11-01	2021-09-29	GW0039-092921	10581934014	10581934	CuDis	mg/L	0.0014	0.0005	0.001	GW0040-092921	10581934015	0.0013	0.0005	0.001	7.41	0.0001
BPS11-01	2021-09-29	GW0039-092921	10581934014	10581934	ZnDis	mg/L	0.0035	0.002	0.005	GW0040-092921	10581934015	0.0036	0.002	0.005	2.82	1E-04
BPS11-01	2021-09-29	GW0039-092921	10581934014	10581934	HgDis	mg/L	0.000045	0.000045	0.0002	GW0040-092921	10581934015	0.000045	0.000045	0.0002	0	0
FP98-1B	2021-09-30	GW0074-093021	10582495005	10582495	PbDis	mg/L	0.000057	0.000028	0.0001	GW0075-093021	10582495006	0.000043	0.000028	0.0001	28	0.000014
FP98-1B	2021-09-30	GW0074-093021	10582495005	10582495	AsDis	mg/L	0.0012	0.000083	0.0005	GW0075-093021	10582495006	0.0013	0.000083	0.0005	8	0.0001
FP98-1B	2021-09-30	GW0074-093021	10582495005	10582495	CdDis	mg/L	0.0053	0.000016	0.00008	GW0075-093021	10582495006	0.0056	0.000016	0.00008	5.5	
FP98-1B	2021-09-30	GW0074-093021	10582495005	10582495	CuDis	mg/L	0.0033	0.0005	0.001	GW0075-093021	10582495006	0.0031	0.0005	0.001	6.25	0.0002
FP98-1B	2021-09-30	GW0074-093021	10582495005	10582495	ZnDis	mg/L	0.58	0.039	0.1	GW0075-093021	10582495006	0.55	0.039	0.1	5.31	
FP98-1B	2021-09-30	GW0074-093021	10582495005	10582495	HgDis	mg/L	0.000045	0.000045	0.0002	GW0075-093021	10582495006	0.000045	0.000045	0.0002	0	0
BPS11-13B	2021-10-01	GW0098-100121	10582497007	10582497	PbDis	mg/L	0.000028	0.000028	0.0001	GW0099-100121	10582497008	0.00006	0.000028	0.0001	72.73	0.000032
BPS11-13B	2021-10-01	GW0098-100121	10582497007	10582497	AsDis	mg/L	0.0019	0.000083	0.0005	GW0099-100121	10582497008	0.0019	0.000083	0.0005	0	0
BPS11-13B	2021-10-01	GW0098-100121	10582497007	10582497	CdDis	mg/L	0.0035	0.000016	0.00008	GW0099-100121	10582497008	0.0035	0.000016	0.00008	0	
BPS11-13B	2021-10-01	GW0098-100121	10582497007	10582497	CuDis	mg/L	0.033	0.0005	0.001	GW0099-100121	10582497008	0.034	0.0005	0.001	2.99	
BPS11-13B	2021-10-01	GW0098-100121	10582497007	10582497	ZnDis	mg/L	0.48	0.039	0.1	GW0099-100121	10582497008	0.53	0.039	0.1	9.9	0.05
BPS11-13B	2021-10-01	GW0098-100121	10582497007	10582497	HgDis	mg/L	0.000045	0.000045	0.0002	GW0099-100121	10582497008	0.000045	0.000045	0.0002	0	0
AMW-08	2021-10-05	GW0115-100521	10583409002	10583409	PbDis	mg/L	0.015	0.00014	0.0005	GW0116-100521	10583409003	0.015	0.00014	0.0005	0	
AMW-08	2021-10-05	GW0115-100521	10583409002	10583409	AsDis	mg/L	0.023	0.00041	0.0025	GW0116-100521	10583409003	0.024	0.00041	0.0025	4.26	
AMW-08	2021-10-05	GW0115-100521	10583409002	10583409	CdDis	mg/L	0.065	0.00008	0.0004	GW0116-100521	10583409003	0.069	0.00008	0.0004	5.97	
AMW-08	2021-10-05	GW0115-100521	10583409002	10583409	CuDis	mg/L	1.7	0.12	0.25	GW0116-100521	10583409003	1.8	0.12	0.25	5.71	
AMW-08	2021-10-05	GW0115-100521	10583409002	10583409	ZnDis	mg/L	374	9.8	25	GW0116-100521	10583409003	431	9.8	25	14.16	
AMW-08	2021-10-05	GW0115-100521	10583409002	10583409	HgDis	mg/L	0.000045	0.000045	0.0002	GW0116-100521	10583409003	0.000045	0.000045	0.0002	0	0

Highlighted cells indicate field precision outside of criteria

Table B5b. BPSOU 2021 Groundwater Data Quality Assessment - Holding Times

SDG	Batch ID	Lab	Media	Field Sample ID	Sample Date	Parameter	Prep Date	Prep Method	Analysis Date	Analysis Method	Hold Expires	DV Q
10558077	739219	PACE_MPLS	GW	GW0001-042221	2021-04-22	HgDis	2021-05-04	EPA 245.1	2021-05-05	EPA 245.1	2021-05-20	
10558077	739219	PACE_MPLS	GW	GW0002-042221	2021-04-22	HgDis	2021-05-04	EPA 245.1	2021-05-05	EPA 245.1	2021-05-20	
10558077	739219	PACE_MPLS	GW	GW0003-042221	2021-04-22	HgDis	2021-05-04	EPA 245.1	2021-05-05	EPA 245.1	2021-05-20	
10558077	739219	PACE_MPLS	GW	GW0004-042221	2021-04-22	HgDis	2021-05-04	EPA 245.1	2021-05-05	EPA 245.1	2021-05-20	
10558077	739219	PACE_MPLS	GW	GW0005-042321	2021-04-23	HgDis	2021-05-04	EPA 245.1	2021-05-05	EPA 245.1	2021-05-21	
10558077	739219	PACE_MPLS	GW	GW0006-042321	2021-04-23	HgDis	2021-05-04	EPA 245.1	2021-05-05	EPA 245.1	2021-05-21	
10558077	739219	PACE_MPLS	GW	GW0007-042321	2021-04-23	HgDis	2021-05-04	EPA 245.1	2021-05-05	EPA 245.1	2021-05-21	
10558077	739219	PACE_MPLS	GW	GW0008-042321	2021-04-23	HgDis	2021-05-04	EPA 245.1	2021-05-05	EPA 245.1	2021-05-21	
10558077	739219	PACE_MPLS	GW	GW0009-042621	2021-04-26	HgDis	2021-05-04	EPA 245.1	2021-05-05	EPA 245.1	2021-05-24	
10558077	739219	PACE_MPLS	GW	GW0010-042721	2021-04-27	HgDis	2021-05-04	EPA 245.1	2021-05-05	EPA 245.1	2021-05-25	
10558077	739219	PACE_MPLS	GW	GW0011-042721	2021-04-27	HgDis	2021-05-04	EPA 245.1	2021-05-05	EPA 245.1	2021-05-25	
10558077	739219	PACE_MPLS	GW	GW0012-042721	2021-04-27	HgDis	2021-05-04	EPA 245.1	2021-05-05	EPA 245.1	2021-05-25	
10558077	739219	PACE_MPLS	GW	GW0013-042721	2021-04-27	HgDis	2021-05-04	EPA 245.1	2021-05-05	EPA 245.1	2021-05-25	
10558077	739219	PACE_MPLS	GW	GW0014-042721	2021-04-27	HgDis	2021-05-04	EPA 245.1	2021-05-05	EPA 245.1	2021-05-25	
10558077	741139	PACE_MPLS	GW	GW0015-042721	2021-04-27	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0016-042821	2021-04-28	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-25	
10558077	741139	PACE_MPLS	GW	GW0017-042821	2021-04-28	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-25	
10558077	741139	PACE_MPLS	GW	GW0012-042721	2021-04-27	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0013-042721	2021-04-27	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0014-042721	2021-04-27	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0018-042821	2021-04-28	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-25	
10558077	741139	PACE_MPLS	GW	GW0019-042721	2021-04-27	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0020-042721	2021-04-27	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0011-042721	2021-04-27	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0009-042621	2021-04-26	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-23	
10558077	741139	PACE_MPLS	GW	GW0010-042721	2021-04-27	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0008-042321	2021-04-23	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-20	
10558077	741139	PACE_MPLS	GW	GW0007-042321	2021-04-23	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-20	
10558077	741139	PACE_MPLS	GW	GW0004-042221	2021-04-22	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741139	PACE_MPLS	GW	GW0005-042321	2021-04-23	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-20	
10558077	741139	PACE_MPLS	GW	GW0006-042321	2021-04-23	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-20	
10558077	741139	PACE_MPLS	GW	GW0003-042221	2021-04-22	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741139	PACE_MPLS	GW	GW0001-042221	2021-04-22	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741139	PACE_MPLS	GW	GW0002-042221	2021-04-22	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741139	PACE_MPLS	GW	GW0002-042221	2021-04-22	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741139	PACE_MPLS	GW	GW0001-042221	2021-04-22	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741139	PACE_MPLS	GW	GW0003-042221	2021-04-22	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741139	PACE_MPLS	GW	GW0006-042321	2021-04-23	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-20	
10558077	741139	PACE_MPLS	GW	GW0005-042321	2021-04-23	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-20	
10558077	741139	PACE_MPLS	GW	GW0004-042221	2021-04-22	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741139	PACE_MPLS	GW	GW0007-042321	2021-04-23	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-20	
10558077	741139	PACE_MPLS	GW	GW0008-042321	2021-04-23	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-20	
10558077	741139	PACE_MPLS	GW	GW0010-042721	2021-04-27	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0009-042621	2021-04-26	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-23	
10558077	741139	PACE_MPLS	GW	GW0011-042721	2021-04-27	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0020-042721	2021-04-27	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0019-042721	2021-04-27	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0018-042821	2021-04-28	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-25	
10558077	741139	PACE_MPLS	GW	GW0014-042721	2021-04-27	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0013-042721	2021-04-27	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0012-042721	2021-04-27	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0017-042821	2021-04-28	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-25	
10558077	741139	PACE_MPLS	GW	GW0016-042821	2021-04-28	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-25	
10558077	741139	PACE_MPLS	GW	GW0015-042721	2021-04-27	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0015-042721	2021-04-27	CuDis	2021-05-11	EPA 200.8	2021-05-17	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0016-042821	2021-04-28	CuDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-25	
10558077	741139	PACE_MPLS	GW	GW0017-042821	2021-04-28	CuDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-25	
10558077	741139	PACE_MPLS	GW	GW0012-042721	2021-04-27	CuDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0013-042721	2021-04-27	CuDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0014-042721	2021-04-27	CuDis	2021-05-11	EPA 200.8	2021-05-17	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0018-042821	2021-04-28	CuDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-25	
10558077	741139	PACE_MPLS	GW	GW0019-042721	2021-04-27	CuDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0020-042721	2021-04-27	CuDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0011-042721	2021-04-27	CuDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	

Table B5b. BPSOU 2021 Groundwater Data Quality Assessment - Holding Times

SDG	Batch ID	Lab	Media	Field Sample ID	Sample Date	Parameter	Prep Date	Prep Method	Analysis Date	Analysis Method	Hold Expires	DV Q
10558077	741139	PACE_MPLS	GW	GW0009-042621	2021-04-26	CuDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-23	
10558077	741139	PACE_MPLS	GW	GW0010-042721	2021-04-27	CuDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0008-042321	2021-04-23	CuDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-20	
10558077	741139	PACE_MPLS	GW	GW0007-042321	2021-04-23	CuDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-20	
10558077	741139	PACE_MPLS	GW	GW0004-042221	2021-04-22	CuDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741139	PACE_MPLS	GW	GW0005-042321	2021-04-23	CuDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-20	
10558077	741139	PACE_MPLS	GW	GW0006-042321	2021-04-23	CuDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-20	
10558077	741139	PACE_MPLS	GW	GW0003-042221	2021-04-22	CuDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741139	PACE_MPLS	GW	GW0001-042221	2021-04-22	CuDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741139	PACE_MPLS	GW	GW0002-042221	2021-04-22	CuDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741139	PACE_MPLS	GW	GW0003-042221	2021-04-22	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741139	PACE_MPLS	GW	GW0002-042221	2021-04-22	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741139	PACE_MPLS	GW	GW0005-042321	2021-04-23	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-20	
10558077	741139	PACE_MPLS	GW	GW0004-042221	2021-04-22	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741139	PACE_MPLS	GW	GW0007-042321	2021-04-23	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-20	
10558077	741139	PACE_MPLS	GW	GW0006-042321	2021-04-23	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-20	
10558077	741139	PACE_MPLS	GW	GW0009-042621	2021-04-26	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-23	
10558077	741139	PACE_MPLS	GW	GW0008-042321	2021-04-23	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-20	
10558077	741139	PACE_MPLS	GW	GW0011-042721	2021-04-27	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0010-042721	2021-04-27	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0001-042221	2021-04-22	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741139	PACE_MPLS	GW	GW0016-042821	2021-04-28	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-25	
10558077	741139	PACE_MPLS	GW	GW0017-042821	2021-04-28	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-25	
10558077	741139	PACE_MPLS	GW	GW0018-042821	2021-04-28	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-25	
10558077	741139	PACE_MPLS	GW	GW0019-042721	2021-04-27	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0020-042721	2021-04-27	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0013-042721	2021-04-27	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0012-042721	2021-04-27	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0015-042721	2021-04-27	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0014-042721	2021-04-27	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0015-042721	2021-04-27	ZnDis	2021-05-11	EPA 200.8	2021-05-17	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0017-042821	2021-04-28	ZnDis	2021-05-11	EPA 200.8	2021-05-17	EPA 200.8	2021-10-25	
10558077	741139	PACE_MPLS	GW	GW0016-042821	2021-04-28	ZnDis	2021-05-11	EPA 200.8	2021-05-17	EPA 200.8	2021-10-25	
10558077	741139	PACE_MPLS	GW	GW0012-042721	2021-04-27	ZnDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0014-042721	2021-04-27	ZnDis	2021-05-11	EPA 200.8	2021-05-17	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0013-042721	2021-04-27	ZnDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0018-042821	2021-04-28	ZnDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-25	
10558077	741139	PACE_MPLS	GW	GW0020-042721	2021-04-27	ZnDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0019-042721	2021-04-27	ZnDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0011-042721	2021-04-27	ZnDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0010-042721	2021-04-27	ZnDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741139	PACE_MPLS	GW	GW0009-042621	2021-04-26	ZnDis	2021-05-11	EPA 200.8	2021-05-17	EPA 200.8	2021-10-23	
10558077	741139	PACE_MPLS	GW	GW0008-042321	2021-04-23	ZnDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-20	
10558077	741139	PACE_MPLS	GW	GW0007-042321	2021-04-23	ZnDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-20	
10558077	741139	PACE_MPLS	GW	GW0004-042221	2021-04-22	ZnDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741139	PACE_MPLS	GW	GW0006-042321	2021-04-23	ZnDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-20	
10558077	741139	PACE_MPLS	GW	GW0005-042321	2021-04-23	ZnDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-20	
10558077	741139	PACE_MPLS	GW	GW0003-042221	2021-04-22	ZnDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741139	PACE_MPLS	GW	GW0002-042221	2021-04-22	ZnDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741139	PACE_MPLS	GW	GW0001-042221	2021-04-22	ZnDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741140	PACE_MPLS	GW	GW0021-042221	2021-04-22	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741140	PACE_MPLS	GW	GW0022-042221	2021-04-22	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741140	PACE_MPLS	GW	GW0023-042221	2021-04-22	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741140	PACE_MPLS	GW	GW0024-042221	2021-04-22	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741140	PACE_MPLS	GW	GW0025-042221	2021-04-22	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741140	PACE_MPLS	GW	GW0026-042721	2021-04-27	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741140	PACE_MPLS	GW	GW0027-042221	2021-04-22	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741140	PACE_MPLS	GW	GW0028-042321	2021-04-23	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-20	
10558077	741140	PACE_MPLS	GW	GW0029-042321	2021-04-23	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-20	
10558077	741140	PACE_MPLS	GW	GW0030-042321	2021-04-23	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-20	
10558077	741140	PACE_MPLS	GW	GW0031-042321	2021-04-23	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-20	
10558077	741140	PACE_MPLS	GW	GW0032-042721	2021-04-27	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741140	PACE_MPLS	GW	GW0033-042721	2021-04-27	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741140	PACE_MPLS	GW	GW0034-042721	2021-04-27	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	

Table B5b. BPSOU 2021 Groundwater Data Quality Assessment - Holding Times

SDG	Batch ID	Lab	Media	Field Sample ID	Sample Date	Parameter	Prep Date	Prep Method	Analysis Date	Analysis Method	Hold Expires	DV Q
10558077	741140	PACE_MPLS	GW	GW0035-042621	2021-04-26	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-23	
10558077	741140	PACE_MPLS	GW	GW0036-042621	2021-04-26	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-23	
10558077	741140	PACE_MPLS	GW	GW0037-042621	2021-04-26	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-23	
10558077	741140	PACE_MPLS	GW	GW0038-042621	2021-04-26	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-23	
10558077	741140	PACE_MPLS	GW	GW0039-042721	2021-04-27	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741140	PACE_MPLS	GW	GW0040-042721	2021-04-27	AsDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741140	PACE_MPLS	GW	GW0040-042721	2021-04-27	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741140	PACE_MPLS	GW	GW0039-042721	2021-04-27	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741140	PACE_MPLS	GW	GW0038-042621	2021-04-26	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-23	
10558077	741140	PACE_MPLS	GW	GW0037-042621	2021-04-26	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-23	
10558077	741140	PACE_MPLS	GW	GW0036-042621	2021-04-26	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-23	
10558077	741140	PACE_MPLS	GW	GW0035-042621	2021-04-26	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-23	
10558077	741140	PACE_MPLS	GW	GW0034-042721	2021-04-27	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741140	PACE_MPLS	GW	GW0033-042721	2021-04-27	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741140	PACE_MPLS	GW	GW0032-042721	2021-04-27	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741140	PACE_MPLS	GW	GW0031-042321	2021-04-23	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-20	
10558077	741140	PACE_MPLS	GW	GW0030-042321	2021-04-23	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-20	
10558077	741140	PACE_MPLS	GW	GW0029-042321	2021-04-23	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-20	
10558077	741140	PACE_MPLS	GW	GW0028-042321	2021-04-23	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-20	
10558077	741140	PACE_MPLS	GW	GW0027-042221	2021-04-22	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741140	PACE_MPLS	GW	GW0026-042721	2021-04-27	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741140	PACE_MPLS	GW	GW0025-042221	2021-04-22	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741140	PACE_MPLS	GW	GW0024-042221	2021-04-22	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741140	PACE_MPLS	GW	GW0023-042221	2021-04-22	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741140	PACE_MPLS	GW	GW0022-042221	2021-04-22	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741140	PACE_MPLS	GW	GW0021-042221	2021-04-22	CdDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741140	PACE_MPLS	GW	GW0021-042221	2021-04-22	CuDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741140	PACE_MPLS	GW	GW0022-042221	2021-04-22	CuDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741140	PACE_MPLS	GW	GW0023-042221	2021-04-22	CuDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741140	PACE_MPLS	GW	GW0024-042221	2021-04-22	CuDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741140	PACE_MPLS	GW	GW0025-042221	2021-04-22	CuDis	2021-05-11	EPA 200.8	2021-05-18	EPA 200.8	2021-10-19	
10558077	741140	PACE_MPLS	GW	GW0026-042721	2021-04-27	CuDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741140	PACE_MPLS	GW	GW0027-042221	2021-04-22	CuDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741140	PACE_MPLS	GW	GW0028-042321	2021-04-23	CuDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-20	
10558077	741140	PACE_MPLS	GW	GW0029-042321	2021-04-23	CuDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-20	
10558077	741140	PACE_MPLS	GW	GW0030-042321	2021-04-23	CuDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-20	
10558077	741140	PACE_MPLS	GW	GW0031-042321	2021-04-23	CuDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-20	
10558077	741140	PACE_MPLS	GW	GW0032-042721	2021-04-27	CuDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741140	PACE_MPLS	GW	GW0033-042721	2021-04-27	CuDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741140	PACE_MPLS	GW	GW0034-042721	2021-04-27	CuDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741140	PACE_MPLS	GW	GW0035-042621	2021-04-26	CuDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-23	
10558077	741140	PACE_MPLS	GW	GW0036-042621	2021-04-26	CuDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-23	
10558077	741140	PACE_MPLS	GW	GW0037-042621	2021-04-26	CuDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-23	
10558077	741140	PACE_MPLS	GW	GW0038-042621	2021-04-26	CuDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-23	
10558077	741140	PACE_MPLS	GW	GW0039-042721	2021-04-27	CuDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741140	PACE_MPLS	GW	GW0040-042721	2021-04-27	CuDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741140	PACE_MPLS	GW	GW0039-042721	2021-04-27	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741140	PACE_MPLS	GW	GW0040-042721	2021-04-27	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741140	PACE_MPLS	GW	GW0035-042621	2021-04-26	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-23	
10558077	741140	PACE_MPLS	GW	GW0036-042621	2021-04-26	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-23	
10558077	741140	PACE_MPLS	GW	GW0037-042621	2021-04-26	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-23	
10558077	741140	PACE_MPLS	GW	GW0038-042621	2021-04-26	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-23	
10558077	741140	PACE_MPLS	GW	GW0031-042321	2021-04-23	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-20	
10558077	741140	PACE_MPLS	GW	GW0032-042721	2021-04-27	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741140	PACE_MPLS	GW	GW0033-042721	2021-04-27	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741140	PACE_MPLS	GW	GW0034-042721	2021-04-27	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741140	PACE_MPLS	GW	GW0027-042221	2021-04-22	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741140	PACE_MPLS	GW	GW0028-042321	2021-04-23	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-20	
10558077	741140	PACE_MPLS	GW	GW0029-042321	2021-04-23	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-20	
10558077	741140	PACE_MPLS	GW	GW0030-042321	2021-04-23	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-20	
10558077	741140	PACE_MPLS	GW	GW0023-042221	2021-04-22	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741140	PACE_MPLS	GW	GW0024-042221	2021-04-22	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741140	PACE_MPLS	GW	GW0025-042221	2021-04-22	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741140	PACE_MPLS	GW	GW0026-042721	2021-04-27	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	

Table B5b. BPSOU 2021 Groundwater Data Quality Assessment - Holding Times

SDG	Batch ID	Lab	Media	Field Sample ID	Sample Date	Parameter	Prep Date	Prep Method	Analysis Date	Analysis Method	Hold Expires	DV Q
10558077	741140	PACE_MPLS	GW	GW0021-042221	2021-04-22	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741140	PACE_MPLS	GW	GW0022-042221	2021-04-22	PbDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741140	PACE_MPLS	GW	GW0021-042221	2021-04-22	ZnDis	2021-05-11	EPA 200.8	2021-05-17	EPA 200.8	2021-10-19	
10558077	741140	PACE_MPLS	GW	GW0023-042221	2021-04-22	ZnDis	2021-05-11	EPA 200.8	2021-05-17	EPA 200.8	2021-10-19	
10558077	741140	PACE_MPLS	GW	GW0022-042221	2021-04-22	ZnDis	2021-05-11	EPA 200.8	2021-05-17	EPA 200.8	2021-10-19	
10558077	741140	PACE_MPLS	GW	GW0026-042721	2021-04-27	ZnDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741140	PACE_MPLS	GW	GW0025-042221	2021-04-22	ZnDis	2021-05-11	EPA 200.8	2021-05-18	EPA 200.8	2021-10-19	
10558077	741140	PACE_MPLS	GW	GW0024-042221	2021-04-22	ZnDis	2021-05-11	EPA 200.8	2021-05-17	EPA 200.8	2021-10-19	
10558077	741140	PACE_MPLS	GW	GW0029-042321	2021-04-23	ZnDis	2021-05-11	EPA 200.8	2021-05-18	EPA 200.8	2021-10-20	
10558077	741140	PACE_MPLS	GW	GW0028-042321	2021-04-23	ZnDis	2021-05-11	EPA 200.8	2021-05-17	EPA 200.8	2021-10-20	
10558077	741140	PACE_MPLS	GW	GW0027-042221	2021-04-22	ZnDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-19	
10558077	741140	PACE_MPLS	GW	GW0034-042721	2021-04-27	ZnDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741140	PACE_MPLS	GW	GW0036-042621	2021-04-26	ZnDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-23	
10558077	741140	PACE_MPLS	GW	GW0035-042621	2021-04-26	ZnDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-23	
10558077	741140	PACE_MPLS	GW	GW0033-042721	2021-04-27	ZnDis	2021-05-11	EPA 200.8	2021-05-17	EPA 200.8	2021-10-24	
10558077	741140	PACE_MPLS	GW	GW0032-042721	2021-04-27	ZnDis	2021-05-11	EPA 200.8	2021-05-17	EPA 200.8	2021-10-24	
10558077	741140	PACE_MPLS	GW	GW0031-042321	2021-04-23	ZnDis	2021-05-11	EPA 200.8	2021-05-17	EPA 200.8	2021-10-20	
10558077	741140	PACE_MPLS	GW	GW0030-042321	2021-04-23	ZnDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-20	
10558077	741140	PACE_MPLS	GW	GW0037-042621	2021-04-26	ZnDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-23	
10558077	741140	PACE_MPLS	GW	GW0039-042721	2021-04-27	ZnDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-24	
10558077	741140	PACE_MPLS	GW	GW0038-042621	2021-04-26	ZnDis	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	2021-10-23	
10558077	741140	PACE_MPLS	GW	GW0040-042721	2021-04-27	ZnDis	2021-05-11	EPA 200.8	2021-05-17	EPA 200.8	2021-10-24	
10558077	741546	PACE_MPLS	GW	GW0030-042321	2021-04-23	HgDis	2021-05-12	EPA 245.1	2021-05-13	EPA 245.1	2021-05-21	
10558077	741546	PACE_MPLS	GW	GW0027-042221	2021-04-22	HgDis	2021-05-12	EPA 245.1	2021-05-13	EPA 245.1	2021-05-20	
10558077	741546	PACE_MPLS	GW	GW0028-042321	2021-04-23	HgDis	2021-05-12	EPA 245.1	2021-05-13	EPA 245.1	2021-05-21	
10558077	741546	PACE_MPLS	GW	GW0029-042321	2021-04-23	HgDis	2021-05-12	EPA 245.1	2021-05-13	EPA 245.1	2021-05-21	
10558077	741546	PACE_MPLS	GW	GW0024-042221	2021-04-22	HgDis	2021-05-12	EPA 245.1	2021-05-13	EPA 245.1	2021-05-20	
10558077	741546	PACE_MPLS	GW	GW0025-042221	2021-04-22	HgDis	2021-05-12	EPA 245.1	2021-05-13	EPA 245.1	2021-05-20	
10558077	741546	PACE_MPLS	GW	GW0026-042721	2021-04-27	HgDis	2021-05-12	EPA 245.1	2021-05-13	EPA 245.1	2021-05-25	
10558077	741546	PACE_MPLS	GW	GW0022-042221	2021-04-22	HgDis	2021-05-12	EPA 245.1	2021-05-13	EPA 245.1	2021-05-20	
10558077	741546	PACE_MPLS	GW	GW0023-042221	2021-04-22	HgDis	2021-05-12	EPA 245.1	2021-05-13	EPA 245.1	2021-05-20	
10558077	741546	PACE_MPLS	GW	GW0021-042221	2021-04-22	HgDis	2021-05-12	EPA 245.1	2021-05-13	EPA 245.1	2021-05-20	
10558077	741975	PACE_MPLS	GW	GW0019-042721	2021-04-27	HgDis	2021-05-13	EPA 245.1	2021-05-17	EPA 245.1	2021-05-25	
10558077	741975	PACE_MPLS	GW	GW0020-042721	2021-04-27	HgDis	2021-05-13	EPA 245.1	2021-05-17	EPA 245.1	2021-05-25	
10558077	741975	PACE_MPLS	GW	GW0018-042821	2021-04-28	HgDis	2021-05-13	EPA 245.1	2021-05-17	EPA 245.1	2021-05-26	
10558077	741975	PACE_MPLS	GW	GW0016-042821	2021-04-28	HgDis	2021-05-13	EPA 245.1	2021-05-17	EPA 245.1	2021-05-26	
10558077	741975	PACE_MPLS	GW	GW0017-042821	2021-04-28	HgDis	2021-05-13	EPA 245.1	2021-05-17	EPA 245.1	2021-05-26	
10558077	741975	PACE_MPLS	GW	GW0031-042321	2021-04-23	HgDis	2021-05-13	EPA 245.1	2021-05-17	EPA 245.1	2021-05-21	
10558077	741977	PACE_MPLS	GW	GW0032-042721	2021-04-27	HgDis	2021-05-13	EPA 245.1	2021-05-17	EPA 245.1	2021-05-25	
10558077	741977	PACE_MPLS	GW	GW0033-042721	2021-04-27	HgDis	2021-05-13	EPA 245.1	2021-05-17	EPA 245.1	2021-05-25	
10558077	741977	PACE_MPLS	GW	GW0035-042621	2021-04-26	HgDis	2021-05-13	EPA 245.1	2021-05-17	EPA 245.1	2021-05-24	
10558077	741977	PACE_MPLS	GW	GW0036-042621	2021-04-26	HgDis	2021-05-13	EPA 245.1	2021-05-17	EPA 245.1	2021-05-24	
10558077	741977	PACE_MPLS	GW	GW0034-042721	2021-04-27	HgDis	2021-05-13	EPA 245.1	2021-05-17	EPA 245.1	2021-05-25	
10558077	741977	PACE_MPLS	GW	GW0040-042721	2021-04-27	HgDis	2021-05-13	EPA 245.1	2021-05-17	EPA 245.1	2021-05-25	
10558077	741977	PACE_MPLS	GW	GW0038-042621	2021-04-26	HgDis	2021-05-13	EPA 245.1	2021-05-17	EPA 245.1	2021-05-24	
10558077	741977	PACE_MPLS	GW	GW0039-042721	2021-04-27	HgDis	2021-05-13	EPA 245.1	2021-05-17	EPA 245.1	2021-05-25	
10558077	741977	PACE_MPLS	GW	GW0037-042621	2021-04-26	HgDis	2021-05-13	EPA 245.1	2021-05-17	EPA 245.1	2021-05-24	
10558077	741977	PACE_MPLS	GW	GW0015-042721	2021-04-27	HgDis	2021-05-13	EPA 245.1	2021-05-17	EPA 245.1	2021-05-25	
10559096	741844	PACE_MPLS	GW	GW0041-042821	2021-04-28	AsDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741844	PACE_MPLS	GW	GW0042-042821	2021-04-28	AsDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741844	PACE_MPLS	GW	GW0043-042821	2021-04-28	AsDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741844	PACE_MPLS	GW	GW0044-042821	2021-04-28	AsDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741844	PACE_MPLS	GW	GW0045-042821	2021-04-28	AsDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741844	PACE_MPLS	GW	GW0046-042821	2021-04-28	AsDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741844	PACE_MPLS	GW	GW0047-042821	2021-04-28	AsDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741844	PACE_MPLS	GW	GW0048-042921	2021-04-29	AsDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741844	PACE_MPLS	GW	GW0049-042921	2021-04-29	AsDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741844	PACE_MPLS	GW	GW0050-042921	2021-04-29	AsDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741844	PACE_MPLS	GW	GW0051-042921	2021-04-29	AsDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741844	PACE_MPLS	GW	GW0052-042921	2021-04-29	AsDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741844	PACE_MPLS	GW	GW0053-042921	2021-04-29	AsDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741844	PACE_MPLS	GW	GW0054-042921	2021-04-29	AsDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741844	PACE_MPLS	GW	GW0055-042921	2021-04-29	AsDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741844	PACE_MPLS	GW	GW0056-043021	2021-04-30	AsDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-27	

Table B5b. BPSOU 2021 Groundwater Data Quality Assessment - Holding Times

SDG	Batch ID	Lab	Media	Field Sample ID	Sample Date	Parameter	Prep Date	Prep Method	Analysis Date	Analysis Method	Hold Expires	DV Q
10559096	741844	PACE_MPLS	GW	GW0057-043021	2021-04-30	AsDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-27	
10559096	741844	PACE_MPLS	GW	GW0057-043021	2021-04-30	CdDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-27	
10559096	741844	PACE_MPLS	GW	GW0056-043021	2021-04-30	CdDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-27	
10559096	741844	PACE_MPLS	GW	GW0055-042921	2021-04-29	CdDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741844	PACE_MPLS	GW	GW0054-042921	2021-04-29	CdDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741844	PACE_MPLS	GW	GW0053-042921	2021-04-29	CdDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741844	PACE_MPLS	GW	GW0052-042921	2021-04-29	CdDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741844	PACE_MPLS	GW	GW0051-042921	2021-04-29	CdDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741844	PACE_MPLS	GW	GW0050-042921	2021-04-29	CdDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741844	PACE_MPLS	GW	GW0049-042921	2021-04-29	CdDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-26	
10559096	741844	PACE_MPLS	GW	GW0048-042921	2021-04-29	CdDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741844	PACE_MPLS	GW	GW0047-042821	2021-04-28	CdDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741844	PACE_MPLS	GW	GW0046-042821	2021-04-28	CdDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741844	PACE_MPLS	GW	GW0045-042821	2021-04-28	CdDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741844	PACE_MPLS	GW	GW0044-042821	2021-04-28	CdDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741844	PACE_MPLS	GW	GW0043-042821	2021-04-28	CdDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741844	PACE_MPLS	GW	GW0042-042821	2021-04-28	CdDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741844	PACE_MPLS	GW	GW0041-042821	2021-04-28	CdDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741844	PACE_MPLS	GW	GW0041-042821	2021-04-28	CuDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741844	PACE_MPLS	GW	GW0042-042821	2021-04-28	CuDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-25	
10559096	741844	PACE_MPLS	GW	GW0043-042821	2021-04-28	CuDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741844	PACE_MPLS	GW	GW0044-042821	2021-04-28	CuDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741844	PACE_MPLS	GW	GW0045-042821	2021-04-28	CuDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741844	PACE_MPLS	GW	GW0046-042821	2021-04-28	CuDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741844	PACE_MPLS	GW	GW0047-042821	2021-04-28	CuDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-25	
10559096	741844	PACE_MPLS	GW	GW0048-042921	2021-04-29	CuDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741844	PACE_MPLS	GW	GW0049-042921	2021-04-29	CuDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-26	
10559096	741844	PACE_MPLS	GW	GW0050-042921	2021-04-29	CuDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-26	
10559096	741844	PACE_MPLS	GW	GW0051-042921	2021-04-29	CuDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-26	
10559096	741844	PACE_MPLS	GW	GW0052-042921	2021-04-29	CuDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741844	PACE_MPLS	GW	GW0053-042921	2021-04-29	CuDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-26	
10559096	741844	PACE_MPLS	GW	GW0054-042921	2021-04-29	CuDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-26	
10559096	741844	PACE_MPLS	GW	GW0055-042921	2021-04-29	CuDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-26	
10559096	741844	PACE_MPLS	GW	GW0056-043021	2021-04-30	CuDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-27	
10559096	741844	PACE_MPLS	GW	GW0057-043021	2021-04-30	CuDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-27	
10559096	741844	PACE_MPLS	GW	GW0051-042921	2021-04-29	PbDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741844	PACE_MPLS	GW	GW0052-042921	2021-04-29	PbDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741844	PACE_MPLS	GW	GW0053-042921	2021-04-29	PbDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741844	PACE_MPLS	GW	GW0054-042921	2021-04-29	PbDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741844	PACE_MPLS	GW	GW0055-042921	2021-04-29	PbDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741844	PACE_MPLS	GW	GW0056-043021	2021-04-30	PbDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-27	
10559096	741844	PACE_MPLS	GW	GW0057-043021	2021-04-30	PbDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-27	
10559096	741844	PACE_MPLS	GW	GW0047-042821	2021-04-28	PbDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741844	PACE_MPLS	GW	GW0048-042921	2021-04-29	PbDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741844	PACE_MPLS	GW	GW0049-042921	2021-04-29	PbDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741844	PACE_MPLS	GW	GW0050-042921	2021-04-29	PbDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741844	PACE_MPLS	GW	GW0043-042821	2021-04-28	PbDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741844	PACE_MPLS	GW	GW0044-042821	2021-04-28	PbDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741844	PACE_MPLS	GW	GW0045-042821	2021-04-28	PbDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741844	PACE_MPLS	GW	GW0046-042821	2021-04-28	PbDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741844	PACE_MPLS	GW	GW0041-042821	2021-04-28	PbDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741844	PACE_MPLS	GW	GW0042-042821	2021-04-28	PbDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741844	PACE_MPLS	GW	GW0041-042821	2021-04-28	ZnDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741844	PACE_MPLS	GW	GW0045-042821	2021-04-28	ZnDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-25	
10559096	741844	PACE_MPLS	GW	GW0044-042821	2021-04-28	ZnDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741844	PACE_MPLS	GW	GW0043-042821	2021-04-28	ZnDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741844	PACE_MPLS	GW	GW0042-042821	2021-04-28	ZnDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-25	
10559096	741844	PACE_MPLS	GW	GW0046-042821	2021-04-28	ZnDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-25	
10559096	741844	PACE_MPLS	GW	GW0048-042921	2021-04-29	ZnDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-26	
10559096	741844	PACE_MPLS	GW	GW0047-042821	2021-04-28	ZnDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-25	
10559096	741844	PACE_MPLS	GW	GW0049-042921	2021-04-29	ZnDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-26	
10559096	741844	PACE_MPLS	GW	GW0051-042921	2021-04-29	ZnDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-26	
10559096	741844	PACE_MPLS	GW	GW0050-042921	2021-04-29	ZnDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-26	
10559096	741844	PACE_MPLS	GW	GW0054-042921	2021-04-29	ZnDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-26	

Table B5b. BPSOU 2021 Groundwater Data Quality Assessment - Holding Times

SDG	Batch ID	Lab	Media	Field Sample ID	Sample Date	Parameter	Prep Date	Prep Method	Analysis Date	Analysis Method	Hold Expires	DV Q
10559096	741844	PACE_MPLS	GW	GW0053-042921	2021-04-29	ZnDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-26	
10559096	741844	PACE_MPLS	GW	GW0052-042921	2021-04-29	ZnDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741844	PACE_MPLS	GW	GW0057-043021	2021-04-30	ZnDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-27	
10559096	741844	PACE_MPLS	GW	GW0056-043021	2021-04-30	ZnDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-27	
10559096	741844	PACE_MPLS	GW	GW0055-042921	2021-04-29	ZnDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-26	
10559096	741855	PACE_MPLS	GW	GW0061-042821	2021-04-28	AsDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741855	PACE_MPLS	GW	GW0062-042821	2021-04-28	AsDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741855	PACE_MPLS	GW	GW0063-042821	2021-04-28	AsDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741855	PACE_MPLS	GW	GW0064-042821	2021-04-28	AsDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741855	PACE_MPLS	GW	GW0065-042821	2021-04-28	AsDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741855	PACE_MPLS	GW	GW0066-042821	2021-04-28	AsDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741855	PACE_MPLS	GW	GW0067-042921	2021-04-29	AsDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741855	PACE_MPLS	GW	GW0068-042921	2021-04-29	AsDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741855	PACE_MPLS	GW	GW0069-042921	2021-04-29	AsDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741855	PACE_MPLS	GW	GW0070-042921	2021-04-29	AsDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741855	PACE_MPLS	GW	GW0071-042921	2021-04-29	AsDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741855	PACE_MPLS	GW	GW0072-042921	2021-04-29	AsDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741855	PACE_MPLS	GW	GW0073-042921	2021-04-29	AsDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741855	PACE_MPLS	GW	GW0074-043021	2021-04-30	AsDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-27	
10559096	741855	PACE_MPLS	GW	GW0075-043021	2021-04-30	AsDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-27	
10559096	741855	PACE_MPLS	GW	GW0076-043021	2021-04-30	AsDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-27	
10559096	741855	PACE_MPLS	GW	GW0077-043021	2021-04-30	AsDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-27	
10559096	741855	PACE_MPLS	GW	GW0078-043021	2021-04-30	AsDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-27	
10559096	741855	PACE_MPLS	GW	GW0078-043021	2021-04-30	CdDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-27	
10559096	741855	PACE_MPLS	GW	GW0077-043021	2021-04-30	CdDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-27	
10559096	741855	PACE_MPLS	GW	GW0076-043021	2021-04-30	CdDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-27	
10559096	741855	PACE_MPLS	GW	GW0075-043021	2021-04-30	CdDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-27	
10559096	741855	PACE_MPLS	GW	GW0074-043021	2021-04-30	CdDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-27	
10559096	741855	PACE_MPLS	GW	GW0073-042921	2021-04-29	CdDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741855	PACE_MPLS	GW	GW0072-042921	2021-04-29	CdDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741855	PACE_MPLS	GW	GW0071-042921	2021-04-29	CdDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741855	PACE_MPLS	GW	GW0070-042921	2021-04-29	CdDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741855	PACE_MPLS	GW	GW0069-042921	2021-04-29	CdDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741855	PACE_MPLS	GW	GW0068-042921	2021-04-29	CdDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741855	PACE_MPLS	GW	GW0067-042921	2021-04-29	CdDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741855	PACE_MPLS	GW	GW0066-042821	2021-04-28	CdDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741855	PACE_MPLS	GW	GW0065-042821	2021-04-28	CdDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741855	PACE_MPLS	GW	GW0064-042821	2021-04-28	CdDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741855	PACE_MPLS	GW	GW0063-042821	2021-04-28	CdDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741855	PACE_MPLS	GW	GW0062-042821	2021-04-28	CdDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741855	PACE_MPLS	GW	GW0061-042821	2021-04-28	CdDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741855	PACE_MPLS	GW	GW0061-042821	2021-04-28	CuDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741855	PACE_MPLS	GW	GW0062-042821	2021-04-28	CuDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741855	PACE_MPLS	GW	GW0063-042821	2021-04-28	CuDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741855	PACE_MPLS	GW	GW0064-042821	2021-04-28	CuDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741855	PACE_MPLS	GW	GW0065-042821	2021-04-28	CuDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741855	PACE_MPLS	GW	GW0066-042821	2021-04-28	CuDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741855	PACE_MPLS	GW	GW0067-042921	2021-04-29	CuDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741855	PACE_MPLS	GW	GW0068-042921	2021-04-29	CuDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741855	PACE_MPLS	GW	GW0069-042921	2021-04-29	CuDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741855	PACE_MPLS	GW	GW0070-042921	2021-04-29	CuDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741855	PACE_MPLS	GW	GW0071-042921	2021-04-29	CuDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-26	
10559096	741855	PACE_MPLS	GW	GW0072-042921	2021-04-29	CuDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741855	PACE_MPLS	GW	GW0073-042921	2021-04-29	CuDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-26	
10559096	741855	PACE_MPLS	GW	GW0074-043021	2021-04-30	CuDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-27	
10559096	741855	PACE_MPLS	GW	GW0075-043021	2021-04-30	CuDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-27	
10559096	741855	PACE_MPLS	GW	GW0076-043021	2021-04-30	CuDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-27	
10559096	741855	PACE_MPLS	GW	GW0077-043021	2021-04-30	CuDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-27	
10559096	741855	PACE_MPLS	GW	GW0078-043021	2021-04-30	CuDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-27	
10559096	741855	PACE_MPLS	GW	GW0076-043021	2021-04-30	PbDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-27	
10559096	741855	PACE_MPLS	GW	GW0077-043021	2021-04-30	PbDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-27	
10559096	741855	PACE_MPLS	GW	GW0078-043021	2021-04-30	PbDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-27	
10559096	741855	PACE_MPLS	GW	GW0072-042921	2021-04-29	PbDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741855	PACE_MPLS	GW	GW0073-042921	2021-04-29	PbDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	

Table B5b. BPSOU 2021 Groundwater Data Quality Assessment - Holding Times

SDG	Batch ID	Lab	Media	Field Sample ID	Sample Date	Parameter	Prep Date	Prep Method	Analysis Date	Analysis Method	Hold Expires	DV Q
10559096	741855	PACE_MPLS	GW	GW0074-043021	2021-04-30	PbDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-27	
10559096	741855	PACE_MPLS	GW	GW0075-043021	2021-04-30	PbDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-27	
10559096	741855	PACE_MPLS	GW	GW0068-042921	2021-04-29	PbDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741855	PACE_MPLS	GW	GW0069-042921	2021-04-29	PbDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741855	PACE_MPLS	GW	GW0070-042921	2021-04-29	PbDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741855	PACE_MPLS	GW	GW0071-042921	2021-04-29	PbDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741855	PACE_MPLS	GW	GW0064-042821	2021-04-28	PbDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741855	PACE_MPLS	GW	GW0065-042821	2021-04-28	PbDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741855	PACE_MPLS	GW	GW0066-042821	2021-04-28	PbDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741855	PACE_MPLS	GW	GW0067-042921	2021-04-29	PbDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741855	PACE_MPLS	GW	GW0061-042821	2021-04-28	PbDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741855	PACE_MPLS	GW	GW0062-042821	2021-04-28	PbDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741855	PACE_MPLS	GW	GW0063-042821	2021-04-28	PbDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741855	PACE_MPLS	GW	GW0062-042821	2021-04-28	ZnDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741855	PACE_MPLS	GW	GW0064-042821	2021-04-28	ZnDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741855	PACE_MPLS	GW	GW0063-042821	2021-04-28	ZnDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741855	PACE_MPLS	GW	GW0061-042821	2021-04-28	ZnDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741855	PACE_MPLS	GW	GW0067-042921	2021-04-29	ZnDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741855	PACE_MPLS	GW	GW0066-042821	2021-04-28	ZnDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741855	PACE_MPLS	GW	GW0065-042821	2021-04-28	ZnDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-25	
10559096	741855	PACE_MPLS	GW	GW0070-042921	2021-04-29	ZnDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-26	
10559096	741855	PACE_MPLS	GW	GW0069-042921	2021-04-29	ZnDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741855	PACE_MPLS	GW	GW0068-042921	2021-04-29	ZnDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-26	
10559096	741855	PACE_MPLS	GW	GW0075-043021	2021-04-30	ZnDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-27	
10559096	741855	PACE_MPLS	GW	GW0077-043021	2021-04-30	ZnDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-27	
10559096	741855	PACE_MPLS	GW	GW0076-043021	2021-04-30	ZnDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-27	
10559096	741855	PACE_MPLS	GW	GW0074-043021	2021-04-30	ZnDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-27	
10559096	741855	PACE_MPLS	GW	GW0073-042921	2021-04-29	ZnDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-26	
10559096	741855	PACE_MPLS	GW	GW0072-042921	2021-04-29	ZnDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-26	
10559096	741855	PACE_MPLS	GW	GW0071-042921	2021-04-29	ZnDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-26	
10559096	741855	PACE_MPLS	GW	GW0078-043021	2021-04-30	ZnDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-27	
10559096	744269	PACE_MPLS	GW	GW0055-042921	2021-04-29	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-27	
10559096	744269	PACE_MPLS	GW	GW0056-043021	2021-04-30	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-28	
10559096	744269	PACE_MPLS	GW	GW0057-043021	2021-04-30	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-28	
10559096	744269	PACE_MPLS	GW	GW0052-042921	2021-04-29	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-27	
10559096	744269	PACE_MPLS	GW	GW0053-042921	2021-04-29	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-27	
10559096	744269	PACE_MPLS	GW	GW0054-042921	2021-04-29	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-27	
10559096	744269	PACE_MPLS	GW	GW0050-042921	2021-04-29	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-27	
10559096	744269	PACE_MPLS	GW	GW0051-042921	2021-04-29	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-27	
10559096	744269	PACE_MPLS	GW	GW0049-042921	2021-04-29	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-27	
10559096	744269	PACE_MPLS	GW	GW0047-042821	2021-04-28	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-26	
10559096	744269	PACE_MPLS	GW	GW0048-042921	2021-04-29	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-27	
10559096	744269	PACE_MPLS	GW	GW0046-042821	2021-04-28	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-26	
10559096	744269	PACE_MPLS	GW	GW0042-042821	2021-04-28	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-26	
10559096	744269	PACE_MPLS	GW	GW0043-042821	2021-04-28	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-26	
10559096	744269	PACE_MPLS	GW	GW0044-042821	2021-04-28	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-26	
10559096	744269	PACE_MPLS	GW	GW0045-042821	2021-04-28	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-26	
10559096	744269	PACE_MPLS	GW	GW0041-042821	2021-04-28	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-26	
10559096	744270	PACE_MPLS	GW	GW0061-042821	2021-04-28	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-26	
10559096	744270	PACE_MPLS	GW	GW0063-042821	2021-04-28	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-26	
10559096	744270	PACE_MPLS	GW	GW0064-042821	2021-04-28	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-26	
10559096	744270	PACE_MPLS	GW	GW0062-042821	2021-04-28	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-26	
10559096	744270	PACE_MPLS	GW	GW0078-043021	2021-04-30	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-28	
10559096	744270	PACE_MPLS	GW	GW0071-042921	2021-04-29	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-27	
10559096	744270	PACE_MPLS	GW	GW0072-042921	2021-04-29	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-27	
10559096	744270	PACE_MPLS	GW	GW0073-042921	2021-04-29	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-27	
10559096	744270	PACE_MPLS	GW	GW0074-043021	2021-04-30	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-28	
10559096	744270	PACE_MPLS	GW	GW0076-043021	2021-04-30	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-28	
10559096	744270	PACE_MPLS	GW	GW0077-043021	2021-04-30	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-28	
10559096	744270	PACE_MPLS	GW	GW0075-043021	2021-04-30	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-28	
10559096	744270	PACE_MPLS	GW	GW0068-042921	2021-04-29	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-27	
10559096	744270	PACE_MPLS	GW	GW0069-042921	2021-04-29	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-27	
10559096	744270	PACE_MPLS	GW	GW0070-042921	2021-04-29	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-27	
10559096	744270	PACE_MPLS	GW	GW0065-042821	2021-04-28	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-26	

Table B5b. BPSOU 2021 Groundwater Data Quality Assessment - Holding Times

SDG	Batch ID	Lab	Media	Field Sample ID	Sample Date	Parameter	Prep Date	Prep Method	Analysis Date	Analysis Method	Hold Expires	DV Q
10559096	744270	PACE_MPLS	GW	GW0066-042821	2021-04-28	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-26	
10559096	744270	PACE_MPLS	GW	GW0067-042921	2021-04-29	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-27	
10559096	741844	PACE_MPLS	GW	GW0060-050321	2021-05-03	AsDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-30	
10559096	741844	PACE_MPLS	GW	GW0059-050321	2021-05-03	AsDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-30	
10559096	741844	PACE_MPLS	GW	GW0058-050321	2021-05-03	AsDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-30	
10559096	741844	PACE_MPLS	GW	GW0058-050321	2021-05-03	CdDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-30	
10559096	741844	PACE_MPLS	GW	GW0059-050321	2021-05-03	CdDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-30	
10559096	741844	PACE_MPLS	GW	GW0060-050321	2021-05-03	CdDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-30	
10559096	741844	PACE_MPLS	GW	GW0060-050321	2021-05-03	CuDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-30	
10559096	741844	PACE_MPLS	GW	GW0059-050321	2021-05-03	CuDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-30	
10559096	741844	PACE_MPLS	GW	GW0058-050321	2021-05-03	CuDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-30	
10559096	741844	PACE_MPLS	GW	GW0058-050321	2021-05-03	PbDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-30	
10559096	741844	PACE_MPLS	GW	GW0059-050321	2021-05-03	PbDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-30	
10559096	741844	PACE_MPLS	GW	GW0060-050321	2021-05-03	PbDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-30	
10559096	741844	PACE_MPLS	GW	GW0059-050321	2021-05-03	ZnDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-30	
10559096	741844	PACE_MPLS	GW	GW0060-050321	2021-05-03	ZnDis	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	2021-10-30	
10559096	741844	PACE_MPLS	GW	GW0058-050321	2021-05-03	ZnDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-30	
10559096	741855	PACE_MPLS	GW	GW0079-050321	2021-05-03	AsDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-30	
10559096	741855	PACE_MPLS	GW	GW0080-050321	2021-05-03	AsDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-30	
10559096	741855	PACE_MPLS	GW	GW0080-050321	2021-05-03	CdDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-30	
10559096	741855	PACE_MPLS	GW	GW0079-050321	2021-05-03	CdDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-30	
10559096	741855	PACE_MPLS	GW	GW0079-050321	2021-05-03	CuDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-30	
10559096	741855	PACE_MPLS	GW	GW0080-050321	2021-05-03	CuDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-30	
10559096	741855	PACE_MPLS	GW	GW0080-050321	2021-05-03	PbDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-30	
10559096	741855	PACE_MPLS	GW	GW0079-050321	2021-05-03	PbDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-30	
10559096	741855	PACE_MPLS	GW	GW0079-050321	2021-05-03	ZnDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-30	
10559096	741855	PACE_MPLS	GW	GW0080-050321	2021-05-03	ZnDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-30	
10559096	741868	PACE_MPLS	GW	GW0081-050321	2021-05-03	AsDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-30	
10559096	741868	PACE_MPLS	GW	GW0082-050321	2021-05-03	AsDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-30	
10559096	741868	PACE_MPLS	GW	GW0083-050321	2021-05-03	AsDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-30	
10559096	741868	PACE_MPLS	GW	GW0084-050321	2021-05-03	AsDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-30	
10559096	741868	PACE_MPLS	GW	GW0085-050421	2021-05-04	AsDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-31	
10559096	741868	PACE_MPLS	GW	GW0086-050421	2021-05-04	AsDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-31	
10559096	741868	PACE_MPLS	GW	GW0087-050421	2021-05-04	AsDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-31	
10559096	741868	PACE_MPLS	GW	GW0089-050421	2021-05-04	AsDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-31	
10559096	741868	PACE_MPLS	GW	GW0090-050421	2021-05-04	AsDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-31	
10559096	741868	PACE_MPLS	GW	GW0091-050421	2021-05-04	AsDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-31	
10559096	741868	PACE_MPLS	GW	GW0092-050421	2021-05-04	AsDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-31	
10559096	741868	PACE_MPLS	GW	GW0093-050421	2021-05-04	AsDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-31	
10559096	741868	PACE_MPLS	GW	GW0094-050321	2021-05-03	AsDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-30	
10559096	741868	PACE_MPLS	GW	GW0094-050321	2021-05-03	CdDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-30	
10559096	741868	PACE_MPLS	GW	GW0093-050421	2021-05-04	CdDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-31	
10559096	741868	PACE_MPLS	GW	GW0092-050421	2021-05-04	CdDis	2021-05-14	EPA 200.8	2021-05-21	EPA 200.8	2021-10-31	
10559096	741868	PACE_MPLS	GW	GW0091-050421	2021-05-04	CdDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-31	
10559096	741868	PACE_MPLS	GW	GW0090-050421	2021-05-04	CdDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-31	
10559096	741868	PACE_MPLS	GW	GW0089-050421	2021-05-04	CdDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-31	
10559096	741868	PACE_MPLS	GW	GW0087-050421	2021-05-04	CdDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-31	
10559096	741868	PACE_MPLS	GW	GW0086-050421	2021-05-04	CdDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-31	
10559096	741868	PACE_MPLS	GW	GW0085-050421	2021-05-04	CdDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-31	
10559096	741868	PACE_MPLS	GW	GW0084-050321	2021-05-03	CdDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-30	
10559096	741868	PACE_MPLS	GW	GW0083-050321	2021-05-03	CdDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-30	
10559096	741868	PACE_MPLS	GW	GW0082-050321	2021-05-03	CdDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-30	
10559096	741868	PACE_MPLS	GW	GW0081-050321	2021-05-03	CdDis	2021-05-14	EPA 200.8	2021-05-21	EPA 200.8	2021-10-30	
10559096	741868	PACE_MPLS	GW	GW0081-050321	2021-05-03	CuDis	2021-05-14	EPA 200.8	2021-05-21	EPA 200.8	2021-10-30	
10559096	741868	PACE_MPLS	GW	GW0082-050321	2021-05-03	CuDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-30	
10559096	741868	PACE_MPLS	GW	GW0083-050321	2021-05-03	CuDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-30	
10559096	741868	PACE_MPLS	GW	GW0084-050321	2021-05-03	CuDis	2021-05-14	EPA 200.8	2021-05-21	EPA 200.8	2021-10-30	
10559096	741868	PACE_MPLS	GW	GW0085-050421	2021-05-04	CuDis	2021-05-14	EPA 200.8	2021-05-21	EPA 200.8	2021-10-31	
10559096	741868	PACE_MPLS	GW	GW0086-050421	2021-05-04	CuDis	2021-05-14	EPA 200.8	2021-05-21	EPA 200.8	2021-10-31	
10559096	741868	PACE_MPLS	GW	GW0087-050421	2021-05-04	CuDis	2021-05-14	EPA 200.8	2021-05-21	EPA 200.8	2021-10-31	
10559096	741868	PACE_MPLS	GW	GW0089-050421	2021-05-04	CuDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-31	
10559096	741868	PACE_MPLS	GW	GW0090-050421	2021-05-04	CuDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-31	
10559096	741868	PACE_MPLS	GW	GW0091-050421	2021-05-04	CuDis	2021-05-14	EPA 200.8	2021-05-21	EPA 200.8	2021-10-31	
10559096	741868	PACE_MPLS	GW	GW0092-050421	2021-05-04	CuDis	2021-05-14	EPA 200.8	2021-05-21	EPA 200.8	2021-10-31	

Table B5b. BPSOU 2021 Groundwater Data Quality Assessment - Holding Times

SDG	Batch ID	Lab	Media	Field Sample ID	Sample Date	Parameter	Prep Date	Prep Method	Analysis Date	Analysis Method	Hold Expires	DV Q
10559096	741868	PACE_MPLS	GW	GW0093-050421	2021-05-04	CuDis	2021-05-14	EPA 200.8	2021-05-21	EPA 200.8	2021-10-31	
10559096	741868	PACE_MPLS	GW	GW0094-050321	2021-05-03	CuDis	2021-05-14	EPA 200.8	2021-05-21	EPA 200.8	2021-10-30	
10559096	741868	PACE_MPLS	GW	GW0091-050421	2021-05-04	PbDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-31	
10559096	741868	PACE_MPLS	GW	GW0092-050421	2021-05-04	PbDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-31	
10559096	741868	PACE_MPLS	GW	GW0093-050421	2021-05-04	PbDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-31	
10559096	741868	PACE_MPLS	GW	GW0094-050321	2021-05-03	PbDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-30	
10559096	741868	PACE_MPLS	GW	GW0086-050421	2021-05-04	PbDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-31	
10559096	741868	PACE_MPLS	GW	GW0087-050421	2021-05-04	PbDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-31	
10559096	741868	PACE_MPLS	GW	GW0089-050421	2021-05-04	PbDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-31	
10559096	741868	PACE_MPLS	GW	GW0090-050421	2021-05-04	PbDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-31	
10559096	741868	PACE_MPLS	GW	GW0081-050321	2021-05-03	PbDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-30	
10559096	741868	PACE_MPLS	GW	GW0083-050321	2021-05-03	PbDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-30	
10559096	741868	PACE_MPLS	GW	GW0084-050321	2021-05-03	PbDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-30	
10559096	741868	PACE_MPLS	GW	GW0085-050421	2021-05-04	PbDis	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	2021-10-31	
10559096	741868	PACE_MPLS	GW	GW0082-050321	2021-05-03	PbDis	2021-05-14	EPA 200.8	2021-05-21	EPA 200.8	2021-10-30	
10559096	741868	PACE_MPLS	GW	GW0082-050321	2021-05-03	ZnDis	2021-05-14	EPA 200.8	2021-05-21	EPA 200.8	2021-10-30	
10559096	741868	PACE_MPLS	GW	GW0081-050321	2021-05-03	ZnDis	2021-05-14	EPA 200.8	2021-05-21	EPA 200.8	2021-10-30	
10559096	741868	PACE_MPLS	GW	GW0084-050321	2021-05-03	ZnDis	2021-05-14	EPA 200.8	2021-05-21	EPA 200.8	2021-10-30	
10559096	741868	PACE_MPLS	GW	GW0083-050321	2021-05-03	ZnDis	2021-05-14	EPA 200.8	2021-05-21	EPA 200.8	2021-10-30	
10559096	741868	PACE_MPLS	GW	GW0085-050421	2021-05-04	ZnDis	2021-05-14	EPA 200.8	2021-05-21	EPA 200.8	2021-10-31	
10559096	741868	PACE_MPLS	GW	GW0087-050421	2021-05-04	ZnDis	2021-05-14	EPA 200.8	2021-05-21	EPA 200.8	2021-10-31	
10559096	741868	PACE_MPLS	GW	GW0086-050421	2021-05-04	ZnDis	2021-05-14	EPA 200.8	2021-05-21	EPA 200.8	2021-10-31	
10559096	741868	PACE_MPLS	GW	GW0089-050421	2021-05-04	ZnDis	2021-05-14	EPA 200.8	2021-05-24	EPA 200.8	2021-10-31	
10559096	741868	PACE_MPLS	GW	GW0091-050421	2021-05-04	ZnDis	2021-05-14	EPA 200.8	2021-05-21	EPA 200.8	2021-10-31	
10559096	741868	PACE_MPLS	GW	GW0090-050421	2021-05-04	ZnDis	2021-05-14	EPA 200.8	2021-05-24	EPA 200.8	2021-10-31	
10559096	741868	PACE_MPLS	GW	GW0094-050321	2021-05-03	ZnDis	2021-05-14	EPA 200.8	2021-05-21	EPA 200.8	2021-10-30	
10559096	741868	PACE_MPLS	GW	GW0093-050421	2021-05-04	ZnDis	2021-05-14	EPA 200.8	2021-05-21	EPA 200.8	2021-10-31	
10559096	741868	PACE_MPLS	GW	GW0092-050421	2021-05-04	ZnDis	2021-05-14	EPA 200.8	2021-05-24	EPA 200.8	2021-10-31	
10559096	744269	PACE_MPLS	GW	GW0058-050321	2021-05-03	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-31	
10559096	744269	PACE_MPLS	GW	GW0060-050321	2021-05-03	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-31	
10559096	744269	PACE_MPLS	GW	GW0059-050321	2021-05-03	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-31	
10559096	744270	PACE_MPLS	GW	GW0080-050321	2021-05-03	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-31	
10559096	744270	PACE_MPLS	GW	GW0079-050321	2021-05-03	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-31	
10559096	744271	PACE_MPLS	GW	GW0083-050321	2021-05-03	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-31	
10559096	744271	PACE_MPLS	GW	GW0084-050321	2021-05-03	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-31	
10559096	744271	PACE_MPLS	GW	GW0081-050321	2021-05-03	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-31	
10559096	744271	PACE_MPLS	GW	GW0082-050321	2021-05-03	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-05-31	
10559096	744271	PACE_MPLS	GW	GW0090-050421	2021-05-04	HgDis	2021-05-24	EPA 245.1	2021-05-25	EPA 245.1	2021-06-01	
10559096	744271	PACE_MPLS	GW	GW0091-050421	2021-05-04	HgDis	2021-05-24	EPA 245.1	2021-05-25	EPA 245.1	2021-06-01	
10559096	744271	PACE_MPLS	GW	GW0089-050421	2021-05-04	HgDis	2021-05-24	EPA 245.1	2021-05-25	EPA 245.1	2021-06-01	
10559096	744271	PACE_MPLS	GW	GW0086-050421	2021-05-04	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-06-01	
10559096	744271	PACE_MPLS	GW	GW0087-050421	2021-05-04	HgDis	2021-05-24	EPA 245.1	2021-05-25	EPA 245.1	2021-06-01	
10559096	744271	PACE_MPLS	GW	GW0085-050421	2021-05-04	HgDis	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	2021-06-01	
10559096	744271	PACE_MPLS	GW	GW0092-050421	2021-05-04	HgDis	2021-05-24	EPA 245.1	2021-05-25	EPA 245.1	2021-06-01	
10559096	744271	PACE_MPLS	GW	GW0093-050421	2021-05-04	HgDis	2021-05-24	EPA 245.1	2021-05-25	EPA 245.1	2021-06-01	
10559096	744271	PACE_MPLS	GW	GW0094-050321	2021-05-03	HgDis	2021-05-24	EPA 245.1	2021-05-25	EPA 245.1	2021-05-31	
10560315	743060	PACE_MPLS	GW	GW0128-051121	2021-05-11	AsDis	2021-05-21	EPA 200.8	2021-05-26	EPA 200.8	2021-11-07	
10560315	743060	PACE_MPLS	GW	GW0129-051121	2021-05-11	AsDis	2021-05-21	EPA 200.8	2021-05-26	EPA 200.8	2021-11-07	
10560315	743060	PACE_MPLS	GW	GW0122-050721	2021-05-07	AsDis	2021-05-21	EPA 200.8	2021-05-26	EPA 200.8	2021-11-03	
10560315	743060	PACE_MPLS	GW	GW0123-050721	2021-05-07	AsDis	2021-05-21	EPA 200.8	2021-05-26	EPA 200.8	2021-11-03	
10560315	743060	PACE_MPLS	GW	GW0125-051121	2021-05-11	AsDis	2021-05-21	EPA 200.8	2021-05-26	EPA 200.8	2021-11-07	
10560315	743060	PACE_MPLS	GW	GW0127-051121	2021-05-11	AsDis	2021-05-21	EPA 200.8	2021-05-26	EPA 200.8	2021-11-07	
10560315	743060	PACE_MPLS	GW	GW0127-051121	2021-05-11	CdDis	2021-05-21	EPA 200.8	2021-05-26	EPA 200.8	2021-11-07	
10560315	743060	PACE_MPLS	GW	GW0125-051121	2021-05-11	CdDis	2021-05-21	EPA 200.8	2021-05-26	EPA 200.8	2021-11-07	
10560315	743060	PACE_MPLS	GW	GW0123-050721	2021-05-07	CdDis	2021-05-21	EPA 200.8	2021-05-26	EPA 200.8	2021-11-03	
10560315	743060	PACE_MPLS	GW	GW0122-050721	2021-05-07	CdDis	2021-05-21	EPA 200.8	2021-05-26	EPA 200.8	2021-11-03	
10560315	743060	PACE_MPLS	GW	GW0129-051121	2021-05-11	CdDis	2021-05-21	EPA 200.8	2021-05-26	EPA 200.8	2021-11-07	
10560315	743060	PACE_MPLS	GW	GW0128-051121	2021-05-11	CdDis	2021-05-21	EPA 200.8	2021-05-26	EPA 200.8	2021-11-07	
10560315	743060	PACE_MPLS	GW	GW0128-051121	2021-05-11	CuDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-07	
10560315	743060	PACE_MPLS	GW	GW0129-051121	2021-05-11	CuDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-07	
10560315	743060	PACE_MPLS	GW	GW0122-050721	2021-05-07	CuDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-03	
10560315	743060	PACE_MPLS	GW	GW0123-050721	2021-05-07	CuDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-03	
10560315	743060	PACE_MPLS	GW	GW0125-051121	2021-05-11	CuDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-07	
10560315	743060	PACE_MPLS	GW	GW0127-051121	2021-05-11	CuDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-07	

Table B5b. BPSOU 2021 Groundwater Data Quality Assessment - Holding Times

SDG	Batch ID	Lab	Media	Field Sample ID	Sample Date	Parameter	Prep Date	Prep Method	Analysis Date	Analysis Method	Hold Expires	DV Q
10560315	743060	PACE_MPLS	GW	GW0125-051121	2021-05-11	PbDis	2021-05-21	EPA 200.8	2021-05-26	EPA 200.8	2021-11-07	
10560315	743060	PACE_MPLS	GW	GW0127-051121	2021-05-11	PbDis	2021-05-21	EPA 200.8	2021-05-26	EPA 200.8	2021-11-07	
10560315	743060	PACE_MPLS	GW	GW0122-050721	2021-05-07	PbDis	2021-05-21	EPA 200.8	2021-05-26	EPA 200.8	2021-11-03	
10560315	743060	PACE_MPLS	GW	GW0123-050721	2021-05-07	PbDis	2021-05-21	EPA 200.8	2021-05-26	EPA 200.8	2021-11-03	
10560315	743060	PACE_MPLS	GW	GW0128-051121	2021-05-11	PbDis	2021-05-21	EPA 200.8	2021-05-26	EPA 200.8	2021-11-07	
10560315	743060	PACE_MPLS	GW	GW0129-051121	2021-05-11	PbDis	2021-05-21	EPA 200.8	2021-05-26	EPA 200.8	2021-11-07	
10560315	743060	PACE_MPLS	GW	GW0129-051121	2021-05-11	ZnDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-07	
10560315	743060	PACE_MPLS	GW	GW0128-051121	2021-05-11	ZnDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-07	
10560315	743060	PACE_MPLS	GW	GW0122-050721	2021-05-07	ZnDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-03	
10560315	743060	PACE_MPLS	GW	GW0123-050721	2021-05-07	ZnDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-03	
10560315	743060	PACE_MPLS	GW	GW0127-051121	2021-05-11	ZnDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-07	
10560315	743060	PACE_MPLS	GW	GW0125-051121	2021-05-11	ZnDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-07	
10560315	745524	PACE_MPLS	GW	GW0125-051121	2021-05-11	HgDis	2021-06-01	EPA 245.1	2021-06-01	EPA 245.1	2021-06-08	
10560315	745524	PACE_MPLS	GW	GW0127-051121	2021-05-11	HgDis	2021-06-01	EPA 245.1	2021-06-01	EPA 245.1	2021-06-08	
10560315	745524	PACE_MPLS	GW	GW0126-051121	2021-05-11	HgDis	2021-06-01	EPA 245.1	2021-06-01	EPA 245.1	2021-06-08	
10560315	745524	PACE_MPLS	GW	GW0124-050721	2021-05-07	HgDis	2021-06-01	EPA 245.1	2021-06-01	EPA 245.1	2021-06-04	
10560315	745524	PACE_MPLS	GW	GW0123-050721	2021-05-07	HgDis	2021-06-01	EPA 245.1	2021-06-01	EPA 245.1	2021-06-04	
10560315	745524	PACE_MPLS	GW	GW0122-050721	2021-05-07	HgDis	2021-06-01	EPA 245.1	2021-06-01	EPA 245.1	2021-06-04	
10560315	745524	PACE_MPLS	GW	GW0088-050621	2021-05-06	HgDis	2021-06-01	EPA 245.1	2021-06-01	EPA 245.1	2021-06-03	
10560315	745524	PACE_MPLS	GW	GW0128-051121	2021-05-11	HgDis	2021-06-01	EPA 245.1	2021-06-01	EPA 245.1	2021-06-08	
10560315	745524	PACE_MPLS	GW	GW0129-051121	2021-05-11	HgDis	2021-06-01	EPA 245.1	2021-06-01	EPA 245.1	2021-06-08	
10560315	745714	PACE_MPLS	GW	GW0124-050721	2021-05-07	AsDis	2021-06-01	EPA 200.8	2021-06-02	EPA 200.8	2021-11-03	
10560315	745714	PACE_MPLS	GW	GW0126-051121	2021-05-11	AsDis	2021-06-01	EPA 200.8	2021-06-02	EPA 200.8	2021-11-07	
10560315	745714	PACE_MPLS	GW	GW0088-050621	2021-05-06	AsDis	2021-06-01	EPA 200.8	2021-06-02	EPA 200.8	2021-11-02	
10560315	745714	PACE_MPLS	GW	GW0088-050621	2021-05-06	CdDis	2021-06-01	EPA 200.8	2021-06-02	EPA 200.8	2021-11-02	
10560315	745714	PACE_MPLS	GW	GW0126-051121	2021-05-11	CdDis	2021-06-01	EPA 200.8	2021-06-02	EPA 200.8	2021-11-07	
10560315	745714	PACE_MPLS	GW	GW0124-050721	2021-05-07	CdDis	2021-06-01	EPA 200.8	2021-06-02	EPA 200.8	2021-11-03	
10560315	745714	PACE_MPLS	GW	GW0124-050721	2021-05-07	CuDis	2021-06-01	EPA 200.8	2021-06-02	EPA 200.8	2021-11-03	
10560315	745714	PACE_MPLS	GW	GW0126-051121	2021-05-11	CuDis	2021-06-01	EPA 200.8	2021-06-02	EPA 200.8	2021-11-07	
10560315	745714	PACE_MPLS	GW	GW0088-050621	2021-05-06	CuDis	2021-06-01	EPA 200.8	2021-06-02	EPA 200.8	2021-11-02	
10560315	745714	PACE_MPLS	GW	GW0126-051121	2021-05-11	PbDis	2021-06-01	EPA 200.8	2021-06-02	EPA 200.8	2021-11-07	
10560315	745714	PACE_MPLS	GW	GW0124-050721	2021-05-07	PbDis	2021-06-01	EPA 200.8	2021-06-02	EPA 200.8	2021-11-03	
10560315	745714	PACE_MPLS	GW	GW0088-050621	2021-05-06	PbDis	2021-06-01	EPA 200.8	2021-06-02	EPA 200.8	2021-11-02	
10560315	745714	PACE_MPLS	GW	GW0124-050721	2021-05-07	ZnDis	2021-06-01	EPA 200.8	2021-06-02	EPA 200.8	2021-11-03	
10560315	745714	PACE_MPLS	GW	GW0126-051121	2021-05-11	ZnDis	2021-06-01	EPA 200.8	2021-06-03	EPA 200.8	2021-11-07	
10560315	745714	PACE_MPLS	GW	GW0088-050621	2021-05-06	ZnDis	2021-06-01	EPA 200.8	2021-06-02	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0104-050621	2021-05-06	AsDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0105-050621	2021-05-06	AsDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0106-050621	2021-05-06	AsDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0107-050621	2021-05-06	AsDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0108-050621	2021-05-06	AsDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0109-050521	2021-05-05	AsDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-01	
10560318	743507	PACE_MPLS	GW	GW0095-050521	2021-05-05	AsDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-01	
10560318	743507	PACE_MPLS	GW	GW0096-050521	2021-05-05	AsDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-01	
10560318	743507	PACE_MPLS	GW	GW0097-050521	2021-05-05	AsDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-01	
10560318	743507	PACE_MPLS	GW	GW0098-050521	2021-05-05	AsDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-01	
10560318	743507	PACE_MPLS	GW	GW0099-050621	2021-05-06	AsDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0100-050621	2021-05-06	AsDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0101-050621	2021-05-06	AsDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0102-050621	2021-05-06	AsDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0103-050621	2021-05-06	AsDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0103-050621	2021-05-06	CdDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0102-050621	2021-05-06	CdDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0101-050621	2021-05-06	CdDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0100-050621	2021-05-06	CdDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0099-050621	2021-05-06	CdDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0098-050521	2021-05-05	CdDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-01	
10560318	743507	PACE_MPLS	GW	GW0097-050521	2021-05-05	CdDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-01	
10560318	743507	PACE_MPLS	GW	GW0096-050521	2021-05-05	CdDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-01	
10560318	743507	PACE_MPLS	GW	GW0095-050521	2021-05-05	CdDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-01	
10560318	743507	PACE_MPLS	GW	GW0109-050521	2021-05-05	CdDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-01	
10560318	743507	PACE_MPLS	GW	GW0108-050621	2021-05-06	CdDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0107-050621	2021-05-06	CdDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0106-050621	2021-05-06	CdDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	

Table B5b. BPSOU 2021 Groundwater Data Quality Assessment - Holding Times

SDG	Batch ID	Lab	Media	Field Sample ID	Sample Date	Parameter	Prep Date	Prep Method	Analysis Date	Analysis Method	Hold Expires	DV Q
10560318	743507	PACE_MPLS	GW	GW0105-050621	2021-05-06	CdDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0104-050621	2021-05-06	CdDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0104-050621	2021-05-06	CuDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0105-050621	2021-05-06	CuDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0106-050621	2021-05-06	CuDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0107-050621	2021-05-06	CuDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0108-050621	2021-05-06	CuDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0109-050521	2021-05-05	CuDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-01	
10560318	743507	PACE_MPLS	GW	GW0095-050521	2021-05-05	CuDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-01	
10560318	743507	PACE_MPLS	GW	GW0096-050521	2021-05-05	CuDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-01	
10560318	743507	PACE_MPLS	GW	GW0097-050521	2021-05-05	CuDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-01	
10560318	743507	PACE_MPLS	GW	GW0098-050521	2021-05-05	CuDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-01	
10560318	743507	PACE_MPLS	GW	GW0099-050621	2021-05-06	CuDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0100-050621	2021-05-06	CuDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0101-050621	2021-05-06	CuDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0102-050621	2021-05-06	CuDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0103-050621	2021-05-06	CuDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0098-050521	2021-05-05	PbDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-01	
10560318	743507	PACE_MPLS	GW	GW0099-050621	2021-05-06	PbDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0100-050621	2021-05-06	PbDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0101-050621	2021-05-06	PbDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0096-050521	2021-05-05	PbDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-01	
10560318	743507	PACE_MPLS	GW	GW0097-050521	2021-05-05	PbDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-01	
10560318	743507	PACE_MPLS	GW	GW0095-050521	2021-05-05	PbDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-01	
10560318	743507	PACE_MPLS	GW	GW0106-050621	2021-05-06	PbDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0107-050621	2021-05-06	PbDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0108-050621	2021-05-06	PbDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0109-050521	2021-05-05	PbDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-01	
10560318	743507	PACE_MPLS	GW	GW0102-050621	2021-05-06	PbDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0103-050621	2021-05-06	PbDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0104-050621	2021-05-06	PbDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0105-050621	2021-05-06	PbDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0104-050621	2021-05-06	ZnDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0106-050621	2021-05-06	ZnDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0105-050621	2021-05-06	ZnDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0109-050521	2021-05-05	ZnDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-01	
10560318	743507	PACE_MPLS	GW	GW0108-050621	2021-05-06	ZnDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0107-050621	2021-05-06	ZnDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0095-050521	2021-05-05	ZnDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-01	
10560318	743507	PACE_MPLS	GW	GW0096-050521	2021-05-05	ZnDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-01	
10560318	743507	PACE_MPLS	GW	GW0101-050621	2021-05-06	ZnDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0103-050621	2021-05-06	ZnDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0102-050621	2021-05-06	ZnDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0100-050621	2021-05-06	ZnDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0099-050621	2021-05-06	ZnDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-02	
10560318	743507	PACE_MPLS	GW	GW0098-050521	2021-05-05	ZnDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-01	
10560318	743507	PACE_MPLS	GW	GW0097-050521	2021-05-05	ZnDis	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	2021-11-01	
10560318	743509	PACE_MPLS	GW	GW0110-050521	2021-05-05	AsDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-01	
10560318	743509	PACE_MPLS	GW	GW0111-050521	2021-05-05	AsDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-01	
10560318	743509	PACE_MPLS	GW	GW0112-050521	2021-05-05	AsDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-01	
10560318	743509	PACE_MPLS	GW	GW0113-050621	2021-05-06	AsDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0114-050621	2021-05-06	AsDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0115-050621	2021-05-06	AsDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0116-050621	2021-05-06	AsDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0121-050721	2021-05-07	AsDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-03	
10560318	743509	PACE_MPLS	GW	GW0120-050621	2021-05-06	AsDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0117-050621	2021-05-06	AsDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0118-050621	2021-05-06	AsDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0119-050621	2021-05-06	AsDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0119-050621	2021-05-06	CdDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0118-050621	2021-05-06	CdDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0117-050621	2021-05-06	CdDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0120-050621	2021-05-06	CdDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0121-050721	2021-05-07	CdDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-03	

Table B5b. BPSOU 2021 Groundwater Data Quality Assessment - Holding Times

SDG	Batch ID	Lab	Media	Field Sample ID	Sample Date	Parameter	Prep Date	Prep Method	Analysis Date	Analysis Method	Hold Expires	DV Q
10560318	743509	PACE_MPLS	GW	GW0116-050621	2021-05-06	CdDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0115-050621	2021-05-06	CdDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0114-050621	2021-05-06	CdDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0113-050621	2021-05-06	CdDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0112-050521	2021-05-05	CdDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-01	
10560318	743509	PACE_MPLS	GW	GW0111-050521	2021-05-05	CdDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-01	
10560318	743509	PACE_MPLS	GW	GW0110-050521	2021-05-05	CdDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-01	
10560318	743509	PACE_MPLS	GW	GW0110-050521	2021-05-05	CuDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-01	
10560318	743509	PACE_MPLS	GW	GW0112-050521	2021-05-05	CuDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-01	
10560318	743509	PACE_MPLS	GW	GW0111-050521	2021-05-05	CuDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-01	
10560318	743509	PACE_MPLS	GW	GW0113-050621	2021-05-06	CuDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0114-050621	2021-05-06	CuDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0115-050621	2021-05-06	CuDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0116-050621	2021-05-06	CuDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0121-050721	2021-05-07	CuDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-03	
10560318	743509	PACE_MPLS	GW	GW0120-050621	2021-05-06	CuDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0117-050621	2021-05-06	CuDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0118-050621	2021-05-06	CuDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0119-050621	2021-05-06	CuDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0114-050621	2021-05-06	PbDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0115-050621	2021-05-06	PbDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0116-050621	2021-05-06	PbDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0117-050621	2021-05-06	PbDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0118-050621	2021-05-06	PbDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0119-050621	2021-05-06	PbDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0120-050621	2021-05-06	PbDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0121-050721	2021-05-07	PbDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-03	
10560318	743509	PACE_MPLS	GW	GW0112-050521	2021-05-05	PbDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-01	
10560318	743509	PACE_MPLS	GW	GW0113-050621	2021-05-06	PbDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0110-050521	2021-05-05	PbDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-01	
10560318	743509	PACE_MPLS	GW	GW0111-050521	2021-05-05	PbDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-01	
10560318	743509	PACE_MPLS	GW	GW0111-050521	2021-05-05	ZnDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-01	
10560318	743509	PACE_MPLS	GW	GW0110-050521	2021-05-05	ZnDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-01	
10560318	743509	PACE_MPLS	GW	GW0112-050521	2021-05-05	ZnDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-01	
10560318	743509	PACE_MPLS	GW	GW0116-050621	2021-05-06	ZnDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0115-050621	2021-05-06	ZnDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0114-050621	2021-05-06	ZnDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0113-050621	2021-05-06	ZnDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0120-050621	2021-05-06	ZnDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0121-050721	2021-05-07	ZnDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-03	
10560318	743509	PACE_MPLS	GW	GW0117-050621	2021-05-06	ZnDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0119-050621	2021-05-06	ZnDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	743509	PACE_MPLS	GW	GW0118-050621	2021-05-06	ZnDis	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	2021-11-02	
10560318	744837	PACE_MPLS	GW	GW0113-050621	2021-05-06	HgDis	2021-05-26	EPA 245.1	2021-05-27	EPA 245.1	2021-06-03	
10560318	744837	PACE_MPLS	GW	GW0114-050621	2021-05-06	HgDis	2021-05-26	EPA 245.1	2021-05-27	EPA 245.1	2021-06-03	
10560318	744837	PACE_MPLS	GW	GW0115-050621	2021-05-06	HgDis	2021-05-26	EPA 245.1	2021-05-27	EPA 245.1	2021-06-03	
10560318	744837	PACE_MPLS	GW	GW0112-050521	2021-05-05	HgDis	2021-05-26	EPA 245.1	2021-05-27	EPA 245.1	2021-06-02	
10560318	744837	PACE_MPLS	GW	GW0111-050521	2021-05-05	HgDis	2021-05-26	EPA 245.1	2021-05-27	EPA 245.1	2021-06-02	
10560318	744837	PACE_MPLS	GW	GW0107-050621	2021-05-06	HgDis	2021-05-26	EPA 245.1	2021-05-27	EPA 245.1	2021-06-03	
10560318	744837	PACE_MPLS	GW	GW0108-050621	2021-05-06	HgDis	2021-05-26	EPA 245.1	2021-05-27	EPA 245.1	2021-06-03	
10560318	744837	PACE_MPLS	GW	GW0109-050521	2021-05-05	HgDis	2021-05-26	EPA 245.1	2021-05-27	EPA 245.1	2021-06-02	
10560318	744837	PACE_MPLS	GW	GW0105-050621	2021-05-06	HgDis	2021-05-26	EPA 245.1	2021-05-27	EPA 245.1	2021-06-03	
10560318	744837	PACE_MPLS	GW	GW0106-050621	2021-05-06	HgDis	2021-05-26	EPA 245.1	2021-05-27	EPA 245.1	2021-06-03	
10560318	744837	PACE_MPLS	GW	GW0104-050621	2021-05-06	HgDis	2021-05-26	EPA 245.1	2021-05-27	EPA 245.1	2021-06-03	
10560318	744837	PACE_MPLS	GW	GW0097-050521	2021-05-05	HgDis	2021-05-26	EPA 245.1	2021-05-27	EPA 245.1	2021-06-02	
10560318	744837	PACE_MPLS	GW	GW0098-050521	2021-05-05	HgDis	2021-05-26	EPA 245.1	2021-05-27	EPA 245.1	2021-06-02	
10560318	744837	PACE_MPLS	GW	GW0099-050621	2021-05-06	HgDis	2021-05-26	EPA 245.1	2021-05-27	EPA 245.1	2021-06-03	
10560318	744837	PACE_MPLS	GW	GW0100-050621	2021-05-06	HgDis	2021-05-26	EPA 245.1	2021-05-27	EPA 245.1	2021-06-03	
10560318	744837	PACE_MPLS	GW	GW0102-050621	2021-05-06	HgDis	2021-05-26	EPA 245.1	2021-05-27	EPA 245.1	2021-06-03	
10560318	744837	PACE_MPLS	GW	GW0103-050621	2021-05-06	HgDis	2021-05-26	EPA 245.1	2021-05-27	EPA 245.1	2021-06-03	
10560318	744837	PACE_MPLS	GW	GW0101-050621	2021-05-06	HgDis	2021-05-26	EPA 245.1	2021-05-27	EPA 245.1	2021-06-03	
10560318	744837	PACE_MPLS	GW	GW0096-050521	2021-05-05	HgDis	2021-05-26	EPA 245.1	2021-05-27	EPA 245.1	2021-06-02	
10560318	744837	PACE_MPLS	GW	GW0095-050521	2021-05-05	HgDis	2021-05-26	EPA 245.1	2021-05-27	EPA 245.1	2021-06-02	
10560318	744839	PACE_MPLS	GW	GW0110-050521	2021-05-05	HgDis	2021-05-26	EPA 245.1	2021-05-27	EPA 245.1	2021-06-02	

Table B5b. BPSOU 2021 Groundwater Data Quality Assessment - Holding Times

SDG	Batch ID	Lab	Media	Field Sample ID	Sample Date	Parameter	Prep Date	Prep Method	Analysis Date	Analysis Method	Hold Expires	DV Q
10560318	744839	PACE_MPLS	GW	GW0116-050621	2021-05-06	HgDis	2021-05-26	EPA 245.1	2021-05-27	EPA 245.1	2021-06-03	
10560318	744839	PACE_MPLS	GW	GW0118-050621	2021-05-06	HgDis	2021-05-26	EPA 245.1	2021-05-27	EPA 245.1	2021-06-03	
10560318	744839	PACE_MPLS	GW	GW0119-050621	2021-05-06	HgDis	2021-05-26	EPA 245.1	2021-05-27	EPA 245.1	2021-06-03	
10560318	744839	PACE_MPLS	GW	GW0117-050621	2021-05-06	HgDis	2021-05-26	EPA 245.1	2021-05-27	EPA 245.1	2021-06-03	
10560318	744839	PACE_MPLS	GW	GW0121-050721	2021-05-07	HgDis	2021-05-26	EPA 245.1	2021-05-27	EPA 245.1	2021-06-04	
10560318	744839	PACE_MPLS	GW	GW0120-050621	2021-05-06	HgDis	2021-05-26	EPA 245.1	2021-05-27	EPA 245.1	2021-06-03	
10580635	774035	PACE_MPLS	GW	GW0001-092321	2021-09-23	HgDis	2021-10-04	EPA 245.1	2021-10-06	EPA 245.1	2021-10-21	
10580635	774035	PACE_MPLS	GW	GW0002-092321	2021-09-23	HgDis	2021-10-04	EPA 245.1	2021-10-06	EPA 245.1	2021-10-21	
10580635	774035	PACE_MPLS	GW	GW0003-092321	2021-09-23	HgDis	2021-10-04	EPA 245.1	2021-10-06	EPA 245.1	2021-10-21	
10580635	774035	PACE_MPLS	GW	GW0004-092321	2021-09-23	HgDis	2021-10-04	EPA 245.1	2021-10-06	EPA 245.1	2021-10-21	
10580635	774035	PACE_MPLS	GW	GW0005-092421	2021-09-24	HgDis	2021-10-04	EPA 245.1	2021-10-06	EPA 245.1	2021-10-22	
10580635	774035	PACE_MPLS	GW	GW0006-092421	2021-09-24	HgDis	2021-10-04	EPA 245.1	2021-10-06	EPA 245.1	2021-10-22	
10580635	774035	PACE_MPLS	GW	GW0007-092421	2021-09-24	HgDis	2021-10-04	EPA 245.1	2021-10-06	EPA 245.1	2021-10-22	
10580635	774035	PACE_MPLS	GW	GW0008-092421	2021-09-24	HgDis	2021-10-04	EPA 245.1	2021-10-06	EPA 245.1	2021-10-22	
10580635	774035	PACE_MPLS	GW	GW0009-092421	2021-09-24	HgDis	2021-10-04	EPA 245.1	2021-10-06	EPA 245.1	2021-10-22	
10580635	774035	PACE_MPLS	GW	GW0010-092421	2021-09-24	HgDis	2021-10-04	EPA 245.1	2021-10-06	EPA 245.1	2021-10-22	
10580635	774035	PACE_MPLS	GW	GW0011-092421	2021-09-24	HgDis	2021-10-04	EPA 245.1	2021-10-06	EPA 245.1	2021-10-22	
10580635	774035	PACE_MPLS	GW	GW0012-092421	2021-09-24	HgDis	2021-10-04	EPA 245.1	2021-10-06	EPA 245.1	2021-10-22	
10580635	774035	PACE_MPLS	GW	GW0013-092421	2021-09-24	HgDis	2021-10-04	EPA 245.1	2021-10-06	EPA 245.1	2021-10-22	
10580635	774035	PACE_MPLS	GW	GW0014-092421	2021-09-24	HgDis	2021-10-04	EPA 245.1	2021-10-06	EPA 245.1	2021-10-22	
10580635	774035	PACE_MPLS	GW	GW0015-092421	2021-09-24	HgDis	2021-10-04	EPA 245.1	2021-10-06	EPA 245.1	2021-10-22	
10580635	774036	PACE_MPLS	GW	GW0016-092421	2021-09-24	HgDis	2021-10-04	EPA 245.1	2021-10-06	EPA 245.1	2021-10-22	
10580635	774036	PACE_MPLS	GW	GW0017-092421	2021-09-24	HgDis	2021-10-04	EPA 245.1	2021-10-06	EPA 245.1	2021-10-22	
10580635	774036	PACE_MPLS	GW	GW0018-092421	2021-09-24	HgDis	2021-10-04	EPA 245.1	2021-10-06	EPA 245.1	2021-10-22	
10580635	774036	PACE_MPLS	GW	GW0019-092421	2021-09-24	HgDis	2021-10-04	EPA 245.1	2021-10-06	EPA 245.1	2021-10-22	
10580635	774036	PACE_MPLS	GW	GW0020-092421	2021-09-24	HgDis	2021-10-04	EPA 245.1	2021-10-06	EPA 245.1	2021-10-22	
10580635	774036	PACE_MPLS	GW	GW0021-092421	2021-09-24	HgDis	2021-10-04	EPA 245.1	2021-10-06	EPA 245.1	2021-10-22	
10580635	774036	PACE_MPLS	GW	GW0022-092421	2021-09-24	HgDis	2021-10-04	EPA 245.1	2021-10-06	EPA 245.1	2021-10-22	
10580635	774036	PACE_MPLS	GW	GW0023-092421	2021-09-24	HgDis	2021-10-04	EPA 245.1	2021-10-06	EPA 245.1	2021-10-22	
10580635	774036	PACE_MPLS	GW	GW0024-092421	2021-09-24	HgDis	2021-10-04	EPA 245.1	2021-10-06	EPA 245.1	2021-10-22	
10580635	774036	PACE_MPLS	GW	GW0025-092421	2021-09-24	HgDis	2021-10-04	EPA 245.1	2021-10-06	EPA 245.1	2021-10-22	
10580635	774114	PACE_MPLS	GW	GW0017-092421	2021-09-24	AsDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0016-092421	2021-09-24	AsDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0015-092421	2021-09-24	AsDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0012-092421	2021-09-24	AsDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0013-092421	2021-09-24	AsDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0014-092421	2021-09-24	AsDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0011-092421	2021-09-24	AsDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0009-092421	2021-09-24	AsDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0010-092421	2021-09-24	AsDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0008-092421	2021-09-24	AsDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0007-092421	2021-09-24	AsDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0004-092321	2021-09-23	AsDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-22	
10580635	774114	PACE_MPLS	GW	GW0005-092421	2021-09-24	AsDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0006-092421	2021-09-24	AsDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0003-092321	2021-09-23	AsDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-22	
10580635	774114	PACE_MPLS	GW	GW0001-092321	2021-09-23	AsDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-22	
10580635	774114	PACE_MPLS	GW	GW0002-092321	2021-09-23	AsDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-22	
10580635	774114	PACE_MPLS	GW	GW0002-092321	2021-09-23	CdDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-22	
10580635	774114	PACE_MPLS	GW	GW0001-092321	2021-09-23	CdDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-22	
10580635	774114	PACE_MPLS	GW	GW0003-092321	2021-09-23	CdDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-22	
10580635	774114	PACE_MPLS	GW	GW0006-092421	2021-09-24	CdDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0005-092421	2021-09-24	CdDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0004-092321	2021-09-23	CdDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-22	
10580635	774114	PACE_MPLS	GW	GW0007-092421	2021-09-24	CdDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0008-092421	2021-09-24	CdDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0010-092421	2021-09-24	CdDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0009-092421	2021-09-24	CdDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0011-092421	2021-09-24	CdDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0014-092421	2021-09-24	CdDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0013-092421	2021-09-24	CdDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0012-092421	2021-09-24	CdDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0015-092421	2021-09-24	CdDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0016-092421	2021-09-24	CdDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	

Table B5b. BPSOU 2021 Groundwater Data Quality Assessment - Holding Times

SDG	Batch ID	Lab	Media	Field Sample ID	Sample Date	Parameter	Prep Date	Prep Method	Analysis Date	Analysis Method	Hold Expires	DV Q
10580635	774114	PACE_MPLS	GW	GW0017-092421	2021-09-24	CdDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0017-092421	2021-09-24	CuDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0016-092421	2021-09-24	CuDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0015-092421	2021-09-24	CuDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0012-092421	2021-09-24	CuDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0013-092421	2021-09-24	CuDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0014-092421	2021-09-24	CuDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0011-092421	2021-09-24	CuDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0009-092421	2021-09-24	CuDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0010-092421	2021-09-24	CuDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0008-092421	2021-09-24	CuDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0007-092421	2021-09-24	CuDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0004-092321	2021-09-23	CuDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-22	
10580635	774114	PACE_MPLS	GW	GW0005-092421	2021-09-24	CuDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0006-092421	2021-09-24	CuDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0003-092321	2021-09-23	CuDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-22	
10580635	774114	PACE_MPLS	GW	GW0001-092321	2021-09-23	CuDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-22	
10580635	774114	PACE_MPLS	GW	GW0002-092321	2021-09-23	CuDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-22	
10580635	774114	PACE_MPLS	GW	GW0003-092321	2021-09-23	PbDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-22	
10580635	774114	PACE_MPLS	GW	GW0002-092321	2021-09-23	PbDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-22	
10580635	774114	PACE_MPLS	GW	GW0001-092321	2021-09-23	PbDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-22	
10580635	774114	PACE_MPLS	GW	GW0005-092421	2021-09-24	PbDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0004-092321	2021-09-23	PbDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-22	
10580635	774114	PACE_MPLS	GW	GW0007-092421	2021-09-24	PbDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0006-092421	2021-09-24	PbDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0009-092421	2021-09-24	PbDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0008-092421	2021-09-24	PbDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0011-092421	2021-09-24	PbDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0010-092421	2021-09-24	PbDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0013-092421	2021-09-24	PbDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0012-092421	2021-09-24	PbDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0015-092421	2021-09-24	PbDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0014-092421	2021-09-24	PbDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0017-092421	2021-09-24	PbDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0016-092421	2021-09-24	PbDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0016-092421	2021-09-24	ZnDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0015-092421	2021-09-24	ZnDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0017-092421	2021-09-24	ZnDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0012-092421	2021-09-24	ZnDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0014-092421	2021-09-24	ZnDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
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10580635	774114	PACE_MPLS	GW	GW0011-092421	2021-09-24	ZnDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0010-092421	2021-09-24	ZnDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0009-092421	2021-09-24	ZnDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0008-092421	2021-09-24	ZnDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0007-092421	2021-09-24	ZnDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0004-092321	2021-09-23	ZnDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-22	
10580635	774114	PACE_MPLS	GW	GW0006-092421	2021-09-24	ZnDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0005-092421	2021-09-24	ZnDis	2021-10-05	EPA 200.8	2021-10-07	EPA 200.8	2022-03-23	
10580635	774114	PACE_MPLS	GW	GW0003-092321	2021-09-23	ZnDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-22	
10580635	774114	PACE_MPLS	GW	GW0002-092321	2021-09-23	ZnDis	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	2022-03-22	
10580635	774114	PACE_MPLS	GW	GW0001-092321	2021-09-23	ZnDis	2021-10-05	EPA 200.8	2021-10-07	EPA 200.8	2022-03-22	
10580635	774115	PACE_MPLS	GW	GW0018-092421	2021-09-24	AsDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10580635	774115	PACE_MPLS	GW	GW0019-092421	2021-09-24	AsDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10580635	774115	PACE_MPLS	GW	GW0025-092421	2021-09-24	AsDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10580635	774115	PACE_MPLS	GW	GW0024-092421	2021-09-24	AsDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10580635	774115	PACE_MPLS	GW	GW0023-092421	2021-09-24	AsDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10580635	774115	PACE_MPLS	GW	GW0020-092421	2021-09-24	AsDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10580635	774115	PACE_MPLS	GW	GW0021-092421	2021-09-24	AsDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10580635	774115	PACE_MPLS	GW	GW0022-092421	2021-09-24	AsDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10580635	774115	PACE_MPLS	GW	GW0022-092421	2021-09-24	CdDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10580635	774115	PACE_MPLS	GW	GW0021-092421	2021-09-24	CdDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10580635	774115	PACE_MPLS	GW	GW0020-092421	2021-09-24	CdDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10580635	774115	PACE_MPLS	GW	GW0023-092421	2021-09-24	CdDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	

Table B5b. BPSOU 2021 Groundwater Data Quality Assessment - Holding Times

SDG	Batch ID	Lab	Media	Field Sample ID	Sample Date	Parameter	Prep Date	Prep Method	Analysis Date	Analysis Method	Hold Expires	DV Q
10580635	774115	PACE_MPLS	GW	GW0024-092421	2021-09-24	CdDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10580635	774115	PACE_MPLS	GW	GW0025-092421	2021-09-24	CdDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10580635	774115	PACE_MPLS	GW	GW0019-092421	2021-09-24	CdDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10580635	774115	PACE_MPLS	GW	GW0018-092421	2021-09-24	CdDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10580635	774115	PACE_MPLS	GW	GW0018-092421	2021-09-24	CuDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10580635	774115	PACE_MPLS	GW	GW0019-092421	2021-09-24	CuDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10580635	774115	PACE_MPLS	GW	GW0025-092421	2021-09-24	CuDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10580635	774115	PACE_MPLS	GW	GW0024-092421	2021-09-24	CuDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10580635	774115	PACE_MPLS	GW	GW0023-092421	2021-09-24	CuDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10580635	774115	PACE_MPLS	GW	GW0020-092421	2021-09-24	CuDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10580635	774115	PACE_MPLS	GW	GW0021-092421	2021-09-24	CuDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10580635	774115	PACE_MPLS	GW	GW0022-092421	2021-09-24	CuDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10580635	774115	PACE_MPLS	GW	GW0021-092421	2021-09-24	PbDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10580635	774115	PACE_MPLS	GW	GW0020-092421	2021-09-24	PbDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10580635	774115	PACE_MPLS	GW	GW0023-092421	2021-09-24	PbDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10580635	774115	PACE_MPLS	GW	GW0022-092421	2021-09-24	PbDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10580635	774115	PACE_MPLS	GW	GW0025-092421	2021-09-24	PbDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10580635	774115	PACE_MPLS	GW	GW0024-092421	2021-09-24	PbDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10580635	774115	PACE_MPLS	GW	GW0019-092421	2021-09-24	PbDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10580635	774115	PACE_MPLS	GW	GW0018-092421	2021-09-24	PbDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10580635	774115	PACE_MPLS	GW	GW0019-092421	2021-09-24	ZnDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10580635	774115	PACE_MPLS	GW	GW0018-092421	2021-09-24	ZnDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10580635	774115	PACE_MPLS	GW	GW0024-092421	2021-09-24	ZnDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10580635	774115	PACE_MPLS	GW	GW0023-092421	2021-09-24	ZnDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10580635	774115	PACE_MPLS	GW	GW0020-092421	2021-09-24	ZnDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10580635	774115	PACE_MPLS	GW	GW0022-092421	2021-09-24	ZnDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10580635	774115	PACE_MPLS	GW	GW0021-092421	2021-09-24	ZnDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10580635	774115	PACE_MPLS	GW	GW0025-092421	2021-09-24	ZnDis	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	2022-03-23	
10581934	775223	PACE_MPLS	GW	GW0026-092721	2021-09-27	AsDis	2021-10-07	EPA 200.8	2021-10-22	EPA 200.8	2022-03-26	
10581934	775223	PACE_MPLS	GW	GW0027-092721	2021-09-27	AsDis	2021-10-07	EPA 200.8	2021-10-22	EPA 200.8	2022-03-26	
10581934	775223	PACE_MPLS	GW	GW0028-092721	2021-09-27	AsDis	2021-10-07	EPA 200.8	2021-10-22	EPA 200.8	2022-03-26	
10581934	775223	PACE_MPLS	GW	GW0029-092721	2021-09-27	AsDis	2021-10-07	EPA 200.8	2021-10-22	EPA 200.8	2022-03-26	
10581934	775223	PACE_MPLS	GW	GW0030-092721	2021-09-27	AsDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-26	
10581934	775223	PACE_MPLS	GW	GW0031-092721	2021-09-27	AsDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-26	
10581934	775223	PACE_MPLS	GW	GW0032-092721	2021-09-27	AsDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-26	
10581934	775223	PACE_MPLS	GW	GW0033-092821	2021-09-28	AsDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-27	
10581934	775223	PACE_MPLS	GW	GW0034-092821	2021-09-28	AsDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-27	
10581934	775223	PACE_MPLS	GW	GW0035-092821	2021-09-28	AsDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-27	
10581934	775223	PACE_MPLS	GW	GW0036-092821	2021-09-28	AsDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-27	
10581934	775223	PACE_MPLS	GW	GW0038-092821	2021-09-28	AsDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-27	
10581934	775223	PACE_MPLS	GW	GW0039-092921	2021-09-29	AsDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-28	
10581934	775223	PACE_MPLS	GW	GW0040-092921	2021-09-29	AsDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-28	
10581934	775223	PACE_MPLS	GW	GW0041-092921	2021-09-29	AsDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-28	
10581934	775223	PACE_MPLS	GW	GW0042-092921	2021-09-29	AsDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-28	
10581934	775223	PACE_MPLS	GW	GW0043-092921	2021-09-29	AsDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-28	
10581934	775223	PACE_MPLS	GW	GW0044-092921	2021-09-29	AsDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-28	
10581934	775223	PACE_MPLS	GW	GW0045-092921	2021-09-29	AsDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-28	
10581934	775223	PACE_MPLS	GW	GW0045-092921	2021-09-29	CdDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-28	
10581934	775223	PACE_MPLS	GW	GW0044-092921	2021-09-29	CdDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-28	
10581934	775223	PACE_MPLS	GW	GW0043-092921	2021-09-29	CdDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-28	
10581934	775223	PACE_MPLS	GW	GW0042-092921	2021-09-29	CdDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-28	
10581934	775223	PACE_MPLS	GW	GW0041-092921	2021-09-29	CdDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-28	
10581934	775223	PACE_MPLS	GW	GW0040-092921	2021-09-29	CdDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-28	
10581934	775223	PACE_MPLS	GW	GW0039-092921	2021-09-29	CdDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-28	
10581934	775223	PACE_MPLS	GW	GW0038-092821	2021-09-28	CdDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-27	
10581934	775223	PACE_MPLS	GW	GW0036-092821	2021-09-28	CdDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-27	
10581934	775223	PACE_MPLS	GW	GW0035-092821	2021-09-28	CdDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-27	
10581934	775223	PACE_MPLS	GW	GW0034-092821	2021-09-28	CdDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-27	
10581934	775223	PACE_MPLS	GW	GW0033-092821	2021-09-28	CdDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-27	
10581934	775223	PACE_MPLS	GW	GW0032-092721	2021-09-27	CdDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-26	
10581934	775223	PACE_MPLS	GW	GW0031-092721	2021-09-27	CdDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-26	
10581934	775223	PACE_MPLS	GW	GW0030-092721	2021-09-27	CdDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-26	
10581934	775223	PACE_MPLS	GW	GW0029-092721	2021-09-27	CdDis	2021-10-07	EPA 200.8	2021-10-22	EPA 200.8	2022-03-26	
10581934	775223	PACE_MPLS	GW	GW0028-092721	2021-09-27	CdDis	2021-10-07	EPA 200.8	2021-10-22	EPA 200.8	2022-03-26	

Table B5b. BPSOU 2021 Groundwater Data Quality Assessment - Holding Times

SDG	Batch ID	Lab	Media	Field Sample ID	Sample Date	Parameter	Prep Date	Prep Method	Analysis Date	Analysis Method	Hold Expires	DV Q
10581934	775223	PACE_MPLS	GW	GW0027-092721	2021-09-27	CdDis	2021-10-07	EPA 200.8	2021-10-22	EPA 200.8	2022-03-26	
10581934	775223	PACE_MPLS	GW	GW0026-092721	2021-09-27	CdDis	2021-10-07	EPA 200.8	2021-10-22	EPA 200.8	2022-03-26	
10581934	775223	PACE_MPLS	GW	GW0026-092721	2021-09-27	CuDis	2021-10-07	EPA 200.8	2021-10-22	EPA 200.8	2022-03-26	
10581934	775223	PACE_MPLS	GW	GW0027-092721	2021-09-27	CuDis	2021-10-07	EPA 200.8	2021-10-22	EPA 200.8	2022-03-26	
10581934	775223	PACE_MPLS	GW	GW0028-092721	2021-09-27	CuDis	2021-10-07	EPA 200.8	2021-10-22	EPA 200.8	2022-03-26	
10581934	775223	PACE_MPLS	GW	GW0029-092721	2021-09-27	CuDis	2021-10-07	EPA 200.8	2021-10-22	EPA 200.8	2022-03-26	
10581934	775223	PACE_MPLS	GW	GW0030-092721	2021-09-27	CuDis	2021-10-07	EPA 200.8	2021-10-22	EPA 200.8	2022-03-26	
10581934	775223	PACE_MPLS	GW	GW0031-092721	2021-09-27	CuDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-26	
10581934	775223	PACE_MPLS	GW	GW0032-092721	2021-09-27	CuDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-26	
10581934	775223	PACE_MPLS	GW	GW0033-092821	2021-09-28	CuDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-27	
10581934	775223	PACE_MPLS	GW	GW0034-092821	2021-09-28	CuDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-27	
10581934	775223	PACE_MPLS	GW	GW0035-092821	2021-09-28	CuDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-27	
10581934	775223	PACE_MPLS	GW	GW0036-092821	2021-09-28	CuDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-27	
10581934	775223	PACE_MPLS	GW	GW0038-092821	2021-09-28	CuDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-27	
10581934	775223	PACE_MPLS	GW	GW0039-092921	2021-09-29	CuDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-28	
10581934	775223	PACE_MPLS	GW	GW0040-092921	2021-09-29	CuDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-28	
10581934	775223	PACE_MPLS	GW	GW0041-092921	2021-09-29	CuDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-28	
10581934	775223	PACE_MPLS	GW	GW0042-092921	2021-09-29	CuDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-28	
10581934	775223	PACE_MPLS	GW	GW0043-092921	2021-09-29	CuDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-28	
10581934	775223	PACE_MPLS	GW	GW0044-092921	2021-09-29	CuDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-28	
10581934	775223	PACE_MPLS	GW	GW0045-092921	2021-09-29	CuDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-28	
10581934	775223	PACE_MPLS	GW	GW0045-092921	2021-09-29	PbDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-28	
10581934	775223	PACE_MPLS	GW	GW0041-092921	2021-09-29	PbDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-28	
10581934	775223	PACE_MPLS	GW	GW0042-092921	2021-09-29	PbDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-28	
10581934	775223	PACE_MPLS	GW	GW0043-092921	2021-09-29	PbDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-28	
10581934	775223	PACE_MPLS	GW	GW0044-092921	2021-09-29	PbDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-28	
10581934	775223	PACE_MPLS	GW	GW0038-092821	2021-09-28	PbDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-27	
10581934	775223	PACE_MPLS	GW	GW0039-092921	2021-09-29	PbDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-28	
10581934	775223	PACE_MPLS	GW	GW0040-092921	2021-09-29	PbDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-28	
10581934	775223	PACE_MPLS	GW	GW0033-092821	2021-09-28	PbDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-27	
10581934	775223	PACE_MPLS	GW	GW0034-092821	2021-09-28	PbDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-27	
10581934	775223	PACE_MPLS	GW	GW0035-092821	2021-09-28	PbDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-27	
10581934	775223	PACE_MPLS	GW	GW0036-092821	2021-09-28	PbDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-27	
10581934	775223	PACE_MPLS	GW	GW0029-092721	2021-09-27	PbDis	2021-10-07	EPA 200.8	2021-10-22	EPA 200.8	2022-03-26	
10581934	775223	PACE_MPLS	GW	GW0030-092721	2021-09-27	PbDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-26	
10581934	775223	PACE_MPLS	GW	GW0031-092721	2021-09-27	PbDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-26	
10581934	775223	PACE_MPLS	GW	GW0032-092721	2021-09-27	PbDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-26	
10581934	775223	PACE_MPLS	GW	GW0026-092721	2021-09-27	PbDis	2021-10-07	EPA 200.8	2021-10-22	EPA 200.8	2022-03-26	
10581934	775223	PACE_MPLS	GW	GW0027-092721	2021-09-27	PbDis	2021-10-07	EPA 200.8	2021-10-22	EPA 200.8	2022-03-26	
10581934	775223	PACE_MPLS	GW	GW0028-092721	2021-09-27	PbDis	2021-10-07	EPA 200.8	2021-10-22	EPA 200.8	2022-03-26	
10581934	775223	PACE_MPLS	GW	GW0027-092721	2021-09-27	ZnDis	2021-10-07	EPA 200.8	2021-10-22	EPA 200.8	2022-03-26	
10581934	775223	PACE_MPLS	GW	GW0026-092721	2021-09-27	ZnDis	2021-10-07	EPA 200.8	2021-10-22	EPA 200.8	2022-03-26	
10581934	775223	PACE_MPLS	GW	GW0031-092721	2021-09-27	ZnDis	2021-10-07	EPA 200.8	2021-10-22	EPA 200.8	2022-03-26	
10581934	775223	PACE_MPLS	GW	GW0030-092721	2021-09-27	ZnDis	2021-10-07	EPA 200.8	2021-10-22	EPA 200.8	2022-03-26	
10581934	775223	PACE_MPLS	GW	GW0029-092721	2021-09-27	ZnDis	2021-10-07	EPA 200.8	2021-10-22	EPA 200.8	2022-03-26	
10581934	775223	PACE_MPLS	GW	GW0028-092721	2021-09-27	ZnDis	2021-10-07	EPA 200.8	2021-10-22	EPA 200.8	2022-03-26	
10581934	775223	PACE_MPLS	GW	GW0032-092721	2021-09-27	ZnDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-26	
10581934	775223	PACE_MPLS	GW	GW0034-092821	2021-09-28	ZnDis	2021-10-07	EPA 200.8	2021-10-22	EPA 200.8	2022-03-27	
10581934	775223	PACE_MPLS	GW	GW0033-092821	2021-09-28	ZnDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-27	
10581934	775223	PACE_MPLS	GW	GW0035-092821	2021-09-28	ZnDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-27	
10581934	775223	PACE_MPLS	GW	GW0036-092821	2021-09-28	ZnDis	2021-10-07	EPA 200.8	2021-10-22	EPA 200.8	2022-03-27	
10581934	775223	PACE_MPLS	GW	GW0040-092921	2021-09-29	ZnDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-28	
10581934	775223	PACE_MPLS	GW	GW0039-092921	2021-09-29	ZnDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-28	
10581934	775223	PACE_MPLS	GW	GW0038-092821	2021-09-28	ZnDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-27	
10581934	775223	PACE_MPLS	GW	GW0043-092921	2021-09-29	ZnDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-28	
10581934	775223	PACE_MPLS	GW	GW0042-092921	2021-09-29	ZnDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-28	
10581934	775223	PACE_MPLS	GW	GW0041-092921	2021-09-29	ZnDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-28	
10581934	775223	PACE_MPLS	GW	GW0045-092921	2021-09-29	ZnDis	2021-10-07	EPA 200.8	2021-10-22	EPA 200.8	2022-03-28	
10581934	775223	PACE_MPLS	GW	GW0044-092921	2021-09-29	ZnDis	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	2022-03-28	
10581934	775844	PACE_MPLS	GW	GW0046-092921	2021-09-29	HgDis	2021-10-11	EPA 245.1	2021-10-14	EPA 245.1	2021-10-27	
10581934	775844	PACE_MPLS	GW	GW0047-092921	2021-09-29	HgDis	2021-10-11	EPA 245.1	2021-10-14	EPA 245.1	2021-10-27	
10581934	775844	PACE_MPLS	GW	GW0037-092921	2021-09-29	HgDis	2021-10-11	EPA 245.1	2021-10-14	EPA 245.1	2021-10-27	
10581934	775847	PACE_MPLS	GW	GW0040-092921	2021-09-29	HgDis	2021-10-12	EPA 245.1	2021-10-14	EPA 245.1	2021-10-27	
10581934	775847	PACE_MPLS	GW	GW0038-092821	2021-09-28	HgDis	2021-10-12	EPA 245.1	2021-10-14	EPA 245.1	2021-10-26	

Table B5b. BPSOU 2021 Groundwater Data Quality Assessment - Holding Times

SDG	Batch ID	Lab	Media	Field Sample ID	Sample Date	Parameter	Prep Date	Prep Method	Analysis Date	Analysis Method	Hold Expires	DV Q
10581934	775847	PACE_MPLS	GW	GW0039-092921	2021-09-29	HgDis	2021-10-12	EPA 245.1	2021-10-14	EPA 245.1	2021-10-27	
10581934	775847	PACE_MPLS	GW	GW0041-092921	2021-09-29	HgDis	2021-10-12	EPA 245.1	2021-10-14	EPA 245.1	2021-10-27	
10581934	775847	PACE_MPLS	GW	GW0042-092921	2021-09-29	HgDis	2021-10-12	EPA 245.1	2021-10-14	EPA 245.1	2021-10-27	
10581934	775847	PACE_MPLS	GW	GW0043-092921	2021-09-29	HgDis	2021-10-12	EPA 245.1	2021-10-14	EPA 245.1	2021-10-27	
10581934	775847	PACE_MPLS	GW	GW0036-092821	2021-09-28	HgDis	2021-10-12	EPA 245.1	2021-10-14	EPA 245.1	2021-10-26	
10581934	775847	PACE_MPLS	GW	GW0035-092821	2021-09-28	HgDis	2021-10-12	EPA 245.1	2021-10-14	EPA 245.1	2021-10-26	
10581934	775847	PACE_MPLS	GW	GW0033-092821	2021-09-28	HgDis	2021-10-12	EPA 245.1	2021-10-14	EPA 245.1	2021-10-26	
10581934	775847	PACE_MPLS	GW	GW0034-092821	2021-09-28	HgDis	2021-10-12	EPA 245.1	2021-10-14	EPA 245.1	2021-10-26	
10581934	775847	PACE_MPLS	GW	GW0032-092721	2021-09-27	HgDis	2021-10-12	EPA 245.1	2021-10-14	EPA 245.1	2021-10-25	
10581934	775847	PACE_MPLS	GW	GW0028-092721	2021-09-27	HgDis	2021-10-12	EPA 245.1	2021-10-14	EPA 245.1	2021-10-25	
10581934	775847	PACE_MPLS	GW	GW0029-092721	2021-09-27	HgDis	2021-10-12	EPA 245.1	2021-10-14	EPA 245.1	2021-10-25	
10581934	775847	PACE_MPLS	GW	GW0030-092721	2021-09-27	HgDis	2021-10-12	EPA 245.1	2021-10-14	EPA 245.1	2021-10-25	
10581934	775847	PACE_MPLS	GW	GW0031-092721	2021-09-27	HgDis	2021-10-12	EPA 245.1	2021-10-14	EPA 245.1	2021-10-25	
10581934	775847	PACE_MPLS	GW	GW0026-092721	2021-09-27	HgDis	2021-10-12	EPA 245.1	2021-10-14	EPA 245.1	2021-10-25	
10581934	775847	PACE_MPLS	GW	GW0027-092721	2021-09-27	HgDis	2021-10-12	EPA 245.1	2021-10-14	EPA 245.1	2021-10-25	
10581934	775847	PACE_MPLS	GW	GW0044-092921	2021-09-29	HgDis	2021-10-12	EPA 245.1	2021-10-14	EPA 245.1	2021-10-27	
10581934	775847	PACE_MPLS	GW	GW0045-092921	2021-09-29	HgDis	2021-10-12	EPA 245.1	2021-10-14	EPA 245.1	2021-10-27	
10581934	776608	PACE_MPLS	GW	GW0046-092921	2021-09-29	AsDis	2021-10-14	EPA 200.8	2021-10-18	EPA 200.8	2022-03-28	
10581934	776608	PACE_MPLS	GW	GW0047-092921	2021-09-29	AsDis	2021-10-14	EPA 200.8	2021-10-18	EPA 200.8	2022-03-28	
10581934	776608	PACE_MPLS	GW	GW0037-092921	2021-09-29	AsDis	2021-10-14	EPA 200.8	2021-10-18	EPA 200.8	2022-03-28	
10581934	776608	PACE_MPLS	GW	GW0037-092921	2021-09-29	CdDis	2021-10-14	EPA 200.8	2021-10-18	EPA 200.8	2022-03-28	
10581934	776608	PACE_MPLS	GW	GW0047-092921	2021-09-29	CdDis	2021-10-14	EPA 200.8	2021-10-18	EPA 200.8	2022-03-28	
10581934	776608	PACE_MPLS	GW	GW0046-092921	2021-09-29	CdDis	2021-10-14	EPA 200.8	2021-10-18	EPA 200.8	2022-03-28	
10581934	776608	PACE_MPLS	GW	GW0046-092921	2021-09-29	CuDis	2021-10-14	EPA 200.8	2021-10-18	EPA 200.8	2022-03-28	
10581934	776608	PACE_MPLS	GW	GW0047-092921	2021-09-29	CuDis	2021-10-14	EPA 200.8	2021-10-18	EPA 200.8	2022-03-28	
10581934	776608	PACE_MPLS	GW	GW0037-092921	2021-09-29	CuDis	2021-10-14	EPA 200.8	2021-10-18	EPA 200.8	2022-03-28	
10581934	776608	PACE_MPLS	GW	GW0037-092921	2021-09-29	PbDis	2021-10-14	EPA 200.8	2021-10-18	EPA 200.8	2022-03-28	
10581934	776608	PACE_MPLS	GW	GW0046-092921	2021-09-29	PbDis	2021-10-14	EPA 200.8	2021-10-18	EPA 200.8	2022-03-28	
10581934	776608	PACE_MPLS	GW	GW0047-092921	2021-09-29	PbDis	2021-10-14	EPA 200.8	2021-10-18	EPA 200.8	2022-03-28	
10581934	776608	PACE_MPLS	GW	GW0047-092921	2021-09-29	ZnDis	2021-10-14	EPA 200.8	2021-10-18	EPA 200.8	2022-03-28	
10581934	776608	PACE_MPLS	GW	GW0046-092921	2021-09-29	ZnDis	2021-10-14	EPA 200.8	2021-10-18	EPA 200.8	2022-03-28	
10581934	776608	PACE_MPLS	GW	GW0037-092921	2021-09-29	ZnDis	2021-10-14	EPA 200.8	2021-10-19	EPA 200.8	2022-03-28	
10581942	775227	PACE_MPLS	GW	GW0048-092721	2021-09-27	AsDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-26	
10581942	775227	PACE_MPLS	GW	GW0049-092721	2021-09-27	AsDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-26	
10581942	775227	PACE_MPLS	GW	GW0050-092421	2021-09-24	AsDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-23	
10581942	775227	PACE_MPLS	GW	GW0051-092721	2021-09-27	AsDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-26	
10581942	775227	PACE_MPLS	GW	GW0052-092721	2021-09-27	AsDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-26	
10581942	775227	PACE_MPLS	GW	GW0053-092821	2021-09-28	AsDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0054-092821	2021-09-28	AsDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0055-092821	2021-09-28	AsDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0056-092821	2021-09-28	AsDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0057-092821	2021-09-28	AsDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0058-092821	2021-09-28	AsDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0059-092921	2021-09-29	AsDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-28	
10581942	775227	PACE_MPLS	GW	GW0060-093021	2021-09-30	AsDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-29	
10581942	775227	PACE_MPLS	GW	GW0061-092821	2021-09-28	AsDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0062-092821	2021-09-28	AsDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0063-092821	2021-09-28	AsDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0064-092821	2021-09-28	AsDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0064-092821	2021-09-28	CdDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0063-092821	2021-09-28	CdDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0062-092821	2021-09-28	CdDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0061-092821	2021-09-28	CdDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0060-093021	2021-09-30	CdDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-29	
10581942	775227	PACE_MPLS	GW	GW0059-092921	2021-09-29	CdDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-28	
10581942	775227	PACE_MPLS	GW	GW0058-092821	2021-09-28	CdDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0057-092821	2021-09-28	CdDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0056-092821	2021-09-28	CdDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0055-092821	2021-09-28	CdDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0054-092821	2021-09-28	CdDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0053-092821	2021-09-28	CdDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0052-092721	2021-09-27	CdDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-26	
10581942	775227	PACE_MPLS	GW	GW0051-092721	2021-09-27	CdDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-26	
10581942	775227	PACE_MPLS	GW	GW0050-092421	2021-09-24	CdDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-23	

Table B5b. BPSOU 2021 Groundwater Data Quality Assessment - Holding Times

SDG	Batch ID	Lab	Media	Field Sample ID	Sample Date	Parameter	Prep Date	Prep Method	Analysis Date	Analysis Method	Hold Expires	DV Q
10581942	775227	PACE_MPLS	GW	GW0049-092721	2021-09-27	CdDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-26	
10581942	775227	PACE_MPLS	GW	GW0048-092721	2021-09-27	CdDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-26	
10581942	775227	PACE_MPLS	GW	GW0048-092721	2021-09-27	CuDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-26	
10581942	775227	PACE_MPLS	GW	GW0049-092721	2021-09-27	CuDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-26	
10581942	775227	PACE_MPLS	GW	GW0050-092421	2021-09-24	CuDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-23	
10581942	775227	PACE_MPLS	GW	GW0051-092721	2021-09-27	CuDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-26	
10581942	775227	PACE_MPLS	GW	GW0052-092721	2021-09-27	CuDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-26	
10581942	775227	PACE_MPLS	GW	GW0053-092821	2021-09-28	CuDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0054-092821	2021-09-28	CuDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0055-092821	2021-09-28	CuDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0056-092821	2021-09-28	CuDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0057-092821	2021-09-28	CuDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0058-092821	2021-09-28	CuDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0059-092921	2021-09-29	CuDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-28	
10581942	775227	PACE_MPLS	GW	GW0060-093021	2021-09-30	CuDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-29	
10581942	775227	PACE_MPLS	GW	GW0061-092821	2021-09-28	CuDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0062-092821	2021-09-28	CuDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0063-092821	2021-09-28	CuDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0064-092821	2021-09-28	CuDis	2021-10-08	EPA 200.8	2021-10-14	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0058-092821	2021-09-28	PbDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0059-092921	2021-09-29	PbDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-28	
10581942	775227	PACE_MPLS	GW	GW0060-093021	2021-09-30	PbDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-29	
10581942	775227	PACE_MPLS	GW	GW0061-092821	2021-09-28	PbDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0054-092821	2021-09-28	PbDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0055-092821	2021-09-28	PbDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0056-092821	2021-09-28	PbDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0057-092821	2021-09-28	PbDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0050-092421	2021-09-24	PbDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-23	
10581942	775227	PACE_MPLS	GW	GW0051-092721	2021-09-27	PbDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-26	
10581942	775227	PACE_MPLS	GW	GW0052-092721	2021-09-27	PbDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-26	
10581942	775227	PACE_MPLS	GW	GW0053-092821	2021-09-28	PbDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0062-092821	2021-09-28	PbDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0063-092821	2021-09-28	PbDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0064-092821	2021-09-28	PbDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0048-092721	2021-09-27	PbDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-26	
10581942	775227	PACE_MPLS	GW	GW0049-092721	2021-09-27	PbDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-26	
10581942	775227	PACE_MPLS	GW	GW0048-092721	2021-09-27	ZnDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-26	
10581942	775227	PACE_MPLS	GW	GW0052-092721	2021-09-27	ZnDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-26	
10581942	775227	PACE_MPLS	GW	GW0051-092721	2021-09-27	ZnDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-26	
10581942	775227	PACE_MPLS	GW	GW0050-092421	2021-09-24	ZnDis	2021-10-08	EPA 200.8	2021-10-14	EPA 200.8	2022-03-23	
10581942	775227	PACE_MPLS	GW	GW0049-092721	2021-09-27	ZnDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-26	
10581942	775227	PACE_MPLS	GW	GW0053-092821	2021-09-28	ZnDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0055-092821	2021-09-28	ZnDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0054-092821	2021-09-28	ZnDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0056-092821	2021-09-28	ZnDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0058-092821	2021-09-28	ZnDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0057-092821	2021-09-28	ZnDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0061-092821	2021-09-28	ZnDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0060-093021	2021-09-30	ZnDis	2021-10-08	EPA 200.8	2021-10-14	EPA 200.8	2022-03-29	
10581942	775227	PACE_MPLS	GW	GW0059-092921	2021-09-29	ZnDis	2021-10-08	EPA 200.8	2021-10-14	EPA 200.8	2022-03-28	
10581942	775227	PACE_MPLS	GW	GW0064-092821	2021-09-28	ZnDis	2021-10-08	EPA 200.8	2021-10-14	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0063-092821	2021-09-28	ZnDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775227	PACE_MPLS	GW	GW0062-092821	2021-09-28	ZnDis	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	2022-03-27	
10581942	775844	PACE_MPLS	GW	GW0069-093021	2021-09-30	HgDis	2021-10-11	EPA 245.1	2021-10-14	EPA 245.1	2021-10-28	
10581942	775844	PACE_MPLS	GW	GW0068-093021	2021-09-30	HgDis	2021-10-11	EPA 245.1	2021-10-14	EPA 245.1	2021-10-28	
10581942	775844	PACE_MPLS	GW	GW0065-092821	2021-09-28	HgDis	2021-10-11	EPA 245.1	2021-10-14	EPA 245.1	2021-10-26	
10581942	775844	PACE_MPLS	GW	GW0066-092821	2021-09-28	HgDis	2021-10-11	EPA 245.1	2021-10-14	EPA 245.1	2021-10-26	
10581942	775844	PACE_MPLS	GW	GW0067-093021	2021-09-30	HgDis	2021-10-11	EPA 245.1	2021-10-14	EPA 245.1	2021-10-28	
10581942	775848	PACE_MPLS	GW	GW0062-092821	2021-09-28	HgDis	2021-10-12	EPA 245.1	2021-10-14	EPA 245.1	2021-10-26	
10581942	775848	PACE_MPLS	GW	GW0063-092821	2021-09-28	HgDis	2021-10-12	EPA 245.1	2021-10-14	EPA 245.1	2021-10-26	
10581942	775848	PACE_MPLS	GW	GW0064-092821	2021-09-28	HgDis	2021-10-12	EPA 245.1	2021-10-14	EPA 245.1	2021-10-26	
10581942	775848	PACE_MPLS	GW	GW0059-092921	2021-09-29	HgDis	2021-10-12	EPA 245.1	2021-10-14	EPA 245.1	2021-10-27	
10581942	775848	PACE_MPLS	GW	GW0060-093021	2021-09-30	HgDis	2021-10-12	EPA 245.1	2021-10-14	EPA 245.1	2021-10-28	
10581942	775848	PACE_MPLS	GW	GW0061-092821	2021-09-28	HgDis	2021-10-12	EPA 245.1	2021-10-14	EPA 245.1	2021-10-26	

Table B5b. BPSOU 2021 Groundwater Data Quality Assessment - Holding Times

SDG	Batch ID	Lab	Media	Field Sample ID	Sample Date	Parameter	Prep Date	Prep Method	Analysis Date	Analysis Method	Hold Expires	DV Q
10581942	775848	PACE_MPLS	GW	GW0057-092821	2021-09-28	HgDis	2021-10-12	EPA 245.1	2021-10-14	EPA 245.1	2021-10-26	
10581942	775848	PACE_MPLS	GW	GW0058-092821	2021-09-28	HgDis	2021-10-12	EPA 245.1	2021-10-14	EPA 245.1	2021-10-26	
10581942	775848	PACE_MPLS	GW	GW0056-092821	2021-09-28	HgDis	2021-10-12	EPA 245.1	2021-10-14	EPA 245.1	2021-10-26	
10581942	775848	PACE_MPLS	GW	GW0054-092821	2021-09-28	HgDis	2021-10-12	EPA 245.1	2021-10-14	EPA 245.1	2021-10-26	
10581942	775848	PACE_MPLS	GW	GW0055-092821	2021-09-28	HgDis	2021-10-12	EPA 245.1	2021-10-14	EPA 245.1	2021-10-26	
10581942	775848	PACE_MPLS	GW	GW0053-092821	2021-09-28	HgDis	2021-10-12	EPA 245.1	2021-10-14	EPA 245.1	2021-10-26	
10581942	775848	PACE_MPLS	GW	GW0049-092721	2021-09-27	HgDis	2021-10-12	EPA 245.1	2021-10-14	EPA 245.1	2021-10-25	
10581942	775848	PACE_MPLS	GW	GW0050-092421	2021-09-24	HgDis	2021-10-12	EPA 245.1	2021-10-14	EPA 245.1	2021-10-22	
10581942	775848	PACE_MPLS	GW	GW0051-092721	2021-09-27	HgDis	2021-10-12	EPA 245.1	2021-10-14	EPA 245.1	2021-10-25	
10581942	775848	PACE_MPLS	GW	GW0052-092721	2021-09-27	HgDis	2021-10-12	EPA 245.1	2021-10-14	EPA 245.1	2021-10-25	
10581942	775848	PACE_MPLS	GW	GW0048-092721	2021-09-27	HgDis	2021-10-12	EPA 245.1	2021-10-14	EPA 245.1	2021-10-25	
10581942	776608	PACE_MPLS	GW	GW0065-092821	2021-09-28	AsDis	2021-10-14	EPA 200.8	2021-10-18	EPA 200.8	2022-03-27	
10581942	776608	PACE_MPLS	GW	GW0067-093021	2021-09-30	AsDis	2021-10-14	EPA 200.8	2021-10-18	EPA 200.8	2022-03-29	
10581942	776608	PACE_MPLS	GW	GW0066-092821	2021-09-28	AsDis	2021-10-14	EPA 200.8	2021-10-18	EPA 200.8	2022-03-27	
10581942	776608	PACE_MPLS	GW	GW0068-093021	2021-09-30	AsDis	2021-10-14	EPA 200.8	2021-10-18	EPA 200.8	2022-03-29	
10581942	776608	PACE_MPLS	GW	GW0069-093021	2021-09-30	AsDis	2021-10-14	EPA 200.8	2021-10-19	EPA 200.8	2022-03-29	
10581942	776608	PACE_MPLS	GW	GW0068-093021	2021-09-30	CdDis	2021-10-14	EPA 200.8	2021-10-18	EPA 200.8	2022-03-29	
10581942	776608	PACE_MPLS	GW	GW0069-093021	2021-09-30	CdDis	2021-10-14	EPA 200.8	2021-10-18	EPA 200.8	2022-03-29	
10581942	776608	PACE_MPLS	GW	GW0066-092821	2021-09-28	CdDis	2021-10-14	EPA 200.8	2021-10-18	EPA 200.8	2022-03-27	
10581942	776608	PACE_MPLS	GW	GW0067-093021	2021-09-30	CdDis	2021-10-14	EPA 200.8	2021-10-18	EPA 200.8	2022-03-29	
10581942	776608	PACE_MPLS	GW	GW0065-092821	2021-09-28	CdDis	2021-10-14	EPA 200.8	2021-10-18	EPA 200.8	2022-03-27	
10581942	776608	PACE_MPLS	GW	GW0065-092821	2021-09-28	CuDis	2021-10-14	EPA 200.8	2021-10-18	EPA 200.8	2022-03-27	
10581942	776608	PACE_MPLS	GW	GW0067-093021	2021-09-30	CuDis	2021-10-14	EPA 200.8	2021-10-18	EPA 200.8	2022-03-29	
10581942	776608	PACE_MPLS	GW	GW0066-092821	2021-09-28	CuDis	2021-10-14	EPA 200.8	2021-10-18	EPA 200.8	2022-03-27	
10581942	776608	PACE_MPLS	GW	GW0069-093021	2021-09-30	CuDis	2021-10-14	EPA 200.8	2021-10-18	EPA 200.8	2022-03-29	
10581942	776608	PACE_MPLS	GW	GW0068-093021	2021-09-30	CuDis	2021-10-14	EPA 200.8	2021-10-18	EPA 200.8	2022-03-29	
10581942	776608	PACE_MPLS	GW	GW0069-093021	2021-09-30	PbDis	2021-10-14	EPA 200.8	2021-10-18	EPA 200.8	2022-03-29	
10581942	776608	PACE_MPLS	GW	GW0066-092821	2021-09-28	PbDis	2021-10-14	EPA 200.8	2021-10-18	EPA 200.8	2022-03-27	
10581942	776608	PACE_MPLS	GW	GW0068-093021	2021-09-30	PbDis	2021-10-14	EPA 200.8	2021-10-18	EPA 200.8	2022-03-29	
10581942	776608	PACE_MPLS	GW	GW0067-093021	2021-09-30	PbDis	2021-10-14	EPA 200.8	2021-10-18	EPA 200.8	2022-03-29	
10581942	776608	PACE_MPLS	GW	GW0065-092821	2021-09-28	PbDis	2021-10-14	EPA 200.8	2021-10-18	EPA 200.8	2022-03-27	
10581942	776608	PACE_MPLS	GW	GW0065-092821	2021-09-28	ZnDis	2021-10-14	EPA 200.8	2021-10-19	EPA 200.8	2022-03-27	
10581942	776608	PACE_MPLS	GW	GW0067-093021	2021-09-30	ZnDis	2021-10-14	EPA 200.8	2021-10-18	EPA 200.8	2022-03-29	
10581942	776608	PACE_MPLS	GW	GW0066-092821	2021-09-28	ZnDis	2021-10-14	EPA 200.8	2021-10-19	EPA 200.8	2022-03-27	
10581942	776608	PACE_MPLS	GW	GW0069-093021	2021-09-30	ZnDis	2021-10-14	EPA 200.8	2021-10-18	EPA 200.8	2022-03-29	
10581942	776608	PACE_MPLS	GW	GW0068-093021	2021-09-30	ZnDis	2021-10-14	EPA 200.8	2021-10-18	EPA 200.8	2022-03-29	
10582495	776536	PACE_MPLS	GW	GW0070-093021	2021-09-30	AsDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-29	
10582495	776536	PACE_MPLS	GW	GW0071-093021	2021-09-30	AsDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-29	
10582495	776536	PACE_MPLS	GW	GW0072-093021	2021-09-30	AsDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-29	
10582495	776536	PACE_MPLS	GW	GW0073-093021	2021-09-30	AsDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-29	
10582495	776536	PACE_MPLS	GW	GW0074-093021	2021-09-30	AsDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-29	
10582495	776536	PACE_MPLS	GW	GW0075-093021	2021-09-30	AsDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-29	
10582495	776536	PACE_MPLS	GW	GW0076-093021	2021-09-30	AsDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-29	
10582495	776536	PACE_MPLS	GW	GW0076-093021	2021-09-30	CdDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-29	
10582495	776536	PACE_MPLS	GW	GW0075-093021	2021-09-30	CdDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-29	
10582495	776536	PACE_MPLS	GW	GW0074-093021	2021-09-30	CdDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-29	
10582495	776536	PACE_MPLS	GW	GW0073-093021	2021-09-30	CdDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-29	
10582495	776536	PACE_MPLS	GW	GW0072-093021	2021-09-30	CdDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-29	
10582495	776536	PACE_MPLS	GW	GW0071-093021	2021-09-30	CdDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-29	
10582495	776536	PACE_MPLS	GW	GW0070-093021	2021-09-30	CdDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-29	
10582495	776536	PACE_MPLS	GW	GW0070-093021	2021-09-30	CuDis	2021-10-18	EPA 200.8	2021-10-22	EPA 200.8	2022-03-29	
10582495	776536	PACE_MPLS	GW	GW0071-093021	2021-09-30	CuDis	2021-10-18	EPA 200.8	2021-10-22	EPA 200.8	2022-03-29	
10582495	776536	PACE_MPLS	GW	GW0073-093021	2021-09-30	CuDis	2021-10-18	EPA 200.8	2021-10-22	EPA 200.8	2022-03-29	
10582495	776536	PACE_MPLS	GW	GW0072-093021	2021-09-30	CuDis	2021-10-18	EPA 200.8	2021-10-22	EPA 200.8	2022-03-29	
10582495	776536	PACE_MPLS	GW	GW0074-093021	2021-09-30	CuDis	2021-10-18	EPA 200.8	2021-10-22	EPA 200.8	2022-03-29	
10582495	776536	PACE_MPLS	GW	GW0075-093021	2021-09-30	CuDis	2021-10-18	EPA 200.8	2021-10-22	EPA 200.8	2022-03-29	
10582495	776536	PACE_MPLS	GW	GW0076-093021	2021-09-30	CuDis	2021-10-18	EPA 200.8	2021-10-22	EPA 200.8	2022-03-29	
10582495	776536	PACE_MPLS	GW	GW0076-093021	2021-09-30	PbDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-29	
10582495	776536	PACE_MPLS	GW	GW0074-093021	2021-09-30	PbDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-29	
10582495	776536	PACE_MPLS	GW	GW0075-093021	2021-09-30	PbDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-29	
10582495	776536	PACE_MPLS	GW	GW0072-093021	2021-09-30	PbDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-29	
10582495	776536	PACE_MPLS	GW	GW0073-093021	2021-09-30	PbDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-29	
10582495	776536	PACE_MPLS	GW	GW0071-093021	2021-09-30	PbDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-29	
10582495	776536	PACE_MPLS	GW	GW0070-093021	2021-09-30	PbDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-29	

Table B5b. BPSOU 2021 Groundwater Data Quality Assessment - Holding Times

SDG	Batch ID	Lab	Media	Field Sample ID	Sample Date	Parameter	Prep Date	Prep Method	Analysis Date	Analysis Method	Hold Expires	DV Q
10582495	776536	PACE_MPLS	GW	GW0070-093021	2021-09-30	ZnDis	2021-10-18	EPA 200.8	2021-10-22	EPA 200.8	2022-03-29	
10582495	776536	PACE_MPLS	GW	GW0071-093021	2021-09-30	ZnDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-29	
10582495	776536	PACE_MPLS	GW	GW0072-093021	2021-09-30	ZnDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-29	
10582495	776536	PACE_MPLS	GW	GW0073-093021	2021-09-30	ZnDis	2021-10-18	EPA 200.8	2021-10-22	EPA 200.8	2022-03-29	
10582495	776536	PACE_MPLS	GW	GW0075-093021	2021-09-30	ZnDis	2021-10-18	EPA 200.8	2021-10-22	EPA 200.8	2022-03-29	
10582495	776536	PACE_MPLS	GW	GW0074-093021	2021-09-30	ZnDis	2021-10-18	EPA 200.8	2021-10-22	EPA 200.8	2022-03-29	
10582495	776536	PACE_MPLS	GW	GW0076-093021	2021-09-30	ZnDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-29	
10582495	776874	PACE_MPLS	GW	GW0076-093021	2021-09-30	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-10-28	
10582495	776874	PACE_MPLS	GW	GW0074-093021	2021-09-30	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-10-28	
10582495	776874	PACE_MPLS	GW	GW0075-093021	2021-09-30	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-10-28	
10582495	776874	PACE_MPLS	GW	GW0073-093021	2021-09-30	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-10-28	
10582495	776874	PACE_MPLS	GW	GW0072-093021	2021-09-30	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-10-28	
10582495	776874	PACE_MPLS	GW	GW0071-093021	2021-09-30	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-10-28	
10582495	776874	PACE_MPLS	GW	GW0070-093021	2021-09-30	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-10-28	
10582497	776539	PACE_MPLS	GW	GW0092-093021	2021-09-30	AsDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-29	
10582497	776539	PACE_MPLS	GW	GW0093-093021	2021-09-30	AsDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-29	
10582497	776539	PACE_MPLS	GW	GW0093-093021	2021-09-30	CdDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-29	
10582497	776539	PACE_MPLS	GW	GW0092-093021	2021-09-30	CdDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-29	
10582497	776539	PACE_MPLS	GW	GW0092-093021	2021-09-30	CuDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-29	
10582497	776539	PACE_MPLS	GW	GW0093-093021	2021-09-30	CuDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-29	
10582497	776539	PACE_MPLS	GW	GW0092-093021	2021-09-30	PbDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-29	
10582497	776539	PACE_MPLS	GW	GW0093-093021	2021-09-30	PbDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-29	
10582497	776539	PACE_MPLS	GW	GW0092-093021	2021-09-30	ZnDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-29	
10582497	776539	PACE_MPLS	GW	GW0093-093021	2021-09-30	ZnDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-29	
10582497	776877	PACE_MPLS	GW	GW0093-093021	2021-09-30	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-10-28	
10582497	776877	PACE_MPLS	GW	GW0092-093021	2021-09-30	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-10-28	
10583409	777579	PACE_MPLS	GW	GW0119-092421	2021-09-24	AsDis	2021-10-20	EPA 200.8	2021-10-27	EPA 200.8	2022-03-23	
10583409	777579	PACE_MPLS	GW	GW0119-092421	2021-09-24	CdDis	2021-10-20	EPA 200.8	2021-10-28	EPA 200.8	2022-03-23	
10583409	777579	PACE_MPLS	GW	GW0119-092421	2021-09-24	CuDis	2021-10-20	EPA 200.8	2021-10-28	EPA 200.8	2022-03-23	
10583409	777579	PACE_MPLS	GW	GW0119-092421	2021-09-24	PbDis	2021-10-20	EPA 200.8	2021-10-27	EPA 200.8	2022-03-23	
10583409	777579	PACE_MPLS	GW	GW0119-092421	2021-09-24	ZnDis	2021-10-20	EPA 200.8	2021-10-28	EPA 200.8	2022-03-23	
10583409	777584	PACE_MPLS	GW	GW0119-092421	2021-09-24	HgDis	2021-10-20	EPA 245.1	2021-10-21	EPA 245.1	2021-10-22	
10582495	776536	PACE_MPLS	GW	GW0078-100121	2021-10-01	AsDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582495	776536	PACE_MPLS	GW	GW0077-100421	2021-10-04	AsDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-02	
10582495	776536	PACE_MPLS	GW	GW0079-100121	2021-10-01	AsDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582495	776536	PACE_MPLS	GW	GW0080-100121	2021-10-01	AsDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582495	776536	PACE_MPLS	GW	GW0081-100121	2021-10-01	AsDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582495	776536	PACE_MPLS	GW	GW0082-100121	2021-10-01	AsDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582495	776536	PACE_MPLS	GW	GW0083-100421	2021-10-04	AsDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-02	
10582495	776536	PACE_MPLS	GW	GW0084-100421	2021-10-04	AsDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-02	
10582495	776536	PACE_MPLS	GW	GW0085-100121	2021-10-01	AsDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582495	776536	PACE_MPLS	GW	GW0086-100121	2021-10-01	AsDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582495	776536	PACE_MPLS	GW	GW0087-100521	2021-10-05	AsDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-03	
10582495	776536	PACE_MPLS	GW	GW0087-100521	2021-10-05	CdDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-03	
10582495	776536	PACE_MPLS	GW	GW0086-100121	2021-10-01	CdDis	2021-10-18	EPA 200.8	2021-10-22	EPA 200.8	2022-03-30	
10582495	776536	PACE_MPLS	GW	GW0085-100121	2021-10-01	CdDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582495	776536	PACE_MPLS	GW	GW0084-100421	2021-10-04	CdDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-02	
10582495	776536	PACE_MPLS	GW	GW0083-100421	2021-10-04	CdDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-02	
10582495	776536	PACE_MPLS	GW	GW0082-100121	2021-10-01	CdDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582495	776536	PACE_MPLS	GW	GW0081-100121	2021-10-01	CdDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582495	776536	PACE_MPLS	GW	GW0080-100121	2021-10-01	CdDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582495	776536	PACE_MPLS	GW	GW0079-100121	2021-10-01	CdDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582495	776536	PACE_MPLS	GW	GW0077-100421	2021-10-04	CdDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-02	
10582495	776536	PACE_MPLS	GW	GW0078-100121	2021-10-01	CdDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582495	776536	PACE_MPLS	GW	GW0078-100121	2021-10-01	CuDis	2021-10-18	EPA 200.8	2021-10-22	EPA 200.8	2022-03-30	
10582495	776536	PACE_MPLS	GW	GW0077-100421	2021-10-04	CuDis	2021-10-18	EPA 200.8	2021-10-22	EPA 200.8	2022-04-02	
10582495	776536	PACE_MPLS	GW	GW0079-100121	2021-10-01	CuDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582495	776536	PACE_MPLS	GW	GW0080-100121	2021-10-01	CuDis	2021-10-18	EPA 200.8	2021-10-22	EPA 200.8	2022-03-30	
10582495	776536	PACE_MPLS	GW	GW0081-100121	2021-10-01	CuDis	2021-10-18	EPA 200.8	2021-10-22	EPA 200.8	2022-03-30	
10582495	776536	PACE_MPLS	GW	GW0082-100121	2021-10-01	CuDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582495	776536	PACE_MPLS	GW	GW0083-100421	2021-10-04	CuDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-02	
10582495	776536	PACE_MPLS	GW	GW0085-100121	2021-10-01	CuDis	2021-10-18	EPA 200.8	2021-10-22	EPA 200.8	2022-03-30	
10582495	776536	PACE_MPLS	GW	GW0086-100121	2021-10-01	CuDis	2021-10-18	EPA 200.8	2021-10-22	EPA 200.8	2022-03-30	
10582495	776536	PACE_MPLS	GW	GW0084-100421	2021-10-04	CuDis	2021-10-18	EPA 200.8	2021-10-22	EPA 200.8	2022-04-02	

Table B5b. BPSOU 2021 Groundwater Data Quality Assessment - Holding Times

SDG	Batch ID	Lab	Media	Field Sample ID	Sample Date	Parameter	Prep Date	Prep Method	Analysis Date	Analysis Method	Hold Expires	DV Q
10582495	776536	PACE_MPLS	GW	GW0087-100521	2021-10-05	CuDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-03	
10582495	776536	PACE_MPLS	GW	GW0086-100121	2021-10-01	PbDis	2021-10-18	EPA 200.8	2021-10-22	EPA 200.8	2022-03-30	
10582495	776536	PACE_MPLS	GW	GW0085-100121	2021-10-01	PbDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582495	776536	PACE_MPLS	GW	GW0087-100521	2021-10-05	PbDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-03	
10582495	776536	PACE_MPLS	GW	GW0083-100421	2021-10-04	PbDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-02	
10582495	776536	PACE_MPLS	GW	GW0084-100421	2021-10-04	PbDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-02	
10582495	776536	PACE_MPLS	GW	GW0079-100121	2021-10-01	PbDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582495	776536	PACE_MPLS	GW	GW0080-100121	2021-10-01	PbDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582495	776536	PACE_MPLS	GW	GW0081-100121	2021-10-01	PbDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582495	776536	PACE_MPLS	GW	GW0082-100121	2021-10-01	PbDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582495	776536	PACE_MPLS	GW	GW0077-100421	2021-10-04	PbDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-02	
10582495	776536	PACE_MPLS	GW	GW0078-100121	2021-10-01	PbDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582495	776536	PACE_MPLS	GW	GW0078-100121	2021-10-01	ZnDis	2021-10-18	EPA 200.8	2021-10-22	EPA 200.8	2022-03-30	
10582495	776536	PACE_MPLS	GW	GW0077-100421	2021-10-04	ZnDis	2021-10-18	EPA 200.8	2021-10-22	EPA 200.8	2022-04-02	
10582495	776536	PACE_MPLS	GW	GW0081-100121	2021-10-01	ZnDis	2021-10-18	EPA 200.8	2021-10-22	EPA 200.8	2022-03-30	
10582495	776536	PACE_MPLS	GW	GW0080-100121	2021-10-01	ZnDis	2021-10-18	EPA 200.8	2021-10-25	EPA 200.8	2022-03-30	
10582495	776536	PACE_MPLS	GW	GW0079-100121	2021-10-01	ZnDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582495	776536	PACE_MPLS	GW	GW0084-100421	2021-10-04	ZnDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-02	
10582495	776536	PACE_MPLS	GW	GW0085-100121	2021-10-01	ZnDis	2021-10-18	EPA 200.8	2021-10-22	EPA 200.8	2022-03-30	
10582495	776536	PACE_MPLS	GW	GW0083-100421	2021-10-04	ZnDis	2021-10-18	EPA 200.8	2021-10-22	EPA 200.8	2022-04-02	
10582495	776536	PACE_MPLS	GW	GW0082-100121	2021-10-01	ZnDis	2021-10-18	EPA 200.8	2021-10-22	EPA 200.8	2022-03-30	
10582495	776536	PACE_MPLS	GW	GW0086-100121	2021-10-01	ZnDis	2021-10-18	EPA 200.8	2021-10-22	EPA 200.8	2022-03-30	
10582495	776536	PACE_MPLS	GW	GW0087-100521	2021-10-05	ZnDis	2021-10-18	EPA 200.8	2021-10-22	EPA 200.8	2022-04-03	
10582495	776540	PACE_MPLS	GW	GW0088-100121	2021-10-01	AsDis	2021-10-18	EPA 200.8	2021-10-20	EPA 200.8	2022-03-30	
10582495	776540	PACE_MPLS	GW	GW0089-100521	2021-10-05	AsDis	2021-10-18	EPA 200.8	2021-10-20	EPA 200.8	2022-04-03	
10582495	776540	PACE_MPLS	GW	GW0090-100521	2021-10-05	AsDis	2021-10-18	EPA 200.8	2021-10-20	EPA 200.8	2022-04-03	
10582495	776540	PACE_MPLS	GW	GW0091-100521	2021-10-05	AsDis	2021-10-18	EPA 200.8	2021-10-20	EPA 200.8	2022-04-03	
10582495	776540	PACE_MPLS	GW	GW0091-100521	2021-10-05	CdDis	2021-10-18	EPA 200.8	2021-10-20	EPA 200.8	2022-04-03	
10582495	776540	PACE_MPLS	GW	GW0090-100521	2021-10-05	CdDis	2021-10-18	EPA 200.8	2021-10-20	EPA 200.8	2022-04-03	
10582495	776540	PACE_MPLS	GW	GW0089-100521	2021-10-05	CdDis	2021-10-18	EPA 200.8	2021-10-20	EPA 200.8	2022-04-03	
10582495	776540	PACE_MPLS	GW	GW0088-100121	2021-10-01	CdDis	2021-10-18	EPA 200.8	2021-10-20	EPA 200.8	2022-03-30	
10582495	776540	PACE_MPLS	GW	GW0088-100121	2021-10-01	CuDis	2021-10-18	EPA 200.8	2021-10-20	EPA 200.8	2022-03-30	
10582495	776540	PACE_MPLS	GW	GW0089-100521	2021-10-05	CuDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-03	
10582495	776540	PACE_MPLS	GW	GW0090-100521	2021-10-05	CuDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-03	
10582495	776540	PACE_MPLS	GW	GW0091-100521	2021-10-05	CuDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-03	
10582495	776540	PACE_MPLS	GW	GW0088-100121	2021-10-01	PbDis	2021-10-18	EPA 200.8	2021-10-20	EPA 200.8	2022-03-30	
10582495	776540	PACE_MPLS	GW	GW0089-100521	2021-10-05	PbDis	2021-10-18	EPA 200.8	2021-10-20	EPA 200.8	2022-04-03	
10582495	776540	PACE_MPLS	GW	GW0090-100521	2021-10-05	PbDis	2021-10-18	EPA 200.8	2021-10-20	EPA 200.8	2022-04-03	
10582495	776540	PACE_MPLS	GW	GW0091-100521	2021-10-05	PbDis	2021-10-18	EPA 200.8	2021-10-20	EPA 200.8	2022-04-03	
10582495	776540	PACE_MPLS	GW	GW0089-100521	2021-10-05	ZnDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-03	
10582495	776540	PACE_MPLS	GW	GW0091-100521	2021-10-05	ZnDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-03	
10582495	776540	PACE_MPLS	GW	GW0090-100521	2021-10-05	ZnDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-03	
10582495	776540	PACE_MPLS	GW	GW0088-100121	2021-10-01	ZnDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582495	776874	PACE_MPLS	GW	GW0087-100521	2021-10-05	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-11-02	
10582495	776874	PACE_MPLS	GW	GW0086-100121	2021-10-01	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-10-29	
10582495	776874	PACE_MPLS	GW	GW0084-100421	2021-10-04	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-11-01	
10582495	776874	PACE_MPLS	GW	GW0082-100121	2021-10-01	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-10-29	
10582495	776874	PACE_MPLS	GW	GW0083-100421	2021-10-04	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-11-01	
10582495	776874	PACE_MPLS	GW	GW0085-100121	2021-10-01	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-10-29	
10582495	776874	PACE_MPLS	GW	GW0079-100121	2021-10-01	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-10-29	
10582495	776874	PACE_MPLS	GW	GW0080-100121	2021-10-01	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-10-29	
10582495	776874	PACE_MPLS	GW	GW0081-100121	2021-10-01	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-10-29	
10582495	776874	PACE_MPLS	GW	GW0077-100421	2021-10-04	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-11-01	
10582495	776874	PACE_MPLS	GW	GW0078-100121	2021-10-01	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-10-29	
10582495	776876	PACE_MPLS	GW	GW0088-100121	2021-10-01	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-10-29	
10582495	776876	PACE_MPLS	GW	GW0090-100521	2021-10-05	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-11-02	
10582495	776876	PACE_MPLS	GW	GW0091-100521	2021-10-05	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-11-02	
10582495	776876	PACE_MPLS	GW	GW0089-100521	2021-10-05	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-11-02	
10582497	776539	PACE_MPLS	GW	GW0094-100121	2021-10-01	AsDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0095-100121	2021-10-01	AsDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0096-100121	2021-10-01	AsDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0097-100121	2021-10-01	AsDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0098-100121	2021-10-01	AsDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0099-100121	2021-10-01	AsDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	

Table B5b. BPSOU 2021 Groundwater Data Quality Assessment - Holding Times

SDG	Batch ID	Lab	Media	Field Sample ID	Sample Date	Parameter	Prep Date	Prep Method	Analysis Date	Analysis Method	Hold Expires	DV Q
10582497	776539	PACE_MPLS	GW	GW0100-100121	2021-10-01	AsDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0101-100121	2021-10-01	AsDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0102-100121	2021-10-01	AsDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0103-100121	2021-10-01	AsDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0104-100121	2021-10-01	AsDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0105-100121	2021-10-01	AsDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0106-100421	2021-10-04	AsDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-02	
10582497	776539	PACE_MPLS	GW	GW0107-100421	2021-10-04	AsDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-02	
10582497	776539	PACE_MPLS	GW	GW0109-100421	2021-10-04	AsDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-02	
10582497	776539	PACE_MPLS	GW	GW0109-100421	2021-10-04	CdDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-02	
10582497	776539	PACE_MPLS	GW	GW0107-100421	2021-10-04	CdDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-02	
10582497	776539	PACE_MPLS	GW	GW0106-100421	2021-10-04	CdDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-02	
10582497	776539	PACE_MPLS	GW	GW0105-100121	2021-10-01	CdDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0104-100121	2021-10-01	CdDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0103-100121	2021-10-01	CdDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0102-100121	2021-10-01	CdDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0101-100121	2021-10-01	CdDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0100-100121	2021-10-01	CdDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0099-100121	2021-10-01	CdDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0098-100121	2021-10-01	CdDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0097-100121	2021-10-01	CdDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0096-100121	2021-10-01	CdDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0095-100121	2021-10-01	CdDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0094-100121	2021-10-01	CdDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0094-100121	2021-10-01	CuDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0095-100121	2021-10-01	CuDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0096-100121	2021-10-01	CuDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0097-100121	2021-10-01	CuDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0098-100121	2021-10-01	CuDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0099-100121	2021-10-01	CuDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0100-100121	2021-10-01	CuDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0101-100121	2021-10-01	CuDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0102-100121	2021-10-01	CuDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0103-100121	2021-10-01	CuDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0104-100121	2021-10-01	CuDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0105-100121	2021-10-01	CuDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0106-100421	2021-10-04	CuDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-02	
10582497	776539	PACE_MPLS	GW	GW0107-100421	2021-10-04	CuDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-02	
10582497	776539	PACE_MPLS	GW	GW0109-100421	2021-10-04	CuDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-02	
10582497	776539	PACE_MPLS	GW	GW0107-100421	2021-10-04	PbDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-02	
10582497	776539	PACE_MPLS	GW	GW0109-100421	2021-10-04	PbDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-02	
10582497	776539	PACE_MPLS	GW	GW0103-100121	2021-10-01	PbDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0104-100121	2021-10-01	PbDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0105-100121	2021-10-01	PbDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0106-100421	2021-10-04	PbDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-02	
10582497	776539	PACE_MPLS	GW	GW0099-100121	2021-10-01	PbDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0100-100121	2021-10-01	PbDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0101-100121	2021-10-01	PbDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0102-100121	2021-10-01	PbDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0095-100121	2021-10-01	PbDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0096-100121	2021-10-01	PbDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0097-100121	2021-10-01	PbDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0098-100121	2021-10-01	PbDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0094-100121	2021-10-01	PbDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0094-100121	2021-10-01	ZnDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0097-100121	2021-10-01	ZnDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0096-100121	2021-10-01	ZnDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0095-100121	2021-10-01	ZnDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0102-100121	2021-10-01	ZnDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0104-100121	2021-10-01	ZnDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0103-100121	2021-10-01	ZnDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0101-100121	2021-10-01	ZnDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0100-100121	2021-10-01	ZnDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0099-100121	2021-10-01	ZnDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	

Table B5b. BPSOU 2021 Groundwater Data Quality Assessment - Holding Times

SDG	Batch ID	Lab	Media	Field Sample ID	Sample Date	Parameter	Prep Date	Prep Method	Analysis Date	Analysis Method	Hold Expires	DV Q
10582497	776539	PACE_MPLS	GW	GW0098-100121	2021-10-01	ZnDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0105-100121	2021-10-01	ZnDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-03-30	
10582497	776539	PACE_MPLS	GW	GW0107-100421	2021-10-04	ZnDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-02	
10582497	776539	PACE_MPLS	GW	GW0106-100421	2021-10-04	ZnDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-02	
10582497	776539	PACE_MPLS	GW	GW0109-100421	2021-10-04	ZnDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-02	
10582497	776540	PACE_MPLS	GW	GW0110-100421	2021-10-04	AsDis	2021-10-18	EPA 200.8	2021-10-20	EPA 200.8	2022-04-02	
10582497	776540	PACE_MPLS	GW	GW0111-100421	2021-10-04	AsDis	2021-10-18	EPA 200.8	2021-10-20	EPA 200.8	2022-04-02	
10582497	776540	PACE_MPLS	GW	GW0112-100421	2021-10-04	AsDis	2021-10-18	EPA 200.8	2021-10-20	EPA 200.8	2022-04-02	
10582497	776540	PACE_MPLS	GW	GW0113-100421	2021-10-04	AsDis	2021-10-18	EPA 200.8	2021-10-20	EPA 200.8	2022-04-02	
10582497	776540	PACE_MPLS	GW	GW0113-100421	2021-10-04	CdDis	2021-10-18	EPA 200.8	2021-10-20	EPA 200.8	2022-04-02	
10582497	776540	PACE_MPLS	GW	GW0112-100421	2021-10-04	CdDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-02	
10582497	776540	PACE_MPLS	GW	GW0111-100421	2021-10-04	CdDis	2021-10-18	EPA 200.8	2021-10-20	EPA 200.8	2022-04-02	
10582497	776540	PACE_MPLS	GW	GW0110-100421	2021-10-04	CdDis	2021-10-18	EPA 200.8	2021-10-20	EPA 200.8	2022-04-02	
10582497	776540	PACE_MPLS	GW	GW0110-100421	2021-10-04	CuDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-02	
10582497	776540	PACE_MPLS	GW	GW0111-100421	2021-10-04	CuDis	2021-10-18	EPA 200.8	2021-10-20	EPA 200.8	2022-04-02	
10582497	776540	PACE_MPLS	GW	GW0112-100421	2021-10-04	CuDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-02	
10582497	776540	PACE_MPLS	GW	GW0113-100421	2021-10-04	CuDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-02	
10582497	776540	PACE_MPLS	GW	GW0112-100421	2021-10-04	PbDis	2021-10-18	EPA 200.8	2021-10-20	EPA 200.8	2022-04-02	
10582497	776540	PACE_MPLS	GW	GW0113-100421	2021-10-04	PbDis	2021-10-18	EPA 200.8	2021-10-20	EPA 200.8	2022-04-02	
10582497	776540	PACE_MPLS	GW	GW0110-100421	2021-10-04	PbDis	2021-10-18	EPA 200.8	2021-10-20	EPA 200.8	2022-04-02	
10582497	776540	PACE_MPLS	GW	GW0111-100421	2021-10-04	PbDis	2021-10-18	EPA 200.8	2021-10-20	EPA 200.8	2022-04-02	
10582497	776540	PACE_MPLS	GW	GW0111-100421	2021-10-04	ZnDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-02	
10582497	776540	PACE_MPLS	GW	GW0110-100421	2021-10-04	ZnDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-02	
10582497	776540	PACE_MPLS	GW	GW0113-100421	2021-10-04	ZnDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-02	
10582497	776540	PACE_MPLS	GW	GW0112-100421	2021-10-04	ZnDis	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	2022-04-02	
10582497	776876	PACE_MPLS	GW	GW0112-100421	2021-10-04	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-11-01	
10582497	776876	PACE_MPLS	GW	GW0113-100421	2021-10-04	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-11-01	
10582497	776876	PACE_MPLS	GW	GW0110-100421	2021-10-04	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-11-01	
10582497	776876	PACE_MPLS	GW	GW0111-100421	2021-10-04	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-11-01	
10582497	776877	PACE_MPLS	GW	GW0109-100421	2021-10-04	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-11-01	
10582497	776877	PACE_MPLS	GW	GW0106-100421	2021-10-04	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-11-01	
10582497	776877	PACE_MPLS	GW	GW0107-100421	2021-10-04	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-11-01	
10582497	776877	PACE_MPLS	GW	GW0105-100121	2021-10-01	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-10-29	
10582497	776877	PACE_MPLS	GW	GW0098-100121	2021-10-01	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-10-29	
10582497	776877	PACE_MPLS	GW	GW0099-100121	2021-10-01	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-10-29	
10582497	776877	PACE_MPLS	GW	GW0100-100121	2021-10-01	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-10-29	
10582497	776877	PACE_MPLS	GW	GW0101-100121	2021-10-01	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-10-29	
10582497	776877	PACE_MPLS	GW	GW0103-100121	2021-10-01	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-10-29	
10582497	776877	PACE_MPLS	GW	GW0104-100121	2021-10-01	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-10-29	
10582497	776877	PACE_MPLS	GW	GW0102-100121	2021-10-01	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-10-29	
10582497	776877	PACE_MPLS	GW	GW0095-100121	2021-10-01	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-10-29	
10582497	776877	PACE_MPLS	GW	GW0096-100121	2021-10-01	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-10-29	
10582497	776877	PACE_MPLS	GW	GW0097-100121	2021-10-01	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-10-29	
10582497	776877	PACE_MPLS	GW	GW0094-100121	2021-10-01	HgDis	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	2021-10-29	
10583409	777579	PACE_MPLS	GW	GW0120-100521	2021-10-05	AsDis	2021-10-20	EPA 200.8	2021-10-27	EPA 200.8	2022-04-03	
10583409	777579	PACE_MPLS	GW	GW0117-100521	2021-10-05	AsDis	2021-10-20	EPA 200.8	2021-10-28	EPA 200.8	2022-04-03	
10583409	777579	PACE_MPLS	GW	GW0118-100721	2021-10-07	AsDis	2021-10-20	EPA 200.8	2021-10-28	EPA 200.8	2022-04-05	
10583409	777579	PACE_MPLS	GW	GW0114-100521	2021-10-05	AsDis	2021-10-20	EPA 200.8	2021-10-27	EPA 200.8	2022-04-03	
10583409	777579	PACE_MPLS	GW	GW0115-100521	2021-10-05	AsDis	2021-10-20	EPA 200.8	2021-10-27	EPA 200.8	2022-04-03	
10583409	777579	PACE_MPLS	GW	GW0116-100521	2021-10-05	AsDis	2021-10-20	EPA 200.8	2021-10-27	EPA 200.8	2022-04-03	
10583409	777579	PACE_MPLS	GW	GW0108-100721	2021-10-07	AsDis	2021-10-20	EPA 200.8	2021-10-27	EPA 200.8	2022-04-05	
10583409	777579	PACE_MPLS	GW	GW0121-100621	2021-10-06	AsDis	2021-10-20	EPA 200.8	2021-10-28	EPA 200.8	2022-04-04	
10583409	777579	PACE_MPLS	GW	GW0122-100621	2021-10-06	AsDis	2021-10-20	EPA 200.8	2021-10-27	EPA 200.8	2022-04-04	
10583409	777579	PACE_MPLS	GW	GW0122-100621	2021-10-06	CdDis	2021-10-20	EPA 200.8	2021-10-28	EPA 200.8	2022-04-04	
10583409	777579	PACE_MPLS	GW	GW0121-100621	2021-10-06	CdDis	2021-10-20	EPA 200.8	2021-10-28	EPA 200.8	2022-04-04	
10583409	777579	PACE_MPLS	GW	GW0108-100721	2021-10-07	CdDis	2021-10-20	EPA 200.8	2021-10-27	EPA 200.8	2022-04-05	
10583409	777579	PACE_MPLS	GW	GW0116-100521	2021-10-05	CdDis	2021-10-20	EPA 200.8	2021-10-27	EPA 200.8	2022-04-03	
10583409	777579	PACE_MPLS	GW	GW0115-100521	2021-10-05	CdDis	2021-10-20	EPA 200.8	2021-10-27	EPA 200.8	2022-04-03	
10583409	777579	PACE_MPLS	GW	GW0114-100521	2021-10-05	CdDis	2021-10-20	EPA 200.8	2021-10-27	EPA 200.8	2022-04-03	
10583409	777579	PACE_MPLS	GW	GW0118-100721	2021-10-07	CdDis	2021-10-20	EPA 200.8	2021-10-28	EPA 200.8	2022-04-05	
10583409	777579	PACE_MPLS	GW	GW0117-100521	2021-10-05	CdDis	2021-10-20	EPA 200.8	2021-10-28	EPA 200.8	2022-04-03	
10583409	777579	PACE_MPLS	GW	GW0120-100521	2021-10-05	CdDis	2021-10-20	EPA 200.8	2021-10-27	EPA 200.8	2022-04-03	
10583409	777579	PACE_MPLS	GW	GW0120-100521	2021-10-05	CuDis	2021-10-20	EPA 200.8	2021-10-28	EPA 200.8	2022-04-03	
10583409	777579	PACE_MPLS	GW	GW0117-100521	2021-10-05	CuDis	2021-10-20	EPA 200.8	2021-10-28	EPA 200.8	2022-04-03	

Table B5b. BPSOU 2021 Groundwater Data Quality Assessment - Holding Times

SDG	Batch ID	Lab	Media	Field Sample ID	Sample Date	Parameter	Prep Date	Prep Method	Analysis Date	Analysis Method	Hold Expires	DV Q
10583409	777579	PACE_MPLS	GW	GW0118-100721	2021-10-07	CuDis	2021-10-20	EPA 200.8	2021-10-28	EPA 200.8	2022-04-05	
10583409	777579	PACE_MPLS	GW	GW0114-100521	2021-10-05	CuDis	2021-10-20	EPA 200.8	2021-10-28	EPA 200.8	2022-04-03	
10583409	777579	PACE_MPLS	GW	GW0115-100521	2021-10-05	CuDis	2021-10-20	EPA 200.8	2021-10-28	EPA 200.8	2022-04-03	
10583409	777579	PACE_MPLS	GW	GW0116-100521	2021-10-05	CuDis	2021-10-20	EPA 200.8	2021-10-28	EPA 200.8	2022-04-03	
10583409	777579	PACE_MPLS	GW	GW0108-100721	2021-10-07	CuDis	2021-10-20	EPA 200.8	2021-10-28	EPA 200.8	2022-04-05	
10583409	777579	PACE_MPLS	GW	GW0121-100621	2021-10-06	CuDis	2021-10-20	EPA 200.8	2021-10-28	EPA 200.8	2022-04-04	
10583409	777579	PACE_MPLS	GW	GW0122-100621	2021-10-06	CuDis	2021-10-20	EPA 200.8	2021-10-28	EPA 200.8	2022-04-04	
10583409	777579	PACE_MPLS	GW	GW0118-100721	2021-10-07	PbDis	2021-10-20	EPA 200.8	2021-10-28	EPA 200.8	2022-04-05	
10583409	777579	PACE_MPLS	GW	GW0121-100621	2021-10-06	PbDis	2021-10-20	EPA 200.8	2021-10-28	EPA 200.8	2022-04-04	
10583409	777579	PACE_MPLS	GW	GW0122-100621	2021-10-06	PbDis	2021-10-20	EPA 200.8	2021-10-27	EPA 200.8	2022-04-04	
10583409	777579	PACE_MPLS	GW	GW0108-100721	2021-10-07	PbDis	2021-10-20	EPA 200.8	2021-10-27	EPA 200.8	2022-04-05	
10583409	777579	PACE_MPLS	GW	GW0114-100521	2021-10-05	PbDis	2021-10-20	EPA 200.8	2021-10-27	EPA 200.8	2022-04-03	
10583409	777579	PACE_MPLS	GW	GW0115-100521	2021-10-05	PbDis	2021-10-20	EPA 200.8	2021-10-27	EPA 200.8	2022-04-03	
10583409	777579	PACE_MPLS	GW	GW0116-100521	2021-10-05	PbDis	2021-10-20	EPA 200.8	2021-10-27	EPA 200.8	2022-04-03	
10583409	777579	PACE_MPLS	GW	GW0117-100521	2021-10-05	PbDis	2021-10-20	EPA 200.8	2021-10-28	EPA 200.8	2022-04-03	
10583409	777579	PACE_MPLS	GW	GW0120-100521	2021-10-05	PbDis	2021-10-20	EPA 200.8	2021-10-27	EPA 200.8	2022-04-03	
10583409	777579	PACE_MPLS	GW	GW0120-100521	2021-10-05	ZnDis	2021-10-20	EPA 200.8	2021-10-28	EPA 200.8	2022-04-03	
10583409	777579	PACE_MPLS	GW	GW0118-100721	2021-10-07	ZnDis	2021-10-20	EPA 200.8	2021-10-28	EPA 200.8	2022-04-05	
10583409	777579	PACE_MPLS	GW	GW0117-100521	2021-10-05	ZnDis	2021-10-20	EPA 200.8	2021-10-28	EPA 200.8	2022-04-03	
10583409	777579	PACE_MPLS	GW	GW0116-100521	2021-10-05	ZnDis	2021-10-20	EPA 200.8	2021-10-28	EPA 200.8	2022-04-03	
10583409	777579	PACE_MPLS	GW	GW0115-100521	2021-10-05	ZnDis	2021-10-20	EPA 200.8	2021-10-28	EPA 200.8	2022-04-03	
10583409	777579	PACE_MPLS	GW	GW0114-100521	2021-10-05	ZnDis	2021-10-20	EPA 200.8	2021-10-28	EPA 200.8	2022-04-03	
10583409	777579	PACE_MPLS	GW	GW0108-100721	2021-10-07	ZnDis	2021-10-20	EPA 200.8	2021-10-28	EPA 200.8	2022-04-05	
10583409	777579	PACE_MPLS	GW	GW0121-100621	2021-10-06	ZnDis	2021-10-20	EPA 200.8	2021-10-28	EPA 200.8	2022-04-04	
10583409	777579	PACE_MPLS	GW	GW0122-100621	2021-10-06	ZnDis	2021-10-20	EPA 200.8	2021-10-28	EPA 200.8	2022-04-04	
10583409	777584	PACE_MPLS	GW	GW0122-100621	2021-10-06	HgDis	2021-10-20	EPA 245.1	2021-10-21	EPA 245.1	2021-11-03	
10583409	777584	PACE_MPLS	GW	GW0121-100621	2021-10-06	HgDis	2021-10-20	EPA 245.1	2021-10-21	EPA 245.1	2021-11-03	
10583409	777584	PACE_MPLS	GW	GW0108-100721	2021-10-07	HgDis	2021-10-20	EPA 245.1	2021-10-21	EPA 245.1	2021-11-04	
10583409	777584	PACE_MPLS	GW	GW0114-100521	2021-10-05	HgDis	2021-10-20	EPA 245.1	2021-10-21	EPA 245.1	2021-11-02	
10583409	777584	PACE_MPLS	GW	GW0115-100521	2021-10-05	HgDis	2021-10-20	EPA 245.1	2021-10-21	EPA 245.1	2021-11-02	
10583409	777584	PACE_MPLS	GW	GW0116-100521	2021-10-05	HgDis	2021-10-20	EPA 245.1	2021-10-21	EPA 245.1	2021-11-02	
10583409	777584	PACE_MPLS	GW	GW0117-100521	2021-10-05	HgDis	2021-10-20	EPA 245.1	2021-10-21	EPA 245.1	2021-11-02	
10583409	777584	PACE_MPLS	GW	GW0118-100721	2021-10-07	HgDis	2021-10-20	EPA 245.1	2021-10-21	EPA 245.1	2021-11-04	
10583409	777584	PACE_MPLS	GW	GW0120-100521	2021-10-05	HgDis	2021-10-20	EPA 245.1	2021-10-21	EPA 245.1	2021-11-02	

Table B5c. BPSOU 2021 Groundwater Data Quality Assessment - Field Blanks

SDG	Lab	Field Sample ID	Lab Sample ID	Batch ID	Param	Sample Date	Prep Date	Prep Method	Analysis Date	Analysis Method	Result (mg/L)	MDL (mg/L)	CRQL (mg/L)	Lab Q	DV Q	DV Code
10558077	PACE_MPLS	GW0018-042821	10558077018	741139	AsDis	2021-04-28	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	0.00014	0.00014	0.0005	U		
10558077	PACE_MPLS	GW0018-042821	10558077018	741139	CdDis	2021-04-28	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	0.00003	0.00003	0.00008	U		
10558077	PACE_MPLS	GW0018-042821	10558077018	741139	CuDis	2021-04-28	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	0.00089	0.00043	0.001	J		
10558077	PACE_MPLS	GW0018-042821	10558077018	741139	PbDis	2021-04-28	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	0.000043	0.000043	0.0001	U		
10558077	PACE_MPLS	GW0018-042821	10558077018	741139	ZnDis	2021-04-28	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	0.0044	0.0023	0.005	J		
10558077	PACE_MPLS	GW0034-042721	10558077034	741140	AsDis	2021-04-27	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	0.00014	0.00014	0.0005	U		
10558077	PACE_MPLS	GW0034-042721	10558077034	741140	CdDis	2021-04-27	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	0.00003	0.00003	0.00008	U		
10558077	PACE_MPLS	GW0034-042721	10558077034	741140	CuDis	2021-04-27	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	0.00043	0.00043	0.001	U		
10558077	PACE_MPLS	GW0034-042721	10558077034	741140	PbDis	2021-04-27	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	0.000043	0.000043	0.0001	U		
10558077	PACE_MPLS	GW0034-042721	10558077034	741140	ZnDis	2021-04-27	2021-05-11	EPA 200.8	2021-05-14	EPA 200.8	0.0023	0.0023	0.005	U		
10558077	PACE_MPLS	GW0018-042821	10558077018	741975	HgDis	2021-04-28	2021-05-13	EPA 245.1	2021-05-17	EPA 245.1	0.0000045	0.0000045	0.00001	U		
10558077	PACE_MPLS	GW0034-042721	10558077034	741977	HgDis	2021-04-27	2021-05-13	EPA 245.1	2021-05-17	EPA 245.1	0.0000045	0.0000045	0.00001	U		
10559096	PACE_MPLS	GW0060-050321	10559096020	741844	AsDis	2021-05-03	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	0.00014	0.00014	0.0005	U		
10559096	PACE_MPLS	GW0060-050321	10559096020	741844	CdDis	2021-05-03	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	0.00003	0.00003	0.00008	U		
10559096	PACE_MPLS	GW0060-050321	10559096020	741844	CuDis	2021-05-03	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	0.00097	0.00043	0.001	J		
10559096	PACE_MPLS	GW0060-050321	10559096020	741844	PbDis	2021-05-03	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	0.000043	0.000043	0.0001	U		
10559096	PACE_MPLS	GW0060-050321	10559096020	741844	ZnDis	2021-05-03	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	0.007	0.0023	0.005			
10559096	PACE_MPLS	GW0076-043021	10559096036	741855	AsDis	2021-04-30	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	0.00014	0.00014	0.0005	U		
10559096	PACE_MPLS	GW0076-043021	10559096036	741855	CdDis	2021-04-30	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	0.00003	0.00003	0.00008	U		
10559096	PACE_MPLS	GW0076-043021	10559096036	741855	CuDis	2021-04-30	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	0.00043	0.00043	0.001	U		
10559096	PACE_MPLS	GW0076-043021	10559096036	741855	PbDis	2021-04-30	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	0.000043	0.000043	0.0001	U		
10559096	PACE_MPLS	GW0076-043021	10559096036	741855	ZnDis	2021-04-30	2021-05-14	EPA 200.8	2021-05-19	EPA 200.8	0.0023	0.0023	0.005	U		
10559096	PACE_MPLS	GW0091-050421	10559096050	741868	AsDis	2021-05-04	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	0.00014	0.00014	0.0005	U		
10559096	PACE_MPLS	GW0091-050421	10559096050	741868	CdDis	2021-05-04	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	0.00003	0.00003	0.00008	U		
10559096	PACE_MPLS	GW0091-050421	10559096050	741868	CuDis	2021-05-04	2021-05-14	EPA 200.8	2021-05-21	EPA 200.8	0.00045	0.00043	0.001	J		
10559096	PACE_MPLS	GW0091-050421	10559096050	741868	PbDis	2021-05-04	2021-05-14	EPA 200.8	2021-05-20	EPA 200.8	0.000043	0.000043	0.0001	U		
10559096	PACE_MPLS	GW0091-050421	10559096050	741868	ZnDis	2021-05-04	2021-05-14	EPA 200.8	2021-05-21	EPA 200.8	0.0023	0.0023	0.005	U		
10559096	PACE_MPLS	GW0060-050321	10559096020	744269	HgDis	2021-05-03	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	0.000045	0.000045	0.0002	U,MD		
10559096	PACE_MPLS	GW0076-043021	10559096036	744270	HgDis	2021-04-30	2021-05-24	EPA 245.1	2021-05-24	EPA 245.1	0.000045	0.000045	0.0002	U,MD		
10559096	PACE_MPLS	GW0091-050421	10559096050	744271	HgDis	2021-05-04	2021-05-24	EPA 245.1	2021-05-25	EPA 245.1	0.000045	0.000045	0.0002	U,MD		
10560315	PACE_MPLS	GW0124-050721	10560315003	745524	HgDis	2021-05-07	2021-06-01	EPA 245.1	2021-06-01	EPA 245.1	0.000045	0.000045	0.0002	U,MD		
10560315	PACE_MPLS	GW0124-050721	10560315003	745714	AsDis	2021-05-07	2021-06-01	EPA 200.8	2021-06-02	EPA 200.8	0.00014	0.00014	0.0005	U		
10560315	PACE_MPLS	GW0124-050721	10560315003	745714	CdDis	2021-05-07	2021-06-01	EPA 200.8	2021-06-02	EPA 200.8	0.00003	0.00003	0.00008	U		
10560315	PACE_MPLS	GW0124-050721	10560315003	745714	CuDis	2021-05-07	2021-06-01	EPA 200.8	2021-06-02	EPA 200.8	0.00052	0.00043	0.001	J		
10560315	PACE_MPLS	GW0124-050721	10560315003	745714	PbDis	2021-05-07	2021-06-01	EPA 200.8	2021-06-02	EPA 200.8	0.000043	0.000043	0.0001	U		
10560315	PACE_MPLS	GW0124-050721	10560315003	745714	ZnDis	2021-05-07	2021-06-01	EPA 200.8	2021-06-02	EPA 200.8	0.0023	0.0023	0.005	U		
10560318	PACE_MPLS	GW0105-050621	10560318011	743507	AsDis	2021-05-06	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	0.0007	0.0007	0.0025	U		
10560318	PACE_MPLS	GW0105-050621	10560318011	743507	CdDis	2021-05-06	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	0.00015	0.00015	0.0004	U		
10560318	PACE_MPLS	GW0105-050621	10560318011	743507	CuDis	2021-05-06	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	0.0021	0.0021	0.005	U		
10560318	PACE_MPLS	GW0105-050621	10560318011	743507	PbDis	2021-05-06	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	0.00022	0.00022	0.0005	U		
10560318	PACE_MPLS	GW0105-050621	10560318011	743507	ZnDis	2021-05-06	2021-05-21	EPA 200.8	2021-05-28	EPA 200.8	0.011	0.011	0.025	U		
10560318	PACE_MPLS	GW0118-050621	10560318024	743509	AsDis	2021-05-06	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	0.00014	0.00014	0.0005	U		
10560318	PACE_MPLS	GW0118-050621	10560318024	743509	CdDis	2021-05-06	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	0.00003	0.00003	0.00008	U		
10560318	PACE_MPLS	GW0118-050621	10560318024	743509	CuDis	2021-05-06	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	0.00043	0.00043	0.001	U		
10560318	PACE_MPLS	GW0118-050621	10560318024	743509	PbDis	2021-05-06	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	0.000043	0.000043	0.0001	U		
10560318	PACE_MPLS	GW0118-050621	10560318024	743509	ZnDis	2021-05-06	2021-05-21	EPA 200.8	2021-05-27	EPA 200.8	0.0023	0.0023	0.005	U		

Table B5c. BPSOU 2021 Groundwater Data Quality Assessment - Field Blanks

SDG	Lab	Field Sample ID	Lab Sample ID	Batch ID	Param	Sample Date	Prep Date	Prep Method	Analysis Date	Analysis Method	Result (mg/L)	MDL (mg/L)	CRQL (mg/L)	Lab Q	DV Q	DV Code
10560318	PACE_MPLS	GW0105-050621	10560318011	744837	HgDis	2021-05-06	2021-05-26	EPA 245.1	2021-05-27	EPA 245.1	0.000045	0.000045	0.0002	U,MD		
10560318	PACE_MPLS	GW0118-050621	10560318024	744839	HgDis	2021-05-06	2021-05-26	EPA 245.1	2021-05-27	EPA 245.1	0.000045	0.000045	0.0002	U		
10580635	PACE_MPLS	GW0010-092421	10580635010	774035	HgDis	2021-09-24	2021-10-04	EPA 245.1	2021-10-06	EPA 245.1	0.0000047	0.0000047	0.00001	U		
10580635	PACE_MPLS	GW0022-092421	10580635022	774036	HgDis	2021-09-24	2021-10-04	EPA 245.1	2021-10-06	EPA 245.1	0.0000047	0.0000047	0.00001	U		
10580635	PACE_MPLS	GW0010-092421	10580635010	774114	AsDis	2021-09-24	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	0.000083	0.000083	0.0005	U		
10580635	PACE_MPLS	GW0010-092421	10580635010	774114	CdDis	2021-09-24	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	0.000016	0.000016	0.00008	U		
10580635	PACE_MPLS	GW0010-092421	10580635010	774114	CuDis	2021-09-24	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	0.0005	0.0005	0.001	U		
10580635	PACE_MPLS	GW0010-092421	10580635010	774114	PbDis	2021-09-24	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	0.000028	0.000028	0.0001	U		
10580635	PACE_MPLS	GW0010-092421	10580635010	774114	ZnDis	2021-09-24	2021-10-05	EPA 200.8	2021-10-06	EPA 200.8	0.002	0.002	0.005	U		
10580635	PACE_MPLS	GW0022-092421	10580635022	774115	AsDis	2021-09-24	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	0.000083	0.000083	0.0005	U		
10580635	PACE_MPLS	GW0022-092421	10580635022	774115	CdDis	2021-09-24	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	0.000016	0.000016	0.00008	U		
10580635	PACE_MPLS	GW0022-092421	10580635022	774115	CuDis	2021-09-24	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	0.0005	0.0005	0.001	U		
10580635	PACE_MPLS	GW0022-092421	10580635022	774115	PbDis	2021-09-24	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	0.000058	0.000028	0.0001	J		
10580635	PACE_MPLS	GW0022-092421	10580635022	774115	ZnDis	2021-09-24	2021-10-05	EPA 200.8	2021-10-11	EPA 200.8	0.002	0.002	0.005	U		
10581934	PACE_MPLS	GW0041-092921	10581934016	775223	AsDis	2021-09-29	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	0.000083	0.000083	0.0005	U		
10581934	PACE_MPLS	GW0041-092921	10581934016	775223	CdDis	2021-09-29	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	0.000016	0.000016	0.00008	U		
10581934	PACE_MPLS	GW0041-092921	10581934016	775223	CuDis	2021-09-29	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	0.0005	0.0005	0.001	U		
10581934	PACE_MPLS	GW0041-092921	10581934016	775223	PbDis	2021-09-29	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	0.000028	0.000028	0.0001	U		
10581934	PACE_MPLS	GW0041-092921	10581934016	775223	ZnDis	2021-09-29	2021-10-07	EPA 200.8	2021-10-19	EPA 200.8	0.002	0.002	0.005	U		
10581934	PACE_MPLS	GW0041-092921	10581934016	775847	HgDis	2021-09-29	2021-10-12	EPA 245.1	2021-10-14	EPA 245.1	0.000045	0.000045	0.0002	U		
10581942	PACE_MPLS	GW0057-092821	10581942010	775227	AsDis	2021-09-28	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	0.000083	0.000083	0.0005	U		
10581942	PACE_MPLS	GW0057-092821	10581942010	775227	CdDis	2021-09-28	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	0.00002	0.000016	0.00008	J		
10581942	PACE_MPLS	GW0057-092821	10581942010	775227	CuDis	2021-09-28	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	0.0005	0.0005	0.001	U		
10581942	PACE_MPLS	GW0057-092821	10581942010	775227	PbDis	2021-09-28	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	0.000035	0.000028	0.0001	J		
10581942	PACE_MPLS	GW0057-092821	10581942010	775227	ZnDis	2021-09-28	2021-10-08	EPA 200.8	2021-10-12	EPA 200.8	0.002	0.002	0.005	U		
10581942	PACE_MPLS	GW0057-092821	10581942010	775848	HgDis	2021-09-28	2021-10-12	EPA 245.1	2021-10-14	EPA 245.1	0.000045	0.000045	0.0002	U		
10582495	PACE_MPLS	GW0076-093021	10582495007	776536	AsDis	2021-09-30	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	0.000083	0.000083	0.0005	U		
10582495	PACE_MPLS	GW0076-093021	10582495007	776536	CdDis	2021-09-30	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	0.000016	0.000016	0.00008	U		
10582495	PACE_MPLS	GW0076-093021	10582495007	776536	CuDis	2021-09-30	2021-10-18	EPA 200.8	2021-10-22	EPA 200.8	0.0005	0.0005	0.001	U		
10582495	PACE_MPLS	GW0076-093021	10582495007	776536	PbDis	2021-09-30	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	0.000028	0.000028	0.0001	U		
10582495	PACE_MPLS	GW0076-093021	10582495007	776536	ZnDis	2021-09-30	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	0.002	0.002	0.005	U		
10582495	PACE_MPLS	GW0076-093021	10582495007	776874	HgDis	2021-09-30	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	0.000045	0.000045	0.0002	U		
10582497	PACE_MPLS	GW0100-100121	10582497009	776539	AsDis	2021-10-01	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	0.000083	0.000083	0.0005	U		
10582497	PACE_MPLS	GW0100-100121	10582497009	776539	CdDis	2021-10-01	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	0.000016	0.000016	0.00008	U		
10582497	PACE_MPLS	GW0100-100121	10582497009	776539	CuDis	2021-10-01	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	0.0005	0.0005	0.001	U		
10582497	PACE_MPLS	GW0100-100121	10582497009	776539	PbDis	2021-10-01	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	0.000028	0.000028	0.0001	U		
10582497	PACE_MPLS	GW0100-100121	10582497009	776539	ZnDis	2021-10-01	2021-10-18	EPA 200.8	2021-10-21	EPA 200.8	0.002	0.002	0.005	U		
10582497	PACE_MPLS	GW0100-100121	10582497009	776877	HgDis	2021-10-01	2021-10-18	EPA 245.1	2021-10-21	EPA 245.1	0.000045	0.000045	0.0002	U		
10583409	PACE_MPLS	GW0117-100521	10583409004	777579	AsDis	2021-10-05	2021-10-20	EPA 200.8	2021-10-28	EPA 200.8	0.000083	0.000083	0.0005	U		
10583409	PACE_MPLS	GW0117-100521	10583409004	777579	CdDis	2021-10-05	2021-10-20	EPA 200.8	2021-10-28	EPA 200.8	0.000016	0.000016	0.00008	J		
10583409	PACE_MPLS	GW0117-100521	10583409004	777579	CuDis	2021-10-05	2021-10-20	EPA 200.8	2021-10-28	EPA 200.8	0.0025	0.0005	0.001			
10583409	PACE_MPLS	GW0117-100521	10583409004	777579	PbDis	2021-10-05	2021-10-20	EPA 200.8	2021-10-28	EPA 200.8	0.000028	0.000028	0.0001	U		
10583409	PACE_MPLS	GW0117-100521	10583409004	777579	ZnDis	2021-10-05	2021-10-20	EPA 200.8	2021-10-28	EPA 200.8	0.003	0.002	0.005	J		
10583409	PACE_MPLS	GW0117-100521	10583409004	777584	HgDis	2021-10-05	2021-10-20	EPA 245.1	2021-10-21	EPA 245.1	0.000045	0.000045	0.0002	U		

Table B5d. BPSOU 2021 Groundwater Data Quality Assessment - Laboratory Quality Assessment

Lab	SDG	Batch	QC Sample ID	Lab Sample ID	Parent Sample ID	QC Sample Type	Test Type	Param	Fraction	DF	Prep Date	Prep Method	Analysis Date	Analysis Method	Parent Value	Spike Value	QC Sample Value	MDL	RL	Unit	%R	RPD %	Lab Lower %R Limit	Lab Upper %R Limit	Lab %RPD Limit
PACE_MPLS	10558077	741139	GW0004-042221MS	3952317	GW0004-042221	MS	INITIAL	AsDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 04:48	EPA 200.8	0.0051	0.1	0.1	0.00014	0.0005	mg/L	99		70	130	
PACE_MPLS	10558077	741139	GW0004-042221MSD	3952318	GW0004-042221	MSD	INITIAL	AsDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 04:51	EPA 200.8	0.0051	0.1	0.1	0.00014	0.0005	mg/L	98		70	130	20
PACE_MPLS	10558077	741139	GW0011-042721MS	3952319	GW0011-042721	MS	INITIAL	AsDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 05:23	EPA 200.8	0.007	0.1	0.11	0.00014	0.0005	mg/L	101		70	130	
PACE_MPLS	10558077	741140	GW0024-042221MS	3952322	GW0024-042221	MS	INITIAL	AsDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 02:56	EPA 200.8	0.05	0.1	0.15	0.00014	0.0005	mg/L	99		70	130	
PACE_MPLS	10558077	741140	GW0024-042221MSD	3952323	GW0024-042221	MSD	INITIAL	AsDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 02:59	EPA 200.8	0.05	0.1	0.15	0.00014	0.0005	mg/L	99		70	130	20
PACE_MPLS	10558077	741140	GW0031-042321MS	3952324	GW0031-042321	MS	INITIAL	AsDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 03:34	EPA 200.8	0.02	0.1	0.12	0.00014	0.0005	mg/L	103		70	130	
PACE_MPLS	10558077	741139	GW0011-042721MS	3952319	GW0011-042721	MS	INITIAL	CdDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 05:23	EPA 200.8	0.0038	0.1	0.097	0.00003	0.00008	mg/L	94		70	130	
PACE_MPLS	10558077	741139	GW0004-042221MSD	3952318	GW0004-042221	MSD	INITIAL	CdDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 04:51	EPA 200.8	0.00036	0.1	0.097	0.00003	0.00008	mg/L	97	1	70	130	20
PACE_MPLS	10558077	741139	GW0004-042221MS	3952317	GW0004-042221	MS	INITIAL	CdDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 04:48	EPA 200.8	0.00036	0.1	0.096	0.00003	0.00008	mg/L	96		70	130	
PACE_MPLS	10558077	741140	GW0024-042221MS	3952322	GW0024-042221	MS	INITIAL	CdDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 02:56	EPA 200.8		0.1	0.095	0.00003	0.00008	mg/L	95		70	130	
PACE_MPLS	10558077	741140	GW0024-042221MSD	3952323	GW0024-042221	MSD	INITIAL	CdDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 02:59	EPA 200.8		0.1	0.097	0.00003	0.00008	mg/L	97	1	70	130	20
PACE_MPLS	10558077	741140	GW0031-042321MS	3952324	GW0031-042321	MS	INITIAL	CdDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 03:34	EPA 200.8	0.0086	0.1	0.11	0.00003	0.00008	mg/L	97		70	130	
PACE_MPLS	10558077	741139	GW0011-042721MS	3952319	GW0011-042721	MS	INITIAL	CuDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 05:23	EPA 200.8	0.056	0.1	0.15	0.00043	0.001	mg/L	99		70	130	
PACE_MPLS	10558077	741139	GW0004-042221MSD	3952318	GW0004-042221	MSD	INITIAL	CuDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 04:51	EPA 200.8	0.0014	0.1	0.1	0.00043	0.001	mg/L	99	1	70	130	20
PACE_MPLS	10558077	741139	GW0004-042221MS	3952317	GW0004-042221	MS	INITIAL	CuDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 04:48	EPA 200.8	0.0014	0.1	0.099	0.00043	0.001	mg/L	97		70	130	
PACE_MPLS	10558077	741140	GW0024-042221MS	3952322	GW0024-042221	MS	INITIAL	CuDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 02:56	EPA 200.8	0.00072	0.1	0.093	0.00043	0.001	mg/L	92		70	130	
PACE_MPLS	10558077	741140	GW0024-042221MSD	3952323	GW0024-042221	MSD	INITIAL	CuDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 02:59	EPA 200.8	0.00072	0.1	0.094	0.00043	0.001	mg/L	93	1	70	130	20
PACE_MPLS	10558077	741140	GW0031-042321MS	3952324	GW0031-042321	MS	INITIAL	CuDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 03:34	EPA 200.8	0.12	0.1	0.22	0.00043	0.001	mg/L	102		70	130	
PACE_MPLS	10558077	739219	GW0013-042721MS	3942572	GW0013-042721	MS	INITIAL	HgDis	D	1	2021-05-04 06:45	EPA 245.1	2021-05-05 03:08	EPA 245.1		0.0001	0.0001	0.0000045	0.00001	mg/L	96		70	130	
PACE_MPLS	10558077	739219	GW0004-042221MS	3942570	GW0004-042221	MS	INITIAL	HgDis	D	1	2021-05-04 06:45	EPA 245.1	2021-05-05 02:26	EPA 245.1		0.0001	0.0001	0.0000045	0.00001	mg/L	95		70	130	
PACE_MPLS	10558077	739219	GW0004-042221MSD	3942571	GW0004-042221	MSD	INITIAL	HgDis	D	1	2021-05-04 06:45	EPA 245.1	2021-05-05 02:29	EPA 245.1		0.0001	0.0001	0.0000045	0.00001	mg/L	95		70	130	20
PACE_MPLS	10558077	741546	GW0024-042221MS	3954429	GW0024-042221	MS	INITIAL	HgDis	D	1	2021-05-12 04:48	EPA 245.1	2021-05-13 03:21	EPA 245.1		0.0001	0.000097	0.0000045	0.00001	mg/L	97		70	130	
PACE_MPLS	10558077	741546	GW0024-042221MSD	3954430	GW0024-042221	MSD	INITIAL	HgDis	D	1	2021-05-12 04:48	EPA 245.1	2021-05-13 03:24	EPA 245.1		0.0001	0.0001	0.0000045	0.00001	mg/L	103	6	70	130	20
PACE_MPLS	10558077	741975	GW0016-042821MS	3956761	GW0016-042821	MS	INITIAL	HgDis	D	1	2021-05-13 05:17	EPA 245.1	2021-05-17 01:49	EPA 245.1	0.000015	0.0001	0.00012	0.0000045	0.00001	mg/L	101		70	130	
PACE_MPLS	10558077	741975	GW0016-042821MSD	3956762	GW0016-042821	MSD	INITIAL	HgDis	D	1	2021-05-13 05:17	EPA 245.1	2021-05-17 01:52	EPA 245.1	0.000015	0.0001	0.00011	0.0000045	0.00001	mg/L	98	3	70	130	20
PACE_MPLS	10558077	741977	GW0032-042721MS	3956772	GW0032-042721	MS	INITIAL	HgDis	D	1	2021-05-13 05:17	EPA 245.1	2021-05-17 02:45	EPA 245.1	0.000023	0.0001	0.00012	0.0000045	0.00001	mg/L	95		70	130	
PACE_MPLS	10558077	741977	GW0032-042721MSD	3956773	GW0032-042721	MSD	INITIAL	HgDis	D	1	2021-05-13 05:17	EPA 245.1	2021-05-17 02:48	EPA 245.1	0.000023	0.0001	0.00011	0.0000045	0.00001	mg/L	91	3	70	130	20
PACE_MPLS	10558077	741139	GW0011-042721MS	3952319	GW0011-042721	MS	INITIAL	PbDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 05:23	EPA 200.8		0.1	0.097	0.000043	0.0001	mg/L	97		70	130	
PACE_MPLS	10558077	741139	GW0004-042221MSD	3952318	GW0004-042221	MSD	INITIAL	PbDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 04:51	EPA 200.8		0.1	0.099	0.000043	0.0001	mg/L	99	2	70	130	20
PACE_MPLS	10558077	741139	GW0004-042221MS	3952317	GW0004-042221	MS	INITIAL	PbDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 04:48	EPA 200.8		0.1	0.097	0.000043	0.0001	mg/L	97		70	130	
PACE_MPLS	10558077	741140	GW0024-042221MSD	3952323	GW0024-042221	MSD	INITIAL	PbDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 02:59	EPA 200.8	0.000053	0.1	0.097	0.000043	0.0001	mg/L	97	2	70	130	20
PACE_MPLS	10558077	741140	GW0024-042221MS	3952322	GW0024-042221	MS	INITIAL	PbDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 02:56	EPA 200.8	0.000053	0.1	0.095	0.000043	0.0001	mg/L	95		70	130	
PACE_MPLS	10558077	741140	GW0031-042321MS	3952324	GW0031-042321	MS	INITIAL	PbDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 03:34	EPA 200.8	0.018	0.1	0.11	0.000043	0.0001	mg/L	97		70	130	
PACE_MPLS	10558077	741139	GW0011-042721MS	3952319	GW0011-042721	MS	INITIAL	ZnDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 05:23	EPA 200.8	0.43	0.1	0.54	0.0023	0.005	mg/L	114		70	130	
PACE_MPLS	10558077	741139	GW0004-042221MS	3952317	GW0004-042221	MS	INITIAL	ZnDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 04:48	EPA 200.8	0.047	0.1	0.14	0.0023	0.005	mg/L	96		70	130	
PACE_MPLS	10558077	741139	GW0004-042221MSD	3952318	GW0004-042221	MSD	INITIAL	ZnDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 04:51	EPA 200.8	0.047	0.1	0.15	0.0023	0.005	mg/L	100	3	70	130	20
PACE_MPLS	10558077	741140	GW0024-042221MS	3952322	GW0024-042221	MS	INITIAL	ZnDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 02:56	EPA 200.8	1.6	0.1	1.7	0.0023	0.005	mg/L	51		70	130	
PACE_MPLS	10558077	741140	GW0031-042321MS	3952324	GW0031-042321	MS	INITIAL	ZnDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 03:34	EPA 200.8	1.4	0.1	1.6	0.0023	0.005	mg/L	151		70	130	
PACE_MPLS	10558077	741140	GW0024-042221MSD	3952323	GW0024-042221	MSD	INITIAL	ZnDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 02:59	EPA 200.8	1.6	0.1	1.7	0.0023	0.005	mg/L	61	1	70	130	20
PACE_MPLS	10559096	741844	GW0041-042821MS	3956080	GW0041-042821	MS	INITIAL	AsDis	D	1	2021-05-14 01:38	EPA 200.8	2021-05-19 09:12	EPA 200.8	0.11	0.1	0.21	0.00014	0.0005	mg/L	99		70	130	
PACE_MPLS	10559096	741844	GW0041-042821MSD	3956081	GW0041-042821	MSD	INITIAL	AsDis	D	1	2021-05-14 01:38	EPA 200.8	2021-05-19 09:15	EPA 200.8	0.11	0.1	0.21	0.00014	0.0005	mg/L	104	2	70	130	20
PACE_MPLS	10559096	741844	GW0051-042921MS	3956082	GW0051-042921	MS	INITIAL	AsDis	D	1	2021-05-14 01:38	EPA 200.8	2021-05-19 09:52	EPA 200.8	0.0028	0.1	0.1	0.00014	0.0005	mg/L	101		70	130	
PACE_MPLS	10559096	741855	GW0077-043021MS	3956148	GW0077-043021	MS	INITIAL	AsDis	D	1	2021-05-14 08:07	EPA 200.8	2021-05-19 11:53	EPA 200.8	0.0032	0.1	0.1	0.00014	0.0005	mg/L	98		70	130	
PACE_MPLS	10559096	741855	GW0061-042821MS	3956147	GW0061-042821	MS	INITIAL	AsDis	D	1	2021-05-14 08:07	EPA 200.8	2021-05-19 10:45	EPA 200.8	0.35	0.1	0.45	0.00014	0.0005	mg/L	106		70	130	
PACE_MPLS	10559096	741855	GW0077-043021MSD	3956149	GW0077-043021	MSD	INITIAL	AsDis	D	1	2021-05-14 08:07	EPA 200.8	2021-05-19 11:55	EPA 200.8	0.0032	0.1	0.1	0.00014	0.0005	mg/L	97	1	70	130	20
PACE_MPLS	10559096	741844	GW0051-042921MS	3956082	GW0051-042921	MS	INITIAL	CdDis	D	1	2021-05-14 01:38	EPA 200.8	2021-05-19 09:52	EPA 200.8	0.032	0.1	0.13	0.00003	0.00008	mg/L	94		70	130	
PACE_MPLS	10559096	741844	GW0041-042821MSD	3956081	GW0041-042821	MSD	INITIAL	CdDis	D	1	2021-05-14 01:38	EPA 200.8	2021-05-19 09:15	EPA 200.8	0.0026	0.1	0.099	0.00003	0.00008	mg/L	96	1	70	130	20
PACE_MPLS	10559096	741844	GW0041-042821MS	3956080	GW0041-042821	MS	INITIAL	CdDis	D	1	2021-05-14 01:38	EPA 200.8	2021-05-19 09:12	EPA 200.8	0.0026	0.1	0.1	0.00003	0.00008	mg/L	97		70	130	
PACE_MPLS	10559096	741855	GW0077-043021MSD	3956149	GW0077-043021	MSD	INITIAL	CdDis	D	1	2021-05-14 08:07	EPA 200.8	2021-05-19 11:55	EPA 200.8	0.0019	0.1	0.096	0.00003	0.00008	mg/L	94	1	70	130	20
PACE_MPLS	10559096	741855	GW0061-042821MS	3956147	GW0061-042821	MS	INITIAL	CdDis	D	1	2021-05-14 08:07	EPA 200.8	2021-05-19 10:45	EPA 200.8	0.000046	0.1	0.092	0.00003	0.00008	mg/L	91		70	130	
PACE_MPLS	10559096	741855	GW0077-043021MS	3956148	GW0077-043021	MS	INITIAL	CdDis	D	1	2021-05-14 08:07	EPA 200.8	2021-05-19 11:53	EPA 200.8	0.0019	0.1	0.095	0.00003	0.00008	mg/L	93		70	130	
PACE_MPLS	10559096	741844	GW0041-042821MSD	3956081	GW0041-042821	MSD	INITIAL	CuDis	D	1	2021-05-14 01:38	EPA 200.8	2021-05-19 09:15	EPA 200.8	0.056	0.1	0.15	0.00043	0.001	mg/L	96		70	130	20
PACE_MPLS	10559096	741844	GW0051-042921MS	3956082	GW0051-042921	MS	INITIAL	CuDis	D	1	2021-05-14 01:38	EPA 200.8	2021-05-19 09:52	EPA 200.8	2.2	0.1	2	0.00043	0.001	mg/L			70	130	
PACE_MPLS	10559096	741844	GW0041-042821MS	3956080	GW0041-042821	MS	INITIAL	CuDis	D	1	2021-05-14 01:38	EPA 200.8	2021-05-19 09:12	EPA 200.8	0.056	0.1	0.15	0.00043	0.001	mg/L	97		70	130	
PACE_MPLS	10559096	741855	GW0061-042821MS	3956147	GW0061-042821	MS	INITIAL	CuDis	D	1	2021-05-14 08:07	EPA 200.8	2021-05-19 10:45	EPA 200.8	0.00031	0.1	0.091	0.00043	0.001	mg/L	90		70	130	
PACE_MPLS	10559096	741855	GW0077-043021MS	3956148	GW0077-043021	MS	INITIAL	CuDis	D	1	2021-05-14 08:07	EPA 200.8	2021-05-19 11:53	EPA 200.8	0.00095	0.1	0.1	0.00043	0.001	mg/L	99		70	130	
PACE_MPLS	10559096	741855	GW0077-043021MSD	3956149	GW0077-043021	MSD	INITIAL	CuDis	D	1	2021-05-14 08:07	EPA 200.8	2021-05-19 11:55	EPA 200.8	0.00095	0.1	0.098	0.00043	0.001	mg/L	97	2	70	130	20
PACE_MPLS	10559096	744269	GW0053-042921MS	3969299	GW0053-042921	MS	INITIAL	HgDis	D	1	2021-05-24 04:36	EPA 245.1	2021-05-24 10:58	EPA 245.1	0.00008	0.005	0.005	0.000045	0.0002	mg/L	98		70	130	
PACE_MPLS	10559096	744269	GW0041-042821MSD	3969298	GW0041-042821	MSD	INITIAL	HgDis	D	1	2021-05-24 04:36	EPA 245.1	2021-05-24 10:33	EPA 245.1		0.005	0.0051	0.000045	0.0002	mg/L	102	1	70	130	20

Table B5d. BPSOU 2021 Groundwater Data Quality Assessment - Laboratory Quality Assessment

Lab	SDG	Batch	QC Sample ID	Lab Sample ID	Parent Sample ID	QC Sample Type	Test Type	Param	Fraction	DF	Prep Date	Prep Method	Analysis Date	Analysis Method	Parent Value	Spike Value	QC Sample Value	MDL	RL	Unit	%R	RPD %	Lab Lower %R Limit	Lab Upper %R Limit	Lab %RPD Limit
PACE_MPLS	10559096	744269	GW0041-042821MS	3969297	GW0041-042821	MS	INITIAL	HgDis	D	1	2021-05-24 04:36	EPA 245.1	2021-05-24 10:32	EPA 245.1		0.005	0.0051	0.000045	0.0002	mg/L	101		70	130	
PACE_MPLS	10559096	744270	GW0063-042821MS	3969303	GW0063-042821	MS	INITIAL	HgDis	D	1	2021-05-24 04:36	EPA 245.1	2021-05-24 09:48	EPA 245.1		0.005	0.0052	0.000045	0.0002	mg/L	104		70	130	
PACE_MPLS	10559096	744270	GW0077-043021MS	3969304	GW0077-043021	MS	INITIAL	HgDis	D	1	2021-05-24 04:36	EPA 245.1	2021-05-24 10:16	EPA 245.1		0.005	0.005	0.000045	0.0002	mg/L	99		70	130	
PACE_MPLS	10559096	744270	GW0077-043021MSD	3969305	GW0077-043021	MSD	INITIAL	HgDis	D	1	2021-05-24 04:36	EPA 245.1	2021-05-24 10:17	EPA 245.1		0.005	0.0051	0.000045	0.0002	mg/L	102	3	70	130	20
PACE_MPLS	10559096	741844	GW0041-042821MSD	3956081	GW0041-042821	MSD	INITIAL	PbDis	D	1	2021-05-14 01:38	EPA 200.8	2021-05-19 09:15	EPA 200.8	0.000017	0.1	0.11	0.000043	0.0001	mg/L	106		70	130	20
PACE_MPLS	10559096	741844	GW0051-042921MS	3956082	GW0051-042921	MS	INITIAL	PbDis	D	1	2021-05-14 01:38	EPA 200.8	2021-05-19 09:52	EPA 200.8	0.000079	0.1	0.11	0.000043	0.0001	mg/L	106		70	130	
PACE_MPLS	10559096	741844	GW0041-042821MS	3956080	GW0041-042821	MS	INITIAL	PbDis	D	1	2021-05-14 01:38	EPA 200.8	2021-05-19 09:12	EPA 200.8	0.000017	0.1	0.11	0.000043	0.0001	mg/L	105		70	130	
PACE_MPLS	10559096	741855	GW0077-043021MSD	3956149	GW0077-043021	MSD	INITIAL	PbDis	D	1	2021-05-14 08:07	EPA 200.8	2021-05-19 11:55	EPA 200.8	0.000026	0.1	0.1	0.000043	0.0001	mg/L	104	2	70	130	20
PACE_MPLS	10559096	741855	GW0061-042821MS	3956147	GW0061-042821	MS	INITIAL	PbDis	D	1	2021-05-14 08:07	EPA 200.8	2021-05-19 10:45	EPA 200.8	0.00044	0.1	0.1	0.000043	0.0001	mg/L	103		70	130	
PACE_MPLS	10559096	741855	GW0077-043021MS	3956148	GW0077-043021	MS	INITIAL	PbDis	D	1	2021-05-14 08:07	EPA 200.8	2021-05-19 11:53	EPA 200.8	0.000026	0.1	0.11	0.000043	0.0001	mg/L	106		70	130	
PACE_MPLS	10559096	741844	GW0041-042821MS	3956080	GW0041-042821	MS	INITIAL	ZnDis	D	1	2021-05-14 01:38	EPA 200.8	2021-05-19 09:12	EPA 200.8	0.25	0.1	0.35	0.0023	0.005	mg/L	99		70	130	
PACE_MPLS	10559096	741844	GW0041-042821MSD	3956081	GW0041-042821	MSD	INITIAL	ZnDis	D	1	2021-05-14 01:38	EPA 200.8	2021-05-19 09:15	EPA 200.8	0.25	0.1	0.36	0.0023	0.005	mg/L	109	3	70	130	20
PACE_MPLS	10559096	741844	GW0051-042921MS	3956082	GW0051-042921	MS	INITIAL	ZnDis	D	1	2021-05-14 01:38	EPA 200.8	2021-05-19 09:52	EPA 200.8	7.8	0.1	7.2	0.0023	0.005	mg/L			70	130	
PACE_MPLS	10559096	741855	GW0077-043021MS	3956148	GW0077-043021	MS	INITIAL	ZnDis	D	1	2021-05-14 08:07	EPA 200.8	2021-05-19 11:53	EPA 200.8	0.14	0.1	0.25	0.0023	0.005	mg/L	102		70	130	
PACE_MPLS	10559096	741855	GW0061-042821MS	3956147	GW0061-042821	MS	INITIAL	ZnDis	D	1	2021-05-14 08:07	EPA 200.8	2021-05-19 10:45	EPA 200.8	0.21	0.1	0.31	0.0023	0.005	mg/L	96		70	130	
PACE_MPLS	10559096	741855	GW0077-043021MSD	3956149	GW0077-043021	MSD	INITIAL	ZnDis	D	1	2021-05-14 08:07	EPA 200.8	2021-05-19 11:55	EPA 200.8	0.14	0.1	0.25	0.0023	0.005	mg/L	102		70	130	20
PACE_MPLS	10558077	741139	3952315BLANK_10558077	3952315		MB	INITIAL	AsDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 04:15	EPA 200.8			0.00014	0.00014	0.0005	mg/L					
PACE_MPLS	10558077	741139	3952316LCS_10558077	3952316		LCS	INITIAL	AsDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 04:19	EPA 200.8		0.1	0.098	0.00014	0.0005	mg/L	98		85	115	
PACE_MPLS	10558077	741140	3952320BLANK_10558077	3952320		MB	INITIAL	AsDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 02:24	EPA 200.8			0.00014	0.00014	0.0005	mg/L					
PACE_MPLS	10558077	741140	3952321LCS_10558077	3952321		LCS	INITIAL	AsDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 02:27	EPA 200.8		0.1	0.1	0.00014	0.0005	mg/L	100		85	115	
PACE_MPLS	10558077	741139	3952316LCS_10558077	3952316		LCS	INITIAL	CdDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 04:19	EPA 200.8		0.1	0.098	0.00003	0.00008	mg/L	98		85	115	
PACE_MPLS	10558077	741139	3952315BLANK_10558077	3952315		MB	INITIAL	CdDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 04:15	EPA 200.8			0.00003	0.00003	0.00008	mg/L					
PACE_MPLS	10558077	741140	3952320BLANK_10558077	3952320		MB	INITIAL	CdDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 02:24	EPA 200.8			0.00003	0.00003	0.00008	mg/L					
PACE_MPLS	10558077	741140	3952321LCS_10558077	3952321		LCS	INITIAL	CdDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 02:27	EPA 200.8		0.1	0.098	0.00003	0.00008	mg/L	98		85	115	
PACE_MPLS	10558077	741139	3952316LCS_10558077	3952316		LCS	INITIAL	CuDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 04:19	EPA 200.8		0.1	0.1	0.00043	0.001	mg/L	102		85	115	
PACE_MPLS	10558077	741139	3952315BLANK_10558077	3952315		MB	INITIAL	CuDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 04:15	EPA 200.8			0.00043	0.00043	0.001	mg/L					
PACE_MPLS	10558077	741140	3952320BLANK_10558077	3952320		MB	INITIAL	CuDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 02:24	EPA 200.8			0.00043	0.00043	0.001	mg/L					
PACE_MPLS	10558077	741140	3952321LCS_10558077	3952321		LCS	INITIAL	CuDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 02:27	EPA 200.8		0.1	0.1	0.00043	0.001	mg/L	102		85	115	
PACE_MPLS	10558077	739219	3942568BLANK_10558077	3942568		MB	INITIAL	HgDis	D	1	2021-05-04 06:45	EPA 245.1	2021-05-05 02:07	EPA 245.1			0.0000045	0.0000045	0.00001	mg/L					
PACE_MPLS	10558077	739219	3942569LCS_10558077	3942569		LCS	INITIAL	HgDis	D	1	2021-05-04 06:45	EPA 245.1	2021-05-05 02:10	EPA 245.1		0.0001	0.000097	0.0000045	0.00001	mg/L	97		85	115	
PACE_MPLS	10558077	741546	3954427BLANK_10558077	3954427		MB	INITIAL	HgDis	D	1	2021-05-12 04:48	EPA 245.1	2021-05-13 03:02	EPA 245.1			0.0000045	0.0000045	0.00001	mg/L					
PACE_MPLS	10558077	741546	3954428LCS_10558077	3954428		LCS	INITIAL	HgDis	D	1	2021-05-12 04:48	EPA 245.1	2021-05-13 03:05	EPA 245.1		0.0001	0.000096	0.0000045	0.00001	mg/L	96		85	115	
PACE_MPLS	10558077	741975	3956759BLANK_10558077	3956759		MB	INITIAL	HgDis	D	1	2021-05-13 05:17	EPA 245.1	2021-05-17 03:04	EPA 245.1			0.0000045	0.0000045	0.00001	mg/L					
PACE_MPLS	10558077	741975	3956760LCS_10558077	3956760		LCS	INITIAL	HgDis	D	1	2021-05-13 05:17	EPA 245.1	2021-05-17 01:43	EPA 245.1		0.0001	0.000095	0.0000045	0.00001	mg/L	95		85	115	
PACE_MPLS	10558077	741977	3956770BLANK_10558077	3956770		MB	INITIAL	HgDis	D	1	2021-05-13 05:17	EPA 245.1	2021-05-17 02:32	EPA 245.1			0.0000045	0.0000045	0.00001	mg/L					
PACE_MPLS	10558077	741977	3956771LCS_10558077	3956771		LCS	INITIAL	HgDis	D	1	2021-05-13 05:17	EPA 245.1	2021-05-17 02:35	EPA 245.1		0.0001	0.000098	0.0000045	0.00001	mg/L	98		85	115	
PACE_MPLS	10558077	741139	3952315BLANK_10558077	3952315		MB	INITIAL	PbDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 04:15	EPA 200.8			0.000043	0.000043	0.0001	mg/L					
PACE_MPLS	10558077	741139	3952316LCS_10558077	3952316		LCS	INITIAL	PbDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 04:19	EPA 200.8		0.1	0.1	0.000043	0.0001	mg/L	101		85	115	
PACE_MPLS	10558077	741140	3952321LCS_10558077	3952321		LCS	INITIAL	PbDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 02:27	EPA 200.8		0.1	0.1	0.000043	0.0001	mg/L	100		85	115	
PACE_MPLS	10558077	741140	3952320BLANK_10558077	3952320		MB	INITIAL	PbDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 02:24	EPA 200.8			0.000043	0.000043	0.0001	mg/L					
PACE_MPLS	10558077	741139	3952316LCS_10558077	3952316		LCS	INITIAL	ZnDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 04:19	EPA 200.8		0.1	0.1	0.0023	0.005	mg/L	102		85	115	
PACE_MPLS	10558077	741139	3952315BLANK_10558077	3952315		MB	INITIAL	ZnDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 04:15	EPA 200.8			0.0023	0.0023	0.005	mg/L					
PACE_MPLS	10558077	741140	3952320BLANK_10558077	3952320		MB	INITIAL	ZnDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 02:24	EPA 200.8			0.0023	0.0023	0.005	mg/L					
PACE_MPLS	10558077	741140	3952321LCS_10558077	3952321		LCS	INITIAL	ZnDis	D	1	2021-05-11 01:41	EPA 200.8	2021-05-14 02:27	EPA 200.8		0.1	0.1	0.0023	0.005	mg/L	102		85	115	
PACE_MPLS	10559096	741844	3956078BLANK_10559096	3956078		MB	INITIAL	AsDis	D	1	2021-05-14 01:38	EPA 200.8	2021-05-19 08:57	EPA 200.8			0.00014	0.00014	0.0005	mg/L					
PACE_MPLS	10559096	741844	3956079LCS_10559096	3956079		LCS	INITIAL	AsDis	D	1	2021-05-14 01:38	EPA 200.8	2021-05-19 09:00	EPA 200.8		0.1	0.098	0.00014	0.0005	mg/L	98		85	115	
PACE_MPLS	10559096	741855	3956145BLANK_10559096	3956145		MB	INITIAL	AsDis	D	1	2021-05-14 08:07	EPA 200.8	2021-05-19 10:36	EPA 200.8			0.00014	0.00014	0.0005	mg/L					
PACE_MPLS	10559096	741855	3956146LCS_10559096	3956146		LCS	INITIAL	AsDis	D	1	2021-05-14 08:07	EPA 200.8	2021-05-19 10:39	EPA 200.8		0.1	0.097	0.00014	0.0005	mg/L	97		85	115	
PACE_MPLS	10559096	741868	3956198BLANK_10559096	3956198		MB	INITIAL	AsDis	D	1	2021-05-14 12:48	EPA 200.8	2021-05-20 06:42	EPA 200.8			0.00014	0.00014	0.0005	mg/L					
PACE_MPLS	10559096	741868	3956199LCS_10559096	3956199		LCS	INITIAL	AsDis	D	1	2021-05-14 12:48	EPA 200.8	2021-05-20 06:45	EPA 200.8		0.1	0.1	0.00014	0.0005	mg/L	102		85	115	
PACE_MPLS	10559096	741868	GW0081-050321MS	3956200	GW0081-050321	MS	INITIAL	AsDis	D	1	2021-05-14 12:48	EPA 200.8	2021-05-20 06:57	EPA 200.8	0.00099	0.1	0.1	0.00014	0.0005	mg/L	100		70	130	
PACE_MPLS	10559096	741868	GW0081-050321MSD	3956201	GW0081-050321	MSD	INITIAL	AsDis	D	1	2021-05-14 12:48	EPA 200.8	2021-05-20 06:59	EPA 200.8	0.00099	0.1	0.1	0.00014	0.0005	mg/L	104	4	70	130	20
PACE_MPLS	10559096	741868	GW0092-050421MS	3956202	GW0092-050421	MS	INITIAL	AsDis	D	1	2021-05-14 12:48	EPA 200.8	2021-05-20 07:37	EPA 200.8	0.0018	0.1	0.098	0.00014	0.0005	mg/L	96		70	130	
PACE_MPLS	10559096	741844	3956079LCS_10559096	3956079		LCS	INITIAL	CdDis	D	1	2021-05-14 01:38	EPA 200.8	2021-05-19 09:00	EPA 200.8		0.1	0.1	0.00003	0.00008	mg/L	101		85	115	
PACE_MPLS	10559096	741844	3956078BLANK_10559096	3956078		MB	INITIAL	CdDis	D	1	2021-05-14 01:38	EPA 200.8	2021-05-19 08:57	EPA 200.8			0.00003	0.00003	0.00008	mg/L					
PACE_MPLS	10559096	741855	3956146LCS_10559096	3956146		LCS	INITIAL	CdDis	D	1	2021-05-14 08:07	EPA 200.8	2021-05-19 10:39	EPA 200.8		0.1	0.099	0.00003	0.00008	mg/L	99		85	115	
PACE_MPLS	10559096	741855	3956145BLANK_10559096	3956145		MB	INITIAL	CdDis	D	1	2021-05-14 08:07	EPA 200.8	2021-05-19 10:36	EPA 200.8			0.00003	0.00003	0.00008	mg/L					
PACE_MPLS	10559096	741868	3956199LCS_10559096	3956199		LCS	INITIAL	CdDis	D	1	2021-05-14 12:48	EPA 200.8	2021-05-20 06:45	EPA 200.8		0.1	0.099	0.00003	0.00008	mg/L	99		85	115	
PACE_MPLS	10559096	741868	3956198BLANK_10559096	3956198		MB	INITIAL	CdDis	D	1	2021-05-14 12:48	EPA 200.8	2021-05-20 06:42	EPA 200.8			0.00003	0.00003	0.00008	mg/L					

Table B5d. BPSOU 2021 Groundwater Data Quality Assessment - Laboratory Quality Assessment

Lab	SDG	Batch	QC Sample ID	Lab Sample ID	Parent Sample ID	QC Sample Type	Test Type	Param	Fraction	DF	Prep Date	Prep Method	Analysis Date	Analysis Method	Parent Value	Spike Value	QC Sample Value	MDL	RL	Unit	%R	RPD %	Lab Lower %R Limit	Lab Upper %R Limit	Lab %RPD Limit
PACE_MPLS	10559096	741868	GW0092-050421MS	3956202	GW0092-050421	MS	INITIAL	CdDis	D	1	2021-05-14 12:48	EPA 200.8	2021-05-20 07:37	EPA 200.8	1	0.1	1	0.00003	0.00008	mg/L			70	130	
PACE_MPLS	10559096	741868	GW0081-050321MSD	3956201	GW0081-050321	MSD	INITIAL	CdDis	D	1	2021-05-14 12:48	EPA 200.8	2021-05-20 06:59	EPA 200.8	0.66	0.1	0.69	0.00003	0.00008	mg/L	36	4	70	130	20
PACE_MPLS	10559096	741868	GW0081-050321MS	3956200	GW0081-050321	MS	INITIAL	CdDis	D	1	2021-05-14 12:48	EPA 200.8	2021-05-20 06:57	EPA 200.8	0.66	0.1	0.67	0.00003	0.00008	mg/L	10		70	130	
PACE_MPLS	10559096	741844	3956078BLANK_10559096	3956078		MB	INITIAL	CuDis	D	1	2021-05-14 01:38	EPA 200.8	2021-05-19 08:57	EPA 200.8			0.00043	0.00043	0.001	mg/L					
PACE_MPLS	10559096	741844	3956079LCS_10559096	3956079		LCS	INITIAL	CuDis	D	1	2021-05-14 01:38	EPA 200.8	2021-05-19 09:00	EPA 200.8		0.1	0.1	0.00043	0.001	mg/L	104		85	115	
PACE_MPLS	10559096	741855	3956145BLANK_10559096	3956145		MB	INITIAL	CuDis	D	1	2021-05-14 08:07	EPA 200.8	2021-05-19 10:36	EPA 200.8			0.00043	0.00043	0.001	mg/L					
PACE_MPLS	10559096	741855	3956146LCS_10559096	3956146		LCS	INITIAL	CuDis	D	1	2021-05-14 08:07	EPA 200.8	2021-05-19 10:39	EPA 200.8		0.1	0.1	0.00043	0.001	mg/L	104		85	115	
PACE_MPLS	10559096	741868	3956198BLANK_10559096	3956198		MB	INITIAL	CuDis	D	1	2021-05-14 12:48	EPA 200.8	2021-05-20 06:42	EPA 200.8			0.00043	0.00043	0.001	mg/L					
PACE_MPLS	10559096	741868	3956199LCS_10559096	3956199		LCS	INITIAL	CuDis	D	1	2021-05-14 12:48	EPA 200.8	2021-05-20 06:45	EPA 200.8		0.1	0.11	0.00043	0.001	mg/L	107		85	115	
PACE_MPLS	10559096	741868	GW0081-050321MS	3956200	GW0081-050321	MS	INITIAL	CuDis	D	1	2021-05-14 12:48	EPA 200.8	2021-05-20 06:57	EPA 200.8	31.4	0.1	22.8	0.00043	0.001	mg/L			70	130	
PACE_MPLS	10559096	741868	GW0081-050321MSD	3956201	GW0081-050321	MSD	INITIAL	CuDis	D	1	2021-05-14 12:48	EPA 200.8	2021-05-20 06:59	EPA 200.8	31.4	0.1	23.8	0.00043	0.001	mg/L		4	70	130	20
PACE_MPLS	10559096	741868	GW0092-050421MS	3956202	GW0092-050421	MS	INITIAL	CuDis	D	1	2021-05-14 12:48	EPA 200.8	2021-05-20 07:37	EPA 200.8	35.3	0.1	25.7	0.00043	0.001	mg/L			70	130	
PACE_MPLS	10559096	744269	3969295BLANK_10559096	3969295		MB	INITIAL	HgDis	D	1	2021-05-24 04:36	EPA 245.1	2021-05-24 10:28	EPA 245.1			0.000045	0.000045	0.0002	mg/L					
PACE_MPLS	10559096	744269	3969296LCS_10559096	3969296		LCS	INITIAL	HgDis	D	1	2021-05-24 04:36	EPA 245.1	2021-05-24 10:29	EPA 245.1		0.005	0.0052	0.000045	0.0002	mg/L	105		85	115	
PACE_MPLS	10559096	744270	3969301BLANK_10559096	3969301		MB	INITIAL	HgDis	D	1	2021-05-24 04:36	EPA 245.1	2021-05-24 09:41	EPA 245.1			0.000045	0.000045	0.0002	mg/L					
PACE_MPLS	10559096	744270	3969302LCS_10559096	3969302		LCS	INITIAL	HgDis	D	1	2021-05-24 04:36	EPA 245.1	2021-05-24 09:42	EPA 245.1		0.005	0.0052	0.000045	0.0002	mg/L	104		85	115	
PACE_MPLS	10559096	744271	3969306BLANK_10559096	3969306		MB	INITIAL	HgDis	D	1	2021-05-24 05:02	EPA 245.1	2021-05-24 11:42	EPA 245.1			0.000045	0.000045	0.0002	mg/L					
PACE_MPLS	10559096	744271	3969307LCS_10559096	3969307		LCS	INITIAL	HgDis	D	1	2021-05-24 05:02	EPA 245.1	2021-05-24 11:44	EPA 245.1		0.005	0.0052	0.000045	0.0002	mg/L	104		85	115	
PACE_MPLS	10559096	744271	GW0094-050321MS	3969310	GW0094-050321	MS	INITIAL	HgDis	D	1	2021-05-24 05:02	EPA 245.1	2021-05-25 12:10	EPA 245.1		0.005	0.0049	0.000045	0.0002	mg/L	98		70	130	
PACE_MPLS	10559096	744271	GW0081-050321MSD	3969309	GW0081-050321	MSD	INITIAL	HgDis	D	1	2021-05-24 05:02	EPA 245.1	2021-05-24 11:48	EPA 245.1		0.005	0.0051	0.000045	0.0002	mg/L	101	1	70	130	20
PACE_MPLS	10559096	744271	GW0081-050321MS	3969308	GW0081-050321	MS	INITIAL	HgDis	D	1	2021-05-24 05:02	EPA 245.1	2021-05-24 11:46	EPA 245.1		0.005	0.0051	0.000045	0.0002	mg/L	102		70	130	
PACE_MPLS	10559096	741844	3956079LCS_10559096	3956079		LCS	INITIAL	PbDis	D	1	2021-05-14 01:38	EPA 200.8	2021-05-19 09:00	EPA 200.8		0.1	0.11	0.000043	0.0001	mg/L	110		85	115	
PACE_MPLS	10559096	741844	3956078BLANK_10559096	3956078		MB	INITIAL	PbDis	D	1	2021-05-14 01:38	EPA 200.8	2021-05-19 08:57	EPA 200.8			0.000043	0.000043	0.0001	mg/L					
PACE_MPLS	10559096	741855	3956145BLANK_10559096	3956145		MB	INITIAL	PbDis	D	1	2021-05-14 08:07	EPA 200.8	2021-05-19 10:36	EPA 200.8			0.000043	0.000043	0.0001	mg/L					
PACE_MPLS	10559096	741855	3956146LCS_10559096	3956146		LCS	INITIAL	PbDis	D	1	2021-05-14 08:07	EPA 200.8	2021-05-19 10:39	EPA 200.8		0.1	0.11	0.000043	0.0001	mg/L	108		85	115	
PACE_MPLS	10559096	741868	3956198BLANK_10559096	3956198		MB	REANALYSIS	PbDis	D	1	2021-05-14 12:48	EPA 200.8	2021-05-21 10:00	EPA 200.8			0.000043	0.000043	0.0001	mg/L					
PACE_MPLS	10559096	741868	3956199LCS_10559096	3956199		LCS	INITIAL	PbDis	D	1	2021-05-14 12:48	EPA 200.8	2021-05-20 06:45	EPA 200.8		0.1	0.1	0.000043	0.0001	mg/L	105		85	115	
PACE_MPLS	10559096	741868	GW0081-050321MSD	3956201	GW0081-050321	MSD	INITIAL	PbDis	D	1	2021-05-14 12:48	EPA 200.8	2021-05-20 06:59	EPA 200.8	0.33	0.1	0.44	0.000043	0.0001	mg/L	103	5	70	130	20
PACE_MPLS	10559096	741868	GW0092-050421MS	3956202	GW0092-050421	MS	INITIAL	PbDis	D	1	2021-05-14 12:48	EPA 200.8	2021-05-20 07:37	EPA 200.8	0.012	0.1	0.11	0.000043	0.0001	mg/L	103		70	130	
PACE_MPLS	10559096	741868	GW0081-050321MS	3956200	GW0081-050321	MS	INITIAL	PbDis	D	1	2021-05-14 12:48	EPA 200.8	2021-05-20 06:57	EPA 200.8	0.33	0.1	0.42	0.000043	0.0001	mg/L	83		70	130	
PACE_MPLS	10559096	741844	3956079LCS_10559096	3956079		LCS	INITIAL	ZnDis	D	1	2021-05-14 01:38	EPA 200.8	2021-05-19 09:00	EPA 200.8		0.1	0.1	0.0023	0.005	mg/L	101		85	115	
PACE_MPLS	10559096	741844	3956078BLANK_10559096	3956078		MB	INITIAL	ZnDis	D	1	2021-05-14 01:38	EPA 200.8	2021-05-19 08:57	EPA 200.8			0.0023	0.0023	0.005	mg/L					
PACE_MPLS	10559096	741855	3956146LCS_10559096	3956146		LCS	INITIAL	ZnDis	D	1	2021-05-14 08:07	EPA 200.8	2021-05-19 10:39	EPA 200.8		0.1	0.1	0.0023	0.005	mg/L	100		85	115	
PACE_MPLS	10559096	741855	3956145BLANK_10559096	3956145		MB	INITIAL	ZnDis	D	1	2021-05-14 08:07	EPA 200.8	2021-05-19 10:36	EPA 200.8			0.0023	0.0023	0.005	mg/L					
PACE_MPLS	10559096	741868	3956199LCS_10559096	3956199		LCS	INITIAL	ZnDis	D	1	2021-05-14 12:48	EPA 200.8	2021-05-20 06:45	EPA 200.8		0.1	0.1	0.0023	0.005	mg/L	102		85	115	
PACE_MPLS	10559096	741868	3956198BLANK_10559096	3956198		MB	INITIAL	ZnDis	D	1	2021-05-14 12:48	EPA 200.8	2021-05-20 06:42	EPA 200.8			0.0023	0.0023	0.005	mg/L					
PACE_MPLS	10559096	741868	GW0081-050321MS	3956200	GW0081-050321	MS	INITIAL	ZnDis	D	1	2021-05-14 12:48	EPA 200.8	2021-05-20 06:57	EPA 200.8	110	0.1	90.2	0.0023	0.005	mg/L			70	130	
PACE_MPLS	10559096	741868	GW0081-050321MSD	3956201	GW0081-050321	MSD	INITIAL	ZnDis	D	1	2021-05-14 12:48	EPA 200.8	2021-05-20 06:59	EPA 200.8	110	0.1	93.6	0.0023	0.005	mg/L		4	70	130	20
PACE_MPLS	10559096	741868	GW0092-050421MS	3956202	GW0092-050421	MS	INITIAL	ZnDis	D	1	2021-05-14 12:48	EPA 200.8	2021-05-20 07:37	EPA 200.8	198	0.1	213	0.0023	0.005	mg/L	15300		70	130	
PACE_MPLS	10560315	743060	GW0125-051121MSD	3962685	GW0125-051121	MSD	INITIAL	AsDis	D	1	2021-05-21 01:15	EPA 200.8	2021-05-26 11:17	EPA 200.8	0.0039	0.1	0.11	0.00014	0.0005	mg/L	104		70	130	20
PACE_MPLS	10560315	743060	GW0125-051121MS	3962684	GW0125-051121	MS	INITIAL	AsDis	D	1	2021-05-21 01:15	EPA 200.8	2021-05-26 11:15	EPA 200.8	0.0039	0.1	0.11	0.00014	0.0005	mg/L	104		70	130	
PACE_MPLS	10560315	743060	3962680BLANK_10560315	3962680		MB	INITIAL	AsDis	D	1	2021-05-21 01:15	EPA 200.8	2021-05-26 10:05	EPA 200.8			0.00014	0.00014	0.0005	mg/L					
PACE_MPLS	10560315	743060	3962681LCS_10560315	3962681		LCS	INITIAL	AsDis	D	1	2021-05-21 01:15	EPA 200.8	2021-05-26 10:08	EPA 200.8		0.1	0.1	0.00014	0.0005	mg/L	100		85	115	
PACE_MPLS	10560315	743060	3962681LCS_10560315	3962681		LCS	INITIAL	CdDis	D	1	2021-05-21 01:15	EPA 200.8	2021-05-26 10:08	EPA 200.8		0.1	0.1	0.00003	0.00008	mg/L	101		85	115	
PACE_MPLS	10560315	743060	3962680BLANK_10560315	3962680		MB	INITIAL	CdDis	D	1	2021-05-21 01:15	EPA 200.8	2021-05-26 10:05	EPA 200.8			0.00003	0.00003	0.00008	mg/L					
PACE_MPLS	10560315	743060	GW0125-051121MS	3962684	GW0125-051121	MS	INITIAL	CdDis	D	1	2021-05-21 01:15	EPA 200.8	2021-05-26 11:15	EPA 200.8	0.03	0.1	0.13	0.00003	0.00008	mg/L	97		70	130	
PACE_MPLS	10560315	743060	GW0125-051121MSD	3962685	GW0125-051121	MSD	INITIAL	CdDis	D	1	2021-05-21 01:15	EPA 200.8	2021-05-26 11:17	EPA 200.8	0.03	0.1	0.13	0.00003	0.00008	mg/L	98		70	130	20
PACE_MPLS	10560315	743060	GW0125-051121MSD	3962685	GW0125-051121	MSD	DILUTION	CuDis	D	5	2021-05-21 01:15	EPA 200.8	2021-05-28 05:41	EPA 200.8	1.9	0.1	1.8	0.0021	0.005	mg/L			70	130	20
PACE_MPLS	10560315	743060	GW0125-051121MS	3962684	GW0125-051121	MS	DILUTION	CuDis	D	5	2021-05-21 01:15	EPA 200.8	2021-05-28 05:38	EPA 200.8	1.9	0.1	1.8	0.0021	0.005	mg/L			70	130	
PACE_MPLS	10560315	743060	3962680BLANK_10560315	3962680		MB	INITIAL	CuDis	D	1	2021-05-21 01:15	EPA 200.8	2021-05-26 10:05	EPA 200.8			0.00043	0.00043	0.001	mg/L					
PACE_MPLS	10560315	743060	3962681LCS_10560315	3962681		LCS	INITIAL	CuDis	D	1	2021-05-21 01:15	EPA 200.8	2021-05-26 10:08	EPA 200.8		0.1	0.11	0.00043	0.001	mg/L	107		85	115	
PACE_MPLS	10560315	745524	GW0125-051121MSD	3976992	GW0125-051121	MSD	INITIAL	HgDis	D	1	2021-06-01 07:23	EPA 245.1	2021-06-01 01:57	EPA 245.1		0.005	0.0051	0.000045	0.0002	mg/L	102	1	70	130	20
PACE_MPLS	10560315	745524	GW0125-051121MS	3976991	GW0125-051121	MS	INITIAL	HgDis	D	1	2021-06-01 07:23	EPA 245.1	2021-06-01 01:55	EPA 245.1		0.005	0.0051	0.000045	0.0002	mg/L	102		70	130	
PACE_MPLS	10560315	743060	GW0125-051121MSD	3962685	GW0125-051121	MSD	INITIAL	PbDis	D	1	2021-05-21 01:15	EPA 200.8	2021-05-26 11:17	EPA 200.8	0.0003	0.1	0.11	0.000043	0.0001	mg/L	106		70	130	20
PACE_MPLS	10560315	743060	GW0125-051121MS	3962684	GW0125-051121	MS	INITIAL	PbDis	D	1	2021-05-21 01:15	EPA 200.8	2021-05-26 11:15	EPA 200.8	0.0003	0.1	0.11	0.000043	0.0001	mg/L	106		70	130	
PACE_MPLS	10560315	743060	3962681LCS_10560315	3962681		LCS	INITIAL	PbDis	D	1	2021-05-21 01:15	EPA 200.8	2021-05-26 10:08	EPA 200.8		0.1	0.11	0.000043	0.0001	mg/L	109		85	115	
PACE_MPLS	10560315	743060	3962680BLANK_10560315	3962680		MB	INITIAL	PbDis	D	1	2021-05-21 01:15	EPA 200.8	2021-05-26 10:05	EPA 200.8			0.000043	0.000043	0.0001	mg/L					
PACE_MPLS	10560315	743060	3962680BLANK_10560315	3962680		MB	INITIAL	ZnDis	D	1	2021-05-21 01:15	EPA 200.8	2021-05-26 10:05	EPA 200.8			0.0059	0.0023	0.005	mg/L					
PACE_MPLS	10560315	743060	3962681LCS_10560315	3962681		LCS	INITIAL	ZnDis	D	1	2021-05-21 01:15	EPA 200.8	2021-05-26 10:08	EPA 200.8		0.1	0.11	0.0023	0.005	mg/L	110		85	115	

Table B5d. BPSOU 2021 Groundwater Data Quality Assessment - Laboratory Quality Assessment

Lab	SDG	Batch	QC Sample ID	Lab Sample ID	Parent Sample ID	QC Sample Type	Test Type	Param	Fraction	DF	Prep Date	Prep Method	Analysis Date	Analysis Method	Parent Value	Spike Value	QC Sample Value	MDL	RL	Unit	%R	RPD %	Lab Lower %R Limit	Lab Upper %R Limit	Lab %RPD Limit
PACE_MPLS	10560315	743060	GW0125-051121MSD	3962685	GW0125-051121	MSD	INITIAL	ZnDis	D	1	2021-05-21 01:15	EPA 200.8	2021-05-26 11:17	EPA 200.8	6.6	0.1	6.2	0.0023	0.005	mg/L		1	70	130	20
PACE_MPLS	10560315	743060	GW0125-051121MS	3962684	GW0125-051121	MS	INITIAL	ZnDis	D	1	2021-05-21 01:15	EPA 200.8	2021-05-26 11:15	EPA 200.8	6.6	0.1	6.1	0.0023	0.005	mg/L			70	130	
PACE_MPLS	10560318	743507	GW0095-050521MS	3965082	GW0095-050521	MS	INITIAL	AsDis	D	5	2021-05-21 09:43	EPA 200.8	2021-05-28 04:33	EPA 200.8	0.0099	0.1	0.1	0.0007	0.0025	mg/L	93		70	130	
PACE_MPLS	10560318	743507	GW0095-050521MSD	3965083	GW0095-050521	MSD	INITIAL	AsDis	D	5	2021-05-21 09:43	EPA 200.8	2021-05-28 04:36	EPA 200.8	0.0099	0.1	0.1	0.0007	0.0025	mg/L	92	1	70	130	20
PACE_MPLS	10560318	743507	GW0105-050621MS	3965084	GW0105-050621	MS	INITIAL	AsDis	D	5	2021-05-21 09:43	EPA 200.8	2021-05-28 05:20	EPA 200.8		0.1	0.084	0.0007	0.0025	mg/L	84		70	130	
PACE_MPLS	10560318	743507	3965081LCS_10560318	3965081		LCS	INITIAL	AsDis	D	1	2021-05-21 09:43	EPA 200.8	2021-05-28 04:22	EPA 200.8		0.1	0.097	0.00014	0.0005	mg/L	97		85	115	
PACE_MPLS	10560318	743507	3965080BLANK_10560318	3965080		MB	INITIAL	AsDis	D	1	2021-05-21 09:43	EPA 200.8	2021-05-28 04:18	EPA 200.8			0.00014	0.00014	0.0005	mg/L					
PACE_MPLS	10560318	743509	3965093BLANK_10560318	3965093		MB	INITIAL	AsDis	D	1	2021-05-21 07:21	EPA 200.8	2021-05-27 02:35	EPA 200.8			0.00014	0.00014	0.0005	mg/L					
PACE_MPLS	10560318	743509	3965094LCS_10560318	3965094		LCS	INITIAL	AsDis	D	1	2021-05-21 07:21	EPA 200.8	2021-05-27 02:39	EPA 200.8		0.1	0.1	0.00014	0.0005	mg/L	100		85	115	
PACE_MPLS	10560318	743509	GW0110-050521MS	3965095	GW0110-050521	MS	INITIAL	AsDis	D	1	2021-05-21 07:21	EPA 200.8	2021-05-27 02:58	EPA 200.8	0.0019	0.1	0.1	0.00014	0.0005	mg/L	101		70	130	
PACE_MPLS	10560318	743509	GW0110-050521MSD	3965096	GW0110-050521	MSD	INITIAL	AsDis	D	1	2021-05-21 07:21	EPA 200.8	2021-05-27 03:01	EPA 200.8	0.0019	0.1	0.11	0.00014	0.0005	mg/L	103	2	70	130	20
PACE_MPLS	10560318	743509	GW0120-050621MS	3965097	GW0120-050621	MS	INITIAL	AsDis	D	1	2021-05-21 07:21	EPA 200.8	2021-05-27 03:50	EPA 200.8	0.0053	0.1	0.11	0.00014	0.0005	mg/L	105		70	130	
PACE_MPLS	10560318	743507	GW0105-050621MS	3965084	GW0105-050621	MS	INITIAL	CdDis	D	5	2021-05-21 09:43	EPA 200.8	2021-05-28 05:20	EPA 200.8	0.00001	0.1	0.086	0.00015	0.0004	mg/L	86		70	130	
PACE_MPLS	10560318	743507	GW0095-050521MSD	3965083	GW0095-050521	MSD	INITIAL	CdDis	D	5	2021-05-21 09:43	EPA 200.8	2021-05-28 04:36	EPA 200.8	0.0012	0.1	0.093	0.00015	0.0004	mg/L	92		70	130	20
PACE_MPLS	10560318	743507	GW0095-050521MS	3965082	GW0095-050521	MS	INITIAL	CdDis	D	5	2021-05-21 09:43	EPA 200.8	2021-05-28 04:33	EPA 200.8	0.0012	0.1	0.093	0.00015	0.0004	mg/L	91		70	130	
PACE_MPLS	10560318	743507	3965080BLANK_10560318	3965080		MB	INITIAL	CdDis	D	1	2021-05-21 09:43	EPA 200.8	2021-05-28 04:18	EPA 200.8			0.00003	0.00003	0.00008	mg/L					
PACE_MPLS	10560318	743507	3965081LCS_10560318	3965081		LCS	INITIAL	CdDis	D	1	2021-05-21 09:43	EPA 200.8	2021-05-28 04:22	EPA 200.8		0.1	0.099	0.00003	0.00008	mg/L	99		85	115	
PACE_MPLS	10560318	743509	3965094LCS_10560318	3965094		LCS	INITIAL	CdDis	D	1	2021-05-21 07:21	EPA 200.8	2021-05-27 02:39	EPA 200.8		0.1	0.099	0.00003	0.00008	mg/L	99		85	115	
PACE_MPLS	10560318	743509	3965093BLANK_10560318	3965093		MB	INITIAL	CdDis	D	1	2021-05-21 07:21	EPA 200.8	2021-05-27 02:35	EPA 200.8			0.000039	0.00003	0.00008	mg/L					
PACE_MPLS	10560318	743509	GW0120-050621MS	3965097	GW0120-050621	MS	INITIAL	CdDis	D	1	2021-05-21 07:21	EPA 200.8	2021-05-27 03:50	EPA 200.8	0.0078	0.1	0.11	0.00003	0.00008	mg/L	101		70	130	
PACE_MPLS	10560318	743509	GW0110-050521MSD	3965096	GW0110-050521	MSD	INITIAL	CdDis	D	1	2021-05-21 07:21	EPA 200.8	2021-05-27 03:01	EPA 200.8	0.00041	0.1	0.1	0.00003	0.00008	mg/L	101	3	70	130	20
PACE_MPLS	10560318	743509	GW0110-050521MS	3965095	GW0110-050521	MS	INITIAL	CdDis	D	1	2021-05-21 07:21	EPA 200.8	2021-05-27 02:58	EPA 200.8	0.00041	0.1	0.098	0.00003	0.00008	mg/L	98		70	130	
PACE_MPLS	10560318	743507	3965081LCS_10560318	3965081		LCS	INITIAL	CuDis	D	1	2021-05-21 09:43	EPA 200.8	2021-05-28 04:22	EPA 200.8		0.1	0.11	0.00043	0.001	mg/L	105		85	115	
PACE_MPLS	10560318	743507	GW0095-050521MS	3965082	GW0095-050521	MS	INITIAL	CuDis	D	5	2021-05-21 09:43	EPA 200.8	2021-05-28 04:33	EPA 200.8	0.00069	0.1	0.095	0.0021	0.005	mg/L	94		70	130	
PACE_MPLS	10560318	743507	GW0095-050521MSD	3965083	GW0095-050521	MSD	INITIAL	CuDis	D	5	2021-05-21 09:43	EPA 200.8	2021-05-28 04:36	EPA 200.8	0.00069	0.1	0.095	0.0021	0.005	mg/L	94	1	70	130	20
PACE_MPLS	10560318	743507	GW0105-050621MS	3965084	GW0105-050621	MS	INITIAL	CuDis	D	5	2021-05-21 09:43	EPA 200.8	2021-05-28 05:20	EPA 200.8	0.000036	0.1	0.091	0.0021	0.005	mg/L	91		70	130	
PACE_MPLS	10560318	743507	3965080BLANK_10560318	3965080		MB	INITIAL	CuDis	D	1	2021-05-21 09:43	EPA 200.8	2021-05-28 04:18	EPA 200.8			0.00043	0.00043	0.001	mg/L					
PACE_MPLS	10560318	743509	3965093BLANK_10560318	3965093		MB	INITIAL	CuDis	D	1	2021-05-21 07:21	EPA 200.8	2021-05-27 02:35	EPA 200.8			0.00043	0.00043	0.001	mg/L					
PACE_MPLS	10560318	743507	3965080BLANK_10560318	3965080		MB	INITIAL	CuDis	D	1	2021-05-21 09:43	EPA 200.8	2021-05-28 04:18	EPA 200.8			0.00043	0.00043	0.001	mg/L					
PACE_MPLS	10560318	743509	3965093BLANK_10560318	3965093		MB	INITIAL	CuDis	D	1	2021-05-21 07:21	EPA 200.8	2021-05-27 02:35	EPA 200.8			0.00043	0.00043	0.001	mg/L					
PACE_MPLS	10560318	743509	3965094LCS_10560318	3965094		LCS	INITIAL	CuDis	D	1	2021-05-21 07:21	EPA 200.8	2021-05-27 02:39	EPA 200.8		0.1	0.099	0.00043	0.001	mg/L	99		85	115	
PACE_MPLS	10560318	743509	GW0110-050521MS	3965095	GW0110-050521	MS	INITIAL	CuDis	D	1	2021-05-21 07:21	EPA 200.8	2021-05-27 02:58	EPA 200.8	0.00028	0.1	0.099	0.00043	0.001	mg/L	99	2	70	130	20
PACE_MPLS	10560318	743509	GW0120-050621MS	3965097	GW0120-050621	MS	DILUTION	CuDis	D	5	2021-05-21 07:21	EPA 200.8	2021-05-27 10:36	EPA 200.8	0.0095	0.1	0.11	0.0021	0.005	mg/L	100		70	130	
PACE_MPLS	10560318	743509	GW0110-050521MS	3965095	GW0110-050521	MS	INITIAL	CuDis	D	1	2021-05-21 07:21	EPA 200.8	2021-05-27 02:58	EPA 200.8	0.00028	0.1	0.096	0.00043	0.001	mg/L	96		70	130	
PACE_MPLS	10560318	744837	3972055BLANK_10560318	3972055		MB	INITIAL	HgDis	D	1	2021-05-26 03:35	EPA 245.1	2021-05-27 11:28	EPA 245.1			0.000045	0.000045	0.0002	mg/L					
PACE_MPLS	10560318	744837	3972056LCS_10560318	3972056		LCS	INITIAL	HgDis	D	1	2021-05-26 03:35	EPA 245.1	2021-05-27 11:29	EPA 245.1		0.005	0.005	0.000045	0.0002	mg/L	101		85	115	
PACE_MPLS	10560318	744837	GW0105-050621MS	3972095	GW0105-050621	MS	INITIAL	HgDis	D	1	2021-05-26 03:35	EPA 245.1	2021-05-27 11:53	EPA 245.1		0.005	0.0052	0.000045	0.0002	mg/L	105		70	130	
PACE_MPLS	10560318	744837	GW0095-050521MSD	3972094	GW0095-050521	MSD	INITIAL	HgDis	D	1	2021-05-26 03:35	EPA 245.1	2021-05-27 11:34	EPA 245.1		0.005	0.005	0.000045	0.0002	mg/L	101		70	130	20
PACE_MPLS	10560318	744837	GW0095-050521MS	3972093	GW0095-050521	MS	INITIAL	HgDis	D	1	2021-05-26 03:35	EPA 245.1	2021-05-27 11:32	EPA 245.1		0.005	0.005	0.000045	0.0002	mg/L	101		70	130	
PACE_MPLS	10560318	744839	3972062BLANK_10560318	3972062		MB	INITIAL	HgDis	D	1	2021-05-26 03:35	EPA 245.1	2021-05-27 10:47	EPA 245.1			0.000045	0.000045	0.0002	mg/L					
PACE_MPLS	10560318	744839	3972063LCS_10560318	3972063		LCS	INITIAL	HgDis	D	1	2021-05-26 03:35	EPA 245.1	2021-05-27 10:48	EPA 245.1		0.005	0.005	0.000045	0.0002	mg/L	100		85	115	
PACE_MPLS	10560318	744839	GW0110-050521MS	3972096	GW0110-050521	MS	INITIAL	HgDis	D	1	2021-05-26 03:35	EPA 245.1	2021-05-27 10:51	EPA 245.1		0.005	0.0051	0.000045	0.0002	mg/L	101		70	130	
PACE_MPLS	10560318	744839	GW0110-050521MSD	3972097	GW0110-050521	MSD	INITIAL	HgDis	D	1	2021-05-26 03:35	EPA 245.1	2021-05-27 10:53	EPA 245.1		0.005	0.005	0.000045	0.0002	mg/L	100	2	70	130	20
PACE_MPLS	10560318	743507	GW0095-050521MS	3965082	GW0095-050521	MS	INITIAL	PbDis	D	5	2021-05-21 09:43	EPA 200.8	2021-05-28 04:33	EPA 200.8	0.00043	0.1	0.092	0.00022	0.0005	mg/L	92		70	130	
PACE_MPLS	10560318	743507	3965081LCS_10560318	3965081		LCS	INITIAL	PbDis	D	1	2021-05-21 09:43	EPA 200.8	2021-05-28 04:22	EPA 200.8		0.1	0.1	0.000043	0.0001	mg/L	102		85	115	
PACE_MPLS	10560318	743507	GW0095-050521MSD	3965083	GW0095-050521	MSD	INITIAL	PbDis	D	5	2021-05-21 09:43	EPA 200.8	2021-05-28 04:36	EPA 200.8	0.00043	0.1	0.094	0.00022	0.0005	mg/L	94	2	70	130	20
PACE_MPLS	10560318	743507	GW0105-050621MS	3965084	GW0105-050621	MS	INITIAL	PbDis	D	5	2021-05-21 09:43	EPA 200.8	2021-05-28 05:20	EPA 200.8		0.1	0.089	0.00022	0.0005	mg/L	89		70	130	
PACE_MPLS	10560318	743507	3965080BLANK_10560318	3965080		MB	INITIAL	PbDis	D	1	2021-05-21 09:43	EPA 200.8	2021-05-28 04:18	EPA 200.8			0.000043	0.000043	0.0001	mg/L					
PACE_MPLS	10560318	743509	3965093BLANK_10560318	3965093		MB	INITIAL	PbDis	D	1	2021-05-21 07:21	EPA 200.8	2021-05-27 02:35	EPA 200.8			0.000043	0.000043	0.0001	mg/L					
PACE_MPLS	10560318	743509	3965094LCS_10560318	3965094		LCS	INITIAL	PbDis	D	1	2021-05-21 07:21	EPA 200.8	2021-05-27 02:39	EPA 200.8		0.1	0.1	0.000043	0.0001	mg/L	104		85	115	
PACE_MPLS	10560318	743509	GW0120-050621MS	3965097	GW0120-050621	MS	INITIAL	PbDis	D	1	2021-05-21 07:21	EPA 200.8	2021-05-27 03:50	EPA 200.8	0.000054	0.1	0.1	0.000043	0.0001	mg/L	102		70	130	
PACE_MPLS	10560318	743509	GW0110-050521MSD	3965096	GW0110-050521	MSD	INITIAL	PbDis	D	1	2021-05-21 07:21	EPA 200.8	2021-05-27 03:01	EPA 200.8	0.00004	0.1	0.1	0.000043	0.0001	mg/L	104	3	70	130	20
PACE_MPLS	10560318	743509	GW0110-050521MS	3965095	GW0110-050521	MS	INITIAL	PbDis	D	1	2021-05-21 07:21	EPA 200.8	2021-05-27 02:58	EPA 200.8	0.00004	0.1	0.1	0.000043	0.0001	mg/L	102		70	130	
PACE_MPLS	10560318	743507	GW0105-050621MS	3965084	GW0105-050621	MS	INITIAL	ZnDis	D	5	2021-05-21 09:43	EPA 200.8	2021-05-28 05:20	EPA 200.8	0.0012	0.1	0.087	0.011	0.025	mg/L	86		70	130	
PACE_MPLS	10560318	743507	GW0095-050521MSD	3965083	GW0095-050521	MSD	INITIAL	ZnDis	D	5	2021-05-21 09:43	EPA 200.8	2021-05-28 04:36	EPA 200.8	0.35	0.1	0.45	0.011	0.025	mg/L	94	1	70	130	20
PACE_MPLS	10560318	743507	GW0095-050521MS	3965082	GW0095-050521	MS	INITIAL	ZnDis	D	5	2021-05-21 09:43	EPA 200.8	2021-05-28 04:33	EPA 200.8	0.35	0.1	0.45	0.011	0.025	mg/L	99		70	130	
PACE_MPLS	10560318	743507	3965081LCS_10560318	3965081		LCS	INITIAL	ZnDis	D	1	2021-05-21 09:43	EPA 200.8	2021-05-28 04:22	EPA 200.8		0.1	0.099	0.0023	0.005	mg/L	99		85	115	
PACE_MPLS	10560318	743507	3965080BLANK_10560318	3965080		MB	INITIAL	ZnDis	D	1	2021-05-21 09:43	EPA 200.8	2021-05-28 04:18	EPA 200.8			0.0023	0.0023	0.005	mg/L					
PACE_MPLS	10560318	743509	3965094LCS_10560318	3965094		LCS	INITIAL	ZnDis	D	1	2021-05-21 07:21	EPA 200.8	2021-05-27 02:39	EPA 200.8		0.1	0.1	0.0023	0.005	mg/L	101		85	115	
PACE_MPLS	10560318	743509	3965093BLANK_10560318	3965093		MB	INITIAL	ZnDis	D	1	2021-05-21 07:21	EPA 200.8	2021-05-27 02:35	EPA 200.8			0.0023	0.0023	0.005	mg/L					
PACE_MPLS	10560318	743509	GW0110-050521MS	3965095	GW0110-050521	MS	INITIAL	ZnDis	D	1	2021-05-21 07:21	EPA 200.8	2021-05-27 02:58	EPA 200.8	0.016	0.1	0.12	0.0023	0.005	mg/L	100		70	130	

Table B5d. BPSOU 2021 Groundwater Data Quality Assessment - Laboratory Quality Assessment

Lab	SDG	Batch	QC Sample ID	Lab Sample ID	Parent Sample ID	QC Sample Type	Test Type	Param	Fraction	DF	Prep Date	Prep Method	Analysis Date	Analysis Method	Parent Value	Spike Value	QC Sample Value	MDL	RL	Unit	%R	RPD %	Lab Lower %R Limit	Lab Upper %R Limit	Lab %RPD Limit
PACE_MPLS	10560318	743509	GW0110-050521MSD	3965096	GW0110-050521	MSD	INITIAL	ZnDis	D	1	2021-05-21 07:21	EPA 200.8	2021-05-27 03:01	EPA 200.8	0.016	0.1	0.12	0.0023	0.005	mg/L	102	2	70	130	20
PACE_MPLS	10560318	743509	GW0120-050621MS	3965097	GW0120-050621	MS	DILUTION	ZnDis	D	5	2021-05-21 07:21	EPA 200.8	2021-05-27 10:36	EPA 200.8	0.79	0.1	0.8	0.011	0.025	mg/L	8		70	130	
PACE_MPLS	10560315	745714	3977710BLANK_10560315	3977710		MB	INITIAL	AsDis	D	1	2021-06-01 12:00	EPA 200.8	2021-06-02 08:48	EPA 200.8			0.00014	0.00014	0.0005	mg/L					
PACE_MPLS	10560315	745714	3977711LCS_10560315	3977711		LCS	INITIAL	AsDis	D	1	2021-06-01 12:00	EPA 200.8	2021-06-02 08:51	EPA 200.8		0.1	0.095	0.00014	0.0005	mg/L	95		85	115	
PACE_MPLS	10560315	745714	3977711LCS_10560315	3977711		LCS	INITIAL	CdDis	D	1	2021-06-01 12:00	EPA 200.8	2021-06-02 08:51	EPA 200.8		0.1	0.095	0.00003	0.00008	mg/L	95		85	115	
PACE_MPLS	10560315	745714	3977710BLANK_10560315	3977710		MB	INITIAL	CdDis	D	1	2021-06-01 12:00	EPA 200.8	2021-06-02 08:48	EPA 200.8			0.00003	0.00003	0.00008	mg/L					
PACE_MPLS	10560315	745714	3977710BLANK_10560315	3977710		MB	INITIAL	CuDis	D	1	2021-06-01 12:00	EPA 200.8	2021-06-02 08:48	EPA 200.8			0.00043	0.00043	0.001	mg/L					
PACE_MPLS	10560315	745714	3977711LCS_10560315	3977711		LCS	INITIAL	CuDis	D	1	2021-06-01 12:00	EPA 200.8	2021-06-02 08:51	EPA 200.8		0.1	0.096	0.00043	0.001	mg/L	96		85	115	
PACE_MPLS	10560315	745524	3976989BLANK_10560315	3976989		MB	INITIAL	HgDis	D	1	2021-06-01 07:23	EPA 245.1	2021-06-01 01:44	EPA 245.1			0.000045	0.000045	0.0002	mg/L					
PACE_MPLS	10560315	745524	3976990LCS_10560315	3976990		LCS	INITIAL	HgDis	D	1	2021-06-01 07:23	EPA 245.1	2021-06-01 01:45	EPA 245.1		0.005	0.0052	0.000045	0.0002	mg/L	104		85	115	
PACE_MPLS	10560315	745714	3977710BLANK_10560315	3977710		MB	INITIAL	PbDis	D	1	2021-06-01 12:00	EPA 200.8	2021-06-02 08:48	EPA 200.8			0.000043	0.000043	0.0001	mg/L					
PACE_MPLS	10560315	745714	3977711LCS_10560315	3977711		LCS	INITIAL	PbDis	D	1	2021-06-01 12:00	EPA 200.8	2021-06-02 08:51	EPA 200.8		0.1	0.097	0.000043	0.0001	mg/L	97		85	115	
PACE_MPLS	10560315	745714	3977710BLANK_10560315	3977710		MB	INITIAL	ZnDis	D	1	2021-06-01 12:00	EPA 200.8	2021-06-02 08:48	EPA 200.8			0.0023	0.0023	0.005	mg/L					
PACE_MPLS	10560315	745714	3977711LCS_10560315	3977711		LCS	INITIAL	ZnDis	D	1	2021-06-01 12:00	EPA 200.8	2021-06-02 08:51	EPA 200.8		0.1	0.09	0.0023	0.005	mg/L	90		85	115	
PACE_MPLS	10580635	774114	GW0008-092421MS	4123736	GW0008-092421	MS	INITIAL	AsDis	D	1	2021-10-05 06:18	EPA 200.8	2021-10-06 10:19	EPA 200.8	0.0019	0.1	0.11	0.000083	0.0005	mg/L	106		70	130	
PACE_MPLS	10580635	774114	GW0008-092421MSD	4123737	GW0008-092421	MSD	INITIAL	AsDis	D	1	2021-10-05 06:18	EPA 200.8	2021-10-06 10:22	EPA 200.8	0.0019	0.1	0.11	0.000083	0.0005	mg/L	106		70	130	20
PACE_MPLS	10580635	774114	GW0016-092421MS	4123738	GW0016-092421	MS	INITIAL	AsDis	D	1	2021-10-05 06:18	EPA 200.8	2021-10-06 11:01	EPA 200.8	0.011	0.1	0.11	0.000083	0.0005	mg/L	102		70	130	
PACE_MPLS	10580635	774114	GW0016-092421MSD	4123739	GW0016-092421	MSD	INITIAL	AsDis	D	1	2021-10-05 06:18	EPA 200.8	2021-10-06 11:04	EPA 200.8	0.011	0.1	0.12	0.000083	0.0005	mg/L	104	2	70	130	20
PACE_MPLS	10580635	774115	GW0025-092421MS	4123742	GW0025-092421	MS	INITIAL	AsDis	D	1	2021-10-05 06:02	EPA 200.8	2021-10-11 09:34	EPA 200.8	0.00095	0.1	0.1	0.000083	0.0005	mg/L	102		70	130	
PACE_MPLS	10580635	774115	GW0025-092421MSD	4123743	GW0025-092421	MSD	INITIAL	AsDis	D	1	2021-10-05 06:02	EPA 200.8	2021-10-11 09:37	EPA 200.8	0.00095	0.1	0.11	0.000083	0.0005	mg/L	105	3	70	130	20
PACE_MPLS	10580635	774114	GW0016-092421MSD	4123739	GW0016-092421	MSD	INITIAL	CdDis	D	1	2021-10-05 06:18	EPA 200.8	2021-10-06 11:04	EPA 200.8	0.000039	0.1	0.11	0.000016	0.00008	mg/L	109	1	70	130	20
PACE_MPLS	10580635	774114	GW0016-092421MS	4123738	GW0016-092421	MS	INITIAL	CdDis	D	1	2021-10-05 06:18	EPA 200.8	2021-10-06 11:01	EPA 200.8	0.000039	0.1	0.11	0.000016	0.00008	mg/L	108		70	130	
PACE_MPLS	10580635	774114	GW0008-092421MSD	4123737	GW0008-092421	MSD	INITIAL	CdDis	D	1	2021-10-05 06:18	EPA 200.8	2021-10-06 10:22	EPA 200.8	0.00041	0.1	0.11	0.000016	0.00008	mg/L	108		70	130	20
PACE_MPLS	10580635	774114	GW0008-092421MS	4123736	GW0008-092421	MS	INITIAL	CdDis	D	1	2021-10-05 06:18	EPA 200.8	2021-10-06 10:19	EPA 200.8	0.00041	0.1	0.11	0.000016	0.00008	mg/L	108		70	130	
PACE_MPLS	10580635	774115	GW0025-092421MS	4123742	GW0025-092421	MS	INITIAL	CdDis	D	1	2021-10-05 06:02	EPA 200.8	2021-10-11 09:34	EPA 200.8	0.0089	0.1	0.11	0.000016	0.00008	mg/L	100		70	130	
PACE_MPLS	10580635	774115	GW0025-092421MSD	4123743	GW0025-092421	MSD	INITIAL	CdDis	D	1	2021-10-05 06:02	EPA 200.8	2021-10-11 09:37	EPA 200.8	0.0089	0.1	0.11	0.000016	0.00008	mg/L	100		70	130	20
PACE_MPLS	10580635	774114	GW0016-092421MS	4123738	GW0016-092421	MS	INITIAL	CuDis	D	1	2021-10-05 06:18	EPA 200.8	2021-10-06 11:01	EPA 200.8	0.002	0.1	0.11	0.0005	0.001	mg/L	106		70	130	
PACE_MPLS	10580635	774114	GW0016-092421MSD	4123739	GW0016-092421	MSD	INITIAL	CuDis	D	1	2021-10-05 06:18	EPA 200.8	2021-10-06 11:04	EPA 200.8	0.002	0.1	0.11	0.0005	0.001	mg/L	106	1	70	130	20
PACE_MPLS	10580635	774114	GW0008-092421MS	4123736	GW0008-092421	MS	INITIAL	CuDis	D	1	2021-10-05 06:18	EPA 200.8	2021-10-06 10:19	EPA 200.8	0.00031	0.1	0.1	0.0005	0.001	mg/L	104		70	130	
PACE_MPLS	10580635	774114	GW0008-092421MSD	4123737	GW0008-092421	MSD	INITIAL	CuDis	D	1	2021-10-05 06:18	EPA 200.8	2021-10-06 10:22	EPA 200.8	0.00031	0.1	0.1	0.0005	0.001	mg/L	104	1	70	130	20
PACE_MPLS	10580635	774115	GW0025-092421MS	4123742	GW0025-092421	MS	INITIAL	CuDis	D	1	2021-10-05 06:02	EPA 200.8	2021-10-11 09:34	EPA 200.8	0.0069	0.1	0.11	0.0005	0.001	mg/L	100		70	130	
PACE_MPLS	10580635	774115	GW0025-092421MSD	4123743	GW0025-092421	MSD	INITIAL	CuDis	D	1	2021-10-05 06:02	EPA 200.8	2021-10-11 09:37	EPA 200.8	0.0069	0.1	0.11	0.0005	0.001	mg/L	106	5	70	130	20
PACE_MPLS	10580635	774035	GW0008-092421MS	4122944	GW0008-092421	MS	INITIAL	HgDis	D	1	2021-10-04 07:14	EPA 245.1	2021-10-06 02:37	EPA 245.1		0.0001	0.00009	0.0000047	0.00001	mg/L	90		70	130	
PACE_MPLS	10580635	774035	GW0008-092421MSD	4122945	GW0008-092421	MSD	INITIAL	HgDis	D	1	2021-10-04 07:14	EPA 245.1	2021-10-06 02:40	EPA 245.1		0.0001	0.000092	0.0000047	0.00001	mg/L	92	2	70	130	20
PACE_MPLS	10580635	774035	GW0014-092421MS	4122946	GW0014-092421	MS	INITIAL	HgDis	D	1	2021-10-04 07:14	EPA 245.1	2021-10-06 03:03	EPA 245.1		0.0001	0.000093	0.0000047	0.00001	mg/L	93		70	130	
PACE_MPLS	10580635	774036	GW0016-092421MSD	4122950	GW0016-092421	MSD	INITIAL	HgDis	D	1	2021-10-04 10:02	EPA 245.1	2021-10-06 11:25	EPA 245.1		0.0001	0.000099	0.0000047	0.00001	mg/L	98	2	70	130	20
PACE_MPLS	10580635	774036	GW0016-092421MS	4122949	GW0016-092421	MS	INITIAL	HgDis	D	1	2021-10-04 10:02	EPA 245.1	2021-10-06 11:21	EPA 245.1		0.0001	0.0001	0.0000047	0.00001	mg/L	100		70	130	
PACE_MPLS	10580635	774036	GW0025-092421MS	4122951	GW0025-092421	MS	INITIAL	HgDis	D	1	2021-10-04 10:02	EPA 245.1	2021-10-06 12:28	EPA 245.1		0.0001	0.000097	0.0000047	0.00001	mg/L	96		70	130	
PACE_MPLS	10580635	774036	GW0025-092421MSD	4122952	GW0025-092421	MSD	INITIAL	HgDis	D	1	2021-10-04 10:02	EPA 245.1	2021-10-06 12:31	EPA 245.1		0.0001	0.000097	0.0000047	0.00001	mg/L	96		70	130	20
PACE_MPLS	10580635	774114	GW0016-092421MSD	4123739	GW0016-092421	MSD	INITIAL	PbDis	D	1	2021-10-05 06:18	EPA 200.8	2021-10-06 11:04	EPA 200.8	0.000033	0.1	0.11	0.000028	0.0001	mg/L	109	4	70	130	20
PACE_MPLS	10580635	774114	GW0008-092421MSD	4123737	GW0008-092421	MSD	INITIAL	PbDis	D	1	2021-10-05 06:18	EPA 200.8	2021-10-06 10:22	EPA 200.8	0.000021	0.1	0.11	0.000028	0.0001	mg/L	109	2	70	130	20
PACE_MPLS	10580635	774114	GW0016-092421MS	4123738	GW0016-092421	MS	INITIAL	PbDis	D	1	2021-10-05 06:18	EPA 200.8	2021-10-06 11:01	EPA 200.8	0.000033	0.1	0.1	0.000028	0.0001	mg/L	104		70	130	
PACE_MPLS	10580635	774114	GW0008-092421MS	4123736	GW0008-092421	MS	INITIAL	PbDis	D	1	2021-10-05 06:18	EPA 200.8	2021-10-06 10:19	EPA 200.8	0.000021	0.1	0.11	0.000028	0.0001	mg/L	107		70	130	
PACE_MPLS	10580635	774115	GW0025-092421MS	4123742	GW0025-092421	MS	INITIAL	PbDis	D	1	2021-10-05 06:02	EPA 200.8	2021-10-11 09:34	EPA 200.8	0.00008	0.1	0.097	0.000028	0.0001	mg/L	97		70	130	
PACE_MPLS	10580635	774115	GW0025-092421MSD	4123743	GW0025-092421	MSD	INITIAL	PbDis	D	1	2021-10-05 06:02	EPA 200.8	2021-10-11 09:37	EPA 200.8	0.00008	0.1	0.11	0.000028	0.0001	mg/L	106	9	70	130	20
PACE_MPLS	10580635	774114	GW0016-092421MSD	4123739	GW0016-092421	MSD	INITIAL	ZnDis	D	1	2021-10-05 06:18	EPA 200.8	2021-10-06 11:04	EPA 200.8	0.00098	0.1	0.1	0.002	0.005	mg/L	103		70	130	20
PACE_MPLS	10580635	774114	GW0008-092421MS	4123736	GW0008-092421	MS	INITIAL	ZnDis	D	1	2021-10-05 06:18	EPA 200.8	2021-10-06 10:19	EPA 200.8	0.016	0.1	0.12	0.002	0.005	mg/L	104		70	130	
PACE_MPLS	10580635	774114	GW0016-092421MS	4123738	GW0016-092421	MS	INITIAL	ZnDis	D	1	2021-10-05 06:18	EPA 200.8	2021-10-06 11:01	EPA 200.8	0.00098	0.1	0.1	0.002	0.005	mg/L	103		70	130	
PACE_MPLS	10580635	774114	GW0008-092421MSD	4123737	GW0008-092421	MSD	INITIAL	ZnDis	D	1	2021-10-05 06:18	EPA 200.8	2021-10-06 10:22	EPA 200.8	0.016	0.1	0.12	0.002	0.005	mg/L	103	1	70	130	20
PACE_MPLS	10580635	774115	GW0025-092421MS	4123742	GW0025-092421	MS	INITIAL	ZnDis	D	1	2021-10-05 06:02	EPA 200.8	2021-10-11 09:34	EPA 200.8	2.7	0.1	2.7	0.002	0.005	mg/L			70	130	
PACE_MPLS	10580635	774115	GW0025-092421MSD	4123743	GW0025-092421	MSD	INITIAL	ZnDis	D	1	2021-10-05 06:02	EPA 200.8	2021-10-11 09:37	EPA 200.8	2.7	0.1	2.9	0.002	0.005	mg/L	167	7	70	130	20
PACE_MPLS	10581934	775223	GW0026-092721MS	4129196	GW0026-092721	MS	INITIAL	AsDis	D	1	2021-10-07 11:25	EPA 200.8	2021-10-19 01:32	EPA 200.8	0.22	0.1	0.35	0.000083	0.0005	mg/L	127		70	130	
PACE_MPLS	10581934	775223	GW0026-092721MSD	4129197	GW0026-092721	MSD	INITIAL	AsDis	D	1	2021-10-07 11:25	EPA 200.8	2021-10-19 01:35	EPA 200.8	0.22	0.1	0.34	0.000083	0.0005	mg/L	117	3	70	130	20
PACE_MPLS	10581934	775223	GW0036-092821MS	4129198	GW0036-092821	MS	INITIAL	AsDis	D	1	2021-10-07 11:25	EPA 200.8	2021-10-19 02:19	EPA 200.8	0.022	0.1	0.13	0.000083	0.0005	mg/L	108		70	130	
PACE_MPLS	10581934	776608	GW0037-092921MS	4137136	GW0037-092921	MS	INITIAL	AsDis	D	1	2021-10-14 11:31	EPA 200.8	2021-10-18 09:12	EPA 200.8	0.0062	0.1	0.11	0.000083	0.0005	mg/L	105		70	130	
PACE_MPLS	10581934	776608	GW0037-092921MSD	4137137	GW0037-092921	MSD	INITIAL	AsDis	D	1	2021-10-14 11:31	EPA 200.8	2021-10-18 09:15	EPA 200.8	0.0062	0.1	0.11	0.000083	0.0005	mg/L	102	3	70	130	20
PACE_MPLS	10581934	775223	GW0036-092821MS	4129198	GW0036-092821	MS	INITIAL	CdDis	D	1	2021-10-07 11:25	EPA 200.8	2021-10-19 02:19	EPA 200.8	0.0094	0.1	0.12	0.000016	0.00008	mg/L	106		70	130	
PACE_MPLS	10581934	775223	GW0026-092721MSD	4129197	GW0026-092721	MSD	REANALYSIS	CdDis	D	1	2021-10-07 11:25	EPA 200.8	2021-10-22 10:51	EPA 200.8	0.000087	0.1	0.11	0.000016	0.00008	mg/L	110	3	70	130	20
PACE_MPLS	10581934	775223	GW0026-092721MS	4129196	GW0026-092721	MS	REANALYSIS	CdDis	D	1	2021-10-07 11:25	EPA 200.8	2021-10-22 10:48	EPA 200.8	0.000087	0.1	0.11	0.000016	0.00008	mg/L	108		70	130	

Table B5d. BPSOU 2021 Groundwater Data Quality Assessment - Laboratory Quality Assessment

Lab	SDG	Batch	QC Sample ID	Lab Sample ID	Parent Sample ID	QC Sample Type	Test Type	Param	Fraction	DF	Prep Date	Prep Method	Analysis Date	Analysis Method	Parent Value	Spike Value	QC Sample Value	MDL	RL	Unit	%R	RPD %	Lab Lower %R Limit	Lab Upper %R Limit	Lab %RPD Limit
PACE_MPLS	10581934	776608	GW0037-092921MS	4137136	GW0037-092921	MS	INITIAL	CdDis	D	1	2021-10-14 11:31	EPA 200.8	2021-10-18 09:12	EPA 200.8	0.0077	0.1	0.11	0.000016	0.00008	mg/L	106		70	130	
PACE_MPLS	10581934	776608	GW0037-092921MSD	4137137	GW0037-092921	MSD	INITIAL	CdDis	D	1	2021-10-14 11:31	EPA 200.8	2021-10-18 09:15	EPA 200.8	0.0077	0.1	0.11	0.000016	0.00008	mg/L	105	2	70	130	20
PACE_MPLS	10581934	775223	GW0036-092821MS	4129198	GW0036-092821	MS	INITIAL	CuDis	D	1	2021-10-07 11:25	EPA 200.8	2021-10-19 02:19	EPA 200.8	0.18	0.1	0.28	0.0005	0.001	mg/L	102		70	130	
PACE_MPLS	10581934	775223	GW0026-092721MSD	4129197	GW0026-092721	MSD	INITIAL	CuDis	D	1	2021-10-07 11:25	EPA 200.8	2021-10-19 01:35	EPA 200.8	0.0012	0.1	0.11	0.0005	0.001	mg/L	105	1	70	130	20
PACE_MPLS	10581934	775223	GW0026-092721MS	4129196	GW0026-092721	MS	INITIAL	CuDis	D	1	2021-10-07 11:25	EPA 200.8	2021-10-19 01:32	EPA 200.8	0.0012	0.1	0.11	0.0005	0.001	mg/L	104		70	130	
PACE_MPLS	10581934	776608	GW0037-092921MS	4137136	GW0037-092921	MS	INITIAL	CuDis	D	1	2021-10-14 11:31	EPA 200.8	2021-10-18 09:12	EPA 200.8	0.011	0.1	0.11	0.0005	0.001	mg/L	95		70	130	
PACE_MPLS	10581934	776608	GW0037-092921MSD	4137137	GW0037-092921	MSD	INITIAL	CuDis	D	1	2021-10-14 11:31	EPA 200.8	2021-10-18 09:15	EPA 200.8	0.011	0.1	0.1	0.0005	0.001	mg/L	92	3	70	130	20
PACE_MPLS	10581934	775844	GW0037-092921MS	4132519	GW0037-092921	MS	INITIAL	HgDis	D	1	2021-10-11 11:52	EPA 245.1	2021-10-14 12:14	EPA 245.1	0.000015	0.005	0.0043	0.000045	0.0002	mg/L	85		70	130	
PACE_MPLS	10581934	775844	GW0037-092921MSD	4132520	GW0037-092921	MSD	INITIAL	HgDis	D	1	2021-10-11 11:52	EPA 245.1	2021-10-14 12:15	EPA 245.1	0.000015	0.005	0.005	0.000045	0.0002	mg/L	100	16	70	130	20
PACE_MPLS	10581934	775847	GW0038-092821MS	4132525	GW0038-092821	MS	INITIAL	HgDis	D	1	2021-10-12 09:29	EPA 245.1	2021-10-14 01:03	EPA 245.1	0.000033	0.005	0.0051	0.000045	0.0002	mg/L	102		70	130	
PACE_MPLS	10581934	775847	GW0026-092721MSD	4132524	GW0026-092721	MSD	INITIAL	HgDis	D	1	2021-10-12 09:29	EPA 245.1	2021-10-14 12:40	EPA 245.1	0.000024	0.005	0.0052	0.000045	0.0002	mg/L	103	4	70	130	20
PACE_MPLS	10581934	775847	GW0026-092721MS	4132523	GW0026-092721	MS	INITIAL	HgDis	D	1	2021-10-12 09:29	EPA 245.1	2021-10-14 12:38	EPA 245.1	0.000024	0.005	0.005	0.000045	0.0002	mg/L	100		70	130	
PACE_MPLS	10581934	775223	GW0026-092721MSD	4129197	GW0026-092721	MSD	INITIAL	PbDis	D	1	2021-10-07 11:25	EPA 200.8	2021-10-19 01:35	EPA 200.8	0.00024	0.1	0.11	0.000028	0.0001	mg/L	107		70	130	20
PACE_MPLS	10581934	775223	GW0036-092821MS	4129198	GW0036-092821	MS	INITIAL	PbDis	D	1	2021-10-07 11:25	EPA 200.8	2021-10-19 02:19	EPA 200.8	0.014	0.1	0.12	0.000028	0.0001	mg/L	105		70	130	
PACE_MPLS	10581934	775223	GW0026-092721MS	4129196	GW0026-092721	MS	INITIAL	PbDis	D	1	2021-10-07 11:25	EPA 200.8	2021-10-19 01:32	EPA 200.8	0.00024	0.1	0.11	0.000028	0.0001	mg/L	107		70	130	
PACE_MPLS	10581934	776608	GW0037-092921MS	4137136	GW0037-092921	MS	INITIAL	PbDis	D	1	2021-10-14 11:31	EPA 200.8	2021-10-18 09:12	EPA 200.8	0.00066	0.1	0.095	0.000028	0.0001	mg/L	94		70	130	
PACE_MPLS	10581934	776608	GW0037-092921MSD	4137137	GW0037-092921	MSD	INITIAL	PbDis	D	1	2021-10-14 11:31	EPA 200.8	2021-10-18 09:15	EPA 200.8	0.00066	0.1	0.093	0.000028	0.0001	mg/L	92	2	70	130	20
PACE_MPLS	10581934	775223	GW0036-092821MS	4129198	GW0036-092821	MS	INITIAL	ZnDis	D	1	2021-10-07 11:25	EPA 200.8	2021-10-19 02:19	EPA 200.8	1.5	0.1	1.5	0.002	0.005	mg/L	45		70	130	
PACE_MPLS	10581934	775223	GW0026-092721MSD	4129197	GW0026-092721	MSD	INITIAL	ZnDis	D	1	2021-10-07 11:25	EPA 200.8	2021-10-19 01:35	EPA 200.8	1.4	0.1	1.5	0.002	0.005	mg/L	112	4	70	130	20
PACE_MPLS	10581934	775223	GW0026-092721MS	4129196	GW0026-092721	MS	INITIAL	ZnDis	D	1	2021-10-07 11:25	EPA 200.8	2021-10-19 01:32	EPA 200.8	1.4	0.1	1.6	0.002	0.005	mg/L	175		70	130	
PACE_MPLS	10581934	776608	GW0037-092921MS	4137136	GW0037-092921	MS	INITIAL	ZnDis	D	1	2021-10-14 11:31	EPA 200.8	2021-10-18 09:12	EPA 200.8	3.2	0.1	2.7	0.002	0.005	mg/L			70	130	
PACE_MPLS	10581934	776608	GW0037-092921MSD	4137137	GW0037-092921	MSD	INITIAL	ZnDis	D	1	2021-10-14 11:31	EPA 200.8	2021-10-18 09:15	EPA 200.8	3.2	0.1	2.8	0.002	0.005	mg/L		2	70	130	20
PACE_MPLS	10581942	775227	GW0048-092721MSD	4129225	GW0048-092721	MSD	INITIAL	AsDis	D	1	2021-10-08 07:55	EPA 200.8	2021-10-12 06:58	EPA 200.8	0.0036	0.1	0.097	0.000083	0.0005	mg/L	94	3	70	130	20
PACE_MPLS	10581942	775227	GW0048-092721MS	4129224	GW0048-092721	MS	INITIAL	AsDis	D	1	2021-10-08 07:55	EPA 200.8	2021-10-12 06:55	EPA 200.8	0.0036	0.1	0.1	0.000083	0.0005	mg/L	97		70	130	
PACE_MPLS	10581942	775227	GW0061-092821MS	4129226	GW0061-092821	MS	INITIAL	AsDis	D	1	2021-10-08 07:55	EPA 200.8	2021-10-12 07:59	EPA 200.8	0.0066	0.1	0.1	0.000083	0.0005	mg/L	98		70	130	
PACE_MPLS	10581942	775227	GW0061-092821MSD	4129747	GW0061-092821	MSD	INITIAL	AsDis	D	1	2021-10-08 07:55	EPA 200.8	2021-10-12 08:02	EPA 200.8	0.0066	0.1	0.1	0.000083	0.0005	mg/L	95	2	70	130	20
PACE_MPLS	10581942	775227	GW0061-092821MSD	4129747	GW0061-092821	MSD	INITIAL	CdDis	D	1	2021-10-08 07:55	EPA 200.8	2021-10-12 08:02	EPA 200.8	0.0036	0.1	0.097	0.000016	0.00008	mg/L	93	2	70	130	20
PACE_MPLS	10581942	775227	GW0061-092821MS	4129226	GW0061-092821	MS	INITIAL	CdDis	D	1	2021-10-08 07:55	EPA 200.8	2021-10-12 07:59	EPA 200.8	0.0036	0.1	0.098	0.000016	0.00008	mg/L	94		70	130	
PACE_MPLS	10581942	775227	GW0048-092721MSD	4129225	GW0048-092721	MSD	INITIAL	CdDis	D	1	2021-10-08 07:55	EPA 200.8	2021-10-12 06:58	EPA 200.8	0.00012	0.1	0.097	0.000016	0.00008	mg/L	97		70	130	20
PACE_MPLS	10581942	775227	GW0048-092721MS	4129224	GW0048-092721	MS	INITIAL	CdDis	D	1	2021-10-08 07:55	EPA 200.8	2021-10-12 06:55	EPA 200.8	0.00012	0.1	0.097	0.000016	0.00008	mg/L	96		70	130	
PACE_MPLS	10581942	775227	GW0048-092721MS	4129224	GW0048-092721	MS	INITIAL	CuDis	D	1	2021-10-08 07:55	EPA 200.8	2021-10-12 06:55	EPA 200.8	0.0027	0.1	0.099	0.0005	0.001	mg/L	96		70	130	
PACE_MPLS	10581942	775227	GW0048-092721MSD	4129225	GW0048-092721	MSD	INITIAL	CuDis	D	1	2021-10-08 07:55	EPA 200.8	2021-10-12 06:58	EPA 200.8	0.0027	0.1	0.096	0.0005	0.001	mg/L	93	3	70	130	20
PACE_MPLS	10581942	775227	GW0061-092821MS	4129226	GW0061-092821	MS	INITIAL	CuDis	D	1	2021-10-08 07:55	EPA 200.8	2021-10-12 07:59	EPA 200.8	0.052	0.1	0.15	0.0005	0.001	mg/L	94		70	130	
PACE_MPLS	10581942	775227	GW0061-092821MSD	4129747	GW0061-092821	MSD	INITIAL	CuDis	D	1	2021-10-08 07:55	EPA 200.8	2021-10-12 08:02	EPA 200.8	0.052	0.1	0.14	0.0005	0.001	mg/L	91	2	70	130	20
PACE_MPLS	10581942	775848	GW0061-092821MSD	4132531	GW0061-092821	MSD	INITIAL	HgDis	D	1	2021-10-12 09:29	EPA 245.1	2021-10-14 01:52	EPA 245.1	0.000026	0.005	0.0051	0.000045	0.0002	mg/L	101		70	130	20
PACE_MPLS	10581942	775848	GW0048-092721MSD	4132529	GW0048-092721	MSD	INITIAL	HgDis	D	1	2021-10-12 09:29	EPA 245.1	2021-10-14 01:25	EPA 245.1	0.000029	0.005	0.0052	0.000045	0.0002	mg/L	104	1	70	130	20
PACE_MPLS	10581942	775848	GW0061-092821MS	4132530	GW0061-092821	MS	INITIAL	HgDis	D	1	2021-10-12 09:29	EPA 245.1	2021-10-14 01:51	EPA 245.1	0.000026	0.005	0.0051	0.000045	0.0002	mg/L	101		70	130	
PACE_MPLS	10581942	775848	GW0048-092721MS	4132528	GW0048-092721	MS	INITIAL	HgDis	D	1	2021-10-12 09:29	EPA 245.1	2021-10-14 01:23	EPA 245.1	0.000029	0.005	0.0052	0.000045	0.0002	mg/L	103		70	130	
PACE_MPLS	10581942	775227	GW0048-092721MSD	4129225	GW0048-092721	MSD	INITIAL	PbDis	D	1	2021-10-08 07:55	EPA 200.8	2021-10-12 06:58	EPA 200.8	0.000055	0.1	0.1	0.000028	0.0001	mg/L	101	3	70	130	20
PACE_MPLS	10581942	775227	GW0061-092821MS	4129226	GW0061-092821	MS	INITIAL	PbDis	D	1	2021-10-08 07:55	EPA 200.8	2021-10-12 07:59	EPA 200.8	0.00003	0.1	0.099	0.000028	0.0001	mg/L	99		70	130	
PACE_MPLS	10581942	775227	GW0061-092821MSD	4129747	GW0061-092821	MSD	INITIAL	PbDis	D	1	2021-10-08 07:55	EPA 200.8	2021-10-12 08:02	EPA 200.8	0.00003	0.1	0.098	0.000028	0.0001	mg/L	98	1	70	130	20
PACE_MPLS	10581942	775227	GW0048-092721MS	4129224	GW0048-092721	MS	INITIAL	PbDis	D	1	2021-10-08 07:55	EPA 200.8	2021-10-12 06:55	EPA 200.8	0.000055	0.1	0.1	0.000028	0.0001	mg/L	104		70	130	
PACE_MPLS	10581942	775227	GW0048-092721MS	4129224	GW0048-092721	MS	INITIAL	ZnDis	D	1	2021-10-08 07:55	EPA 200.8	2021-10-12 06:55	EPA 200.8	0.0026	0.1	0.096	0.002	0.005	mg/L	93		70	130	
PACE_MPLS	10581942	775227	GW0048-092721MSD	4129225	GW0048-092721	MSD	INITIAL	ZnDis	D	1	2021-10-08 07:55	EPA 200.8	2021-10-12 06:58	EPA 200.8	0.0026	0.1	0.094	0.002	0.005	mg/L	91	2	70	130	20
PACE_MPLS	10581942	775227	GW0061-092821MS	4129226	GW0061-092821	MS	INITIAL	ZnDis	D	1	2021-10-08 07:55	EPA 200.8	2021-10-12 07:59	EPA 200.8	0.39	0.1	0.49	0.002	0.005	mg/L	100		70	130	
PACE_MPLS	10581942	775227	GW0061-092821MSD	4129747	GW0061-092821	MSD	INITIAL	ZnDis	D	1	2021-10-08 07:55	EPA 200.8	2021-10-12 08:02	EPA 200.8	0.39	0.1	0.49	0.002	0.005	mg/L	103		70	130	20
PACE_MPLS	10582495	776536	GW0074-093021MS	4136700	GW0074-093021	MS	INITIAL	AsDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-21 04:47	EPA 200.8	0.0012	0.1	0.1	0.000083	0.0005	mg/L	100		70	130	
PACE_MPLS	10582495	776536	GW0074-093021MSD	4136701	GW0074-093021	MSD	INITIAL	AsDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-21 04:50	EPA 200.8	0.0012	0.1	0.1	0.000083	0.0005	mg/L	99	1	70	130	20
PACE_MPLS	10582495	776536	GW0074-093021MSD	4136701	GW0074-093021	MSD	INITIAL	CdDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-21 04:50	EPA 200.8	0.0053	0.1	0.1	0.000016	0.00008	mg/L	100	1	70	130	20
PACE_MPLS	10582495	776536	GW0074-093021MS	4136700	GW0074-093021	MS	INITIAL	CdDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-21 04:47	EPA 200.8	0.0053	0.1	0.1	0.000016	0.00008	mg/L	98		70	130	
PACE_MPLS	10582495	776536	GW0074-093021MS	4136700	GW0074-093021	MS	INITIAL	CuDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-21 04:47	EPA 200.8	0.0033	0.1	0.1	0.0005	0.001	mg/L	97		70	130	
PACE_MPLS	10582495	776536	GW0074-093021MSD	4136701	GW0074-093021	MSD	INITIAL	CuDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-21 04:50	EPA 200.8	0.0033	0.1	0.1	0.0005	0.001	mg/L	97	1	70	130	20
PACE_MPLS	10582495	776874	GW0074-093021MS	4138391	GW0074-093021	MS	INITIAL	HgDis	D	1	2021-10-18 06:50	EPA 245.1	2021-10-21 01:23	EPA 245.1		0.005	0.005	0.000045	0.0002	mg/L	100		70	130	
PACE_MPLS	10582495	776874	GW0074-093021MSD	4138392	GW0074-093021	MSD	INITIAL	HgDis	D	1	2021-10-18 06:50	EPA 245.1	2021-10-21 01:27	EPA 245.1		0.005	0.0049	0.000045	0.0002	mg/L	98	3	70	130	20
PACE_MPLS	10582495	776536	GW0074-093021MSD	4136701	GW0074-093021	MSD	INITIAL	PbDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-21 04:50	EPA 200.8	0.000057	0.1	0.1	0.000028	0.0001	mg/L	101	1	70	130	20
PACE_MPLS	10582495	776536	GW0074-093021MS	4136700	GW0074-093021	MS	INITIAL	PbDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-21 04:47	EPA 200.8	0.000057	0.1	0.1	0.000028	0.0001	mg/L	101		70	130	
PACE_MPLS	10582495	776536	GW0074-093021MSD	4136701	GW0074-093021	MSD	INITIAL	ZnDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-21 04:50	EPA 200.8	0.58	0.1	0.57	0.002	0.005	mg/L		1	70	130	20
PACE_MPLS	10582495	776536	GW0074-093021MS	4136700	GW0074-093021	MS	INITIAL	ZnDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-21 04:47	EPA 200.8	0.58	0.1	0.58	0.002	0.005	mg/L			70	130	
PACE_MPLS	10582497	776539	GW0092-093021MS	4136710	GW0092-093021	MS	INITIAL	AsDis	D	1	2021-10-18 06:04	EPA 200.8	2021-10-21 12:56	EPA 200.8	0.0074	0.1	0.11	0.000083	0.0005	mg/L	104		70	130	

Table B5d. BPSOU 2021 Groundwater Data Quality Assessment - Laboratory Quality Assessment

Lab	SDG	Batch	QC Sample ID	Lab Sample ID	Parent Sample ID	QC Sample Type	Test Type	Param	Fraction	DF	Prep Date	Prep Method	Analysis Date	Analysis Method	Parent Value	Spike Value	QC Sample Value	MDL	RL	Unit	%R	RPD %	Lab Lower %R Limit	Lab Upper %R Limit	Lab %RPD Limit
PACE_MPLS	10582497	776539	GW0092-093021MSD	4136711	GW0092-093021	MSD	INITIAL	AsDis	D	1	2021-10-18 06:04	EPA 200.8	2021-10-21 01:00	EPA 200.8	0.0074	0.1	0.1	0.000083	0.0005	mg/L	97	7	70	130	20
PACE_MPLS	10582497	776539	GW0092-093021MSD	4136711	GW0092-093021	MSD	INITIAL	CdDis	D	1	2021-10-18 06:04	EPA 200.8	2021-10-21 01:00	EPA 200.8	0.0022	0.1	0.11	0.000016	0.00008	mg/L	107	1	70	130	20
PACE_MPLS	10582497	776539	GW0092-093021MS	4136710	GW0092-093021	MS	INITIAL	CdDis	D	1	2021-10-18 06:04	EPA 200.8	2021-10-21 12:56	EPA 200.8	0.0022	0.1	0.11	0.000016	0.00008	mg/L	106		70	130	
PACE_MPLS	10582497	776539	GW0092-093021MS	4136710	GW0092-093021	MS	INITIAL	CuDis	D	1	2021-10-18 06:04	EPA 200.8	2021-10-21 12:56	EPA 200.8	0.0014	0.1	0.099	0.0005	0.001	mg/L	98		70	130	
PACE_MPLS	10582497	776539	GW0092-093021MSD	4136711	GW0092-093021	MSD	INITIAL	CuDis	D	1	2021-10-18 06:04	EPA 200.8	2021-10-21 01:00	EPA 200.8	0.0014	0.1	0.099	0.0005	0.001	mg/L	97		70	130	20
PACE_MPLS	10582497	776877	GW0092-093021MS	4138404	GW0092-093021	MS	INITIAL	HgDis	D	1	2021-10-18 06:50	EPA 245.1	2021-10-21 12:34	EPA 245.1		0.005	0.005	0.000045	0.0002	mg/L	99		70	130	
PACE_MPLS	10582497	776877	GW0092-093021MSD	4138405	GW0092-093021	MSD	INITIAL	HgDis	D	1	2021-10-18 06:50	EPA 245.1	2021-10-21 12:35	EPA 245.1		0.005	0.005	0.000045	0.0002	mg/L	99		70	130	20
PACE_MPLS	10582497	776539	GW0092-093021MSD	4136711	GW0092-093021	MSD	INITIAL	PbDis	D	1	2021-10-18 06:04	EPA 200.8	2021-10-21 01:00	EPA 200.8	0.000035	0.1	0.1	0.000028	0.0001	mg/L	103	3	70	130	20
PACE_MPLS	10582497	776539	GW0092-093021MS	4136710	GW0092-093021	MS	INITIAL	PbDis	D	1	2021-10-18 06:04	EPA 200.8	2021-10-21 12:56	EPA 200.8	0.000035	0.1	0.11	0.000028	0.0001	mg/L	106		70	130	
PACE_MPLS	10582497	776539	GW0092-093021MS	4136710	GW0092-093021	MS	INITIAL	ZnDis	D	1	2021-10-18 06:04	EPA 200.8	2021-10-21 12:56	EPA 200.8	0.19	0.1	0.29	0.002	0.005	mg/L	100		70	130	
PACE_MPLS	10582497	776539	GW0092-093021MSD	4136711	GW0092-093021	MSD	INITIAL	ZnDis	D	1	2021-10-18 06:04	EPA 200.8	2021-10-21 01:00	EPA 200.8	0.19	0.1	0.28	0.002	0.005	mg/L	95	2	70	130	20
PACE_MPLS	10580635	774114	4123734BLANK_10580635	4123734		MB	INITIAL	AsDis	D	1	2021-10-05 06:18	EPA 200.8	2021-10-06 09:37	EPA 200.8			0.000083	0.000083	0.0005	mg/L					
PACE_MPLS	10580635	774114	4123735LCS_10580635	4123735		LCS	INITIAL	AsDis	D	1	2021-10-05 06:18	EPA 200.8	2021-10-06 09:40	EPA 200.8		0.1	0.098	0.000083	0.0005	mg/L	98		85	115	
PACE_MPLS	10580635	774115	4123740BLANK_10580635	4123740		MB	INITIAL	AsDis	D	1	2021-10-05 06:02	EPA 200.8	2021-10-11 08:40	EPA 200.8			0.000083	0.000083	0.0005	mg/L					
PACE_MPLS	10580635	774115	4123741LCS_10580635	4123741		LCS	INITIAL	AsDis	D	1	2021-10-05 06:02	EPA 200.8	2021-10-11 08:44	EPA 200.8		0.1	0.11	0.000083	0.0005	mg/L	105		85	115	
PACE_MPLS	10580635	774114	4123735LCS_10580635	4123735		LCS	INITIAL	CdDis	D	1	2021-10-05 06:18	EPA 200.8	2021-10-06 09:40	EPA 200.8		0.1	0.11	0.000016	0.00008	mg/L	106		85	115	
PACE_MPLS	10580635	774114	4123734BLANK_10580635	4123734		MB	INITIAL	CdDis	D	1	2021-10-05 06:18	EPA 200.8	2021-10-06 09:37	EPA 200.8			0.000016	0.000016	0.00008	mg/L					
PACE_MPLS	10580635	774115	4123740BLANK_10580635	4123740		MB	INITIAL	CdDis	D	1	2021-10-05 06:02	EPA 200.8	2021-10-11 08:40	EPA 200.8			0.000016	0.000016	0.00008	mg/L					
PACE_MPLS	10580635	774115	4123741LCS_10580635	4123741		LCS	INITIAL	CdDis	D	1	2021-10-05 06:02	EPA 200.8	2021-10-11 08:44	EPA 200.8		0.1	0.1	0.000016	0.00008	mg/L	102		85	115	
PACE_MPLS	10580635	774114	4123735LCS_10580635	4123735		LCS	INITIAL	CuDis	D	1	2021-10-05 06:18	EPA 200.8	2021-10-06 09:40	EPA 200.8		0.1	0.11	0.0005	0.001	mg/L	105		85	115	
PACE_MPLS	10580635	774114	4123734BLANK_10580635	4123734		MB	INITIAL	CuDis	D	1	2021-10-05 06:18	EPA 200.8	2021-10-06 09:37	EPA 200.8			0.0005	0.0005	0.001	mg/L					
PACE_MPLS	10580635	774115	4123740BLANK_10580635	4123740		MB	INITIAL	CuDis	D	1	2021-10-05 06:02	EPA 200.8	2021-10-11 08:40	EPA 200.8			0.0005	0.0005	0.001	mg/L					
PACE_MPLS	10580635	774115	4123741LCS_10580635	4123741		LCS	INITIAL	CuDis	D	1	2021-10-05 06:02	EPA 200.8	2021-10-11 08:44	EPA 200.8		0.1	0.11	0.0005	0.001	mg/L	108		85	115	
PACE_MPLS	10580635	774035	4122942BLANK_10580635	4122942		MB	INITIAL	HgDis	D	1	2021-10-04 07:14	EPA 245.1	2021-10-06 01:58	EPA 245.1			0.0000047	0.0000047	0.00001	mg/L					
PACE_MPLS	10580635	774035	4122943LCS_10580635	4122943		LCS	INITIAL	HgDis	D	1	2021-10-04 07:14	EPA 245.1	2021-10-06 02:02	EPA 245.1		0.0001	0.000091	0.0000047	0.00001	mg/L	91		85	115	
PACE_MPLS	10580635	774036	4122947BLANK_10580635	4122947		MB	INITIAL	HgDis	D	1	2021-10-04 10:02	EPA 245.1	2021-10-06 11:12	EPA 245.1			0.0000047	0.0000047	0.00001	mg/L					
PACE_MPLS	10580635	774036	4122948LCS_10580635	4122948		LCS	INITIAL	HgDis	D	1	2021-10-04 10:02	EPA 245.1	2021-10-06 11:15	EPA 245.1		0.0001	0.0001	0.0000047	0.00001	mg/L	101		85	115	
PACE_MPLS	10580635	774114	4123734BLANK_10580635	4123734		MB	INITIAL	PbDis	D	1	2021-10-05 06:18	EPA 200.8	2021-10-06 09:37	EPA 200.8			0.000028	0.000028	0.0001	mg/L					
PACE_MPLS	10580635	774114	4123735LCS_10580635	4123735		LCS	INITIAL	PbDis	D	1	2021-10-05 06:18	EPA 200.8	2021-10-06 09:40	EPA 200.8		0.1	0.1	0.000028	0.0001	mg/L	104		85	115	
PACE_MPLS	10580635	774115	4123740BLANK_10580635	4123740		MB	INITIAL	PbDis	D	1	2021-10-05 06:02	EPA 200.8	2021-10-11 08:40	EPA 200.8			0.000028	0.000028	0.0001	mg/L					
PACE_MPLS	10580635	774115	4123741LCS_10580635	4123741		LCS	INITIAL	PbDis	D	1	2021-10-05 06:02	EPA 200.8	2021-10-11 08:44	EPA 200.8		0.1	0.1	0.000028	0.0001	mg/L	105		85	115	
PACE_MPLS	10580635	774114	4123735LCS_10580635	4123735		LCS	INITIAL	ZnDis	D	1	2021-10-05 06:18	EPA 200.8	2021-10-06 09:40	EPA 200.8		0.1	0.1	0.002	0.005	mg/L	102		85	115	
PACE_MPLS	10580635	774114	4123734BLANK_10580635	4123734		MB	INITIAL	ZnDis	D	1	2021-10-05 06:18	EPA 200.8	2021-10-06 09:37	EPA 200.8			0.002	0.002	0.005	mg/L					
PACE_MPLS	10580635	774115	4123740BLANK_10580635	4123740		MB	INITIAL	ZnDis	D	1	2021-10-05 06:02	EPA 200.8	2021-10-11 08:40	EPA 200.8			0.002	0.002	0.005	mg/L					
PACE_MPLS	10580635	774115	4123741LCS_10580635	4123741		LCS	INITIAL	ZnDis	D	1	2021-10-05 06:02	EPA 200.8	2021-10-11 08:44	EPA 200.8		0.1	0.11	0.002	0.005	mg/L	107		85	115	
PACE_MPLS	10581934	775223	4129194BLANK_10581934	4129194		MB	INITIAL	AsDis	D	1	2021-10-07 11:25	EPA 200.8	2021-10-19 01:15	EPA 200.8			0.000083	0.000083	0.0005	mg/L					
PACE_MPLS	10581934	775223	4129195LCS_10581934	4129195		LCS	INITIAL	AsDis	D	1	2021-10-07 11:25	EPA 200.8	2021-10-19 01:19	EPA 200.8		0.1	0.11	0.000083	0.0005	mg/L	105		85	115	
PACE_MPLS	10581934	776608	4137135LCS_10581934	4137135		LCS	INITIAL	AsDis	D	1	2021-10-14 11:31	EPA 200.8	2021-10-18 08:59	EPA 200.8		0.1	0.099	0.000083	0.0005	mg/L	99		85	115	
PACE_MPLS	10581934	776608	4137134BLANK_10581934	4137134		MB	INITIAL	AsDis	D	1	2021-10-14 11:31	EPA 200.8	2021-10-18 08:55	EPA 200.8			0.000083	0.000083	0.0005	mg/L					
PACE_MPLS	10581934	775223	4129195LCS_10581934	4129195		LCS	INITIAL	CdDis	D	1	2021-10-07 11:25	EPA 200.8	2021-10-19 01:19	EPA 200.8		0.1	0.11	0.000016	0.00008	mg/L	105		85	115	
PACE_MPLS	10581934	775223	4129194BLANK_10581934	4129194		MB	REANALYSIS	CdDis	D	1	2021-10-07 11:25	EPA 200.8	2021-10-22 10:31	EPA 200.8			0.000016	0.000016	0.00008	mg/L					
PACE_MPLS	10581934	776608	4137134BLANK_10581934	4137134		MB	INITIAL	CdDis	D	1	2021-10-14 11:31	EPA 200.8	2021-10-18 08:55	EPA 200.8			0.000016	0.000016	0.00008	mg/L					
PACE_MPLS	10581934	776608	4137135LCS_10581934	4137135		LCS	INITIAL	CdDis	D	1	2021-10-14 11:31	EPA 200.8	2021-10-18 08:59	EPA 200.8		0.1	0.11	0.000016	0.00008	mg/L	108		85	115	
PACE_MPLS	10581934	775223	4129194BLANK_10581934	4129194		MB	INITIAL	CuDis	D	1	2021-10-07 11:25	EPA 200.8	2021-10-19 01:15	EPA 200.8			0.0005	0.0005	0.001	mg/L					
PACE_MPLS	10581934	775223	4129195LCS_10581934	4129195		LCS	INITIAL	CuDis	D	1	2021-10-07 11:25	EPA 200.8	2021-10-19 01:19	EPA 200.8		0.1	0.11	0.0005	0.001	mg/L	109		85	115	
PACE_MPLS	10581934	776608	4137135LCS_10581934	4137135		LCS	INITIAL	CuDis	D	1	2021-10-14 11:31	EPA 200.8	2021-10-18 08:59	EPA 200.8		0.1	0.1	0.0005	0.001	mg/L	102		85	115	
PACE_MPLS	10581934	776608	4137134BLANK_10581934	4137134		MB	INITIAL	CuDis	D	1	2021-10-14 11:31	EPA 200.8	2021-10-18 08:55	EPA 200.8			0.0005	0.0005	0.001	mg/L					
PACE_MPLS	10581934	775844	4132517BLANK_10581934	4132517		MB	INITIAL	HgDis	D	1	2021-10-11 11:52	EPA 245.1	2021-10-14 12:09	EPA 245.1			0.000045	0.000045	0.0002	mg/L					
PACE_MPLS	10581934	775844	4132518LCS_10581934	4132518		LCS	INITIAL	HgDis	D	1	2021-10-11 11:52	EPA 245.1	2021-10-14 12:11	EPA 245.1		0.005	0.0051	0.000045	0.0002	mg/L	101		85	115	
PACE_MPLS	10581934	775847	4132521BLANK_10581934	4132521		MB	INITIAL	HgDis	D	1	2021-10-12 09:29	EPA 245.1	2021-10-14 12:34	EPA 245.1			0.000045	0.000045	0.0002	mg/L					
PACE_MPLS	10581934	775847	4132522LCS_10581934	4132522		LCS	INITIAL	HgDis	D	1	2021-10-12 09:29	EPA 245.1	2021-10-14 12:35	EPA 245.1		0.005	0.0051	0.000045	0.0002	mg/L	103		85	115	
PACE_MPLS	10581934	775223	4129195LCS_10581934	4129195		LCS	INITIAL	PbDis	D	1	2021-10-07 11:25	EPA 200.8	2021-10-19 01:19	EPA 200.8		0.1	0.11	0.000028	0.0001	mg/L	107		85	115	
PACE_MPLS	10581934	775223	4129194BLANK_10581934	4129194		MB	INITIAL	PbDis	D	1	2021-10-07 11:25	EPA 200.8	2021-10-19 01:15	EPA 200.8			0.000028	0.000028	0.0001	mg/L					
PACE_MPLS	10581934	776608	4137134BLANK_10581934	4137134		MB	INITIAL	PbDis	D	1	2021-10-14 11:31	EPA 200.8	2021-10-18 08:55	EPA 200.8			0.000028	0.000028	0.0001	mg/L					
PACE_MPLS	10581934	776608	4137135LCS_10581934	4137135		LCS	INITIAL	PbDis	D	1	2021-10-14 11:31	EPA 200.8	2021-10-18 08:59	EPA 200.8		0.1	0.1	0.000028	0.0001	mg/L	100		85	115	
PACE_MPLS	10581934	775223	4129194BLANK_10581934	4129194		MB	INITIAL	ZnDis	D	1	2021-10-07 11:25	EPA 200.8	2021-10-19 01:15	EPA 200.8			0.002	0.002	0.005	mg/L					
PACE_MPLS	10581934	775223	4129195LCS_10581934	4129195		LCS	INITIAL	ZnDis	D	1	2021-10-07 11:25	EPA 200.8	2021-10-19 01:19	EPA 200.8		0.1	0.11	0.002	0.005	mg/L	106		85	115	
PACE_MPLS	10581934	776608	4137135LCS_10581934	4137135		LCS	INITIAL	ZnDis	D	1	2021-10-14 11:31	EPA 200.8	2021-10-18 08:59	EPA 200.8		0.1	0.1	0.002	0.005	mg/L	102		85	115	
PACE_MPLS	10581934	776608	4137134BLANK_10581934	4137134		MB	INITIAL	ZnDis	D	1	2021-10-14 11:31	EPA 200.8	2021-10-18 08:55	EPA 200.8			0.002	0.002	0.005	mg/L					

Table B5d. BPSOU 2021 Groundwater Data Quality Assessment - Laboratory Quality Assessment

Lab	SDG	Batch	QC Sample ID	Lab Sample ID	Parent Sample ID	QC Sample Type	Test Type	Param	Fraction	DF	Prep Date	Prep Method	Analysis Date	Analysis Method	Parent Value	Spike Value	QC Sample Value	MDL	RL	Unit	%R	RPD %	Lab Lower %R Limit	Lab Upper %R Limit	Lab %RPD Limit
PACE_MPLS	10581942	775227	4129222BLANK_10581942	4129222		MB	INITIAL	AsDis	D	1	2021-10-08 07:55	EPA 200.8	2021-10-12 06:40	EPA 200.8			0.000083	0.000083	0.0005	mg/L					
PACE_MPLS	10581942	775227	4129223LCS_10581942	4129223		LCS	INITIAL	AsDis	D	1	2021-10-08 07:55	EPA 200.8	2021-10-12 06:44	EPA 200.8		0.1	0.091	0.000083	0.0005	mg/L	91		85	115	
PACE_MPLS	10581942	776608	4137134BLANK_10581942	4137134		MB	INITIAL	AsDis	D	1	2021-10-14 11:31	EPA 200.8	2021-10-18 08:55	EPA 200.8			0.000083	0.000083	0.0005	mg/L					
PACE_MPLS	10581942	776608	4137135LCS_10581942	4137135		LCS	INITIAL	AsDis	D	1	2021-10-14 11:31	EPA 200.8	2021-10-18 08:59	EPA 200.8		0.1	0.099	0.000083	0.0005	mg/L	99		85	115	
PACE_MPLS	10581942	775227	4129223LCS_10581942	4129223		LCS	INITIAL	CdDis	D	1	2021-10-08 07:55	EPA 200.8	2021-10-12 06:44	EPA 200.8		0.1	0.095	0.000016	0.00008	mg/L	95		85	115	
PACE_MPLS	10581942	775227	4129222BLANK_10581942	4129222		MB	INITIAL	CdDis	D	1	2021-10-08 07:55	EPA 200.8	2021-10-12 06:40	EPA 200.8			0.000016	0.000016	0.00008	mg/L					
PACE_MPLS	10581942	776608	4137134BLANK_10581942	4137134		MB	INITIAL	CdDis	D	1	2021-10-14 11:31	EPA 200.8	2021-10-18 08:55	EPA 200.8			0.000016	0.000016	0.00008	mg/L					
PACE_MPLS	10581942	776608	4137135LCS_10581942	4137135		LCS	INITIAL	CdDis	D	1	2021-10-14 11:31	EPA 200.8	2021-10-18 08:59	EPA 200.8		0.1	0.11	0.000016	0.00008	mg/L	108		85	115	
PACE_MPLS	10581942	775227	4129223LCS_10581942	4129223		LCS	INITIAL	CuDis	D	1	2021-10-08 07:55	EPA 200.8	2021-10-12 06:44	EPA 200.8		0.1	0.098	0.0005	0.001	mg/L	98		85	115	
PACE_MPLS	10581942	775227	4129222BLANK_10581942	4129222		MB	INITIAL	CuDis	D	1	2021-10-08 07:55	EPA 200.8	2021-10-12 06:40	EPA 200.8			0.0005	0.0005	0.001	mg/L					
PACE_MPLS	10581942	776608	4137134BLANK_10581942	4137134		MB	INITIAL	CuDis	D	1	2021-10-14 11:31	EPA 200.8	2021-10-18 08:55	EPA 200.8			0.0005	0.0005	0.001	mg/L					
PACE_MPLS	10581942	776608	4137135LCS_10581942	4137135		LCS	INITIAL	CuDis	D	1	2021-10-14 11:31	EPA 200.8	2021-10-18 08:59	EPA 200.8		0.1	0.1	0.0005	0.001	mg/L	102		85	115	
PACE_MPLS	10581942	775844	4132517BLANK_10581942	4132517		MB	INITIAL	HgDis	D	1	2021-10-11 11:52	EPA 245.1	2021-10-14 12:09	EPA 245.1			0.000045	0.000045	0.0002	mg/L					
PACE_MPLS	10581942	775844	4132518LCS_10581942	4132518		LCS	INITIAL	HgDis	D	1	2021-10-11 11:52	EPA 245.1	2021-10-14 12:11	EPA 245.1		0.005	0.0051	0.000045	0.0002	mg/L	101		85	115	
PACE_MPLS	10581942	775848	4132526BLANK_10581942	4132526		MB	INITIAL	HgDis	D	1	2021-10-12 09:29	EPA 245.1	2021-10-14 01:19	EPA 245.1			0.000045	0.000045	0.0002	mg/L					
PACE_MPLS	10581942	775848	4132527LCS_10581942	4132527		LCS	INITIAL	HgDis	D	1	2021-10-12 09:29	EPA 245.1	2021-10-14 01:20	EPA 245.1		0.005	0.0051	0.000045	0.0002	mg/L	102		85	115	
PACE_MPLS	10581942	775227	4129223LCS_10581942	4129223		LCS	INITIAL	PbDis	D	1	2021-10-08 07:55	EPA 200.8	2021-10-12 06:44	EPA 200.8		0.1	0.1	0.000028	0.0001	mg/L	101		85	115	
PACE_MPLS	10581942	775227	4129222BLANK_10581942	4129222		MB	INITIAL	PbDis	D	1	2021-10-08 07:55	EPA 200.8	2021-10-12 06:40	EPA 200.8			0.000028	0.000028	0.0001	mg/L					
PACE_MPLS	10581942	776608	4137134BLANK_10581942	4137134		MB	INITIAL	PbDis	D	1	2021-10-14 11:31	EPA 200.8	2021-10-18 08:55	EPA 200.8			0.000028	0.000028	0.0001	mg/L					
PACE_MPLS	10581942	776608	4137135LCS_10581942	4137135		LCS	INITIAL	PbDis	D	1	2021-10-14 11:31	EPA 200.8	2021-10-18 08:59	EPA 200.8		0.1	0.1	0.000028	0.0001	mg/L	100		85	115	
PACE_MPLS	10581942	775227	4129223LCS_10581942	4129223		LCS	INITIAL	ZnDis	D	1	2021-10-08 07:55	EPA 200.8	2021-10-12 06:44	EPA 200.8		0.1	0.094	0.002	0.005	mg/L	94		85	115	
PACE_MPLS	10581942	775227	4129222BLANK_10581942	4129222		MB	INITIAL	ZnDis	D	1	2021-10-08 07:55	EPA 200.8	2021-10-12 06:40	EPA 200.8			0.002	0.002	0.005	mg/L					
PACE_MPLS	10581942	776608	4137135LCS_10581942	4137135		LCS	INITIAL	ZnDis	D	1	2021-10-14 11:31	EPA 200.8	2021-10-18 08:59	EPA 200.8		0.1	0.1	0.002	0.005	mg/L	102		85	115	
PACE_MPLS	10581942	776608	4137134BLANK_10581942	4137134		MB	INITIAL	ZnDis	D	1	2021-10-14 11:31	EPA 200.8	2021-10-18 08:55	EPA 200.8			0.002	0.002	0.005	mg/L					
PACE_MPLS	10582495	776536	4136698BLANK_10582495	4136698		MB	INITIAL	AsDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-21 04:10	EPA 200.8			0.000083	0.000083	0.0005	mg/L					
PACE_MPLS	10582495	776536	4136699LCS_10582495	4136699		LCS	INITIAL	AsDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-21 04:14	EPA 200.8		0.1	0.099	0.000083	0.0005	mg/L	99		85	115	
PACE_MPLS	10582495	776536	GW0080-100121MS	4136702	GW0080-100121	MS	INITIAL	AsDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-21 05:20	EPA 200.8	0.004	0.1	0.11	0.000083	0.0005	mg/L	107		70	130	
PACE_MPLS	10582495	776540	GW0088-100121MS	4136716	GW0088-100121	MS	INITIAL	AsDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-20 10:54	EPA 200.8	0.00076	0.1	0.11	0.000083	0.0005	mg/L	110		70	130	
PACE_MPLS	10582495	776540	GW0088-100121MSD	4136717	GW0088-100121	MSD	INITIAL	AsDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-20 10:57	EPA 200.8	0.00076	0.1	0.11	0.000083	0.0005	mg/L	109	1	70	130	20
PACE_MPLS	10582495	776540	4136714BLANK_10582495	4136714		MB	INITIAL	AsDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-20 10:37	EPA 200.8			0.000083	0.000083	0.0005	mg/L					
PACE_MPLS	10582495	776540	4136715LCS_10582495	4136715		LCS	INITIAL	AsDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-20 10:41	EPA 200.8		0.1	0.11	0.000083	0.0005	mg/L	108		85	115	
PACE_MPLS	10582495	776536	4136699LCS_10582495	4136699		LCS	INITIAL	CdDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-21 04:14	EPA 200.8		0.1	0.099	0.000016	0.00008	mg/L	99		85	115	
PACE_MPLS	10582495	776536	4136698BLANK_10582495	4136698		MB	INITIAL	CdDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-21 04:10	EPA 200.8			0.000016	0.000016	0.00008	mg/L					
PACE_MPLS	10582495	776536	GW0080-100121MS	4136702	GW0080-100121	MS	INITIAL	CdDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-21 05:20	EPA 200.8	0.12	0.1	0.22	0.000016	0.00008	mg/L	96		70	130	
PACE_MPLS	10582495	776540	GW0088-100121MSD	4136717	GW0088-100121	MSD	INITIAL	CdDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-20 10:57	EPA 200.8	0.0083	0.1	0.11	0.000016	0.00008	mg/L	103	2	70	130	20
PACE_MPLS	10582495	776540	GW0088-100121MS	4136716	GW0088-100121	MS	INITIAL	CdDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-20 10:54	EPA 200.8	0.0083	0.1	0.11	0.000016	0.00008	mg/L	105		70	130	
PACE_MPLS	10582495	776540	4136715LCS_10582495	4136715		LCS	INITIAL	CdDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-20 10:41	EPA 200.8		0.1	0.11	0.000016	0.00008	mg/L	108		85	115	
PACE_MPLS	10582495	776540	4136714BLANK_10582495	4136714		MB	INITIAL	CdDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-20 10:37	EPA 200.8			0.000016	0.000016	0.00008	mg/L					
PACE_MPLS	10582495	776536	4136698BLANK_10582495	4136698		MB	INITIAL	CuDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-21 04:10	EPA 200.8			0.0005	0.0005	0.001	mg/L					
PACE_MPLS	10582495	776536	4136699LCS_10582495	4136699		LCS	INITIAL	CuDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-21 04:14	EPA 200.8		0.1	0.1	0.0005	0.001	mg/L	104		85	115	
PACE_MPLS	10582495	776536	GW0080-100121MS	4136702	GW0080-100121	MS	INITIAL	CuDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-21 05:20	EPA 200.8	12.7	0.1	10.6	0.0005	0.001	mg/L			70	130	
PACE_MPLS	10582495	776540	GW0088-100121MS	4136716	GW0088-100121	MS	INITIAL	CuDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-20 10:54	EPA 200.8	0.044	0.1	0.14	0.0005	0.001	mg/L	97		70	130	
PACE_MPLS	10582495	776540	GW0088-100121MSD	4136717	GW0088-100121	MSD	INITIAL	CuDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-20 10:57	EPA 200.8	0.044	0.1	0.14	0.0005	0.001	mg/L	94	2	70	130	20
PACE_MPLS	10582495	776540	4136714BLANK_10582495	4136714		MB	INITIAL	CuDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-20 10:37	EPA 200.8			0.0005	0.0005	0.001	mg/L					
PACE_MPLS	10582495	776540	4136715LCS_10582495	4136715		LCS	INITIAL	CuDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-20 10:41	EPA 200.8		0.1	0.11	0.0005	0.001	mg/L	108		85	115	
PACE_MPLS	10582495	776874	4138389BLANK_10582495	4138389		MB	INITIAL	HgDis	D	1	2021-10-18 06:50	EPA 245.1	2021-10-21 01:13	EPA 245.1			0.000045	0.000045	0.0002	mg/L					
PACE_MPLS	10582495	776874	4138390LCS_10582495	4138390		LCS	INITIAL	HgDis	D	1	2021-10-18 06:50	EPA 245.1	2021-10-21 01:14	EPA 245.1		0.005	0.0051	0.000045	0.0002	mg/L	102		85	115	
PACE_MPLS	10582495	776874	GW0081-100121MS	4138393	GW0081-100121	MS	INITIAL	HgDis	D	1	2021-10-18 06:50	EPA 245.1	2021-10-21 01:42	EPA 245.1		0.005	0.0051	0.000045	0.0002	mg/L	101		70	130	
PACE_MPLS	10582495	776876	GW0088-100121MS	4138398	GW0088-100121	MS	INITIAL	HgDis	D	1	2021-10-18 07:12	EPA 245.1	2021-10-21 12:09	EPA 245.1		0.005	0.0052	0.000045	0.0002	mg/L	103		70	130	
PACE_MPLS	10582495	776876	GW0088-100121MSD	4138399	GW0088-100121	MSD	INITIAL	HgDis	D	1	2021-10-18 07:12	EPA 245.1	2021-10-21 12:10	EPA 245.1		0.005	0.0049	0.000045	0.0002	mg/L	97	6	70	130	20
PACE_MPLS	10582495	776876	4138396BLANK_10582495	4138396		MB	INITIAL	HgDis	D	1	2021-10-18 07:12	EPA 245.1	2021-10-21 12:04	EPA 245.1			0.000045	0.000045	0.0002	mg/L					
PACE_MPLS	10582495	776876	4138397LCS_10582495	4138397		LCS	INITIAL	HgDis	D	1	2021-10-18 07:12	EPA 245.1	2021-10-21 12:06	EPA 245.1		0.005	0.0051	0.000045	0.0002	mg/L	102		85	115	
PACE_MPLS	10582495	776536	4136699LCS_10582495	4136699		LCS	INITIAL	PbDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-21 04:14	EPA 200.8		0.1	0.1	0.000028	0.0001	mg/L	101		85	115	
PACE_MPLS	10582495	776536	4136698BLANK_10582495	4136698		MB	INITIAL	PbDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-21 04:10	EPA 200.8			0.000028	0.000028	0.0001	mg/L					
PACE_MPLS	10582495	776536	GW0080-100121MS	4136702	GW0080-100121	MS	INITIAL	PbDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-21 05:20	EPA 200.8	0.000047	0.1	0.092	0.000028	0.0001	mg/L	92		70	130	
PACE_MPLS	10582495	776540	GW0088-100121MS	4136716	GW0088-100121	MS	INITIAL	PbDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-20 10:54	EPA 200.8	0.0011	0.1	0.1	0.000028	0.0001	mg/L	102		70	130	
PACE_MPLS	10582495	776540	4136714BLANK_10582495	4136714		MB	INITIAL	PbDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-20 10:37	EPA 200.8			0.000028	0.000028	0.0001	mg/L					
PACE_MPLS	10582495	776540	4136715LCS_10582495	4136715		LCS	INITIAL	PbDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-20 10:41	EPA 200.8		0.1	0.11	0.000028	0.0001	mg/L	110		85	115	
PACE_MPLS	10582495	776540	GW0088-100121MSD	4136717	GW0088-100121	MSD	INITIAL	PbDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-20 10:57	EPA 200.8	0.0011	0.1	0.1	0.000028	0.0001	mg/L	100	1	70	130	20

Table B5d. BPSOU 2021 Groundwater Data Quality Assessment - Laboratory Quality Assessment

Lab	SDG	Batch	QC Sample ID	Lab Sample ID	Parent Sample ID	QC Sample Type	Test Type	Param	Fraction	DF	Prep Date	Prep Method	Analysis Date	Analysis Method	Parent Value	Spike Value	QC Sample Value	MDL	RL	Unit	%R	RPD %	Lab Lower %R Limit	Lab Upper %R Limit	Lab %RPD Limit
PACE_MPLS	10582495	776536	GW0080-100121MS	4136702	GW0080-100121	MS	INITIAL	ZnDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-21 05:20	EPA 200.8	42	0.1	38.3	0.002	0.005	mg/L			70	130	
PACE_MPLS	10582495	776536	4136699LCS_10582495	4136699		LCS	INITIAL	ZnDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-21 04:14	EPA 200.8		0.1	0.1	0.002	0.005	mg/L	102		85	115	
PACE_MPLS	10582495	776536	4136698BLANK_10582495	4136698		MB	INITIAL	ZnDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-21 04:10	EPA 200.8			0.002	0.002	0.005	mg/L					
PACE_MPLS	10582495	776540	4136715LCS_10582495	4136715		LCS	INITIAL	ZnDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-20 10:41	EPA 200.8		0.1	0.11	0.002	0.005	mg/L	109		85	115	
PACE_MPLS	10582495	776540	4136714BLANK_10582495	4136714		MB	INITIAL	ZnDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-20 10:37	EPA 200.8			0.002	0.002	0.005	mg/L					
PACE_MPLS	10582495	776540	GW0088-100121MSD	4136717	GW0088-100121	MSD	INITIAL	ZnDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-20 10:57	EPA 200.8	1.4	0.1	1.3	0.002	0.005	mg/L		4	70	130	20
PACE_MPLS	10582495	776540	GW0088-100121MS	4136716	GW0088-100121	MS	INITIAL	ZnDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-20 10:54	EPA 200.8	1.4	0.1	1.3	0.002	0.005	mg/L			70	130	
PACE_MPLS	10582497	776539	4136708BLANK_10582497	4136708		MB	INITIAL	AsDis	D	1	2021-10-18 06:04	EPA 200.8	2021-10-21 12:40	EPA 200.8			0.000083	0.000083	0.0005	mg/L					
PACE_MPLS	10582497	776539	GW0104-100121MS	4136712	GW0104-100121	MS	INITIAL	AsDis	D	1	2021-10-18 06:04	EPA 200.8	2021-10-21 02:03	EPA 200.8	0.00052	0.1	0.11	0.000083	0.0005	mg/L	107		70	130	
PACE_MPLS	10582497	776539	GW0104-100121MSD	4136713	GW0104-100121	MSD	INITIAL	AsDis	D	1	2021-10-18 06:04	EPA 200.8	2021-10-21 02:06	EPA 200.8	0.00052	0.1	0.1	0.000083	0.0005	mg/L	102	4	70	130	20
PACE_MPLS	10582497	776539	4136709LCS_10582497	4136709		LCS	INITIAL	AsDis	D	1	2021-10-18 06:04	EPA 200.8	2021-10-21 12:43	EPA 200.8		0.1	0.11	0.000083	0.0005	mg/L	105		85	115	
PACE_MPLS	10582497	776540	4136714BLANK_10582497	4136714		MB	INITIAL	AsDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-20 10:37	EPA 200.8			0.000083	0.000083	0.0005	mg/L					
PACE_MPLS	10582497	776540	4136715LCS_10582497	4136715		LCS	INITIAL	AsDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-20 10:41	EPA 200.8		0.1	0.11	0.000083	0.0005	mg/L	108		85	115	
PACE_MPLS	10582497	776539	4136709LCS_10582497	4136709		LCS	INITIAL	CdDis	D	1	2021-10-18 06:04	EPA 200.8	2021-10-21 12:43	EPA 200.8		0.1	0.11	0.000016	0.00008	mg/L	109		85	115	
PACE_MPLS	10582497	776539	GW0104-100121MSD	4136713	GW0104-100121	MSD	INITIAL	CdDis	D	1	2021-10-18 06:04	EPA 200.8	2021-10-21 02:06	EPA 200.8	0.025	0.1	0.13	0.000016	0.00008	mg/L	107	2	70	130	20
PACE_MPLS	10582497	776539	GW0104-100121MS	4136712	GW0104-100121	MS	INITIAL	CdDis	D	1	2021-10-18 06:04	EPA 200.8	2021-10-21 02:03	EPA 200.8	0.025	0.1	0.13	0.000016	0.00008	mg/L	110		70	130	
PACE_MPLS	10582497	776539	4136708BLANK_10582497	4136708		MB	INITIAL	CdDis	D	1	2021-10-18 06:04	EPA 200.8	2021-10-21 12:40	EPA 200.8			0.000016	0.000016	0.00008	mg/L					
PACE_MPLS	10582497	776540	4136714BLANK_10582497	4136714		MB	INITIAL	CdDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-20 10:37	EPA 200.8			0.000016	0.000016	0.00008	mg/L					
PACE_MPLS	10582497	776540	4136715LCS_10582497	4136715		LCS	INITIAL	CdDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-20 10:41	EPA 200.8		0.1	0.11	0.000016	0.00008	mg/L	108		85	115	
PACE_MPLS	10582497	776539	4136709LCS_10582497	4136709		LCS	INITIAL	CuDis	D	1	2021-10-18 06:04	EPA 200.8	2021-10-21 12:43	EPA 200.8		0.1	0.11	0.0005	0.001	mg/L	105		85	115	
PACE_MPLS	10582497	776539	GW0104-100121MS	4136712	GW0104-100121	MS	INITIAL	CuDis	D	1	2021-10-18 06:04	EPA 200.8	2021-10-21 02:03	EPA 200.8	0.28	0.1	0.37	0.0005	0.001	mg/L	94		70	130	
PACE_MPLS	10582497	776539	GW0104-100121MSD	4136713	GW0104-100121	MSD	INITIAL	CuDis	D	1	2021-10-18 06:04	EPA 200.8	2021-10-21 02:06	EPA 200.8	0.28	0.1	0.37	0.0005	0.001	mg/L	91	1	70	130	20
PACE_MPLS	10582497	776539	4136708BLANK_10582497	4136708		MB	INITIAL	CuDis	D	1	2021-10-18 06:04	EPA 200.8	2021-10-21 12:40	EPA 200.8			0.0005	0.0005	0.001	mg/L					
PACE_MPLS	10582497	776540	4136714BLANK_10582497	4136714		MB	INITIAL	CuDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-20 10:37	EPA 200.8			0.0005	0.0005	0.001	mg/L					
PACE_MPLS	10582497	776540	4136715LCS_10582497	4136715		LCS	INITIAL	CuDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-20 10:41	EPA 200.8		0.1	0.11	0.0005	0.001	mg/L	108		85	115	
PACE_MPLS	10582497	776876	4138396BLANK_10582497	4138396		MB	INITIAL	HgDis	D	1	2021-10-18 07:12	EPA 245.1	2021-10-21 12:04	EPA 245.1			0.000045	0.000045	0.0002	mg/L					
PACE_MPLS	10582497	776876	4138397LCS_10582497	4138397		LCS	INITIAL	HgDis	D	1	2021-10-18 07:12	EPA 245.1	2021-10-21 12:06	EPA 245.1		0.005	0.0051	0.000045	0.0002	mg/L	102		85	115	
PACE_MPLS	10582497	776877	4138402BLANK_10582497	4138402		MB	INITIAL	HgDis	D	1	2021-10-18 06:50	EPA 245.1	2021-10-21 12:29	EPA 245.1			0.000045	0.000045	0.0002	mg/L					
PACE_MPLS	10582497	776877	4138403LCS_10582497	4138403		LCS	INITIAL	HgDis	D	1	2021-10-18 06:50	EPA 245.1	2021-10-21 12:31	EPA 245.1		0.005	0.005	0.000045	0.0002	mg/L	101		85	115	
PACE_MPLS	10582497	776877	GW0104-100121MSD	4138407	GW0104-100121	MSD	INITIAL	HgDis	D	1	2021-10-18 06:50	EPA 245.1	2021-10-21 01:01	EPA 245.1		0.005	0.0051	0.000045	0.0002	mg/L	102	4	70	130	20
PACE_MPLS	10582497	776877	GW0104-100121MS	4138406	GW0104-100121	MS	INITIAL	HgDis	D	1	2021-10-18 06:50	EPA 245.1	2021-10-21 01:00	EPA 245.1		0.005	0.0049	0.000045	0.0002	mg/L	99		70	130	
PACE_MPLS	10582497	776539	GW0104-100121MSD	4136713	GW0104-100121	MSD	INITIAL	PbDis	D	1	2021-10-18 06:04	EPA 200.8	2021-10-21 02:06	EPA 200.8	0.000029	0.1	0.11	0.000028	0.0001	mg/L	107	4	70	130	20
PACE_MPLS	10582497	776539	GW0104-100121MS	4136712	GW0104-100121	MS	INITIAL	PbDis	D	1	2021-10-18 06:04	EPA 200.8	2021-10-21 02:03	EPA 200.8	0.000029	0.1	0.11	0.000028	0.0001	mg/L	112		70	130	
PACE_MPLS	10582497	776539	4136709LCS_10582497	4136709		LCS	INITIAL	PbDis	D	1	2021-10-18 06:04	EPA 200.8	2021-10-21 12:43	EPA 200.8		0.1	0.11	0.000028	0.0001	mg/L	110		85	115	
PACE_MPLS	10582497	776539	4136708BLANK_10582497	4136708		MB	INITIAL	PbDis	D	1	2021-10-18 06:04	EPA 200.8	2021-10-21 12:40	EPA 200.8			0.000028	0.000028	0.0001	mg/L					
PACE_MPLS	10582497	776540	4136714BLANK_10582497	4136714		MB	INITIAL	PbDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-20 10:37	EPA 200.8			0.000028	0.000028	0.0001	mg/L					
PACE_MPLS	10582497	776540	4136715LCS_10582497	4136715		LCS	INITIAL	PbDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-20 10:41	EPA 200.8		0.1	0.11	0.000028	0.0001	mg/L	110		85	115	
PACE_MPLS	10582497	776539	4136709LCS_10582497	4136709		LCS	INITIAL	ZnDis	D	1	2021-10-18 06:04	EPA 200.8	2021-10-21 12:43	EPA 200.8		0.1	0.11	0.002	0.005	mg/L	108		85	115	
PACE_MPLS	10582497	776539	GW0104-100121MSD	4136713	GW0104-100121	MSD	INITIAL	ZnDis	D	1	2021-10-18 06:04	EPA 200.8	2021-10-21 02:06	EPA 200.8	3.4	0.1	3.3	0.002	0.005	mg/L			70	130	20
PACE_MPLS	10582497	776539	GW0104-100121MS	4136712	GW0104-100121	MS	INITIAL	ZnDis	D	1	2021-10-18 06:04	EPA 200.8	2021-10-21 02:03	EPA 200.8	3.4	0.1	3.3	0.002	0.005	mg/L			70	130	
PACE_MPLS	10582497	776539	4136708BLANK_10582497	4136708		MB	INITIAL	ZnDis	D	1	2021-10-18 06:04	EPA 200.8	2021-10-21 12:40	EPA 200.8			0.002	0.002	0.005	mg/L					
PACE_MPLS	10582497	776540	4136714BLANK_10582497	4136714		MB	INITIAL	ZnDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-20 10:37	EPA 200.8			0.002	0.002	0.005	mg/L					
PACE_MPLS	10582497	776540	4136715LCS_10582497	4136715		LCS	INITIAL	ZnDis	D	1	2021-10-18 06:36	EPA 200.8	2021-10-20 10:41	EPA 200.8		0.1	0.11	0.002	0.005	mg/L	109		85	115	
PACE_MPLS	10583409	777579	4142099BLANK_10583409	4142099		MB	INITIAL	AsDis	D	1	2021-10-20 11:48	EPA 200.8	2021-10-27 05:48	EPA 200.8			0.000083	0.000083	0.0005	mg/L					
PACE_MPLS	10583409	777579	4142100LCS_10583409	4142100		LCS	INITIAL	AsDis	D	1	2021-10-20 11:48	EPA 200.8	2021-10-27 05:52	EPA 200.8		0.1	0.1	0.000083	0.0005	mg/L	102		85	115	
PACE_MPLS	10583409	777579	GW0114-100521MS	4142103	GW0114-100521	MS	INITIAL	AsDis	D	1	2021-10-20 11:48	EPA 200.8	2021-10-27 06:48	EPA 200.8	0.0004	0.1	0.1	0.000083	0.0005	mg/L	102		70	130	
PACE_MPLS	10583409	777579	GW0114-100521MSD	4142104	GW0114-100521	MSD	INITIAL	AsDis	D	1	2021-10-20 11:48	EPA 200.8	2021-10-27 06:52	EPA 200.8	0.0004	0.1	0.1	0.000083	0.0005	mg/L	102		70	130	20
PACE_MPLS	10583409	777579	GW0114-100521MSD	4142104	GW0114-100521	MSD	INITIAL	CdDis	D	1	2021-10-20 11:48	EPA 200.8	2021-10-27 06:52	EPA 200.8	0.11	0.1	0.21	0.000016	0.00008	mg/L	103	1	70	130	20
PACE_MPLS	10583409	777579	GW0114-100521MS	4142103	GW0114-100521	MS	INITIAL	CdDis	D	1	2021-10-20 11:48	EPA 200.8	2021-10-27 06:48	EPA 200.8	0.11	0.1	0.21	0.000016	0.00008	mg/L	100		70	130	
PACE_MPLS	10583409	777579	4142100LCS_10583409	4142100		LCS	INITIAL	CdDis	D	1	2021-10-20 11:48	EPA 200.8	2021-10-27 05:52	EPA 200.8		0.1	0.1	0.000016	0.00008	mg/L	101		85	115	
PACE_MPLS	10583409	777579	4142099BLANK_10583409	4142099		MB	INITIAL	CdDis	D	1	2021-10-20 11:48	EPA 200.8	2021-10-27 05:48	EPA 200.8			0.000016	0.000016	0.00008	mg/L					
PACE_MPLS	10583409	777579	4142099BLANK_10583409	4142099		MB	INITIAL	CuDis	D	1	2021-10-20 11:48	EPA 200.8	2021-10-27 05:48	EPA 200.8			0.0005	0.0005	0.001	mg/L					
PACE_MPLS	10583409	777579	4142100LCS_10583409	4142100		LCS	INITIAL	CuDis	D	1	2021-10-20 11:48	EPA 200.8	2021-10-27 05:52	EPA 200.8		0.1	0.1	0.0005	0.001	mg/L	105		85	115	
PACE_MPLS	10583409	777579	GW0114-100521MS	4142103	GW0114-100521	MS	INITIAL	CuDis	D	1	2021-10-20 11:48	EPA 200.8	2021-10-27 06:48	EPA 200.8	2.2	0.1	1.9	0.0005	0.001	mg/L			70	130	
PACE_MPLS	10583409	777579	GW0114-100521MSD	4142104	GW0114-100521	MSD	INITIAL	CuDis	D	1	2021-10-20 11:48	EPA 200.8	2021-10-27 06:52	EPA 200.8	2.2	0.1	2	0.0005	0.001	mg/L		4	70	130	20
PACE_MPLS	10583409	777584	GW0114-100521MSD	4142146	GW0114-100521	MSD	INITIAL	HgDis	D	1	2021-10-20 12:27	EPA 245.1	2021-10-21 03:56	EPA 245.1		0.005	0.0051	0.000045	0.0002	mg/L	101	1	70	130	20
PACE_MPLS	10583409	777584	4142141BLANK_10583409	4142141		MB	INITIAL	HgDis	D	1	2021-10-20 12:27	EPA 245.1	2021-10-21 03:33	EPA 245.1			0.000045	0.000045	0.0002	mg/L					
PACE_MPLS	10583409	777584	4142142LCS_10583409	4142142		LCS	INITIAL	HgDis	D	1	2021-10-20 12:27	EPA 245.1	2021-10-21 03:34	EPA 245.1		0.005	0.0051	0.000045	0.0002	mg/L	101		85	115	
PACE_MPLS	10583409	777584	GW0114-100521MS	4142145	GW0114-100521	MS	INITIAL	HgDis	D	1	2021-10-20 12:27	EPA 245.1	2021-10-21 03:55	EPA 245.1		0.005	0.0051	0.000045	0.0002	mg/L	102		70	130	

Table B5d. BPSOU 2021 Groundwater Data Quality Assessment - Laboratory Quality Assessment

Lab	SDG	Batch	QC Sample ID	Lab Sample ID	Parent Sample ID	QC Sample Type	Test Type	Param	Fraction	DF	Prep Date	Prep Method	Analysis Date	Analysis Method	Parent Value	Spike Value	QC Sample Value	MDL	RL	Unit	%R	RPD %	Lab Lower %R Limit	Lab Upper %R Limit	Lab %RPD Limit
PACE_MPLS	10583409	777579	GW0114-100521MSD	4142104	GW0114-100521	MSD	INITIAL	PbDis	D	1	2021-10-20 11:48	EPA 200.8	2021-10-27 06:52	EPA 200.8	0.00064	0.1	0.09	0.000028	0.0001	mg/L	89	5	70	130	20
PACE_MPLS	10583409	777579	GW0114-100521MS	4142103	GW0114-100521	MS	INITIAL	PbDis	D	1	2021-10-20 11:48	EPA 200.8	2021-10-27 06:48	EPA 200.8	0.00064	0.1	0.094	0.000028	0.0001	mg/L	94		70	130	
PACE_MPLS	10583409	777579	4142100LCS_10583409	4142100		LCS	INITIAL	PbDis	D	1	2021-10-20 11:48	EPA 200.8	2021-10-27 05:52	EPA 200.8		0.1	0.1	0.000028	0.0001	mg/L	100		85	115	
PACE_MPLS	10583409	777579	4142099BLANK_10583409	4142099		MB	INITIAL	PbDis	D	1	2021-10-20 11:48	EPA 200.8	2021-10-27 05:48	EPA 200.8			0.000028	0.000028	0.0001	mg/L					
PACE_MPLS	10583409	777579	4142100LCS_10583409	4142100		LCS	INITIAL	ZnDis	D	1	2021-10-20 11:48	EPA 200.8	2021-10-27 05:52	EPA 200.8		0.1	0.1	0.002	0.005	mg/L	102		85	115	
PACE_MPLS	10583409	777579	4142099BLANK_10583409	4142099		MB	INITIAL	ZnDis	D	1	2021-10-20 11:48	EPA 200.8	2021-10-27 05:48	EPA 200.8			0.002	0.002	0.005	mg/L					
PACE_MPLS	10583409	777579	GW0114-100521MS	4142103	GW0114-100521	MS	INITIAL	ZnDis	D	1	2021-10-20 11:48	EPA 200.8	2021-10-27 06:48	EPA 200.8	28.5	0.1	25.5	0.002	0.005	mg/L			70	130	
PACE_MPLS	10583409	777579	GW0114-100521MSD	4142104	GW0114-100521	MSD	INITIAL	ZnDis	D	1	2021-10-20 11:48	EPA 200.8	2021-10-27 06:52	EPA 200.8	28.5	0.1	26.5	0.002	0.005	mg/L		4	70	130	20

Attachment A: Analytical and Field Data Validation Checklists

Data Validation Summary for SDG 10558077

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)

Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, June 4, 2021)

Site:	Butte Priority Soils Operable Unit	**Project:**	BPSOU GW Monitoring - 0231348
Laboratory:	Pace Analytical Services (Minneapolis, MN)	**Case Number:**	10558077
Matrix:	Aqueous	**Analysis:**	Dissolved Mercury, Dissolved As, Cd, Cu, Pb, Zn
Sample Date(s):	4/22/2021, 4/23/2021, 4/26/2021-4/28/2021	**Analysis Date(s):**	5/5/2021, 5/13/2021, 5/14/2021, 5/17/2021, 5/18/2021
Data Validator:	Michele Bay	**Validation Date:**	

Sample Delivery Group

Analyte	Matrix	Method	Collection Date	Analysis Date
Dissolved Mercury	Aqueous	EPA 245.1	4/22/2021, 4/23/2021, 4/26/2021-4/28/2021	5/5/2021, 5/13/2021, 5/17/2021
Dissolved As, Cd, Cu, Pb, Zn	Aqueous	EPA 200.8	4/22/2021, 4/23/2021, 4/26/2021-4/28/2021	5/14/2021, 5/17/2021, 5/18/2021

Were Level A field documentation and QA/QC practices met for this data set? Y_X_ N___

Were Level B field documentation and QA/QC practices met for this data set? Y_X_ N___

Summary

	Data Points	Natural Data Points	Enforcement Quality (E)	Screening Level (S)	Unusable (R)
Total	240	216	201	15	0
Percentage	100%	90%	93%	7%	0%

Analyses associated with this sample set resulted in 216 natural sample data points. Of these, 201 (93%) had no quality control deficiencies and are defined as enforcement quality while, 15 (7%) were qualified for field blank detections and assigned screening quality. All anticipated data was collected, thus completeness for this data set is 100%.

LABORATORY DATA VALIDATION CHECKLIST FOR MERCURY

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)

Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, June 4, 2021)

Site:	Butte Priority Soils Operable Unit	**Project:**	BPSOU GW Monitoring - 0231348
Laboratory:	Pace Analytical Services (Minneapolis, MN)	**Case Number:**	10558077
Matrix:	Aqueous	**Analysis:**	Dissolved Mercury
Sample Date(s):	4/22/2021, 4/23/2021, 4/26/2021-4/28/2021	**Analysis Date(s):**	5/5/2021, 5/13/2021, 5/17/2021
Data Validator:	Michele Bay	**Validation Date:**	6/14/2021

Sample Delivery Group

Field Sample ID	Lab Sample ID	Lab QC Batch	Sample Type	Associated Fld QC	Abbreviated Field ID
GW0001-042221	10558077001	739219	FG	GW0018-042821	GW0001
GW0002-042221	10558077002	739219	FG	GW0018-042821	GW0002
GW0003-042221	10558077003	739219	FG	GW0018-042821	GW0003
GW0004-042221	10558077004	739219	FG	GW0018-042821	GW0004
GW0005-042321	10558077005	739219	FG	GW0018-042821	GW0005
GW0006-042321	10558077006	739219	FG	GW0018-042821	GW0006
GW0007-042321	10558077007	739219	FG	GW0018-042821	GW0007
GW0008-042321	10558077008	739219	FG	GW0018-042821	GW0008
GW0009-042621	10558077009	739219	FG	GW0018-042821	GW0009
GW0010-042721	10558077010	739219	FG	GW0018-042821	GW0010
GW0011-042721	10558077011	739219	FG	GW0018-042821	GW0011
GW0012-042721	10558077012	739219	FG	GW0018-042821	GW0012
GW0013-042721	10558077013	739219	FG	GW0018-042821	GW0013
GW0014-042721	10558077014	739219	FG	GW0018-042821	GW0014
GW0015-042721	10558077015	741977	FG	GW0018-042821	GW0015
GW0016-042821	10558077016	741975	FG-N	GW0018-042821	GW0016
GW0017-042821	10558077017	741975	FG-D	GW0018-042821	GW0017
GW0018-042821	10558077018	741975	FB	GW0018-042821	GW0018
GW0019-042721	10558077019	741975	FG	GW0018-042821	GW0019
GW0020-042721	10558077020	741975	FG	GW0018-042821	GW0020

LABORATORY DATA VALIDATION CHECKLIST FOR MERCURY

GW0021-042221	10558077021	741546	FG	GW0034-042721	GW0021
GW0022-042221	10558077022	741546	FG	GW0034-042721	GW0022
GW0023-042221	10558077023	741546	FG	GW0034-042721	GW0023
GW0024-042221	10558077024	741546	FG	GW0034-042721	GW0024
GW0025-042221	10558077025	741546	FG	GW0034-042721	GW0025
GW0026-042721	10558077026	741546	FG	GW0034-042721	GW0026
GW0027-042221	10558077027	741546	FG	GW0034-042721	GW0027
GW0028-042321	10558077028	741546	FG	GW0034-042721	GW0028
GW0029-042321	10558077029	741546	FG	GW0034-042721	GW0029
GW0030-042321	10558077030	741546	FG	GW0034-042721	GW0030
GW0031-042321	10558077031	741975	FG	GW0034-042721	GW0031
GW0032-042721	10558077032	741977	FG-N	GW0034-042721	GW0032
GW0033-042721	10558077033	741977	FG-D	GW0034-042721	GW0033
GW0034-042721	10558077034	741977	FB	GW0034-042721	GW0034
GW0035-042621	10558077035	741977	FG	GW0034-042721	GW0035
GW0036-042621	10558077036	741977	FG	GW0034-042721	GW0036
GW0037-042621	10558077037	741977	FG	GW0034-042721	GW0037
GW0038-042621	10558077038	741977	FG	GW0034-042721	GW0038
GW0039-042721	10558077039	741977	FG	GW0034-042721	GW0039
GW0040-042721	10558077040	741977	FG	GW0034-042721	GW0040

1. Holding Times

Analyte	Matrix	Method	Collection Date	Analysis Date	Affected data flagged
Dissolved Mercury	Aqueous	EPA 245.1	4/22/2021, 4/23/2021, 4/26/2021-4/28/2021	5/5/2021, 5/13/2021, 5/17/2021	No

Describe corrective actions taken because of holding time problems.

2. Blanks

Were Method Blanks (MB) analyzed at the frequency of 1/20 samples? Y__X__ N_____

Were MB results non-detects? Y__X__ N_____

Were any data flagged because of blank problems? Y_____ N__X__

Describe corrective actions taken because of blank problems.

LABORATORY DATA VALIDATION CHECKLIST FOR MERCURY

3. Laboratory Control Sample (LCS)

Was Laboratory Control Sample (LCS) analyzed at the frequency of 1/20 samples?	Y__X__ N_____
Was LCS within control window of 85-115% recovery?	Y__X__ N_____
Were any data flagged because of LCS problems?	Y_____ N__X__
Describe corrective actions taken because of LCS problems.	

4. Laboratory Fortified Matrix Spike/Matrix Spike Duplicate Analaysis (MS/MSD)

Were laboratory Fortified Matrix Spike (MS) samples analyzed at the frequency of 1 per batch with an additional MS analyzed for batches of 11 or more samples ?	Y__X__ N_____
Was MS/MSD within control window of 70-130% recovery for samples in which the parent sample concentration was ≤ 4X the spike concentration?	Y__X__ N_____
Were laboratory Fortified Matrix Spike Duplicate Samples (MSD) analyzed at the frequency of 1/20 samples ?	Y__X__ N_____
For MS & MSD results > 5 times the RL, were results of the MSD ≤ 20% relative percent difference (RPD)? For MS & MSD results < 5 times the RL, were results of the MSD ≤ the RL?	Y__X__ N_____
Were any data flagged because of MS/MSD recovery problems?	Y_____ N__X__
Were any data flagged because of MS/MSD RPD problems?	Y_____ N__X__
Describe corrective actions taken because of MS/MSD recovery and/or RPD problems.	

Are there any additional analytical limitations that users should be aware of?	Y_____ N__X__

LABORATORY DATA VALIDATION CHECKLIST FOR ICPMS

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)

Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, June 4, 2021)

Site:	Butte Priority Soils Operable Unit	**Project:**	BPSOU GW Monitoring - 0231348
Laboratory:	Pace Analytical Services (Minneapolis, MN)	**Case Number:**	10558077
Matrix:	Aqueous	**Analysis:**	Dissolved As, Cd, Cu, Pb, Zn
Sample Date(s):	4/22/2021, 4/23/2021, 4/26/2021-4/28/2021	**Analysis Date(s):**	5/14/2021, 5/17/2021, 5/18/2021
Data Validator:	Michele Bay	**Validation Date:**	6/14/2021

Sample Delivery Group

Field Sample ID	Lab Sample ID	Lab QC Batch	Sample Type	Associated Fld QC	Abbreviated Field ID
GW0001-042221	10558077001	741139	FG	GW0018-042821	GW0001
GW0002-042221	10558077002	741139	FG	GW0018-042821	GW0002
GW0003-042221	10558077003	741139	FG	GW0018-042821	GW0003
GW0004-042221	10558077004	741139	FG	GW0018-042821	GW0004
GW0005-042321	10558077005	741139	FG	GW0018-042821	GW0005
GW0006-042321	10558077006	741139	FG	GW0018-042821	GW0006
GW0007-042321	10558077007	741139	FG	GW0018-042821	GW0007
GW0008-042321	10558077008	741139	FG	GW0018-042821	GW0008
GW0009-042621	10558077009	741139	FG	GW0018-042821	GW0009
GW0010-042721	10558077010	741139	FG	GW0018-042821	GW0010
GW0011-042721	10558077011	741139	FG	GW0018-042821	GW0011
GW0012-042721	10558077012	741139	FG	GW0018-042821	GW0012
GW0013-042721	10558077013	741139	FG	GW0018-042821	GW0013
GW0014-042721	10558077014	741139	FG	GW0018-042821	GW0014
GW0015-042721	10558077015	741139	FG	GW0018-042821	GW0015
GW0016-042821	10558077016	741139	FG-N	GW0018-042821	GW0016
GW0017-042821	10558077017	741139	FG-D	GW0018-042821	GW0017
GW0018-042821	10558077018	741139	FB	GW0018-042821	GW0018
GW0019-042721	10558077019	741139	FG	GW0018-042821	GW0019
GW0020-042721	10558077020	741139	FG	GW0018-042821	GW0020

LABORATORY DATA VALIDATION CHECKLIST FOR ICPMS

GW0021-042221	10558077021	741140	FG	GW0034-042721	GW0021
GW0022-042221	10558077022	741140	FG	GW0034-042721	GW0022
GW0023-042221	10558077023	741140	FG	GW0034-042721	GW0023
GW0024-042221	10558077024	741140	FG	GW0034-042721	GW0024
GW0025-042221	10558077025	741140	FG	GW0034-042721	GW0025
GW0026-042721	10558077026	741140	FG	GW0034-042721	GW0026
GW0027-042221	10558077027	741140	FG	GW0034-042721	GW0027
GW0028-042321	10558077028	741140	FG	GW0034-042721	GW0028
GW0029-042321	10558077029	741140	FG	GW0034-042721	GW0029
GW0030-042321	10558077030	741140	FG	GW0034-042721	GW0030
GW0031-042321	10558077031	741140	FG	GW0034-042721	GW0031
GW0032-042721	10558077032	741140	FG-N	GW0034-042721	GW0032
GW0033-042721	10558077033	741140	FG-D	GW0034-042721	GW0033
GW0034-042721	10558077034	741140	FB	GW0034-042721	GW0034
GW0035-042621	10558077035	741140	FG	GW0034-042721	GW0035
GW0036-042621	10558077036	741140	FG	GW0034-042721	GW0036
GW0037-042621	10558077037	741140	FG	GW0034-042721	GW0037
GW0038-042621	10558077038	741140	FG	GW0034-042721	GW0038
GW0039-042721	10558077039	741140	FG	GW0034-042721	GW0039
GW0040-042721	10558077040	741140	FG	GW0034-042721	GW0040

1. Holding Times

Analyte	Matrix	Method	Collection Date	Analysis Date	Affected data flagged
Dissolved As, Cd, Cu, Pb, Zn	Aqueous	EPA 200.8	4/22/2021, 4/23/2021, 4/26/2021-4/28/2021	5/14/2021, 5/17/2021, 5/18/2021	No

Describe corrective actions taken because of holding time problems.

LABORATORY DATA VALIDATION CHECKLIST FOR ICPMS

2. Blanks

Were method blanks analyzed at the frequency of 1/20 samples?	Y__X__ N_____
Were MB results non-detects?	Y__X__ N_____
Were any data flagged because of blank problems?	Y_____ N__X__

Describe corrective actions taken because of blank problems.

3. Laboratory Control Sample (LCS)

Was Laboratory Control Sample (LCS) analyzed at the frequency of 1/20 samples?	Y__X__ N_____
Was LCS within control window of 85-115% recovery?	Y__X__ N_____
Were any data flagged because of LCS problems?	Y_____ N__X__

Describe corrective actions taken because of LCS problems.

4. Matrix Spike/Matrix Spike Duplicate Sample Results

Was Matrix Spike Sample (MS) analyzed at the frequency of 1/10 samples?	Y__X__ N_____
Was MS result within control window of 70-130% for samples in which the parent sample concentration was ≤ 4X the spike concentration?	Y__X__ N_____
Was the Matrix Spike Duplicate Sample (MSD) analyzed at the frequency of 1/20 samples?	Y__X__ N_____
For MS & MSD results > 5 times the RL, were results of the MSD ≤ 20% relative percent difference (RPD)? For MS & MSD results < 5 times the RL, were results of the MSD ≤ the RL?	Y__X__ N_____
Were any data flagged because of MS/MSD recovery problems?	Y_____ N__X__
Were any data flagged because of MS/MSD RPD problems?	Y_____ N__X__

Describe corrective actions taken because of MS problems.

***QC Batch 741140**, MS 3952322 MSD 3952323 ZnDis recoveries <70%. MS 3952324 ZnDis recovery >130%. In all cases, no assoicated ZnDis sample results were qualified because the parent sample concentrations were >4X the spike concentrations.*

Are there any additional analytical limitations that users should be aware of?	Y_____ N__X__

FIELD QUALITY CONTROL SAMPLE CHECKLIST

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)

Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, June 4, 2021)

Site:	Butte Priority Soils Operable Unit	**Project:**	BPSOU GW Monitoring - 0231348
Laboratory:	Pace Analytical Services (Minneapolis,	**Case Number:**	10558077
Matrix:	Aqueous	**Analysis:**	Dissolved Mercury, Dissolved As, Cd, Cu, Pb, Zn
Sample Date(s):	4/22/2021, 4/23/2021, 4/26/2021-4/28/2021	**Analysis Date(s):**	5/5/2021, 5/13/2021, 5/14/2021, 5/17/2021, 5/18/2021
Data Validator:	Michele Bay	**Validation Date:**	6/14/2021

Sample Delivery Group

Field Sample ID	Lab Sample ID	Sample Type	Associated Fld QC	Abbreviated Field ID
GW0001-042221	10558077001	FG	GW0018-042821	GW0001
GW0002-042221	10558077002	FG	GW0018-042821	GW0002
GW0003-042221	10558077003	FG	GW0018-042821	GW0003
GW0004-042221	10558077004	FG	GW0018-042821	GW0004
GW0005-042321	10558077005	FG	GW0018-042821	GW0005
GW0006-042321	10558077006	FG	GW0018-042821	GW0006
GW0007-042321	10558077007	FG	GW0018-042821	GW0007
GW0008-042321	10558077008	FG	GW0018-042821	GW0008
GW0009-042621	10558077009	FG	GW0018-042821	GW0009
GW0010-042721	10558077010	FG	GW0018-042821	GW0010
GW0011-042721	10558077011	FG	GW0018-042821	GW0011
GW0012-042721	10558077012	FG	GW0018-042821	GW0012
GW0013-042721	10558077013	FG	GW0018-042821	GW0013
GW0014-042721	10558077014	FG	GW0018-042821	GW0014
GW0015-042721	10558077015	FG	GW0018-042821	GW0015

FIELD QUALITY CONTROL SAMPLE CHECKLIST

GW0016-042821	10558077016	FG-N	GW0018-042821	GW0016
GW0017-042821	10558077017	FG-D	GW0018-042821	GW0017
GW0018-042821	10558077018	FB	GW0018-042821	GW0018
GW0019-042721	10558077019	FG	GW0018-042821	GW0019
GW0020-042721	10558077020	FG	GW0018-042821	GW0020
GW0021-042221	10558077021	FG	GW0034-042721	GW0021
GW0022-042221	10558077022	FG	GW0034-042721	GW0022
GW0023-042221	10558077023	FG	GW0034-042721	GW0023
GW0024-042221	10558077024	FG	GW0034-042721	GW0024
GW0025-042221	10558077025	FG	GW0034-042721	GW0025
GW0026-042721	10558077026	FG	GW0034-042721	GW0026
GW0027-042221	10558077027	FG	GW0034-042721	GW0027
GW0028-042321	10558077028	FG	GW0034-042721	GW0028
GW0029-042321	10558077029	FG	GW0034-042721	GW0029
GW0030-042321	10558077030	FG	GW0034-042721	GW0030
GW0031-042321	10558077031	FG	GW0034-042721	GW0031
GW0032-042721	10558077032	FG-N	GW0034-042721	GW0032
GW0033-042721	10558077033	FG-D	GW0034-042721	GW0033
GW0034-042721	10558077034	FB	GW0034-042721	GW0034
GW0035-042621	10558077035	FG	GW0034-042721	GW0035
GW0036-042621	10558077036	FG	GW0034-042721	GW0036
GW0037-042621	10558077037	FG	GW0034-042721	GW0037
GW0038-042621	10558077038	FG	GW0034-042721	GW0038
GW0039-042721	10558077039	FG	GW0034-042721	GW0039
GW0040-042721	10558077040	FG	GW0034-042721	GW0040

FIELD QUALITY CONTROL SAMPLE CHECKLIST

Analyte	Matrix	Method	Collection Date	Analysis Date
Dissolved Mercury	Aqueous	EPA 245.1	4/22/2021, 4/23/2021, 4/26/2021-4/28/2021	5/5/2021, 5/13/2021, 5/17/2021
Dissolved As, Cd, Cu, Pb, Zn	Aqueous	EPA 200.8	4/22/2021, 4/23/2021, 4/26/2021-4/28/2021	5/14/2021, 5/17/2021, 5/18/2021

Field QC Samples

Field Blanks FB)

Were FBs sumbitted as specified in the BPSOU GW QAPP (1 in 20)? Y_X_ N___

Were results for FBs within the target control limits in the BPSOU GW QAPP (< MDL)? Y___ N_X_

Were any data qualified because of FB problems? Y_X_ N___

CuDis was detected in FB GW0018 at a concentration >1.5X MDL. Associated CuDis sample result GW0010 was ≥MDL, but ≤RL and was qualified UJ. Associated CuDis sample results GW0001, GW0004, GW0005, GW0007, GW0008, GW0012, GW0013, GW0019, and GW0020 were >RL, but ≤10X FB value and were qualified J+. Associated CuDis sample results GW0002 and GW0003 were non-detect, and sample results GW0006, GW0009, GW0011, GW0014-GW0017 were >10X the FB value thus, were not qualified.

ZnDis was detected in FB GW0018 at a concentration >1.5X MDL. Associated ZnDis results in GW0001 and GW0013 were >MDL, but ≤ RL and qualified UJ. Associated ZnDis sample results GW0002, GW0003 , and GW0020 were >RL, but ≤ 10X the FB value thus, were qualified J+. Sample results GW0004 - GW0012, GW0014 - GW0017, and GW0019 were >10X the FB value and were not qualified.

Field Replicates

Were field duplicates (FD) submitted as specified in the BPSOU GW QAPP (1 in 20)? Y_X_ N___

Were results for FDs within the target control limits in the BPSOU GW QAPP (< 20% RPD or Δ ≤ RL as applicable)? Y_X_ N___

Were any data qualified because of FD results? Y___ N_X_

Additional Comments

Data Validation Summary for SDG 10559096

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)

Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, June 4, 2021)

Site:	Butte Priority Soils Operable Unit	**Project:**	BPSOU GW Monitoring - 0231348
Laboratory:	Pace Analytical Services (Minneapolis, MN)	**Case Number:**	10559096
Matrix:	Aqueous	**Analysis:**	Dissolved: Hg, As, Cd, Cu, Pb, Zn
Sample Date(s):	4/28/2021 - 5/3/2021	**Analysis Date(s):**	5/19/2021-5/21/2021, 5/24/2021, 5/25/2021
Data Validator:	Michele Bay	**Validation Date:**	7/20/2021

Sample Delivery Group

Analyte	Matrix	Method	Collection Date	Analysis Date
Mercury (Dissolved)	Aqueous	EPA 245.1	4/28/2021 - 5/3/2021	5/24/2021 - 5/25/2021
Metals (Dissolved)	Aqueous	EPA 200.8	4/28/2021 - 5/3/2021	5/19/2021 - 5/21/2021

Were Level A field documentation and QA/QC practices met for this data set? Y_X_ N___

Were Level B field documentation and QA/QC practices met for this data set? Y_X_ N___

Summary

	Data Points	Natural Data Points	Enforcement Quality (E)	Screening Level (S)	Unusable (R)
Total	318	282	244	38	0
Percentage	100%	89%	87%	13%	0%

Analyses associated with this sample set resulted with 282 natural data points. Of these, 244 (87%) had no quality control deficiencies and are defined as enforcement quality while, 38 (13%) had quality control deficiencies and are defined as screening quality. Of the 38 qualified data points; five were coded "FB" due to field accuracy criteria not being met, and 33 were coded "FD" due to field precision criteria not being met. All anticipated data was collected thus, completeness for this data set is 100%.

LABORATORY DATA VALIDATION CHECKLIST FOR MERCURY

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)

Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, June 4, 2021)

Site:	Butte Priority Soils Operable Unit	**Project:**	BPSOU GW Monitoring - 0231348
Laboratory:	Pace Analytical Services (Minneapolis, MN)	**Case Number:**	10559096
Matrix:	Aqueous	**Analysis:**	Mercury (Dissolved)
Sample Date(s):	4/28/2021 - 5/3/2021	**Analysis Date(s):**	5/24/2021 - 5/25/2021
Data Validator:	Michele Bay	**Validation Date:**	7/20/2021

Sample Delivery Group

Field Sample ID	Lab Sample ID	Lab QC Batch	Sample Type	Associated Fld QC	Abbreviated Field ID
10559096001	GW0041-042821	744269	FG	GW0060-050321	GW0041
10559096002	GW0042-042821	744269	FG	GW0060-050321	GW0042
10559096003	GW0043-042821	744269	FG	GW0060-050321	GW0043
10559096004	GW0044-042821	744269	FG	GW0060-050321	GW0044
10559096005	GW0045-042821	744269	FG	GW0060-050321	GW0045
10559096006	GW0046-042821	744269	FG	GW0060-050321	GW0046
10559096007	GW0047-042821	744269	FG	GW0060-050321	GW0047
10559096008	GW0048-042921	744269	FG	GW0060-050321	GW0048
10559096009	GW0049-042921	744269	FG	GW0060-050321	GW0049
10559096010	GW0050-042921	744269	FG	GW0060-050321	GW0050
10559096011	GW0051-042921	744269	FG	GW0060-050321	GW0051
10559096012	GW0052-042921	744269	FG	GW0060-050321	GW0052
10559096013	GW0053-042921	744269	FG	GW0060-050321	GW0053
10559096014	GW0054-042921	744269	FG	GW0060-050321	GW0054
10559096015	GW0055-042921	744269	FG	GW0060-050321	GW0055
10559096016	GW0056-043021	744269	FG	GW0060-050321	GW0056
10559096017	GW0057-043021	744269	FG	GW0060-050321	GW0057
10559096018	GW0058-050321	744269	FG-N	GW0060-050321	GW0058
10559096019	GW0059-050321	744269	FG-D	GW0060-050321	GW0059
10559096020	GW0060-050321	744269	FB	GW0060-050321	GW0060

LABORATORY DATA VALIDATION CHECKLIST FOR MERCURY

10559096021	GW0061-042821	744270	FG	GW0076-043021	GW0061
10559096022	GW0062-042821	744270	FG	GW0076-043021	GW0062
10559096023	GW0063-042821	744270	FG	GW0076-043021	GW0063
10559096024	GW0064-042821	744270	FG	GW0076-043021	GW0064
10559096025	GW0065-042821	744270	FG	GW0076-043021	GW0065
10559096026	GW0066-042821	744270	FG	GW0076-043021	GW0066
10559096027	GW0067-042921	744270	FG	GW0076-043021	GW0067
10559096028	GW0068-042921	744270	FG	GW0076-043021	GW0068
10559096029	GW0069-042921	744270	FG	GW0076-043021	GW0069
10559096030	GW0070-042921	744270	FG	GW0076-043021	GW0070
10559096031	GW0071-042921	744270	FG	GW0076-043021	GW0071
10559096032	GW0072-042921	744270	FG	GW0076-043021	GW0072
10559096033	GW0073-042921	744270	FG	GW0076-043021	GW0073
10559096034	GW0074-043021	744270	FG-N	GW0076-043021	GW0074
10559096035	GW0075-043021	744270	FG-D	GW0076-043021	GW0075
10559096036	GW0076-043021	744270	FB	GW0076-043021	GW0076
10559096037	GW0077-043021	744270	FG	GW0092-050421	GW0077
10559096038	GW0078-043021	744270	FG	GW0092-050421	GW0078
10559096039	GW0079-050321	744270	FG	GW0092-050421	GW0079
10559096040	GW0080-050321	744270	FG	GW0092-050421	GW0080
10559096041	GW0081-050321	744271	FG	GW0092-050421	GW0081
10559096042	GW0082-050321	744271	FG	GW0092-050421	GW0082
10559096043	GW0083-050321	744271	FG	GW0092-050421	GW0083
10559096044	GW0084-050321	744271	FG	GW0092-050421	GW0084
10559096045	GW0085-050421	744271	FG	GW0092-050421	GW0085
10559096046	GW0086-050421	744271	FG	GW0092-050421	GW0086
10559096047	GW0087-050421	744271	FG	GW0092-050421	GW0087
10559096048	GW0089-050421	744271	FG	GW0092-050421	GW0089
10559096049	GW0090-050421	744271	FG-N	GW0092-050421	GW0090
10559096050	GW0091-050421	744271	FG-D	GW0092-050421	GW0091
10559096051	GW0092-050421	744271	FB	GW0092-050421	GW0092
10559096052	GW0093-050421	744271	FG	GW0092-050421	GW0093
10559096053	GW0094-050321	744271	FG	GW0092-050421	GW0094

LABORATORY DATA VALIDATION CHECKLIST FOR MERCURY

1. Holding Times

Analyte	Matrix	Method	Collection Date	Analysis Date	Affected data flagged
Mercury (Dissolved)	Aqueous	EPA 245.1	4/28/2021 - 5/3/2021	5/24/2021 - 5/25/2021	No

Describe corrective actions taken because of holding time problems.

2. Blanks

Were Method Blanks (MB) analyzed at the frequency of 1/20 samples? Y__X__ N_____

Were MB results non-detects? Y__X__ N_____

Were any data flagged because of blank problems? Y_____ N__X__

Describe corrective actions taken because of blank problems.

3. Laboratory Control Sample (LCS)

Was Laboratory Control Sample (LCS) analyzed at the frequency of 1/20 samples? Y__X__ N_____

Was LCS within control window of 85-115% recovery? Y__X__ N_____

Were any data flagged because of LCS problems? Y_____ N__X__

Describe corrective actions taken because of LCS problems.

4. Laboratory Fortified Matrix Spike/Matrix Spike Duplicate Analaysis (MS/MSD)

Were laboratory Fortified Matrix Spike (MS) samples analyzed at the frequency of 1 per batch with an additional MS analyzed for batches of 11 or more samples ? Y__X__ N_____

Was MS/MSD within control window of 70-130% recovery for samples in which the parent sample concentration was ≤ 4X the spike concentration? Y__X__ N_____

Were laboratory Fortified Matrix Spike Duplicate Samples (MSD) analyzed at the frequency of 1/20 samples ? Y__X__ N_____

For MS & MSD results > 5 times the RL, were results of the MSD ≤ 20% relative percent difference (RPD)? For MS & MSD results < 5 times the RL, were results of the MSD ≤ the RL? Y__X__ N_____

Were any data flagged because of MS/MSD recovery problems? Y_____ N__X__

Were any data flagged because of MS/MSD RPD problems? Y_____ N__X__

Describe corrective actions taken because of MS/MSD recovery and/or RPD problems.

Are there any additional analytical limitations that users should be aware of? Y_____ N__X__

LABORATORY DATA VALIDATION CHECKLIST FOR ICPMS

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)					
Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, June 4, 2021)					
Site:	Butte Priority Soils Operable Unit		**Project:**	BPSOU GW Monitoring - 0231348	
Laboratory:	Pace Analytical Services (Minneapolis, MN)		**Case Number:**	10559096	
Matrix:	Aqueous		**Analysis:**	Metals (Dissolved)	
Sample Date(s):	4/28/2021 - 5/3/2021		**Analysis Date(s):**	5/19/2021 - 5/21/2021	
Data Validator:	Michele Bay		**Validation Date:**	7/20/2021	
Sample Delivery Group					
Field Sample ID	**Lab Sample ID**	**Lab QC Batch**	**Sample Type**	**Associated Fld QC**	**Abbreviated Field ID**
10559096001	GW0041-042821	741844	FG	GW0060-050321	GW0041
10559096002	GW0042-042821	741844	FG	GW0060-050321	GW0042
10559096003	GW0043-042821	741844	FG	GW0060-050321	GW0043
10559096004	GW0044-042821	741844	FG	GW0060-050321	GW0044
10559096005	GW0045-042821	741844	FG	GW0060-050321	GW0045
10559096006	GW0046-042821	741844	FG	GW0060-050321	GW0046
10559096007	GW0047-042821	741844	FG	GW0060-050321	GW0047
10559096008	GW0048-042921	741844	FG	GW0060-050321	GW0048
10559096009	GW0049-042921	741844	FG	GW0060-050321	GW0049
10559096010	GW0050-042921	741844	FG	GW0060-050321	GW0050
10559096011	GW0051-042921	741844	FG	GW0060-050321	GW0051
10559096012	GW0052-042921	741844	FG	GW0060-050321	GW0052
10559096013	GW0053-042921	741844	FG	GW0060-050321	GW0053
10559096014	GW0054-042921	741844	FG	GW0060-050321	GW0054
10559096015	GW0055-042921	741844	FG	GW0060-050321	GW0055
10559096016	GW0056-043021	741844	FG	GW0060-050321	GW0056
10559096017	GW0057-043021	741844	FG	GW0060-050321	GW0057
10559096018	GW0058-050321	741844	FG-N	GW0060-050321	GW0058
10559096019	GW0059-050321	741844	FG-D	GW0060-050321	GW0059
10559096020	GW0060-050321	741844	FB	GW0060-050321	GW0060
10559096021	GW0061-042821	741855	FG	GW0076-043021	GW0061
10559096022	GW0062-042821	741855	FG	GW0076-043021	GW0062
10559096023	GW0063-042821	741855	FG	GW0076-043021	GW0063
10559096024	GW0064-042821	741855	FG	GW0076-043021	GW0064

LABORATORY DATA VALIDATION CHECKLIST FOR ICPMS

10559096025	GW0065-042821	741855	FG	GW0076-043021	GW0065
10559096026	GW0066-042821	741855	FG	GW0076-043021	GW0066
10559096027	GW0067-042921	741855	FG	GW0076-043021	GW0067
10559096028	GW0068-042921	741855	FG	GW0076-043021	GW0068
10559096029	GW0069-042921	741855	FG	GW0076-043021	GW0069
10559096030	GW0070-042921	741855	FG	GW0076-043021	GW0070
10559096031	GW0071-042921	741855	FG	GW0076-043021	GW0071
10559096032	GW0072-042921	741855	FG	GW0076-043021	GW0072
10559096033	GW0073-042921	741855	FG	GW0076-043021	GW0073
10559096034	GW0074-043021	741855	FG-N	GW0076-043021	GW0074
10559096035	GW0075-043021	741855	FG-D	GW0076-043021	GW0075
10559096036	GW0076-043021	741855	FB	GW0076-043021	GW0076
10559096037	GW0077-043021	741855	FG	GW0092-050421	GW0077
10559096038	GW0078-043021	741855	FG	GW0092-050421	GW0078
10559096039	GW0079-050321	741855	FG	GW0092-050421	GW0079
10559096040	GW0080-050321	741855	FG	GW0092-050421	GW0080
10559096041	GW0081-050321	741868	FG	GW0092-050421	GW0081
10559096042	GW0082-050321	741868	FG	GW0092-050421	GW0082
10559096043	GW0083-050321	741868	FG	GW0092-050421	GW0083
10559096044	GW0084-050321	741868	FG	GW0092-050421	GW0084
10559096045	GW0085-050421	741868	FG	GW0092-050421	GW0085
10559096046	GW0086-050421	741868	FG	GW0092-050421	GW0086
10559096047	GW0087-050421	741868	FG	GW0092-050421	GW0087
10559096048	GW0089-050421	741868	FG	GW0092-050421	GW0089
10559096049	GW0090-050421	741868	FG-N	GW0092-050421	GW0090
10559096050	GW0091-050421	741868	FG-D	GW0092-050421	GW0091
10559096051	GW0092-050421	741868	FB	GW0092-050421	GW0092
10559096052	GW0093-050421	741868	FG	GW0092-050421	GW0093
10559096053	GW0094-050321	741868	FG	GW0092-050421	GW0094

LABORATORY DATA VALIDATION CHECKLIST FOR ICPMS

1. Holding Times

Analyte	Matrix	Method	Collection Date	Analysis Date	Affected data flagged
Metals (Dissolved)	Aqueous	EPA 200.8	4/28/2021 - 5/3/2021	5/19/2021 - 5/21/2021	No

Describe corrective actions taken because of holding time problems.

2. Blanks

Were method blanks analyzed at the frequency of 1/20 samples? Y__X__ N_____

Were MB results non-detects? Y__X__ N_____

Were any data flagged because of blank problems? Y_____ N__X__

Describe corrective actions taken because of blank problems.

3. Laboratory Control Sample (LCS)

Was Laboratory Control Sample (LCS) analyzed at the frequency of 1/20 samples? Y__X__ N_____

Was LCS within control window of 85-115% recovery? Y__X__ N_____

Were any data flagged because of LCS problems? Y_____ N__X__

Describe corrective actions taken because of LCS problems.

4. Matrix Spike/Matrix Spike Duplicate Sample Results

Was Matrix Spike Sample (MS) analyzed at the frequency of 1/10 samples? Y__X__ N_____

Was MS result within control window of 70-130% for samples in which the parent sample concentration was ≤ 4X the spike concentration? Y__X__ N_____

Was the Matrix Spike Duplicate Sample (MSD) analyzed at the frequency of 1/20 samples? Y__X__ N_____

For MS & MSD results > 5 times the RL, were results of the MSD ≤ 20% relative percent difference (RPD)? For MS & MSD results < 5 times the RL, were results of the MSD ≤ the RL? Y__X__ N_____

Were any data flagged because of MS/MSD recovery problems? Y_____ N__X__

Were any data flagged because of MS/MSD RPD problems? Y_____ N__X__

Describe corrective actions taken because of MS problems.

QC Batch 741844, *MS 3956082 CuDis and ZnDis recoveries < 70%. No associated CuDis or ZnDis sample results were qualified because the parent sample concentrations were >4X the spike concentrations.*

QC Batch 741868, *MS 3956200 MSD 3956201 CdDis, CuDis, and ZnDis recoveries <70%. MS 3956202 CdDis and CuDis recoveries <70% and ZnDis recovery >130%. No associated CdDis, CuDis, or ZnDis sample results were qualified because the parent sample concentrations were >4X the spike concentrations.*

Are there any additional analytical limitations that users should be aware of? Y_____ N__X__

FIELD QUALITY CONTROL SAMPLE CHECKLIST

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)

Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, June 4, 2021)

Site:	Butte Priority Soils Operable Unit	**Project:**	BPSOU GW Monitoring - 0231348
Laboratory:	Pace Analytical Services (Minneapolis,	**Case Number:**	10559096
Matrix:	Aqueous	**Analysis:**	Dissolved: Hg, As, Cd, Cu, Pb, Zn
Sample Date(s):	4/28/2021 - 5/3/2021	**Analysis Date(s):**	5/19/2021-5/21/2021, 5/24/2021, 5/25/2021
Data Validator:	Michele Bay	**Validation Date:**	7/20/2021

Sample Delivery Group

Field Sample ID	Lab Sample ID	Sample Type	Associated Fld QC	Abbreviated Field ID
GW0041-042821	10559096001	FG	GW0060-050321	GW0041
GW0042-042821	10559096002	FG	GW0060-050321	GW0042
GW0043-042821	10559096003	FG	GW0060-050321	GW0043
GW0044-042821	10559096004	FG	GW0060-050321	GW0044
GW0045-042821	10559096005	FG	GW0060-050321	GW0045
GW0046-042821	10559096006	FG	GW0060-050321	GW0046
GW0047-042821	10559096007	FG	GW0060-050321	GW0047
GW0048-042921	10559096008	FG	GW0060-050321	GW0048
GW0049-042921	10559096009	FG	GW0060-050321	GW0049
GW0050-042921	10559096010	FG	GW0060-050321	GW0050
GW0051-042921	10559096011	FG	GW0060-050321	GW0051
GW0052-042921	10559096012	FG	GW0060-050321	GW0052
GW0053-042921	10559096013	FG	GW0060-050321	GW0053
GW0054-042921	10559096014	FG	GW0060-050321	GW0054
GW0055-042921	10559096015	FG	GW0060-050321	GW0055
GW0056-043021	10559096016	FG	GW0060-050321	GW0056
GW0057-043021	10559096017	FG	GW0060-050321	GW0057

FIELD QUALITY CONTROL SAMPLE CHECKLIST

GW0058-050321	10559096018	FG-N	GW0060-050321	GW0058
GW0059-050321	10559096019	FG-D	GW0060-050321	GW0059
GW0060-050321	10559096020	FB	GW0060-050321	GW0060
GW0061-042821	10559096021	FG	GW0076-043021	GW0061
GW0062-042821	10559096022	FG	GW0076-043021	GW0062
GW0063-042821	10559096023	FG	GW0076-043021	GW0063
GW0064-042821	10559096024	FG	GW0076-043021	GW0064
GW0065-042821	10559096025	FG	GW0076-043021	GW0065
GW0066-042821	10559096026	FG	GW0076-043021	GW0066
GW0067-042921	10559096027	FG	GW0076-043021	GW0067
GW0068-042921	10559096028	FG	GW0076-043021	GW0068
GW0069-042921	10559096029	FG	GW0076-043021	GW0069
GW0070-042921	10559096030	FG	GW0076-043021	GW0070
GW0071-042921	10559096031	FG	GW0076-043021	GW0071
GW0072-042921	10559096032	FG	GW0076-043021	GW0072
GW0073-042921	10559096033	FG	GW0076-043021	GW0073
GW0074-043021	10559096034	FG-N	GW0076-043021	GW0074
GW0075-043021	10559096035	FG-D	GW0076-043021	GW0075
GW0076-043021	10559096036	FB	GW0076-043021	GW0076
GW0077-043021	10559096037	FG	GW0092-050421	GW0077
GW0078-043021	10559096038	FG	GW0092-050421	GW0078
GW0079-050321	10559096039	FG	GW0092-050421	GW0079
GW0080-050321	10559096040	FG	GW0092-050421	GW0080
GW0081-050321	10559096041	FG	GW0092-050421	GW0081
GW0082-050321	10559096042	FG	GW0092-050421	GW0082
GW0083-050321	10559096043	FG	GW0092-050421	GW0083
GW0084-050321	10559096044	FG	GW0092-050421	GW0084
GW0085-050421	10559096045	FG	GW0092-050421	GW0085
GW0086-050421	10559096046	FG	GW0092-050421	GW0086
GW0087-050421	10559096047	FG	GW0092-050421	GW0087
GW0089-050421	10559096048	FG	GW0092-050421	GW0089
GW0090-050421	10559096049	FG-N	GW0092-050421	GW0090

FIELD QUALITY CONTROL SAMPLE CHECKLIST

GW0091-050421	10559096050	FG-D	GW0092-050421	GW0091
GW0092-050421	10559096051	FB	GW0092-050421	GW0092
GW0093-050421	10559096052	FG	GW0092-050421	GW0093
GW0094-050321	10559096053	FG	GW0092-050421	GW0094

Analyte	Matrix	Method	Collection Date	Analysis Date
Mercury (Dissolved)	Aqueous	EPA 245.1	4/28/2021 - 5/3/2021	5/24/2021 - 5/25/2021
Metals (Dissolved)	Aqueous	EPA 200.8	4/28/2021 - 5/3/2021	5/19/2021 - 5/21/2021

Field QC Samples

Field Blanks FB)

Were FBs sumbitted as specified in the BPSOU GW QAPP (1 in 20)? Y_X_ N___

Were results for FBs within the target control limits in the BPSOU GW QAPP (< MDL)? Y___ N_X_

Were any data qualified because of FB problems? Y_X_ N___

CuDis was detected in FB GW0060 at a concentration >1.5X MDL. Associated CuDis sample results GW0043, GW0046, GW0052, and GW0056 were >RL, but <10X the FB value thus, were qualified J+. Associated CuDis sample results GW0041, GW0042, GW0044, GW0045, GW0047 - GW0051, GW0053 - GW0055, and GW0057 - GW0059 were >10X FB value thus, were not qualified.

ZnDis was detected in FB GW0060 at a concentration >1.5X MDL. Associated ZnDis sample result GW0052 was ≥MDL, but ≤RL and qualified UJ. All other associated ZnDis sample results were >10X the FB value thus, were not qualified.

CuDis was detected in FB GW0091 at a concentration <1.5X MDL, thus was not further assessed per TREC DV Guidelines.

Field Replicates

Were field duplicates (FD) submitted as specified in the BPSOU GW QAPP (1 in 20)? Y_X_ N___

Were results for FDs within the target control limits in the BPSOU GW QAPP (< 20% RPD or Δ ≤ RL as applicable)? Y___ N_X_

Were any data qualified because of FD results? Y__X_ N___

Duplicate set GW0058/GW0059 PbDis sample results were ≥5X RL and RPD>20%. Associated PbDis sample results GW0042, GW0043, GW0045, GW0048 - GW0051, GW0053, and GW0055 - GW0059 were ≥MDL and qualified J. Associated PbDis sample results GW0041, GW0044, GW0046, GW0047, GW0052, and GW0054 were non-detect and qualified UJ.

Duplicate set GW0089/GW0090 PbDis sample results were ≥5X RL and RPD>20%. Associated PbDis sample results GW 0078 - GW0090, and GW0092 - GW0094 were ≥MDL and qualified J. Associated PbDis sample result GW00 77 was non-detect and qualified UJ.

Additional Comments

Data Validation Summary for SDG 10560318

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)

Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, January 13, 2021)

Site:	Butte Priority Soils Operable Unit	**Project:**	BPSOU GW Monitoring - 0231348
Laboratory:	Pace Analytical Services (Minneapolis, MN)	**Case Number:**	10560318
Matrix:	Aqueous	**Analysis:**	Dissolved Mercury, Dissolved As, Cd, Cu, Pb, Zn
Sample Date(s):	5/5/2021-5/7/2021	**Analysis Date(s):**	5/27/2021, 5/28/2021
Data Validator:	Michele Bay	**Validation Date:**	6/16/2021-6/17/2021

Sample Delivery Group

Field Sample ID	Work Order	Lab Sample ID	Sample Type	Associated Fld QC	Abbreviated Field ID

Analyte	Matrix	Method	Collection Date	Analysis Date
Dissolved Mercury	Aqueous	EPA 245.1	5/5/2021-5/7/2021	5/27/2021
Dissolved As, Cd, Cu, Pb, Zn	Aqueous	EPA 200.8	5/5/2021-5/7/2021	5/27/2021, 5/28/2021

Were Level A field documentation and QA/QC practices met for this data set? Y_X_ N___

Were Level B field documentation and QA/QC practices met for this data set? Y_X_ N___

Summary

	Data Points	Natural Data Points	Enforcement Quality (E)	Screening Level (S)	Unusable (R)
Total	162	138	137	1	0
Percentage	100%	85%	99%	0.72%	0%

Analyses of this sample set resulted in 138 natural sample data points. Of these 137 (99%) data points had no quality control deficiencies, and were defined as enforcement quality. One data point (<1%) was assigned screening quality for a CRDL check standard which did not meet acceptance criteria. All anticipated data was collected thus, completeness for this data set is 100%.

LABORATORY DATA DATA VALIDATION CHECKLIST FOR MERCURY

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)

Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, January 13, 2021)

Site:	Butte Priority Soils Operable Unit	**Project:**	BPSOU GW Monitoring - 0231348
Laboratory:	Pace Analytical Services (Minneapolis, MN)	**Case Number:**	10560318
Matrix:	Aqueous	**Analysis:**	Dissolved Mercury
Sample Date(s):	5/5/2021-5/7/2021	**Analysis Date(s):**	5/27/2021
Data Validator:	Michele Bay	**Validation Date:**	6/16/2021 - 6/17/2021

Sample Delivery Group

Field Sample ID	Lab Sample ID	Lab QC Batch	Sample Type	Associated Fld QC	Abbreviated Field ID
GW0095-050521	10560318001	744837	FG	GW0105-050621	GW0095
GW0096-050521	10560318002	744837	FG	GW0105-050621	GW0096
GW0097-050521	10560318003	744837	FG	GW0105-050621	GW0097
GW0098-050521	10560318004	744837	FG	GW0105-050621	GW0098
GW0099-050621	10560318005	744837	FG	GW0105-050621	GW0099
GW0100-050621	10560318006	744837	FG	GW0105-050621	GW0100
GW0101-050621	10560318007	744837	FG	GW0105-050621	GW0101
GW0102-050621	10560318008	744837	FG	GW0105-050621	GW0102
GW0103-050621	10560318009	744837	FG-N	GW0105-050621	GW0103
GW0104-050621	10560318010	744837	FG-D	GW0105-050621	GW0104
GW0105-050621	10560318011	744837	FB	GW0105-050621	GW0105
GW0106-050621	10560318012	744837	FG	GW0118-050621	GW0106
GW0107-050621	10560318013	744837	FG	GW0118-050621	GW0107
GW0108-050621	10560318014	744837	FG	GW0118-050621	GW0108
GW0109-050521	10560318015	744837	FG	GW0118-050621	GW0109
GW0110-050521	10560318016	744839	FG	GW0118-050621	GW0110
GW0111-050521	10560318017	744837	FG	GW0118-050621	GW0111
GW0112-050521	10560318018	744837	FG	GW0118-050621	GW0112
GW0113-050621	10560318019	744837	FG	GW0118-050621	GW0113
GW0114-050621	10560318020	744837	FG	GW0118-050621	GW0114

LABORATORY DATA DATA VALIDATION CHECKLIST FOR MERCURY

GW0115-050621	10560318021	744837	FG	GW0118-050621	GW0115
GW0116-050621	10560318022	744839	FG-N	GW0118-050621	GW0116
GW0117-050621	10560318023	744839	FG-D	GW0118-050621	GW0117
GW0118-050621	10560318024	744839	FB	GW0118-050621	GW0118
GW0119-050621	10560318025	744839	FG	GW0118-050621	GW0119
GW0120-050621	10560318026	744839	FG	GW0118-050621	GW0120
GW0121-050721	10560318027	744839	FG	GW0118-050621	GW0121

1. Holding Times

Analyte	Matrix	Method	Collection Date	Analysis Date	Affected data flagged
Dissolved Mercury	Aqueous	EPA 245.1	5/5/2021- 5/7/2021	5/27/2021	No

Describe corrective actions taken because of holding time problems.

2. Instrument Calibration

Was instrument successfully calibrated at the correct frequency and with appropriate standards and blanks?	Y__X__ N_____
Did the calibration curve have an R value of ≥ 0.995?	Y__X__ N_____
Was the ICV performed immediately following calibration with results within criteria of 95-105%?	Y__X__ N_____
Were CCVs performed at a 10% frequency, with results within criteria of 90-110%?	Y__X__ N_____
Were any data flagged because of calibration problems?	Y_____ N__X__
Was an CCV performed at the end of the analytical run, with results within criteria of 90-110%?	Y__X__ N_____

Describe corrective actions taken because of calibration problems.

3. CRDL Check Standard

Was the CRDL check standard performed with recoveries between 70 and 130%?	Y__X__ N_____

4. Blanks

Was the ICB analyzed immediately after the ICV?	Y__X__ N_____
Was the ICB result > 0 and < the MDL?	Y__X__ N_____
Were Continuing Calibration Blanks (CCBs) analyzed at the frequency of 10%?	Y__X__ N_____
Were CCB results > 0 and < the MDL?	Y__X__ N_____
Were Method Blanks (MB) analyzed at the frequency of 1/20 samples?	Y__X__ N_____
Were MB results non-detects?	Y__X__ N_____

LABORATORY DATA DATA VALIDATION CHECKLIST FOR MERCURY

Were any data flagged because of blank problems?	Y_____ N__X__
Describe corrective actions taken because of blank problems.	
5. Laboratory Control Sample (LCS)	
Was Laboratory Fortified Blank (LFB) analyzed at the frequency of 1/20 samples?	Y__X__ N_____
Was LFB within control window of 85-115% recovery?	Y__X__ N_____
Were any data flagged because of LCS problems?	Y_____ N__X__
Describe corrective actions taken because of LCS problems.	
7. Laboratory Fortified Matrix Spike/Matrix Spike Duplicate Analaysis (MS/MSD)	
Were laboratory Fortified Matrix Spike (MS) samples analyzed at the frequency of 1 per batch with an additional MS analyzed for batches of 11 or more samples ?	Y__X__ N_____
Was LFM/LFMD within control window of 70-130% recovery for samples in which the parent sample concentration was ≤ 4X the spike concentration?	Y__X__ N_____
Were laboratory Fortified Matrix Spike Duplicate Samples (MSD) analyzed at the frequency of 1/20 samples ?	Y__X__ N_____
For sample & duplicate values > 5 times the RL, were results of the MSD ≤ 20% relative percent difference (RPD)?	Y__X__ N_____
For sample or duplicate values < 5 times the RL, is the absolute difference between the sample and duplicate values ≤ the RL?	
Were the MS and MSD analyzed at the same dilution factor?	Y__X__ N_____
Were the parent sample, matrix spike, and matrix spike duplicate analyzed at the same dilution factor?	Y__X__ N_____
Were any data flagged because of MS/MSD recovery problems?	Y_____ N__X__
Were any data flagged because of MS/MSD RPD problems?	Y_____ N__X__
Describe corrective actions taken because of MS/MSD recovery and/or RPD problems.	
Are there any additional analytical limitations that users should be aware of?	Y_____ N__X__

LABORATORY DATA DATA VALIDATION CHECKLIST FOR ICPMS

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)			
Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, January 13, 2021)			
Site:	Butte Priority Soils Operable Unit	**Project:**	BPSOU GW Monitoring - 0231348
Laboratory:	Pace Analytical Services (Minneapolis, MN)	**Case Number:**	10560318
Matrix:	Aqueous	**Analysis:**	Dissolved As, Cd, Cu, Pb, Zn
Sample Date(s):	5/5/2021-5/7/2021	**Analysis Date(s):**	5/27/2021, 5/28/2021
Data Validator:	Michele Bay	**Validation Date:**	6/16/2021 - 6/17/2021

Sample Delivery Group

Field Sample ID	Lab Sample ID	Lab QC Batch	Sample Type	Associated Fld QC	Abbreviated Field ID
GW0095-050521	10560318001	743507	FG	GW0105-050621	GW0095
GW0096-050521	10560318002	743507	FG	GW0105-050621	GW0096
GW0097-050521	10560318003	743507	FG	GW0105-050621	GW0097
GW0098-050521	10560318004	743507	FG	GW0105-050621	GW0098
GW0099-050621	10560318005	743507	FG	GW0105-050621	GW0099
GW0100-050621	10560318006	743507	FG	GW0105-050621	GW0100
GW0101-050621	10560318007	743507	FG	GW0105-050621	GW0101
GW0102-050621	10560318008	743507	FG	GW0105-050621	GW0102
GW0103-050621	10560318009	743507	FG-N	GW0105-050621	GW0103
GW0104-050621	10560318010	743507	FG-D	GW0105-050621	GW0104
GW0105-050621	10560318011	743507	FB	GW0105-050621	GW0105
GW0106-050621	10560318012	743507	FG	GW0118-050621	GW0106
GW0107-050621	10560318013	743507	FG	GW0118-050621	GW0107
GW0108-050621	10560318014	743507	FG	GW0118-050621	GW0108
GW0109-050521	10560318015	743507	FG	GW0118-050621	GW0109
GW0110-050521	10560318016	743509	FG	GW0118-050621	GW0110
GW0111-050521	10560318017	743509	FG	GW0118-050621	GW0111
GW0112-050521	10560318018	743509	FG	GW0118-050621	GW0112
GW0113-050621	10560318019	743509	FG	GW0118-050621	GW0113
GW0114-050621	10560318020	743509	FG	GW0118-050621	GW0114
GW0115-050621	10560318021	743509	FG	GW0118-050621	GW0115

LABORATORY DATA DATA VALIDATION CHECKLIST FOR ICPMS

GW0116-050621	10560318022	743509	FG-N	GW0118-050621	GW0116
GW0117-050621	10560318023	743509	FG-D	GW0118-050621	GW0117
GW0118-050621	10560318024	743509	FB	GW0118-050621	GW0118
GW0119-050621	10560318025	743509	FG	GW0118-050621	GW0119
GW0120-050621	10560318026	743509	FG	GW0118-050621	GW0120
GW0121-050721	10560318027	743509	FG	GW0118-050621	GW0121

1. Holding Times

Analyte	Matrix	Method	Collection Date	Analysis Date	Affected data flagged
Dissolved As, Cd, Cu, Pb, Zn	Aqueous	EPA 200.8	5/5/2021-5/7/2021	5/27/2021, 5/28/2021	No

Describe corrective actions taken because of holding time problems.

2. Instrument Tuning

Prior to calibration, was the ICP-MS tuning solution analyzed at least five times (5X) consecutively and necessary adjustments made to bring peak width within the instrument manufacturer's specifications and mass calibration to within 0.1 amu over the range of 9-208 amu? Y__X__ N_____

Was the Percent Relative Standard Deviation (%RSD) of the absolute signals for all analytes (and for each isotope) in the tuning solution < 5%? Y__X__ N_____

3. Instrument Calibration

Was instrument calibrated at the correct frequency (daily or once every 24 hours) with appropriate standards & blanks? Y__X__ N_____

Did the calibration curve have an R value of ≥ 0.998? Y__X__ N_____

Was the ICV performed immediately following calibration with results within criteria of 90-110%? Y__X__ N_____

Were CCVs performed at a 10% frequency, with results within criteria of 90-110%? Y_____ N__X__

Was a CCV performed at the end if the analytical run, with results within criteria of 90-110%? Y__X__ N_____

Were any data flagged because of calibration problems? Y_____ N__X__

Describe corrective actions taken because of calibration problems.

In QC batch 743509, a CC V performed on 5/27/2021 at 3:57 had CuDis and ZnDis recoveries >110%, but the only Cu and Zn results reported between this CCV, the previous in-control CCV, and the following in-control CCV were < the MDL. Thus, no qualifications were assigned.

LABORATORY DATA DATA VALIDATION CHECKLIST FOR ICPMS

4. CRDL Check Standard

Was the CRDL check standard performed with recoveries between 60 and 140%? Y_____ N__X__

In QC batch 743509, the CRDL check standard performed on 5/27/21 at 4:08 had recoveries >140% for CuDis and ZnDis. CuDis associated with this CRDL was reported for only one sample (GW0118), and that result was non-detect. ZnDis associated with this CRDL was reported for GW0111 and GW0118. The GW0118 Zn result was non-detect, so not qualified. The GW0111 ZnDis result was > MDL and qualified J+.

5. Internal Standards

Does the internal standard solution contain a minimum of five elements, and include elements from the following list? Li^{6}, Sc, Y, Rh, In^{115}, Tb, Ho, Lu, Bi? Y__X__ N_____

Is the Percent Relative Intensity (%RI) in the samples within 60-125% of the response in the calibation blank? Y__X__ N_____

If the %RI falls outside of 60-125%, are the affected samples re-analyzed at a 2X dilution until the Internal standards are within the criteria? Y___ N___ NA _X_

Were any data flagged because of internal standard problems? Y_____ N__X__

Describe corrective actions taken because of internal standard problems.

6. Blanks

Was Initial Calibration Blank (ICB) analyzed? Y__X__ N_____

Was the ICB result > 0 and < the MDL? Y__X__ N_____

Were Continuing Calibration Blanks (CCBs) analyzed at the frequency of 10%? Y__X__ N_____

Were CCB results > 0 and < the MDL? Y_____ N__X__

Were method blanks analyzed at the frequency of 1/20 samples? Y__X__ N_____

Were MB results non-detects? Y_____ N__X__

Were any data flagged because of blank problems? Y_____ N__X__

Describe corrective actions taken because of blank problems.

QC batch 743509, a CCB on 5/27/21 at 0404 had a CuDis detection >1.5X MDL and a ZnDis detection <1.5X the MDL. The ZnDis detection was not further assessed per TREC DV guidelines. No CuDis results were reported following this CCB. The only CuDis result reported between this CCB and the previous in-control CCB was non-detect; thus, no data were qualified.

QC Batch 743509, CdDis was detected in MB 3965093 at a concentration <1.5X MDL thus, no associated sample results were qualified per TREC DV Guidelines.

LABORATORY DATA DATA VALIDATION CHECKLIST FOR ICPMS

7. Interference Check Sample

Were the ICSA/ICSAB analyzed at the beginning of each run?	Y__X__ N_____
Were ICSA within control window of 80-120% recovery?	Y__X__ N_____
Were ICSAB within control window of 80-120% recovery?	Y__X__ N_____
Were any data flagged because of ICS problems?	Y_____ N__X__

Describe corrective actions taken because of ICS problems.

8. Laboratory Control Sample

Was Laboratory Control Sample (LCS) analyzed at the frequency of 1/20 samples?	Y__X__ N_____
Was LCS within control window of 85-115% recovery?	Y__X__ N_____
Were any data flagged because of LCS problems?	Y_____ N__X__

Describe corrective actions taken because of LCS problems.

10. Matrix Spike/Matrix Spike Duplicate Sample Results

Was Matrix Spike Sample (MS) analyzed at the frequency of 1/10 samples?	Y__X__ N_____
Was MS result within control window of 70-130% for samples in which the parent sample concentration was ≤ 4X the spike concentration?	Y__X__ N_____
Was the Matrix Spike Duplicate Sample (MSD) analyzed at the frequency of 1/20 samples?	Y__X__ N_____
For sample & duplicate values > 5 times the RL, were results of the MSD ≤ 20% relative percent difference (RPD)?	Y__X__ N_____
For sample or duplicate values < 5 times the RL, is the absolute difference between the sample and duplicate values ≤ the RL?	
Were the MS and MSD analyzed at the same dilution factor?	Y__X__ N_____
Were the parent sample, MS, and MSD analyzed at the same dilution factor?	Y__X__ N_____
Were any data flagged because of MS/MSD recovery problems?	Y_____ N__X__
Were any data flagged because of MS/MSD RPD problems?	Y_____ N__X__

Describe corrective actions taken because of MS problems.

QC Batch 743509, MS 3965097 ZnDis recovery <70%. No associated ZnDis sample results were qualified because the parent sample concentration was >4X the spike concentration.

11. Laboratory Post Digestion Spike Analysis

Was the post digestion spike analyzed at a frequency of 1/20 samples?	Y_____ N__X__
Was post digestion spike recovery within control window of 75-125%?	Y___ N___ NA _X_
Were the sample and post digestion spike analyzed at the same dilution factor?	Y___ N___ NA _X_
Were any data flagged because of post digestion spike problems?	Y___ N___ NA _X_

LABORATORY DATA DATA VALIDATION CHECKLIST FOR ICPMS

Describe corrective actions taken because of post digestion spike problems.

12. ICP Serial Dilution

Was the laboratory serial dilution analyzed at the frequency of 1/20 samples Y__X__ N_____

For sample concentrations >50 times the MDL, did the serial dilution agree within 10% of the original determination after correction for dilution? Y__X__ N_____

Were any data flagged because of serial dilution problems? Y_____ N__X__

Describe corrective actions taken because of serial dilution problems.

Serial dilution analyses was performed on samples GW0095 and GW0110 for QC Batches 743507 and 743509 respectively. In both batches, %D for CdDis was >10%; however, original CdDis concentrations in both samples was <50X the MDL. Thus, no associated CdDis sample results were qualified.

Are there any additional analytical limitations that users should be aware of? Y_____ N__X__

DATA VALIDATION CHECKLIST FOR FIELD QUALITY CONTROL

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)

Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, January 13, 2021)

Site:	Butte Priority Soils Operable Unit	**Project:**	BPSOU GW Monitoring - 0231348
Laboratory:	Pace Analytical Services (Minneapolis, MN)	**Case Number:**	10560318
Matrix:	Aqueous	**Analysis:**	Dissolved Mercury, Dissolved As, Cd, Cu, Pb, Zn
Sample Date(s):	5/5/2021-5/7/2021	**Analysis Date(s):**	5/27/2021, 5/28/2021
Data Validator:	Michele Bay	**Validation Date:**	6/16/2021 - 6/17/2021

Sample Delivery Group

Field Sample ID	Lab Sample ID	Sample Type	Associated Fld QC	Abbreviated Field ID
GW0095-050521	10560318001	FG	GW0105-050621	GW0095
GW0096-050521	10560318002	FG	GW0105-050621	GW0096
GW0097-050521	10560318003	FG	GW0105-050621	GW0097
GW0098-050521	10560318004	FG	GW0105-050621	GW0098
GW0099-050621	10560318005	FG	GW0105-050621	GW0099
GW0100-050621	10560318006	FG	GW0105-050621	GW0100
GW0101-050621	10560318007	FG	GW0105-050621	GW0101
GW0102-050621	10560318008	FG	GW0105-050621	GW0102
GW0103-050621	10560318009	FG-N	GW0105-050621	GW0103
GW0104-050621	10560318010	FG-D	GW0105-050621	GW0104
GW0105-050621	10560318011	FB	GW0105-050621	GW0105
GW0106-050621	10560318012	FG	GW0118-050621	GW0106
GW0107-050621	10560318013	FG	GW0118-050621	GW0107
GW0108-050621	10560318014	FG	GW0118-050621	GW0108
GW0109-050521	10560318015	FG	GW0118-050621	GW0109
GW0110-050521	10560318016	FG	GW0118-050621	GW0110
GW0111-050521	10560318017	FG	GW0118-050621	GW0111

DATA VALIDATION CHECKLIST FOR FIELD QUALITY CONTROL

GW0112-050521	10560318018	FG	GW0118-050621	GW0112
GW0113-050621	10560318019	FG	GW0118-050621	GW0113
GW0114-050621	10560318020	FG	GW0118-050621	GW0114
GW0115-050621	10560318021	FG	GW0118-050621	GW0115
GW0116-050621	10560318022	FG-N	GW0118-050621	GW0116
GW0117-050621	10560318023	FG-D	GW0118-050621	GW0117
GW0118-050621	10560318024	FB	GW0118-050621	GW0118
GW0119-050621	10560318025	FG	GW0118-050621	GW0119
GW0120-050621	10560318026	FG	GW0118-050621	GW0120
GW0121-050721	10560318027	FG	GW0118-050621	GW0121

Analyte	Matrix	Method	Collection Date	Analysis Date
Dissolved Mercury	Aqueous	EPA 245.1	5/5/2021-5/7/2021	5/27/2021
Dissolved As, Cd, Cu, Pb, Zn	Aqueous	EPA 200.8	5/5/2021-5/7/2021	5/27/2021, 5/28/2021

Field QC Samples

Field Blanks FB)

Were FBs sumbitted as specified in the BPSOU GW QAPP (1 in 20)? Y_X_ N___

Were results for FBs within the target control limits in the BPSOU GW QAPP (< MDL)? Y_X_ N___

Were any data qualified because of FB problems? Y___ N_X_

Field Replicates

Were field duplicates (FD) submitted as specified in the BPSOU GW QAPP (1 in 20)? Y_X_ N___

Were results for FDs within the target control limits in the BPSOU GW QAPP (< 20% RPD or Δ ≤ RL as applicable)? Y_X_ N___

Were any data qualified because of FD results? Y___ N_X_

Additional Comments

Data Validation Summary for SDG 10560315

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)

Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, June 4, 2021)

Site:	Butte Priority Soils Operable Unit	**Project:**	BPSOU GW Monitoring - 0231348
Laboratory:	Pace Analytical Services (Minneapolis, MN)	**Case Number:**	10560315
Matrix:	Aqueous	**Analysis:**	Dissolved Mercury, Dissolved As, Cd, Cu, Pb, Zn
Sample Date(s):	5/6/2021-5/11/2021	**Analysis Date(s):**	5/26/2021, 5/28/2021, 6/1/2021-6/3/2021
Data Validator:	Michele Bay	**Validation Date:**	

Sample Delivery Group

Analyte	Matrix	Method	Collection Date	Analysis Date
Dissolved Mercury	Aqueous	EPA 245.1	5/6/2021-5/11/2021	6/1/2021
Dissolved As, Cd, Cu, Pb, Zn	Aqueous	EPA 200.8	5/6/2021-5/11/2021	5/26/2021, 5/28/2021, 6/2/2021, 6/3/2021

Were Level A field documentation and QA/QC practices met for this data set? Y_X_ N___

Were Level B field documentation and QA/QC practices met for this data set? Y_X_ N___

Summary

	Data Points	Natural Data Points	Enforcement Quality (E)	Screening Level (S)	Unusable (R)
Total	54	42	35	7	0
Percentage	100%	78%	83%	17%	0%

Analyses associated with this sample set resulted in 42 natural sample data points. Of these, 35 (83%) had no quality control deficiencies and are defined as enforcement quality while, 7 (17%) were qualified for field precision and given screening quality. All anticipated data was collected thus, completeness for this data set is 100%.

LABORATORY DATA VALIDATION CHECKLIST FOR MERCURY

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)

Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, June 4, 2021)

Site:	Butte Priority Soils Operable Unit	**Project:**	BPSOU GW Monitoring - 0231348
Laboratory:	Pace Analytical Services (Minneapolis, MN)	**Case Number:**	10560315
Matrix:	Aqueous	**Analysis:**	Dissolved Mercury
Sample Date(s):	5/6/2021-5/11/2021	**Analysis Date(s):**	6/1/2021
Data Validator:	Michele Bay	**Validation Date:**	6/29/2021

Sample Delivery Group

Field Sample ID	Lab Sample ID	Lab QC Batch	Sample Type	Associated Fld QC	Abbreviated Field ID
GW0088-050621	10560315009	745524	FG	GW0124-050721	GW0088
GW0122-050721	10560315001	745524	FG-N	GW0124-050721	GW0122
GW0123-050721	10560315002	745524	FG-D	GW0124-050721	GW0123
GW0124-050721	10560315003	745524	FB	GW0124-050721	GW0124
GW0125-051121	10560315004	745524	FG	GW0124-050721	GW0125
GW0126-051121	10560315005	745524	FG	GW0124-050721	GW0126
GW0127-051121	10560315006	745524	FG	GW0124-050721	GW0127
GW0128-051121	10560315007	745524	FG	GW0124-050721	GW0128
GW0129-051121	10560315008	745524	FG	GW0124-050721	GW0129

1. Holding Times

Analyte	Matrix	Method	Collection Date	Analysis Date	Affected data flagged
Dissolved Mercury	Aqueous	EPA 245.1	5/6/2021-5/11/2021	6/1/21	No

Describe corrective actions taken because of holding time problems.

2. Blanks

Were Method Blanks (MB) analyzed at the frequency of 1/20 samples? Y__X__ N_____

Were MB results non-detects? Y__X__ N_____

Were any data flagged because of blank problems? Y_____ N__X__

Describe corrective actions taken because of blank problems.

LABORATORY DATA VALIDATION CHECKLIST FOR MERCURY

3. Laboratory Control Sample (LCS)

Was Laboratory Control Sample (LCS) analyzed at the frequency of 1/20 samples?	Y__X__ N_____
Was LCS within control window of 85-115% recovery?	Y__X__ N_____
Were any data flagged because of LCS problems?	Y_____ N__X__
Describe corrective actions taken because of LCS problems.	

4. Laboratory Fortified Matrix Spike/Matrix Spike Duplicate Analaysis (MS/MSD)

Were laboratory Fortified Matrix Spike (MS) samples analyzed at the frequency of 1 per batch with an additional MS analyzed for batches of 11 or more samples ?	Y__X__ N_____
Was MS/MSD within control window of 70-130% recovery for samples in which the parent sample concentration was ≤ 4X the spike concentration?	Y__X__ N_____
Were laboratory Fortified Matrix Spike Duplicate Samples (MSD) analyzed at the frequency of 1/20 samples ?	Y__X__ N_____
For MS & MSD results > 5 times the RL, were results of the MSD ≤ 20% relative percent difference (RPD)? For MS & MSD results < 5 times the RL, were results of the MSD ≤ the RL?	Y__X__ N_____
Were any data flagged because of MS/MSD recovery problems?	Y_____ N__X__
Were any data flagged because of MS/MSD RPD problems?	Y_____ N__X__
Describe corrective actions taken because of MS/MSD recovery and/or RPD problems.	

Are there any additional analytical limitations that users should be aware of?	Y_____ N__X__

LABORATORY DATA VALIDATION CHECKLIST FOR ICPMS

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)

Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, June 4, 2021)

Site:	Butte Priority Soils Operable Unit	**Project:**	BPSOU GW Monitoring - 0231348
Laboratory:	Pace Analytical Services (Minneapolis, MN)	**Case Number:**	10560315
Matrix:	Aqueous	**Analysis:**	Dissolved As, Cd, Cu, Pb, Zn
Sample Date(s):	5/6/2021-5/11/2021	**Analysis Date(s):**	5/26/2021, 5/28/2021, 6/2/2021, 6/3/2021
Data Validator:	Michele Bay	**Validation Date:**	6/29/2021

Sample Delivery Group

Field Sample ID	Lab Sample ID	Lab QC Batch	Sample Type	Associated Fld QC	Abbreviated Field ID
GW0088-050621	10560315009	745714	FG	GW0124-050721	GW0088
GW0122-050721	10560315001	743060	FG-N	GW0124-050721	GW0122
GW0123-050721	10560315002	743060	FG-D	GW0124-050721	GW0123
GW0124-050721	10560315003	745714	FB	GW0124-050721	GW0124
GW0125-051121	10560315004	743060	FG	GW0124-050721	GW0125
GW0126-051121	10560315005	745714	FG	GW0124-050721	GW0126
GW0127-051121	10560315006	743060	FG	GW0124-050721	GW0127
GW0128-051121	10560315007	743060	FG	GW0124-050721	GW0128
GW0129-051121	10560315008	743060	FG	GW0124-050721	GW0129

1. Holding Times

Analyte	Matrix	Method	Collection Date	Analysis Date	Affected data flagged
Dissolved As, Cd, Cu, Pb, Zn	Aqueous	EPA 200.8	5/6/2021-5/11/2021	5/26/2021, 5/28/2021, 6/2/2021, 6/3/2021	No

Describe corrective actions taken because of holding time problems.

LABORATORY DATA VALIDATION CHECKLIST FOR ICPMS

2. Blanks

Were method blanks analyzed at the frequency of 1/20 samples?	Y__X__ N_____
Were MB results non-detects?	Y_____ N__X__
Were any data flagged because of blank problems?	Y_____ N__X__

Describe corrective actions taken because of blank problems.

***QC Batch 743060**, ZnDis was detected in MB 3962680 at a concentration >1.5X MDL. No associated ZnDis sample results were qualified because the sample results were >10X the MB value.*

3. Laboratory Control Sample (LCS)

Was Laboratory Control Sample (LCS) analyzed at the frequency of 1/20 samples?	Y__X__ N_____
Was LCS within control window of 85-115% recovery?	Y__X__ N_____
Were any data flagged because of LCS problems?	Y_____ N__X__

Describe corrective actions taken because of LCS problems.

4. Matrix Spike/Matrix Spike Duplicate Sample Results

Was Matrix Spike Sample (MS) analyzed at the frequency of 1/10 samples?	Y__X__ N_____
Was MS result within control window of 70-130% for samples in which the parent sample concentration was ≤ 4X the spike concentration?	Y__X__ N_____
Was the Matrix Spike Duplicate Sample (MSD) analyzed at the frequency of 1/20 samples?	Y__X__ N_____
For MS & MSD results > 5 times the RL, were results of the MSD ≤ 20% relative percent difference (RPD)? For MS & MSD results < 5 times the RL, were results of the MSD ≤ the RL?	Y__X__ N_____
Were any data flagged because of MS/MSD recovery problems?	Y_____ N__X__
Were any data flagged because of MS/MSD RPD problems?	Y_____ N__X__

Describe corrective actions taken because of MS problems.

***QC Batch 743060**, MS 3962684 MSD 3962685 CuDis and ZnDis recoveries <70%. No associated CuDis or ZnDis sample results were qualified because the parent sample concentrations were >4X the spike concentrations.*

Are there any additional analytical limitations that users should be aware of?	Y_____ N__X__

FIELD QUALITY CONTROL SAMPLE CHECKLIST

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)

Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, June 4, 2021)

Site:	Butte Priority Soils Operable Unit	**Project:**	BPSOU GW Monitoring - 0231348
Laboratory:	Pace Analytical Services (Minneapolis,	**Case Number:**	10560315
Matrix:	Aqueous	**Analysis:**	Dissolved Mercury, Dissolved As, Cd, Cu, Pb, Zn
Sample Date(s):	5/6/2021-5/11/2021	**Analysis Date(s):**	5/26/2021, 5/28/2021, 6/1/2021-6/3/2021
Data Validator:	Michele Bay	**Validation Date:**	6/29/2021

Sample Delivery Group

Field Sample ID	Lab Sample ID	Sample Type	Associated Fld QC	Abbreviated Field ID
GW0088-050621	10560315009	FG	GW0124-050721	GW0088
GW0122-050721	10560315001	FG-N	GW0124-050721	GW0122
GW0123-050721	10560315002	FG-D	GW0124-050721	GW0123
GW0124-050721	10560315003	FB	GW0124-050721	GW0124
GW0125-051121	10560315004	FG	GW0124-050721	GW0125
GW0126-051121	10560315005	FG	GW0124-050721	GW0126
GW0127-051121	10560315006	FG	GW0124-050721	GW0127
GW0128-051121	10560315007	FG	GW0124-050721	GW0128
GW0129-051121	10560315008	FG	GW0124-050721	GW0129

Analyte	Matrix	Method	Collection Date	Analysis Date
Dissolved Mercury	Aqueous	EPA 245.1	5/6/2021-5/11/2021	6/1/2021
Dissolved As, Cd, Cu, Pb, Zn	Aqueous	EPA 200.8	5/6/2021-5/11/2021	5/26/2021, 5/28/2021, 6/2/2021, 6/3/2021

Field QC Samples

Field Blanks FB)

Were FBs sumbitted as specified in the BPSOU GW QAPP (1 in 20)? Y_X_ N___

Were results for FBs within the target control limits in the BPSOU GW QAPP (< MDL)? Y___ N_X_

FIELD QUALITY CONTROL SAMPLE CHECKLIST

Were any data qualified because of FB problems? Y___ N_X_

CuDis was detected in FB GW0124 at a concentration <1.5X MDL. No associated CuDis sample results were qualified per TREC DV Guidelines.

Field Replicates

Were field duplicates (FD) submitted as specified in the BPSOU GW QAPP (1 in 20)? Y_X_ N___

Were results for FDs within the target control limits in the BPSOU GW QAPP (< 20% RPD or Δ ≤ RL as applicable)? Y___ N_X_

Were any data qualified because of FD results? Y_X_ N___

Duplicate set GW0122/GW0123 CuDis and ZnDis sample results were both ≥5X the RL and RPDs>20%. Associated CuDis result in GW0088 was significantly lower than all other samples in this QC batch; thus, considered to be of a differing matrix than the parent and field duplicate samples. CuDis results in GW00125-GW0129 were similar to results in the field duplicate set and qualified as estimated, J. ZnDis results for the field duplicate set were significantly higher than ZnDis results for all other samples in this SDG. ZnDis for the field duplicate set was reported from a 5000X dilution, while ZnDis for other samples in this SDG were reported from 1X to 500X dilutions. Thus the only ZnDis results qualified for field precison were those for the field dupliate set, GW0122/GW0123. Field blanks are not assessed for duplicate precision since they are of a differing matrix.

Additional Comments

Data Validation Summary for SDG 10580635

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)

Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, June 4, 2021)

Site:	Butte Priority Soils Operable Unit	**Project:**	BPSOU GW Monitoring - 0231348
Laboratory:	Pace Analytical Services (Minneapolis, MN)	**Case Number:**	10580635
Matrix:	Aqueous	**Analysis:**	Dissolved Mercury, Dissolved As, Cd, Cu, Pb, Zn
Sample Date(s):	9/23/21-9/24/21		
Data Validator:	Tina Donovan		

Sample Delivery Group

Field Sample ID	Work Order	Lab Sample ID	Sample Type	Associated Fld QC	Abbreviated Field ID

Analyte	Matrix	Method	Collection Date	Analysis Date
Dissolved Mercury	Aqueous	EPA 245.1	9/23/21-9/24/21	10/6/21
Dissolved As, Cd, Cu, Pb, Zn	Aqueous	EPA 200.8	9/23/21-9/24/21	10/6/21, 10/7/21, 10/11/21

Were Level A field documentation and QA/QC practices met for this data set? Y_X_ N___

Were Level B field documentation and QA/QC practices met for this data set? Y_X_ N___

Summary

	Data Points	Natural Data Points	Enforcement Quality (E)	Screening Level (S)	Unusable (R)
Total	150	126	121	5	
Percentage	100%	84%	96%	4%	0%

Analysis of this data set resulted in 126 natural sample data points. Of these 121 (96%) had no quality control nor documentation deficiencies and were assigned enforcement quality. Five data points (4%) were assigned screening quality because of a field blank detection. All anticipated data were collected thus, completeness for this data set is 100%.

LEVEL 2b LABORATORY DATA VALIDATION CHECKLIST FOR MERCURY

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)

Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, June 4, 2021)

Site:	Butte Priority Soils Operable Unit	**Project:**	BPSOU GW Monitoring - 0231348
Laboratory:	Pace Analytical Services (Minneapolis, MN)	**Case Number:**	10580635
Matrix:	Aqueous	**Analysis:**	Dissolved Mercury
Sample Date(s):	9/23/21-9/24/21	**Analysis Date(s):**	10/6/2021
Data Validator:	Tina Donovan	**Validation Date:**	10/22/2021

Sample Delivery Group

Field Sample ID	Lab Sample ID	Lab QC Batch	Sample Type	Associated Fld QC	Abbreviated Field ID
GW0001-092321	10580635001	774035	FG	GW0010-092421	GW0001
GW0002-092321	10580635002	774035	FG	GW0010-092421	GW0002
GW0003-092321	10580635003	774035	FG	GW0010-092421	GW0003
GW0004-092321	10580635004	774035	FG	GW0010-092421	GW0004
GW0005-092421	10580635005	774035	FG	GW0010-092421	GW0005
GW0006-092421	10580635006	774035	FG	GW0010-092421	GW0006
GW0007-092421	10580635007	774035	FG	GW0010-092421	GW0007
GW0008-092421	10580635008	774035	FG-N	GW0010-092421	GW0008
GW0009-092421	10580635009	774035	FG-D	GW0010-092421	GW0009
GW0010-092421	10580635010	774035	FB	GW0010-092421	GW0010
GW0011-092421	10580635011	774035	FG	GW0010-092421	GW0011
GW0012-092421	10580635012	774035	FG	GW0010-092421	GW0012
GW0013-092421	10580635013	774035	FG	GW0010-092421	GW0013
GW0014-092421	10580635014	774035	FG	GW0010-092421	GW0014
GW0015-092421	10580635015	774035	FG	GW0010-092421	GW0015
GW0016-092421	10580635016	774036	FG	GW0010-092421	GW0016
GW0017-092421	10580635017	774036	FG	GW0022-092421	GW0017
GW0018-092421	10580635018	774036	FG	GW0022-092421	GW0018
GW0019-092421	10580635019	774036	FG	GW0022-092421	GW0019
GW0020-092421	10580635020	774036	FG-N	GW0022-092421	GW0020

LEVEL 2b LABORATORY DATA VALIDATION CHECKLIST FOR MERCURY

GW0021-092421	10580635021	774036	FG-D	GW0022-092421	GW0021
GW0022-092421	10580635022	774036	FB	GW0022-092421	GW0022
GW0023-092421	10580635023	774036	FG	GW0022-092421	GW0023
GW0024-092421	10580635024	774036	FG	GW0022-092421	GW0024
GW0025-092421	10580635025	774036	FG	GW0022-092421	GW0025

1. Holding Times

Analyte	Matrix	Method	Collection Date	Analysis Date	Affected data flagged
Dissolved Mercury	Aqueous	EPA 245.1	9/23/21-9/24/21	10/6/21	No

Describe corrective actions taken because of holding time problems.

2. Instrument Calibration

Was instrument successfully calibrated at the correct frequency and with appropriate standards and blanks? Y__X__ N_____

Did the calibration curve have an R value of ≥ 0.995? Y__X__ N_____

Was the ICV performed immediately following calibration with results within criteria of 95-105%? Y__X__ N_____

Were CCVs performed at a 10% frequency, with results within criteria of 90-110%? Y__X__ N_____

Was an CCV performed at the end if the analytical run, with results within criteria of 90-110%? Y__X__ N_____

Were any data flagged because of calibration problems? Y_____ N__X__

Describe corrective actions taken because of calibration problems.

3. CRDL Check Standard

Was the CRDL check standard performed with recoveries between 70 and 130%? Y__X__ N_____

4. Blanks

Was the ICB analyzed immediately after the ICV? Y__X__ N_____

Was the ICB result > 0 and < the MDL? Y__X__ N_____

Were Continuing Calibration Blanks (CCBs) analyzed at the frequency of 10%? Y__X__ N_____

Were CCB results > 0 and < the MDL? Y__X__ N_____

Were Method Blanks (MB) analyzed at the frequency of 1/20 samples? Y__X__ N_____

Were MB results non-detects? Y__X__ N_____

Were any data flagged because of blank problems? Y_____ N__X__

Describe corrective actions taken because of blank problems.

LEVEL 2b LABORATORY DATA VALIDATION CHECKLIST FOR MERCURY

5. Laboratory Control Sample (LCS)

Was Laboratory Fortified Blank (LFB) analyzed at the frequency of 1/20 samples?	Y__X__ N_____
Was LFB within control window of 85-115% recovery?	Y__X__ N_____
Were any data flagged because of LCS problems?	Y_____ N__X__
Describe corrective actions taken because of LCS problems.	

7. Laboratory Fortified Matrix Spike/Matrix Spike Duplicate Analaysis (MS/MSD)

Were laboratory Fortified Matrix Spike (MS) samples analyzed at the frequency of 1 per batch with an additional MS analyzed for batches of 11 or more samples ?	Y__X__ N_____
Was LFM/LFMD within control window of 70-130% recovery for samples in which the parent sample concentration was ≤ 4X the spike concentration?	Y__X__ N_____
Were laboratory Fortified Matrix Spike Duplicate Samples (MSD) analyzed at the frequency of 1/20 samples ?	Y__X__ N_____
For sample & duplicate values > 5 times the RL, were results of the MSD ≤ 20% relative percent difference (RPD)?	Y__X__ N_____
For sample or duplicate values < 5 times the RL, is the absolute difference between the sample and duplicate values ≤ the RL?	
Were the MS and MSD analyzed at the same dilution factor?	Y__X__ N_____
Were the parent sample, matrix spike, and matrix spike duplicate analyzed at the same dilution factor?	Y__X__ N_____
Were any data flagged because of MS/MSD recovery problems?	Y_____ N__X__
Were any data flagged because of MS/MSD RPD problems?	Y_____ N__X__
Describe corrective actions taken because of MS/MSD recovery and/or RPD problems.	

Are there any additional analytical limitations that users should be aware of?	Y_____ N__X__

LEVEL 2b LABORATORY DATA VALIDATION CHECKLIST FOR ICPMS

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)

Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, June 4, 2021)

Site:	Butte Priority Soils Operable Unit	**Project:**	BPSOU GW Monitoring - 0231348
Laboratory:	Pace Analytical Services (Minneapolis, MN)	**Case Number:**	10580635
Matrix:	Aqueous	**Analysis:**	Dissolved As, Cd, Cu, Pb, Zn
Sample Date(s):	9/23/21-9/24/21	**Analysis Date(s):**	10/6/21, 10/7/21, 10/11/21
Data Validator:	Tina Donovan	**Validation Date:**	10/22/2021

Sample Delivery Group

Field Sample ID	Lab Sample ID	Lab QC Batch	Sample Type	Associated Fld QC	Abbreviated Field ID
GW0001-092321	10580635001	774114	FG	GW0010-092421	GW0001
GW0002-092321	10580635002	774114	FG	GW0010-092421	GW0002
GW0003-092321	10580635003	774114	FG	GW0010-092421	GW0003
GW0004-092321	10580635004	774114	FG	GW0010-092421	GW0004
GW0005-092421	10580635005	774114	FG	GW0010-092421	GW0005
GW0006-092421	10580635006	774114	FG	GW0010-092421	GW0006
GW0007-092421	10580635007	774114	FG	GW0010-092421	GW0007
GW0008-092421	10580635008	774114	FG-N	GW0010-092421	GW0008
GW0009-092421	10580635009	774114	FG-D	GW0010-092421	GW0009
GW0010-092421	10580635010	774114	FB	GW0010-092421	GW0010
GW0011-092421	10580635011	774114	FG	GW0010-092421	GW0011
GW0012-092421	10580635012	774114	FG	GW0010-092421	GW0012
GW0013-092421	10580635013	774114	FG	GW0010-092421	GW0013
GW0014-092421	10580635014	774114	FG	GW0010-092421	GW0014
GW0015-092421	10580635015	774114	FG	GW0010-092421	GW0015
GW0016-092421	10580635016	774114	FG	GW0010-092421	GW0016
GW0017-092421	10580635017	774114	FG	GW0022-092421	GW0017
GW0018-092421	10580635018	774115	FG	GW0022-092421	GW0018
GW0019-092421	10580635019	774115	FG	GW0022-092421	GW0019
GW0020-092421	10580635020	774115	FG-N	GW0022-092421	GW0020
GW0021-092421	10580635021	774115	FG-D	GW0022-092421	GW0021
GW0022-092421	10580635022	774115	FB	GW0022-092421	GW0022
GW0023-092421	10580635023	774115	FG	GW0022-092421	GW0023
GW0024-092421	10580635024	774115	FG	GW0022-092421	GW0024
GW0025-092421	10580635025	774115	FG	GW0022-092421	GW0025

LEVEL 2b LABORATORY DATA VALIDATION CHECKLIST FOR ICPMS

1. Holding Times

Analyte	Matrix	Method	Collection Date	Analysis Date	Affected data flagged
Dissolved As, Cd, Cu, Pb, Zn	Aqueous	EPA 200.8	9/23/21-9/24/21	10/6/21, 10/7/21, 10/11/21	No

Describe corrective actions taken because of holding time problems.

2. Instrument Tuning

Prior to calibration, was the ICP-MS tuning solution analyzed at least five times (5X) consecutively and necessary adjustments made to bring peak width within the instrument manufacturer's specifications and mass calibration to within 0.1 amu over the range of 9-208 amu? Y__X__ N_____

Was the Percent Relative Standard Deviation (%RSD) of the absolute signals for all analytes (and for each isotope) in the tuning solution < 5%? Y__X__ N_____

The fifth tune failed the required axis for Mass 9. The required axis is 8.90-9.10 and the axis result was 8.85. A sixth tune was performed, and this tune passed with an axis of 8.95 for Mass 9.

3. Instrument Calibration

Was instrument calibrated at the correct frequency (daily or once every 24 hours) with appropriate standards & blanks? Y__X__ N_____

Did the calibration curve have an R value of ≥ 0.998? Y__X__ N_____

Was the ICV performed immediately following calibration with results within criteria of 90-110%? Y__X__ N_____

Were CCVs performed at a 10% frequency, with results within criteria of 90-110%? Y_____ N__X__

Was a CCV performed at the end if the analytical run, with results within criteria of 90-110%? Y__X__ N_____

Were any data flagged because of calibration problems? Y_____ N__X__

Describe corrective actions taken because of calibration problems.

CCVs were performed at a 10% frequency. A CCV at 1607 on 10/6/21 had a 114.4% recovery for copper. No copper results were reported prior to this CCV or between this CCV and the following in-control CCV. Thus, no qualifications resulted from the high CCV recovery.

4. CRDL Check Standard

Was the CRDL check standard performed with recoveries between 60 and 140%? Y__X__ N_____

5. Internal Standards

Does the internal standard solution contain a minimum of five elements, and include elements from the following list? Li^{6}, Sc, Y, Rh, In^{115}, Tb, Ho, Lu, Bi? Y__X__ N_____

Is the Percent Relative Intensity (%RI) in the samples within 60-125% of the response in the calibation blank? Y__X__ N_____

If the %RI falls outside of 60-125%, are the affected samples re-analyzed at a 2X dilution until the Internal standards are within the criteria? Y___ N___ NA _X_

Were any data flagged because of internal standard problems? Y_____ N__X__

Describe corrective actions taken because of internal standard problems.

LEVEL 2b LABORATORY DATA VALIDATION CHECKLIST FOR ICPMS

6. Blanks

Was Initial Calibration Blank (ICB) analyzed?	Y__X__ N_____
Was the ICB result > 0 and < the MDL?	Y__X__ N_____
Were Continuing Calibration Blanks (CCBs) analyzed at the frequency of 10%?	Y__X__ N_____
Were CCB results > 0 and < the MDL?	Y__X__ N_____
Were method blanks analyzed at the frequency of 1/20 samples?	Y__X__ N_____
Were MB results non-detects?	Y__X__ N_____
Were any data flagged because of blank problems?	Y_____ N__X__
Describe corrective actions taken because of blank problems.	

7. Interference Check Sample

Were the ICSA/ICSAB analyzed at the beginning of each run?	Y__X__ N_____
Were ICSA within control window of 80-120% recovery?	Y__X__ N_____
Were ICSAB within control window of 80-120% recovery?	Y__X__ N_____
Were any data flagged because of ICS problems?	Y_____ N__X__
Describe corrective actions taken because of ICS problems.	

8. Laboratory Control Sample

Was Laboratory Control Sample (LCS) analyzed at the frequency of 1/20 samples?	Y__X__ N_____
Was LCS within control window of 85-115% recovery?	Y__X__ N_____
Were any data flagged because of LCS problems?	Y_____ N__X__
Describe corrective actions taken because of LCS problems.	

10. Matrix Spike/Matrix Spike Duplicate Sample Results

Was Matrix Spike Sample (MS) analyzed at the frequency of 1/10 samples?	Y__X__ N_____
Was MS result within control window of 70-130% for samples in which the parent sample concentration was ≤ 4X the spike concentration?	Y__X__ N_____
Was the Matrix Spike Duplicate Sample (MSD) analyzed at the frequency of 1/20 samples?	Y__X__ N_____
For sample & duplicate values > 5 times the RL, were results of the MSD ≤ 20% relative percent difference (RPD)? For sample or duplicate values < 5 times the RL, is the absolute difference between the sample and duplicate values ≤ the RL?	Y__X__ N_____
Were the MS and MSD analyzed at the same dilution factor?	Y__X__ N_____
Were the parent sample, MS, and MSD analyzed at the same dilution factor?	Y_____ N__X__
Were any data flagged because of MS/MSD recovery problems?	Y_____ N__X__
Were any data flagged because of MS/MSD RPD problems?	Y_____ N__X__
Describe corrective actions taken because of MS problems.	

LEVEL 2b LABORATORY DATA VALIDATION CHECKLIST FOR ICPMS

QC batch 774115, *MS/MSD 4123742/4123743 zinc recoveries were -22%/167%. The parent sample concentration was >4X the spike concentration, so recovery criteria were waived.*
MS/MSD 4123742/4123743 were analyzed at a 1X dilution for all parameters. The parent sample, GW0025, was analyzed at a 1X dilution for As, Cd, Cu, and Pb; while, Zn was analyzed at a 10X dilution. All other MS and MSD samples were analyzed at the same DF as the parent sample.

11. Laboratory Post Digestion Spike Analysis

Was the post digestion spike analyzed at a frequency of 1/20 samples?	Y___ N_X_
Was post digestion spike recovery within control window of 75-125%?	Y___ N___ NA _X_
Were the sample and post digestion spike analyzed at the same dilution factor?	Y___ N___ NA _X_
Were any data flagged because of post digestion spike problems?	Y___ N___ NA _X_

Describe corrective actions taken because of post digestion spike problems.
A post digestion spike is not required for EPA 200.8, additionally all MS/MSD recoveries in which the parent sample concentrations were <4X the spike concentrations were within acceptable limits. The data package does not include results for a post digestion spike.

12. ICP Serial Dilution

Was the laboratory serial dilution analyzed at the frequency of 1/20 samples	Y__X__ N_____
For sample concentrations >50 times the MDL, did the serial dilution agree within 10% of the original determination after correction for dilution?	Y__X__ N_____
Were any data flagged because of serial dilution problems?	Y___ N_X_

Describe corrective actions taken because of serial dilution problems.
QC batch 774114, *SD 4126140 had a 16.4% difference between the ZnDis initial sample result and the SD result. SD 4126096 had a 19.3 % difference between the AsDis initial sample result and the SD result and a 13.1 % difference between the CuDis initial sample result and the serial dilution result. In all cases the initial sample result was <50X the MDL, so no qualifiers were applied.*

Are there any additional analytical limitations that users should be aware of?	Y_____ N__X__

DATA VALIDATION CHECKLIST FOR FIELD QUALITY CONTROL

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)

Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, June 4, 2021)

Site:	Butte Priority Soils Operable Unit	**Project:**	BPSOU GW Monitoring - 0231348
Laboratory:	Pace Analytical Services (Minneapolis, MN)	**Case Number:**	10580635
Matrix:	Aqueous	**Analysis:**	Dissolved Mercury, Dissolved As, Cd, Cu, Pb, Zn
Sample Date(s):	9/23/21-9/24/21		
Data Validator:	Tina Donovan	**Validation Date:**	10/22/2021

Sample Delivery Group

Field Sample ID	Lab Sample ID	Sample Type	Associated Fld QC	Abbreviated Field ID
GW0001-092321	10580635001	FG	GW0010-092421	GW0001
GW0002-092321	10580635002	FG	GW0010-092421	GW0002
GW0003-092321	10580635003	FG	GW0010-092421	GW0003
GW0004-092321	10580635004	FG	GW0010-092421	GW0004
GW0005-092421	10580635005	FG	GW0010-092421	GW0005
GW0006-092421	10580635006	FG	GW0010-092421	GW0006
GW0007-092421	10580635007	FG	GW0010-092421	GW0007
GW0008-092421	10580635008	FG-N	GW0010-092421	GW0008
GW0009-092421	10580635009	FG-D	GW0010-092421	GW0009
GW0010-092421	10580635010	FB	GW0010-092421	GW0010
GW0011-092421	10580635011	FG	GW0010-092421	GW0011
GW0012-092421	10580635012	FG	GW0010-092421	GW0012
GW0013-092421	10580635013	FG	GW0010-092421	GW0013
GW0014-092421	10580635014	FG	GW0010-092421	GW0014
GW0015-092421	10580635015	FG	GW0010-092421	GW0015
GW0016-092421	10580635016	FG	GW0010-092421	GW0016
GW0017-092421	10580635017	FG	GW0022-092421	GW0017
GW0018-092421	10580635018	FG	GW0022-092421	GW0018

DATA VALIDATION CHECKLIST FOR FIELD QUALITY CONTROL

GW0019-092421	10580635019	FG	GW0022-092421	GW0019
GW0020-092421	10580635020	FG-N	GW0022-092421	GW0020
GW0021-092421	10580635021	FG-D	GW0022-092421	GW0021
GW0022-092421	10580635022	FB	GW0022-092421	GW0022
GW0023-092421	10580635023	FG	GW0022-092421	GW0023
GW0024-092421	10580635024	FG	GW0022-092421	GW0024
GW0025-092421	10580635025	FG	GW0022-092421	GW0025

Analyte	Matrix	Method	Collection Date	Analysis Date
Dissolved Mercury	Aqueous	EPA 245.1	9/23/21-9/24/21	10/6/21
Dissolved As, Cd, Cu, Pb, Zn	Aqueous	EPA 200.8	9/23/21-9/24/21	10/6/21, 10/7/21, 10/11/21

Field QC Samples

Field Blanks FB)

Were FBs sumbitted as specified in the BPSOU GW QAPP (1 in 20)? Y_X_ N___

Were results for FBs within the target control limits in the BPSOU GW QAPP (< MDL)? Y___ N_X_

Were any data qualified because of FB problems? Y_X_ N___

FB GW0022, associated with samples GW0017 through GW0025, had a PbDis detection at a concentration >1.5X the MDL. PbDis results in GW0017-GW0021 and GW0025 were > MDL, but < the RL; thus, were qualified UJ. PbDis results in GW0023 and GW0024 were non-detect and were not qualified.

Field Replicates

Were field duplicates (FD) submitted as specified in the BPSOU GW QAPP (1 in 20)? Y_X_ N___

Were results for FDs within the target control limits in the BPSOU GW QAPP (< 20% RPD or Δ ≤ RL as applicable)? Y_X_ N___

Were any data qualified because of FD results? Y___ N_X_

Field duplicate set GW0008/GW0009 had RPDs >20% for CuDis and PbDis. In both cases, both primary and duplicate results were <5X the RL and the absolute difference between primary and duplicate results was < the RL thus, no data were qualified based on field precision.

Additional Comments

Data Validation Summary for SDG 10581942

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)

Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, July 2021)

Site:	Butte Priority Soils Operable Unit	**Project:**	BPSOU GW Monitoring - 0231348
Laboratory:	Pace Analytical Services (Minneapolis, MN)	**Case Number:**	10581942
Matrix:	Aqueous	**Analysis:**	Dissolved Mercury, Dissolved As, Cd, Cu, Pb, Zn
Sample Date(s):	9/27/21, 9/28/21, 9/30/21		
Data Validator:	Tina Donovan	**Validation Date:**	12/13/2021

Sample Delivery Group

Analyte	Matrix	Method	Collection Date	Analysis Date
Dissolved Mercury	Aqueous	EPA 245.1	9/27/21, 9/28/21, 9/30/21	10/14/21
Dissolved As, Cd, Cu, Pb, Zn	Aqueous	EPA 200.8	9/27/21, 9/28/21, 9/30/21	10/12/21, 10/14/21, 10/18/21, 10/19/21

Were Level A field documentation and QA/QC practices met for this data set? Y_X_ N___

Were Level B field documentation and QA/QC practices met for this data set? Y_X_ N___

Summary

	Data Points	Natural Data Points	Enforcement Quality (E)	Screening Level (S)	Unusable (R)
Total	132	120	120		
Percentage	100%	91%	100%	0%	0%

Analaysis of this data set resulted in 120 natural sample data points. All 120 of these data points met enforcement quality criteria. All anticipated data was collected and no results were rejected; therefore, completeness for this data set is 100%.

LABORATORY DATA VALIDATION CHECKLIST FOR MERCURY

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)

Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, July 2021)

Site:	Butte Priority Soils Operable Unit	**Project:**	BPSOU GW Monitoring - 0231348
Laboratory:	Pace Analytical Services (Minneapolis, MN)	**Case Number:**	10581942
Matrix:	Aqueous	**Analysis:**	Dissolved Mercury
Sample Date(s):	9/27/21, 9/28/21, 9/30/21	**Analysis Date(s):**	10/14/21
Data Validator:	Tina Donovan	**Validation Date:**	12/13/2021

Sample Delivery Group

Field Sample ID	Lab Sample ID	Lab QC Batch	Sample Type	Associated Fld QC	Abbreviated Field ID
GW0048-092721	10581942001	775848	FG	GW0057-092821	GW0048
GW0049-092721	10581942002	775848	FG	GW0057-092821	GW0049
GW0050-092421	10581942003	775848	FG	GW0057-092821	GW0050
GW0051-092721	10581942004	775848	FG	GW0057-092821	GW0051
GW0052-092721	10581942005	775848	FG	GW0057-092821	GW0052
GW0053-092821	10581942006	775848	FG	GW0057-092821	GW0053
GW0054-092821	10581942007	775848	FG	GW0057-092821	GW0054
GW0055-092821	10581942008	775848	FG-N	GW0057-092821	GW0055
GW0056-092821	10581942009	775848	FG-D	GW0057-092821	GW0056
GW0057-092821	10581942010	775848	FB	GW0057-092821	GW0057
GW0058-092821	10581942011	775848	FG	GW0057-092821	GW0058
GW0059-092921	10581942012	775848	FG	GW0057-092821	GW0059
GW0060-093021	10581942013	775848	FG	GW0057-092821	GW0060
GW0061-092821	10581942014	775848	FG	GW0057-092821	GW0061
GW0062-092821	10581942015	775848	FG	GW0057-092821	GW0062
GW0063-092821	10581942016	775848	FG	GW0057-092821	GW0063
GW0064-092821	10581942017	775848	FG	GW0057-092821	GW0064
GW0065-092821	10581942018	775844	FG	GW0057-092821	GW0065
GW0066-092821	10581942019	775844	FG	GW0057-092821	GW0066
GW0067-093021	10581942020	775844	FG	GW0057-092821	GW0067

LABORATORY DATA VALIDATION CHECKLIST FOR MERCURY

GW0068-093021	10581942021	775844	FG	GW0057-092821	GW0068
GW0069-093021	10581942022	775844	FG	GW0057-092821	GW0069

1. Holding Times

Analyte	Matrix	Method	Collection Date	Analysis Date	Affected data flagged
Dissolved Mercury	Aqueous	EPA 245.1	9/27/21, 9/28/21,	10/14/21	No

Describe corrective actions taken because of holding time problems.

2. Blanks

Were Method Blanks (MB) analyzed at the frequency of 1/20 samples? Y__X__ N_____

Were MB results non-detects? Y__X__ N_____

Were any data flagged because of blank problems? Y_____ N__X__

Describe corrective actions taken because of blank problems.

3. Laboratory Control Sample (LCS)

Was Laboratory Control Sample (LCS) analyzed at the frequency of 1/20 samples? Y__X__ N_____

Was LCS within control window of 85-115% recovery? Y__X__ N_____

Were any data flagged because of LCS problems? Y_____ N__X__

Describe corrective actions taken because of LCS problems.

4. Laboratory Fortified Matrix Spike/Matrix Spike Duplicate Analaysis (MS/MSD)

Were laboratory Fortified Matrix Spike (MS) samples analyzed at the frequency of 1 per batch with an additional MS analyzed for batches of 11 or more samples ? Y__X__ N_____

Was MS/MSD within control window of 70-130% recovery for samples in which the parent sample concentration was ≤ 4X the spike concentration? Y__X__ N_____

Were laboratory Fortified Matrix Spike Duplicate Samples (MSD) analyzed at the frequency of 1/20 samples ? Y__X__ N_____

For MS & MSD results > 5 times the RL, were results of the MSD ≤ 20% relative percent difference (RPD)? For MS & MSD results < 5 times the RL, were results of the MSD ≤ the RL? Y__X__ N_____

Were any data flagged because of MS/MSD recovery problems? Y_____ N__X__

Were any data flagged because of MS/MSD RPD problems? Y_____ N__X__

Describe corrective actions taken because of MS/MSD recovery and/or RPD problems.

Are there any additional analytical limitations that users should be aware of? Y_____ N__X__

LEVEL 2a LABORATORY DATA VALIDATION CHECKLIST FOR ICPMS

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)

Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, July 2021)

Site:	Butte Priority Soils Operable Unit	**Project:**	BPSOU GW Monitoring - 0231348
Laboratory:	Pace Analytical Services (Minneapolis, MN)	**Case Number:**	10581942
Matrix:	Aqueous	**Analysis:**	Dissolved As, Cd, Cu, Pb, Zn
Sample Date(s):	9/27/21, 9/28/21, 9/30/21	**Analysis Date(s):**	10/12/21, 10/14/21, 10/18/21, 10/19/21
Data Validator:	Tina Donovan	**Validation Date:**	12/13/2021

Sample Delivery Group

Field Sample ID	Lab Sample ID	Lab QC Batch	Sample Type	Associated Fld QC	Abbreviated Field ID
GW0048-092721	10581942001	775227	FG	GW0057-092821	GW0048
GW0049-092721	10581942002	775227	FG	GW0057-092821	GW0049
GW0050-092421	10581942003	775227	FG	GW0057-092821	GW0050
GW0051-092721	10581942004	775227	FG	GW0057-092821	GW0051
GW0052-092721	10581942005	775227	FG	GW0057-092821	GW0052
GW0053-092821	10581942006	775227	FG	GW0057-092821	GW0053
GW0054-092821	10581942007	775227	FG	GW0057-092821	GW0054
GW0055-092821	10581942008	775227	FG-N	GW0057-092821	GW0055
GW0056-092821	10581942009	775227	FG-D	GW0057-092821	GW0056
GW0057-092821	10581942010	775227	FB	GW0057-092821	GW0057
GW0058-092821	10581942011	775227	FG	GW0057-092821	GW0058
GW0059-092921	10581942012	775227	FG	GW0057-092821	GW0059
GW0060-093021	10581942013	775227	FG	GW0057-092821	GW0060
GW0061-092821	10581942014	775227	FG	GW0057-092821	GW0061
GW0062-092821	10581942015	775227	FG	GW0057-092821	GW0062
GW0063-092821	10581942016	775227	FG	GW0057-092821	GW0063
GW0064-092821	10581942017	775227	FG	GW0057-092821	GW0064
GW0065-092821	10581942018	776608	FG	GW0057-092821	GW0065
GW0066-092821	10581942019	776608	FG	GW0057-092821	GW0066
GW0067-093021	10581942020	776608	FG	GW0057-092821	GW0067
GW0068-093021	10581942021	776608	FG	GW0057-092821	GW0068
GW0069-093021	10581942022	776608	FG	GW0057-092821	GW0069

LEVEL 2a LABORATORY DATA VALIDATION CHECKLIST FOR ICPMS

1. Holding Times

Analyte	Matrix	Method	Collection Date	Analysis Date	Affected data flagged
Dissolved As, Cd, Cu, Pb, Zn	Aqueous	EPA 200.8	9/27/21, 9/28/21, 9/30/21	10/12/21, 10/14/21, 10/18/21, 10/19/21	No

Describe corrective actions taken because of holding time problems.

2. Blanks

Were method blanks analyzed at the frequency of 1/20 samples? Y__X__ N_____

Were MB results non-detects? Y__X__ N_____

Were any data flagged because of blank problems? Y_____ N__X__

Describe corrective actions taken because of blank problems.

3. Laboratory Control Sample (LCS)

Was Laboratory Control Sample (LCS) analyzed at the frequency of 1/20 samples? Y__X__ N_____

Was LCS within control window of 85-115% recovery? Y__X__ N_____

Were any data flagged because of LCS problems? Y_____ N__X__

Describe corrective actions taken because of LCS problems.

4. Matrix Spike/Matrix Spike Duplicate Sample Results

Was Matrix Spike Sample (MS) analyzed at the frequency of 1/10 samples? Y__X__ N_____

Was MS result within control window of 70-130% for samples in which the parent sample concentration was ≤ 4X the spike concentration? Y__X__ N_____

Was the Matrix Spike Duplicate Sample (MSD) analyzed at the frequency of 1/20 samples? Y__X__ N_____

For MS & MSD results > 5 times the RL, were results of the MSD ≤ 20% relative percent difference (RPD)? For MS & MSD results < 5 times the RL, were results of the MSD ≤ the RL? Y__X__ N_____

Were any data flagged because of MS/MSD recovery problems? Y_____ N__X__

Were any data flagged because of MS/MSD RPD problems? Y_____ N__X__

Describe corrective actions taken because of MS problems.

QC batch 776608, MS 4137136 and MSD 4137137 ZnDis recoveries were -541% and -475%. The parent sample concentration was >4X the spike concentration, so recovery criteria were waived.

Are there any additional analytical limitations that users should be aware of? Y_____ N__X__

FIELD QUALITY CONTROL SAMPLE CHECKLIST

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)

Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, July 2021)

Site:	Butte Priority Soils Operable Unit	**Project:**	BPSOU GW Monitoring - 0231348
Laboratory:	Pace Analytical Services (Minneapolis,	**Case Number:**	10581942
Matrix:	Aqueous	**Analysis:**	Dissolved Mercury, Dissolved As, Cd, Cu, Pb, Zn
Sample Date(s):	9/27/21, 9/28/21, 9/30/21		
Data Validator:	Tina Donovan	**Validation Date:**	12/13/2021

Sample Delivery Group

Field Sample ID	Lab Sample ID	Sample Type	Associated Fld QC	Abbreviated Field ID
GW0048-092721	10581942001	FG	GW0057-092821	GW0048
GW0049-092721	10581942002	FG	GW0057-092821	GW0049
GW0050-092421	10581942003	FG	GW0057-092821	GW0050
GW0051-092721	10581942004	FG	GW0057-092821	GW0051
GW0052-092721	10581942005	FG	GW0057-092821	GW0052
GW0053-092821	10581942006	FG	GW0057-092821	GW0053
GW0054-092821	10581942007	FG	GW0057-092821	GW0054
GW0055-092821	10581942008	FG-N	GW0057-092821	GW0055
GW0056-092821	10581942009	FG-D	GW0057-092821	GW0056
GW0057-092821	10581942010	FB	GW0057-092821	GW0057
GW0058-092821	10581942011	FG	GW0057-092821	GW0058
GW0059-092921	10581942012	FG	GW0057-092821	GW0059
GW0060-093021	10581942013	FG	GW0057-092821	GW0060
GW0061-092821	10581942014	FG	GW0057-092821	GW0061
GW0062-092821	10581942015	FG	GW0057-092821	GW0062
GW0063-092821	10581942016	FG	GW0057-092821	GW0063
GW0064-092821	10581942017	FG	GW0057-092821	GW0064
GW0065-092821	10581942018	FG	GW0057-092821	GW0065

FIELD QUALITY CONTROL SAMPLE CHECKLIST

GW0066-092821	10581942019	FG	GW0057-092821	GW0066
GW0067-093021	10581942020	FG	GW0057-092821	GW0067
GW0068-093021	10581942021	FG	GW0057-092821	GW0068
GW0069-093021	10581942022	FG	GW0057-092821	GW0069

Analyte	Matrix	Method	Collection Date	Analysis Date
Dissolved Mercury	Aqueous	EPA 245.1	9/27/21, 9/28/21, 9/30/21	10/14/21
Dissolved As, Cd, Cu, Pb, Zn	Aqueous	EPA 200.8	9/27/21, 9/28/21, 9/30/21	10/12/21, 10/14/21, 10/18/21, 10/19/21

Field QC Samples

Field Blanks FB)

Were FBs sumbitted as specified in the BPSOU GW QAPP (1 in 20)? Y_X_ N___

Were results for FBs within the target control limits in the BPSOU GW QAPP (< MDL)? Y___ N_X_

Were any data qualified because of FB problems? Y___ N_X_

FB GW0057 had detections of CdDis and PbDis, both of which were <1.5X the MDL. Blank detections ≤1.5X the MDL are not assessed per TREC data validation guidelines.

Field Replicates

Were field duplicates (FD) submitted as specified in the BPSOU GW QAPP (1 in 20)? Y_X_ N___

Were results for FDs within the target control limits in the BPSOU GW QAPP (< 20% RPD or Δ ≤ RL as applicable)? Y_X_ N___

Were any data qualified because of FD results? Y___ N_X_

Additional Comments

Data Validation Summary for SDG 10582495

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)

Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, July 2021)

Site:	Butte Priority Soils Operable Unit	**Project:**	BPSOU GW Monitoring - 0231348
Laboratory:	Pace Analytical Services (Minneapolis, MN)	**Case Number:**	10582495
Matrix:	Aqueous	**Analysis:**	Dissolved Mercury, Dissolved As, Cd, Cu, Pb, Zn
Sample Date(s):	9/30/21, 10/1/21, 10/4/21, 10/5/21	**Analysis Date(s):**	10/20/2021-10/22/2021
Data Validator:	Michele Bay	**Validation Date:**	

Sample Delivery Group

Analyte	Matrix	Method	Collection Date	Analysis Date
Dissolved Mercury	Aqueous	EPA 245.1	9/30/21, 10/1/21, 10/4/21, 10/5/21	10/21/2021
Dissolved As, Cd, Cu, Pb, Zn	Aqueous	EPA 200.8	9/30/21, 10/1/21, 10/4/21, 10/5/21	10/20/21-10/22/21, 10/25/21

Were Level A field documentation and QA/QC practices met for this data set? Y_X_ N___

Were Level B field documentation and QA/QC practices met for this data set? Y_X_ N___

Summary

	Data Points	Natural Data Points	Enforcement Quality (E)	Screening Level (S)	Unusable (R)
Total	132	120	120	0	0
Percentage	100%	91%	100%	0%	0%

Analyses associated with this sample set resulted with 120 natural data points. Of these, 120 (100%) had no quality control deficiencies and are defined as enforcement quality. All anticipated data was collected thus, completeness for this data set is 100%.

LABORATORY DATA VALIDATION CHECKLIST FOR MERCURY

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)

Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, July 2021)

Site:	Butte Priority Soils Operable Unit	**Project:**	BPSOU GW Monitoring - 0231348
Laboratory:	Pace Analytical Services (Minneapolis, MN)	**Case Number:**	10582495
Matrix:	Aqueous	**Analysis:**	Dissolved Mercury
Sample Date(s):	9/30/21, 10/1/21, 10/4/21, 10/5/21	**Analysis Date(s):**	10/21/2021
Data Validator:	Michele Bay	**Validation Date:**	11/16/2021

Sample Delivery Group

Field Sample ID	Lab Sample ID	Lab QC Batch	Sample Type	Associated Fld QC	Abbreviated Field ID
GW0070-093021	10582495001	776874	FG	GW0076-093021	GW0070
GW0071-093021	10582495002	776874	FG	GW0076-093021	GW0071
GW0072-093021	10582495003	776874	FG	GW0076-093021	GW0072
GW0073-093021	10582495004	776874	FG	GW0076-093021	GW0073
GW0074-093021	10582495005	776874	FG-N	GW0076-093021	GW0074
GW0075-093021	10582495006	776874	FG-D	GW0076-093021	GW0075
GW0076-093021	10582495007	776874	FB	GW0076-093021	GW0076
GW0077-100421	10582495008	776874	FG	GW0076-093021	GW0077
GW0078-100121	10582495009	776874	FG	GW0076-093021	GW0078
GW0079-100121	10582495010	776874	FG	GW0076-093021	GW0079
GW0080-100121	10582495011	776874	FG	GW0076-093021	GW0080
GW0081-100121	10582495012	776874	FG	GW0076-093021	GW0081
GW0082-100121	10582495013	776874	FG	GW0076-093021	GW0082
GW0083-100421	10582495014	776874	FG	GW0076-093021	GW0083
GW0084-100421	10582495015	776874	FG	GW0076-093021	GW0084
GW0085-100121	10582495016	776874	FG	GW0076-093021	GW0085
GW0086-100121	10582495017	776874	FG	GW0076-093021	GW0086
GW0087-100521	10582495018	776874	FG	GW0076-093021	GW0087
GW0088-100121	10582495019	776876	FG	GW0076-093021	GW0088
GW0089-100521	10582495020	776876	FG	GW0076-093021	GW0089

LABORATORY DATA VALIDATION CHECKLIST FOR MERCURY

GW0090-100521	10582495021	776876	FG	GW0076-093021	GW0090
GW0091-100521	10582495022	776876	FG	GW0076-093021	GW0091

1. Holding Times

Analyte	Matrix	Method	Collection Date	Analysis Date	Affected data flagged
Dissolved Mercury	Aqueous	EPA 245.1	9/30/21, 10/1/21, 10/4/21, 10/5/21	10/21/2021	No

Describe corrective actions taken because of holding time problems.

2. Blanks

Were Method Blanks (MB) analyzed at the frequency of 1/20 samples? Y__X__ N_____

Were MB results non-detects? Y__X__ N_____

Were any data flagged because of blank problems? Y_____ N__X__

Describe corrective actions taken because of blank problems.

3. Laboratory Control Sample (LCS)

Was Laboratory Control Sample (LCS) analyzed at the frequency of 1/20 samples? Y__X__ N_____

Was LCS within control window of 85-115% recovery? Y__X__ N_____

Were any data flagged because of LCS problems? Y_____ N__X__

Describe corrective actions taken because of LCS problems.

4. Laboratory Fortified Matrix Spike/Matrix Spike Duplicate Analaysis (MS/MSD)

Were laboratory Fortified Matrix Spike (MS) samples analyzed at the frequency of 1 per batch with an additional MS analyzed for batches of 11 or more samples ? Y__X__ N_____

Was MS/MSD within control window of 70-130% recovery for samples in which the parent sample concentration was ≤ 4X the spike concentration? Y__X__ N_____

Were laboratory Fortified Matrix Spike Duplicate Samples (MSD) analyzed at the frequency of 1/20 samples ? Y__X__ N_____

For MS & MSD results > 5 times the RL, were results of the MSD ≤ 20% relative percent difference (RPD)? For MS & MSD results < 5 times the RL, were results of the MSD ≤ the RL? Y__X__ N_____

Were any data flagged because of MS/MSD recovery problems? Y_____ N__X__

Were any data flagged because of MS/MSD RPD problems? Y_____ N__X__

Describe corrective actions taken because of MS/MSD recovery and/or RPD problems.

Are there any additional analytical limitations that users should be aware of? Y_____ N__X__

LABORATORY DATA VALIDATION CHECKLIST FOR ICPMS

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)					
Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, July 2021)					
Site:	Butte Priority Soils Operable Unit		**Project:**	BPSOU GW Monitoring - 0231348	
Laboratory:	Pace Analytical Services (Minneapolis, MN)		**Case Number:**	10582495	
Matrix:	Aqueous		**Analysis:**	Dissolved As, Cd, Cu, Pb, Zn	
Sample Date(s):	9/30/21, 10/1/21, 10/4/21, 10/5/21		**Analysis Date(s):**	10/20/21-10/22/21, 10/25/21	
Data Validator:	Michele Bay		**Validation Date:**	11/16/2021	
Sample Delivery Group					
Field Sample ID	**Lab Sample ID**	**Lab QC Batch**	**Sample Type**	**Associated Fld QC**	**Abbreviated Field ID**
GW0070-093021	10582495001	776536	FG	GW0076-093021	GW0070
GW0071-093021	10582495002	776536	FG	GW0076-093021	GW0071
GW0072-093021	10582495003	776536	FG	GW0076-093021	GW0072
GW0073-093021	10582495004	776536	FG	GW0076-093021	GW0073
GW0074-093021	10582495005	776536	FG-N	GW0076-093021	GW0074
GW0075-093021	10582495006	776536	FG-D	GW0076-093021	GW0075
GW0076-093021	10582495007	776536	FB	GW0076-093021	GW0076
GW0077-100421	10582495008	776536	FG	GW0076-093021	GW0077
GW0078-100121	10582495009	776536	FG	GW0076-093021	GW0078
GW0079-100121	10582495010	776536	FG	GW0076-093021	GW0079
GW0080-100121	10582495011	776536	FG	GW0076-093021	GW0080
GW0081-100121	10582495012	776536	FG	GW0076-093021	GW0081
GW0082-100121	10582495013	776536	FG	GW0076-093021	GW0082
GW0083-100421	10582495014	776536	FG	GW0076-093021	GW0083
GW0084-100421	10582495015	776536	FG	GW0076-093021	GW0084
GW0085-100121	10582495016	776536	FG	GW0076-093021	GW0085
GW0086-100121	10582495017	776536	FG	GW0076-093021	GW0086
GW0087-100521	10582495018	776536	FG	GW0076-093021	GW0087
GW0088-100121	10582495019	776540	FG	GW0076-093021	GW0088
GW0089-100521	10582495020	776540	FG	GW0076-093021	GW0089
GW0090-100521	10582495021	776540	FG	GW0076-093021	GW0090
GW0091-100521	10582495022	776540	FG	GW0076-093021	GW0091

LABORATORY DATA VALIDATION CHECKLIST FOR ICPMS

1. Holding Times

Analyte	Matrix	Method	Collection Date	Analysis Date	Affected data flagged
Dissolved As, Cd, Cu, Pb, Zn	Aqueous	EPA 200.8	9/30/21, 10/1/21, 10/4/21, 10/5/21	10/20/21-10/22/21, 10/25/21	No

Describe corrective actions taken because of holding time problems.

2. Blanks

Were method blanks analyzed at the frequency of 1/20 samples? Y__X__ N_____

Were MB results non-detects? Y__X__ N_____

Were any data flagged because of blank problems? Y_____ N__X__

Describe corrective actions taken because of blank problems.

3. Laboratory Control Sample (LCS)

Was Laboratory Control Sample (LCS) analyzed at the frequency of 1/20 samples? Y__X__ N_____

Was LCS within control window of 85-115% recovery? Y__X__ N_____

Were any data flagged because of LCS problems? Y_____ N__X__

Describe corrective actions taken because of LCS problems.

4. Matrix Spike/Matrix Spike Duplicate Sample Results

Was Matrix Spike Sample (MS) analyzed at the frequency of 1/10 samples? Y__X__ N_____

Was MS result within control window of 70-130% for samples in which the parent sample concentration was ≤ 4X the spike concentration? Y__X__ N_____

Was the Matrix Spike Duplicate Sample (MSD) analyzed at the frequency of 1/20 samples? Y__X__ N_____

For MS & MSD results > 5 times the RL, were results of the MSD ≤ 20% relative percent difference (RPD)? For MS & MSD results < 5 times the RL, were results of the MSD ≤ the RL? Y__X__ N_____

Were any data flagged because of MS/MSD recovery problems? Y_____ N__X__

Were any data flagged because of MS/MSD RPD problems? Y_____ N__X__

Describe corrective actions taken because of MS problems.

QC Batch 776536, *MS 4136700 MSD 4136701 ZnDis recoveries <30%, MS 4136702 CuDis and ZnDis recoveries <30%. No associated ZnDis or CuDis sample results were qualified because the parent sample concentrations were >4X the spike concentrations.*

QC Batch 776540, *MS 4136716 MSD 4136717 ZnDis recoveries <30%. No associated ZnDis sample results were qualified because the parent sample concentration was >4X the spike concentrations.*

Are there any additional analytical limitations that users should be aware of? Y_____ N__X__

FIELD QUALITY CONTROL SAMPLE CHECKLIST

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)

Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, July 2021)

Site:	Butte Priority Soils Operable Unit	**Project:**	BPSOU GW Monitoring - 0231348
Laboratory:	Pace Analytical Services (Minneapolis,	**Case Number:**	10582495
Matrix:	Aqueous	**Analysis:**	Dissolved Mercury, Dissolved As, Cd, Cu, Pb, Zn
Sample Date(s):	9/30/21, 10/1/21, 10/4/21, 10/5/21	**Analysis Date(s):**	10/20/2021-10/22/2021
Data Validator:	Michele Bay	**Validation Date:**	11/16/2021

Sample Delivery Group

Field Sample ID	Lab Sample ID	Sample Type	Associated Fld QC	Abbreviated Field ID
GW0070-093021	10582495001	FG	GW0076-093021	GW0070
GW0071-093021	10582495002	FG	GW0076-093021	GW0071
GW0072-093021	10582495003	FG	GW0076-093021	GW0072
GW0073-093021	10582495004	FG	GW0076-093021	GW0073
GW0074-093021	10582495005	FG-N	GW0076-093021	GW0074
GW0075-093021	10582495006	FG-D	GW0076-093021	GW0075
GW0076-093021	10582495007	FB	GW0076-093021	GW0076
GW0077-100421	10582495008	FG	GW0076-093021	GW0077
GW0078-100121	10582495009	FG	GW0076-093021	GW0078
GW0079-100121	10582495010	FG	GW0076-093021	GW0079
GW0080-100121	10582495011	FG	GW0076-093021	GW0080
GW0081-100121	10582495012	FG	GW0076-093021	GW0081
GW0082-100121	10582495013	FG	GW0076-093021	GW0082
GW0083-100421	10582495014	FG	GW0076-093021	GW0083
GW0084-100421	10582495015	FG	GW0076-093021	GW0084
GW0085-100121	10582495016	FG	GW0076-093021	GW0085
GW0086-100121	10582495017	FG	GW0076-093021	GW0086

FIELD QUALITY CONTROL SAMPLE CHECKLIST

GW0087-100521	10582495018	FG	GW0076-093021	GW0087
GW0088-100121	10582495019	FG	GW0076-093021	GW0088
GW0089-100521	10582495020	FG	GW0076-093021	GW0089
GW0090-100521	10582495021	FG	GW0076-093021	GW0090
GW0091-100521	10582495022	FG	GW0076-093021	GW0091

Analyte	Matrix	Method	Collection Date	Analysis Date
Dissolved Mercury	Aqueous	EPA 245.1	9/30/21, 10/1/21, 10/4/21, 10/5/21	10/21/2021
Dissolved As, Cd, Cu, Pb, Zn	Aqueous	EPA 200.8	9/30/21, 10/1/21, 10/4/21, 10/5/21	10/20/21-10/22/21, 10/25/21

Field QC Samples

Field Blanks FB)

Were FBs sumbitted as specified in the BPSOU GW QAPP (1 in 20)? Y_X_ N___

Were results for FBs within the target control limits in the BPSOU GW QAPP (< MDL)? Y_X_ N___

Were any data qualified because of FB problems? Y___ N_X_

Field Replicates

Were field duplicates (FD) submitted as specified in the BPSOU GW QAPP (1 in 20)? Y_X_ N___

Were results for FDs within the target control limits in the BPSOU GW QAPP (< 20% RPD or Δ ≤ RL as applicable)? Y_X_ N___

Were any data qualified because of FD results? Y___ N_X_

Field duplicate set GW0074/GW0075 *PbDis RPD>20%, but the primary and duplicate sample results were <5X the RL and the absolute difference between primary and duplicate sample results was <RL thus, no associated data were qualified.*

Additional Comments

Data Validation Summary for SDG 10583409

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)

Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, July 2021)

Site:	Butte Priority Soils Operable Unit	**Project:**	BPSOU GW Monitoring - 0231348
Laboratory:	Pace Analytical Services (Minneapolis, MN)	**Case Number:**	10583409
Matrix:	Aqueous	**Analysis:**	Dissolved Mercury, Dissolved As, Cd, Cu, Pb, Zn
Sample Date(s):	9/24/21, 10/5/21-10/7/21		
Data Validator:	Nadia Reed	**Validation Date:**	11/19/2021

Sample Delivery Group

Analyte	Matrix	Method	Collection Date	Analysis Date
Dissolved Mercury	Aqueous	EPA 245.1	9/24/21, 10/5/21-10/7/21	10/21/2021
Dissolved As, Cd, Cu, Pb, Zn	Aqueous	EPA 200.8	9/24/21, 10/5/21-10/7/21	10/27/2021, 10/28/2021

Were Level A field documentation and QA/QC practices met for this data set? Y_X_ N___

Were Level B field documentation and QA/QC practices met for this data set? Y_X_ N___

Summary

	Data Points	Natural Data Points	Enforcement Quality (E)	Screening Level (S)	Unusable (R)
Total	60	48	48	0	0
Percentage	100%	80%	100%	0%	0%

Analyses associated with this sample set resulted in 48 natural sample data points. No quality control deficiencies occurred, thus all 48 data points were defined as enforcement quality. All anticipated data was collected, thus completeness for the data set is 100%.

LABORATORY DATA VALIDATION CHECKLIST FOR MERCURY

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)

Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, July 2021)

Site:	Butte Priority Soils Operable Unit	**Project:**	BPSOU GW Monitoring - 0231348
Laboratory:	Pace Analytical Services (Minneapolis, MN)	**Case Number:**	10583409
Matrix:	Aqueous	**Analysis:**	Dissolved Mercury
Sample Date(s):	9/24/21, 10/5/21-10/7/21	**Analysis Date(s):**	10/21/2021
Data Validator:	Nadia Reed	**Validation Date:**	11/19/2021

Sample Delivery Group

Field Sample ID	Lab Sample ID	Lab QC Batch	Sample Type	Associated Fld QC	Abbreviated Field ID
GW0108-100721	10583409010	777584	FG	GW0117-100521	GW0108
GW0114-100521	10583409001	777584	FG	GW0117-100521	GW0114
GW0115-100521	10583409002	777584	FG-N	GW0117-100521	GW0115
GW0116-100521	10583409003	777584	FG-D	GW0117-100521	GW0116
GW0117-100521	10583409004	777584	FB	GW0117-100521	GW0117
GW0118-100721	10583409005	777584	FG	GW0117-100521	GW0118
GW0119-092421	10583409006	777584	FG	GW0117-100521	GW0119
GW0120-100521	10583409007	777584	FG	GW0117-100521	GW0120
GW0121-100621	10583409008	777584	FG	GW0117-100521	GW0121
GW0122-100621	10583409009	777584	FG	GW0117-100521	GW0122

1. Holding Times

Analyte	Matrix	Method	Collection Date	Analysis Date	Affected data flagged
Dissolved Mercury	Aqueous	EPA 245.1	9/24/21, 10/5/21-10/7/21	10/21/2021	No

Describe corrective actions taken because of holding time problems.

LABORATORY DATA VALIDATION CHECKLIST FOR MERCURY

2. Blanks	
Were Method Blanks (MB) analyzed at the frequency of 1/20 samples?	Y__X__ N_____
Were MB results non-detects?	Y__X__ N_____
Were any data flagged because of blank problems?	Y_____ N__X__
Describe corrective actions taken because of blank problems.	
3. Laboratory Control Sample (LCS)	
Was Laboratory Control Sample (LCS) analyzed at the frequency of 1/20 samples?	Y__X__ N_____
Was LCS within control window of 85-115% recovery?	Y__X__ N_____
Were any data flagged because of LCS problems?	Y_____ N__X__
Describe corrective actions taken because of LCS problems.	
4. Laboratory Fortified Matrix Spike/Matrix Spike Duplicate Analaysis (MS/MSD)	
Were laboratory Fortified Matrix Spike (MS) samples analyzed at the frequency of 1 per batch with an additional MS analyzed for batches of 11 or more samples ?	Y__X__ N_____
Was MS/MSD within control window of 70-130% recovery for samples in which the parent sample concentration was ≤ 4X the spike concentration?	Y__X__ N_____
Were laboratory Fortified Matrix Spike Duplicate Samples (MSD) analyzed at the frequency of 1/20 samples?	Y__X__ N_____
For MS & MSD results > 5 times the RL, were results of the MSD ≤ 20% relative percent difference (RPD)? For MS & MSD results < 5 times the RL, were results of the MSD ≤ the RL?	Y__X__ N_____
Were any data flagged because of MS/MSD recovery problems?	Y_____ N__X__
Were any data flagged because of MS/MSD RPD problems?	Y_____ N__X__
Describe corrective actions taken because of MS/MSD recovery and/or RPD problems.	
Are there any additional analytical limitations that users should be aware of?	Y_____ N__X__

LABORATORY DATA VALIDATION CHECKLIST FOR ICPMS

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)

Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, July 2021)

Site:	Butte Priority Soils Operable Unit	**Project:**	BPSOU GW Monitoring - 0231348
Laboratory:	Pace Analytical Services (Minneapolis, MN)	**Case Number:**	10583409
Matrix:	Aqueous	**Analysis:**	Dissolved As, Cd, Cu, Pb, Zn
Sample Date(s):	9/24/21, 10/5/21-10/7/21	**Analysis Date(s):**	10/27/2021, 10/28/2021
Data Validator:	Nadia Reed	**Validation Date:**	11/19/2021

Sample Delivery Group

Field Sample ID	Lab Sample ID	Lab QC Batch	Sample Type	Associated Fld QC	Abbreviated Field ID
GW0108-100721	10583409010	777579	FG	GW0117-100521	GW0108
GW0114-100521	10583409001	777579	FG	GW0117-100521	GW0114
GW0115-100521	10583409002	777579	FG-N	GW0117-100521	GW0115
GW0116-100521	10583409003	777579	FG-D	GW0117-100521	GW0116
GW0117-100521	10583409004	777579	FB	GW0117-100521	GW0117
GW0118-100721	10583409005	777579	FG	GW0117-100521	GW0118
GW0119-092421	10583409006	777579	FG	GW0117-100521	GW0119
GW0120-100521	10583409007	777579	FG	GW0117-100521	GW0120
GW0121-100621	10583409008	777579	FG	GW0117-100521	GW0121
GW0122-100621	10583409009	777579	FG	GW0117-100521	GW0122

1. Holding Times

Analyte	Matrix	Method	Collection Date	Analysis Date	Affected data flagged
Dissolved As, Cd, Cu, Pb, Zn	Aqueous	EPA 200.8	9/24/21, 10/5/21-10/7/21	10/27/2021, 10/28/2021	No

Describe corrective actions taken because of holding time problems.

LABORATORY DATA VALIDATION CHECKLIST FOR ICPMS

2. Blanks

Were method blanks analyzed at the frequency of 1/20 samples?	Y__X__ N_____
Were MB results non-detects?	Y__X__ N_____
Were any data flagged because of blank problems?	Y_____ N__X__

Describe corrective actions taken because of blank problems.

3. Laboratory Control Sample (LCS)

Was Laboratory Control Sample (LCS) analyzed at the frequency of 1/20 samples?	Y__X__ N_____
Was LCS within control window of 85-115% recovery?	Y__X__ N_____
Were any data flagged because of LCS problems?	Y_____ N__X__

Describe corrective actions taken because of LCS problems.

4. Matrix Spike/Matrix Spike Duplicate Sample Results

Was Matrix Spike Sample (MS) analyzed at the frequency of 1/10 samples?	Y__X__ N_____
Was MS result within control window of 70-130% for samples in which the parent sample concentration was ≤ 4X the spike concentration?	Y__X__ N_____
Was the Matrix Spike Duplicate Sample (MSD) analyzed at the frequency of 1/20 samples?	Y__X__ N_____
For MS & MSD results > 5 times the RL, were results of the MSD ≤ 20% relative percent difference (RPD)? For MS & MSD results < 5 times the RL, were results of the MSD ≤ the RL?	Y__X__ N_____
Were any data flagged because of MS/MSD recovery problems?	Y__X__ N_____
Were any data flagged because of MS/MSD RPD problems?	Y_____ N__X__

Describe corrective actions taken because of MS problems.

***QC Batch 777579** , MS 4142103 MSD 4142104 CuDis and ZnDis recovery <30%; however, the parent sample concentrations were >4X the spike concentrations. Therefore, no qualifiers were applied.*

Are there any additional analytical limitations that users should be aware of?	Y_____ N__X__

FIELD QUALITY CONTROL SAMPLE CHECKLIST

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)

Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, July 2021)

Site:	Butte Priority Soils Operable Unit	**Project:**	BPSOU GW Monitoring - 0231348
Laboratory:	Pace Analytical Services (Minneapolis, MN)	**Case Number:**	10583409
Matrix:	Aqueous	**Analysis:**	Dissolved Mercury, Dissolved As, Cd, Cu, Pb, Zn
Sample Date(s):	9/24/21, 10/5/21-10/7/21	**Analysis Date(s):**	10/21/2021, 10/27/2021, 10/28/2021
Data Validator:	Nadia Reed	**Validation Date:**	11/19/2021

Sample Delivery Group

Field Sample ID	Lab Sample ID	Sample Type	Associated Fld QC	Abbreviated Field ID
GW0108-100721	10583409010	FG	GW0117-100521	GW0108
GW0114-100521	10583409001	FG	GW0117-100521	GW0114
GW0115-100521	10583409002	FG-N	GW0117-100521	GW0115
GW0116-100521	10583409003	FG-D	GW0117-100521	GW0116
GW0117-100521	10583409004	FB	GW0117-100521	GW0117
GW0118-100721	10583409005	FG	GW0117-100521	GW0118
GW0119-092421	10583409006	FG	GW0117-100521	GW0119
GW0120-100521	10583409007	FG	GW0117-100521	GW0120
GW0121-100621	10583409008	FG	GW0117-100521	GW0121
GW0122-100621	10583409009	FG	GW0117-100521	GW0122

Analyte	Matrix	Method	Collection Date	Analysis Date
Dissolved Mercury	Aqueous	EPA 245.1	)/24/21, 10/5/21-10/7/2	10/21/2021
Dissolved As, Cd, Cu, Pb, Zn	Aqueous	EPA 200.8	)/24/21, 10/5/21-10/7/2	10/27/2021, 10/28/2021

FIELD QUALITY CONTROL SAMPLE CHECKLIST

Field QC Samples

Field Blanks FB)

Were FBs sumbitted as specified in the BPSOU GW QAPP (1 in 20)? Y_X_ N___

Were results for FBs within the target control limits in the BPSOU GW QAPP (< MDL)? Y___ N_X_

Were any data qualified because of FB problems? Y___ N_X_

*CuDis was detected in **FB GW0117** at a concentration >1.5X MDL. All CuDis sample results were >10X the blank value therefore no results were qualified.*

*CdDis and ZnDis were detected in **FB GW0117** at concentrations ≤1.5X MDL thus, were not further assessed per TREC data validation guidelines.*

Field Replicates

Were field duplicates (FD) submitted as specified in the BPSOU GW QAPP (1 in 20)? Y_X_ N___

Were results for FDs within the target control limits in the BPSOU GW QAPP (< 20% RPD or Δ ≤ RL as applicable)? Y_X_ N___

Were any data qualified because of FD results? Y___ N_X_

Additional Comments

Data Validation Summary for SDG 10581934

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)

Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, July 2021)

Site:	Butte Priority Soils Operable Unit	**Project:**	BPSOU GW Monitoring - 0231348
Laboratory:	Pace Analytical Services (Minneapolis, MN)	**Case Number:**	10581934
Matrix:	Aqueous	**Analysis:**	Dissolved Mercury, Dissolved As, Cd, Cu, Pb, Zn
Sample Date(s):	9/27/2021-9/29/2021		
Data Validator:	Michele Bay	**Validation Date:**	11/16/2021

Sample Delivery Group

Analyte	Matrix	Method	Collection Date	Analysis Date
Dissolved Mercury	Aqueous	EPA 245.1	9/27/2021-9/29/2021	10/14/2021
Dissolved As, Cd, Cu, Pb, Zn	Aqueous	EPA 200.8	9/27/2021-9/29/2021	10/18/2021, 10/19/2021, 10/22/2021

Were Level A field documentation and QA/QC practices met for this data set? Y_X_ N___

Were Level B field documentation and QA/QC practices met for this data set? Y_X_ N___

Summary

	Data Points	Natural Data Points	Enforcement Quality (E)	Screening Level (S)	Unusable (R)
Total	132	120	120	0	0
Percentage	100%	91%	100%	0%	0%

Analyses associated with this sample set resulted with 120 natural data points. Of these 120 (100%) had no quality control deficiencies and are defined as enforcement quality. All anticipated data was collected thus, completeness for this data set is 100%.

LABORATORY DATA VALIDATION CHECKLIST FOR MERCURY

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)

Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, July 2021)

Site:	Butte Priority Soils Operable Unit	**Project:**	BPSOU GW Monitoring - 0231348
Laboratory:	Pace Analytical Services (Minneapolis, MN)	**Case Number:**	10581934
Matrix:	Aqueous	**Analysis:**	Dissolved Mercury
Sample Date(s):	9/27/2021-9/29/2021	**Analysis Date(s):**	10/14/2021
Data Validator:	Michele Bay	**Validation Date:**	11/16/2021

Sample Delivery Group

Field Sample ID	Lab Sample ID	Lab QC Batch	Sample Type	Associated Fld QC	Abbreviated Field ID
GW0026-092721	10581934001	775847	FG	GW0041-092921	GW0026
GW0027-092721	10581934002	775847	FG	GW0041-092921	GW0027
GW0028-092721	10581934003	775847	FG	GW0041-092921	GW0028
GW0029-092721	10581934004	775847	FG	GW0041-092921	GW0029
GW0030-092721	10581934005	775847	FG	GW0041-092921	GW0030
GW0031-092721	10581934006	775847	FG	GW0041-092921	GW0031
GW0032-092721	10581934007	775847	FG	GW0041-092921	GW0032
GW0033-092821	10581934008	775847	FG	GW0041-092921	GW0033
GW0034-092821	10581934009	775847	FG	GW0041-092921	GW0034
GW0035-092821	10581934010	775847	FG	GW0041-092921	GW0035
GW0036-092821	10581934011	775847	FG	GW0041-092921	GW0036
GW0037-092921	10581934012	775844	FG	GW0041-092921	GW0037
GW0038-092821	10581934013	775847	FG	GW0041-092921	GW0038
GW0039-092921	10581934014	775847	FG-N	GW0041-092921	GW0039
GW0040-092921	10581934015	775847	FG-D	GW0041-092921	GW0040
GW0041-092921	10581934016	775847	FB	GW0041-092921	GW0041
GW0042-092921	10581934017	775847	FG	GW0041-092921	GW0042
GW0043-092921	10581934018	775847	FG	GW0041-092921	GW0043
GW0044-092921	10581934019	775847	FG	GW0041-092921	GW0044
GW0045-092921	10581934020	775847	FG	GW0041-092921	GW0045

LABORATORY DATA VALIDATION CHECKLIST FOR MERCURY

GW0046-092921	10581934021	775844	FG	GW0041-092921	GW0046
GW0047-092921	10581934022	775844	FG	GW0041-092921	GW0047

1. Holding Times

Analyte	Matrix	Method	Collection Date	Analysis Date	Affected data flagged
Dissolved Mercury	Aqueous	EPA 245.1	9/27/2021- 9/29/2021	10/14/2021	No

Describe corrective actions taken because of holding time problems.

2. Blanks

Were Method Blanks (MB) analyzed at the frequency of 1/20 samples? Y__X__ N_____

Were MB results non-detects? Y__X__ N_____

Were any data flagged because of blank problems? Y_____ N__X__

Describe corrective actions taken because of blank problems.

3. Laboratory Control Sample (LCS)

Was Laboratory Control Sample (LCS) analyzed at the frequency of 1/20 samples? Y__X__ N_____

Was LCS within control window of 85-115% recovery? Y__X__ N_____

Were any data flagged because of LCS problems? Y_____ N__X__

Describe corrective actions taken because of LCS problems.

4. Laboratory Fortified Matrix Spike/Matrix Spike Duplicate Analaysis (MS/MSD)

Were laboratory Fortified Matrix Spike (MS) samples analyzed at the frequency of 1 per batch with an additional MS analyzed for batches of 11 or more samples ? Y__X__ N_____

Was MS/MSD within control window of 70-130% recovery for samples in which the parent sample concentration was ≤ 4X the spike concentration? Y__X__ N_____

Were laboratory Fortified Matrix Spike Duplicate Samples (MSD) analyzed at the frequency of 1/20 samples ? Y__X__ N_____

For MS & MSD results > 5 times the RL, were results of the MSD ≤ 20% relative percent difference (RPD)? For MS & MSD results < 5 times the RL, were results of the MSD ≤ the RL? Y__X__ N_____

Were any data flagged because of MS/MSD recovery problems? Y_____ N__X__

Were any data flagged because of MS/MSD RPD problems? Y_____ N__X__

Describe corrective actions taken because of MS/MSD recovery and/or RPD problems.

Are there any additional analytical limitations that users should be aware of? Y_____ N__X__

LEVEL LABORATORY DATA VALIDATION CHECKLIST FOR ICPMS

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)					
Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, July 2021)					
Site:	Butte Priority Soils Operable Unit		**Project:**	BPSOU GW Monitoring - 0231348	
Laboratory:	Pace Analytical Services (Minneapolis, MN)		**Case Number:**	10581934	
Matrix:	Aqueous		**Analysis:**	Dissolved As, Cd, Cu, Pb, Zn	
Sample Date(s):	9/27/2021-9/29/2021		**Analysis Date(s):**	10/18/2021, 10/19/2021, 10/22/2021	
Data Validator:	Michele Bay		**Validation Date:**	11/16/2021	
Sample Delivery Group					
Field Sample ID	**Lab Sample ID**	**Lab QC Batch**	**Sample Type**	**Associated Fld QC**	**Abbreviated Field ID**
GW0026-092721	10581934001	775223	FG	GW0041-092921	GW0026
GW0027-092721	10581934002	775223	FG	GW0041-092921	GW0027
GW0028-092721	10581934003	775223	FG	GW0041-092921	GW0028
GW0029-092721	10581934004	775223	FG	GW0041-092921	GW0029
GW0030-092721	10581934005	775223	FG	GW0041-092921	GW0030
GW0031-092721	10581934006	775223	FG	GW0041-092921	GW0031
GW0032-092721	10581934007	775223	FG	GW0041-092921	GW0032
GW0033-092821	10581934008	775223	FG	GW0041-092921	GW0033
GW0034-092821	10581934009	775223	FG	GW0041-092921	GW0034
GW0035-092821	10581934010	775223	FG	GW0041-092921	GW0035
GW0036-092821	10581934011	775223	FG	GW0041-092921	GW0036
GW0037-092921	10581934012	776608	FG	GW0041-092921	GW0037
GW0038-092821	10581934013	775223	FG	GW0041-092921	GW0038
GW0039-092921	10581934014	775223	FG-N	GW0041-092921	GW0039
GW0040-092921	10581934015	775223	FG-D	GW0041-092921	GW0040
GW0041-092921	10581934016	775223	FB	GW0041-092921	GW0041
GW0042-092921	10581934017	775223	FG	GW0041-092921	GW0042
GW0043-092921	10581934018	775223	FG	GW0041-092921	GW0043
GW0044-092921	10581934019	775223	FG	GW0041-092921	GW0044
GW0045-092921	10581934020	775223	FG	GW0041-092921	GW0045
GW0046-092921	10581934021	776608	FG	GW0041-092921	GW0046
GW0047-092921	10581934022	776608	FG	GW0041-092921	GW0047

LEVEL LABORATORY DATA VALIDATION CHECKLIST FOR ICPMS

1. Holding Times

Analyte	Matrix	Method	Collection Date	Analysis Date	Affected data flagged
Dissolved As, Cd, Cu, Pb, Zn	Aqueous	EPA 200.8	9/27/2021-9/29/2021	10/18/2021, 10/19/2021, 10/22/2021	No

Describe corrective actions taken because of holding time problems.

2. Blanks

Were method blanks analyzed at the frequency of 1/20 samples? Y__X__ N_____

Were MB results non-detects? Y__X__ N_____

Were any data flagged because of blank problems? Y_____ N__X__

Describe corrective actions taken because of blank problems.

3. Laboratory Control Sample (LCS)

Was Laboratory Control Sample (LCS) analyzed at the frequency of 1/20 samples? Y__X__ N_____

Was LCS within control window of 85-115% recovery? Y__X__ N_____

Were any data flagged because of LCS problems? Y_____ N__X__

Describe corrective actions taken because of LCS problems.

4. Matrix Spike/Matrix Spike Duplicate Sample Results

Was Matrix Spike Sample (MS) analyzed at the frequency of 1/10 samples? Y__X__ N_____

Was MS result within control window of 70-130% for samples in which the parent sample concentration was ≤ 4X the spike concentration? Y__X__ N_____

Was the Matrix Spike Duplicate Sample (MSD) analyzed at the frequency of 1/20 samples? Y__X__ N_____

For MS & MSD results > 5 times the RL, were results of the MSD ≤ 20% relative percent difference (RPD)? For MS & MSD results < 5 times the RL, were results of the MSD ≤ the RL? Y__X__ N_____

Were any data flagged because of MS/MSD recovery problems? Y_____ N__X__

Were any data flagged because of MS/MSD RPD problems? Y_____ N__X__

Describe corrective actions taken because of MS problems.

QC Batch 775223 *, MS 4129196 ZnDis recovery >130%. No associated ZnDis sample results were qualified because the parent sample concentration was >4X the spike concentration. MS 4129198 ZnDis recovery <70%. No associated ZnDis sample results were qualified because the parent sample concentration was >4X the spike concentration.*

QC Batch 776608, *MS 4137136 MSD 4137137 ZnDis recoveries <30%. No associated ZnDis sample results were qualified because the parent sample concentration was >4X the spike concentrations.*

Are there any additional analytical limitations that users should be aware of? Y_____ N__X__

FIELD QUALITY CONTROL SAMPLE CHECKLIST

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)

Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, July 2021)

Site:	Butte Priority Soils Operable Unit	**Project:**	BPSOU GW Monitoring - 0231348
Laboratory:	Pace Analytical Services (Minneapolis,	**Case Number:**	10581934
Matrix:	Aqueous	**Analysis:**	Dissolved Mercury, Dissolved As, Cd, Cu, Pb, Zn
Sample Date(s):	9/27/2021-9/29/2021	**Analysis Date(s):**	10/14/2021, 10/18/2021, 10/19/2021, 10/22/2021
Data Validator:	Michele Bay	**Validation Date:**	11/16/2021

Sample Delivery Group

Field Sample ID	Lab Sample ID	Sample Type	Associated Fld QC	Abbreviated Field ID
GW0026-092721	10581934001	FG	GW0041-092921	GW0026
GW0027-092721	10581934002	FG	GW0041-092921	GW0027
GW0028-092721	10581934003	FG	GW0041-092921	GW0028
GW0029-092721	10581934004	FG	GW0041-092921	GW0029
GW0030-092721	10581934005	FG	GW0041-092921	GW0030
GW0031-092721	10581934006	FG	GW0041-092921	GW0031
GW0032-092721	10581934007	FG	GW0041-092921	GW0032
GW0033-092821	10581934008	FG	GW0041-092921	GW0033
GW0034-092821	10581934009	FG	GW0041-092921	GW0034
GW0035-092821	10581934010	FG	GW0041-092921	GW0035
GW0036-092821	10581934011	FG	GW0041-092921	GW0036
GW0037-092921	10581934012	FG	GW0041-092921	GW0037

FIELD QUALITY CONTROL SAMPLE CHECKLIST

GW0038-092821	10581934013	FG	GW0041-092921	GW0038
GW0039-092921	10581934014	FG-N	GW0041-092921	GW0039
GW0040-092921	10581934015	FG-D	GW0041-092921	GW0040
GW0041-092921	10581934016	FB	GW0041-092921	GW0041
GW0042-092921	10581934017	FG	GW0041-092921	GW0042
GW0043-092921	10581934018	FG	GW0041-092921	GW0043
GW0044-092921	10581934019	FG	GW0041-092921	GW0044
GW0045-092921	10581934020	FG	GW0041-092921	GW0045
GW0046-092921	10581934021	FG	GW0041-092921	GW0046
GW0047-092921	10581934022	FG	GW0041-092921	GW0047

Analyte	Matrix	Method	Collection Date	Analysis Date
Dissolved Mercury	Aqueous	EPA 245.1	9/27/2021-9/29/2021	10/14/2021
Dissolved As, Cd, Cu, Pb, Zn	Aqueous	EPA 200.8	9/27/2021-9/29/2021	10/18/2021, 10/19/2021, 10/22/2021

Field QC Samples

Field Blanks FB)

Were FBs sumbitted as specified in the BPSOU GW QAPP (1 in 20)? Y_X_ N___

Were results for FBs within the target control limits in the BPSOU GW QAPP (< MDL)? Y_X_ N___

Were any data qualified because of FB problems? Y___ N_X_

Field Replicates

Were field duplicates (FD) submitted as specified in the BPSOU GW QAPP (1 in 20)? Y_X_ N___

Were results for FDs within the target control limits in the BPSOU GW QAPP (< 20% RPD or Δ ≤ RL as applicable)? Y_X_ N___

Were any data qualified because of FD results? Y___ N_X_

Additional Comments

Data Validation Summary for SDG 10582497

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)

Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, July 2021)

Site:	Butte Priority Soils Operable Unit	**Project:**	BPSOU GW Monitoring - 0231348
Laboratory:	Pace Analytical Services (Minneapolis, MN)	**Case Number:**	10582497
Matrix:	Aqueous	**Analysis:**	Dissolved Mercury, Dissolved As, Cd, Cu, Pb, Zn
Sample Date(s):	9/30/21, 10/1/21, 10/4/21		
Data Validator:	Michele Bay	**Validation Date:**	11/18/2021

Sample Delivery Group

Analyte	Matrix	Method	Collection Date	Analysis Date
Dissolved Mercury	Aqueous	EPA 245.1	9/30/21, 10/1/21, 10/4/21	10/21/2021
Dissolved As, Cd, Cu, Pb, Zn	Aqueous	EPA 200.8	9/30/21, 10/1/21, 10/4/21	10/20/2021, 10/21/2021

Were Level A field documentation and QA/QC practices met for this data set? Y_X_ N___

Were Level B field documentation and QA/QC practices met for this data set? Y_X_ N___

Summary

	Data Points	Natural Data Points	Enforcement Quality (E)	Screening Level (S)	Unusable (R)
Total	126	114	114	0	0
Percentage	100%	90%	100%	0%	0%

Analyses associated with this sample set resulted with 114 natural data points. Of these, all 114 (100%) data points had no quality control deficiencies and are defined as enforcement quality. All anticipated data was collected thus, completeness for this data set is 100%.

LABORATORY DATA VALIDATION CHECKLIST FOR MERCURY

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)

Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, July 2021)

Site:	Butte Priority Soils Operable Unit	**Project:**	BPSOU GW Monitoring - 0231348
Laboratory:	Pace Analytical Services (Minneapolis, MN)	**Case Number:**	10582497
Matrix:	Aqueous	**Analysis:**	Dissolved Mercury
Sample Date(s):	9/30/21, 10/1/21, 10/4/21	**Analysis Date(s):**	10/21/2021
Data Validator:	Michele Bay	**Validation Date:**	11/18/2021

Sample Delivery Group

Field Sample ID	Lab Sample ID	Lab QC Batch	Sample Type	Associated Fld QC	Abbreviated Field ID
GW0092-093021	10582497001	776877	FG	GW0100-100121	GW0092
GW0093-093021	10582497002	776877	FG	GW0100-100121	GW0093
GW0094-100121	10582497003	776877	FG	GW0100-100121	GW0094
GW0095-100121	10582497004	776877	FG	GW0100-100121	GW0095
GW0096-100121	10582497005	776877	FG	GW0100-100121	GW0096
GW0097-100121	10582497006	776877	FG	GW0100-100121	GW0097
GW0098-100121	10582497007	776877	FG-N	GW0100-100121	GW0098
GW0099-100121	10582497008	776877	FG-D	GW0100-100121	GW0099
GW0100-100121	10582497009	776877	FB	GW0100-100121	GW0100
GW0101-100121	10582497010	776877	FG	GW0100-100121	GW0101
GW0102-100121	10582497011	776877	FG	GW0100-100121	GW0102
GW0103-100121	10582497012	776877	FG	GW0100-100121	GW0103
GW0104-100121	10582497013	776877	FG	GW0100-100121	GW0104
GW0105-100121	10582497014	776877	FG	GW0100-100121	GW0105
GW0106-100421	10582497015	776877	FG	GW0100-100121	GW0106
GW0107-100421	10582497016	776877	FG	GW0100-100121	GW0107
GW0109-100421	10582497017	776877	FG	GW0100-100121	GW0109
GW0110-100421	10582497018	776876	FG	GW0100-100121	GW0110
GW0111-100421	10582497019	776876	FG	GW0100-100121	GW0111
GW0112-100421	10582497020	776876	FG	GW0100-100121	GW0112

LABORATORY DATA VALIDATION CHECKLIST FOR MERCURY

GW0113-100421	10582497021	776876	FG	GW0100-100121	GW0113

1. Holding Times

Analyte	Matrix	Method	Collection Date	Analysis Date	Affected data flagged
Dissolved Mercury	Aqueous	EPA 245.1	9/30/21, 10/1/21, 10/4/21	10/21/2021	No

Describe corrective actions taken because of holding time problems.

2. Blanks

Were Method Blanks (MB) analyzed at the frequency of 1/20 samples? Y__X__ N_____

Were MB results non-detects? Y__X__ N_____

Were any data flagged because of blank problems? Y_____ N__X__

Describe corrective actions taken because of blank problems.

3. Laboratory Control Sample (LCS)

Was Laboratory Control Sample (LCS) analyzed at the frequency of 1/20 samples? Y__X__ N_____

Was LCS within control window of 85-115% recovery? Y__X__ N_____

Were any data flagged because of LCS problems? Y_____ N__X__

Describe corrective actions taken because of LCS problems.

4. Laboratory Fortified Matrix Spike/Matrix Spike Duplicate Analaysis (MS/MSD)

Were laboratory Fortified Matrix Spike (MS) samples analyzed at the frequency of 1 per batch with an additional MS analyzed for batches of 11 or more samples ? Y__X__ N_____

Was MS/MSD within control window of 70-130% recovery for samples in which the parent sample concentration was ≤ 4X the spike concentration? Y__X__ N_____

Were laboratory Fortified Matrix Spike Duplicate Samples (MSD) analyzed at the frequency of 1/20 samples? Y__X__ N_____

For MS & MSD results > 5 times the RL, were results of the MSD ≤ 20% relative percent difference (RPD)? For MS & MSD results < 5 times the RL, were results of the MSD ≤ the RL? Y__X__ N_____

Were any data flagged because of MS/MSD recovery problems? Y_____ N__X__

Were any data flagged because of MS/MSD RPD problems? Y_____ N__X__

Describe corrective actions taken because of MS/MSD recovery and/or RPD problems.

Are there any additional analytical limitations that users should be aware of? Y_____ N__X__

LABORATORY DATA VALIDATION CHECKLIST FOR ICPMS

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)					
Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, July 2021)					
Site:	Butte Priority Soils Operable Unit		**Project:**	BPSOU GW Monitoring - 0231348	
Laboratory:	Pace Analytical Services (Minneapolis, MN)		**Case Number:**	10582497	
Matrix:	Aqueous		**Analysis:**	Dissolved As, Cd, Cu, Pb, Zn	
Sample Date(s):	9/30/21, 10/1/21, 10/4/21		**Analysis Date(s):**	10/20/2021, 10/21/2021	
Data Validator:	Michele Bay		**Validation Date:**	11/18/2021	
Sample Delivery Group					
Field Sample ID	**Lab Sample ID**	**Lab QC Batch**	**Sample Type**	**Associated Fld QC**	**Abbreviated Field ID**
10582497001	GW0092-093021	776539	FG	GW0100-100121	GW0092
10582497002	GW0093-093021	776539	FG	GW0100-100121	GW0093
10582497003	GW0094-100121	776539	FG	GW0100-100121	GW0094
10582497004	GW0095-100121	776539	FG	GW0100-100121	GW0095
10582497005	GW0096-100121	776539	FG	GW0100-100121	GW0096
10582497006	GW0097-100121	776539	FG	GW0100-100121	GW0097
10582497007	GW0098-100121	776539	FG-N	GW0100-100121	GW0098
10582497008	GW0099-100121	776539	FG-D	GW0100-100121	GW0099
10582497009	GW0100-100121	776539	FB	GW0100-100121	GW0100
10582497010	GW0101-100121	776539	FG	GW0100-100121	GW0101
10582497011	GW0102-100121	776539	FG	GW0100-100121	GW0102
10582497012	GW0103-100121	776539	FG	GW0100-100121	GW0103
10582497013	GW0104-100121	776539	FG	GW0100-100121	GW0104
10582497014	GW0105-100121	776539	FG	GW0100-100121	GW0105
10582497015	GW0106-100421	776539	FG	GW0100-100121	GW0106
10582497016	GW0107-100421	776539	FG	GW0100-100121	GW0107
10582497017	GW0109-100421	776539	FG	GW0100-100121	GW0109
10582497018	GW0110-100421	776540	FG	GW0100-100121	GW0110
10582497019	GW0111-100421	776540	FG	GW0100-100121	GW0111
10582497020	GW0112-100421	776540	FG	GW0100-100121	GW0112
10582497021	GW0113-100421	776540	FG	GW0100-100121	GW0113

LABORATORY DATA VALIDATION CHECKLIST FOR ICPMS

1. Holding Times

Analyte	Matrix	Method	Collection Date	Analysis Date	Affected data flagged
Dissolved As, Cd, Cu, Pb, Zn	Aqueous	EPA 200.8	9/30/21, 10/1/21, 10/4/21	10/20/2021, 10/21/2021	No

Describe corrective actions taken because of holding time problems.

2. Blanks

Were method blanks analyzed at the frequency of 1/20 samples? Y__X__ N_____

Were MB results non-detects? Y__X__ N_____

Were any data flagged because of blank problems? Y_____ N__X__

Describe corrective actions taken because of blank problems.

3. Laboratory Control Sample (LCS)

Was Laboratory Control Sample (LCS) analyzed at the frequency of 1/20 samples? Y__X__ N_____

Was LCS within control window of 85-115% recovery? Y__X__ N_____

Were any data flagged because of LCS problems? Y_____ N__X__

Describe corrective actions taken because of LCS problems.

4. Matrix Spike/Matrix Spike Duplicate Sample Results

Was Matrix Spike Sample (MS) analyzed at the frequency of 1/10 samples? Y__X__ N_____

Was MS result within control window of 70-130% for samples in which the parent sample concentration was ≤ 4X the spike concentration? Y__X__ N_____

Was the Matrix Spike Duplicate Sample (MSD) analyzed at the frequency of 1/20 samples? Y__X__ N_____

For MS & MSD results > 5 times the RL, were results of the MSD ≤ 20% relative percent difference (RPD)? For MS & MSD results < 5 times the RL, were results of the MSD ≤ the RL? Y__X__ N_____

Were any data flagged because of MS/MSD recovery problems? Y_____ N__X__

Were any data flagged because of MS/MSD RPD problems? Y_____ N__X__

Describe corrective actions taken because of MS problems.

***QC Batch 776539**, MS 4136712 MSD 4136713 ZnDis recoveries <30%. No associated ZnDis sample results were qualified because the parent sample concentration was >4X the spike concentrations.*

***QC Batch 776540**, MS 4136716 MSD 4136717 ZnDis recoveries <30%. No associated ZnDis sample results were qualified because the parent sample concentration was >4X the spike concentration.*

Are there any additional analytical limitations that users should be aware of? Y_____ N__X__

FIELD QUALITY CONTROL SAMPLE CHECKLIST

Validation Criteria: CFRSSI Data Management/Data Validation Plan and Addendum (ARCO 1992 and ARCO 2000, respectively); Data Validation Guidelines for Inorganic Chemistry (TREC, 2021); National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, November 2020)

Project QAPP: Silver Bow Creek/Butte Area NPL Site 2021 Butte Priority Soils Operable Unit Interim Site-Wide Groundwater Monitoring Quality Assurance Project Plan (QAPP), (Atlantic Richfield, July 2021)

Site:	Butte Priority Soils Operable Unit	**Project:**	BPSOU GW Monitoring - 0231348
Laboratory:	Pace Analytical Services (Minneapolis,	**Case Number:**	10582497
Matrix:	Aqueous	**Analysis:**	Dissolved Mercury, Dissolved As, Cd, Cu, Pb, Zn
Sample Date(s):	9/30/21, 10/1/21, 10/4/21		
Data Validator:	Michele Bay	**Validation Date:**	11/18/2021

Sample Delivery Group

Field Sample ID	Lab Sample ID	Sample Type	Associated Fld QC	Abbreviated Field ID
GW0092-093021	10582497001	FG	GW0100-100121	GW0092
GW0093-093021	10582497002	FG	GW0100-100121	GW0093
GW0094-100121	10582497003	FG	GW0100-100121	GW0094
GW0095-100121	10582497004	FG	GW0100-100121	GW0095
GW0096-100121	10582497005	FG	GW0100-100121	GW0096
GW0097-100121	10582497006	FG	GW0100-100121	GW0097
GW0098-100121	10582497007	FG-N	GW0100-100121	GW0098
GW0099-100121	10582497008	FG-D	GW0100-100121	GW0099
GW0100-100121	10582497009	FB	GW0100-100121	GW0100
GW0101-100121	10582497010	FG	GW0100-100121	GW0101
GW0102-100121	10582497011	FG	GW0100-100121	GW0102
GW0103-100121	10582497012	FG	GW0100-100121	GW0103
GW0104-100121	10582497013	FG	GW0100-100121	GW0104
GW0105-100121	10582497014	FG	GW0100-100121	GW0105
GW0106-100421	10582497015	FG	GW0100-100121	GW0106
GW0107-100421	10582497016	FG	GW0100-100121	GW0107
GW0109-100421	10582497017	FG	GW0100-100121	GW0109

FIELD QUALITY CONTROL SAMPLE CHECKLIST

GW0110-100421	10582497018	FG	GW0100-100121	GW0110
GW0111-100421	10582497019	FG	GW0100-100121	GW0111
GW0112-100421	10582497020	FG	GW0100-100121	GW0112
GW0113-100421	10582497021	FG	GW0100-100121	GW0113

Analyte	Matrix	Method	Collection Date	Analysis Date
Dissolved Mercury	Aqueous	EPA 245.1	9/30/21, 10/1/21, 10/4/21	10/21/2021
Dissolved As, Cd, Cu, Pb, Zn	Aqueous	EPA 200.8	9/30/21, 10/1/21, 10/4/21	10/20/2021, 10/21/2021

Field QC Samples

Field Blanks FB)

Were FBs sumbitted as specified in the BPSOU GW QAPP (1 in 20)? Y_X_ N___

Were results for FBs within the target control limits in the BPSOU GW QAPP (< MDL)? Y_X_ N___

Were any data qualified because of FB problems? Y___ N_X_

Field Replicates

Were field duplicates (FD) submitted as specified in the BPSOU GW QAPP (1 in 20)? Y_X_ N___

Were results for FDs within the target control limits in the BPSOU GW QAPP (< 20% RPD or Δ ≤ RL as applicable)? Y_X_ N___

Were any data qualified because of FD results? Y___ N_X_

Field duplicate set GW0098/GW0099 *PbDis RPD>20%, but the primary and duplicate sample results were <5X the RL and the absolute difference between primary and duplicate sample results was <RL thus, no associated data were qualified.*

Additional Comments

Attachment B: Level A/B Checklists

Level A/B Screening Checklist

I. General Information		II. Screening Results
Site:	BPSOU/10558077	Data are:
Project:	BPSOU GW Monitoring - 0231348	1) Unusable _____
Client:	Atlantic Richfield	2) Level A ___X___
Sample Matrix:	Water	3) Level B ___X___

II. Level A Screening

		Yes/No
1.	Sampling date	Yes
2.	Sample team/or leader	Yes
3.	Physical description of sample location	Yes
4.	Sample depth (soils)	NA
5.	Sample collection technique	Yes
6.	Field preparation technique	Yes
7.	Sample preservation technique	Yes
8.	Sample shipping records	Yes

III. Level B Screening

		Yes/No
1.	Field instrumentation methods and standardization complete	Yes
2.	Sample container preparation	Yes
3.	Collection of field replicates (1/20 minimum)	Yes
4.	Proper and decontaminated sampling equipment	Yes
5.	Field custody documentation	Yes
6.	Shipping custody documentation	Yes
7.	Traceable sample designation number	Yes
8.	Field notebook(s), custody records in secure repository	Yes
9.	Completed field forms (COC Record)	Yes

Level A/B Screening Checklist

I. General Information		II. Screening Results
Site:	BPSOU/10559096	Data are:
Project:	BPSOU GW Monitoring - 0231348	1) Unusable _____
Client:	Atlantic Richfield	2) Level A ___X__
Sample Matrix:	Water	3) Level B ___X__

II. Level A Screening

		Yes/No
1.	Sampling date	Yes
2.	Sample team/or leader	Yes
3.	Physical description of sample location	Yes
4.	Sample depth (soils)	NA
5.	Sample collection technique	Yes
6.	Field preparation technique	Yes
7.	Sample preservation technique	Yes
8.	Sample shipping records	Yes

III. Level B Screening

		Yes/No
1.	Field instrumentation methods and standardization complete	Yes
2.	Sample container preparation	Yes
3.	Collection of field replicates (1/20 minimum)	Yes
4.	Proper and decontaminated sampling equipment	Yes
5.	Field custody documentation	Yes
6.	Shipping custody documentation	Yes
7.	Traceable sample designation number	Yes
8.	Field notebook(s), custody records in secure repository	Yes
9.	Completed field forms (COC Record)	Yes

Level A/B Screening Checklist

I. General Information		II. Screening Results
Site:	BPSOU/10560318	Data are:
Project:	BPSOU GW Monitoring - 0231348	1) Unusable _____
Client:	Atlantic Richfield	2) Level A ___X___
Sample Matrix:	Water	3) Level B __X__

II. Level A Screening

		Yes/No
1.	Sampling date	Yes
2.	Sample team/or leader	Yes
3.	Physical description of sample location	Yes
4.	Sample depth (soils)	NA
5.	Sample collection technique	Yes
6.	Field preparation technique	Yes
7.	Sample preservation technique	Yes
8.	Sample shipping records	Yes

III. Level B Screening

		Yes/No
1.	Field instrumentation methods and standardization complete	Yes
2.	Sample container preparation	Yes
3.	Collection of field replicates (1/20 minimum)	Yes
4.	Proper and decontaminated sampling equipment	Yes
5.	Field custody documentation	Yes
6.	Shipping custody documentation	Yes
7.	Traceable sample designation number	Yes
8.	Field notebook(s), custody records in secure repository	Yes
9.	Completed field forms (COC Record)	Yes

Level A/B Screening Checklist

I. General Information		II. Screening Results
Site:	BPSOU/10560315	Data are:
Project:	BPSOU GW Monitoring - 0231348	1) Unusable _____
Client:	Atlantic Richfield	2) Level A ___X__
Sample Matrix:	Water	3) Level B ___X__

II. Level A Screening

		Yes/No
1.	Sampling date	Yes
2.	Sample team/or leader	Yes
3.	Physical description of sample location	Yes
4.	Sample depth (soils)	NA
5.	Sample collection technique	Yes
6.	Field preparation technique	Yes
7.	Sample preservation technique	Yes
8.	Sample shipping records	Yes

III. Level B Screening

		Yes/No
1.	Field instrumentation methods and standardization complete	Yes
2.	Sample container preparation	Yes
3.	Collection of field replicates (1/20 minimum)	Yes
4.	Proper and decontaminated sampling equipment	Yes
5.	Field custody documentation	Yes
6.	Shipping custody documentation	Yes
7.	Traceable sample designation number	Yes
8.	Field notebook(s), custody records in secure repository	Yes
9.	Completed field forms (COC Record)	Yes

Level A/B Screening Checklist

I. General Information		II. Screening Results
Site:	BPSOU/10580635	Data are:
Project:	BPSOU GW Monitoring - 0231348	1) Unusable _____
Client:	Atlantic Richfield	2) Level A __X__
Sample Matrix:	Water	3) Level B __X__

II. Level A Screening

		Yes/No
1.	Sampling date	Yes
2.	Sample team/or leader	Yes
3.	Physical description of sample location	Yes
4.	Sample depth (soils)	NA
5.	Sample collection technique	Yes
6.	Field preparation technique	Yes
7.	Sample preservation technique	Yes
8.	Sample shipping records	Yes

III. Level B Screening

		Yes/No
1.	Field instrumentation methods and standardization complete	Yes
2.	Sample container preparation	Yes
3.	Collection of field replicates (1/20 minimum)	Yes
4.	Proper and decontaminated sampling equipment	Yes
5.	Field custody documentation	Yes
6.	Shipping custody documentation	Yes
7.	Traceable sample designation number	Yes
8.	Field notebook(s), custody records in secure repository	Yes
9.	Completed field forms (COC Record)	Yes

Level A/B Screening Checklist

I. General Information		II. Screening Results
Site:	BPSOU/10581934	Data are:
Project:	BPSOU GW Monitoring - 0231348	1) Unusable _____
Client:	Atlantic Richfield	2) Level A ___X__
Sample Matrix:	Water	3) Level B ___X___

II. Level A Screening

		Yes/No
1.	Sampling date	Yes
2.	Sample team/or leader	Yes
3.	Physical description of sample location	Yes
4.	Sample depth (soils)	NA
5.	Sample collection technique	Yes
6.	Field preparation technique	Yes
7.	Sample preservation technique	Yes
8.	Sample shipping records	Yes

III. Level B Screening

		Yes/No
1.	Field instrumentation methods and standardization complete	Yes
2.	Sample container preparation	Yes
3.	Collection of field replicates (1/20 minimum)	Yes
4.	Proper and decontaminated sampling equipment	Yes
5.	Field custody documentation	Yes
6.	Shipping custody documentation	Yes
7.	Traceable sample designation number	Yes
8.	Field notebook(s), custody records in secure repository	Yes
9.	Completed field forms (COC Record)	Yes

Level A/B Screening Checklist

I. General Information		II. Screening Results
Site:	BPSOU/10581942	Data are:
Project:	BPSOU GW Monitoring - 0231348	1) Unusable _____
Client:	Atlantic Richfield	2) Level A ___X__
Sample Matrix:	Water	3) Level B ___X___

II. Level A Screening

		Yes/No
1.	Sampling date	Yes
2.	Sample team/or leader	Yes
3.	Physical description of sample location	Yes
4.	Sample depth (soils)	NA
5.	Sample collection technique	Yes
6.	Field preparation technique	Yes
7.	Sample preservation technique	Yes
8.	Sample shipping records	Yes

III. Level B Screening

		Yes/No
1.	Field instrumentation methods and standardization complete	Yes
2.	Sample container preparation	Yes
3.	Collection of field replicates (1/20 minimum)	Yes
4.	Proper and decontaminated sampling equipment	Yes
5.	Field custody documentation	Yes
6.	Shipping custody documentation	Yes
7.	Traceable sample designation number	Yes
8.	Field notebook(s), custody records in secure repository	Yes
9.	Completed field forms (COC Record)	Yes

Level A/B Screening Checklist

I. General Information		II. Screening Results
Site:	BPSOU/10582495	Data are:
Project:	BPSOU GW Monitoring - 0231348	1) Unusable _____
Client:	Atlantic Richfield	2) Level A __X__
Sample Matrix:	Water	3) Level B __X__

II. Level A Screening

		Yes/No
1.	Sampling date	Yes
2.	Sample team/or leader	Yes
3.	Physical description of sample location	Yes
4.	Sample depth (soils)	NA
5.	Sample collection technique	Yes
6.	Field preparation technique	Yes
7.	Sample preservation technique	Yes
8.	Sample shipping records	Yes

III. Level B Screening

		Yes/No
1.	Field instrumentation methods and standardization complete	Yes
2.	Sample container preparation	Yes
3.	Collection of field replicates (1/20 minimum)	Yes
4.	Proper and decontaminated sampling equipment	Yes
5.	Field custody documentation	Yes
6.	Shipping custody documentation	Yes
7.	Traceable sample designation number	Yes
8.	Field notebook(s), custody records in secure repository	Yes
9.	Completed field forms (COC Record)	Yes

Level A/B Screening Checklist

I. General Information		II. Screening Results
Site:	BPSOU/10582497	Data are:
Project:	BPSOU GW Monitoring - 0231348	1) Unusable _____
Client:	Atlantic Richfield	2) Level A __X__
Sample Matrix:	Water	3) Level B __X__

II. Level A Screening

		Yes/No
1.	Sampling date	Yes
2.	Sample team/or leader	Yes
3.	Physical description of sample location	Yes
4.	Sample depth (soils)	NA
5.	Sample collection technique	Yes
6.	Field preparation technique	Yes
7.	Sample preservation technique	Yes
8.	Sample shipping records	Yes

III. Level B Screening

		Yes/No
1.	Field instrumentation methods and standardization complete	Yes
2.	Sample container preparation	Yes
3.	Collection of field replicates (1/20 minimum)	Yes
4.	Proper and decontaminated sampling equipment	Yes
5.	Field custody documentation	Yes
6.	Shipping custody documentation	Yes
7.	Traceable sample designation number	Yes
8.	Field notebook(s), custody records in secure repository	Yes
9.	Completed field forms (COC Record)	Yes

Level A/B Screening Checklist

I. General Information		II. Screening Results
Site:	BPSOU/10583409	Data are:
Project:	BPSOU GW Monitoring - 0231348	1) Unusable _____
Client:	Atlantic Richfield	2) Level A ___X____
Sample Matrix:	Water	3) Level B ___X___

II. Level A Screening

		Yes/No
1.	Sampling date	Yes
2.	Sample team/or leader	Yes
3.	Physical description of sample location	Yes
4.	Sample depth (soils)	NA
5.	Sample collection technique	Yes
6.	Field preparation technique	Yes
7.	Sample preservation technique	Yes
8.	Sample shipping records	Yes

III. Level B Screening

		Yes/No
1.	Field instrumentation methods and standardization complete	Yes
2.	Sample container preparation	Yes
3.	Collection of field replicates (1/20 minimum)	Yes
4.	Proper and decontaminated sampling equipment	Yes
5.	Field custody documentation	Yes
6.	Shipping custody documentation	Yes
7.	Traceable sample designation number	Yes
8.	Field notebook(s), custody records in secure repository	Yes
9.	Completed field forms (COC Record)	Yes

Appendix C: BPSOU Continual Groundwater Level Records

BPSOU 2021 GW DSR Appendix C

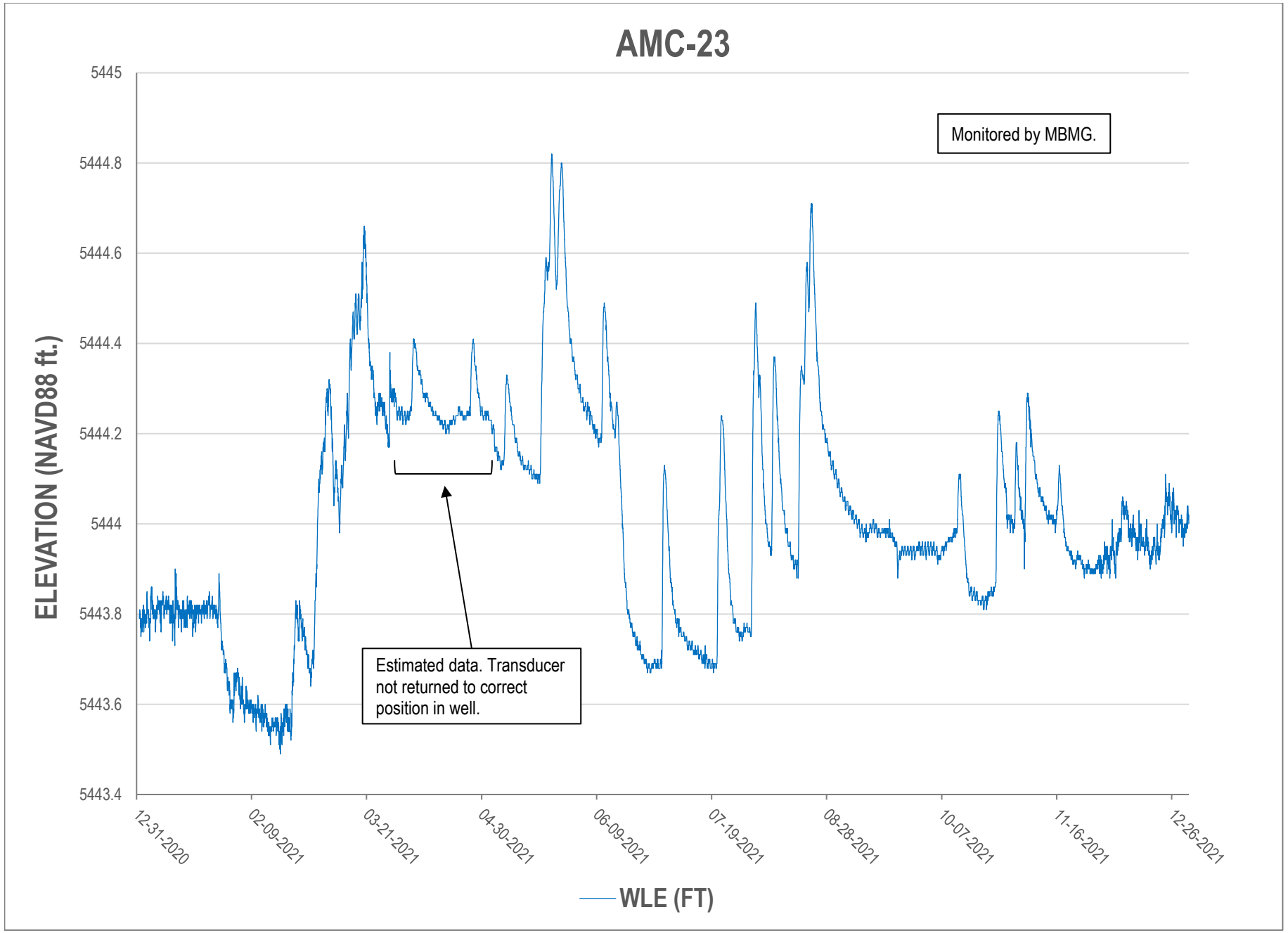
Butte Priority Soils Operable Unit (BPSOU)
Silver Bow Creek/Butte Area NPL Site

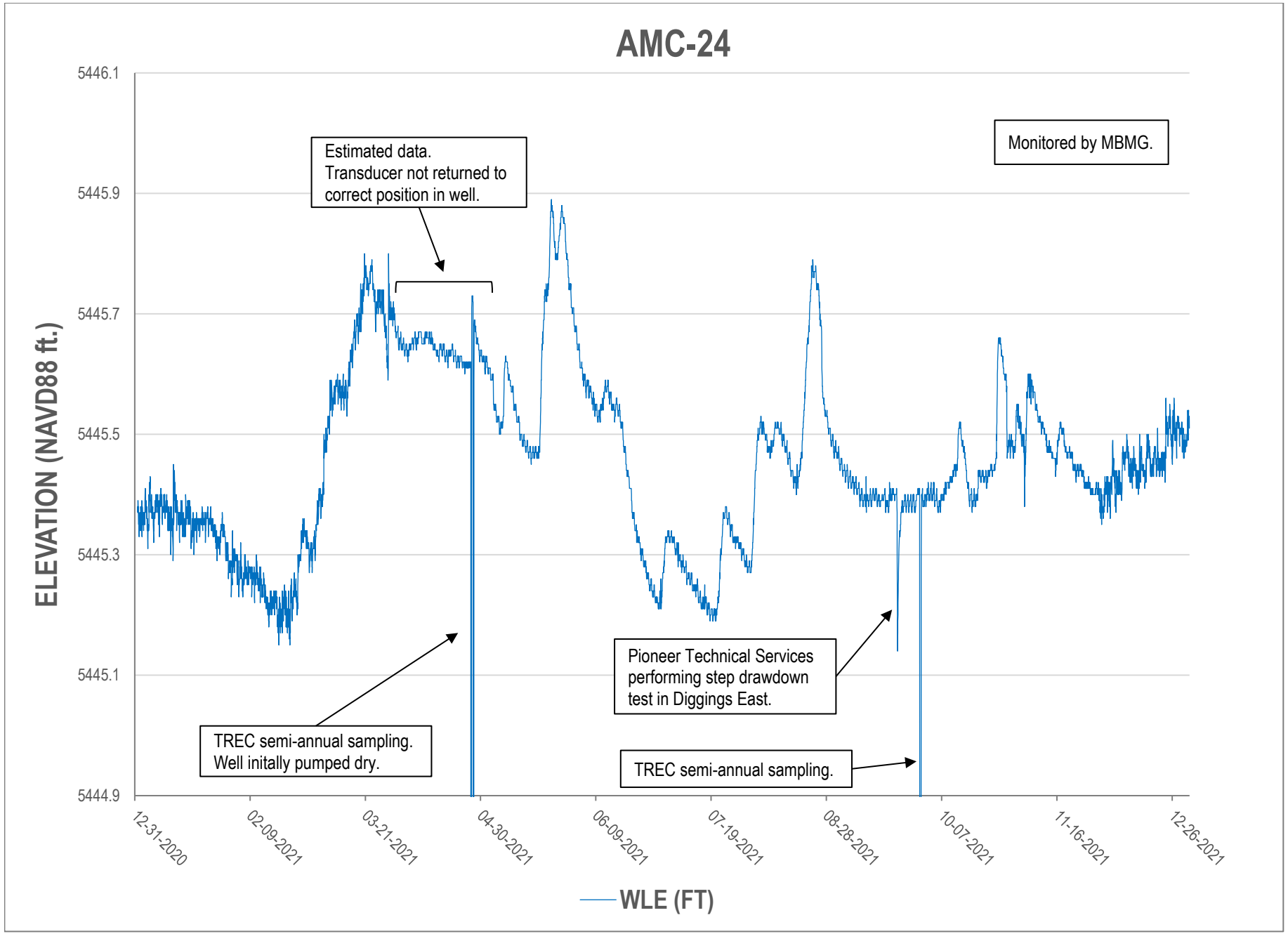
Appendix C: Continuous Water Levels

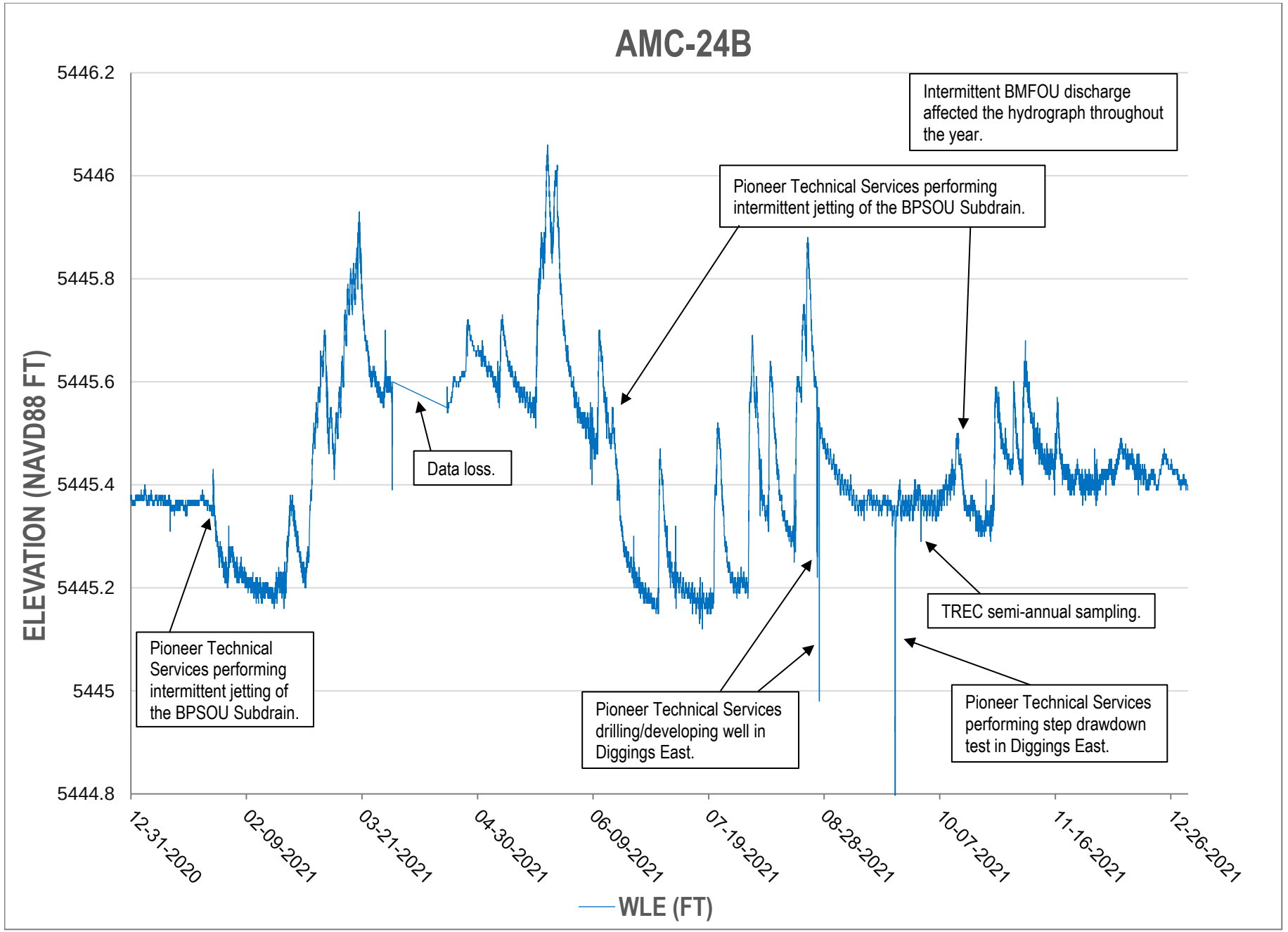
Draft Data Summary Report
January 2021 – December 2021

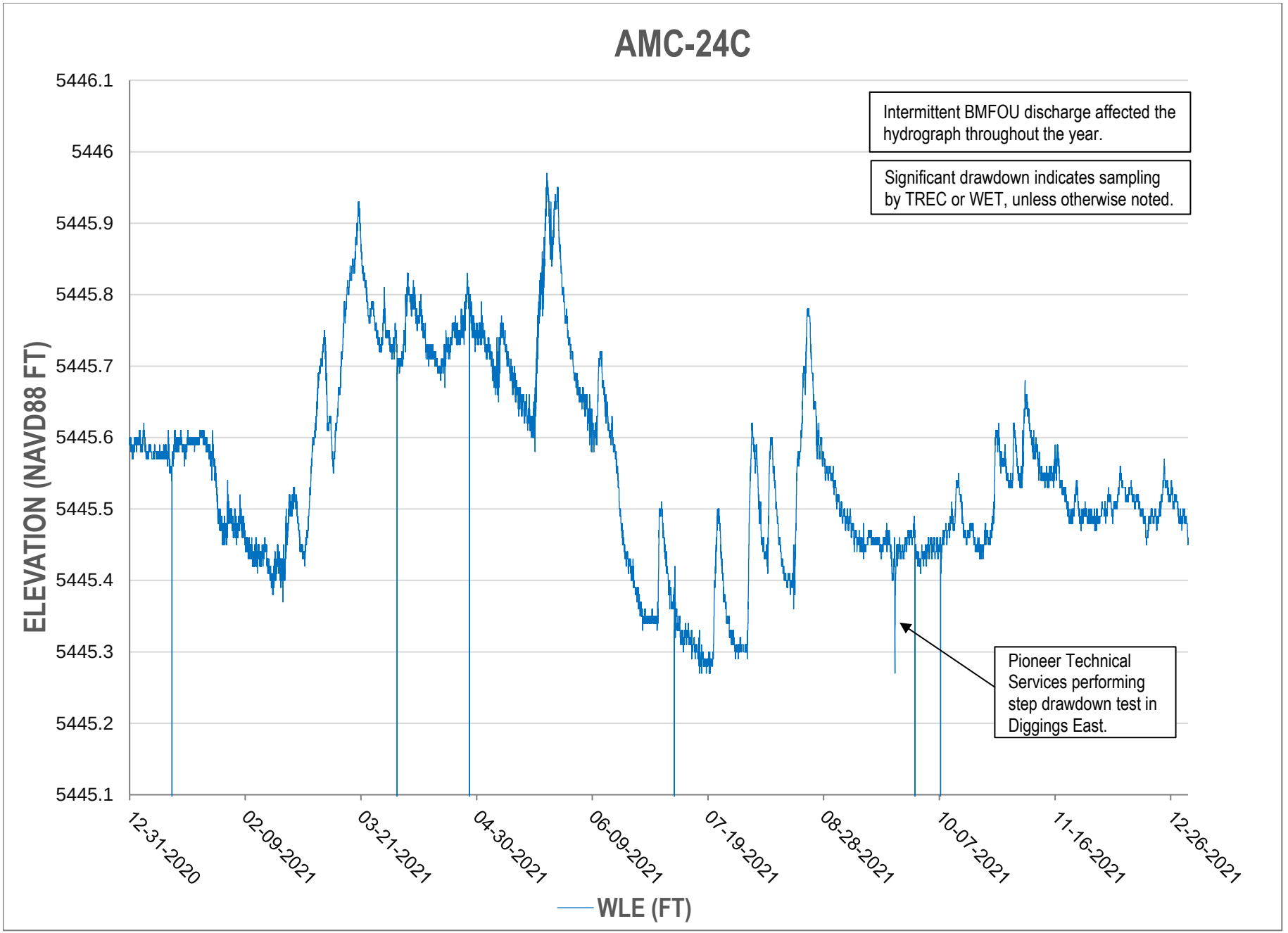
Atlantic Richfield

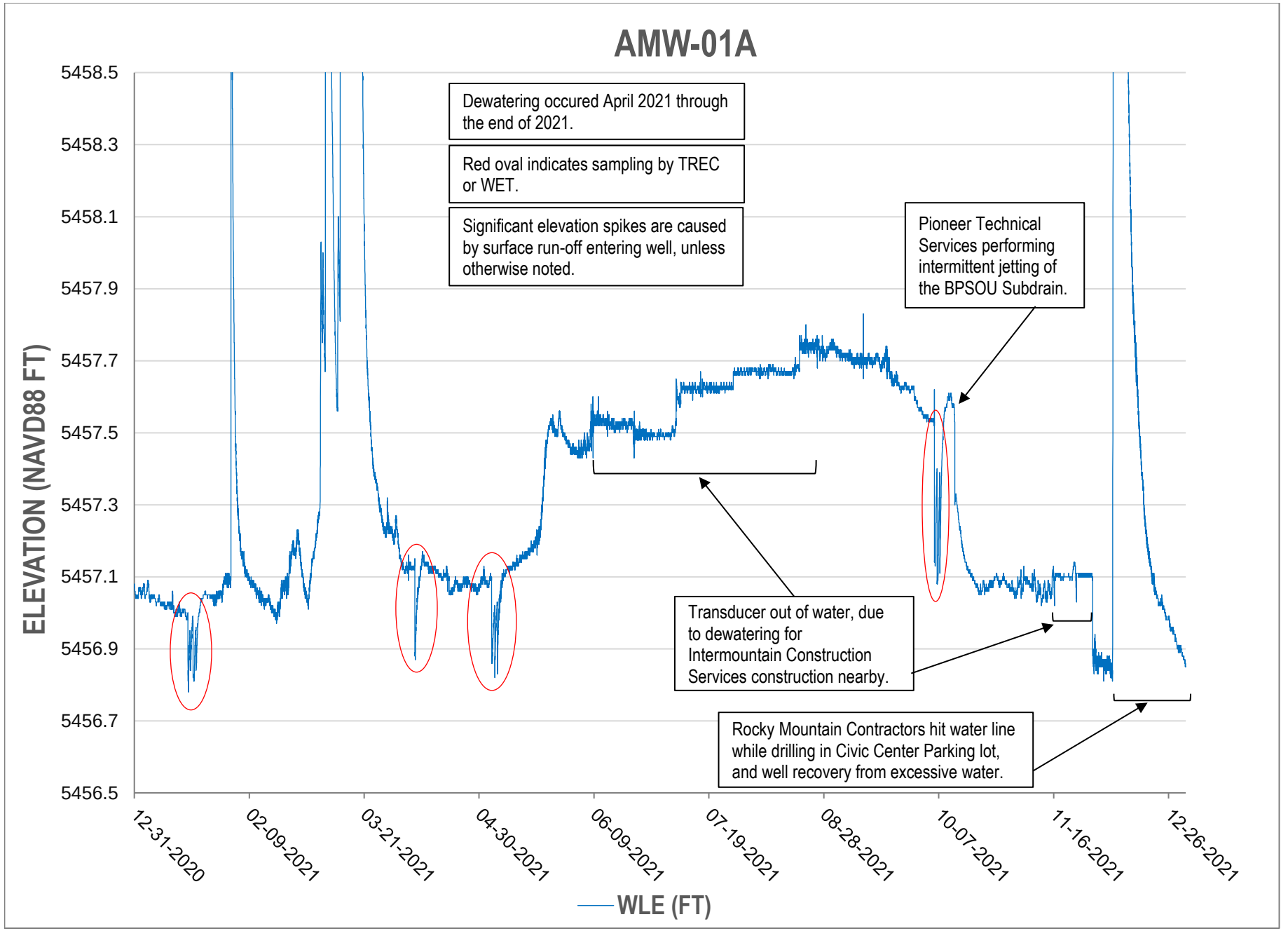
April 2022

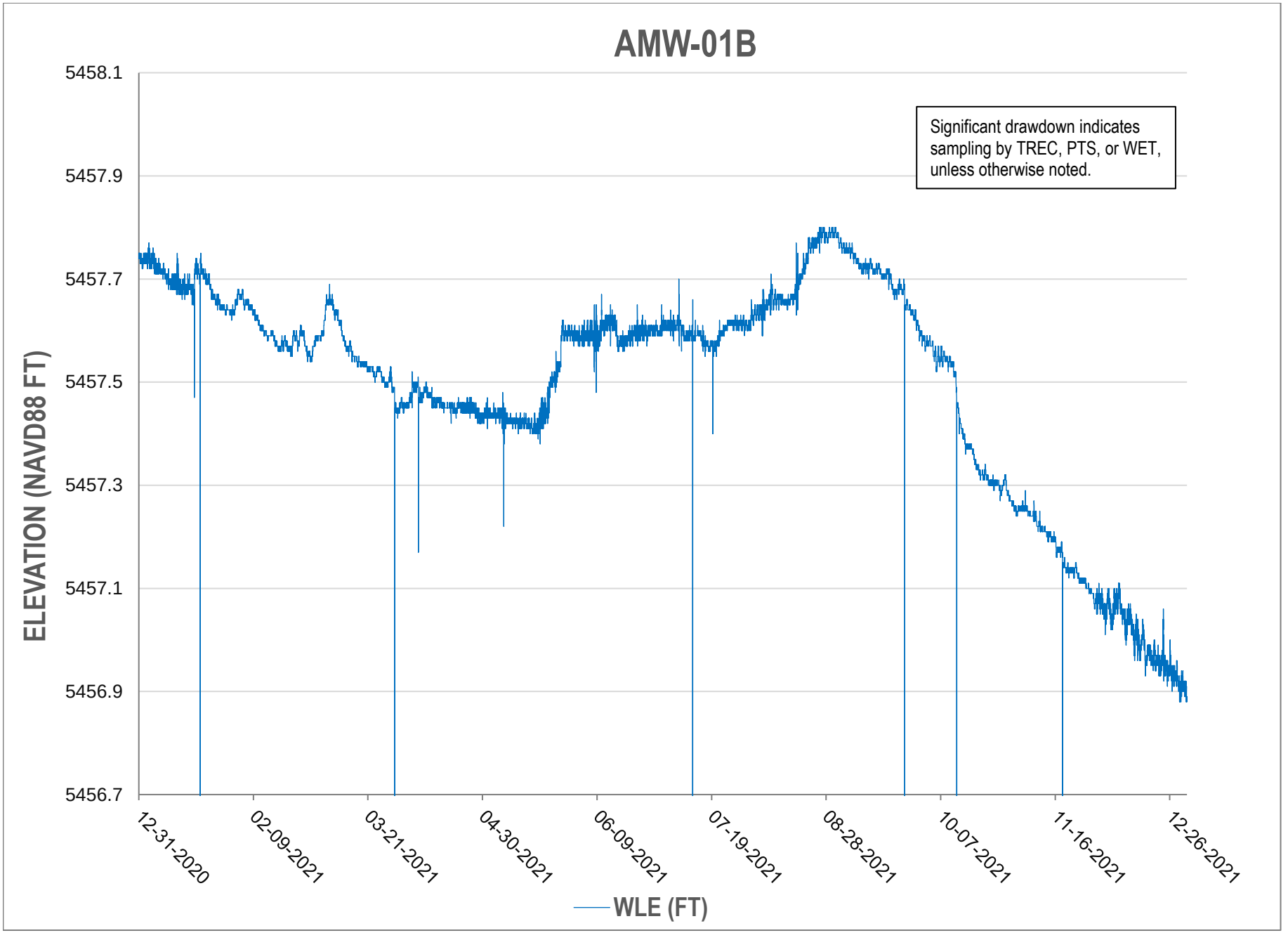

AMC-23
ELEVATION (NAVD88 ft.)
5445
5444.8
5444.6
5444.4
5444.2
5444
5443.8
5443.6
5443.4
Monitored by MBMG.
Estimated data. Transducer not returned to correct position in well.
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)

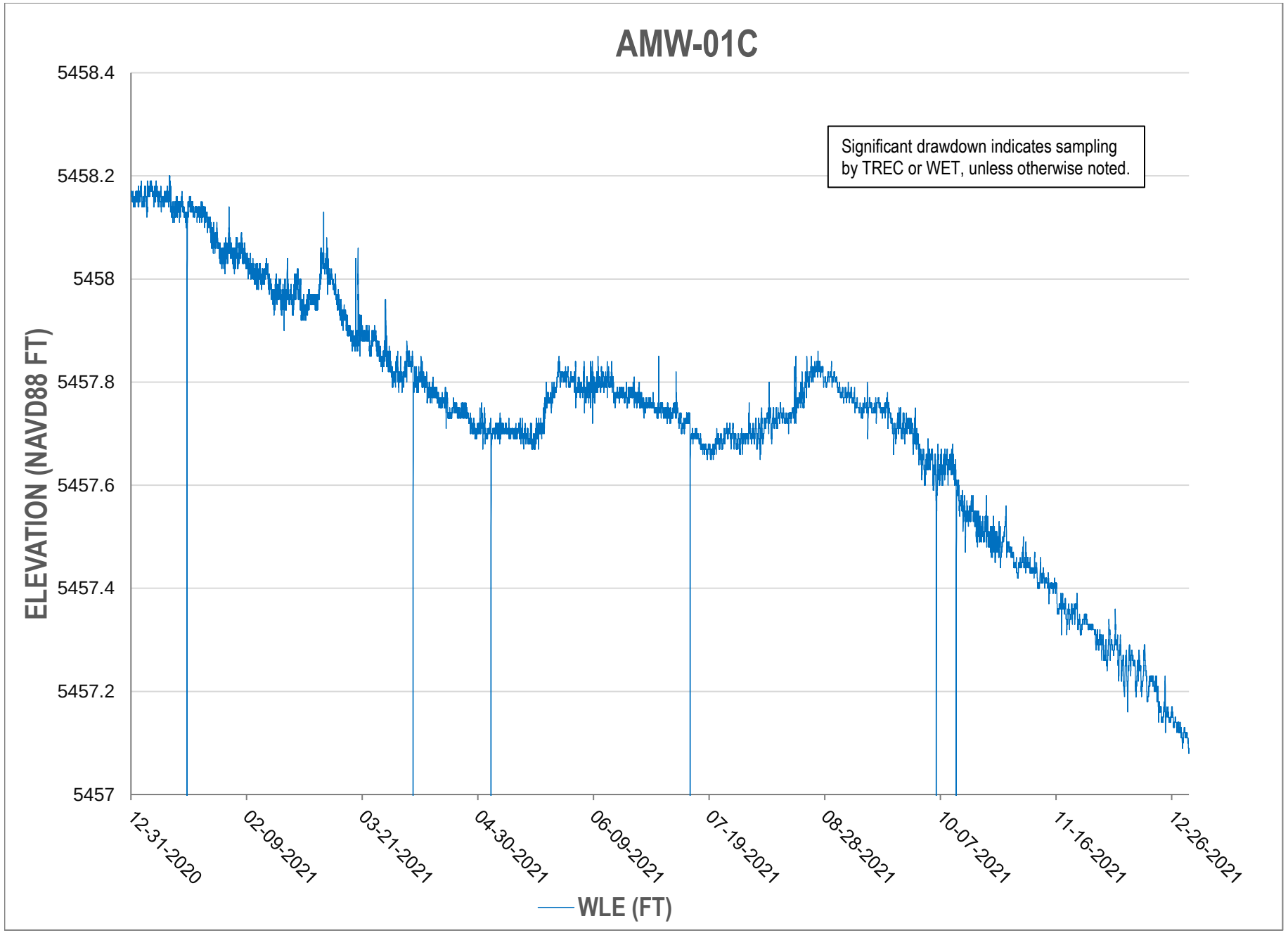

AMC-24
ELEVATION (NAVD88 ft.)
5446.1
5445.9
5445.7
5445.5
5445.3
5445.1
5444.9
Estimated data.
Transducer not returned to
correct position in well.
Monitored by MBMG.
Pioneer Technical Services
performing step drawdown
test in Diggings East.
TREC semi-annual sampling.
Well initally pumped dry.
TREC semi-annual sampling.
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)

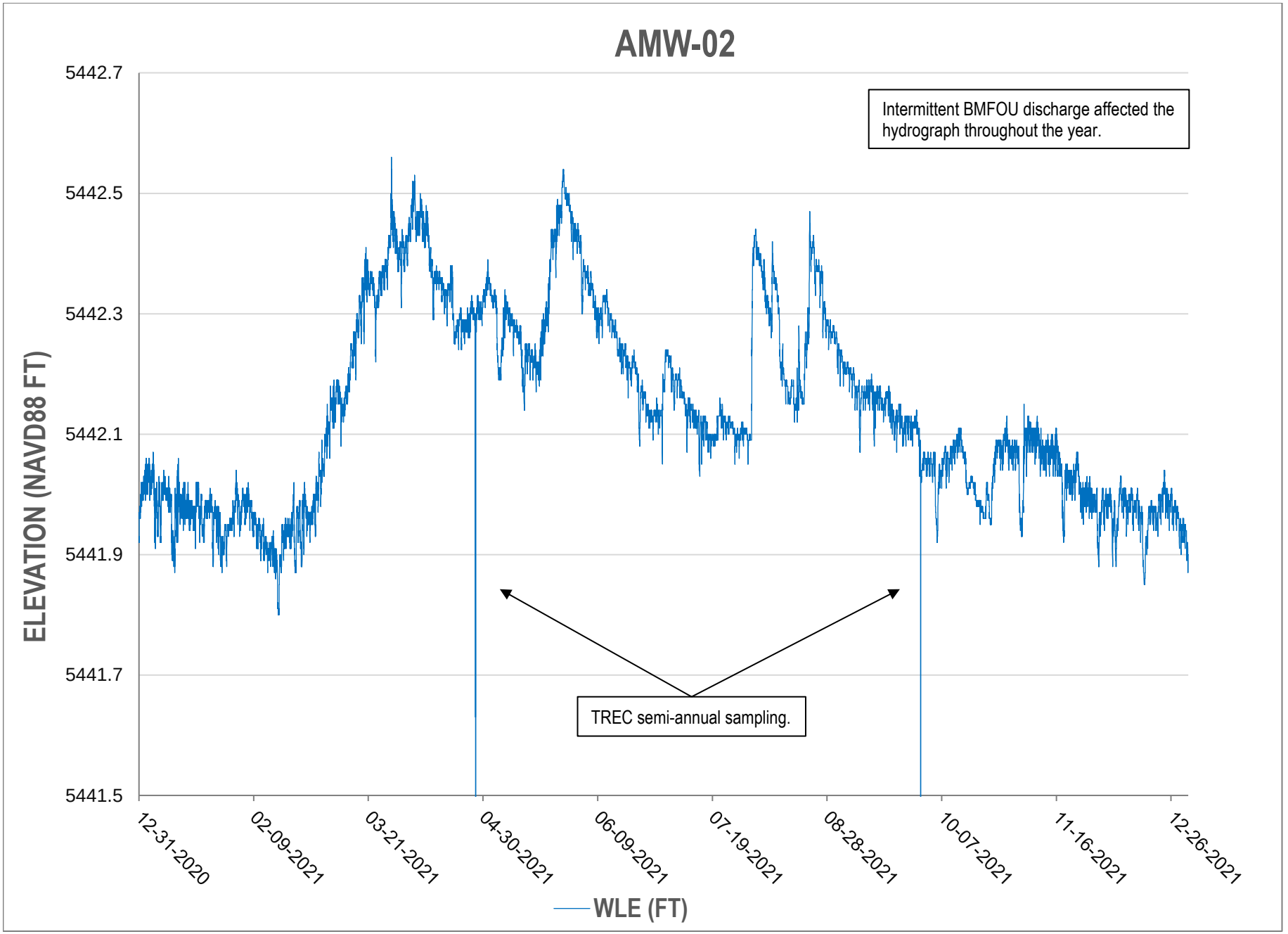

AMC-24B
ELEVATION (NAVD88 FT)
5446.2
5446
5445.8
5445.6
5445.4
5445.2
5445
5444.8
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)
Intermittent BMFOU discharge affected the hydrograph throughout the year.
Pioneer Technical Services performing intermittent jetting of the BPSOU Subdrain.
Data loss.
Pioneer Technical Services performing intermittent jetting of the BPSOU Subdrain.
Pioneer Technical Services drilling/developing well in Diggings East.
TREC semi-annual sampling.
Pioneer Technical Services performing step drawdown test in Diggings East.

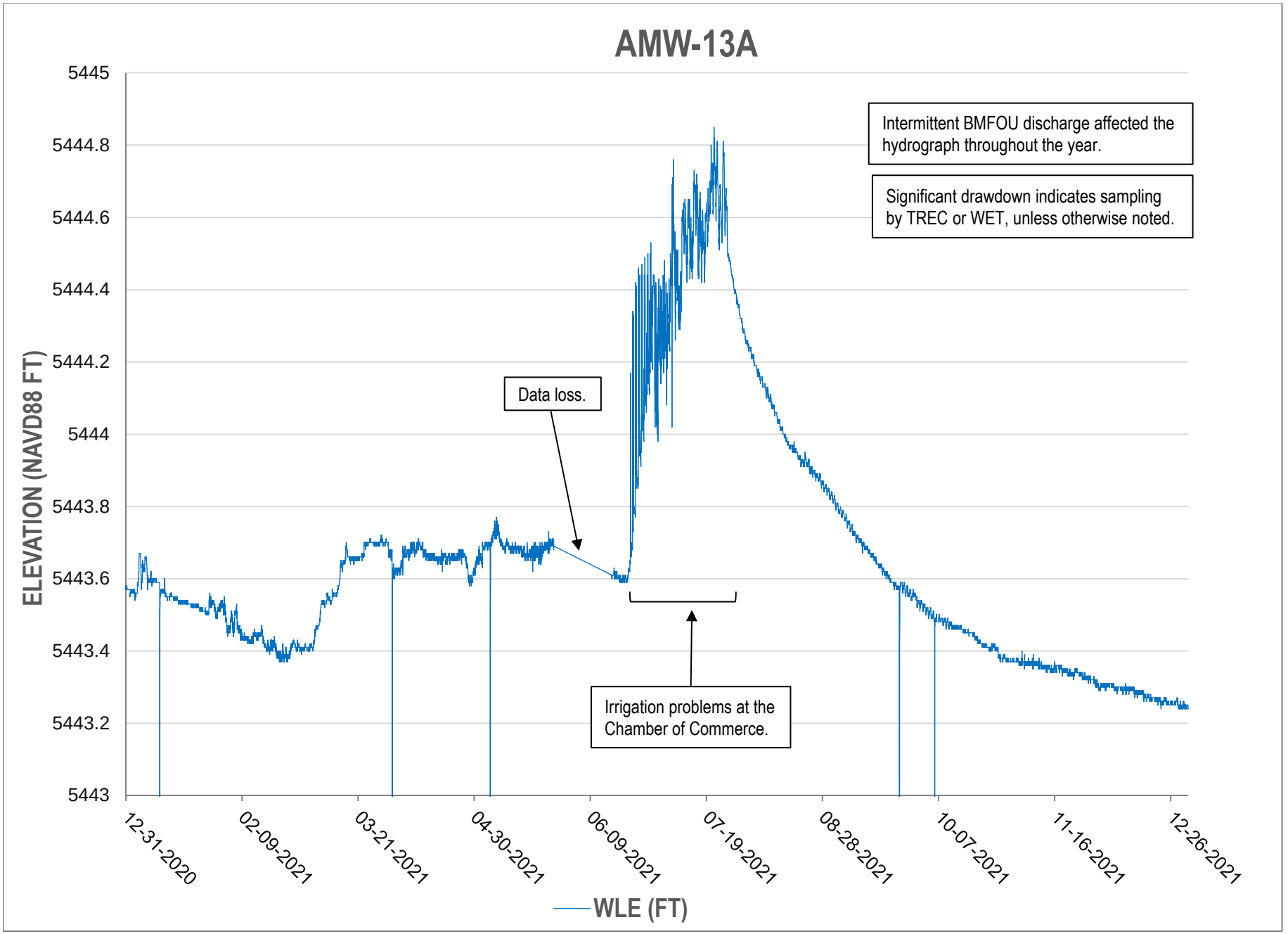

AMC-24C
ELEVATION (NAVD88 FT)
5446.1
5446
5445.9
5445.8
5445.7
5445.6
5445.5
5445.4
5445.3
5445.2
5445.1
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
Intermittent BMFOU discharge affected the hydrograph throughout the year.
Significant drawdown indicates sampling by TREC or WET, unless otherwise noted.
Pioneer Technical Services performing step drawdown test in Diggings East.
WLE (FT)

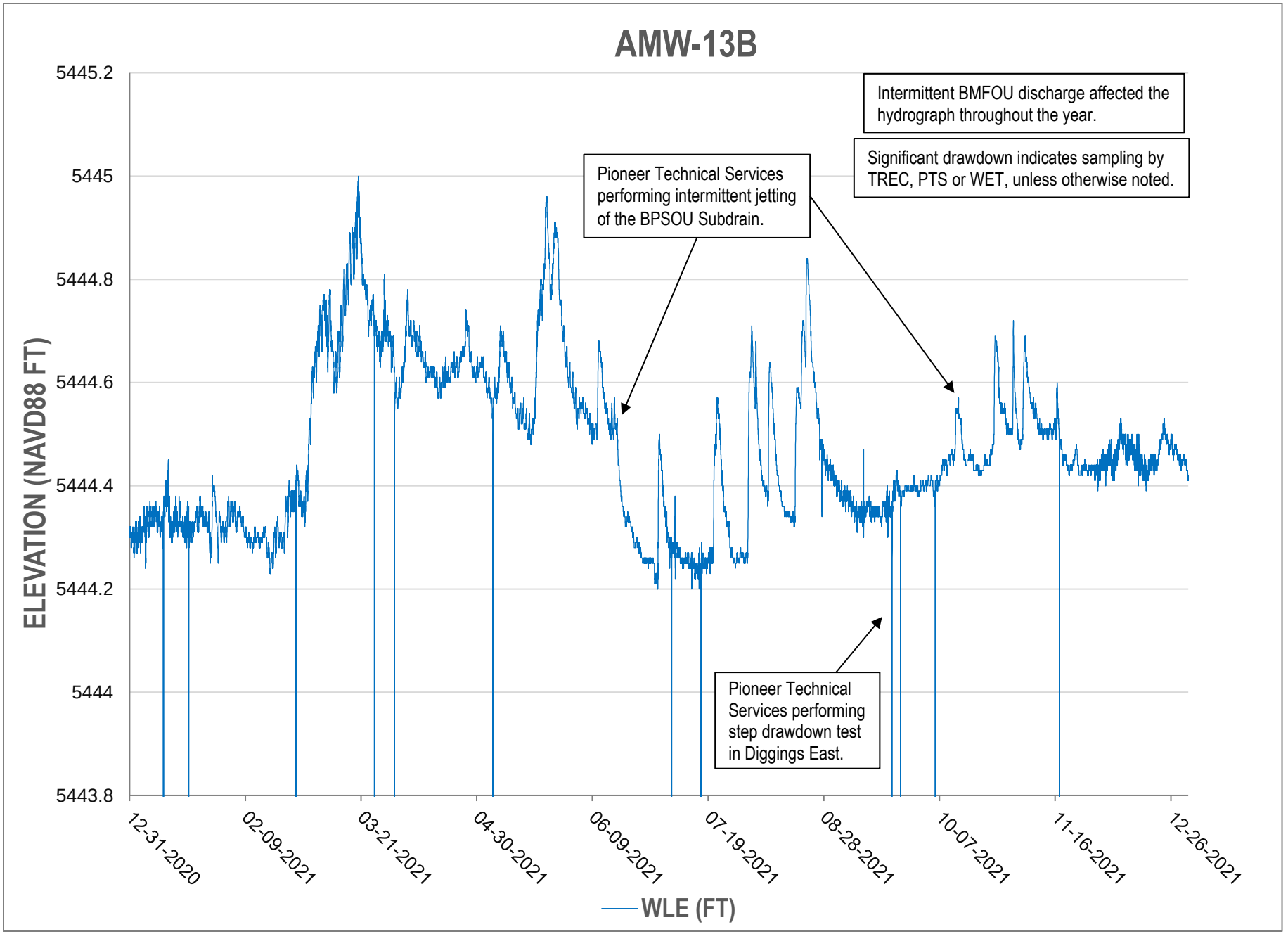

AMW-01A
Dewatering occured April 2021 through the end of 2021.
Red oval indicates sampling by TREC or WET.
Significant elevation spikes are caused by surface run-off entering well, unless otherwise noted.
Pioneer Technical Services performing intermittent jetting of the BPSOU Subdrain.
Transducer out of water, due to dewatering for Intermountain Construction Services construction nearby.
Rocky Mountain Contractors hit water line while drilling in Civic Center Parking lot, and well recovery from excessive water.
ELEVATION (NAVD88 FT)
5458.5
5458.3
5458.1
5457.9
5457.7
5457.5
5457.3
5457.1
5456.9
5456.7
5456.5
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)

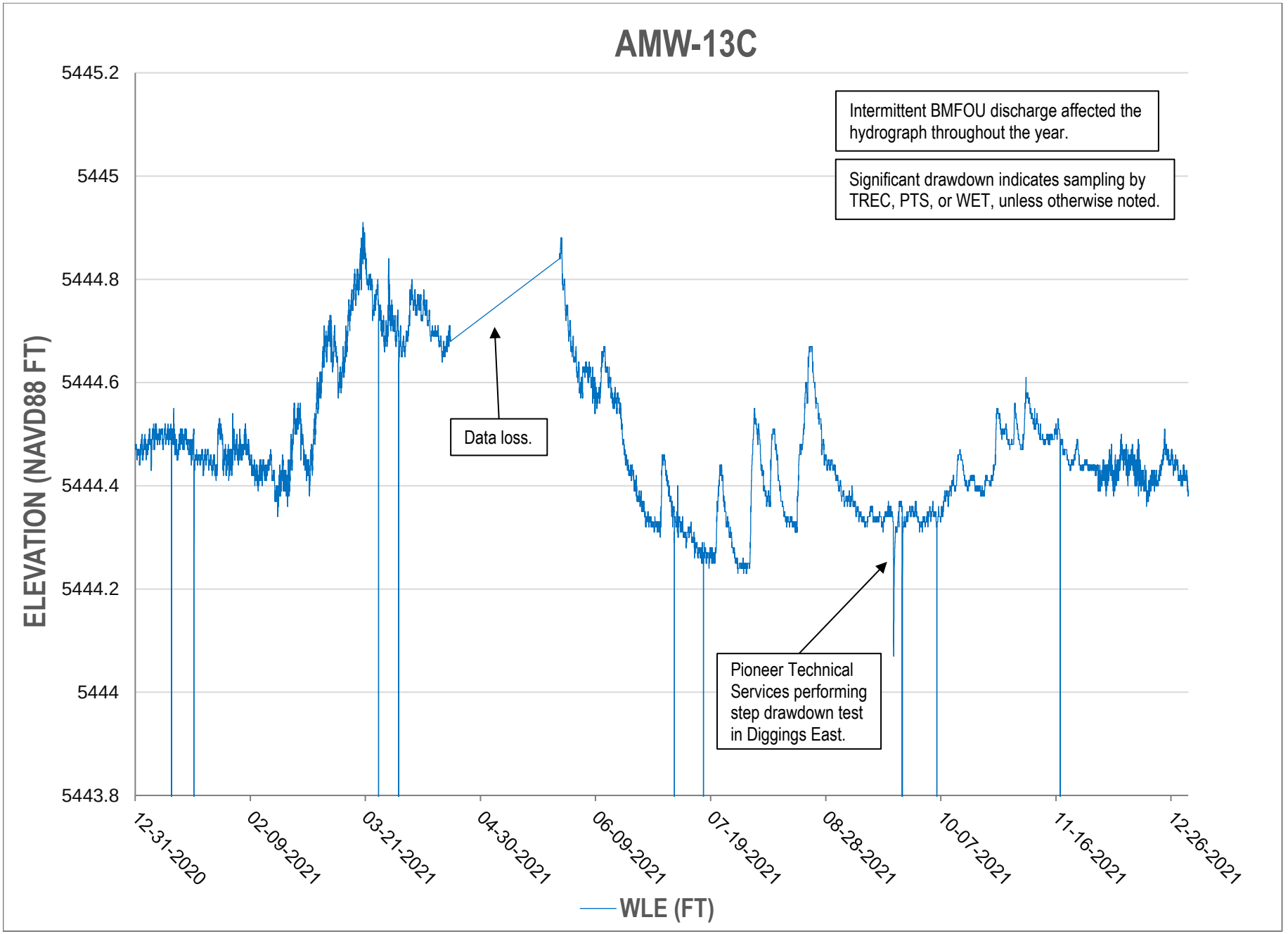

AMW-01B
Significant drawdown indicates sampling by TREC, PTS, or WET, unless otherwise noted.
ELEVATION (NAVD88 FT)
5458.1
5457.9
5457.7
5457.5
5457.3
5457.1
5456.9
5456.7
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)

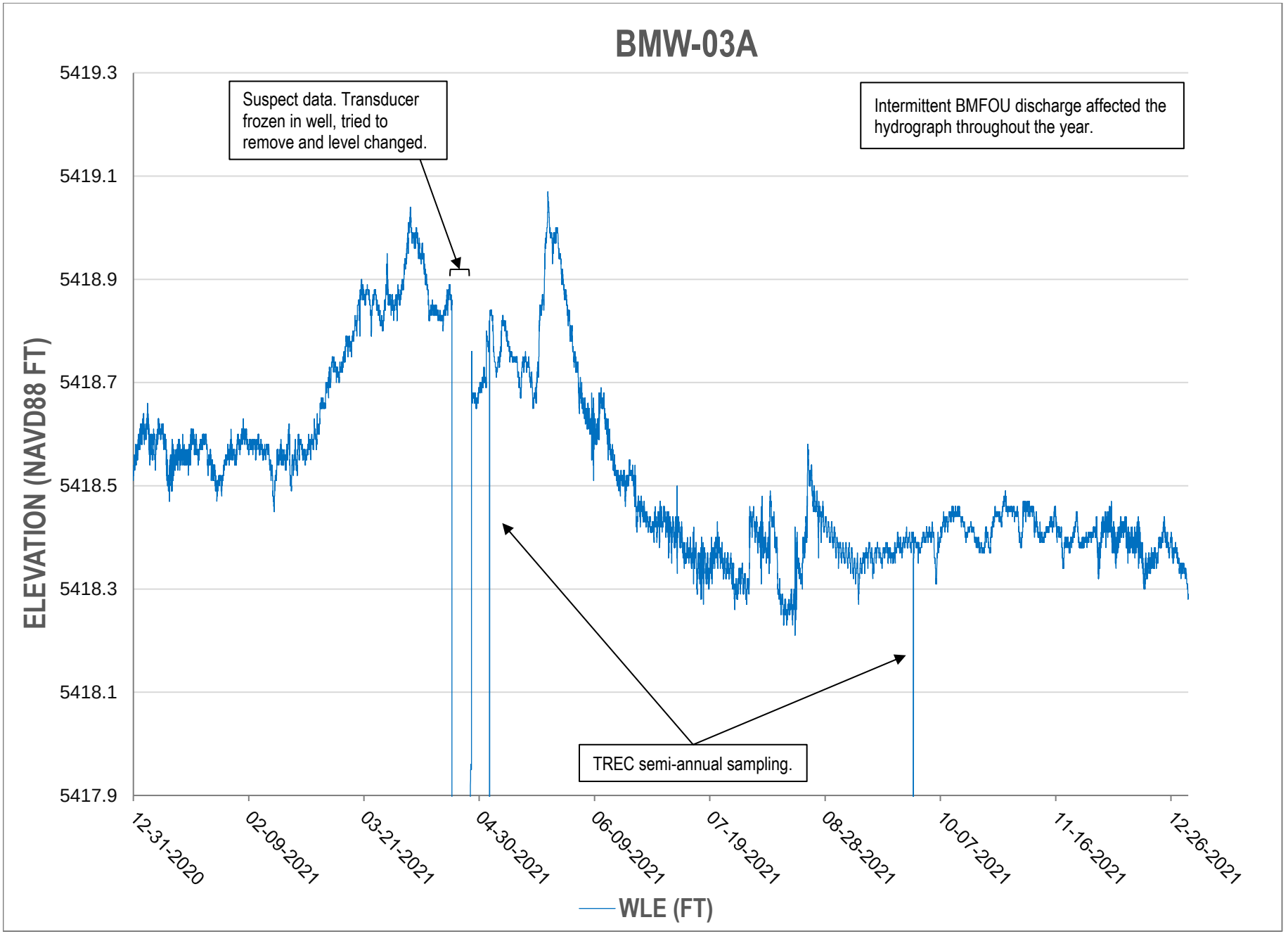

AMW-01C
Significant drawdown indicates sampling by TREC or WET, unless otherwise noted.
ELEVATION (NAVD88 FT)
5458.4
5458.2
5458
5457.8
5457.6
5457.4
5457.2
5457
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)

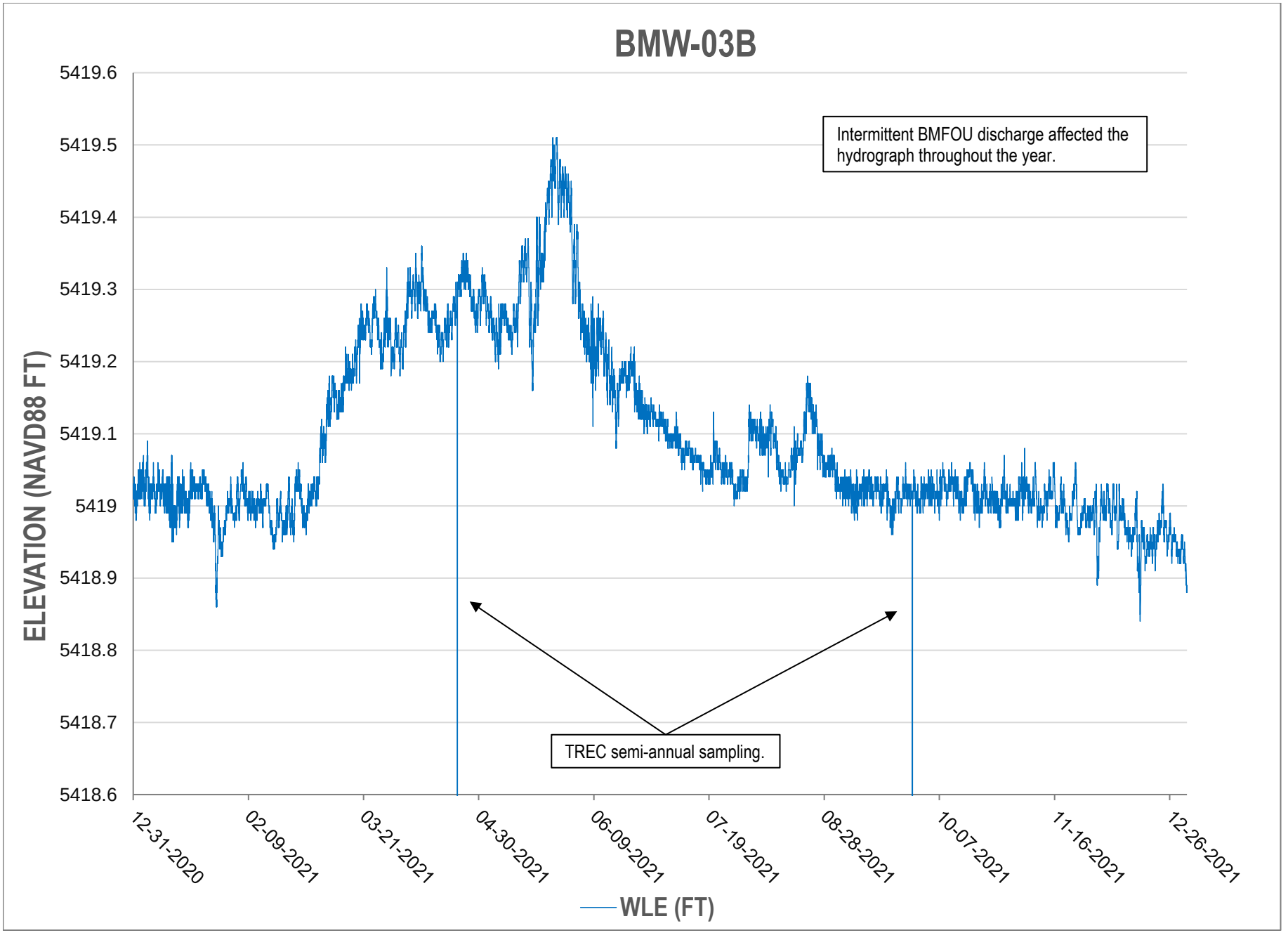

AMW-02
Intermittent BMFOU discharge affected the hydrograph throughout the year.
TREC semi-annual sampling.
ELEVATION (NAVD88 FT)
5442.7
5442.5
5442.3
5442.1
5441.9
5441.7
5441.5
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)

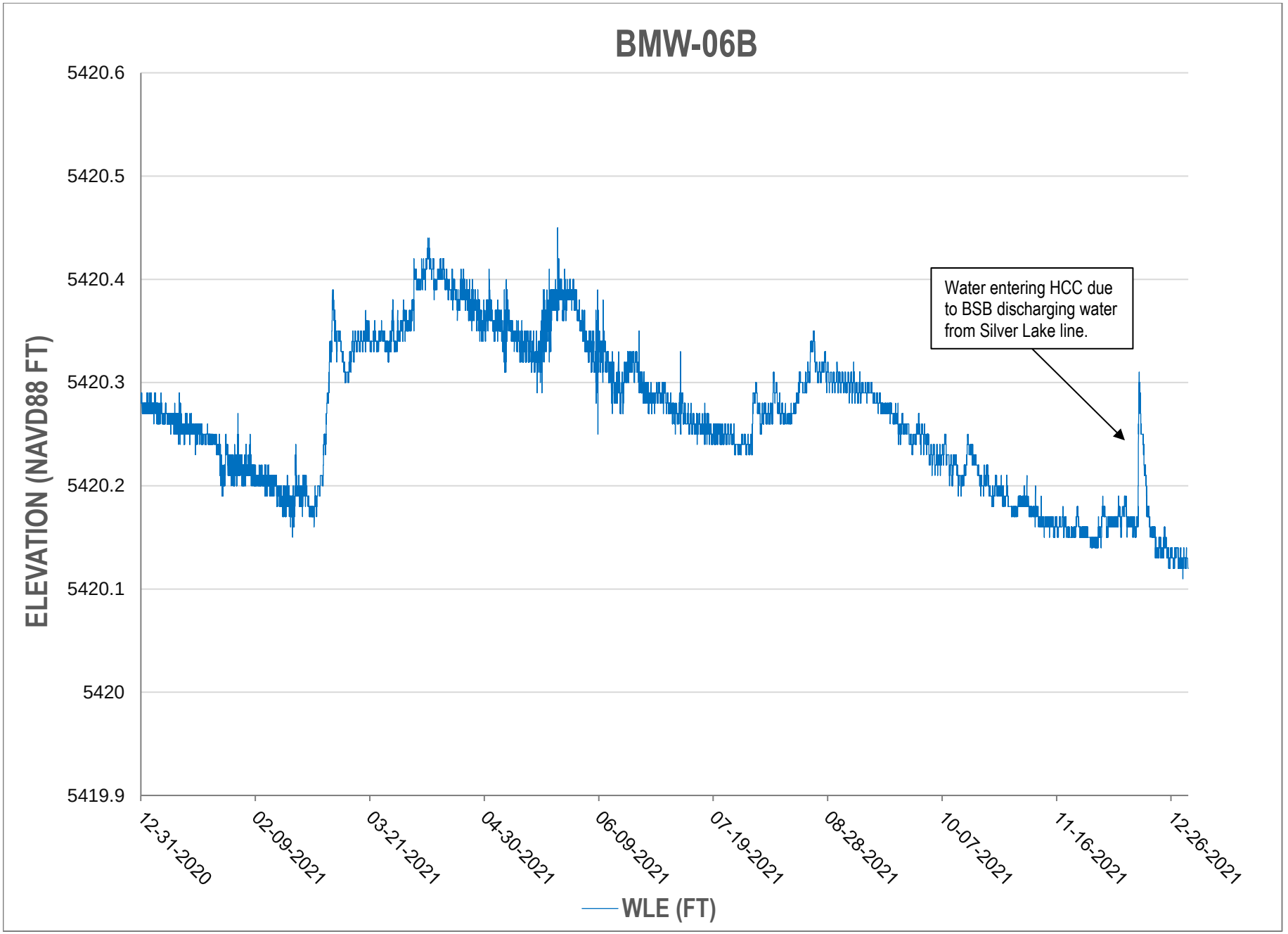

AMW-13A
ELEVATION (NAVD88 FT)
5445
5444.8
5444.6
5444.4
5444.2
5444
5443.8
5443.6
5443.4
5443.2
5443
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
Intermittent BMFOU discharge affected the hydrograph throughout the year.
Significant drawdown indicates sampling by TREC or WET, unless otherwise noted.
Data loss.
Irrigation problems at the Chamber of Commerce.
WLE (FT)

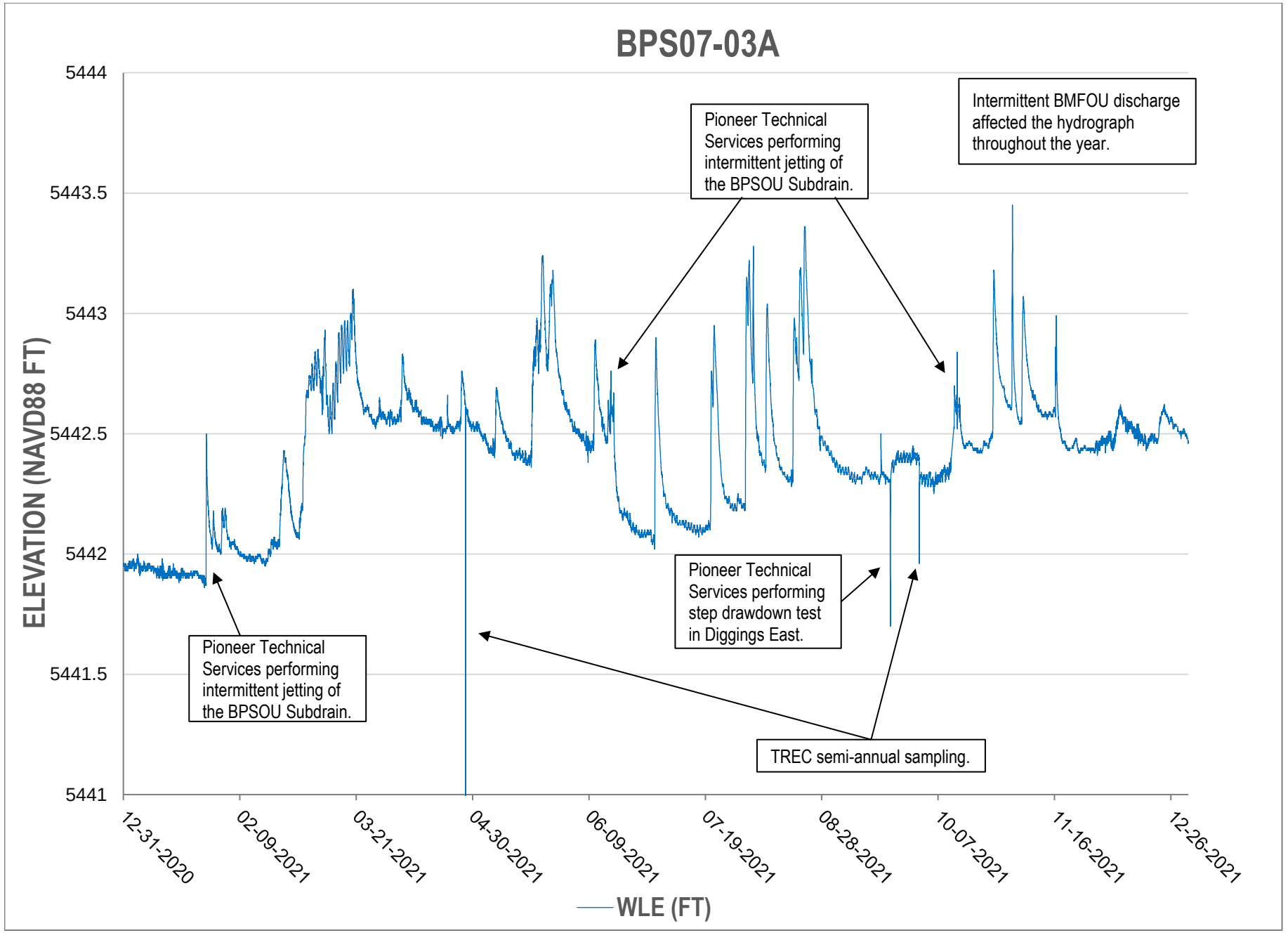

AMW-13B
Intermittent BMFOU discharge affected the hydrograph throughout the year.
Significant drawdown indicates sampling by TREC, PTS or WET, unless otherwise noted.
Pioneer Technical Services performing intermittent jetting of the BPSOU Subdrain.
Pioneer Technical Services performing step drawdown test in Diggings East.
ELEVATION (NAVD88 FT)
5445.2
5445
5444.8
5444.6
5444.4
5444.2
5444
5443.8
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)

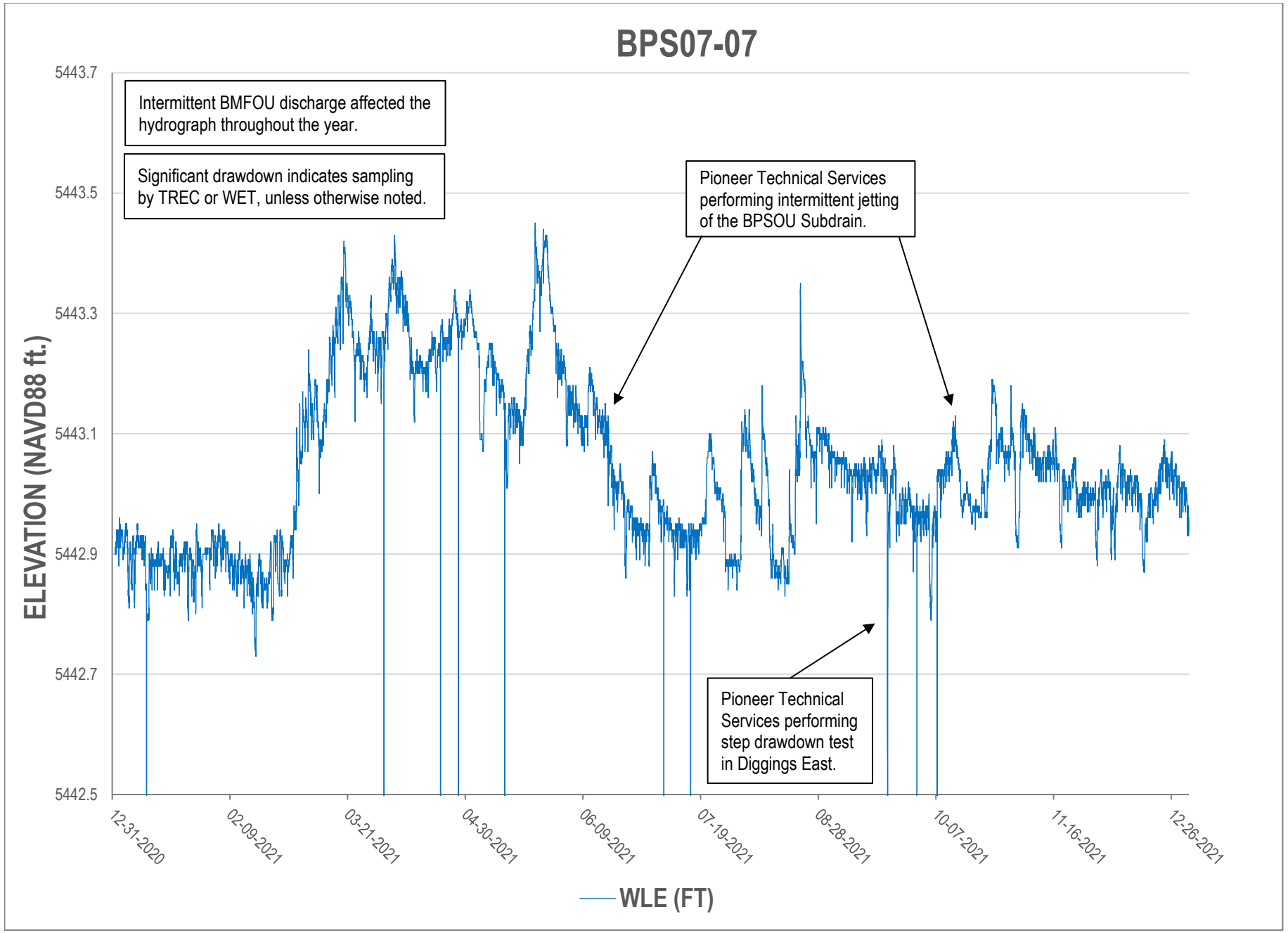

AMW-13C
5445.2
5445
5444.8
5444.6
5444.4
5444.2
5444
5443.8
ELEVATION (NAVD88 FT)
Intermittent BMFOU discharge affected the hydrograph throughout the year.
Significant drawdown indicates sampling by TREC, PTS, or WET, unless otherwise noted.
Data loss.
Pioneer Technical Services performing step drawdown test in Diggings East.
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)

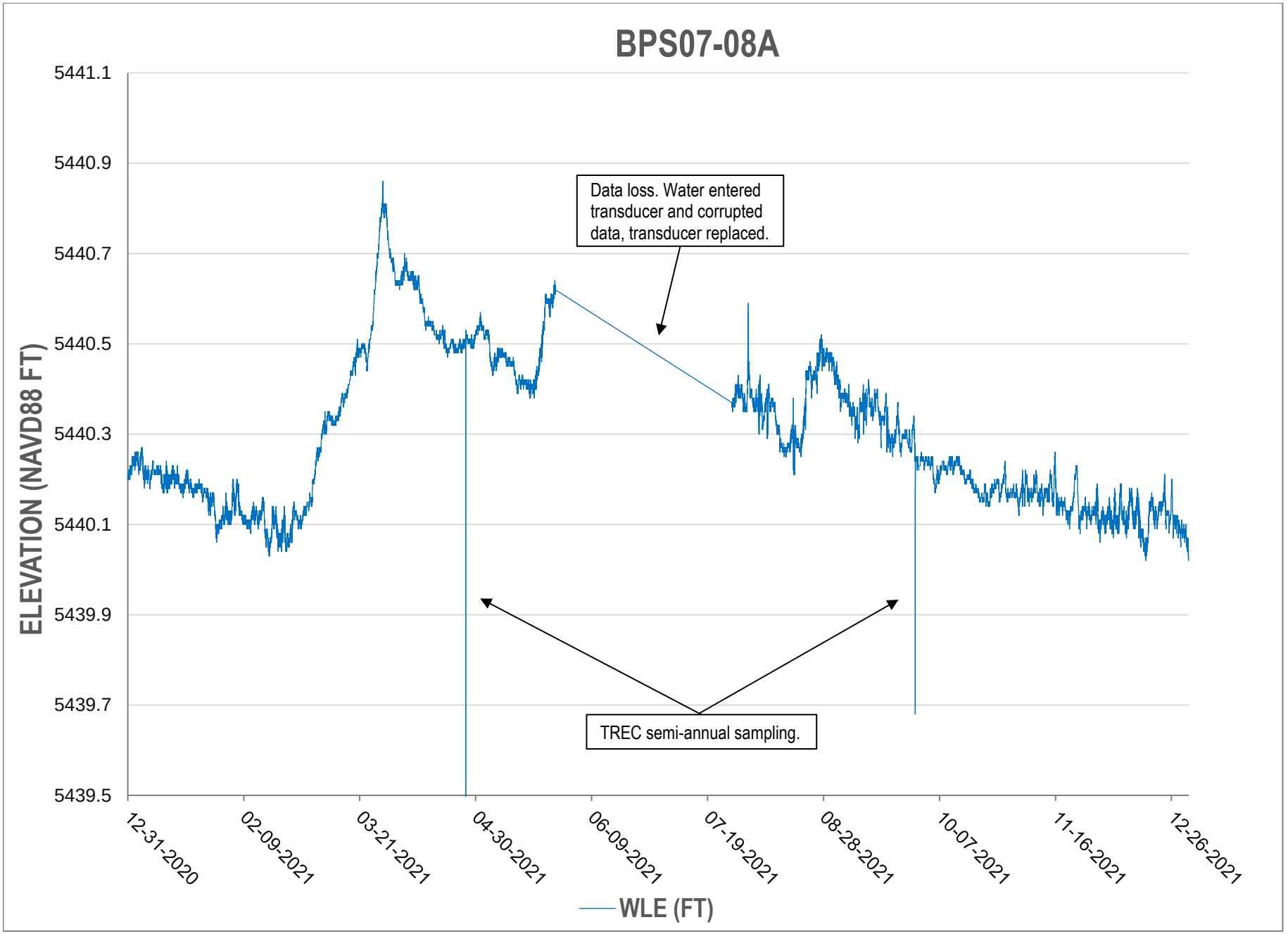

BMW-03A
Suspect data. Transducer frozen in well, tried to remove and level changed.
Intermittent BMFOU discharge affected the hydrograph throughout the year.
TREC semi-annual sampling.
ELEVATION (NAVD88 FT)
5419.3
5419.1
5418.9
5418.7
5418.5
5418.3
5418.1
5417.9
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)

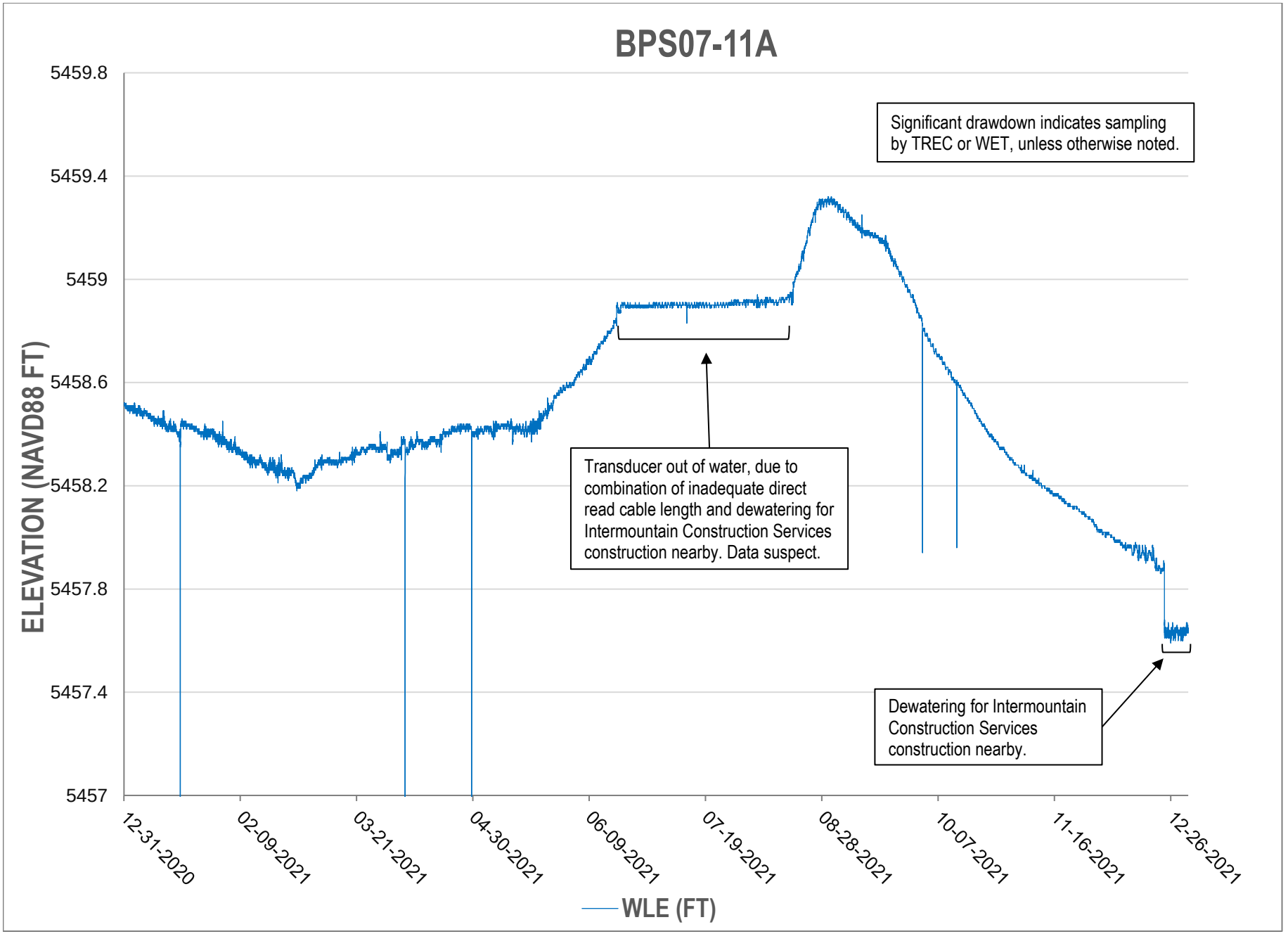

BMW-03B
ELEVATION (NAVD88 FT)
5419.6
5419.5
5419.4
5419.3
5419.2
5419.1
5419
5418.9
5418.8
5418.7
5418.6
Intermittent BMFOU discharge affected the hydrograph throughout the year.
TREC semi-annual sampling.
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)

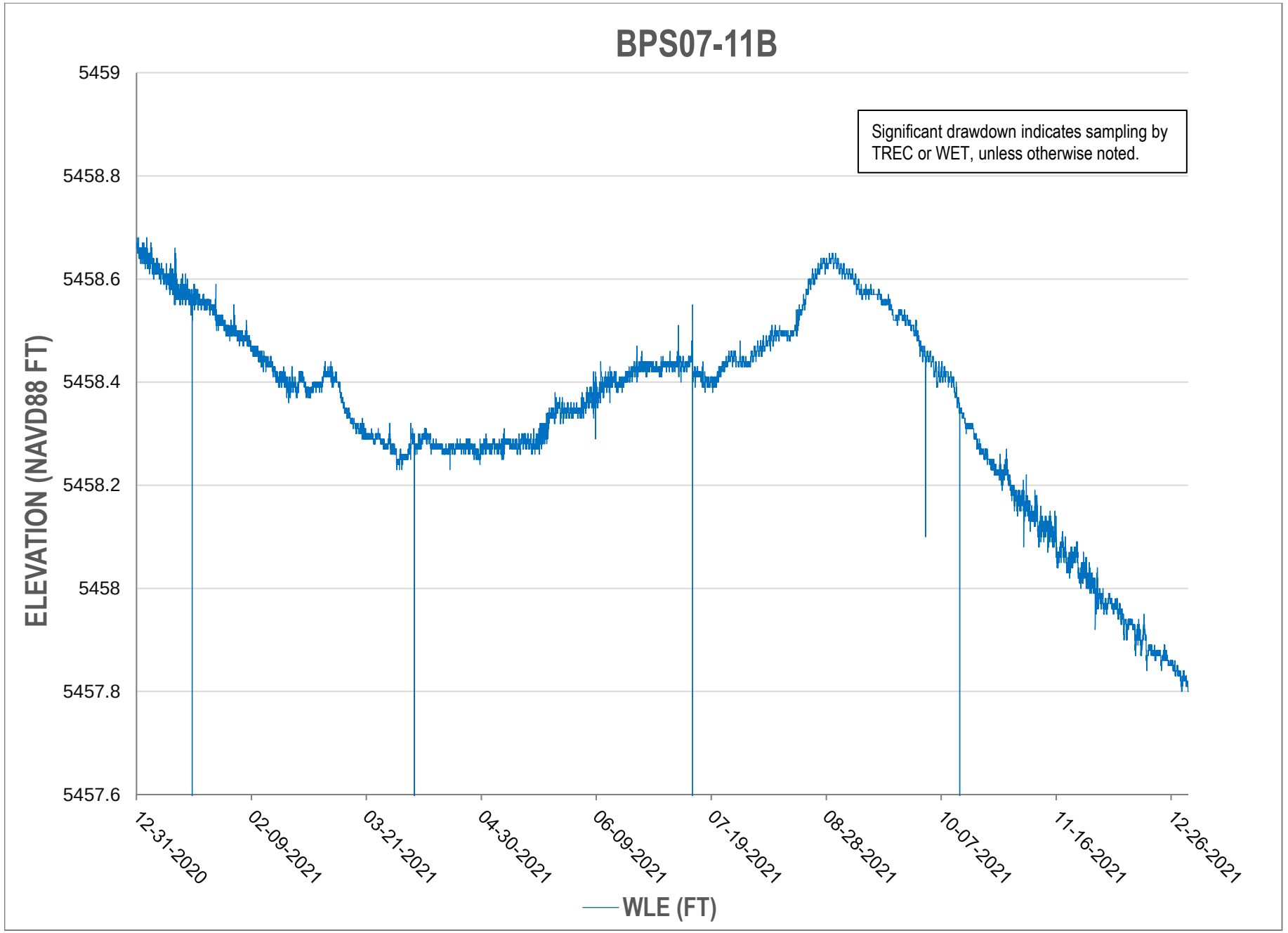

BMW-06B
ELEVATION (NAVD88 FT)
5420.6
5420.5
5420.4
5420.3
5420.2
5420.1
5420
5419.9
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
Water entering HCC due to BSB discharging water from Silver Lake line.
WLE (FT)

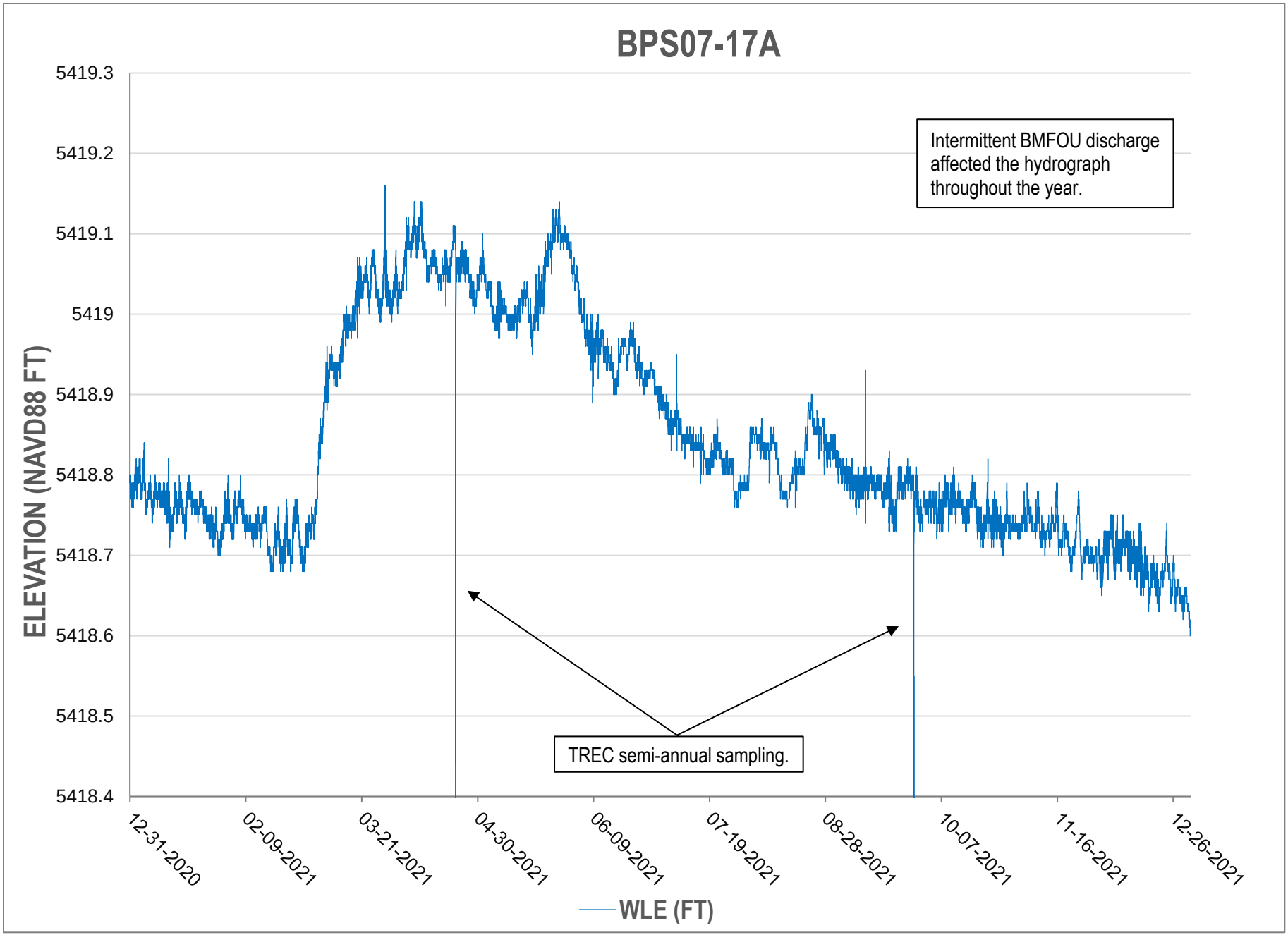

BPS07-03A
ELEVATION (NAVD88 FT)
5444
5443.5
5443
5442.5
5442
5441.5
5441
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
Pioneer Technical Services performing intermittent jetting of the BPSOU Subdrain.
Intermittent BMFOU discharge affected the hydrograph throughout the year.
Pioneer Technical Services performing step drawdown test in Diggings East.
Pioneer Technical Services performing intermittent jetting of the BPSOU Subdrain.
TREC semi-annual sampling.
WLE (FT)

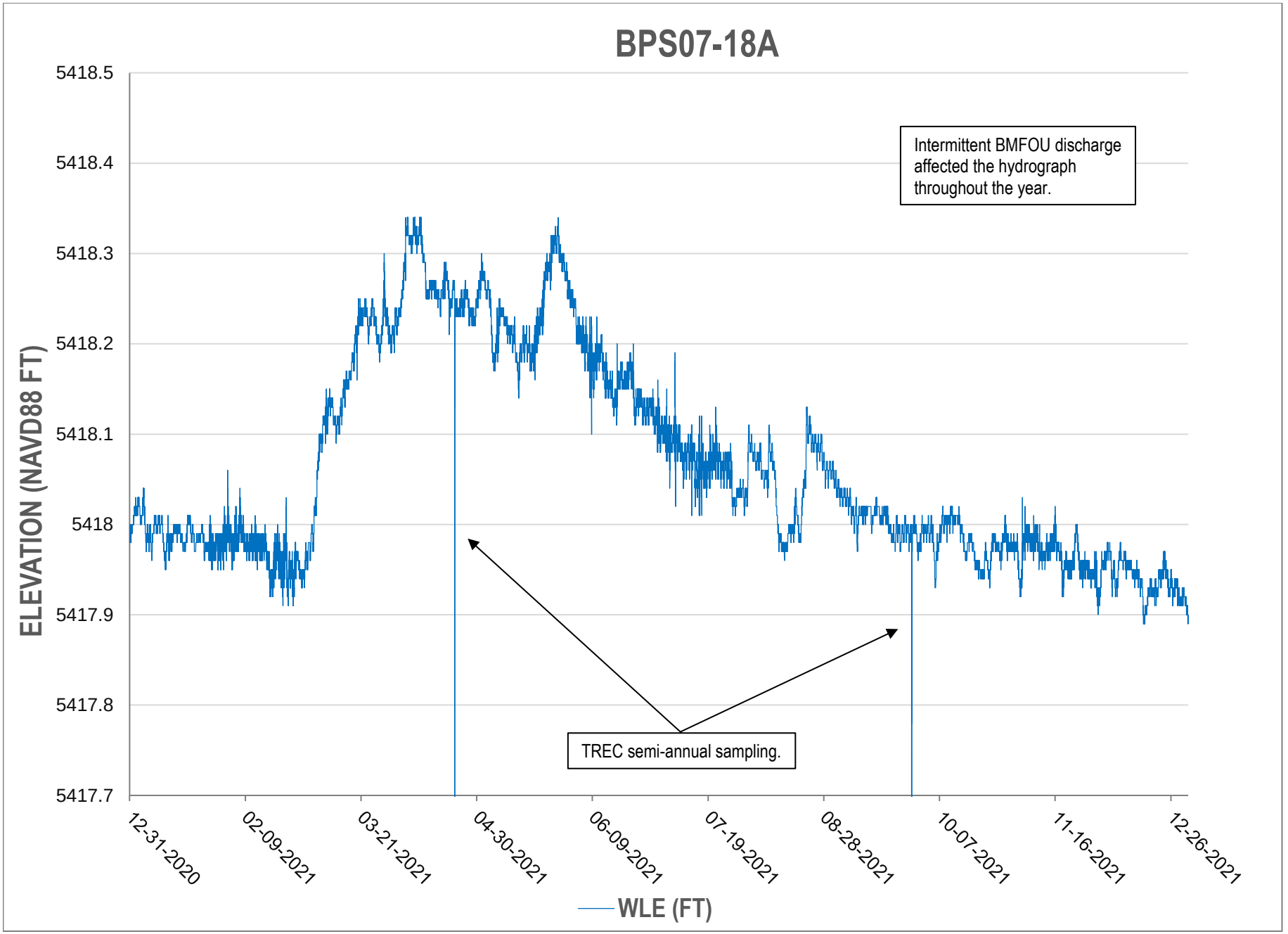

BPS07-07
Intermittent BMFOU discharge affected the hydrograph throughout the year.
Significant drawdown indicates sampling by TREC or WET, unless otherwise noted.
Pioneer Technical Services performing intermittent jetting of the BPSOU Subdrain.
Pioneer Technical Services performing step drawdown test in Diggings East.
ELEVATION (NAVD88 ft.)
5443.7
5443.5
5443.3
5443.1
5442.9
5442.7
5442.5
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)

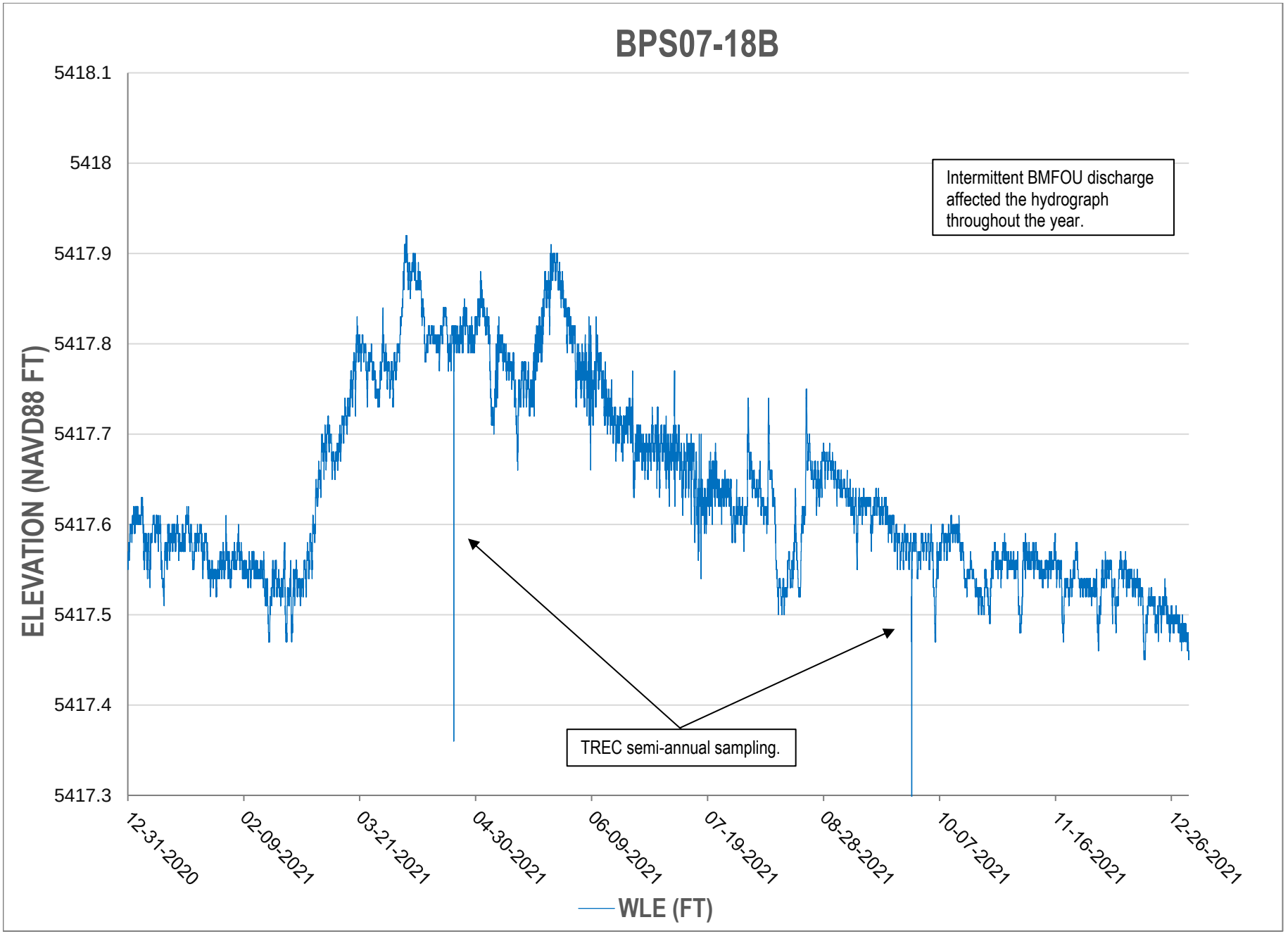

BPS07-08A
ELEVATION (NAVD88 FT)
5441.1
5440.9
5440.7
5440.5
5440.3
5440.1
5439.9
5439.7
5439.5
Data loss. Water entered transducer and corrupted data, transducer replaced.
TREC semi-annual sampling.
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)

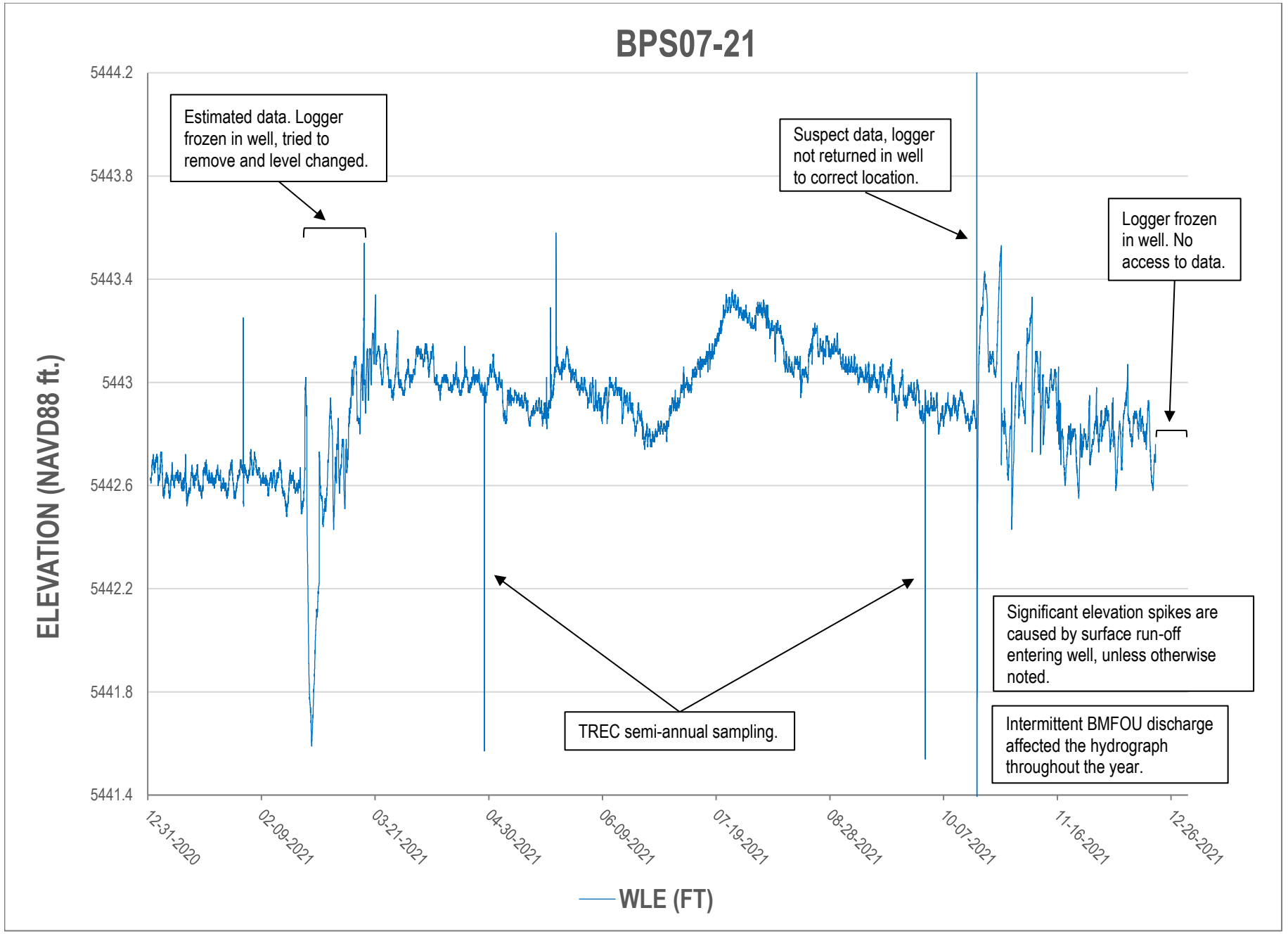

BPS07-11A
ELEVATION (NAVD88 FT)
5459.8
5459.4
5459
5458.6
5458.2
5457.8
5457.4
5457
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)
Significant drawdown indicates sampling by TREC or WET, unless otherwise noted.
Transducer out of water, due to combination of inadequate direct read cable length and dewatering for Intermountain Construction Services construction nearby. Data suspect.
Dewatering for Intermountain Construction Services construction nearby.

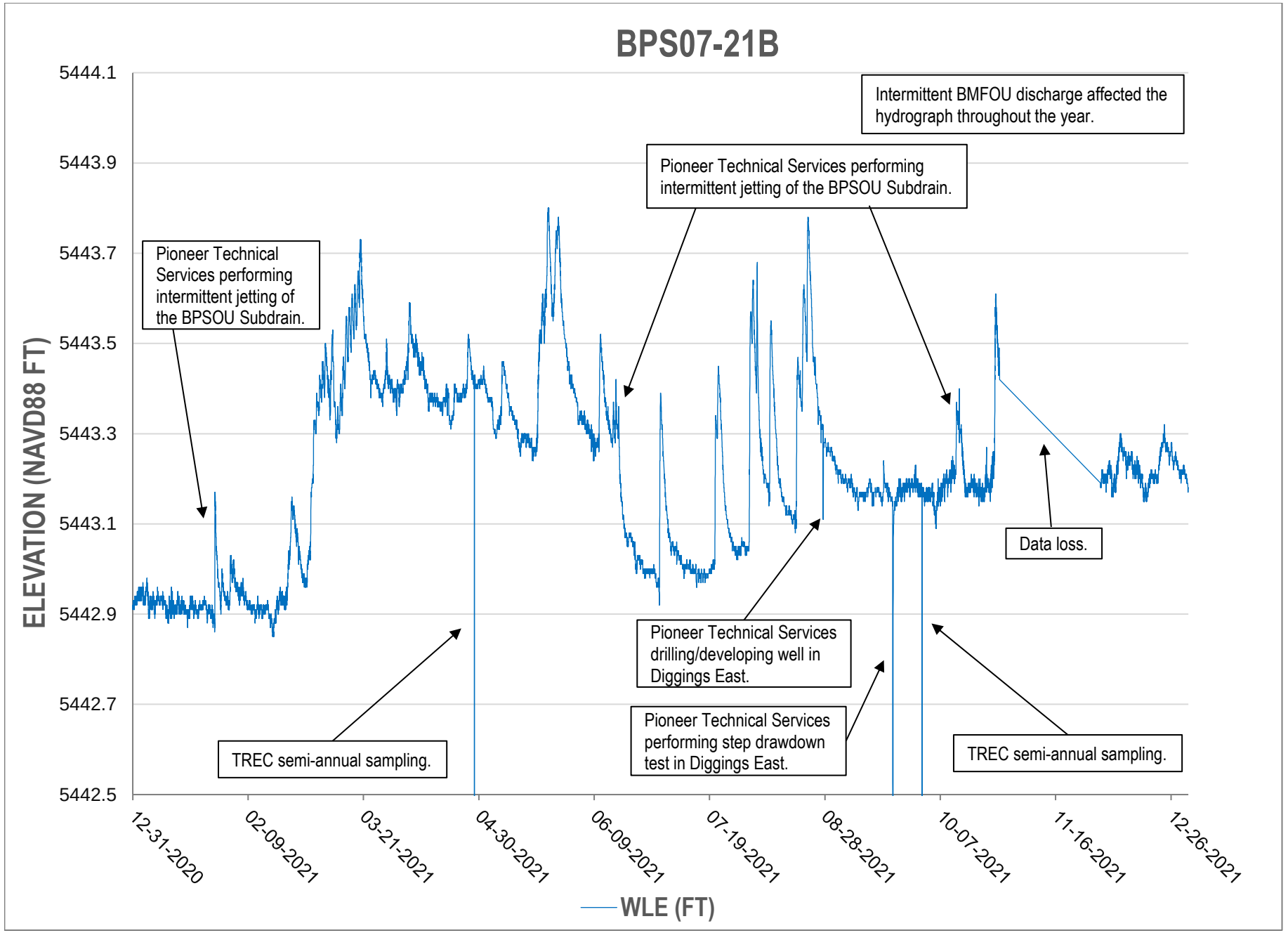

BPS07-11B
Significant drawdown indicates sampling by TREC or WET, unless otherwise noted.
ELEVATION (NAVD88 FT)
5459
5458.8
5458.6
5458.4
5458.2
5458
5457.8
5457.6
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)

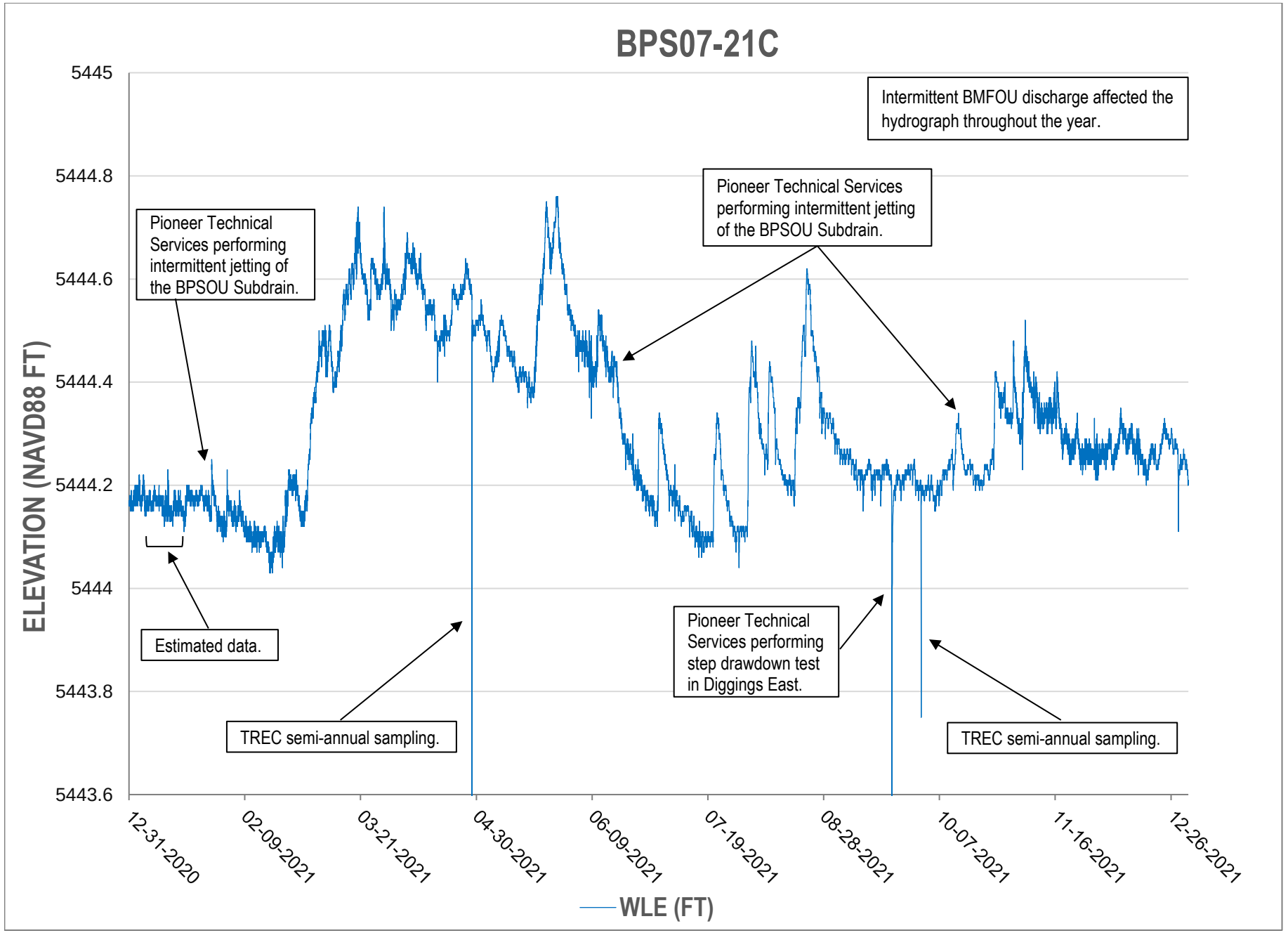

BPS07-17A
ELEVATION (NAVD88 FT)
5419.3
5419.2
5419.1
5419
5418.9
5418.8
5418.7
5418.6
5418.5
5418.4
Intermittent BMFOU discharge affected the hydrograph throughout the year.
TREC semi-annual sampling.
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)

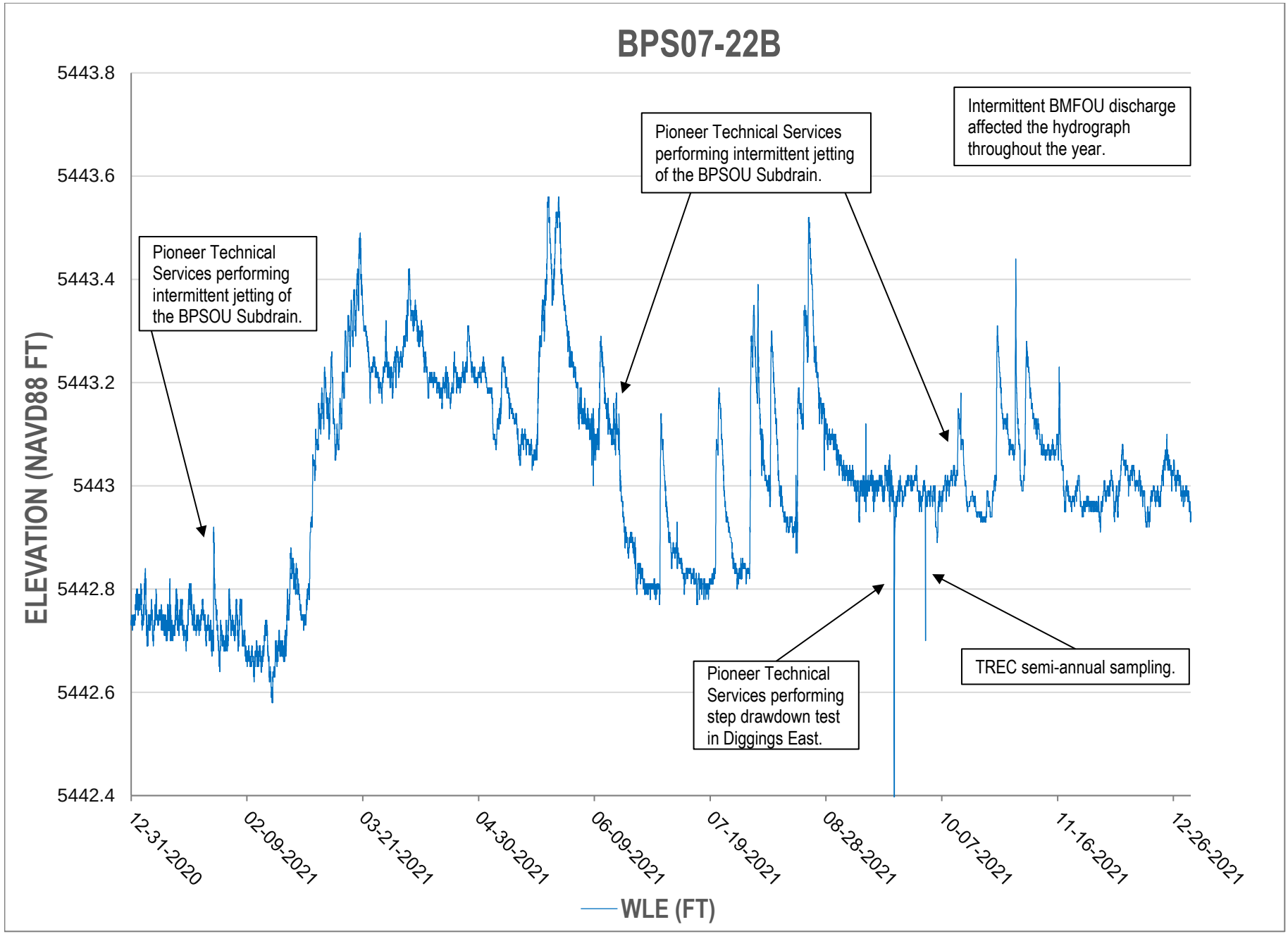

BPS07-18A
ELEVATION (NAVD88 FT)
5418.5
5418.4
5418.3
5418.2
5418.1
5418
5417.9
5417.8
5417.7
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
Intermittent BMFOU discharge affected the hydrograph throughout the year.
TREC semi-annual sampling.
WLE (FT)

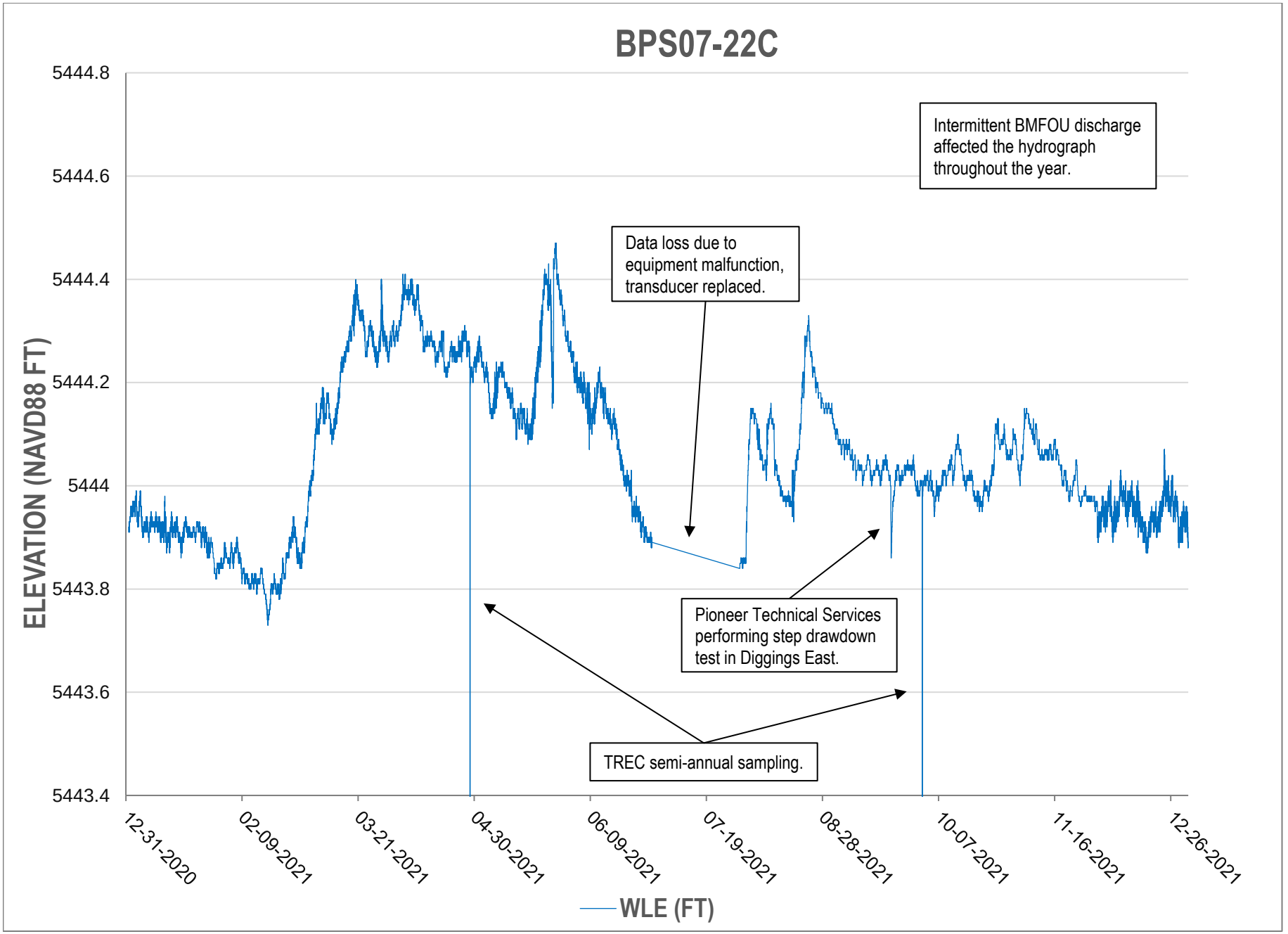

BPS07-18B
ELEVATION (NAVD88 FT)
5418.1
5418
5417.9
5417.8
5417.7
5417.6
5417.5
5417.4
5417.3
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
Intermittent BMFOU discharge affected the hydrograph throughout the year.
TREC semi-annual sampling.
WLE (FT)

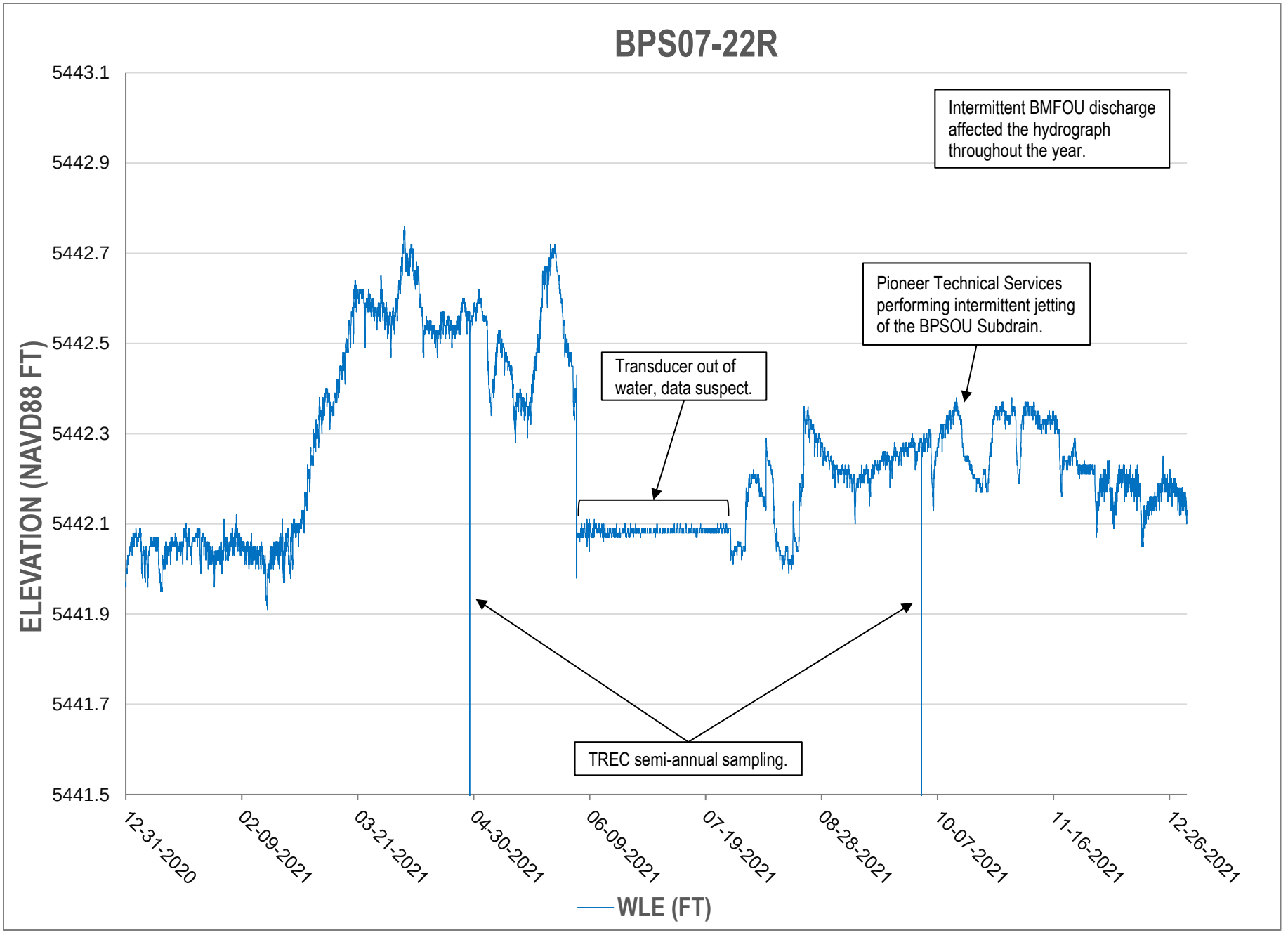

BPS07-21
ELEVATION (NAVD88 ft.)
5444.2
5443.8
5443.4
5443
5442.6
5442.2
5441.8
5441.4
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
Estimated data. Logger frozen in well, tried to remove and level changed.
Suspect data, logger not returned in well to correct location.
Logger frozen in well. No access to data.
TREC semi-annual sampling.
Significant elevation spikes are caused by surface run-off entering well, unless otherwise noted.
Intermittent BMFOU discharge affected the hydrograph throughout the year.
WLE (FT)

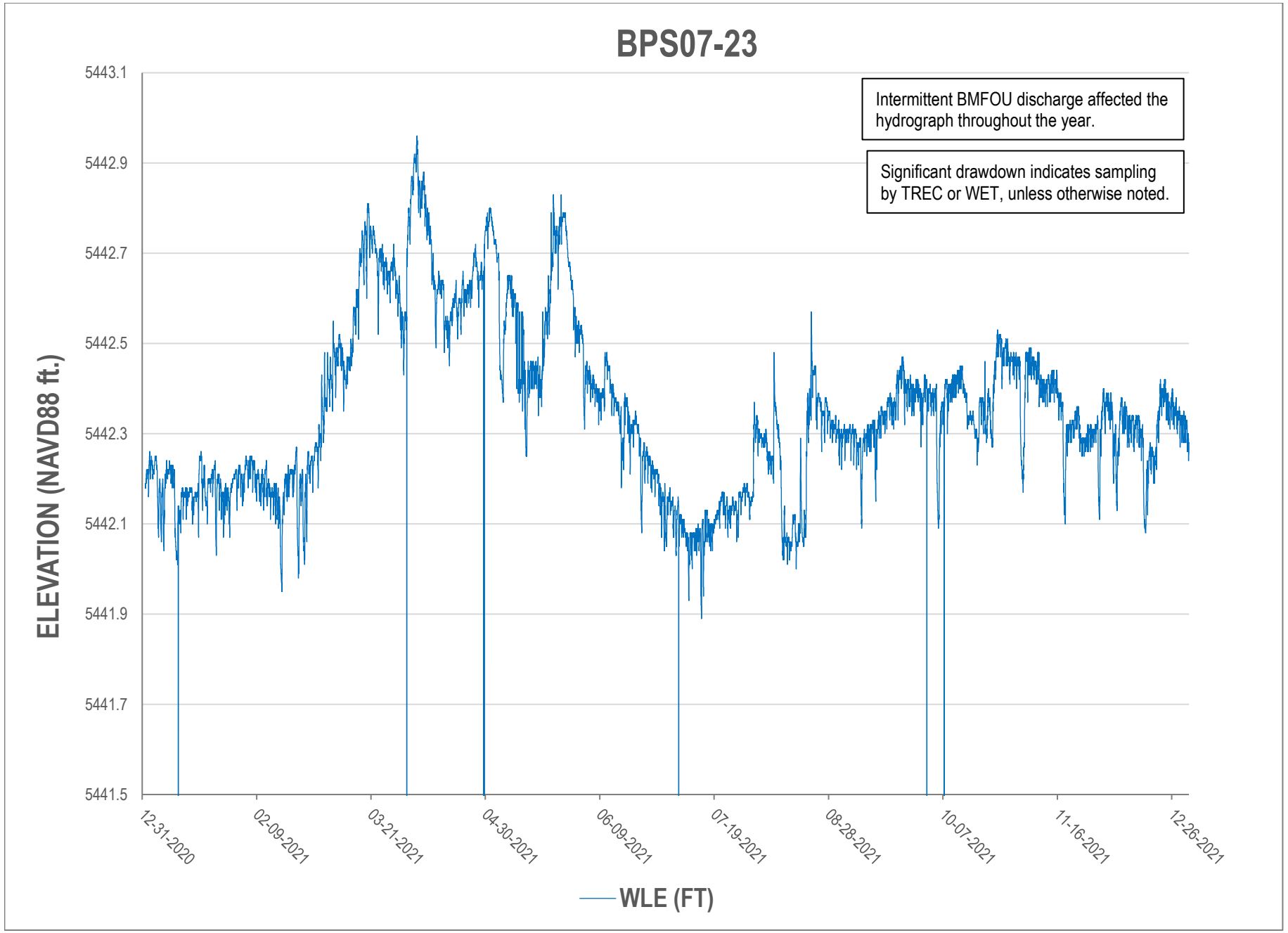

BPS07-21B
ELEVATION (NAVD88 FT)
5444.1
5443.9
5443.7
5443.5
5443.3
5443.1
5442.9
5442.7
5442.5
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
Intermittent BMFOU discharge affected the hydrograph throughout the year.
Pioneer Technical Services performing intermittent jetting of the BPSOU Subdrain.
Pioneer Technical Services performing intermittent jetting of the BPSOU Subdrain.
Data loss.
Pioneer Technical Services drilling/developing well in Diggings East.
Pioneer Technical Services performing step drawdown test in Diggings East.
TREC semi-annual sampling.
TREC semi-annual sampling.
WLE (FT)

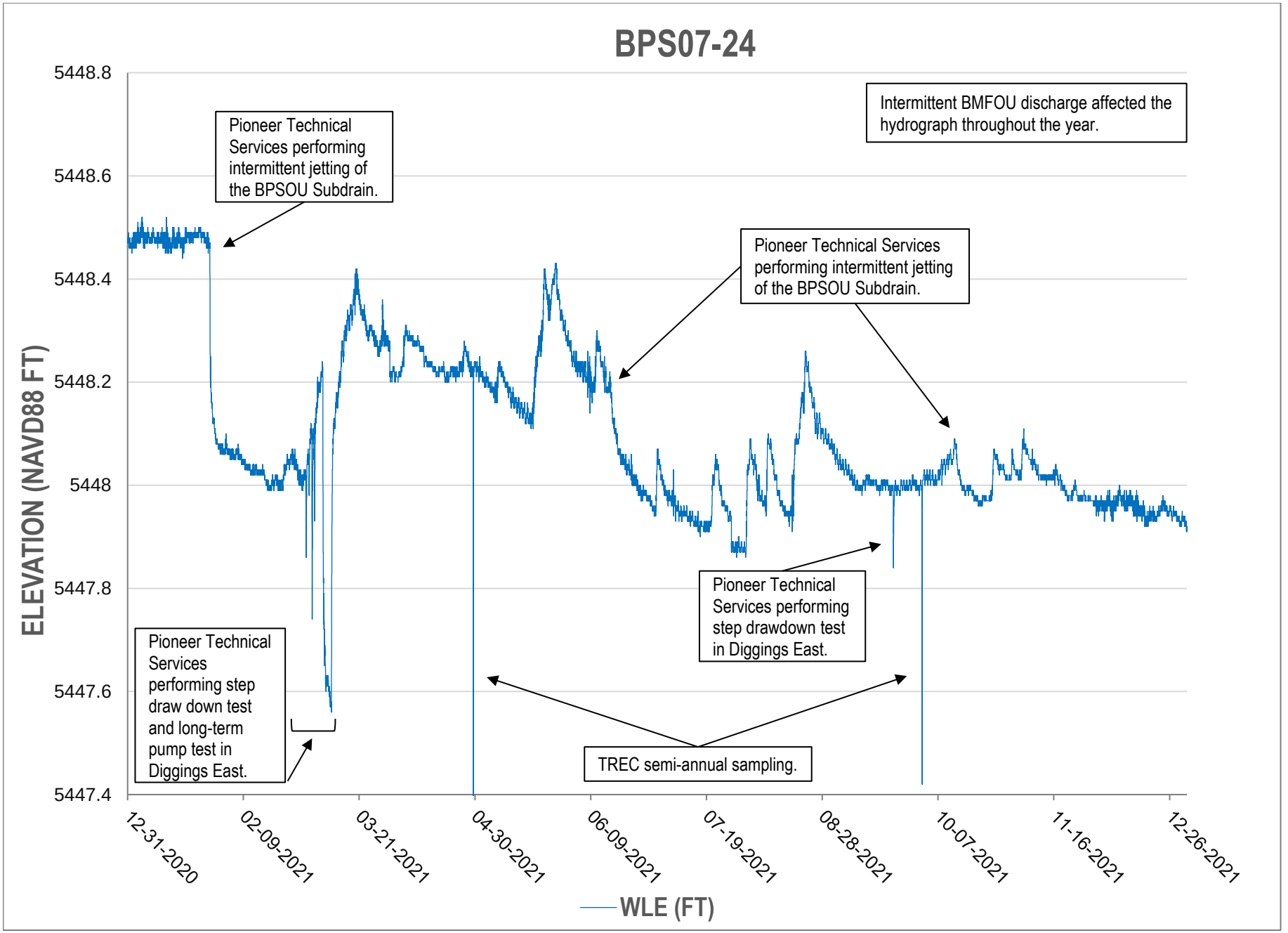

BPS07-21C
ELEVATION (NAVD88 FT)
5445
5444.8
5444.6
5444.4
5444.2
5444
5443.8
5443.6
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)
Intermittent BMFOU discharge affected the hydrograph throughout the year.
Pioneer Technical Services performing intermittent jetting of the BPSOU Subdrain.
Pioneer Technical Services performing intermittent jetting of the BPSOU Subdrain.
Estimated data.
TREC semi-annual sampling.
Pioneer Technical Services performing step drawdown test in Diggings East.
TREC semi-annual sampling.

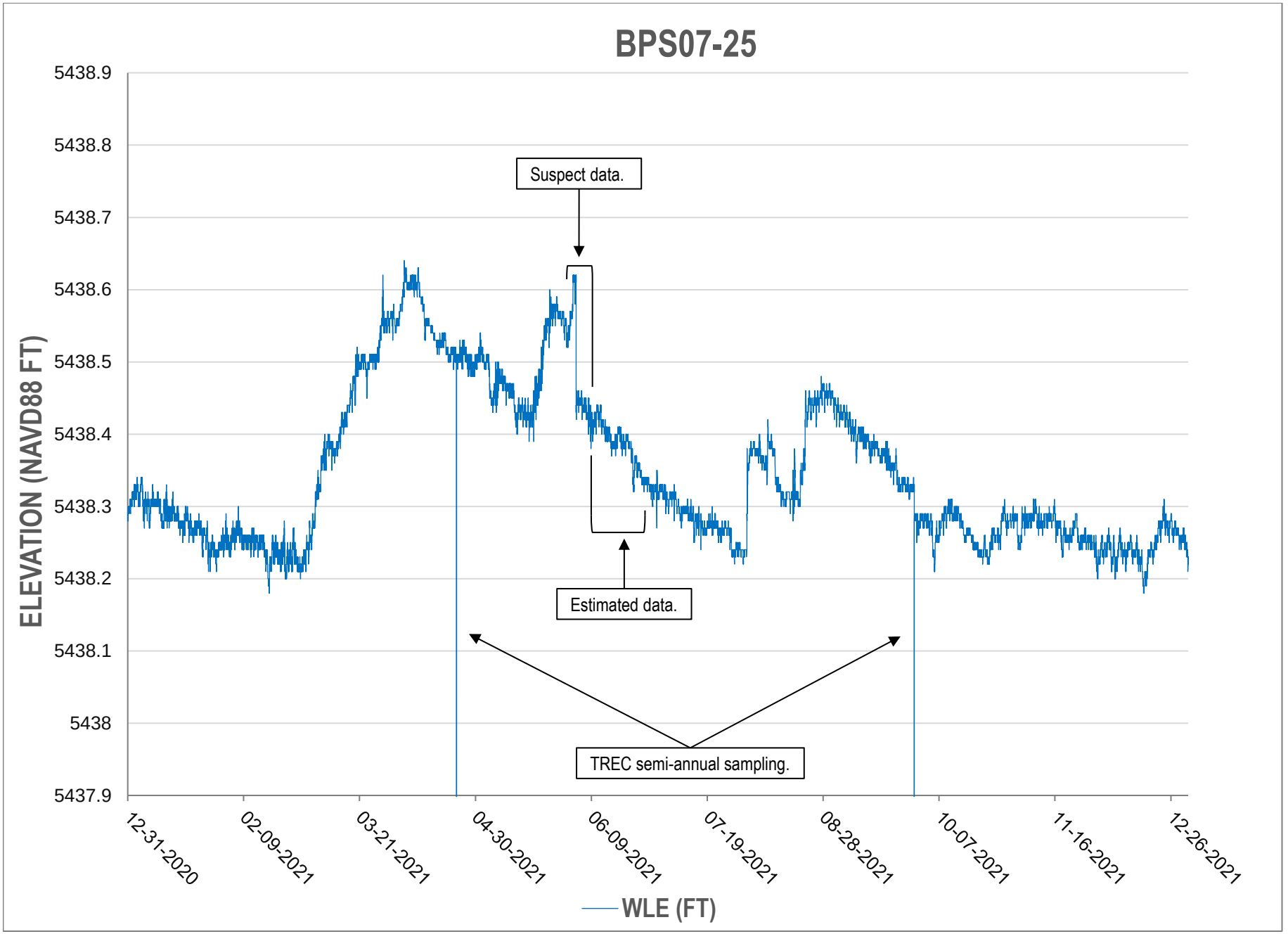

BPS07-22B
ELEVATION (NAVD88 FT)
5443.8
5443.6
5443.4
5443.2
5443
5442.8
5442.6
5442.4
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)
Pioneer Technical Services performing intermittent jetting of the BPSOU Subdrain.
Pioneer Technical Services performing intermittent jetting of the BPSOU Subdrain.
Intermittent BMFOU discharge affected the hydrograph throughout the year.
Pioneer Technical Services performing step drawdown test in Diggings East.
TREC semi-annual sampling.

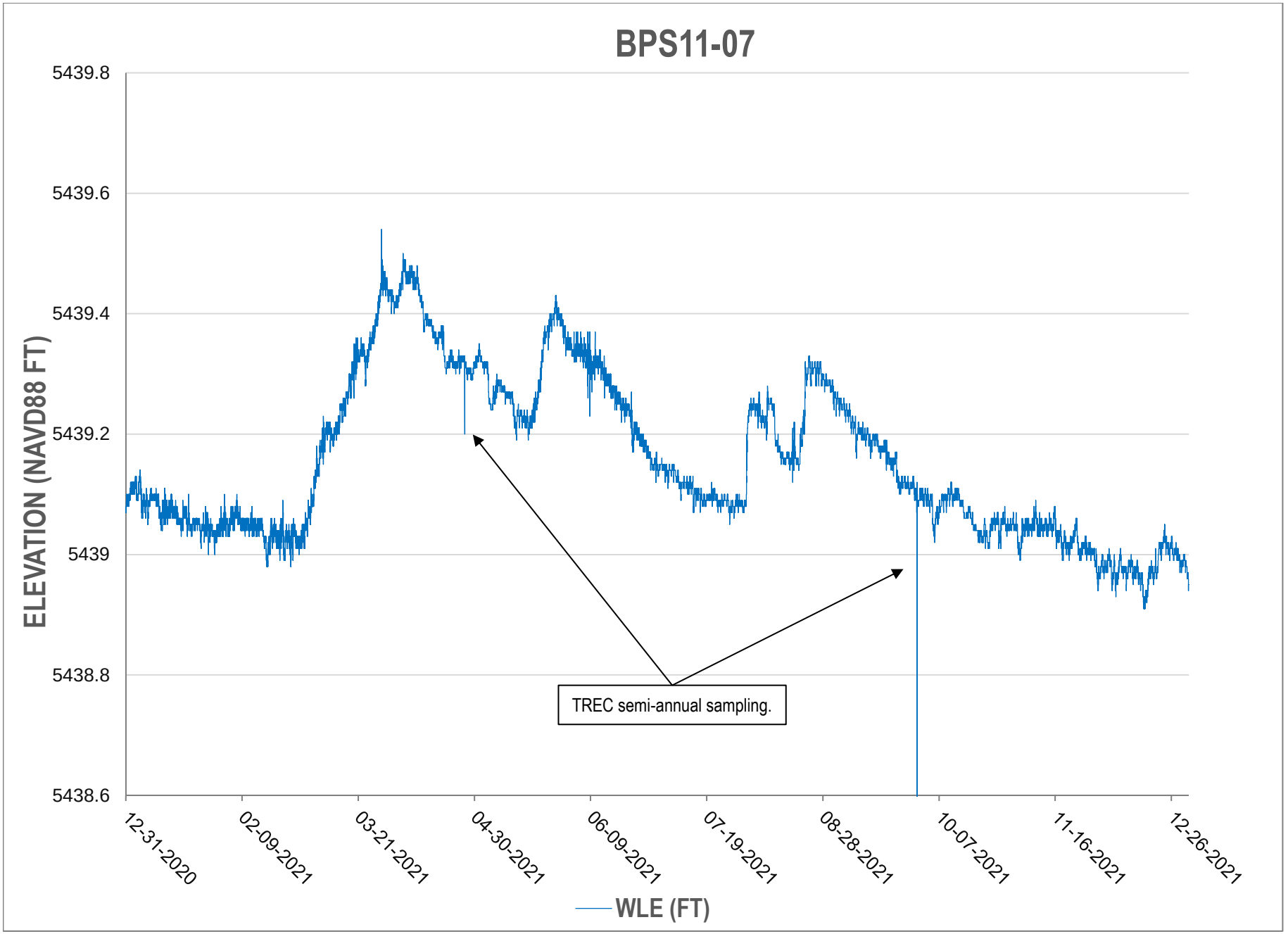

BPS07-22C
ELEVATION (NAVD88 FT)
5444.8
5444.6
5444.4
5444.2
5444
5443.8
5443.6
5443.4
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
Intermittent BMFOU discharge affected the hydrograph throughout the year.
Data loss due to equipment malfunction, transducer replaced.
Pioneer Technical Services performing step drawdown test in Diggings East.
TREC semi-annual sampling.
WLE (FT)

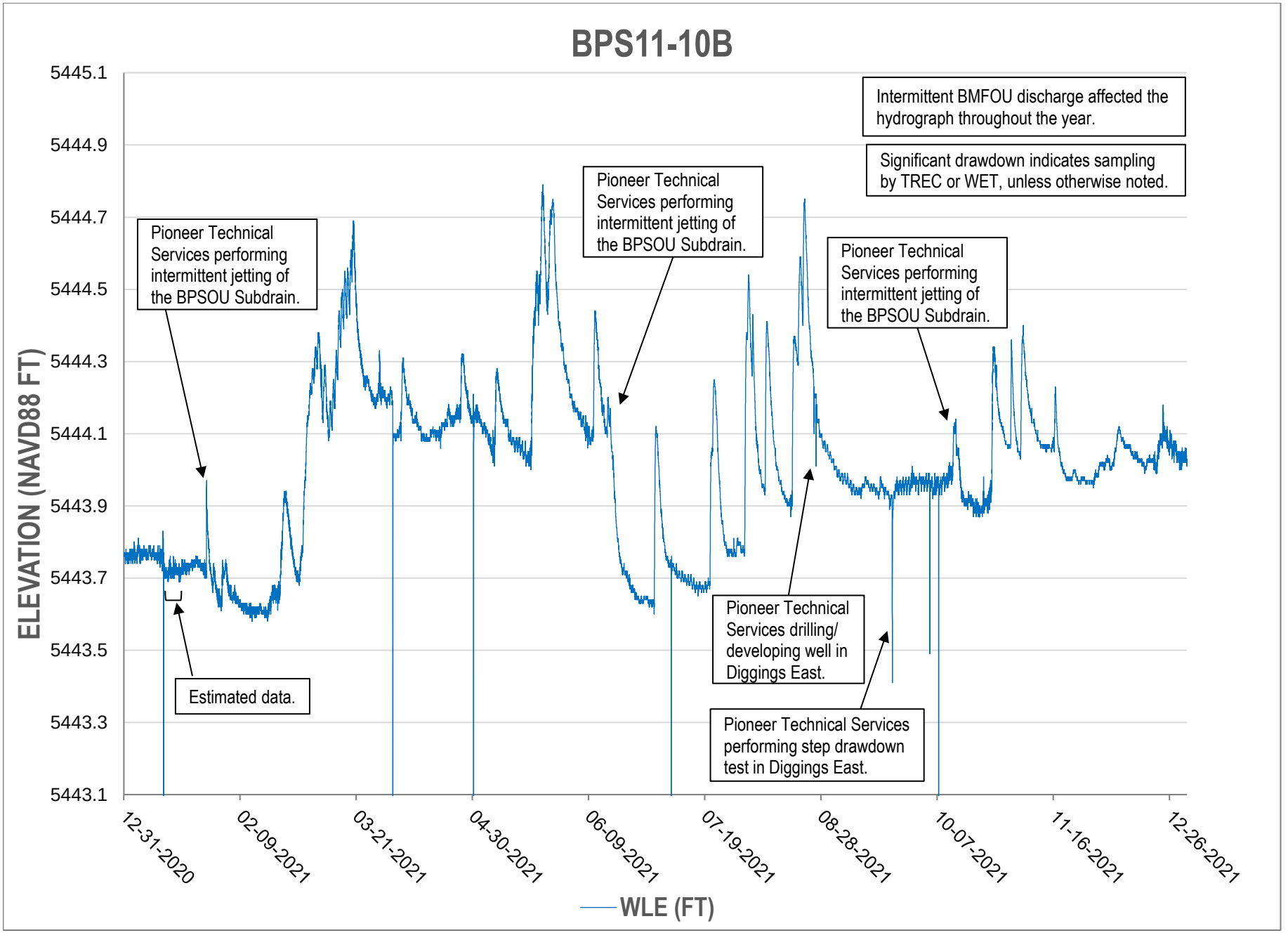

BPS07-22R
ELEVATION (NAVD88 FT)
5443.1
5442.9
5442.7
5442.5
5442.3
5442.1
5441.9
5441.7
5441.5
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
Intermittent BMFOU discharge affected the hydrograph throughout the year.
Pioneer Technical Services performing intermittent jetting of the BPSOU Subdrain.
Transducer out of water, data suspect.
TREC semi-annual sampling.
WLE (FT)

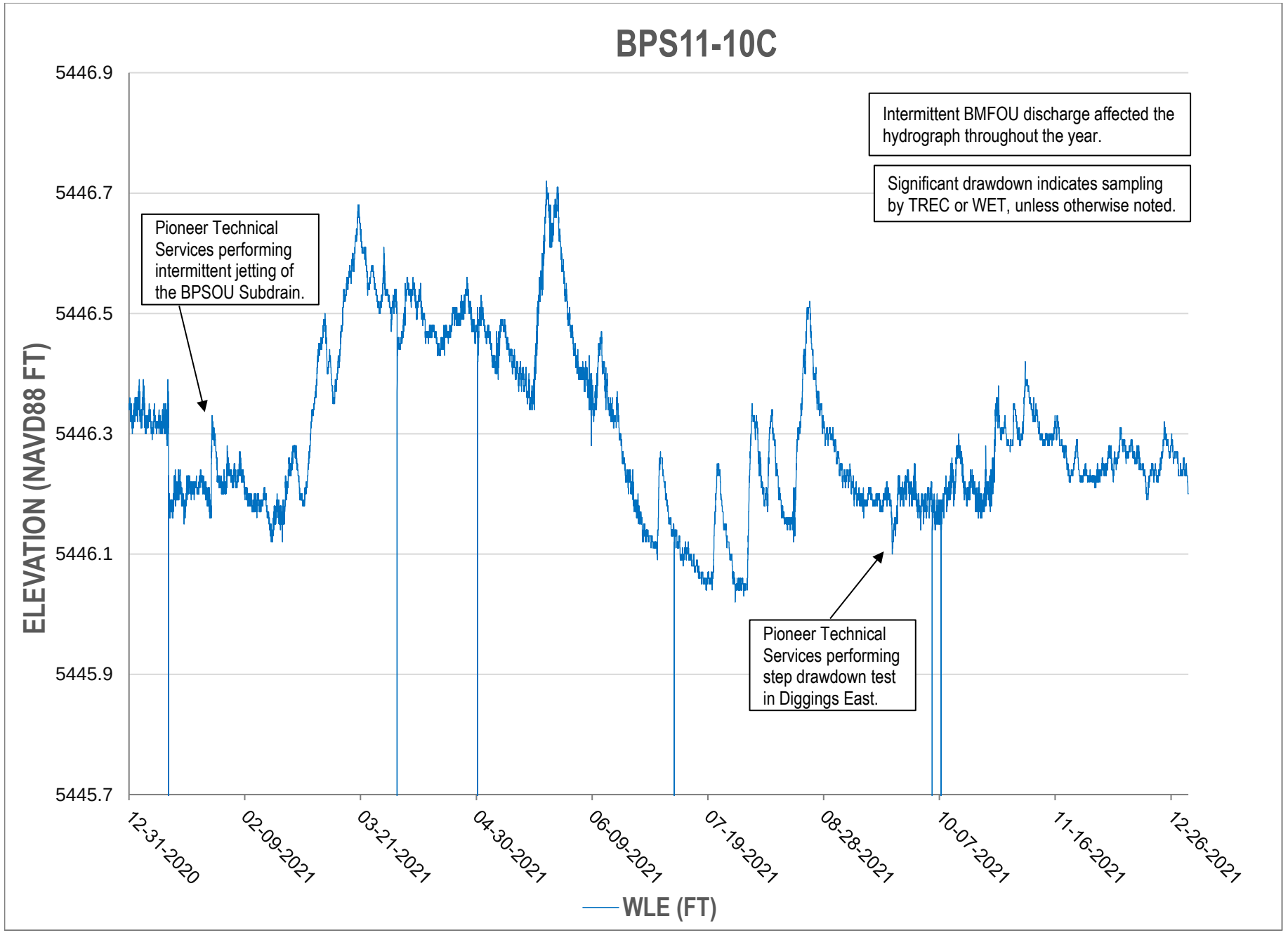

BPS07-23
Intermittent BMFOU discharge affected the hydrograph throughout the year.
Significant drawdown indicates sampling by TREC or WET, unless otherwise noted.
ELEVATION (NAVD88 ft.)
5443.1
5442.9
5442.7
5442.5
5442.3
5442.1
5441.9
5441.7
5441.5
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)

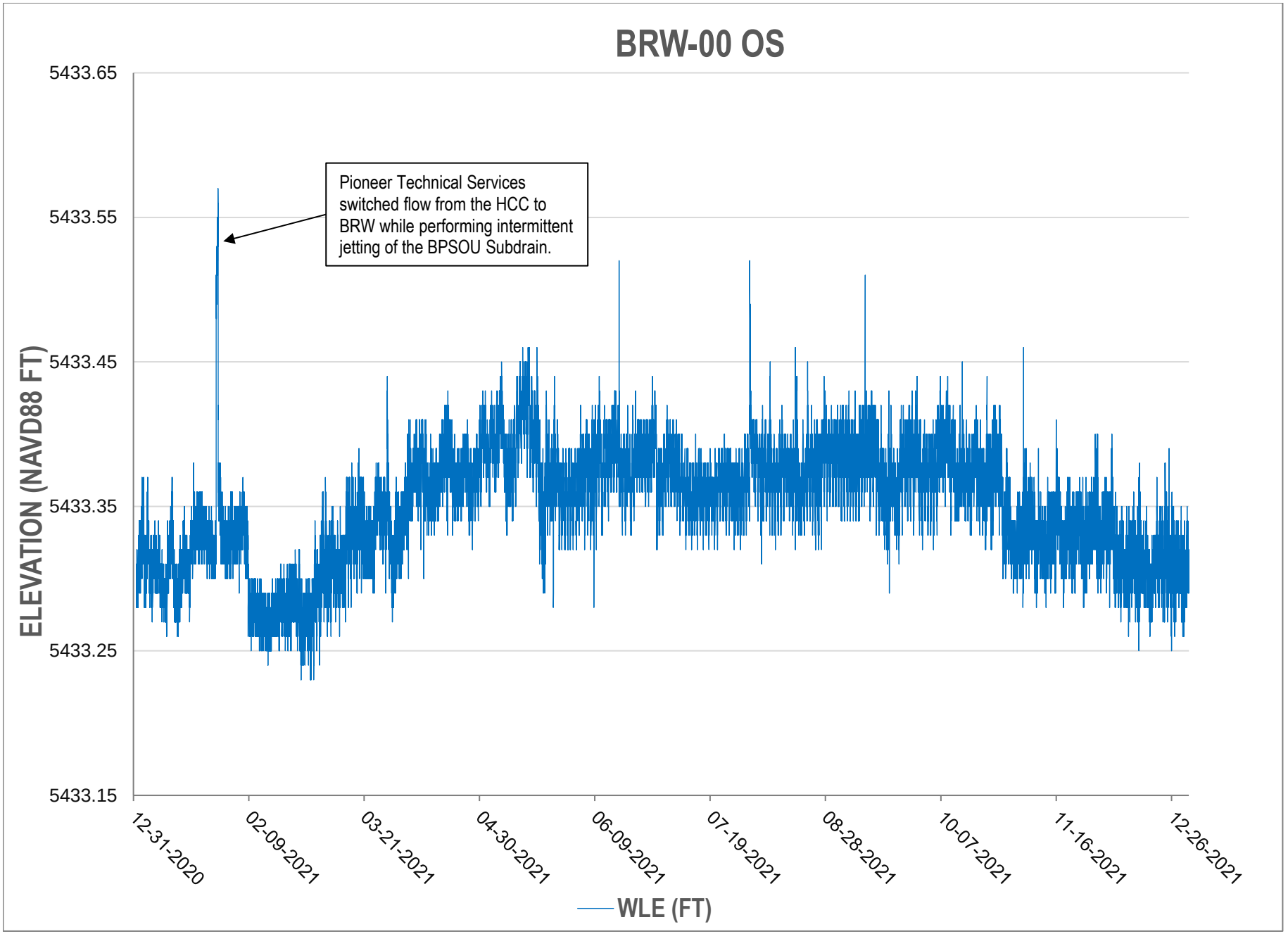

BPS07-24
ELEVATION (NAVD88 FT)
5448.8
5448.6
5448.4
5448.2
5448
5447.8
5447.6
5447.4
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
Pioneer Technical Services performing intermittent jetting of the BPSOU Subdrain.
Intermittent BMFOU discharge affected the hydrograph throughout the year.
Pioneer Technical Services performing intermittent jetting of the BPSOU Subdrain.
Pioneer Technical Services performing step drawdown test in Diggings East.
Pioneer Technical Services performing step draw down test and long-term pump test in Diggings East.
TREC semi-annual sampling.
WLE (FT)

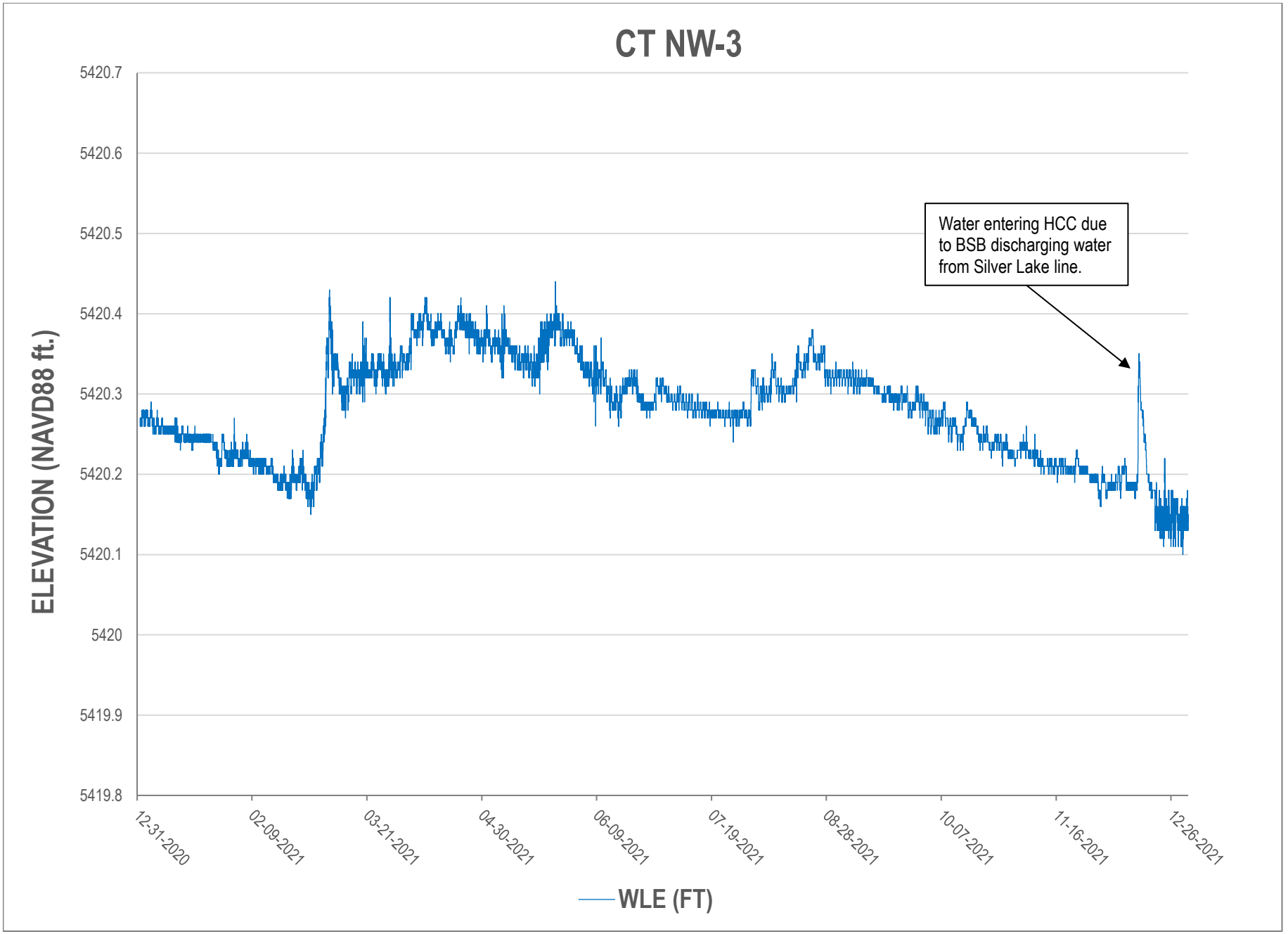

BPS07-25
ELEVATION (NAVD88 FT)
5438.9
5438.8
5438.7
5438.6
5438.5
5438.4
5438.3
5438.2
5438.1
5438
5437.9
Suspect data.
Estimated data.
TREC semi-annual sampling.
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)

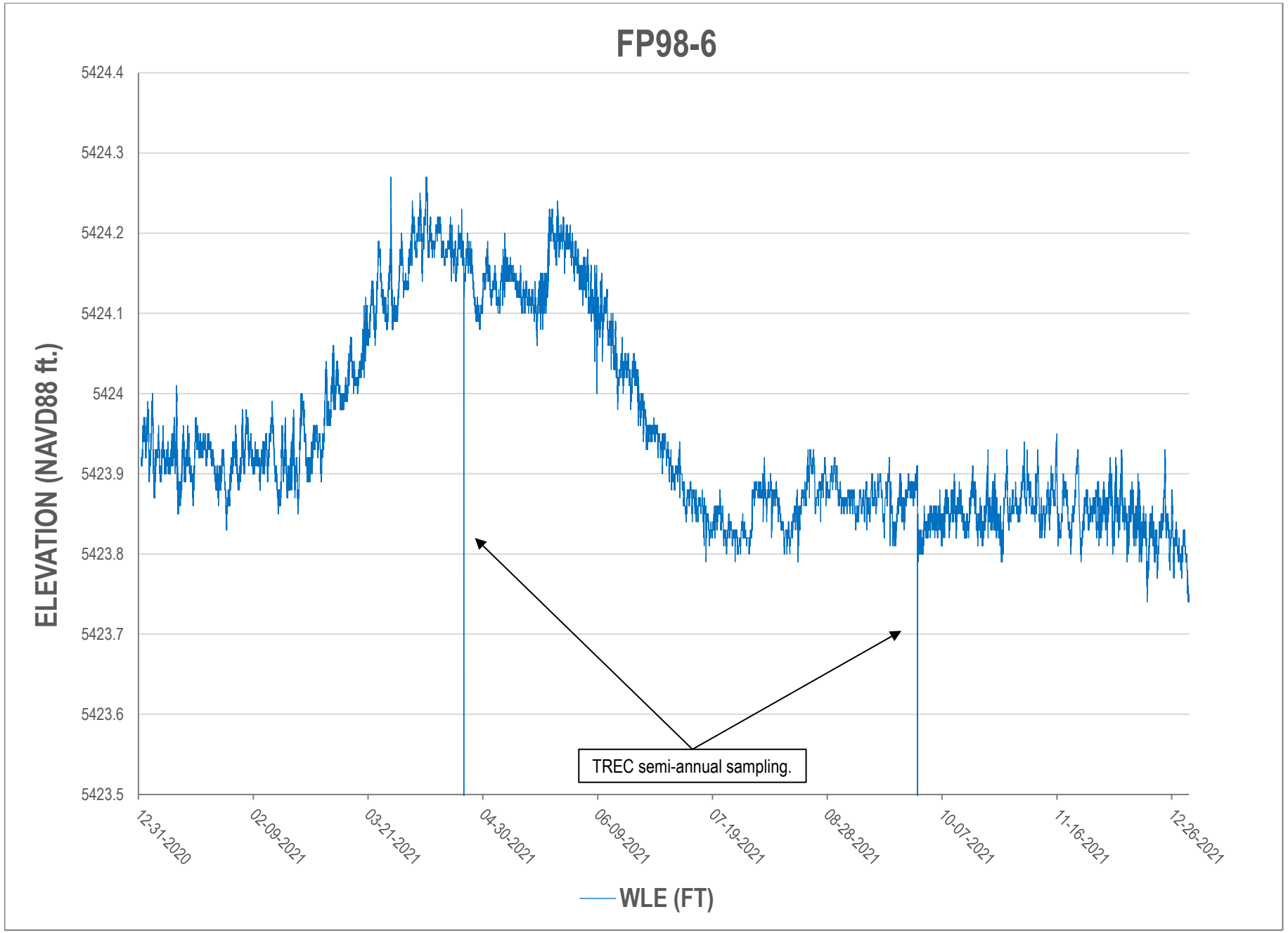

BPS11-07
ELEVATION (NAVD88 FT)
5439.8
5439.6
5439.4
5439.2
5439
5438.8
5438.6
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
TREC semi-annual sampling.
WLE (FT)

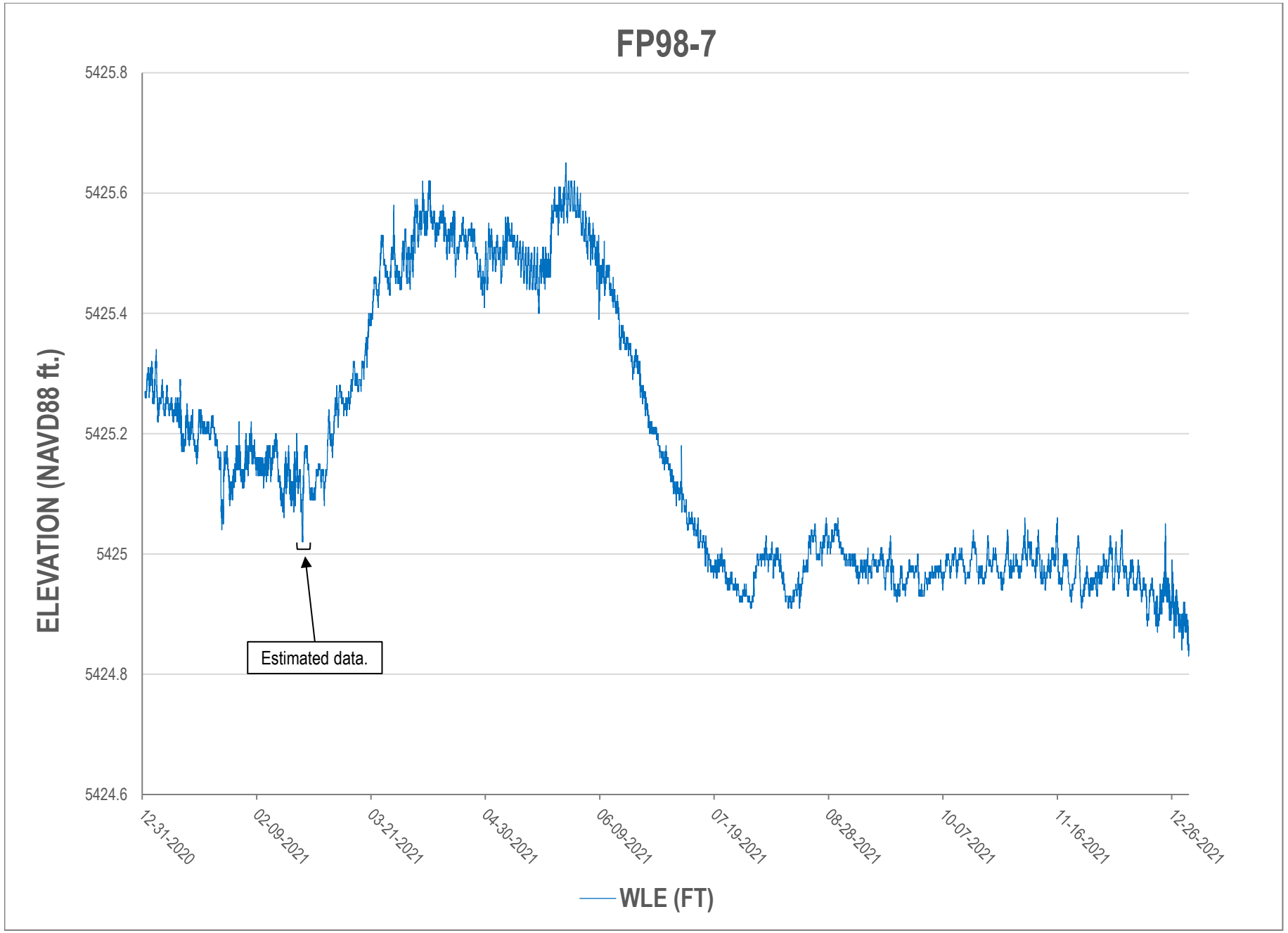

BPS11-10B
ELEVATION (NAVD88 FT)
5445.1
5444.9
5444.7
5444.5
5444.3
5444.1
5443.9
5443.7
5443.5
5443.3
5443.1
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)
Intermittent BMFOU discharge affected the hydrograph throughout the year.
Significant drawdown indicates sampling by TREC or WET, unless otherwise noted.
Pioneer Technical Services performing intermittent jetting of the BPSOU Subdrain.
Pioneer Technical Services performing intermittent jetting of the BPSOU Subdrain.
Pioneer Technical Services performing intermittent jetting of the BPSOU Subdrain.
Estimated data.
Pioneer Technical Services drilling/ developing well in Diggings East.
Pioneer Technical Services performing step drawdown test in Diggings East.

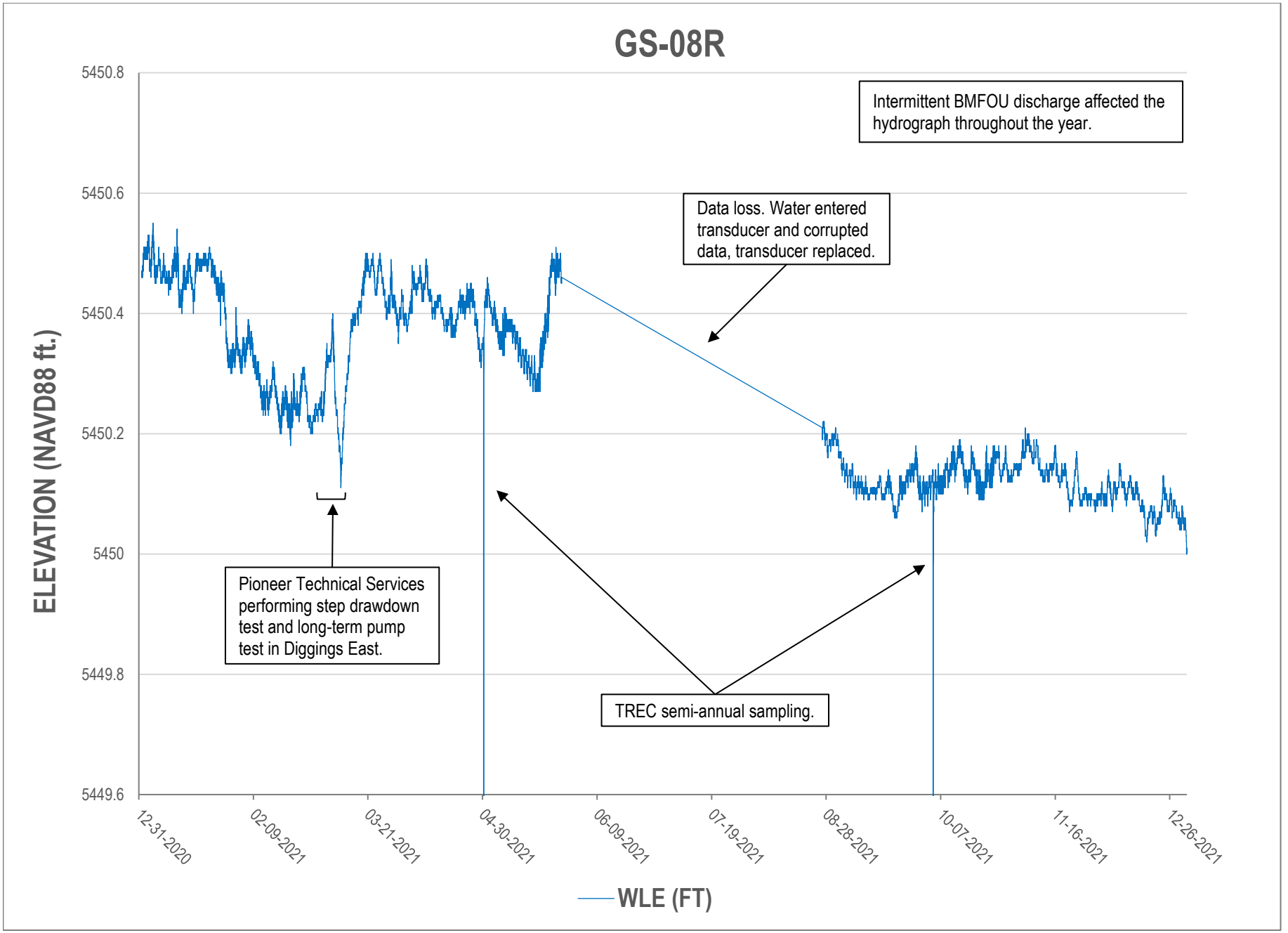

BPS11-10C
ELEVATION (NAVD88 FT)
5446.9
5446.7
5446.5
5446.3
5446.1
5445.9
5445.7
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)
Intermittent BMFOU discharge affected the hydrograph throughout the year.
Significant drawdown indicates sampling by TREC or WET, unless otherwise noted.
Pioneer Technical Services performing intermittent jetting of the BPSOU Subdrain.
Pioneer Technical Services performing step drawdown test in Diggings East.

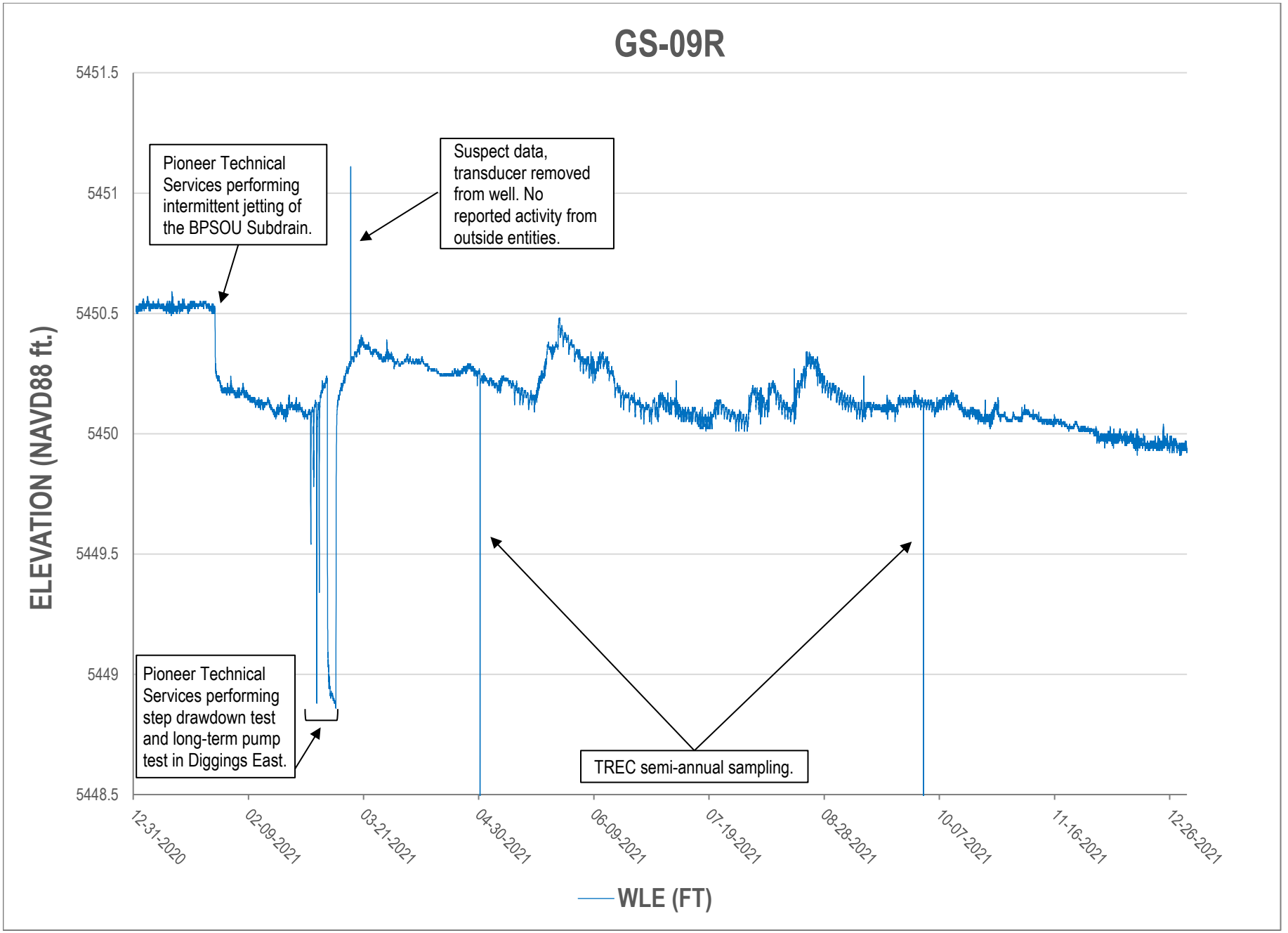

BRW-00 OS
5433.65
5433.55
5433.45
5433.35
5433.25
5433.15
ELEVATION (NAVD88 FT)
Pioneer Technical Services switched flow from the HCC to BRW while performing intermittent jetting of the BPSOU Subdrain.
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)

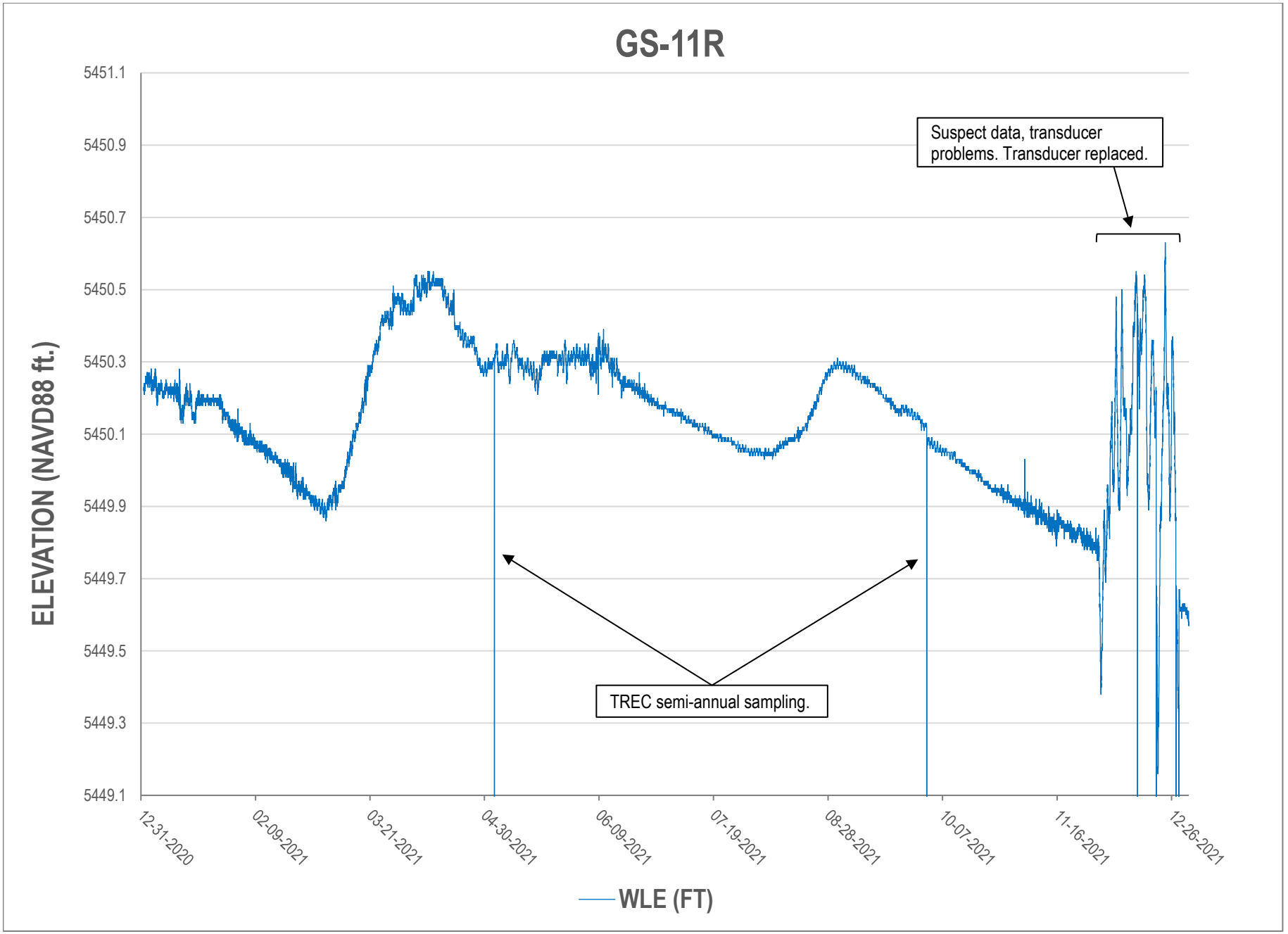

CT NW-3
ELEVATION (NAVD88 ft.)
5420.7
5420.6
5420.5
5420.4
5420.3
5420.2
5420.1
5420
5419.9
5419.8
Water entering HCC due to BSB discharging water from Silver Lake line.
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)

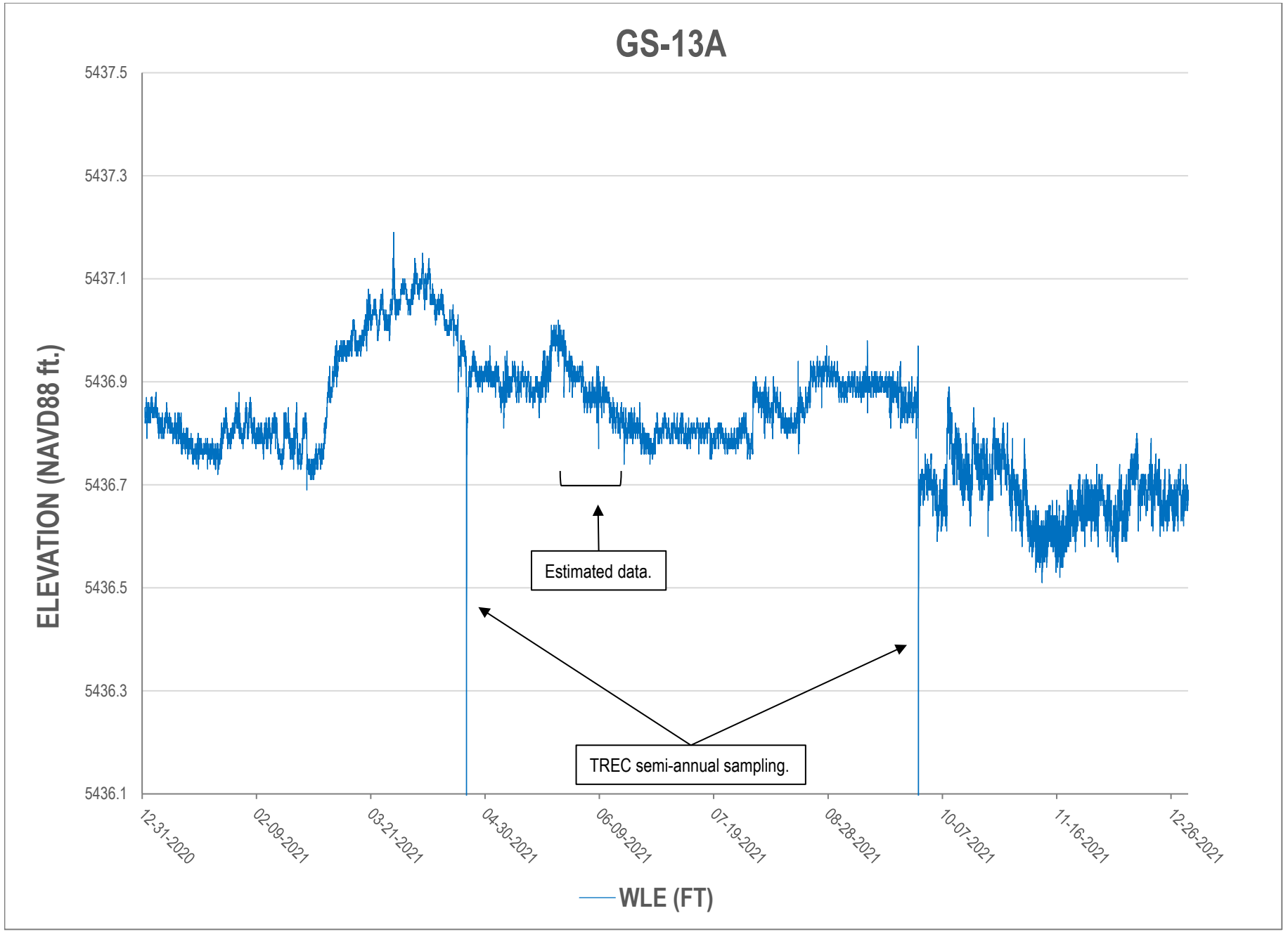

FP98-6
ELEVATION (NAVD88 ft.)
5424.4
5424.3
5424.2
5424.1
5424
5423.9
5423.8
5423.7
5423.6
5423.5
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
TREC semi-annual sampling.
WLE (FT)

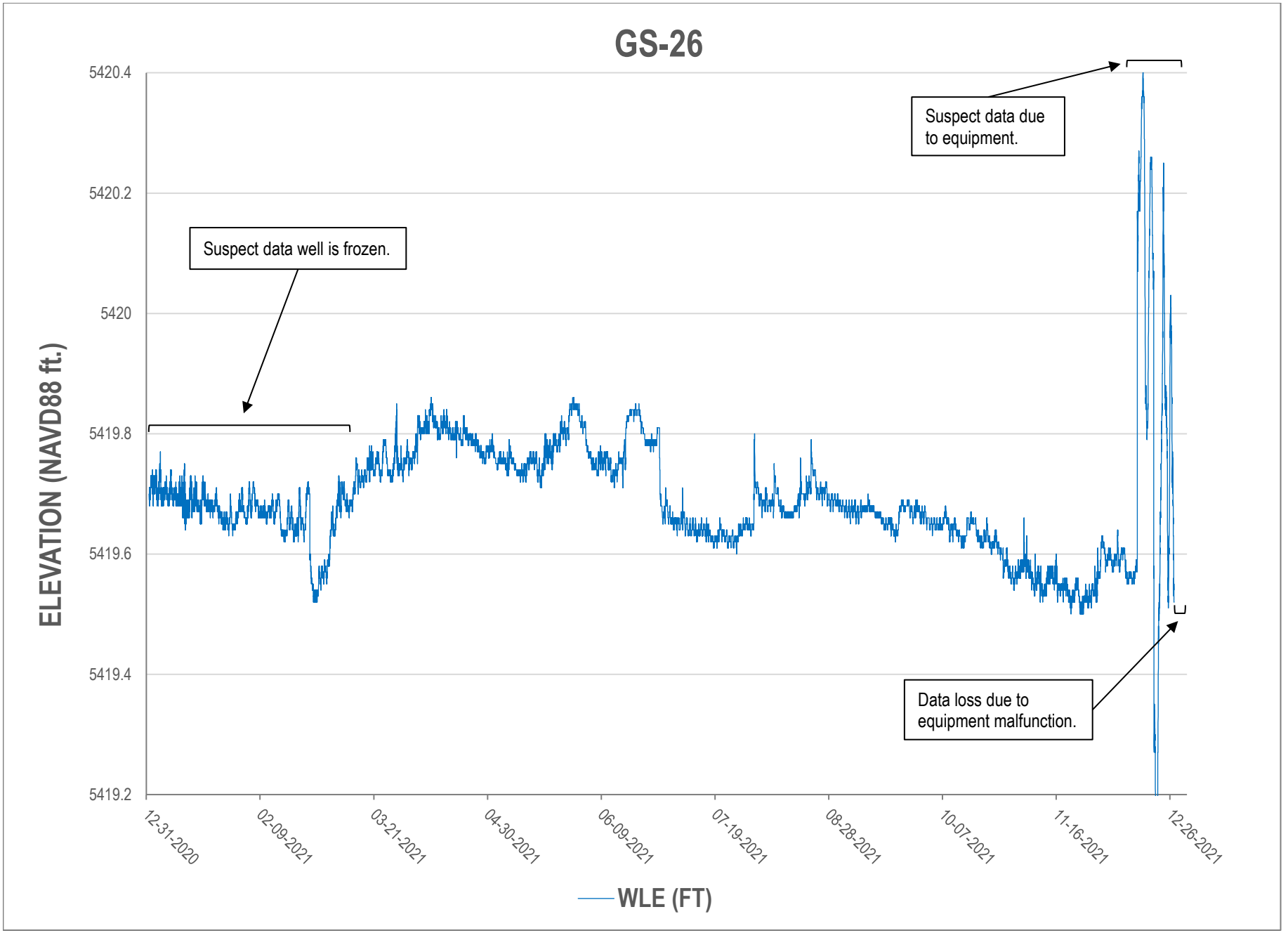

FP98-7
ELEVATION (NAVD88 ft.)
5425.8
5425.6
5425.4
5425.2
5425
5424.8
5424.6
Estimated data.
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)

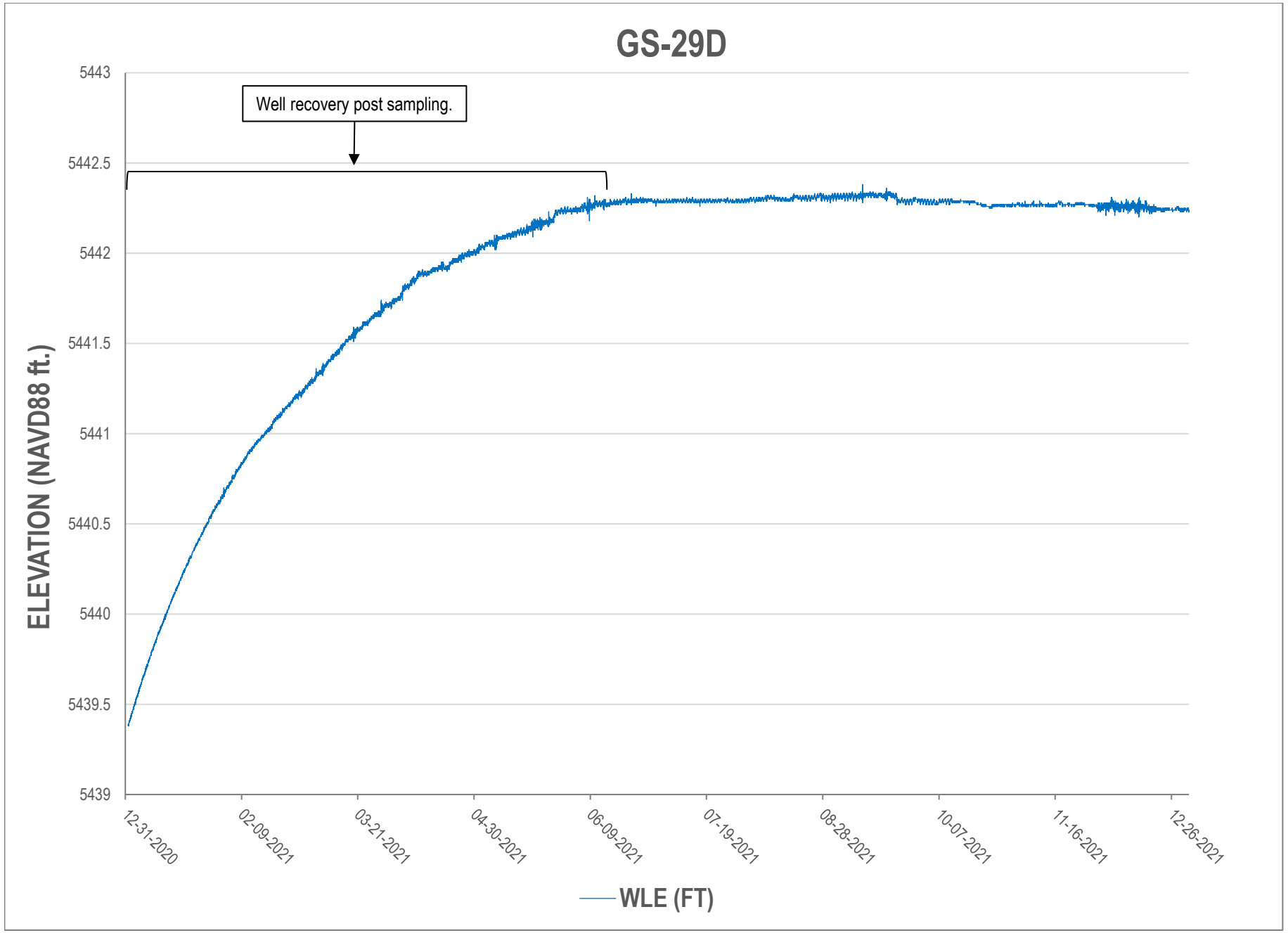

GS-08R
ELEVATION (NAVD88 ft.)
5450.8
5450.6
5450.4
5450.2
5450
5449.8
5449.6
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
Intermittent BMFOU discharge affected the hydrograph throughout the year.
Data loss. Water entered transducer and corrupted data, transducer replaced.
Pioneer Technical Services performing step drawdown test and long-term pump test in Diggings East.
TREC semi-annual sampling.
WLE (FT)

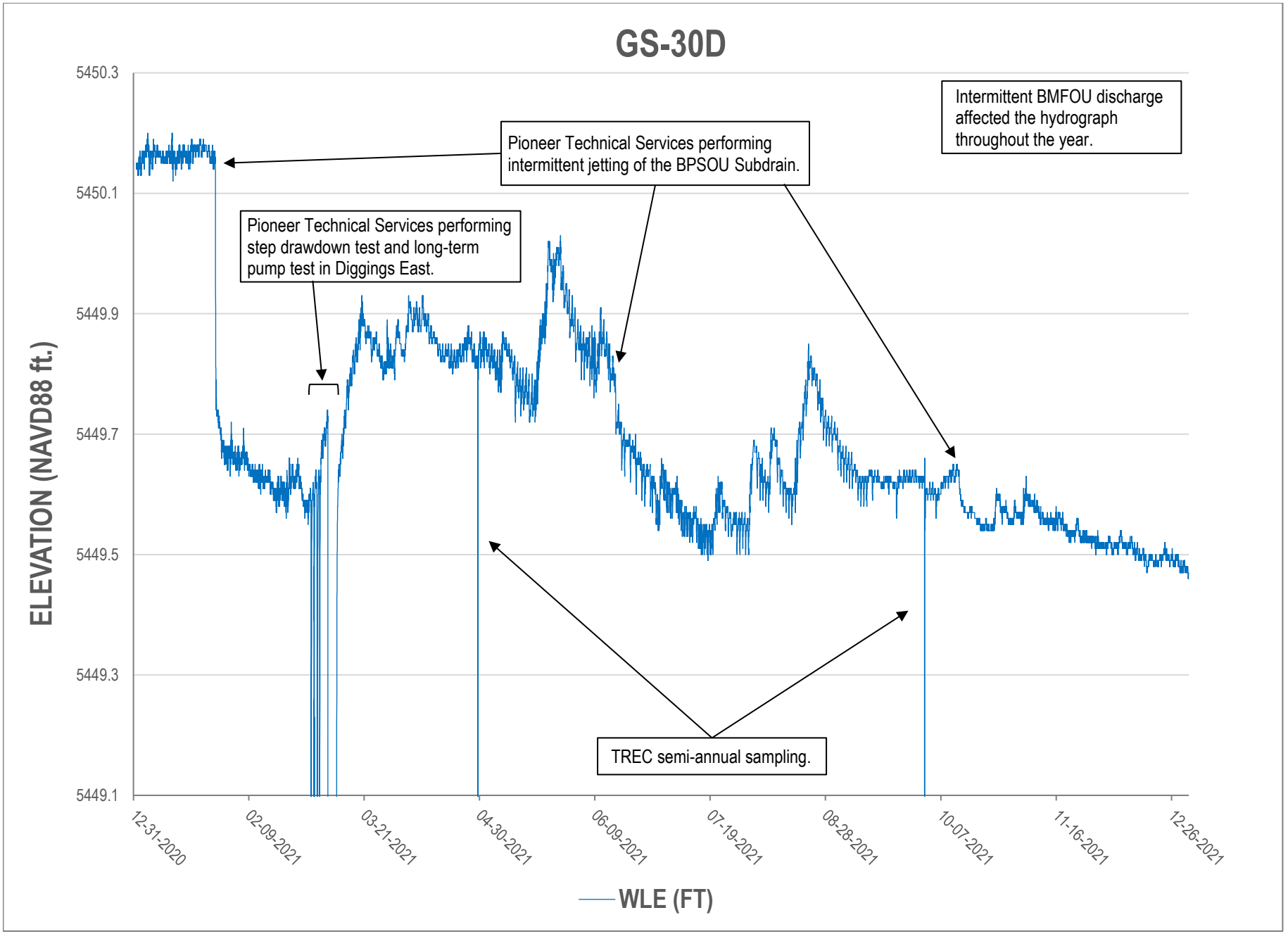

GS-09R
ELEVATION (NAVD88 ft.)
5451.5
5451
5450.5
5450
5449.5
5449
5448.5
Pioneer Technical Services performing intermittent jetting of the BPSOU Subdrain.
Suspect data, transducer removed from well. No reported activity from outside entities.
Pioneer Technical Services performing step drawdown test and long-term pump test in Diggings East.
TREC semi-annual sampling.
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)

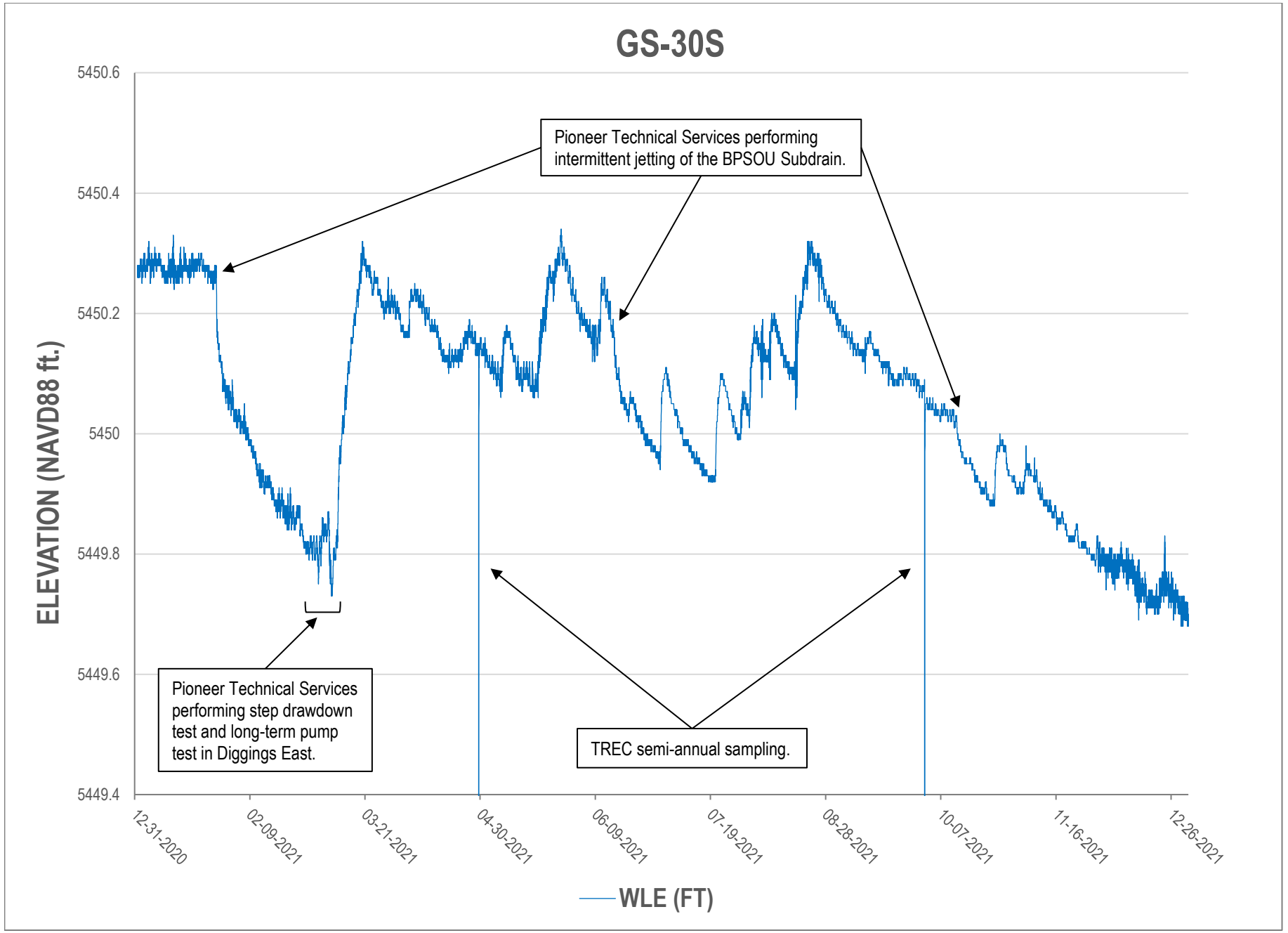

GS-11R
ELEVATION (NAVD88 ft.)
5451.1
5450.9
5450.7
5450.5
5450.3
5450.1
5449.9
5449.7
5449.5
5449.3
5449.1
Suspect data, transducer problems. Transducer replaced.
TREC semi-annual sampling.
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)

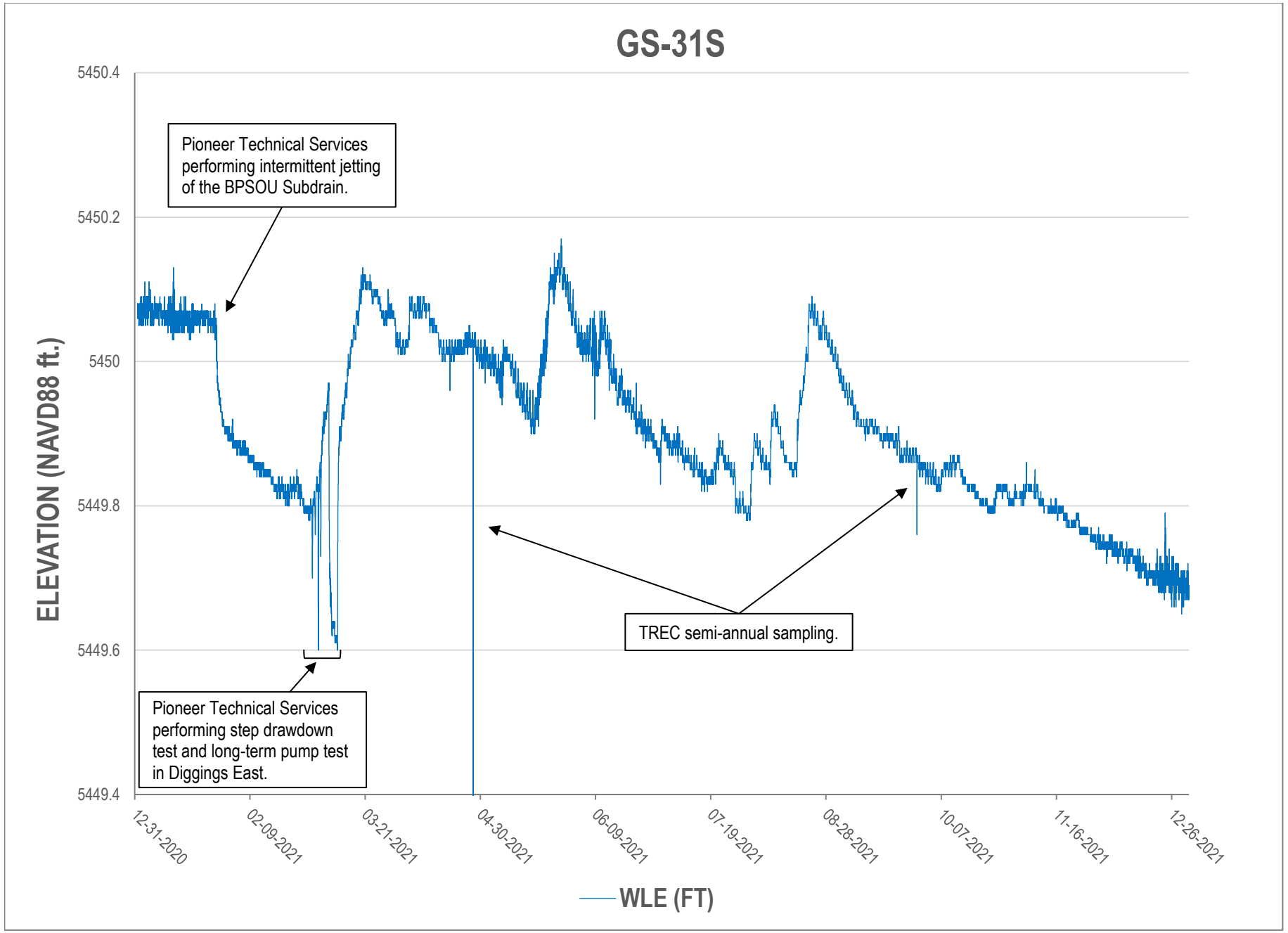

GS-13A
ELEVATION (NAVD88 ft.)
5437.5
5437.3
5437.1
5436.9
5436.7
5436.5
5436.3
5436.1
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
Estimated data.
TREC semi-annual sampling.
WLE (FT)

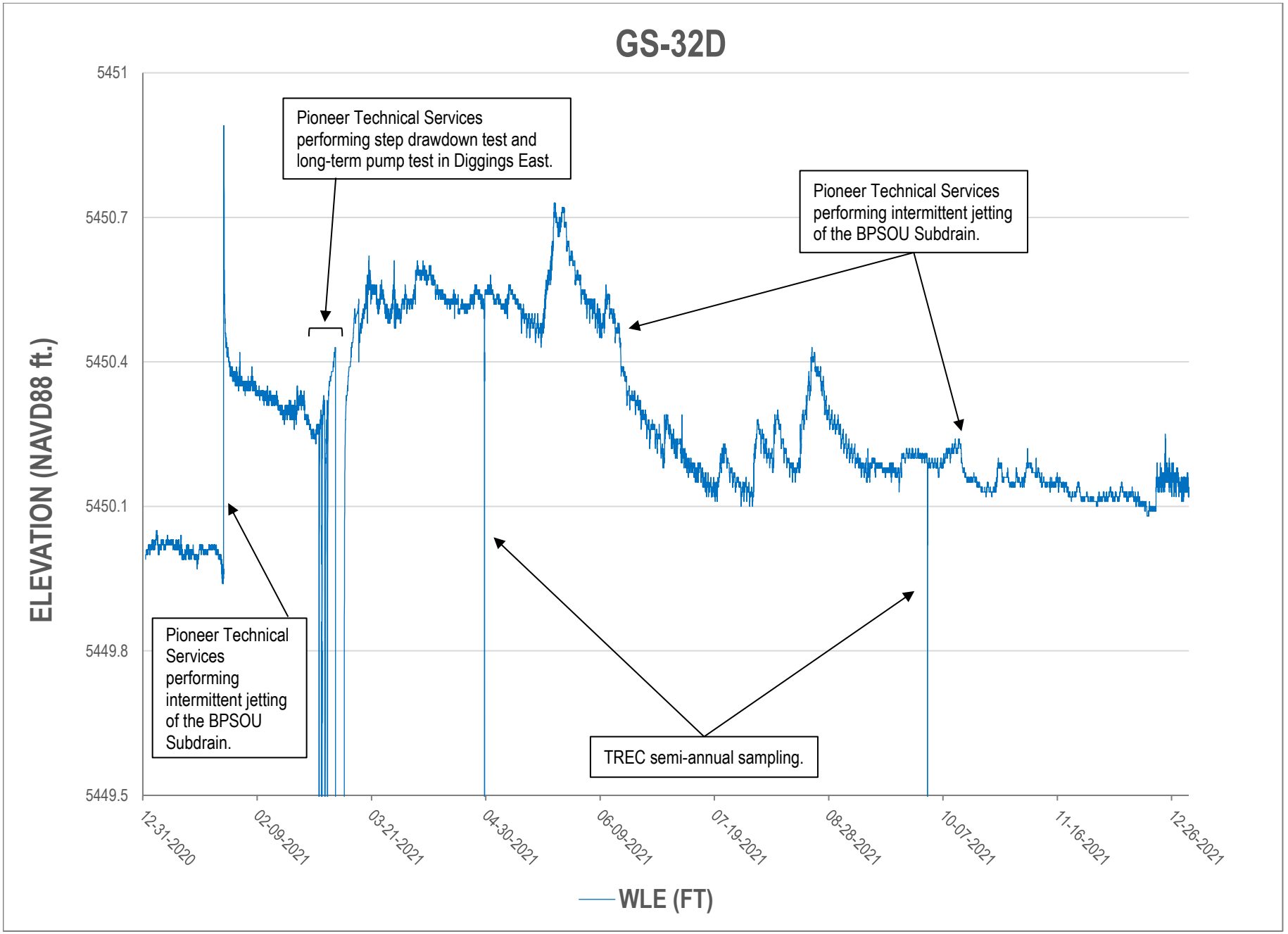

GS-26
ELEVATION (NAVD88 ft.)
5420.4
5420.2
5420
5419.8
5419.6
5419.4
5419.2
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
Suspect data well is frozen.
Suspect data due to equipment.
Data loss due to equipment malfunction.
WLE (FT)

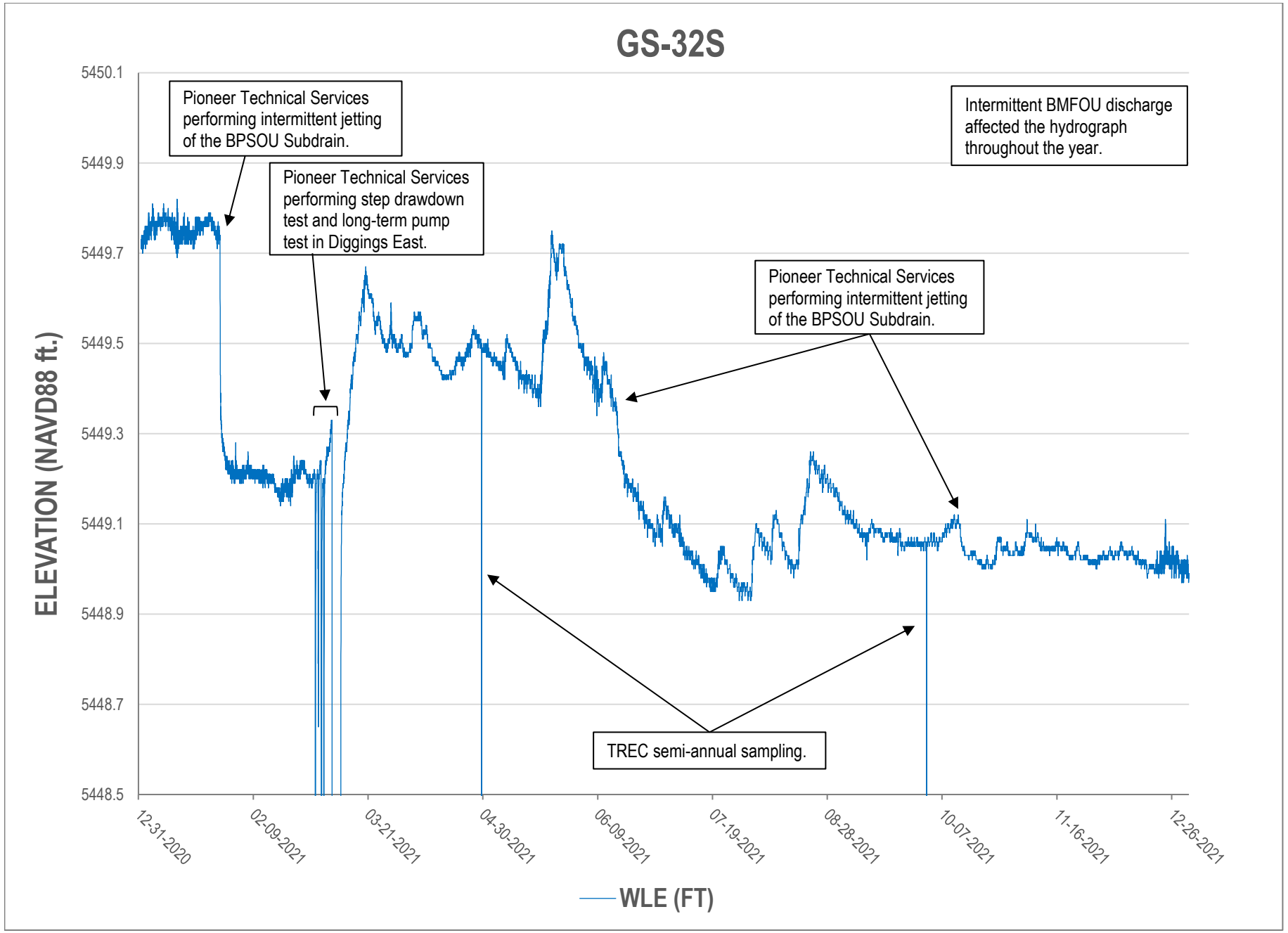

GS-29D
Well recovery post sampling.
ELEVATION (NAVD88 ft.)
5443
5442.5
5442
5441.5
5441
5440.5
5440
5439.5
5439
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)

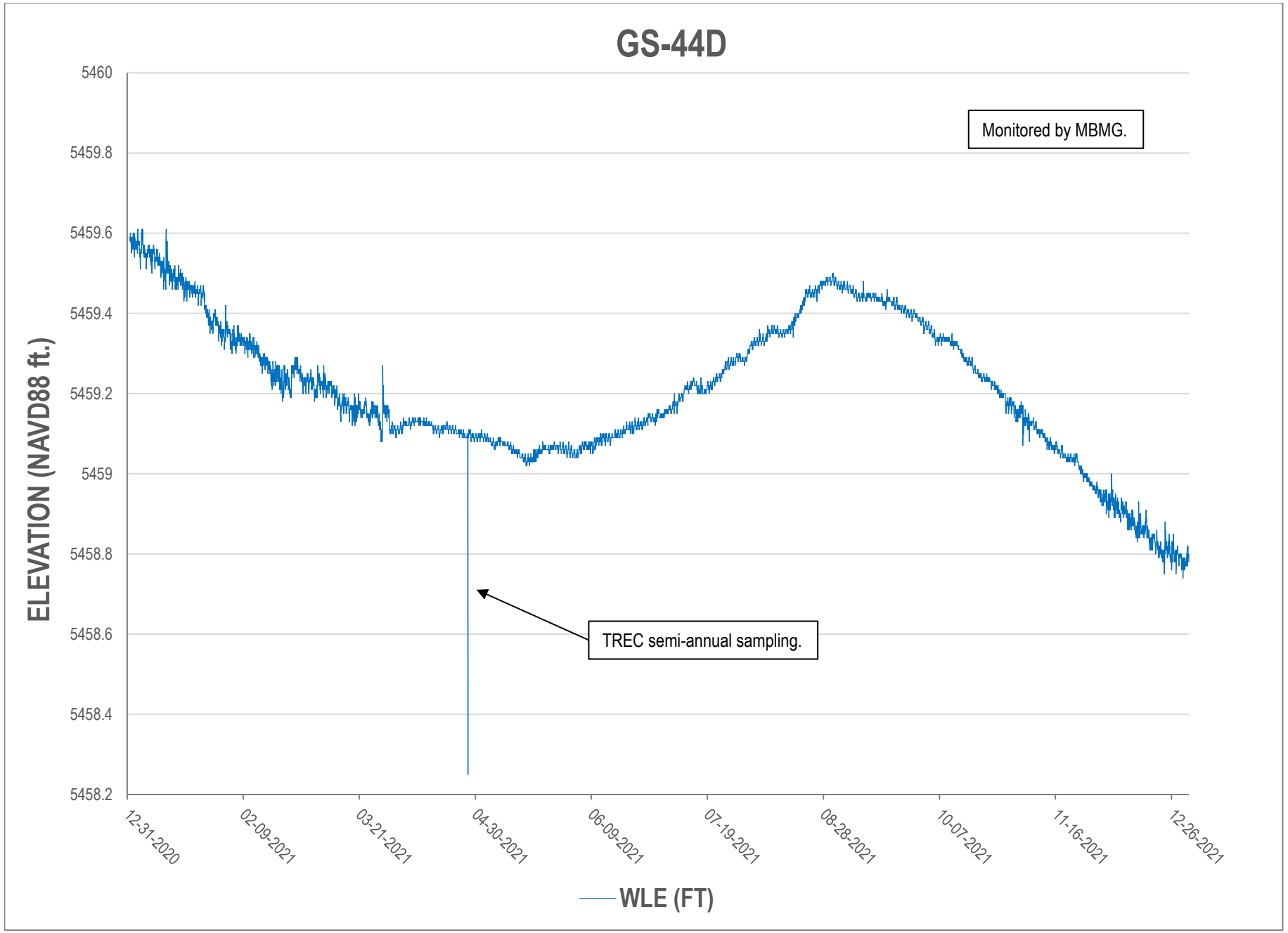

GS-30D
ELEVATION (NAVD88 ft.)
5450.3
5450.1
5449.9
5449.7
5449.5
5449.3
5449.1
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
Intermittent BMFOU discharge affected the hydrograph throughout the year.
Pioneer Technical Services performing intermittent jetting of the BPSOU Subdrain.
Pioneer Technical Services performing step drawdown test and long-term pump test in Diggings East.
TREC semi-annual sampling.
WLE (FT)

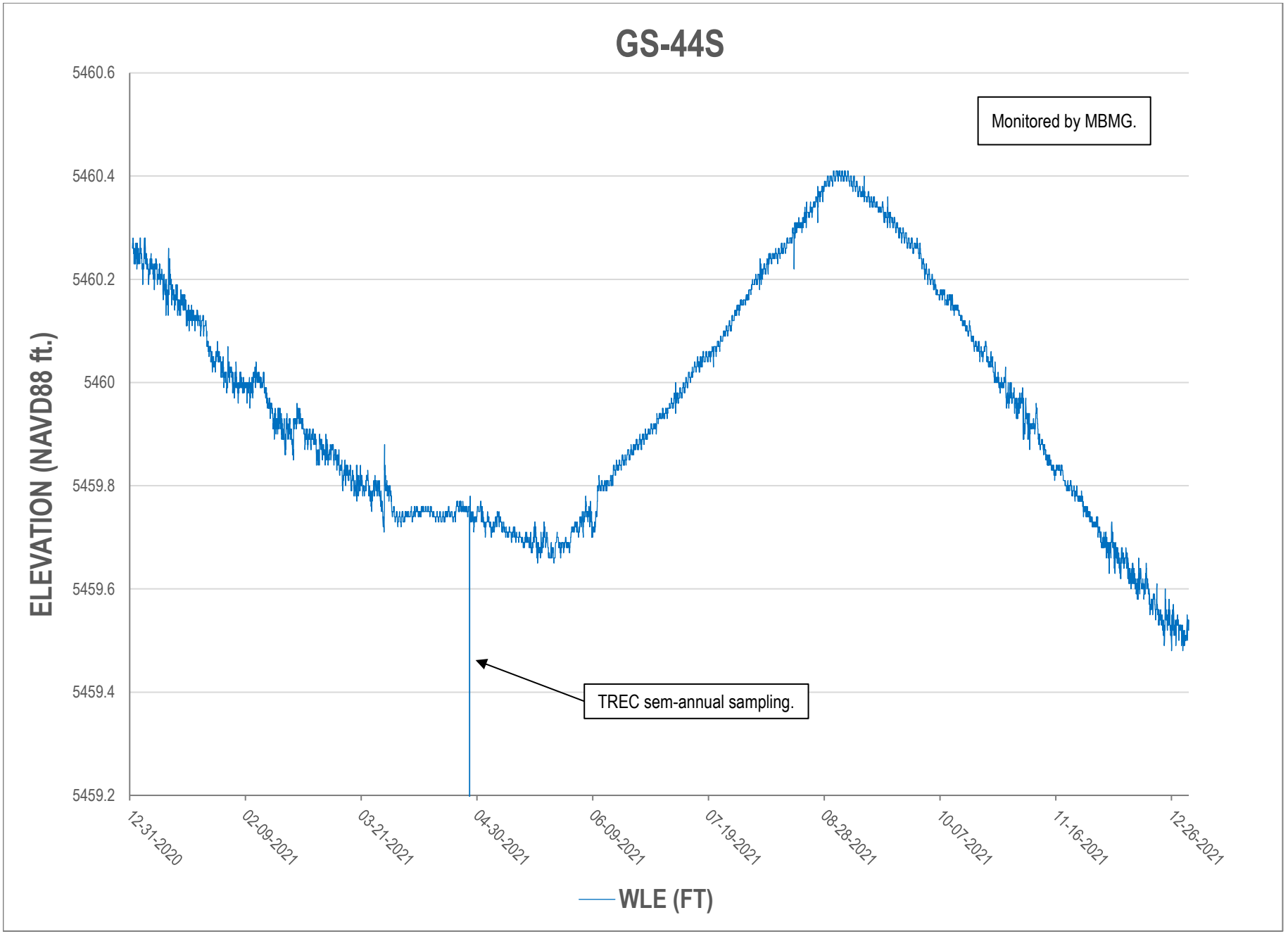

GS-30S
ELEVATION (NAVD88 ft.)
5450.6
5450.4
5450.2
5450
5449.8
5449.6
5449.4
Pioneer Technical Services performing intermittent jetting of the BPSOU Subdrain.
Pioneer Technical Services performing step drawdown test and long-term pump test in Diggings East.
TREC semi-annual sampling.
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)

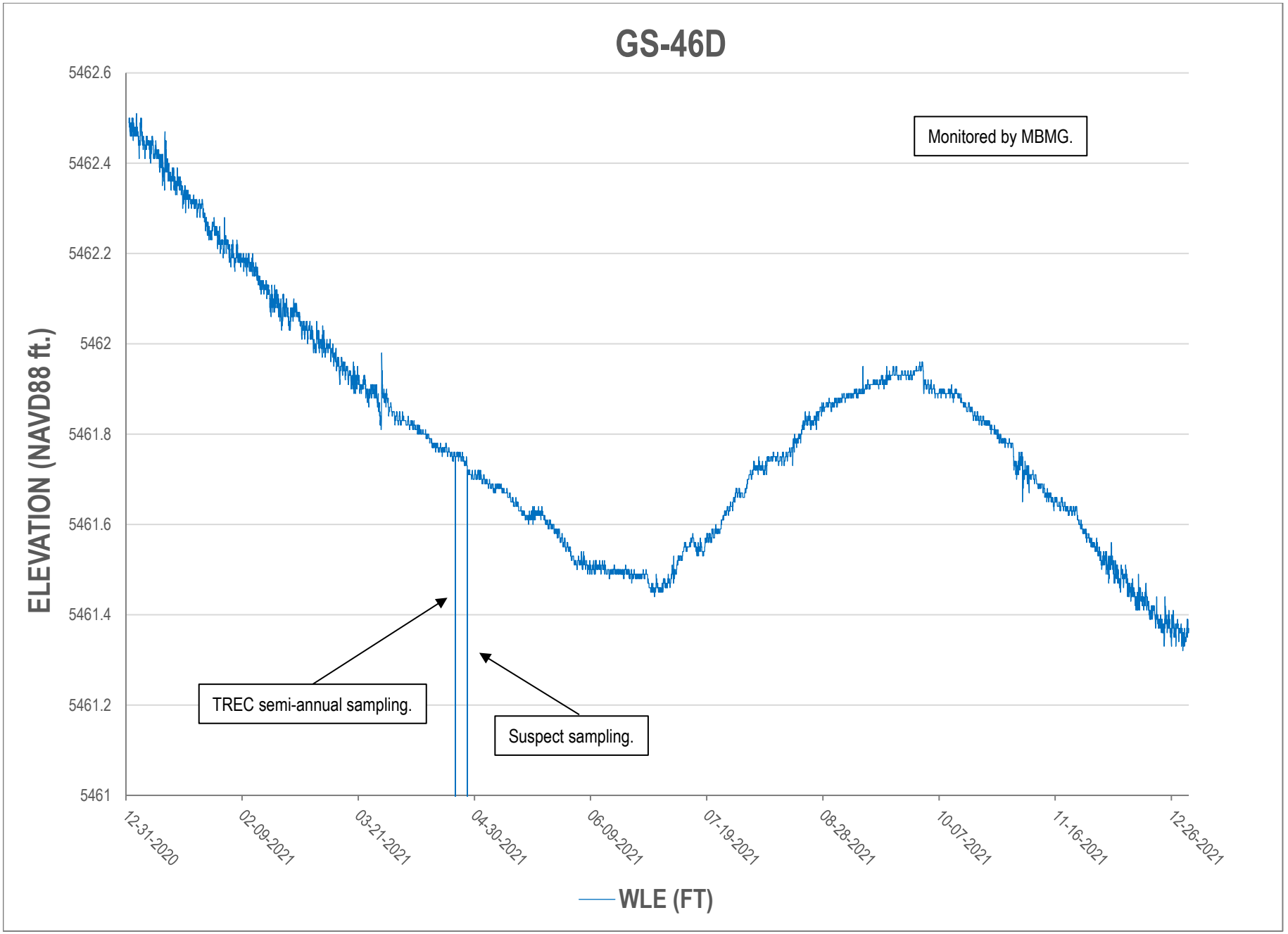

GS-31S
ELEVATION (NAVD88 ft.)
5450.4
5450.2
5450
5449.8
5449.6
5449.4
Pioneer Technical Services performing intermittent jetting of the BPSOU Subdrain.
Pioneer Technical Services performing step drawdown test and long-term pump test in Diggings East.
TREC semi-annual sampling.
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)

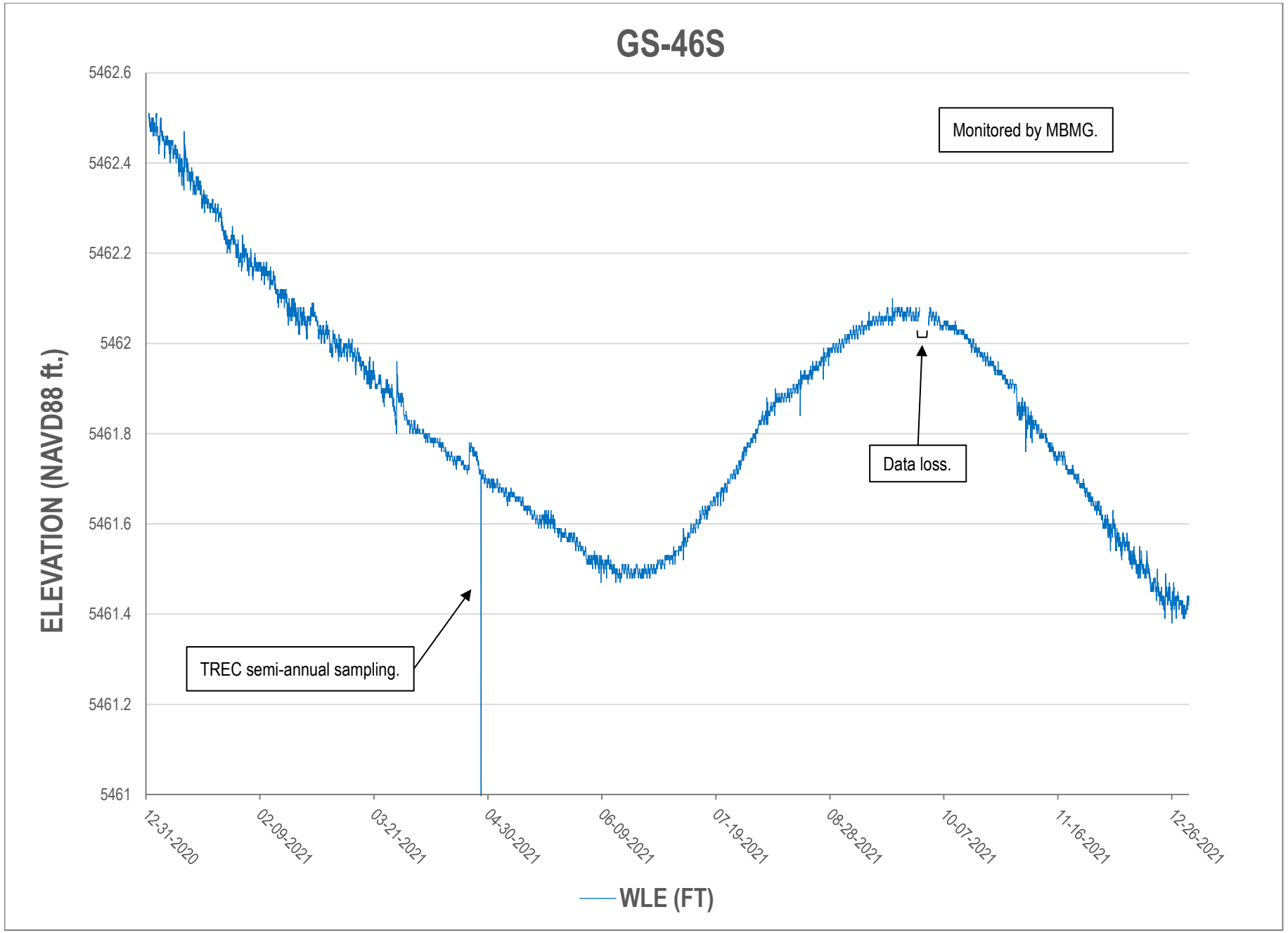

GS-32D
ELEVATION (NAVD88 ft.)
5451
5450.7
5450.4
5450.1
5449.8
5449.5
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
Pioneer Technical Services performing step drawdown test and long-term pump test in Diggings East.
Pioneer Technical Services performing intermittent jetting of the BPSOU Subdrain.
Pioneer Technical Services performing intermittent jetting of the BPSOU Subdrain.
TREC semi-annual sampling.
WLE (FT)

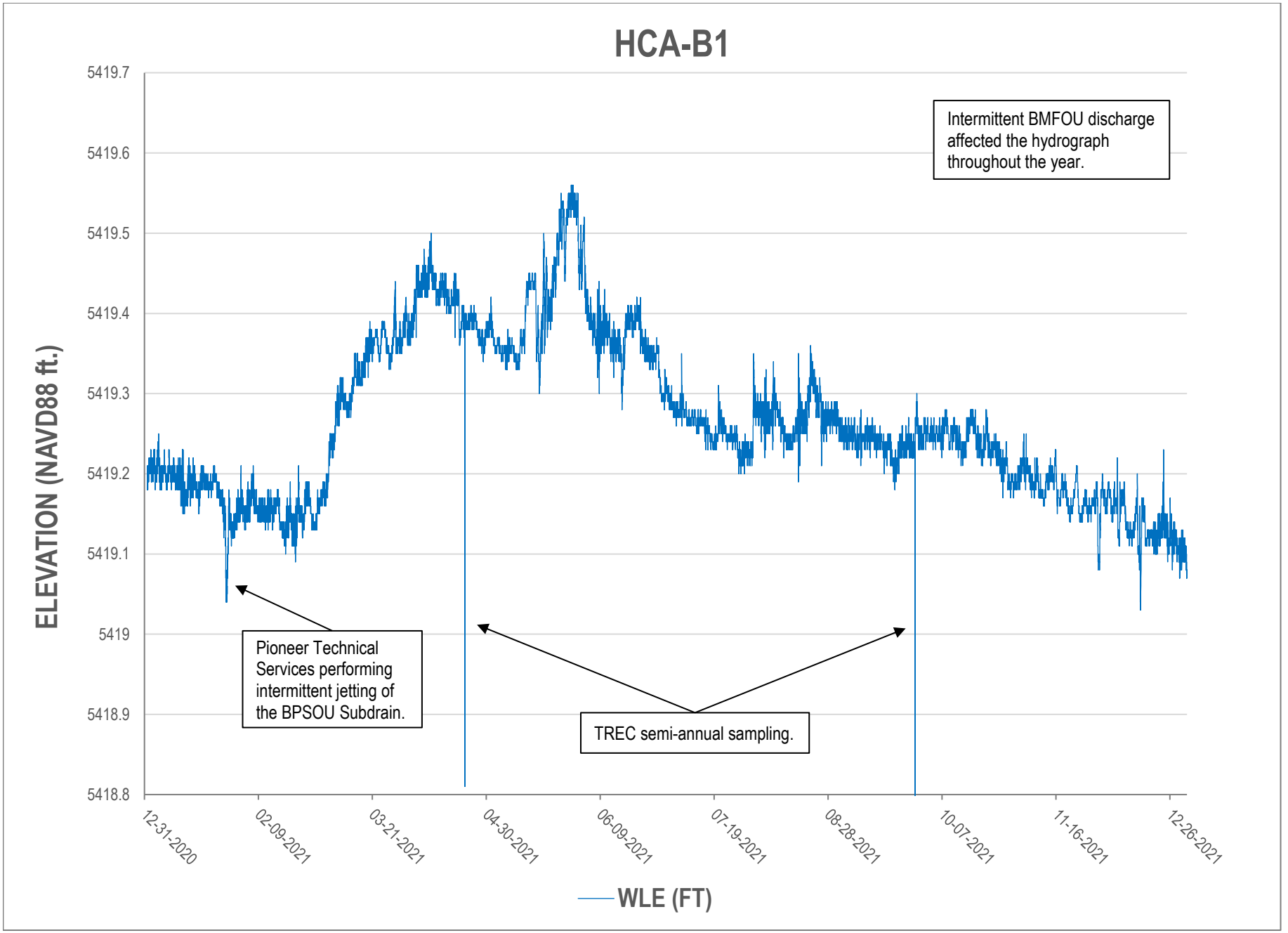

GS-32S
ELEVATION (NAVD88 ft.)
5450.1
5449.9
5449.7
5449.5
5449.3
5449.1
5448.9
5448.7
5448.5
Pioneer Technical Services performing intermittent jetting of the BPSOU Subdrain.
Pioneer Technical Services performing step drawdown test and long-term pump test in Diggings East.
Intermittent BMFOU discharge affected the hydrograph throughout the year.
Pioneer Technical Services performing intermittent jetting of the BPSOU Subdrain.
TREC semi-annual sampling.
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)

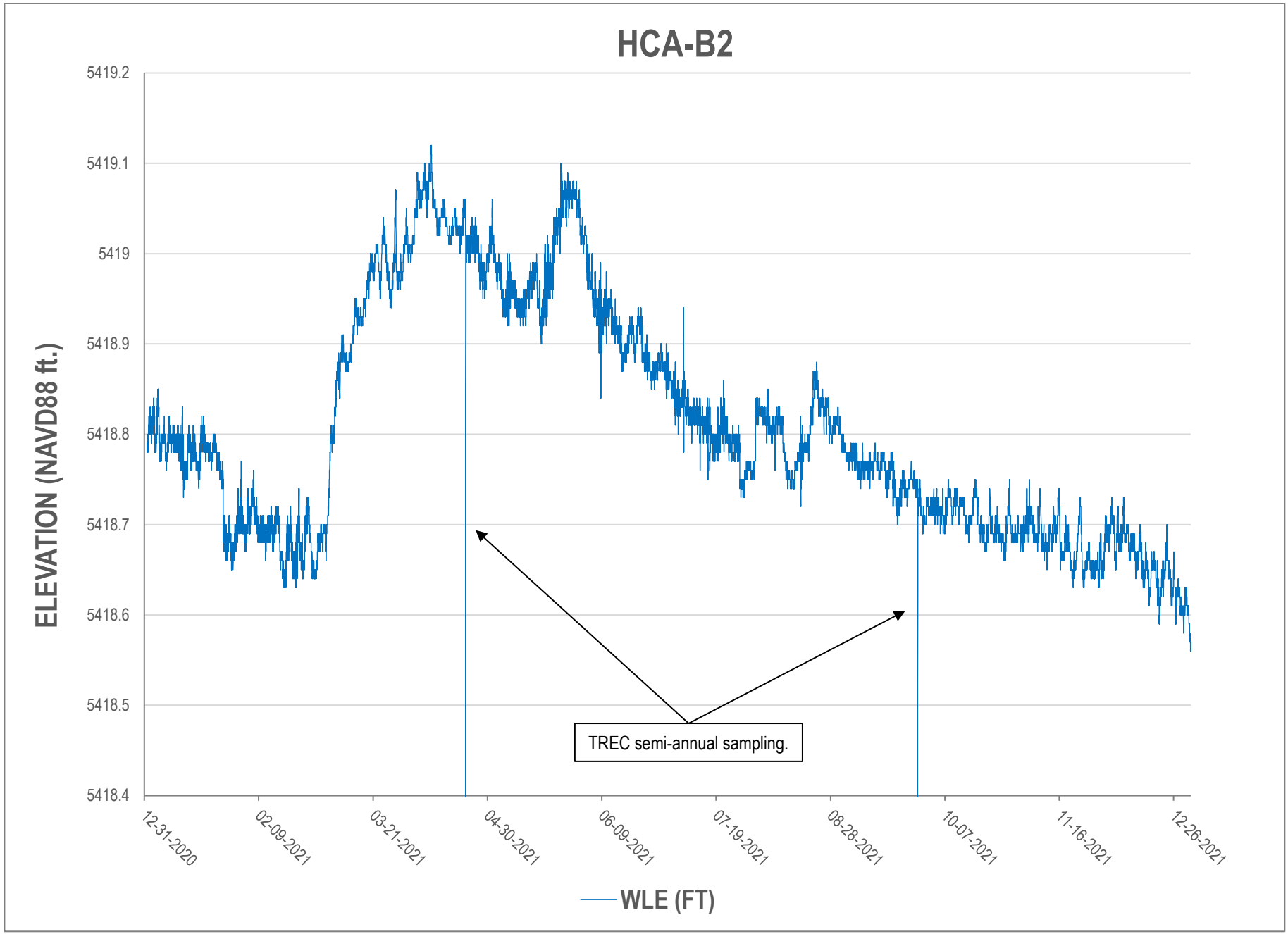

GS-44D
ELEVATION (NAVD88 ft.)
5460
5459.8
5459.6
5459.4
5459.2
5459
5458.8
5458.6
5458.4
5458.2
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
Monitored by MBMG.
TREC semi-annual sampling.
WLE (FT)

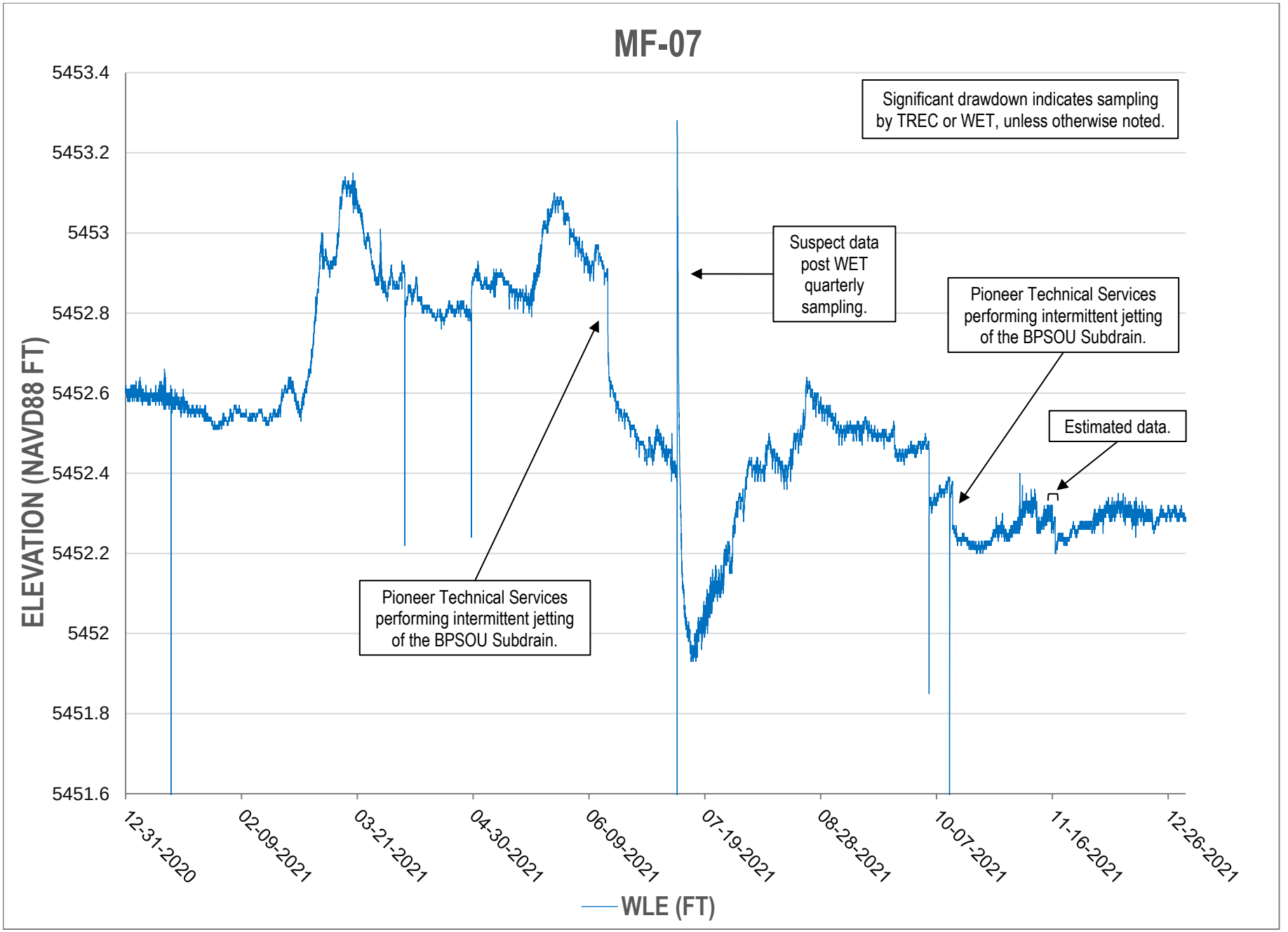

GS-44S
Monitored by MBMG.
TREC sem-annual sampling.
ELEVATION (NAVD88 ft.)
5460.6
5460.4
5460.2
5460
5459.8
5459.6
5459.4
5459.2
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)

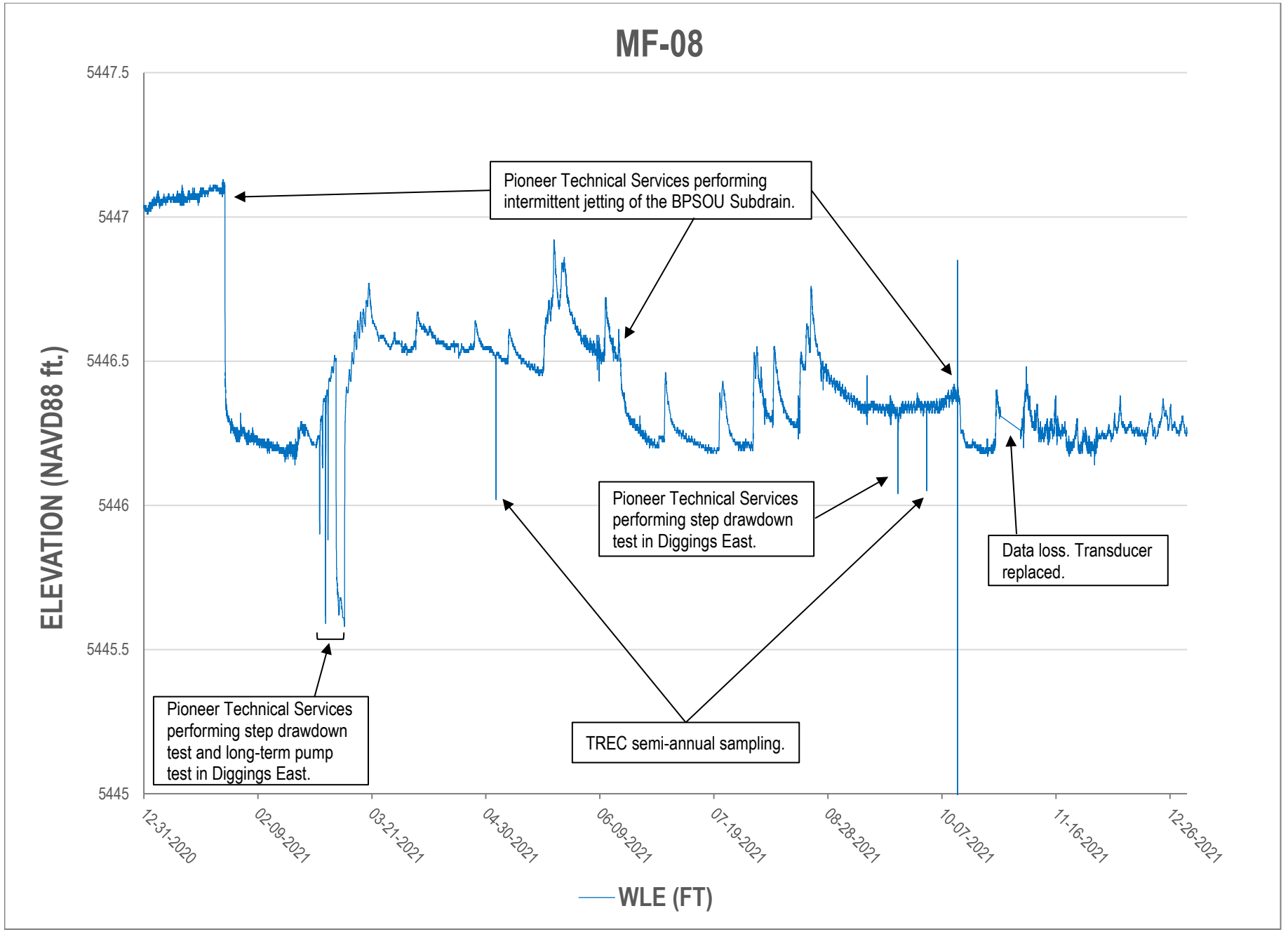

GS-46D
ELEVATION (NAVD88 ft.)
5462.6
5462.4
5462.2
5462
5461.8
5461.6
5461.4
5461.2
5461
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
Monitored by MBMG.
TREC semi-annual sampling.
Suspect sampling.
WLE (FT)

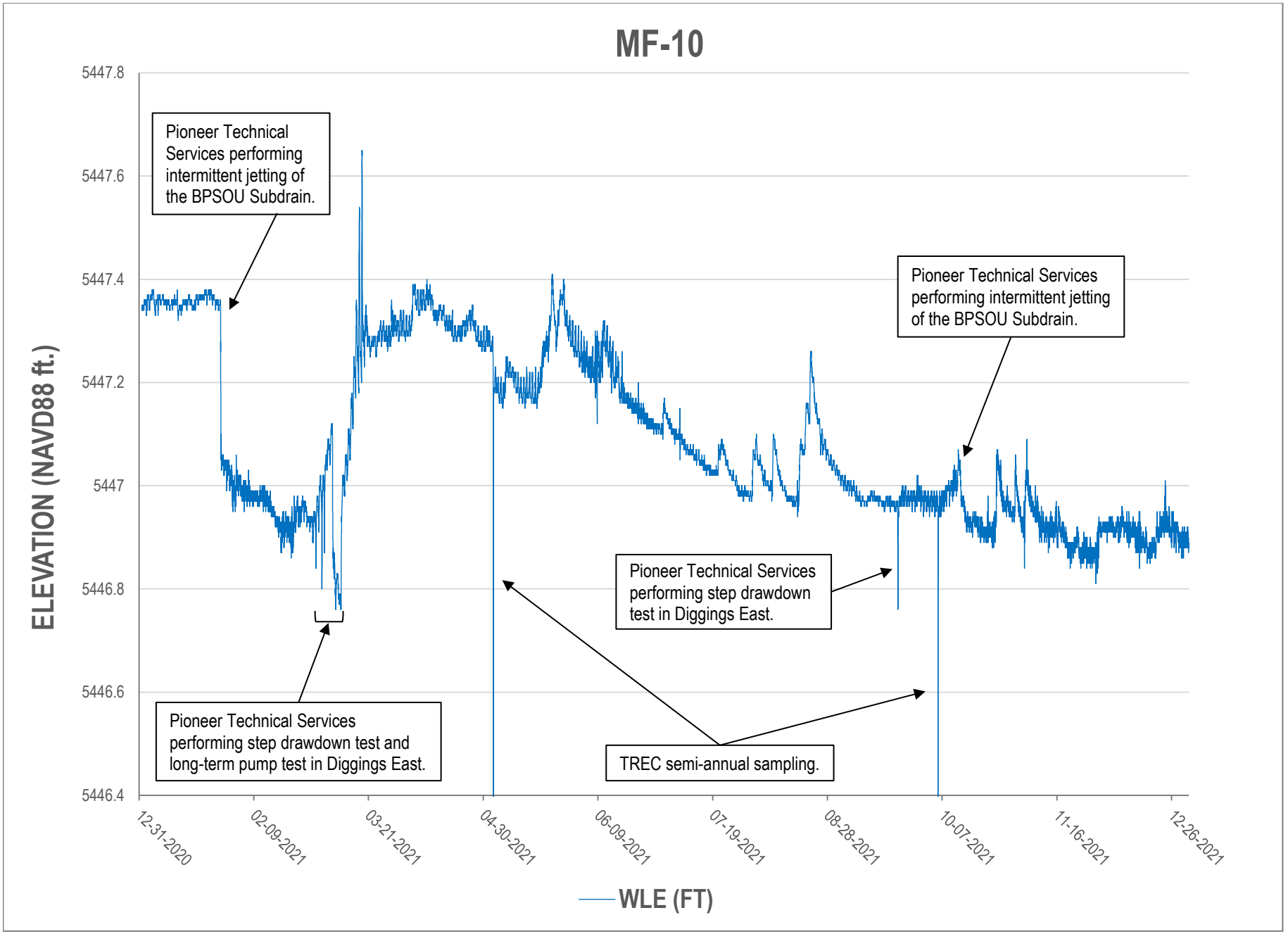

GS-46S
ELEVATION (NAVD88 ft.)
5462.6
5462.4
5462.2
5462
5461.8
5461.6
5461.4
5461.2
5461
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
Monitored by MBMG.
Data loss.
TREC semi-annual sampling.
WLE (FT)

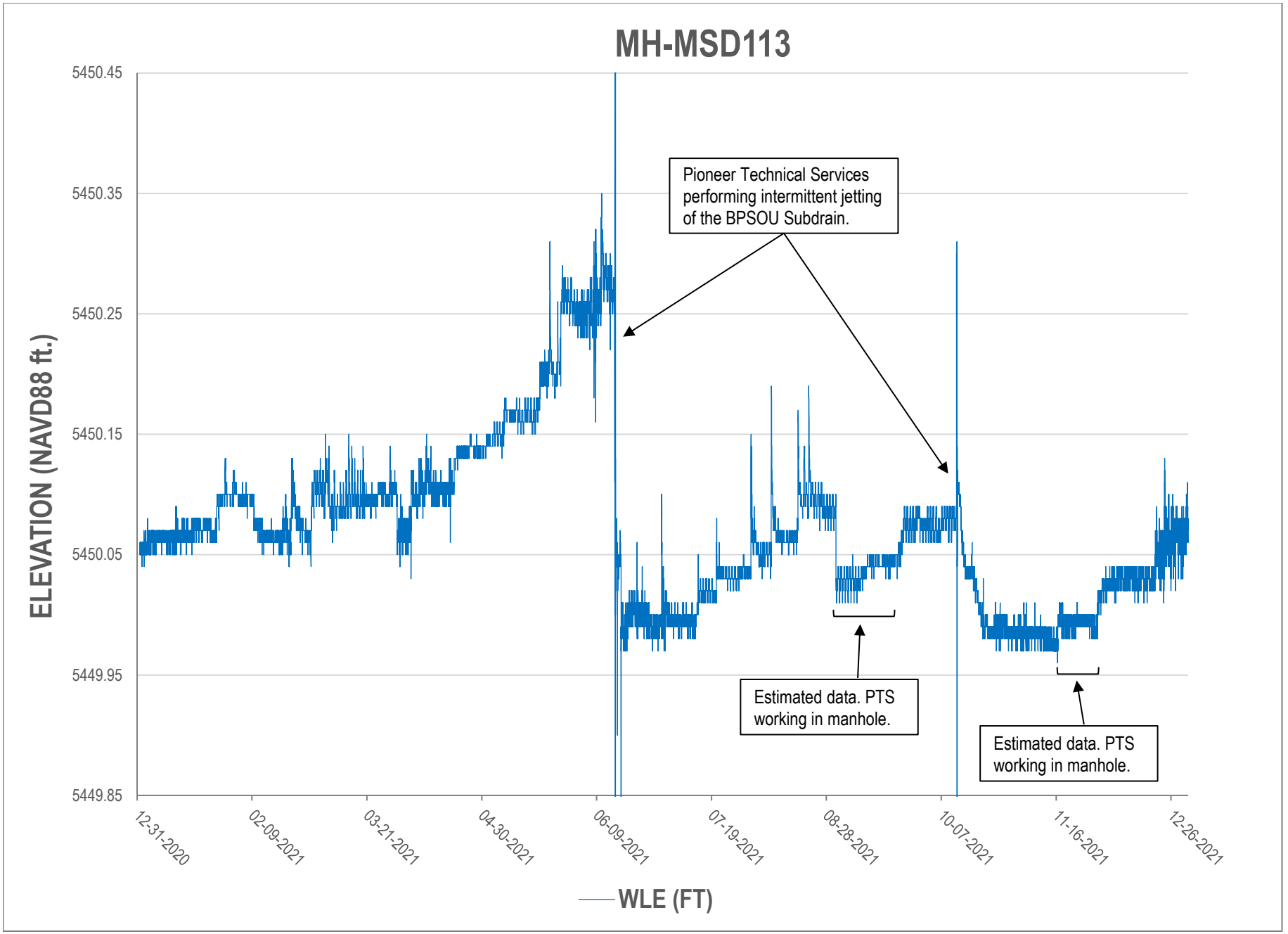

HCA-B1
ELEVATION (NAVD88 ft.)
5419.7
5419.6
5419.5
5419.4
5419.3
5419.2
5419.1
5419
5418.9
5418.8
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
Intermittent BMFOU discharge affected the hydrograph throughout the year.
Pioneer Technical Services performing intermittent jetting of the BPSOU Subdrain.
TREC semi-annual sampling.
WLE (FT)

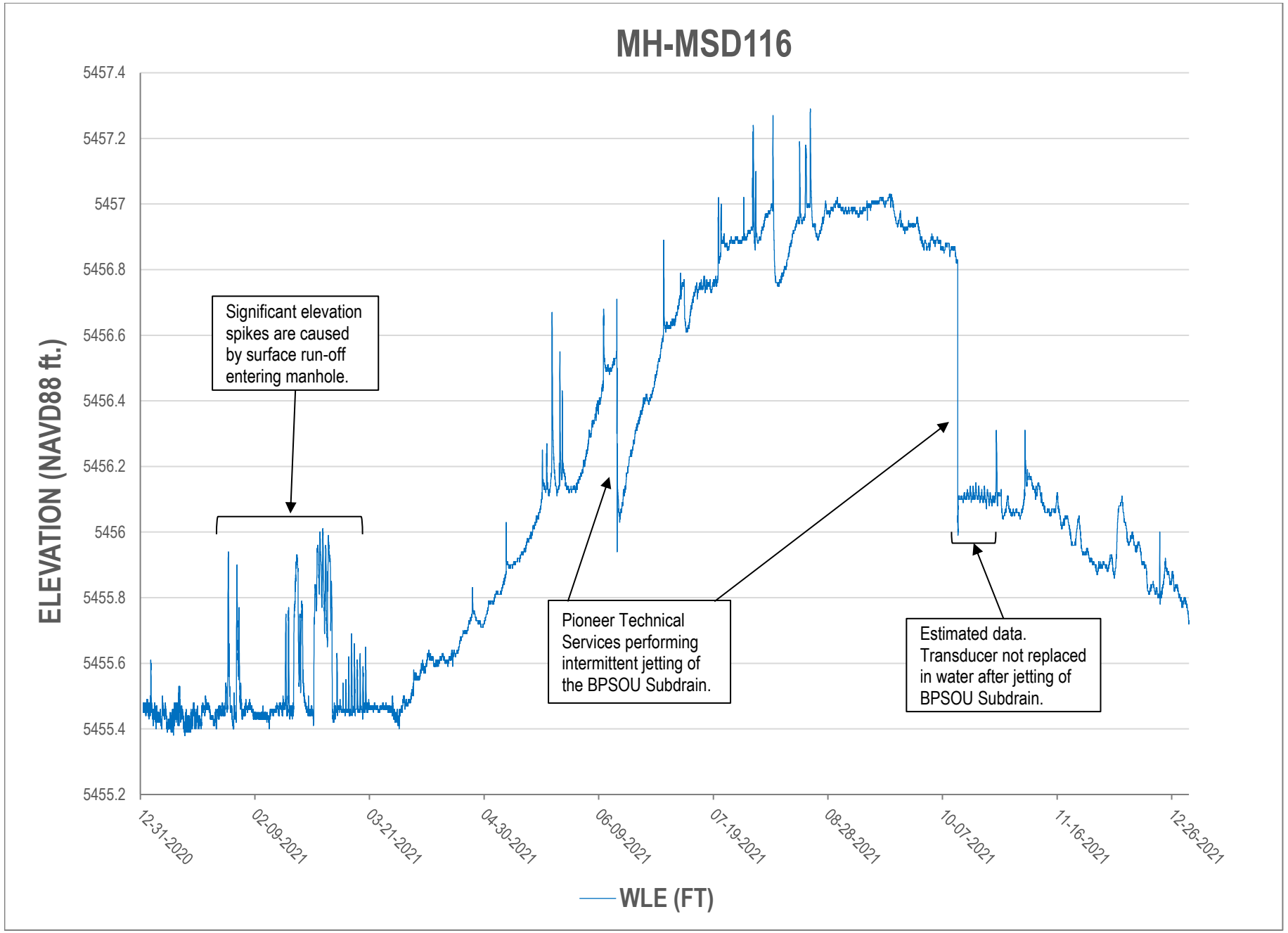

HCA-B2
ELEVATION (NAVD88 ft.)
5419.2
5419.1
5419
5418.9
5418.8
5418.7
5418.6
5418.5
5418.4
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
TREC semi-annual sampling.
WLE (FT)

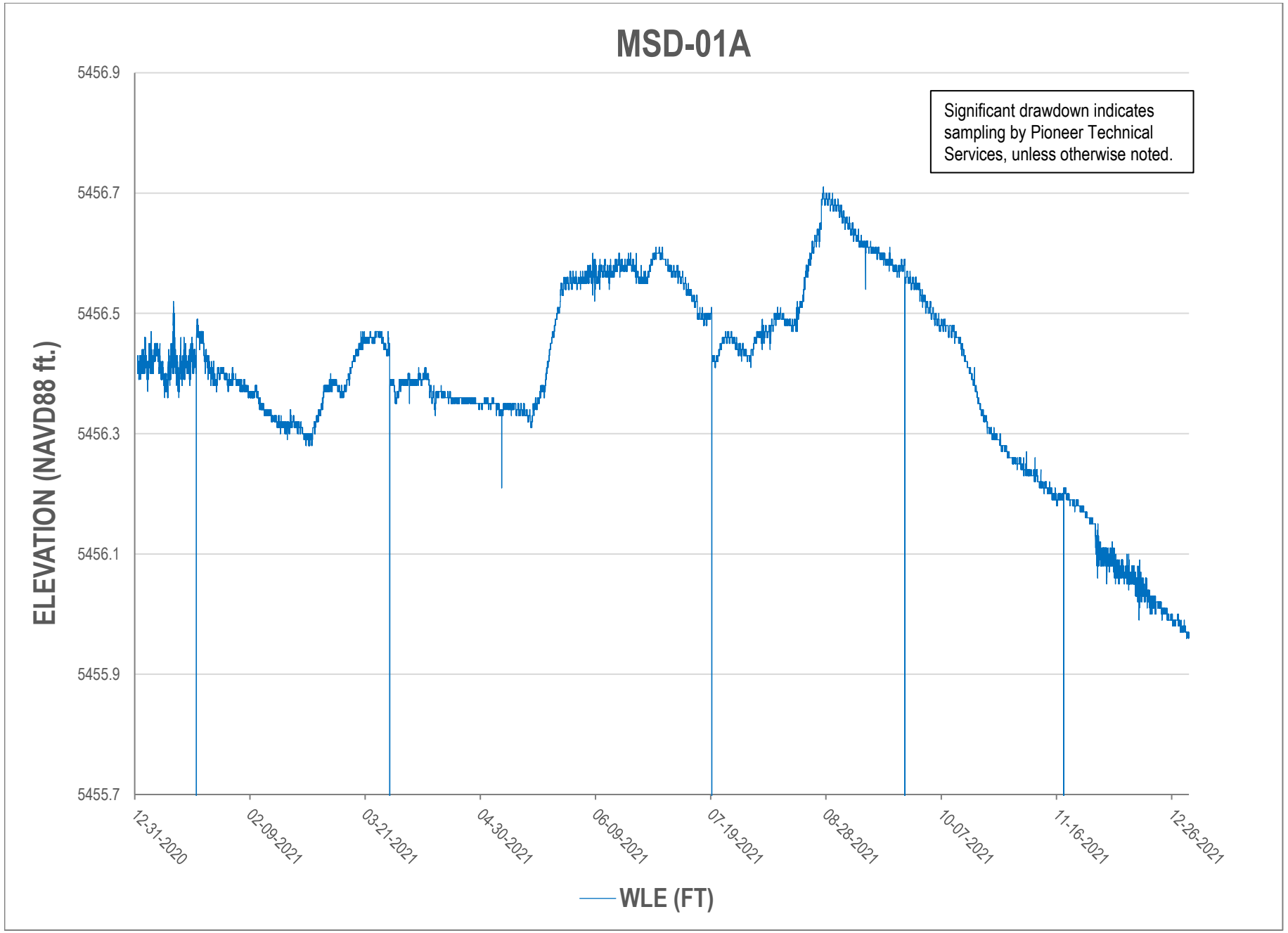

MF-07
ELEVATION (NAVD88 FT)
5453.4
5453.2
5453
5452.8
5452.6
5452.4
5452.2
5452
5451.8
5451.6
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)
Significant drawdown indicates sampling by TREC or WET, unless otherwise noted.
Suspect data post WET quarterly sampling.
Pioneer Technical Services performing intermittent jetting of the BPSOU Subdrain.
Estimated data.
Pioneer Technical Services performing intermittent jetting of the BPSOU Subdrain.

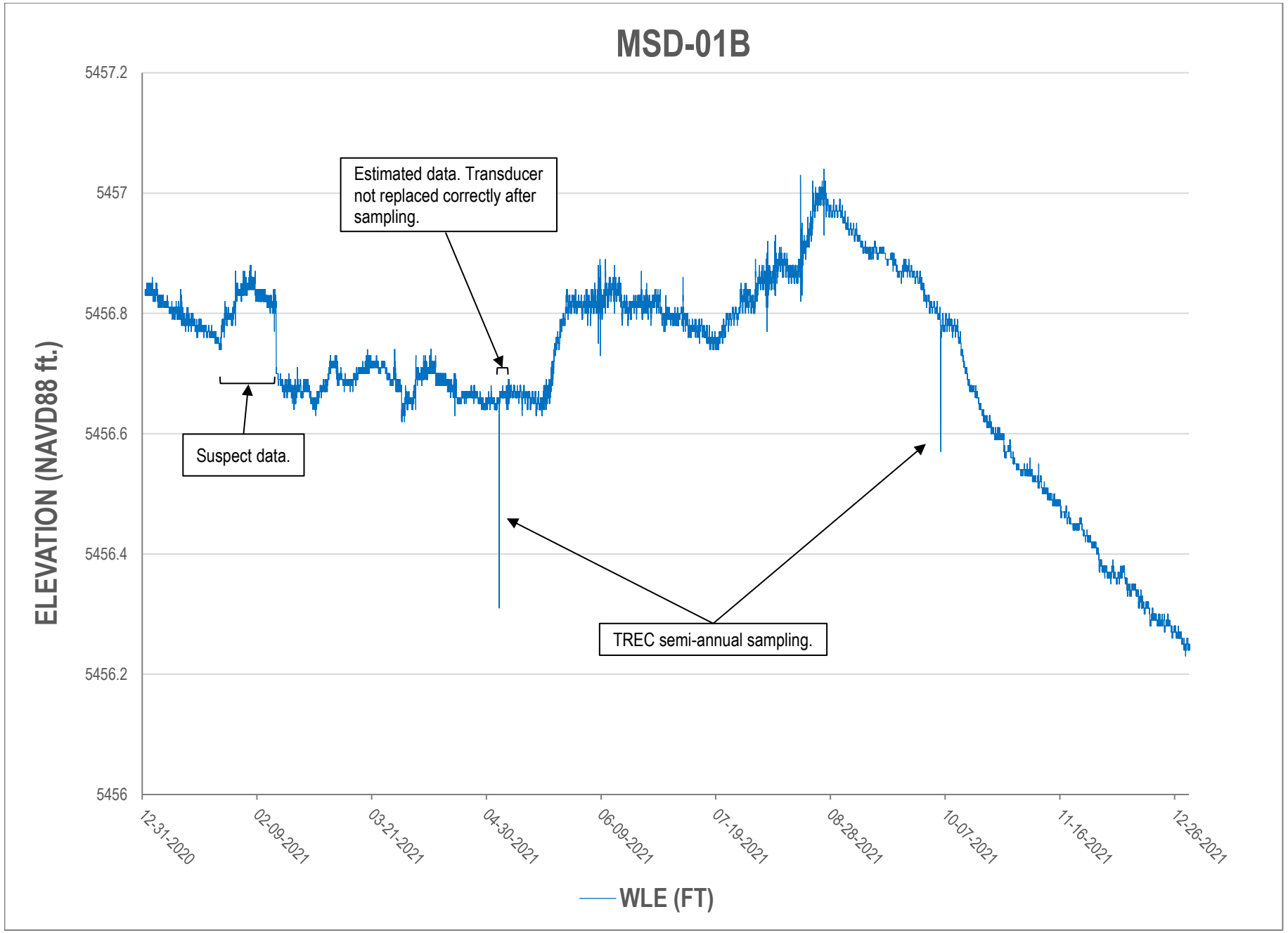

MF-08
ELEVATION (NAVD88 ft.)
5447.5
5447
5446.5
5446
5445.5
5445
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
Pioneer Technical Services performing intermittent jetting of the BPSOU Subdrain.
Pioneer Technical Services performing step drawdown test in Diggings East.
Data loss. Transducer replaced.
Pioneer Technical Services performing step drawdown test and long-term pump test in Diggings East.
TREC semi-annual sampling.
WLE (FT)

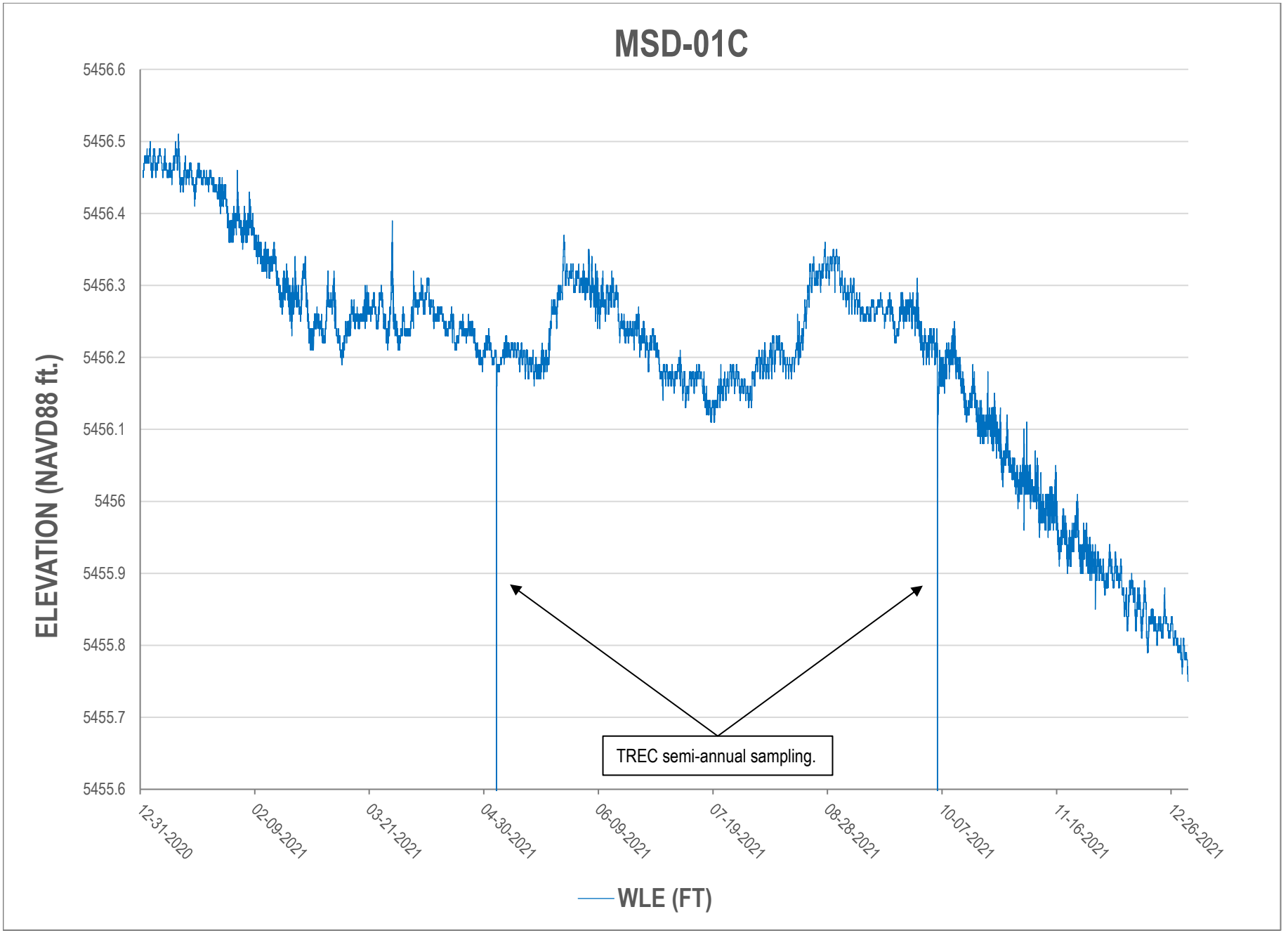

MF-10
ELEVATION (NAVD88 ft.)
5447.8
5447.6
5447.4
5447.2
5447
5446.8
5446.6
5446.4
Pioneer Technical Services performing intermittent jetting of the BPSOU Subdrain.
Pioneer Technical Services performing intermittent jetting of the BPSOU Subdrain.
Pioneer Technical Services performing step drawdown test in Diggings East.
Pioneer Technical Services performing step drawdown test and long-term pump test in Diggings East.
TREC semi-annual sampling.
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)

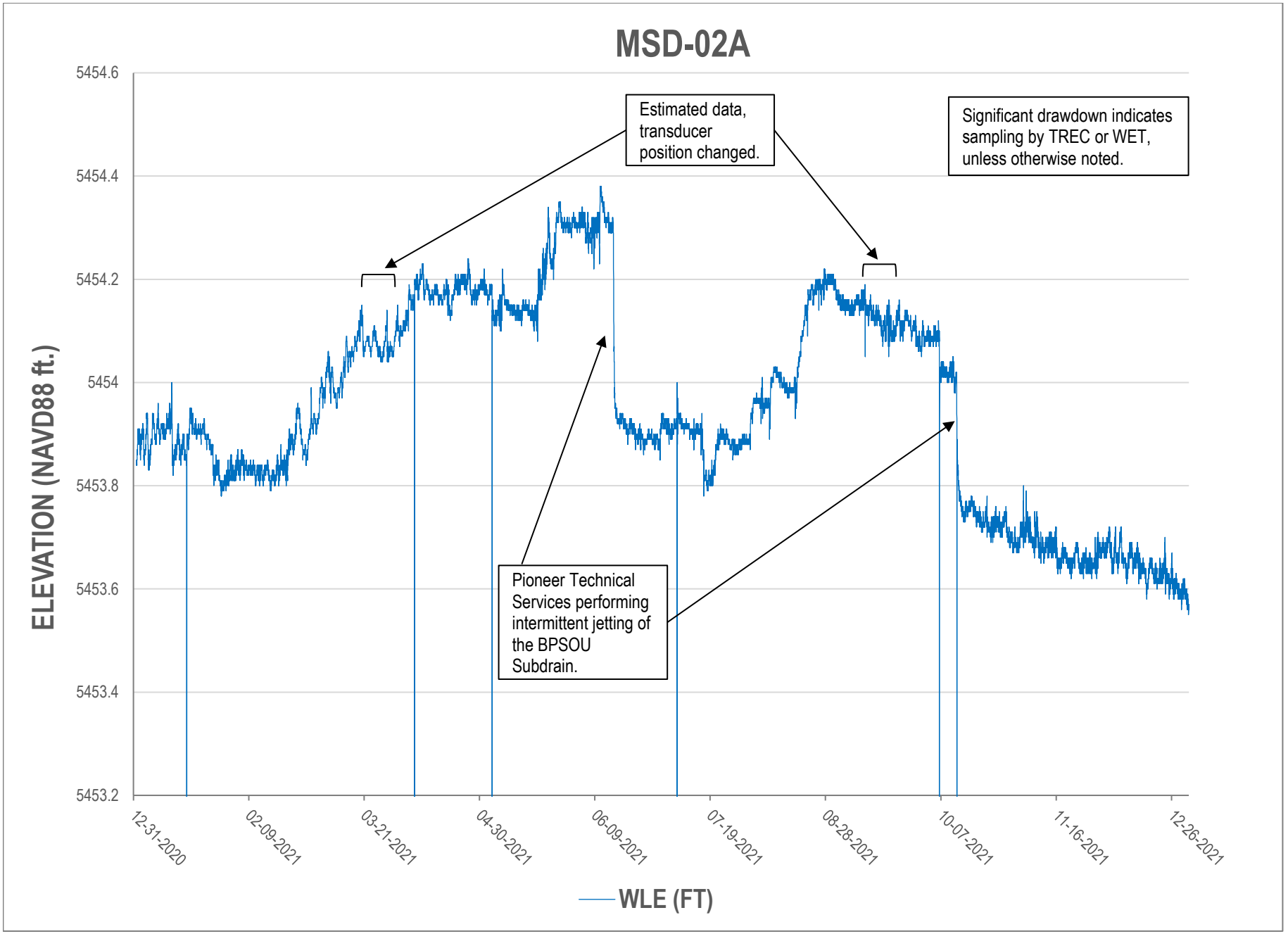

MH-MSD113
ELEVATION (NAVD88 ft.)
5450.45
5450.35
5450.25
5450.15
5450.05
5449.95
5449.85
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
Pioneer Technical Services performing intermittent jetting of the BPSOU Subdrain.
Estimated data. PTS working in manhole.
Estimated data. PTS working in manhole.
WLE (FT)

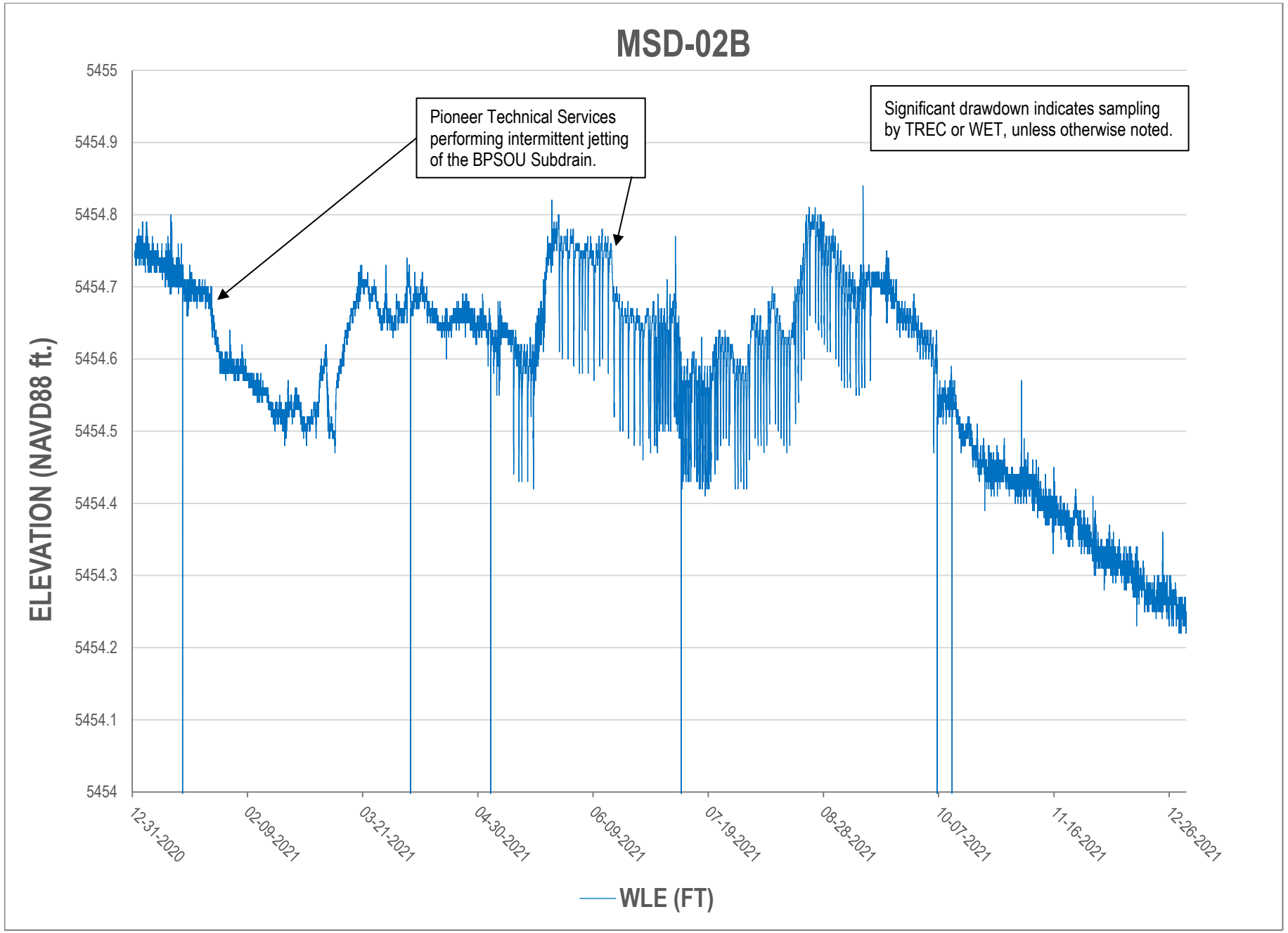

MH-MSD116
ELEVATION (NAVD88 ft.)
5457.4
5457.2
5457
5456.8
5456.6
5456.4
5456.2
5456
5455.8
5455.6
5455.4
5455.2
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
Significant elevation spikes are caused by surface run-off entering manhole.
Pioneer Technical Services performing intermittent jetting of the BPSOU Subdrain.
Estimated data. Transducer not replaced in water after jetting of BPSOU Subdrain.
WLE (FT)

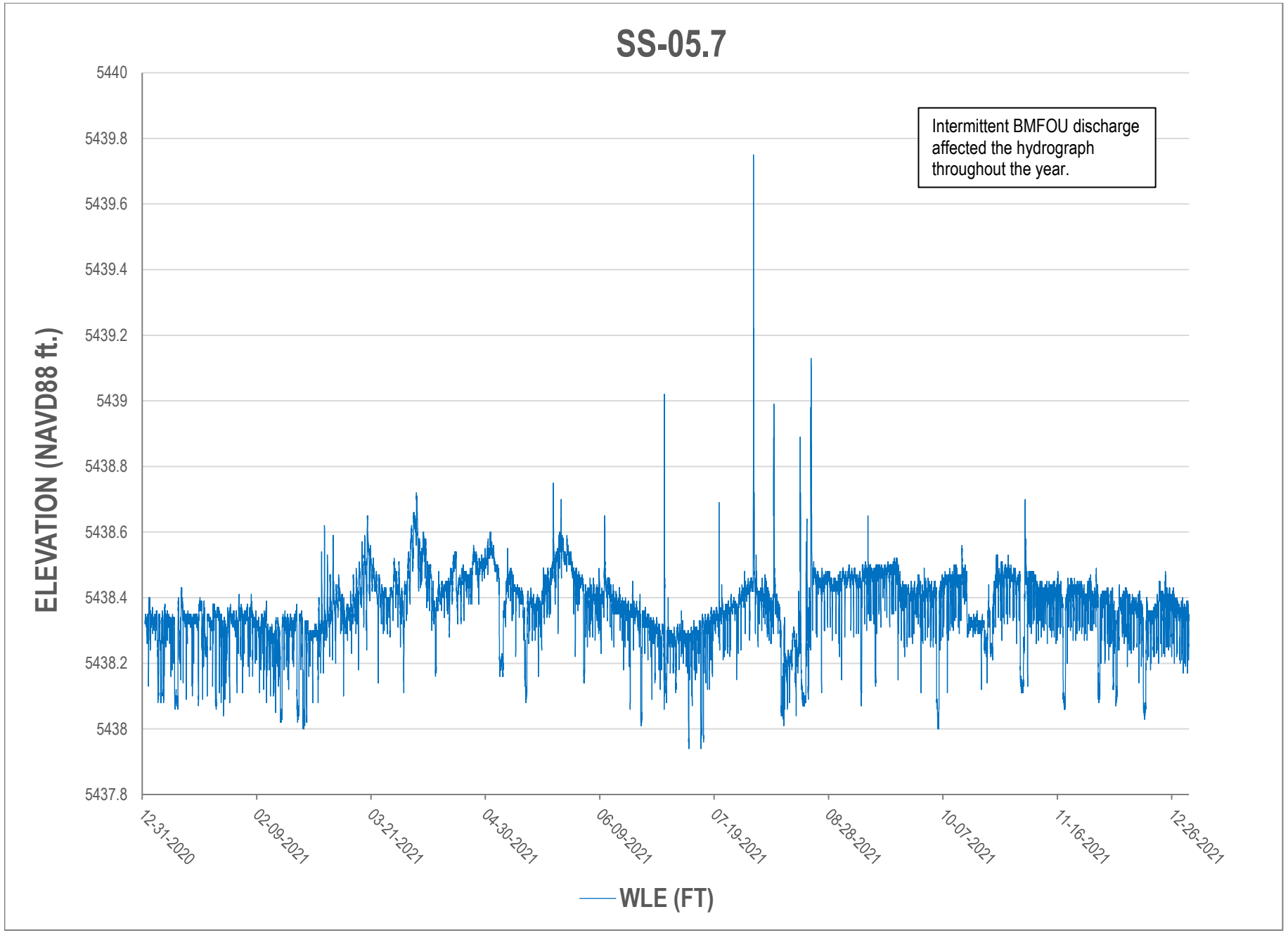

MSD-01A
Significant drawdown indicates sampling by Pioneer Technical Services, unless otherwise noted.
ELEVATION (NAVD88 ft.)
5456.9
5456.7
5456.5
5456.3
5456.1
5455.9
5455.7
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)

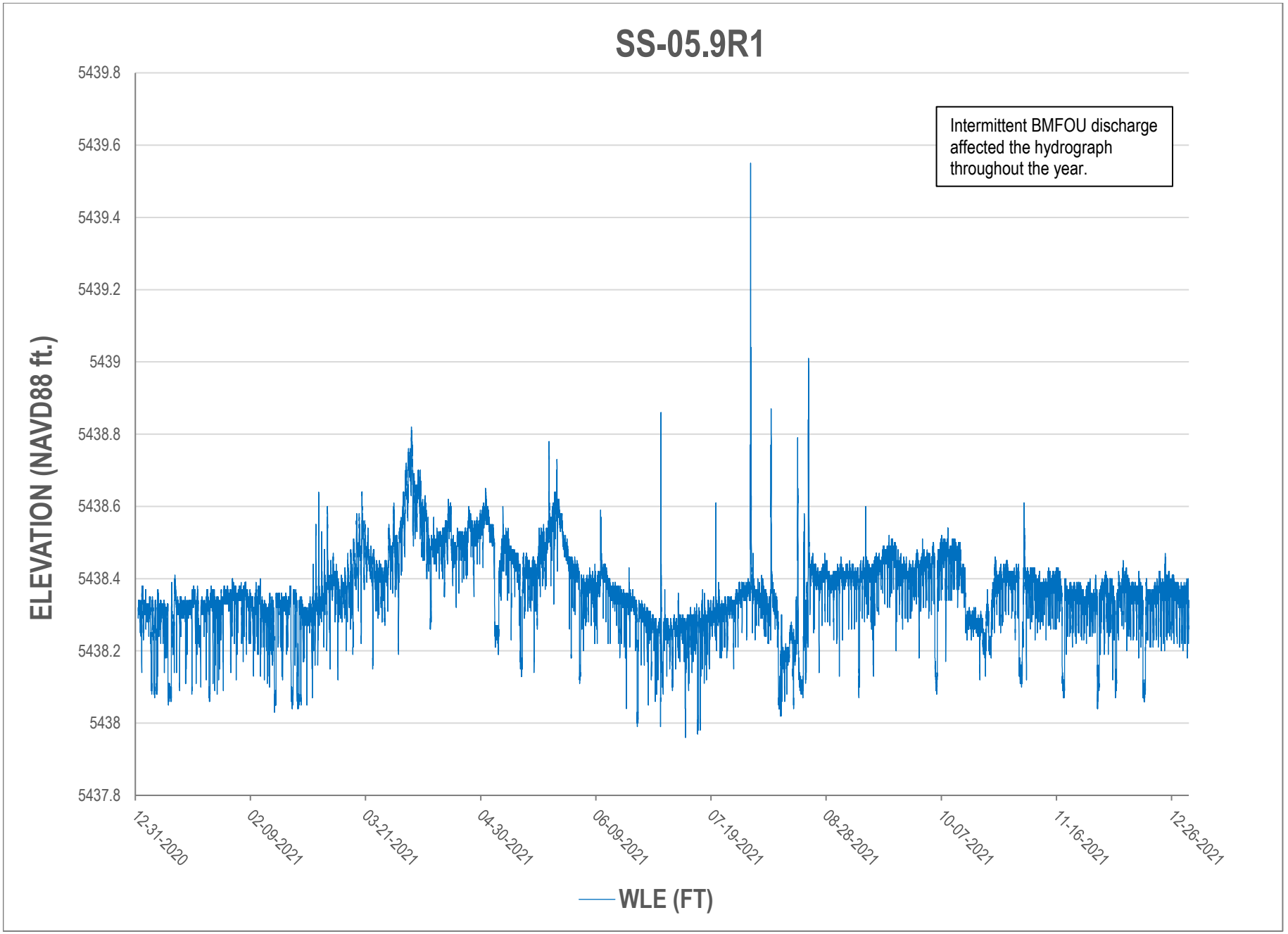

MSD-01B
ELEVATION (NAVD88 ft.)
5457.2
5457
5456.8
5456.6
5456.4
5456.2
5456
Estimated data. Transducer not replaced correctly after sampling.
Suspect data.
TREC semi-annual sampling.
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)


MSD-01C
ELEVATION (NAVD88 ft.)
5456.6
5456.5
5456.4
5456.3
5456.2
5456.1
5456
5455.9
5455.8
5455.7
5455.6
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
TREC semi-annual sampling.
WLE (FT)


MSD-02A
ELEVATION (NAVD88 ft.)
5454.6
5454.4
5454.2
5454
5453.8
5453.6
5453.4
5453.2
Estimated data, transducer position changed.
Significant drawdown indicates sampling by TREC or WET, unless otherwise noted.
Pioneer Technical Services performing intermittent jetting of the BPSOU Subdrain.
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)


MSD-02B
ELEVATION (NAVD88 ft.)
5455
5454.9
5454.8
5454.7
5454.6
5454.5
5454.4
5454.3
5454.2
5454.1
5454
Pioneer Technical Services performing intermittent jetting of the BPSOU Subdrain.
Significant drawdown indicates sampling by TREC or WET, unless otherwise noted.
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)


SS-05.7
Intermittent BMFOU discharge affected the hydrograph throughout the year.
ELEVATION (NAVD88 ft.)
5440
5439.8
5439.6
5439.4
5439.2
5439
5438.8
5438.6
5438.4
5438.2
5438
5437.8
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)


SS-05.9R1
Intermittent BMFOU discharge affected the hydrograph throughout the year.
ELEVATION (NAVD88 ft.)
5439.8
5439.6
5439.4
5439.2
5439
5438.8
5438.6
5438.4
5438.2
5438
5437.8
12-31-2020
02-09-2021
03-21-2021
04-30-2021
06-09-2021
07-19-2021
08-28-2021
10-07-2021
11-16-2021
12-26-2021
WLE (FT)

Appendix D: Raw Data

BPSOU 2021 GW DSR Appendix D

Butte Priority Soils Operable Unit (BPSOU)
Silver Bow Creek/Butte Area NPL Site

Appendix D: Data

Draft Data Summary Report
January 2021 – December 2021

Atlantic Richfield

April 2022

LIST of LABORTORY REPORTS

Spring 2021:

- 10558077 Level 2 Data Package
- 10559096 Level 2 Data Package
- 10560315 Level 2 Data Package
- 10560318 Level 2b Data Package

Fall 2021:

- 10580635 Level 2b Data Package
- 10581934 Level 2 Data Package
- 10581942 Level 2 Data Package
- 10582495 Level 2 Data Package
- 10582497 Level 2 Data Package
- 10583409 Level 2 Data Package

LIST of CONTINUOUS WATER LEVEL DATA SITES

- AMC-23
- AMC-24
- AMC-24B
- AMC-24C
- AMW-01A
- AMW-01B
- AMW-01C
- AMW-02
- AMW-13
- AMW-13B
- AMW-13C
- BMW-03A
- BMW-03B
- BMW-06B
- BPS07-03A
- BPS07-07
- BPS07-08A
- BPS07-11A
- BPS07-11B
- BPS07-17A
- BPS07-18A
- BPS07-18B
- BPS07-21
- BPS07-21B
- BPS07-21C

- BPS07-22B
- BPS07-22C
- BPS07-22R
- BPS07-23
- BPS07-24
- BPS07-25
- BPS11-07
- BPS11-10B
- BPS11-10C
- BRW-00 OS
- CT NW-3
- FP98-6
- FP98-7
- GS-08R
- GS-09R
- GS-11R
- GS-13A
- GS-26
- GS-29D
- GS-30D
- GS-30S
- GS-31S
- GS-32D
- GS-32S
- GS-44D
- GS-44S
- GS-46D
- GS-46S
- HCA-B1
- HCA-B2
- MF-07
- MF-08
- MF-10
- MH-MSD113
- MH-MSD116
- MSD-01A
- MSD-01B
- MSD-01C
- MSD-02A
- MSD-02B
- SS-05.7
- SS-05.9R1