Amended Assessment of Corrective Measures Report

Intermountain Generating Facility
Delta, Utah

Prepared for:
Intermountain Power Service Corporation
850 West Brush Wellman Road
Delta, Utah 84624

Prepared by:
Stantec Consulting Services Inc.
2890 East Cottonwood Parkway, Suite 300
Salt Lake City UT 84121-7283

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Sign-off Sheet and Signatures of Environmental Professionals

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Prepared by:

John G. Russell, III
Utah PG #5216074-2250
Sr. Hydrogeologist, Environmental Risk Manager

Reviewed by:

Chris LaLonde
Risk Assessor

Reviewed by:

Chad Tomlinson, PE
Utah Licensed PE #4777863-2202
Principal Engineer

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Abbreviations

CB Landfill	Combustion By-Products Landfill
CoC	Chain-of-Custody
DQO	Data Quality Objective
ft	Foot or feet
IGF	Intermountain Generating Facility
IPSC	Intermountain Power Service Corporation
LCL	Lower Confidence Limit
MCL	Maximum Contaminant Level
mg/l	milligrams per liter
msl	mean sea level
ORP	Oxygen Reduction Potential
QA/QC	Quality Assurance and Quality Control
QAPP	Quality Assurance Project Plan
RCRA	Resource Conservation and Recovery Act
SAP	Sampling and Analysis Plan
SOPs	Standard Operating Procedures
Stantec	Stantec Consulting Services Inc.
SSI	Statistically Significant Increase
UDEQ	Utah Department of Environmental Quality
UTL	Upper Tolerance Limit
US EPA	United States Environmental Protection Agency

1.0 EXECUTIVE SUMMARY

1.1 PURPOSE OF THIS REPORT

On behalf of Intermountain Power Service Corporation ("IPSC"), Stantec Consulting Services Inc. ("Stantec") has prepared this report to amend IPSC's original January 2019 assessment of corrective measures required by the coal combustion residuals rules, and which supplemented IPSC's September 2016 Updated Corrective Action Plan report at the request of the Utah Department of Environmental Quality ("UDEQ"), Division of Water Quality ("DWQ"). The 2016 report presented IPSC's approach for addressing requirements specified by the facility's DWQ Ground Water Discharge Permit No. UGW270004. The most recent permit renewal was issued by the UDEQ to IPSC's Intermountain Generating Facility ("IGF"), effective May 24, 2016.

During the generalized timeframe of December 2015 through today, IPSC has been complying with facility monitoring measures prescribed by the United States Environmental Protection Agency's 2015 Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals (CCR) from Electric Utilities, 40 CFR 257 Subpart D (the "Federal CCR Rule")(and the corresponding Utah CCR Rule at Utah Admin. Code R315-319 (the "State CCR Rule")(collectively, the "CCR Rules")). IPSC implemented a ground water quality monitoring program prescribed by the CCR Rules that included monitoring of CCR units and installation, monitoring, and sampling of several new, additional monitoring wells that were not part of IPSC's Ground Water Discharge Permit.

Since January 2019, IPSC has been, and still is, conducting semi-annual Assessment Monitoring as prescribed by the CCR Rule, including ongoing monitoring and delineation of CCR constituents, as well as remediation of Total Dissolved Solids (TDS) in groundwater beneath localized areas of the site in compliance with its Groundwater Discharge Permit. This 2020 report incorporates by reference IPSC's September 2016 Updated Corrective Action Plan report and January 2019 Assessment of Corrective Measures and Amended Corrective Action Plan report. This report also incorporates by reference IPSC's routine, semi-annual reports that IPSC has submitted historically to the DWQ as part of ongoing compliance with its Ground Water Discharge Permit and Semi-Annual Progress Reports that have been published on IPSC's public website as part of CCR Rule compliance. Copies of potentiometric and TDS concentration maps, excerpted from historical semi-annual reports, are presented herein in Appendix A.

IPSC commenced a ground water quality monitoring program prescribed sequentially by CCR Rules Parts §257.90 (R315-319-90) Applicability; §257.91 (R315-319-91) Ground Water Monitoring Systems; §257.93 (R315-319-93) Ground Water Sampling and Analysis Requirements; §257.94 (R315-319-94) Detection Monitoring Program; §257.95 (R315-319-95) Assessment Monitoring Program; and §257.96 (R315-319-96) Assessment of Corrective Measures. The CCR Rules apply to each of IPSC's three (3) CCR units (reference Figures 1 and 2 for regional and site-specific, location maps):

- Combustion By-Products Landfill ("CB Landfill");

- Bottom Ash Basin; and
- Waste Water Basin.

The DWQ has regulatory oversight for IPSC's compliance with its Ground Water Discharge Permit. The UDEQ Division of Waste Management and Radiation Control ("DWMRC") also has regulatory oversight pursuant to the State CCR Rule, under which DWMRC issued a permit for the CCR Units. IPSC has prepared this report to provide a summary of its CCR Rule compliance activities while proposing a dove-tailed, ground water monitoring and recovery program intended to comply with the Federal and State CCR Rules and its Ground Water Discharge Permit.

1.2 BACKGROUND

Historically, when complying with its Ground Water Discharge Permit, and as reported to the UDEQ, whenever IPSC identified a potential release from a permitted basin, IPSC implemented investigative and remedial actions to identify the source and then repair the leak area (typically a localized tear in the 80-mil high-density, polyethylene [HDPE] liner material). Investigative and remedial measures were implemented and communicated to the UDEQ in a timely manner and in accordance with Ground Water Discharge Permit requisites.

As a result of localized, historical releases from the Bottom Ash Basin, a plume of Total Dissolved Solids (TDS) in excess of background concentrations impacted the uppermost ground water quality and migrated with ground water toward the southwest (the predominant, uppermost aquifer flow direction in relation to the Bottom Ash Basin). Since March 2010, IPSC has operated three ground water recovery wells that recover ground water from areas that exhibit elevated TDS concentrations within the uppermost aquifer beneath the site. The permit compliance concentration for TDS for Compliance Wells in the Ground Water Discharge Permit is 1,100 ppm. The three recovery wells (wells WR-101, WR-102, and WR-103) collectively recover approximately 25 gallons per minute (gpm) and route recovered ground water to the Ash Recycle Basin.

The three recovery wells were designed to remove TDS mass from the apparent center of the TDS plume, as proposed in IPSC's original June 2007 Corrective Action Plan Report, which was 'approved' by the UDEQ and implemented sequentially, as documented in IPSC's March 2010 Ground Water Recovery Well Installation Report. At the time of installation, the three recovery wells were not intended to control the downgradient migration of the TDS plume, but rather to reduce TDS mass within the uppermost aquifer at locations positioned in relatively close proximity to release source areas.

As of September 2016, TDS water quality data indicated that the down-gradient leading edge of the TDS plume was moving beyond ground water recovery measures in place at the time. IPSC's September 2016 Updated Corrective Action Plan report included a summary of Stantec's ground water modeling and preliminary analysis of subsurface, hydraulic characteristics which were used in part to formulate a proposed enhanced, ground water recovery program. The model was developed generally in accordance with ASTM International's (American Standard for Testing and Materials) Standard Guide for Application of Groundwater Model to a Site-

Specific Problem and the current version of United States Geological Survey (USGS) Modular Three-Dimensional Finite Difference Groundwater Flow Model (MODFLOW-2005).

IPSC proposed to install and test additional ground water recovery wells near the downgradient leading edge of the TDS plume to enhance TDS plume control measures and help IPSC gain a clearer understanding of the hydraulic characteristics of the leading edge of the TDS plume. The TDS plume associated with historical releases at the Bottom Ash Basin is located within the boundaries of IPA-owned property and as such has posed no risk historically or currently to potential on- and/or off-site receptors.

2.0 CCR RULE *DETECTION MONITORING* PROGRAM, 2015-2017

As detailed in IPSC's November 2015 CCR Unit Monitoring Well Design and Installation Summary Report, IPSC installed a series of ground water monitoring wells to monitor uppermost ground water quality in up-gradient (e.g., "background" water quality) and down-gradient directions in relation to the CB Landfill, Bottom Ash Basin, and Waste Water Basin. Table 1 presents a summary of all CCR Rules-related, ground water monitoring well construction details and completion dates, including numerous wells that were installed during IPSC's Assessment Monitoring Program discussed in the following report section *3.0 CCR Rule, Assessment Monitoring Program*. Appendix A includes copies of the drilling logs and well schematic diagrams.

During late-October 2015, IPSC initiated its CCR unit-specific, monitoring, sampling, and analysis program for background and down-gradient, monitoring wells, in accordance with §257.94 (R315-319-94) Detection Monitoring Program and IPSC's November 2015 Ground Water Sampling and Analysis Plan. As prescribed by §257.94(b) (R315-319-94(b)) for existing CCR-regulated landfills and surface impoundments, IPSC analyzed all ground water samples for Appendix III and Appendix IV constituents. As of October 2017, IPSC completed eight (8) independent sampling events from each background and down-gradient monitoring well in accordance with §257.94(b) (R315-319-94(b)).

In accordance with §257.90(e) (R315-319-90(e)), IPSC's January 2018 Annual Ground Water Monitoring Summary Report presented the results of IPSC's eight ground water monitoring and sampling events that comprised its Detection Monitoring Program pursuant to §257.94 (R315-319-94). All monitoring and sampling procedures were implemented in accordance with IPSC's November 2015 *CCR* Unit Monitoring Well Design and Installation Summary Report and corollary Ground Water Sampling and Analysis Plan report. All three predecessor reports are stand-alone documents that are incorporated by reference herein.

As reported in IPSC's January 2018 summary report, statistical analyses indicated potential statistically significant increases ("SSIs") over background concentrations of certain Appendix III constituents associated with each of the three CCR units. Therefore, as of the first quarter of 2018, IPSC initiated implementation of an Assessment Monitoring Program at each of the three CCR units in accordance with measures and timeframes prescribed by CCR Rule §257.95 (R315-319-95), as detailed in following report section 3.0. Table 2 herein provides a summary of all ground water sampling results associated with sampling to date, including the 2015-2017 Detection Monitoring Program and ongoing Assessment Monitoring Program.

3.0 CCR RULE *ASSESSMENT MONITORING* PROGRAM

3.1 ASSESSMENT MONITORING RESULTS

Activities conducted during 2018-2019 entailed implementation of an Assessment Monitoring Program prescribed by CCR Rule §257.95 (R315-319-95), including evaluation of ground water monitoring data, establishment of Ground Water Protection Standards ("GWPSs") for Appendix IV constituents, and §257.96 (R315-319-96) Assessment of Corrective Measures. Simultaneously and as reported to the UDEQ under separate cover, IPSC also continued its Ground Water Discharge Permit compliance program, which included ongoing monitoring and localized recovery of uppermost ground water containing elevated TDS concentrations down-gradient of the Bottom Ash Basin. All such qualitative and quantitative data associated with the commencement of IPSC's Assessment Monitoring Program are discussed in detail within IPSC's January 2019 Assessment of Corrective Actions and Amended Corrective Action Plan report, which is incorporated by reference herein. Copies of semi-annual groundwater flow and TDS concentration maps are presented within Appendix A herein.

During 2015 through 2017, IPSC implemented its Detection Monitoring Program in compliance with the CCR Rule. Subsequently, IPSC transitioned to an Assessment Monitoring Program which continues currently, due to the large acreage (4,614-acres) of the site and ongoing sequential installation of 84 monitoring wells in pursuit of appropriate delineation of the down-gradient leading edge of the TDS plume and monitoring for CCR constituents at the three CCR Rule-regulated units. Through such monitoring, IPSC is refining its Conceptual Site Model and understanding of CCR constituents in groundwater. Additionally, IPSC discovered the presence of TDS plumes located down-gradient of the Waste Water Basin (southwest of the southeastern corner of the basin and west of the northwestern corner of the basin). Groundwater quality down-gradient of the CB Landfill has been consistent with typical background concentrations for all CCR constituents since monitoring began.

Specific to CCR Rule compliance monitoring, IPSC monitors groundwater quality at a total of 84 monitoring wells, located at the boundaries and down-gradient of the CCR-regulated units. TDS, heavy metals, boron, pH, and other CCR constituents will continue to be monitored in compliance with both the DWQ Groundwater Discharge Permit and the CCR Rule.

Groundwater monitoring wells have been installed sequentially since CCR Rule Assessment Monitoring began to further delineate CCR constituents in groundwater and refine IPSC's Conceptual Site Model of subsurface hydrogeologic characteristics. Additional monitoring wells were installed sequentially to more accurately define the down-gradient leading edges of TDS plumes located down-gradient of both the Bottom Ash Basin and the Waste Water Basin.

Aside from some of the Groundwater Discharge Permit monitoring wells, the following wells and installation dates are associated with IPSC's CCR Rule compliance program affiliated with the Bottom Ash Basin:

- Up-gradient monitoring wells BA-U-1 and BA-U-2 were installed during July 2015;
- Wells BAC-1 through BAC-7 were installed during July and August 2015;
- Wells BAC-8, BAC-9, and BAC-10 were installed during April and May 2019;
- Wells BAC-11 through BAC-17 were installed during November and December 2019; and
- Wells BAC-18 through BAC-38 were installed during May 2020.

The following wells and installation dates comprise IPSC's CCR Rule compliance program associated with the Waste Water Basin:

- Wells WWC-1 through WWC-5 were installed during July 2015;
- Up-gradient monitoring wells SI-U-1, WW-U-1, and WW-U-2 were installed during August 2015;
- Wells WWC-6 and WWC-7 were installed during March 2018;
- Wells WWC-8, WWC-9, and WWC-10 were installed during April 2019; and
- Wells WWC-11, WWC-12, and WWC-13 were installed during November 2019; and
- Wells WWC-14 through WWC-17 were installed during April 2020.

The following wells and installation dates comprise IPSC's CCR Rule compliance program associated with the CB Landfill:

- Up-gradient monitoring wells CL-U-1 and CL-U-2 were installed during July 2015;
- Wells CL-W-1 through CL-W-8 were installed during July 2015;
- Well CL-W-9 was installed during March 2018; and
- Up-gradient monitoring well CL-U-3 was installed during March 2018.

Figure 3 identifies the locations of those CCR Rule compliance monitoring wells installed and sampled as of April 2020, the most recent sampling event for which IPSC has received analytical result reports. The figure includes a groundwater potentiometric map as well as TDS and Appendix IV metal analytical data, as discussed in more detail within following paragraphs.

Wells BAC-18 through BAC-38 and WWC-14 through WWC-17 were installed, developed, and pump-tested during the Spring and Summer of 2020. All 25 of these additional wells were installed such that each well can be used as a recovery well, if needed, in support of TDS plume control and containment, as is discussed in more detail within following report sections pertaining to corrective actions. Reference Figure 4 for the locations of all BAC and WWC monitoring wells, including the 25 new BAC and WWC wells.

The 25 wells were sampled, along with other wells during October 2020; however, IPSC has not received the analytical laboratory results as of this report. Upon receipt, the analytical results will be presented within IPSC's Annual Progress Report to be prepared in January 2021, which, as with other CCR Rule reports, will be posted on IPSC's public website. Upon receipt and analysis of the forthcoming water quality data associated with the 25 new wells, Stantec will prepare updated TDS iso-concentration maps for the apparent TDS plumes located down-gradient of the two impoundments. Likewise, similar maps will be developed, if any other CCR constituents exceed corollary Groundwater Protection Standards, including Appendix IV metals.

3.1.1 Ground Water Flow Characteristics

During each ground water monitoring and sampling event, field personnel implemented consistent water level measurement procedures, field techniques, and quality assurance/quality control (QA/QC) protocol in accordance with methodologies specified within IPSC's CCR Rules-specific and Ground Water Discharge Permit-specific, Ground Water Sampling and Analysis Plans. Water levels were measured prior to purging and sampling of each well with field data recorded in a dedicated, project notebook for archiving.

The depth to static water in each well was measured utilizing an electronic meter, capable of measuring to 0.01-foot (ft.). The meter was decontaminated prior to each use to minimize the potential for cross-well contamination, when using the meter between wells. During each sampling event, static ground water level measurements were made to the nearest 0.01-ft. from a consistent, reference point established on the northern top of each PVC monitoring well casing.

Copies of historical semi-annual groundwater flow and TDS concentration maps are presented within Appendix B herein. Figure 3 in this report presents the most recent groundwater flow and TDS result data, as observed during the April 2020 Assessment Monitoring event.

As may be noted by review of the potentiometric maps, the predominant regional ground water flow direction is generally from the east/northeast toward the west/southwest, with more southwesterly, localized components of flow near the Bottom Ash Basin and Waste Water Basin. Although there were slight, localized changes in hydraulic gradient across the site during each individual monitoring event, in general, the gradient patterns appear relatively consistent over time.

Stantec's review of natural topographic elevations presented on the 1971 USGS *Rain Lake, Utah Quadrangle* topographic map indicates that the natural topography grades generally from the east toward the west across the generalized vicinity of the CB Landfill (T15S, R7W, Section 11), while the natural grade becomes more southwesterly in the vicinity of the Bottom Ash Basin (T15S, R7W, Section 14) and the Waste Water Basin (T15S, R7W, Sections 14 and 23) and on-site land located south and southwest of the surface impoundments and north of the Brush Wellman Highway (i.e., State Route 174). In summary, and on a generalized scale, the potentiometric maps tend to mimic the expression of the topography of the land surface across the site.

3.1.2 CCR Unit-Specific, Ground Water Quality Results

Background and down-gradient, CCR unit-specific ground water monitoring wells were purged and sampled as part of the Assessment Monitoring Program on a semi-annual basis as prescribed by the CCR Rule. All purging, sampling, laboratory analysis, and Quality Assurance/Quality Control ("QA/QC") protocols were administered as specified by §257.95 (R315-319-95) Assessment Monitoring Program and as proposed within IPSC's November 2015 Ground Water Sampling and Analysis Plan. Tabulated analytical results and water level

measurement data associated with the CCR Rule Detection and Assessment Monitoring Program events are presented in Table 2 herein.

In accordance with §257.95(d), IPSC has been sampling wells on a semi-annual basis in compliance with CCR Rule Assessment Monitoring and every six months as prescribed by its Groundwater Discharge Permit. As additional groundwater quality data are generated at the site, water quality data and analyte-specific GWPSs will continue to be reported in annual reports and evaluated per statistical analyses performed in accordance with CCR Rule §257.95(d)(2) and §257.95(h) [R315-319-95(d)(2) and R315-319-95(h)] and the following general guidance sources, as has been used for reference to date:

- US EPA "Unified Guidance" document (*Statistical Analysis of Ground Water Monitoring Data at RCRA Facilities, Unified Guidance,* March 2009, *EPA 530/R-09-007*);
- the Interstate Technology and Regulatory Council's (ITRC) 2013, *Groundwater Statistics for Monitoring and Compliance, Statistical Tools for the Project Lifecycle*, Online Guidance; and
- Ofungwu, J. (2014) *Statistical Applications for Environmental Analysis and Risk Assessment*. Hoboken, New Jersey: John Wiley and Sons, Inc.

The Unified Guidance recommends the use of Upper Tolerance Limits ("UTLs") for Assessment Monitoring. Tolerance limits consist of two values expected to contain a pre-specified proportion of the underlying data population with a specified level of confidence. For example, a 95% tolerance interval with a 95% confidence level, there is 95% confidence that, on average, 95% of the data population is contained within the interval. The upper, one-sided UTL is used commonly in environmental monitoring and is constructed using background data (Ofungwu 2014).

In the context of the CCR Rule, data from all background wells is used to estimate a 95% UTL with 95% coverage for each Appendix IV constituent at each CCR-regulated unit. This represents a 95% upper confidence limit on the 95th percentile. In Assessment Monitoring, the UTL may be used to represent the GWPS if: 1) the constituent does not have an established MCL; or 2) the background UTL exceeds the established MCL.

Three Appendix IV constituents do not have a US EPA-promulgated MCL: Cobalt, Lithium, and Molybdenum. However, the US EPA amended the original CCR rule in July 2018 and established the following alternate, regulatory limits for these compounds: Cobalt (0.006 milligrams per liter, mg/L), Lithium (0.04 mg/L), and Molybdenum (0.1 mg/L).

As specified by CCR Rule §257.95(d)(2) and §257.95(h) (R315-319-95(d)(2) and R315-319-95(h)), each constituent-specific GWPS shall be either the MCL for that constituent (or above-referenced, CCR Rule-established, alternate, regulatory limits for Cobalt, Lithium, and Molybdenum) or the UTL in instances where the UTL exceeds the established MCL. Appendix C presents a tabulation of UTL and GWPS data for each CCR unit and each monitoring well.

During Assessment Monitoring, the site is assumed to be free of impacts, unless proven otherwise through statistical testing. The statistical null hypothesis (Ho) represents a mean downgradient

concentration less than or equal to the GWPS, while the alternate hypothesis (Ha) represents a mean downgradient concentration greater than the GWPS (ITRC, 2013). To test this hypothesis, the Lower Confidence Limits (LCL) around the mean downgradient Appendix IV concentrations are estimated using data collected during the Detection Monitoring and Assessment Monitoring programs. The LCL for each constituent/well pair are then compared to their respective GWPS. If the LCL exceeds the GWPS, then downgradient concentrations are at a statistically significant level (SSL) above the GWPS, which *may* trigger corrective action at the Site.

It should be noted that individual sample results of Appendix IV constituents above the GWPS during Assessment Monitoring are not necessarily a demonstration of statistically significant exceedances of the GWPS. The LCL must exceed the GWPS to conclude a statistically significant increase (SSI). However, if individual constituent concentrations exceed GWPSs, then Assessment Monitoring is to continue at that specific CCR unit. Appendix C presents a tabulation of UTL, GWPS, and Confidence Limit data for each CCR unit and each monitoring well.

In summary, and as presented on Figure 3, the quantitative analytical results associated with monitoring under the CCR Rules indicated the following Appendix IV constituent-specific, LCL exceedances above corollary GWPS concentrations at ground water monitoring wells located at each CCR-regulated unit (all concentrations in mg/L):

CCR Unit	Well	Appendix IV Constituent	LCL Concentration	GWPS Concentration
CB Landfill		No Exceedances	------	-----
Bottom Ash Basin	BAC-2	Molybdenum	0.1506	0.1
	BAC-3	Lithium	0.812	0.7415
Waste Water Basin	WWC-1	Arsenic	0.01496	0.01275
	WWC-2	Arsenic	0.01415	0.01275
	WWC-3	Arsenic	0.02045	0.01275

Groundwater quality down-gradient of the CB Landfill is consistent with typical background concentrations for all CCR constituents. It must be noted that recently-installed, down-gradient monitoring wells, used to help delineate the down-gradient leading edges of CCR constituent plumes, will require additional sampling data for comparative analysis to corollary GWPSs; i.e., a few sampling data-sets are insufficient for appropriate statistical analysis.

Since 2001 when groundwater quality monitoring began at IGF with issuance of the Groundwater Discharge Permit, and as observed to date, TDS is the CCR constituent found to be the most wide-spread and has migrated further down-gradient from the surface impoundments than any other CCR constituent. In compliance with its Groundwater Discharge Permit, IPSC commenced recovery of TDS-impacted groundwater in 2010. TDS will continue to be used as the leading indicator parameter of impacted groundwater quality for fashioning a groundwater remediation approach to address both TDS and slower-migrating CCR constituents including heavy metals. This is appropriate because TDS is expected to continue to migrate at a much faster rate than dissolved metals in the clay-rich aquifer that underlies the property.

3.1.2.1 Regional Ground Water Quality

The site is located within the Basin and Range Physiographic Province and the Sevier Desert on a more localized scale. It is well-documented throughout arid Utah that localized, historical Lake Bonneville basin-fill sediments (that underlie the site) and associated uppermost ground water located in close proximity to igneous/volcanic and metamorphic formations contain high concentrations of abundant, naturally-occurring Arsenic (typically attributable to chemical and physical weathering of arsenopyrite). Likewise, Basin and Range Physiographic Province sediments, surface water, and ground water can also exhibit elevated concentrations of natural Lithium – especially in areas that are characterized by hydrologically-closed basins and thermal ground water.

Arsenic and Lithium concentrations within uppermost ground water can vary considerably, over short, lateral distances, in many instances. Indeed, ground water quality data associated with the site exhibits considerable variation in Arsenic and Lithium concentrations across relatively-short, lateral distances, including up-gradient monitoring wells.

Stantec's familiarity with the regional geology surrounding the site, as well as review of United States Geological Survey (USGS) geologic maps associated with areas surrounding, and in a presumed up-gradient direction (northeast of) in relation to the site, indicate vast acreages encompassing square miles of volcanic and metamorphic mountainous areas with interspersed Lake Bonneville-related sediments, which could provide source material for soluble Arsenic and Lithium to impact localized, uppermost ground water quality. Baker Hot Springs and the mountainous Butte Fumarole formation are located a few miles northwest of the site, for instance. Reportedly, there are third-party companies investigating the possibility of Lithium mining/brine processing within nearby areas such as the Sevier Lake watershed and Tule Valley, areas located several miles southwest and west of the site.

4.0 ASSESSMENT OF CORRECTIVE MEASURES

The primary contaminant of potential concern at the site is TDS, as there are localized TDS plumes beneath the site, namely: one plume located southwest of the Bottom Ash Basin and smaller TDS plumes located southwest and west of the Waste Water Basin. TDS is being considered the leading indicator parameter of impacted ground water quality for fashioning a suitable ground water remediation approach. It is anticipated that recovery of TDS-impacted ground water at select recovery wells will also intercept any metal constituents that might be present, as TDS is expected to migrate at a faster rate than dissolved metals in ground water.

4.1 SUMMARY GROUND WATER MODELING RESULTS AND FINDINGS

IPSC's September 2016 Updated Corrective Action Plan report included a summary of Stantec's ground water modeling and preliminary analysis of subsurface, hydraulic characteristics which were used to formulate a proposed enhanced, ground water recovery program, designed to control the down-gradient leading edge of the TDS plume located down-grade/southwest of the Bottom Ash Basin. Stantec constructed and calibrated a three-dimensional, numerical model to simulate ground water flow and fate and transport of TDS in ground water beneath the IGF in an effort to better understand the hydraulic characteristics of the uppermost aquifer beneath the site and for better containment of expansion of the TDS plume. The model was developed generally in accordance with ASTM's Standard Guide for Application of Groundwater Model to a Site-Specific Problem and the current version of USGS Modular Three-Dimensional Finite Difference Groundwater Flow Model (MODFLOW-2005).

In summary, the model was based on site-specific, hydrogeologic and hydraulic characteristics identified during Stantec's past drilling and sampling of soil test borings and ground water monitoring wells located in relatively close proximity to the Bottom Ash Basin, as well as historical pump-testing of the three existing, ground water recovery wells WR-101, WR-102, and WR-103, identified on Figure 5-1 herein, a figure excerpted from IPSC's 2016 report. Stantec also reviewed historical soil boring and ground water monitoring well drilling logs associated with mid- to late-1980s well installations overseen by other consulting firms prior to the construction of the facility.

Stantec's analysis of all hydrogeologic data indicates that the depth to uppermost ground water varies across the site but approximates a range between 55 to 75 feet below grade. Subsurface lithologic conditions in the immediate vicinity of each of the three CCR units were generally as follows:

CCR Unit	Depth to Uppermost Sand Aquifer (feet below ground surface-bgs)	Thickness of Clay-Rich Soils Above the Aquifer (in feet-ft.)
CB Landfill	between 52 to 78	33 to 57 ft. thick
Bottom Ash Basin	between 55 to 60	17 to 33 ft. thick
Waste Water Basin	between 48 to 65	8 to 20 ft. thick

Static water level measurements indicate that the uppermost aquifer beneath the site is under semi-confined to confined, hydraulic conditions, whereby static water levels rose within the wells following well installation and development. In other words, during the drilling of each borehole, uppermost, saturated soils were encountered at a certain subsurface depth. Subsequently, and as evidenced by recent water level measurements, the potentiometric surface of the water table was under such hydraulic pressure that the static water level within each monitoring well rose to a height 20 to 40 feet higher than the original depth at which uppermost saturated soils were first encountered. Water levels have been measured consistently to date, utilizing an electronic water level indicator that measures depth to static water in each well from the northern top of each well casing.

Stantec extrapolated that the down-gradient leading edge of the TDS plume appears to be migrating naturally toward the southwest at an approximate rate of 150 to 180 feet per year. However, this is a generalized plume migration rate estimate, considering the relatively large, lateral distances between water quality monitoring well locations and the highly-varied, lithologic characteristics of the uppermost aquifer underlying the site.

Stantec used the groundwater model to help estimate the total number of vertical ground water recovery wells that might be needed to intercept the TDS plume's southwestern-most, down-gradient leading edge. Each proposed well would be constructed as a 6-inch diameter well, with 20- to 25-lineal feet of well screen at the bottom of each well. The model examined use of a line of equally-spaced, ground water recovery wells located perpendicular to the natural, southwesterly ground water flow direction. Since the three existing recovery wells WR-101, WR1-02, and WR-103 had sustainable yields between 8 to 15 gallons per minute (gpm), Stantec's model estimated that the following scenarios should provide satisfactory containment of the TDS plume southwest of the Bottom Ash Basin:

- 15 wells, located at approximate 188-ft. equidistant, lateral spacings; each well producing at 15 gpm

to

- 19 wells, located at approximate 146-ft. equidistant, lateral spacings; each well producing at 10 gpm.

The model indicated that the lateral capture zone for a recovery well pumping ground water at a rate of 10 gpm should extend out approximately 146 feet to either, lateral side of the well (i.e., generally perpendicular to the southwesterly groundwater flow direction). The lateral capture zone for a well pumping ground water at a rate of 15 gpm was projected to extend out approximately 188 feet to either side of the well. Figures 5-2, 5-3, and 5-4 herein are figures excerpted from the 2016 and 2019 reports that depict groundwater modeling results and proposed supplemental groundwater recovery well locations, based on plume orientation estimated in 2016.

Subsequently, as noted on Figure 5-4, well RW-5 was determined to not contain TDS in excess of the Groundwater Discharge Permit action level of 1,100 ppm, including the most recent sampling event of April 2020. Ongoing monitoring also indicated that Groundwater Discharge

Permit monitoring well RW-9 contained elevated TDS concentrations, deemed attributable to the southwesterly migration of the down-gradient leading edge of the TDS plume. In summary, water quality data indicated that the down-gradient leading edge of the plume was positioned northwest of what had been estimated previously.

As part of subsequent investigation and pursuit of more accurate delineation of the down-gradient leading edge of the TDS plume, IPSC installed additional monitoring wells (constructed such that all may be used for recovery, if needed) west of wells RW-5 and RW-9, namely wells BAC-8, BAC-9, BAC-10 (April-May 2019) and wells BAC-11 through BAC-17 (November-December 2019). The TDS water quality data indicated that the down-gradient leading edge of the TDS plume had migrated farther west than monitoring well BAC-11 and appeared to be located somewhere between wells WDB-5 and WDB-7 to the north and wells BAC-10, BAC-14, and BAC-15 to the south (all TDS concentrations of latter five wells are well below 1,100 ppm), as presented on Figure 3.

Several of the BAC wells were pump-tested during May and June 2019, with results evaluated by Stantec's groundwater model. Each well yielded between 10 to 15 gpm. The model was used to investigate where additional down-gradient wells might be installed for more precise delineation and possible recovery of the down-gradient leading edge of the TDS plume. The model estimated that wells should be positioned at approximate 150-foot lateral distances between one another to provide appropriate capture zones, based on an approximate recovery rate of 10 gpm for each proposed well.

During April through June 2020, 21 additional wells (BAC-18 through BAC-38 on Figure 4) were installed, developed, and pump-tested to investigate areas farther west of the existing network of monitoring wells. The wells were arranged along generalized northwest-to-southeast orientations, anticipated to be perpendicular to the regional, southwesterly groundwater flow direction and deemed most suitable for possible use as groundwater recovery wells, if needed.

According to IPSC's most recent monitoring data, the three existing recovery wells' recovery rates have declined since initial pumping began in 2010 and approximate 3.5 to 9 gpm, currently. Thus, in a conservative mode and instead of well placements every 150 feet, in case the yields of the proposed wells were less than 10 gpm, the 21 new wells were installed at approximate 100- to 125-foot lateral spacings between one another, typically.

All 21 new wells were sampled along with other CCR Rule monitoring wells during the recent October 2020 sampling event as part of IPSC's ongoing assessment monitoring program. IPSC has not received the analytical result reports, as yet. The analytical results will be evaluated upon receipt of laboratory result reports. It is anticipated that the analytical results will be reported within IPSC's forthcoming January 2021 Annual Report. The analytical results will be used to help identify if additional monitoring and/or recovery wells are needed to provide appropriate monitoring and containment of the TDS plume.

4.2 EVALUATION OF ALTERNATIVE CORRECTIVE MEASURES

After Appendix IV constituents were detected above the GWPS during Assessment Monitoring, IPSC completed the requirements in §257.95(g). Notification identifying the constituents in Appendix IV that exceeded the GWPS was made by IPSC. Because there have been no releases from the impoundments that are discernible from the daily recorded impoundment levels, IPSC estimates that any material releases have been in small quantities over indeterminable periods of time into the uppermost aquifer. This confined to semi-confined aquifer is approximately 50 to 70 feet below grade. Because the concentrations of metals within coal burned at the IGF vary, it is anticipated that metal concentrations within CCR material will vary depending on when such material was deposited within a particular basin area. As such, it has been impractical to attempt to estimate concentrations of Appendix IV constituents within the large impoundments.

IPSC has worked with Stantec to install additional monitoring wells to further characterize and define the nature and extent of the TDS plumes. These wells include new monitoring wells at the facility boundary in the direction of contaminant migration. Analytical results associated with the most recent October 2020 and upcoming sampling events will be used by IPSC and Stantec to help further characterize the nature and extent of the release. To date, sampling results show that the plumes have not migrated off-site.

IPSC initiated an assessment of corrective measures within 90 days of detecting Appendix IV constituents above the GWPS. Notification stating that the assessment had been initiated was completed by IPSC, and the results of the assessment were discussed in a public meeting.

As part of ongoing remedy selection, IPSC is evaluating various remedial options, including: ongoing use and expansion of the existing groundwater recovery network used in compliance with its Groundwater Discharge Permit; possible use of horizontal interceptor trenches and Ranney-type, collector wells; possible use of Monitored Natural Attenuation (MNA); and possible use of evaporation ponds and possible construction of a water treatment facility for treatment of recovered groundwater. IPSC is waiting to review the pending October 2020 water quality analytical data before completing its final remedy selection. However, IPSC currently anticipates that the most effective (and conservative) remedial approach will be groundwater recovery and removal from the subsurface and subsequent evaporation of groundwater containing CCR constituents in consideration of the evaluation criteria prescribed by §257.96(c) and §257.97(c).

Historically and to date, TDS is the CCR constituent found to be the most wide-spread and located farthest down-gradient from both the two surface impoundments. Water quality beneath the IGF poses no risk to on- or off-site human health, currently and for the foreseeable future, such that there are no imminent health risks that might warrant immediate abatement of all CCR constituent-impacted groundwater beneath the site.

Since 2010, TDS has been recovered from the subsurface via an existing network of recovery wells and interconnected buried, water conveyance piping, pumphouses, and appurtenances as part of compliance with its Groundwater Discharge Permit. IPSC is removing TDS-impacted

groundwater from existing recovery wells WR-101, WR-102, and WR-103 located down-gradient of the Bottom Ash Basin. The three wells recover groundwater from close proximity to the basin and within the generalized middle of the plume and along the generalized TDS plume centerline.

IPSC is waiting to review the pending October 2020 water quality analytical data, which includes the only sampling event conducted to date at 25 newly-installed wells, before completing its final remedy selection. Currently, IPSC and Stantec are finalizing design of an enhanced ground water recovery network that will intercept TDS-impacted groundwater associated with both the Bottom Ash Basin and the Waste Water Basin TDS plumes at the down-gradient leading edges and within the middle of the TDS plumes. If other CCR constituents become detected in excess of corollary GWPSs, data to date indicate that any such constituents will migrate at considerably slower migration rates, and most probably along similar groundwater flow paths, as TDS. If this occurs, any such CCR constituent can be intercepted and removed from the subsurface by means of the expanded, groundwater recovery network that is being designed currently, if needed. As will be reported in future reports, IPSC will monitor the progress of the expanded groundwater recovery network and is prepared to install additional groundwater monitoring and/or recovery wells , if needed to address any unanticipated release and/or migration of CCR constituents in the future and provide appropriate protection to on- and off-site human health.

IPSC believes that recovery of groundwater from beneath the IGF using vertical groundwater recovery wells, in conjunction with evaporation of recovered groundwater, is the most conservative, practical, reliable, effective, flexible, and timely measure for remediating contaminated groundwater beneath the IGF while providing appropriate protection to on- and off-site human health. Existing and proposed water recovery infrastructure can be expanded readily and in a timely manner to accommodate any supplemental groundwater recovery wells that might be needed in the future.

Historical water quality data to date indicate that MNA is not a viable option, as the down-gradient leading edges of the TDS plumes continue to migrate down-gradient, generally toward the southwest; i.e., limiting attenuation or retardation of TDS in groundwater. Even if MNA were viable, the timeframe for completing the remedy would likely be excessive as compared to other options.

Likewise, Stantec's groundwater model investigated possible use of one or more Ranney-type, collector wells (each a 13-ft diameter, vertical concrete shaft driven to a depth of approximately 70-ft below grade with 300 feet long, horizontal collector screens radiating out from the bottom of the concrete shaft), instead of vertical recovery wells for containment of the TDS plume. The model indicated that use of vertical recovery wells, when compared to use of a Ranney collector well network, provides similar cumulative yield/volume of ground water recovery. However, use of vertical wells is deemed more practical, efficient, and beneficial for TDS Plume containment for numerous reasons, including:

- Greater flexibility and precision for well locating and installation;

- More extensive lateral and vertical aquifer characterization (i.e., individual well pump-testing for investigation of localized hydraulics throughout different areas within the aquifer); and

- Recovery of ground water throughout the approximate 20- to 25-foot thick aquifer (i.e., deeper ground water recovery within the aquifer, when compared to a horizontal ground water recovery network that would be placed at the bottom of the aquifer).

IPSC also evaluated possible use of horizontal groundwater interceptor trenches located at various locations across the site. Discussions with a horizontal trench installation company indicated that installation of any such trenches would be problematic at the IGF. In consideration of the relatively-deep depth of the uppermost aquifer (approximately 50 to 70 feet below grade), as well as the clay-rich lithologic characteristics of the subsurface, installation, operation, and management of any such horizontal trench is deemed impractical and less efficient than use of vertical recovery wells, for numerous reasons including those listed above for comparison to horizontal Ranney-type wells.

Lastly, the anticipated timeframe of a few years to design, permit, and construct an appropriate water treatment facility to treat recovered groundwater was deemed impractical and unnecessary. Likewise, off-site transport of wastewater is deemed impractical due to the large volumes of water to be recovered and remote location of the site. Evaporation of recovered groundwater has been used successfully to date and will continue to be the most viable option in this regard for the foreseeable future. Treated water from a hypothetical treatment plant would need to be directed to on-site evaporation ponds anyway, in consideration of the remote location of the IGF and the extremely dry and arid climate of the area.

In summary, IPSC and Stantec evaluated the following potential remedial approaches in terms of each of the evaluation factors outlined in §257.96(c) and §257.97(c), as regards CCR constituents in groundwater that have been detected in excess of respective GWPSs:

1) Monitored Natural Attenuation (MNA);
2) Groundwater removal via vertical recovery wells and evaporation of recovered water;
3) Groundwater removal via horizontal recovery trenches/wells and evaporation of recovered water;
4) Rather than evaporation for managing recovered water – possible treatment within a to-be-constructed wastewater treatment facility; and
5) Rather than evaporation for managing recovered water – possible off-site transport and disposal of recovered water.

Upon receipt of the forthcoming October 2020 analytical results, IPSC will evaluate these results with all historical analytical data and hydrogeologic data generated at the site historically in terms of CCR Rule evaluation criteria prescribed by §257.96(c) and §257.97(c). Evaluation of data to date indicate that use of vertical groundwater recovery wells and evaporation of recovered groundwater will likely provide the most appropriate, conservative, and effective remedial approach for ongoing protection of human health and the environment, as compared to other potential corrective measure options.

Below is a brief summary comparative tabulation of the different remedial options and evaluation factors for simple reference. The alternative remedies have been ranked in numerical order, with a "1" representative of the option that provides the highest degree of anticipated effectiveness in relation to the other options, and a "3" represents the lowest degree of anticipated effectiveness in comparison to other alternative remedies.

The evaluation criteria prescribed by §257.96(c) and §257.97(c) were organized into the following four categories:

Performance – This category includes the performance and potential impacts of appropriate potential remedies including: safety impacts; cross-media impacts; control of exposure to any residual contamination; the long- and short-term effectiveness and protectiveness of the potential remedy; the degree of certainty that the remedy will prove successful based on the magnitude of reduction of existing risks; the magnitude of residual risks in terms of likelihood of further releases due to CCR remaining following implementation of a remedy; the effectiveness of the remedy in controlling the source to reduce further releases based on consideration of the extent to which containment practices will reduce further releases and the extent to which treatment technologies may be used.

Time Required – This category includes the time required to begin and complete the remedy—the time until full protection is achieved.

Ease of Implementation - This category includes the ease or difficulty of implementing a potential remedy based on consideration of: the degree of difficulty associated with constructing the technology; the need to coordinate with and obtain necessary approvals and permits from other agencies such as state or local permit requirements or other environmental or public health requirements that may substantially affect implementation of the remedy; the availability of necessary equipment and specialists; the available capacity and location of needed treatment, storage, and disposal services; the type and degree of long-term management required, including monitoring, operation, and maintenance; the expected operational reliability of the technologies; the long-term reliability of the engineering and institutional controls; and the potential need for replacement of the remedy.

Community Concerns – This category includes: the degree to which community concerns are addressed by a potential remedy; the short-term risks that might be posed to the community or the environment during implementation of such a remedy, including potential threats to human health and the environment associated with excavation, transportation, and re-disposal of contaminant; and the potential for exposure of humans and environmental receptors to remaining wastes, considering the potential threat to human health and the environment associated with excavation, transportation, re-disposal, or containment.

As noted below, the most effective remedial strategy is represented as the lowest, cumulative ranked score and is anticipated to be recovery of groundwater containing CCR constituents in excess of respective GWPSs by means of vertical groundwater recovery wells and on-site evaporation of recovered water.

EVALUATION AND RANKING OF REMEDIAL ALTERNATIVES IN TERMS OF ANTICIPATED EFFECTIVENESS

Alternative Groundwater Monitoring and Recovery Options

Possible Remedy	Performance	Time Required	Ease of Implementation	Community Concerns	Total Score
MNA	3	3	1	1	8
Vertical Recovery Wells	1	1	2	2	6
Horizontal Recovery Wells	2	2	3	2	9

Alternative Recovered Groundwater Treatment and Disposal Options

On-Site Evaporation of Recovered Water	1	1	1	1	4
On-Site Design, Permitting, & Construction of Wastewater Treatment Facility	2	3	3	2	10
Off-Site Disposal of Recovered Water	3	2	2	3	10

Figure 1 General Site Location Map

IPSC PROPERTY BOUNDARY

Combustion By-Products Landfill

Non-CCR Regulated, Evaporation Basins

Bottom Ash Basin

Waste Water Basin

Flowing Wells

North Sugarville Reservoir

Sugarville

Woodrow

BASE FROM USGS 1:100,000 SCALE METRIC TOPOGRAPHIC MAPS: LYNNDAL, UTAH, 1979 AND DELTA, UTAH, 1989.

1 0 1 2 3 4 KILOMETERS

1 0 1 2 MILES

N

CCR-Regulated Units
DELTA, UTAH

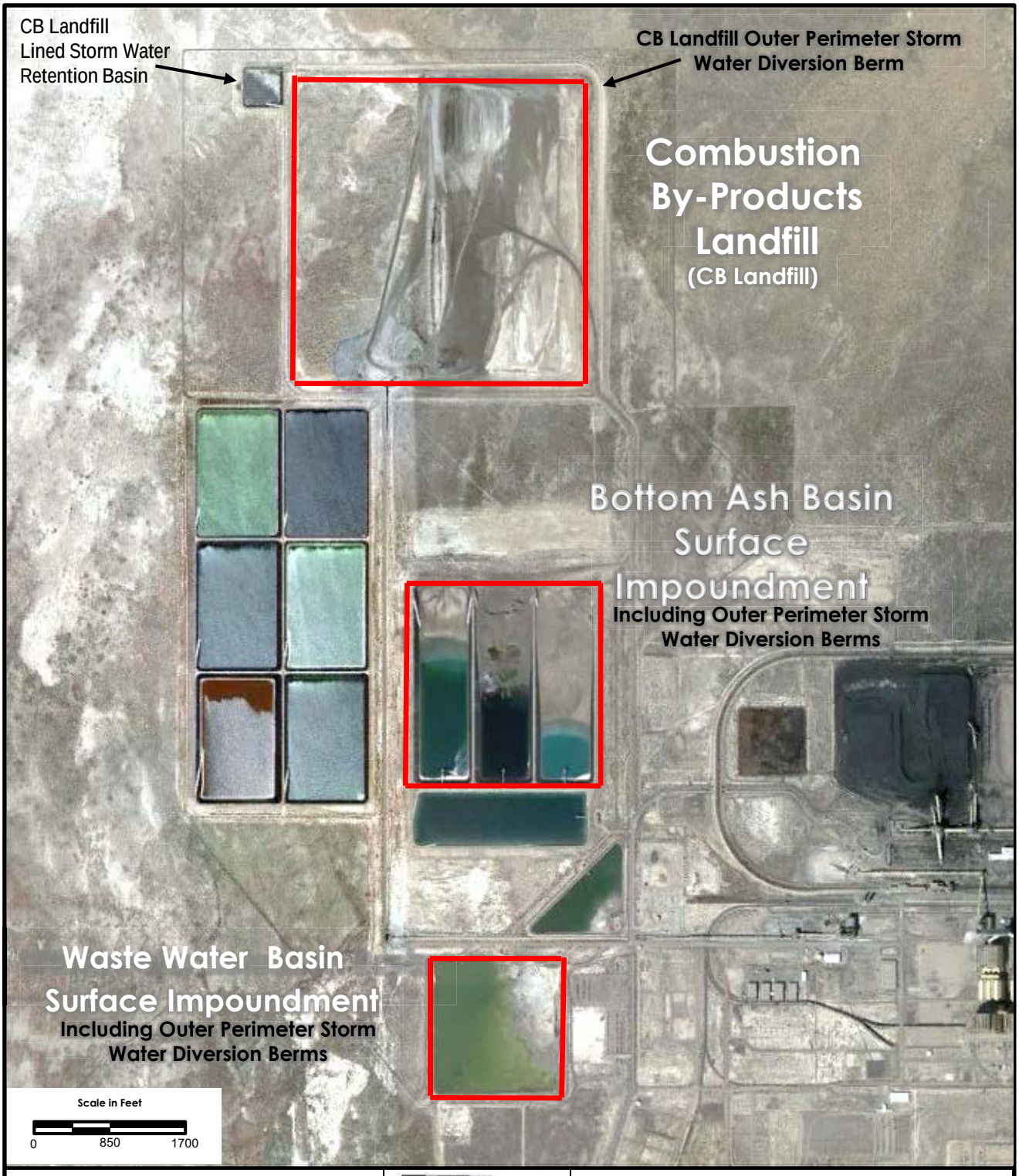
FIGURE 1
SITE TOPOGRAHIC MAP

Stantec

DESIGN BY	DRAWN BY	CH'D BY	SCALE	DATE DRAWN	REVISION
JR	CP		1"=1000'	1-26-17	

drawings\ipsc-04\Fig2 Site Topographic Map.dwg

Figure 2. CCR Units Location Map



Legend

CCR Unit

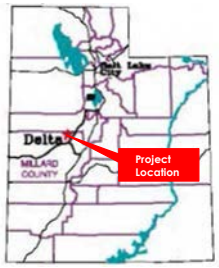


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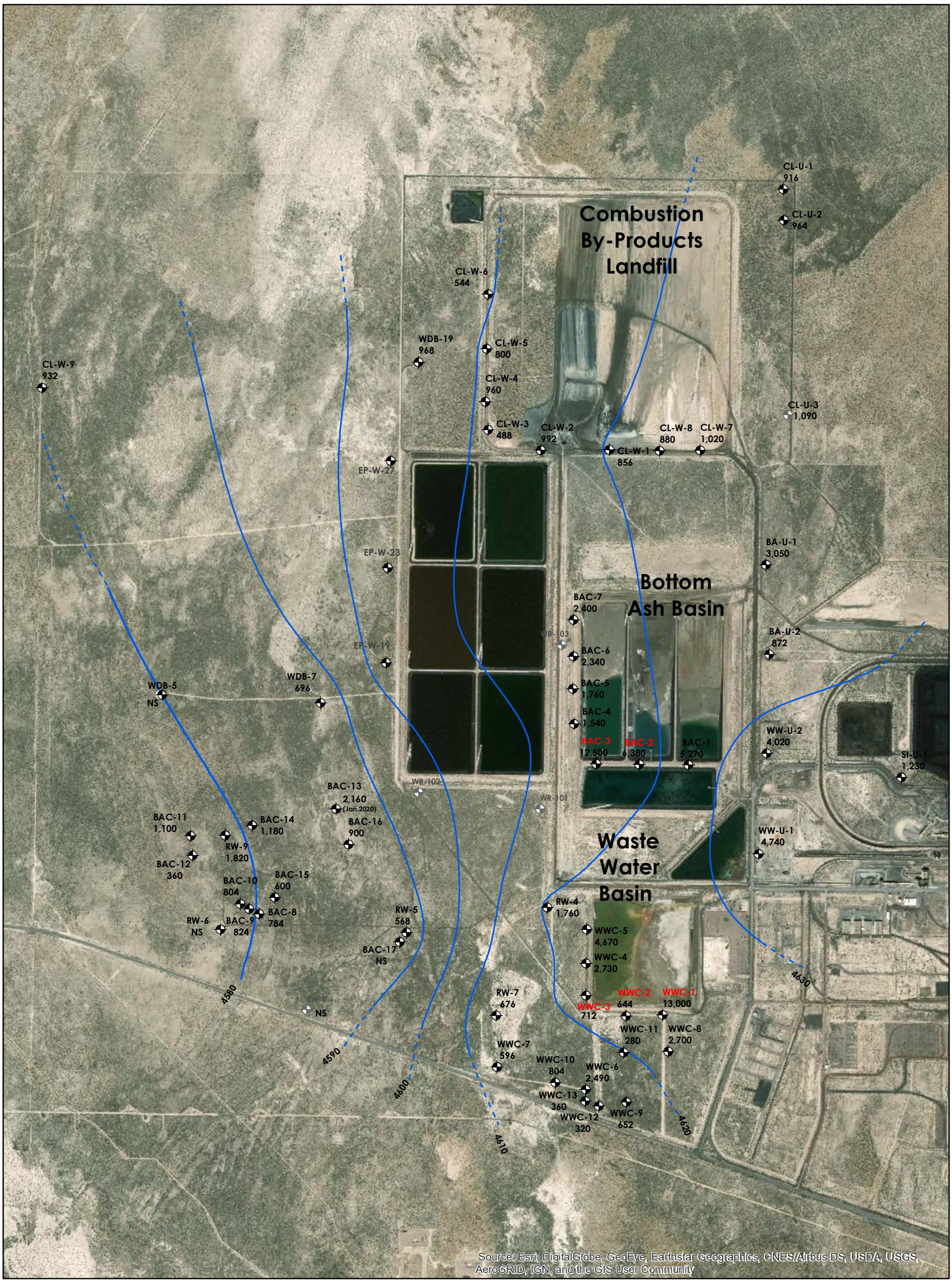
FIGURE 2
Site-Specific Location Map

Stantec

DRAWN BY: JR	DATE DRAWN: 9/30/2016
SCALE: 1 in. approx. 1700 ft.	
PROJECT: 203709098.409	

Figure 3. Potentiometric Map, TDS, and Appendix IV Exceedances, April 2020

C:\Users\ckwiatkowski\Desktop\203709098 Intermountain Power\GIS\2020_04\fig04_March2020GWE_DeltaUT_20200413_11x17.mxd



LEGEND:

- MONITORING WELL (GREYED WHEN NOT USED FOR CONTOURING)
- 600 Total Dissolved Solids (TDS) Concentration in milligrams per liter; mg/L
- GROUNDWATER CONTOUR, mean sea level elevations
- NS NOT SAMPLED

NOTES: ALL ELEVATIONS ARE FEET ABOVE MEAN SEA LEVEL

Appendix IV Metal Constituent Exceedances:

CCR Unit	Well	CCR Constituent	Lower Confidence Limit (LCL) Concentration	Groundwater Protection Standard (GWPS) Concentration
Bottom Ash Basin	BAC-2	Molybdenum	0.1506	0.1
	BAC-3	Lithium	0.812	0.7415
Waste Water Basin	WWC-1	Arsenic	0.01496	0.01275
	WWC-2	Arsenic	0.01415	0.01275
	WWC-3	Arsenic	0.02045	0.01275

Metal concentrations in mg/L

0 1,300 2,600
Feet
1 in = 1,300 ft

Stantec

FOR:
INTERMOUNTAIN POWER SERVICE CORP.
INTERMOUNTAIN GENERATION FACILITY
DELTA, UTAH

APRIL 2020 TDS CONCENTRATIONS and Appendix IV Metal GWPS Exceedances
SUPERIMPOSED ON MARCH 2020 POTENTIOMETRIC MAP

FIGURE: 3

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
203709098	CK	ALL	JR	05/04/20

Figure 4. Locations of 25 Newly-Installed, Developed, and Pump-Tested Wells (Spring and Summer 2020)

Legend

Monitoring Well

1,100 Total Dissolved Solids (TDS) Concentration in milligrams per liter; mg/L; RED if > greater than Groundwater Discharge Permit Action Level of 1,100 mg/L

NS - Not Sampled in April 2020

NI - Not Installed as of April 2020

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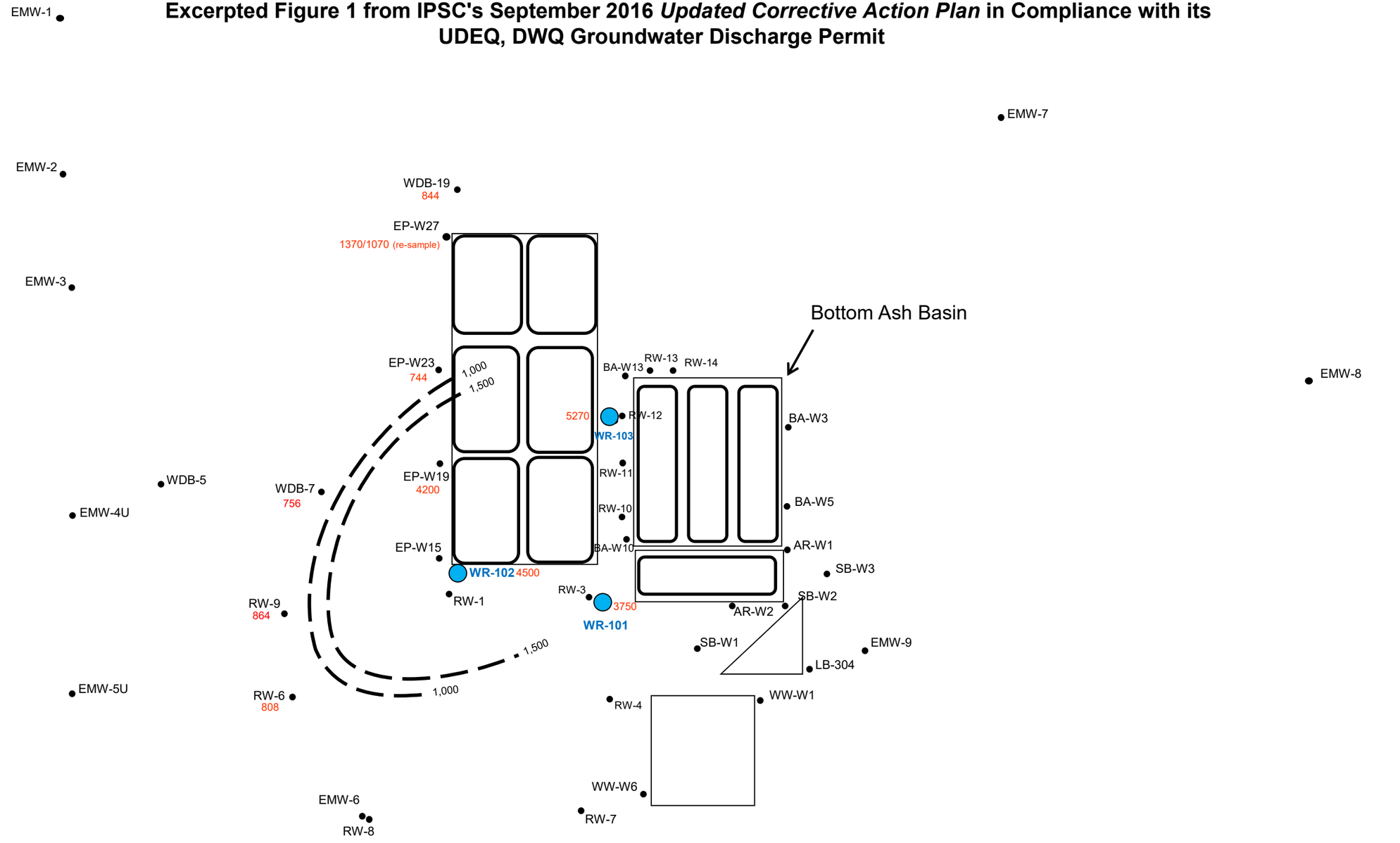
Figure **4**

25 New Wells Installed, Developed, and Surveyed During Summer 2020 with April 2020 TDS Concentrations

Figure 5 Assemblage. Figures Excerpted from IPSC's 2016 Corrective Action Plan Report associated with Compliance with Its Groundwater Discharge Permit

FIGURE 5-1.

Excerpted Figure 1 from IPSC's September 2016 *Updated Corrective Action Plan* in Compliance with its UDEQ, DWQ Groundwater Discharge Permit



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INTERMOUNTAIN GENERATING FACILITY

850 WEST BRUSH WELLMAN ROAD - DELTA, MILLARD COUNTY, UTAH

Figure 1 – GROUND WATER TDS ISO-CONCENTRATION MAP, APRIL 2016

LEGEND

- Monitoring Well Location
- Existing Recovery Well Location
- 5 - Total Dissolved Solids (TDS) Iso-Concentration Contours

Concentration values in milligrams / liter (ppm)

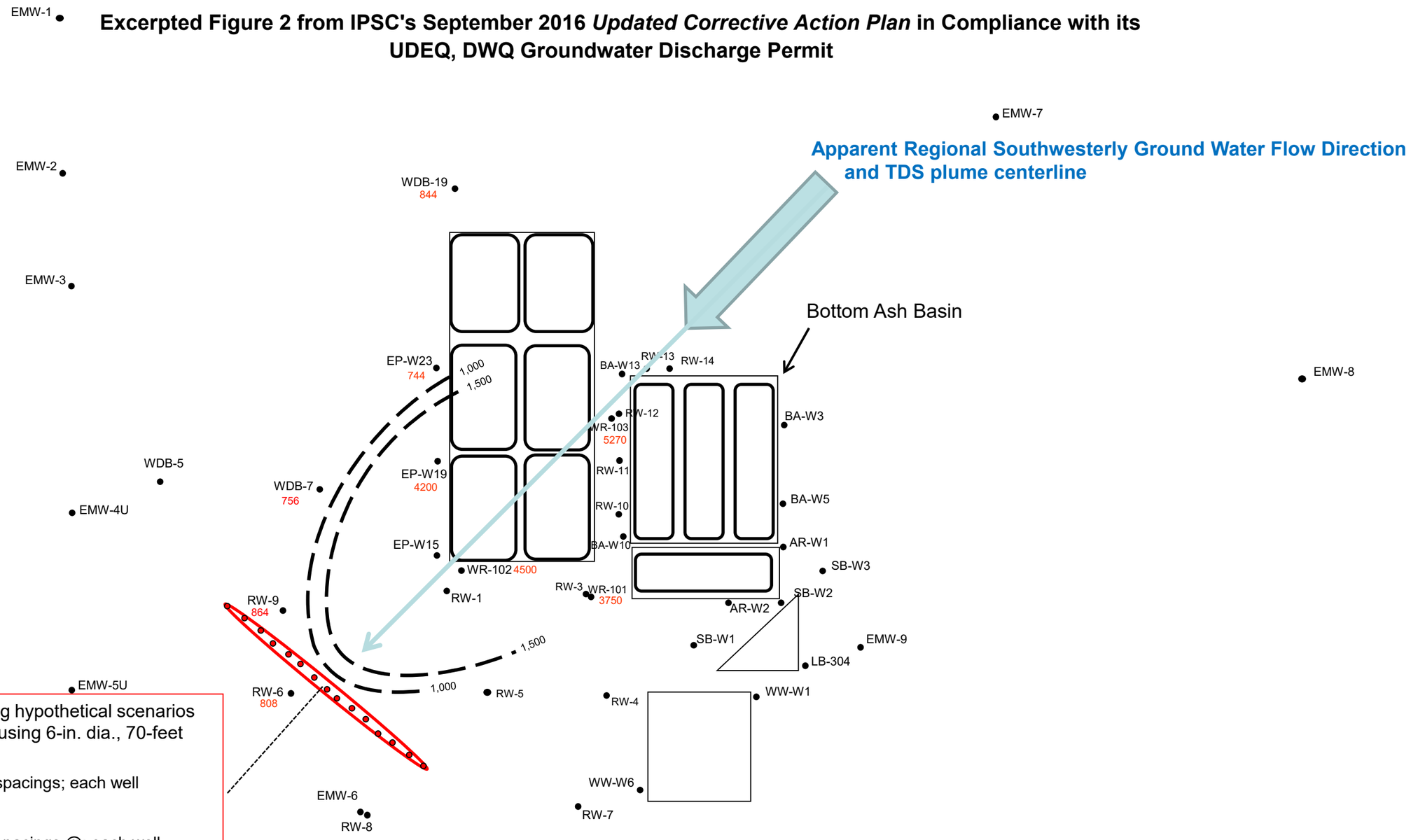
0 FEET 2000

SCALE

N

FIGURE 5-2.

Excerpted Figure 2 from IPSC's September 2016 *Updated Corrective Action Plan* in Compliance with its UDEQ, DWQ Groundwater Discharge Permit



Model estimates the following hypothetical scenarios for intercepting TDS plume, using 6-in. dia., 70-feet deep recovery wells:

- 15 wells @ ~ 188-ft. lateral spacings; each well producing @ 15 gpm

to

- 19 wells @ ~ 146-ft. lateral spacings @; each well producing @ 10 gpm

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INTERMOUNTAIN GENERATING FACILITY

850 WEST BRUSH WELLMAN ROAD - DELTA, MILLARD COUNTY, UTAH

Figure 2. Model-Simulated, Recovery Well Placement for TDS Plume Containment

LEGEND

- Monitoring Well Location
- 5 - Total Dissolved Solids (TDS) Iso-Concentration Contours

Concentration values in milligrams / liter (ppm) ; April 2016

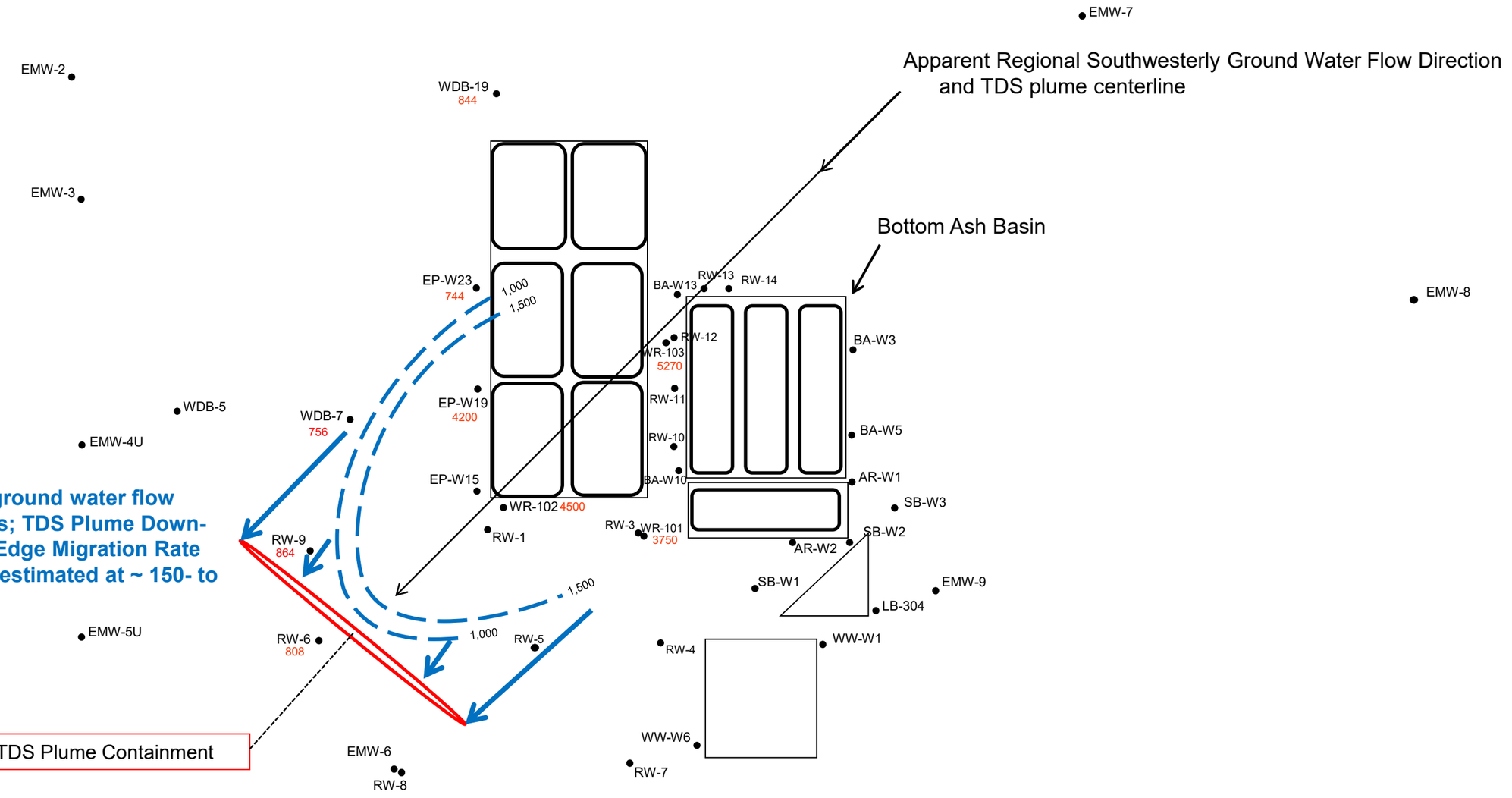
0 FEET 2000

SCALE

N

FIGURE 5-3.

Excerpted Figure 3 from IPSC's September 2016 *Updated Corrective Action Plan* in Compliance with its UDEQ, DWQ Groundwater Discharge Permit



GROUND WATER TDS ISO-CONCENTRATION MAP, **APRIL 2016**

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INTERMOUNTAIN GENERATING FACILITY

850 WEST BRUSH WELLMAN ROAD - DELTA, MILLARD COUNTY, UTAH

Figure 3. Model-Simulated, Ground Water Flow Paths, Particle-Tracking

LEGEND

- Monitoring Well Location
- 5 - Total Dissolved Solids (TDS) Iso-Concentration Contours

Concentration values in milligrams / liter (ppm)

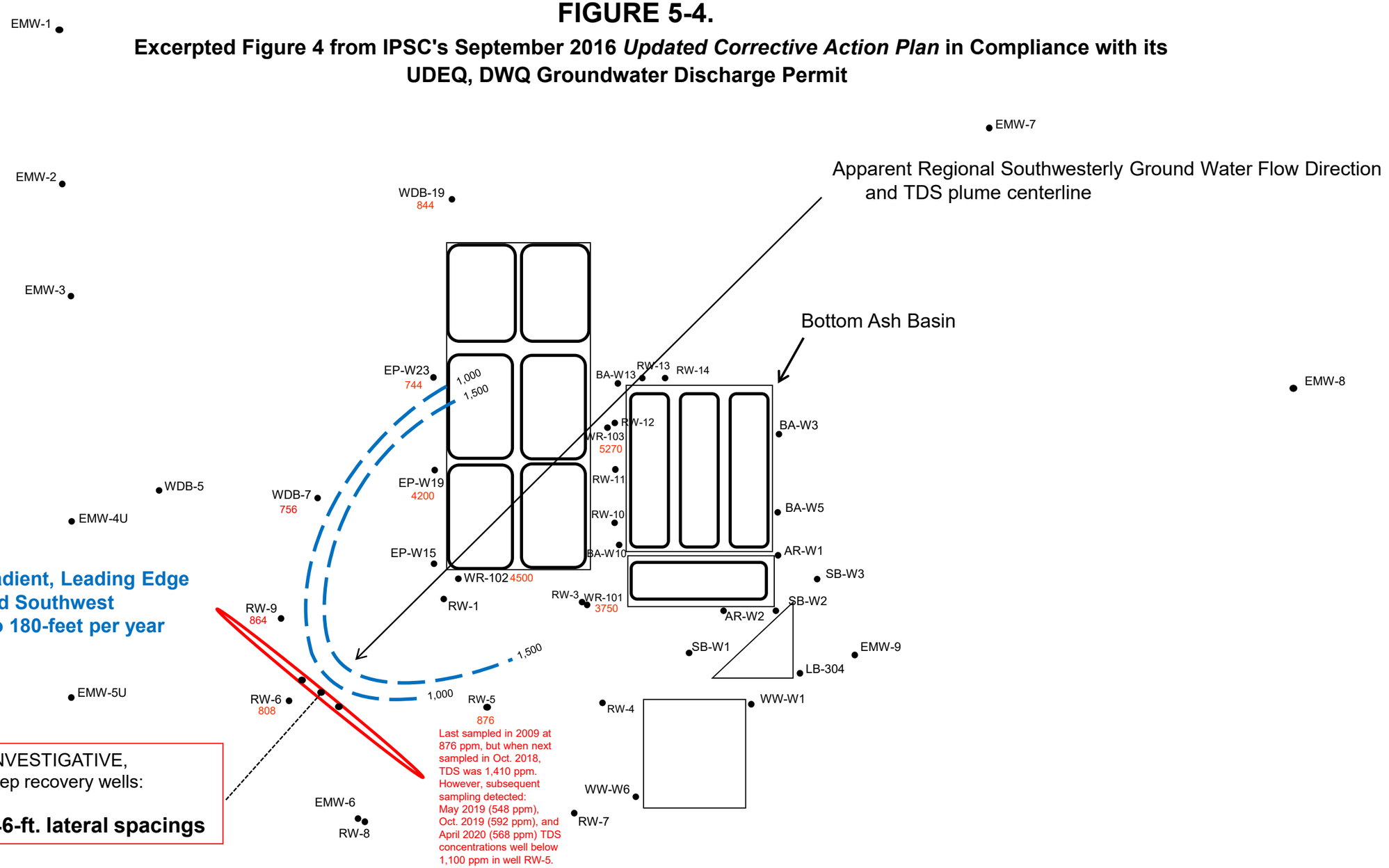
0 FEET 2000

SCALE

N

FIGURE 5-4.

Excerpted Figure 4 from IPSC's September 2016 *Updated Corrective Action Plan* in Compliance with its UDEQ, DWQ Groundwater Discharge Permit



Stantec

INTERMOUNTAIN GENERATING FACILITY

850 WEST BRUSH WELLMAN ROAD - DELTA, MILLARD COUNTY, UTAH

Figure 4. Proposed Preliminary Investigative, Recovery Well Locations

LEGEND

- Monitoring Well Location
- 5 - Total Dissolved Solids (TDS) Iso-Concentration Contours

Concentration values in milligrams / liter (ppm)

0 FEET 2000

SCALE

N

TABLE 1 GROUND WATER MONITORING WELL CONSTRUCTION DETAILS

Table 1
Well Construction Summary
Intermountain Generating Facility
Delta, Utah

MONITOR WELL I.D.	DATE COMPLETED	WELL DIAMETER / MATERIAL	TOTAL DEPTH (feet BGS)	WELL SCREENING INTERVAL (feet BGS)	TOP OF PVC CASING ELEVATION (feet MSL)
Combustion By-Products Landfill Wells					
CLW-1	5/12/2015	4-inch PVC	65	55-65	4653.46
CLW-2	5/14/2015	4-inch PVC	80	70-80	4648.17
CLW-3	5/13/2015	4-inch PVC	80	70-80	4644.03
CLW-4	5/26/2015	4-inch PVC	82	72-82	4642.88
CLW-5	7/27/2015	4-inch PVC	82	72-82	4640.99
CLW-6	7/26/2015	4-inch PVC	88	78-88	4639.63
CLW-7	7/24/2015	4-inch PVC	72	52-72	4659.34
CLW-8	7/24/2015	4-inch PVC	72	62-72	4655.63
CLW-9	3/25/2018	4-inch PVC	97	87-97	4615.615
CL-U-1	7/23/2015	4-inch PVC	80	68-78	4657.48
CL-U-2	7/22/2015	4-inch PVC	80	70-80	4663.48
CL-U-3	3/27/2018	4-inch PVC	77	67-77	4665.367
Bottom Ash Basin Wells					
BAC-1	7/31/2015	4-inch PVC	70	60-70	4668.70
BAC-2	7/29/2015	4-inch PVC	65	55-65	4668.72
BAC-3	7/28/2015	4-inch PVC	72	52-72	4668.84
BAC-4	8/10/2015	4-inch PVC	75	55-75	4649.45
BAC-5	8/9/2015	4-inch PVC	68	58-68	4649.67
BAC-6	8/8/2015	4-inch PVC	65	55-65	4648.15
BAC-7	8/7/2015	4-inch PVC	67	57-68	4650.09
BAC-8	4/29/2019	6-inch PVC	77	52-77	4626.42
BAC-9	5/1/2019	6-inch PVC	77	52-77	4626.27
BAC-10	5/3/2019	6-inch PVC	87	62-87	4626.27
BAC-11	12/7/2019	6-inch PVC	75	50-75	4624.96
BAC-12	12/6/2019	6-inch PVC	78	53-78	4625.055
BAC-13	11/18/2019	6-inch PVC	90	65-90	4629.834
BAC-14	12/4/2019	6-inch PVC	78	53-78	4627.506
BAC-15	12/9/2019	6-inch PVC	75	50-75	4626.494
BAC-16	11/21/2019	6-inch PVC	89	64-89	4630.426

Table 1
Well Construction Summary
Intermountain Generating Facility
Delta, Utah

MONITOR WELL I.D.	DATE COMPLETED	WELL DIAMETER / MATERIAL	TOTAL DEPTH (feet BGS)	WELL SCREENING INTERVAL (feet BGS)	TOP OF PVC CASING ELEVATION (feet MSL)
BAC-17	12/10/2019	6-inch PVC	81	56-81	4629.648
BAC-18	5/8/2020	6-inch PVC	78	53-78	4621.504
BAC-19	5/9/2020	6-inch PVC	78	58-78	4615.62
BAC-20	5/9/202	6-inch PVC	78	53-78	4617.848
BAC-21	5/10/2020	6-inch PVC	88	61-88	4619.625
BAC-22	5/10/2020	6-inch PVC	78	53-78	4619.905
BAC-23	5/11/2020	6-inch PVC	78	53-78	4619.582
BAC-24	5/12/2020	6-inch PVC	76	51-76	4619.207
BAC-25	5/12/2020	6-inch PVC	78	53-78	4619.327
BAC-26	5/13/2020	6-inch PVC	78	53-78	4627.704
BAC-27	5/13/2020	6-inch PVC	78	53-78	4627.355
BAC-28	5/14/2020	6-inch PVC	78	53-78	4625.411
BAC-29	5/15/2020	6-inch PVC	78	53-78	4625.29
BAC-30	5/142020	6-inch PVC	78	53-78	4624.88
BAC-31	5/15/2020	6-inch PVC	78	53-78	4625.024
BAC-32	5/192020	6-inch PVC	78	53-78	4626.583
BAC-33	5/18/2020	6-inch PVC	78	53-78	4626.629
BAC-34	5/21/2020	6-inch PVC	78	53-78	4624.702
BAC-35	5/282020	6-inch PVC	78	53-78	4624.805
BAC-36	5/30/2020	6-inch PVC	78	53-78	4619.231
BAC-37	5/29/2020	6-inch PVC	78	53-78	4618.397
BAC-38	5/31/2020	6-inch PVC	78	53-78	4619.593
BA-U-1	7/24/2015	4-inch PVC	55	45-55	4665.73
BA-U-2	7/25/2015	4-inch PVC	70	60-70	4661.33

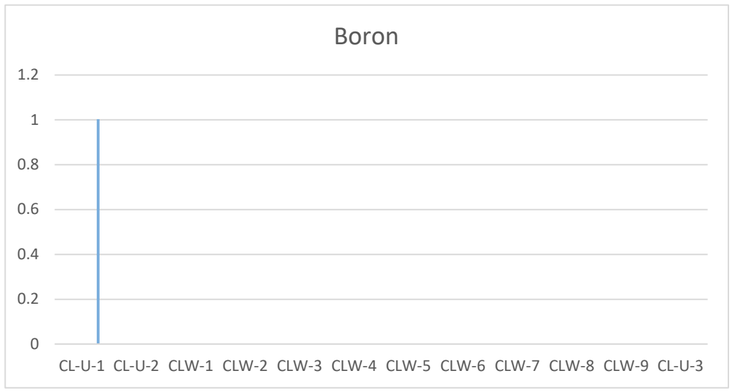
Table 1
Well Construction Summary
Intermountain Generating Facility
Delta, Utah

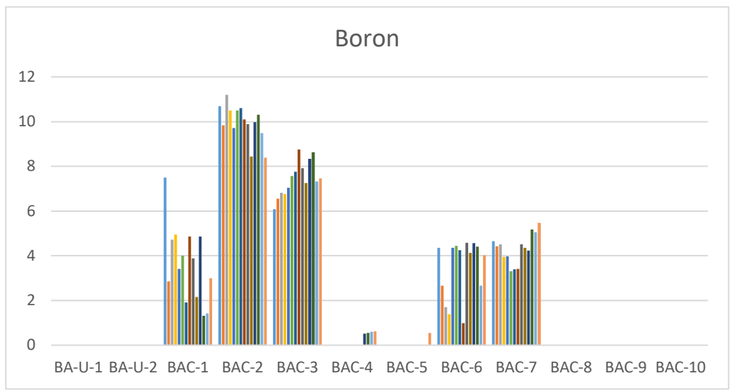
MONITOR WELL I.D.	DATE COMPLETED	WELL DIAMETER / MATERIAL	TOTAL DEPTH (feet BGS)	WELL SCREENING INTERVAL (feet BGS)	TOP OF PVC CASING ELEVATION (feet MSL)
Wastewater Basin Wells					
WWC-1	7/26/2015	4-inch PVC	60	48-58	4644.72
WWC-2	7/27/2015	4-inch PVC	70	60-70	4645.11
WWC-3	7/30/2015	4-inch PVC	65	55-65	4638.90
WWC-4	7/29/2015	4-inch PVC	75	65-75	4640.58
WWC-5	7/28/22015	4-inch PVC	74	64-74	4641.75
WWC-6	3/24/2018	4-inch PVC	87	67-77	4635.945
WWC-7	3/22/2018	4-inch PVC	87	77-87	4630.487
WWC-8	4/25/2019	6-inch PVC	96	71-96	4647.799
WWC-9	4/28/2019	6-inch PVC	87	62-87	4642.58
WWC-10	4/26/2019	6-inch PVC	87	62-87	4633.72
WWC-11	11/16/2019	6-inch PVC	90	65-90	4641.919
WWC-12	11/12/2019	6-inch PVC	90	65-90	4636.661
WWC-13	11/15/2019	6-inch PVC	90	65-90	4635.128
WWC-14	5/6/2020	6-inch PVC	85	60-85	4635.927
WWC-15	5/6/2020	6-inch PVC	88	63-88	4636.864
WWC-16	5/7/2020	6-inch PVC	88	63-88	4635.921
WWC-17	5/8/2020	6-inch PVC	88	63-88	4641.487
SI-U-1	8/12/2015	4-inch PVC	79	69-79	4664.59
WW-U-1	8/11/2015	4-inch PVC	70	60-70	4665.03
WW-U-2	8/11/2015	4-inch PVC	75	65-75	4665.46
Groundwater Discharge Permit Groundwater Recovery Wells					
WR-101	2/11/2007	6-inch PVC	66	46-66	4646.28
WR-102	3/3/2009	6-inch PVC	57	37-57	4637.62
WR-103	3/31/2009	6-inch PVC	55	35-55	4649.82

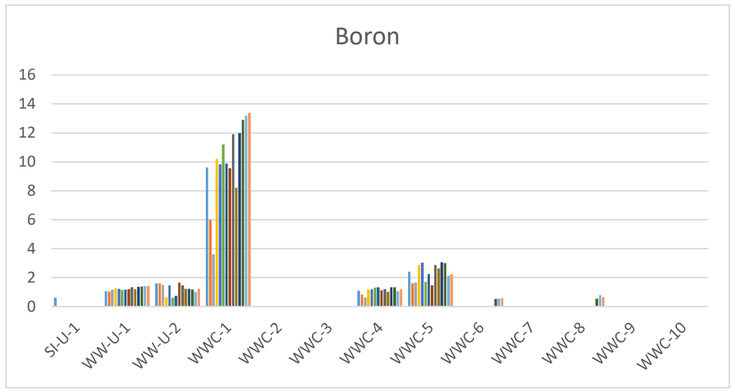
Below Ground Surface
MSL = Mean Sea Level

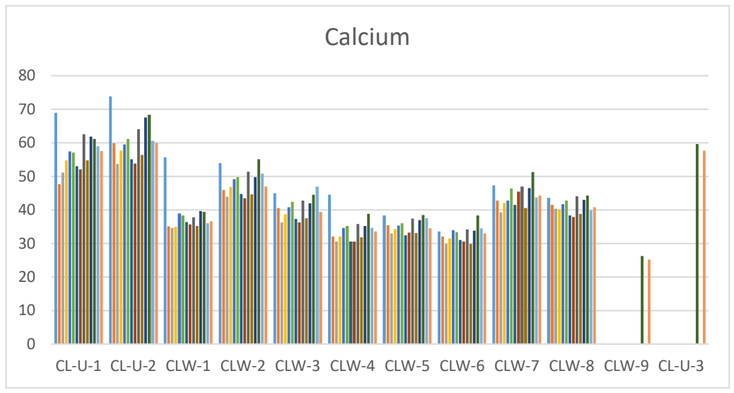
TABLE 2 GROUND WATER LEVEL MEASUREMENT AND WATER QUALITY ANALYTICAL RESULTS

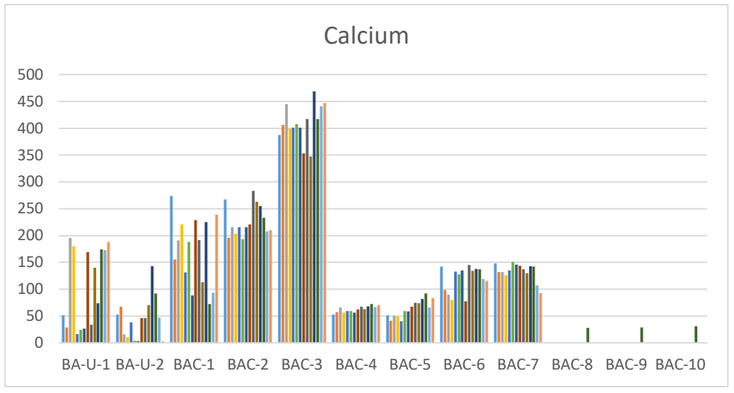
Appendix III (mg/L - pCi/L)

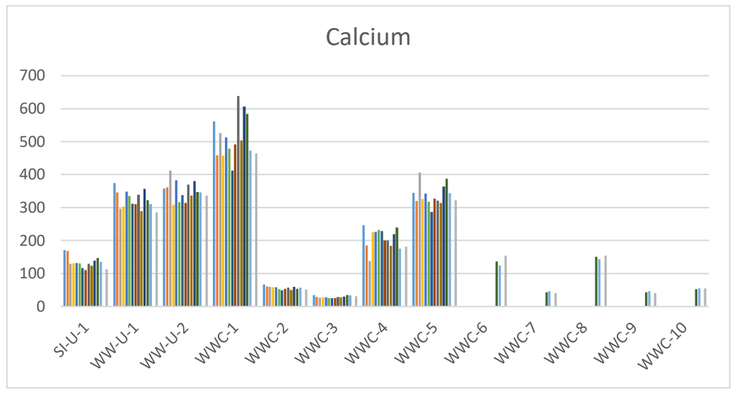


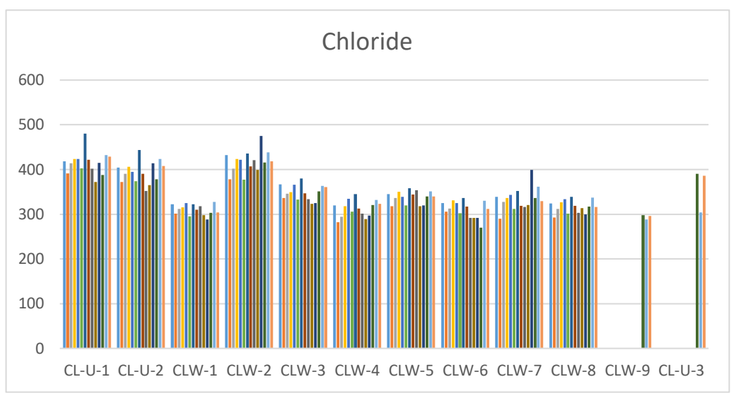


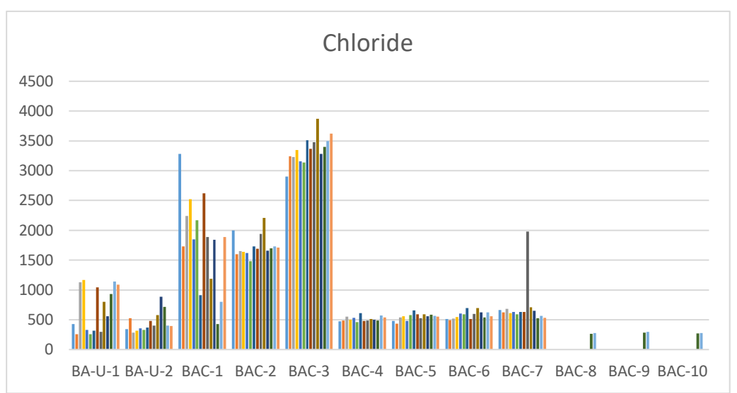


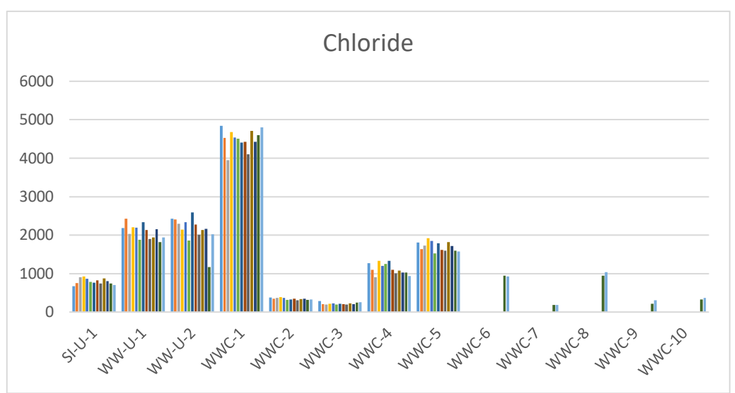


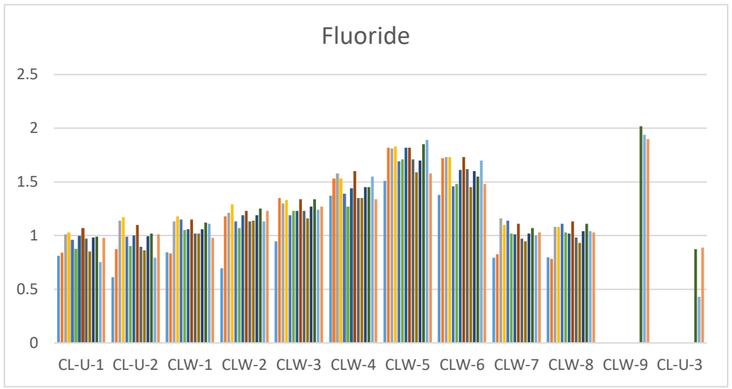


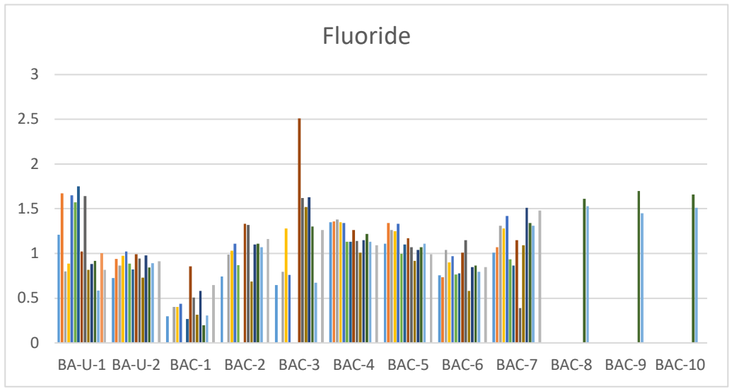


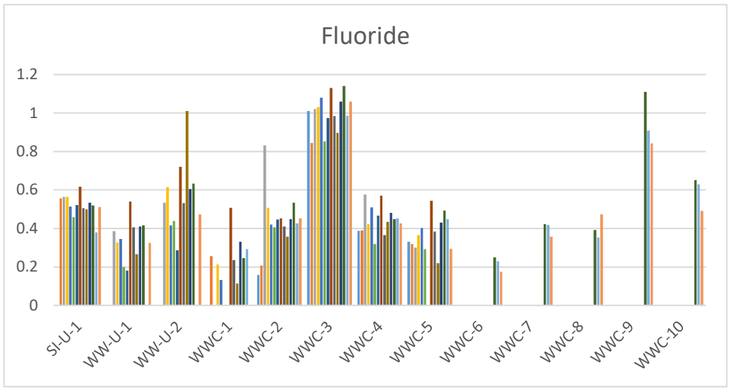




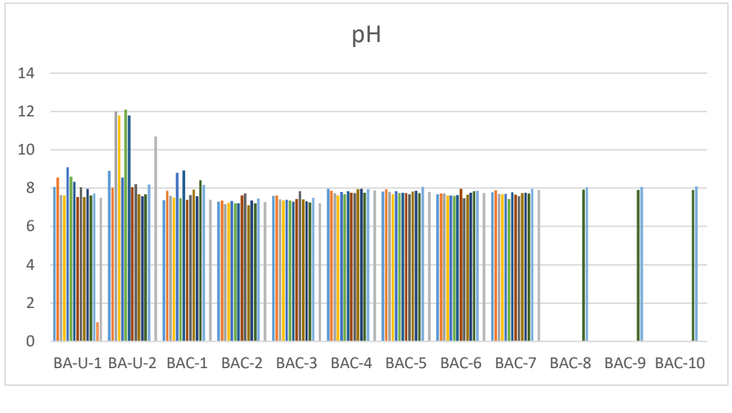


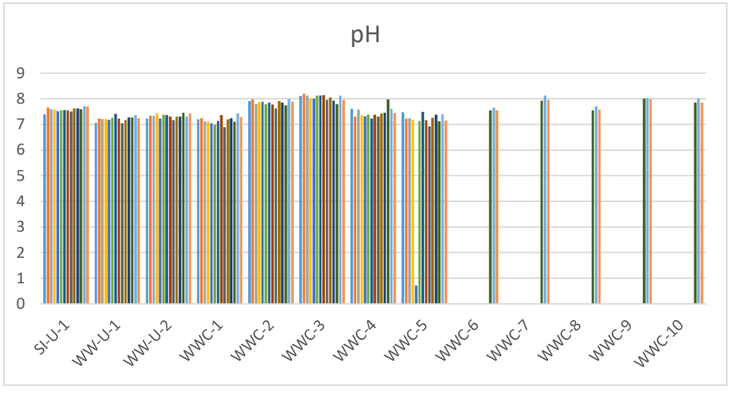

Fluoride
2.5
2
1.5
1
0.5
0
CL-U-1 CL-U-2 CLW-1 CLW-2 CLW-3 CLW-4 CLW-5 CLW-6 CLW-7 CLW-8 CLW-9 CL-U-3

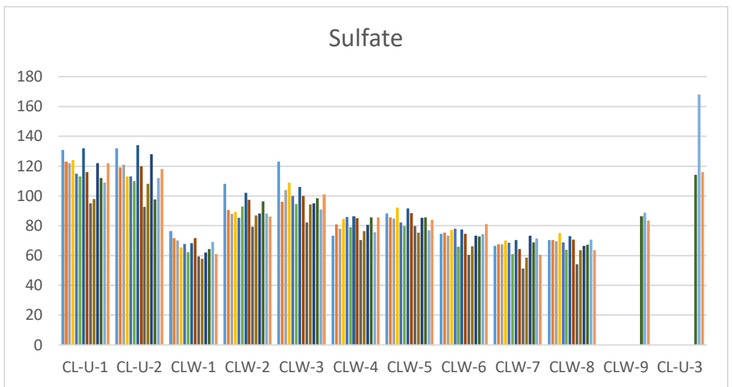

Fluoride
3
2.5
2
1.5
1
0.5
0
BA-U-1 BA-U-2 BAC-1 BAC-2 BAC-3 BAC-4 BAC-5 BAC-6 BAC-7 BAC-8 BAC-9 BAC-10

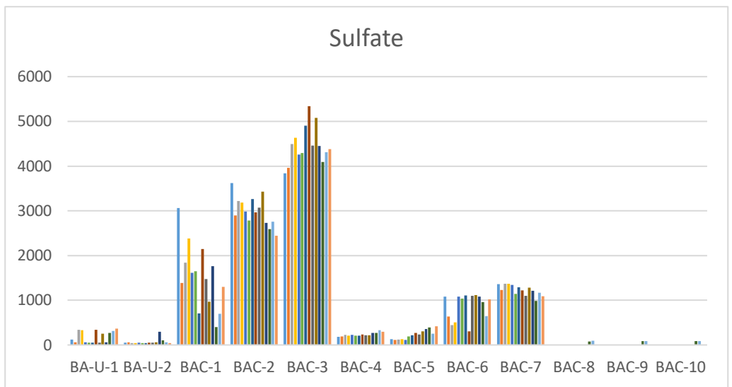

Fluoride
1.2
1
0.8
0.6
0.4
0.2
0
SI-U-1 WW-U-1 WW-U-2 WWC-1 WWC-2 WWC-3 WWC-4 WWC-5 WWC-6 WWC-7 WWC-8 WWC-9 WWC-10

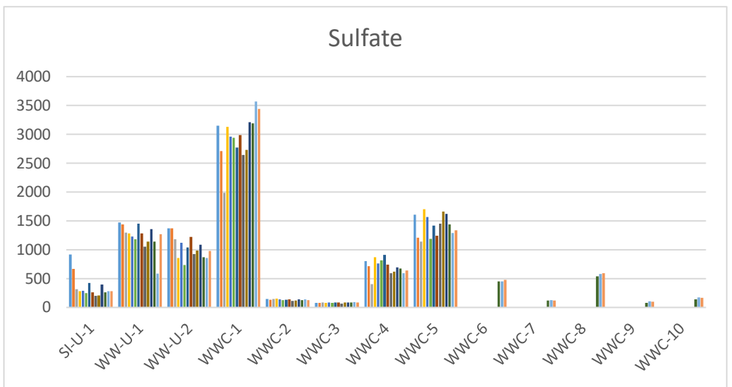

pH
9
8.8
8.6
8.4
8.2
8
7.8
7.6
7.4
7.2
7
6.8
CL-U-1 CL-U-2 CLW-1 CLW-2 CLW-3 CLW-4 CLW-5 CLW-6 CLW-7 CLW-8 CLW-9 CL-U-3

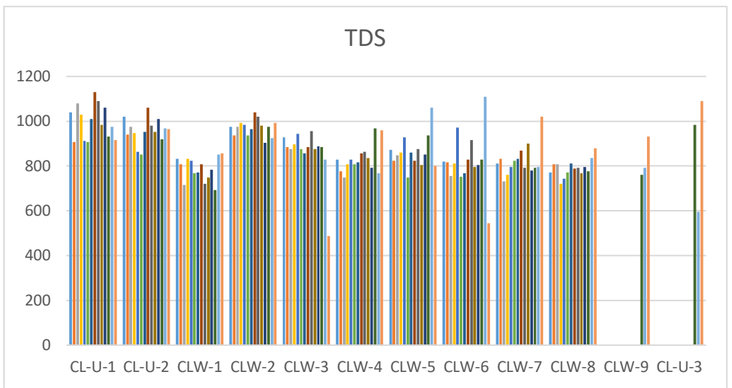

pH
14
12
10
8
6
4
2
0
BA-U-1 BA-U-2 BAC-1 BAC-2 BAC-3 BAC-4 BAC-5 BAC-6 BAC-7 BAC-8 BAC-9 BAC-10

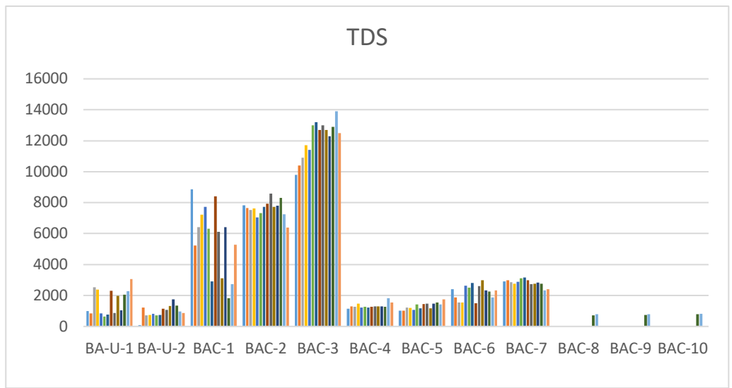

pH
9
8
7
6
5
4
3
2
1
0
SI-U-1 WW-U-1 WW-U-2 WWC-1 WWC-2 WWC-3 WWC-4 WWC-5 WWC-6 WWC-7 WWC-8 WWC-9 WWC-10

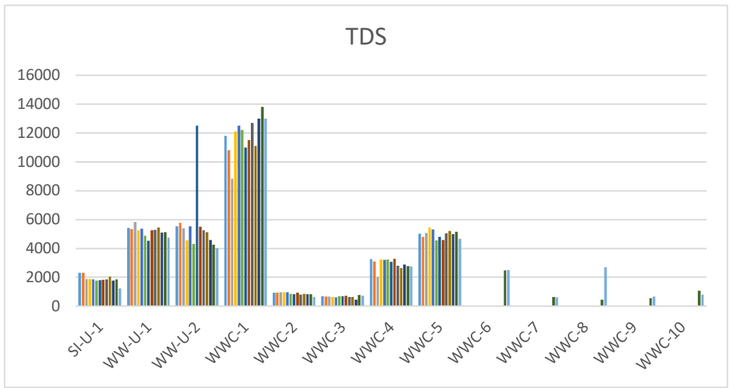

Sulfate
180
160
140
120
100
80
60
40
20
0
CL-U-1 CL-U-2 CLW-1 CLW-2 CLW-3 CLW-4 CLW-5 CLW-6 CLW-7 CLW-8 CLW-9 CL-U-3


Sulfate
6000
5000
4000
3000
2000
1000
0
BA-U-1 BA-U-2 BAC-1 BAC-2 BAC-3 BAC-4 BAC-5 BAC-6 BAC-7 BAC-8 BAC-9 BAC-10

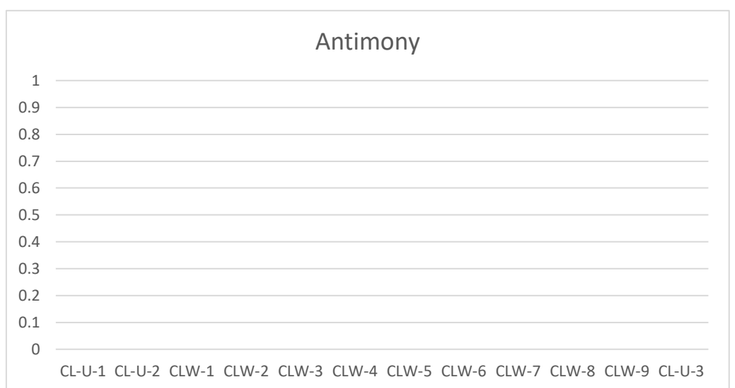

Sulfate
4000
3500
3000
2500
2000
1500
1000
500
0
SI-U-1 WW-U-1 WW-U-2 WWC-1 WWC-2 WWC-3 WWC-4 WWC-5 WWC-6 WWC-7 WWC-8 WWC-9 WWC-10

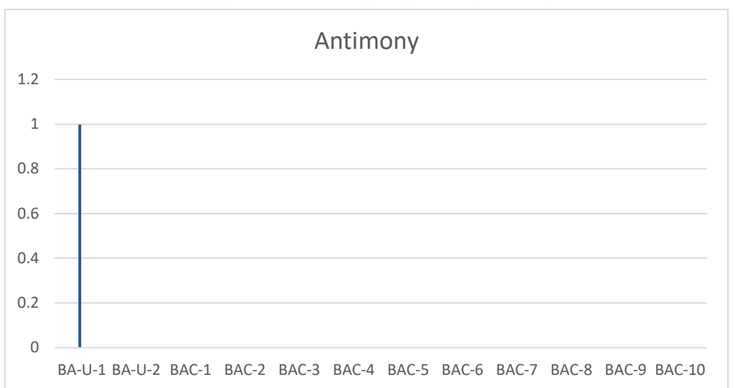

TDS
1200
1000
800
600
400
200
0
CL-U-1 CL-U-2 CLW-1 CLW-2 CLW-3 CLW-4 CLW-5 CLW-6 CLW-7 CLW-8 CLW-9 CL-U-3

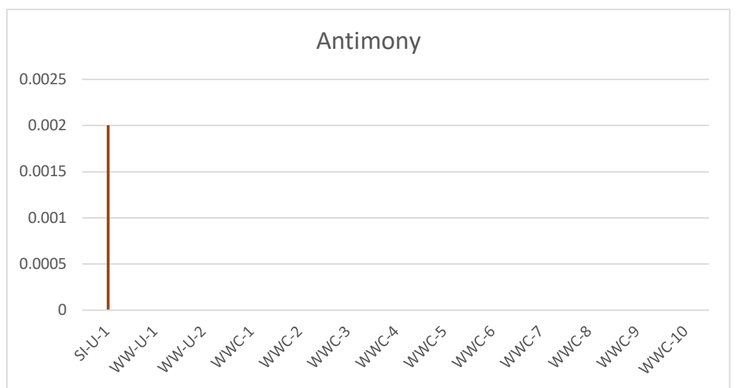

TDS
16000
14000
12000
10000
8000
6000
4000
2000
0
BA-U-1 BA-U-2 BAC-1 BAC-2 BAC-3 BAC-4 BAC-5 BAC-6 BAC-7 BAC-8 BAC-9 BAC-10

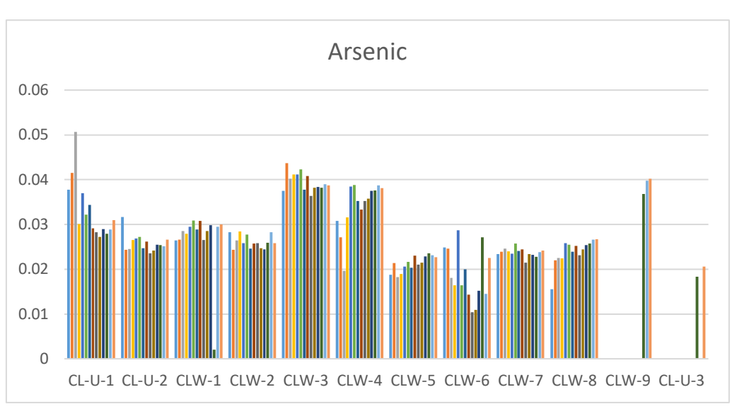

TDS
16000
14000
12000
10000
8000
6000
4000
2000
0
SI-U-1 WW-U-1 WW-U-2 WWC-1 WWC-2 WWC-3 WWC-4 WWC-5 WWC-6 WWC-7 WWC-8 WWC-9 WWC-10

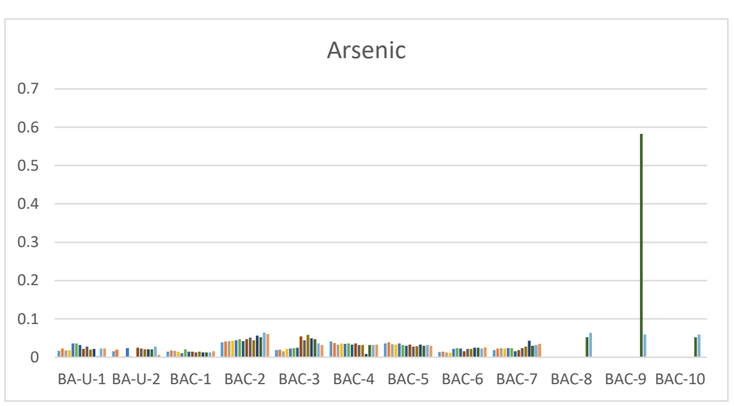
Appendix IV (mg/L - pCi/L)

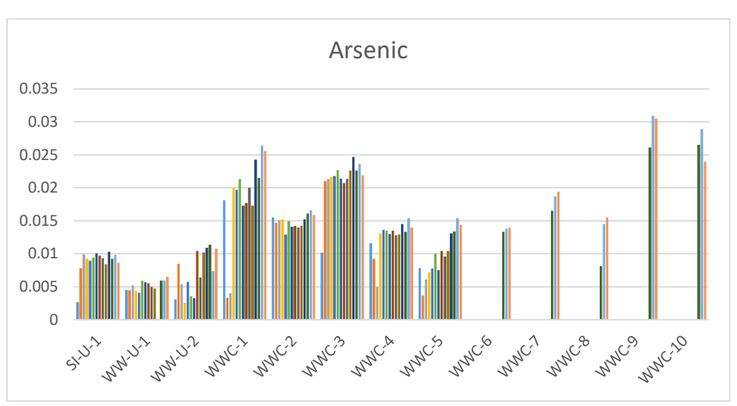


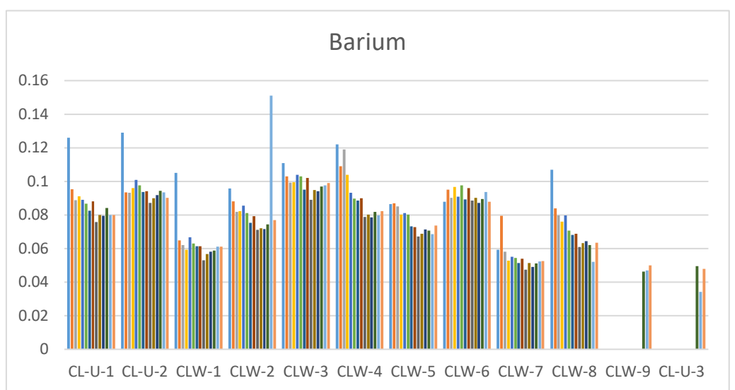


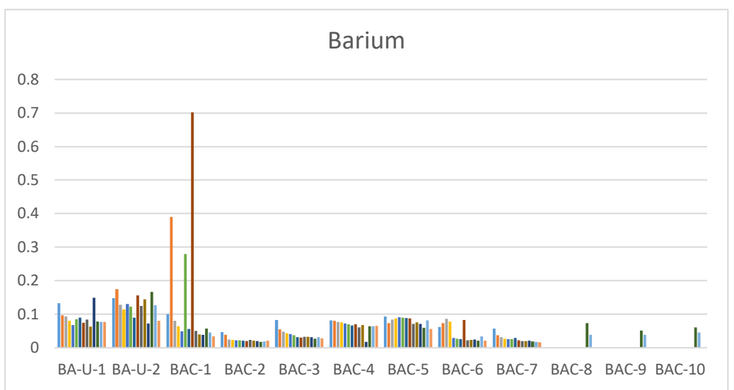


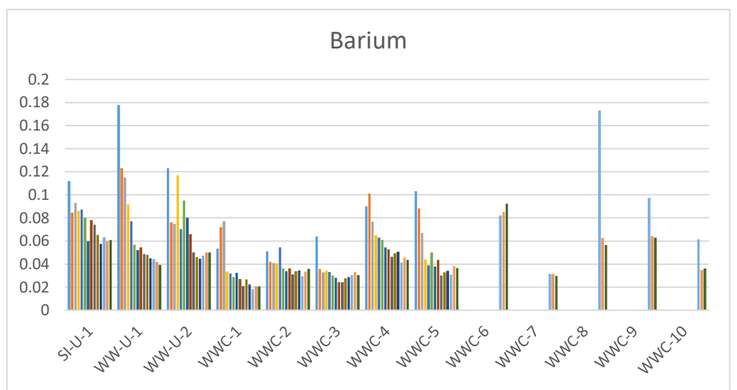


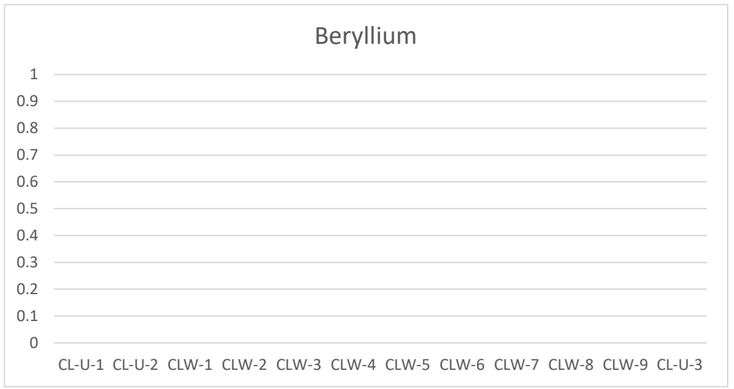


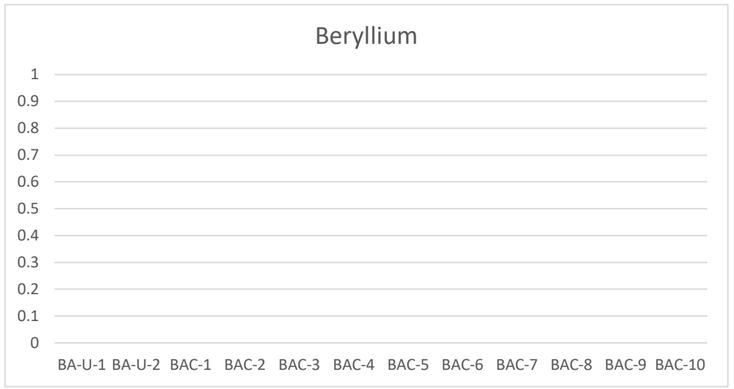


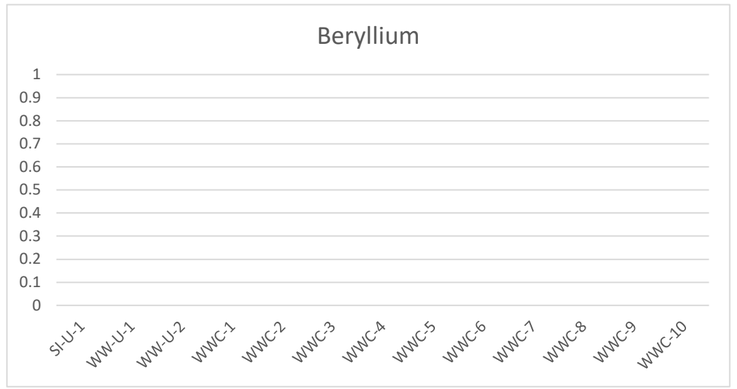


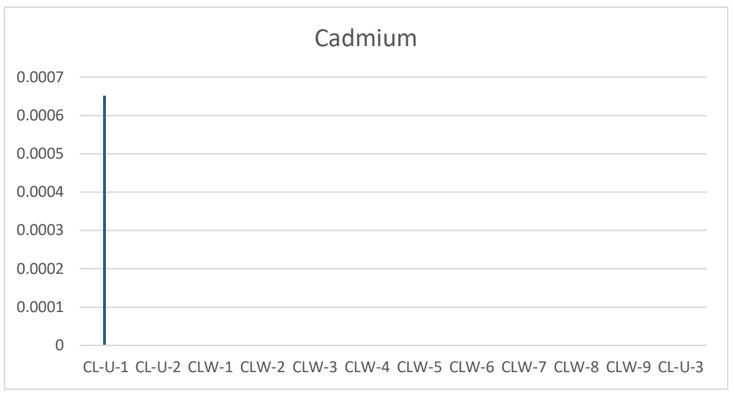


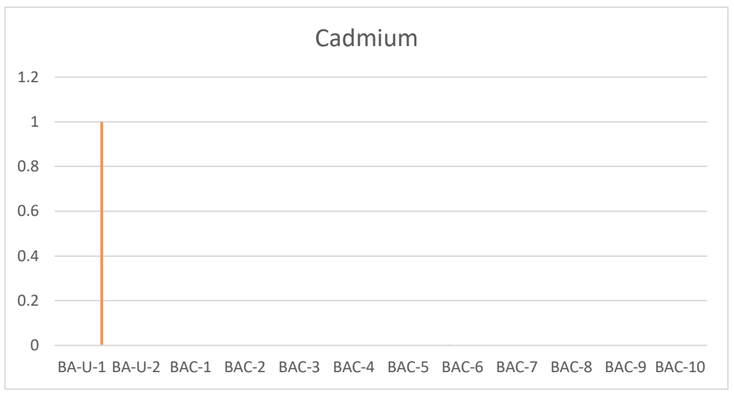


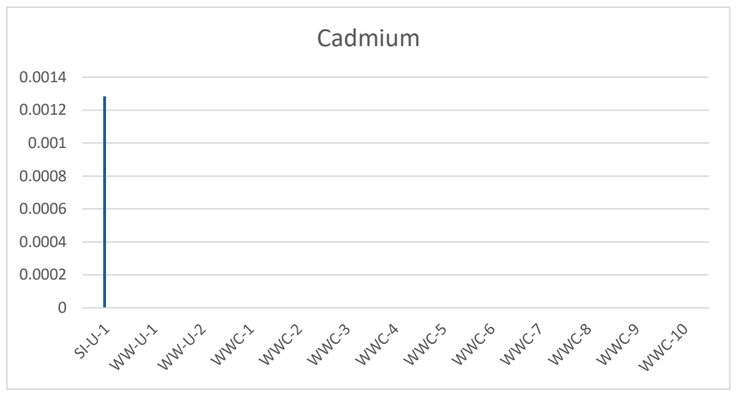

Beryllium
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
CL-U-1 CL-U-2 CLW-1 CLW-2 CLW-3 CLW-4 CLW-5 CLW-6 CLW-7 CLW-8 CLW-9 CL-U-3

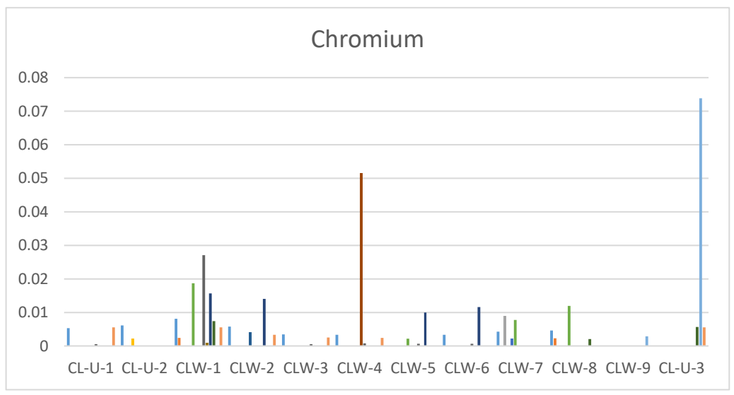

Beryllium
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
BA-U-1 BA-U-2 BAC-1 BAC-2 BAC-3 BAC-4 BAC-5 BAC-6 BAC-7 BAC-8 BAC-9 BAC-10

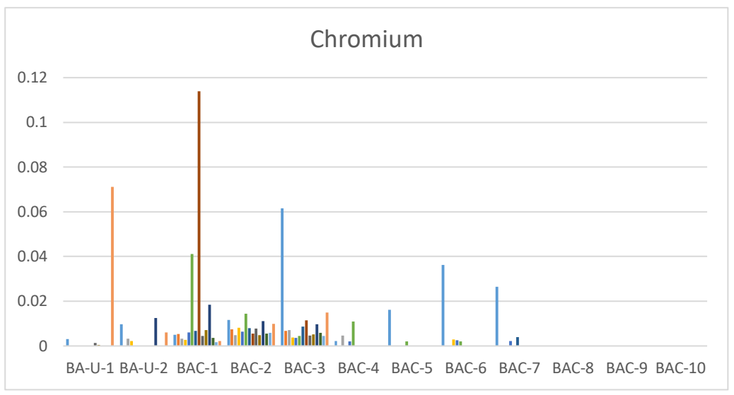

Beryllium
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
SI-U-1
WW-U-1
WW-U-2
WWC-1
WWC-2
WWC-3
WWC-4
WWC-5
WWC-6
WWC-7
WWC-8
WWC-9
WWC-10

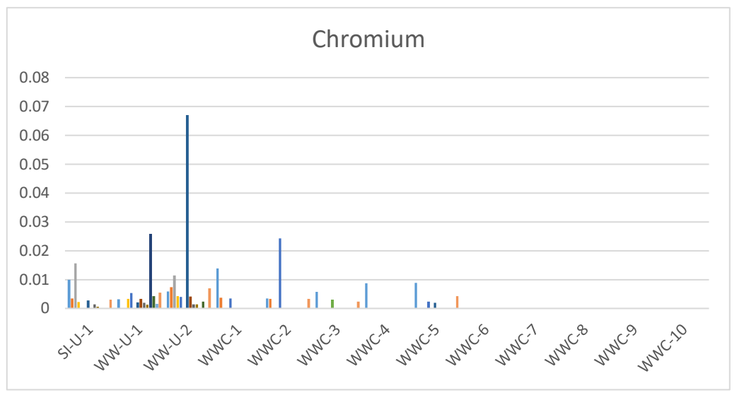

Cadmium
0.0007
0.0006
0.0005
0.0004
0.0003
0.0002
0.0001
0
CL-U-1 CL-U-2 CLW-1 CLW-2 CLW-3 CLW-4 CLW-5 CLW-6 CLW-7 CLW-8 CLW-9 CL-U-3


Cadmium
1.2
1
0.8
0.6
0.4
0.2
0
BA-U-1 BA-U-2 BAC-1 BAC-2 BAC-3 BAC-4 BAC-5 BAC-6 BAC-7 BAC-8 BAC-9 BAC-10

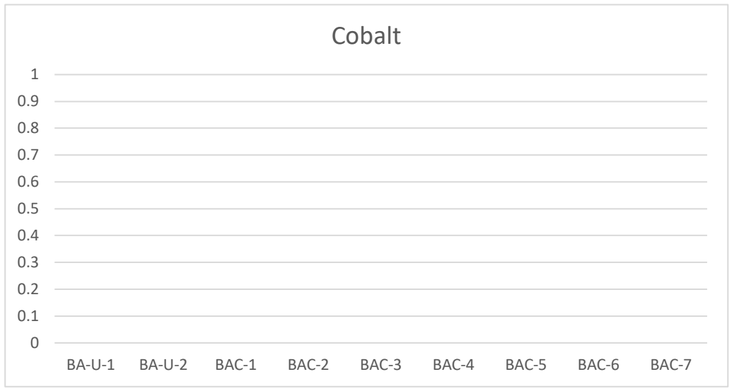

Cadmium
0.0014
0.0012
0.001
0.0008
0.0006
0.0004
0.0002
0
SI-U-1
WW-U-1
WW-U-2
WWC-1
WWC-2
WWC-3
WWC-4
WWC-5
WWC-6
WWC-7
WWC-8
WWC-9
WWC-10

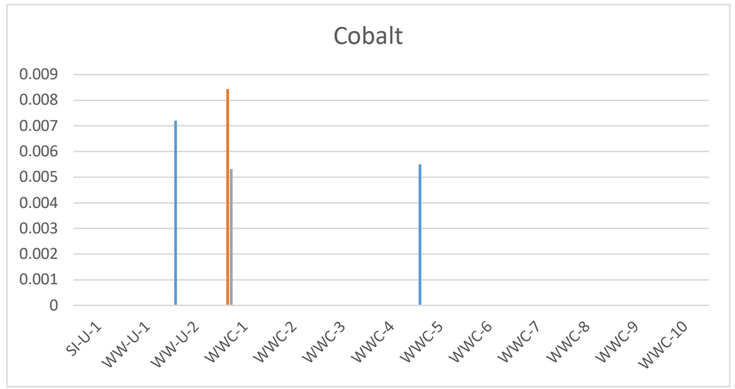

Chromium
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
CL-U-1 CL-U-2 CLW-1 CLW-2 CLW-3 CLW-4 CLW-5 CLW-6 CLW-7 CLW-8 CLW-9 CL-U-3

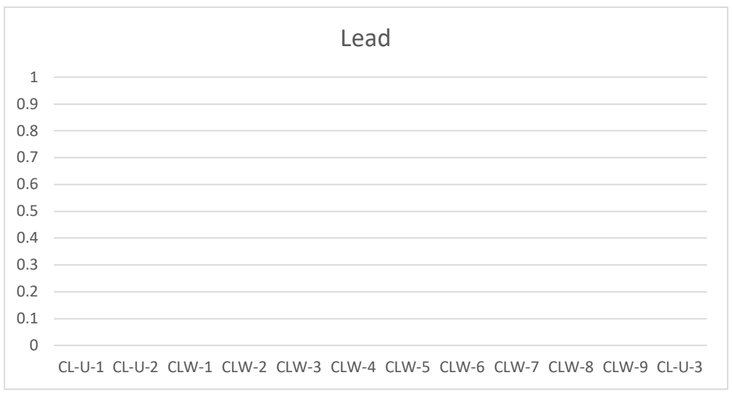

Chromium
0.12
0.1
0.08
0.06
0.04
0.02
0
BA-U-1 BA-U-2 BAC-1 BAC-2 BAC-3 BAC-4 BAC-5 BAC-6 BAC-7 BAC-8 BAC-9 BAC-10

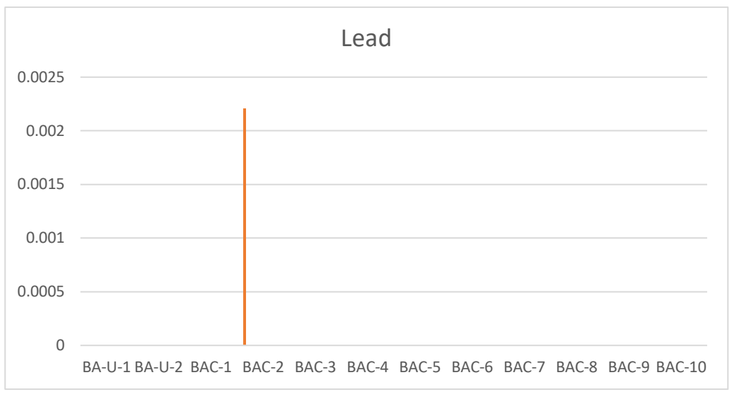

Chromium
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
SI-U-1
WW-U-1
WW-U-2
WWC-1
WWC-2
WWC-3
WWC-4
WWC-5
WWC-6
WWC-7
WWC-8
WWC-9
WWC-10

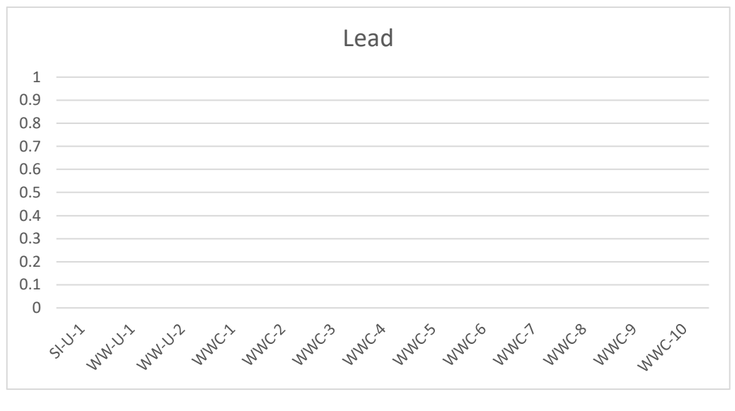

Cobalt
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
CL-U-1 CL-U-2 CLW-1 CLW-2 CLW-3 CLW-4 CLW-5 CLW-6 CLW-7 CLW-8 CLW-9 CL-U-3

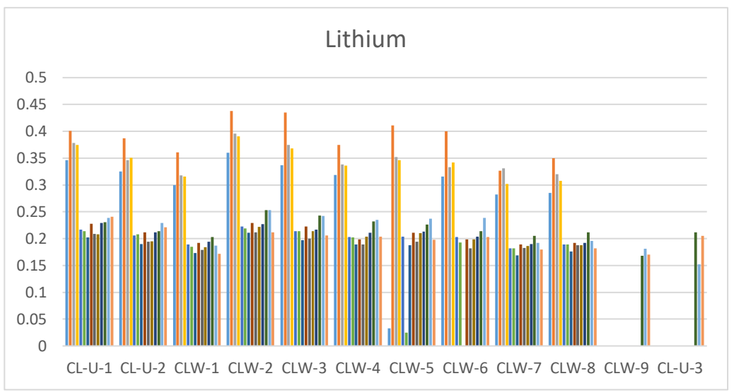

Cobalt
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
BA-U-1 BA-U-2 BAC-1 BAC-2 BAC-3 BAC-4 BAC-5 BAC-6 BAC-7

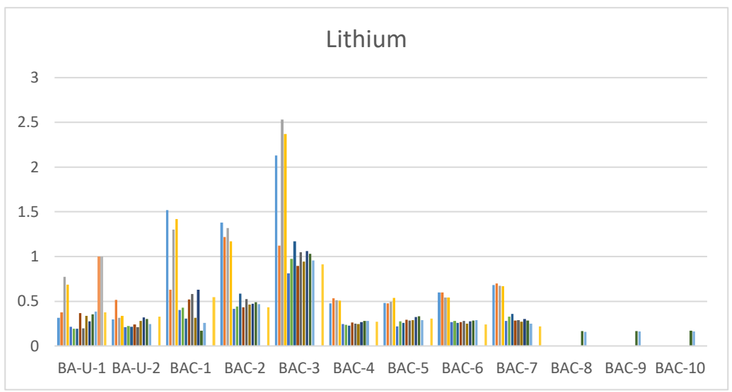

Cobalt
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002
0.001
0
SI-U-1 WW-U-1 WW-U-2 WWC-1 WWC-2 WWC-3 WWC-4 WWC-5 WWC-6 WWC-7 WWC-8 WWC-9 WWC-10

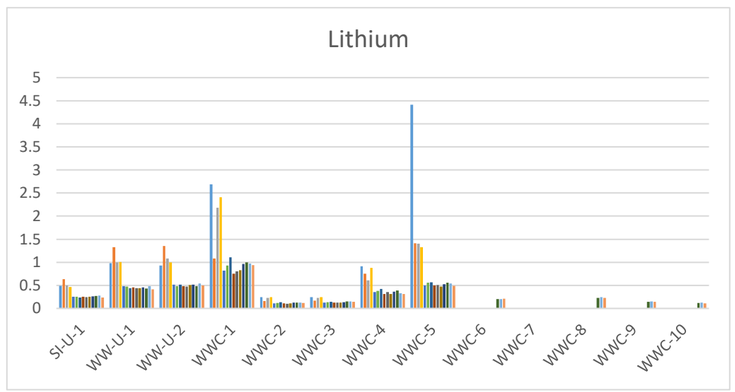

Lead
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
CL-U-1 CL-U-2 CLW-1 CLW-2 CLW-3 CLW-4 CLW-5 CLW-6 CLW-7 CLW-8 CLW-9 CL-U-3

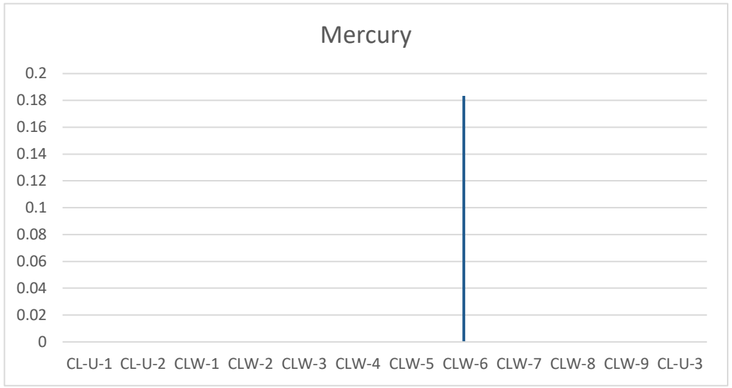

Lead
0.0025
0.002
0.0015
0.001
0.0005
0
BA-U-1 BA-U-2 BAC-1 BAC-2 BAC-3 BAC-4 BAC-5 BAC-6 BAC-7 BAC-8 BAC-9 BAC-10

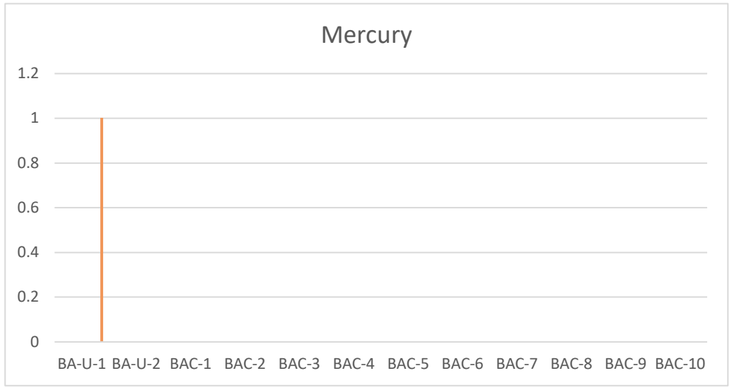

Lead
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
SI-U-1 WW-U-1 WW-U-2 WWC-1 WWC-2 WWC-3 WWC-4 WWC-5 WWC-6 WWC-7 WWC-8 WWC-9 WWC-10

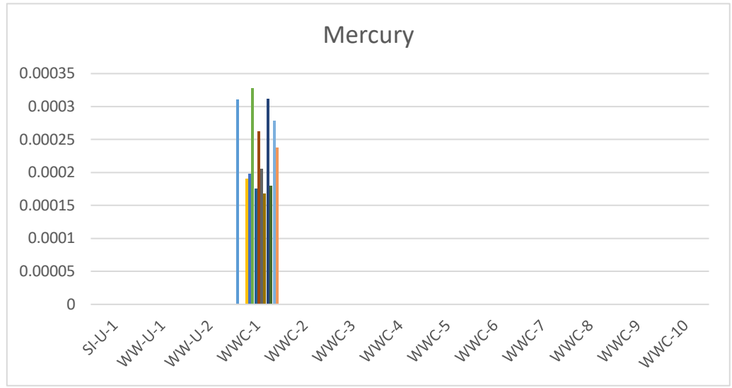

Lithium
0.5
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
CL-U-1 CL-U-2 CLW-1 CLW-2 CLW-3 CLW-4 CLW-5 CLW-6 CLW-7 CLW-8 CLW-9 CL-U-3

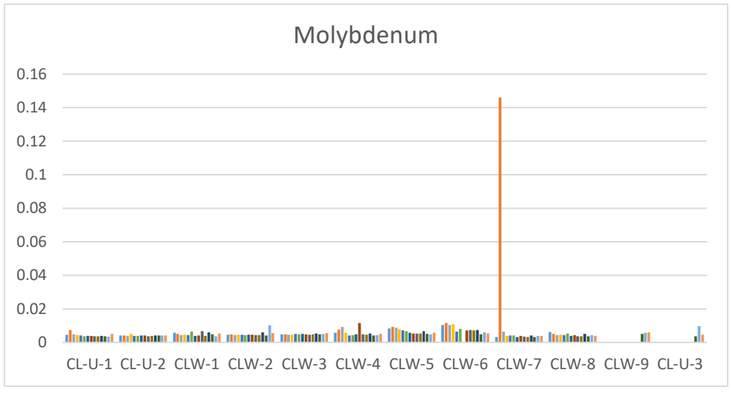

Lithium
3
2.5
2
1.5
1
0.5
0
BA-U-1 BA-U-2 BAC-1 BAC-2 BAC-3 BAC-4 BAC-5 BAC-6 BAC-7 BAC-8 BAC-9 BAC-10

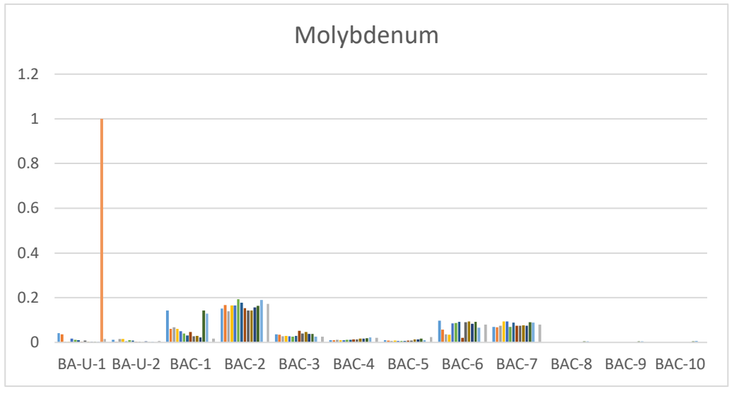

Lithium
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
SI-U-1 WW-U-1 WW-U-2 WWC-1 WWC-2 WWC-3 WWC-4 WWC-5 WWC-6 WWC-7 WWC-8 WWC-9 WWC-10

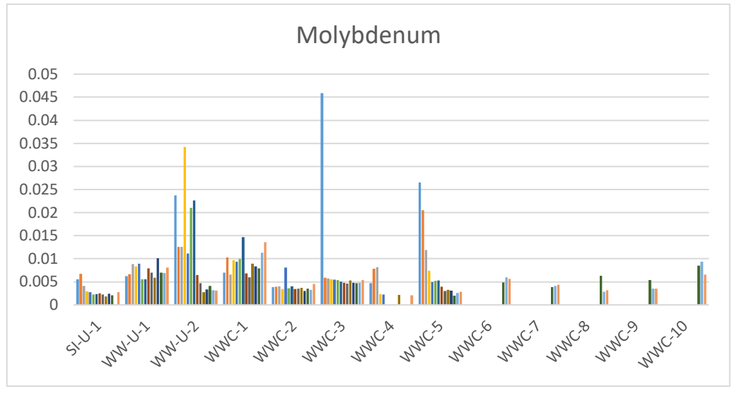

Mercury
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
CL-U-1 CL-U-2 CLW-1 CLW-2 CLW-3 CLW-4 CLW-5 CLW-6 CLW-7 CLW-8 CLW-9 CL-U-3

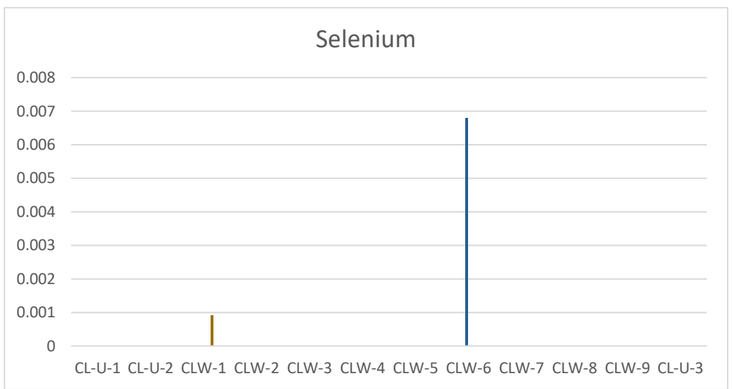

Mercury
1.2
1
0.8
0.6
0.4
0.2
0
BA-U-1 BA-U-2 BAC-1 BAC-2 BAC-3 BAC-4 BAC-5 BAC-6 BAC-7 BAC-8 BAC-9 BAC-10

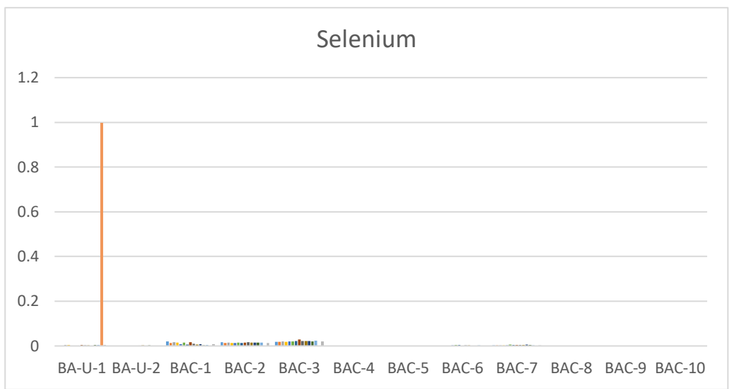

Mercury
0.00035
0.0003
0.00025
0.0002
0.00015
0.0001
0.00005
0
SI-U-1 WW-U-1 WW-U-2 WWC-1 WWC-2 WWC-3 WWC-4 WWC-5 WWC-6 WWC-7 WWC-8 WWC-9 WWC-10

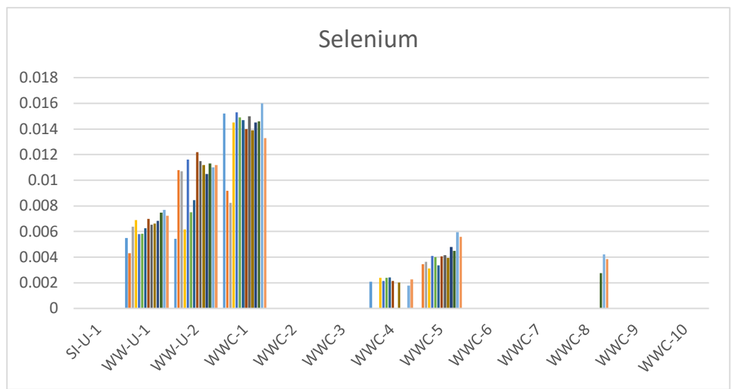

Molybdenum
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
CL-U-1 CL-U-2 CLW-1 CLW-2 CLW-3 CLW-4 CLW-5 CLW-6 CLW-7 CLW-8 CLW-9 CL-U-3

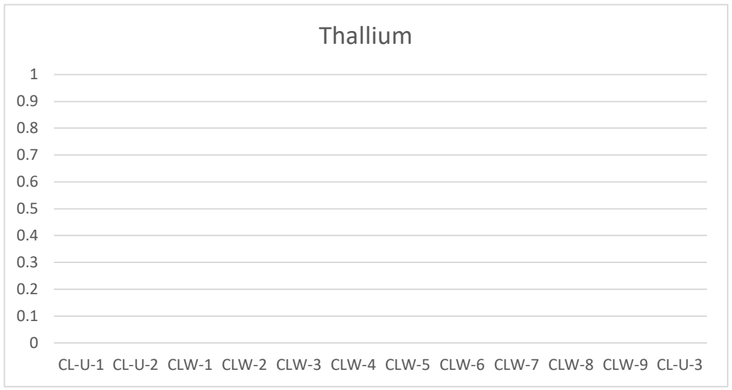

Molybdenum
1.2
1
0.8
0.6
0.4
0.2
0
BA-U-1 BA-U-2 BAC-1 BAC-2 BAC-3 BAC-4 BAC-5 BAC-6 BAC-7 BAC-8 BAC-9 BAC-10


Molybdenum
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
SI-U-1 WW-U-1 WW-U-2 WWC-1 WWC-2 WWC-3 WWC-4 WWC-5 WWC-6 WWC-7 WWC-8 WWC-9 WWC-10

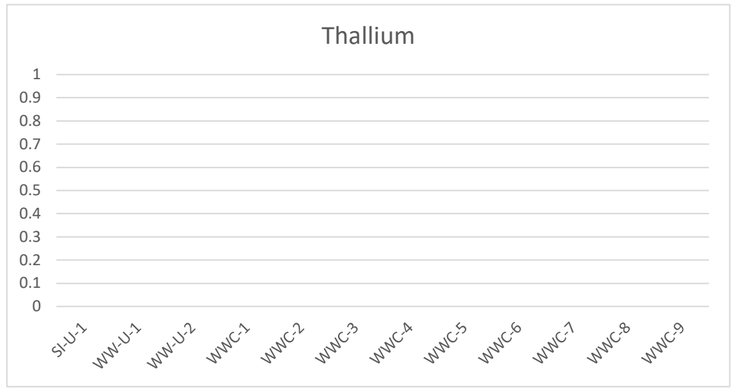

Selenium
0.008
0.007
0.006
0.005
0.004
0.003
0.002
0.001
0
CL-U-1 CL-U-2 CLW-1 CLW-2 CLW-3 CLW-4 CLW-5 CLW-6 CLW-7 CLW-8 CLW-9 CL-U-3

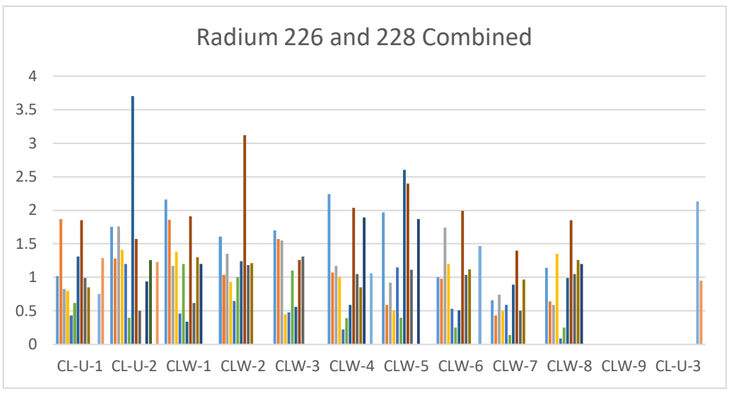

Selenium
1.2
1
0.8
0.6
0.4
0.2
0
BA-U-1 BA-U-2 BAC-1 BAC-2 BAC-3 BAC-4 BAC-5 BAC-6 BAC-7 BAC-8 BAC-9 BAC-10

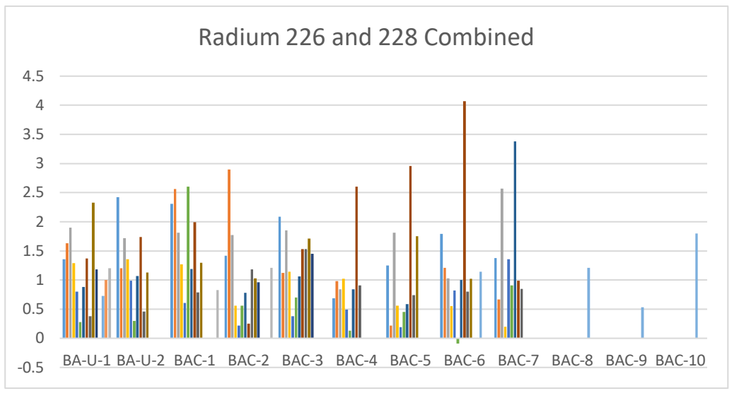

Selenium
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
0
SI-U-1 WW-U-1 WW-U-2 WWC-1 WWC-2 WWC-3 WWC-4 WWC-5 WWC-6 WWC-7 WWC-8 WWC-9 WWC-10

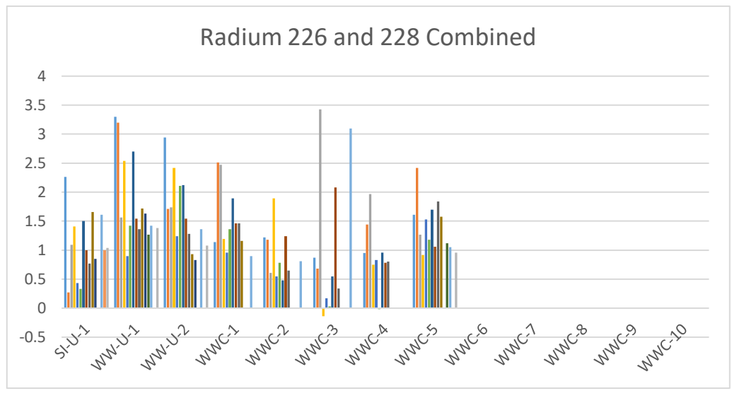

Thallium
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
CL-U-1 CL-U-2 CLW-1 CLW-2 CLW-3 CLW-4 CLW-5 CLW-6 CLW-7 CLW-8 CLW-9 CL-U-3


Thallium
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
BA-U-1 BA-U-2 BAC-1 BAC-2 BAC-3 BAC-4 BAC-5 BAC-6 BAC-7 BAC-8 BAC-9 BAC-10


Thallium
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
SI-U-1
WW-U-1
WW-U-2
WWC-1
WWC-2
WWC-3
WWC-4
WWC-5
WWC-6
WWC-7
WWC-8
WWC-9


Radium 226 and 228 Combined
4
3.5
3
2.5
2
1.5
1
0.5
0
CL-U-1 CL-U-2 CLW-1 CLW-2 CLW-3 CLW-4 CLW-5 CLW-6 CLW-7 CLW-8 CLW-9 CL-U-3


Radium 226 and 228 Combined
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
-0.5
BA-U-1 BA-U-2 BAC-1 BAC-2 BAC-3 BAC-4 BAC-5 BAC-6 BAC-7 BAC-8 BAC-9 BAC-10


Radium 226 and 228 Combined
4
3.5
3
2.5
2
1.5
1
0.5
0
-0.5
SI-U-1
WW-U-1
WW-U-2
WWC-1
WWC-2
WWC-3
WWC-4
WWC-5
WWC-6
WWC-7
WWC-8
WWC-9
WWC-10

CCR Well Levels

Well	Depth	Date	Time
WW-U-1	33.23	12/7/2015	12:54
WW-U-2	23.42	12/7/2015	12:59
SI-U-1	32.47	12/7/2015	13:09
CL-U-1	32.02	12/7/2015	13:35
CL-U-2	37.55	12/7/2015	13:32
CL-W-1	31.05	12/7/2015	13:49
CL-W-2	33.14	12/7/2015	15:55
CL-W-3	31.54	12/7/2015	9:50
CL-W-4	30.56	12/7/2015	11:34
CL-W-5	29.76	12/7/2015	13:21
CL-W-6	28.71	12/7/2015	15:00
CL-W-7	35.23	12/7/2015	13:41
CL-W-8	32.37	12/7/2015	13:47
BA-U-1	39.21	12/7/2015	13:15
BA-U-2	33.26	12/7/2015	13:22
BAC-1	39.32	12/7/2015	16:58
BAC-2	51.38	12/7/2015	17:22
BAC-3	51.02	12/7/2015	17:34
BAC-4	35.35	12/7/2015	17:44
BAC-5	32.62	12/7/2015	17:47
BAC-6	29.76	12/7/2015	17:51
BAC-7	31.26	12/7/2015	17:54
WWC-1	21.16	12/7/2015	17:35
WWC-2	22.16	12/7/2015	17:40
WWC-3	16.42	12/7/2015	17:45
WWC-4	17.85	12/7/2015	17:50
WWC-5	18.78	12/7/2015	17:55

CCR Well Levels

Well	Depth	Date	Time
WW-U-1	33.08	3/3/2016	10:23
WW-U-2	23.52	3/3/2016	9:21
SI-U-1	32.45	3/3/2016	10:27
CL-U-1	31.53	3/3/2016	9:33
CL-U-2	37.09	3/3/2016	9:31
CL-W-1	31.56	3/3/2016	10:36
CL-W-2	32.59	3/3/2016	10:34
CL-W-3	30.91	3/3/2016	13:05
CL-W-4	30.02	3/3/2016	13:02
CL-W-5	28.17	3/3/2016	13:00
CL-W-6	28.13	3/3/2016	12:57
CL-W-7	34.75	3/3/2016	10:40
CL-W-8	31.89	3/3/2016	10:38
BA-U-1	38.82	3/3/2016	9:27
BA-U-2	33.05	3/3/2016	9:24
BAC-1	39.85	3/3/2016	9:16
BAC-2	51.31	3/3/2016	9:11
BAC-3	51.29	3/3/2016	9:07
BAC-4	34.97	3/3/2016	8:59
BAC-5	32.07	3/3/2016	8:57
BAC-6	29.27	3/3/2016	8:55
BAC-7	29.78	3/3/2016	8:48
WWC-1	20.92	3/3/2016	10:21
WWC-2	21.79	3/3/2016	10:17
WWC-3	16.12	3/3/2016	10:12
WWC-4	17.56	3/3/2016	10:11
WWC-5	18.5	3/3/2016	10:09

CCR Well Levels

Well	Depth	Date	Time
WW-U-1	34.2	6/24/2016	9:18
WW-U-2	24.21	6/24/2016	9:40
SI-U-1	32.93	6/24/2016	9:23
CL-U-1	31.88	6/24/2016	9:52
CL-U-2	37.41	6/24/2016	9:49
CL-W-1	30.67	6/24/2016	10:20
CL-W-2	32.49	6/24/2016	10:02
CL-W-3	30.78	6/24/2016	10:15
CL-W-4	29.86	6/24/2016	10:13
CL-W-5	27.97	6/24/2016	10:10
CL-W-6	27.9	6/24/2016	10:06
CL-W-7	34.98	6/24/2016	10:28
CL-W-8	32.07	6/24/2016	10:25
BA-U-1	39.13	6/24/2016	9:44
BA-U-2	33.49	6/24/2016	9:34
BAC-1	40.42	6/24/2016	11:40
BAC-2	51.38	6/24/2016	11:46
BAC-3	51.35	6/24/2016	11:52
BAC-4	34.85	6/24/2016	10:38
BAC-5	31.79	6/24/2016	10:41
BAC-6	28.86	6/24/2016	10:44
BAC-7	30.26	6/24/2016	10:47
WWC-1	21.47	6/24/2016	11:25
WWC-2	22.33	6/24/2016	11:22
WWC-3	16.63	6/24/2016	11:17
WWC-4	18.07	6/24/2016	11:14
WWC-5	19.03	6/24/2016	11:12

CCR Well Levels

Well	Depth	Date	Time
WW-U-1	34.42	8/30/2016	9:22
WW-U-2	24.57	8/30/2016	9:27
SI-U-1	33.49	8/30/2016	9:41
CL-U-1	32.74	8/30/2016	16:16
CL-U-2	38.31	8/30/2016	16:17
CL-W-1	31.52	8/30/2016	16:28
CL-W-2	33.5	8/30/2016	16:31
CL-W-3	31.81	8/30/2016	16:34
CL-W-4	30.89	8/30/2016	16:38
CL-W-5	28.99	8/30/2016	16:39
CL-W-6	28.95	8/30/2016	16:43
CL-W-7	35.84	8/30/2016	16:23
CL-W-8	32.93	8/30/2016	16:25
BA-U-1	39.95	8/30/2016	10.:11
BA-U-2	34.24	8/30/2016	10:20
BAC-1	40.97	8/30/2016	11:42
BAC-2	52.1	8/30/2016	13:03
BAC-3	51.94	8/30/2016	14:40
BAC-4	35.68	8/30/2016	9:41
BAC-5	32.67	8/30/2016	9:36
BAC-6	29.64	8/30/2016	9:30
BAC-7	31.09	8/30/2016	8:33
WWC-1	22.4	8/30/2016	10:27
WWC-2	22.87	8/30/2016	10:31
WWC-3	17.17	8/30/2016	10:36
WWC-4	18.61	8/30/2016	10:39
WWC-5	19.6	8/30/2016	10:45

CCR Well Levels

Well	Depth	Date	Time
WW-U-1	34.74	11/9/2016	13:36
WW-U-2	24.81	11/9/2016	13:39
SI-U-1	33.74	11/9/2016	13:42
CL-U-1	33.04	11/9/2016	13:56
CL-U-2	38.59	11/9/2016	13:54
CL-W-1	31.89	11/9/2016	14:07
CL-W-2	34.00	11/9/2016	14:10
CL-W-3	32.34	11/9/2016	14:15
CL-W-4	31.43	11/9/2016	14:18
CL-W-5	29.58	11/9/2016	14:19
CL-W-6	29.55	11/9/2016	14:20
CL-W-7	36.20	11/9/2016	14:03
CL-W-8	33.28	11/9/2016	14:06
BA-U-1	40.27	11/9/2016	13:49
BA-U-2	34.59	11/9/2016	13:47
BAC-1	41.51	11/9/2016	10:00
BAC-2	52.61	11/9/2016	10:02
BAC-3	52.10	11/9/2016	10:04
BAC-4	35.98	11/9/2016	14:36
BAC-5	32.90	11/9/2016	14:34
BAC-6	29.81	11/9/2016	14:31
BAC-7	30.92	11/9/2016	14:28
WWC-1	22.27	11/9/2016	13:28
WWC-2	23.22	11/9/2016	13:30
WWC-3	17.43	11/9/2016	13:23
WWC-4	18.88	11/9/2016	13:20
WWC-5	19.85	11/9/2016	13:18

CCR Well Levels

Well	Depth	Date	Time
WW-U-1	33.88	3/30/2017	10:22
WW-U-2	22.19	3/30/2017	10:32
SI-U-1	32.89	3/30/2017	10:39
CL-U-1	31.99	3/30/2017	10:53
CL-U-2	37.56	3/30/2017	10:51
CL-W-1	32.84	3/30/2017	11:58
CL-W-2	32.72	3/30/2017	11:35
CL-W-3	31.08	3/30/2017	11:38
CL-W-4	30.25	3/30/2017	11:40
CL-W-5	28.41	3/30/2017	11:43
CL-W-6	28.40	3/30/2017	11:45
CL-W-7	35.15	3/30/2017	11:50
CL-W-8	32.04	3/30/2017	11:54
BA-U-1	39.29	3/30/2017	10:47
BA-U-2	33.67	3/30/2017	10:43
BAC-1	40.89	3/30/2017	12:23
BAC-2	51.32	3/30/2017	12:28
BAC-3	51.94	3/30/2017	12:33
BAC-4	34.73	3/30/2017	11:09
BAC-5	31.71	3/30/2017	11:07
BAC-6	28.74	3/30/2017	11:03
BAC-7	30.03	3/30/2017	11:01
WWC-1	18.91	3/30/2017	11:22
WWC-2	22.21	3/30/2017	11:27
WWC-3	16.53	3/30/2017	11:17
WWC-4	17.97	3/30/2017	11:20
WWC-5	17.94	3/30/2017	11:22

CCR Well Levels

Well	Depth	Date	Time
WW-U-1	34.70	6/21/2017	8:10
WW-U-2	24.75	6/21/2017	8:19
SI-U-1	33.46	6/21/2017	8:24
CL-U-1	32.13	6/21/2017	8:42
CL-U-2	37.72	6/21/2017	8:38
CL-W-1	30.74	6/21/2017	9:24
CL-W-2	32.35	6/21/2017	9:27
CL-W-3	30.72	6/21/2017	9:29
CL-W-4	29.90	6/21/2017	9:32
CL-W-5	28.06	6/21/2017	9:34
CL-W-6	28.01	6/21/2017	9:36
CL-W-7	35.16	6/21/2017	9:20
CL-W-8	32.21	6/21/2017	9:22
BA-U-1	39.41	6/21/2017	8:32
BA-U-2	33.90	6/21/2017	8:29
BAC-1	41.29	6/21/2017	11:30
BAC-2	50.94	6/21/2017	11:36
BAC-3	51.14	6/21/2017	11:41
BAC-4	34.08	6/21/2017	9:50
BAC-5	30.98	6/21/2017	9:47
BAC-6	28.03	6/21/2017	9:46
BAC-7	29.30	6/21/2017	9:44
WWC-1	21.95	6/21/2017	13:16
WWC-2	22.74	6/21/2017	8:01
WWC-3	17.04	6/21/2017	11:51
WWC-4	18.48	6/21/2017	11:48
WWC-5	19.44	6/21/2017	11:46

CCR Well Levels

Well	Depth	Date	Time
WW-U-1	35.43	10/4/2017	12:47
WW-U-2	25.49	10/5/2017	12:53
SI-U-1	34.28	10/6/2017	12:59
CL-U-1	33.25	10/7/2017	13:13
CL-U-2	38.81	10/8/2017	13:10
CL-W-1	31.80	10/9/2017	13:31
CL-W-2	33.60	10/10/2017	13:27
CL-W-3	31.93	10/11/2017	13:35
CL-W-4	31.09	10/12/2017	13:23
CL-W-5	29.26	10/13/2017	13:20
CL-W-6	29.26	10/14/2017	13:19
CL-W-7	36.23	10/15/2017	13:34
CL-W-8	33.28	10/16/2017	13:32
BA-U-1	40.42	10/17/2017	13:05
BA-U-2	34.85	10/18/2017	13:04
BAC-1	41.78	10/19/2017	13:16
BAC-2	52.03	10/20/2017	13:11
BAC-3	52.31	10/21/2017	13:07
BAC-4	35.29	10/22/2017	13:18
BAC-5	32.19	10/23/2017	13:22
BAC-6	29.24	10/24/2017	13:27
BAC-7	30.48	10/25/2017	13:33
WWC-1	22.69	10/26/2017	9:42
WWC-2	23.51	10/27/2017	13:43
WWC-3	17.80	10/28/2017	13:44
WWC-4	19.27	10/29/2017	13:42
WWC-5	20.26	10/30/2017	13:40

CCR Well Levels

Well	Depth	Date
WW-U-1	36.14	3/26/2018
WW-U-2	25.79	3/26/2018
SI-U-1	34.04	3/26/2018
CL-U-1	32.64	3/26/2018
CL-U-2	38.22	3/26/2018
CL-W-1	31.73	3/26/2018
CL-W-2	33.49	3/26/2018
CL-W-3	31.73	3/26/2018
CL-W-4	30.94	3/26/2018
CL-W-5	29.00	3/26/2018
CL-W-6	28.96	3/26/2018
CL-W-7	35.99	3/26/2018
CL-W-8	33.11	3/26/2018
BA-U-1	40.28	3/26/2018
BA-U-2	34.74	3/26/2018
BAC-1	42.05	3/26/2018
BAC-2	34.62	3/26/2018
BAC-3	52.76	3/26/2018
BAC-4	35.82	3/26/2018
BAC-5	33.28	3/26/2018
BAC-6	30.53	3/26/2018
BAC-7	31.88	3/26/2018
WWC-1	22.56	3/26/2018
WWC-2	23.31	3/26/2018
WWC-3	17.55	3/26/2018
WWC-4	19.04	3/26/2018
WWC-5	20.08	3/26/2018

CCR Well Levels

Well	Depth	Date
WW-U-1	36.20	6/13/2018
WW-U-2	25.95	6/13/2018
SI-U-1	34.27	6/13/2018
CL-U-1	32.83	6/13/2018
CL-U-2	38.42	6/13/2018
CL-W-1	31.92	6/13/2018
CL-W-2	33.53	6/13/2018
CL-W-3	31.72	6/13/2018
CL-W-4	30.79	6/13/2018
CL-W-5	28.95	6/13/2018
CL-W-6	29.12	6/13/2018
CL-W-7	36.19	6/13/2018
CL-W-8	33.31	6/13/2018
BA-U-1	40.54	6/13/2018
BA-U-2	35.00	6/13/2018
BAC-1	42.29	6/13/2018
BAC-2	52.68	6/13/2018
BAC-3	53.92	6/13/2018
BAC-4	35.83	6/13/2018
BAC-5	33.32	6/13/2018
BAC-6	30.52	6/13/2018
BAC-7	31.83	6/13/2018
WWC-1	22.89	6/13/2018
WWC-2	23.64	6/13/2018
WWC-3	17.92	6/13/2018
WWC-4	19.34	6/13/2018
WWC-5	20.19	6/13/2018

CCR Well Levels

Well	Depth	Date
WW-U-1	36.74	10/24/2018
WW-U-2	26.65	10/24/2018
SI-U-1	35.25	10/24/2018
CL-U-1	34.43	10/24/2018
CL-U-2	40.02	10/24/2018
CL-W-1	33.69	10/24/2018
CL-W-2	35.53	10/24/2018
CL-W-3	33.67	10/24/2018
CL-W-4	32.74	10/24/2018
CL-W-5	30.84	10/24/2018
CL-W-6	30.79	10/24/2018
CL-W-7	37.82	10/24/2018
CL-W-8	35.01	10/24/2018
BA-U-1	42.07	10/24/2018
BA-U-2	36.40	10/24/2018
BAC-1	43.46	10/24/2018
BAC-2	54.24	10/24/2018
BAC-3	54.22	10/24/2018
BAC-4	35.66	10/24/2018
BAC-5	35.70	10/24/2018
BAC-6	33.22	10/24/2018
BAC-7	34.85	10/24/2018
WWC-1	23.70	10/24/2018
WWC-2	24.48	10/24/2018
WWC-3	18.74	10/24/2018
WWC-4	20.22	10/24/2018
WWC-5	21.23	10/24/2018

Original CCR Wells
Appendix III and IV Constituents
America West COC #1

CCR Wells	Level	Date
WW-U-1	35.34	5/20/19
WW-U-2	25.90	5/20/19
SI-U-1	34.60	5/20/19
CL-U-1	33.35	5/20/19
CL-U-2	38.93	5/20/19
CL-W-1	32.93	5/20/19
CL-W-2	34.76	5/20/19
CL-W-3	32.86	5/20/19
CL-W-4	31.89	5/20/19
CL-W-5	29.99	5/20/19
CL-W-6	29.91	5/20/19
CL-W-7	36.94	5/20/19
CL-W-8	34.18	5/20/19
BA-U-1	41.22	5/20/19
BA-U-2	35.55	5/20/19
BAC-1	43.02	5/20/19
BAC-2	54.19	5/20/19
BAC-3	54.69	5/20/19
BAC-4	37.62	5/20/19
BAC-5	35.66	5/20/19
BAC-6	33.08	5/20/19
BAC-7	34.69	5/20/19
WWC-1	22.95	5/20/19
WWC-2	24.70	5/20/19
WWC-3	18.01	5/20/19
WWC-4	19.47	5/20/19
WWC-5	20.47	5/20/19

CCR New Wells
Appendix III and IV Constituents
America West COC #2

Investigative W	Level	Date
RW-4	19.85	5/20/19
RW-5	45.41	5/20/19
RW-7	13.80	5/20/19
WDB-19	28.00	5/20/19

New CCR Wells
Appendix III and IV Constituents
America West COC #1

Investigative W	Level	Date
CLW-9	18.37	5/20/19
WWC-6	35.74	5/20/19
WWC-7	17.47	5/20/19
WWC-8	27.06	5/20/19
WWC-9	23.80	5/20/19
WWC-10	17.80	5/20/19
BAC-8	45.65	5/20/19
BAC-9	46.70	5/20/19
BAC-10	47.21	5/20/19
CLU-3	41.49	5/20/19

Appendix IV - Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Fluoride, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium, Radium 226 and 228 combined

State Discharge Permit Wells
Chemtech COC #3

(All Constituents* - M	Level	Date
WR-101	54.61	5/20/19
WR-102	44.76	5/20/19
WR-103	47.30	5/20/19
EP-W-19	32.61	5/20/19

(TBS/Boron	Level	Date
RW-6	44.17	5/20/19
RW-9	42.91	5/20/19
WDB-7	41.72	5/20/19
EP-W-23	30.71	5/20/19
EP-W-27	28.92	5/20/19
WDB-19	28.00	5/20/19

* TDS, Boron, Chloride, Sulfate, Alkalinity, Sodium, Magnesium, Potassium, Calcium

Corrective Action Plan Well
Chemtech COC #4

(TDS)	Level	Date
RW-5	45.41	5/20/19

Appendix III - Boron, Calcium, Chloride, Fluoride, pH, Sulfate, TDS

Original CCR Wells
Appendix III and IV Constituents
America West COC #1

CCR Wells	Level	Date
WW-U-1	35.91	10/17/19
WW-U-2	26.64	10/17/19
SI-U-1	35.35	10/17/19
CL-U-1	34.52	10/17/19
CL-U-2	40.08	10/17/19
CL-W-1	33.81	10/17/19
CL-W-2	35.70	10/17/19
CL-W-3	33.85	10/17/19
CL-W-4	32.90	10/17/19
CL-W-5	31.02	10/17/19
CL-W-6	30.99	10/17/19
CL-W-7	37.98	10/17/19
CL-W-8	35.11	10/17/19
BA-U-1	42.09	10/17/19
BA-U-2	36.42	10/17/19
BAC-1	43.71	10/17/19
BAC-2	54.62	10/17/19
BAC-3	55.01	10/17/19
BAC-4	38.14	10/17/19
BAC-5	36.01	10/17/19
BAC-6	33.01	10/17/19
BAC-7	35.06	10/17/19
WWC-1	23.81	10/17/19
WWC-2	24.61	10/17/19
WWC-3	18.90	10/17/19
WWC-4	20.37	10/17/19
WWC-5	21.37	10/17/19

CCR New Wells
Appendix III and IV Constituents
America West COC #2

Investigative W	Level	Date
RW-4	20.69	10/17/19
RW-5	46.31	10/17/19
RW-7	14.74	10/17/19
WDB-19	29.11	10/17/19

New CCR Wells
Appendix III and IV Constituents
America West COC #1

Investigative W	Level	Date
CLW-9	36.97	10/17/19
WWC-6	19.57	10/17/19
WWC-7	19.20	10/17/19
WWC-8	28.15	10/17/19
WWC-9	24.86	10/17/19
WWC-10	19.40	10/17/19
BAC-8	46.07	10/17/19
BAC-9	47.18	10/17/19
BAC-10	47.80	10/17/19
CLU-3	42.49	10/17/19

Appendix IV - Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Fluoride, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium, Radium 226 and 228 combined

State Discharge Permit Wells
Chemtech COC #3

(All Constituents* - M	Level	Date
WR-101	54.60	10/17/19
WR-102	43.14	10/17/19
WR-103	45.40	10/17/19
EP-W-19	33.52	10/17/19

(TBS/Boron	Level	Date
RW-6	44.69	10/17/19
RW-9	43.16	10/17/19
WDB-7	42.55	10/17/19
EP-W-23	31.66	10/17/19
EP-W-27	29.89	10/17/19
WDB-19	29.11	10/17/19

* TDS, Boron, Chloride, Sulfate, Alkalinity, Sodium, Magnesium, Potassium, Calcium

Corrective Action Plan Well
Chemtech COC #4

(TDS)	Level	Date
RW-5	46.31	10/17/19

Appendix III - Boron, Calcium, Chloride, Fluoride, pH, Sulfate, TDS

Original CCR Wells
Appendix III and IV Constituents
America West COC #1

	Level	Date
WW-U-1	30.42	3/23/2020
WW-U-2	22.31	3/23/2020
SI-U-1	33.78	3/23/2020
CL-U-1	33.46	3/23/2020
CL-U-2	38.92	3/23/2020
CL-W-1	32.75	3/23/2020
CL-W-2	34.71	3/23/2020
CL-W-3	32.87	3/23/2020
CL-W-4	31.99	3/23/2020
CL-W-5	30.09	3/23/2020
CL-W-6	30.08	3/23/2020
CL-W-7	36.70	3/23/2020
CL-W-8	33.95	3/23/2020
BA-U-1	40.76	3/23/2020
BA-U-2	34.81	3/23/2020
BAC-1	41.89	3/23/2020
BAC-2	53.88	3/23/2020
BAC-3	54.42	3/23/2020
BAC-4	37.21	3/23/2020
BAC-5	35.05	3/23/2020
BAC-6	32.35	3/23/2020
BAC-7	33.95	3/23/2020
WWC-1	22.85	3/23/2020
WWC-2	23.80	3/23/2020
WWC-3	18.02	3/23/2020
WWC-4	19.42	3/23/2020
WWC-5	20.39	3/23/2020

Appendix IV - Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Fluoride, Lead, Lithium, Mercury, Molybdenum, Selenium, Thallium, Radium 226 and 228 combined

Investigative Wells
Appendix III and IV Constituents
America West COC #2

	Level	Date
RW-4	19.80	3/23/2020
RW-5	45.88	3/23/2020
RW-7	14.01	3/23/2020
WDB-19	28.19	3/23/2020
RW-1		3/23/2020
EPW-15	43.84	3/23/2020

New CCR Wells
Appendix III and IV Constituents
America West COC #1

	Level	Date
CLW-9	36.13	3/23/2020
WWC-6	18.48	3/23/2020
WWC-7	17.68	3/23/2020
WWC-8	27.11	3/23/2020
WWC-9	23.98	3/23/2020
WWC-10	17.92	3/23/2020
WWC-11	22.01	3/23/2020
WWC-12	19.59	3/23/2020
WWC-13	18.66	3/23/2020
~~BAC-8~~	46.08	3/23/2020
~~BAC-9~~	47.08	3/23/2020
~~BAC-10~~	47.60	3/23/2020
BAC-11	47.73	3/23/2020
BAC-12	48.07	3/23/2020
BAC-13	45.11	3/23/2020
BAC-14	46.62	3/23/2020
BAC-15	45.92	3/23/2020
BAC-16	47.19	3/23/2020
~~BAC-17~~	45.33	3/23/2020
CLU-3	41.32	3/23/2020

State Discharge Permit Wells
Chemtech COC #3

	Level	Date
WR-101	35.91	3/23/2020
WR-102	32.16	3/23/2020
WR-103	45.40	3/23/2020
EP-W-19	32.81	3/23/2020

(TBS/Boron	Level	Date
~~RW-6~~	44.55	3/23/2020
RW-9	43.32	3/23/2020
WDB-7	42.13	3/23/2020
EP-W-23	30.75	3/23/2020
EP-W-27	28.79	3/23/2020
WDB-19	28.19	3/23/2020

* TDS, Boron, Chloride, Sulfate, Alkalinity, Sodium, Magnesium, Potassium, Calcium

Corrective Action Plan Well
Chemtech COC #4

(TDS)	Level	Date
RW-5	45.88	3/23/2020

Appendix III - Boron, Calcium, Chloride, Fluoride, pH, Sulfate, TDS

Round 1 Detection Monitoring - December 2-10, 2015

Landfill Wells	Results																						
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
CL-U-1	0	68.9	418	0.813	7.82	131	1040	0	0.0378	0.126	0	0	0.00537	0	0	0.346	0	0.00459	0	0	0.52	0.5	1.02
CL-U-2	0	73.8	404	0.611	7.73	132	1020	0	0.0317	0.129	0	0	0.00613	0	0	0.325	0	0.00406	0	0	0.55	1.2	1.75
CLW-1	0	55.7	322	0.844	7.95	76.5	832	0	0.0264	0.105	0	0	0.00814	0	0	0.3	0	0.00574	0	0	0.56	1.6	2.16
CLW-2	0	53.9	432	0.695	7.75	108	976	0	0.0283	0.0957	0	0	0.00576	0	0	0.36	0	0.00472	0	0	0.51	1.1	1.61
CLW-3	0	45	367	0.948	7.86	123	928	0	0.0375	0.111	0	0	0.00346	0	0	0.337	0	0.00492	0	0	0.4	1.3	1.7
CLW-4	0	44.5	320	1.37	7.87	73.3	828	0	0.0308	0.122	0	0	0.00336	0	0	0.319	0	0.00584	0	0	0.34	1.9	2.24
CLW-5	0	38.4	345	1.51	7.81	88.3	872	0	0.0188	0.0864	0		0	0	0	0.0325	0	0.00841	0	0	0.37	1.6	1.97
CLW-6	0	33.6	325	1.38	7.71	74.5	820	0	0.0249	0.0879	0	0	0.00335	0	0	0.316	0	0.0104	0	0	0.37	0.63	1
CLW-7	0	47.3	339	0.792	7.81	66.4	812	0	0.0234	0.0593	0	0	0.00421	0	0	0.282	0	0.00331	0	0	0.14	0.52	0.66
CLW-8	0	43.6	324	0.797	7.8	70.5	772	0	0.0155	0.107	0	0	0.00463	0	0	0.285	0	0.00626	0	0	0.4	0.74	1.14
CLW-9																							
CL-U-3																							

Round 1

Landfill Wells	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
CL-U-1	13.46	7.74	-42	1720	443	2.12	-
CL-U-2	14.72	6.92	-38	1750	604	2.6	-
CLW-1	14.84	7.69	-45	1490	383	2.28	0.952
CLW-2	9.95	7.86	-144	1810	99.6	1.76	1.16
CLW-3	11.24	7.95	-158	1740	128	1.9	1.11
CLW-4	14.9	7.95	-165	1540	25.1	1.67	0.98
CLW-5	15.12	7.96	-134	1620	46.4	1.6	1.04
CLW-6	15.3	8	-193	1550	30.8	0.98	0.998
CLW-7	16.38	7.54	8	1430	90.9	7.01	0.917
CLW-8	15.01	7.58	0	1530	11.3	2.09	0.976
CLW-9							
CL-U-3							

Bottom Ash	Results																						
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
BA-U-1	0	51.4	430	1.21	8.06	121	984	0	0.0163	0.133	0	0	0.00305	0	0	0.313	0	0.0408	0	0	0.66	0.7	1.36
BA-U-2	0	53	343	0.727	8.9	48.9	82.4	0	0.0154	0.148	0	0	0.00971	0	0	0.297	0	0.0121	0	0	0.32	2.1	2.42
BAC-1	7.49	274	3280	0.299	7.37	3060	8860	0.00237	0.0146	0.1	0	0	0.00503	0.00605	0	1.52	0	0.143	0.0204	0	0.71	1.6	2.31
BAC-2	10.7	267	2000	0.741	7.29	3620	7820	0	0.0386	0.0472	0	0	0.0116	0	0	1.38	0	0.151	0.0164	0	0.48	0.94	1.42
BAC-3	6.09	387	2900	0.648	7.6	3840	9800	0	0.0191	0.0827	0	0	0.0615	0	0	2.13	0	0.0367	0.019	0	0.99	1.1	2.09
BAC-4	0	53	473	1.35	7.96	181	1150	0	0.0407	0.0821	0	0	0.0022	0	0	0.476	0	0.0104	0	0	0.19	0.5	0.69
BAC-5	0	51.1	483	1.11	7.83	129	1010	0	0.0357	0.0928	0	0	0.0161	0	0	0.479	0	0.00926	0	0	0.29	0.96	1.25
BAC-6	4.36	142	516	0.754	7.68	1080	2410	0	0.0134	0.0622	0	0	0.0363	0	0	0.599	0	0.0968	0	0	0.39	1.4	1.79
BAC-7	4.65	148	665	1.01	7.77	1360	2910	0	0.0191	0.0577	0	0	0.0264	0	0	0.681	0	0.0699	0.00276	0	0.46	0.92	1.38

Bottom Ash	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
BA-U-1	14.56	7.93	-67	1590	106	2.51	-
BA-U-2	13.58	8.33	-85	1510	96.4	2.9	-
BAC-1	11.8	7.32	111	15100	54.8	1.84	9.35
BAC-2	15.7	7.12	79	11800	100	1.82	7.33
BAC-3	16.24	7.51	75	15000	34.2	1.36	9.28
BAC-4	14.36	7.93	12	2230	12.5	2.07	1.43
BAC-5	13.96	7.88	-18	2020	113	0.97	1.29
BAC-6	12.49	7.69	-157	3610	96.1	1.2	2.31
BAC-7	14.17	7.76	-96	4430	789	1.12	2.84

Waste Water	Results																						
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
SI-U-1	0.594	171	667	0	7.4	918	2300	0	0.00266	0.112	0	0	0.0099	0	0	0.49	0	0.00554	0	0	0.56	1.7	2.26
WW-U-1	1.05	374	2180	0	7.06	1470	5430	0	0.00453	0.178	0	0	0.0032	0	0	0.983	0	0.00619	0.00549	0	1	2.3	3.3
WW-U-2	1.6	358	2430	0	7.23	1370	5540	0	0.00309	0.123	0	0	0.00582	0.0072	0	0.934	0	0.0237	0.00543	0	0.84	2.1	2.94
WWC-1	9.62	561	4840	0	7.19	3150	11800	0	0.0181	0.0536	0	0	0.0139	0	0	2.69	0.00031	0.00701	0.0152	0	0.31	0.83	1.14
WWC-2	0	66.5	381	0.158	7.91	147	940	0	0.0155	0.0511	0	0	0.00348	0	0	0.241	0	0.00383	0	0	0.12	1.1	1.22
WWC-3	0	34.5	284	1.01	8.11	82.2	688	0	0.0102	0.0638	0	0	0.00577	0	0	0.243	0	0.0459	0	0	0.32	0.55	0.87
WWC-4	1.09	247	1270	0.387	7.61	800	3250	0	0.0116	0.09	0	0	0.00877	0	0	0.909	0	0.00467	0.00207	0	0.5	0.45	0.95
WWC-5	2.4	345	1810	0.331	7.47	1610	5020	0	0.00783	0.103	0	0	0.00892	0.0055	0	4.41	0	0.0265	0	0	0.51	1.1	1.61
WWC-6																							
WWC-7																							

Waste Water	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
SI-U-1	10.79	7.27	-14	3720	74	6.93	-
WW-U-1	13.11	7.01	2	7920	32.9	3.2	-
WW-U-2	12.59	7.23	-11	7920	93.4	5.09	-
WWC-1	14.94	7.06	15	1850	110	1.28	11.5
WWC-2	17.36	7.88	-44	1680	79.9	1.08	1.07
WWC-3	13.92	8.1	-249	1430	121	1.29	0.918
WWC-4	14.73	7.4	-20	5230	61.1	1.52	3.3
WWC-5	15.35	7.3	-122	7740	348	0.97	4.88
WWC-6							
WWC-7							

Results below reporting limit are recorded as 0.

Round 2 Detection Monitoring - February 23-March 8, 2016

Landfill Wells	Results																						
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
CL-U-1	0	47.7	391	0.839	8.52	123	908	0	0.0415	0.0953	0	0	0	0	0	0.401	0	0.00733	0	0	0.27	1.6	1.87
CL-U-2	0	59.9	372	0.873	7.75	119	940	0	0.0243	0.0934	0	0	0	0	0	0.387	0	0.00414	0	0	0.28	1	1.28
CLW-1	0	35.1	301	0.834	7.89	71.6	808	0	0.0266	0.0648	0	0	0.00235	0	0	0.361	0	0.00506	0	0	0.36	1.5	1.86
CLW-2	0	45.9	378	1.18	7.66	90.5	936	0	0.0243	0.0882	0	0	0	0	0	0.438	0	0.00481	0	0	0.51	0.53	1.04
CLW-3	0	40.5	336	1.35	7.92	96	884	0	0.0437	0.103	0	0	0	0	0	0.435	0	0.0049	0	0	0.47	1.1	1.57
CLW-4	0	32.1	282	1.53	7.87	80.9	776	0	0.0271	0.109	0	0	0	0	0	0.375	0	0.00762	0	0	0.37	0.7	1.07
CLW-5	0	35.4	318	1.82	7.91	85.7	824	0	0.0214	0.0869	0	0	0	0	0	0.411	0	0.00922	0	0	0.27	0.32	0.59
CLW-6	0	32.1	306	1.72	7.97	75.4	816	0	0.0246	0.095	0	0	0	0	0	0.4	0	0.0117	0	0	0.02	0.96	0.98
CLW-7	0	42.8	290	0.825	7.65	67.6	832	0	0.0239	0.0794	0	0	0	0	0	0.327	0	0.146	0	0	0.14	0.29	0.43
CLW-8	0	41.5	293	0.782	7.8	70.3	808	0	0.022	0.0839	0	0	0.00224	0	0	0.35	0	0.00499	0	0	0.32	0.32	0.64
CLW-9																							
CL-U-3																							

Landfill Wells	Round 2 Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
CL-U-1	14.18	8.74	-209	1750	4.3	2.15	1.12
CL-U-2	14.41	7.75	-89	1820	4.6	1.85	1.17
CLW-1	15.84	7.95	-60	1560	3.8	1.4	0.996
CLW-2	17.53	7.81	-137	1840	2	9.35	1.17
CLW-3	14.99	7.87	-203	1710	0	3.96	1.09
CLW-4	17.08	7.81	-211	1490	11.5	1.82	0.955
CLW-5	17.06	7.82	-168	1650	10.9	8.45	1.06
CLW-6	15.83	7.91	-194	1600	6.2	0.95	1.02
CLW-7	16.53	7.75	9	1560	3.5	2.67	0.996
CLW-8	15.86	7.81	-25	1560	8	1.92	0.996
CLW-9							
CL-U-3							

Bottom Ash	Results																						
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
BA-U-1	0	28.7	258	1.67	8.55	64.2	852	0	0.023	0.0969	0	0	0	0	0	0.376	0	0.0359	0	0	0.33	1.3	1.63
BA-U-2	0	67.4	529	0.938	8.02	55.7	1230	0	0.0199	0.175	0	0	0	0	0	0.514	0	0.00298	0	0	0.2	1	1.2
BAC-1	2.85	155	1730	0	7.86	1390	5240	0	0.0174	0.39	0	0	0.00536	0	0	0.63	0	0.0607	0.0131	0	0.96	1.6	2.56
BAC-2	9.83	196	1600	0	7.35	2900	7640	0	0.0411	0.0385	0	0	0.00742	0	0.00221	1.22	0	0.167	0.0128	0	0.4	2.5	2.9
BAC-3	6.55	406	3240	0	7.62	3960	10400	0	0.0192	0.0553	0	0	0.00676	0	0	1.12	0	0.0337	0.0184	0	0.44	0.68	1.12
BAC-4	0	57.4	488	1.36	7.87	191	1290	0	0.0371	0.0806	0	0	0	0	0	0.532	0	0.0106	0	0	0.48	0.5	0.98
BAC-5	0	41.3	433	1.34	7.95	111	1010	0	0.0392	0.0736	0	0	0	0	0	0.476	0	0.00758	0	0	0.25	-0.03	0.22
BAC-6	2.67	98.4	491	0.734	7.72	636	1880	0	0.0144	0.0736	0	0	0	0	0	0.597	0	0.0569	0	0	0.61	0.6	1.21
BAC-7	4.43	132	623	1.07	7.89	1230	2980	0	0.0225	0.0372	0	0	0	0	0	0.699	0	0.0681	0.00274	0	0.16	0.51	0.67

Bottom Ash	Round 2 Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
BA-U-1	13.53	8.63	5	1550	11.3	2.59	0.995
BA-U-2	15.78	7.94	-167	2240	19.7	1.06	1.44
BAC-1	17.51	8.16	39	6.5	10.7	3	4.11
BAC-2	16.74	7.2	322	9.96	3.2	2.59	6.26
BAC-3	14.4	7.36	29	1590	3.8	3.35	9.84
BAC-4	15.9	7.81	-55	2370	3.9	2.08	1.51
BAC-5	16.34	7.92	-23	1980	4	2.89	1.27
BAC-6	18.19	7.67	-8	2.94	0	1.73	1.88
BAC-7	14.22	7.9	-9	4560	3.9	2.46	2.92

Waste Water	Results																						
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
SI-U-1	0	168	752	0.557	7.65	665	2320	0	0.00781	0.0846	0	0	0.00346	0	0	0.634	0	0.00671	0	0	0.43	-0.16	0.27
WW-U-1	1.03	346	2430	0	7.23	1440	5330	0	0.00446	0.123	0	0	0	0	0	1.33	0	0.00669	0.00432	0	1	2.2	3.2
WW-U-2	1.59	362	2410	0	7.34	1370	5780	0	0.00846	0.0761	0	0	0.00735	0	0	1.35	0	0.0126	0.0108	0	0.51	1.2	1.71
WWC-1	6.01	458	4530	0.256	7.24	2710	10800	0	0.00331	0.072	0	0	0.00369	0.00842	0	1.08	0	0.0103	0.00919	0	0.91	1.6	2.51
WWC-2	0	61.3	352	0.208	7.97	131	932	0	0.0147	0.0421	0	0	0.00335	0	0	0.162	0	0.00391	0	0	0.18	1	1.18
WWC-3	0	29.2	203	0.845	8.2	78.5	660	0	0.021	0.0357	0	0	0	0	0	0.172	0	0.00593	0	0	0.16	0.52	0.68
WWC-4	0.826	185	1100	0.39	7.31	716	3100	0	0.00923	0.101	0	0	0	0	0	0.75	0	0.00783	0	0	0.6	0.84	1.44
WWC-5	1.59	320	1640	0.319	7.22	1210	4790	0	0.00371	0.0882	0	0	0	0	0	1.41	0	0.0205	0.00345	0	0.52	1.9	2.42
WWC-6																							
WWC-7																							

Waste Water	Round 2 Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
SI-U-1	12.99	7.49	11	3790	7.4	1.37	2.42
WW-U-1	15.75	7.21	-117	8030	19.6	4.07	5.06
WW-U-2	14.5	7.34	-22	9240	12.9	2.4	5.82
WWC-1	15.29	7.11	-108	1400	11.8	7.82	8.62
WWC-2	14.19	7.75	-86	1720	9.1	2.37	1.1
WWC-3	15.63	8.1	-183	1190	2	1.36	0.759
WWC-4	15.58	7.37	-8	5004	4.7	1.61	3.18
WWC-5	15	7.22	19	7510	6.4	2	4.75
WWC-6							
WWC-7							

Results below reporting limit are recorded as 0.

Round 3 Detection Monitoring - June 6-15, 2016

Landfill Wells	Results																						
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
CL-U-1	0	51.2	414	1.01	7.83	122	1080	0	0.0507	0.0887	0	0	0	0	0	0.378	0	0.00491	0	0	0.11	0.72	0.83
CL-U-2	0	53.7	390	1.14	7.75	121	976	0	0.0245	0.0933	0	0	0	0	0	0.346	0	0.00391	0	0	0.26	1.5	1.76
CLW-1	0	34.6	312	1.13	7.9	70.1	716	0	0.0285	0.0621	0	0	0	0	0	0.318	0	0.00438	0	0	0.28	0.89	1.17
CLW-2	0	43.9	402	1.21	7.84	87.9	976	0	0.0264	0.0819	0	0	0	0	0	0.396	0	0.00427	0	0	0.25	1.1	1.35
CLW-3	0	36.2	346	1.3	7.86	104	876	0	0.0402	0.0992	0	0	0	0	0	0.375	0	0.00463	0	0	0.35	1.2	1.55
CLW-4	0	30.6	294	1.58	7.79	77.9	748	0	0.0196	0.119	0	0	0	0	0	0.338	0	0.0092	0	0	0.45	0.72	1.17
CLW-5	0	33	336	1.81	7.86	84.9	848	0	0.0182	0.0851	0	0	0	0	0	0.352	0	0.00868	0	0	0.27	0.65	0.92
CLW-6	0	29.8	313	1.73	7.9	73.2	756	0	0.0181	0.0901	0	0	0	0	0	0.333	0	0.0105	0	0	0.34	1.4	1.74
CLW-7	0	39.3	328	1.16	7.64	67.4	732	0	0.0246	0.0581	0	0	0.00891	0	0	0.331	0	0.00638	0	0	0.19	0.55	0.74
CLW-8	0	40.3	312	1.08	7.82	69.7	808	0	0.0225	0.0797	0	0	0	0	0	0.32	0	0.00435	0	0	0.27	0.32	0.59
CLW-9																							
CL-U-3																							

Round 3

Landfill Wells	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
CL-U-1	18.94	8.04	-204	1910	22.6	1.2	1.22
CL-U-2	18.47	7.7	-136	1900	1	2.72	1.22
CLW-1	23.71	7.77	62	1550	0	1.34	0.99
CLW-2	22.15	7.66	-169	1840	0	1.31	1.17
CLW-3	20.8	7.71	-225	1720	0.8	1.8	1.1
CLW-4	19.51	7.8	-235	1480	0	4.39	0.95
CLW-5	21.24	7.77	-209	1570	11.5	4.22	1.01
CLW-6	18.81	7.87	-235	1600	0	1.7	1.02
CLW-7	16.73	7.62	66	1580	8.9	3.82	1.01
CLW-8	20.93	7.66	55	1510	0	12.58	0.966
CLW-9							
CL-U-3							

Bottom Ash	Results																						
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
BA-U-1	0	195	1130	0.801	7.63	339	2520	0	0.0177	0.0935	0	0	0	0	0	0.773	0	0.00317	0.00426	0	0.3	1.6	1.9
BA-U-2	0	15.9	284	0.865	12	40.6	720	0	0	0.128	0	0	0.0032	0	0	0.315	0	0.016	0	0	0.22	1.5	1.72
BAC-1	4.73	191	2240	0.402	7.59	1840	6420	0	0.0164	0.081	0	0	0.0033	0	0	1.3	0	0.0669	0.0168	0	0.51	1.3	1.81
BAC-2	11.2	216	1650	0.986	7.17	3220	7520	0	0.0416	0.0248	0	0	0.00488	0	0	1.32	0	0.14	0.0142	0	0.17	1.6	1.77
BAC-3	6.82	445	3230	0.794	7.42	4490	10900	0	0.0158	0.048	0	0	0.00707	0	0	2.53	0	0.0269	0.0198	0	0.25	1.6	1.85
BAC-4	0	66.1	551	1.38	7.73	223	1280	0	0.0334	0.0772	0	0	0.00461	0	0	0.509	0	0.0122	0	0	0.16	0.68	0.84
BAC-5	0	50.4	541	1.26	7.79	122	1220	0	0.0337	0.0839	0	0	0	0	0	0.494	0	0.00738	0	0	0.11	1.7	1.81
BAC-6	1.7	89.5	521	1.04	7.72	448	1560	0	0.0122	0.0859	0	0	0	0	0	0.542	0	0.0359	0	0	0.27	0.76	1.03
BAC-7	4.51	132	685	1.31	7.69	1370	2870	0	0.0234	0.0315	0	0	0	0	0	0.674	0	0.0749	0.00319	0	0.17	2.4	2.57

Bottom Ash	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
BA-U-1	18.51	7.48	-114	4730	4.9	1.73	3.03
BA-U-2	20.17	11.9	-206	1980	5.1	4.04	1.26
BAC-1	20.91	7.43	-5	10.3	33.2	3.43	6.41
BAC-2	19.81	7.01	33	11.6	2	0.69	7.18
BAC-3	18.81	7.19	16	16.6	2.6	1.26	10.3
BAC-4	18.21	7.71	83	2490	2.6	3.05	1.59
BAC-5	18.58	7.75	51	2260	0	1320	1.45
BAC-6	20.42	7.7	50	2740	0.4	21.84	1.75
BAC-7	21.43	7.63	-7	4510	8	15.04	2.89

Waste Water	Results																						
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
SI-U-1	0	129	901	0.564	7.6	318	1880	0	0.00989	0.0929	0	0	0.0156	0	0	0.499	0	0.00411	0	0	0.45	0.64	1.09
WW-U-1	1.18	296	2030	0.386	7.21	1300	5820	0	0.0052	0.115	0	0	0	0	0	1	0	0.00888	0.00637	0	0.64	0.92	1.56
WW-U-2	1.49	412	2300	0.534	7.33	1180	5400	0	0.00538	0.0746	0	0	0.0114	0	0	1.08	0	0.0126	0.0107	0	0.64	1.1	1.74
WWC-1	3.59	526	3950	0	7.12	1990	8820	0	0.00401	0.077	0	0	0	0.00532	0	2.18	0	0.00653	0.00824	0	0.47	2	2.47
WWC-2	0	59.1	369	0.833	7.79	145	956	0	0.0151	0.0408	0	0	0	0	0	0.225	0	0.00402	0	0	0.22	0.39	0.61
WWC-3	0	26.4	197	1.02	8.12	85.6	664	0	0.0213	0.0328	0	0	0	0	0	0.23	0	0.00574	0	0	0.13	3.3	3.43
WWC-4	0.627	138	902	0.576	7.57	406	2010	0	0.00498	0.0768	0	0	0	0	0	0.606	0	0.0082	0	0	0.27	1.7	1.97
WWC-5	1.65	406	1730	0.3	7.24	1140	5060	0	0.00608	0.067	0	0	0	0	0	1.4	0	0.0119	0.00363	0	0.42	0.85	1.27
WWC-6																							
WWC-7																							

Waste Water	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
SI-U-1	18	7.54	-69	3350	0.3	8.11	2.14
WW-U-1	22.73	7.15	34	7560	0	4.74	4.76
WW-U-2	18.42	7.25	-66	8820	25.9	1.6	5.56
WWC-1	18.38	6.9	62	14.7	1.6	1.86	9.13
WWC-2	18.22	7.74	-101	1.74	1.9	5.2	1.12
WWC-3	16.62	7.99	-168	1.2	0	0.59	0.765
WWC-4	16.85	7.43	-8	3.63	1.2	0.85	2.32
WWC-5	17.35	7.01	15	7.44	1	0.78	4.69
WWC-6							
WWC-7							

Results below reporting limit are recorded as 0.

Round 4 Detection Monitoring - August 22-September 1, 2016

Landfill Wells	Results																					
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
CL-U-1	0	54.8	424	1.03	7.63	124	1030	0	0.0301	0.0911	0	0	0	0	0	0.375	0	0.00428	0	0	0.36	0.44	0.8
CL-U-2	0	57.7	406	1.17	7.69	113	948	0	0.0265	0.0961	0	0	0.00227	0	0	0.351	0	0.00508	0	0	0.31	1.1	1.41
CLW-1	0	35	315	1.18	7.89	65.4	832	0	0.0279	0.0594	0	0	0	0	0	0.316	0	0.00454	0	0	0.52	0.86	1.38
CLW-2	0	46.8	424	1.29	7.75	89.2	992	0	0.0284	0.0823	0	0	0	0	0	0.391	0	0.00462	0	0	0.31	0.62	0.93
CLW-3	0	38.7	349	1.33	7.75	109	896	0	0.0412	0.0995	0	0	0	0	0	0.368	0	0.00472	0	0	0.3	0.15	0.45
CLW-4	0	32.1	318	1.53	7.81	84.5	808	0	0.0316	0.104	0	0	0	0	0	0.336	0	0.00577	0	0	0.39	0.62	1.01
CLW-5	0	34.3	350	1.83	7.75	92.1	860	0	0.0189	0.0803	0	0	0	0	0	0.346	0	0.00798	0	0	0.24	0.27	0.51
CLW-6	0	31.5	331	1.73	7.84	77.1	812	0	0.0164	0.0966	0	0	0	0	0	0.342	0	0.011	0	0	0.2	1	1.2
CLW-7	0	42.1	336	1.1	7.71	70	760	0	0.024	0.0529	0	0	0	0	0	0.302	0	0.00396	0	0	0.17	0.33	0.5
CLW-8	0	40.1	327	1.08	7.73	75	720	0	0.0224	0.0761	0	0	0	0	0	0.308	0	0.00459	0	0	0.35	1	1.35
CLW-9																							
CL-U-3																							

Bottom Ash	Results																					
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
BA-U-1	0	180	1170	0.888	7.62	327	2390	0	0.0191	0.0802	0	0	0	0	0	0.684	0	0.00386	0.00384	0	0.45	0.84	1.29
BA-U-2	0	10.4	317	0.975	11.8	39.9	748	0	0.00225	0.114	0	0	0.00216	0	0	0.337	0	0.0147	0	0	0.26	1.1	1.36
BAC-1	4.95	221	2520	0.401	7.52	2380	7210	0	0.0146	0.0643	0	0	0.0028	0	0	1.42	0	0.0603	0.0148	0	0.63	0.64	1.27
BAC-2	10.5	203	1640	1.03	7.22	3180	7620	0	0.0431	0.0237	0	0	0.0081	0	0	1.17	0	0.166	0.0136	0	0.33	0.23	0.56
BAC-3	6.77	399	3350	1.28	7.36	4630	11700	0	0.0213	0.0436	0	0	0.00386	0	0	2.37	0	0.0294	0.019	0	0.38	0.76	1.14
BAC-4	0	56.1	498	1.35	7.62	210	1460	0	0.0358	0.0757	0	0	0	0	0	0.508	0	0.0103	0	0	0.19	0.83	1.02
BAC-5	0	49.4	561	1.25	7.68	127	1200	0	0.0331	0.0879	0	0	0	0	0	0.538	0	0.0077	0	0	0.1	0.46	0.56
BAC-6	1.38	80.2	546	0.901	7.61	502	1540	0	0.0115	0.0781	0	0.000677	0.00283	0	0	0.54	0	0.034	0	0	0.31	0.24	0.55
BAC-7	3.96	126	612	1.28	7.68	1370	2770	0	0.0232	0.0274	0	0	0	0	0	0.669	0	0.0942	0.00257	0	0.37	-0.17	0.2

Waste Water	Results																					
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
SI-U-1	0	131	922	0.564	7.57	281	1880	0	0.00926	0.0858	0	0	0.00217	0	0	0.467	0	0.00295	0	0	0.45	0.96	1.41
WW-U-1	1.25	304	2200	0.327	7.21	1280	5270	0	0.00439	0.0916	0	0	0.00337	0	0	1.01	0	0.00835	0.00689	0	0.54	2	2.54
WW-U-2	0.641	308	2140	0.614	7.42	854	4550	0	0.00258	0.117	0	0	0.00424	0	0	0.994	0	0.0342	0.00617	0	0.82	1.6	2.42
WWC-1	10.2	457	4680	0.213	7.11	3130	12100	0	0.02	0.0335	0	0	0	0	0	2.41	0.00019	0.00966	0.0145	0	0.33	0.86	1.19
WWC-2	0	57.9	389	0.508	7.86	151	960	0	0.0152	0.0406	0	0	0	0	0	0.243	0	0.0034	0	0	0.69	1.2	1.89
WWC-3	0	27.3	220	1.03	8.02	78	628	0	0.0217	0.0342	0	0	0	0	0	0.241	0	0.00559	0	0	0.2	-0.34	-0.14
WWC-4	1.17	225	1330	0.422	7.37	868	3230	0	0.0131	0.065	0	0	0	0	0	0.879	0	0.00237	0.00238	0	0.27	0.48	0.75
WWC-5	2.87	326	1920	0.366	7.18	1700	5440	0	0.00717	0.0439	0	0	0	0	0	1.33	0	0.00742	0.00312	0	0.41	0.51	0.92
WWC-6																							
WWC-7																							

Results below reporting limit are recorded as 0.

Round 4

Landfill Wells	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
CL-U-1	17.53	7.66	-180	1.84	4.1	1.72	1.18
CL-U-2	19.27	7.65	-151	1.81	0	9.25	1.16
CLW-1	18.96	7.85	34	1.55	0	5.66	0.992
CLW-2	19.41	7.7	-177	1.81	0	10.68	1.16
CLW-3	19.1	7.74	-225	1.66	0	10.74	1.07
CLW-4	21.52	7.8	-244	1.54	0	5.07	0.985
CLW-5	20.36	7.74	-195	1.67	45.2	9.17	1.07
CLW-6	18.53	7.79	-235	1.61	0	4.22	1.03
CLW-7	19.86	7.62	-71	1.57	0.01	12.06	1.01
CLW-8	20.81	7.7	-78	1.53	0	5.02	0.976
CLW-9							
CL-U-3							

Bottom Ash	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
BA-U-1	20.11	7.46	-160	4.24	0	3.38	2.72
BA-U-2	17.77	11.83	-224	2.11	9.1	8.94	1.35
BAC-1	22.39	7.33	10	11.8	8.7	2.54	7.3
BAC-2	21.36	7.04	0	10200	0	2.17	6.33
BAC-3	22.52	7.22	34	15.4	0	2.18	9.58
BAC-4	19.45	7.62	-94	2350	0	11.45	1.51
BAC-5	19.21	7.62	-96	2340	0	10.71	1.5
BAC-6	19.95	7.59	9	2650	0	24.99	1.7
BAC-7	19.38	7.56	-77	4270	0	2.75	2.73

Waste Water	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
SI-U-1	21.31	7.57	-21	3.25	1.6	14.7	2.08
WW-U-1	20.96	7.12	34	8.06	10.9	3.52	5.08
WW-U-2	19.51	7.41	-63	7.34	4.7	8.24	4.62
WWC-1	20.69	6.94	-34	18400	0	0.54	11.4
WWC-2	17.91	7.64	-153	1720	2.6	3.57	1.1
WWC-3	17.39	7.97	-176	1200	0	0.54	0.766
WWC-4	17.14	7.22	-68	5320	0	2.25	3.35
WWC-5	17.85	7.01	-89	7790	0.9	0.59	4.91
WWC-6							
WWC-7							

Round 5 Detection Monitoring - October 17-26, 2016

Landfill Wells	Results																						
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
CL-U-1	0	57.4	424	0.959	7.7	115	912	0	0.037	0.089	0	0	0	0	0	0.217	0	0.00404	0	0	0.25	0.18	0.43
CL-U-2	0	59.5	395	0.99	7.73	113	864	0	0.0269	0.101	0	0	0	0	0	0.206	0	0.00401	0	0	0.36	0.84	1.2
CLW-1	0	38.9	325	1.15	7.8	67.8	824	0	0.0295	0.0668	0	0	0	0	0	0.189	0	0.0043	0	0	0.27	0.19	0.46
CLW-2	0	49.2	422	1.13	7.82	85.3	984	0	0.0258	0.0855	0	0	0	0	0	0.223	0	0.00456	0	0	0.31	0.34	0.65
CLW-3	0	40.8	366	1.19	7.83	100	944	0	0.0412	0.104	0	0	0	0	0	0.214	0	0.00508	0	0	0.35	0.13	0.48
CLW-4	0	34.6	335	1.39	7.84	85.9	828	0	0.0385	0.0932	0	0	0	0	0	0.203	0	0.00414	0	0	0.59	-0.37	0.22
CLW-5	0	35.3	339	1.69	7.89	82.1	928	0	0.0206	0.0812	0	0	0	0	0	0.204	0	0.00723	0	0	0.31	0.84	1.15
CLW-6	0	33.9	325	1.46	7.85	77.9	972	0	0.0287	0.0908	0	0	0	0	0	0.203	0	0.00638	0	0	0.35	0.18	0.53
CLW-7	0	42.8	343	1.14	7.9	68.6	796	0	0.0235	0.0551	0	0	0.00234	0	0	0.182	0	0.00413	0	0	0.27	0.32	0.59
CLW-8	0	41.7	334	1.11	7.77	68.9	744	0	0.0258	0.0797	0	0	0	0	0	0.189	0	0.00428	0	0	0.37	-0.28	0.09
CLW-9																							
CL-U-3																							

Round 5

Landfill Wells	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
CL-U-1	16.15	7.72	-195	1900	0.7	2.79	1.22
CL-U-2	16.89	7.67	-102	1820	0.4	0.82	1.17
CLW-1	16.85	7.77	-50	1520	2	1.57	0.974
CLW-2	17.05	7.76	-202	1900	0.4	3.82	1.21
CLW-3	15.28	7.75	-231	1720	1.8	1.29	1.1
CLW-4	14.67	7.78	-235	1620	7	1.4	1.04
CLW-5	17.4	7.71	-209	1690	8.1	1.41	1.08
CLW-6	15.85	7.83	-249	1620	1.1	1.72	1.04
CLW-7	17.42	7.7	-73	564	0	13.65	0.361
CLW-8	17.18	7.7	-100	1530	2.2	1.03	0.978
CLW-9							
CL-U-3							

Bottom Ash	Results																						
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
BA-U-1	0	16.7	327	1.65	9.08	60.2	832	0	0.0362	0.0679	0	0	0	0	0	0.215	0	0.0163	0	0	0.67	0.13	0.8
BA-U-2	0	38.1	357	1.02	8.56	51.9	824	0	0.0234	0.131	0	0	0	0	0	0.21	0	0.00449	0	0	0.57	0.42	0.99
BAC-1	3.42	131	1850	0.437	8.8	1610	7720	0	0.0103	0.049	0	0	0.00612	0	0	0.402	0	0.0498	0.00852	0	0.34	0.27	0.61
BAC-2	9.71	216	1620	1.11	7.34	2980	7040	0	0.0444	0.0228	0	0	0.00644	0	0	0.414	0	0.165	0.0131	0	0.25	-0.03	0.22
BAC-3	7.04	401	3160	0.76	7.39	4260	11400	0	0.0226	0.0404	0	0	0.00362	0	0	0.812	0	0.0275	0.0195	0	0.24	0.14	0.38
BAC-4	0	59.2	534	1.34	7.8	222	1230	0	0.0352	0.0723	0	0	0.00212	0	0	0.243	0	0.00992	0	0	0.09	0.4	0.49
BAC-5	0	40.5	479	1.33	7.85	110	1070	0	0.0359	0.0909	0	0	0	0	0	0.219	0	0.00715	0	0	0.2	-0.01	0.19
BAC-6	4.35	133	606	0.97	7.61	1080	2620	0	0.022	0.0287	0	0	0.00257	0	0	0.266	0	0.0858	0.00369	0	0.13	0.69	0.82
BAC-7	3.97	135	628	1.42	7.69	1340	2880	0	0.0241	0.026	0	0	0.00217	0	0	0.279	0	0.0944	0.00279	0	0.26	1.1	1.36

Bottom Ash	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
BA-U-1	16.41	9.07	6	1660	3.2	1.88	1.06
BA-U-2	16.67	8.77	-318	1600	1.7	1.76	1.03
BAC-1	18.66	7.57	-144	8800	7.7	0.55	6.19
BAC-2	19.51	7.01	-2	10200	0.6	0.46	6.34
BAC-3	18.63	7.15	2	16700	20	4.99	10.4
BAC-4	16.35	7.72	-120	0.859	3	4.2	0.55
BAC-5	16.43	7.85	-64	726	1.4	12.41	0.464
BAC-6	16.07	7.62	-86	1370	11.4	1.77	0.879
BAC-7	16.64	7.59	-67	1560	4.6	12.42	0.998

Waste Water	Results																						
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
SI-U-1	0	132	863	0.514	7.52	286	1850	0	0.00895	0.0871	0	0	0	0	0	0.254	0	0.00276	0	0	0.32	0.11	0.43
WW-U-1	1.23	348	2190	0.346	7.18	1230	5370	0	0.0041	0.0771	0	0	0.00538	0	0	0.479	0	0.00891	0.00579	0	0.73	0.17	0.9
WW-U-2	1.47	383	2340	0.416	7.22	1120	5540	0	0.00573	0.0704	0	0	0.00396	0	0	0.512	0	0.0111	0.0116	0	0.78	0.46	1.24
WWC-1	9.83	513	4540	0.133	7.04	2960	12500	0	0.0197	0.0317	0	0	0.00348	0	0	0.819	0.000198	0.00936	0.0153	0	0.23	0.73	0.96
WWC-2	0	58.5	369	0.42	7.88	140	960	0	0.0129	0.0543	0	0	0.0243	0	0	0.112	0	0.00809	0	0	0.1	0.45	0.55
WWC-3	0	27.7	224	1.08	8.01	86.1	612	0	0.0218	0.0332	0	0	0	0	0	0.123	0	0.00543	0	0	0.07	0.1	0.17
WWC-4	1.19	227	1200	0.509	7.32	763	3200	0	0.0136	0.0629	0	0	0	0	0	0.351	0	0.00222	0.00216	0	0.08	0.75	0.83
WWC-5	3.02	343	1850	0.401	0.71	1570	5300	0	0.00778	0.0389	0	0	0.00238	0	0	0.497	0	0.00498	0.0041	0	0.43	1.1	1.53
WWC-6																							
WWC-7																							

Waste Water	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
SI-U-1	16.62	7.47	-22	3370	1	9	2.16
WW-U-1	17.72	6.99	7	8330	3	1.89	5.25
WW-U-2	17.84	7.19	-10	8400	2.6	1.89	5.29
WWC-1	15.78	6.93	-22	18600	0	0.51	11.6
WWC-2	15.91	7.75	-210	1680	6	1.08	1.07
WWC-3	16.26	7.94	-166	1210	0	0.24	0.772
WWC-4	16.51	7.22	-41	5140	0.2	1.09	3.24
WWC-5	15.83	7.02	-87	7930	0.2	0.37	4.99
WWC-6							
WWC-7							

Results below reporting limit are recorded as 0.

Round 6 Detection Monitoring - March 20-30, 2017

Landfill Wells	Results																					
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
CL-U-1	0	57.1	403	0.876	7.83	113	908	0	0.0322	0.0867	0	0	0	0	0	0.214	0	0.00365	0	0	0.62	0.22	0.62
CL-U-2	0	61.2	374	0.903	7.89	110	852	0	0.0272	0.0976	0	0	0	0	0	0.208	0	0.00386	0	0	0.4	0.39	0.4
CLW-1	0	38.4	295	1.05	7.83	62.4	768	0	0.0309	0.0631	0	0	0.0187	0	0	0.185	0	0.00654	0	0	0.41	0.78	1.2
CLW-2	0	49.7	377	1.07	7.85	92.9	936	0	0.0277	0.0811	0	0	0	0	0	0.219	0	0.00437	0	0	0.31	0.72	1
CLW-3	0	42.4	333	1.23	7.87	94.4	876	0	0.0423	0.103	0	0	0	0	0	0.214	0	0.00473	0	0	0.35	0.7	1.1
CLW-4	0	35.2	306	1.27	8.02	79.1	808	0	0.0388	0.0898	0	0	0	0	0	0.202	0	0.00439	0	0	0.39	0.12	0.39
CLW-5	0	36	320	1.71	7.88	79.9	748	0	0.0216	0.0801	0	0	0.00214	0	0	0.025	0	0.00666	0	0	0.4	0.38	0.4
CLW-6	0	33.4	302	1.48	7.91	66	752	0	0.0164	0.0976	0	0	0	0	0	0.193	0	0.00805	0	0	0.25	-0.35	0.25
CLW-7	0	46.4	312	1.02	7.68	61	824	0	0.0257	0.0545	0	0	0.00772	0	0	0.182	0	0.00425	0	0	0.14	0.18	0.14
CLW-8	0	42.8	301	1.03	7.71	63.8	772	0	0.0255	0.0707	0	0	0.012	0	0	0.189	0	0.00526	0	0	0.25	0.29	0.25
CLW-9																							
CL-U-3																							

Round 6

Landfill Wells	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
CL-U-1	17.27	7.52	-194	957	4.2	2.53	0.613
CL-U-2	15.81	7.48	-139	929	0	10.45	0.598
CLW-1	14.45	7.6	-173	1540	0	5.98	0.984
CLW-2	16.63	7.58	-221	950	0	9.29	0.609
CLW-3	16.58	7.66	-235	840	0	10.64	0.539
CLW-4	16.67	7.68	-253	785	0	2.14	0.502
CLW-5	16.63	7.6	-222	834	0	2.29	0.534
CLW-6	15.51	7.65	-245	790	0	8.85	0.505
CLW-7	15.48	7.52	-150	1600	0	1.94	1.02
CLW-8	15.08	7.57	-159	1550	0	1.55	0.991
CLW-9							
CL-U-3							

Bottom Ash	Results																					
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
BA-U-1	0	24.5	259	1.57	8.59	48.8	648	0	0.0359	0.0856	0	0	0	0	0	0.193	0	0.0124	0	0	0.28	0.15	0.28
BA-U-2	0	3.76	328	0.886	12.1	39.2	728	0	0.00254	0.122	0	0	0	0	0	0.221	0	0.00986	0	0	0.3	0.47	0.3
BAC-1	4.01	188	2170	0	7.47	1650	6320	0	0.0202	0.279	0	0	0.0412	0	0	0.429	0	0.0391	0.0152	0	1.1	1.5	2.6
BAC-2	10.5	193	1480	0.871	7.2	2780	7320	0	0.0469	0.022	0	0	0.0145	0	0	0.44	0	0.194	0.0144	0	0.34	0.22	0.56
BAC-3	7.57	408	3140	0	7.36	4290	13000	0	0.0239	0.0376	0	0	0.00447	0	0	0.974	0	0.026	0.0211	0	0.2	0.5	0.7
BAC-4	0	59	461	1.13	7.68	206	1260	0	0.0362	0.0705	0	0	0.011	0	0	0.237	0	0.012	0	0	0.13	0.18	0.13
BAC-5	0	59.5	576	0.994	7.73	190	1430	0	0.032	0.0893	0	0	0.00204	0	0	0.277	0	0.00666	0	0	0.21	0.24	0.45
BAC-6	4.44	128	594	0.763	7.6	1040	2500	0	0.0237	0.0269	0	0	0.00205	0	0	0.28	0	0.0873	0.0045	0	0.12	-0.21	-0.09
BAC-7	3.31	151	591	0.936	7.43	1140	3120	0	0.0237	0.0253	0	0	0	0	0	0.327	0	0.0702	0.007	0	0.21	0.7	0.91

Bottom Ash	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
BA-U-1	16.08	8.22	55	783	1.8	6.02	0.501
BA-U-2	17.77	11.71	-250	2120	1.9	7.87	1.36
BAC-1	16.44	7.24	-131	9640	11.2	2.14	6.07
BAC-2	15.89	6.86	-53	10400	0.1	0.6	6.44
BAC-3	15.61	7.1	-44	18000	3.4	0.5	11.2
BAC-4	14.42	7.58	-165	2400	0	2.76	1.53
BAC-5	15.18	7.53	-155	2550	0.1	0.57	1.63
BAC-6	16.07	7.42	-115	4030	0	0.32	2.58
BAC-7	16.54	7.34	-124	4780	1.5	0.38	3.06

Waste Water	Results																					
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
SI-U-1	0	131	785	0.458	7.54	247	1760	0	0.00941	0.08	0	0	0	0	0	0.25	0	0.00227	0	0	0.33	0.24	0.33
WW-U-1	1.15	336	1880	0.2	7.26	1180	4890	0	0.00593	0.0568	0	0	0	0	0	0.477	0	0.00558	0.00583	0	0.53	0.89	1.42
WW-U-2	0.6	317	1860	0.438	7.38	734	4300	0	0.00355	0.095	0	0	0	0	0	0.479	0	0.021	0.00749	0	0.51	1.6	2.11
WWC-1	11.2	479	4510	0	6.98	2940	12200	0	0.0213	0.0288	0	0	0	0	0	0.932	0.000328	0.00995	0.0149	0	0.26	1.1	1.36
WWC-2	0	52	318	0.405	7.79	125	856	0	0.0149	0.0361	0	0	0	0	0	0.122	0	0.00357	0	0	0.17	0.61	0.78
WWC-3	0	25.7	195	0.852	8.13	76	680	0	0.0227	0.0302	0	0	0.00309	0	0	0.137	0	0.00537	0	0	0.24	-0.21	0.03
WWC-4	1.3	233	1250	0.319	7.38	819	3230	0	0.0135	0.061	0	0	0	0	0	0.382	0	0	0.00239	0	0.18	-0.2	-0.02
WWC-5	1.72	318	1520	0.292	7.13	1190	4560	0	0.01	0.0501	0	0	0	0	0	0.555	0	0.00523	0.00399	0	0.23	0.95	1.18
WWC-6																							
WWC-7																							

Waste Water	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
SI-U-1	17.03	7.37	-45	3340	1.1	8.42	2.14
WW-U-1	18.15	6.96	-57	7980	11.5	1.02	5.02
WW-U-2	17.03	7.29	-15	7470	2.3	1.36	4.71
WWC-1	15.08	6.74	-32	19700	0.3	1.8	12.2
WWC-2	15.4	7.75	-134	1650	1	0.44	1.06
WWC-3	15.31	8.09	207	1230	1.2	0.22	0.784
WWC-4	15.85	7.18	-70	5390	0.5	3.15	3.39
WWC-5	16.2	6.84	-61	7180	0	0.62	4.52
WWC-6							
WWC-7							

Results below reporting limit are recorded as 0.

Round 7 Detection Monitoring - June 5-21, 2017

Landfill Wells	Results																					
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
CL-U-1	0	53	480	0.996	7.74	132	1010	0	0.0344	0.0826	0	0.00065	0	0	0	0.202	0	0.00402	0	0	0.36	0.95	1.31
CL-U-2	0	55.1	444	1	7.8	134	952	0	0.0247	0.0938	0	0	0	0	0	0.19	0	0.00408	0	0	2.7	1	3.7
CLW-1	0	36.4	322	1.06	7.85	68.2	772	0	0.0289	0.0615	0	0	0	0	0	0.173	0	0.00389	0	0	0.2	0.14	0.34
CLW-2	0	44.7	436	1.19	7.83	102	964	0	0.0246	0.0754	0	0	0.00411	0	0	0.211	0	0.00461	0	0	0.24	1	1.24
CLW-3	0	37.3	380	1.23	7.85	106	856	0	0.0378	0.0951	0	0	0	0	0	0.197	0	0.00498	0	0	0.27	0.29	0.56
CLW-4	0	30.6	345	1.44	7.89	86.3	816	0	0.0352	0.0885	0	0	0	0	0	0.189	0	0.00481	0	0	0.29	0.3	0.59
CLW-5	0	32.4	358	1.82	7.86	91.6	860	0	0.0203	0.0732	0	0	0	0	0	0.188	0	0.00572	0	0	1.4	1.2	2.6
CLW-6	0	31	336	1.61	7.9	77.5	768	0	0.02	0.0893	0	0	0	0	0	0	0.183	0	0.0068	0	0.01	0.5	0.51
CLW-7	0	41.5	352	1.01	7.88	70.4	832	0	0.0241	0.0514	0	0	0	0	0	0.169	0	0.0033	0	0	0.14	0.75	0.89
CLW-8	0	38.4	339	1.02	7.81	73.1	812	0	0.0239	0.0681	0	0	0	0	0	0.176	0	0.00391	0	0	0.18	0.81	0.99
CLW-9																							
CL-U-3																							

Bottom Ash	Results																					
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
BA-U-1	0	26.3	317	1.75	8.32	52.9	776	0	0.0323	0.0901	0	0	0	0	0	0.191	0	0.0109	0	0	0.15	0.73	0.88
BA-U-2	0	3.58	366	0.821	11.8	39.6	748	0	0	0.0899	0	0	0	0	0	0.215	0	0.0086	0	0	0.09	0.98	1.07
BAC-1	1.91	88.7	914	0.266	8.92	702	2920	0	0.0145	0.0563	0	0	0.00666	0	0	0.305	0	0.0317	0.00643	0	0.2	0.99	1.19
BAC-2	10.6	216	1730	0	7.21	3260	7720	0	0.042	0.0211	0	0	0.00799	0	0	0.586	0	0.177	0.0138	0	0.14	0.64	0.78
BAC-3	7.76	401	3510	0	7.29	4900	13200	0	0.0251	0.0316	0	0	0.00858	0	0	1.17	0	0.0292	0.0212	0	0.3	0.76	1.06
BAC-4	0	56.1	612	1.13	7.84	212	1220	0	0.0329	0.0666	0	0	0	0	0	0.228	0	0.0113	0	0	0.37	0.47	0.84
BAC-5	0	58.3	654	1.1	7.76	217	1180	0	0.0297	0.0881	0	0	0	0	0	0.259	0	0.00728	0	0	0.31	0.28	0.59
BAC-6	4.25	135	697	0.779	7.63	1110	2810	0	0.0229	0.0256	0	0	0	0	0	0.257	0	0.0921	0.00414	0	0.24	0.76	1
BAC-7	3.4	146	632	0.864	7.78	1290	3170	0	0.0154	0.0288	0	0	0.00398	0	0	0.36	0	0.0888	0.00457	0	2.5	0.88	3.38

Waste Water	Results																					
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
SI-U-1	0	116	763	0.522	7.56	427	1800	0	0.0101	0.0599	0	0.00128	0.00274	0	0	0.235	0	0.00233	0	0	0.2	1.3	1.5
WW-U-1	1.18	312	2340	0.181	7.41	1450	4540	0	0.00568	0.0521	0	0	0.00212	0	0	0.441	0	0.00556	0.00625	0	1.2	1.5	2.7
WW-U-2	0.741	338	2590	0.287	7.36	1040	12500	0	0.00325	0.0803	0	0	0.067	0	0	0.512	0	0.0226	0.00846	0	0.52	1.6	2.12
WWC-1	9.88	413	4410	0	7.14	2770	11000	0	0.0173	0.0326	0	0	0	0	0	1.11	0.000175	0.0147	0.0147	0	0.39	1.5	1.89
WWC-2	0	49.5	326	0.447	7.85	134	832	0	0.0141	0.0339	0	0	0	0	0	0.138	0	0.00405	0	0	0.24	0.24	0.48
WWC-3	0	25.9	220	0.974	8.12	84.3	696	0	0.0214	0.0281	0	0	0	0	0	0.146	0	0.00504	0	0	0.1	0.45	0.55
WWC-4	1.33	229	1330	0.466	7.22	912	3060	0	0.013	0.0545	0	0	0	0	0	0.421	0	0	0.00241	0	0.22	0.74	0.96
WWC-5	2.25	287	1790	0	7.49	1420	4810	0	0.00753	0.0379	0	0	0.00202	0	0	0.567	0	0.00531	0.00336	0	0.2	1.5	1.7
WWC-6																							
WWC-7																							

Results below reporting limit are recorded as 0.

Round 7

Landfill Wells	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
CL-U-1	16.35	7.59	-206	1920	0	1.51	1.23
CL-U-2	15.98	7.5	-177	1860	0	1.62	1.19
CLW-1	18.47	7.79	-160	768	0	0.9	0.491
CLW-2	16.77	7.73	-210	945	0	1.52	0.605
CLW-3	17.35	7.78	-246	879	0	213	0.562
CLW-4	17.86	7.75	-252	1580	0	4.35	1.01
CLW-5	18.97	7.66	-232	1680	0	2.65	1.08
CLW-6	16.95	7.75	-258	1590	0	5.1	1.02
CLW-7	18.07	7.7	-131	805	0	2.21	0.516
CLW-8	17.59	7.74	-130	776	0	1.58	0.497
CLW-9							
CL-U-3							

Bottom Ash	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
BA-U-1	18.46	8.13	-138	1500	0	2.32	0.963
BA-U-2	19.9	11.43	-301	1870	0	0.58	1.2
BAC-1	22.57	9.92	-118	5180	15.6	2.32	3.27
BAC-2	19.02	7.09	-80	10900	2.2	0.84	6.76
BAC-3	18.87	7.1	-69	17800	3.2	1.02	11
BAC-4	17.01	7.62	-158	2380	0	1.61	1.52
BAC-5	17.31	7.69	-131	2560	0	2.62	1.64
BAC-6	19.46	7.59	-128	3900	35.2	0.85	2.5
BAC-7	17.97	7.5	-147	4610	2.9	1.16	2.95

Waste Water	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
SI-U-1	17.96	7.27	-138	3170	0	0.57	2.03
WW-U-1	18.63	6.87	-32	8050	0	1	5.07
WW-U-2	18.21	7.22	-161	7610	0	0.91	4.79
WWC-1	16.96	6.95	-34	15200	0.1	0.67	9.48
WWC-2	16.11	7.72	-169	1500	1.3	0.94	0.96
WWC-3	16.94	7.99	-194	1210	0.7	0.63	0.773
WWC-4	16.15	7.16	-73	5.48	0.5	0.6	3.46
WWC-5	16.54	7.01	-42	7225	0.9	0.76	4.57
WWC-6							
WWC-7							

Round 8 Detection Monitoring - September 25-October 4, 2017

Landfill Wells	Results																					
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
CL-U-1	0	52.1	422	1.07	7.73	116	1130	0	0.0291	0.088	0	0	0	0	0	0.228	0	0.00398	0	0	0.25	1.6	1.85
CL-U-2	0	53.8	390	1.1	7.67	120	1060	0	0.0262	0.0941	0	0	0	0	0	0.212	0	0.00415	0	0	0.17	1.4	1.57
CLW-1	0	35.7	310	1.15	7.85	71.7	808	0	0.0308	0.0614	0	0	0	0	0	0.192	0	0.00407	0	0	0.21	1.7	1.91
CLW-2	0	43.5	407	1.23	7.76	97.3	1040	0	0.0257	0.0793	0	0	0	0	0	0.229	0	0.00467	0	0	0.12	3	3.12
CLW-3	0	36.2	347	1.34	7.8	100	884	0	0.0408	0.102	0	0	0	0	0	0.223	0	0.00474	0	0	0.16	1.1	1.26
CLW-4	0	30.5	313	1.6	7.81	85.1	856	0	0.0333	0.09	0	0	0.0516	0	0	0.199	0	0.0115	0	0	0.24	1.8	2.04
CLW-5	0	33.2	344	1.82	7.8	88.5	824	0	0.023	0.0727	0	0	0	0	0	0.211	0	0.0052	0	0	0.2	2.2	2.4
CLW-6	0	30.5	317	1.73	7.82	74.5	828	0	0.0143	0.0961	0	0	0	0	0	0.199	0	0.00721	0	0	0.29	1.7	1.99
CLW-7	0	45.5	319	1.11	7.7	64.5	868	0	0.0244	0.0539	0	0	0	0	0	0.189	0	0.00389	0	0	0.45	0.95	1.4
CLW-8	0	37.9	319	1.13	7.77	70.6	788	0	0.0252	0.0689	0	0	0	0	0	0.192	0	0.00431	0	0	0.25	1.6	1.85
CLW-9																							
CL-U-3																							

Round 8

Landfill Wells	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
CL-U-1	16.07	7.45	-199	1930	0.4	0.56	1.24
CL-U-2	15.67	7.43	-176	1880	0.8	0.58	1.2
CLW-1	20.49	7.68	-172	1.48	0	0.41	0.949
CLW-2	16.63	7.63	-199	1880	0.7	0.64	1.2
CLW-3	16.82	7.59	-251	1750	1.5	2.9	1.12
CLW-4	17.63	7.56	-269	1620	1.6	1.56	1.03
CLW-5	17.21	7.71	-244	1690	3.7	1.12	1.09
CLW-6	15.97	7.75	-259	1.6	2.3	3.3	1.02
CLW-7	16.72	7.59	-147	1640	0	0.86	1.05
CLW-8	18.26	7.65	-145	1.53	1.1	1.89	0.975
CLW-9							
CL-U-3							

Bottom Ash	Results																					
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
BA-U-1	0	169	1040	1.02	7.53	343	2310	0	0.0215	0.0745	0	0	0	0	0	0.368	0	0.00296	0.00375	0	0.07	1.3	1.37
BA-U-2	0	46.3	479	0.993	8.04	53.7	1140	0	0.0249	0.156	0	0	0	0	0	0.241	0	0.00294	0	0	0.24	1.5	1.74
BAC-1	4.86	229	2620	0.854	7.4	2150	8400	0	0.0148	0.702	0	0	0.114	0.00461	0	0.52	0	0.0467	0.0174	0	0.39	1.6	1.99
BAC-2	10.1	221	1690	1.33	7.62	2970	7940	0	0.0469	0.0202	0	0	0.00547	0	0	0.431	0	0.154	0.0149	0	0.11	0.14	0.25
BAC-3	8.76	353	3370	2.51	7.43	5340	12700	0	0.054	0.0306	0	0	0.0114	0	0	0.897	0	0.0525	0.0287	0	0.23	1.3	1.53
BAC-4	0	62.4	482	1.26	7.76	231	1280	0	0.0359	0.0703	0	0	0	0	0	0.262	0	0.0139	0	0	0.1	2.5	2.6
BAC-5	0	67.5	593	1.17	7.74	269	1450	0	0.0325	0.0877	0	0	0	0	0	0.294	0	0.00838	0	0	0.26	2.7	2.96
BAC-6	0.978	77.2	516	1.01	7.97	301	1510	0	0.0156	0.0833	0	0	0	0	0	0.265	0	0.0213	0	0	0.27	3.8	4.07
BAC-7	3.41	144	633	1.15	7.65	1220	2990	0	0.0191	0.0223	0	0	0	0	0	0.285	0	0.074	0.00446	0	0.15	0.84	0.99

Bottom Ash	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
BA-U-1	16.04	7.21	-166	4300	1.7	0.78	2.75
BA-U-2	16.58	8.07	-272	2030	0	1.63	1.3
BAC-1	15.36	6.93	-28	7170	1	0.54	4.52
BAC-2	16.95	6.92	-20	11500	2	0.9	7.11
BAC-3	16.87	7.07	-102	18.7	43.3	0.94	11.6
BAC-4	16.67	7.68	-148	2470	1.1	0.62	1.58
BAC-5	16.66	7.71	-140	2740	0.8	1.12	1.75
BAC-6	17.02	7.83	-47	2610	0.9	2.54	1.67
BAC-7	15.97	7.45	-121	4500	3.3	2.56	2.88

Waste Water	Results																					
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
SI-U-1	0	110	820	0.618	7.55	263	1810	0.002	0.00969	0.0783	0	0	0	0	0	0.257	0	0.00251	0	0	0.44	0.56	1
WW-U-1	1.2	311	2130	0.539	7.23	1280	5260	0	0.0055	0.0545	0	0	0.003309	0	0	0.459	0	0.00792	0.00697	0	0.34	1.2	1.54
WW-U-2	1.66	314	2280	0.721	7.31	1220	5510	0	0.0104	0.0659	0	0	0.00415	0	0	0.485	0	0.00647	0.0122	0	0.24	1.3	1.54
WWC-1	9.55	492	4430	0.507	7.37	2990	11500	0	0.0177	0.0272	0	0	0	0	0	0.755	0.000262	0.0068	0.014	0	0.26	1.2	1.46
WWC-2	0	53.6	347	0.452	7.78	137	936	0	0.0142	0.0361	0	0	0	0	0	0.112	0	0.00341	0	0	0.04	1.2	1.24
WWC-3	0	25.3	207	1.13	8.14	84	704	0	0.0207	0.0242	0	0	0	0	0	0.127	0	0.00477	0	0	0.08	2	2.08
WWC-4	1.11	201	1100	0.57	7.38	744	3280	0	0.0135	0.0529	0	0	0	0	0	0.313	0	0	0.00214	0	0.38	0.4	0.78
WWC-5	1.48	327	1620	0.544	7.16	1240	4590	0	0.0104	0.0438	0	0	0	0	0	0.496	0	0.00395	0.00407	0	0.41	0.65	1.06
WWC-6																							
WWC-7																							

Waste Water	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
SI-U-1	17.02	7.36	-123	3490	0	1.25	2.24
WW-U-1	16.41	6.96	-135	8820	0.7	1.56	5.56
WW-U-2	16.68	7.09	-34	9.23	0.6	3.75	5.82
WWC-1	16.21	6.78	48	18900	0.8	1.92	11.7
WWC-2	16.38	7.64	-110	1740	1	2.87	1.12
WWC-3	15.49	8.16	-207	1220	1.3	0.45	0.781
WWC-4	16.11	7.17	-77	4980	1.2	0.46	3.19
WWC-5	15.42	6.94	-31	7180	1.3	0.53	4.52
WWC-6							
WWC-7							

Results below reporting limit are recorded as 0.

Round 9 Assessment Monitoring - March 26-30, 2018

Landfill Wells	Results																					
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
CL-U-1	0	62.6	402	0.971	7.66	94.9	1090	0	0.0283	0.0758	0	0	0.000529	0	0	0.209	0	0.00359	0	0	0.18	0.81	0.99
CL-U-2	0	64.1	352	0.895	7.65	92.7	980	0	0.0236	0.0873	0	0	0	0	0	0.194	0	0.00376	0	0	0.34	0.16	0.5
CLW-1	0	37.8	318	1.02	7.67	59.5	720	0	0.0265	0.053	0	0	0.0271	0	0	0.179	0	0.0068	0	0	0.09	0.53	0.62
CLW-2	0	51.4	421	1.13	7.8	79.4	1020	0	0.0258	0.0711	0	0	0	0	0	0.212	0	0.00439	0	0	0.24	0.94	1.18
CLW-3	0	42.8	334	1.23	7.86	82.3	956	0	0.0364	0.089	0	0	0.000505	0	0	0.2	0	0.00464	0	0	0.37	0.94	1.31
CLW-4	0	35.8	301	1.35	7.77	70.4	864	0	0.0352	0.0788	0	0	0.000762	0	0	0.189	0	0.00477	0	0	0.46	0.59	1.05
CLW-5	0	37.4	354	1.71	7.66	79.9	876	0	0.021	0.0671	0	0	0.000712	0	0	0.194	0	0.0054	0	0	0.15	0.96	1.11
CLW-6	0	34.2	292	1.62	7.74	60.4	916	0	0.0104	0.0885	0	0	0.000612	0	0	0.182	0	0.00729	0	0	0.56	0.48	1.04
CLW-7	0	47	316	0.972	7.59	51.3	792	0	0.0215	0.0475	0		0	0	0	0.183	0	0.00341	0	0	0.28	0.22	0.5
CLW-8	0	44.1	303	0.981	7.63	54.2	792	0	0.0231	0.0609	0	0	0	0	0	0.188	0	0.00376	0	0	0.25	0.8	1.05
CLW-9																							
CL-U-3																							

Bottom Ash	Results																					
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
BA-U-1	0	33.5	296	1.64	8.05	50.7	872	0	0.0276	0.0837	0	0	0.00126	0	0	0.199	0	0.00914	0.0022	0	0.07	0.31	0.38
BA-U-2	0	46.2	399	0.943	8.2	46.9	1080	0	0.0227	0.125	0	0	0	0	0	0.209	0	0.00311	0.000691	0	0.12	0.34	0.46
BAC-1	3.88	192	1890	0.507	7.63	1470	6120	0.00138	0.0127	0.0501	0	0	0.00451	0	0	0.581	0	0.028	0.00924	0	0.31	0.48	0.79
BAC-2	9.89	283	1940	1.32	7.72	3070	8590	0	0.0508	0.0238	0	0	0.00777	0	0	0.524	0	0.142	0.0173	0	0.29	0.89	1.18
BAC-3	7.91	417	3480	1.62	7.84	4460	13000	0	0.0441	0.0331	0	0	0.00468	0	0	1.05	0	0.0396	0.0228	0	0.28	1.25	1.53
BAC-4	0	67.4	489	1.14	7.74	221	1300	0	0.0316	0.0605	0	0	0	0	0	0.249	0	0.0143	0	0	0.1	0.81	0.91
BAC-5	0	74.8	524	1.07	7.68	234	1480	0	0.0275	0.0706	0	0	0	0	0	0.284	0	0.00915	0	0	0.24	0.5	0.74
BAC-6	4.58	145	595	1.15	7.48	1100	2600	0	0.0214	0.0227	0	0	0	0	0	0.28	0	0.0898	0.00249	0	0.08	0.72	0.8
BAC-7	4.51	137	1980	0.388	7.57	1100	2730	0	0.0235	0.0195	0	0	0	0	0	0.288	0	0.0752	0.0048	0	0.14	0.71	0.85

Waste Water	Results																					
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
SI-U-1	0	129	739	0.506	7.5	201	1840	0	0.00929	0.0741	0	0	0.00137	0	0	0.241	0	0.00227	0	0	0.04	0.73	0.77
WW-U-1	1.34	339	1900	0.406	7.05	1050	5280	0	0.005	0.0486	0	0	0.00193	0	0	0.436	0	0.00702	0.00653	0	0.45	0.91	1.36
WW-U-2	1.47	370	2010	0.532	7.16	925	5260	0	0.00642	0.0499	0	0	0.00144	0	0	0.475	0	0.00467	0.0115	0	0.34	0.94	1.28
WWC-1	11.9	638	4100	0.236	6.89	2640	12700	0	0.02	0.0209	0	0	0	0	0	0.805	0.000205	0.00596	0.015	0	0.25	1.21	1.46
WWC-2	0	57.2	308	0.41	7.62	111	784	0	0.014	0.031	0	0	0	0	0	0.104	0	0.00356	0	0	0.1	0.55	0.65
WWC-3	0	28.9	200	0.985	7.96	67.8	628	0	0.0214	0.0245	0	0	0	0	0	0.131	0	0.00464	0	0	0.07	0.27	0.34
WWC-4	1.19	200	1010	0.365	7.3	593	2790	0	0.0128	0.0463	0	0	0	0	0	0.355	0	0	0	0	0.22	0.58	0.8
WWC-5	2.86	321	1600	0.384	6.92	1450	5030	0	0.0096	0.0302	0	0	0	0	0	0.511	0	0.00301	0.00415	0	0.2	1.64	1.84
WWC-6																							
WWC-7																							

Results below reporting limit are recorded as 0.

Round 9

Landfill Wells	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
CL-U-1	14.91	7.28	-193	1940	0.6	0.54	1.24
CL-U-2	14.84	7.24	-174	1890	0.2	0.67	1.21
CLW-1	16.76	7.7	-186	1530	0.2	0.7	0.98
CLW-2	15.47	7.6	-204	1880	0.4	0.96	1.22
CLW-3	16.64	7.49	-236	1720	0	1.61	1.1
CLW-4	16.15	7.51	-259	1610	0	2.2	1.03
CLW-5	16.46	7.43	-239	1720	3	1	1.1
CLW-6	15.56	7.47	-250	1600	0.1	3.61	1.03
CLW-7	18.88	7.52	-123	1570	0	1.89	1
CLW-8	18.47	7.58	-129	1520	0	0.45	0.973
CLW-9							
CL-U-3							

Bottom Ash	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
BA-U-1	15.13	7.78	-33	1600	0.6	3.82	1.02
BA-U-2	16.14	8.65	-281	1750	0.2	0.25	1.12
BAC-1	16.99	7.23	-189	9190	8.1	0.52	5.79
BAC-2	15.94	6.82	-77	12000	1.2	0.51	7.44
BAC-3	15.37	7.03	-82	18900	5	3.65	11.7
BAC-4	15.79	7.47	-150	2500	0.5	0.7	1.6
BAC-5	18.41	7.47	-149	2570	0.5	3.97	1.63
BAC-6	19.15	7.32	-92	3810	0.5	0.55	2440
BAC-7	19.26	7.4	-101	4190	3	3.14	2.68

Waste Water	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
SI-U-1	16.11	7.56	-31	3240	0	0.71	2.07
WW-U-1	16.35	7.11	-75	8010	0.7	0.4	5.03
WW-U-2	16.11	7.27	-10	8450	0.2	0.47	5.32
WWC-1	16.03	6.65	-17	19900	0	2.51	12.4
WWC-2	15.75	7.52	-124	1650	0.4	0.55	1.05
WWC-3	14.89	7.81	-190	1250	1.1	0.79	0.8
WWC-4	16.17	7.26	-64	4600	2.3	0.37	2.92
WWC-5	17.27	7.02	-36	7300	0	0.34	4.6
WWC-6							
WWC-7							

Round 10 Assessment Monitoring - June 4-13, 2018

Landfill Wells	Results																						
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
CL-U-1	0	54.7	372	0.853	7.7	98	984	0	0.0272	0.0799	0	0	0	0	0	0.208	0	0.00361	0	0	0.18	0.67	0.85
CL-U-2	0	56.4	365	0.862	7.64	108	952	0	0.0242	0.09	0	0	0	0	0	0.195	0	0.0038	0	0	-0.02	0.67	0
CLW-1	0	35.2	298	1.02	7.93	57.8	748	0	0.0285	0.0568	0	0	0.00102	0	0	0.184	0	0.00388	0.000928	0	0.29	1.01	1.3
CLW-2	0	44.6	399	1.14	7.79	86.8	980	0	0.0247	0.072	0	0	0	0	0	0.222	0	0.00433	0	0	0.25	0.96	1.21
CLW-3	0	37.5	323	1.16	7.91	94.2	876	0	0.0382	0.0948	0	0	0	0	0	0.214	0	0.00483	0	0	0.18	0.55	0
CLW-4	0	31.8	289	1.35	7.91	76.4	836	0	0.0358	0.0801	0	0	0	0	0	0.204	0	0.00459	0	0	0.13	0.85	0.85
CLW-5	0	33.1	318	1.59	7.79	75.3	804	0	0.0215	0.0689	0	0	0	0	0	0.21	0	0.00519	0	0	0.11	0.76	0
CLW-6	0	29.9	292	1.45	7.88	66.3	796	0	0.0109	0.0902	0	0	0	0	0	0.199	0	0.00711	0	0	0.27	0.85	1.12
CLW-7	0	40.6	321	0.945	7.68	58.6	900	0	0.0234	0.0514	0	0	0	0	0	0.186	0	0.00329	0	0	0.16	0.97	0.97
CLW-8	0	38.8	314	0.933	7.73	63.5	768	0	0.0244	0.0632	0	0	0	0	0	0.188	0	0.00359	0	0	0.18	1.26	1.26
CLW-9																							
CL-U-3																							

Round 10

Landfill Wells	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
CL-U-1	17.54	7.56	-196	1888	1.7	0.39	1.2
CL-U-2	17.81	7.55	-171	1830	0.7	2.53	1.17
CLW-1	19.97	7.67	-159	1480	2.1	4.08	9.45
CLW-2	17.54	7.63	-220	1830	4.5	0.63	1.18
CLW-3	17.95	7.73	-260	1680	5.5	1.57	1.07
CLW-4	17.85	7.73	-278	1570	2.8	1.64	1
CLW-5	17.16	7.72	-276	1660	8.2	1.29	1.07
CLW-6	17.86	7.83	-280	1570	8	2.56	1.01
CLW-7	17.32	7.6	-150	1610	15.7	3.84	1.03
CLW-8	17.1	7.61	-194	1550	2	0.73	0.985
CLW-9							
CL-U-3							

Bottom Ash	Results																						
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
BA-U-1	0	140	799	0.818	7.54	254	1970	0	0.0199	0.0636	0	0	0.000506	0	0	0.337	0	0.00279	0.00324	0	0.39	1.94	2.33
BA-U-2	0	70.1	578	0.73	7.68	63.5	1330	0	0.0208	0.145	0	0	0	0	0	0.279	0	0.00215	0.00201	0	0.16	1.13	1.13
BAC-1	2.16	113	1190	0.315	7.92	971	3120	0.00158	0.0141	0.0393	0	0	0.00714	0	0	0.314	0	0.0288	0.00694	0	0.24	1.06	1.3
BAC-2	8.44	263	2210	0.684	7.1	3430	7720	0	0.0445	0.021	0	0	0.00483	0	0	0.463	0	0.143	0.0154	0	0.12	1.03	1.03
BAC-3	7.26	347	3870	1.52	7.42	5080	12700	0	0.0588	0.0327	0	0	0.00511	0	0	0.944	0	0.0467	0.0229	0	0.27	1.44	1.71
BAC-4	0	62.8	510	1.01	7.95	221	1290	0	0.0322	0.0672	0	0	0	0	0	0.247	0	0.0165	0	0	0.06	0.92	0
BAC-5	0	73.5	591	0.916	7.82	302	1180	0	0.0292	0.0763	0	0	0	0	0	0.288	0	0.0128	0	0	0.19	1.56	1.75
BAC-6	4.12	134	694	0.582	7.65	1120	2980	0	0.0217	0.0235	0	0	0	0	0	0.25	0	0.0938	0.00229	0	0.14	1.02	1.02
BAC-7	4.36	130	709	1.09	7.74	1280	2760	0	0.0275	0.0204	0	0	0	0	0	0.269	0	0.0757	0.00541	0	0.06	0.87	0

Bottom Ash	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
BA-U-1	19.26	7.41	-163	3640	1	0.46	2.33
BA-U-2	18.16	7.63	-187	2370	2.1	1.31	1.51
BAC-1	17.87	8.86	-418	6480	53.2	2.95	4.04
BAC-2	16.94	6.98	-63	12400	2.3	4.29	7.68
BAC-3	17.19	7.16	-356	18300	15.2	0.87	11.4
BAC-4	17.11	7.64	-149	2500	1.5	0.75	1.6
BAC-5	17.63	7.61	-126	2850	1.2	0.65	1.83
BAC-6	17.58	7.51	-112	4210	0	0.51	2.63
BAC-7	17.32	7.6	-127	4440	0	0.56	2.84

Waste Water	Results																						
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
SI-U-1	0	123	873	0.499	7.62	209	2040	0	0.00839	0.0653	0	0	0.000602	0	0	0.254	0	0.00182	0	0	0.32	1.34	1.66
WW-U-1	1.19	289	1940	0.265	7.17	1140	5450	0	0.00477	0.0479	0	0	0.00124	0	0	0.443	0	0.00591	0.00663	0	0.23	1.49	1.72
WW-U-2	1.23	337	2130	1.01	7.3	985	5120	0	0.0102	0.0459	0	0	0.00137	0	0	0.508	0	0.00277	0.0112	0	0.05	0.93	0.93
WWC-1	8.22	504	4710	0.114	7.2	2730	11100	0	0.0173	0.0268	0	0	0	0	0	0.831	0.000168	0.00896	0.0139	0	0.25	1.16	1.16
WWC-2	0	50	340	0.358	7.91	119	852	0	0.0143	0.0338	0	0	0	0	0	0.11	0	0.00372	0	0	0.08	0.27	0
WWC-3	0	27.3	230	0.897	8.05	88.4	644	0	0.0226	0.0278	0	0	0	0	0	0.125	0	0.00527	0	0	-0.03	0.15	0
WWC-4	0.998	184	1080	0.435	7.43	620	2640	0	0.0129	0.0495	0	0	0	0	0	0.309	0	0.00215	0.00201	0	0.28	0.35	0
WWC-5	2.64	314	1820	0.219	7.26	1660	5200	0	0.0104	0.0327	0	0	0	0	0	0.472	0	0.00324	0.00395	0	0.1	1.58	1.58
WWC-6																							
WDB-7																							

Waste Water	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
SI-U-1	18.38	7.39	-108	3510	1.7	0.79	2.25
WW-U-1	21.81	6.92	-77	8180	0.1	0.51	5.14
WW-U-2	18.76	7.09	-16	8130	7.6	1.06	5.12
WWC-1	16.92	6.94	-84	15600	1.5	4.48	9.65
WWC-2	17.4	7.75	-163	1570	1.2	0.4	1
WWC-3	17.01	7.89	-191	1220	2.6	0.42	0.782
WWC-4	18.39	7.27	-106	4320	2.4	1.17	2.77
WWC-5	15.81	6.98	-84	7740	0.8	0.58	4.88
WWC-6							
WWC-7							

Results below reporting limit are recorded as 0.

Date	6/7/2018							0.006	0.015	0.04		0.1		
Results below laboratory *Reporting Limit* (RL) are recorded as 0. *RLs* as follows:		*0.001*	*0.002*	*0.002*	*0.002*	*0.005*	*0.002*	*0.004*	*0.002*	*0.1*	*0.00015*	*0.002*	*0.002*	*0.002*

Date

Round 11 (all results ppm) Assessment Monitoring - October 8-18, 2018

Round 11

Landfill Wells	Results																						Field Results						
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined		Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
CL-U-1	0	61.9	415	0.981	7.79	122	1060	0	0.029	0.0796	0	0	0	0	0	0.229	0	0.00383	0	0	0.09	0.32	0	**CL-U-1**	17.4	7.85	-132	1800	40.9	0.61	1.15
CL-U-2	0	67.5	414	0.995	7.73	128	1010	0	0.0255	0.0919	0	0	0	0	0	0.212	0	0.00408	0	0	0.12	0.94	0.94	**CL-U-2**	18.15	7.83	-97	1770	0	3.95	1.13
CLW-1	0	39.6	288	1.06	7.76	61.9	784	0	0.0298	0.0582	0	0	0.0157	0	0	0.194	0	0.00589	0	0	0.11	1.2	1.2	**CLW-1**	17.83	7.93	-114	1490	0	1.48	0.951
CLW-2	0	49.7	475	1.19	7.72	88.1	904	0	0.0244	0.0716	0	0	0.014	0	0	0.227	0	0.00593	0	0	0.17	0.39	0	**CLW-2**	16.04	7.84	-184	1850	0.6	2.72	1.18
CLW-3	0	42	325	1.27	7.79	95	888	0	0.0384	0.0941	0	0	0	0	0	0.217	0	0.0052	0	0	0.33	0.68	0	**CLW-3**	17.52	7.98	-178	1660	3.6	3.1	1.06
CLW-4	0	35.2	297	1.45	7.85	80.7	792	0	0.0375	0.0786	0	0	0	0	0	0.211	0	0.00525	0	0	1.89	0.65	1.89	**CLW-4**	18.53	8.02	-192	1530	7.2	1.63	0.983
CLW-5	0	36.9	320	1.7	7.72	85.3	852	0	0.0229	0.0714	0	0	0.00999	0	0	0.213	0	0.00679	0	0	1.87	0.17	1.87	**CLW-5**	21	7.94	-175	1640	0	1.29	1.05
CLW-6	0	33.8	292	1.6	7.82	73.3	804	0	0.0152	0.0873	0	0	0.0116	0	0	0.204	0	0.00746	0	0	0.18	0.41	0	**CLW-6**	16.49	8.02	-210	1560	0	2.23	1
CLW-7	0	46.5	399	1.02	7.65	73.2	780	0	0.0232	0.0491	0	0	0	0	0	0.19	0	0.00416	0	0	0.05	0.07	0	**CLW-7**	17.12	7.83	-81	1560	2.4	2.97	1
CLW-8	0	43	300	1.04	7.71	66.5	796	0	0.0254	0.0643	0	0	0	0	0	0.192	0	0.00503	0	0	0.19	1.2	1.2	**CLW-8**	17.05	7.91	-130	1510	0	1.37	0.963
CLW-9																								**CLW-9**							
CL-U-3																								**CL-U-3**							

Bottom Ash	Results																						Field Results						
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined		Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
BA-U-1	0	73.9	561	0.881	7.97	62.2	1050	0	0.0216	0.149	0	0	0	0	0	0.276	0	0.00237	0	0	0.44	0.74	1.18	**BA-U-1**	16.4	7.71	-41	3010	0	0.7	1.94
BA-U-2	0	143	885	0.977	7.58	298	1750	0	0.0209	0.0728	0	0	0.0125	0	0	0.321	0	0.00574	0	0	0.22	0.62	0	**BA-U-2**	18.72	8.31	-138	2010	0	0.56	1.28
BAC-1	4.87	225	1840	0.582	7.57	1760	6420	0	0.0129	0.0391	0	0	0.0184	0	0	0.629	0	0.0232	0.00818	0	0.45	0.88	0	**BAC-1**	16.12	7.43	-228	9840	77.8	0.85	6.2
BAC-2	9.98	255	1660	1.1	7.35	2730	7800	0	0.0565	0.0204	0	0	0.0111	0	0	0.472	0	0.156	0.0157	0	0.08	0.96	0.96	**BAC-2**	16.79	7.15	-22	11200	2.5	1.3	6.93
BAC-3	8.33	469	3280	1.63	7.31	4450	12300	0	0.0496	0.0317	0	0	0.00968	0	0	1.06	0	0.038	0.022	0	0.39	1.06	1.45	**BAC-3**	16.79	7.31	42	18300	7	5.15	11.3
BAC-4	0.523	68.1	501	1.15	7.96	273	1300	0	0.00882	0.0171	0	0	0	0	0	0.267	0	0.017	0	0	-0.16	0.48	0	**BAC-4**	15.08	7.77	-69	2500	0.2	0.61	1.6
BAC-5	0	82.2	557	1.04	7.86	353	1460	0	0.0325	0.0714	0	0	0	0	0	0.323	0	0.0134	0	0	0.26	0.81	0	**BAC-5**	16.95	7.88	-43	2860	0	0.52	1.83
BAC-6	4.57	138	624	0.847	7.75	1080	2340	0	0.0248	0.0245	0	0	0	0	0	0.276	0	0.0842	0	0	0.17	1.02	0	**BAC-6**	17.13	7.74	-35	3970	0	0.49	2.54
BAC-7	4.24	143	649	1.51	7.75	1210	2830	0	0.0434	0.0214	0	0	0	0	0	0.303	0	0.075	0.00579	0	0.19	0.71	0	**BAC-7**	17	7.76	-71	4420	1.9	0.48	2.84

Waste Water	Results																						Field Results						
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined		Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
SI-U-1	0	139	805	0.533	7.63	394	1760	0	0.0103	0.0575	0	0	0	0	0	0.265	0	0.00241	0	0	0.07	0.85	0.85	**SI-U-1**	17.1	7.65	-6	3290	0	0.58	2.11
WW-U-1	1.36	357	2150	0.41	7.28	1360	5090	0	0	0.0449	0	0	0.0258	0	0	0.456	0	0.0101	0.00682	0	0.43	1.2	1.63	**WW-U-1**	16.29	7.25	-7	8350	0.6	0.87	5.27
WW-U-2	1.23	380	2160	0.604	7.31	1090	4570	0	0.0109	0.0446	0	0	0	0	0	0.519	0	0.00338	0.0105	0	0.14	0.83	0.83	**WW-U-2**	16.41	7.44	55	7730	0	1.5	4.87
WWC-1	12	607	4430	0.331	7.25	3210	13000	0	0.0243	0.0223	0	0	0	0	0	0.964	0.000312	0.00835	0.0145	0	0.15	1.2	0	**WWC-1**	16.6	7.11	40	19600	0	4.49	12.1
WWC-2	0	59.5	344	0.448	7.85	139	832	0	0.0152	0.0344	0	0	0	0	0	0.124	0	0.00304	0	0	0.17	0.03	0	**WWC-2**	17.73	7.91	-84	1600	2.1	0.62	1.03
WWC-3	0	29.7	209	1.06	7.92	84.2	436	0	0.0247	0.0289	0	0	0	0	0	0.139	0	0.00482	0	0	0	0.76	0	**WWC-3**	16.97	8.12	-179	1190	0.2	0.56	0.759
WWC-4	1.34	219	1030	0.481	7.46	692	2880	0	0.0145	0.0507	0	0	0	0	0	0.36	0	0	0	0	0.03	0.8	0	**WWC-4**	16.27	7.4	-32	4780	0.7	0.54	3.06
WWC-5	3.07	364	1720	0.431	7.38	1620	5000	0	0.0131	0.034	0	0	0	0	0	0.523	0	0.0031	0.00478	0	0.2	-0.56	0	**WWC-5**	15.76	7.16	-11	7580	1	3.51	4.77
WWC-6																								**WWC-6**	15.05	7.63	-148	3550	1.8	0.7	2.27
WDB-7																								**WWC-7**	15.18	8.07	-195	1510	8.4	0.65	0.967

Results below reporting limit are recorded as 0.

Date Oct. 2018

Date

Results below laboratory *Reporting Limit* (RL) are recorded as 0. *RLs* as follows:	*0.001*	*0.002*	*0.002*	*0.002*	*0.005*	*0.002*	*0.004*	*0.002*	*0.1*	*0.00015*	*0.002*	*0.002*	*0.002*

Round 12 (all results ppm) Assessment Monitoring - April 4 - May 15, 2019

Landfill Wells	Results																					
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
CL-U-1	0	61.1	388	0.989	7.74	112	932	0	0.0279	0.0841	0	0	0	0	0	0.231	0	0.0036	0	0	0.13	0.4	0
CL-U-2	0	68.4	378	1.02	7.74	97.6	920	0	0.0254	0.0943	0	0	0	0	0	0.214	0	0.00405	0	0	0.31	0.94	1.25
CLW-1	0	39.4	303	1.12	7.88	64.5	692	0	0.002	0.0589	0	0	0.00742	0	0	0.203	0	0.00481	0	0	0	0.41	0
CLW-2	0	55.1	416	1.25	7.8	96.4	976	0	0.0259	0.0743	0	0	0	0	0	0.253	0	0.00423	0	0	0.21	0.75	0
CLW-3	0	44.5	351	1.34	7.83	98.4	884	0	0.0382	0.0970	0	0	0	0	0	0.243	0	0.00488	0	0	0.16	0.49	0
CLW-4	0	38.8	321	1.45	7.90	85.5	968	0	0.0376	0.0819	0	0	0	0	0	0.232	0	0.00425	0	0	0.47	0.54	0
CLW-5	0	38.5	340	1.85	7.93	85.6	936	0	0.0236	0.0707	0	0	0	0	0	0.226	0	0.00515	0	0	0.14	0.28	0
CLW-6	0	38.4	270	1.55	7.89	72.8	828	0	0.0271	0.0896	0	0	0	0	0	0.214	0	0.00478	0	0	0.2	0.78	0
CLW-7	0	51.3	336	1.07	7.76	68.9	792	0	0.0228	0.0511	0	0	0	0	0	0.205	0	0.00323	0	0	-0.09	0.54	0
CLW-8	0	44.3	317	1.11	7.81	67.2	776	0	0.0257	0.0621	0	0	0.00200	0	0	0.212	0	0.00358	0	0	0.27	0.22	0
CLW-9	0	26.2	298	2.02	7.91	86.4	760	0	0.0368	0.0462	0	0	0	0	0	0.168	0	0.00518	0	0	0.21	0.21	0
CL-U-3	0	59.6	390	0.872	7.83	114	984	0	0.0183	0.0495	0	0	0.00565	0	0	0.212	0	0.00372	0	0	0	0.48	0

Round 12

Landfill Wells	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
CL-U-1	15.92	7.84	-138	1880	1.6	0.42	1.2
CL-U-2	15.68	7.81	-119	1820	4.7	0.6	1.17
CLW-1	15.59	7.68	-68	1540	0.9	2.06	0.984
CLW-2	15.77	7.86	-187	1870	1.7	1.5	1.2
CLW-3	15.45	7.93	-201	1720	2.1	1.37	1.1
CLW-4	15.51	7.97	-203	1610	12.7	1.55	1.03
CLW-5	15.07	7.94	-214	1.69	3.8	3.03	1.08
CLW-6	16.62	8.04	-225	1570	1.1	1.54	1
CLW-7	16.75	7.76	-79	1630	0.5	0.91	1.05
CLW-8	16.41	7.82	-99	1570	0.07	1.7	1.01
CLW-9	15.39	7.98	-184	1550	3.6	0.83	0.993
CL-U-3	15.07	7.55	-197	1830	0.3	2.51	1.17

Bottom Ash	Results																					
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
BA-U-1	0	174	934	0.919	7.61	271	2050	0	0.002	0.0776	0	0	0	0	0	0.354	0	0.00312	0.00458	0	0	0.4	0
BA-U-2	0	91.8	718	0.844	7.68	102	1350	0	0.0211	0.1670	0	0	0	0	0	0.300	0	0.0022	0.00234	0	0.18	0.62	0
BAC-1	1.31	72.4	431	0.197	8.42	404	1830	0	0.0121	0.0567	0	0	0.00359	0	0	0.172	0	0.142	0.00278	0	0.28	0.09	0
BAC-2	10.3	233	1700	1.11	7.2	2590	8310	0	0.0519	0.0180	0	0	0.00556	0	0	0.491	0	0.163	0.0145	0	0.17	0.48	0
BAC-3	8.64	417	3400	1.3	7.24	4090	12900	0	0.0472	0.0272	0	0	0.00593	0	0	1.030	0.000105	0.0388	0.0206	0	0.17	0.77	0
BAC-4	0.553	72.4	488	1.22	7.76	269	1270	0	0.0319	0.0641	0	0	0	0	0	0.281	0	0.0196	0	0	0.16	0.58	0
BAC-5	0	91.8	585	1.07	7.73	393	1540	0	0.0294	0.0594	0	0	0	0	0	0.334	0	0.0168	0	0	-0.1	0.27	0
BAC-6	4.4	137	536	0.866	7.84	963	2260	0	0.0248	0.0206	0	0	0	0	0	0.283	0	0.0923	0	0	-0.09	-0.38	0
BAC-7	5.17	142	529	1.34	7.72	985	2760	0	0.0298	0.0184	0	0	0	0	0	0.284	0	0.0908	0.00388	0	0.09	0.34	0
BAC-8	0	27.8	266	1.61	7.92	81.1	708	0	0.0519	0.0732	0	0	0	0	0	0.165	0	0.0055	0	0	0.31	0.41	0
BAC-9	0	28.4	283	1.7	7.91	82.6	736	0	0.583	0.051	0	0	0	0	0	0.167	0	0.00451	0	0	0.06	0.53	0
BAC-10	0	31.1	273	1.66	7.91	85	788	0	0.0527	0.0612	0	0	0	0	0	0.171	0	0.00567	0	0	0.15	0.5	0

Bottom Ash	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
BA-U-1	18.39	7.67	-60	3720	1.1	0.31	2.38
BA-U-2	16.57	7.81	-97	2710	2	0.38	1.74
BAC-1	19.56	8.75	-282	1340	22.8	1.17	0.852
BAC-2	18.83	7.25	-39	5370	2.2	1.1	3.38
BAC-3	17.57	7.34	-11	8.95	1.1	1.61	5.64
BAC-4	15.14	7.6	-57	2600	0	1.94	1.66
BAC-5	15.26	7.68	-62	2960	0	2.03	1.9
BAC-6	15.21	7.63	-44	3880	0	1.48	2.48
BAC-7	15.95	7.74	-71	4210	0	1.37	2.7
BAC-8	17.34	7.98	-91	1490	3.9	1.21	0.954
BAC-9	16.49	8.02	-69	1460	1.6	0.96	0.937
BAC-10	17.35	8	-80	1500	2.9	0.94	0.963

Waste Water	Results																					
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
SI-U-1	0	147	744	0.519	7.59	263	1840	0	0.00927	0.0634	0	0	0	0	0	0.271	0	0.00206	0	0	0.27	0.59	0
WW-U-1	1.39	323	1820	0.416	7.27	1140	5120	0	0.00592	0.0442	0	0	0.00432	0	0	0.431	0	0.00702	0.00748	0	0.38	0.89	1.27
WW-U-2	1.16	347	1170	0.633	7.45	872	4270	0	0.0114	0.0473	0	0	0.00237	0	0	0.484	0	0.00411	0.0113	0	0.19	0.54	0
WWC-1	12.9	584	4600	0.245	7.1	3190	13800	0	0.0215	0.0183	0	0	0	0	0	1.000	0.00018	0.00794	0.0146	0	0.13	0.82	0
WWC-2	0	54.2	316	0.534	7.75	128	824	0	0.0161	0.0296	0	0	0	0	0	0.128	0	0.00348	0	0	-0.06	0.5	0
WWC-3	0	35.3	244	1.14	7.79	86	764	0	0.0226	0.0306	0	0	0	0	0	0.151	0	0.00471	0	0	0.06	0.38	0
WWC-4	1.34	240	1030	0.449	7.97	673	2780	0	0.0133	0.0412	0	0	0	0	0	0.388	0	0	0	0	-0.03	0.56	0
WWC-5	3	388	1600	0.493	7.12	1440	5160	0	0.0134	0.0309	0	0	0	0	0	0.557	0	0.00203	0.00448	0	0.18	1.12	1.12
WWC-6	0.535	137	943	0.25	7.54	451	2470	0	0.0133	0.0822	0	0	0	0	0	0.204	0	0.00484	0	0	0.48	0.81	0
WWC-7	0	42.8	187	0.422	7.93	119	640	0	0.0165	0.0314	0	0	0	0	0	0	0	0.00386	0	0	0.16	0.18	0
WWC-8	0.561	151	943	0.391	7.54	537	440	0	0.0081	0.173	0	0	0	0	0	0.23	0	0.00632	0.00274	0	0.29	0.68	0
WWC-9	0	42.6	212	1.11	8.01	78.2	560	0	0.0261	0.0973	0	0	0	0	0	0.147	0	0.00538	0	0	0.16	0.27	0
WWC-10	0	52.3	328	0.651	7.85	141	1070	0	0.0265	0.0615	0	0	0	0	0	0.115	0	0.00854	0	0	0.13	0.49	0

Waste Water	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
SI-U-1	16.23	7.68	-37	3470	1.9	0.36	2.22
WW-U-1	16.64	7.24	-17	8020	0	0.41	5.05
WW-U-2	17.11	7.41	-8	7650	1.1	0.51	4.82
WWC-1	16.68	7.13	2	9830	0	1.37	6.19
WWC-2	15.94	8.03	-95	1550	2.9	1.56	0.989
WWC-3	16.07	8.01	-144	1310	0	2.09	0.841
WWC-4	15.29	7.38	-19	4910	0	1.4	3.14
WWC-5	15.41	7.16	-6	7900	0.5	1.67	4.98
WWC-6	15.12	7.59	-62	4040	1.6	0.72	2.59
WWC-7	14.7	8.01	-200	1120	7.6	2.26	0.718
WWC-8	17.02	7.76	-113	3990	22.2	1.66	2.55
WWC-9	16.66	7.89	-91	1.53	13	1.32	0.985
WWC-10	15.91	8.12	-152	1700	9.8	1.42	1.09

Results below reporting limit are recorded as 0.

Date Oct. 2018

Results below laboratory *Reporting Limit* (RL) are recorded as 0. *RLs* as follows:	*0.001*	*0.002*	*0.002*	*0.002*	*0.005*	*0.002*	*0.004*	*0.002*	*0.1*	*0.00015*	*0.002*	*0.002*	*0.002*

Assessment	Results																					
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
RW-4	0.798	61.8	633	0.919	7.78	247	1660	0	0.0295	0.0823	0	0	0.00278	0	0	0.235	0	0.00365	0	0	0.11	0.11	0
RW-5	0	30.8	165	0.563	8.01	109	548	0	0.027	0.0244	0	0	0	0	0	0	0	0.00393	0	0	-0.15	0.47	0
RW-7	0	44	333	0.626	7.87	127	920	0	0.0203	0.0311	0	0	0	0	0	0.132	0	0.00399	0	0	0.2	0.16	0

Assessment	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
RW-4							
RW-5							
RW-7							
WDB-19							

Round 13 (all results ppm) Assessment Monitoring - September 23 - October 15, 2019

Landfill Wells	Results																					
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
CL-U-1	0	58.9	432	0.753	7.94	109	976	0	0.0289	0.0799	0	0	0	0	0	0.239	0	0.0035	0	0	0.03	0.75	0.75
CL-U-2	0	60.6	424	0.792	7.87	112	968	0	0.0251	0.0935	0	0	0	0	0	0.229	0	0.00412	0	0	0.03	0.57	0
CLW-1	0	36	328	1.11	8.03	69.1	852	0	0.0295	0.0612	0	0	0	0	0	0.187	0	0.00357	0	0	0.29	0.38	0
CLW-2	0	50.8	438	1.13	8.15	88.1	924	0	0.0283	0.1510	0	0	0	0	0	0.253	0	0.0102	0	0	0.08	0.56	0
CLW-3	0	47	363	1.24	7.99	90.8	828	0	0.039	0.0976	0	0	0	0	0	0.242	0	0.00504	0	0	0.6	0.43	0
CLW-4	0	34.6	332	1.55	7.97	75.6	768	0	0.0387	0.0797	0	0	0	0	0	0.235	0	0.00441	0	0	0.22	1.06	1.06
CLW-5	0	37.5	351	1.89	8	76.9	1060	0	0.0231	0.0685	0	0	0	0	0	0.237	0	0.00479	0	0	0.25	0.44	0
CLW-6	0	34.5	330	1.7	7.98	74.4	1110	0	0.0145	0.0936	0	0	0	0	0	0.239	0	0.00607	0	0	0.42	1.05	1.47
CLW-7	0	43.7	362	1	7.89	71.4	796	0	0.0238	0.0523	0	0	0	0	0	0.192	0	0.00402	0	0	0.12	-0.03	0
CLW-8	0	39.9	337	1.04	7.98	70.7	836	0	0.0266	0.0521	0	0	0.00000	0	0	0.196	0	0.00449	0	0	-0.05	0.32	0
CLW-9	0	26.9	288	1.94	8.12	88.7	792	0	0.0398	0.0469	0	0	0.00287	0	0	0.181	0	0.00573	0	0	0.36	0.02	0
CL-U-3	0	64.6	304	0.429	8.85	168	596	0	0	0.0342	0	0	0.0738	0	0	0.152	0	0.00964	0	0	2.13	0.21	2.13

Bottom Ash	Results																					
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
BA-U-1	0	173	1140	0.587	7.71	314	2290	0	0.0223	0.0770	0	0	0	0	0	0.385	0	0.00302	0.00502	0	0.16	0.73	0.73
BA-U-2	0	47.1	400	0.893	8.18	56.6	972	0	0.0283	0.1270	0	0	0	0	0	0.247	0	0.00332	0	0	0.26	0.7	0
BAC-1	1.43	93.7	801	0.307	8.16	701	2730	0	0.0126	0.0460	0	0	0.00163	0	0	0.259	0	0.128	0.00436	0	0	0.14	0
BAC-2	9.49	208	1730	1.07	7.45	2760	7240	0	0.0647	0.0192	0	0	0.0058	0	0	0.466	0.00028	0.19	0.0145	0	0.12	0.39	0
BAC-3	7.32	441	3500	0.675	7.49	4310	13900	0.0027	0.0356	0.0321	0	0	0.00449	0	0	0.957	0	0.0255	0.0236	0	0	0.45	0
BAC-4	0.606	66.7	573	1.13	7.95	330	1820	0	0.0322	0.0637	0	0	0	0	0	0.279	0	0.0218	0	0	0.15	0.16	0
BAC-5	0	66.2	568	1.11	8.07	250	1410	0	0.0321	0.0814	0	0	0	0	0	0.289	0	0.00941	0	0	0.25	0.36	0
BAC-6	2.66	119	625	0.796	7.86	646	1870	0	0.0223	0.0338	0	0	0	0	0	0.288	0	0.0651	0.00273	0	0.31	0.83	1.14
BAC-7	5.06	107	566	1.31	7.96	1170	2320	0	0.0314	0.0174	0	0	0	0	0	0.248	0	0.0887	0.00276	0	0.04	0.22	0
BAC-8	0	23.2	280	1.53	8.05	95.5	784	0	0.0639	0.0389	0	0	0	0	0	0.156	0	0.00545	0	0	0.03	1.21	1.21
BAC-9	0	27.1	299	1.45	8.06	87.6	788	0	0.0593	0.0388	0	0	0	0	0	0.16	0	0.00483	0	0	0.09	0	0.53
BAC-10	0	25.7	280	1.51	8.09	87.4	808	0	0.0595	0.045	0	0	0	0	0	0.16	0	0.00584	0	0	0.8	1	1.8

Waste Water	Results																					
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
SI-U-1	0	136	824	0.38	7.71	281	1850	0	0.00981	0.0599	0	0	0	0	0	0.277	0	0	0	0	0.19	1.61	1.61
WW-U-1	1.41	311	1010	0	7.37	588	5720	0	0.00594	0.0419	0	0	0.00166	0	0	0.485	0	0.00689	0.0077	0	-0.08	1.42	1.42
WW-U-2	1.02	346	2020	0	7.3	855	4400	0	0.00735	0.0499	0	0	0	0	0	0.54	0	0.00317	0.011	0	-0.2	1.36	1.36
WWC-1	13.2	473	4940	0.292	7.42	3570	14900	0	0.0264	0.0205	0	0	0	0	0	0.974	0.000278	0.0113	0.016	0	0.23	0.9	0.9
WWC-2	0	57.6	349	0.427	7.99	141	876	0	0.0166	0.0336	0	0	0	0	0	0.126	0	0.00327	0	0	-0.15	0.81	0.81
WWC-3	0	33.3	262	0.986	8.13	95.3	776	0	0.0236	0.0331	0	0	0	0	0	0.151	0	0.00477	0	0	3.1	0.58	3.1
WWC-4	1.06	176	968	0.453	7.61	594	3080	0	0.0154	0.0456	0	0	0	0	0	0.329	0	0	0.00177	0	0.72	0.57	0
WWC-5	2.11	344	1530	0.448	7.39	1290	4740	0	0.0154	0.0382	0	0	0	0	0	0.538	0	0.00256	0.00596	0	0.26	1.05	1.05
WWC-6	0.548	125	855	0.23	7.66	451	2340	0	0.0138	0.0852	0	0	0	0	0	0.204	0	0.00595	0	0	0.034	0.41	0
WWC-7	0	46.7	186	0.418	8.12	129	652	0	0.0187	0.0316	0	0	0	0	0	0	0	0.00414	0	0	0.14	0.21	0
WWC-8	0.803	144	1230	0.353	7.7	579	3670	0	0.0145	0.0627	0	0	0	0	0	0.246	0	0.00284	0.00422	0	0.05	0.42	0
WWC-9	0	47.1	309	0.909	8.04	107	780	0	0.0309	0.0643	0	0	0	0	0	0.153	0	0.00351	0	0	0.14	0.05	0
WWC-10	0	54.4	380	0.629	8.02	177	988	0	0.0289	0.0347	0	0	0	0	0	0.125	0	0.00932	0	0	0.03	0.14	0

Round 13

Landfill Wells	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
CL-U-1	15.85	7.75	-159	777	0	1.62	0.497
CL-U-2	15.96	7.7	-158	743	0	1.01	0.476
CLW-1	15.83	7.73	-48	1480	1.3	2.01	0.948
CLW-2	16.6	7.79	-191	760	0	2	0.488
CLW-3	17.14	7.84	-215	1730	0.5	1.43	1.11
CLW-4	16.47	7.88	-233	1600	2.7	1.61	1.03
CLW-5	17.05	7.83	-220	1700	1.9	1.84	1.09
CLW-6	16.65	7.7	-229	1590	1.6	2.69	1.02
CLW-7	17.74	7.76	-57	1580	0.6	1.24	1.01
CLW-8	16.37	7.81	-36	1520	1	1.51	0.969
CLW-9	16.03	7.72	-299	1610	0.2	7.56	1.03
CL-U-3	16.1	9.08	-76	503	0	1.84	0.322

Bottom Ash	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
BA-U-1	16.68	7.47	-58	1610	0	1.29	1.03
BA-U-2	16.37	8.94	-255	1550	1.4	0.8	0.99
BAC-1	17.09	7.98	-50	3950	1.32	3.4	2.53
BAC-2	16.92	7.19	28	10600	3.3	2.45	6.59
BAC-3	17.34	7.1	20	16700	2	0.61	10.4
BAC-4	16.73	7.81	-57	2570	0.6	1.18	1.64
BAC-5	17.52	7.84	-50	2540	0.4	1.33	1.63
BAC-6	16.78	7.74	-52	2670	0.7	0.87	1.71
BAC-7	17.16	7.83	-156	4000	3.1	0.86	2.56
BAC-8	15.03	7.65	-41	1540	0.2	5.45	0.989
BAC-9	15.03	7.68	-23	1560	0.3	1.2	0.993
BAC-10	14.98	7.65	-31	1560	0.1	1.15	0.999

Waste Water	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
SI-U-1	16.51	7.63	-12	3290	0.1	0.78	2.11
WW-U-1	16.11	7.19	14	8000	2.8	1.93	5.04
WW-U-2	16.06	7.38	22	7390	0.6	1.32	4.66
WWC-1	15.13	6.79	36	1910	0	3.67	11.8
WWC-2	14.82	7.31	-29	1720	0.3	0.47	1.1
WWC-3	15.96	7.72	-244	1420	0	0.2	0.909
WWC-4	14.38	7.21	-34	4460	0	2.35	2.86
WWC-5	16.43	6.92	13	7170	0	0.21	4.52
WWC-6	14.67	7.23	-190	3970	0.3	1.64	2.54
WWC-7	14.97	7.79	-200	1150	1.7	0.28	0.736
WWC-8	15.01	7.23	-60	4920	0.6	0.32	3.15
WWC-9	15.26	7.79	-96	1540	1.4	1.72	0.99
WWC-10	14.48	7.49	-132	1880	0.6	5.51	

Results below reporting limit are recorded as 0.

Date Oct. 2018

Results below laboratory *Reporting Limit* (RL) are recorded as 0. *RLs* as follows:	*0.001*	*0.002*	*0.002*	*0.002*	*0.005*	*0.002*	*0.004*	*0.002*	*0.1*	*0.00015*	*0.002*	*0.002*	*0.002*

Assessment	Results																					
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
RW-4	0.664	65.5	661	0.758	7.97	292	2280	0	0.0313	0.0880	0	0	0	0	0	0.247	0	0.00314	0	0	-0.11	0.77	0
RW-5	0	28.9	457	0.625	8.19	121	592	0	0.0337	0.0253	0	0	0	0	0	0	0	0.00482	0	0.664	0.08	0.61	0
RW-7	0	47.5	318	0.626	8.35	137	832	0	0.0223	0.0327	0	0	0	0	0	0.148	0	0.0047	0	0	3.1	0.25	3.1
WDB-19	0	33.4	306	1.3	8.23	65.6	824	0	0.0302	0.0476	0	0	0	0	0	0.214	0	0.00675	0	0	0.21	0.87	0.87

Assessment	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
RW-4	15.2	7.49	-27	2940	0.2	0.27	1.89
RW-5	14.88	7.83	-42	1120	0.3	1.84	0.718
RW-7	15.32	7.65	-132	1610	0	0.55	1.03
WDB-19	17.02	7.89	-201	1610	1.3	4.54	1.03

Assessment 4 - January 7/8, 2020

Landfill Wells	Results																					
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
Bottom Ash	**Results**																						
	Boron	**Calcium**	**Chloride**	**Fluoride**	**pH**	**Sulfate**	**TDS**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Chromium**	**Cobalt**	**Lead**	**Lithium**	**Mercury**	**Molybdenum**	**Selenium**	**Thallium**	**Radium 226**	**Radium 228**	**Radium 226 and 228 combined**
BAC-11	0	72.6	727	0.824	8.06	141	1680	0	0.0321	0.1250	0	0	0	0	0	0.236	0	0.00366	0	0			
BAC-12	0	31.2	228	1.12	8.26	77.7	940	0	0.0331	0.2220	0	0	0	0	0	0.322	0	0.00526	0	0			
BAC-13	0.604	107	1040	0.699	7.63	302	2160	0	0.0223	0.1020	0	0	0	0	0	0.281	0	0.0045	0	0			
BAC-14	0.555	160	1160	0.538	8.29	527	2540	0	0.0296	0.0606	0	0	0	0	0	0.34	0	0.00201	0	0			
BAC-15	0	25.2	284	1.49	8.12	85.2	880	0	0.059	0.0506	0	0	0	0	0	0.155	0	0.00733	0	0			
BAC-16	0	22.5	331	1.69	8.1	84.7	940	0	0.0851	0.0363	0	0	0	0	0	0.167	0	0.00591	0	0			
BAC-17	0	25.1	135	0.644	8.41	104	420	0	0.032	0.0618	0	0	0	0	0	0	0	0.00497	0	0			
Waste Water	**Results**																						
	Boron	**Calcium**	**Chloride**	**Fluoride**	**pH**	**Sulfate**	**TDS**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Chromium**	**Cobalt**	**Lead**	**Lithium**	**Mercury**	**Molybdenum**	**Selenium**	**Thallium**	**Radium 226**	**Radium 228**	**Radium 226 and 228 combined**
WWC-11	0	4.85	132	0.35	11.2	72.1	740	0	0.00231	0.0762	0	0	0.00246	0	0	0.196	0	0.0119	0	0			
WWC-12	0	53.8	367	0.377	8.96	140	1080	0	0.0264	0.0583	0	0	0	0	0	0.117	0	0.00444	0	0			
WWC-13	0	56.3	349	0.34	8.78	131	820	0	0.019	0.0589	0	0	0	0	0	0.109	0	0.00442	0	0			

Assessment 4

Landfill Wells	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
Bottom Ash	**Field Results**						
	Temp	**pH**	**REDOX**	**Conductance**	**Turbidity (NTUs)**	**DO**	**TDS**
BAC-11	14.74	7.56	-9	2770	0.7	8	1.77
BAC-12	14.53	7.87	-219	1250	0.9	0.24	0.802
BAC-13	14.66	7.39	-36	3900	2.7	2.59	2.5
BAC-14	14.4	7.37	10	4310	1	0.84	2.76
BAC-15	14.39	7.78	-5	1530	1.1	3.61	0.982
BAC-16	14.71	7.79	-46	1730	0.3	1.82	1.11
BAC-17	15.42	8.12	-252	920	2.9	0.33	0.589
Waste Water	**Field Results**						
	Temp	**pH**	**REDOX**	**Conductance**	**Turbidity (NTUs)**	**DO**	**TDS**
WWC-11	13.28	11.3	-488	1350	10.9	1	0.861
WWC-12	13.91	9.19	-295	1610	10.1	0.74	1.03
WWC-13	14.29	8.85	-277	1590	4.9	0.74	1.02

Results below reporting limit are recorded as 0.

Date Oct. 2018

Results below laboratory *Reporting Limit* (RL) are recorded as 0. *RLs* as follows:	*0.001*	*0.002*	*0.002*	*0.002*	*0.005*	*0.002*	*0.004*	*0.002*	*0.1*	*0.00015*	*0.002*	*0.002*	*0.002*

Round 14 (all results ppm) Assessment Monitoring - March 25 - April 9, 2020

Landfill Wells	Results																					
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
CL-U-1	0	57.6	429	0.979	7.70	122	916	0	0.0310	0.0800	0	0	0.00551	0	0	0.241	0	0.00505	0	0	0.36	0.93	1.29
CL-U-2	0	60.0	408	1.01	7.68	118	964	0	0.0266	0.0901	0	0	0	0	0	0.221	0	0.00404	0	0	0.09	1.23	1.23
CLW-1	0	36.6	304	0.979	7.91	61.0	856	0	0.0300	0.0612	0	0	0.00551	0	0	0.172	0	0.00527	0	0	0.25	0.12	0
CLW-2	0	47.0	418	1.23	7.84	86.0	992	0	0.0258	0.0770	0	0	0.00337	0	0	0.212	0	0.00556	0	0	0.03	0.54	0
CLW-3	0	39.4	361	1.27	7.88	101	488	0	0.0387	0.0991	0	0	0.00251	0	0	0.206	0	0.00560	0	0	0.20	-0.04	0
CLW-4	0	33.6	323	1.34	7.88	85.5	960	0	0.0381	0.0822	0	0	0.00245	0	0	0.204	0	0.00508	0	0	-0.03	0.47	0
CLW-5	0	34.5	340	1.58	7.86	83.9	800	0	0.0227	0.0737	0	0	0	0	0	0.198	0	0.00585	0	0	0.15	0.62	0
CLW-6	0	33.0	312	1.48	7.94	81.2	544	0	0.0225	0.0878	0	0	0	0	0	0.203	0	0.00540	0	0	0.43	-0.06	0
CLW-7	0	44.3	329	1.03	7.79	60.5	1020	0	0.0242	0.0526	0	0	0	0	0	0.180	0	0.00392	0	0	0.20	-0.08	0
CLW-8	0	40.8	316	1.03	7.86	63.7	880	0	0.0267	0.0634	0	0	0	0	0	0.182	0	0.00400	0	0	0.12	0.12	0
CLW-9	0	25.2	296	1.90	7.96	83.5	932	0	0.0402	0.0499	0	0	0	0	0	0.170	0	0.00597	0	0	0.15	0.32	0
CL-U-3	0	57.7	386	0.889	7.75	116	1090	0	0.0206	0.0478	0	0	0.00553	0	0	0.205	0	0.00467	0	0	-0.06	0.95	0.95

Round 13

Landfill Wells	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
Round 13	14.31	7.53	-172	1970	1.0	0.46	1.26
CL-U-2	14.47	7.47	-132	1890	1.1	4.72	1.21
CLW-1	15.51	7.45	-110	1500	0.3	0.40	0.96
CLW-2	15.46	7.59	-189	1950	1.0	0.14	1.25
CLW-3	15.26	7.66	-230	1760	1.0	0.16	1.13
CLW-4	15.25	7.67	-237	1650	3.3	0.17	1.06
CLW-5	15.20	7.57	-234	1730	7.5	0.40	1.11
CLW-6	14.63	7.57	-236	1650	0.9	0.26	1.06
CLW-7	16.02	7.45	-97	1610	0.2	0.24	1.03
CLW-8	16.24	7.47	-106	1540	6.0	0.37	0.98
CLW-9	13.95	7.72	-276	1590	1.9	6.57	1.02
CL-U-3	14.31	7.51	-210	1870	1.7	5.53	1.20

Bottom Ash	Results																					
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
BA-U-1	0	188	1090	0.817	7.50	367	3050	0	0.0226	0.0774	0	0	0.0711	0	0	0.375	0	0.0152	0.00519	0	0.28	1.20	1.2
BA-U-2	0	2.47	395	0.912	10.70	42.7	872	0	0.00683	0.0804	0	0	0.00611	0	0	0.327	0	0.00629	0	0	-0.03	0.70	0
BAC-1	3.00	239	1890	0.645	7.39	1300	5270	0	0.0154	0.0340	0	0	0.00219	0	0	0.547	0	0.0170	0.00791	0	0.09	0.83	0.83
BAC-2	8.38	210	1710	1.16	7.27	2440	6380	0	0.0609	0.0206	0	0	0.00986	0	0	0.431	0.000192	0.172	0.0128	0	0.33	1.21	1.21
BAC-3	7.47	447	3620	1.26	7.21	4380	12500	0	0.0321	0.0284	0	0	0.0150	0	0	0.913	0	0.0251	0.0204	0	0.16	0.51	0
BAC-4	0.613	70.5	541	1.09	7.89	295	1540	0	0.0330	0.0649	0	0	0	0	0	0.272	0	0.0211	0	0	-0.06	0.17	0
BAC-5	0.547	83.5	552	0.991	7.79	416	1760	0	0.0297	0.0560	0	0	0	0	0	0.306	0	0.0242	0	0	0.03	0.22	0
BAC-6	4.02	115	560	0.847	7.74	1020	2340	0	0.0255	0.0215	0	0	0	0	0	0.242	0	0.0805	0	0	0.14	0.52	0
BAC-7	5.48	92.6	532	1.48	7.91	1090	2400	0	0.0350	0.0168	0	0	0	0	0	0.218	0	0.0805	0.00202	0	0.21	0.25	0
BAC-8																							
BAC-9																							
BAC-10																							
BAC-11	0	84.4	676	0.984	7.71	147	1100	0	0.0312	0.116	0	0	0	0	0	0.244	0	0.00345	0	0	0.36	0.09	0
BAC-12	0	25.9	210	1.24	7.99	71.7	360	0	0.0423	0.0938	0	0	0	0	0	0.132	0	0.00479	0	0	0.23	0.18	0
BAC-13	0.604	115	929	0.957	7.50	276	46400	0	0.0329	0.0773	0	0	0	0	0	0.285	0	0.00250	0	0	0.35	0.55	0
BAC-14	0.565	158	940	0.972	7.53	432	1180	0	0.0359	0.0542	0	0	0	0	0	0.321	0	0.00222	0	0	0.03	0.08	0
BAC-15	0	25.5	267	1.66	7.90	77.9	4600	0	0.0588	0.0423	0	0	0	0	0	0.156	0	0.00705	0	0	0.22	0.00	0
BAC-16	0	24.0	310	1.79	7.93	77.5	4620	0	0.0856	0.0364	0	0	0	0	0	0.171	0	0.00633	0	0	0.23	0.29	0
BAC-17																							

Bottom Ash	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
BA-U-1	15.43	7.22	-203	4340	5.7	0.20	2.78
BA-U-2	15.98	10.31	-330	469	0.0	0.35	0.305
BAC-1	17.25	7.20	-60	8060	2.4	0.32	5.09
BAC-2	16.70	7.16	-30	10100	8.1	5.44	6.26
BAC-3	16.05	7.18	-5	16500	3.7	0.50	10.2
BAC-4	15.70	7.53	-107	2600	0.0	0.18	1.67
BAC-5	15.76	7.51	-74	2900	0.2	0.16	1.86
BAC-6	16.17	7.49	-63	3540	0.9	0.33	2.26
BAC-7	15.35	7.66	-115	3840	1.9	2.47	2.46
BAC-8							
BAC-9							
BAC-10							
BAC-11	15.03	7.41	12	2980	7.1	7.33	1.91
BAC-12	14.93	7.75	-152	1280	1.4	6.36	0.821
BAC-13	14.46	7.28	-47	3850	1.1	6.99	2.47
BAC-14	14.81	7.20	4230	22	2.0	4.84	2.7
BAC-15	14.67	7.72	-45	1550	1.5	7.69	0.99
BAC-16	14.41	7.71	-64	1710	0.5	7.76	1.1
BAC-17							

Waste Water	Results																					
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
SI-U-1	0	113	699	0.511	7.70	279	1230	0	0.00865	0.0609	0	0	0.00305	0	0	0.239	0	0.00280	0	0	0.20	1.04	1.04
WW-U-1	1.42	286	1940	0.324	7.24	1270	4740	0	0.00653	0.0391	0	0	0.00544	0	0	0.412	0	0.00811	0.00724	0	0.21	1.38	1.38
WW-U-2	1.23	337	2020	0.473	7.42	981	4020	0	0.0108	0.0502	0	0	0.00696	0	0	0.498	0	0.00309	0.0112	0	0	1.08	1.08
WWC-1	13.4	464	4800	0	7.29	3440	13000	0	0.0256	0.0207	0	0	0	0	0	0.936	0.000238	0.0136	0.0133	0	0.32	0.36	0
WWC-2	0	51.7	322	0.452	7.88	124	644	0	0.0159	0.0357	0	0	0.00332	0	0	0.119	0	0.00455	0	0	0.24	-0.15	0
WWC-3	0	31.8	254	1.06	7.96	85.8	712	0	0.0219	0.0304	0	0	0.00240	0	0	0.142	0	0.00536	0	0	-0.08	0.19	0
WWC-4	1.20	182	935	0.426	7.44	638	2730	0	0.0140	0.0437	0	0	0	0	0	0.314	0	0.00207	0.00228	0	0.47	0.27	0
WWC-5	2.23	322	1580	0.295	7.15	1340	4670	0	0.0144	0.0367	0	0	0.00432	0	0	0.487	0	0.00283	0.00560	0	0.04	0.96	0.96
WWC-6	0.589	154	925	0.175	7.55	480	2490	0	0.0140	0.0925	0	0	0	0	0	0.213	0	0.00566	0	0	0.60	0.13	0
WWC-7	0	41.0	186	0.357	7.96	122	596	0	0.0194	0.0297	0	0	0	0	0	0	0	0.0044	0	0	0.11	0.17	0
WWC-8	0.652	154	1040	0.472	7.58	593	2700	0	0.0155	0.0564	0	0	0	0	0	0.229	0	0.00322	0.00385	0	0.18	0.18	0
WWC-9	0	40.5	302	0.843	7.99	98.8	652	0	0.0305	0.0629	0	0	0	0	0	0.147	0	0.00350	0	0	0.13	0.09	0
WWC-10	0	55.2	369	0.491	7.85	164	804	0	0.0240	0.0361	0	0	0	0	0	0.107	0	0.00656	0	0	0.03	0.40	0
WWC-11	0	34.9	197	0.467	8.64	97.8	280	0	0.00470	0.150	0	0	0	0	0	0	0	0.00718	0	0	0.21	0.48	0
WWC-12	0	77.1	382	0.453	8.85	143	320	0	0.0428	0.0761	0	0	0.00414	0	0	0.111	0	0.00423	0	0	0.03	0.42	0
WWC-13	0	66.4	350	0.389	7.94	138	360	0	0.0207	0.0450	0	0	0	0	0	0.103	0	0.00382	0	0	0.15	0.24	0

Waste Water	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
SI-U-1	16.33	7.30	3	789	0.0	3.90	0.505
WW-U-1	15.39	7.01	-38	3910	1.2	0.17	2.5
WW-U-2	13.24	7.19	-19	3800	0.7	1.02	2.43
WWC-1	14.71	6.90	-20	19400	2.8	0.31	12.0
WWC-2	13.47	7.59	-97	1690	12.8	0.54	1.08
WWC-3	14.65	7.67	-154	1430	1.1	0.17	0.916
WWC-4	14.61	7.13	-12	4750	1.4	0.40	3.04
WWC-5	13.45	6.81	-15	7240	2.8	1.09	4.56
WWC-6	12.59	7.24	-179	4390	1.5	1.21	2.81
WWC-7	13.36	7.54	-191	1150	1.9	4.72	0.738
WWC-8	14.61	7.27	-60	4680	0.8	0.25	2.99
WWC-9	14.20	7.61	-23	1590	3.8	0.22	1.02
WWC-10	15.12	7.70	-135	1830	1.2	5.35	1.17
WWC-11	14.21	8.05	-305	1170	13.8	6.12	0.745
WWC-12	13.44	7.98	-267	1830	29.5	0.27	1.17
WWC-13	13.45	7.69	-173	1700	3.1	6.94	1.09

Results below reporting limit are recorded as 0.

Date Oct. 2018

Results below laboratory *Reporting Limit* (RL) are recorded as 0. *RLs* as follows:	*0.001*	*0.002*	*0.002*	*0.002*	*0.005*	*0.002*	*0.004*	*0.002*	*0.1*	*0.00015*	*0.002*	*0.002*	*0.002*

Assessment	Results																					
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
RW-4	0.709	77	676	0.831	7.78	305.0	1760	0	0.0264	0.0890	0	0	0	0	0	0.262	0	0.00292	0	0	0	0.66	0
RW-5	0	29.6	179	0.627	8.14	115	568	0	0.0306	0.0258	0	0	0	0	0	0	0	0.00466	0	0	0.07	0.4	0
RW-7	0	45.0	361	0.564	7.92	133	676	0	0.0206	0.0317	0	0	0	0	0	0.142	0	0.00442	0	0	-0.07	0.58	0
WDB-19	0	33.6	333	1.44	7.89	78.0	968	0	0.0294	0.0481	0	0	0	0	0	0.224	0	0.00429	0	0	0.18	0.25	0
RW-1																							
EPW-15	0.521	174	1220	0.614	7.56	314	2750	0	0.0209	0.0465	0	0	0.00220	0.00782	0	0.341	0	0.00206	0	0	0.12	1.08	1.08

Assessment	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
RW-4	14.38	7.47	-26	3080	0.8	6.51	1.97
RW-5	14.84	7.80	-129	1100	1.4	7.86	0.711
RW-7	14.93	7.67	-78	1670	1.4	0.23	1.07
WDB-19	15.03	7.59	-180	1700	2.0	0.21	1.09
RW-1							
EPW-15	18.47	7.27	-12	4710	6.0	0.37	3.02

Appendix A Historical Groundwater Flow and TDS Concentration Maps, Excerpted from Semi-Annual Assessment Monitoring Reports

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Combustion By-Products Landfill

Bottom Ash Basin

Waste Water Basin

CL-U-1 1,060
CL-U-2 1,010
CL-W-6 804
CL-W-5 852
4550
WDB-19 892
CL-W-9
CL-W-4 784
CL-W-3 888
CL-W-2 904
CL-W-1 784
CL-W-8
CL-W-7
796
780
CL-U-3
EP-W-27 2,400
EP-W-23 732
BA-U-1 1,050
BAC-7 2,830
WR-103 5,420
BAC-6 2,340
BA-U-2 1,750
EP-W-19 11,600
BAC-5 1,460
WDB-7 716
BAC-4 1,300
WW-U-2 4,570
BAC-3 12,300
BAC-2 7,800
BAC-1 6,420
SI-U-1 1,760
EP-W15 2,230
WR-102 9,600
RW-9 1,560
WR-101 4,070
RW-3 well adjacent/west of WR-101
WW-U-1 5,090
RW-4 1,370
RW-6 828
RW-5 1,410
WWC-5 5,000
WWC-4 2,880
WWC-2 832
WWC-1 13,000
RW-7 784
WWC-3 436
4620
WWC-7 856
4520
4530
4570
4580
4590
4600
4610
WWC-6 2,080
2,080

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

LEGEND:

MONITORING WELL TDS Concentration (milligrams per Liter; i.e., ppm)

GROUND WATER CONTOUR

NOTE:

1) DATA COLLECTED OCTOBER 2018
2) ALL ELEVATIONS ARE FEET ABOVE MEAN SEA LEVEL

0 1,300 2,600
Feet
1 in = 1,350 ft

Stantec

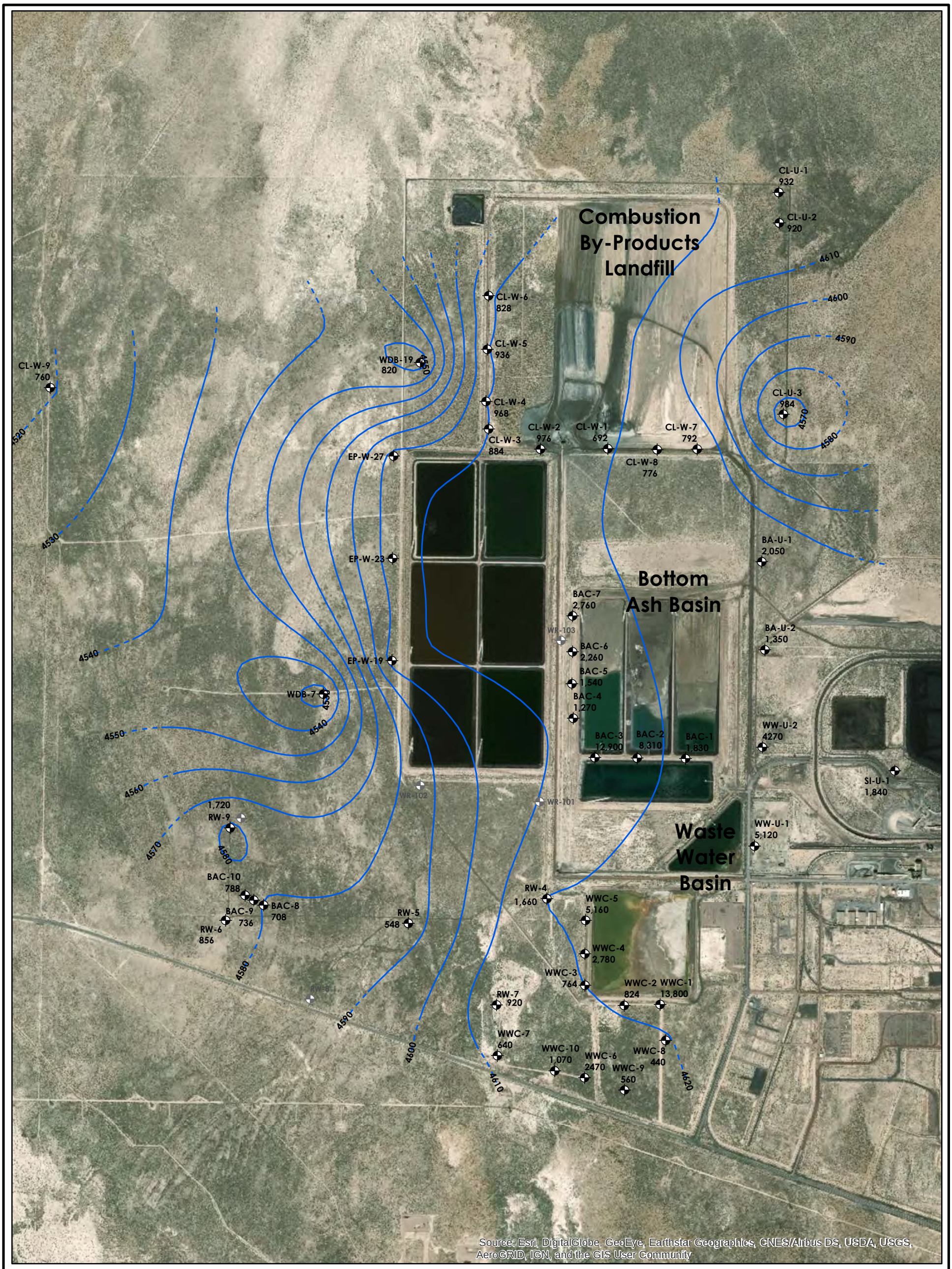
FOR:
INTERMOUNTAIN POWER SERVICE CORP.
INTERMOUNTAIN GENERATION FACILITY
DELTA, UTAH

OCTOBER 2018
TDS Concentrations
Superimposed atop
Oct. 2018 Potentiometric Map

FIGURE: **7**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
203709098	JR	ALL		11/21/18

Q:\active\203709098 Intermountain Power\GIS\2019_10\fig05_Spring2019TDSResults_20191216.mxd



LEGEND:

- MONITORING WELL (GREYED WHEN NOT USED FOR CONTOURING
- 718 TDS RESULT (parts per million-ppm)
- GROUNDWATER CONTOUR

NOTE:

1) DATA COLLECTED SPRING 2019
2) ALL ELEVATIONS ARE FEET ABOVE MEAN SEA LEVEL

0 1,300 2,600
Feet
1 in = 1,350 ft

Stantec

FOR: INTERMOUNTAIN POWER SERVICE CORP.
INTERMOUNTAIN GENERATION FACILITY
DELTA, UTAH

SPRING 2019 TDS RESULTS

FIGURE: 5

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
203709098	CK	ALL		12/18/19

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Combustion By-Products Landfill

Bottom Ash Basin

Waste Water Basin

CL-U-1 976
CL-U-2 968
CL-U-3 596
CL-W-1 852
CL-W-2 924
CL-W-3 828
CL-W-4 768
CL-W-5 1,060
CL-W-6 1,110
CL-W-7 796
CL-W-8 836
CL-W-9 792
EP-W-19
EP-W-23
EP-W-27
WDB-7
WDB-19 **824**
BA-U-1 2,290
BA-U-2 972
BAC-1 2,730
BAC-2 7,240
BAC-3 13,900
BAC-4 1,820
BAC-5 1,410
BAC-6 1,870
BAC-7 2,320
BAC-8 784
BAC-9 788
BAC-10 808
BAC-15
RW-4 **2,280**
RW-5 **592**
RW-6 **864**
RW-7 **832**
RW-8
RW-9 **1,860**
SI-U-1 1,850
WR-101
WR-102
WR-103
WW-U-1 5,720
WW-U-2 4,400
WWC-1 14,900
WWC-2 876
WWC-3 776
WWC-4 3,080
WWC-5 4,740
WWC-6 2,340
WWC-7 652
WWC-8 3,670
WWC-9 780
WWC-10 988

4520 4530 4540 4550 4560 4570 4580 4590 4600 4610 4620

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

LEGEND:

- MONITORING WELL (GREYED WHEN NOT USED FOR CONTOURING)
- 718 TDS RESULT (parts per million-ppm)
- GROUNDWATER CONTOUR

NOTE:

1) DATA COLLECTED FALL 2019
2) ALL ELEVATIONS ARE FEET ABOVE MEAN SEA LEVEL

0 1,300 2,600
Feet
1 in = 1,350 ft

Stantec

FOR: INTERMOUNTAIN POWER SERVICE CORP.
INTERMOUNTAIN GENERATION FACILITY
DELTA, UTAH

FALL 2019 TDS RESULTS

FIGURE: 6

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
203709098	CK	ALL		12/18/19

Appendix B Drilling Logs and Well Schematic Diagrams

Boring Logs

IPSC

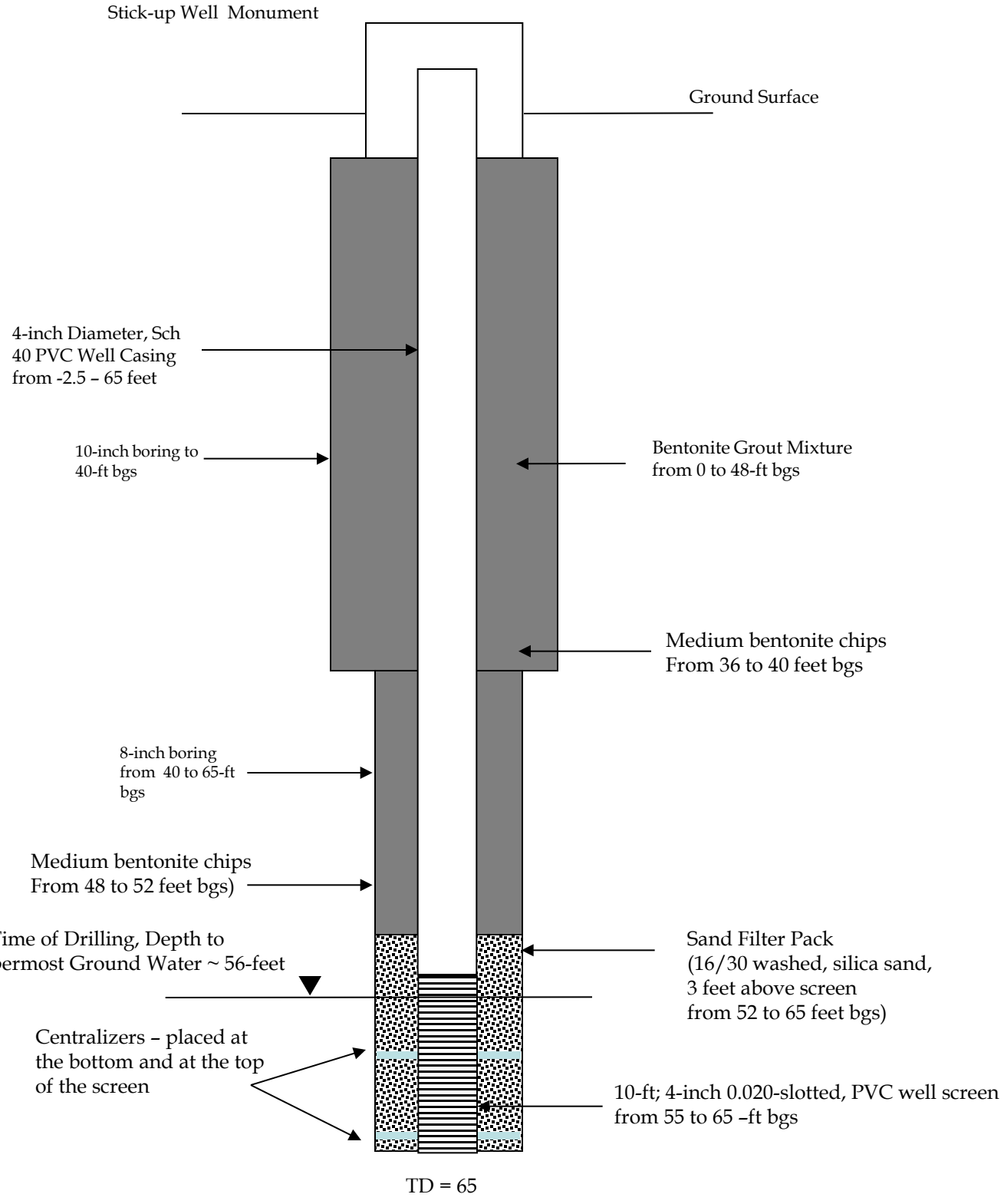
Delta, Utah

CLW-1

Interval (feet)	Drilling Method	Sample Description
		5/11/2015
0-3	10" Sonic	Brown fine grained Sand with gravel, dry
3-6	10" Sonic	Light to Dark Brown fine to medium grained Sand, no gravel present, dry
6-8	10" Sonic	Light Brown fine grained Sand
8-11.5	10" Sonic	Grayish white fine grained Sand, gravels present, rounded, dry
11.5-13.5	10" Sonic	Tan SILT with clay matrix, slightly moist
13.5-17	10" Sonic	Grayish Tan CLAY with small amount of silt present, slightly moist
17-23	10" Sonic	Grayish Tan SILT with fine grain sand present, trace amounts of clay, slightly moist
23-27	10" Sonic	Tannish Gray CLAY, denser, dry
27-32	10" Sonic	Tan CLAY, slightly moist
32-35	10" Sonic	Tan CLAY, denser material, slightly moist
		5/12/2015
35-48	10" Sonic to 40 feet	Tannish gray CLAY, moist
48-51	8" Sonic	Tannish gray CLAY, moist, softer
51-52	8" Sonic	Orangish, Brown, black fine grained Sand, moist
52-54	8" Sonic	Orangish, Brown , Red CLAY, slightly moist
54-56	8" Sonic	Orangish Brown CLAY with a fine grained sand matrix, slightly moist
56-62	8" Sonic	Light Brown fine grained Sand, saturated
62-63	8" Sonic	Light Brown CLAY, slightly moist
63-63.5	8" Sonic	Fine to medium grained Sand, slightly moist
63.5-64	8" Sonic	Light Brown CLAY, dry to slightly moist
64-65	8" Sonic	Light Brown fine grained Sand with clay matrix, moist

TD = 65; PVC 4-inch screen from 55 to 65; PVC 4-inch riser from -2.5 to 55

Drilling Company - Cascade Drilling
Driller - Rick Mallett
Geologist - Thomas Hedrick



Stantec

ISPC– CB LANDFILL AREA
DELTA, UTAH

Figure 1 – CLW-1 Schematic

Design by	Drawn by	Scale	Date Drawn / Last Revision Date

Boring Logs

IPSC

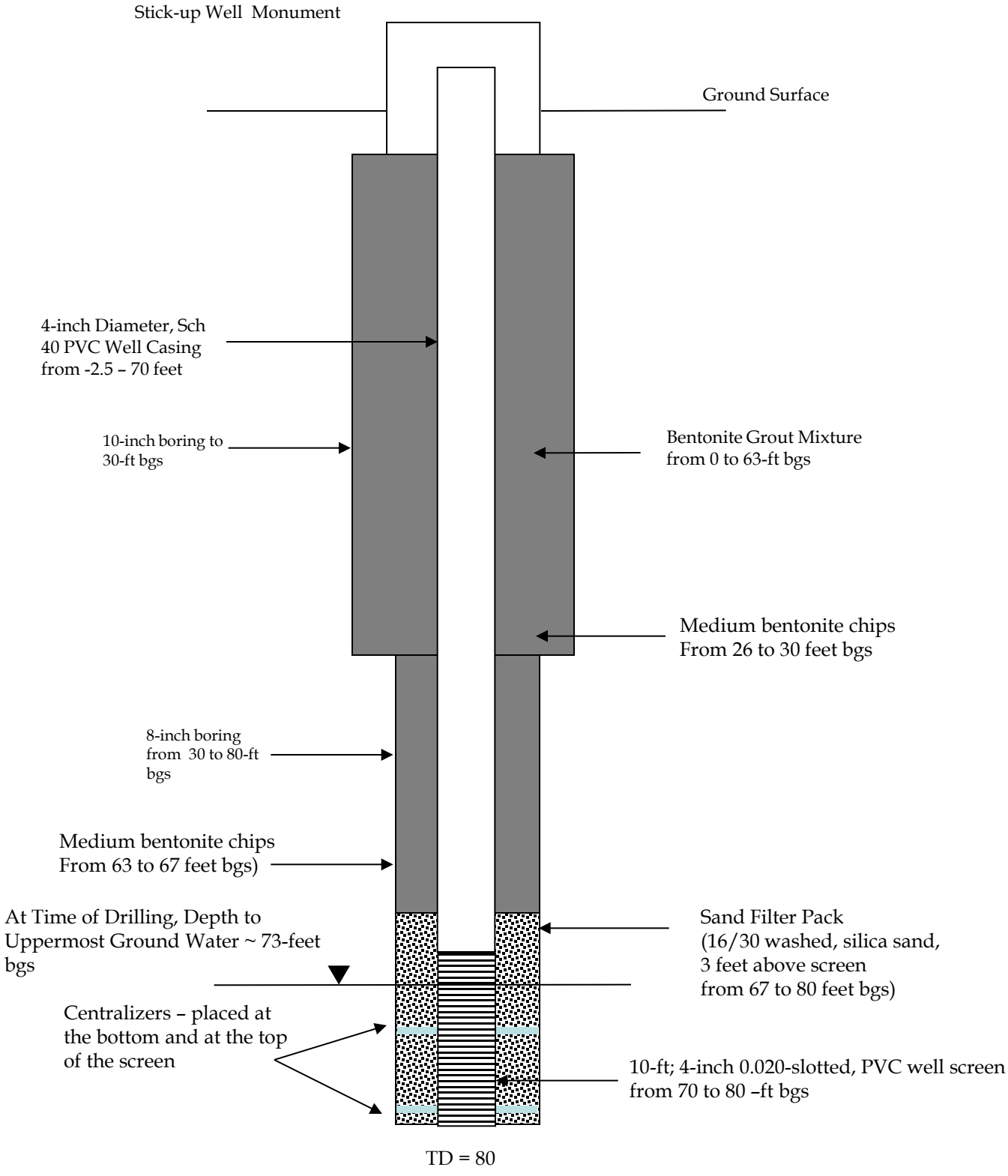
Delta, Utah

CLW-2

Interval (feet)	Drilling Method	Sample Description
		5/14/2015
0-8	10" Sonic	Brown fine grained Sand, clay present with gravel, dry
8-10	10" Sonic	Light to Dark Brown medium to course grained SAND, gravel present, dry
10-17	10" Sonic	Light Brown to Brown clayey SILT, slightly moist
17-25	10" Sonic	Light Brown Silty CLAY, moist
25-46	10" Sonic to 30 feet	Brown CLAY, slightly moist, from 40 to 45 feet transitioned to a Tan to Light Gray color
46-46.5	8" Sonic	Very moist to saturated zone, very soft clay , very sticky
46.5-50	8" Sonic	Light Gray CLAY, moist
50-51	8" Sonic	Tan to Light Gray with Orange zones, CLAY, slightly moist
51-51.5	8" Sonic	Very moist zone, CLAY
62	8" Sonic	Transitioning to a Orangish Red CLAY, Slightly moist
66-66.5	8" Sonic	Moist zone, transitioning from an Orangish Red to a Brown CLAY
66.5-73	8" Sonic	Reddish brown fine grained Sand with a clay matrix, very moist
73-80	8" Sonic	Brown fine gained Sand, trace amounts of clay, saturated.

TD = 80; PVC 4-inch screen from 70 to 80; PVC 4-inch riser from -2.5 to 70

Drilling Company - Cascade Drilling
Driller - Rick Mallett
Geologist - Thomas Hedrick



Stantec

ISPC– CB LANDFILL AREA
DELTA, UTAH

Figure 1 – CLW-2 Schematic

Design by	Drawn by	Scale	Date Drawn
			Last Revision Date

Boring Logs

IPSC

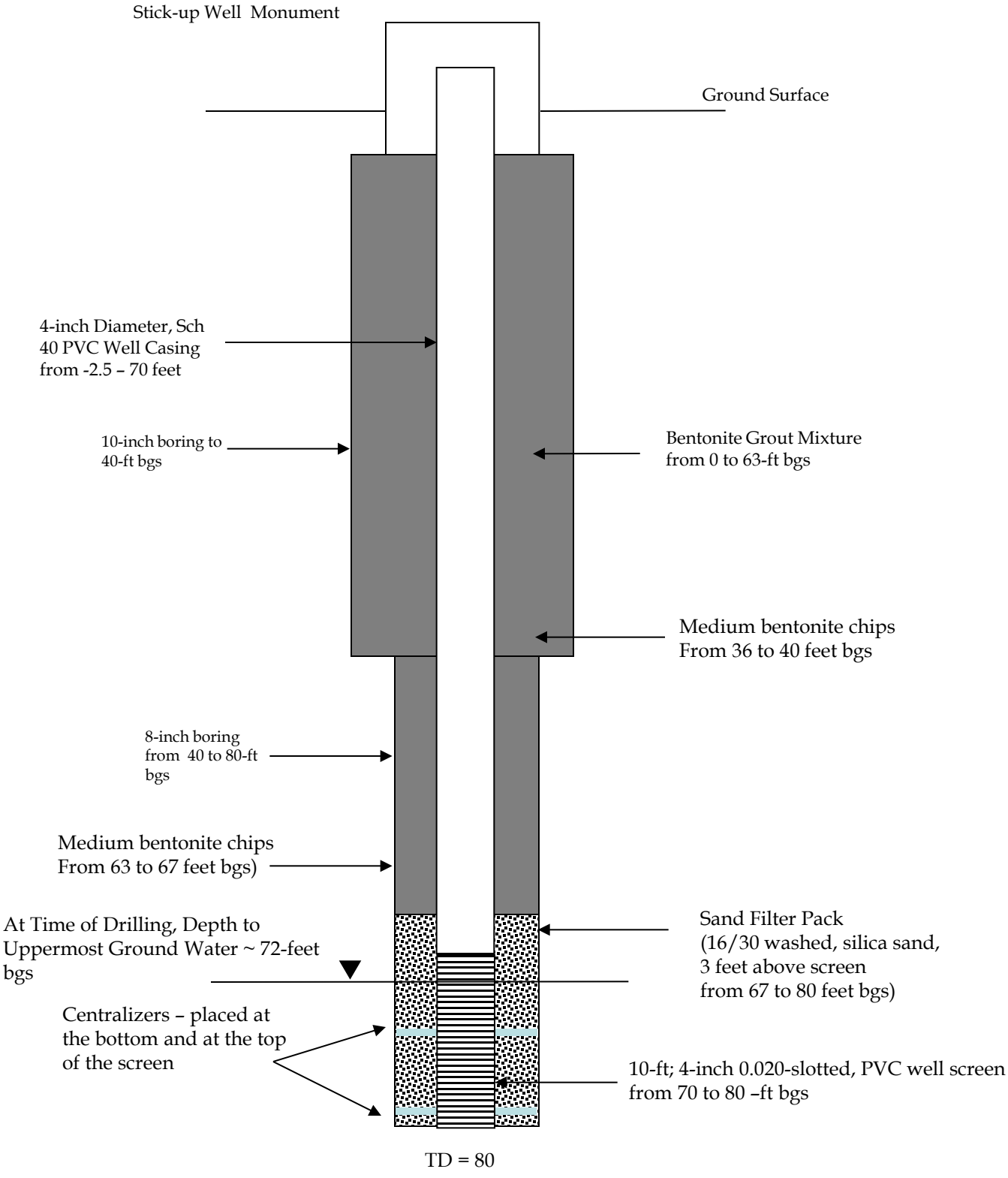
Delta, Utah

CLW-3

Interval (feet)	Drilling Method	Drill Time	Sample Description
			5/13/2015
0-3	10" Sonic		Brown fine grained Sand , clay present with gravel, dry
3-6	10" Sonic		Light to Dark Brown fine to medium grained Sand, no gravel present, dry
6-11	10" Sonic		Grayish White fine grained Sand, gravels present, rounded, dry
11-13	10" Sonic		Brownish Orange SILT, with fine grained sand present, soft
13-16	10" Sonic		Tannish Gray SILT with a clay present, very moist, sticky
16-21	10" Sonic		Tannish Gray SILT with a clay matrix, very moist, sticky
21-24	10" Sonic		Light Gray CLAY, with silt present, very moist
24-33	10" Sonic		Light Gray to Orange CLAY, with silt present, slightly moist
32-40	10" Sonic to 40 feet		Tan CLAY, denser material, slightly moist
40-66	8" Sonic		Tan to Light Brown CLAY, slightly moist to Dry
63	8" Sonic		Transiting into a Darker Gray CLAY, Moist
66-72	8" Sonic		Very moist to saturated, clay very plastic, firm and sticky
72-73	8" Sonic		Dark Gray fine to medium grained Sand, saturated
73-74	8" Sonic		Dark Gray CLAY, sticky firm, very moist
74-80	8" Sonic		Dark Gray fine to medium grained Sand, saturated

TD = 80; PVC 4-inch screen from 70 to 80; PVC 4-inch riser from -2.5 to 70

Drilling Company - Cascade Drilling
Driller - Rick Mallett
Geologist - Thomas Hedrick



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ISPC– CB LANDFILL AREA
DELTA, UTAH

Figure 1 – CLW-3 Schematic

Design by	Drawn by	Scale	Date Drawn
			Last Revision Date

Boring Logs

IPSC

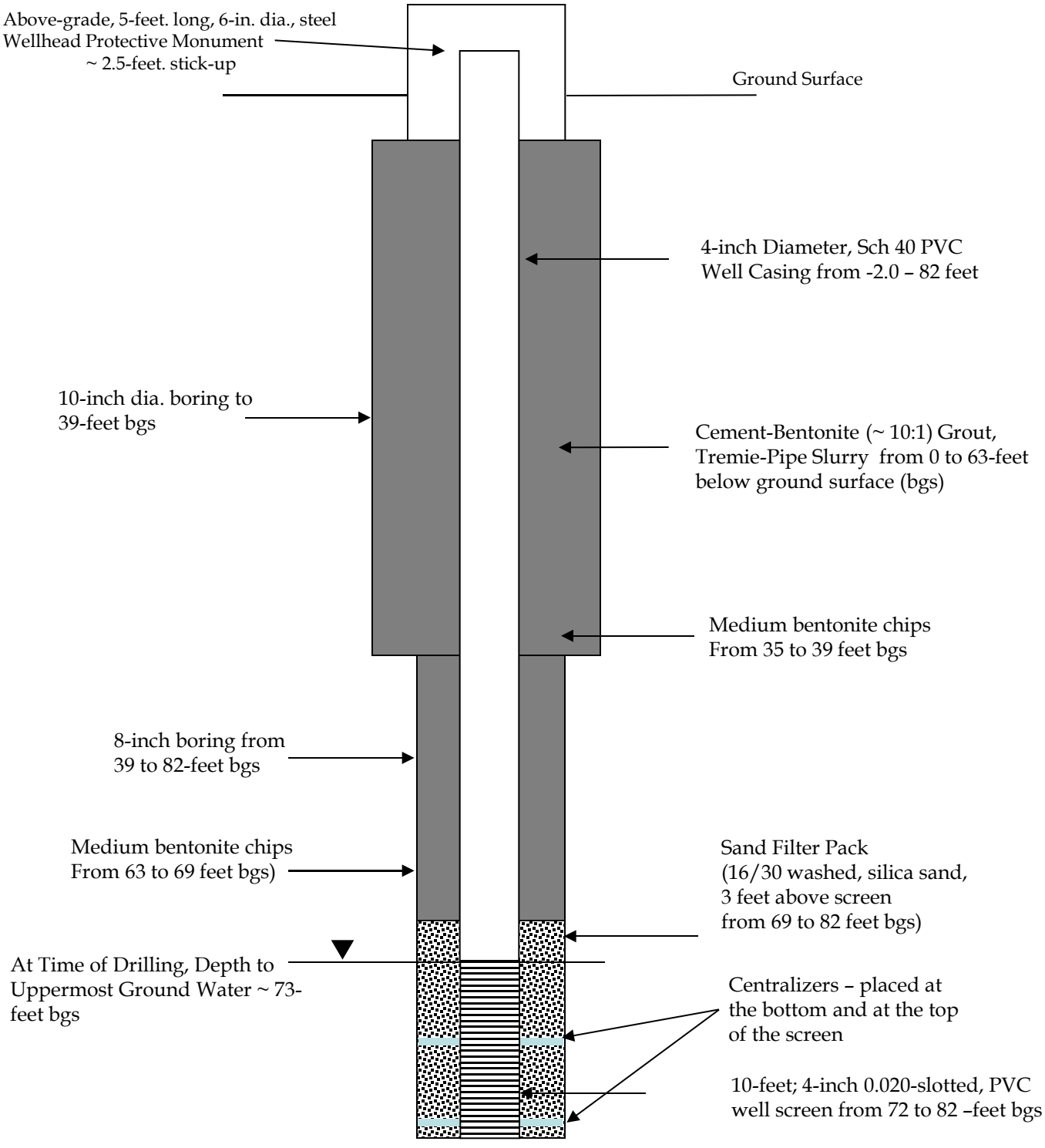
Delta, Utah

CLW-4

Interval (feet)	Drilling Method	Sample Description
		7/24/2015
0-2	10" Sonic	Light Brown fine grained Sands with silts and gravel, dry
2-5	10" Sonic	Light Brown fine grained Sands, dry
5-11	10" Sonic	Light Brown to gray fine grained SAND, dry to slightly moist
11-13	10" Sonic	Light Brown silty CLAY, slightly moist, good plasticity
13-14	10" Sonic	Light Brown fine grained SAND, with clays present, poor plasticity, dry
14-16	10" Sonic	Light Brown clayey SILT, dry
16-18	10" Sonic	Light Brown to Brown silty CLAY, slightly moist, good plasticity
18-21	10" Sonic	Light Brown to Gray silty CLAY, slightly moist to moist, good plasticity
21-24	10" Sonic	Brownish Gray CLAY, moist, high plascity
34-32	10" Sonic	Browninsh Gray CLAY, moist to very moist, high plasticity
32-53	10" Sonic to 39 feet	Brownish Gray CLAY, dencer, slightly moist,
		44 - thin layer of brownish orange fine grained sand
		47 - transitioning into a gray clay
		49 - thin layer of brownish orange fine grained sand
53-55	8" Sonic	Brownish Gray CLAY, dense, very plastic, slightly moist
55-73	8" Sonic	Brown CLAY, very plastic, slightly moist
73-82	8" Sonic	Brown fine grained SAND with a clay matrix, saturated

TD = 82; PVC 4-inch screen from 72 to 82; PVC 4-inch riser from -2.5 to 72

Drilling Company - Cascade Drilling
Driller - Rick Mallett
Geologist - Thomas Hedrick



Total Depth (TD) = 82 feet bgs

Stantec

ISPC– CB LANDFILL AREA
DELTA, UTAH

CLW-4 Schematic

Design by	Drawn by	Scale	Date Drawn	Last Revision Date
	TH		9/1/15	

Boring Logs

IPSC

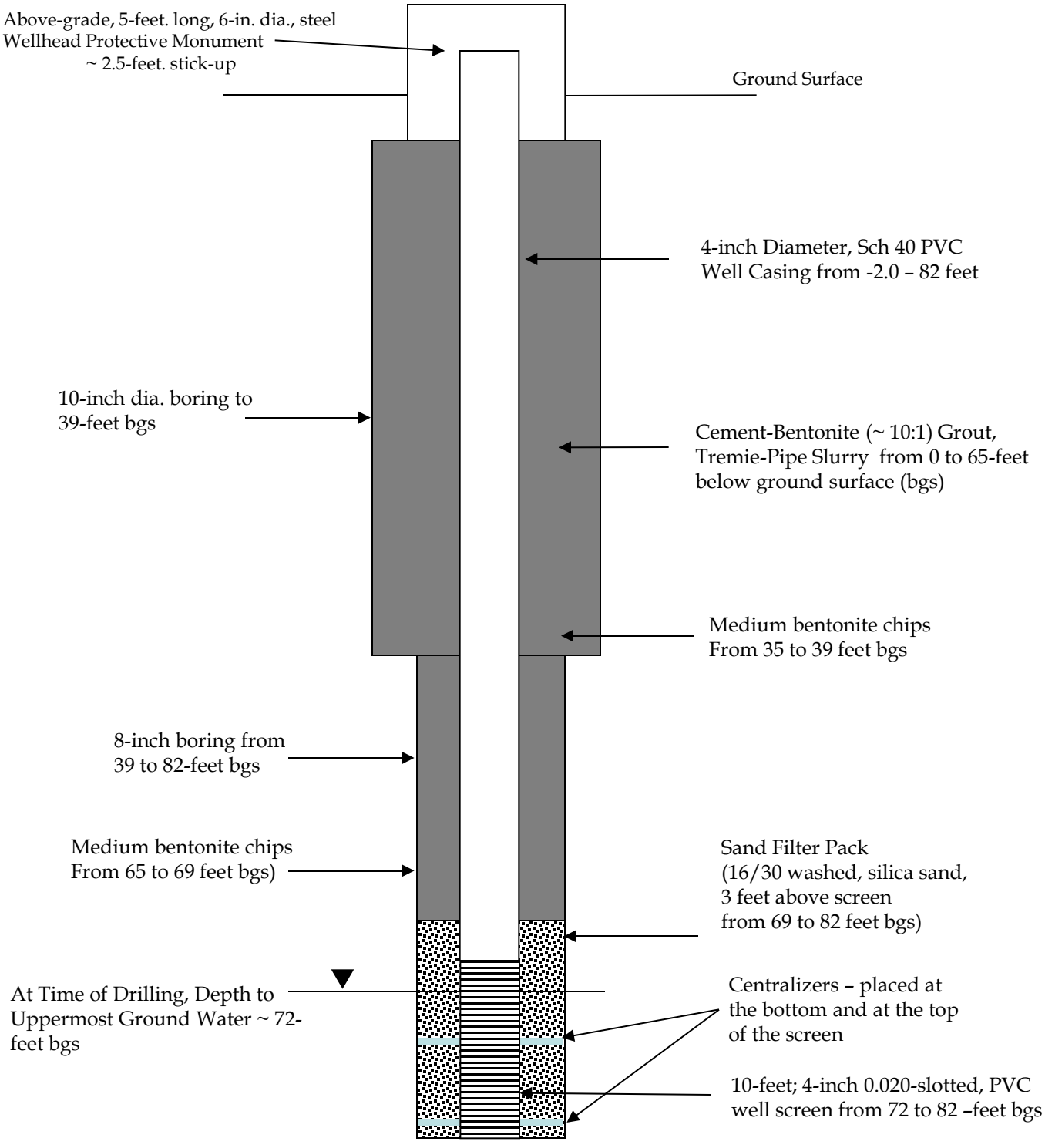
Delta, Utah

CLW-5

Interval (feet)	Drilling Method	Sample Description
		7/26/2015
0-3	10" Sonic	Light Brown fine grained Sands with silts and gravel, dry
3-4	10" Sonic	Gravels with medium to fine grand sands, moist
4-7.5	10" Sonic	Light Brown sitly CLAY, slightly moist, good plasticity
7.5-10	10" Sonic	Light Brown fine to medium grained SAND, dry
10-12	10" Sonic	Light Brown to Gray fine to medium grained SAND, gravels present, slightly moist
12-13	10" Sonic	Light Brown clayey SILT, slightly moist,
13-15	10" Sonic	Brown fine to medium grained SAND, wht clays and silts, slightly moist
		7/27/2015
15-22	10" Sonic	Brown silty CLAY, slightly moist, good plasticity
22-32	10" Sonic	Light Brown CLAY, moistgood plasticity
32-38	10" Sonic	Brown CLAY, slightly moist, high plasticity
38-40	10" Sonic to 39 feet	Light Gray CLAY, slightly moist, hight plasticity
40-44	8" Sonic	Light Brown to Brown CLAY, slightly moist, high plasticity
44-52	8" Sonic	Light Gray CLAY, hight plasticity, slighly moist
52-53	8" Sonic	Brown CLAY, high plasticity, slightly moist
53-55	8" Sonic	Gray CLAY, high plasticity, slightly moist
55-72	8" Sonic	Gray CLAY, high plasticity, moist
72-74	8" Sonic	Gray fine grained SAND, with clay matrix, moist to saturated
74-75	8" Sonic	Gray CLAY with fine grained sandy matrix, poor plasticity, moist
75-78	8" Sonic	Gray fine grained SAND wht a clayey matrix, poor plasticity, saturated
78-80	8" Sonic	Gray CLAY with fine grained sandy matrix, poor plasticity, moist
80-82	8" Sonic	Gray fine grained SAND wht a clayey matrix, poor plasticity, saturated

TD = 82; PVC 4-inch screen from 72 to 82; PVC 4-inch riser from -2.5 to 72

Drilling Company - Cascade Drilling
Driller - Rick Mallett
Geologist - Thomas Hedrick



Total Depth (TD) = 82 feet bgs

Stantec

ISPC– CB LANDFILL AREA
DELTA, UTAH

CLW-5 Schematic

Design by	Drawn by	Scale	Date Drawn	Last Revision Date
	TH		9/1/15	

Boring Logs

IPSC

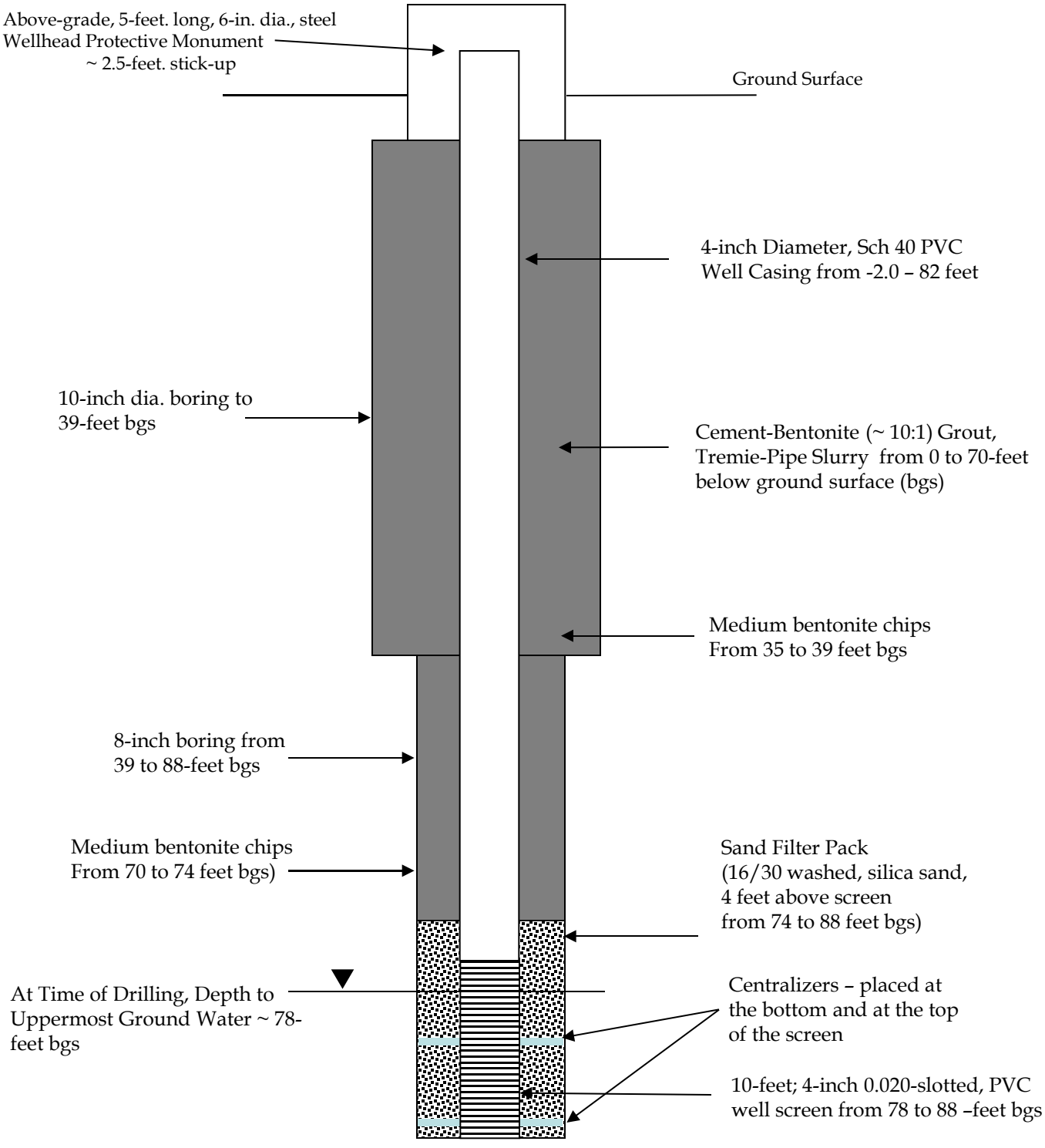
Delta, Utah

CLW-6

Interval (feet)	Drilling Method	Sample Description
		7/26/2015
0-3	10" Sonic	Light Brown fine grained Sands with silts and gravel, dry
3-5	10" Sonic	Light Brown silty fine grained SAND, dry
5-7	10" Sonic	Light Brown fine grained sandy SILT, dry
7-12	10" Sonic	Light Brown fine to medium grained SAND, dry
12-15	10" Sonic	Light Brown fine grained sand, with a clay matrix, dry
15-21	10" Sonic	Light Brown to Brown clayey SILT, slightly moist, poor plasticity
21-22	10" Sonic	Light Brown fine grained sand, with a clay matrix, dry
21-23		Light Brown to Brown clayey SILT, slightly moist, poor plasticity
23-32	10" Sonic	Light Brown CLAY, moist, sticky, high plasticity
32-38	10" Sonic	Light Brown to Gray CLAY, moist, high plasticity
38-47	10" Sonic	Light Gray to Gray CLAY, slightly moist, high plasticity
47-55	10" Sonic to 39 feet	Transitioned to a Brownish gray CLAY, high plasticity, slight moist
55-72	8" Sonic	Brown CLAY, high plasticity, slightly moist
		58 - 58.5 very moist to saturated, 59 - slightly moist
72-78	8" Sonic	Gray CLAY, very moist, high plasticity
78-82	8" Sonic	Gray fine grained SAND with a clay matrix, poor plasticity, saturated
82-84	8" Sonic	Gray CLAY, high plasticity, very moist
84-85	8" Sonic	Gray fine grained SAND with a clay matrix, poor plasticity, saturated
85-88	8" Sonic	Gray CLAY, high plasticity, very moist

TD = 88; PVC 4-inch screen from 78 to 88; PVC 4-inch riser from -2.5 to 78

Drilling Company - Cascade Drilling
Driller - Rick Mallett
Geologist - Thomas Hedrick



Total Depth (TD) = 88 feet bgs

Stantec

ISPC– CB LANDFILL AREA
DELTA, UTAH

CLW-6 Schematic

Design by	Drawn by	Scale	Date Drawn	Last Revision Date
	TH		9/1/15	

Boring Logs

IPSC

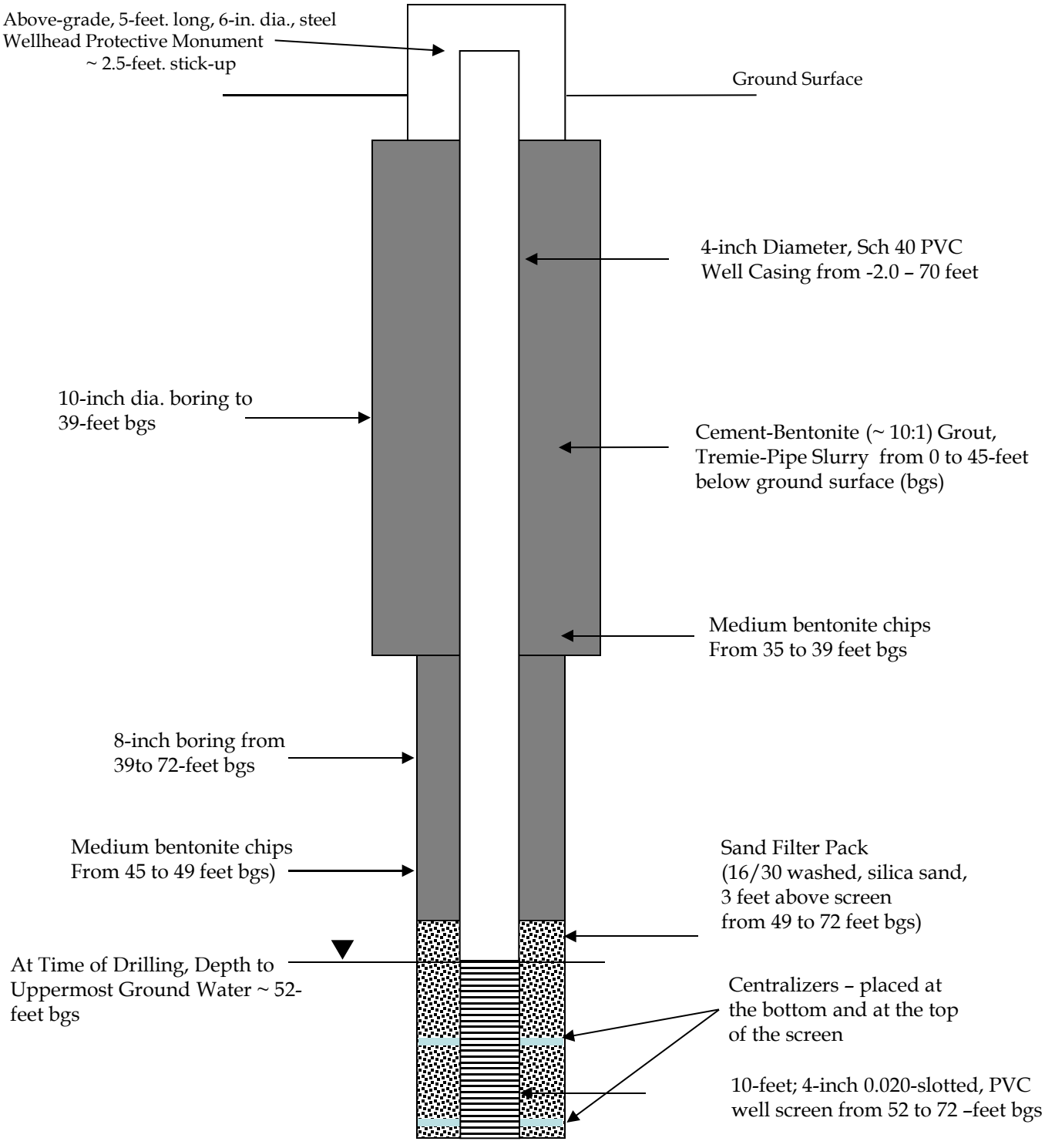
Delta, Utah

CLW-7

Interval (feet)	Drilling Method	Sample Description
		7/24/2015
0-8	10" Sonic	Light Brown fine grained Sands with silts and gravel, angular, Dry
8-12	10" Sonic	Light Brown fine grained Sands with silts and clay, No gravel, Dry
12-15	10" Sonic	Tan SILT with a clay matrix, Dry
15-17	10" Sonic	Light Brown to Gray CLAY, medium plasticity, silty present, Dry
17-22	10" Sonic	Light Brown Clayey SILT, slightly moist
22-24	10" Sonic	Light Brown to Grayish silty CLAY, Dry
24-32	10" Sonic	Light Brown to Grayish CLAY, Brown silts and fine grained sands present, , Dry
32-40	10" Sonic to 39 feet	Light Brown CLAY, slightly moist, became denser at 35 feet
40-43	8" Sonic	Light Brown to Grayish CLAY, very dense, slightly moist
43-48	8" Sonic	Gray CLAY, slightly moist, some layers of a brown fine grained sand present every 3 to 4 inches alone the core
48-50	8" Sonic	Gray CLAY, slightly moist, some Iron Oxide present
50-51.5	8" Sonic	Brown fine to medium grained SANDS, saturated
51.5-58	8" Sonic	Brown CLAY, moist to slightly moist
58-58.5	8" Sonic	Brown fine grained SANDS, with a clay matrix, saturated
58.5-61	8" Sonic	Brown CLAY, moist to slightly moist
61-68	8" Sonic	Brown fine to medium grained SANDS, saturated
68-70	8" Sonic	Brown CLAY, moist to slightly moist
70-72	8" Sonic	Brown fine to medium grained SANDS, saturated

TD = 72; PVC 4-inch screen from 52 to 72; PVC 4-inch riser from -2.5 to 52

Drilling Company - Cascade Drilling
Driller - Rick Mallett
Geologist - Thomas Hedrick



Stantec

ISPC– CB LANDFILL AREA
DELTA, UTAH

CLW-7 Schematic

Design by	Drawn by	Scale	Date Drawn	Last Revision Date
	TH		9/1/15	

Boring Logs

IPSC

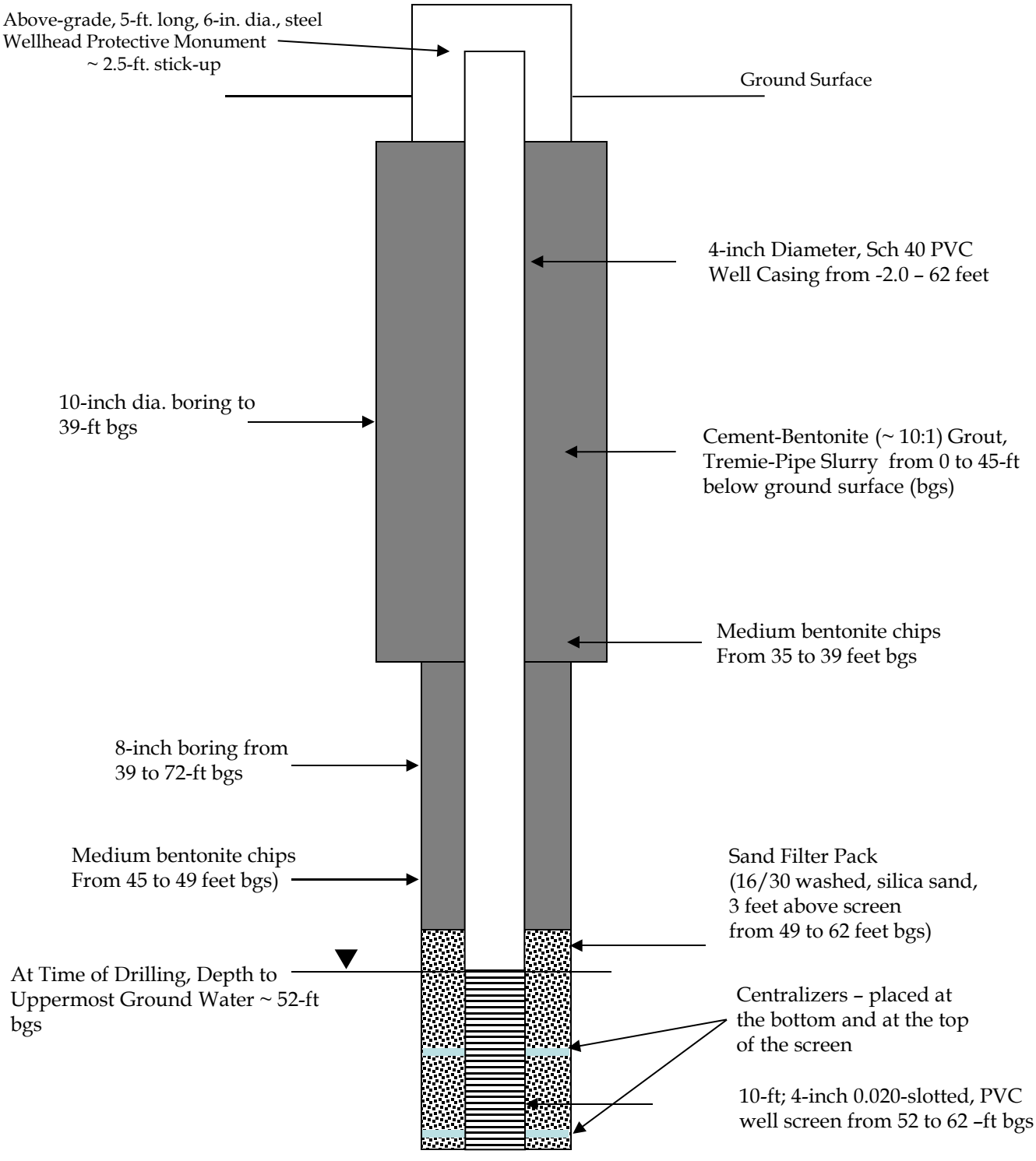
Delta, Utah

CLW-8

Interval (feet)	Drilling Method	Sample Description
		7/24/2015
0-3	10" Sonic	Light Brown fine grained Sands with silts and gravel, dry
3-5	10" Sonic	Light Brown fine grained Sands, slightly moist
5-7	10" Sonic	Tannish white fine grained Sand, with smooth, rounded pebbles, slightly moist
7-10	10" Sonic	Tannish white silty, fine grained Sand, slightly moist
10-13	10" Sonic	Tan SILT with a clay matrix, slightly most, slightly plastic
13-15	10" Sonic	Tan Clayey SILT, dry, plastic
15-18	10" Sonic	Light Brown to tan silty CLAY, slightly moist, good plasticity
18-24	10" Sonic	Light Brown CLAY with silts present, slightly moist, good plasticity
24-32	10" Sonic	Brown silty CLAY, slightly moist, good plasticity
32-37	10" Sonic	Brown CLAY, dence, dry to slihgtly moist, very plastic
37-52	10" Sonic to 39 feet	Transitioned fomrthe Brown CLAY to a Gray CLAY, with interbeds of brown fine gran sand layers, highly plastic, slihglty moist
52-62	8" Sonic	Brown fine grained SAND with a clay matrix, saturated

TD = 62; PVC 4-inch screen from 52 to 62; PVC 4-inch riser from -2.5 to 52

Drilling Company - Cascade Drilling
Driller - Rick Mallett
Geologist - Thomas Hedrick



Total Depth (TD) = 62 feet bgs

Stantec

ISPC– CB LANDFILL AREA
DELTA, UTAH

CLW-8 Schematic

Design by	Drawn by	Scale	Date Drawn	Last Revision Date
	TH		9/1/15	

Boring Logs

IPSC

Delta, Utah

CL-U-1

Interval (feet)	Drilling Method	USCS	Sample Description
7/22/2015			
0-0.5	8" Sonic	TOPSOIL	Surface - Sand, Gravel, roots, coal ash.
0.5-2	8" Sonic	SP/SM	SAND with silt:
2-2.5	8" Sonic	SM/ML	Silty SAND/Sandy Silt:
2.5-5	8" Sonic	SM	Silty SAND:
5-6	8" Sonic	CL	CLAY:
6-7.5	8" Sonic	SM/ML	Silty SAND/Sandy SILT with clay:
7.5-10	8" Sonic	CH	CLAY:
10-11	8" Sonic		CLAY:
11-12.5	8" Sonic		CLAY:
12.5-13.5	8" Sonic		CLAY:
13.5-15	8" Sonic	ML	Sandy SILT:
15-16.5	8" Sonic	SP/SM	SAND with silt:
16.5-17.5	8" Sonic	SM	Silty SAND:
17.5-20	8" Sonic	SP	SAND:
20-21	8" Sonic		SAND:
21-22	8" Sonic	ML	Sandy SILT:
22-23	8" Sonic	SP	SAND:
23-24	8" Sonic	ML	Sandy SILT:
24-25	8" Sonic	SP	SAND:
25-26	8" Sonic	ML	Sandy SILT:
26-28	8" Sonic		Sandy SILT:
28-30	8" Sonic		SILT with clay:
30-32	8" Sonic		Sandy SILT:
32-34	8" Sonic	SP	SAND:
34-35	8" Sonic	ML	Sandy SILT with clay:
35-40	8" Sonic	CL	CLAY:
40-42	8" Sonic	ML	SILT with clay:
42-45	8" Sonic	CH	CLAY:
45-55	8" Sonic		CLAY:
55-65	8" Sonic		CLAY:
7/23/2015			
65-66.5	8" Sonic	CH	Sandy CLAY:
66.5-67.5	8" Sonic	SP/SM	SAND with silt:
67.5-72.5	8" Sonic		SAND with silt:
72.5-73.5	8" Sonic	SP	SAND:
73.5-75	8" Sonic	SC	Clayey SAND:
75-76.5	8" Sonic	SW	SAND:
76.5-79	8" Sonic	SP	SAND:
79-80	8" Sonic	CH	CLAY:

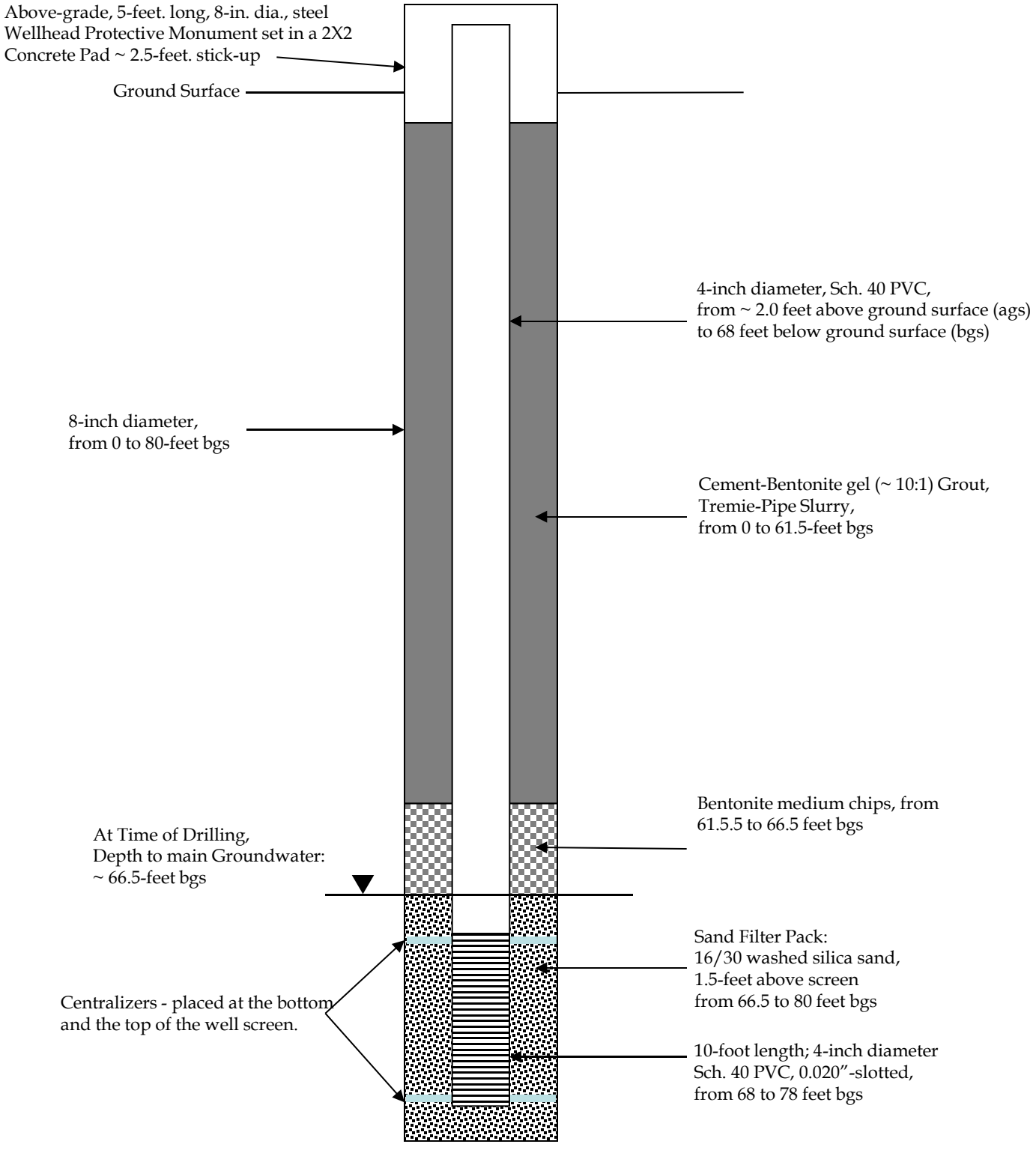
TD = 80'; PVC 4-inch screen from 68 to 78; PVC 4-inch riser from -2.5 to 68

Drilling Method: Guspech GS24-300RS 8" Rotosonic

Drilling Company - Cascade Drilling

Driller - Daniel Dodge

Geologist - Michael Sauerwein



Total Depth (TD) = 80 feet bgs

Stantec

IPSC – COMBUSTION BYPRODUCT LANDFILL AREA
DELTA, UTAH

Well CL-U-1 Schematic

Design by	Drawn by	Scale	Date Drawn	Last Revision Date
	MS		7/23/15	

Boring Logs

IPSC

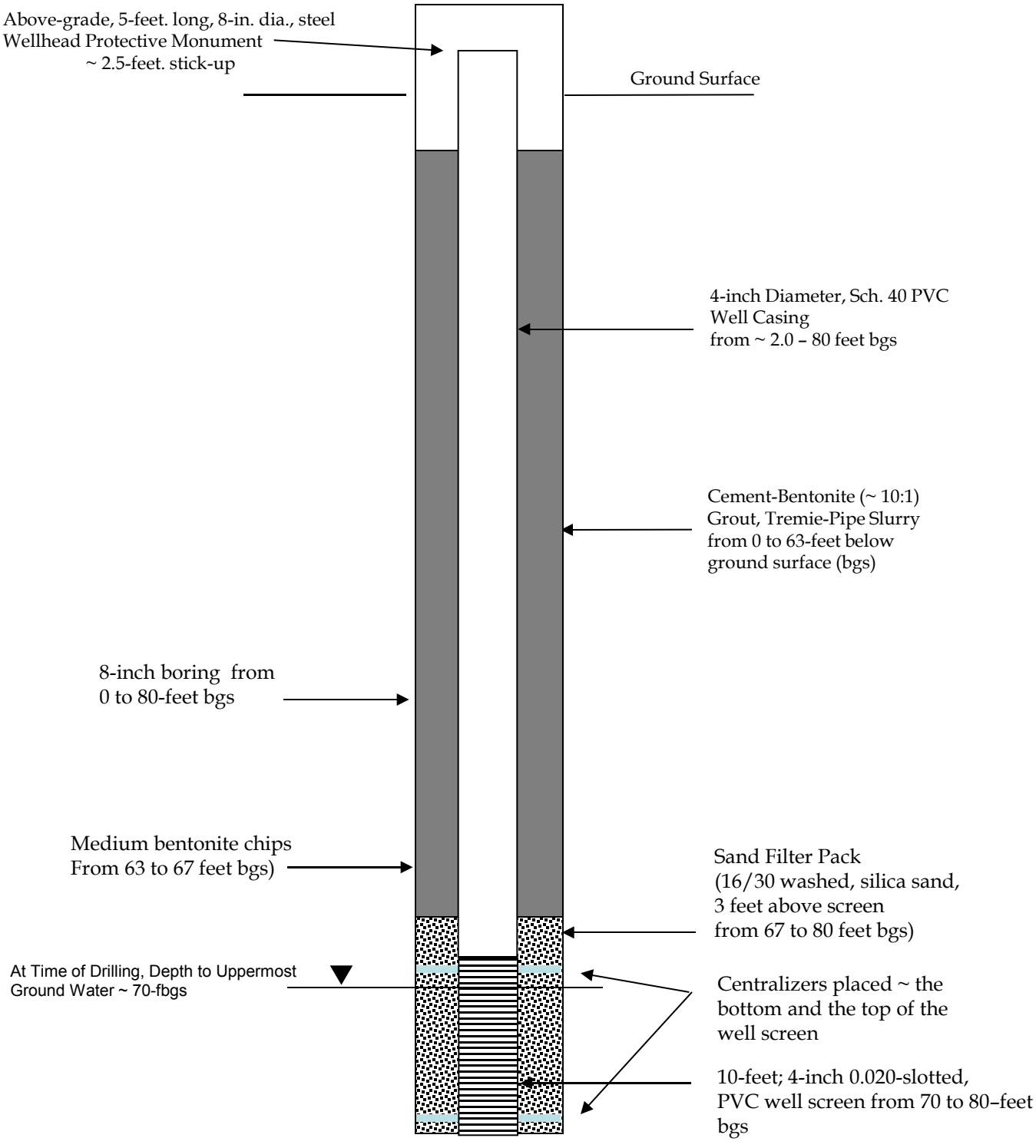
Delta, Utah

CLU-2

Interval (feet)	Drilling Method	Sample Description
		7/22/2015
0-6	8" Sonic	Light Brown fine grained SAND with silt, dry
6-7.5	8" Sonic	Light Brown to Tan CLAY with silt, slightly moist
7.5-13	8" Sonic	Light Brown fine grained SAND with silt, dry
13-16	8" Sonic	Brown fine grained SAND with clayey matrix, slightly moist, some plasticity
16-24	8" Sonic	Light Brown fine grained SAND, dry
24-35	8" Sonic	Light Brown clayey SILT, dry
35-44	8" Sonic	Light Brown Silty CLAY, dry, good plasticity
44-48	8" Sonic	Gray Clayey SILT, dry, slightly plastic
48-49	8" Sonic	Brownish Orange CLAY, with a silty matrix, dry, good plasticity
49-60	8" Sonic	Brownish Orange CLAY, slightly moist
	8" Sonic	53-55 soil becomes slightly moist and Iron Oxide present
	8" Sonic	57-61 soil is dry
61-67	8" Sonic	Brownish Gray CLAY, at 61 feet very moist, very plastic
67-70	8" Sonic	Gray CLAY, moist, very plastic
70-75	8" Sonic	Gray fine to medium grained SAND, saturated, nonplastic
75-77	8" Sonic	Greenish Gray to Brown Clay fine grained SAND with a CLAY matrix, saturated
77-80	8" Sonic	Brownish Gray, fine to medium grained SAND, saturated

TD = 80; PVC 4-inch screen from 70 to 80; PVC 4-inch riser from -2.5 to 70

Drilling Company - Cascade Drilling
Driller - Rick Mallett
Geologist - Thomas Hedrick



Total Depth (TD) = 80 feet bgs

Stantec	IPSC– CB LANDFILL AREA DELTA, UTAH	
	Well CLU-2 Schematic	
		Date Drawn 9/1/15
Design by	Drawn by TH	Scale / Last Revision Date

Boring Logs

ISPC

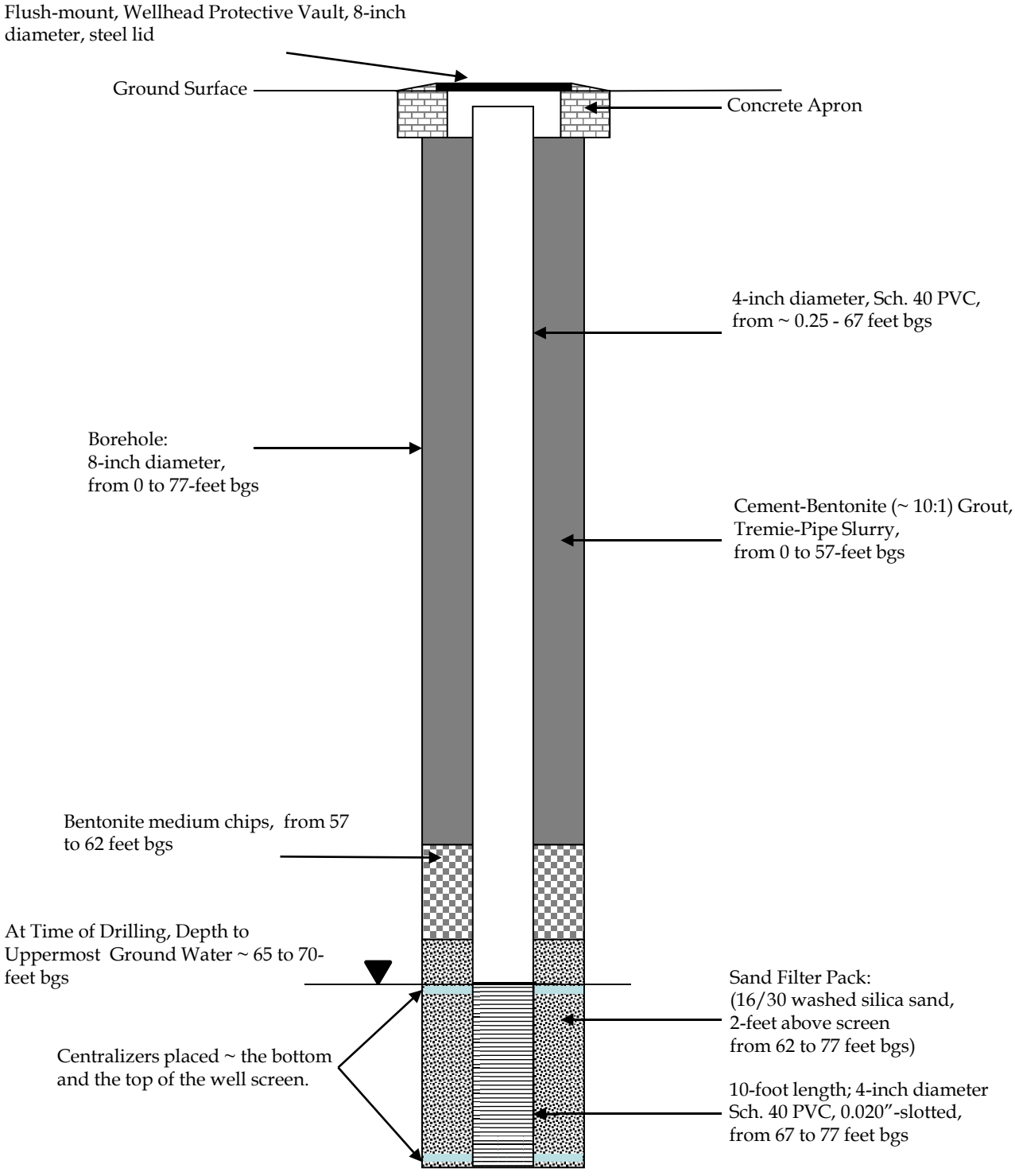
Delta, Utah

CL-U-3

Interval (feet)	Drilling Method	USCS	Sample Description
3/26/2018			
0-2	8" Sonic	SW	Sand, silt and clay
2-14	8" Sonic	SP	Sand, poorly graded, dry
14-17	8" Sonic	MH	Silt, dry
17-18	8" Sonic	MH	Silt with trace clay, dry
18-27.5	8" Sonic	MH	Silt, dry
27.5-37	8" Sonic	CH	Clay, silt stringers every 3-10", red mottling, moist
37-48	8" Sonic	CH	Clay, distance between silt stringers increasing to 10-18"
48-57	8" Sonic	CH	Clay, massively bedded
57-64	8" Sonic	CH	Clay, massively bedded
64-65	8" Sonic	SP	Sand, medium-grain, saturated
65-66	8" Sonic	MH	Silt, saturated
66-67	8" Sonic	SP	Sand, saturated
67-74	8" Sonic	SP	Sand, saturated
74-75	8" Sonic	CH	Clay
75-77	8" Sonic	SP	Sand, saturated

TD = 77; screen 67-77; sand 62-7; plug 57-62; grout to surface; centralizers 66.5 and 76.5
Drilling Method: Sonic

Drilling Company - Cascade Drilling
Driller - David Donnely
Geologist - Tom Fendler



Total Depth (TD) = 77 feet bgs

Stantec

IPSC – BOTTOM ASH SURFACE IMPOUNDMENT AREA
DELTA, UTAH

Well CL-U-3 Schematic

Design by	Drawn by JR	Scale	Date Drawn 10/24/18
			Last Revision Date

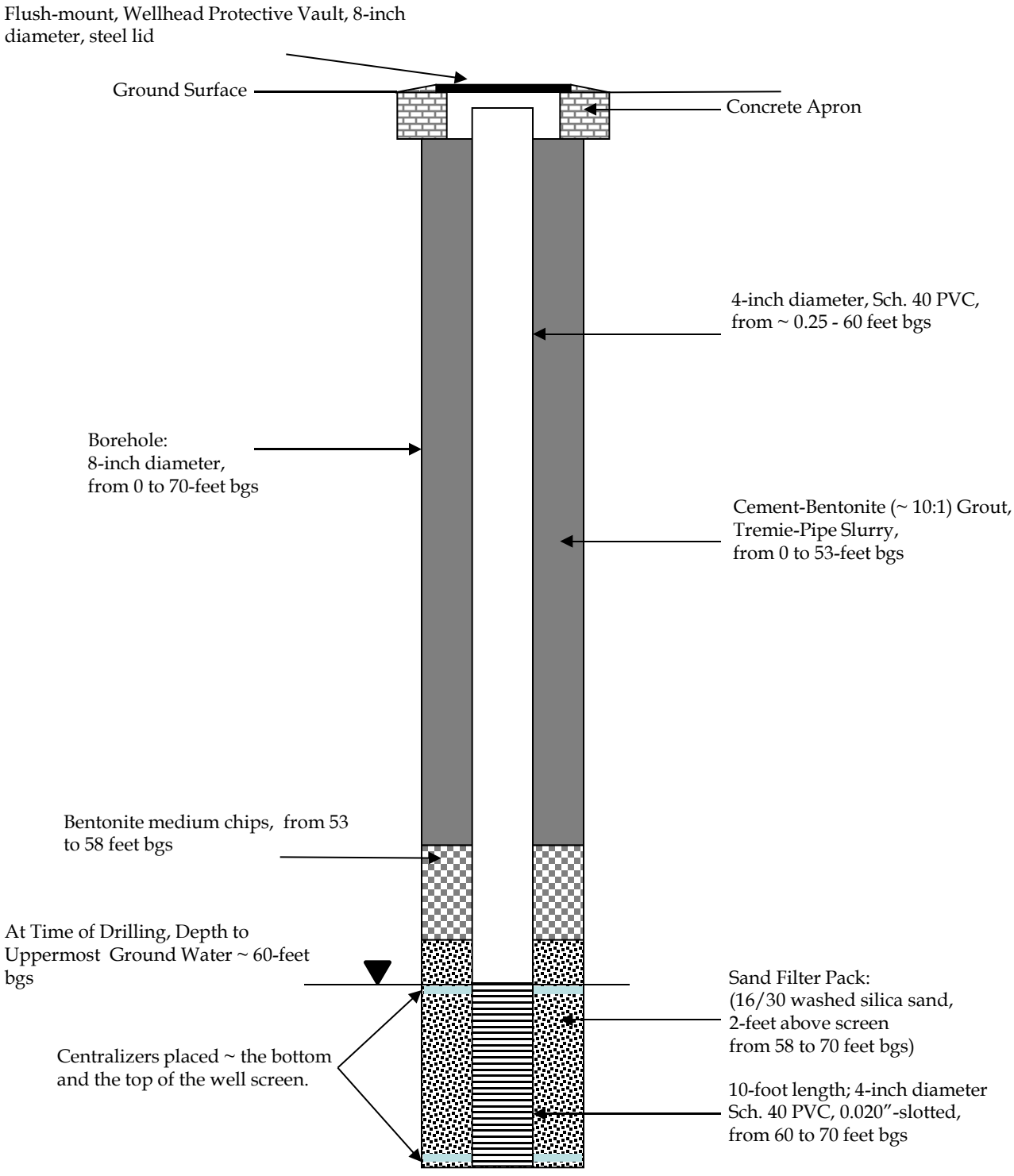
Boring Logs
ISPC
Delta, Utah

BAC-1

Interval (feet)	Drilling Method	USCS	Sample Description
7/31/2015			
0-0.75	8" Sonic	Concrete	Surface - concrete soil mixture
0.75-2.5	8" Sonic	SM	Silty SAND:
2.5-3.25	8" Sonic		Silty SAND:
3.25-5	8" Sonic	SP/SM	SAND with silt:
5-12.5	8" Sonic		SAND with silt:
12.5-13.5	8" Sonic		SAND with silt:
13.5-14.5	8" Sonic	ML	Sandy SILT:
14.5-15	8" Sonic		Sandy SILT:
15-17.5	8" Sonic	SP	SAND:
17.5-19	8" Sonic	SP/SW	SAND:
19-20	8" Sonic	SP/SM	SAND with silt:
20-21.5	8" Sonic	SP	SAND:
21.5-22.5	8" Sonic	ML	Sandy SILT:
22.5-24	8" Sonic		Sandy SILT:
24-25	8" Sonic	SP	SAND:
25-26.75	8" Sonic	SM	Silty SAND:
26.75-27.5	8" Sonic	SP	SAND:
27.5-28.5	8" Sonic		SAND:
28.5-30	8" Sonic	SM	Silty SAND:
30-31.5	8" Sonic	SP	SAND:
31.5-32.25	8" Sonic	SM	Silty SAND:
32.25-33.75	8" Sonic	SP/SM	SAND with silt:
33.75-35	8" Sonic	SM	Silty SAND:
35-36	8" Sonic	SP/SM	SAND with silt:
36-37.5	8" Sonic	SM	Silty SAND:
37.5-38	8" Sonic	SP/SM	SAND with silt:
38-38.5	8" Sonic	SM	Silty SAND:
38.5-40	8" Sonic	ML	Sandy SILT:
40-42.5	8" Sonic	SC	Clayey SAND:
42.5-43.5	8" Sonic	CL	Sandy CLAY:
43.5-44.5	8" Sonic		Sandy CLAY:
44.5-45	8" Sonic		Sandy CLAY:
45-46	8" Sonic		Sandy CLAY:
46-47	8" Sonic		Sandy CLAY:
47-47.75	8" Sonic	SW	SAND:
47.75-48.5	8" Sonic	CH	Sandy CLAY:
48.5-50	8" Sonic		Sandy CLAY:
50-51.5	8" Sonic		CLAY:
51.5-53.5	8" Sonic		Sandy CLAY:
53.5-56	8" Sonic		CLAY:
56-57.5	8" Sonic		Sandy CLAY:
57.5-58	8" Sonic	SC	Clayey SAND:
58-59.5	8" Sonic	CH	CLAY:
59.5-60	8" Sonic	SC	Clayey SAND:
60-64.5	8" Sonic	SM	Silty SAND with clay:
64.5-65.5	8" Sonic	SC	Clayey SAND:
65.5-67.5	8" Sonic	SP	SAND:
67.5-70	8" Sonic	SW	SAND:

TD = 70'; PVC 4-inch screen from 60 to 70; PVC 4-inch riser from 0 to 60
Drilling Method: Guspech GS24-300RS, 8" Rotosonic

Drilling Company - Cascade Drilling
Driller - Daniel Dodge
Geologist - Michael Sauerwein



Total Depth (TD) = 70 feet bgs

Stantec

IPSC – BOTTOM ASH SURFACE IMPOUNDMENT AREA
DELTA, UTAH

Well BAC-1 Schematic

Design by	Drawn by	Scale	Date Drawn	Last Revision Date
	MS		7/31/15	

Boring Logs

IPSC

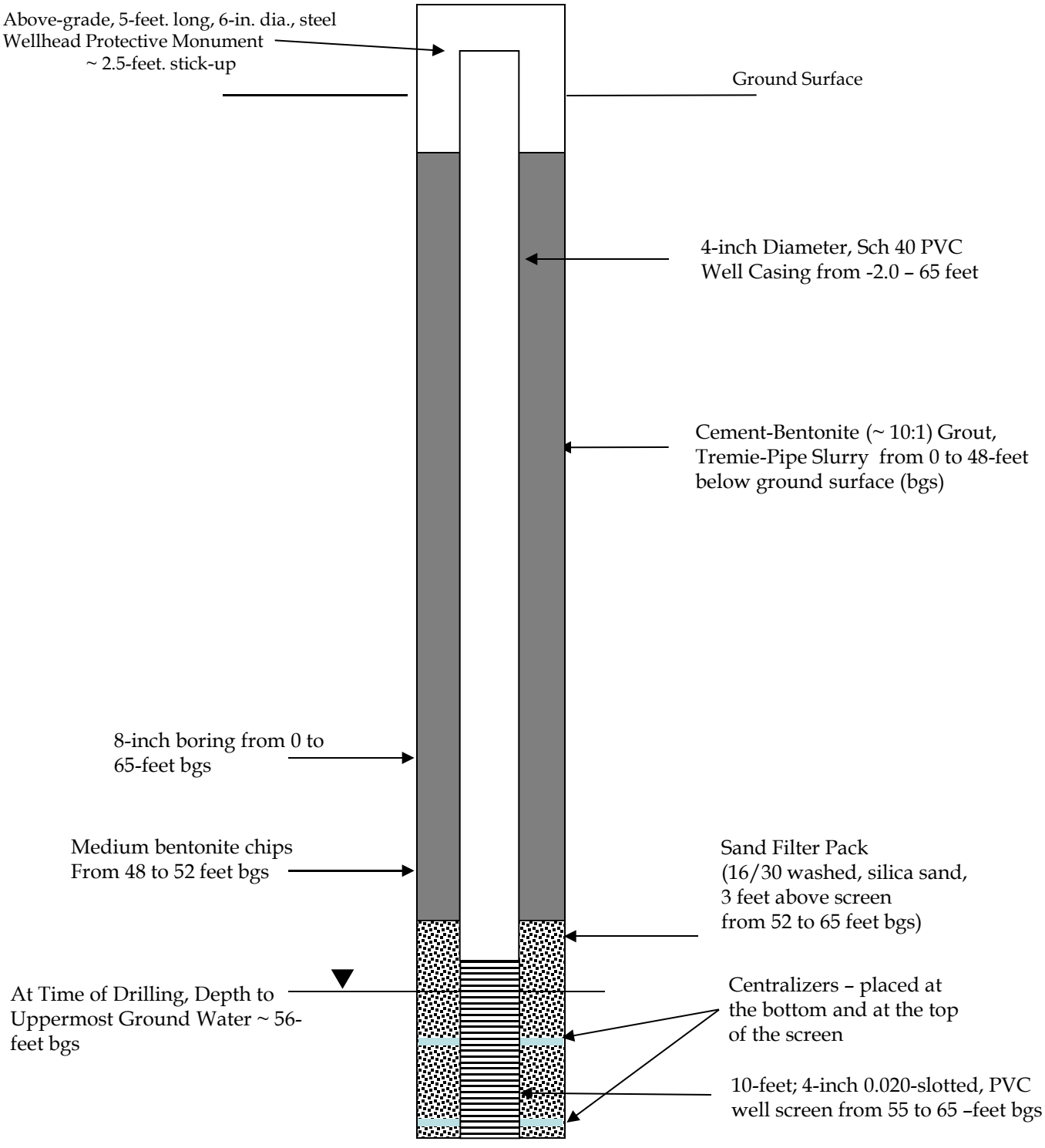
Delta, Utah

BAC-2

Interval (feet)	Drilling Method	Sample Description
		7/29/2015
0-6	8" Sonic	Light Brown fine grained Sand, gravels, dry
6-12	8" Sonic	Light Brown fine grained SAND, moist
12-18	8" Sonic	Light Brown fine to medium grained sand, dry
18-23	8" Sonic	Light Brown fine to medium grained sand, with a clay matrix, dry
23-24	8" Sonic	Light Brown fine to medium grained sand, very moist, trace amount of clay
24-26	8" Sonic	Brown fine to medium grained sand, slightly moist
26-30	8" Sonic	Brown fine to medium grained sand, with gravels present, slightly moist
30-33	8" Sonic	Light Brown fine grained sand, slightly moist
33-34	8" Sonic	Light Brown CLAY, very moist, high plasticity
34-36	8" Sonic	Light Brown fine grained sand, with a clay matrix, moist
36-38	8" Sonic	Light Brown Silty CLAY, moderately plastic, slightly moist
38-40	8" Sonic	Brownish Red silty CLAY, good plasticity, slightly moist
40-41	8" Sonic	Brown fine grained SAND, saturated
41-42	8" Sonic	Brown SILT with a clay matrix, slightly moist
42-52	8" Sonic	Reddish brown CLAY, high plasticity, dry to slightly moist
52-55	8" Sonic	Reddish brown CLAY, high plasticity, dry to slightly moist, very dense
55-56	8" Sonic	Brown fine grained SAND with a clay matrix very moist to saturated
56-57	8" Sonic	Reddish brown CLAY, high plasticity, slightly moist to moist
57-65	8" Sonic	Brown fine grained SAND with a clay matrix, saturated

TD = 65; PVC 4-inch screen from 55 to 65; PVC 4-inch riser from -2.5 to 55

Drilling Company - Cascade Drilling
Driller - Rick Mallett
Geologist - Thomas Hedrick



Total Depth (TD) = 65 feet bgs

Stantec

IPSC – BOTTOM ASH SURFACE IMPOUNDMENT
DELTA, UTAH

BAC-2 Schematic

Design by	Drawn by	Scale	Date Drawn	Last Revision Date
	TH		9/1/15	

Boring Logs

IPSC

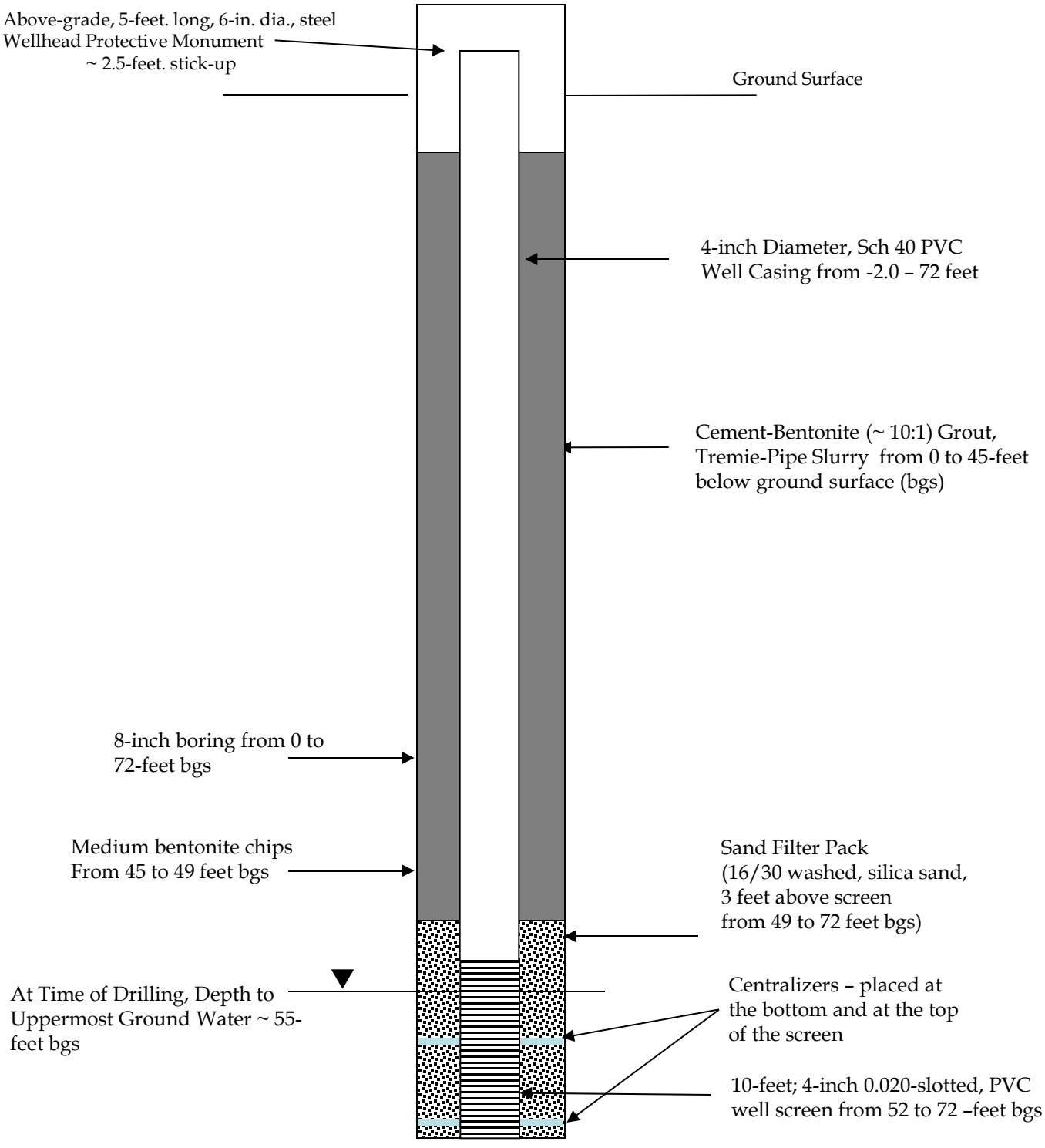
Delta, Utah

BAC-3

Interval (feet)	Drilling Method	Sample Description
		7/28/2015
0-8.5	8" Sonic	Light Brown fine grained Sand, dry
8.5-11	8" Sonic	Light Brown fine to medium grained SAND, moist
11-14	8" Sonic	Light Brown fine grained sand, with a clay matrix, dry
14-17	8" Sonic	Gravels with fine to medium grained SAND, slightly moist
17-20	8" Sonic	Brown fine grained sand, slightly moist
20-22	8" Sonic	Brown fine to medium grained sand, with a clay matrix, slightly moist
22-26	8" Sonic	Brown fine to medium grained sand, with a clay matrix, moist
26-30	8" Sonic	Brown fine grained sand, moist
30-43	8" Sonic	Light Brown CLAY, slightly moist to moist, high plasticity
		30-33 Silty CLAY, poor plasticity
		33-35 Silty CLAY, moderately plastic
		35-43 very little silt present, high plasticity
43-45	8" Sonic	Transitioned to a Reddish Brown CLAY, dry, high plasticity
45-50	8" Sonic	Transitioned to a Brown CLAY, dry, high plasticity
50-55	8" Sonic	Light Brown CLAY, moist, high plasticity
55-58	8" Sonic	Light Brown fine grained SAND, with a clay matrix, slightly moist to moist
58-72	8" Sonic	Light Brown CLAY, with a sandy matrix medium to poor plasticity, moist

TD = 72; PVC 4-inch screen from 52 to 72; PVC 4-inch riser from -2.5 to 52

Drilling Company - Cascade Drilling
Driller - Rick Mallett
Geologist - Thomas Hedrick



Total Depth (TD) = 72 feet bgs

Stantec

ISPC– BOTTOM ASH SURFACE IMPOUNDMENT
DELTA, UTAH

BAC-3 Schematic

Design by	Drawn by	Scale	Date Drawn	Last Revision Date
	TH		9/1/15	

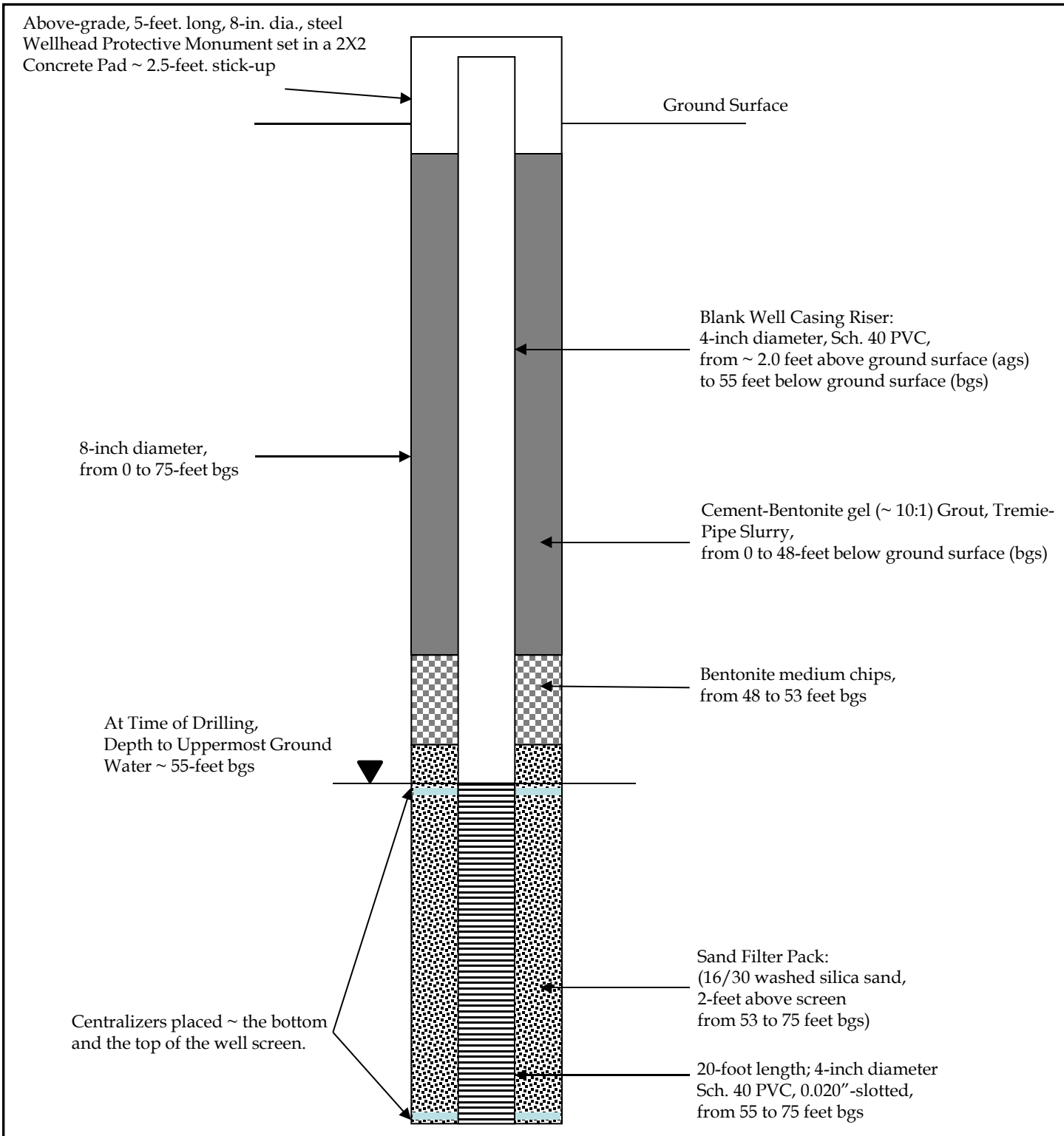
Boring Log
ISPC
Delta, Utah

BAC-4

Interval (feet)	Drilling Method	USCS	Sample Description
8/10/2015			
0-0.5	8' Sonic	TOPSOIL	Surface - Sand, Gravel, roots, coal ash.
0.5-2.5	8' Sonic	SP/SM	SAND with silt:
2.5-5	8' Sonic	SP	SAND:
5-9	8' Sonic		SAND:
9-10	8' Sonic	SP/SM	SAND with silt:
10-15	8' Sonic	SP	SAND:
15-17.5	8' Sonic	SP/SM	SAND with silt:
17.5-19	8' Sonic		SAND with silt:
19-2	8' Sonic	SC	Clayey SAND:
20-21	8' Sonic		Clayey SAND:
21-22	8' Sonic	CL	Sandy CLAY:
22-22.5	8' Sonic	ML	Sandy SILT:
22.5-25	8' Sonic	CL	Sandy CLAY:
25-32.5	8' Sonic	CH	CLAY:
32.5-33.75	8' Sonic	SP	SAND:
33.75-35	8' Sonic	SM	Silty SAND:
35-36.5	8' Sonic	SP/SM	SAND with silt:
36.5-37.5	8' Sonic		SAND with silt:
37.5-38	8' Sonic	SM	Silty SAND:
38-38.75	8' Sonic	CH	Sandy CLAY:
38.75-39	8' Sonic	SP/SM	SAND with silt:
39-40	8' Sonic	CH	Sandy CLAY:
40-42.5	8' Sonic	ML	Sandy SILT with clay:
42.5-43.5	8' Sonic	SM	Silty SAND and clay:
43.5-45	8' Sonic	CH	CLAY:
45-47.5	8' Sonic		CLAY:
47.5-48.5	8' Sonic		CLAY:
48.5-50	8' Sonic	ML	Clayey SILT with sand:
50-51.25	8' Sonic		Clayey SILT:
51.25-52.5	8' Sonic	CH	CLAY:
52.5-55	8' Sonic	SC	Clayey SAND:
55-56.5	8' Sonic	SM	Silty SAND:
56.5-57	8' Sonic	ML	Clayey SILT with sand:
57-57.5	8' Sonic	CH	CLAY:
57.5-58.5	8' Sonic		CLAY:
58.5-59.5	8' Sonic	ML	Clayey SILT with sand:
59.5-61	8' Sonic		Clayey SILT with sand:
61-64	8' Sonic		Clayey SILT with sand:
64-65	8' Sonic		Clayey SILT with sand:
65-65.5	8' Sonic	SM	Silty SAND:
65.5-67	8' Sonic	CL	Silty CLAY:
67-67.5	8' Sonic	ML	Clayey SILT:
67.5-69	8' Sonic	CH	CLAY:
69-69.5	8' Sonic		CLAY:
69.5-70	8' Sonic		CLAY:
70-72.5	8' Sonic	ML	Sandy SILT with clay:
72.5-74	8' Sonic	CH	Silty CLAY:
74-75	8' Sonic	SM	Silty SAND:

TD = 75'; PVC 4-inch screen from 55 to 75; PVC 4-inch riser from -2.5 to 55
Drilling Method: Prosonic T600, 8" Rotosonic

Drilling Company - Cascade Drilling
Driller - Rick Mallett
Geologist - Michael Sauerwein



Total Depth (TD) = 75 feet bgs

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IPSC – BOTTOM ASH SURFACE IMPOUNDMENT
DELTA, UTAH

Well BAC-4 Schematic

Design by	Drawn by	Scale	Date Drawn	Last Revision Date
	MS		8/10/15	

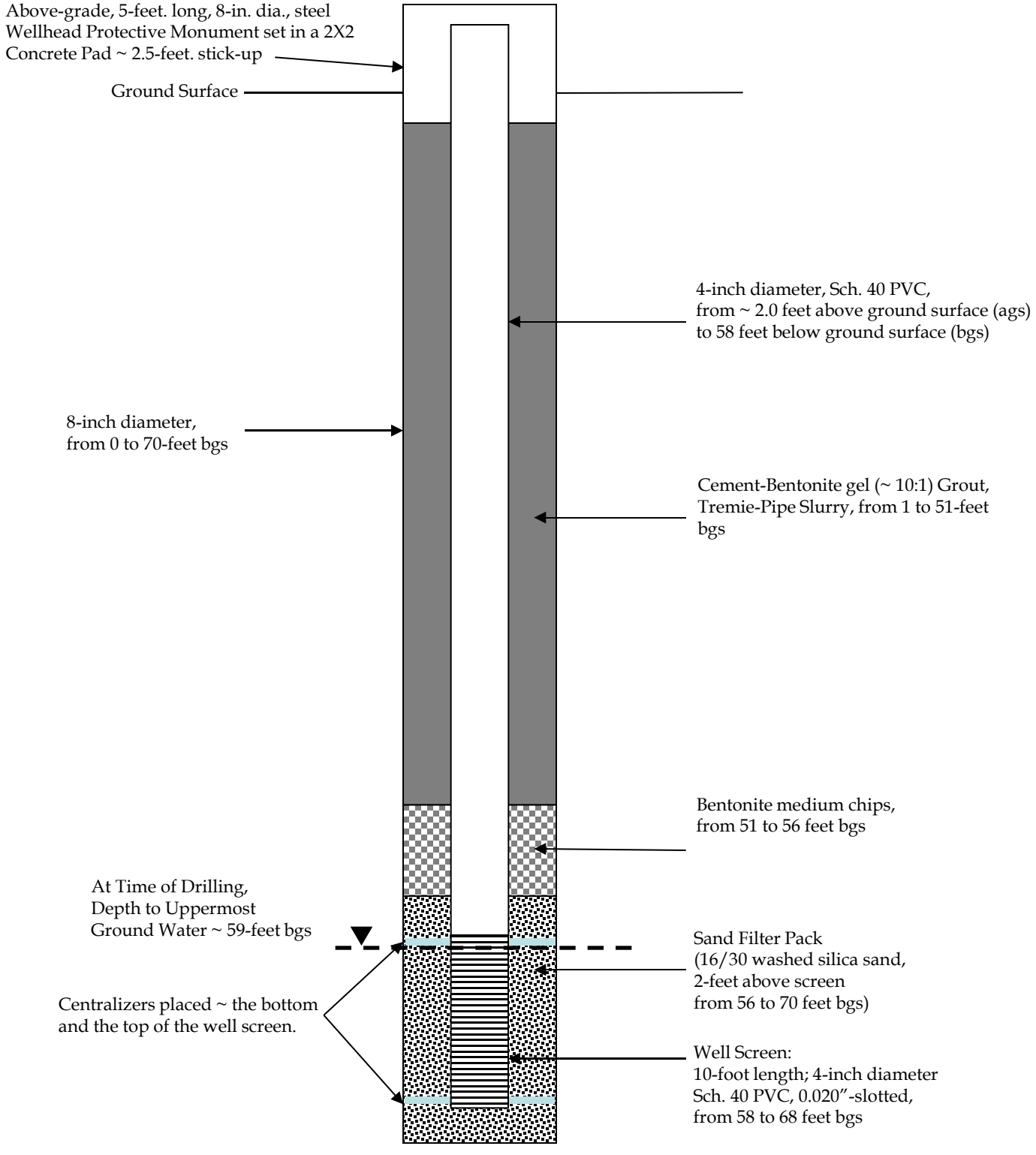
Boring Logs
ISPC
Delta, Utah

BAC-5

Interval (feet)	Drilling Method	USCS	Sample Description
8/9/2015			
0-0.5	8" Sonic	TOPSOIL	Surface - Sand, Gravel, roots, coal ash.
0.5-2.5	8" Sonic	SP/SM	Gravelly SAND with silt:
2.5-3	8" Sonic	SP	SAND:
3-6.5	8" Sonic		SAND:
6.5-10	8" Sonic		SAND:
10-12.5	8" Sonic		SAND:
12.5-15	8" Sonic	SP/SM	SAND with silt:
15-19	8" Sonic	SM	Silty SAND:
19-19.5	8" Sonic	SC	Clayey SAND:
19.5-20	8" Sonic	SP/SM	SAND with silt:
20-22.5	8" Sonic	CL	Sandy CLAY:
22.5-23.75	8" Sonic		Sandy CLAY:
23.75-25	8" Sonic		Sandy CLAY:
25-27.5	8" Sonic		Sandy CLAY:
27.5-30	8" Sonic		CLAY:
30-32.5	8" Sonic	CL/CH	CLAY:
32.5-33.5	8" Sonic	SP	SAND:
33.5-35	8" Sonic		SAND:
35-36	8" Sonic	SC	Clayey SAND:
36-37.5	8" Sonic	ML	Sandy SILT:
37.5-38.5	8" Sonic		Sandy SILT:
38.5-40	8" Sonic	SM	Silty SAND with clay:
40-42.5	8" Sonic		Silty SAND:
42.5-44.25	8" Sonic		Silty SAND with clay:
44.25-45	8" Sonic	CH	CLAY:
45-46.5	8" Sonic		CLAY:
46.5-47.5	8" Sonic		CLAY:
47.5-49	8" Sonic		CLAY:
49-50.75	8" Sonic	SM	Silty SAND:
50.75-52.5	8" Sonic	CH	CLAY:
52.5-53.5	8" Sonic		CLAY:
53.5-55.5	8" Sonic	SP	SAND:
55.5-57.5	8" Sonic	CH	CLAY:
57.5-59	8" Sonic		CLAY:
59-60	8" Sonic	SM	Silty SAND with clay:
60-62.5	8" Sonic	SP	SAND:
62.5-63	8" Sonic	SC	Clayey SAND:
63-65	8" Sonic	SP	SAND:
65-65.75	8" Sonic	SC	Clayey SAND:
65.75-66.5	8" Sonic	CH	CLAY:
66.5-67.5	8" Sonic	SC	Clayey SAND:
67.5-69	8" Sonic	CH	CLAY:
69-70	8" Sonic		CLAY:

TD = 70'; PVC 4-inch screen from 58 to 68; PVC 4-inch riser from -2.5 to 58
Drilling Method: Prosonic T600, 8" Rotosonic

Drilling Company - Cascade Drilling
Driller - Rick Mallett
Geologist - Michael Sauerwein



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IPSC – BOTTOM ASH SURFACE IMPOUNDMENT
DELTA, UTAH

Well BAC-5 Schematic

Design by	Drawn by	Scale	Date Drawn	Last Revision Date
	MS		8/09/15	

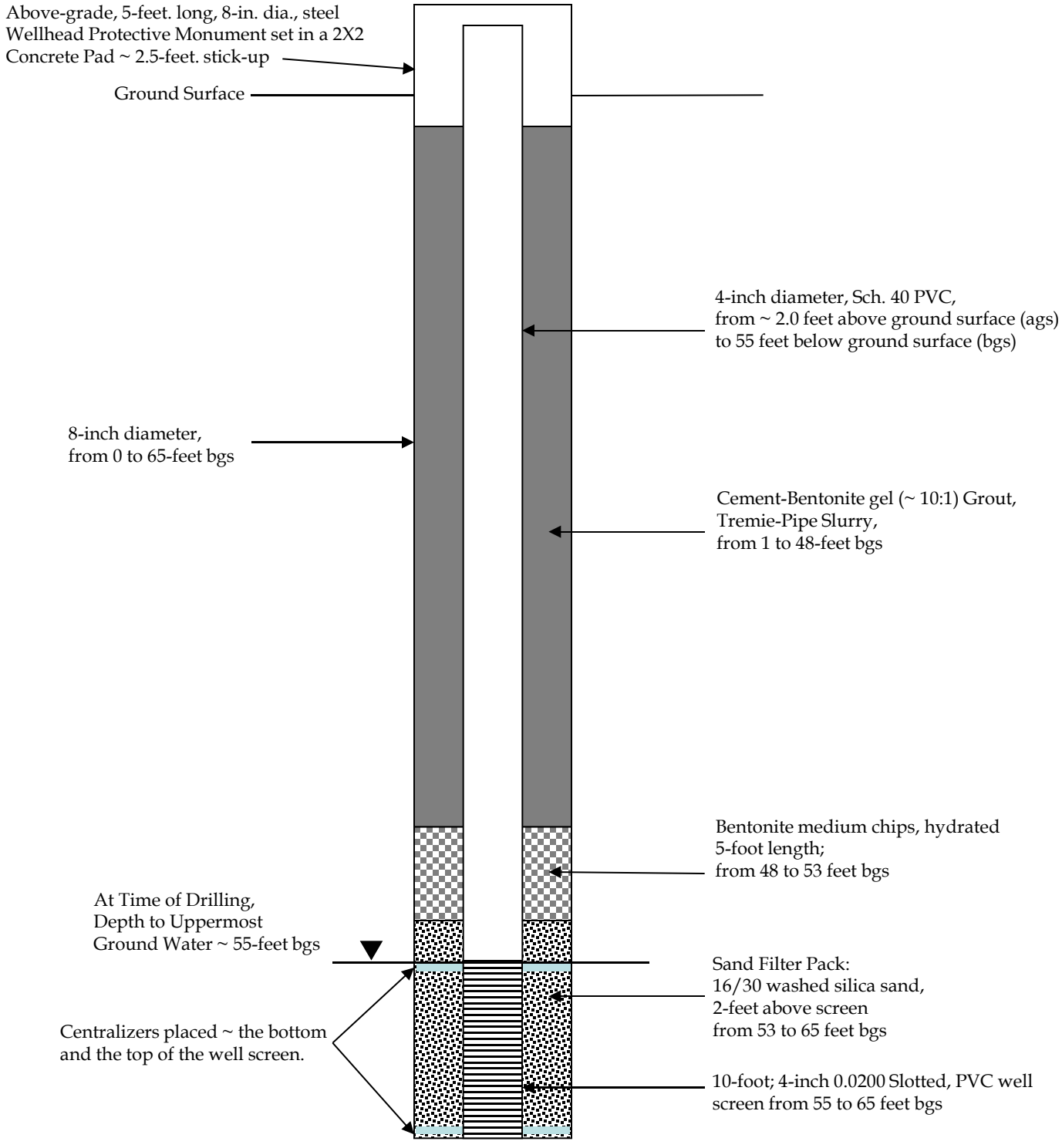
Boring Logs
ISPC
Delta, Utah

BAC-6

Interval (feet)	Drilling Method	USCS	Sample Description
8/8/2015			
0-0.5	8" Sonic	TOPSOIL	Surface - Sand, Gravel, roots, coal ash.
0.5-2.5	8" Sonic	SP/SM	Gravelly SAND with silt:
2.5-5	8" Sonic	SP	SAND:
5-6.5	8" Sonic	SP/SM	SAND with silt:
6.5-7.5	8" Sonic	SP	SAND:
7.5-10	8" Sonic		SAND:
10-13.5	8" Sonic		SAND:
13.5-15	8" Sonic	SM	Silty SAND:
15-16	8" Sonic	SP	SAND:
16-17.5	8" Sonic	SM	Silty SAND:
17.5-18.25	8" Sonic	SP/SM	SAND with silt:
18.25-18.75	8" Sonic	CL	Sandy CLAY:
18.75-20	8" Sonic	SC	Clayey SAND:
20-21.5	8" Sonic	CH	Sandy CLAY:
21.5-23	8" Sonic	SM	Silty SAND:
23-25	8" Sonic	CL	CLAY:
25-27.5	8" Sonic	CH	CLAY:
27.5-30	8" Sonic		CLAY:
30-32.5	8" Sonic		CLAY:
32.5-33.5	8" Sonic		CLAY:
33.5-35	8" Sonic	SW	SAND:
35-36	8" Sonic	SM	Silty SAND:
36-37.5	8" Sonic	SP/SM	SAND with silt:
37.5-38.5	8" Sonic	CH	CLAY:
38.5-40	8" Sonic	SM	Silty SAND with clay:
40-42.5	8" Sonic		Silty SAND:
42.5-43.5	8" Sonic	CH	Sandy CLAY:
43.5-45	8" Sonic		CLAY:
45-45.5	8" Sonic	SC	Clayey SAND:
45.5-47.5	8" Sonic	CH	CLAY:
47.5-48	8" Sonic	SP	SAND:
48-49.5	8" Sonic	SM	Silty SAND with clay:
49.5-50	8" Sonic	CH	Sandy CLAY:
50-52.5	8" Sonic		CLAY:
52.5-55	8" Sonic		CLAY:
55-56	8" Sonic	SM	Silty SAND:
56-60	8" Sonic	SW	SAND:
60-61	8" Sonic		SAND:
61-62.5	8" Sonic	CH	Sandy CLAY:
62.5-63.5	8" Sonic		CLAY:
63.5-65	8" Sonic	SC	Clayey SAND:

TD = 65'; PVC 4-inch screen from 55 to 65; PVC 4-inch riser from -2.5 to 55
Drilling Method: Guspech GS24-300RS, 8" Rotosonic

Drilling Company - Cascade Drilling
Driller - Daniel Dodge
Geologist - Michael Sauerwein



Total Depth (TD) = 65 feet bgs

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IPSC – BOTTOM ASH SURFACE IMPOUNDMENT
DELTA, UTAH

Well BAC-6 Schematic

Design by	Drawn by	Scale	Date Drawn	Last Revision Date
	MS		8/08/15	

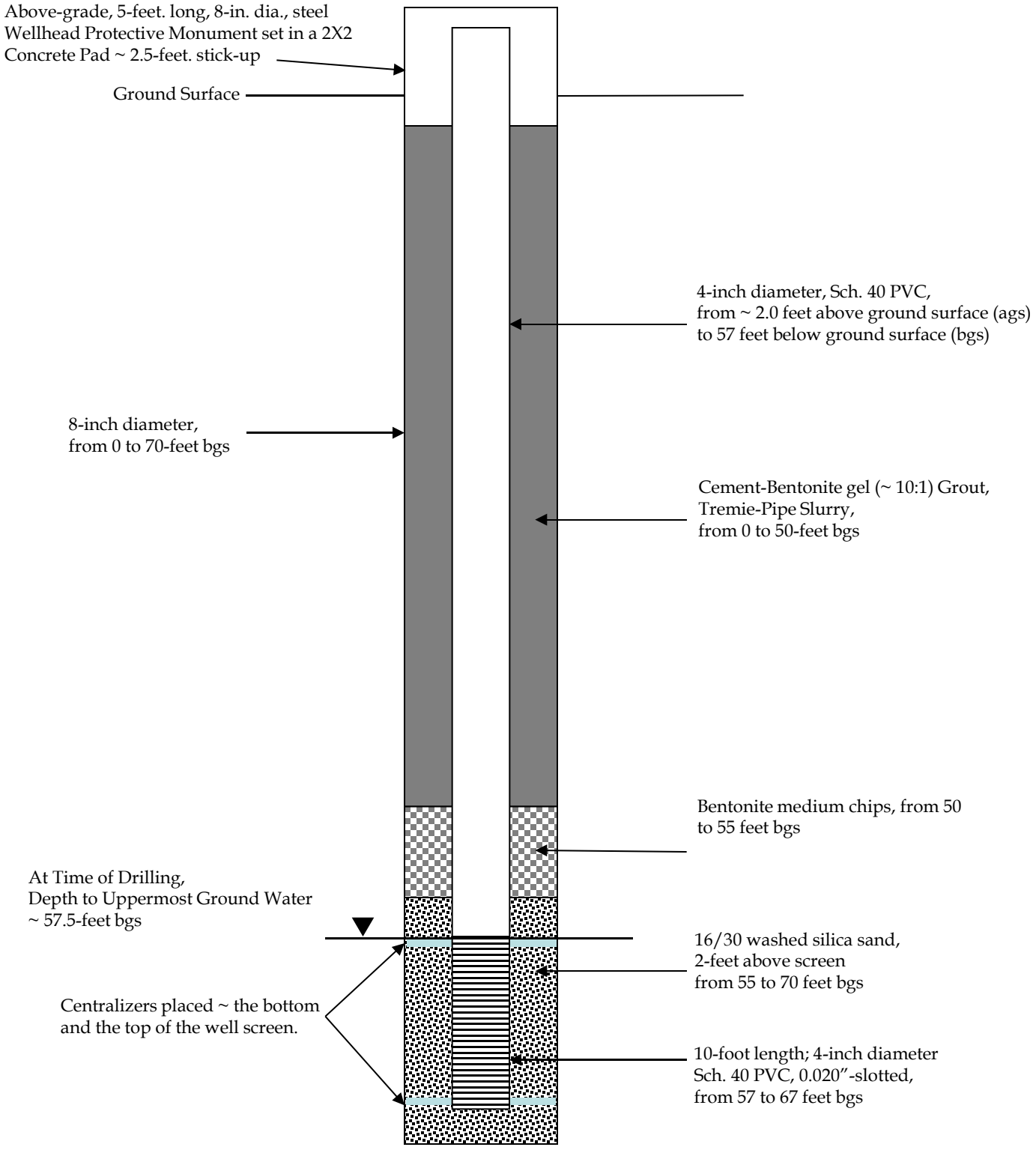
Boring Logs
ISPC
Delta, Utah

BAC-7

Interval (feet)	Drilling Method	USCS	Sample Description
8/7/2015			
0-0.5	8" Sonic	TOPSOIL	Surface - Sand, Gravel, roots, coal ash.
0.5-2	8" Sonic	SP/SM	Gravelly SAND:
2-2.5	8" Sonic	SP	Gravelly SAND:
2.5-5	8" Sonic		SAND:
5-7	8" Sonic		SAND:
7-8.5	8" Sonic		SAND:
8.5-9	8" Sonic	SP/SM	SAND with silt:
9-9.5	8" Sonic	SP	SAND:
9.5-11	8" Sonic	SP/SM	SAND with silt:
11-13	8" Sonic		SAND with silt:
13-17	8" Sonic	SM	Silty SAND:
17-18.5	8" Sonic		Silty SAND:
18.5-19	8" Sonic	ML	Sandy SILT:
19-20.25	8" Sonic	SP/SM	SAND with silt:
20.25-22	8" Sonic	CL	Sandy CLAY:
22-24	8" Sonic		Sandy CLAY:
24-25	8" Sonic	SC	Clayey SAND:
25-27.5	8" Sonic	CH	CLAY:
27.5-36.5	8" Sonic		CLAY:
36.5-40	8" Sonic	SP	SAND:
40-41.25	8" Sonic		SAND:
41.25-43.75	8" Sonic	SP/SM	SAND with silt:
43.75-45	8" Sonic	CH	CLAY:
45-47.5	8" Sonic		CLAY:
47.5-49	8" Sonic		CLAY:
49-50	8" Sonic	SM	Silty SAND:
50-57.5	8" Sonic	CH	CLAY:
57.5-60	8" Sonic	SW	SAND:
60-62.5	8" Sonic		SAND:
62.5-64	8" Sonic	SP	SAND:
64-65	8" Sonic	CH	CLAY:
65-66.25	8" Sonic		Sandy CLAY:
66.25-67.5	8" Sonic		CLAY:
67.5-70	8" Sonic		CLAY:

TD = 70'; PVC 4-inch screen from 57 to 67; PVC 4-inch riser from -2.5 to 57
Drilling Method: Guspech GS24-300RS, 8" Rotosonic

Drilling Company - Cascade Drilling
Driller - Daniel Dodge
Geologist - Michael Sauerwein



Total Depth (TD) = 70 feet bgs

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IPSC – BOTTOM ASH SURFACE IMPOUNDMENT
DELTA, UTAH

Well BAC-7 Schematic

Design by	Drawn by	Scale	Date Drawn	Last Revision Date
	MS		8/07/15	

Project Name: Intermountain Power Service Corporation
Boring Monitor Well: BAC-8

Project No.: 203709098
Completion Date: 2019-04-29

Drilling Firm: Cascade
Boring Method: Sonic
Boring Diameter: 10 inches

Driller: Ryan Miller
Logged by: Rich Pratt
Depth to Water at Drilling: 67 feet
Depth to Water at Drilling (static at 24 hours): 45.59 feet

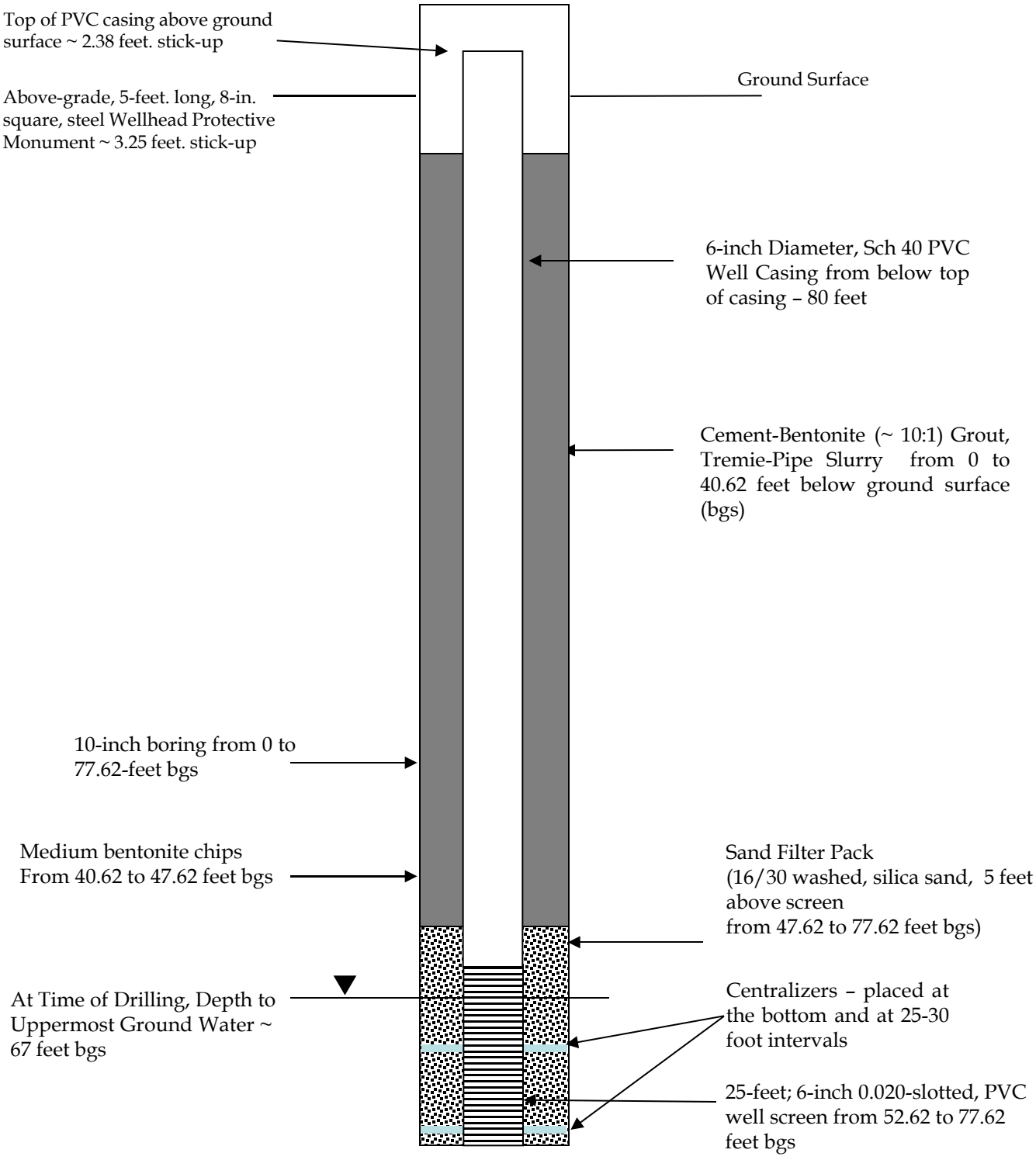
BAC-8

Interval (feet)	Description
0 - 1	Light brown fine-grained sand with clay, dry
1 - 13	Light brown clay with silt, dry
13 - 17	Light brown fine-grained sand with clay, dry
17 - 18	Light brown clay with sand, moist
18 - 19	Medium brown sand, saturated
19 - 21	Light brown clay with sand, moist
21 - 27	Light brown clay with sand, dry
27 - 28	Brown with red clay, moist
28 - 31	Brown clay, moist
31 - 34	Gray clay, moist
34 - 43	Brown clay, moist
43 - 56	Medium brown medium-grained sand, moist
56 – 56.5	Medium brown medium-grained sand with pebbles, moist
56.5 - 57	Medium brown medium-grained sand, moist
57 - 63	Brown clay, moist
63 - 65	Medium brown fine-grained sand, moist
65 – 66.5	Brown clay, moist
66.5 - 67	Medium brown fine-grained sand, moist
67 - 68	Medium brown fine-grained sand, saturated
68 - 69.5	Medium brown fine-grained sand
69.5 - 77	Red and brown clay

Well Completion materials and Depth Intervals (feet) Below Ground Surface

Surface Completion: Stick-up
Casing, solid (6-inch PVC): 0-52.62 feet
Screen (6 inch, 0.02 slotted, PVC): 52.62-77.62 feet
Sand Pack: 16/30 sand, 47.62-77.62 feet
Bentonite Seal: Hydrolyzed bentonite pellet seal 40.62-47.62 feet

Top of 6 in. PVC Casing Elevation (Relative Datum Survey): NA
Top of Manhole Cover (Relative Datum Survey): NA



Total Depth (TD) = 77.62 feet bgs

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ISPC BOTTOM ASH SURFACE IMPOUNDMENT
DELTA, UTAH

BAC-8 Schematic

Design by	Drawn by	Scale	Date Drawn	Last Revision Date
	RP		6-4-19	

Project Name: Intermountain Power Service Corporation
Boring Monitor Well: BAC-9

Project No.: 203709098
Completion Date: 2019-05-1

Drilling Firm: Cascade
Boring Method: Sonic
Boring Diameter: 10 inches

Driller: Ryan Miller
Logged by: John Russell
Depth to Water at Drilling: 60 feet
Depth to Water at Drilling (static at 24 hours): 44.82 feet

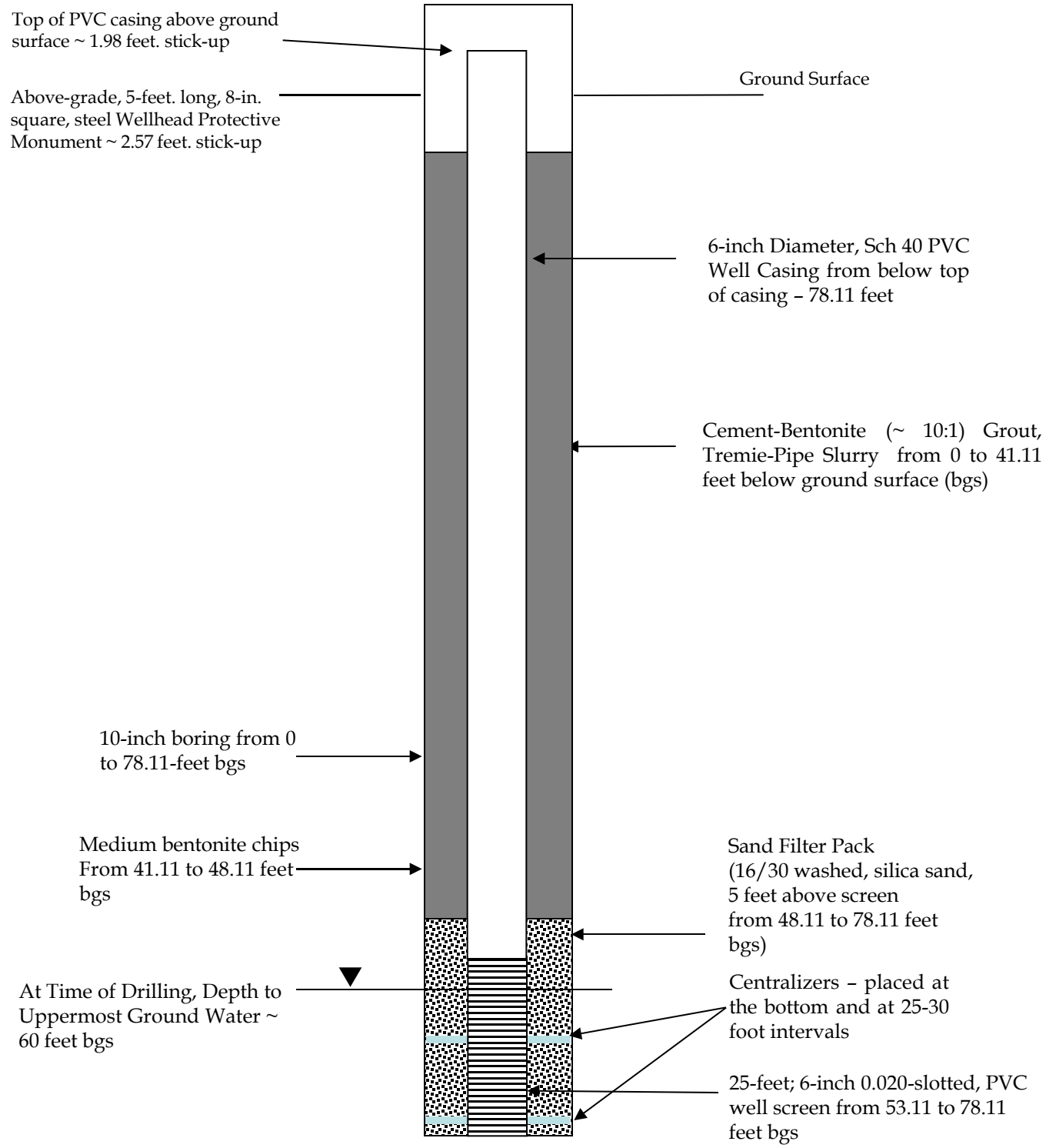
BAC-9

Interval (feet)	Description
0 - 10	Light gray to brown silt with clay to clay with silt, dry
10 - 20	Light gray to brown silt, dry
20 - 30	Light brown silt, dry
30 - 44	Light brown silt, dry
44 - 50	Medium brown clay, dry
50 - 54	Light brown silt to clay with silt, moist
54 – 54.5	Medium brown silt with clay, moist
54.5 - 60	Light brown clay with silt, moist
60 - 77	Medium brown silt with clay and silt stringers, saturated

Well Completion materials and Depth Intervals (feet) Below Ground Surface

Surface Completion: Stick-up
Casing, solid (6-inch PVC): 0-53.11 feet
Screen (6 inch, 0.02 slotted, PVC): 53.11-78.11 feet
Sand Pack: 16/30 sand, 48.11-78.11 feet
Bentonite Seal: Hydrolyzed bentonite pellet seal 41.11-48.11 feet

Top of 6 in. PVC Casing Elevation (Relative Datum Survey): NA
Top of Manhole Cover (Relative Datum Survey): NA



Total Depth (TD) = 78.11 feet bgs

Stantec	IPSC – BOTTOM ASH SURFACE IMPOUNDMENT DELTA, UTAH	
	BAC-9 Schematic	
		Date Drawn 6-4-19
Design by	Drawn by RP	Scale / Last Revision Date

Project Name: Intermountain Power Service Corporation
Boring Monitor Well: BAC-10

Project No.: 203709098
Completion Date: 2019-05-3

Drilling Firm: Cascade
Boring Method: Sonic
Boring Diameter: 10 inches

Driller: Ryan Miller
Logged by: Rich Pratt
Depth to Water at Drilling: 69 feet
Depth to Water at Drilling (static at 24 hours): 63.1 feet

BAC-10

Interval (feet)	Description
0 - 1	Light brown silt, dry
1 - 3	Light brown silt with clay, dry
3 - 14	Light brown clay with silt, dry
14 - 17	Light brown fine-grained sand, dry
17 - 19	Light brown fine-grained sand with clay, moist
19 - 21	Light brown fine-grained sand with clay, moist
21 - 23	Light brown fine-grained sand, moist
23 - 25	Light brown fine-grained sand with clay, moist
25 - 26	Light brown fine-grained sand, moist
26 - 27	Light brown fine-grained sand with clay, moist
27 - 28	Light brown fine-grained sand, moist to moist
27 - 34	Light brown fine-grained sand, moist
34 – 34.5	Light brown silt with clay, dry
34.5 – 40.5	Red brown clay, dry
40.5 - 41	Medium brown medium grained sand, moist to moist
41 - 45	Medium brown clay, moist
45 - 46	Medium brown sand, moist to moist
46 - 48	Medium brown clay, moist
48 – 56.5	Red brown clay, moist
56.5 - 57	Gray clay, moist
57 - 62	Light brown clay, moist to moist
62 - 63	Medium brown medium grained sand, moist
63 - 64	Medium brown medium grained sand with clay, moist
64 - 69	Red, brown, and gray clay, moist
69 – 69.5	Medium brown sand, saturated
69.5 - 77	Red, brown, and gray clay
77 - 79	Medium brown clay with sand
79 - 81	Medium brown clay
81 - 85	Medium brown clay with sand

85 - 87	Medium brown clay, moist

Well Completion materials and Depth Intervals (feet) Below Ground Surface

Surface Completion: Stick-up

Casing, solid (6-inch PVC): 0-62.95 feet

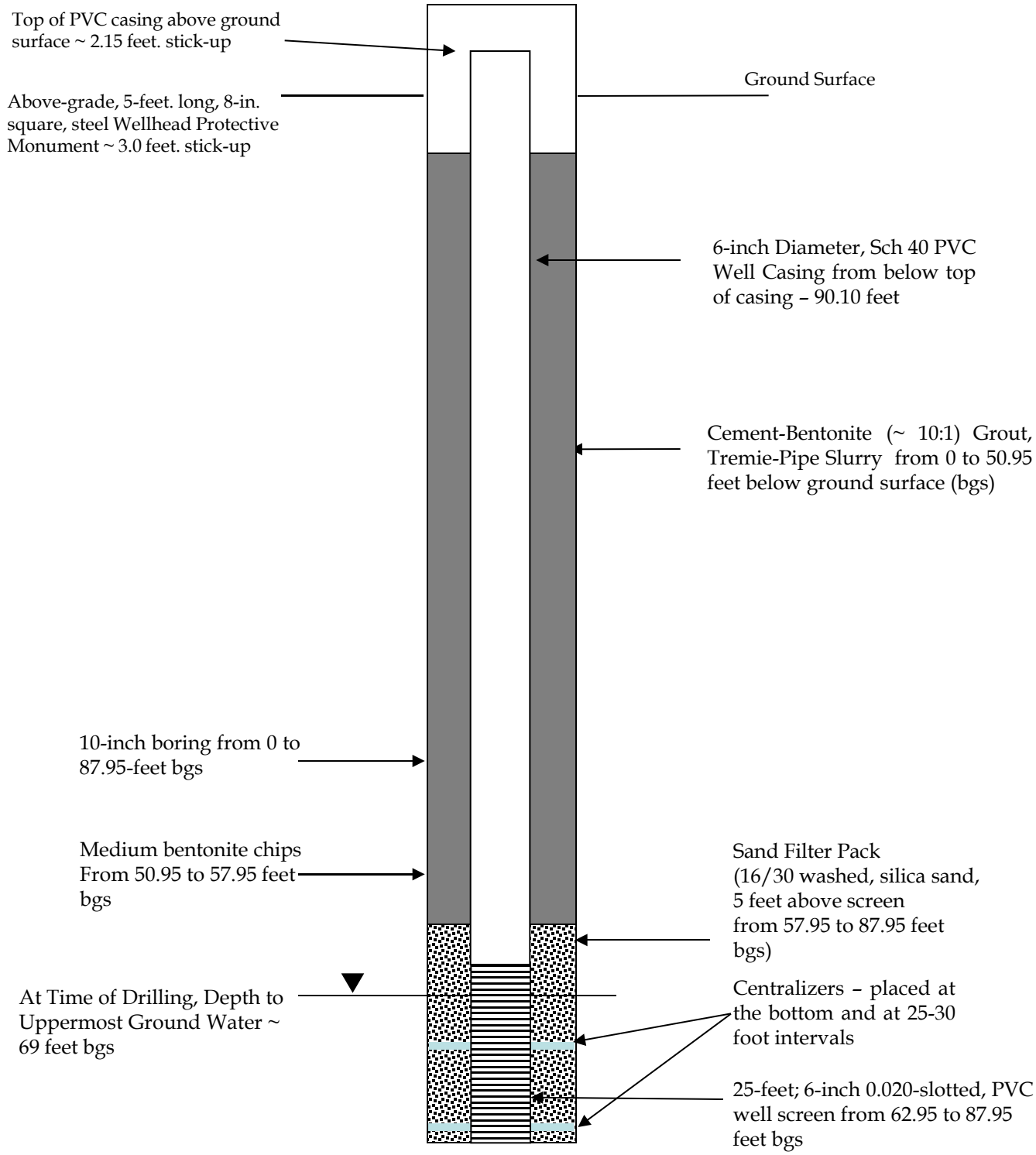
Screen (6 inch, 0.02 slotted, PVC): 62.95-87.95 feet

Sand Pack: 16/30 sand, 57.95-87.95 feet

Bentonite Seal: Hydrolyzed bentonite pellet seal 50.95-57.95 feet

Top of 6 in. PVC Casing Elevation (Relative Datum Survey): NA

Top of Manhole Cover (Relative Datum Survey): NA



Total Depth (TD) = 87.95 feet bgs

Stantec

IPSC – BOTTOM ASH SURFACE IMPOUNDMENT
DELTA, UTAH

BAC-10 Schematic

Design by	Drawn by	Scale	Date Drawn	Last Revision Date
	RP		6-4-19	

INTERMOUNTAIN POWER SERVICE CORP.

MONITORNG WELL ID: **BAC-11**

CLIENT: Intermountain Power Service Corporation

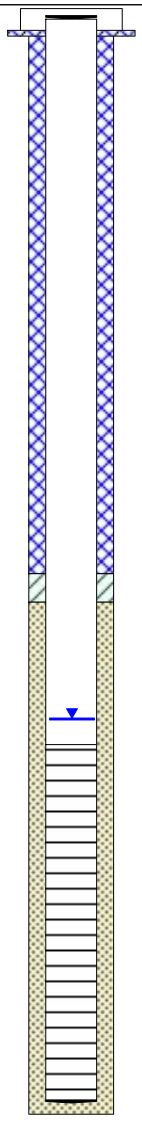
PROJECT: Monitoring Well Installation

SITE LOCATION: Southwest of Bottom Ash Basin Surface Impoundment

Stantec

DRILLING CONTRACTOR:	Cascade Drilling	COORDINATE SYSTEM:	
DRILLING METHOD:	Sonic	EASTING:	NORTHING:
DRILLING EQUIPMENT:	Pro Sonic 600 11-77287	ELEVATION:	BOREHOLE ANGLE: 90 degrees
SAMPLING METHOD:	4 inch sonic core barrel 0 to 91 ft bgs., 10 inch sonic core barrel 0 to 91 ft bgs.	TOTAL DEPTH (ft.): 81	GROUNDWATER LEVEL (ft. btoc.): 48.21
		DATE STARTED: 12/6/2019	DATE FINISHED: 12/7/2019
		LOGGED BY: Michael Ward	

DEPTH (feet)	LITHOLOGICAL DESCRIPTION
0	Fill Poorly Graded Sand with Silt (SP-SM), fine grained sand 100%, loose, soft, dry, very pale brown (10 YR 7/3).
5	
10	Clay with Sand (CL), low plasticity, soft to medium density, moist, light brownish gray (10 YR 6/2). Poorly Graded Sand with Clay (SP-SC), fine grained sand 85%, loose, medium dense, moist, light brownish gray (10 YR 6/2); clay are low plasticity, medium dense.
15	
20	Clay (CL), medium plasticity, medium dense, cohesive, moist, light brownish gray (10 YR 6/2), mottled with brownish yellow (10 YR 6/8).
25	
30	Poorly Graded Sand with Clay (SP-SC), fine grained sand 90%, loose, soft, moist, light yellowish brown (10 YR 6/4); clay low plasticity, soft, non cohesive. Same as above, becoming brown (10 YR 5/3).
35	
40	Clay (CL), medium plasticity, medium dense, cohesive, moist, light yellowish brown (10 YR 6/4).
45	
50	Poorly Graded Sand (SP), fine to medium grained sand 100%, loose, soft, wet, brown (10 YR 5/3).
55	Clay (CL), medium plasticity, medium dense, cohesive, moist, light yellowish brown (10 YR 6/4). Clay with Sand (CL), low plasticity, soft, wet, pale brown (10 YR 6/3).
60	Well Graded Sand (SW), fine to coarse Sand 95%, loose, soft, wet, brown (10 YR 5/3), trace gravel, subrounded.
65	Same as above, increase in coarse grained sand between 65.2 to 65.8 ft bgs. Same as 60 ft bgs.
70	
75	Clay (CL), medium plasticity, medium dense, moist, cohesive, light yellowish brown (10 YR 6/4).
80	End of borehole at 81 ft bgs. Installed monitoring well per scope of work.
85	



WELL CONSTUCTION DIAGRAM

- Above ground monument with well cap
- Borehole diameter 10 inches from 0 to 76 ft bgs., and 4 inches from 76 to 81 ft bgs.
- Grout 0 to 38 ft bgs.
- 0 to 50 ft bgs., 6 in dia., Sch. 40 PVC riser
- Bentonite 38 to 40 ft bgs.
- Filter Pack Sand 40 to 76 ft bgs.
- 50 to 75 ft bgs., 6 in dia., Sch. 40 PVC screen with 0.02 inch slot aperture
- End Cap

Notes: bgs. = below ground surface; dia. = diameter; ft = feet; Sch. = Schedule; YR = Yellow-Red

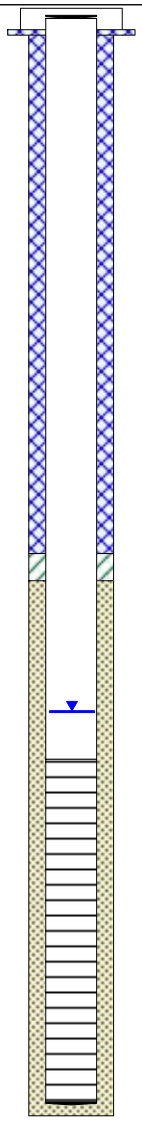
INTERMOUNTAIN POWER SERVICE CORP.

MONITORNG WELL ID: **BAC-12**
CLIENT: Intermountain Power Service Corporation
PROJECT: Monitoring Well Installation
SITE LOCATION: Southwest of Bottom Ash Basin Surface Impoundment

Stantec

DRILLING CONTRACTOR:	Cascade Drilling	COORDINATE SYSTEM:	
DRILLING METHOD:	Sonic	EASTING:	NORTHING:
DRILLING EQUIPMENT:	Pro Sonic 600 11-77287	ELEVATION:	BOREHOLE ANGLE: 90 degrees
SAMPLING METHOD:	4 inch sonic core barrel 0 to 91 ft bgs., 10 inch sonic core barrel 0 to 91 ft bgs.	TOTAL DEPTH (ft.): 81	GROUNDWATER LEVEL (ft. btoc.): 49.55
		DATE STARTED: 12/4/2019	DATE FINISHED: 12/6/2019
		LOGGED BY: Michael Ward	

DEPTH (feet)	LITHOLOGICAL GRAPHIC	LITHOLOGICAL DESCRIPTION
0		Poorly Graded Sand with Silt (SP-SM), fine grained sand 95%, loose, soft, dry, pale brown (10 YR 6/3).
10		Clay (CL), medium plasticity, medium dense, moist, cohesive, light brownish gray (10 YR 6/2).
		Poorly Graded Sand with Clay (SP-SC), fine grained sand 90%, loose, soft, dry, light brownish gray (10 YR 6/2); clay 10%, low plasticity, soft.
20		Clay (CL), medium plasticity, medium dense, moist, cohesive, very pale brown (10 YR 7/3), mottled with brownish yellow (10 YR 6/8).
25		Poorly Graded Sand with Silt (SP-SM), loose, soft, dry, pale brown (10 YR 6/3).
30		Well Graded Sand with Gravel (SW), fine to coarse sand 85%, loose, soft, dry, light brownish gray (10 YR 6/2), gravel 15%, small, subangular to subrounded, assorted matrix.
		Poorly Graded Sand (SP), fine grained sand 95%, loose, soft, moist, pale brown (10 YR 6/3), 5% clay.
40		Clay with Sand (CL), medium plasticity, medium dense, moist, light yellowish brown (10 YR 6/3).
		Clay (CL), medium plasticity, stiff, moist, cohesive, pale brown (10 YR 6/2).
45		Clay with Sand (CL), low plasticity, soft, non cohesive, wet, brown (10 YR 5/3).
		Clay (CL), Same as 39.5 ft bgs.
		Clay with Sand (CL), Same as 38.5 ft bgs.
50		Clay (CL), Same as 41.5 ft bgs.
		Clay with Sand (CL), low plasticity, soft, non cohesive, wet, brown (10 YR 5/3).
55		Clay (CL), medium plasticity, medium dense, cohesive , moist, brown (10 YR 5/3), mottled with yellowish brown (10 YR 5/6).
60		Clay with Sand (CL), low plasticity, soft, non cohesive, wet, brown (10 YR 5/3).
		Well Graded Sand (SW) fine to coarse sand 98%, loose, soft, wet, brown (10 YR 5/3), trace gravel.
65		Clay with Sand (CL), low to medium plasticity, medium dense, wet, non cohesive, brown (10 YR 5/3), mottled with light brownish gray (10 YR 6/2).
70		Well Graded Sand with Clay (SW-SC), fine grained sand 90%, loose, soft, wet, brown (10 YR 5/3): clay 10%, low plasticity, non cohesive.
75		Clay (CL), medium plasticity, medium dense, cohesive , moist, brown (10 YR 5/3).
80		End of borehole at 81 ft bgs. Installed monitoring well per scope of work.
85		



WELL CONSTUCTION DIAGRAM

- Above ground monument with well cap
- Borehole diameter 10 inches from 0 to 78 ft bgs., and 4 inches from 79 to 81 ft bgs.
- Grout 0 to 38 ft bgs.
- 0 to 53 ft bgs., 6 in dia., Sch. 40 PVC riser
- Bentonite 38 to 40 ft bgs.
- Filter Pack Sand 40 to 79 ft bgs.
- 53 to 78ft bgs., 6 in dia., Sch. 40 PVC screen with 0.02 inch slot aperture
- End Cap

Notes: bgs. = below ground surface; dia. = diameter; ft = feet; Sch. = Schedule; YR = Yellow-Red

INTERMOUNTAIN POWER SERVICE CORP.

MONITORNG WELL ID: **BAC-13**

CLIENT: Intermountain Power Service Corporation

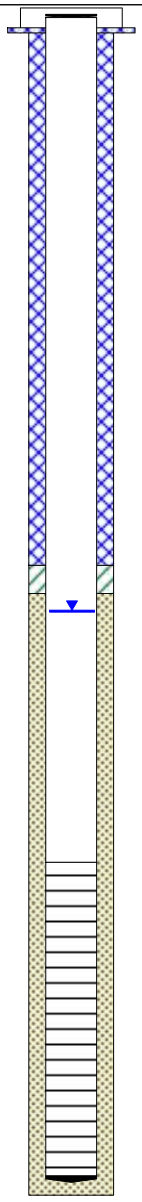
PROJECT: Monitoring Well Installation

SITE LOCATION: Southwest of Bottom Ash Basin Surface Impoundment

Stantec

DRILLING CONTRACTOR:	Cascade Drilling	COORDINATE SYSTEM:	
DRILLING METHOD:	Sonic	EASTING:	NORTHING:
DRILLING EQUIPMENT:	Pro Sonic 600 11-77287	ELEVATION:	BOREHOLE ANGLE: 90 degrees
SAMPLING METHOD:	4 inch sonic core barrel 0 to 91 ft bgs., 10 inch sonic core barrel 0 to 91 ft bgs.	TOTAL DEPTH (ft.): 91	GROUNDWATER LEVEL (ft. btoc.): 45.38
		DATE STARTED: 11/16/2019	DATE FINISHED: 11/18/2019
		LOGGED BY: Michael Ward	

DEPTH (feet)	LITHOLOGICAL DESCRIPTION
0	Poorly Graded Sand with Silt and Gravel (SP-SM), fine grained sand 85%, silts 10%, trace gravel 5%, loose, dry, light gray (10 YR 7/2).
5	Same as above, becoming dense, consolidated.
	Well Graded Sand with Gravel (SW), sand fine to coarse 85%, gravel 15%, loose, soft, dry, pale brown (10 YR 6/3), gravel are subrounded.
10	Same as above, no gravel, sand 100%.
	Clay with Sand (CL), low plasticity, dry to moist, non cohesive, brown (10 YR 5/3), with small clay interfingering, reddish yellow (5 YR 6/8).
15	Same as above, moist.
	Same as above, medium plasticity.
20	Poorly Graded Sand (SP), fine grained sand 100%, loose, dry, dark brown (10 YR 3/3), thinly bedded.
	Clay with Sand (CL), low plasticity, moist, non cohesive, brown (10 YR 5/3), with small clay interfingering, reddish yellow (5 YR 6/8).
25	
30	
35	Well Graded Sand with Gravel (SW), sand fine to coarse 85%, gravel 15%, loose, soft, dry, pale brown (10 YR 6/3), gravel are subrounded.
	Poorly Graded Sand (SP), medium grained sand 100%, loose, soft, moist, brown (10 YR 5/3).
40	Clay (CL), medium plasticity, medium dense, moist, brownish yellow (10 YR 6/6).
	Clay with Sand (CL), low plasticity, soft density, wet, non cohesive, light yellowish brown (10 YR 6/4).
45	Clay (CL), medium plasticity, medium dense, moist, cohesive, brownish yellow (10 YR 6/6), with mottled clay, brownish yellow (10 YR 6/8).
50	
55	Clay with Sand (CL), low to medium plasticity, soft to medium dense, wet, non cohesive, brown (10 YR 6/3).
	Clay (CL), medium plasticity, medium dense, moist to wet, cohesive, light brownish gray (10 YR 6/2).
60	Clay with Sand (CL), low to medium plasticity, soft to medium dense, wet, brown (10 YR 6/3).
	Clay (CL), high plasticity, stiff, moist, cohesive, pale brown (10 YR 6/3).
65	Clay (CL), medium plasticity, medium dense, moist to wet, cohesive, light brownish gray (10 YR 6/2).
	Clay (CL), high plasticity, stiff, moist, cohesive, pale brown (10 YR 6/3).
70	Poorly Graded Sand (SP), medium grained sand 95%, loose, soft, wet, brown (10 YR 5/3), trace gravel 5%, rounded to subrounded, assorted matrix.
75	
80	
85	Clay with Sand (CL), low plasticity, soft, wet, non cohesive, brown (10 YR 5/3).
	Clay (CL), medium plasticity, medium dense, moist to wet, cohesive, brown gray (10 YR 5/3).
90	End of borehole to 91 ft bgs., per scope of work.
95	



WELL CONSTUCTION DIAGRAM

- Above ground monument with well cap
- Grout 0 to 42 ft bgs. Borehole diameter 10 inches from 0 to 91 ft bgs.
- 0 to 65 ft bgs., 6 in dia., Sch. 40 PVC riser
- Bentonite 42 to 44 ft bgs.
- Filter pack sand 44 to 91 ft bgs.
- 65 to 90 ft bgs., 6 in dia., Sch. 40 PVC screen with 0.02 inch slot aperture
- End Cap

Notes: bgs. = below ground surface; dia. = diameter; ft = feet; Sch. = Schedule; YR = Yellow-Red

INTERMOUNTAIN POWER SERVICE CORP.

MONITORNG WELL ID: **BAC-14**

CLIENT: Intermountain Power Service Corporation

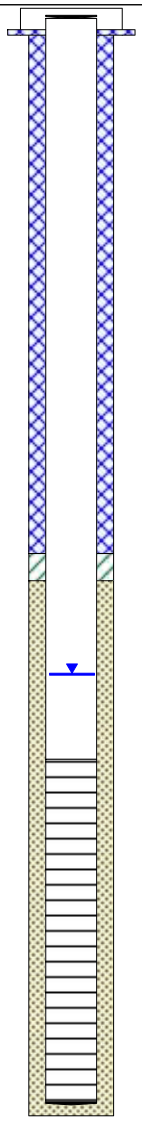
PROJECT: Monitoring Well Installation

SITE LOCATION: Southwest of Bottom Ash Basin Surface Impoundment

Stantec

DRILLING CONTRACTOR:	Cascade Drilling	COORDINATE SYSTEM:	
DRILLING METHOD:	Sonic	EASTING:	NORTHING:
DRILLING EQUIPMENT:	Pro Sonic 600 11-77287	ELEVATION:	BOREHOLE ANGLE: 90 degrees
SAMPLING METHOD:	4 inch sonic core barrel 0 to 81 ft bgs., 10 inch sonic core barrel 0 to 78 ft bgs.	TOTAL DEPTH (ft.): 81	GROUNDWATER LEVEL (ft. btoc.): 46.81
		DATE STARTED: 11/21/2019	DATE FINISHED: 12/4/2019
		LOGGED BY: Michael Ward	

DEPTH (feet)	LITHOLOGICAL DESCRIPTION
0	Well Graded Sand (SW), fine to coarse sand 95%, loose, soft, dry, yellowish brown (10 YR 5/4); 5% gravel, subrounded, small.
5	Well Graded Sand with Clay (SW-SC), fine to coarse sand 95%, medium dense, dry, light gray (10 YR 7/4).
10	Clay with Sand (CL), low to medium plasticity, soft to medium dense, dry to moist, very pale brown (10 YR 7/3).
15	
20	Clay (CL), medium plasticity, medium dense, moist, cohesive, pale brown (10 YR 6/3), with trace mottled clay, brownish yellow (10 YR 6/8).
25	
30	Poorly Graded Sand (SP), fine sand 100%, loose, soft, light brownish gray (10 YR 6/2). Poorly Graded Sand with Clay (SP-SC), fine sand 90%, loose, soft, moist, light brownish gray (10 YR 6/2); clay 10% low plasticity, soft, non cohesive.
35	
40	Clay (CL), medium plasticity, medium dense, moist, cohesive, yellowish brown (10 YR 5/4).
45	Poorly Graded Sand (SP), fine sand 100%, loose, soft, moist to wet, brown (10 YR 5/4).
50	Clay (CL), medium plasticity, medium to stiff dense, moist, cohesive, light brownish red (5 YR 6/3), mottled with reddish yellow (5YR 6/6).
55	Poorly Graded Sand with Clay (SP-SC), fine sand 90%, loose, soft, moist, brown (10 YR 5/3); clay 10% low plasticity. Clay (CL), medium plasticity, medium to stiff dense, moist, cohesive, light brownish red (5 YR 6/3), mottled with reddish yellow (5YR 6/6).
60	Poorly Graded Sand (SP), fine grained, loose, soft, wet, brown (10 YR 5/3). Clay (CL), medium plasticity, medium dense, wet, cohesive, light yellowish brown (10 YR 6/4).
65	Poorly Graded Sand with Clay (SP-SC), fine sand 85%, loose medium dense, wet, brown (10 YR 5/3); clay 15% low plasticity, non cohesive, light yellowish brown (10 YR 6/4).
70	Clay (CL), medium plasticity, medium dense, wet, cohesive, light yellowish brown (10 YR 6/4). Poorly Graded Sand (SP), fine grained, loose, soft, wet, brown (10 YR 5/3). Clay with Sand (CL), low plasticity, soft, wet, non cohesive, brown (10 YR 5/3).
75	Poorly Graded Sand with Clay (SP-SC), fine sand 90%, loose, soft, wet, brown (10 YR 5/3); clay 10%, low plasticity, soft, non cohesive. Poorly Graded Sand (SP), fine grained, loose, soft, wet, brown (10 YR 5/3).
80	Clay (CL), medium plasticity, medium to stiff, moist, brown (10 YR 5/3).
	End of borehole at 81 ft bgs. Installed monitoring well per scope of work.
85	



WELL CONSTUCTION DIAGRAM

- Above ground monument with well cap
- Borehole diameter 10 inches from 0 to 79 ft bgs. 4 inch borehole to 81 ft bgs.
- Grout 0 to 38 ft bgs.
- 0 to 53 ft bgs., 6 in dia., Sch. 40 PVC riser
- Bentonite 38 to 40 ft bgs.
- Filter Pack Sand 40 to 79 ft bgs.
- 53 to 78 ft bgs., 6 in dia., Sch. 40 PVC screen with 0.02 inch slot aperture
- End Cap

Notes: bgs. = below ground surface; dia. = diameter; ft = feet; Sch. = Schedule; YR = Yellow-Red

INTERMOUNTAIN POWER SERVICE CORP.

MONITORNG WELL ID: **BAC-15**

CLIENT: Intermountain Power Service Corporation

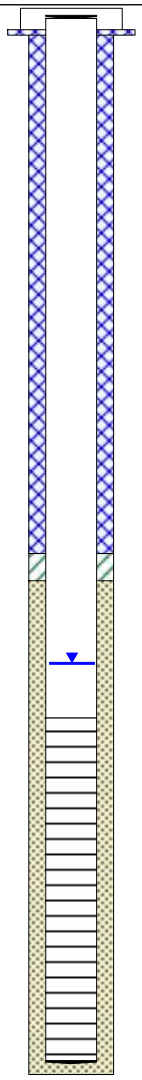
PROJECT: Monitoring Well Installation

SITE LOCATION: Southwest of Bottom Ash Basin Surface Impoundment

Stantec

DRILLING CONTRACTOR:	Cascade Drilling	COORDINATE SYSTEM:	
DRILLING METHOD:	Sonic	EASTING:	NORTHING:
DRILLING EQUIPMENT:	Pro Sonic 600 11-77287	ELEVATION:	BOREHOLE ANGLE: 90 degrees
SAMPLING METHOD:	4 inch sonic core barrel 0 to 91 ft bgs., 10 inch sonic core barrel 0 to 91 ft bgs.	TOTAL DEPTH (ft.): 81	GROUNDWATER LEVEL (ft. btoc.): 46.03
		DATE STARTED: 12/7/2019	DATE FINISHED: 12/9/2019
		LOGGED BY: Michael Ward	

DEPTH (feet)	LITHOLOGICAL DESCRIPTION
0	Fill
	Poorly Graded Sand (SP), fine grained sand 98%, loose, soft, dry, very pale brown (10 YR 7/3), trace gravel, subrounded.
5	Clay (CL), medium plasticity, medium dense, cohesive, dry, light brownish gray (10 YR 6/2), trace white (10 YR 8/1), trace calcium carbonate between clay layering, effervesces with HCL.
10	
15	Poorly Graded Sand (SP), fine grained sand 98%, loose, soft, dry, light gray (10 YR 7/1), trace clay at depth.
20	Poorly Graded Sand with Clay (SP-SC), fine grained sand 90%, soft to medium dense, dry, pale brown (10 YR 6/3), clay low plasticity, medium dense.
25	
30	Clay (CL), medium plasticity, medium dense, cohesive, moist, pale brown (10 YR 6/3).
	Same as above, becoming light yellowish brown (10 YR 6/4).
35	Clay with Sand (CL), low plasticity, soft, non cohesive, light yellowish brown (10 YR 6/4).
40	Clay (CL), medium plasticity, medium dense, cohesive, moist, light yellowish brown (10 YR 6/4).
45	Well Graded Sand with Gravel (SW), fine to coarse sand 90%, loose, soft, wet, brown (10 YR 5/3), gravel 10%, subrounded.
50	
	Same as above, with trace black staining.
55	Clay with Sand (CL), low plasticity, soft, non cohesive, wet, light yellowish brown (10 YR 6/4).
	Clay (CL), medium plasticity, medium dense, cohesive, moist, yellowish brown (10 YR 5/6).
	Clay with Sand (CL), low plasticity, soft, non cohesive, wet, light yellowish brown (10 YR 6/4).
60	Poorly Graded Sand (SP), fine grained sand 100%, loose, soft, wet, brown (10 YR 5/3)
	Same as above, with some clay.
65	Poorly Graded Sand (SP), fine grained sand 100%, loose, soft, wet, brown (10 YR 5/3).
	Same as above, color change to yellowish brown (10 YR 6/4).
70	Clay (CL), medium plasticity, medium dense, cohesive, moist, yellowish brown (10 YR 5/4).
	Same as above, with mottled yellowish red (5 YR 5/6).
75	Clay with Sand (CL), low plasticity, soft, non cohesive, wet, brown (10 YR 5/3).
	Clay (CL), medium plasticity, medium dense, cohesive, moist, yellowish brown (10 YR 5/4).
80	Clay with Sand (CL), low plasticity, soft, non cohesive, wet, brown (10 YR 5/3).
	Poorly Graded Sand (SP), fine grained sand 98%, loose, soft, wet, brown (10 YR 5/3).
	End of borehole at 81 ft bgs. Installed monitoring well per scope of work.
85	



WELL CONSTUCTION DIAGRAM

- Above ground monument with well cap
- Borehole diameter 10 inches from 0 to 76 ft bgs., and 4 inches from 76 to 81 ft bgs.
- Grout 0 to 38 ft bgs.
- 0 to 50 ft bgs., 6 in dia., Sch. 40 PVC riser
- Bentonite 38 to 40 ft bgs.
- Filter Pack Sand 40 to 76 ft bgs.
- 50 to 75 ft bgs., 6 in dia., Sch. 40 PVC screen with 0.02 inch slot aperture
- End Cap

Notes: bgs. = below ground surface; dia. = diameter; ft = feet; Sch. = Schedule; YR = Yellow-Red

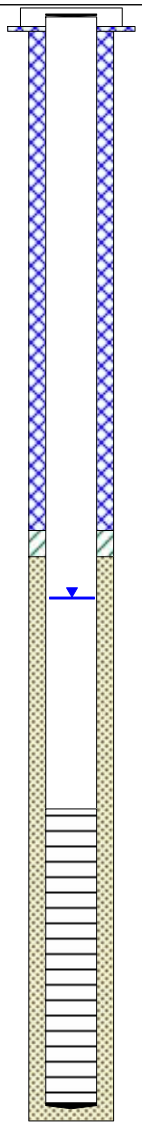
INTERMOUNTAIN POWER SERVICE CORP.

MONITORNG WELL ID: **BAC-16**
CLIENT: Intermountain Power Service Corporation
PROJECT: Monitoring Well Installation
SITE LOCATION: Southwest of Bottom Ash Basin Surface Impoundment

Stantec

DRILLING CONTRACTOR:	Cascade Drilling	COORDINATE SYSTEM:	
DRILLING METHOD:	Sonic	EASTING:	NORTHING:
DRILLING EQUIPMENT:	Pro Sonic 600 11-77287	ELEVATION:	BOREHOLE ANGLE: 90 degrees
SAMPLING METHOD:	4 inch sonic core barrel 0 to 91 ft bgs., 10 inch sonic core barrel 0 to 91 ft bgs.	TOTAL DEPTH (ft.): 91	GROUNDWATER LEVEL (ft. btoc.): 47.45
		DATE STARTED: 11/18/2019	DATE FINISHED: 11/21/2019
		LOGGED BY: Michael Ward	

DEPTH (feet)	LITHOLOGICAL GRAPHIC	LITHOLOGICAL DESCRIPTION
0		Fill.
		Clay with Sand (CL), low plasticity, soft to medium dense, dry, light gray (10 YR 7/1).
5		
		No core retrieved from sonic core barrel.
10		Clay with Sand (CL), low plasticity, soft to medium dense, dry, light gray (10 YR 7/1).
		Well Graded Sand (SW), fine to coarse grained sand 95%, loose, soft, light brownish gray (10 YR 6/2), trace gravel 5%, subrounded, small.
15		Clay with Sand (CL), low plasticity, soft to medium dense, dry, light gray (10 YR 7/1).
20		
25		Clay (CL).
		Clay with Sand (CL), low to medium plasticity, soft to medium dense, dry, non cohesive, pale brown (10 YR 6/3).
30		Poorly Graded Sand (SP), fine grained 100%, loose to medium dense, dry, light gray (10 YR 7/1).
35		
40		Clay (CL), medium plasticity, medium density, moist, light yellowish brown (10 YR 6/4), with some interfingering clay, brownish yellow (10 YR 6/8).
		Clay with Sand (CL).
45		Poorly Graded Sand with clay (SP-SC), fine sand 90%, clay 10%, soft, loose, moist to wet, light yellowish brown (10 YR 6/4).
		Clay (CL), medium plasticity, medium dense, cohesive, moist, yellowish brown (10 YR 5/4).
50		Poorly Graded Sand with clay (SP-SC), fine sand 90%, clay 10%, soft, loose, moist to wet, light yellowish brown (10 YR 6/4).
55		Clay (CL), medium plasticity, medium dense, cohesive, moist, light yellowish brown (10 YR 6/4).
60		Poorly Graded Sand (SP), fine grained sand 95%, loose, soft, brown (10 YR 5/3), with trace interfingering clay 5%, yellowish red (5 YR5/6).
65		Well Graded Sand (SW), fine to coarse sand 98%, loose, soft, wet, brown (10 YR 5/3), 2% gravel, small, subrounded.
70		Clay with Sand (CL), low to medium plasticity, soft to medium density, wet, light brownish gray (10 YR 6/2).
		Clay (CL), medium plasticity, medium to stiff, cohesive, moist, light yellowish gray (10 YR 6/2).
75		Poorly Graded Sand with Clay (SP-SC), fine grained sand 85%, clay 15% loose, soft, wet, brown (10 YR 5/3).
80		Clay (CL), medium plasticity, stiff, cohesive, moist to wet, brown (10 YR 5/3).
		Poorly Graded Sand (SP), fine grained sand 100%, loose, soft, wet, brown (10 YR 5/3).
85		Clay (CL), same as 73 ft bgs.
		Poorly Graded Sand (SP), same as 82 ft bgs.
		Clay (CL), same as 73 ft bgs.
90		Poorly Graded Sand with Clay (SP-SC), fine grained sand 85%, clay 15% loose, soft, wet, brown (10 YR 5/3).
95		Clay (CL), same as 73 ft bgs., with mottled interbedded clay, yellowish red (5 YR 5/6).
		End of borehole at 91 ft bgs. Installed monitoring well per scope of work.
100		



WELL CONSTUCTION DIAGRAM

- Above ground monument with well cap
- Grout 0 to 42 ft bgs. Borehole diameter 10 inches from 0 to 91 ft bgs.
- 0 to 65 ft bgs., 6 in dia., Sch. 40 PVC riser
- Bentonite 42 to 44 ft bgs.
- Filter Pack Sand 44 to 91 ft bgs.
- 64 to 89 ft bgs., 6 in dia., Sch. 40 PVC screen with 0.02 inch slot aperture
- End Cap

Notes: bgs. = below ground surface; dia. = diameter; ft = feet; Sch. = Schedule; YR = Yellow-Red

INTERMOUNTAIN POWER SERVICE CORP.

MONITORNG WELL ID: **BAC-17**

CLIENT: Intermountain Power Service Corporation

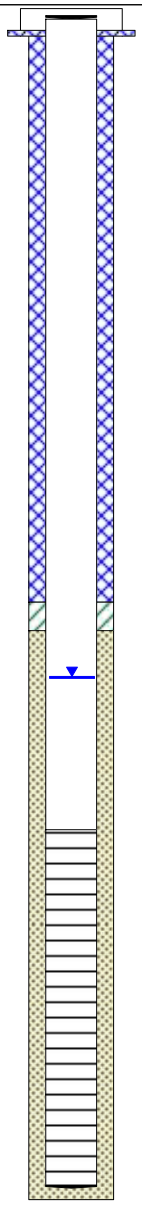
PROJECT: Monitoring Well Installation

SITE LOCATION: Southwest of Bottom Ash Basin Surface Impoundment

Stantec

DRILLING CONTRACTOR:	Cascade Drilling	COORDINATE SYSTEM:	
DRILLING METHOD:	Sonic	EASTING:	NORTHING:
DRILLING EQUIPMENT:	Pro Sonic 600 11-77287	ELEVATION:	BOREHOLE ANGLE: 90 degrees
SAMPLING METHOD:	4 inch sonic core barrel 0 to 91 ft bgs., 10 inch sonic core barrel 0 to 91 ft bgs.	TOTAL DEPTH (ft.): 82	GROUNDWATER LEVEL (ft. btoc.): 45.3
		DATE STARTED: 12/12/9/2019	DATE FINISHED: 12/10/2019
		LOGGED BY: Michael Ward	

DEPTH (feet)	LITHOLOGICAL DESCRIPTION
0	Well Graded Sand with Silt (SW-SM), fine to coarse sand 90%, loose, soft, pale brown (10 YR 6/3), fine silts, trace calcium carbonate.
5	Well Graded Sand (SW), fine to coarse sand 100%, loose, soft, pale brown (10 YR 6/3).
10	
15	
20	Well Graded Sand with Gravel and Clay (SW-SC), loose, soft, fine to coarse sand 90%, loose, soft, pale brown (10 YR 6/3), clay low plasticity, soft, gravel, small, subrounded. Well Graded Sand (SW), fine to coarse 98%, loose, soft, light yellowish brown (10 YR 6/4), gravel 2%, small, subrounded.
25	
30	Clay (CL), low plasticity, soft, wet, very pale brown (10 YR 7/3), perched groundwater. Clay with Sand (CL), low plasticity, soft, moist, light yellowish brown (10 YR 6/4).
35	
40	Clay (CL), medium plasticity, medium dense, cohesive, brown (10 YR 5/3), mottled with some reddish yellow (5 YR 6/6).
45	
50	
55	Clay with Sand (CL), low plasticity, soft, wet non cohesive, brown (10 YR 5/3).
60	Poorly Graded Sand with Clay (SP), fine grained sand 98%, loose, soft, wet, brown (10 YR 5/3), with trace gravel 2%, subrounded, small.
65	
70	Poorly Graded Sand with Clay (SP-SC), fine grained sand 98%, loose, soft, wet, brown (10 YR 5/3), clay, medium plasticity, soft to low density, non cohesive, light yellowish brown (10 YR 5/4). Clay (CL), medium plasticity, medium dense, moist, cohesive, yellowish brown (10 YR 5/4).
75	Poorly Graded Sand with Clay (SP-SC), fine grained sand, loose, soft, wet, brown (10 YR 5/3), clay are low plasticity, soft. Clay with Sand (CL), low to medium plasticity, soft, wet, cohesive, brown (10 YR 5/3).
80	Poorly Graded Sand (SP), fine grained sand 100%, loose, soft, wet, brown (10 YR 5/3). End of borehole at 81 ft bgs. Installed monitoring well per scope of work.
85	



WELL CONSTUCTION DIAGRAM

- Above ground monument with well cap
- Borehole diameter 10 inches from 0 to 81 ft bgs.
- Grout 0 to 40 ft bgs.
- 0 to 56 ft bgs., 6 in dia., Sch. 40 PVC riser
- Bentonite 40 to 42 ft bgs.
- Filter Pack Sand 42 to 81 ft bgs.
- 56 to 81 ft bgs., 6 in dia., Sch. 40 PVC screen with 0.02 inch slot aperture
- End Cap

Notes: bgs. = below ground surface; dia. = diameter; ft = feet; Sch. = Schedule; YR = Yellow-Red

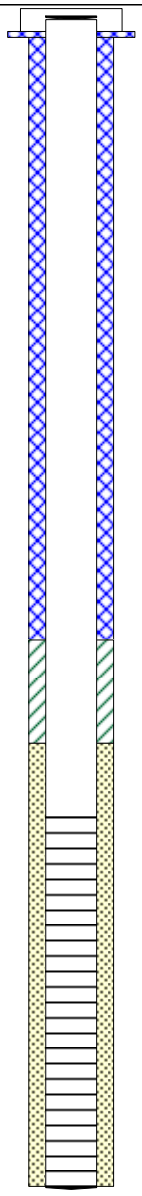
INTERMOUNTAIN POWER SERVICE CORP.

MONITORNG WELL ID:	**BAC-18**
CLIENT:	Intermountain Power Service Corporation
PROJECT:	Monitoring Well Installation
SITE LOCATION:	Down Gradient North

Stantec

DRILLING CONTRACTOR:	Cascade Drilling	COORDINATE SYSTEM:	
DRILLING METHOD:	Sonic	EASTING:	NORTHING:
DRILLING EQUIPMENT:	Pro Sonic 600	ELEVATION:	BOREHOLE ANGLE: 90 degrees
SAMPLING METHOD:	4 inch sonic core barrel 0 to 78 ft bgs., 10 inch sonic core barrel 0 to 78 ft bgs.,	TOTAL DEPTH (ft.): 78	GROUNDWATER LEVEL (ft. btoc.):
		DATE STARTED: 5/8/2020	DATE FINISHED: 5/9/2020
		LOGGED BY: Rich Pratt	

DEPTH (feet)	LITHOLOGICAL GRAPHIC	LITHOLOGICAL DESCRIPTION
0		Poorly graded Sand with Silt (SP), light brown, dry
15		Poorly graded Sand with Silt (SP), light brown, moist
		Well Graded Sand with Gravel (SW), light brown, moist
20		Well Graded Sand with Clay (SW-SC), light brown, moist
25		Well Graded Sand with Clay (SW-SC), light brown, moist
55		Well Graded Sand with Gravel (SW), light brown, wet
		Well Graded Sand with Gravel (SW), light brown, moist
60		Clay (CL), light brown, moist
65		Clay (CL), with sand, light brown, moist
		Well Graded Sand with Gravel (SW), light brown, moist
75		Well Graded Sand with Gravel (SW), light brown, wet
		Well Graded Sand with Gravel (SW), light brown, moist
80		End of borehole at 78 ft bgs. Installed monitoring well per scope of work.



WELL CONSTUCTION DIAGRAM

- Above ground monument with well cap
- Grout 0 to 41 ft bgs. Borehole diameter 10 inches from 0 to 78 ft bgs.
- 0 to 53 ft bgs., 6 in dia., Sch. 80 PVC riser
- Bentonite 41 to 48 ft bgs.
- Filter pack sand 48 to 78 ft bgs.
- 53 to 78 ft bgs., 6 in dia., Sch. 80 PVC screen with 0.02 inch slot aperture
- End Cap

Notes: bgs. = below ground surface; dia. = diameter; ft = feet; Sch. = Schedule; YR = Yellow-Red

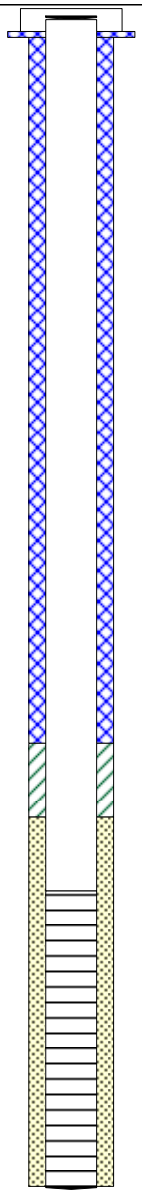
INTERMOUNTAIN POWER SERVICE CORP.

MONITORNG WELL ID:	**BAC-19**
CLIENT:	Intermountain Power Service Corporation
PROJECT:	Monitoring Well Installation
SITE LOCATION:	Down Gradient South

Stantec

DRILLING CONTRACTOR:	Cascade Drilling	COORDINATE SYSTEM:	
DRILLING METHOD:	Sonic	EASTING:	NORTHING:
DRILLING EQUIPMENT:	Pro Sonic 600	ELEVATION:	BOREHOLE ANGLE: 90 degrees
SAMPLING METHOD:	4 inch sonic core barrel 0 to 91 ft bgs., 10 inch sonic core barrel 0 to 91 ft bgs.,	TOTAL DEPTH (ft.): 78	GROUNDWATER LEVEL (ft. btoc.):
		DATE STARTED: 5/9/2020	DATE FINISHED: 5/9/2020
		LOGGED BY: Michael Ward	

DEPTH (feet)	LITHOLOGICAL DESCRIPTION
0	Well Graded Sand with Silt (SP-SM), fine to coarse sands, loose, soft, dry, very pale brown (10 YR 7/3).
5	
	Sand with Clay (SC), fine to coarse sand, soft, loose, dry to moist, light gray (10 YR 7/1).
10	Poorly Graded Sand (SP) medium grained, loose, soft, unconsolidated, dry, light gray (10 YR 7/2).
	Clay (CL), moderate plasticity, moist, soft, cohesive, brown (10 YR 5/3).
15	
20	Poorly Graded Sand (SP) medium grained, loose, soft, unconsolidated, moist to dry, brown (10 YR 5/3).
25	
30	
	Clay (CL), moderate plasticity, moist, soft to medium dense, cohesive, brown (7.5 YR 5/4).
35	Same as above, becoming moist to wet.
	Poorly Graded Sand (SP), fine grained sands, soft, loose, wet, brown (10 YR 5/3).
40	Same as above, with trace white staining.
45	Clay (CL), moderate plasticity, medium to stiff, cohesive, brown (7.5 YR 5/4).
50	
55	Well Graded Sand (SW), fine to coarse sands, soft, loose, unconsolidated, brown (10 YR 5/3).
60	Clay (CL), moderate plasticity, medium to stiff, cohesive, brown (7.5 YR 5/4).
65	
	Clayey Sand (SC), fine to medium grained sands, medium dense, wet, brown (10 YR 5/3), with thin trace interbedded black lenses.
70	Well Graded Sand (SW), fine to coarse sands, soft, loose, unconsolidated, brown (10 YR 5/3).
	Clay (CL), moderate plasticity, medium to stiff, cohesive, brown (7.5 YR 5/4).
75	Well Graded Sand (SW), fine to coarse sands, soft, loose, unconsolidated, brown (10 YR 5/3).
	End of borehole at 78 ft bgs. Installed monitoring well per scope of work.
80	



WELL CONSTUCTION DIAGRAM

- Above ground monument with well cap
- Borehole diameter 10 inches from 0 to 78 ft bgs.
- Grout 0 to 48 ft bgs.
- 0 to 58 ft bgs., 6 in dia., Sch. 80 PVC riser
- Bentonite 48 to 53 ft bgs.
- Filter Pack Sand 53 to 78 ft bgs.
- 58 to 78 ft bgs., 6 in dia., Sch. 80 PVC screen with 0.02 inch slot aperture
- End Cap

Notes: bgs. = below ground surface; dia. = diameter; ft = feet; Sch. = Schedule; YR = Yellow-Red

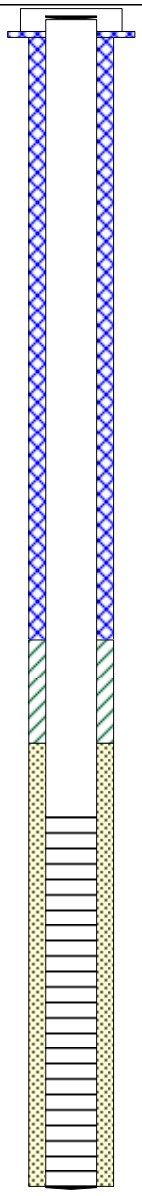
INTERMOUNTAIN POWER SERVICE CORP.

MONITORNG WELL ID:	**BAC-20**
CLIENT:	Intermountain Power Service Corporation
PROJECT:	Monitoring Well Installation
SITE LOCATION:	South Wells

Stantec

DRILLING CONTRACTOR:	Cascade Drilling	COORDINATE SYSTEM:	
DRILLING METHOD:	Sonic	EASTING:	NORTHING:
DRILLING EQUIPMENT:	Pro Sonic 600	ELEVATION:	BOREHOLE ANGLE: 90 degrees
SAMPLING METHOD:	4 inch sonic core barrel 0 to 78 ft bgs., 10 inch sonic core barrel 0 to 78 ft bgs.,	TOTAL DEPTH (ft.): 78	GROUNDWATER LEVEL (ft. btoc.):
		DATE STARTED: 5/9/2020	DATE FINISHED: 5/10/2020
		LOGGED BY: Rich Pratt	

DEPTH (feet)	LITHOLOGICAL DESCRIPTION
0	Poorly graded Sand with Silt (SP), light brown, dry
15	Well Graded Sand with Gravel (SW), moist, dry
	Clay (CL), light brown, moist
25	Well Graded Sand with Gravel (SW), moist, light brown
30	Clay (CL), light brown, moist
40	Well Graded Sand with Gravel (SW), moist, light brown
	Clay (CL), light brown, moist
55	Well Graded Sand with Gravel (SW), wet, light brown
	Well Graded Sand with Gravel (SW), moist, light brown
	Clay (CL), light brown, moist
60	Well Graded Sand with Gravel (SW), wet, light brown
	Clay (CL), light brown, moist
	Well Graded Sand with Gravel (SW), moist, light brown
70	Clay (CL), light brown, moist
	Well Graded Sand with Gravel (SW), wet, light brown
75	Clay (CL), light brown, moist
	Well Graded Sand with Gravel (SW), wet, light brown
80	Clay (CL), light brown, moist
	End of borehole at 78 ft bgs. Installed monitoring well per scope of work.



WELL CONSTUCTION DIAGRAM

- Above ground monument with well cap
- Grout 0 to 41 ft bgs. Borehole diameter 10 inches from 0 to 78 ft bgs.
- 0 to 53 ft bgs., 6 in dia., Sch. 80 PVC riser
- Bentonite 41 to 48 ft bgs.
- Filter pack sand 48 to 78 ft bgs.
- 53 to 78 ft bgs., 6 in dia., Sch. 80 PVC screen with 0.02 inch slot aperture
- End Cap

Notes: bgs. = below ground surface; dia. = diameter; ft = feet; Sch. = Schedule; YR = Yellow-Red

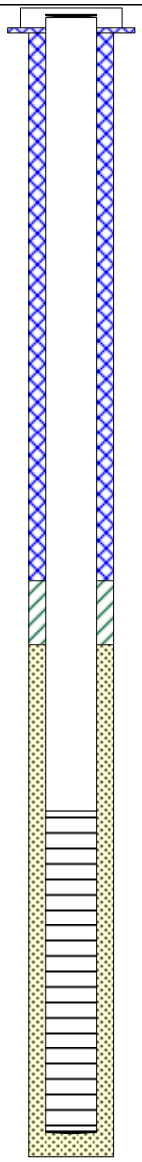
INTERMOUNTAIN POWER SERVICE CORP.

MONITORNG WELL ID:	**BAC-21**
CLIENT:	Intermountain Power Service Corporation
PROJECT:	Monitoring Well Installation
SITE LOCATION:	South Wells

Stantec

DRILLING CONTRACTOR:	Cascade Drilling	COORDINATE SYSTEM:	
DRILLING METHOD:	Sonic	EASTING:	NORTHING:
DRILLING EQUIPMENT:	Pro Sonic 600	ELEVATION:	BOREHOLE ANGLE: 90 degrees
SAMPLING METHOD:	4 inch sonic core barrel 0 to 91 ft bgs., 10 inch sonic core barrel 0 to 91 ft bgs.,	TOTAL DEPTH (ft.): 88	GROUNDWATER LEVEL (ft. btoc.):
		DATE STARTED: 5/10/2020	DATE FINISHED: 5/10/2020
		LOGGED BY: Michael Ward	

DEPTH (feet)	LITHOLOGICAL DESCRIPTION
0	Poorly Graded Sand with Silt (SP-SM), fine to coarse sand, loose, soft, unconsolidated, very pale brown (10 YR 7/3).
10	Sandy Clay (SC), fine to coarse sands, medium dense, dry, pale brown (10 YR 7/3).
15	Clay (CL), low to medium plasticity, cohesive, medium dense, brown (10 YR 5/3).
30	Well Graded Sand with Clay (SW-SC), fine grained sand, medium dense, dry to moist, very pale brown (10 YR 7/3).
35	Clay (CL), medium plasticity, cohesive, medium dense, light brownish gray (10 YR 6/2).
40	Well Graded Sand (SW), fine grained sand, loose, soft, brown (10 YR 5/3).
	Clay (CL), medium to high plasticity, stiff, cohesive, pale brown (10 YR 6/3).
45	Same as above, becoming yellowish red (10 YR 5/4).
50	Well Graded Sand (SW), fine grained sand, loose, soft, brown (10 YR 5/3).
	Clay (CL), medium to high plasticity, stiff, cohesive, pale brown (10 YR 6/3).
55	Sandy Clay (SC), fine grained sand, loose to medium dense, wet, yellowish brown (10 YR 5/4).
60	Clay (CL), medium plasticity, stiff, cohesive, light yellowish brown (10 YR 6/4).
65	Sandy Clay (SC), fine grained sand, loose to medium dense, wet, yellowish brown (10 YR 5/4).
80	Well Graded Sand (SW), medium grained sand, soft, loose, brown (10 YR 5/4).
85	Clay (CL), medium plasticity, medium to stiff density, cohesive, light yellowish brown (10 YR 6/4).
90	End of borehole at 88 ft bgs. Installed monitoring well per scope of work.
95	



WELL CONSTUCTION DIAGRAM

- Above ground monument with well cap
- Grout 0 to 43 ft bgs. Borehole diameter 10 inches from 0 to 88 ft bgs.
- 0 to 61 ft bgs., 6 in dia., Sch. 80 PVC riser
- Bentonite 43 to 48 ft bgs.
- Filter pack sand 48 to 88 ft bgs.
- 61 to 88 ft bgs., 6 in dia., Sch. 80 PVC screen with 0.02 inch slot aperture
- End Cap

Notes: bgs. = below ground surface; dia. = diameter; ft = feet; Sch. = Schedule; YR = Yellow-Red

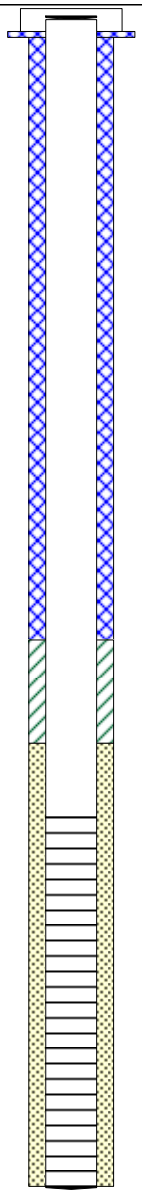
INTERMOUNTAIN POWER SERVICE CORP.

MONITORNG WELL ID: **BAC-22**
CLIENT: Intermountain Power Service Corporation
PROJECT: Monitoring Well Installation
SITE LOCATION: South Wells

Stantec

DRILLING CONTRACTOR:	Cascade Drilling	COORDINATE SYSTEM:	
DRILLING METHOD:	Sonic	EASTING:	NORTHING:
DRILLING EQUIPMENT:	Pro Sonic 600	ELEVATION:	BOREHOLE ANGLE: 90 degrees
SAMPLING METHOD:	4 inch sonic core barrel 0 to 78 ft bgs., 10 inch sonic core barrel 0 to 78 ft bgs.,	TOTAL DEPTH (ft.): 78	GROUNDWATER LEVEL (ft. btoc.):
		DATE STARTED: 5/10/2020	DATE FINISHED: 5/10/2020
		LOGGED BY: Rich Pratt	

DEPTH (feet)	LITHOLOGICAL DESCRIPTION
0	Poorly graded Sand with Silt (SP), light brown, dry
10	Poorly graded Sand with Silt and Clay (SP), light brown, dry
20	Clay (CL), light brown, moist
25	Poorly graded Sand with Silt (SP), light brown, dry
30	Well Graded Sand with Clay (SW), light brown, moist
35	Well Graded Sand with Gravel (SW), moist, light brown
40	Well Graded Sand with Gravel (SW), wet, light brown
45	Clay (CL), light brown, moist
50	Well Graded Sand with Gravel (SW), moist, light brown
	Well Graded Sand with Gravel (SW), wet, light brown
55	Clay (CL), light brown, moist
	Well Graded Sand with Gravel (SW), wet, light brown
60	Well Graded Sand with Clay (SW), light brown, moist
	Clay (CL), light brown, moist
	Well Graded Sand with Gravel (SW), moist, light brown
65	Clay (CL), light brown, moist
	Well Graded Sand with Clay (SW), light brown, moist
	Well Graded Sand with Gravel (SW), moist, light brown
	Well Graded Sand with Gravel (SW), wet, light brown
70	Well Graded Sand with Gravel (SW), moist, light brown (black sections)
	Well Graded Sand with Gravel (SW), moist, light brown
75	Clay (CL), light brown, moist
80	End of borehole at 78 ft bgs. Installed monitoring well per scope of work.



WELL CONSTUCTION DIAGRAM

- Above ground monument with well cap
- Grout 0 to 41 ft bgs. Borehole diameter 10 inches from 0 to 78 ft bgs.
- 0 to 53 ft bgs., 6 in dia., Sch. 80 PVC riser
- Bentonite 41 to 48 ft bgs.
- Filter pack sand 48 to 78 ft bgs.
- 53 to 78 ft bgs., 6 in dia., Sch. 80 PVC screen with 0.02 inch slot aperture
- End Cap

Notes:
bgs. = below ground surface
dia. = diameter
ft = feet
Sch. = Schedule
YR = Yellow-Red

INTERMOUNTAIN POWER SERVICE CORP.

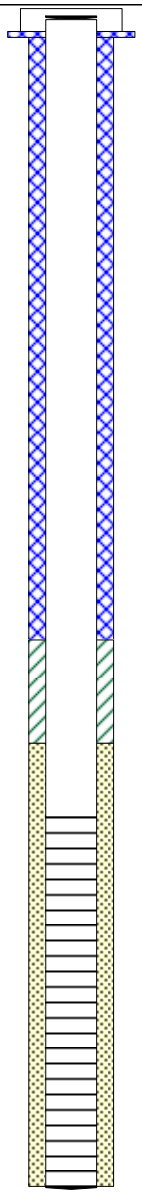
MONITORNG WELL ID: **BAC-23**
CLIENT: Intermountain Power Service Corporation
PROJECT: Monitoring Well Installation
SITE LOCATION: South Wells

Stantec

DRILLING CONTRACTOR:	Cascade Drilling	COORDINATE SYSTEM:	
DRILLING METHOD:	Sonic	EASTING:	NORTHING:
DRILLING EQUIPMENT:	Pro Sonic 600	ELEVATION:	BOREHOLE ANGLE: 90 degrees
SAMPLING METHOD:	4 inch sonic core barrel 0 to 78 ft bgs., 10 inch sonic core barrel 0 to 78 ft bgs.,	TOTAL DEPTH (ft.): 78	GROUNDWATER LEVEL (ft. btoc.):
		DATE STARTED: 5/11/2020	DATE FINISHED: 5/11/2020
		LOGGED BY: Rich Pratt	

DEPTH (feet)	LITHOLOGICAL DESCRIPTION
0	Poorly graded Sand with Silt (SP), light brown, dry
15	Poorly graded Sand with Silt and Clay (SP), light brown, dry
	Clay (CL), light brown, dry
35	Well Graded Sand with Clay (SW), light brown, dry
	Poorly graded Sand with Silt (SP), light brown, dry
	Poorly graded Sand with Silt (SP), light brown, moist
40	Clay (CL), light brown, moist
	Well Graded Sand with Gravel (SW), moist, light brown
45	Well Graded Sand with Gravel (SW), wet, light brown
	Well Graded Sand with Gravel (SW), moist, light brown
	Clay (CL), light brown, moist
50	Well Graded Sand with Gravel (SW), wet, light brown
	Clay (CL), light brown, moist
55	Well Graded Sand with Clay (SW), light brown, moist
	Well Graded Sand with Clay (SW), light brown, wet
	Clay (CL), light brown, moist
60	Well Graded Sand with Gravel (SW), moist, light brown
	Clay (CL), light brown, moist
65	Well Graded Sand with Gravel (SW), moist, light brown
70	Well Graded Sand with Clay (SW), light brown, moist
75	Clay (CL), light brown, moist
	Well Graded Sand with Gravel (SW), moist, light brown
	Clay (CL), light brown, moist
80	End of borehole at 78 ft bgs. Installed monitoring well per scope of work.

WELL CONSTUCTION DIAGRAM



- Above ground monument with well cap
- Grout 0 to 41 ft bgs. Borehole diameter 10 inches from 0 to 78 ft bgs.
- 0 to 53 ft bgs., 6 in dia., Sch. 80 PVC riser
- Bentonite 41 to 48 ft bgs.
- Filter pack sand 48 to 78 ft bgs.
- 53 to 78 ft bgs., 6 in dia., Sch. 80 PVC screen with 0.02 inch slot aperture
- End Cap

Notes: bgs. = below ground surface; dia. = diameter; ft = feet; Sch. = Schedule; YR = Yellow-Red

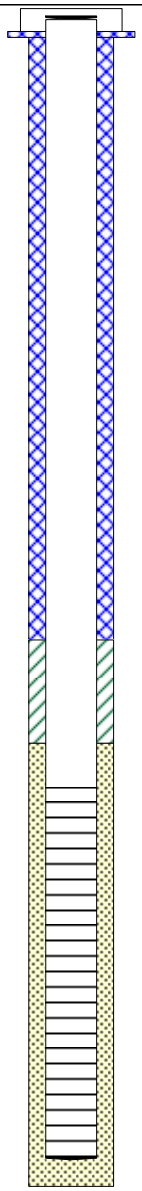
INTERMOUNTAIN POWER SERVICE CORP.

MONITORNG WELL ID: **BAC-24**
CLIENT: Intermountain Power Service Corporation
PROJECT: Monitoring Well Installation
SITE LOCATION: South Wells

Stantec

DRILLING CONTRACTOR:	Cascade Drilling	COORDINATE SYSTEM:	
DRILLING METHOD:	Sonic	EASTING:	NORTHING:
DRILLING EQUIPMENT:	Pro Sonic 600	ELEVATION:	BOREHOLE ANGLE: 90 degrees
SAMPLING METHOD:	4 inch sonic core barrel 0 to 78 ft bgs., 10 inch sonic core barrel 0 to 78 ft bgs.,	TOTAL DEPTH (ft.): 76.2	GROUNDWATER LEVEL (ft. btoc.):
		DATE STARTED: 5/12/2020	DATE FINISHED: 5/12/2020
		LOGGED BY: Rich Pratt	

DEPTH (feet)	LITHOLOGICAL DESCRIPTION
0	Poorly graded Sand with Silt (SP), light brown, dry
5	Well Graded Sand with Gravel (SW), dry, light brown
10	Poorly graded Sand with Silt (SP), light brown, dry
15	Poorly graded Sand with Silt and Clay (SP), light brown, dry
20	Poorly graded Sand with Silt (SP), light brown, dry
	Well Graded Sand with Gravel (SW), moist, light brown
25	Clay with well graded sand (SW), light brown, moist
	Clay (CL), light brown, dry
	Well Graded Sand with Gravel (SW), moist, light brown
30	Clay (CL), light brown, moist
35	Well Graded Sand with Gravel (SW), dry, light brown
	Well Graded Sand with Gravel (SW), moist, light brown
40	
45	
50	
	Clay (CL), light brown, moist
55	Clay with well graded sand (SW), light brown, moist
	Well Graded Sand with Gravel (SW), wet, light brown
	Well Graded Sand with Gravel (SW), moist, light brown
60	Clay (CL), light brown, moist
	Well Graded Sand with Gravel (SW), moist, light brown
	Clay (CL), light brown, moist
65	Clay with well graded sand (SW), light brown, moist
	Clay (CL), light brown, moist
	Well Graded Sand with Gravel (SW), moist, light brown
70	
75	
80	End of borehole at 78 ft bgs. Installed monitoring well per scope of work.



WELL CONSTUCTION DIAGRAM

- Above ground monument with well cap
- Grout 0 to 41 ft bgs. Borehole diameter 10 inches from 0 to 78 ft bgs.
- 0 to 51 ft bgs., 6 in dia., Sch. 80 PVC riser
- Bentonite 41 to 48 ft bgs.
- Filter pack sand 48 to 78 ft bgs.
- 51 to 76 ft bgs., 6 in dia., Sch. 80 PVC screen with 0.02 inch slot aperture
- End Cap

Notes: bgs. = below ground surface; dia. = diameter; ft = feet; Sch. = Schedule; YR = Yellow-Red

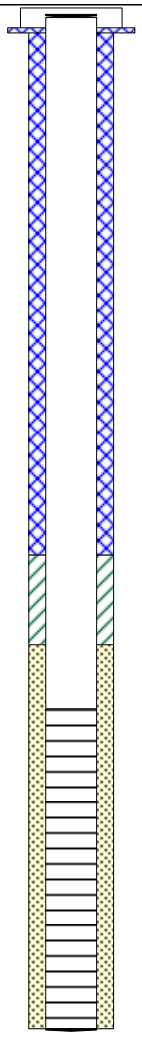
INTERMOUNTAIN POWER SERVICE CORP.

MONITORNG WELL ID: **BAC-25**
CLIENT: Intermountain Power Service Corporation
PROJECT: Monitoring Well Installation
SITE LOCATION: South Wells

Stantec

DRILLING CONTRACTOR:	Cascade Drilling	COORDINATE SYSTEM:	
DRILLING METHOD:	Sonic	EASTING:	NORTHING:
DRILLING EQUIPMENT:	Pro Sonic 600	ELEVATION:	BOREHOLE ANGLE: 90 degrees
SAMPLING METHOD:	4 inch sonic core barrel 0 to 78 ft bgs., 10 inch sonic core barrel 0 to 78 ft bgs.,	TOTAL DEPTH (ft.): 78	GROUNDWATER LEVEL (ft. btoc.):
		DATE STARTED: 5/12/2020	DATE FINISHED: 5/12/2020
		LOGGED BY: Rich Pratt	

DEPTH (feet)	LITHOLOGICAL GRAPHIC	LITHOLOGICAL DESCRIPTION
0		Poorly graded Sand with Silt (SP), light brown, dry
5		Poorly graded Sand with Silt and Clay (SP), light brown, dry
		Poorly graded Sand with Silt (SP), light brown, dry
10		Poorly graded Sand with Silt and Clay (SP), light brown, dry
		Poorly graded Sand with Silt (SP), light brown, dry
		Poorly Graded Sand with Clay (SW), light brown, dry
15		Poorly graded Sand with Silt and Clay (SP), light brown, dry
		Clay (CL) with sand, light brown, dry
20		Clay (CL), light brown, moist
25		
30		
35		
40		Well Graded Sand with Gravel (SW), moist, light brown
		Clay (CL), light brown, moist
		Well Graded Sand with Clay (SW), light brown, moist
45		Clay (CL), light brown, moist
50		Well Graded Sand with Clay (SW), light brown, moist
		Well Graded Sand with Gravel (SW), moist, light brown
		Clay (CL) with sand, light brown, dry
55		Well Graded Sand with Clay (SW), light brown, moist
		Clay (CL) with sand, light brown, dry
60		Clay (CL), light brown, moist
		Well Graded Sand with Gravel (SW), wet, light brown
		Well Graded Sand with Gravel (SW), moist, light brown
65		Clay (CL), light brown, moist
70		Well Graded Sand with Gravel (SW), moist, light brown
		Clay (CL), light brown, moist
		Clay (CL), light brown, moist
75		Well Graded Sand with Gravel (SW), moist, light brown
		Clay (CL), light brown, moist
		Well Graded Sand with Gravel (SW), moist, light brown
80		Well Graded Sand with Gravel (SW), wet, light brown
		Well Graded Sand with Gravel (SW), moist, light brown
		Well Graded Sand with Clay (SW), light brown, moist
85		Clay (CL), light brown, moist
		Well Graded Sand with Clay (SW), light brown, moist
90		End of borehole at 78 ft bgs. Installed monitoring well per scope of work.
95		



WELL CONSTUCTION DIAGRAM

- Above ground monument with well cap
- Grout 0 to 41 ft bgs. Borehole diameter 10 inches from 0 to 78 ft bgs.
- 0 to 53 ft bgs., 6 in dia., Sch. 80 PVC riser
- Bentonite 41 to 48 ft bgs.
- Filter pack sand 48 to 78 ft bgs.
- 53 to 78 ft bgs., 6 in dia., Sch. 80 PVC screen with 0.02 inch slot aperture
- End Cap

Notes:
bgs. = below ground surface
dia. = diameter
ft = feet
Sch. = Schedule
YR = Yellow-Red

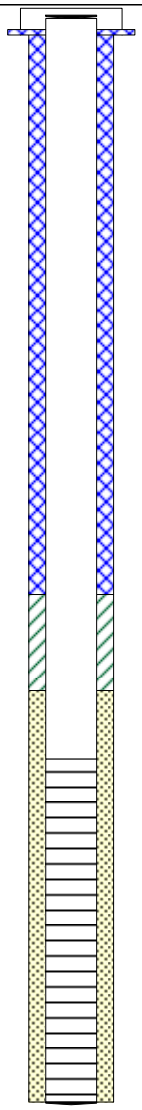
INTERMOUNTAIN POWER SERVICE CORP.

MONITORNG WELL ID:	**BAC-26**
CLIENT:	Intermountain Power Service Corporation
PROJECT:	Monitoring Well Installation
SITE LOCATION:	South Wells

Stantec

DRILLING CONTRACTOR:	Cascade Drilling	COORDINATE SYSTEM:	
DRILLING METHOD:	Sonic	EASTING:	NORTHING:
DRILLING EQUIPMENT:	Pro Sonic 600	ELEVATION:	BOREHOLE ANGLE: 90 degrees
SAMPLING METHOD:	4 inch sonic core barrel 0 to 78 ft bgs., 10 inch sonic core barrel 0 to 78 ft bgs.,	TOTAL DEPTH (ft.): 78	GROUNDWATER LEVEL (ft. btoc.):
		DATE STARTED: 5/13/2020	DATE FINISHED: 5/13/2020
		LOGGED BY: Rich Pratt	

DEPTH (feet)	LITHOLOGICAL GRAPHIC	LITHOLOGICAL DESCRIPTION
0		Poorly graded Sand with Silt (SP), light brown, dry
10		Poorly graded Sand with Silt and Clay (SP), light brown, dry
15		Poorly graded Sand with Silt (SP), light brown, dry
20		Poorly Graded Sand (SP), dry, light brown Poorly graded Sand with Silt and Clay (SP), light brown, moist
30		Clay (CL), light brown, moist
50		Well Graded Sand with Gravel (SW), moist, light brown Clay (CL), light brown, moist
55		Well Graded Sand with Gravel (SW), wet, light brown
60		Clay (CL), light brown, moist Well Graded Sand with Gravel (SW), moist, light brown
65		Well Graded Sand with Gravel (SW), wet, light brown Clay (CL), light brown, moist
70		Well Graded Sand with Gravel (SW), moist, light brown Clay (CL), light brown, moist
75		Well Graded Sand with Clay (SW), light brown, moist
80		Well Graded Sand with Gravel (SW), wet, light brown Clay (CL), light brown, moist End of borehole at 78 ft bgs. Installed monitoring well per scope of work.
85		



WELL CONSTUCTION DIAGRAM

- Above ground monument with well cap
- Grout 0 to 41 ft bgs. Borehole diameter 10 inches from 0 to 78 ft bgs.
- 0 to 53 ft bgs., 6 in dia., Sch. 80 PVC riser
- Bentonite 41 to 48 ft bgs.
- Filter pack sand 48 to 78 ft bgs.
- 53 to 78 ft bgs., 6 in dia., Sch. 80 PVC screen with 0.02 inch slot aperture
- End Cap

Notes: bgs. = below ground surface; dia. = diameter; ft = feet; Sch. = Schedule; YR = Yellow-Red

INTERMOUNTAIN POWER SERVICE CORP.

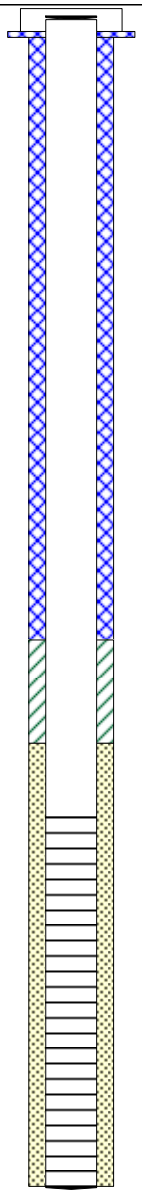
MONITORNG WELL ID:	**BAC-27**
CLIENT:	Intermountain Power Service Corporation
PROJECT:	Monitoring Well Installation
SITE LOCATION:	North Wells

Stantec

DRILLING CONTRACTOR:	Cascade Drilling	COORDINATE SYSTEM:	
DRILLING METHOD:	Sonic	EASTING:	NORTHING:
DRILLING EQUIPMENT:	Pro Sonic 600	ELEVATION:	BOREHOLE ANGLE: 90 degrees
SAMPLING METHOD:	4 inch sonic core barrel 0 to 78 ft bgs., 10 inch sonic core barrel 0 to 78 ft bgs.,	TOTAL DEPTH (ft.): 78	GROUNDWATER LEVEL (ft. btoc.):
		DATE STARTED: 5/13/2020	DATE FINISHED: 5/13/2020
		LOGGED BY: Rich Pratt	

DEPTH (feet)	LITHOLOGICAL GRAPHIC	LITHOLOGICAL DESCRIPTION
0		Poorly graded Sand with Silt (SP), light brown, dry
15		Poorly graded Sand with Silt and Clay (SP), light brown, dry
25		Clay (CL), light brown, moist
50		Well Graded Sand with Gravel (SW), moist, light brown
55		Clay (CL), light brown, moist
60		Well Graded Sand with Gravel (SW), moist, light brown Well Graded Sand with Gravel (SW), wet, light brown Well Graded Sand with Clay (SW), light brown, moist Well Graded Sand with Gravel (SW), moist, light brown
65		Clay (CL), light brown, moist
70		Well Graded Sand with Gravel (SW), moist, light brown Well Graded Sand with Gravel (SW), wet, light brown Well Graded Sand with Clay (SW), light brown, moist
75		Clay (CL), light brown, moist
80		End of borehole at 78 ft bgs. Installed monitoring well per scope of work.

WELL CONSTUCTION DIAGRAM



- Above ground monument with well cap
- Grout 0 to 41 ft bgs. Borehole diameter 10 inches from 0 to 78 ft bgs.
- 0 to 53 ft bgs., 6 in dia., Sch. 80 PVC riser
- Bentonite 41 to 48 ft bgs.
- Filter pack sand 48 to 78 ft bgs.
- 53 to 78 ft bgs., 6 in dia., Sch. 80 PVC screen with 0.02 inch slot aperture
- End Cap

Notes: bgs. = below ground surface; dia. = diameter; ft = feet; Sch. = Schedule; YR = Yellow-Red

INTERMOUNTAIN POWER SERVICE CORP.

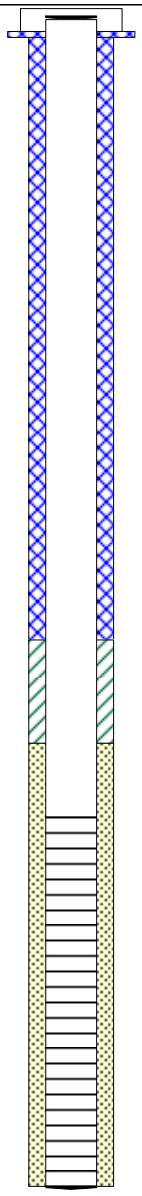
MONITORNG WELL ID: **BAC-28**
CLIENT: Intermountain Power Service Corporation
PROJECT: Monitoring Well Installation
SITE LOCATION: North Wells

Stantec

DRILLING CONTRACTOR:	Cascade Drilling	COORDINATE SYSTEM:	
DRILLING METHOD:	Sonic	EASTING:	NORTHING:
DRILLING EQUIPMENT:	Pro Sonic 600	ELEVATION:	BOREHOLE ANGLE: 90 degrees
SAMPLING METHOD:	4 inch sonic core barrel 0 to 78 ft bgs., 10 inch sonic core barrel 0 to 78 ft bgs.,	TOTAL DEPTH (ft.): 78	GROUNDWATER LEVEL (ft. btoc.):
		DATE STARTED: 5/14/2020	DATE FINISHED: 5/14/2020
		LOGGED BY: Rich Pratt	

DEPTH (feet)	LITHOLOGICAL GRAPHIC	LITHOLOGICAL DESCRIPTION
0		Poorly graded Sand with Silt (SP), light brown, dry
15		Poorly graded Sand with Silt and Clay (SP), light brown, dry Poorly graded Sand with Silt (SP), light brown, dry
20		Poorly graded Sand with Silt and Clay (SP), light brown, dry
25		Clay (CL), light brown, moist
45		Well Graded Sand with Clay (SW), light brown, moist
50		Clay (CL), light brown, moist
55		Well Graded Sand with Clay (SW), light brown, moist
60		Well Graded Sand with Clay (SW), light brown, wet Well Graded Sand with Clay (SW), light brown, moist Clay (CL), light brown, moist
70		Well Graded Sand with Clay (SW), light brown, wet Well Graded Sand with Clay (SW), light brown, moist
75		Clay (CL), light brown, moist
80		End of borehole at 78 ft bgs. Installed monitoring well per scope of work.

WELL CONSTUCTION DIAGRAM



Above ground monument with well cap

Grout 0 to 41 ft bgs.
Borehole diameter 10 inches from 0 to 78 ft bgs.

0 to 53 ft bgs., 6 in dia., Sch. 80 PVC riser

Bentonite 41 to 48 ft bgs.

Filter pack sand 48 to 78 ft bgs.

53 to 78 ft bgs., 6 in dia., Sch. 80 PVC screen with 0.02 inch slot aperture
End Cap

Notes: bgs. = below ground surface; dia. = diameter; ft = feet; Sch. = Schedule; YR = Yellow-Red

INTERMOUNTAIN POWER SERVICE CORP.

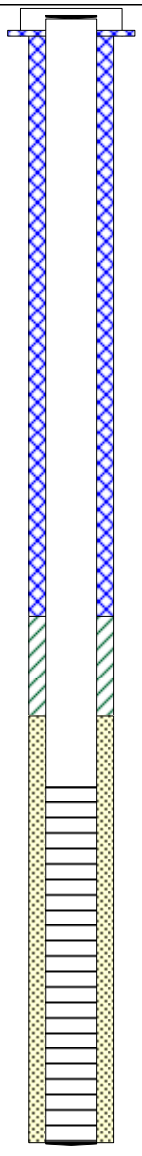
MONITORNG WELL ID: **BAC-29**
CLIENT: Intermountain Power Service Corporation
PROJECT: Monitoring Well Installation
SITE LOCATION: North Wells

Stantec

DRILLING CONTRACTOR:	Cascade Drilling	COORDINATE SYSTEM:	
DRILLING METHOD:	Sonic	EASTING:	NORTHING:
DRILLING EQUIPMENT:	Pro Sonic 600	ELEVATION:	BOREHOLE ANGLE: 90 degrees
SAMPLING METHOD:	4 inch sonic core barrel 0 to 78 ft bgs., 10 inch sonic core barrel 0 to 78 ft bgs.,	TOTAL DEPTH (ft.): 78	GROUNDWATER LEVEL (ft. btoc.):
		DATE STARTED: 5/15/2020	DATE FINISHED: 5/15/2020
		LOGGED BY: Rich Pratt	

DEPTH (feet)	LITHOLOGICAL GRAPHIC	LITHOLOGICAL DESCRIPTION
0		Poorly graded Sand with Silt (SP), light brown, dry
15		Silty Clay, light brown, dry
20		Poorly graded Sand with Silt and Clay (SP-SM), light brown, moist
		Clay (CL), light brown, moist
40		Well Graded Sand with Gravel (SW), moist, light brown
45		Clay (CL), light brown, moist
50		Well Graded Sand with Clay (SW), light brown, moist
		Well Graded Sand with Gravel (SW), moist, light brown
55		Clay (CL), light brown, moist
		Well Graded Sand with Gravel (SW), moist, light brown
		Clay (CL), light brown, moist
60		Well Graded Sand with Gravel (SW), moist, light brown
		Well Graded Sand with Gravel (SW), wet, light brown
		Clay (CL), light brown, moist
70		Well Graded Sand with Gravel (SW), moist, light brown
		Clay (CL), light brown, moist
		Well Graded Sand with Clay (SW), light brown, moist
		Clay (CL), light brown, moist
80		Well Graded Sand with Clay (SW), light brown, moist
		Clay (CL), light brown, moist
		Well Graded Sand with Clay (SW), light brown, moist
		End of borehole at 78 ft bgs. Installed monitoring well per scope of work.

WELL CONSTUCTION DIAGRAM



- Above ground monument with well cap
- Grout 0 to 41 ft bgs. Borehole diameter 10 inches from 0 to 78 ft bgs.
- 0 to 53 ft bgs., 6 in dia., Sch. 80 PVC riser
- Bentonite 41 to 48 ft bgs.
- Filter pack sand 48 to 78 ft bgs.
- 53 to 78 ft bgs., 6 in dia., Sch. 80 PVC screen with 0.02 inch slot aperture
- End Cap

Notes: bgs. = below ground surface; dia. = diameter; ft = feet; Sch. = Schedule; YR = Yellow-Red

INTERMOUNTAIN POWER SERVICE CORP.

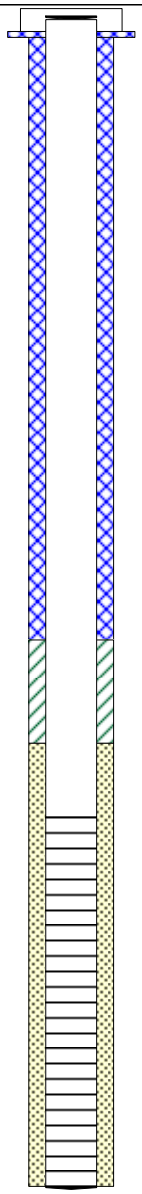
MONITORNG WELL ID: **BAC-30**
CLIENT: Intermountain Power Service Corporation
PROJECT: Monitoring Well Installation
SITE LOCATION: North Wells

Stantec

DRILLING CONTRACTOR:	Cascade Drilling	COORDINATE SYSTEM:	
DRILLING METHOD:	Sonic	EASTING:	NORTHING:
DRILLING EQUIPMENT:	Pro Sonic 600	ELEVATION:	BOREHOLE ANGLE: 90 degrees
SAMPLING METHOD:	4 inch sonic core barrel 0 to 78 ft bgs., 10 inch sonic core barrel 0 to 78 ft bgs.,	TOTAL DEPTH (ft.): 78	GROUNDWATER LEVEL (ft. btoc.):
		DATE STARTED: 5/14/2020	DATE FINISHED: 5/15/2020
		LOGGED BY: Joel Pierson	

DEPTH (feet)	LITHOLOGICAL GRAPHIC	LITHOLOGICAL DESCRIPTION
0		Well Graded Sand with some Gravel (SP), sand 90%, gravel 5%, fines 5%, dry, light brown (10 YR 8/2), increasing fines from 11'
15		Sand (SP), sand 90%, fines 10%, loose.
20		Poorly-Graded Clay (ML) increasing from fines 60%, sand 40% to fines 95%, sand 5%, medium plasticity, wet Silty Sand (SM), sand 80%, 20% fines, moist
25		Poorly-Graded Silty Clay (CL), low plasticity, iron staining
40		Poorly-Graded Silty Clay (CL), increasing plasticity, increasing moisture Poorly-Graded Silty Clay (CL), decreasing plasticity
45		Silty Sand (SP), moist Clay (CL), moist, low plasticity
50		Silty Sand (SP), sand 90%, fines 10%, moist, loose
55		Silty Clay (CL), moist, medium-high plasticity, dense and hard Sandy Clay (CL) lense Silty Clay (CL), moist, medium-high plasticity, dense and hard
65		Silty Sand (SP), sand 90%, fines 10%, moist, loose Clay (CL), moist, hard, medium plasticity
70		Silty Sand (SP), sand 90%, fines 10%, moist, loose
75		Sandy Clay (CL), hard, moist, dense, medium-high plasticity
80		End of borehole at 78 ft bgs. Installed monitoring well per scope of work.

WELL CONSTUCTION DIAGRAM



- Above ground monument with well cap
- Borehole diameter 10 inches from 0 to 78 ft bgs.
- Grout 0 to 41 ft bgs.
- 0 to 53 ft bgs., 6 in dia., Sch. 80 PVC riser
- Bentonite 41 to 48 ft bgs.
- Filter Pack Sand 48 to 78 ft bgs.
- 53 to 78 ft bgs., 6 in dia., Sch. 80 PVC screen with 0.02 inch slot aperture
- End Cap

Notes: bgs. = below ground surface; dia. = diameter; ft = feet; Sch. = Schedule; YR = Yellow-Red

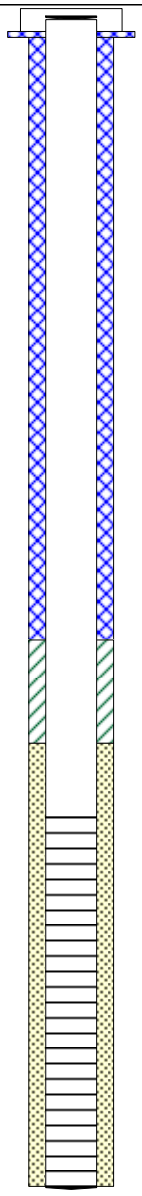
INTERMOUNTAIN POWER SERVICE CORP.

MONITORNG WELL ID: **BAC-31**
CLIENT: Intermountain Power Service Corporation
PROJECT: Monitoring Well Installation
SITE LOCATION: North Wells

Stantec

DRILLING CONTRACTOR:	Cascade Drilling	COORDINATE SYSTEM:	
DRILLING METHOD:	Sonic	EASTING:	NORTHING:
DRILLING EQUIPMENT:	Pro Sonic 600	ELEVATION:	BOREHOLE ANGLE: 90 degrees
SAMPLING METHOD:	4 inch sonic core barrel 0 to 78 ft bgs., 10 inch sonic core barrel 0 to 78 ft bgs.,	TOTAL DEPTH (ft.): 78	GROUNDWATER LEVEL (ft. btoc.):
		DATE STARTED: 5/15/2020	DATE FINISHED: 5/18/2020
		LOGGED BY: Joel Pierson	

DEPTH (feet)	LITHOLOGICAL GRAPHIC	LITHOLOGICAL DESCRIPTION
0		Silty Sand (SW), sand 50%, gravel 40%, fines 10%, dry to slightly moist, very loose, pinkish-gray (5YR 7/2)
15		Silty Clay (ML), fines 90%, sand 10%, slightly moist
		Silty Sand (SP), increasing fines from sand 80%, fines 20% to sand 60%, fines 40%.
20		Sandy Clay (CL), fines 60%, sand 40%, moist, dense, iron staining, dark reddish brown (5YR 3/3)
40		Sand (SP), sand 90%, fines 10%, moist, loose, decreasing sand
45		Clay (CL), fines 100%, moist, very hard, olive brown 2.5Y 4/3
		Sandy Clay (CL), moist
50		Silty Sand (SP), moist to very moist, increasingly coarse sand
		Silty Clay (CH), fines 85%, sand 15%
55		Silty Sand (SP), moist to very moist
		Clay (CH), fines 100%, very hard
		Silty Sand (SP), sand 90%, fines 10%, moist, loose
60		Clay (CL), fines 100%, moist, very hard, medium-high plasticity
65		Silty Sand (SP), fines vary from 10% to 30%, moist to very moist, some iron staining, ~4-5" clay lense at 65'
70		Clay (CH), moist to very moist, high plasticity from 73' to 74.5', very hard from 74.5' to 76.5'
75		Silty Sand (SP), sand 80%, fines 20%, grayish brown (2.5Y 5/2)
80		End of borehole at 78 ft bgs. Installed monitoring well per scope of work.



WELL CONSTUCTION DIAGRAM

- Above ground monument with well cap
- Borehole diameter 10 inches from 0 to 78 ft bgs.
- Grout 0 to 41 ft bgs.
- 0 to 53 ft bgs., 6 in dia., Sch. 80 PVC riser
- Bentonite 41 to 48 ft bgs.
- Filter Pack Sand 48 to 78 ft bgs.
- 53 to 78 ft bgs., 6 in dia., Sch. 80 PVC screen with 0.02 inch slot aperture
- End Cap

Notes: bgs. = below ground surface; dia. = diameter; ft = feet; Sch. = Schedule; YR = Yellow-Red

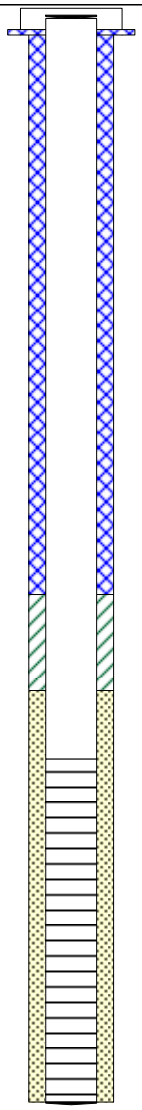
INTERMOUNTAIN POWER SERVICE CORP.

MONITORNG WELL ID:	**BAC-32**
CLIENT:	Intermountain Power Service Corporation
PROJECT:	Monitoring Well Installation
SITE LOCATION:	North Wells

Stantec

DRILLING CONTRACTOR:	Cascade Drilling	COORDINATE SYSTEM:	
DRILLING METHOD:	Sonic	EASTING:	NORTHING:
DRILLING EQUIPMENT:	Pro Sonic 600	ELEVATION:	BOREHOLE ANGLE: 90 degrees
SAMPLING METHOD:	4 inch sonic core barrel 0 to 78 ft bgs., 10 inch sonic core barrel 0 to 78 ft bgs.,	TOTAL DEPTH (ft.): 78	GROUNDWATER LEVEL (ft. btoc.):
		DATE STARTED: 5/19/2020	DATE FINISHED: 5/19/2020
		LOGGED BY: Not Available	

DEPTH (feet)	LITHOLOGICAL DESCRIPTION
0	Lithological Description infered from BAC-26. Poorly graded Sand with Silt (SP), light brown, dry
10	Poorly graded Sand with Silt and Clay (SP), light brown, dry
15	Poorly graded Sand with Silt (SP), light brown, dry
20	Poorly Graded Sand (SP), dry, light brown Poorly graded Sand with Silt and Clay (SP), light brown, moist
30	Clay (CL), light brown, moist
50	Well Graded Sand with Gravel (SW), moist, light brown Clay (CL), light brown, moist
55	
60	Well Graded Sand with Gravel (SW), wet, light brown Clay (CL), light brown, moist Well Graded Sand with Gravel (SW), moist, light brown
65	Well Graded Sand with Gravel (SW), wet, light brown Clay (CL), light brown, moist
70	Well Graded Sand with Gravel (SW), moist, light brown Clay (CL), light brown, moist
75	Well Graded Sand with Clay (SW), light brown, moist
80	Well Graded Sand with Gravel (SW), wet, light brown Clay (CL), light brown, moist End of borehole at 78 ft bgs. Installed monitoring well per scope of work.
85	



WELL CONSTUCTION DIAGRAM

- Above ground monument with well cap
- Borehole diameter 10 inches from 0 to 78 ft bgs.
- Grout 0 to 41 ft bgs.
- 0 to 53 ft bgs., 6 in dia., Sch. 80 PVC riser
- Bentonite 41 to 48 ft bgs.
- Filter Pack Sand 48 to 78 ft bgs.
- 53 to 78 ft bgs., 6 in dia., Sch. 80 PVC screen with 0.02 inch slot aperture
- End Cap

Notes: bgs. = below ground surface; dia. = diameter; ft = feet; Sch. = Schedule; YR = Yellow-Red

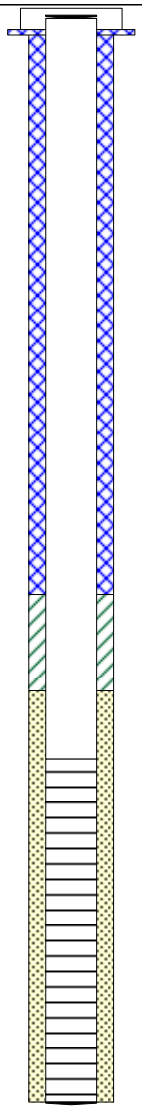
INTERMOUNTAIN POWER SERVICE CORP.

MONITORNG WELL ID:	**BAC-33**
CLIENT:	Intermountain Power Service Corporation
PROJECT:	Monitoring Well Installation
SITE LOCATION:	North Wells

Stantec

DRILLING CONTRACTOR:	Cascade Drilling	COORDINATE SYSTEM:	
DRILLING METHOD:	Sonic	EASTING:	NORTHING:
DRILLING EQUIPMENT:	Pro Sonic 600	ELEVATION:	BOREHOLE ANGLE: 90 degrees
SAMPLING METHOD:	4 inch sonic core barrel 0 to 78 ft bgs., 10 inch sonic core barrel 0 to 78 ft bgs.,	TOTAL DEPTH (ft.): 78	GROUNDWATER LEVEL (ft. btoc.):
		DATE STARTED: 5/18/2020	DATE FINISHED: 5/18/2020
		LOGGED BY: Not Available	

DEPTH (feet)	LITHOLOGICAL DESCRIPTION
0	Lithological Description inferred from BAC-26. Poorly graded Sand with Silt (SP), light brown, dry
10	Poorly graded Sand with Silt and Clay (SP), light brown, dry
15	Poorly graded Sand with Silt (SP), light brown, dry
20	Poorly Graded Sand (SP), dry, light brown Poorly graded Sand with Silt and Clay (SP), light brown, moist
30	Clay (CL), light brown, moist
50	Well Graded Sand with Gravel (SW), moist, light brown Clay (CL), light brown, moist
55	Well Graded Sand with Gravel (SW), wet, light brown
60	Clay (CL), light brown, moist Well Graded Sand with Gravel (SW), moist, light brown
65	Well Graded Sand with Gravel (SW), wet, light brown Clay (CL), light brown, moist
70	Well Graded Sand with Gravel (SW), moist, light brown Clay (CL), light brown, moist
75	Well Graded Sand with Clay (SW), light brown, moist
80	Well Graded Sand with Gravel (SW), wet, light brown Clay (CL), light brown, moist End of borehole at 78 ft bgs. Installed monitoring well per scope of work.
85	



WELL CONSTUCTION DIAGRAM

- Above ground monument with well cap
- Borehole diameter 10 inches from 0 to 78 ft bgs.
- Grout 0 to 41 ft bgs.
- 0 to 53 ft bgs., 6 in dia., Sch. 80 PVC riser
- Bentonite 41 to 48 ft bgs.
- Filter Pack Sand 48 to 78 ft bgs.
- 53 to 78 ft bgs., 6 in dia., Sch. 80 PVC screen with 0.02 inch slot aperture
- End Cap

Notes: bgs. = below ground surface; dia. = diameter; ft = feet; Sch. = Schedule; YR = Yellow-Red

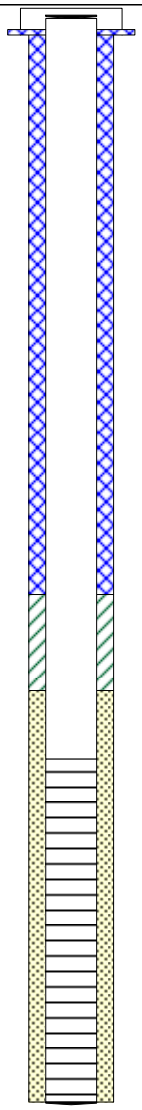
INTERMOUNTAIN POWER SERVICE CORP.

MONITORNG WELL ID:	**BAC-34**
CLIENT:	Intermountain Power Service Corporation
PROJECT:	Monitoring Well Installation
SITE LOCATION:	North Wells

Stantec

DRILLING CONTRACTOR:	Cascade Drilling	COORDINATE SYSTEM:	
DRILLING METHOD:	Sonic	EASTING:	NORTHING:
DRILLING EQUIPMENT:	Pro Sonic 600	ELEVATION:	BOREHOLE ANGLE: 90 degrees
SAMPLING METHOD:	4 inch sonic core barrel 0 to 78 ft bgs., 10 inch sonic core barrel 0 to 78 ft bgs.,	TOTAL DEPTH (ft.): 78	GROUNDWATER LEVEL (ft. btoc.):
		DATE STARTED: 5/21/2020	DATE FINISHED: 5/21/2020
		LOGGED BY: Not Available	

DEPTH (feet)	LITHOLOGICAL DESCRIPTION
0	Lithological Description inferred from BAC-26. Poorly graded Sand with Silt (SP), light brown, dry
10	Poorly graded Sand with Silt and Clay (SP), light brown, dry
15	Poorly graded Sand with Silt (SP), light brown, dry
20	Poorly Graded Sand (SP), dry, light brown Poorly graded Sand with Silt and Clay (SP), light brown, moist
30	Clay (CL), light brown, moist
50	Well Graded Sand with Gravel (SW), moist, light brown Clay (CL), light brown, moist
55	
60	Well Graded Sand with Gravel (SW), wet, light brown Clay (CL), light brown, moist Well Graded Sand with Gravel (SW), moist, light brown
65	Well Graded Sand with Gravel (SW), wet, light brown Clay (CL), light brown, moist
70	Well Graded Sand with Gravel (SW), moist, light brown Clay (CL), light brown, moist
75	Well Graded Sand with Clay (SW), light brown, moist Well Graded Sand with Gravel (SW), wet, light brown
80	Clay (CL), light brown, moist End of borehole at 78 ft bgs. Installed monitoring well per scope of work.
85	



WELL CONSTUCTION DIAGRAM

- Above ground monument with well cap
- Borehole diameter 10 inches from 0 to 78 ft bgs.
- Grout 0 to 41 ft bgs.
- 0 to 53 ft bgs., 6 in dia., Sch. 80 PVC riser
- Bentonite 41 to 48 ft bgs.
- Filter Pack Sand 48 to 78 ft bgs.
- 53 to 78 ft bgs., 6 in dia., Sch. 80 PVC screen with 0.02 inch slot aperture
- End Cap

Notes: bgs. = below ground surface; dia. = diameter; ft = feet; Sch. = Schedule; YR = Yellow-Red

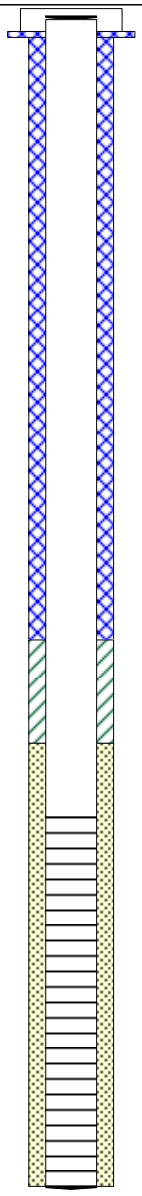
INTERMOUNTAIN POWER SERVICE CORP.

MONITORNG WELL ID:	**BAC-35**
CLIENT:	Intermountain Power Service Corporation
PROJECT:	Monitoring Well Installation
SITE LOCATION:	North Wells

Stantec

DRILLING CONTRACTOR:	Cascade Drilling	COORDINATE SYSTEM:	
DRILLING METHOD:	Sonic	EASTING:	NORTHING:
DRILLING EQUIPMENT:	Pro Sonic 600	ELEVATION:	BOREHOLE ANGLE: 90 degrees
SAMPLING METHOD:	4 inch sonic core barrel 0 to 78 ft bgs., 10 inch sonic core barrel 0 to 78 ft bgs.,	TOTAL DEPTH (ft.): 78	GROUNDWATER LEVEL (ft. btoc.):
		DATE STARTED: 5/28/2020	DATE FINISHED: 5/29/2020
		LOGGED BY: Joel Pierson	

DEPTH (feet)	LITHOLOGICAL DESCRIPTION
0	Silty Sand (SP), sand 90%, fines 10%, very loose, very fine, dry, reddish gray (2.5 YR 7/1)
20	Silty Sand (SM), fines 70%, very fine sand 30%, loose
	Sandy Silt (ML), fines 70%, very fine sand 30%, medium dense, low plasticity, some oxidation, slightly moist, pale yellow (2.5Y 7/3)
30	Sandy Silty Clay (CL), moist, medium plasticity, dense, moist, some oxidation, light brownish gray (2.5 YR 6/2), yellow (2.5 YR 7/6), hard
50	Sandy Silty Clay (CL), fines 60%, very fine sand 40%, small sand increase, weak, loose
55	Sandy Silty Clay (CL), moist, medium plasticity, dense, moist, some oxidation, light brownish gray (2.5 YR 6/2), yellow (2.5 YR 7/6), hard
60	Fine Sand (SP), sand 90%, fines 10%, loose, weak, moist, very dark grayish brown (2.5Y 3/2), sand lense at 64.5' with medium sand 100%
65	Silty Sandy Clay (CL), fines 90%, sand 10%, moist, dense, low to medium plasticity
70	Silty Sand (SP), sand 80%, fines 20%, moist, loose, very dark grayish brown (2.5 Y 3/2),
	Clay lense (CL), very fine sand 90%, fines 10%
	Silty Sand (SP), sand 80%, fines 20%, moist, loose, very dark grayish brown (2.5 Y 3/2),
75	Sandy Silty Clay (CL), fines 90%, very fine sand 10%, moist, dense, low plasticity, reddish gray (5YR 5/2)
80	End of borehole at 78 ft bgs. Installed monitoring well per scope of work.



WELL CONSTUCTION DIAGRAM

- Above ground monument with well cap
- Borehole diameter 10 inches from 0 to 78 ft bgs.
- Grout 0 to 41 ft bgs.
- 0 to 53 ft bgs., 6 in dia., Sch. 80 PVC riser
- Bentonite 41 to 48 ft bgs.
- Filter Pack Sand 48 to 78 ft bgs.
- 53 to 78 ft bgs., 6 in dia., Sch. 80 PVC screen with 0.02 inch slot aperture
- End Cap

Notes: bgs. = below ground surface; dia. = diameter; ft = feet; Sch. = Schedule; YR = Yellow-Red

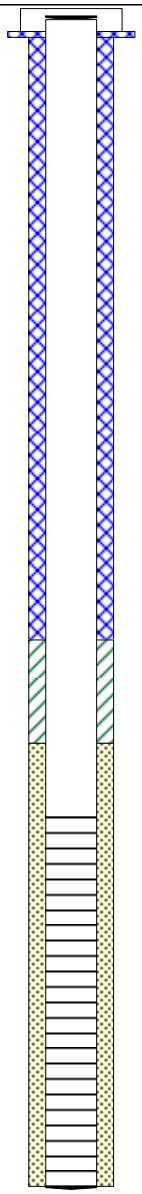
INTERMOUNTAIN POWER SERVICE CORP.

MONITORNG WELL ID: **BAC-36**
CLIENT: Intermountain Power Service Corporation
PROJECT: Monitoring Well Installation
SITE LOCATION: South Wells

Stantec

DRILLING CONTRACTOR:	Cascade Drilling	COORDINATE SYSTEM:	
DRILLING METHOD:	Sonic	EASTING:	NORTHING:
DRILLING EQUIPMENT:	Pro Sonic 600	ELEVATION:	BOREHOLE ANGLE: 90 degrees
SAMPLING METHOD:	4 inch sonic core barrel 0 to 78 ft bgs., 10 inch sonic core barrel 0 to 78 ft bgs.,	TOTAL DEPTH (ft.): 78	GROUNDWATER LEVEL (ft. btoc.):
		DATE STARTED: 5/30/2020	DATE FINISHED: 5/31/2020
		LOGGED BY: Joel Pierson	

DEPTH (feet)	LITHOLOGICAL GRAPHIC	LITHOLOGICAL DESCRIPTION
0		Silty Sand (SM), sand 80%, fines 15%, gravel 5%, dry, very loose, subangular clasts, light gray (2.5Y 7/2)
5		
10		
15		
20		Silty Sandy Clay (CL), fines 80%, fine sand 20%, dense, moist, low to medium plasticity, light olive brown (2.5Y 5/3). Small fracture with iron oxidation, reddish yellow (7.5YR 6/6).
25		
30		
35		No recovery from 33 to 38 ft bgs
40		Silty Sand (SM), fine sand 70%, fines 30%, loose, moist, olive brown (2.5Y 5/3), increasing fines from 45' to 46' with sand 50%, fines 50%
45		Silty Clay (CL), fines 100%, dense, moist, medium plasticity, brown (7.5YR 5/3/)
50		Silty Clay (CL), fines 70%, very fine sand 30%
55		Silty Clay (CL), fines 100%, dense, moist, medium plasticity, brown (7.5YR 5/3/)
60		Gravelly Silty Sand (SM), sand 80%, gravel 10%, fines 10%, loose, moist, light yellowish brown (2.5YR 6/4), gravel lense at 59', decreasing fines
65		Silty Clay (CL), fines 90%, very fine sand 10%, moist, dense, low plasticity, brown (7.5YR 5/4).
70		Silty Sand (SM), very fine sand 70%, fines 30%, reddish yellow (7.5YR 7/6), moist, loose
75		
80		End of borehole at 78 ft bgs. Installed monitoring well per scope of work.



WELL CONSTUCTION DIAGRAM

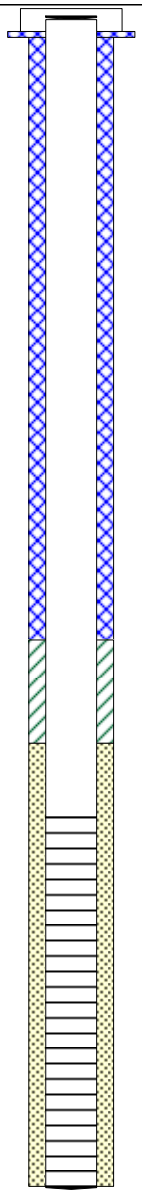
- Above ground monument with well cap
- Borehole diameter 10 inches from 0 to 78 ft bgs.
- Grout 0 to 41 ft bgs.
- 0 to 53 ft bgs., 6 in dia., Sch. 80 PVC riser
- Bentonite 41 to 48 ft bgs.
- Filter Pack Sand 48 to 78 ft bgs.
- 53 to 78 ft bgs., 6 in dia., Sch. 80 PVC screen with 0.02 inch slot aperture
- End Cap

Notes:
bgs. = below ground surface
dia. = diameter
ft = feet
Sch. = Schedule
YR = Yellow-Red

MONITORNG WELL ID:	**BAC-37**
CLIENT:	Intermountain Power Service Corporation
PROJECT:	Monitoring Well Installation
SITE LOCATION:	South Wells

DRILLING CONTRACTOR:	Cascade Drilling	COORDINATE SYSTEM:	
DRILLING METHOD:	Sonic	EASTING:	NORTHING:
DRILLING EQUIPMENT:	Pro Sonic 600	ELEVATION:	BOREHOLE ANGLE: 90 degrees
SAMPLING METHOD:	4 inch sonic core barrel 0 to 78 ft bgs., 10 inch sonic core barrel 0 to 78 ft bgs.,	TOTAL DEPTH (ft.): 78	GROUNDWATER LEVEL (ft. btoc.):
		DATE STARTED: 5/29/2020	DATE FINISHED: 5/30/2020
		LOGGED BY: Joel Pierson	

DEPTH (feet)	LITHOLOGICAL GRAPHIC	LITHOLOGICAL DESCRIPTION
0		Silty Fine Sand (SM), sand 80%, fines 20%, dry, loose, light gray (2.5Y 7/2)
5		
10		
15		
20		Silty Sandy Clay (CL), fines 90%, sand 10%, slightly moist, low plasticity, dense, hard, pale yellow (2.5Y 7/3)
		Silty Sandy Clay (CL), fines 70%, fine sand 30%, loose
25		Silty Sandy Clay (CL), fines 90%, sand 10%, slightly moist, low plasticity, dense, hard, iron staining, yellow (2.5Y 7/3)
30		
35		Silty Fine Sand (SM), fine sand 70%, fines 30%, moist, loose
40		Fine Gravel (GM), sand 60%, gravel 30%, fines 10%, angular to subangular clasts
		Silty Fine Sand (SM), fine sand 70%, fines 30%, moist, loose
45		Sandy Clay (CL), fines 90%, sand 10%, moist, medium dense, low plasticity, light brownish gray (2.5 YR 6/2)
50		Fine Silty Sand (SM), sand 80%, fines 20%, moist, loose
		Silty Clay (CL), 100% fines, moist, hard, low plasticity, reddish
55		Silty Sand (SP), sand 90%, fines 10% , reddish gray (5YR 5/2)
		Silty Sand (SP), sand 70%, fines 30%, reddish gray (5YR 5/2)
60		
		Silty Clay (CL), fines 100%, dense, moist, medium-high plasticity
65		Fine Silty Sand (SM), sand 80%, fines 20%, moist, loose
70		
75		Fine Silty Sand (SM), sand 60%, fines 40%, moist, loose
		Fine Silty Sand (SM), sand 80%, fines 20%, moist, loose
80		End of borehole at 78 ft bgs. Installed monitoring well per scope of work.



WELL CONSTUCTION DIAGRAM

- Above ground monument with well cap
- Borehole diameter 10 inches from 0 to 78 ft bgs.
- Grout 0 to 41 ft bgs.
- 0 to 53 ft bgs., 6 in dia., Sch. 80 PVC riser
- Bentonite 41 to 48 ft bgs.
- Filter Pack Sand 48 to 78 ft bgs.
- 53 to 78 ft bgs., 6 in dia., Sch. 80 PVC screen with 0.02 inch slot aperture
- End Cap

Notes: bgs. = below ground surface; dia. = diameter; ft = feet; Sch. = Schedule; YR = Yellow-Red

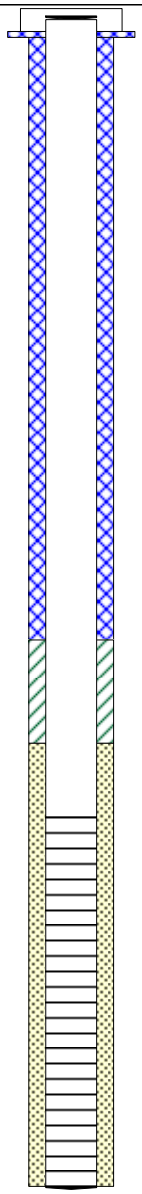
INTERMOUNTAIN POWER SERVICE CORP.

MONITORNG WELL ID: **BAC-38**
CLIENT: Intermountain Power Service Corporation
PROJECT: Monitoring Well Installation
SITE LOCATION: South Wells

Stantec

DRILLING CONTRACTOR:	Cascade Drilling	COORDINATE SYSTEM:	
DRILLING METHOD:	Sonic	EASTING:	NORTHING:
DRILLING EQUIPMENT:	Pro Sonic 600	ELEVATION:	BOREHOLE ANGLE: 90 degrees
SAMPLING METHOD:	4 inch sonic core barrel 0 to 78 ft bgs., 10 inch sonic core barrel 0 to 78 ft bgs.,	TOTAL DEPTH (ft.): 78	GROUNDWATER LEVEL (ft. btoc.):
		DATE STARTED: 5/31/2020	DATE FINISHED: 5/31/2020
		LOGGED BY: Joel Pierson	

DEPTH (feet)	LITHOLOGICAL GRAPHIC	LITHOLOGICAL DESCRIPTION
0		Silty Fine Sand (SM), sand 70%, fines 30%, dry, very loose, light yellowish brown (2.5Y 6/3)
10		Silty Sandy Clay (CL), fines 80%, sand 20%, slightly moist, low plasticity, dense, olive brown (2.5Y 7/3). Fracture-like facies with iron oxidation
20		Gravel Sand (SP), sand 80%, gravel 20%, very loose, dry, light yellowish brown (2.5Y 6/3)
25		
30		Silty Clay (CL), fines 100%, slightly moist, low plasticity, dense, red (2.5YR 5/8)
35		Silty Sand (SP), sand 90%, fines 10%, loose, moist, light olive brown (2.5Y 5/3)
40		
45		Silty Clay (CL), fines 100%, moist, medium-high plasticity, dense, red (2.5YR 5/4)
50		
55		Silty Sand (SM), sand 80%, fines 20%, loose, moist, light olive brown (2.5Y 5/3)
60		Silty Clay (CL), transitioning from fines 90%, sand 10% to fines 60%, sand 40%, moist, medium-high plasticity, dense, red (2.5YR 5/8)
65		Fine sand (SP), sand 100%, moist, very loose, dark grayish brown (2.5Y 3/2)
70		
75		
80		End of borehole at 78 ft bgs. Installed monitoring well per scope of work.



WELL CONSTUCTION DIAGRAM

- Above ground monument with well cap
- Borehole diameter 10 inches from 0 to 78 ft bgs.
- Grout 0 to 41 ft bgs.
- 0 to 53 ft bgs., 6 in dia., Sch. 80 PVC riser
- Bentonite 41 to 48 ft bgs.
- Filter Pack Sand 48 to 78 ft bgs.
- 53 to 78 ft bgs., 6 in dia., Sch. 80 PVC screen with 0.02 inch slot aperture
- End Cap

Notes: bgs. = below ground surface; dia. = diameter; ft = feet; Sch. = Schedule; YR = Yellow-Red

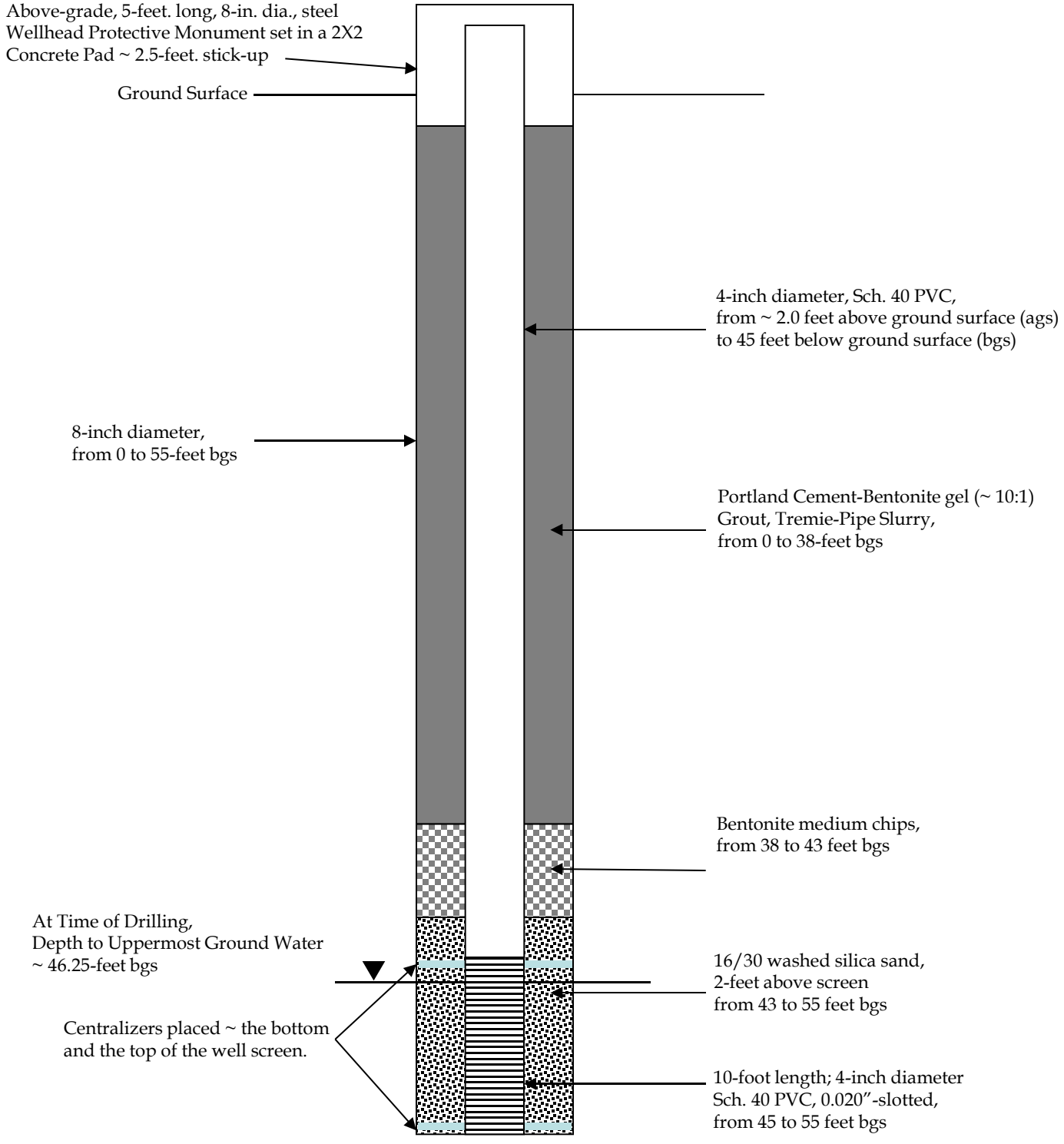
Boring Logs
ISPC
Delta, Utah

BA-U-1

Interval (feet)	Drilling Method	USCS	Sample Description
7/24/2015			
0-0.5	8" Sonic	TOPSOIL	Surface - Sand, Gravel, roots, coal ash.
0.5-1.5	8" Sonic	SM	Silty SAND:
1.5-2.5	8" Sonic	SC	Clayey SAND:
2.5-3.5	8" Sonic	ML	Sandy SILT:
3.5-5	8" Sonic	SM/ML	Silty SAND/Sandy Silt:
5-6	8" Sonic	SP	SAND:
6-9.5	8" Sonic		SAND:
9.5-11	8" Sonic		SAND:
11-11.5	8" Sonic	SM	Silty SAND:
11.5-12	8" Sonic		Silty SAND:
12-13	8" Sonic	SP/SM	SAND with silt:
13-17	8" Sonic	SP	SAND:
17-17.5	8" Sonic	SP/SM	SAND with silt:
17.5-20	8" Sonic	SP	SAND:
20-22.5	8" Sonic		SAND:
22.5-25	8" Sonic	SM	Silty SAND:
25-26	8" Sonic	SP	SAND:
26-27.5	8" Sonic	SP/SM	SAND with silt:
27.5-28.25	8" Sonic	SM	Silty SAND with clay:
28.25-29.25	8" Sonic	SP/SM	SAND with silt:
29.25-30	8" Sonic	CL	CLAY:
30-31.5	8" Sonic		Sandy CLAY:
31.5-33	8" Sonic	ML	Sandy SILT:
33-35	8" Sonic	SM	Silty SAND with clay:
35-36.25	8" Sonic	SP/SM	SAND with silt:
36.25-40	8" Sonic	CH	CLAY:
40-46.5	8" Sonic		CLAY:
46.5-47.5	8" Sonic	SP/SM	SAND with silt:
47.5-50	8" Sonic	SM	Silty SAND with clay:
50-51	8" Sonic	SC	Clayey SAND:
51-51.75	8" Sonic	SW	SAND:
51.75-52.5	8" Sonic	SP	SAND:
52.5-53	8" Sonic	CH	Sandy CLAY:
53-54	8" Sonic		Sandy CLAY:
54-55	8" Sonic		CLAY:

TD = 55'; PVC 4-inch screen from 45 to 55; PVC 4-inch riser from -2.5 to 45
Drilling Method: Guspech GS24-300RS, 8" Rotosonic

Drilling Company - Cascade Drilling
Driller - Daniel Dodge
Geologist - Michael Sauerwein



Total Depth (TD) = 55 feet bgs

Stantec

IPSC – BOTTOM ASH BASIN AREA
DELTA, UTAH

Well BA-U-1 Schematic

Design by	Drawn by MS	Scale	Date Drawn 7/24/15
			Last Revision Date

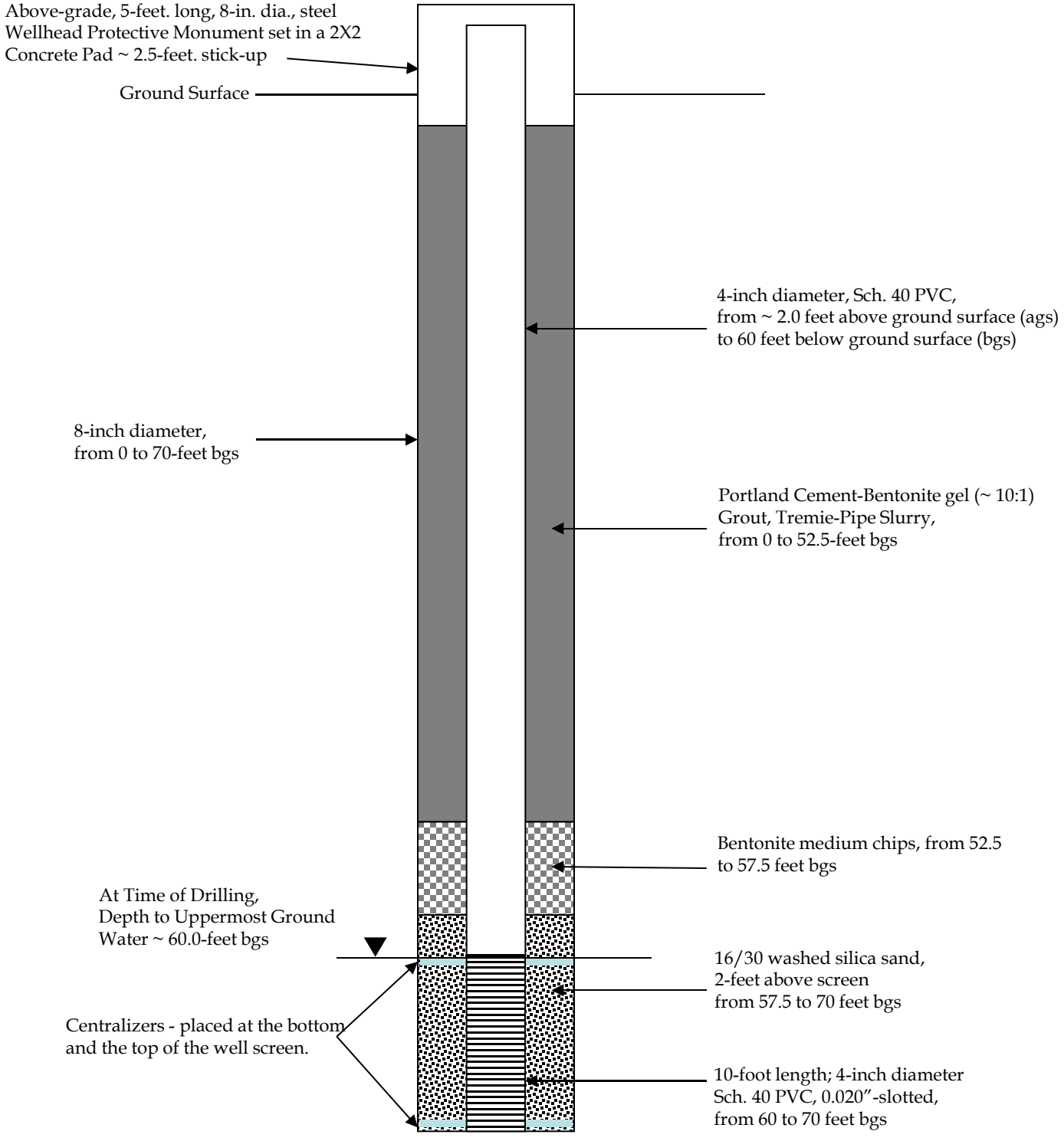
Boring Logs
ISPC
Delta, Utah

BA-U-2

Interval (feet)	Drilling Method	USCS	Sample Description
7/25/2015			
0-0.5	8" Sonic	TOPSOIL	Surface - Sand, Gravel, roots, coal ash.
0.5-1.5	8" Sonic	ML	Sandy SILT:
1.5-2.5	8" Sonic	SP/SM	SAND with silt:
2.5-4	8" Sonic		SAND with silt:
4-5	8" Sonic	ML	SILT with sand and clay:
5-6	8" Sonic	SP/SM	SAND with silt:
6-7	8" Sonic	SP	SAND:
7-9	8" Sonic	SW	Gravelly SAND:
9-9.75	8" Sonic		Gravelly SAND:
9.75-10.25	8" Sonic	SP	Gravelly SAND:
10.25-11	8" Sonic	SP/SM	SAND with silt:
11-12.5	8" Sonic	CL	CLAY:
12.5-13	8" Sonic	SP	SAND:
13-15.5	8" Sonic		SAND:
15.5-18	8" Sonic		SAND:
18-22.5	8" Sonic		SAND:
22.5-23	8" Sonic		SAND:
23-23.5	8" Sonic	SM	Silty SAND:
23.5-25	8" Sonic	SP/SM	SAND with silt:
25-30	8" Sonic	SM	Silty SAND:
30-32.5	8" Sonic	SC	Clayey SAND:
32.5-35	8" Sonic	SM	Silty SAND with clay:
35-37.5	8" Sonic		Silty SAND:
37.5-40	8" Sonic	CL	Sandy CLAY:
40-42	8" Sonic	SC	Clayey SAND:
42-45	8" Sonic	CH	CLAY:
45-47.5	8" Sonic		Sandy CLAY:
47.5-51.75	8" Sonic		CLAY:
51.75-53	8" Sonic	SM	Silty SAND:
53-54	8" Sonic		Silty SAND:
54-55	8" Sonic	SC/SM	Clayey SAND with silt:
55-56.5	8" Sonic	CH	CLAY:
56.5-57.5	8" Sonic		CLAY:
57.5-60	8" Sonic	SC	Clayey SAND:
60-60.75	8" Sonic	SM	Silty SAND with clay:
60.75-61.5	8" Sonic	SC	Clayey SAND:
61.5-62.5	8" Sonic	SP	SAND:
62.5-63.5	8" Sonic		SAND:
63.5-65	8" Sonic	SW	SAND:
65-67.5	8" Sonic	SP	SAND:
67.5-70	8" Sonic		SAND:

TD = 70'; PVC 4-inch screen from 60 to 70; PVC 4-inch riser from -2.5 to 60
Drilling Method: Guspech GS24-300RS, 8" Rotosonic

Drilling Company - Cascade Drilling
Driller - Daniel Dodge
Geologist - Michael Sauerwein



Total Depth (TD) = 70 feet bgs

Stantec

IPSC – BOTTOM ASH BASIN AREA
DELTA, UTAH

Well BA-U-2 Schematic

Design by	Drawn by	Scale	Date Drawn	Last Revision Date
	MS		7/25/15	

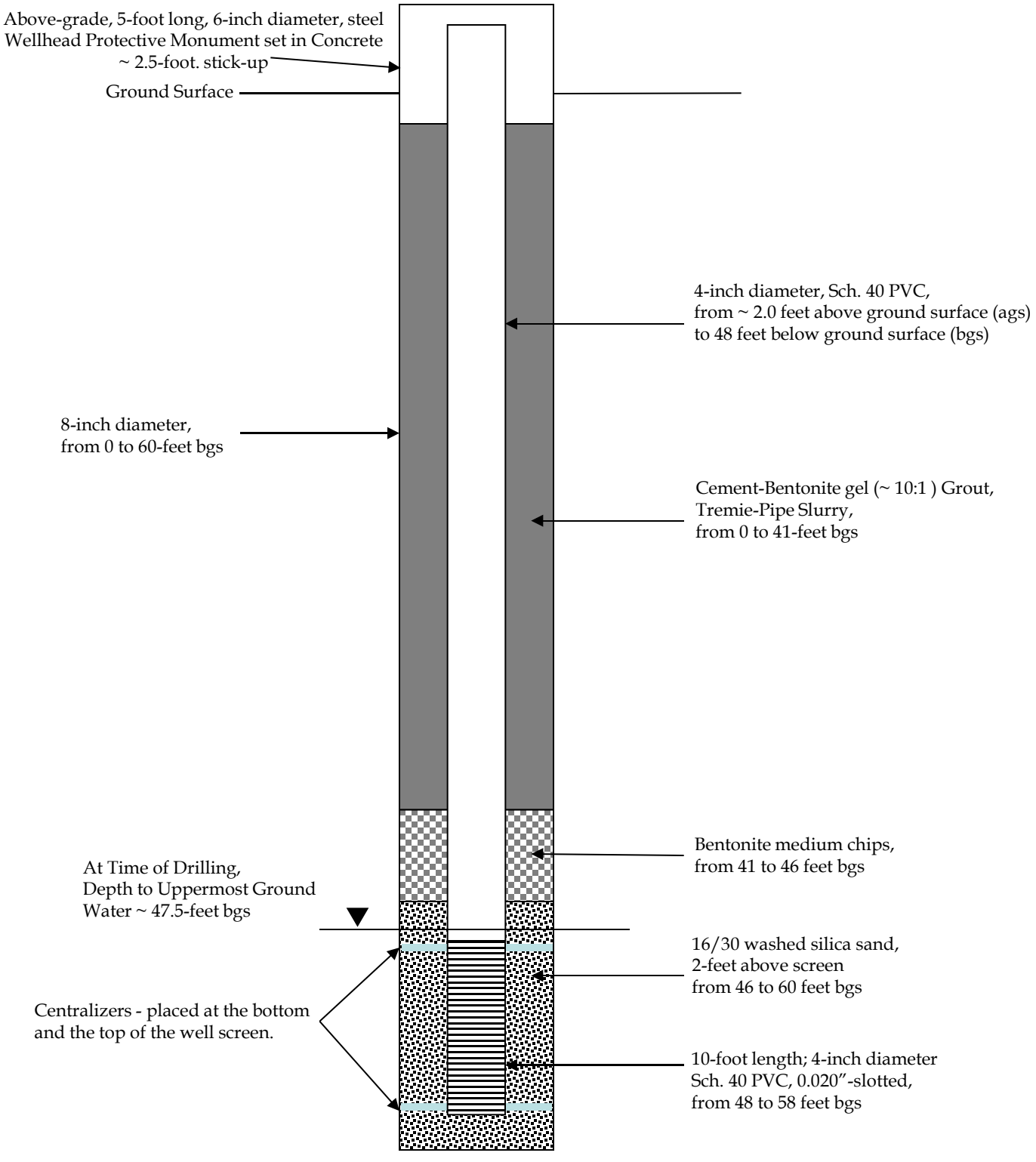
Boring Logs
IPSC
Delta, Utah

WWC-1

Interval (feet)	Drilling Method	USCS	Sample Description
7/26/2015			
0-0.5	8" Sonic	TOPSOIL	Surface - Sand, Gravel, roots, coal ash.
0.5-2	8" Sonic	ML	Sandy SILT:
2-2.5	8" Sonic	SP	SAND:
2.5-5	8" Sonic		SAND:
5-6.75	8" Sonic	SM	Silty SAND:
6.75-7.5	8" Sonic	ML	Sandy SILT:
7.5-10	8" Sonic		Sandy SILT:
10-12	8" Sonic		Sandy SILT:
12-12.5	8" Sonic	SP/SM	SAND with silt:
12.5-13	8" Sonic	SM	Silty SAND:
13-15	8" Sonic	CL	Silty CLAY:
15-17.5	8" Sonic		Silty CLAY:
17.5-18.5	8" Sonic		Silty CLAY:
18.5-19	8" Sonic		Sandy CLAY:
19-20	8" Sonic		Silty CLAY:
20-22	8" Sonic	CH	CLAY:
22-24.5	8" Sonic		Sandy CLAY:
24.5-25.5	8" Sonic		Sandy CLAY:
25.5-27	8" Sonic		Sandy CLAY:
27-31	8" Sonic		CLAY:
31-31.5	8" Sonic		CLAY:
31.5-33	8" Sonic		CLAY:
33-34.5	8" Sonic		Sandy CLAY:
34.5-35	8" Sonic		Sandy CLAY:
35-37.5	8" Sonic	SM	Silty SAND:
37.5-40	8" Sonic		Silty SAND:
40-41.5	8" Sonic	SP	SAND:
41.5-42.5	8" Sonic		SAND:
42.5-44	8" Sonic		SAND:
44-45	8" Sonic		SAND:
45-46.5	8" Sonic	CH	CLAY:
46.5-47.5	8" Sonic		Sandy CLAY:
47.5-50.5	8" Sonic	SC/SM	SAND with silt and clay:
50.5-52.5	8" Sonic	SW	SAND:
52.5-53.5	8" Sonic		SAND:
53.5-55	8" Sonic	SM	Silty SAND:
55-57	8" Sonic		Silty SAND:
57-57.5	8" Sonic	CH	CLAY:
57.5-60			CLAY:

TD = 60'; PVC 4-inch screen from 48 to 58; PVC 4-inch riser from -2.5 to 48
Drilling Method: Guspech GS24-300RS, 8" Rotosonic

Drilling Company - Cascade Drilling
Driller - Daniel Dodge
Geologist - Michael Sauerwein



Total Depth (TD) = 60 feet bgs

Stantec

IPSC – WASTEWATER SURFACE IMPOUNDMENT
DELTA, UTAH

Well WWC-1 Schematic

Design by	Drawn by	Scale	Date Drawn	Last Revision Date
	MS		7/26/15	

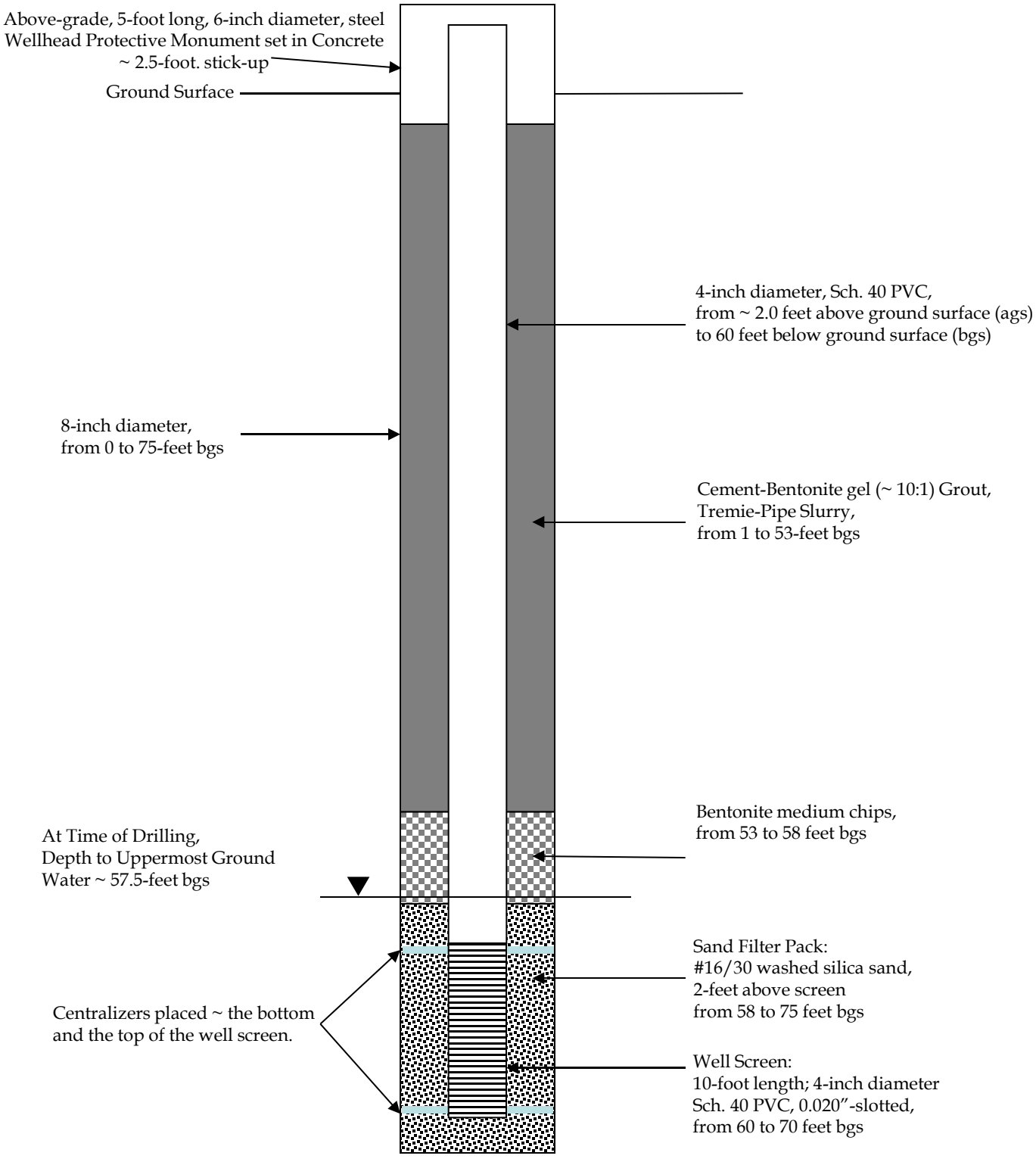
Boring Logs
IPSC
Delta, Utah

WWC-2

Interval (feet)	Driling Method	USCS	Sample Description
7/27/2015			
0-0.5	8" Sonic	TOPSOIL	Surface - Sand, Gravel, roots, coal ash.
0.5-2.5	8" Sonic	SM	Silty SAND:
2.5-5	8" Sonic	SP	SAND:
5-7	8" Sonic		SAND:
7-9.5	8" Sonic	SW	Gravelly SAND:
9.5-10	8" Sonic	SW/SP	SAND:
10-12	8" Sonic	SP	SAND:
12-12.5	8" Sonic	SP/SW	Gravelly SAND:
12.5-14.5	8" Sonic	SW	Gravelly SAND:
14.5-15	8" Sonic	SP	SAND with gravel:
15-16	8" Sonic		SAND:
16-17.5	8" Sonic	CL	Sandy CLAY:
17.5-19	8" Sonic	SC	Clayey SAND:
19-20	8" Sonic		Clayey SAND:
20-21	8" Sonic		Clayey SAND:
21-22	8" Sonic	CH	CLAY:
22-24	8" Sonic		CLAY:
24-25	8" Sonic	SM	Silty SAND with clay:
25-26.5	8" Sonic	SM/SC	Silty SAND and clay:
26.5-27.5	8" Sonic	SC	Clayey SAND with silt:
27.5-31.5	8" Sonic	CH	CLAY:
31.5-34	8" Sonic		Silty CLAY:
34-35.5	8" Sonic	SP	SAND:
35.5-37	8" Sonic	ML	Sandy SILT with clay:
37-38.5	8" Sonic	CL	Silty CLAY:
38.5-40	8" Sonic	SM	Silty SAND:
40-42	8" Sonic	CH	CLAY:
42-42.5	8" Sonic		Silty CLAY:
42.5-45	8" Sonic	SC	Clayey SAND:
45-46.25	8" Sonic	CH	CLAY:
46.25-46.75	8" Sonic	SW/SM	SAND with silt:
46.75-47	8" Sonic	ML	Sandy SILT:
47-47.5	8" Sonic	SM	Silty SAND:
47.5-50	8" Sonic	CH	CLAY:
50-51.5	8" Sonic	SM	Silty SAND:
51.5-52	8" Sonic	CH	Sandy CLAY:
52-52.5	8" Sonic	SM	CLAY:
52.5-53.5	8" Sonic	CH	Sandy CLAY:
53.5-55	8" Sonic	SM	Silty SAND:
55-56.25	8" Sonic	ML	Sandy SILT:
56.25-57.5	8" Sonic		SILT:
57.5-60	8" Sonic	SP/SM	SAND with silt:
60-61.5	8" Sonic	SM	Silty SAND:
61.5-62.5	8" Sonic	CH	CLAY:
62.5-63.75	8" Sonic	SP/SM	SAND with silt:
63.75-65	8" Sonic	SW	SAND:
65-67.5	8" Sonic		SAND:
67.5-70	8" Sonic		Gravelly SAND:
70-70.5	8" Sonic	SC/SM	Silty SAND and clay:
70.5-72.5	8" Sonic	CH	CLAY:
72.5-75	8" Sonic		CLAY:

TD = 75'; PVC 4-inch screen from 60 to 70; PVC 4-inch riser from -2.5 to 60
Drilling Method: Guspech GS24-300RS, 8" Rotosonic

Drilling Company - Cascade Drilling
Driller - Daniel Dodge
Geologist - Michael Sauerwein



Total Depth (TD) = 75 feet bgs

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IPSC – WASTEWATER SURFACE IMPOUNDMENT
DELTA, UTAH

Well WWC-2 Schematic

Design by	Drawn by	Scale	Date Drawn	Last Revision Date
	MS		7/27/15	

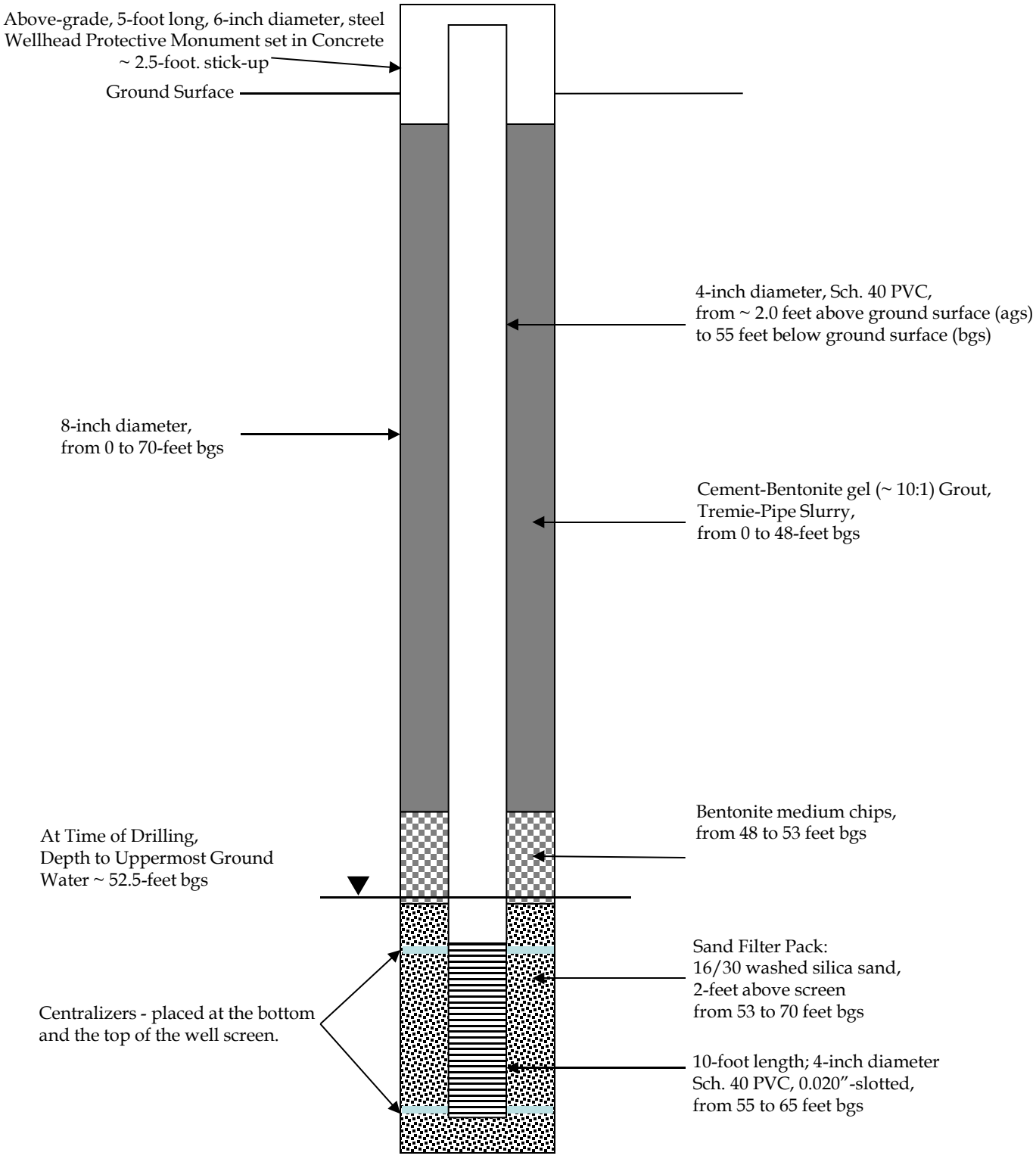
Boring Logs
ISPC
Delta, Utah

WWC-3

Interval (feet)	Drilling Method	USCS	Sample Description
7/30/2015			
0-0.5	8" Sonic	TOPSOIL	Surface - Sand, Gravel, roots, coal ash.
0.5-1	8" Sonic	SP	Gravelly SAND:
1-2.5	8" Sonic	SM	Silty SAND:
2.5-3.5	8" Sonic		Silty SAND:
3.5-5	8" Sonic	SP/SM	SAND with silt:
5-6.5	8" Sonic	ML	Sandy SILT:
6.5-7.5	8" Sonic	CL	Sandy CLAY:
7.5-8	8" Sonic	SM	Silty SAND:
8-10	8" Sonic	SC	Clayey SAND:
10-11	8" Sonic	SM	Silty SAND:
11-12.5	8" Sonic		Silty SAND with clay:
12.5-13.5	8" Sonic		Silty SAND:
13.5-14	8" Sonic	SC	Clayey SAND:
14-15	8" Sonic	SM	Silty SAND:
15-15.5	8" Sonic	CH	CLAY:
15.5-16	8" Sonic		CLAY:
16-16.5	8" Sonic		Sandy CLAY:
16.5-17.5	8" Sonic		Sandy CLAY:
17.5-20	8" Sonic		CLAY:
20-21	8" Sonic		CLAY:
21-22	8" Sonic		CLAY:
22-24	8" Sonic		CLAY:
24-25	8" Sonic	SM	Silty SAND:
25-26.25	8" Sonic	SP/SM	SAND with silt:
26.25-27	8" Sonic	SP	SAND:
27-29	8" Sonic	SM	Silty SAND:
29-30	8" Sonic	CH	CLAY:
30-31	8" Sonic		CLAY:
31-32.5	8" Sonic	SP	SAND:
32.5-34	8" Sonic		SAND:
34-36	8" Sonic	CH	CLAY:
36-37	8" Sonic		CLAY:
37-39.5	8" Sonic	SP/SM	SAND with silt:
39.5-40.5	8" Sonic	SP	SAND:
40.5-41.5	8" Sonic		SAND:
41.5-43	8" Sonic	CH	CLAY:
43-44	8" Sonic	SP/SM	SAND with silt:
44-45	8" Sonic	SM	Silty SAND:
45-47.5	8" Sonic	SP	SAND:
47.5-50	8" Sonic	CH	CLAY:
50-52.5	8" Sonic		CLAY:
52.5-55	8" Sonic	SP	SAND:
55-61	8" Sonic		SAND:
61-62.5	8" Sonic	SW	SAND:
62.5-65	8" Sonic		SAND:
65-67.5	8" Sonic	SP	SAND:
67.5-69.5	8" Sonic	SW	SAND:
69.5-70	8" Sonic	CH	CLAY:

TD = 70'; PVC 4-inch screen from 55 to 65; PVC 4-inch riser from -2.5 to 55
Drilling Method: Guspech GS24-300RS, 8" Rotosonic

Drilling Company - Cascade Drilling
Driller - Daniel Dodge
Geologist - Michael Sauerwein



Total Depth (TD) = 70 feet bgs

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IPSC – WASTEWATER SURFACE IMPOUNDMENT
DELTA, UTAH UTAH

Well WWC-3 Schematic

Design by	Drawn by MS	Scale	Date Drawn 7/30/15
			Last Revision Date

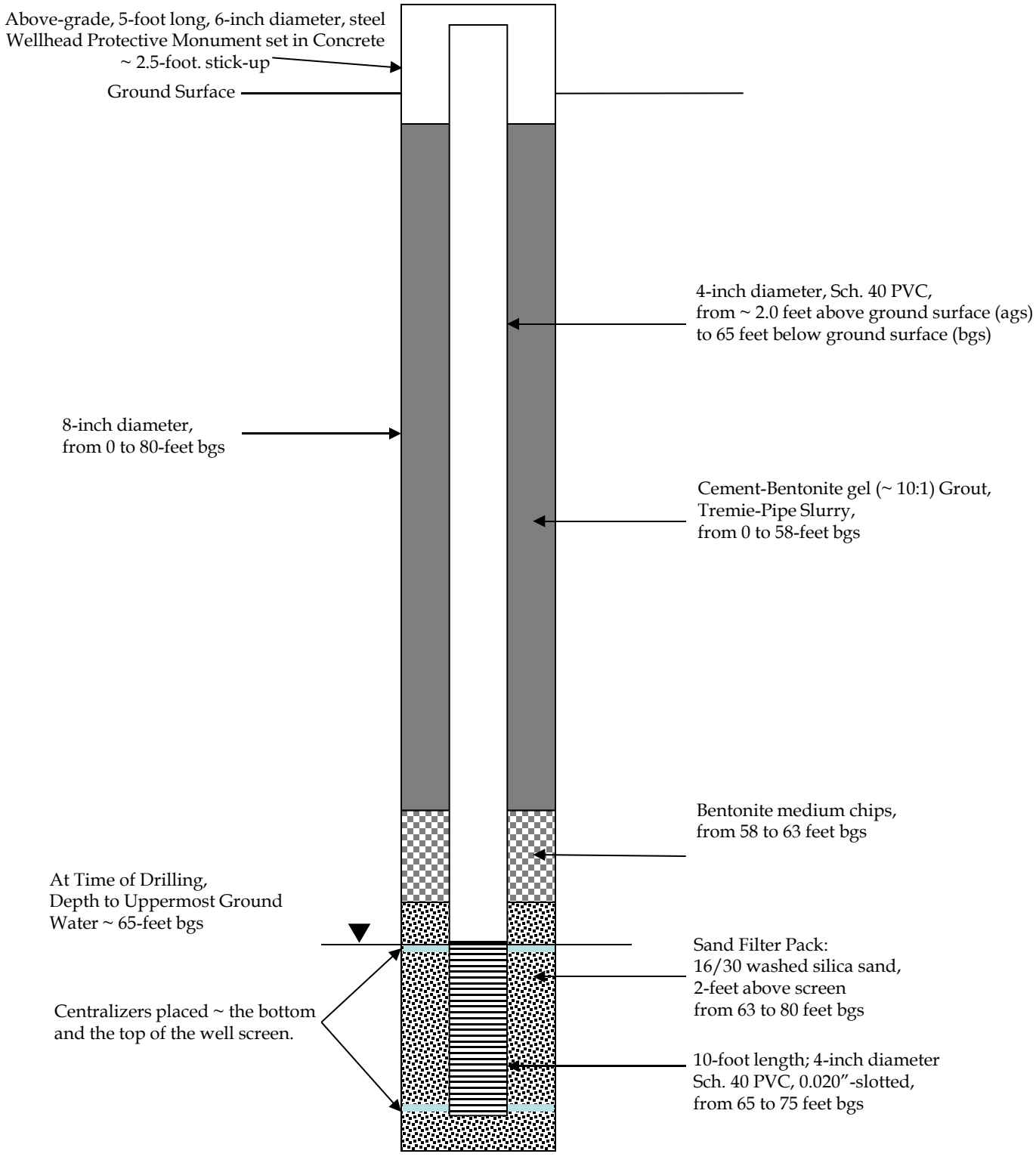
Boring Logs
ISPC
Delta, Utah

WWC-4

Interval (feet)	Drilling Method	USCS	Sample Description
7/29/2015			
0-0.5	8" Sonic	TOPSOIL	Surface - Sand, Gravel, roots, coal ash.
0.5-2.5	8" Sonic	SP/SM	SAND with silt:
2.5-5	8" Sonic		SAND with silt:
5-6.25	8" Sonic	ML	Sandy SILT:
6.25-7.25	8" Sonic	CL	CLAY:
7.25-8	8" Sonic	SC	Clayey SAND:
8-9	8" Sonic	SP/SC	SAND with clay:
9-10	8" Sonic	SP	SAND:
10-11	8" Sonic	ML	SILT:
11-12.5	8" Sonic	ML/CL	Clayey SILT:
12.5-14	8" Sonic	CL	CLAY:
14-15	8" Sonic		Sandy CLAY:
15-16	8" Sonic	SC	Clayey SAND:
16-18	8" Sonic		Clayey SAND:
18-19.5	8" Sonic	SM	Silty SAND:
19.5-20	8" Sonic	CH	CLAY:
20-21.25	8" Sonic		Sandy CLAY:
21.25-22.5	8" Sonic	SM	Silty SAND:
22.5-23.75	8" Sonic	CH	CLAY:
23.75-25	8" Sonic	SM	Silty SAND:
25-25.75	8" Sonic	SC	Clayey SAND:
25.75-27.5	8" Sonic	CL	Sandy CLAY:
27.5-29	8" Sonic	CH	CLAY:
29-30.5	8" Sonic		CLAY:
30.5-31.5	8" Sonic	SM	Silty SAND:
31.5-32.25	8" Sonic	CL	Sandy CLAY:
32.25-32.5	8" Sonic		Sandy CLAY:
32.5-33	8" Sonic	CH	CLAY:
33-36	8" Sonic	SP/SM	SAND with silt:
36-37	8" Sonic	SM	Silty SAND:
37-40	8" Sonic	SP	SAND:
40-42.5	8" Sonic		SAND:
42.5-45	8" Sonic		SAND:
45-46	8" Sonic	SP/SW	SAND:
46-46.5	8" Sonic	CH	CLAY:
45.5-47.5	8" Sonic		Sandy CLAY:
47.5-48.5	8" Sonic		CLAY:
48.5-50	8" Sonic		CLAY:
50-50.5	8" Sonic		CLAY:
50.5-52.5	8" Sonic	SM	Silty SAND:
52.5-54	8" Sonic	CH	CLAY:
54-55	8" Sonic	SP	SAND:
55-57	8" Sonic	CH	Sandy CLAY:
57-57.5	8" Sonic	SP	SAND:
57.5-60	8" Sonic	SM	Silty SAND:
60-62	8" Sonic		Silty SAND:
62-62.5	8" Sonic	SC	Clayey SAND:
62.5-63	8" Sonic	CH	Sandy CLAY:
63-65	8" Sonic	SM	Silty SAND:
65-67.5	8" Sonic	SW	SAND:
67.5-69.5	8" Sonic	SP	SAND:
69.5-70	8" Sonic	SW	SAND:
70-72	8" Sonic		SAND:
72-72.5	8" Sonic	SP/SM	SAND with silt:
72.5-75	8" Sonic	SM	Silty SAND:
75-80	8" Sonic	CH	CLAY:

TD = 80'; PVC 4-inch screen from 65 to 75; PVC 4-inch riser from -2.5 to 65
Drilling Method: Guspech GS24-300RS, 8" Rotosonic

Drilling Company - Cascade Drilling
Driller - Daniel Dodge
Geologist - Michael Sauerwein



Total Depth (TD) = 80 feet bgs

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IPSC – WASTEWATER SURFACE IMPOUNDMENT
DELTA, UTAH

Well WWC-4 Schematic

Design by	Drawn by MS	Scale	Date Drawn 7/29/15
			Last Revision Date

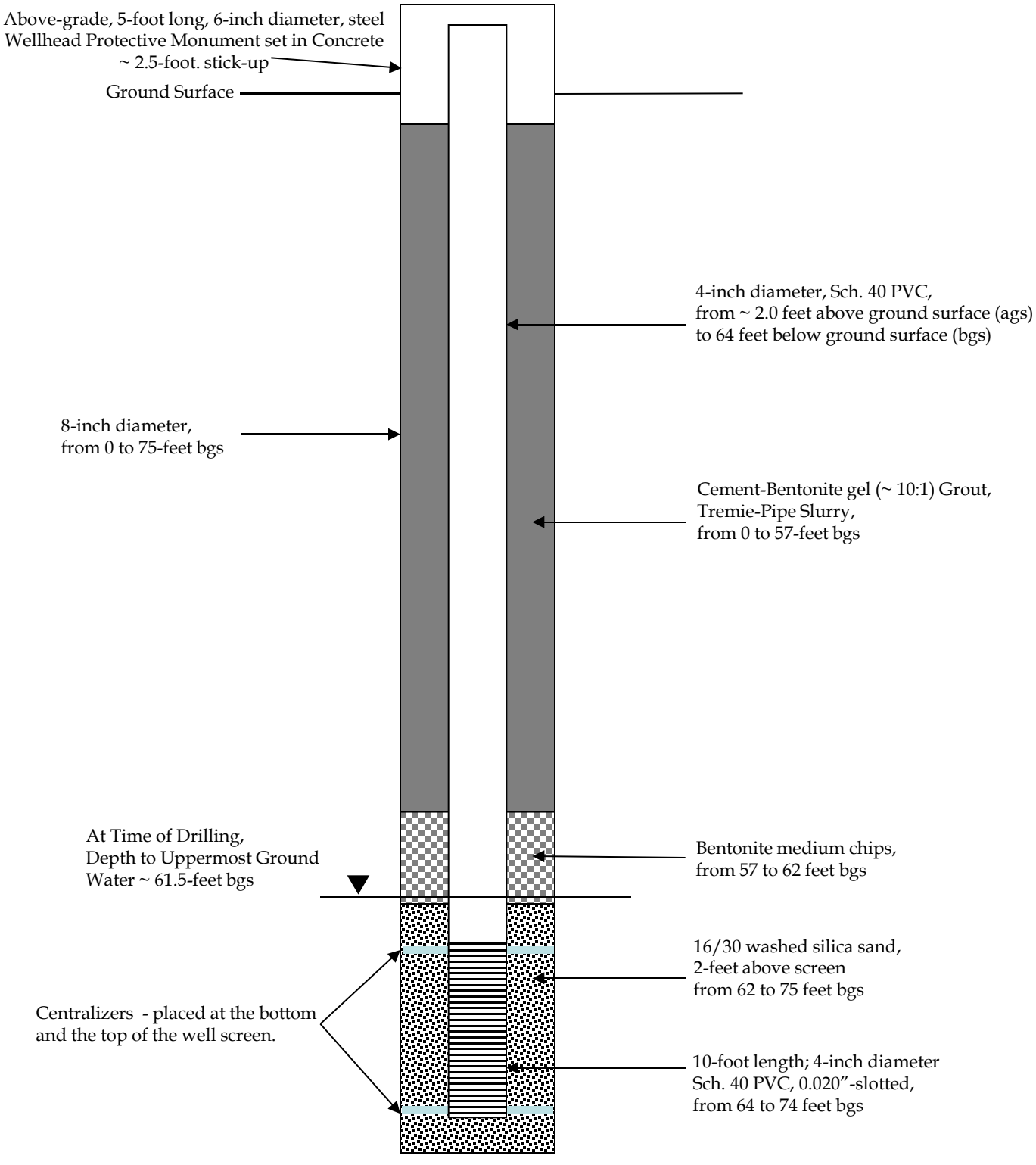
Boring Logs
ISPC
Delta, Utah

WWC-5

Interval (feet)	Drilling Method	USCS	Sample Description
7/28/2015			
0-0.5	8" Sonic	TOPSOIL	Surface - Sand, Gravel, roots, coal ash.
0.5-2	8" Sonic	ML	Sandy SILT:
2-2.5	8" Sonic	SP/SM	SAND with silt:
2.5-4.25	8" Sonic	SM	Silty SAND:
4.25-5	8" Sonic	SP	SAND:
5-7.5	8" Sonic	ML	Clayey SILT:
7.5-9	8" Sonic	CL	Silty CLAY:
9-10	8" Sonic		Sandy CLAY:
10-10.5	8" Sonic	SC	Clayey SAND:
10.5-11.25	8" Sonic	CL	CLAY:
11.25-12.5	8" Sonic	ML	Clayey SILT:
12.5-13.25	8" Sonic	SM	Silty SAND:
13.25-13.75	8" Sonic	SC	Clayey SAND:
13.75-15	8" Sonic	CL	CLAY:
15-16	8" Sonic		CLAY:
16-17.5	8" Sonic	CH	CLAY:
17.5-19	8" Sonic	SC	Clayey SAND:
19-20.5	8" Sonic	CH	CLAY:
20.5-21.25	8" Sonic		Sandy CLAY:
21.25-22	8" Sonic		CLAY:
22-22.5	8" Sonic	SC	Clayey SAND:
22.5-24	8" Sonic	SM	Silty SAND:
24-25	8" Sonic	CH	CLAY:
25-26	8" Sonic	SM/CH	Silty SAND / CLAY:
26-27.5	8" Sonic	CH	CLAY:
27.5-28	8" Sonic		Sandy CLAY:
28-28.25	8" Sonic	SM	Silty SAND:
28.25-30	8" Sonic	CH	CLAY:
30-32.5	8" Sonic	SP	SAND:
32.5-34	8" Sonic		SAND:
34-37.5	8" Sonic		SAND:
37.5-40	8" Sonic	SP/SM	SAND with silt:
40-42.5	8" Sonic	CH	CLAY:
42.5-42.75	8" Sonic	SM	Silty SAND:
42.75-44	8" Sonic	CH	Sandy CLAY:
44-44.5	8" Sonic	SM	Silty SAND:
44.5-45	8" Sonic		Silty SAND:
45-45.5	8" Sonic		Silty SAND:
45.5-46.75	8" Sonic		Silty SAND:
46.75-47.5	8" Sonic	CH	CLAY:
47.5-50	8" Sonic		CLAY:
50-50.5	8" Sonic		Sandy CLAY:
50.5-51.5	8" Sonic		CLAY:
51.5-52	8" Sonic	SM	Silty SAND:
52-53.25	8" Sonic	CH	CLAY:
53.25-53.5	8" Sonic		CLAY:
53.5-54	8" Sonic	SC	Clayey SAND:
54-55	8" Sonic	SM/SC	Silty SAND and clay:
55-57.5	8" Sonic	SP	SAND:
57.5-60	8" Sonic		SAND:
60-60.75	8" Sonic		SAND:
60.75-61.5	8" Sonic	CH	CLAY:
61.5-62.5	8" Sonic	SP/SM	SAND with silt:
62.5-64	8" Sonic		SAND with silt:
64-65	8" Sonic	SW	SAND:
65-67.5	8" Sonic		SAND with gravel:
67.5-70	8" Sonic		Gravelly SAND:
70-72.5	8" Sonic		SAND:
72.5-75	8" Sonic		SAND:

TD = 75'; PVC 4-inch screen from 64 to 74; PVC 4-inch riser from -2.5 to 64
Drilling Method: Guspech GS24-300RS, 8" Rotosonic

Drilling Company - Cascade Drilling
Driller - Daniel Dodge
Geologist - Michael Sauerwein



Total Depth (TD) = 75 feet bgs

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IPSC – WASTEWATER SURFACE IMPOUNDMENT
DELTA, UTAH

Well WWC-5 Schematic

Design by	Drawn by	Scale	Date Drawn	Last Revision Date
	MS		7/28/15	

Boring Logs

ISPC

Delta, Utah

WWC-6

Interval (feet)	Drilling Method	USCS	Sample Description
03/23/2018 - 03/24/2018			
0-0.5	8" Sonic	SM	Silty sand
0.7-7	8" Sonic	SP	Sand, poorly graded, dry
7-12.5	8" Sonic	CH	Silty clay
12.5-15.5	8" Sonic	SM	Sand, some silt
15.5-19.5	8" Sonic	SP	Sand, poorly graded
19.5-21.5	8" Sonic	SW/GW	Sand and gravel
21.5-27	8" Sonic	SP	Sand, poorly graded, running sands @ ~26
27-29.5	8" Sonic	SP	Sand, poorly graded, running sands
29.5-30	8" Sonic	SW	Sand with gravel
30.37	8" Sonic	CH	Clay, stiff
37-41	8" Sonic	CH	Clay, trace silt, moist, stiff
41-47	8" Sonic	CH	Clay, stiff, moist
47-48	8" Sonic	SP	Sand
48-57	8" Sonic	SW	Sand, silt and gravel
57-59	8" Sonic	SP	Sand
59-60.5	8" Sonic	CH	Clay wet
60.5-64.5	8" Sonic	MH	Silt, trace clay
64.5-67	8" Sonic	CH	Clay wet
67-72	8" Sonic	CH	Clay wet
72-77	8" Sonic	SP	Sand, saturated
77-87	8" Sonic	CH	Clay

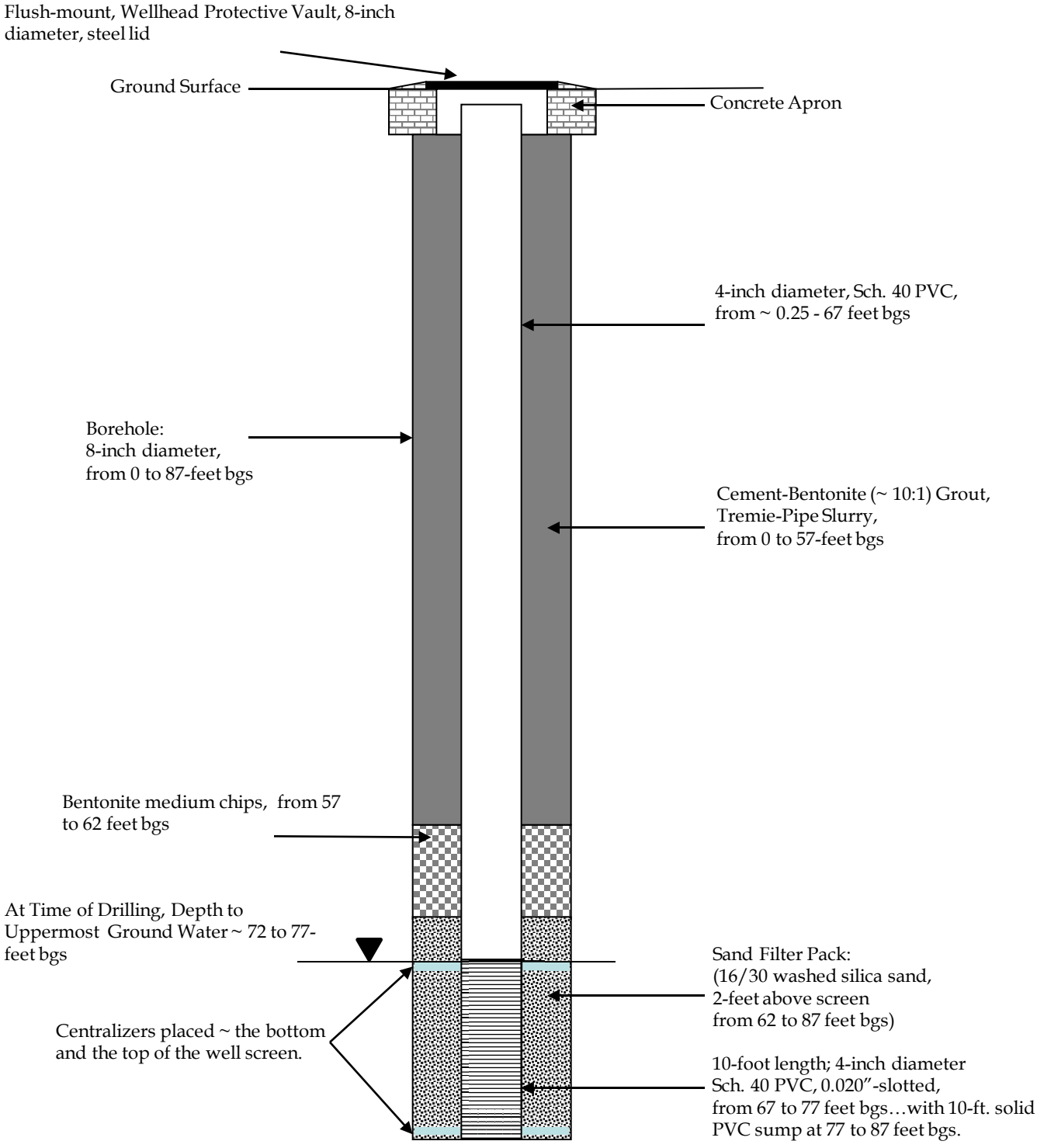
TD = 87'; PVC sump 87-77; 4" screen 77-67; sand 87-62 centralizers 67.5 and 76.5

Drilling Method: Sonic

Drilling Company - Cascade Drilling

Driller - David Donnely

Geologist - Tom Fendler



Total Depth (TD) = 87 feet bgs

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IPSC – WASTEWATER SURFACE IMPOUNDMENT
Delta, Utah

Well WWC-6 Schematic

Design by	Drawn by JR	Scale	Date Drawn 10/24/18
			Last Revision Date

Boring Logs

ISPC

Delta, Utah

WWC-7

Interval (feet)	Drilling Method	USCS	Sample Description
03/20/2018 - 03/23/2018			
0-1.5	8" Sonic	SM	Silty sand, dry
1.5-8.5	8" Sonic	SP	Sand, poorly graded, saturated at 7.5
8.5-9	8" Sonic	CH	Sandy clay
9-14	8" Sonic	SC	Clay with trace sand
14-24	8" Sonic	SP	Sand, poorly graded, saturated with heaving sands at 17 '
24-25	8" Sonic	SW/GW	Gravel/sand and gravel
25-27	8" Sonic	CH	Clay, moist
27-34.5	8" Sonic	SP	Sandy, wet
34.5-35.5	8" Sonic	SW/GW	Sand, some gravel
35.5-37	8" Sonic	CH	Clay, moist, stiff
37-47	8" Sonic	CH	Clay, moist, stiff
47-49.5	8" Sonic	CH	Clay, moist, stiff
49.5-50.5	8" Sonic	SP	Sand, poorly softed, moist
50.5-57	8" Sonic	CH	Clay, moist, stiff
57-67	8" Sonic	CH	Clay, moist, stiff
67-72	8" Sonic	CH	Clay, moist, stiff
72-77	8" Sonic	SP	Sand, poorly graded, saturated @76.5
77-87	8" Sonic	SP	Sand, poorly graded, saturated

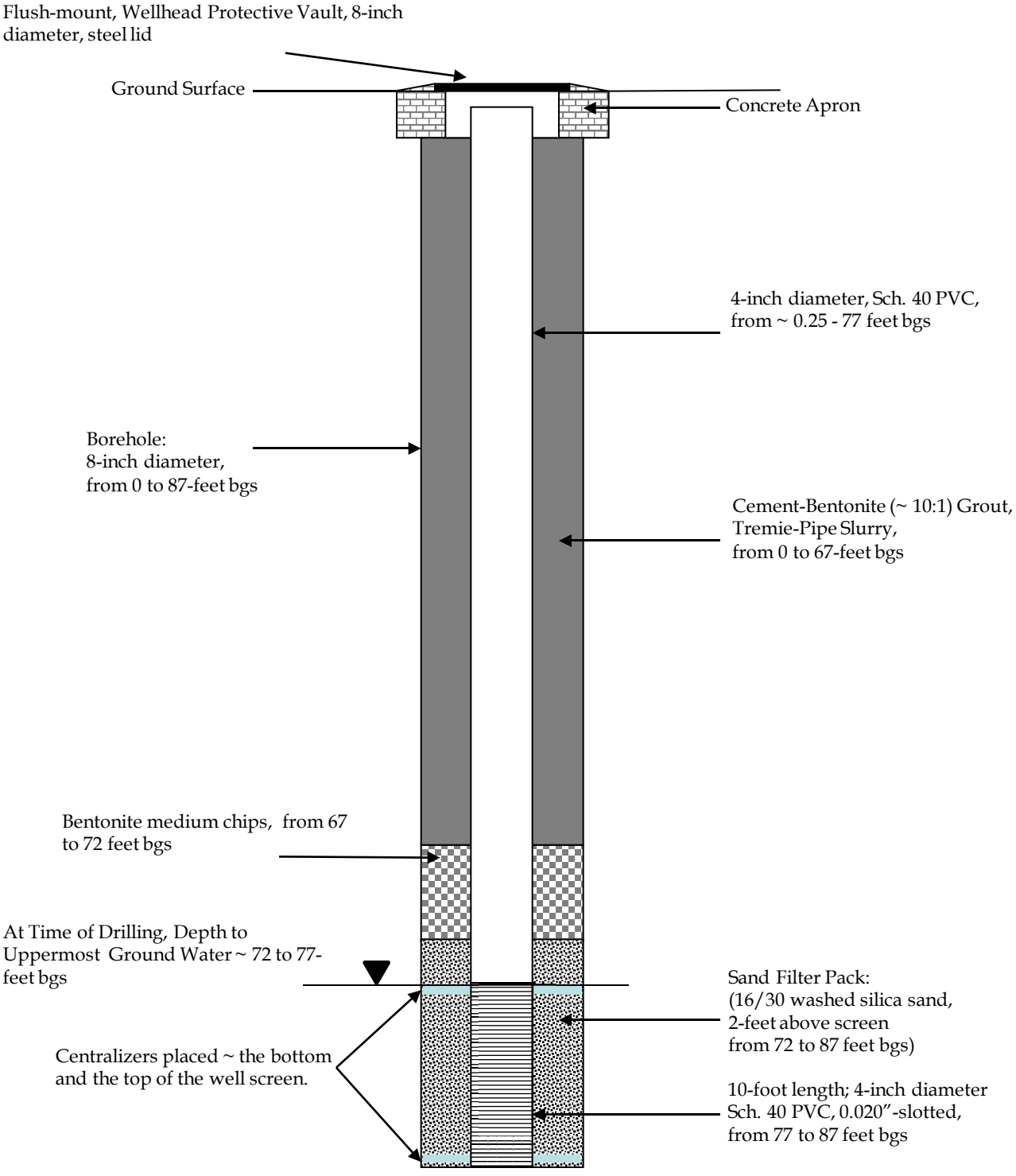
TD = 87'; PVC 4-inch screen from 77 to 87; sand pack 72-87; bentonite pellets 67-72; grout 67-grade

Drilling Method: Sonic

Drilling Company - Cascade Drilling

Driller - David Donnely

Geologist - Tom Fendler



Total Depth (TD) = 87 feet bgs

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IPSC – WASTEWATER SURFACE IMPOUNDMENT
DELTA, UTAH

Well WWC-7 Schematic

Design by	Drawn by JR	Scale	Date Drawn 10/24/18
			Last Revision Date

Project Name: Intermountain Power Service Corporation
Boring Monitor Well: WWC-8

Project No.: 203709098
Completion Date: 2019-04-25

Drilling Firm: Cascade
Boring Method: Sonic
Boring Diameter: 10 inches

Driller: Ryan Miller
Logged by: Rich Pratt
Depth to Water at Drilling: 77 feet
Depth to Water at Drilling (static at 24 hours): 27 feet

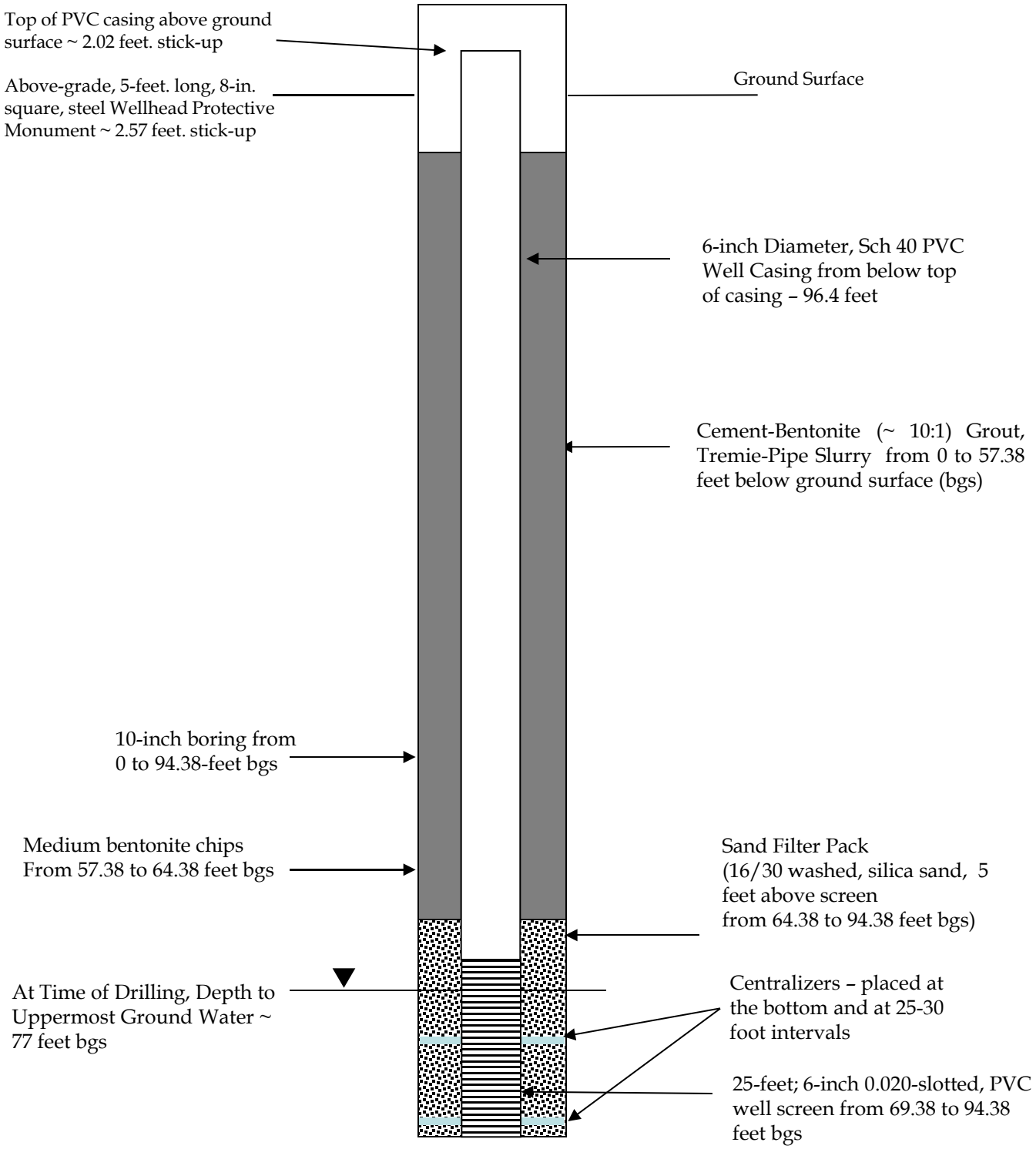
WWC-8

Interval (feet)	Description
0 - 3	Light brown sand, moist
3 - 7	Light brown sand with silt, dry
7 - 9	Medium brown clay with sand, moist
9 - 13	Medium brown clay, moist
13 - 15	Light brown clay, moist
15 - 17	Light brown clay, dry
17 - 26	Light brown clay, moist
26 - 35	Light brown clay with sand, moist
35 - 37	Light brown clay, moist
37 - 41	Medium brown medium grained sand, moist
41 - 43	Medium brown medium grained sand, moist
43 - 55	Medium brown medium grained sand, moist
55 - 59	Light brown clay, moist
59 - 63	Light brown clay with sand, moist
63 - 66	Light brown clay, moist
66 - 67	Light brown clay with sand, moist
67 - 68	Light brown sand, moist
68 - 77	Light brown clay with sand, moist
77 - 88	Medium brown sand, saturated
88 - 93	Light brown clay
93 - 94	Light brown clay with sand
94 - 96	Light brown clay
96 - 97	Medium brown sand

Well Completion materials and Depth Intervals (feet) Below Ground Surface

Surface Completion: Stick-up
Casing, solid (6-inch PVC): 0-69.38 feet
Screen (6 inch, 0.02 slotted, PVC): 69.38-94.38 feet
Sand Pack: 16/30 sand, 64.38-94.38 feet
Bentonite Seal: Hydrolyzed bentonite pellet seal 57.38-64.38 feet

Top of 6 in. PVC Casing Elevation (Relative Datum Survey): NA
Top of Manhole Cover (Relative Datum Survey): NA



Total Depth (TD) = 94.38 feet bgs

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IPSC – WASTEWATER SURFACE IMPOUNDMENT
DELTA, UTAH

WWC-8 Schematic

Design by	Drawn by	Scale	Date Drawn	Last Revision Date
	RP		6-4-19	

Project Name: Intermountain Power Service Corporation
Boring Monitor Well: WWC-9

Project No.: 203709098
Completion Date: 2019-04-28

Drilling Firm: Cascade
Boring Method: Sonic
Boring Diameter: 10 inches

Driller: Ryan Miller
Logged by: Rich Pratt
Depth to Water at Drilling: 67 feet
Depth to Water at Drilling (static at 24 hours): 23.75 feet

WWC-9

Interval (feet)	Description
0 - 0.5	Medium brown silt, dry
0.5 - 1	Medium brown clay, dry
1 - 4	Light brown fine-grained sand, dry
4 - 8	Light brown clay, dry
8 - 13	Light brown fine-grained sand, dry
13 - 15	Light brown clay, dry
15 - 16	Light brown clay with sand, dry
16 - 17	Light brown clay, dry
17 - 18	Light brown clay with sand, moist
18 – 21.5	Light brown clay, moist
21.5 - 22	Light brown clay with sand, moist
22 - 23	Light brown clay, moist
23 - 26	Light brown clay with sand, moist
26 - 27	Light brown clay, moist
27 - 30	Light brown clay, moist
30 - 31	Light brown clay, saturated
31 - 32	Light brown clay with sand, moist
32 - 36	Light brown clay, moist
36 - 37	Light brown clay with sand, moist
37 - 38	Light brown clay with sand, moist
38 - 51	Medium brown medium grained sand, moist
51 - 54	Light brown clay, moist
54 - 58	Medium brown medium grained sand, moist
58 - 59	Medium brown medium grained sand, moist
59 - 62	Medium brown medium grained sand, moist
62 - 63	Light brown clay, moist to moist
63 - 66	Light brown clay with sand, moist
66 - 67	Light brown clay, moist
67 - 69	Light brown clay with sand, saturated

Interval (feet)	Description
69 – 69.5	Medium brown sand
69.5 - 70	Light brown clay with sand
70 - 71	Light brown clay
71 - 74	Light brown clay with sand
74 - 75	Medium brown sand
75 - 77	Light brown clay
77 - 83	Medium brown sand
83 - 85	Light brown clay
85 - 87	Light brown clay with sand

Well Completion materials and Depth Intervals (feet) Below Ground Surface

Surface Completion: Stick-up

Casing, solid (6-inch PVC): 0-61.7 feet

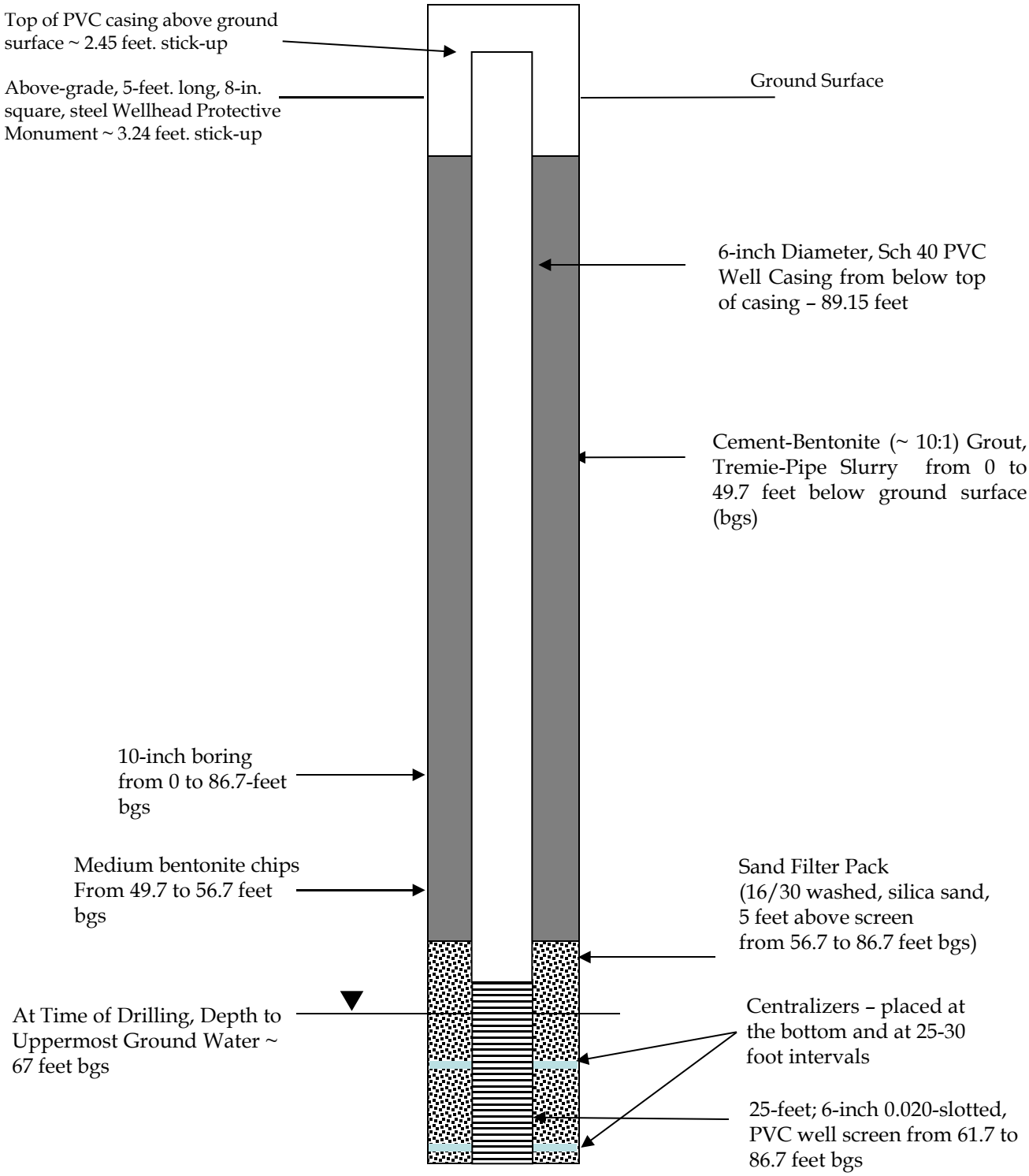
Screen (6 inch, 0.02 slotted, PVC): 61.7-86.7 feet

Sand Pack: 16/30 sand, 56.7-86.7 feet

Bentonite Seal: Hydrolyzed bentonite pellet seal 49.7-56.7 feet

Top of 6 in. PVC Casing Elevation (Relative Datum Survey): NA

Top of Manhole Cover (Relative Datum Survey): NA



Total Depth (TD) = 86.7 feet bgs

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IPSC – WASTEWATER SURFACE IMPOUNDMENT
Delta, Utah

WWC-9 Schematic

Design by	Drawn by	Scale	Date Drawn	Last Revision Date
	RP		6-4-19	

Project Name: Intermountain Power Service Corporation
Boring Monitor Well: WWC-10

Project No.: 203709098
Completion Date: 2019-04-26

Drilling Firm: Cascade
Boring Method: Sonic
Boring Diameter: 10 inches

Driller: Ryan Miller
Logged by: Rich Pratt
Depth to Water at Drilling: 67 feet
Depth to Water at Drilling (static at 24 hours): 17.65 feet

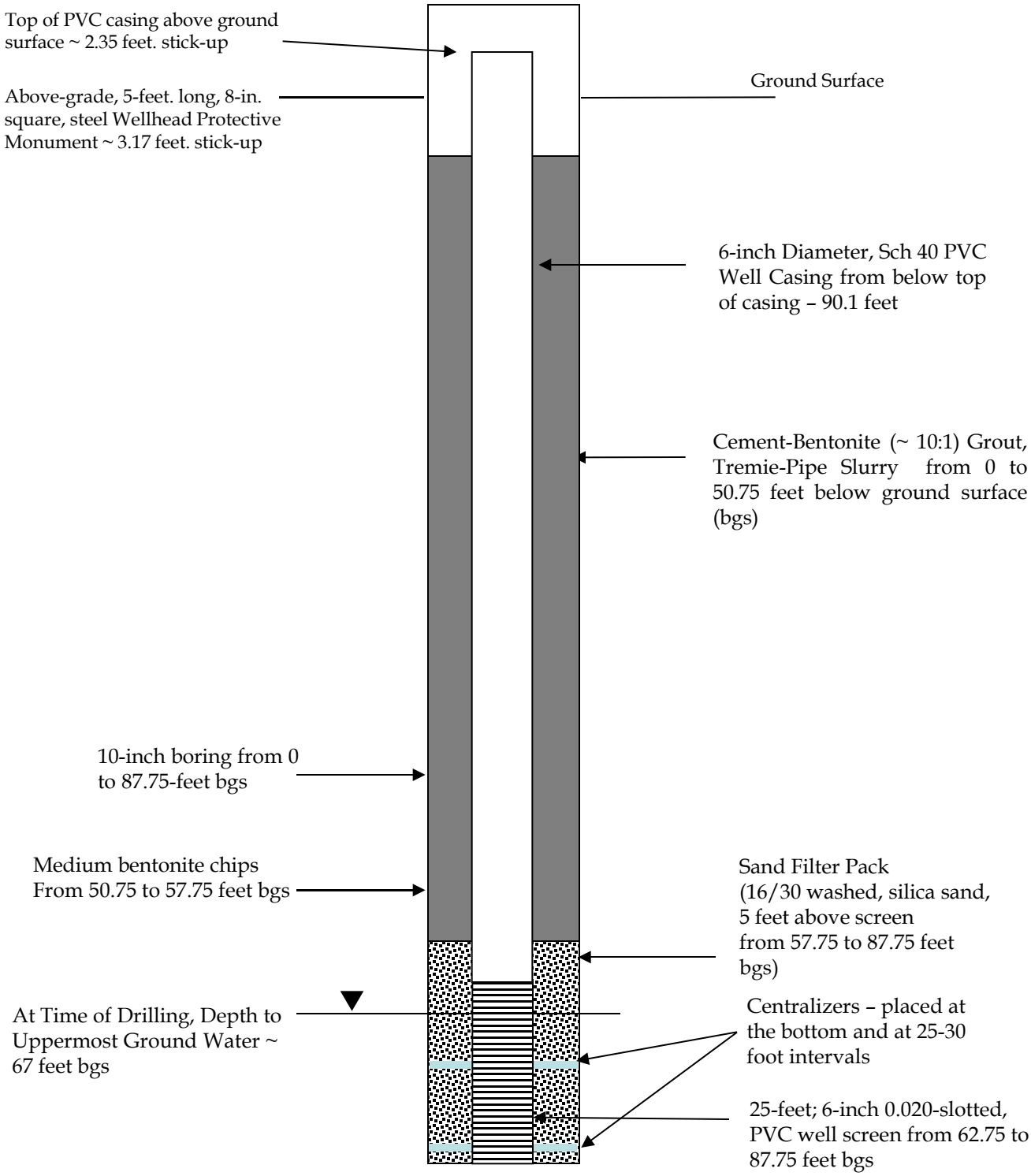
WWC-10

Interval (feet)	Description
0 - 5	Light brown sand, moist
5 – 9.5	Light brown clay with sand, moist
9.5 - 13	Dark gray clay, moist
13 - 14	Dark brown silt with organic plant matter, moist
14 - 15	Dark gray clay, moist
15 - 17	Gray medium grained sand, moist
17 - 34	Gray medium grained sand, moist
34 - 45	Brown medium grained sand, moist
45 - 47	Medium brown clay, moist
47 - 49	Medium brown clay with sand, moist
49 - 50	Medium brown medium grained sand, moist
50 - 51	Medium brown clay with sand, moist
51 - 52	Medium brown medium grained sand, moist
52 - 53	Medium brown clay with sand, moist
53 - 54	Medium brown medium grained sand, moist
54 - 60	Medium brown clay, moist
60 - 61	Medium brown clay with sand, moist
61 - 67	Medium brown clay, moist
67 - 68	Medium brown clay, saturated
68 - 69	Medium brown clay with sand
69 - 70	Medium brown clay
70 - 76	Medium brown clay with sand
76 - 87	Medium brown clay

Well Completion materials and Depth Intervals (feet) Below Ground Surface

Surface Completion: Stick-up
Casing, solid (6-inch PVC): 0-62.75 feet
Screen (6 inch, 0.02 slotted, PVC): 62.75-87.75 feet
Sand Pack: 16/30 sand, 57.75-87.75 feet
Bentonite Seal: Hydrolyzed bentonite pellet seal 50.75-57.75 feet

Top of 6 in. PVC Casing Elevation (Relative Datum Survey): NA
Top of Manhole Cover (Relative Datum Survey): NA



Total Depth (TD) = 87.75 feet bgs

Stantec

IPSC – WASTEWATER SURFACE IMPOUNDMENT
DELTA, UTAH

WWC-10 Schematic

Design by	Drawn by	Scale	Date Drawn	Last Revision Date
	RP		6-4-19	

INTERMOUNTAIN POWER SERVICE CORP.

MONITORNG WELL ID: **WWC-11**

CLIENT: Intermountain Power Service Corporation

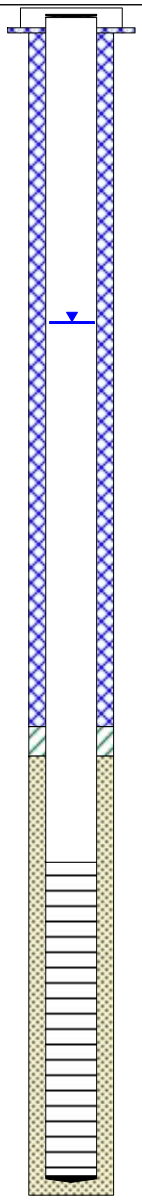
PROJECT: Monitoring Well Installation

SITE LOCATION: South of Waste Water Basin Surface Impoundment

Stantec

DRILLING CONTRACTOR:	Cascade Drilling	COORDINATE SYSTEM:	
DRILLING METHOD:	Sonic	EASTING:	NORTHING:
DRILLING EQUIPMENT:	Pro Sonic 600 11-77287	ELEVATION:	BOREHOLE ANGLE: 90 degrees
SAMPLING METHOD:	4 inch sonic core barrel 0 to 91 ft bgs., 10 inch sonic core barrel 0 to 91 ft bgs.	TOTAL DEPTH (ft.): 91	GROUNDWATER LEVEL (ft. btoc.): 22.82
		DATE STARTED: 11/15/2019	DATE FINISHED: 11/16/2019
		LOGGED BY: Michael Ward	

DEPTH (feet)	LITHOLOGICAL DESCRIPTION
0	Poorly graded Sand with Silt (SP), fine sand 95%, loose, soft, dry, very pale brown (10 YR 7/4), trace gravel 5%.
5	
10	Clay (CL), medium plasticity, cohesive, moist, soft to medium density, light gray (10 YR 7/1), mottled with some trace interfingered clay, brownish yellow (10 YR 6/8).
	Well Graded Sand with Clay (SW-SC), medium grained sand 85%, gravel 10%, clay 5%, moist, loose, pale brown (10 YR 6/3).
15	Clay with Sand (CL), low to medium plasticity, soft to medium density, non cohesive, dry to moist, brown (10 YR 5/3).
	Same as above, Clay (CL), no sand.
20	Poorly Graded Sand (SP), fine sand 98%, loose soft, dry, pale brown (10 YR 6/3), 2% gravel, subrounded.
25	
30	
35	Well Graded Sand with Gravel (SW), fine to coarse sand 90%, small gravel 10%, loose, moist, brown (10 YR 5/3), gravel are subangular to subrounded, assorted gravel matrix.
40	
45	Clay (CL), medium plasticity, medium density, moist to wet, cohesive, pale brown (10 YR 6/3).
	Well Graded Sand with gravel (SW), fine to coarse sand 90%, gravel 10%, loose, soft, brown (10 YR 5/3).
50	
	Same as above, becoming wet.
55	Clay (CL), medium plasticity, medium density, wet, cohesive, pale brown (10 YR 6/3).
	Clay with Sand (CL), low to medium plasticity, soft to medium density, non cohesive, moist, pale brown (10 YR 6/3).
60	Same as above, fine grained sand, saturated, low plasticity, non cohesive.
65	Same as above, with trace interfingering clay, reddish yellow (5 YR 6/6).
70	
	Well Graded Sand with Gravel (SW), fine to coarse sand 90%, small gravel 10%, loose, wet, brown (10 YR 5/3), gravel are subrounded, assorted matrix.
75	
80	
85	
90	Clay with Sand (CL), medium plasticity, medium density, wet, cohesive, pale brown (10 YR 6/3).
95	End of borehole to 91 ft bgs., per scope of work.



WELL CONSTUCTION DIAGRAM

- Above ground monument with well cap
- Grout 0 to 54.4 ft bgs. Borehole diameter 10 inches from 0 to 91 ft bgs.
- 0 to 65 ft bgs., 6 in dia., Sch. 40 PVC riser
- Bentonite 54.4 to 56.7 ft bgs.
- Filter pack sand 56.7 to 91 ft bgs.
- 65 to 90 ft bgs., 6 in dia., Sch. 40 PVC screen with 0.02 inch slot aperture
- End Cap

Notes: bgs. = below ground surface; dia. = diameter; ft = feet; Sch. = Schedule; YR = Yellow-Red

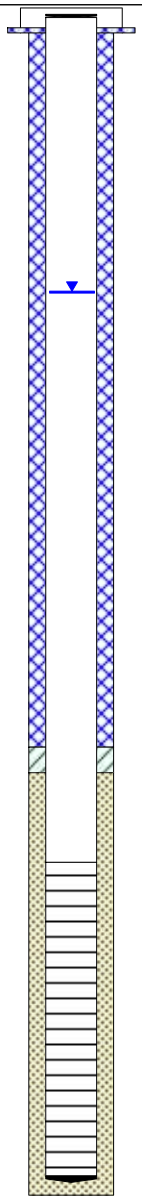
INTERMOUNTAIN POWER SERVICE CORP.

MONITORNG WELL ID: **WWC-12**
CLIENT: Intermountain Power Service Corporation
PROJECT: Monitoring Well Installation
SITE LOCATION: South of Waste Water Basin Surface Impoundment

Stantec

DRILLING CONTRACTOR:	Cascade Drilling	COORDINATE SYSTEM:	
DRILLING METHOD:	Sonic	EASTING:	NORTHING:
DRILLING EQUIPMENT:	Pro Sonic 600 11-77287	ELEVATION:	BOREHOLE ANGLE: 90 degrees
SAMPLING METHOD:	4 inch sonic core barrel 0 to 91 ft bgs., 10 inch sonic core barrel 0 to 91 ft bgs.	TOTAL DEPTH (ft.): 91	GROUNDWATER LEVEL (ft. btoc.): 20.46
		DATE STARTED: 11/11/2019	DATE FINISHED: 11/12/2019
		LOGGED BY: Michael Ward	

DEPTH (feet)	LITHOLOGICAL DESCRIPTION
0	Poorly Graded Sand with Silt (SP-SM), 90% sand, 10% silts, light gray (7.5 YR 7/1), soft, loose, fine grained, dry, sand are mostly quartz, subangular quartz grains.
5	Same as above, becoming light yellowish brown (10 YR 6/4).
10	Same as above, becoming wet at 8.5 ft bgs., perched groundwater.
	Clay (CL), medium plasticity, medium stiff, cohesive, very pale brown (10 YR 7/4).
15	Poorly Graded Sand with Silt (SP-SM), 95% fine grained sand, 5% silts, loose, soft, moist, brown (10 YR 4/3), trace gravel.
20	Well Graded Sand with Gravel (SW), 80% sand, 20% gravel, fine to coarse sand, moist, loose soft, dark yellowish brown (10YR 4/4), gravel are subrounded to rounded, small.
25	Clay (CL), medium plasticity, medium density, moist, cohesive, light yellowish brown (10 YR 6/4), thickly bedded, sharp contact at 25 ft bgs.
30	
35	Poorly Graded Sand (SP), fine grained sand 100%, loose, soft, moist, brown (10YR 5/3).
40	Well Graded Sand with Gravel (SW), fine to coarse grained sand 90%, small gravel 10%, loose, soft, moist, dark yellowish brown (10 YR 4/4).
45	Same as above, increase in gravel to 30%.
	Same as above, decrease in gravel to 10%.
50	Poorly Graded Sand (SP), fined grained sand 100%, loose, moist, brown (10YR 4/3). Sharp contact.
55	Clay (CL), high plasticity, stiff, moist, cohesive, light yellowish brown (10 YR 6/4), sharp contact.
60	Lost core sample from sonic casing.
	Clay (CH), high plasticity, stiff, moist, cohesive, yellowish brown (10 YR 5/4).
65	
70	Well Graded Sand with Silt and Clay (SW-SM), fine or medium grained sand 100%, soft, loose, brown (10 YR 4/3).
75	Clay (CH), high plasticity, stiff, moist, cohesive, yellowish brown (10 YR 5/4).
80	Poorly Graded Sand with Silts and Clay (SP-SC), fine grained sand 95%s, soft, loose, wet, light yellowish brown (10 YR 6/4), trace clay.
85	Clay with Sand (CL), medium plasticity, soft to medium density, wet, pale brown (10YR 6/3), sand are fine grained.
	Same as above with gradational transition to clay.
90	Clay (CH), high plasticity, mottled, wet, cohesive, pale brown (10 YR 6/3), mottled color is reddish yellow (7.5 YR 7/6).
95	End of borehole to 91 ft bgs., per scope of work.



WELL CONSTUCTION DIAGRAM

- Above ground monument with well cap
- Grout 0 to 55 ft bgs. Borehole diameter 10 inches from 0 to 91 ft bgs.
- 0 to 65 ft bgs., 6 in dia., Sch. 40 PVC riser
- Bentonite 55 to 58 ft bgs. Filter Pack Sand 58 to 91 ft bgs.
- 65 to 90 ft bgs., 6 in dia., Sch. 40 PVC screen with 0.02 inch slot aperture
- End Cap

Notes: bgs. = below ground surface; dia. = diameter; ft = feet; Sch. = Schedule; YR = Yellow-Red

INTERMOUNTAIN POWER SERVICE CORP.

MONITORNG WELL ID: **WWC-13**

CLIENT: Intermountain Power Service Corporation

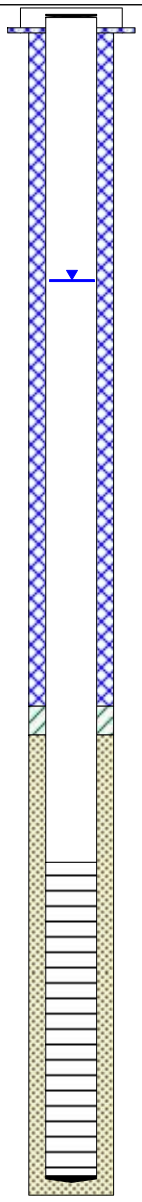
PROJECT: Monitoring Well Installation

SITE LOCATION: South of Waste Water Basin Surface Impoundment

Stantec

DRILLING CONTRACTOR:	Cascade Drilling	COORDINATE SYSTEM:	
DRILLING METHOD:	Sonic	EASTING:	NORTHING:
DRILLING EQUIPMENT:	Pro Sonic 600 11-77287	ELEVATION:	BOREHOLE ANGLE: 90 degrees
SAMPLING METHOD:	4 inch sonic core barrel 0 to 91 ft bgs., 10 inch sonic core barrel 0 to 91 ft bgs.	TOTAL DEPTH (ft.): 91	GROUNDWATER LEVEL (ft. btoc.): 19.55
		DATE STARTED: 11/13/2019	DATE FINISHED: 11/15/2019
		LOGGED BY: Michael Ward	

DEPTH (feet)	LITHOLOGICAL DESCRIPTION
0	Poorly Graded Sand with Silts (SP-SM), fine sand 95%, 5% silts, soft, loose, dry, light gray (7.5 YR 7/1).
5	Well Graded Sand (SW), fine to medium grained sand 95%, soft, loose, dry, pinkish gray (7.5 YR 7/2), trace gravel, small gravel, assorted matrix, subrounded.
	Same as above, with clay, increase gravel 10%, wet.
10	Clay with Sand (CL), low to medium plasticity, moist, cohesive, very pale brown (10 YR 7/4).
	Well Graded Sand (SW), fine to medium grained sand 95%, soft, loose, , moist, pale brown (10 YR 6/3), trace gravel 5%, subrounded.
15	
20	
	Same as above, with clay (SW-SC) at 10%, wet, soft, low plasticity clay.
25	Clay with Sand (CL), medium plasticity, moist cohesive, thick bedded, fine sand, sharp contact at 23 ft, bgs,
	Same as above, Clay (CL), trace black staining.
30	Clay with Sand (CL), medium plasticity, moist cohesive, fine sand.
	Poorly Graded Sand (SP), fine grained sand 100%, loose, soft, moist, brown (10 YR 5/3).
35	
40	
	Well Graded Sand with gravel (SW), fine to coarse sand 85%, 15% gravel, loose, soft, moist, brown (10 YR 5/3), gravel are small, subrounded, assorted matrix.
45	Poorly Graded Sand (SP), fine to medium grained sand 98%, loose, soft, moist, brown (10 YR 5/3), trace small gravel 2%, subrounded.
	Same as above, trace clay.
50	Clay with Sand (CL), low to medium plasticity, soft to medium density, moist, yellowish brown (10 YR 5/4), secondary sand are fine grained.
55	
	Clay (CL), medium to high plasticity, medium to stiff density, moist, thickly bedded, cohesive, brown (10 YR 5/3), mottled, reddish yellow (5 YR 6/6).
60	
65	
	Clay with Sand (CL) , medium plasticity, moist to wet, cohesive, brown (10 YR 5/3).
70	Clay (CL), medium plasticity, medium to stiff density, moist, cohesive, brown (10 YR 5/3), mottled, reddish yellow (5 YR 6/6).
75	
	Poorly Graded Sand with Clay (SP-SC), fine grained sand 95%, loose, soft, wet, brown (10 YR 5/3), some trace interfingering clay 5%, reddish yellow (5 YR 5/3).
80	Clay with Sand (CL), low plasticity, soft, wet, non cohesive, pale brown (10 YR 6/3).
	Clay (CL), medium to high plasticity, wet, cohesive, pale brown (10 YR 6/3), interfingering clay reddish yellow (5 YR 6/6), trace sand.
85	
90	Same as above, becoming medium plasticity.
	End of borehole to 91 ft bgs., per scope of work.
95	



Above ground monument with well cap

Grout 0 to 52.8 ft bgs.
Borehole diameter 10 inches from 0 to 91 ft bgs.

0 to 65 ft bgs., 6 in dia., Sch. 40 PVC riser

Bentonite 52.8 to 55 ft bgs.

Filter pack sand 55 to 91 ft bgs.

65 to 90 ft bgs., 6 in dia., Sch. 40 PVC screen with 0.02 inch slot aperture

End Cap

Notes: bgs. = below ground surface; dia. = diameter; ft = feet; Sch. = Schedule; YR = Yellow-Red

INTERMOUNTAIN POWER SERVICE CORP.

MONITORNG WELL ID: **WWC-14**

CLIENT: Intermountain Power Service Corporation

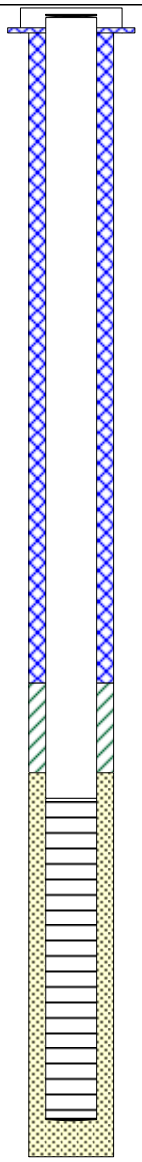
PROJECT: Monitoring Well Installation

SITE LOCATION: South of Waste Water Basin Surface Impoundment

Stantec

DRILLING CONTRACTOR:	Cascade Drilling	COORDINATE SYSTEM:	
DRILLING METHOD:	Sonic	EASTING:	NORTHING:
DRILLING EQUIPMENT:	Pro Sonic 600	ELEVATION:	BOREHOLE ANGLE: 90 degrees
SAMPLING METHOD:	4 inch sonic core barrel 0 to 88 ft bgs., 10 inch sonic core barrel 0 to 88 ft bgs.,	TOTAL DEPTH (ft.): 88	GROUNDWATER LEVEL (ft. btoc.):
		DATE STARTED: 5/6/2020	DATE FINISHED: 5/7/2020
		LOGGED BY: Rich Pratt	

DEPTH (feet)	LITHOLOGICAL GRAPHIC	LITHOLOGICAL DESCRIPTION
0		Poorly graded Sand with Silt (SP), light brown, dry
		Well Graded Sand with Clay (SW-SC), light and dark brown, dry
5		Poorly graded Sand with Silt (SP), light brown, dry
10		Well Graded Sand with Clay (SW-SC), light and dark brown, dry
15		Well Graded Sand with Gravel (SW), moist, dark brown
		Well Graded Sand with Gravel (SW), moist, light brown
20		
25		Well Graded Sand with Gravel (SW), moist, dark brown
		Clay (CL), light brown, moist
30		Well Graded Sand with Clay (SW-SC), light brown, moist
		Well Graded Sand with Gravel (SW), moist, dark brown
35		
40		
45		
50		
55		Well Graded Sand with Clay (SW-SC), light brown, moist
60		
		Clay (CL), light brown, moist
65		
70		Well Graded Sand with Clay (SW-SC), light brown, moist
		Well Graded Sand with Gravel (SW), moist, dark brown
		Clay (CL), light brown, moist
75		
		Well Graded Sand with Gravel (SW), moist, dark brown
80		Well Graded Sand with Clay (SW-SC), light brown, moist
85		Clay (CL), light brown, moist
		End of borehole to 88 ft bgs., per scope of work.
90		
95		



WELL CONSTUCTION DIAGRAM

- Above ground monument with well cap
- Grout 0 to 51 ft bgs. Borehole diameter 10 inches from 0 to 88 ft bgs.
- 0 to 60 ft bgs., 6 in dia., Sch. 80 PVC riser
- Bentonite 51 to 58 ft bgs.
- Filter pack sand 58 to 88 ft bgs.
- 60 to 85 ft bgs., 6 in dia., Sch. 80 PVC screen with 0.02 inch slot aperture
- End Cap

Notes: bgs. = below ground surface; dia. = diameter; ft = feet; Sch. = Schedule; YR = Yellow-Red

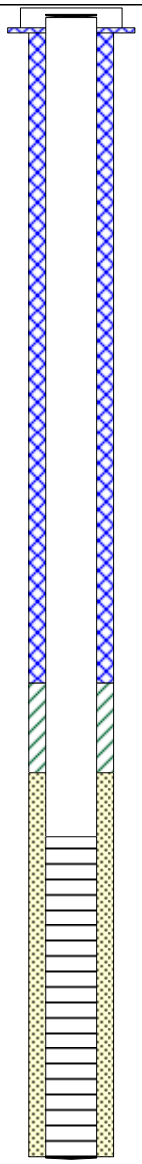
INTERMOUNTAIN POWER SERVICE CORP.

MONITORNG WELL ID:	**WWC-15**
CLIENT:	Intermountain Power Service Corporation
PROJECT:	Monitoring Well Installation
SITE LOCATION:	South of Waste Water Basin Surface Impoundment

Stantec

DRILLING CONTRACTOR:	Cascade Drilling	COORDINATE SYSTEM:	
DRILLING METHOD:	Sonic	EASTING:	NORTHING:
DRILLING EQUIPMENT:	Pro Sonic 600	ELEVATION:	BOREHOLE ANGLE: 90 degrees
SAMPLING METHOD:	4 inch sonic core barrel 0 to 88 ft bgs., 10 inch sonic core barrel 0 to 88 ft bgs.,	TOTAL DEPTH (ft.): 88	GROUNDWATER LEVEL (ft. btoc.):
		DATE STARTED: 5/6/2020	DATE FINISHED: 5/7/2020
		LOGGED BY: Michael Ward	

DEPTH (feet)	LITHOLOGICAL DESCRIPTION
0	Well graded sand with silt (SW-SM), fine to medium grained sands, loose, soft, dry, unconsolidated, light yellowish brown (10 YR 6/4).
5	Poorly graded sand (SP), fine to medium grained, dry, soft, loose, light brownish gray (10 YR 6/2).
10	
15	Poorly Graded Sand with Clay (SP-SC), fine grained, moist, clays are soft, dark yellowish brown (10 YR 5/4).
20	Well Graded Sand (SW), fine to coarse sand, loose, soft, unconsolidated, dark yellowish brown (10 YR 4/4), trace gravels.
25	Poorly graded sand (SP), fine to medium grained, dry, soft, loose, brown (10 YR 4/3).
30	Clay (CL), stiff, medium to high plasticity, moist, cohesive, light yellowish brown (10 YR 6/4).
35	Poorly Graded Sand with Clay (SP-SC), fine to medium grained, moist to wet, soft, noncohesive, pale brown (10 YR 6/3).
40	Clay (CL), stiff, medium to high plasticity, moist, cohesive, light yellowish brown (10 YR 6/4).
45	Poorly Graded Sand (SP), fine or medium grained, loose, soft, moist, brown (10 YR 5/3), trace gravels.
50	Well Graded Sand (SW), fine to coarse sand, loose, soft, unconsolidated, moist, brown (10 YR 5/3).
55	Clays (CL), stiff, medium to high plasticity, moist.
60	Well Graded Sand (SW), fine to coarse sand, loose, soft, unconsolidated, moist, brown (10 YR 5/3), trace gravels, rounded.
65	Clay (CL), medium plasticity, stiff, cohesive, brown (7.5 YR 5/4).
70	Same as above, becoming high plasticity.
75	Poorly Graded Sand (SW), fine or medium grained, wet, saturated, loose, soft, brown (10 YR 5/3).
80	Clay (CL), medium plasticity, stiff, cohesive, brown (7.5 YR 5/4).
85	Poorly Graded Sand (SW), fine or medium grained, wet, saturated, loose, soft, brown (10 YR 5/3).
90	Clay (CL), medium plasticity, stiff, cohesive, brown (7.5 YR 5/4).
95	Clay with Sand (CL), wet, non cohesive, low plasticity, brown (10 YR 5/3).
	End of borehole at 88 ft bgs. Installed monitoring well per scope of work.



WELL CONSTUCTION DIAGRAM

- Above ground monument with well cap
- Grout 0 to 51 ft bgs. Borehole diameter 10 inches from 0 to 88.5 ft bgs.
- 0 to 63 ft bgs., 6 in dia., Sch. 80 PVC riser
- Bentonite 51 to 58 ft bgs.
- Filter pack sand 58 to 88 ft bgs.
- 63 to 88 ft bgs., 6 in dia., Sch. 80 PVC screen with 0.02 inch slot aperture
- End Cap

Notes: bgs. = below ground surface; dia. = diameter; ft = feet; Sch. = Schedule; YR = Yellow-Red

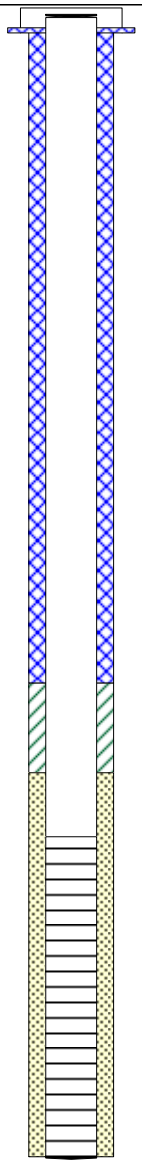
INTERMOUNTAIN POWER SERVICE CORP.

MONITORNG WELL ID:	**WWC-16**
CLIENT:	Intermountain Power Service Corporation
PROJECT:	Monitoring Well Installation
SITE LOCATION:	South of Waste Water Basin Surface Impoundment

Stantec

DRILLING CONTRACTOR:	Cascade Drilling	COORDINATE SYSTEM:	
DRILLING METHOD:	Sonic	EASTING:	NORTHING:
DRILLING EQUIPMENT:	Pro Sonic 600	ELEVATION:	BOREHOLE ANGLE: 90 degrees
SAMPLING METHOD:	4 inch sonic core barrel 0 to 88 ft bgs., 10 inch sonic core barrel 0 to 88 ft bgs.,	TOTAL DEPTH (ft.): 88	GROUNDWATER LEVEL (ft. btoc.):
		DATE STARTED: 5/7/2020	DATE FINISHED: 5/8/2020
		LOGGED BY: Rich Pratt	

DEPTH (feet)	LITHOLOGICAL DESCRIPTION
0	Poorly graded Sand with Silt (SP), light brown, dry
5	Clay (CL), light brown, dry Well Graded Sand with Clay (SW-SC), light brown, dry
10	
15	Clay (CL) with sand, light brown, dry Clay (CL), light brown, moist
20	Well Graded Sand with Gravel (SW), moist, brown
25	
30	Clay (CL), light brown, moist
35	
40	Well Graded Sand with Clay (SW-SC), light brown, moist Clay (CL), light brown, moist
45	Well Graded Sand with Gravel (SW), light brown, moist
50	
55	
60	Clay (CL), light brown, moist Well Graded Sand with Clay (SW-SC), light brown, moist
65	Clay (CL), light brown, moist Well Graded Sand with Clay (SW-SC), light brown, moist
70	Clay (CL), light brown, moist
75	
80	Well Graded Sand with Gravel (SW), light brown, moist Clay (CL), light brown, moist Well Graded Sand with Gravel (SW), moist, brown
85	Clay (CL), light brown, moist
90	Well Graded Sand with Clay (SW-SC), light brown, moist End of borehole at 88 ft bgs. Installed monitoring well per scope of work.
95	



WELL CONSTUCTION DIAGRAM

- Above ground monument with well cap
- Grout 0 to 51 ft bgs. Borehole diameter 10 inches from 0 to 88 ft bgs.
- 0 to 63 ft bgs., 6 in dia., Sch. 80 PVC riser
- Bentonite 51 to 58 ft bgs.
- Filter pack sand 58 to 88 ft bgs.
- 63 to 88 ft bgs., 6 in dia., Sch. 80 PVC screen with 0.02 inch slot aperture
- End Cap

Notes: bgs. = below ground surface; dia. = diameter; ft = feet; Sch. = Schedule; YR = Yellow-Red

INTERMOUNTAIN POWER SERVICE CORP.

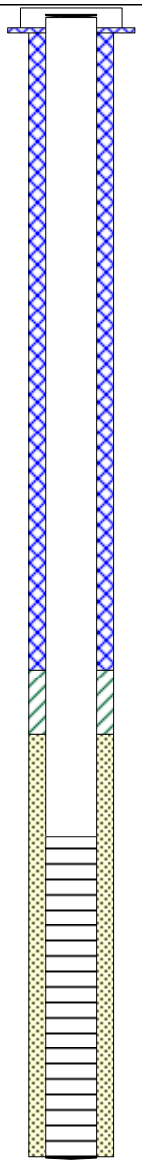
MONITORNG WELL ID:	**WWC-17**
CLIENT:	Intermountain Power Service Corporation
PROJECT:	Monitoring Well Installation
SITE LOCATION:	South of Waste Water Basin Surface Impoundment

Stantec

DRILLING CONTRACTOR:	Cascade Drilling	COORDINATE SYSTEM:	
DRILLING METHOD:	Sonic	EASTING:	NORTHING:
DRILLING EQUIPMENT:	Pro Sonic 600	ELEVATION:	BOREHOLE ANGLE: 90 degrees
SAMPLING METHOD:	4 inch sonic core barrel 0 to 91 ft bgs., 10 inch sonic core barrel 0 to 91 ft bgs.,	TOTAL DEPTH (ft.): 88	GROUNDWATER LEVEL (ft. btoc.):
		DATE STARTED: 5/8/2020	DATE FINISHED: 5/8/2020
		LOGGED BY: Michael Ward	

DEPTH (feet)	LITHOLOGICAL DESCRIPTION
0	Well Graded Sand with Silt (SW-SM), fine or medium grained sand, loose, soft, dry, very pale brown (10 YR 7/4).
5	Poorly Graded Sand (SP), fine to coarse, loose, soft, dry, unconsolidated, light gray (10 YR 7/2).
	Clays (CL), low to medium plasticity, medium dense, moist, light yellowish brown (10 YR 7/4).
10	Poorly Graded Sand (SP), fine to coarse, loose, soft, dry, unconsolidated, light gray (10 YR 7/2).
15	Clay (CL), medium plasticity, medium dense, cohesive, dark red (2.5 YR 4/6).
	Well Graded Sand (SW), fine grained , loose, soft, moist, yellowish brown (10 YR 5/4).
20	Clay (CL), medium plasticity, medium dense, cohesive, dark red (2.5 YR 4/6).
25	
30	Well Graded Sand (SW), fine grained , loose, soft, brown (10 YR 4/3).
	Clay (CL), medium plasticity, medium dense, cohesive, dark red (2.5 YR 4/6), mottled with gray (10 YR 6/1).
35	Well Graded Sand (SW), fine grained, loose, soft, wet, brown (10 YR 4/3), with thin black lenses.
40	
45	
50	Sandy Lean Clay (CL), low plasticity, soft to medium dense, wet, yellowish brown (10 YR 6/1).
55	Well Graded Sand with Clay (SW-SC), fine grained sand, wet, loose, soft, yellowish brown (10 YR 5/4).
60	
65	Sandy Lean Clay (CL), low plasticity, soft to medium dense, wet, brown (10 YR 5/3).
70	Well Graded Sand (SW), fine or medium grained sand, loose, soft, wet, brown (10 YR 5/3)
75	Clay (CL), moderate plasticity, medium dense, consolidated, brown (10 YR 5/3).
	Well Graded Sand (SW), fine or medium grained sand, loose, soft, wet, brown (10 YR 5/3)
80	Clay (CL), medium to high plasticity, stiff, dense, consolidated, brown (10 YR 5/3).
85	Well Graded Sand (SW), fine or medium grained sand, loose, soft, wet, brown (10 YR 5/3)
90	End of borehole at 88 ft bgs. Installed monitoring well per scope of work.
95	

WELL CONSTUCTION DIAGRAM



- Above ground monument with well cap
- Grout 0 to 50 ft bgs. Borehole diameter 10 inches from 0 to 88 ft bgs.
- 0 to 63 ft bgs., 6 in dia., Sch. 80 PVC riser
- Bentonite 50 to 55 ft bgs.
- Filter pack sand 55 to 88 ft bgs.
- 63 to 88 ft bgs., 6 in dia., Sch. 80 PVC screen with 0.02 inch slot aperture
- End Cap

Notes: bgs. = below ground surface; dia. = diameter; ft = feet; Sch. = Schedule; YR = Yellow-Red

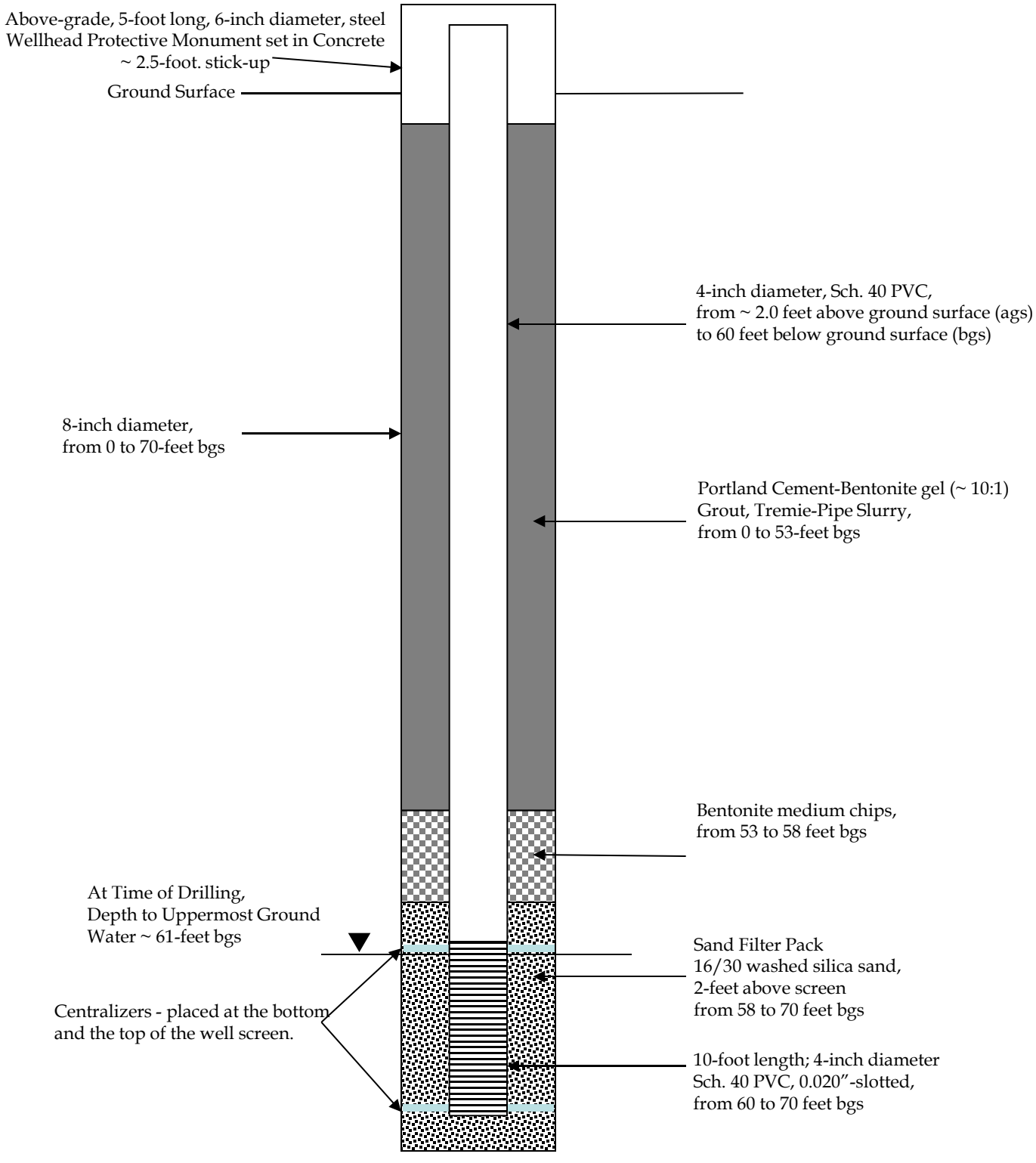
Boring Log
ISPC
Delta, Utah

WWU-1

Interval (feet)	Drilling Method	USCS	Sample Description
8/11/2015			
0-0.5	8" Sonic	TOPSOIL	Surface - Sand and Gravel.
0.5-1.5	8" Sonic	SM	Silty SAND:
1.5-2.5	8" Sonic	SP/SM	SAND with silt:
2.5-3.5	8" Sonic	ML	Sandy SILT:
3.5-4.75	8" Sonic	SP	SAND:
4.75-5	8" Sonic	SC	Clayey SAND:
5-7	8" Sonic	SP/SM	SAND with silt:
7-10.75	8" Sonic	SC	Clayey SAND:
10.75-12.5	8" Sonic	SP/SM	SAND with silt:
12.5-13	8" Sonic	SC	Clayey SAND:
13-14	8" Sonic	SM	Silty SAND:
14-15	8" Sonic	SP	SAND:
15-17.5	8" Sonic	SP/SM	SAND with silt:
17.5-20	8" Sonic	SP	SAND:
20-22	8" Sonic	SP/SM	SAND with silt:
22-22.5	8" Sonic	SC	Clayey SAND:
22.5-25	8" Sonic	CL	Sandy CLAY:
25-27.5	8" Sonic		Sandy CLAY:
27.5-28	8" Sonic	SC	Clayey SAND:
28-30	8" Sonic	SW	Gravelly SAND:
30-32.5	8" Sonic	SP/SM	SAND with silt:
32.5-35	8" Sonic	SM	Silty SAND:
35-37.5	8" Sonic	SP	SAND:
37.5-40	8" Sonic		SAND:
40-42.5	8" Sonic	SW/SM	SAND with silt:
42.5-43.25	8" Sonic	SM	Silty SAND:
43.25-44.25	8" Sonic		Silty SAND:
44.25-45	8" Sonic	SP/SW	SAND:
45-47.5	8" Sonic	SW	SAND:
47.5-50	8" Sonic	SP	SAND:
50-50.5	8" Sonic		SAND:
50.5-51.75	8" Sonic	ML	Sandy SILT:
51.75-52.5	8" Sonic	SP	SAND:
52.5-53.25	8" Sonic	SC	Clayey SAND:
53.25-55	8" Sonic		Clayey SAND:
55-56.5	8" Sonic		Clayey SAND:
56.5-57.5	8" Sonic		Clayey SAND:
57.5-60	8" Sonic		Clayey SAND:
60-61	8" Sonic	ML	Clayey SILT with sand:
61-62.5	8" Sonic	SM	Silty SAND:
62.5-63.75	8" Sonic	CL	Sandy CLAY:
63.75-64.75	8" Sonic	SM	Silty SAND:
64.75-65.5	8" Sonic	SP	SAND:
65.5-66.5	8" Sonic	ML	Clayey SILT with sand:
66.5-67.5	8" Sonic	SC	Clayey SAND:
67.5-70	8" Sonic	SM	Silty SAND with clay:

TD = 70'; PVC 4-inch screen from 60 to 70; PVC 4-inch riser from -2.5 to 60
Drilling Method: Prosonic T600, 8" Rotosonic

Drilling Company - Cascade Drilling
Driller - Rick Mallett
Geologist - Michael Sauerwein



Total Depth (TD) = 70 feet bgs

Stantec

IPSC – WASTEWATER HOLDING BASIN AREA
DELTA, UTAH

Well WW-U-1 Schematic

Design by	Drawn by	Scale	Date Drawn	Last Revision Date
	MS		8/11/15	

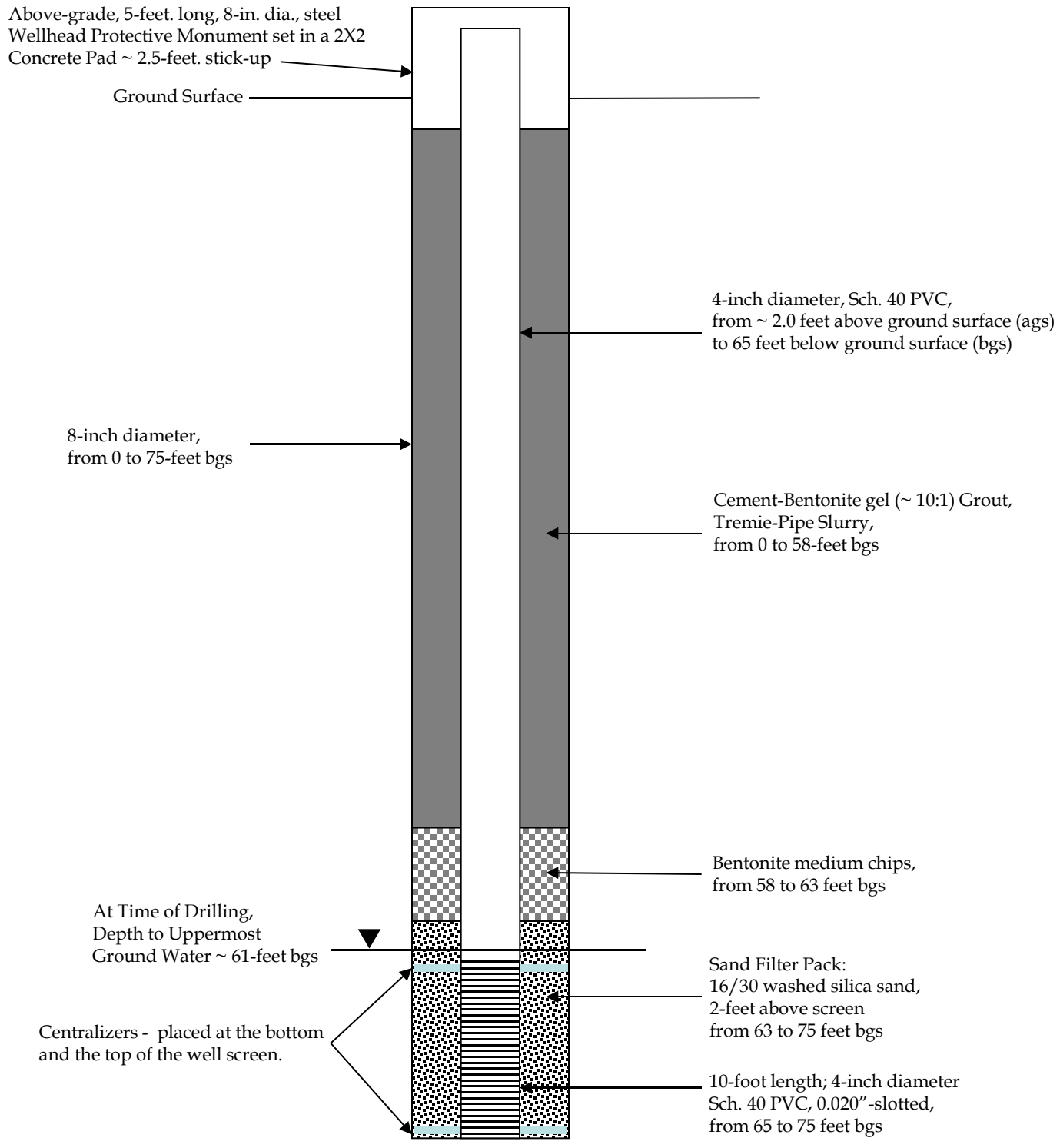
Boring Logs
ISPC
Delta, Utah

WWU-2

Interval (feet)	Drilling Method	USCS	Sample Description
8/11/2015			
0-0.5	8" Sonic	TOPSOIL	Surface - Sand and Gravel.
0.5-2.5	8" Sonic	ML	Gravelly SILT with sand:
2.5-4	8" Sonic	SP	SAND:
4-5	8" Sonic		SAND:
5-5.5	8" Sonic		SAND:
5.5-7.5	8" Sonic		SAND:
7.5-9.5	8" Sonic	SP/SW	SAND:
9.5-10	8" Sonic	SP	SAND:
10-11	8" Sonic	SW	SAND:
11-12.5	8" Sonic	SP/SM	SAND with silt:
12.5-13	8" Sonic	SM	Silty SAND:
13-15	8" Sonic	ML	Sandy SILT:
15-15.5	8" Sonic	SP	SAND:
15.5-17	8" Sonic	SC	Clayey SAND with gravel:
17-17.5	8" Sonic	SW	Gravelly SAND with sand:
17.5-19	8" Sonic		SAND:
19-20	8" Sonic		SAND:
20-22.5	8" Sonic	GW	Sandy GRAVEL:
22.5-23.5	8" Sonic	SW	SAND:
23.5-25	8" Sonic	SP/SM	SAND with silt:
25-32.5	8" Sonic		SAND with silt:
32.5-33.5	8" Sonic	SW/SC	Gravelly SAND with clay:
33.5-35	8" Sonic	SP/SM	SAND with silt:
35-37.5	8" Sonic		SAND with silt:
37.5-39	8" Sonic	SC/CL	Clayey SAND/Sandy CLAY:
39-40	8" Sonic	SC	Clayey SAND:
40-45	8" Sonic	SC/CL	Clayey SAND/Sandy CLAY:
45-45.5	8" Sonic	SM	Silty SAND with clay:
45.5-47.5	8" Sonic	SC/CL	Clayey SAND/Sandy CLAY:
47.5-49.5	8" Sonic	CH/SC	Sandy CLAY/Clayey SAND:
49.5-50	8" Sonic	SP/SM	SAND with silt:
50-51.5	8" Sonic	SC	Clayey SAND:
51.5-52.5	8" Sonic	SP/SC	SAND with clay:
52.5-55	8" Sonic	SP	SAND:
55-56.5	8" Sonic	CH	Sandy CLAY:
56.5-57.5	8" Sonic	SC	Clayey SAND:
57.5-59	8" Sonic	ML	Clayey SILT with sand:
59-60	8" Sonic	CH	Sandy CLAY:
60-62.5	8" Sonic	SC	Clayey SAND:
62.5-64	8" Sonic	CH	Sandy CLAY:
64-65	8" Sonic	SM	Silty SAND:
65-66.5	8" Sonic	SP	SAND:
66.5-67.5	8" Sonic	SM	Silty SAND:
67.5-75	8" Sonic	SW	SAND:

TD = 75'; PVC 4-inch screen from 65 to 75; PVC 4-inch riser from -2.5 to 65
Drilling Method: Prosonic T600, 8" Rotosonic

Drilling Company - Cascade Drilling
Driller - Rick Mallett
Geologist - Michael Sauerwein



Total Depth (TD) = 75 feet bgs

Stantec

IPSC – WASTEWATER HOLDING BASIN AREA
DELTA, UTAH

Well WW-U-2 Schematic

Design by	Drawn by	Scale	Date Drawn	Last Revision Date
	MS		8/11/15	

Boring Logs

ISPC

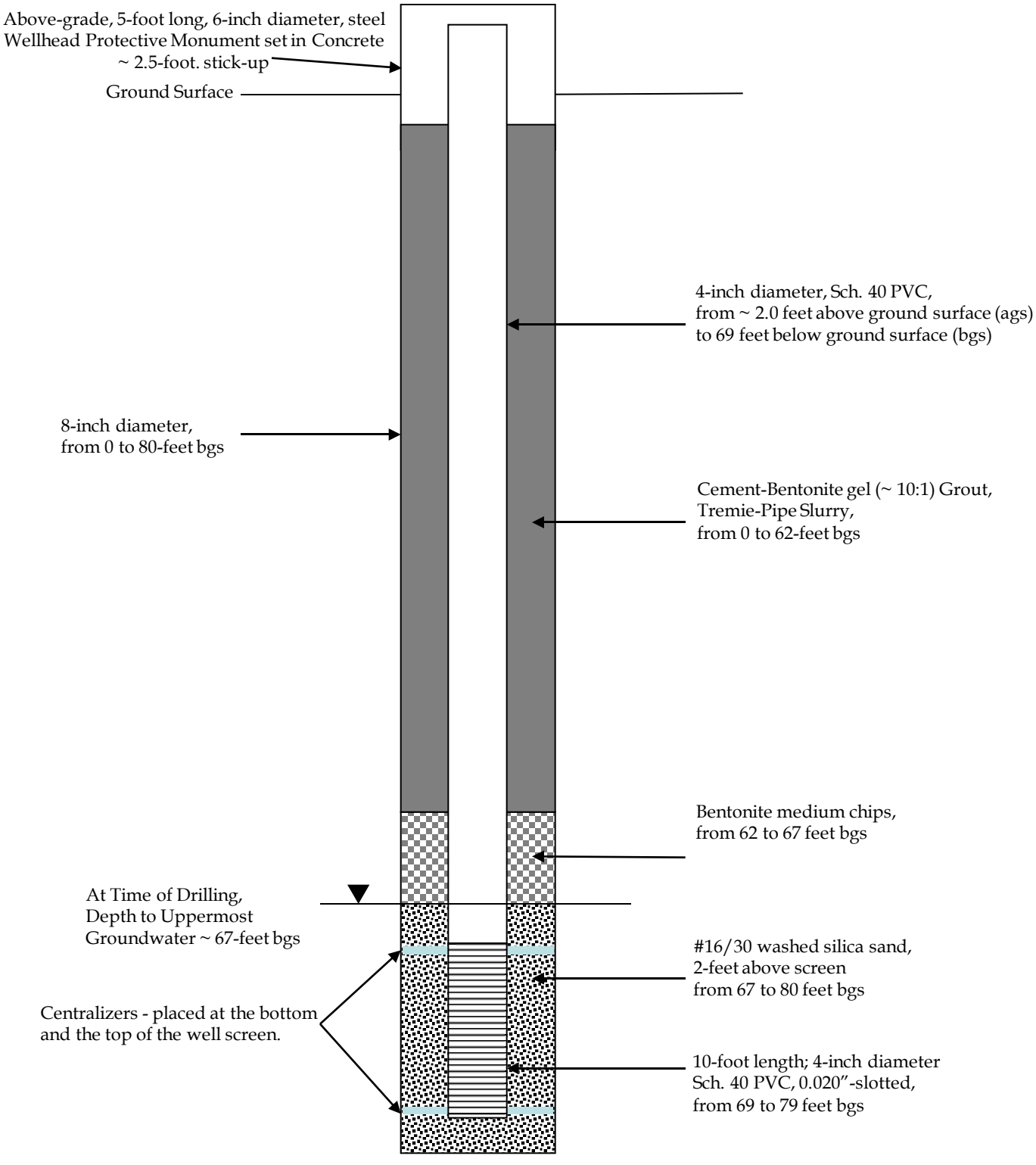
Delta, Utah

SI-U-1

Interval (feet)	USCS	Sample Description
8/12/2015		
0-0.5	TOPSOIL	Surface - Sand and Gravel, roots and grass.
0.5-2.5	SP/SM	SAND with silt:
2.5-5	SP	SAND:
5-6.5	SP/SM	SAND with silt:
6.5-7.5	SW/SM	SAND with silt:
7.5-8	SW	SAND:
8-12.5	SP	SAND:
12.5-17.5		SAND:
17.5-18	SP/SM	SAND with silt:
18-19	SM	Silty SAND:
19-20	CL	CLAY:
20-21.5	SP	SAND:
21.5-22.5	SP/SM	Gravelly SAND with silt:
22.5-26.5	SW	SAND:
26.5-27.5	SW/SC	SAND with clay:
27.5-29.5	ML	Sandy SILT with clay:
29.5-30	SP	SAND:
30-32	ML	Sandy SILT with clay:
32-32.5	SW	SAND with gravel:
32.5-38	SC	Clayey SAND:
38-40	SM	Silty SAND:
40-42.5	SP/SM	SAND with silt:
42.5-44.25	GW	Sandy GRAVEL with clay:
44.25-45	SM	Silty SAND:
45-46.5	SC	Clayey SAND:
46.5-47.75	SP/SC	SAND with clay:
47.75-52.5	SP	SAND:
52.5-54	CH	CLAY:
54-55	SC/CH	Clayey SAND/Sandy CLAY:
55-60	CH	CLAY:
60-62.5		CLAY:
62.5-66		CLAY:
66-70	SC	Clayey SAND:
70-70.75	ML	Clayey SILT with sand:
70.75-71.5	CH	CLAY:
71.5-72.5	SP/SC	SAND with clay:
72.5-75	SP/SM	SAND with silt:
75-75.75	SM	Silty SAND:
75.75-77	SC	Clayey SAND:
77-80	SP/SM	SAND with silt:

TD = 80'; PVC 4-inch screen from 69 to 79; PVC 4-inch riser from -2.5 to 69
Drilling Method: Prosonic T600, 8" Rotosonic

Drilling Company - Cascade Drilling
Driller - Rick Mallett
Geologist - Michael Sauerwein



Total Depth (TD) = 80 feet bgs

Stantec

IPSC – COAL STORAGE AND UNLOADING AREA
DELTA, UTAH

Well SI-U-1 Schematic

Design by	Drawn by MS	Scale	Date Drawn 8/12/15
			Last Revision Date

jbr environmental consultants, inc.

DRILLING LOG

PROJECT NAME: Intermountain Power Plant
BORING/MONITORING WELL: WR-101 / RW-2
DRILLING FIRM: Boart Longyear
BORING METHOD: Sonic
BORING DIAMETER: 10.0-inch

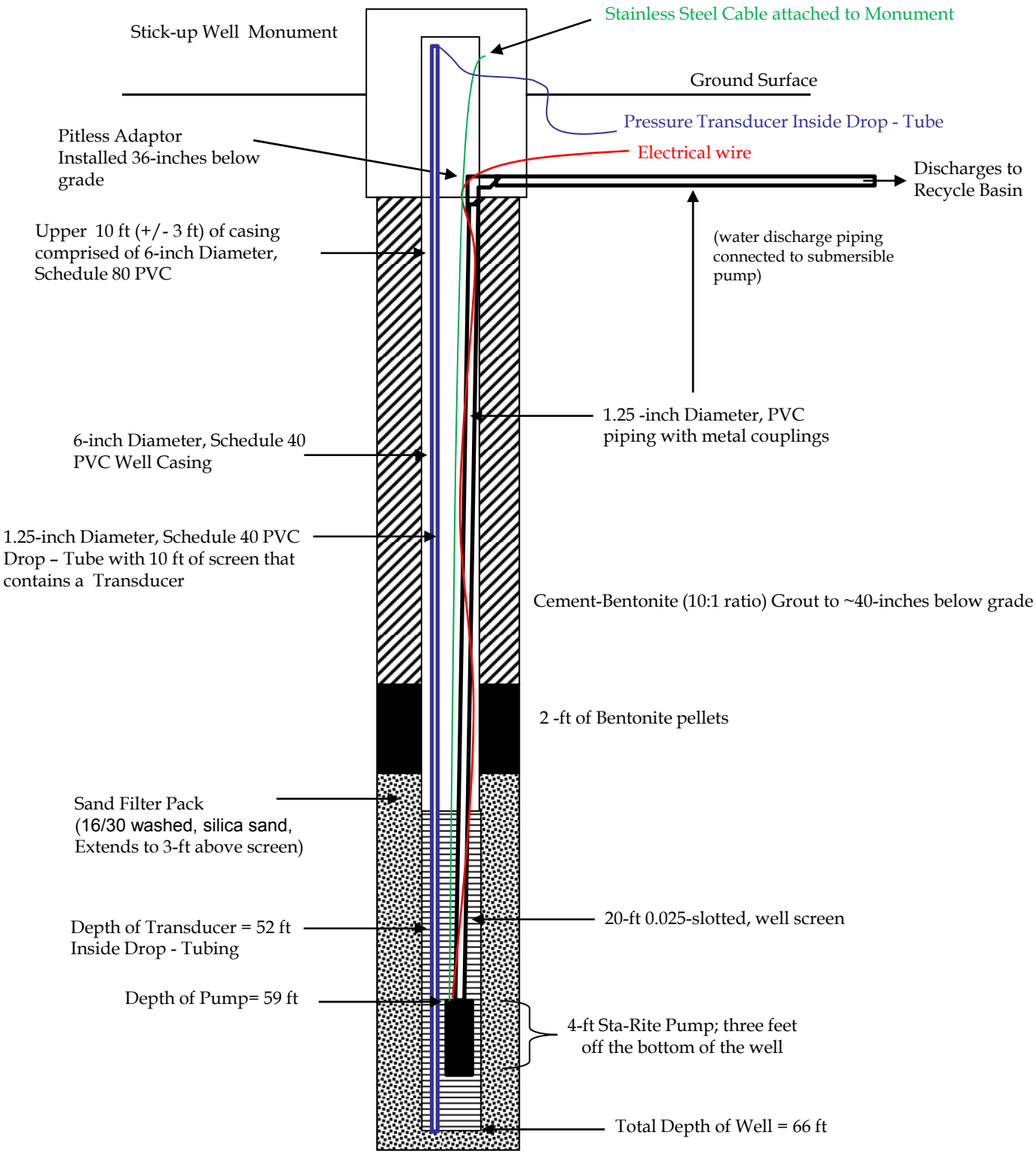
PROJECT No.: 07.00408.01
COMPLETION DATE: 12/11/2007
DRILLER: Robert
LOGGED BY: Thomas Hedrick
DEPTH TO WATER (at drilling): ~ 40 ft.
DEPTH TO WATER (static > 24-hrs.): 36.09 ft.

WR-101 / RW-2

Interval (feet)	Drilling Method	Sample Description
0 - 9	SDM	Light Brown fine grained SAND with clay matrix
9 - 17	SDM	Light Brown clayey SILT
17 - 20	SDM	Light Brown silty CLAY
20 - 25	SDM	Brown medium grained SAND with pebbles, Dry and loose
25 - 28	SDM	Light Brown silty CLAY, very tight, MOIST
28 - 38	SDM	Light Brown CLAY, Moist
38 - 42	SDM	Brown fine grained SAND, Moist
42 - 50	SDM	Brownish/Red CLAY, Dry
50 - 56	SDM	Brown medium grained SAND with clay matrix, very moist/saturated
56 - 58	SDM	Brown silty CLAY, moist
60 - 66	SDM	Brown medium grained SAND, Saturated
		Total Depth = 66 feet BGS, Screened from 66 – 46', Sand 40-66', Bentonite 36-40', Grout 0-36'

Well Completion Materials and Depth Intervals (ft.)

Surface Completion: Stick-up
Casing, solid: 6 inch diameter sch. 80 PVC casing, 0-7 ft.
Casing, solid: 6 inch diameter sch. 40 PVC casing, 7 -46 ft.
Screen: 6 inch diameter sch. 40 PVC well screen 0.025-slotted, 46-66 ft.
Sand Pack: 16/30 washed, silica sand, 40-66 ft.
Bentonite Seal: "Pure Gold" Bentonite Pellets, 36-40 ft.
Cement-Bentonite (10:1 ratio) Grout: 0-36 ft.



JBR

INTERMOUNTAIN POWER PLANT

850 WEST BRUSH WELLMAN ROAD – DELTA, MILLARD COUNTY, UTAH

Ground Water Recovery Well WR-101 Schematic

			Date Drawn
Design by	Drawn by	Scale	Last Revision Date

jbr environmental consultants, inc.

DRILLING LOG

PROJECT NAME: Intermountain Power Plant
BORING/MONITORING WELL: WR-102

PROJECT No.: 08.00463.01
COMPLETION DATE: 3/30/2009

DRILLING FIRM: Boart Longyear
BORING METHOD: Sonic Drilling Method
BORING DIAMETER: 10.0-inch

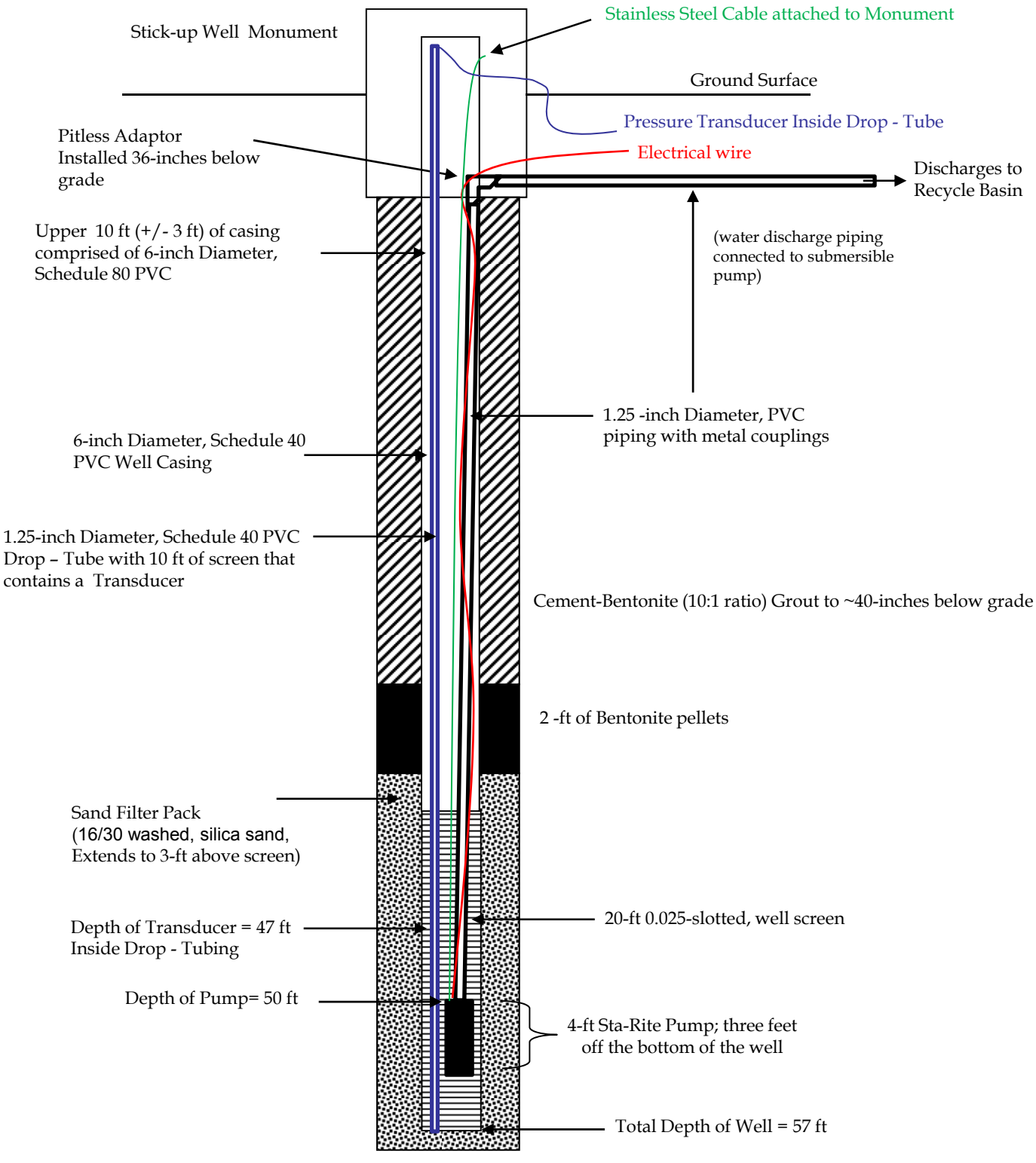
DRILLER: Chato
LOGGED BY: Thomas Hedrick
DEPTH TO WATER (at drilling): ~ 40 ft.
DEPTH TO WATER (static > 24-hrs.): ~ 27 ft.

WR-102

Interval (feet)	Drilling Method	Sample Description
0 - 11	SDM	Light Brown fine grained SAND with pebbles present from 3 - 7 feet, Dry
11 - 16	SDM	Light Brown fine grained SAND with interbeds of brown CLAY, Dry
16 - 35	SDM	Light Gray CLAY, moist at ~ 35 feet,
35 - 37	SDM	Light Gray Clay with a fine to medium grained sandy matrix, very moist
37 - 48	SDM	Brown fine to medium grained SAND, saturated
48 - 50	SDM	Brown CLAY, dry
50 - 53	SDM	Brown to Black medium grained SAND, saturated
53 - 57	SDM	Brown CLAY with two fine grained sand layer present
		Total Depth = 57 feet BGS, Screened from 37 – 57', Sand 34-57', Bentonite 31-34, Grout 0-31'

Well Completion Materials and Depth Intervals (ft.)

Surface Completion: Stick-up
Casing, solid: 6 inch diameter sch. 80 PVC casing, 0-9 ft.
Casing, solid: 6 inch diameter sch. 40 PVC casing, 9 -37 ft.
Screen: 6 inch diameter sch. 40 PVC well screen 0.025-slotted, 37-57 ft.
Sand Pack: 16/30 washed, silica sand, 34-57 ft.
Bentonite Seal: "Pure Gold" Bentonite Pellets, 31-34 ft.
Cement-Bentonite (10:1 ratio) Grout: 0-31 ft.



JBR

INTERMOUNTAIN POWER PLANT

850 WEST BRUSH WELLMAN ROAD – DELTA, MILLARD COUNTY, UTAH

Ground Water Recovery Well WR-102 Schematic

Design by	Drawn by	Scale	Date Drawn
			Last Revision Date

jbr environmental consultants, inc.

DRILLING LOG

PROJECT NAME: Intermountain Power
Plant BORING/MONITORING WELL: WR-103

PROJECT No.: 08.00463.01
COMPLETION DATE: 3/31/2009

DRILLING FIRM: Boart Longyear
BORING METHOD: Sonic
BORING DIAMETER: 10.0-inch

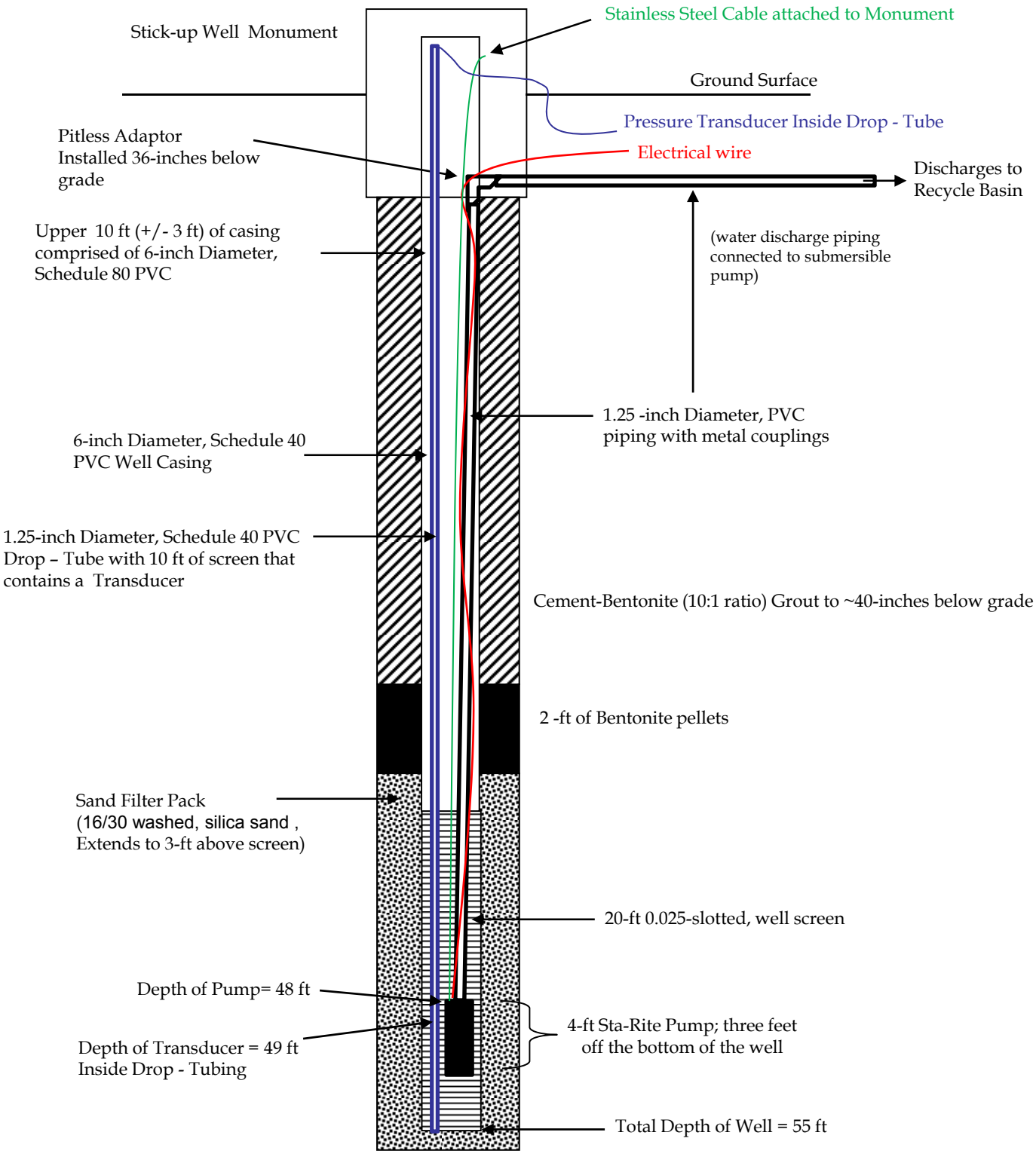
DRILLER: Chato
LOGGED BY: Thomas Hedrick
DEPTH TO WATER (at drilling): ~ 40 ft.
DEPTH TO WATER (static > 24-hrs.): ~ 30 ft.

WR-103

Interval (feet)	Drilling Method	Sample Description
0 - 3	SDM	Brown to Light brown fine grained SAND to silt, Dry
3 - 15	SDM	Light brown fine to medium grained SAND, pebbles present from 3 - 5 feet, Dry
15 - 17	SDM	Light brown fine to medium grained SAND, with interbeds of light brown CLAY with a sandy matrix, Dry
17 - 24	SDM	Light brown CLAY, Dry
24 - 37	SDM	Reddish Gray CLAY, Dry
37 - 45	SDM	Brown to Black medium fine to medium grained SAND, very moist
45 - 47	SDM	Brown fine grained SAND with a CLAY matrix, very moist
47 - 52	SDM	Brown Fine to medium grained SAND, saturated
52 - 55	SDM	Red CLAY, dry
		Total Depth = 55 feet BGS, Screened from 35 – 55', Sand 32-55', Bentonite 29-32, Grout 0-29'

Well Completion Materials and Depth Intervals (ft.)

Surface Completion: Stick-up
Casing, solid: 6 inch diameter sch. 80 PVC casing, 0-6.5 ft.
Casing, solid: 6 inch diameter sch. 40 PVC casing, 6.5 -35 ft.
Screen: 6 inch diameter sch. 40 PVC well screen 0.025-slotted, 35-55 ft.
Sand Pack: 16/30 washed, silica sand, 32-55 ft.
Bentonite Seal: "Pure Gold" Bentonite Pellets, 29-32 ft.
Cement-Bentonite (10:1 ratio) Grout: 0-29 ft.



JBR

INTERMOUNTAIN POWER PLANT

850 WEST BRUSH WELLMAN ROAD – DELTA, MILLARD COUNTY, UTAH

Ground Water Recovery Well WR-103 Schematic

Design by	Drawn by	Scale	Date Drawn / Last Revision Date

Appendix C Tabulation of UTL and GWPS Values, CCR Unit-Specific

Assessment Monitoring - Statistically Significant Levels above Groundwater Protection Standards
Intermountain Power Service Corporation - Intermountain Generation Facility
Delta, Utah

Constituent	Downgradient Well ID	N	Mean	SD	SE	Median	1st Quartile	3rd Quartile	Minimum	Maximum	% Non-Detects	UTL	MCL	GWPS	LCL	LCL Exceeds GWPS
BOTTOM ASH BASIN																
lithium (mg/L)	BAC-3	11	1.369	0.6401	0.193	1.06	0.944	2.13	0.812	2.53	0.0%	0.7415	0.04	0.7415	0.812	YES
molybdenum (mg/L)	BAC-2	11	0.1595	0.01643	0.004953	0.156	0.143	0.167	0.14	0.194	0.0%	0.04038	0.1	0.1	0.1506	YES
COMBUSTION BY-PRODUCTS LANDFILL																
NO STATISTICALLY SIGNIFICANT LEVELS ABOVE GWPS																
WASTE WATER BASIN																
arsenic (mg/L)	WWC-1	11	0.01664	0.006735	0.002031	0.0181	0.0173	0.02	0.00331	0.0243	0.0%				0.01496	YES
arsenic (mg/L)	WWC-2	11	0.01455	0.0007488	0.0002258	0.0147	0.0141	0.0152	0.0129	0.0155	0.0%	0.01275	0.01	0.01275	0.01415	YES
arsenic (mg/L)	WWC-3	11	0.02086	0.003704	0.001117	0.0214	0.021	0.0226	0.0102	0.0247	0.0%				0.02045	YES

All units micrograms per liter (mg/L)
N: Number of Samples
SD: Standard Deviation
SE: Standard Error
UTL: Upper Tolerance Limit, calculated using samples collected from upgradient wells
Bottom Ash upgrandient wells: BA-U-1, BA-U-2 (n=22)
Waste Water upgradient wells: WW-U-1, WW-U-2, SI-U-1 (n=33)
GWPS: Ground water Protection Standard = the greater value of the UTL or MCL
LCL: Lower Confidence Limit of the Mean, If the LCL exceeds the GWPS it is evidence of a statistically significant level above background

Constituent Name	Well	N	Mean	Standard Deviation	Standard Error	Median	Lower Quartile,	Upper Quartile,	Minimum	Maximum	% Non-Detects	UTL	MCL	GWPS	LCL	UCL	LCL Exceeds GWPS2	UCL Exceeds GWPS
antimony (mg/L)	Background	33	0.00103	0.0001741	0.0000303	0.001	0.001	0.001	0.001	0.002	96.97	0.001	0.006	0.006				
antimony (mg/L)	WWC-1	11	0.001	0	0	0.001	0.001	0.001	0.001	0.001	100				0.001	0.001	NO	NO
antimony (mg/L)	WWC-2	11	0.001	0	0	0.001	0.001	0.001	0.001	0.001	100				0.001	0.001	NO	NO
antimony (mg/L)	WWC-3	11	0.001	0	0	0.001	0.001	0.001	0.001	0.001	100				0.001	0.001	NO	NO
antimony (mg/L)	WWC-4	11	0.001	0	0	0.001	0.001	0.001	0.001	0.001	100				0.001	0.001	NO	NO
antimony (mg/L)	WWC-5	11	0.001	0	0	0.001	0.001	0.001	0.001	0.001	100				0.001	0.001	NO	NO
arsenic (mg/L)	Background	33	0.006554	0.002831	0.0004929	0.00573	0.004425	0.00935	0.001	0.0109	3.03	0.01275	0.01	0.01275				
arsenic (mg/L)	WWC-1	11	0.01664	0.006735	0.002031	0.0181	0.0173	0.02	0.00331	0.0243	0				0.01496	0.0203	YES	YES
arsenic (mg/L)	WWC-2	11	0.01455	0.0007488	0.0002258	0.0147	0.0141	0.0152	0.0129	0.0155	0				0.01415	0.01496	YES	YES
arsenic (mg/L)	WWC-3	11	0.02086	0.003704	0.001117	0.0214	0.021	0.0226	0.0102	0.0247	0				0.02045	0.02262	YES	YES
arsenic (mg/L)	WWC-4	11	0.01206	0.002721	0.0008204	0.013	0.0116	0.0135	0.00498	0.0145	0				0.01147	0.01344	NO	YES
arsenic (mg/L)	WWC-5	11	0.008509	0.002536	0.0007647	0.00783	0.00717	0.0104	0.00371	0.0131	0				0.007123	0.009895	NO	NO
barium (mg/L)	Background	33	0.07908	0.02935	0.005109	0.0761	0.05565	0.09225	0.0446	0.178	0	0.1481	2	2				
barium (mg/L)	WWC-1	11	0.03876	0.01967	0.00593	0.0317	0.0268	0.0536	0.0209	0.077	0				0.02755	0.04481	NO	NO
barium (mg/L)	WWC-2	11	0.03947	0.007406	0.002233	0.0361	0.0339	0.0421	0.031	0.0543	0				0.03543	0.04352	NO	NO
barium (mg/L)	WWC-3	11	0.03304	0.01088	0.003279	0.0302	0.0278	0.0342	0.0242	0.0638	0				0.0242	0.0357	NO	NO
barium (mg/L)	WWC-4	11	0.0646	0.01769	0.005334	0.061	0.0507	0.0768	0.0463	0.101	0				0.05493	0.07427	NO	NO
barium (mg/L)	WWC-5	11	0.05179	0.02411	0.00727	0.0438	0.034	0.067	0.0302	0.103	0				0.03844	0.06223	NO	NO
beryllium (mg/L)	Background	33	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100	0.002	0.004	0.004				
beryllium (mg/L)	WWC-1	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
beryllium (mg/L)	WWC-2	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
beryllium (mg/L)	WWC-3	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
beryllium (mg/L)	WWC-4	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
beryllium (mg/L)	WWC-5	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
cadmium (mg/L)	Background	33	0.004887	0.0006476	0.0001127	0.005	0.005	0.005	0.00128	0.005	96.97	0.005	0.005	0.005				
cadmium (mg/L)	WWC-1	11	0.005	0	0	0.005	0.005	0.005	0.005	0.005	100				0.002	0.002	NO	NO
cadmium (mg/L)	WWC-2	11	0.005	0	0	0.005	0.005	0.005	0.005	0.005	100				0.002	0.002	NO	NO
cadmium (mg/L)	WWC-3	11	0.005	0	0	0.005	0.005	0.005	0.005	0.005	100				0.002	0.002	NO	NO
cadmium (mg/L)	WWC-4	11	0.005	0	0	0.005	0.005	0.005	0.005	0.005	100				0.002	0.002	NO	NO
cadmium (mg/L)	WWC-5	11	0.005	0	0	0.005	0.005	0.005	0.005	0.005	100				0.002	0.002	NO	NO
chromium (mg/L)	Background	33	0.00627	0.012	0.002088	0.00217	0.002	0.00481	0.000602	0.067	27.27	0.067	0.1	0.1				
chromium (mg/L)	WWC-1	11	0.00337	0.00355	0.00107	0.002	0.002	0.00348	0.002	0.0139	72.73				0.002	0.00369	NO	NO
chromium (mg/L)	WWC-2	11	0.004285	0.006663	0.002009	0.002	0.002	0.00335	0.002	0.0243	72.73				0.002	0.00348	NO	NO
chromium (mg/L)	WWC-3	11	0.002442	0.001151	0.0003471	0.002	0.002	0.002	0.002	0.00577	81.82				0.002	0.00309	NO	NO
chromium (mg/L)	WWC-4	11	0.002615	0.002041	0.0006155	0.002	0.002	0.002	0.002	0.00877	90.91				0.002	0.002	NO	NO
chromium (mg/L)	WWC-5	11	0.002665	0.002078	0.0006264	0.002	0.002	0.00202	0.002	0.00892	72.73				0.002	0.00238	NO	NO
cobalt (mg/L)	Background	33	0.004097	0.000557	0.00009697	0.004	0.004	0.004	0.004	0.0072	96.97	0.0072	0.006	0.0072				
cobalt (mg/L)	WWC-1	11	0.004522	0.001352	0.0004077	0.004	0.004	0.004	0.004	0.00842	81.82				0.004	0.00532	NO	NO
cobalt (mg/L)	WWC-2	11	0.004	0	0	0.004	0.004	0.004	0.004	0.004	100				0.004	0.004	NO	NO
cobalt (mg/L)	WWC-3	11	0.004	0	0	0.004	0.004	0.004	0.004	0.004	100				0.004	0.004	NO	NO
cobalt (mg/L)	WWC-4	11	0.004	0	0	0.004	0.004	0.004	0.004	0.004	100				0.004	0.004	NO	NO
cobalt (mg/L)	WWC-5	11	0.004136	0.0004523	0.0001364	0.004	0.004	0.004	0.004	0.0055	90.91				0.004	0.004	NO	NO
fluoride (mg/L)	Background	33	0.4106	0.2331	0.04058	0.458	0.276	0.548	0	1.01	15.15	0.9086	4	4				
fluoride (mg/L)	WWC-1	11	0.1627	0.1651	0.04978	0.133	0	0.256	0	0.507	36.36				0.0767	0.2488	NO	NO
fluoride (mg/L)	WWC-2	11	0.4225	0.1728	0.0521	0.42	0.358	0.452	0.158	0.833	0				0.328	0.5169	NO	NO
fluoride (mg/L)	WWC-3	11	0.9894	0.09192	0.02772	1.01	0.897	1.06	0.845	1.13	0				0.9391	1.04	NO	NO
fluoride (mg/L)	WWC-4	11	0.4473	0.08237	0.02484	0.435	0.387	0.509	0.319	0.576	0				0.4023	0.4923	NO	NO
fluoride (mg/L)	WWC-5	11	0.3261	0.1374	0.04143	0.331	0.292	0.401	0	0.544	9.091				0.251	0.4012	NO	NO
lead (mg/L)	Background	33	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100	0.002	0.015	0.015				
lead (mg/L)	WWC-1	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
lead (mg/L)	WWC-2	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
lead (mg/L)	WWC-3	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
lead (mg/L)	WWC-4	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
lead (mg/L)	WWC-5	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
lithium (mg/L)	Background	33	0.5821	0.3149	0.05482	0.479	0.4385	0.784	0.235	1.35	0	1.35	0.04	1.35				
lithium (mg/L)	WWC-1	11	1.325	0.7251	0.2186	0.964	0.819	2.18	0.755	2.69	0				0.755	2.41	NO	YES
lithium (mg/L)	WWC-2	11	0.1539	0.05544	0.01672	0.124	0.112	0.225	0.104	0.243	0				0.104	0.241	NO	NO
lithium (mg/L)	WWC-3	11	0.1649	0.04891	0.01475	0.139	0.127	0.23	0.123	0.243	0				0.123	0.241	NO	NO
lithium (mg/L)	WWC-4	11	0.5123	0.2318	0.0699	0.382	0.351	0.75	0.309	0.909	0				0.309	0.879	NO	NO
lithium (mg/L)	WWC-5	11	1.106	1.165	0.3513	0.555	0.497	1.4	0.472	4.41	0				0.472	1.41	NO	YES
mercury (mg/L)	Background	33	0.00015	0	0	0.00015	0.00015	0.00015	0.00015	0.00015	100	0.00015	0.002	0.002				
mercury (mg/L)	WWC-1	11	0.0002225	0.00006787	0.00002046	0.000198	0.000168	0.00031	0.00015	0.000328	18.18				0.0001872	0.0002579	NO	NO
mercury (mg/L)	WWC-2	11	0.00015	0	0	0.00015	0.00015	0.00015	0.00015	0.00015	100				0.00015	0.00015	NO	NO
mercury (mg/L)	WWC-3	11	0.00015	0	0	0.00015	0.00015	0.00015	0.00015	0.00015	100				0.00015	0.00015	NO	NO
mercury (mg/L)	WWC-4	11	0.00015	0	0	0.00015	0.00015	0.00015	0.00015	0.00015	100				0.00015	0.00015	NO	NO
mercury (mg/L)	WWC-5	11	0.00015	0	0	0.00015	0.00015	0.00015	0.00015	0.00015	100				0.00015	0.00015	NO	NO
molybdenum (mg/L)	Background	33	0.008239	0.00735	0.001279	0.00619	0.00286	0.009505	0.00182	0.0342	0	0.02676	0.1	0.1				
molybdenum (mg/L)	WWC-1	11	0.008871	0.00245	0.0007387	0.00896	0.0068	0.00995	0.00596	0.0147	0				0.007532	0.01021	NO	NO
molybdenum (mg/L)	WWC-2	11	0.004055	0.001372	0.0004137	0.00372	0.00341	0.00402	0.00304	0.00809	0				0.00304	0.00405	NO	NO
molybdenum (mg/L)	WWC-3	11	0.008955	0.01226	0.003697	0.00537	0.00482	0.00574	0.00464	0.0459	0				0.00464	0.00593	NO	NO
molybdenum (mg/L)	WWC-4	11	0.002949	0.002736	0.0008249	0.00215	0.001	0.00467	0.001	0.0082	45.45				0.001	0.00783	NO	NO
molybdenum (mg/L)	WWC-5	11	0.008649	0.007883	0.002377	0.00523	0.00324	0.0119	0.00301	0.0265	0				0.004262	0.009735	NO	NO
radium226and228combined (pCi/L)	Background	30	1.633	0.7959	0.1453	1.54	1.045	2.19	0.27	3.3	0	3.4	5	5				
radium226and228combined (pCi/L)	WWC-1	10	1.56	0.551	0.1743	1.41	1.15	2.18	0.96	2.51	0				1.241	1.879	NO	NO
radium226and228combined (pCi/L)	WWC-2	10	0.86	0.5302	0.1677	0.715	0.515	1.23	0	1.89	10				0.5526	1.167	NO	NO
radium226and228combined (pCi/L)	WWC-3	10	0.801	1.124	0.3553	0.445	0.015	1.475	-0.14	3.43	10				0.02739	0.9845	NO	NO
radium226and228combined (pCi/L)	WWC-4	10	0.846	0.5889	0.1862	0.815	0.375	1.2	-0.02	1.97	10				0.5046	1.187	NO	NO
radium226and228combined (pCi/L)	WWC-5	10	1.511	0.4353	0.1377	1.555	1.12	1.77	0.92	2.42	0				1.259	1.763	NO	NO
selenium (mg/L)	Background	33	0.005938	0.003461	0.0006026	0.00617	0.002	0.007975	0.002	0.0122	33.33	0.0122	0.05	0.05				
selenium (mg/L)	WWC-1	11	0.01358	0.002457	0.0007407	0.0145	0.0139	0.015	0.00824	0.0153	0				0.00824	0.0152	NO	NO
selenium (mg/L)	WWC-2	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
selenium (mg/L)	WWC-3	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
selenium (mg/L)	WWC-4	11	0.002142	0.0001713	0.00005166	0.00207	0.002	0.00238	0.002	0.00241	36.36				0.002	0.00239	NO	NO
selenium (mg/L)	WWC-5	11	0.003691	0.0007226	0.0002179	0.00395	0.00336	0.0041	0.002	0.00478	9.091				0.003296	0.004086	NO	NO

thallium (mg/L)	Background	33	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100	0.002	0.02	0.02				
thallium (mg/L)	WWC-1	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
thallium (mg/L)	WWC-2	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
thallium (mg/L)	WWC-3	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
thallium (mg/L)	WWC-4	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
thallium (mg/L)	WWC-5	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO

Constituent Name	Well	N	Mean	Standard Deviation	Standard Error	Median	Lower Quartile,	Upper Quartile,	Minimum	Maximum	% Non-Detects	UTLs	MCL	GWPS	LC L	UCL	LCL Exceed GWPS	UCL Exceed GWPS
antimony (mg/L)	Background	22	0.001	0	0	0.001	0.001	0.001	0.001	0.001	100	0.001	0.006	0.006				
antimony (mg/L)	CLW-1	11	0.001	0	0	0.001	0.001	0.001	0.001	0.001	100				0.001	0.001	NO	NO
antimony (mg/L)	CLW-2	11	0.001	0	0	0.001	0.001	0.001	0.001	0.001	100				0.001	0.001	NO	NO
antimony (mg/L)	CLW-3	11	0.001	0	0	0.001	0.001	0.001	0.001	0.001	100				0.001	0.001	NO	NO
antimony (mg/L)	CLW-4	11	0.001	0	0	0.001	0.001	0.001	0.001	0.001	100				0.001	0.001	NO	NO
antimony (mg/L)	CLW-5	11	0.001	0	0	0.001	0.001	0.001	0.001	0.001	100				0.001	0.001	NO	NO
antimony (mg/L)	CLW-6	11	0.001	0	0	0.001	0.001	0.001	0.001	0.001	100				0.001	0.001	NO	NO
antimony (mg/L)	CLW-7	11	0.001	0	0	0.001	0.001	0.001	0.001	0.001	100				0.001	0.001	NO	NO
antimony (mg/L)	CLW-8	11	0.001	0	0	0.001	0.001	0.001	0.001	0.001	100				0.001	0.001	NO	NO
arsenic (mg/L)	Background	22	0.03012	0.006689	0.001426	0.02775	0.0251	0.0333	0.0236	0.0507	0	0.047	0.01	0.047				
arsenic (mg/L)	CLW-1	11	0.02857	0.001619	0.0004882	0.0285	0.0266	0.0298	0.0264	0.0309	0				0.02769	0.02946	NO	NO
arsenic (mg/L)	CLW-2	11	0.02601	0.001529	0.0004609	0.0258	0.0246	0.0277	0.0243	0.0284	0				0.02517	0.02684	NO	NO
arsenic (mg/L)	CLW-3	11	0.03979	0.002278	0.000687	0.0402	0.0378	0.0412	0.0364	0.0437	0				0.03855	0.04104	NO	NO
arsenic (mg/L)	CLW-4	11	0.03304	0.005682	0.001713	0.0352	0.0308	0.0375	0.0196	0.0388	0				0.02993	0.03614	NO	NO
arsenic (mg/L)	CLW-5	11	0.02075	0.001594	0.0004806	0.021	0.0189	0.0216	0.0182	0.023	0				0.01987	0.02162	NO	NO
arsenic (mg/L)	CLW-6	11	0.01817	0.005867	0.001769	0.0164	0.0143	0.0246	0.0104	0.0287	0				0.01497	0.02138	NO	NO
arsenic (mg/L)	CLW-7	11	0.02379	0.00104	0.0003135	0.0239	0.0234	0.0244	0.0215	0.0257	0				0.02322	0.02436	NO	NO
arsenic (mg/L)	CLW-8	11	0.02325	0.00291	0.0008773	0.0239	0.0224	0.0254	0.0155	0.0258	0				0.0222	0.02476	NO	NO
barium (mg/L)	Background	22	0.09319	0.0127	0.002708	0.0915	0.087	0.0957	0.0758	0.129	0	0.129	2	2				
barium (mg/L)	CLW-1	11	0.06474	0.01389	0.004187	0.0615	0.0582	0.0648	0.053	0.105	0				0.053	0.0668	NO	NO
barium (mg/L)	CLW-2	11	0.08037	0.007668	0.002312	0.0811	0.072	0.0855	0.0711	0.0957	0				0.07618	0.08456	NO	NO
barium (mg/L)	CLW-3	11	0.09952	0.006035	0.00182	0.0995	0.0948	0.103	0.089	0.111	0				0.09622	0.1028	NO	NO
barium (mg/L)	CLW-4	11	0.09573	0.01558	0.004697	0.09	0.0801	0.109	0.0786	0.122	0				0.08721	0.1042	NO	NO
barium (mg/L)	CLW-5	11	0.07757	0.007172	0.002163	0.0801	0.0714	0.0851	0.0671	0.0869	0				0.07365	0.08149	NO	NO
barium (mg/L)	CLW-6	11	0.09176	0.003801	0.001146	0.0902	0.0885	0.0961	0.0873	0.0976	0				0.08969	0.09384	NO	NO
barium (mg/L)	CLW-7	11	0.05569	0.008609	0.002596	0.0539	0.0514	0.0581	0.0475	0.0794	0				0.0475	0.0593	NO	NO
barium (mg/L)	CLW-8	11	0.07477	0.01305	0.003936	0.0707	0.0643	0.0797	0.0609	0.107	0				0.06764	0.08191	NO	NO
beryllium (mg/L)	Background	22	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100	0.002	0.004	0.004				
beryllium (mg/L)	CLW-1	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
beryllium (mg/L)	CLW-2	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
beryllium (mg/L)	CLW-3	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
beryllium (mg/L)	CLW-4	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
beryllium (mg/L)	CLW-5	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
beryllium (mg/L)	CLW-6	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
beryllium (mg/L)	CLW-7	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
beryllium (mg/L)	CLW-8	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
cadmium (mg/L)	Background	22	0.004802	0.0009274	0.0001977	0.005	0.005	0.005	0.00065	0.005	95.45	0.005	0.005	0.005				
cadmium (mg/L)	CLW-1	11	0.005	0	0	0.005	0.005	0.005	0.005	0.005	100				0.005	0.005	NO	NO
cadmium (mg/L)	CLW-2	11	0.005	0	0	0.005	0.005	0.005	0.005	0.005	100				0.005	0.005	NO	NO
cadmium (mg/L)	CLW-3	11	0.005	0	0	0.005	0.005	0.005	0.005	0.005	100				0.005	0.005	NO	NO
cadmium (mg/L)	CLW-4	11	0.005	0	0	0.005	0.005	0.005	0.005	0.005	100				0.005	0.005	NO	NO
cadmium (mg/L)	CLW-5	10	0.005	0	0	0.005	0.005	0.005	0.005	0.005	100				0.005	0.005	NO	NO
cadmium (mg/L)	CLW-6	11	0.005	0	0	0.005	0.005	0.005	0.005	0.005	100				0.005	0.005	NO	NO
cadmium (mg/L)	CLW-7	10	0.005	0	0	0.005	0.005	0.005	0.005	0.005	100				0.005	0.005	NO	NO
cadmium (mg/L)	CLW-8	11	0.005	0	0	0.005	0.005	0.005	0.005	0.005	100				0.005	0.005	NO	NO
chromium (mg/L)	Background	22	0.002286	0.001172	0.0002499	0.002	0.002	0.002	0.000529	0.00613	81.82	0.00613	0.1	0.1				
chromium (mg/L)	CLW-1	11	0.007546	0.008927	0.002692	0.002	0.002	0.0157	0.00102	0.0271	45.45				0.00102	0.0187	NO	NO
chromium (mg/L)	CLW-2	11	0.003625	0.003655	0.001102	0.002	0.002	0.00411	0.002	0.014	72.73				0.002	0.00576	NO	NO
chromium (mg/L)	CLW-3	11	0.001997	0.0006608	0.0001992	0.002	0.002	0.002	0.000505	0.00346	81.82				0.000505	0.002	NO	NO
chromium (mg/L)	CLW-4	11	0.00652	0.01496	0.004511	0.002	0.002	0.002	0.000762	0.0516	72.73				0.000762	0.00336	NO	NO
chromium (mg/L)	CLW-5	11	0.002622	0.002475	0.0007463	0.002	0.002	0.002	0.000712	0.00999	72.73				0.000712	0.00214	NO	NO
chromium (mg/L)	CLW-6	11	0.002869	0.00296	0.0008924	0.002	0.002	0.002	0.000612	0.0116	72.73				0.000612	0.00335	NO	NO
chromium (mg/L)	CLW-7	11	0.00338	0.00254	0.0007658	0.002	0.002	0.00421	0.002	0.00891	63.64				0.002	0.00772	NO	NO
chromium (mg/L)	CLW-8	11	0.00317	0.003032	0.0009141	0.002	0.002	0.00224	0.002	0.012	72.73				0.002	0.00463	NO	NO
cobalt (mg/L)	Background	22	0.004	0	0	0.004	0.004	0.004	0.004	0.004	100	0.004	0.006	0.006				
cobalt (mg/L)	CLW-1	11	0.004	0	0	0.004	0.004	0.004	0.004	0.004	100				0.004	0.004	NO	NO
cobalt (mg/L)	CLW-2	11	0.004	0	0	0.004	0.004	0.004	0.004	0.004	100				0.004	0.004	NO	NO
cobalt (mg/L)	CLW-3	11	0.004	0	0	0.004	0.004	0.004	0.004	0.004	100				0.004	0.004	NO	NO
cobalt (mg/L)	CLW-4	11	0.004	0	0	0.004	0.004	0.004	0.004	0.004	100				0.004	0.004	NO	NO
cobalt (mg/L)	CLW-5	11	0.004	0	0	0.004	0.004	0.004	0.004	0.004	100				0.004	0.004	NO	NO
cobalt (mg/L)	CLW-6	11	0.004	0	0	0.004	0.004	0.004	0.004	0.004	100				0.004	0.004	NO	NO
cobalt (mg/L)	CLW-7	11	0.004	0	0	0.004	0.004	0.004	0.004	0.004	100				0.004	0.004	NO	NO
cobalt (mg/L)	CLW-8	11	0.004	0	0	0.004	0.004	0.004	0.004	0.004	100				0.004	0.004	NO	NO
fluoride (mg/L)	Background	22	0.9517	0.1236	0.02635	0.976	0.8675	1.02	0.611	1.17	0	1.242	4	4				
fluoride (mg/L)	CLW-1	11	1.045	0.1158	0.03492	1.06	1.02	1.15	0.834	1.18	0				0.982	1.109	NO	NO
fluoride (mg/L)	CLW-2	11	1.132	0.1564	0.04715	1.18	1.13	1.21	0.695	1.29	0				1.094	1.209	NO	NO
fluoride (mg/L)	CLW-3	11	1.234	0.1135	0.03422	1.23	1.19	1.33	0.948	1.35	0				1.18	1.296	NO	NO
fluoride (mg/L)	CLW-4	11	1.442	0.1068	0.03219	1.44	1.35	1.53	1.27	1.6	0				1.383	1.5	NO	NO
fluoride (mg/L)	CLW-5	11	1.728	0.1058	0.0319	1.71	1.69	1.82	1.51	1.83	0				1.67	1.786	NO	NO
fluoride (mg/L)	CLW-6	11	1.592	0.1303	0.03928	1.61	1.46	1.73	1.38	1.73	0				1.521	1.663	NO	NO
fluoride (mg/L)	CLW-7	11	1.009	0.1205	0.03632	1.02	0.945	1.11	0.792	1.16	0				0.9427	1.074	NO	NO
fluoride (mg/L)	CLW-8	11	0.9985	0.1176	0.03545	1.03	0.933	1.08	0.782	1.13	0				0.9342	1.063	NO	NO
lead (mg/L)	Background	22	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100	0.002	0.015	0.015				
lead (mg/L)	CLW-1	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
lead (mg/L)	CLW-2	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
lead (mg/L)	CLW-3	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
lead (mg/L)	CLW-4	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
lead (mg/L)	CLW-5	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
lead (mg/L)	CLW-6	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
lead (mg/L)	CLW-7	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
lead (mg/L)	CLW-8	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO

lithium (mg/L)	Background	22	0.2651	0.07813	0.01666	0.2155	0.207	0.3485	0.19	0.401	0	0.401	0.04	0.401				
lithium (mg/L)	CLW-1	11	0.2355	0.07161	0.02159	0.192	0.184	0.316	0.173	0.361	0				0.173	0.318	NO	NO
lithium (mg/L)	CLW-2	11	0.2844	0.09059	0.02731	0.227	0.219	0.391	0.211	0.438	0				0.211	0.396	NO	NO
lithium (mg/L)	CLW-3	11	0.2722	0.08772	0.02645	0.217	0.214	0.368	0.197	0.435	0				0.197	0.375	NO	NO
lithium (mg/L)	CLW-4	11	0.2514	0.07328	0.02209	0.204	0.199	0.336	0.189	0.375	0				0.189	0.338	NO	NO
lithium (mg/L)	CLW-5	11	0.217	0.1204	0.03631	0.21	0.188	0.346	0.025	0.411	0				0.1511	0.2828	NO	NO
lithium (mg/L)	CLW-6	11	0.2383	0.09904	0.02986	0.203	0.193	0.333	0.05	0.4	9.091				0.1841	0.2924	NO	NO
lithium (mg/L)	CLW-7	11	0.2294	0.06576	0.01983	0.189	0.182	0.302	0.169	0.331	0				0.169	0.327	NO	NO
lithium (mg/L)	CLW-8	11	0.2343	0.06641	0.02002	0.192	0.188	0.308	0.176	0.35	0				0.176	0.32	NO	NO
mercury (mg/L)	Background	22	0.00015	0	0	0.00015	0.00015	0.00015	0.00015	0.00015	100	0.00015	0.002	0.002				
mercury (mg/L)	CLW-1	11	0.00015	0	0	0.00015	0.00015	0.00015	0.00015	0.00015	100				0.00015	0.00015	NO	NO
mercury (mg/L)	CLW-2	11	0.00015	0	0	0.00015	0.00015	0.00015	0.00015	0.00015	100				0.00015	0.00015	NO	NO
mercury (mg/L)	CLW-3	11	0.00015	0	0	0.00015	0.00015	0.00015	0.00015	0.00015	100				0.00015	0.00015	NO	NO
mercury (mg/L)	CLW-4	11	0.00015	0	0	0.00015	0.00015	0.00015	0.00015	0.00015	100				0.00015	0.00015	NO	NO
mercury (mg/L)	CLW-5	11	0.00015	0	0	0.00015	0.00015	0.00015	0.00015	0.00015	100				0.00015	0.00015	NO	NO
mercury (mg/L)	CLW-6	11	0.01677	0.05513	0.01662	0.00015	0.00015	0.00015	0.00015	0.183	90.91				0.00015	0.00015	NO	NO
mercury (mg/L)	CLW-7	11	0.00015	0	0	0.00015	0.00015	0.00015	0.00015	0.00015	100				0.00015	0.00015	NO	NO
mercury (mg/L)	CLW-8	11	0.00015	0	0	0.00015	0.00015	0.00015	0.00015	0.00015	100				0.00015	0.00015	NO	NO
molybdenum (mg/L)	Background	22	0.004216	0.000791	0.0001686	0.00403	0.003815	0.004215	0.00359	0.00733	0	0.00733	0.1	0.1				
molybdenum (mg/L)	CLW-1	11	0.005008	0.001067	0.0003218	0.00454	0.00407	0.00589	0.00388	0.0068	0				0.004425	0.005591	NO	NO
molybdenum (mg/L)	CLW-2	11	0.004662	0.0004551	0.0001372	0.00461	0.00437	0.00472	0.00427	0.00593	0				0.00427	0.00481	NO	NO
molybdenum (mg/L)	CLW-3	11	0.004852	0.0001833	0.00005526	0.00483	0.00472	0.00498	0.00463	0.0052	0				0.004752	0.004952	NO	NO
molybdenum (mg/L)	CLW-4	11	0.006171	0.002332	0.0007033	0.00525	0.00459	0.00762	0.00414	0.0115	0				0.004892	0.007143	NO	NO
molybdenum (mg/L)	CLW-5	11	0.006953	0.00147	0.0004431	0.00679	0.0054	0.00841	0.00519	0.00922	0				0.00615	0.007756	NO	NO
molybdenum (mg/L)	CLW-6	11	0.008009	0.002976	0.0008972	0.00746	0.00711	0.0105	0.001	0.0117	9.091				0.006383	0.009635	NO	NO
molybdenum (mg/L)	CLW-7	11	0.01692	0.04282	0.01291	0.00396	0.00331	0.00425	0.00329	0.146	0				0.00329	0.00638	NO	NO
molybdenum (mg/L)	CLW-8	11	0.004575	0.0007728	0.000233	0.00435	0.00391	0.00503	0.00359	0.00626	0				0.004153	0.004998	NO	NO
radium226and228combined (pCi/L)	Background	20	1.207	0.7924	0.1772	1.11	0.71	1.66	0	3.7	5	3.106	5	5				
radium226and228combined (pCi/L)	CLW-1	10	1.24	0.6247	0.1975	1.25	0.54	1.885	0.34	2.16	0				0.8779	1.602	NO	NO
radium226and228combined (pCi/L)	CLW-2	10	1.333	0.6785	0.2146	1.195	0.965	1.48	0.65	3.12	0				0.9641	1.603	NO	NO
radium226and228combined (pCi/L)	CLW-3	10	0.998	0.5829	0.1843	1.18	0.465	1.56	0	1.7	10				0.6601	1.336	NO	NO
radium226and228combined (pCi/L)	CLW-4	10	1.063	0.6487	0.2051	1.03	0.49	1.605	0.22	2.24	0				0.687	1.439	NO	NO
radium226and228combined (pCi/L)	CLW-5	10	1.165	0.8818	0.2788	1.015	0.455	2.185	0	2.6	10				0.6538	1.676	NO	NO
radium226and228combined (pCi/L)	CLW-6	10	1.036	0.5369	0.1698	1.02	0.52	1.47	0.25	1.99	0				0.7248	1.347	NO	NO
radium226and228combined (pCi/L)	CLW-7	10	0.682	0.346	0.1094	0.625	0.465	0.93	0.14	1.4	0				0.4814	0.8826	NO	NO
radium226and228combined (pCi/L)	CLW-8	10	0.921	0.5334	0.1687	1.02	0.42	1.305	0.09	1.85	0				0.6118	1.23	NO	NO
selenium (mg/L)	Background	22	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100	0.002	0.05	0.05				
selenium (mg/L)	CLW-1	11	0.001903	0.0003232	0.00009745	0.002	0.002	0.002	0.000928	0.002	90.91				0.000928	0.002	NO	NO
selenium (mg/L)	CLW-2	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
selenium (mg/L)	CLW-3	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
selenium (mg/L)	CLW-4	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
selenium (mg/L)	CLW-5	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
selenium (mg/L)	CLW-6	11	0.002436	0.001447	0.0004364	0.002	0.002	0.002	0.002	0.0068	90.91				0.002	0.002	NO	NO
selenium (mg/L)	CLW-7	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
selenium (mg/L)	CLW-8	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
thallium (mg/L)	Background	22	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100	0.002	0.02	0.02				
thallium (mg/L)	CLW-1	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
thallium (mg/L)	CLW-2	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
thallium (mg/L)	CLW-3	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
thallium (mg/L)	CLW-4	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
thallium (mg/L)	CLW-5	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
thallium (mg/L)	CLW-6	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
thallium (mg/L)	CLW-7	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
thallium (mg/L)	CLW-8	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO

Constituent Name	Well	N	Mean	Standard Deviation	Standard Error	Median	Lower Quartile,	Upper Quartile,	Minimum	Maximum	% Non-Detects	UTL	MCL	GWPS	LCL	UCL	LCL Exceeds GWPS	UCL Exceeds GWPS
antimony (mg/L)	Background	22	0.001	0	0	0.001	0.001	0.001	0.001	0.001	100	0.001	0.006	0.006				
antimony (mg/L)	BAC-1	11	0.001212	0.0004318	0.0001302	0.001	0.001	0.00138	0.001	0.00237	72.73				0.001	0.00158	NO	NO
antimony (mg/L)	BAC-2	11	0.001	0	0	0.001	0.001	0.001	0.001	0.001	100				0.001	0.001	NO	NO
antimony (mg/L)	BAC-3	11	0.001	0	0	0.001	0.001	0.001	0.001	0.001	100				0.001	0.001	NO	NO
antimony (mg/L)	BAC-4	11	0.001	0	0	0.001	0.001	0.001	0.001	0.001	100				0.001	0.001	NO	NO
antimony (mg/L)	BAC-5	11	0.001	0	0	0.001	0.001	0.001	0.001	0.001	100				0.001	0.001	NO	NO
antimony (mg/L)	BAC-6	11	0.001	0	0	0.001	0.001	0.001	0.001	0.001	100				0.001	0.001	NO	NO
antimony (mg/L)	BAC-7	11	0.001	0	0	0.001	0.001	0.001	0.001	0.001	100				0.001	0.001	NO	NO
arsenic (mg/L)	Background	22	0.01936	0.01013	0.00216	0.02085	0.01585	0.02415	0.001	0.0362	9.091	0.04317	0.01	0.04317				
arsenic (mg/L)	BAC-1	11	0.01477	0.002596	0.0007828	0.0146	0.0129	0.0164	0.0103	0.0202	0				0.01335	0.01619	NO	NO
arsenic (mg/L)	BAC-2	11	0.04513	0.005039	0.001519	0.0444	0.0416	0.0469	0.0386	0.0565	0				0.04237	0.04788	NO	YES
arsenic (mg/L)	BAC-3	11	0.03214	0.01602	0.004831	0.0239	0.0192	0.0496	0.0158	0.0588	0				0.02259	0.03865	NO	NO
arsenic (mg/L)	BAC-4	11	0.03271	0.00833	0.002512	0.0352	0.0322	0.0362	0.00882	0.0407	0				0.03142	0.03659	NO	NO
arsenic (mg/L)	BAC-5	11	0.03282	0.003337	0.001006	0.0325	0.0297	0.0357	0.0275	0.0392	0				0.03099	0.03464	NO	NO
arsenic (mg/L)	BAC-6	11	0.01851	0.005069	0.001528	0.0214	0.0134	0.0229	0.0115	0.0248	0				0.01574	0.02128	NO	NO
arsenic (mg/L)	BAC-7	11	0.02408	0.00717	0.002162	0.0234	0.0191	0.0241	0.0154	0.0434	0				0.02023	0.02683	NO	NO
barium (mg/L)	Background	22	0.1102	0.03251	0.006932	0.1055	0.08195	0.139	0.0636	0.175	0	0.1866	2	2				
barium (mg/L)	BAC-1	11	0.1682	0.2106	0.06349	0.0643	0.049	0.279	0.0391	0.702	0				0.0391	0.39	NO	NO
barium (mg/L)	BAC-2	11	0.02595	0.008703	0.002624	0.0228	0.021	0.0248	0.0202	0.0472	0				0.0202	0.0385	NO	NO
barium (mg/L)	BAC-3	11	0.04248	0.0155	0.004672	0.0376	0.0317	0.048	0.0306	0.0827	0				0.03428	0.04787	NO	NO
barium (mg/L)	BAC-4	11	0.06728	0.01782	0.005373	0.0705	0.0666	0.0772	0.0171	0.0821	0				0.06453	0.07578	NO	NO
barium (mg/L)	BAC-5	11	0.08295	0.008322	0.002509	0.0877	0.0736	0.0893	0.0706	0.0928	0				0.07841	0.0875	NO	NO
barium (mg/L)	BAC-6	11	0.04864	0.02748	0.008286	0.0287	0.0245	0.0781	0.0227	0.0859	0				0.0227	0.0833	NO	NO
barium (mg/L)	BAC-7	11	0.02886	0.0109	0.003288	0.026	0.0214	0.0315	0.0195	0.0577	0				0.0231	0.03327	NO	NO
beryllium (mg/L)	Background	22	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100	0.002	0.004	0.004				
beryllium (mg/L)	BAC-1	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
beryllium (mg/L)	BAC-2	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
beryllium (mg/L)	BAC-3	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
beryllium (mg/L)	BAC-4	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
beryllium (mg/L)	BAC-5	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
beryllium (mg/L)	BAC-6	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
beryllium (mg/L)	BAC-7	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
cadmium (mg/L)	Background	22	0.005	0	0	0.005	0.005	0.005	0.005	0.005	100	0.005	0.005	0.005				
cadmium (mg/L)	BAC-1	11	0.005	0	0	0.005	0.005	0.005	0.005	0.005	100				0.005	0.005	NO	NO
cadmium (mg/L)	BAC-2	11	0.005	0	0	0.005	0.005	0.005	0.005	0.005	100				0.005	0.005	NO	NO
cadmium (mg/L)	BAC-3	11	0.005	0	0	0.005	0.005	0.005	0.005	0.005	100				0.005	0.005	NO	NO
cadmium (mg/L)	BAC-4	11	0.005	0	0	0.005	0.005	0.005	0.005	0.005	100				0.005	0.005	NO	NO
cadmium (mg/L)	BAC-5	11	0.005	0	0	0.005	0.005	0.005	0.005	0.005	100				0.005	0.005	NO	NO
cadmium (mg/L)	BAC-6	11	0.004607	0.001303	0.000393	0.005	0.005	0.005	0.000677	0.005	90.91				0.000677	0.005	NO	NO
cadmium (mg/L)	BAC-7	11	0.005	0	0	0.005	0.005	0.005	0.005	0.005	100				0.005	0.005	NO	NO
chromium (mg/L)	Background	22	0.002836	0.002757	0.0005879	0.002	0.002	0.00208	0.000506	0.0125	68.18	0.0125	0.1	0.1				
chromium (mg/L)	BAC-1	11	0.0195	0.03328	0.01003	0.00612	0.00451	0.0184	0.0028	0.114	0				0.0028	0.0412	NO	NO
chromium (mg/L)	BAC-2	11	0.008191	0.003057	0.0009216	0.00777	0.00547	0.0111	0.00483	0.0145	0				0.00652	0.009861	NO	NO
chromium (mg/L)	BAC-3	11	0.01152	0.01677	0.005055	0.00676	0.00447	0.00968	0.00362	0.0615	0				0.00362	0.0114	NO	NO
chromium (mg/L)	BAC-4	11	0.003085	0.002737	0.0008253	0.002	0.002	0.0022	0.002	0.011	63.64				0.002	0.00461	NO	NO
chromium (mg/L)	BAC-5	11	0.003285	0.00425	0.001281	0.002	0.002	0.002	0.002	0.0161	81.82				0.002	0.00204	NO	NO
chromium (mg/L)	BAC-6	11	0.00525	0.0103	0.003106	0.002	0.002	0.00257	0.002	0.0363	63.64				0.002	0.00283	NO	NO
chromium (mg/L)	BAC-7	11	0.004414	0.007316	0.002206	0.002	0.002	0.00217	0.002	0.0264	72.73				0.002	0.00398	NO	NO
cobalt (mg/L)	Background	22	0.004	0	0	0.004	0.004	0.004	0.004	0.004	100	0.004	0.006	0.006				
cobalt (mg/L)	BAC-1	11	0.004242	0.000627	0.000189	0.004	0.004	0.004	0.004	0.00605	81.82				0.004	0.00461	NO	NO
cobalt (mg/L)	BAC-2	11	0.004	0	0	0.004	0.004	0.004	0.004	0.004	100				0.004	0.004	NO	NO
cobalt (mg/L)	BAC-3	11	0.004	0	0	0.004	0.004	0.004	0.004	0.004	100				0.004	0.004	NO	NO
cobalt (mg/L)	BAC-4	11	0.004	0	0	0.004	0.004	0.004	0.004	0.004	100				0.004	0.004	NO	NO
cobalt (mg/L)	BAC-5	11	0.004	0	0	0.004	0.004	0.004	0.004	0.004	100				0.004	0.004	NO	NO
cobalt (mg/L)	BAC-6	11	0.004	0	0	0.004	0.004	0.004	0.004	0.004	100				0.004	0.004	NO	NO
cobalt (mg/L)	BAC-7	11	0.004	0	0	0.004	0.004	0.004	0.004	0.004	100				0.004	0.004	NO	NO
fluoride (mg/L)	Background	22	1.081	0.3373	0.07191	0.959	0.843	1.39	0.727	1.75	0	1.75	4	4				
fluoride (mg/L)	BAC-1	11	0.3694	0.2444	0.07368	0.401	0.266	0.507	0	0.854	18.18				0.242	0.4967	NO	NO
fluoride (mg/L)	BAC-2	11	0.8338	0.4598	0.1386	0.986	0.684	1.11	0	1.33	18.18				0.5942	1.073	NO	NO
fluoride (mg/L)	BAC-3	11	0.9784	0.8142	0.2455	0.794	0	1.62	0	2.51	27.27				0.5541	1.403	NO	NO
fluoride (mg/L)	BAC-4	11	1.236	0.1279	0.03857	1.26	1.13	1.35	1.01	1.38	0				1.166	1.306	NO	NO
fluoride (mg/L)	BAC-5	11	1.144	0.1387	0.04181	1.11	1.04	1.26	0.916	1.34	0				1.068	1.219	NO	NO
fluoride (mg/L)	BAC-6	11	0.8664	0.1652	0.04981	0.847	0.754	1.01	0.582	1.15	0				0.7761	0.9566	NO	NO
fluoride (mg/L)	BAC-7	11	1.093	0.3078	0.09282	1.09	0.936	1.31	0.388	1.51	0				0.9252	1.262	NO	NO
lead (mg/L)	Background	22	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100	0.002	0.015	0.015				
lead (mg/L)	BAC-1	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
lead (mg/L)	BAC-2	11	0.002019	0.00006332	0.00001909	0.002	0.002	0.002	0.002	0.00221	90.91				0.002	0.002	NO	NO
lead (mg/L)	BAC-3	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
lead (mg/L)	BAC-4	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO

lead (mg/L)	BAC-5	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
lead (mg/L)	BAC-6	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
lead (mg/L)	BAC-7	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
lithium (mg/L)	Background	22	0.322	0.1536	0.03275	0.288	0.2125	0.3525	0.191	0.773	0	0.7415	0.04	0.7415				
lithium (mg/L)	BAC-1	11	0.7318	0.4543	0.137	0.581	0.402	1.3	0.305	1.52	0				0.4639	0.8974	NO	YES
lithium (mg/L)	BAC-2	11	0.7655	0.408	0.123	0.524	0.44	1.22	0.414	1.38	0				0.414	1.32	NO	YES
lithium (mg/L)	BAC-3	11	1.369	0.6401	0.193	1.06	0.944	2.13	0.812	2.53	0				0.812	2.37	YES	YES
lithium (mg/L)	BAC-4	11	0.3416	0.1315	0.03966	0.262	0.243	0.508	0.228	0.532	0				0.228	0.509	NO	NO
lithium (mg/L)	BAC-5	11	0.3574	0.1144	0.03449	0.294	0.277	0.479	0.219	0.538	0				0.2914	0.4126	NO	NO
lithium (mg/L)	BAC-6	11	0.3775	0.1536	0.04631	0.28	0.265	0.542	0.25	0.599	0				0.25	0.597	NO	NO
lithium (mg/L)	BAC-7	11	0.4395	0.193	0.0582	0.327	0.285	0.674	0.269	0.699	0				0.269	0.681	NO	NO
mercury (mg/L)	Background	22	0.00015	0	0	0.00015	0.00015	0.00015	0.00015	0.00015	100	0.00015	0.002	0.002				
mercury (mg/L)	BAC-1	11	0.00015	0	0	0.00015	0.00015	0.00015	0.00015	0.00015	100				0.00015	0.00015	NO	NO
mercury (mg/L)	BAC-2	11	0.00015	0	0	0.00015	0.00015	0.00015	0.00015	0.00015	100				0.00015	0.00015	NO	NO
mercury (mg/L)	BAC-3	11	0.00015	0	0	0.00015	0.00015	0.00015	0.00015	0.00015	100				0.00015	0.00015	NO	NO
mercury (mg/L)	BAC-4	11	0.00015	0	0	0.00015	0.00015	0.00015	0.00015	0.00015	100				0.00015	0.00015	NO	NO
mercury (mg/L)	BAC-5	11	0.00015	0	0	0.00015	0.00015	0.00015	0.00015	0.00015	100				0.00015	0.00015	NO	NO
mercury (mg/L)	BAC-6	11	0.00015	0	0	0.00015	0.00015	0.00015	0.00015	0.00015	100				0.00015	0.00015	NO	NO
mercury (mg/L)	BAC-7	11	0.00015	0	0	0.00015	0.00015	0.00015	0.00015	0.00015	100				0.00015	0.00015	NO	NO
molybdenum (mg/L)	Background	22	0.01015	0.01031	0.002198	0.00717	0.00297	0.01355	0.00215	0.0408	0	0.04038	0.1	0.1				
molybdenum (mg/L)	BAC-1	11	0.05256	0.03347	0.01009	0.0467	0.0288	0.0607	0.0232	0.143	0				0.03483	0.06541	NO	NO
molybdenum (mg/L)	BAC-2	11	0.1595	0.01643	0.004953	0.156	0.143	0.167	0.14	0.194	0				0.1506	0.1685	YES	YES
molybdenum (mg/L)	BAC-3	11	0.03511	0.008635	0.002604	0.0337	0.0275	0.0396	0.026	0.0525	0				0.03039	0.03983	NO	NO
molybdenum (mg/L)	BAC-4	11	0.01258	0.002503	0.0007548	0.012	0.0104	0.0143	0.00992	0.017	0				0.01122	0.01395	NO	NO
molybdenum (mg/L)	BAC-5	11	0.008795	0.00228	0.0006875	0.0077	0.00728	0.00926	0.00666	0.0134	0				0.00666	0.0128	NO	NO
molybdenum (mg/L)	BAC-6	11	0.07072	0.02813	0.008481	0.0858	0.0359	0.0921	0.0213	0.0968	0				0.07083	0.08867	NO	NO
molybdenum (mg/L)	BAC-7	11	0.07822	0.00959	0.002892	0.075	0.0702	0.0888	0.0681	0.0944	0				0.0681	0.0942	NO	NO
radium226and228combined (pCi/L)	Background	20	1.231	0.6188	0.1384	1.245	0.84	1.675	0.28	2.42	0	2.713	5	5				
radium226and228combined (pCi/L)	BAC-1	10	1.643	0.7154	0.2262	1.555	0.99	2.435	0.61	2.6	0				1.228	2.058	NO	NO
radium226and228combined (pCi/L)	BAC-2	10	1.067	0.8147	0.2576	0.905	0.405	1.595	0.22	2.9	0				0.5947	1.539	NO	NO
radium226and228combined (pCi/L)	BAC-3	10	1.311	0.5293	0.1674	1.335	0.88	1.78	0.38	2.09	0				1.004	1.618	NO	NO
radium226and228combined (pCi/L)	BAC-4	10	0.85	0.7078	0.2238	0.84	0.31	1	0	2.6	10				0.3394	1.157	NO	NO
radium226and228combined (pCi/L)	BAC-5	10	1.052	0.8877	0.2807	0.665	0.335	1.78	0.19	2.96	0				0.5374	1.567	NO	NO
radium226and228combined (pCi/L)	BAC-6	10	1.22	1.109	0.3508	1.01	0.675	1.5	-0.09	4.07	0				-0.09	1.79	NO	NO
radium226and228combined (pCi/L)	BAC-7	10	1.231	1.035	0.3274	0.95	0.435	1.975	0	3.38	10				0.6308	1.831	NO	NO
selenium (mg/L)	Background	22	0.002272	0.0007933	0.0001691	0.002	0.002	0.002105	0.000691	0.00426	68.18	0.00426	0.05	0.05				
selenium (mg/L)	BAC-1	11	0.01246	0.004803	0.001448	0.0131	0.00818	0.0168	0.00643	0.0204	0				0.009831	0.01508	NO	NO
selenium (mg/L)	BAC-2	11	0.01469	0.001404	0.0004233	0.0144	0.0136	0.0157	0.0128	0.0173	0				0.01392	0.01546	NO	NO
selenium (mg/L)	BAC-3	11	0.02131	0.002908	0.0008769	0.0211	0.019	0.0228	0.0184	0.0287	0				0.01973	0.02278	NO	NO
selenium (mg/L)	BAC-4	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
selenium (mg/L)	BAC-5	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
selenium (mg/L)	BAC-6	11	0.002646	0.0009703	0.0002925	0.002	0.002	0.00369	0.002	0.0045	54.55				0.002	0.00414	NO	NO
selenium (mg/L)	BAC-7	11	0.004189	0.001492	0.0004499	0.00446	0.00276	0.00541	0.00257	0.007	0				0.003374	0.005005	NO	NO
thallium (mg/L)	Background	22	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100	0.002	0.02	0.02				
thallium (mg/L)	BAC-1	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
thallium (mg/L)	BAC-2	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
thallium (mg/L)	BAC-3	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
thallium (mg/L)	BAC-4	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
thallium (mg/L)	BAC-5	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
thallium (mg/L)	BAC-6	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO
thallium (mg/L)	BAC-7	11	0.002	0	0	0.002	0.002	0.002	0.002	0.002	100				0.002	0.002	NO	NO