Selection of Remedy Report
40 C.F.R. §257.97(a)

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

Project No.: 203709098

June 16, 2021

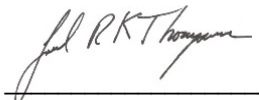
Sign-off Sheet and Signatures of Environmental Professionals

This document was prepared by Stantec Consulting Services Inc. ("Stantec") for Intermountain Power Service Corporation (the "Client"). The material in it reflects Stantec's professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

Prepared by:

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

Reviewed by:



Joel Thompson
Principal Hydrogeologist

and

David P. Grills, Jr., P.E.
Sr. Engineer

Table of Contents

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

LIST OF ATTACHMENTS

1.0 EXECUTIVE SUMMARY

1.1 BACKGROUND

On behalf of Intermountain Power Service Corporation ("IPSC"), Stantec Consulting Services Inc. ("Stantec") has prepared this report to document IPSC's rationale and proposed design for implementing an enhanced groundwater monitoring and recovery program pursuant to the United States Environmental Protection Agency's ("US EPA") 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")) at IPSC's Intermountain Generating Facility ("IGF") located approximately 10 miles north of Delta, Millard County, Utah. IPSC's CCR compliance program addresses elements prescribed by CCR Rule Parts §257.90 (R315-319-90) Applicability; §257.91 (R315-319-91) Groundwater Monitoring Systems; §257.93 (R315-319-93) Groundwater Sampling and Analysis Requirements; §257.95 (R315-319-95) Assessment Monitoring Program; §257.96 (R315-319-96) Assessment of Corrective Measures; and §257.97(a-e) Selection of Remedy (R315-319-97).

The Utah Department of Environmental Quality ("UDEQ"), Division of Waste Management and Radiation Control ("DWMRC") has regulatory oversight pursuant to the State CCR Rule, under which DWMRC issued Permit No. SW419 for IPSC's CCR units on November 23, 2020. 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 (surface impoundment underlain by 80-millimeter High Density Polyethylene [HDPE] liner), and
- Waste Water Basin (surface impoundment underlain by 80-mil HDPE liner).

Historical reports posted on IPSC's public website present IPSC's approach for addressing requirements specified by the CCR Rules, as well as the facility's UDEQ, Division of Water Quality ("DWQ") Groundwater Discharge Permit No. UGW270004. The DWQ has regulatory oversight for IPSC's compliance with its Groundwater Discharge Permit, which includes operation, monitoring, maintenance, and corrective measure protocol associated with IPSC's Groundwater Discharge permitted facilities that include the Bottom Ash Basin and the Waste Water Basin.

As detailed in IPSC's most recent reports, including IPSC's November 2020 Amended Assessment of Corrective Measures report and 2020 Annual Groundwater Monitoring and Corrective Action Summary Report (dated January 2021), IPSC is implementing groundwater monitoring and corrective measures under its CCR and Groundwater Discharge Permits. The DWQ and IPSC agreed that IPSC would implement a phased groundwater investigation and recovery program that focused initially on removal of Total Dissolved Solids (TDS) located downgradient of, and in relatively close proximity to, the Bottom Ash Basin. IPSC's DWQ permit action level for TDS is 1,100

milligrams per liter (mg/L; i.e. parts per million-ppm). Groundwater recovery wells WR-101, WR-102, and WR-103 have been used since 2010 for recovery of TDS-impacted groundwater (reference Figure 3 for well locations), as part of IPSC's Groundwater Discharge Permit compliance program.

The DWQ and IPSC agreed that additional groundwater monitoring wells, including sampling and pump testing of wells associated with CCR Rule compliance, would be installed to help delineate more precisely the location and hydraulic characteristics of the down-gradient leading edge of the TDS plume located southwest of the Bottom Ash Basin. Following delineation of the downgradient leading edge of the TDS plume, IPSC would then evaluate how to control the downgradient migration of the plume and select and design a remedy intended to ensure ongoing protection to human health and the environment.

Supplemental groundwater monitoring indicated that TDS had impacted groundwater quality downgradient of the Waste Water Basin. No supplemental wells were deemed necessary down-gradient of the Combustion By-Products Landfill, as all CCR constituent concentrations including TDS quantified to date represent typical background concentrations. The only exceedances for CCR Appendix IV metals are arsenic and lithium (both of which have elevated background concentrations throughout the area) and molybdenum at the southwest boundary of the Bottom Ash Basin; and only arsenic and lithium at the southern and western boundaries of the Waste Water Basin. Since TDS is located downgradient of the two impoundments, TDS is being used as the leading indicator of impacted groundwater quality for fashioning a more comprehensive groundwater remediation program.

During 2020 as part of its corrective measure assessment, IPSC installed 25 wells to more definitively delineate the downgradient leading edges of TDS plumes located downgradient (southwest) of the Bottom Ash Basin and the Waste Water Basin. To date, IPSC has installed 84 groundwater monitoring wells as part of DWQ and DWMRC regulatory compliance and investigation of the downgradient leading edges of the TDS plumes. Figure 4 herein identifies TDS concentrations quantified during the most recent April 2021 semi-annual sampling event, superimposed atop an April 2021-extrapolated groundwater flow potentiometric map.

As detailed in this report, IPSC intends to expand its current groundwater recovery network by increasing the number of wells being used for groundwater recovery to reduce total mass of CCR constituents in groundwater and control the downgradient migration of such constituents. As additional groundwater quality data is generated and evaluated through statistical analysis, IPSC will be prepared to expand and/or enhance the groundwater monitoring and/or remedial approach, if deemed warranted. Currently, and for the foreseeable future, the CCR constituent plumes downgradient of the two surface impoundments do not pose unacceptable risk to human health, ecologic receptors, and/or the environment.

1.2 SELECTED REMEDY OVERVIEW

Recently, Stantec utilized data associated with the 2020 installation, aquifer testing, and sampling/analysis of 25 groundwater monitoring wells located at the downgradient leading edges of the TDS plumes to update its Conceptual Site Model and numerical groundwater fate and transport model. Model results and observations are discussed in more detail in the following report section *2.1.3 Stantec's Groundwater Fate and Transport Model*. The model results have been used in support of selecting and designing an enhanced groundwater remediation program that is outlined in this report.

As part of the selected remedy, at least 30 existing groundwater monitoring wells will be equipped with dedicated submersible pumps and conveyance piping for groundwater recovery, in addition to the ongoing use of existing recovery wells WR-101, WR-102, and WR-103. Recovered water will be conveyed from wellheads to trunklines and break tanks before discharge to and evaporation in to-be-constructed, HDPE-lined evaporation basins regulated by the DWQ.

The recovery wells are intended to remove CCR contaminant mass from the aquifer and control downgradient migration of the plumes. Groundwater removal efforts will be concentrated at the downgradient leading edges of the TDS plumes (to facilitate plume containment) as well as at select wells located within central areas of the TDS plumes and in close proximity to the two surface impoundments (to facilitate plume mass removal and control).

IPSC's selected remedy also includes possible installation of additional, supplemental groundwater monitoring and/or recovery wells, if deemed warranted based on initial performance and groundwater monitoring results.

Pursuant to §257.97(a) [DWQ R315-319-97(a)], the owner or operator of a CCR unit, must satisfy the following criteria:

- As soon as feasible, select a remedy;
- Upon selection of a remedy, prepare a final report describing the selected remedy and how it meets applicable standards;
- Obtain a certification from a qualified professional engineer that the selected remedy meets the applicable requirements; and
- Place the remedy selection report in the operating record.

The following report sections detail how the selected remedy for addressing groundwater impacted by historical releases of CCR constituents from the Bottom Ash Basin and Waste Water Basin was selected based on criteria and evaluation factors specified by §257.97(a-d) [R315-319-97(a-d)]. IPSC intends to install and initiate operation of the expanded groundwater remediation program in accordance with the timeframe prescribed by §257.98 (R315-319-98). Likewise, routine groundwater quality monitoring will be administered on a semi-annual basis in accordance with §257.95 (R315-319-95) to monitor the success and effectiveness of the selected remedy's expanded groundwater recovery system.

As detailed in IPSC's November 2020 CCR Unit Closure Plans, each of the three CCR units will be closed 'in-situ,' whereby CCR materials are left and capped in-place in accordance with closure requisites specified by §257.101 and 102 (R315-319-101 and 102). Closure and post-closure care will be implemented in accordance with the CCR Rule, as is also detailed within IPSC's November 2020 CCR Unit Closure Plans. Planned CCR unit closure and post-closure actions will remediate CCR within the three regulated units and provide routine, post-closure monitoring for potential future releases from the closed units.

Implementation of the selected remedy, in conjunction with ongoing compliance with the CCR and Groundwater Discharge Permits, is intended to satisfy applicable groundwater quality standards and provide appropriate protection to human health and the environment, currently and for the foreseeable future. In summary, IPSC reviewed alternative remedial approaches and decided upon the selected remedy utilizing evaluation factors and standards prescribed by §257.97 (R315-319-97).

The CCR constituent plumes pose little to no risk to on- and off-site human health, currently and for the foreseeable future. Given the vast real property acreage (4,614-acres) that is owned by the IGF owner Intermountain Power Agency (IPA), as well as the relatively large distances (approximately two to 2.5-miles) to downgradient, off-site potential receptors who might use groundwater for potable and/or non-potable uses, IPSC anticipates that it can implement its selected remedy in a prompt and timely manner that will continue to provide protection to on- and off-site, human health and the environment.

2.0 NATURE AND EXTENT OF CCR CONSTITUENT-IMPACTED GROUNDWATER

2.1 CONCEPTUAL SITE MODEL

2.1.1 Regional and Localized Hydrogeologic Characteristics

As discussed in IPSC's November 2020 Amended Assessment of Corrective Measures report, Stantec's Conceptual Site Model of the subsurface beneath the IGF was based on site-specific, hydrogeologic and hydraulic characteristics identified during past drilling, sampling, and pump testing of soil test borings and/or groundwater monitoring wells located across the IGF site. Subsequently during recent months, Stantec refined its Conceptual Site Model through update of its groundwater fate and transport model, as summarized in Attachment 1.

Stantec's current Conceptual Site Model indicates that the depth to uppermost groundwater varies across the site but approximates a range between 55 to 75 feet below grade. Typically, the uppermost sand and clay-matrix aquifer is located beneath one to several different clay-rich layers of varying clay thickness. Subsurface lithologic conditions in the vicinity of each of the three CCR units were generally as follows:

CCR Unit	Depth to Uppermost Aquifer (feet [ft.] below ground surface)	Thickness of Clay-Rich Soils Above the Aquifer (in feet-ft.)
CB Landfill	between 52 to 78 ft.	33 to 57 ft. thick
Bottom Ash Basin	between 55 to 60 ft.	25 to 40 ft. thick
Waste Water Basin	between 45 to 65 ft.	15 to 30 ft. thick

Copies of Stantec drilling logs and monitoring well schematic diagrams and IPSC's April 2021 water level measurements and water quality analytical results are presented in Appendices A and B, respectively herein. Table 1 herein presents a summary of groundwater monitoring well construction details. As may be noted by review of cross-sectional, hydrogeologic figures presented in Appendix C herein, the CCR units and much of the IGF are underlain by silt and clay-rich soils. Clay layers exhibit relatively impermeable, vertical permeability characteristics on the order of 1×10^{-6} to 1×10^{-9} centimeters per second (cm/sec), as quantified by historical geotechnical engineering, laboratory analyses.

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. During the drilling of each borehole, uppermost, saturated soils were encountered at a certain subsurface depth (such as 55 to 75 feet below grade, for instance). Subsequently, the potentiometric head of the water table was under such hydraulic pressure that the static water level within each monitoring well rose to a height 10 to 45 feet higher than the original depth at which uppermost saturated soils were first encountered at time of borehole drilling. Areas overlain by thicker clay layers appear to exhibit more

pronounced confined hydraulic characteristics. Typically, the potentiometric surface of uppermost groundwater approximates a range of between 20 to 55 feet below natural grade.

As shown in Figure 3 herein, Stantec's groundwater flow and potentiometric map associated with April 2021 water level monitoring data, the predominant groundwater flow direction across the site is generally from the northeast toward the southwest, with localized, varying components of flow from the east toward the west. In general, and as observed through historical monitoring of monitoring wells/piezometers associated with initial construction of the IGF in the late-1980s, historical flow patterns have been relatively consistent. The closest, regional body of surface water into which groundwater associated with the IGF might be expected to discharge, the Sevier River, is located approximately 10 to 15 miles south/southwest (downgradient) of the site. The river flows from the northeast toward the southwest and discharges into the terminal, saline Sevier Lake located approximately 35-miles southwest of the IGF.

As may be noted by review of Figure 4, the TDS plume located downgradient of the Bottom Ash Basin appears to be migrating toward the southwest predominantly. There is a localized area southwest/west of the southwestern corner of the Waste Water Basin, where groundwater appears to be migrating in two different, localized directions: flow is toward the west, due west of the basin and flow is toward the southwest, south of the basin. Analysis of localized, subsurface lithologic and hydrogeologic conditions suggests that the uppermost aquifer in this generalized area appears to exhibit relatively low vertical and horizontal permeability and hydraulic conductivity characteristics. The lithologic conditions result in a localized bifurcation of groundwater flow patterns toward the west and southwest, respectively.

2.1.2 General Groundwater Quality

As reported in IPSC's historical reports, groundwater monitoring associated with IPSC's Groundwater Discharge and CCR Rule Permits indicates that there are plumes of TDS-impacted groundwater in excess of TDS background concentrations located downgradient of the Bottom Ash Basin and the Waste Water Basin. Water quality data to date indicate that TDS has migrated farther downgradient of the two surface impoundments than any other monitored CCR constituent, and as such is being used as the leading indicator parameter for CCR constituent plume monitoring and remediation.

Comparative analysis of the Spring 2021 water quality data with preceding Fall 2020 data indicate no significant changes in CCR Appendix IV metal concentrations, with most Appendix IV constituent concentrations significantly less than those identified during Fall 2020. As reported in IPSC's 2020 Annual Groundwater Monitoring and Corrective Action Summary Report (dated January 2021), the quantitative analytical results associated with monitoring under the CCR Rule indicated the below-tabulated Appendix IV constituent/well pairs that represented Statistically Significant Levels (SSLs) above their respective Groundwater Protection Standards (GWPSs). There have been no SSL exceedances associated with the CB Landfill to date.

CCR Appendix IV SSLs in excess of GWPSs (2015 – 2020)			
CCR Unit	**Constituent/Well Pair**	**Lower Confidence Limit/Lower Confidence Band (LCL/LCB)**	**GWPS**
CB Landfill	No SSLs above GWPS		
Bottom Ash Basin	Arsenic/BAC-2	0.059 mg/L	0.0362 mg/L
	Lithium/BAC-3	0.930 mg/L	0.4564 mg/L
	Molybdenum/BAC-2	0.156 mg/L	0.1 mg/L
Waste Water Basin	Arsenic/WWC-1	0.0219 mg/L	0.01338 mg/L
	Arsenic/WWC-2	0.0148 mg/L	
	Arsenic/WWC-3	0.0218 mg/L	
	Arsenic/WWC-4	0.0142 mg/L	
	Arsenic/WWC-5	0.0146 mg/L	
	Lithium/WWC-1	0.867 mg/L	0.587 mg/L

Current water quality data indicate that three CCR Appendix IV metals exceed corollary GWPSs within monitoring and/or recovery wells located at the basin boundaries of the two surface impoundments. If the three metals are attributable to localized release of CCR constituents from the CCR impoundments (i.e., anthropogenic presence), it is anticipated that the rate of vertical migration of released CCR metal constituents beneath the basins into the unsaturated, vadose zone above the water table has been historically, and will continue to be, retarded (slowed) as a direct result of physical retardation through the low-permeability clays as well as geochemical processes (e.g., natural adsorption and cationic exchange within the porous, clay-rich soils). Likewise, in consideration of the relatively thick and impermeable, clay-rich soils located beneath the site, including within the saturated, phreatic zone, it is anticipated that similar retardation of metals is likely, historically and in the future.

Although it is documented throughout Utah and in proximity to the site that Arsenic and Lithium can be present naturally in soil and groundwater at elevated concentrations, IPSC will continue monitoring these and other CCR Rule metal constituents in groundwater as part of its routine groundwater monitoring program. It is documented that basin-fill aquifers in Utah (including Lake Bonneville sediments similar to those underlying the IGF) and throughout the western United States can contain elevated concentrations of naturally-occurring Arsenic and Lithium attributable to volcanic rock source material and lacustrine and hot spring deposits. For instance, the Baker Hot Springs and adjacent 9-mile by 6-mile Fumarole Butte/Crater Bench topographic features are located approximately 6-miles northwest of the IGF. Moreover, naturally-occurring concentrations of both Arsenic and Lithium can vary considerably across short, lateral distances within topsoil, subsurface soil, and aquifers, as a result of localized hydrogeologic, geochemical, and mineralogic characteristics.

Typically, TDS fate and transport is considered conservative (tends to migrate at the same rate as the average linear groundwater flow velocity); however, Appendix IV metal constituents, such as Arsenic, Molybdenum, and Lithium, are not anticipated to migrate at the same velocity as natural groundwater as a result of the clay-rich nature of the uppermost aquifer beneath the site. Natural attenuation processes, such as adsorption, cationic exchange, and dispersion, tend

to attenuate the lateral (saturated, phreatic zone) movement of metals in clay-rich aquifers. Thus in summary, and as used historically for IPSC's compliance with its DWQ Groundwater Discharge Permit, IPSC intends to continue to utilize TDS as a leading indicator parameter of impacted groundwater quality at the site for fashioning and maintaining a successful groundwater remedial program.

The following report subsections provide more specific details regarding Stantec's analysis of subsurface lithologic and hydrogeologic conditions, as relate to the locations and orientations of the TDS plumes located downgradient of the two surface impoundments.

2.1.2.1 Bottom Ash Basin, TDS Plume

As may be noted by review of Figure 4, a TDS plume is inferred to extend generally from the Bottom Ash Basin toward the southwest. The downgradient leading edge of the plume is located well within IGF property boundaries at an approximate lateral distance to the closest, western property boundary of at least 2,000 feet. The highest TDS concentrations within the plume are associated with monitoring wells (and the three existing recovery wells WR-101, WR-102, and WR-103) located in relatively-close proximity to the basin. Historically and currently, the highest TDS concentrations are located near the northwestern-most corner and southern sides of the basin, areas which have experienced reported release (and localized liner repair) incidents in the past.

During CCR permit monitoring, TDS was quantified on occasion at concentrations in excess of background concentrations within CCR monitoring wells BA-U-1, BA-U-2, WWU-2, and WWU-1, each of which is located in an apparent upgradient (east) direction in relation to the Bottom Ash and Waste Water Basins. However, as may be noted by review of historical water quality data since monitoring began in late-2015, TDS concentrations have fluctuated in many of these wells, including concentrations that have been less than or typical of background concentrations in some wells, on occasion.

Additionally, during the most recent April 2021 semi-annual sampling event, TDS was quantified within wells BAC-15 and BAC-16 at concentrations not identified historically. Since monitoring began, neither well contained elevated concentrations of TDS. IPSC intends to utilize future groundwater quality monitoring to help identify how the TDS plume is moving in this region of the site. If needed, downgradient wells BAC-8, BAC-9, and/or BAC-10 may be used for groundwater recovery. Likewise, if needed, additional monitoring and/or recovery wells may be installed in this area.

As more data is generated with time, IPSC will gain better understanding of TDS concentrations and migration patterns east of the basin. As detailed in Attachment 1 , Stantec's most recent update of its groundwater model indicates that TDS-impacted groundwater located east of the Bottom Ash Basin is expected to flow toward the west/southwest in similar fashion and flow paths as currently associated with TDS-impacted groundwater located beneath and downgradient of the basin. In turn, it is anticipated that IPSC's selected remedy, which includes the possible

installation of additional monitoring and/or recovery wells, should provide effective and satisfactory protection to human health and the environment.

2.1.2.2 Waste Water Basin, TDS Plumes

As shown in Figure 4, there appear to be two TDS plumes located west and southwest of the Waste Water Basin, respectively. The TDS plume located near the northwestern-most corner of the basin is aligned predominantly toward the west. The TDS plume located near the southeastern most corner of the Waste Water Basin is aligned toward the southwest. As discussed in following report section *3.0 Corrective Measures Assessment and Selected Remedy*, both plumes are anticipated to be intercepted and removed from the aquifer as part of IPSC's selected remedy, thereby providing ongoing protection to human health and the environment.

3.0 CORRECTIVE MEASURES ASSESSMENT AND SELECTION OF REMEDY

As detailed in IPSC's November 2020 Amended Assessment of Corrective Measures report, IPSC and Stantec evaluated alternative remedial strategies that could be employed to address CCR constituents in groundwater at the IGF. IPSC initiated an assessment of corrective measures within 90 days of detecting Appendix IV constituents above corollary GWPSs. Notification stating that the assessment had been initiated was completed by IPSC, and the results of the assessment were discussed in a public meeting.

IPSC evaluated 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 basins and possible construction of a water treatment facility for treatment of recovered groundwater.

IPSC currently anticipates that the most effective (and protective) remedial approach will be groundwater recovery and removal from the subsurface and subsequent evaporation of groundwater containing CCR constituents. 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 practical, reliable, and effective measure for remediating 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.

In compliance with its Groundwater Discharge Permit, IPSC has been recovering groundwater since 2010 from recovery wells WR-101, WR-102, and WR-103 identified on Figure 4. The three wells are recovering TDS-impacted groundwater from areas located in close proximity to the estimated TDS plume centerline in a general downgradient direction from the Bottom Ash Basin and historical release areas located near the northwest corner and southern portions of the basin. Historically, the recovery wells have removed groundwater at rates between approximately 8 to 15 gpm, although the yields have declined with time to approximate 5 to 12 gpm currently. All recovered groundwater is being discharged to the east-west oriented, rectangular-shaped Recycling Basin located immediately south of the Bottom Ash Basin.

Since TDS has migrated farther downgradient from the Bottom Ash Basin and the Waste Water Basin than other CCR constituents, TDS will continue to be used as the leading indicator parameter of impacted groundwater quality for implementing IPSC's groundwater remediation program. IPSC and Stantec anticipate that the recovery of TDS-impacted groundwater at select recovery wells will also intercept metal constituents that might be present, as TDS is expected to continue to migrate at a faster rate than dissolved metals in the clay-rich aquifer that underlies the property.

The three existing recovery wells are recovering groundwater from within the generalized middle of the TDS plume to help reduce the total mass of TDS within the uppermost aquifer beneath areas located southwest of the Bottom Ash Basin. IPSC intends to continue recovering TDS-impacted groundwater from the three wells for the foreseeable future, as such recovery is deemed an important element of its groundwater remediation program.

Aquifer testing of several wells located farther downgradient of the Bottom Ash Basin, as well as wells located at and downgradient of the Waste Water Basin, indicate individual well recovery yields of two (2) gpm to 15 gpm. Groundwater modeling indicates that use of groundwater recovery wells at the downgradient leading edges of the TDS plumes will intercept and recover CCR constituent-impacted groundwater, thereby capturing contamination and controlling downgradient migration. Likewise, recovery of groundwater from wells located closer to the two surface impoundments is intended to remove total mass of TDS from the aquifer.

As part of the selected remedy, 36 existing groundwater monitoring wells will be equipped with dedicated submersible pumps and groundwater conveyance piping, for groundwater recovery, in addition to the ongoing use of existing recovery wells WR-101, WR-102, and WR-103. Recovered water will be conveyed from wellheads to trunklines and break tanks before discharge to and evaporation within HDPE-lined, evaporation basins regulated under the DWQ Groundwater Discharge Permit.

Currently, and until a new evaporation basin is constructed in 2025, all recovered groundwater is being discharged into the Ash Recycle Basin for evaporation. Presently, IPSC is designing a new evaporation basin system that will be installed before the June 2025 transition from the existing coal units to the new natural gas- and hydrogen-fired units. Once constructed, IPSC intends to use the proposed evaporation basin system rather than the Ash Recycle Basin for future evaporation of recovered groundwater as part of its CCR and Groundwater Discharge Permit compliance programs.

At this time however, IPSC intends to use the following wells for groundwater recovery and plume control:

- Bottom Ash Basin Plume Control:
  wells WR-101, WR-102, WR-103, RW-9, BAC-11, BAC-13, BAC-14 and BAC-20 through BAC-38.

- Waste Water Basin Plume Control:
  wells: WWC-1, WWC-4, WWC-5, RW-4, WWC-6, and WWC-8 through WWC-17 (excluding WWC-9 and WWC-10).

Figure 5 presents Stantec's preliminary design for the selected remedy component elements, including recovery wells, water conveyance piping, and break tanks. IPSC's selected remedy includes the possible installation of additional, supplemental groundwater monitoring and/or recovery wells, if deemed necessary for ongoing monitoring and control of the TDS plumes and protection to human health and the environment. IPSC intends to utilize future water quality monitoring data to help identify if any such additional wells might be warranted.

4.0 SELECTION OF REMEDY, GENERAL REQUIREMENTS §257.97(b)

In accordance with *40 CFR §257.97(a-e)* Selection of Remedy (R315-319-97), IPSC has evaluated the following criteria, as part of analysis of alternative corrective measures which included the selected remedy of expansion of the existing groundwater recovery program. Following report subsections address each of the following criteria.

§257.97(b) Remedies must:

(1) Be protective of human health and the environment;
(2) Attain the groundwater protection standard as specified pursuant to § 257.95(h) (R315-319-95(h);
(3) Control the source(s) of releases so as to reduce or eliminate, to the maximum extent feasible, further releases of constituents in Appendix IV to this part into the environment;
(4) Remove from the environment as much of the contaminated material that was released from the CCR unit as is feasible, taking into account factors such as avoiding inappropriate disturbance of sensitive ecosystems; and
(5) Comply with standards for management of wastes as specified in § 257.98(d) (R315-319-98(d).

4.1 PROTECTIVE OF POTENTIAL RISK TO HUMAN HEALTH, ECOLOGICAL RECEPTORS, AND THE ENVIRONMENT, 40 CFR §257.97(B)(1)

Currently, and for the foreseeable future, groundwater containing CCR constituents within the uppermost aquifer located beneath the IGF poses little to no risk to potential on- or off-site human health or ecological (wildlife and aquatic) receptors. As summarized below, there are no current and/or future-projected, complete exposure pathways.

IPSC's groundwater monitoring program indicates that the TDS plumes located southwest of the Bottom Ash Basin and west of the Waste Water Basin are located within IGF property boundaries. IPSC intends to use future groundwater quality monitoring data associated with WWC monitoring/recovery wells (including proposed groundwater recovery in the vicinity of the downgradient leading edge of the TDS plume located southwest of the Waste Water Basin) to investigate the impacts of the selected remedy and whether additional monitoring and/or recovery wells might be warranted for TDS plume delineation and/or control.

The depth to the uppermost aquifer beneath the IGF approximates 50 to 70 feet below natural grade, generally between the two surface impoundments and the closest, down-gradient property boundary (reference Figure 1). Thus, there is no identified current or anticipated means by which humans or wildlife (including domesticated animals) might come into direct contact with groundwater containing CCR constituents, including no dermal, inhalation, and/or ingestion exposure scenarios.

Groundwater in the uppermost, on-site aquifer is not being recovered for potable, irrigation, or any other domestic and/or industrial use. As discussed in detail within IPSC's November 2020 Demonstration of Requirements for Alternative Closure Deadline under 40 CFR §257.103(f)(2)

report, Stantec's review of the Utah Department of Natural Resources, Division of Water Rights' Internet-based, public, water well inventory (and as of April 2021) indicates that the closest reported, off-site groundwater production well located down-gradient (southwest) of the IPSC property is approximately 2.5 miles southwest of the IGF's southern property boundary (e.g., southwest of the Brush Wellman roadway). Given the vast real property acreage that is owned by IPA (4,614-acres), as well as the significant distances (approximately 2- to 2.5-miles) to off-site potential receptors who might use groundwater for potable and/or non-potable uses, IPSC anticipates that the selected remedy will mitigate future potential off-site exposures to CCR-impacted groundwater.

No IPSC staff or other on-site potential receptors come into contact with the recovered water. Groundwater being recovered at recovery wells, currently and as part of future implementation of the selected remedy, is pumped directly from each recovery well to a trunkline for discharge into an 80-mil HDPE-lined, evaporation basin. The outer perimeter of the IGF is secured by fencing and monitored by on-site security staff, preventing public access to the wells, surface impoundments, and evaporation basins.

There are also no wildlife, aquatic biota, or environmental exposure concerns implicated at the IGF. There is no natural body of surface water located on the IGF property. Since groundwater approximates 50 to 70 feet below grade, no potential wildlife or aquatic biota receptor should come in contact with groundwater. The closest body of surface water in relation to the IGF is the Sevier River, located approximately 10 to 15 miles south/southwest of the site. The perennial river flows generally from the northeast toward the southwest in this part of Millard County and ultimately discharges into the terminal, salt water Sevier Lake located approximately 35-miles southwest of the IGF. In summary, there are no known or potential exposure concerns as regards on- and off-site human health, wildlife, aquatic biota, and the environment.

4.2 ATTAINMENT OF GROUNDWATER PROTECTION STANDARDS, 40 CFR § 257.97(B)(2)

Following completion of proposed, in-situ closure of the Bottom Ash Basin, and based on the current array of recovery wells proposed for use as part of the selected remedy, Stantec's groundwater fate and transport model simulates that the selected remedy is capable of achieving groundwater protection standards sometime during an approximate 34-to 37-year timeframe for the TDS plume located southwest of the impoundment. The ultimate timeframe will be influenced by the degree of success of the selected remedy including use of the existing array of wells proposed for groundwater recovery, as well as the lateral extent to which the plume extends east/upgradient of the impoundment.

Following completion of proposed in-situ closure of the Waste Water Basin, and based on the current array of recovery wells proposed for use as part of the selected remedy, Stantec's groundwater fate and transport model predicts that the selected remedy will achieve groundwater protection standards sometime during an approximate 8- to 10-year timeframe for the CCR constituent plume located southwest of the impoundment. Future monitoring of groundwater recovery at recovery wells and monitoring of water quality at downgradient

monitoring wells will be used to help gauge if and when additional monitoring and/or recovery wells might be warranted to ensure appropriate delineation and control of the TDS plume located downgradient of the basin.

Currently, it is anticipated that it may require approximately 10 to 15 years to achieve groundwater protection standards west of the northwestern-most corner of the Waste Water Basin. Future monitoring of groundwater recovery at proposed recovery wells RW-4, WWC-5, and WWC-4 and monitoring of water quality at downgradient monitoring wells will be used to help gauge if and when additional monitoring and/or recovery wells might be warranted to ensure appropriate delineation and control of the small TDS plume located near the northwestern-most corner of the Waste Water Basin.

Based on current information, and given that there are no existing or future-projected, potential unacceptable risks to on- and/or off-site human health, ecological receptors, and/or the environment, IPSC intends to monitor the progress and success of the selected remedy, utilizing the existing array of recovery and monitoring wells proposed herein. Currently-proposed remedial actions are focused on interception and control of the downgradient leading edges of the CCR constituent plumes, in pursuit of achieving groundwater protection standards. If deemed advantageous and/or necessary to ensure continued protection of human health, potential ecological receptors, and/or the environment in the future, IPSC will evaluate whether additional monitoring and/or recovery wells might be warranted at the IGF (i.e. 'Adaptive Management' process).

4.3 SOURCE CONTROL, REMOVAL OF AS MUCH CCR MATERIAL RELEASED FROM THE CCR UNITS AS IS FEASIBLE, AND WASTE MANAGEMENT, 40 CFR §257.97(B)(3)-(5)

4.3.1 Interim Measures Prior to Closure

Source control measures under 40 CFR § 257.97(b)(3) are prescribed by UDEQ-regulated Groundwater Discharge Permit No. UGW270004 and DWMRC CCR Permit No. SW419, and as detailed within IPSC's November 2020 Demonstration of Requirements for Alternative Closure Deadline under 40 CFR §257.103(f)(2) report, IPSC intends to continue implementing its existing compliance programs as prescribed by the two UDEQ permits. Permit compliance requisites include measures and compliance schedules designed to operate, monitor, maintain, record/report, limit, and remediate (if and when necessary) IPSC's UDEQ-permitted facilities, per 40 CFR § 257.103(f)(2)(v)(B)(1). The permits define acceptable and prohibited wastes that may or may not be placed within each permitted unit during the operational lifespan of each CCR unit.

Currently, and as anticipated through closure and post-closure proceedings at each CCR unit, IPSC implements routine Best Management Practices (BMPs) including:

- proper facility operation and maintenance (O&M) protocol, including stormwater and inflow design flood control at regulated units and facilities;
- routine facility, embankment, and liner inspections and compliance monitoring;

- leak detection, release source and contamination assessment, and spill/leak reparation protocol;
- groundwater quality monitoring and remediation,
- fugitive air emission controls;
- compliance recording and regulatory reporting requisites; and
- closure and post-closure care.

Identified as Best Available Technology (BAT) within the IGF's Groundwater Discharge Permit, each of the two surface impoundments is underlain by a liner constructed of 80-mil HDPE material that lines the interior sidewalls (compacted embankment material) of each impoundment. As part of its DWQ permit, historically, currently, and for the foreseeable future, IPSC implements BMPs that are intended to help inspect for and remediate (if and when necessary) the potential release of CCR material contained within the two CCR surface impoundments. Likewise, routine BMPs are implemented at the CB Landfill to help inspect for and remediate (if and when necessary) potential release of CCR material.

On a daily basis, IPSC conducts visual inspections of the CCR surface impoundments to monitor water levels in the impoundments. IPSC conducts a more detailed inspection of the CCR units weekly to investigate for visible signs of actual and/or potential conditions that have resulted and/or might result in a potential release of CCR material from a surface impoundment to the surrounding environment. BMPs include monitoring of water levels inside each impoundment, inspecting exposed (daylighted) sections of HDPE liner material, inspecting interior and exterior embankment material, and inspecting for any other abnormal conditions that might result in, and/or indicate, actual and/or potential release of CCR material from a surface impoundment. Every 30 days, IPSC conducts an instrumentation inspection at each of the CCR units. A Professional Engineer completes an annual visual inspection of the CCR units and reviews the facility's operating record each year. Additionally, on an annual basis, IPSC contracts an independent contractor to conduct HDPE liner inspections.

Routine groundwater quality monitoring is also used as a means by which potential releases of CCR constituents can be identified downgradient of the impoundments and the CB Landfill. For instance, in the event that one or more CCR constituents is identified within a groundwater monitoring well for the first time, and/or there is an apparent anomalous increase in a constituent concentration in a monitoring well, IPSC will evaluate the groundwater quality data as part of its permitted facility monitoring program. If such data indicates the potential of a new release, IPSC will investigate (and repair, if applicable) the potential for a leak in the upgradient surface impoundment or CB Landfill.

IPSC field staff are required to report any such potential release incident or threat of release to IPSC's Environmental Group immediately. IPSC investigates and remediates (if and where necessary) the suspect and/or apparent release area. Additionally, as stipulated by its Groundwater Discharge Permit, IPSC must report a release incident to the DWQ, typically within five days of identification of the release incident. The report must include a description of the

release and its cause; the timeframe of the release; the estimated timeframe of ongoing release, whether it can be repaired immediately; as well as measures implemented to reduce, eliminate, and prevent recurrence of the release. Likewise, the CCR Permit also includes prescribed timeframes by which release, non-compliance, and remedial response must be addressed, recorded, and reported.

Liner reparation equipment and trained personnel are located at the IGF facility. In addition, IPSC works with contractors who are able to provide needed repairs in an efficient and timely manner. Typically, for instance, if a liner tear is identified, the liner tear is repaired by means of fusion welding and testing to verify satisfactory liner repair and integrity.

IPSC's October 2016 Structural Stability Assessment and Safety Factor Assessment reports (included within Gerhart Cole, Inc.'s 2016 Engineering Assessments of CCR Facilities, Intermountain Power Plant report) are posted on IPSC's public website and also presented within IPSC's November 2020 Demonstration of Requirements for Alternative Closure Deadline under 40 CFR §257.103(f)(2) report. The assessments indicated that the Bottom Ash Basin and Waste Water Basin berms were structurally stable and safe, as determined by an independent professional engineering firm. Ongoing, routine monitoring and reporting of the berms for stability and safety will continue in accordance with CCR Permit compliance, including independent 5-year reviews.

4.3.2 CCR Unit Closure and Post-Closure Care

Consistent with the removal and waste management requirements under 40 CFR § 257.97(b)(4)-(5), all three CCR-regulated units will be closed by in-situ dewatering, stabilization, burial, and capping, followed by post-closure monitoring and care, in accordance with relevant closure specifications prescribed by §257.101 through 104 and as detailed within IPSC's November 2020 CCR Unit Closure and Post-Closure Plan documents. It is anticipated that in-situ closure and capping of each CCR unit will provide satisfactory encapsulation of CCR material contained within the CCR units, thereby providing long-term source control and prevention of future releases of CCR constituents to the environment.

Closure elements, including dewatering, stabilization, unit capping, and stormwater control will provide protection against potential infiltration of stormwater and precipitation and potential leaching of CCR constituents from the units to the underlying unsaturated, vadose zone and phreatic zone (i.e., the water table and groundwater). IPSC intends to implement its CCR and non-CCR unit closure and post-closure proceedings, as prescribed by its UDEQ permits. The selected remedy for addressing CCR constituents in groundwater is intended to remove as much CCR mass that was released to the environment historically, as will be deemed feasible and practicable during ongoing site monitoring and review of potential risk to human health and the environment.

5.0 SELECTION OF REMEDY, EVALUATION FACTORS - § 257.97(c)

§257.97(c) In selecting a remedy that meets the standards of §257.97(b), the owner or operator of the CCR unit shall consider the following evaluation factors:

(1) The long- and short-term effectiveness and protectiveness of the potential remedy(s), along with the degree of certainty that the remedy will prove successful;
(2) The effectiveness of the remedy in controlling the source to reduce further releases;
(3) The degree to which community concerns are addressed by a potential remedy(s).

5.1 SHORT AND LONG-TERM EFFECTIVENESS AND PROTECTIVENESS

Ongoing compliance with its UDEQ CCR and Groundwater Discharge Permits, as outlined in preceding report section *4.3.1 Interim Measures Until CCR Unit Closures*, is anticipated to provide short- and long-term effectiveness and protection to human health and the environment including groundwater. The selected remedy of physical recovery/removal of CCR constituent mass from groundwater is a conservative remedial approach for ensuring effective contaminant control, reduction of total contaminant mass in the subsurface, and ongoing monitoring for protection of human health and the environment.

In the event of potential release of CCR constituents from a CCR unit prior to closure of the unit, IPSC anticipates that its ongoing permit compliance program will prescribe successful response, remedial actions and source control that will reduce further releases from the unit and ensure effective protection of human health and the environment. Following closure of the CCR units, with the sources of CCR material encapsulated/remediated and monitored through CCR unit closure and post-closure proceedings, including ongoing groundwater monitoring and recovery, IPSC anticipates that such actions will provide long-term source control and prevention of future releases of CCR constituents to the environment including groundwater.

IPSC has a high degree of certainty that the selected remedy will prove effective, reliable, and successful in achieving IPSC's objectives of source control, reduction, and elimination. Of those remedial measures evaluated by IPSC, it is anticipated that the selected remedy offers a permanent, protective solution designed to provide short- and long-term certainty for successful, ongoing protection of human health and the environment.

5.2 SELECTED REMEDY IS PROTECTIVE OF COMMUNITY CONCERNS

The IGF is located in a remote, rural area, more than 10 miles north of the closest, municipal town of Delta, Utah, which had an estimated population of 3,550 in 2018. Rural residential land use located north of Delta, Utah is comprised primarily of sparsely populated, farming properties, each of which is typically comprised of several to 1000s of acres of predominantly undeveloped, agricultural-related lands. The closest residential area in relation to the IGF is located approximately 3 miles southwest of the southern IGF property boundary and is characterized by

two small farms and homes, surrounded by at least a one-mile radius of undeveloped, agricultural-related land.

Off-site lands, extending for at least a 10-mile radius in all other directions (west, north, and east) surrounding the IGF are predominantly undeveloped, public and private land. The closest, off-site industrial property is owned and operated as a subsurface (1000s of feet below grade) natural gas storage facility by Magnum Development, LLC (south of State Route 174 and the IGF). Reportedly, neither Magnum nor the closest off-site groundwater production well (industrial operator located over 2.5-miles southwest of the IGF) recover groundwater from the uppermost aquifer below grade. As discussed in preceding report section 4.1, the closest, off-site groundwater production well is located approximately 2.5-miles southwest of the southern IGF property boundary, and the industrial well recovers groundwater from a deep aquifer that underlies the uppermost aquifer by hundreds of feet.

On the evening of January 9, 2019, IPSC and the UDEQ held a formal Public Meeting in Delta, Utah which was advertised to the public in advance. IPSC presented details regarding its compliance with the CCR Rules and its Groundwater Discharge Permit. IPSC discussed its intent to convert its operations from coal-fired boilers to natural gas and close/cap the three CCR-regulated units in accordance with CCR Rule requisites. IPSC also discussed the presence of CCR constituents in groundwater and IPSC's ongoing monitoring and remedial compliance program related to its UDEQ-regulated units and groundwater quality. IPSC discussed the fact that there were no existing unacceptable risks to human health or the environment and IPSC's intentions to continue its compliance with UDEQ regulatory requirements to ensure ongoing protection of human health and the environment. IPSC, UDEQ, and Stantec representatives responded to public questions and comments during the meeting.

IPSC discussed IPSC's intention to continue delineating/remediating the plumes of TDS-impacted groundwater through installation and monitoring of supplemental groundwater monitoring wells and expand its existing groundwater recovery program to ensure ongoing protection to on- and off-site human health and the environment. The proposed expansion of its monitoring/recovery well network was intended to evaluate more precisely the downgradient leading edges of the CCR constituent plumes, in an effort to help identify the most practicable, reliable, timely, and protective remedy for addressing groundwater quality beneath the IGF and continued protection to human health and the environment. There were no reported public objections to IPSC's current and future CCR compliance program and approach for continued remediation and monitoring of the IGF CCR units and groundwater quality beneath the property.

6.0 SCHEDULE AND RECORDKEEPING

6.1 SCHEDULE FOR IMPLEMENTATION OF SELECTED REMEDY, §257.97(D)

§257.97(d) The owner or operator must specify as part of the selected remedy a schedule(s) for implementing and completing remedial activities.

IPSC's November 2020 CCR Unit Closure Plans provide extensive details and element-specific schedules for closure of each of the three CCR units, no later than the end of 2028. This report section provides IPSC's anticipated schedule for implementation of the selected remedy for groundwater remediation.

Currently, IPSC is finalizing design of the electrical power components of the groundwater recovery system, designed to provide necessary monitoring and control of water recovery (wells with submersible pumps and water level controls, etc.) and water conveyance (trunkline piping and break tanks) components. Electrical power needs are being analyzed presently, with intents to solicit bids from Construction Contractors for installation during the Summer of 2021. Likewise, all other aspects of selected remedy components are also being designed currently. IPSC anticipates soliciting bids from Contractors for installation and start-up of the expanded groundwater recovery network, sometime during the third and fourth quarters of 2021.

6.2 RECORDKEEPING, §257.97(E)

§257.97(e) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in §257.105(h), the notification requirements specified in § 257.106(h), and the Internet requirements specified in § 257.107(h).

As of finalization of this report in June 2021, IPSC has posted this report on its public website, in similar fashion as all other CCR Rule-related documents that are web-posted currently.

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

Flowing Well

Sugarville

Woodrow

4WD

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

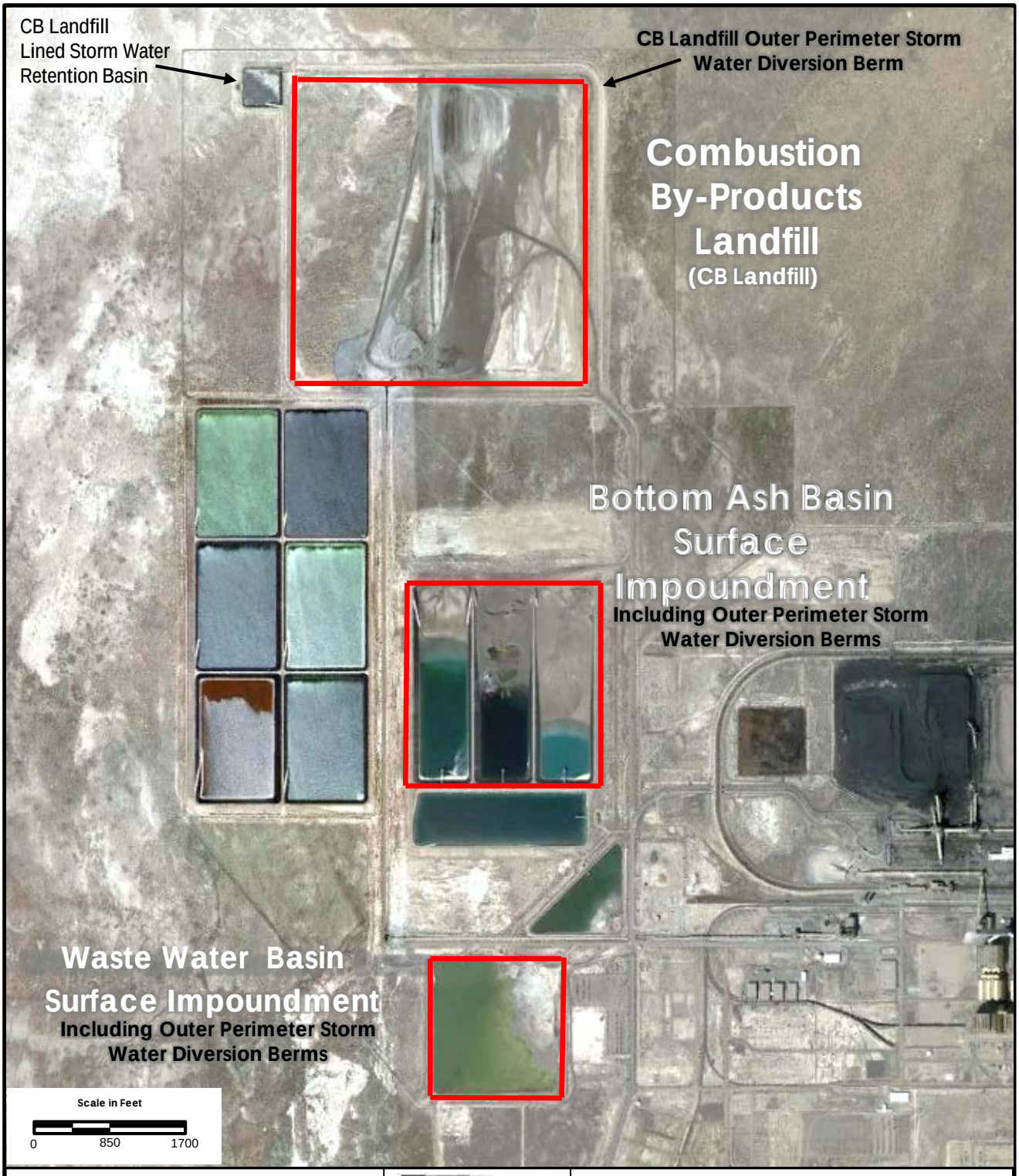
FIGURE 1
SITE TOPOGRAHIC MAP

Stantec

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

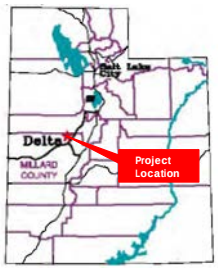
drawings\ipsc-04\Fig2 Site Topographic Map.dwg

Figure 2. CCR Units Location Map



Legend

CCR Unit



INTERMOUNTAIN GENERATING FACILITY

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 April 2021 Groundwater Potentiometric Map

C:\Users\ckwiatkowski\Desktop\203709098 Intermountain Power\GIS\2021_05\fig06_Spring2021GWE_DeltaUT_20210505_11x17.mxd

LEGEND:

- MONITORING WELL
- 4577.22 GROUNDWATER ELEVATION (FT)
- INFERRED GROUNDWATER CONTOUR

NOTE:

1) DATA COLLECTED APRIL 2020
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 2021 POTENTIOMETRIC MAP AND GROUNDWATER FLOW MAP

FIGURE: 3

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
203709098	CK	JT	JR	05/05/21

Figure 4 April 2021 TDS Iso-Concentration Map

C:\Users\ckwiatkowski\Desktop\203709098 Intermountain Power\GIS\2021_05\fig06_Spring2021GWE_DeltaUT_20210505_11x17.mxd

Combustion By-Products Landfill

Bottom Ash Basin

Waste Water Basin

CL-U-1 932
CL-U-2 480
CL-U-3 1,080
CLW-6 1,010
WDB-19 868
CL-W-5 944
CL-W-4 688
CL-W-3 952
CL-W-2 1,060
CL-W-1 892
CL-W-7 376
CL-W-8 840
CL-W-9 856
WDB-17 660
BA-U-1 2,760
BA-U-2 1,620
WW-U-1 5,100
WW-U-2 4,750
SI-U-1 1,840
BAC-7 3,210
BAC-6 2,340
BAC-5 1,780
BAC-4 1,560
BAC-1 5,900
BAC-3 13,900
BAC-2 7,140
WR-103 4,670
WR-102 14,000
WR-101 4,160
RW-1 2,360
RW-4 1,820
RW-5 648
RW-6 692
RW-7 960
RW-8
RW-9 1,600
BAC-34 768
BAC-33 848
BAC-26 780
BAC-27 812
BAC-28 732
BAC-29 1,560
BAC-30 1,340
BAC-31 1,150
BAC-32 680
BAC-35 724
BAC-18 676
BAC-37 632
BAC-36 648
BAC-25 560
BAC-20 744
BAC-21 640
BAC-22 668
BAC-19 696
BAC-23 760
BAC-24 824
BAC-38 812
WDB-5 568
WDB-7 664
BAC-13 2,960
BAC-14 2,470
BAC-11 1,560
BAC-16 4,720
BAC-12 688
BAC-15 1,420
BAC-10 840
BAC-9 860
BAC-8 872
BAC-17 576
WWC-5 5,020
WWC-4 3,000
WWC-3 932
WWC-2 796
WWC-1 13,400
WWC-11 608
WWC-8 2,570
WWC-6 2,720
WWC-16 724
WWC-9 984
WWC-7 780
WWC-10 1,040
WWC-14 3,210
WWC-15 1,600
WWC-17 764
WWC-12 1,140
WWC-13 708
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
- 1,100 Total Dissolved Solids (TDS) MILLIGRAMS PER LITER (mg/L) NS - Not Sampled
- GROUNDWATER CONTOUR

NOTE:

1) DATA COLLECTED APRIL 2021
2) ALL ELEVATIONS ARE FEET ABOVE MEAN SEA LEVEL

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

Stantec

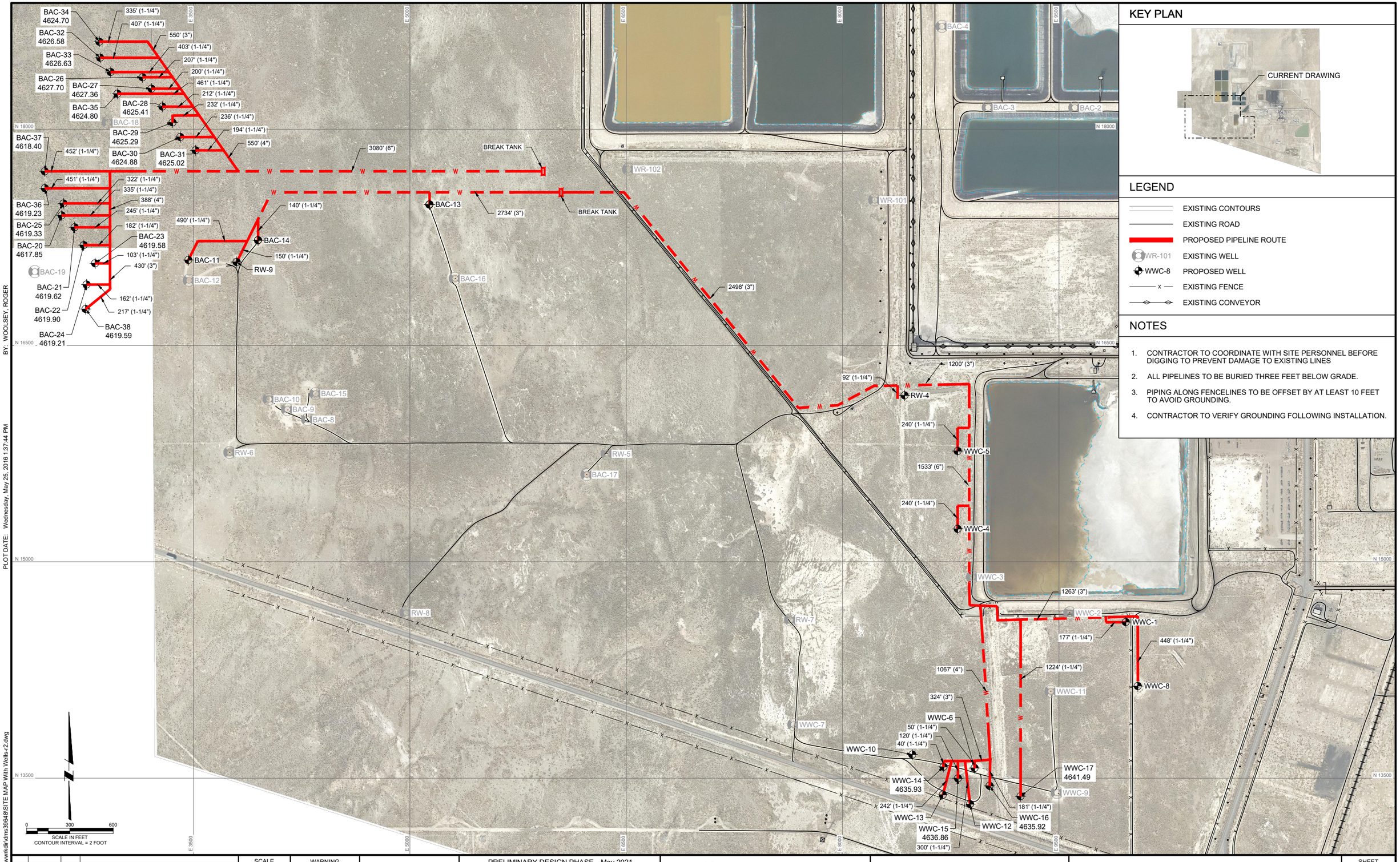
FOR:
INTERMOUNTAIN POWER SERVICE CORP.
INTERMOUNTAIN GENERATION FACILITY
DELTA, UTAH

SPRING 2021
TDS ISOCONCENTRATION MAP

FIGURE: 4

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
203709098	CK	JT	JR	05/05/21

Figure 5 Preliminary Design of Selected Remedy Components



KEY PLAN

LEGEND

- EXISTING CONTOURS
- EXISTING ROAD
- PROPOSED PIPELINE ROUTE
- WR-101 EXISTING WELL
- WWC-8 PROPOSED WELL
- x EXISTING FENCE
- EXISTING CONVEYOR

NOTES

1. CONTRACTOR TO COORDINATE WITH SITE PERSONNEL BEFORE DIGGING TO PREVENT DAMAGE TO EXISTING LINES
2. ALL PIPELINES TO BE BURIED THREE FEET BELOW GRADE.
3. PIPING ALONG FENCELINES TO BE OFFSET BY AT LEAST 10 FEET TO AVOID GROUNDING.
4. CONTRACTOR TO VERIFY GROUNDING FOLLOWING INSTALLATION.

REV	DATE	BY	DESCRIPTION
C	10/30/2020	RNW	ISSUED FOR REVIEW
B	10/23/2020	RNW	ISSUED FOR INFORMATION
A	04/24/2020	BDR	ISSUED FOR DISCUSSION

SCALE: 1" = 300'

WARNING: 0 ½ 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED

DRAWN B ROBERTSON

CHECKED

PRELIMINARY DESIGN PHASE - May 2021

NOT FOR CONSTRUCTION

This document is an interim document and not suitable for construction. As an interim document, it may contain data that is potentially inaccurate or incomplete and is not to be relied upon without the express written consent of the preparer.

Stantec

INTERMOUNTAIN POWER SERVICE CORP

Preliminary Design for Groundwater Recovery Network

SHEET: FIG 5

Job# 233001396

PLOT DATE: Wednesday, May 25, 2016 1:37:44 PM

BY: WOOLSEY, ROGER

DWG FILE: C:\pwwrkdir\dms39648\SITE MAP With Wells-r2.dwg

Figure 6 Groundwater Fate and Transport Model Flow Lines and Linear Velocities

C:\Users\ckwiatkowski\Desktop\203709098 Intermountain Power\GIS\2021_05\fig04_FateAndTransport_DeltaUT_20210519_11x17.mxd

Combustion By-Products Landfill

Bottom Ash Basin

Waste Water Basin

CL-U-1 4623.27
CL-U-2 4623.70
CL-U-3 4623.14
CL-W-6 4608.73
WDB-19 4603.26
CL-W-5 4610.04
CL-W-4 4610.09
CL-W-9 4579.63
EP-W-27 4603.59
CL-W-3 4610.29
CL-W-2 4612.56
CL-W-1 4619.85
CL-W-7 4621.74
CL-W-8 4620.72
EP-W-23 4604.28
BA-U-1 4623.89
BAC-34 4577.08
BAC-33 4579.06
BAC-26 4579.73
BAC-27 4579.95
BAC-28 4580.37
BAC-29 4580.68
BAC-30 4580.38
BAC-31 4580.98
BAC-32 4578.86
BAC-35 4577.21
BAC-18 4576.92
BAC-37 4575.09
BAC-36 4574.82
BAC-25 4575.14
BAC-20 4575.23
BAC-21 4575.21
BAC-22 4575.13
BAC-19 4574.72
BAC-23 4575.34
BAC-24 4575.26
BAC-38 4577.22
WDB-7 4583.56
EP-W-19 4604.52
BAC-7 4615.10
WR-103 4604.42
BAC-6 4614.69
BAC-5 4613.50
BAC-4 4611.09
BA-U-2 4625.18
WW-U-2 4628.97
BAC-1 4626.29
BAC-3 4614.25
BAC-2 4613.91
SI-U-1 4629.68
WR-102 4592.46
WR-101 4591.67
BAC-13 4583.94
BAC-14 4580.31
BAC-16 4582.58
BAC-11 4576.47
RW-9 4581.50
BAC-12 4576.19
WW-U-1 4628.55
BAC-15 4579.96
BAC-10 4577.98
BAC-9 4578.55
BAC-8 4579.74
RW-6 4576.33
BAC-17 4583.53
RW-5 4583.99
RW-4 4620.77
WWC-5 4620.89
WWC-4 4620.86
WWC-3 4620.73
RW-8 4579.27
4580
RW-7 4588.44
WWC-2 4621.23
WWC-1 4621.49
WWC-8 4620.32
WWC-11 4619.85
WWC-6 4617.37
WWC-16 4617.89
WWC-9 4618.40
WWC-7 4612.01
4590
4600
4610
4620
WWC-10 4615.48
WWC-14 4618.37
WWC-15 4616.93
WWC-17 4618.06
WWC-12 4616.91
WWC-13 4616.24

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

LEGEND:

- MONITORING WELL
- 4577.22 GROUNDWATER ELEVATION (FT)
- INFERRED GROUNDWATER CONTOUR

PARTICLE FLOW LINE

- MINIMUM VELOCITY
- MAXIMUM VELOCITY

TIME STEP

- 10 YEARS
- 20 YEARS
- 30 YEARS

NOTE:

1) DATA COLLECTED APRIL 2021
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

GROUNDWATER FATE AND TRANSPORT FLOW LINES AND LINEAR VELOCITIES

FIGURE: 6

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
203709098	CK	JT	JR	05/19/21

TABLE 1 GROUNDWATER 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

APPENDIX A DRILLING LOGS AND WELL SCHEMATIC DIAGRAMS

Boring Logs

IPSC

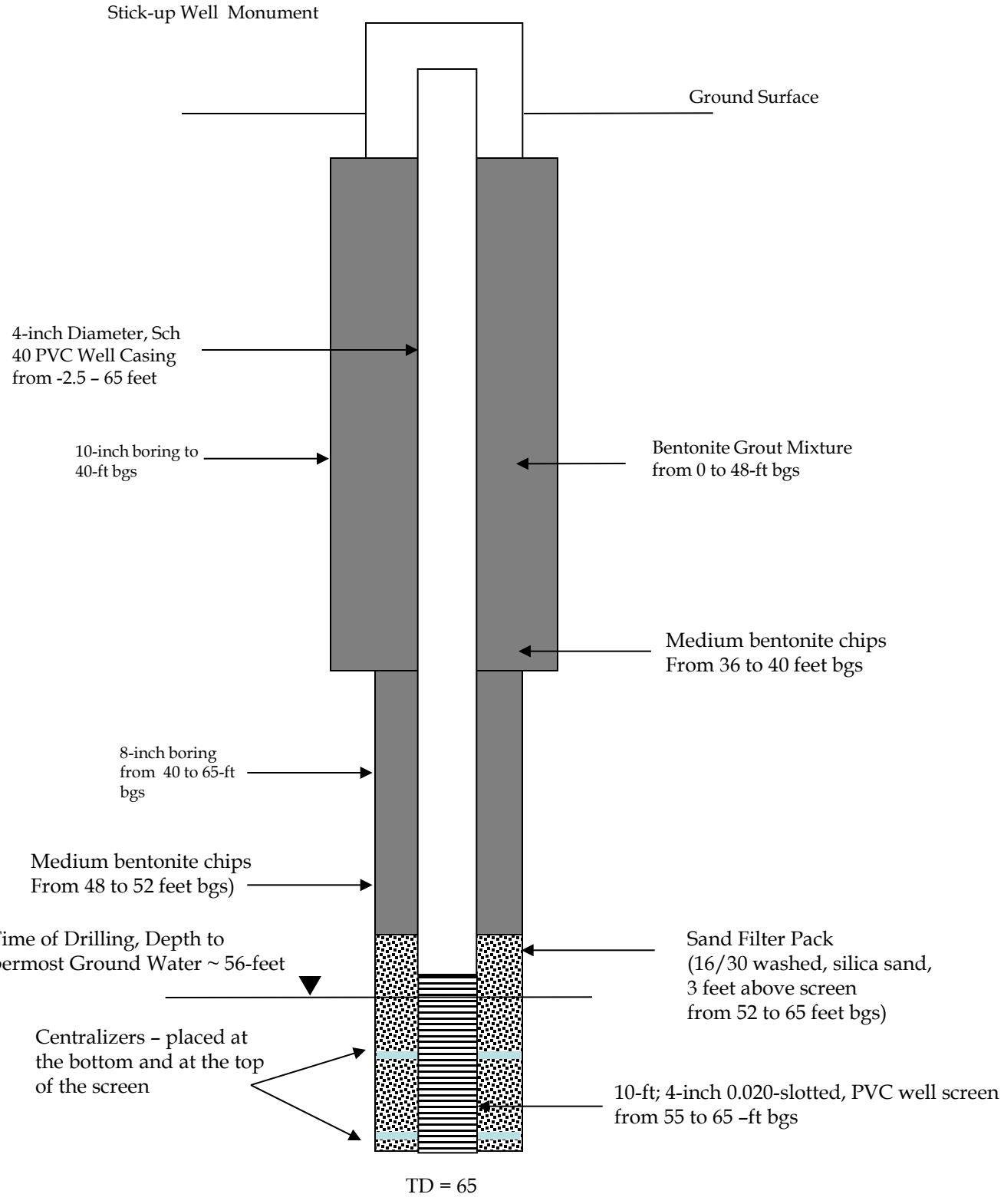
Delta, Utah

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

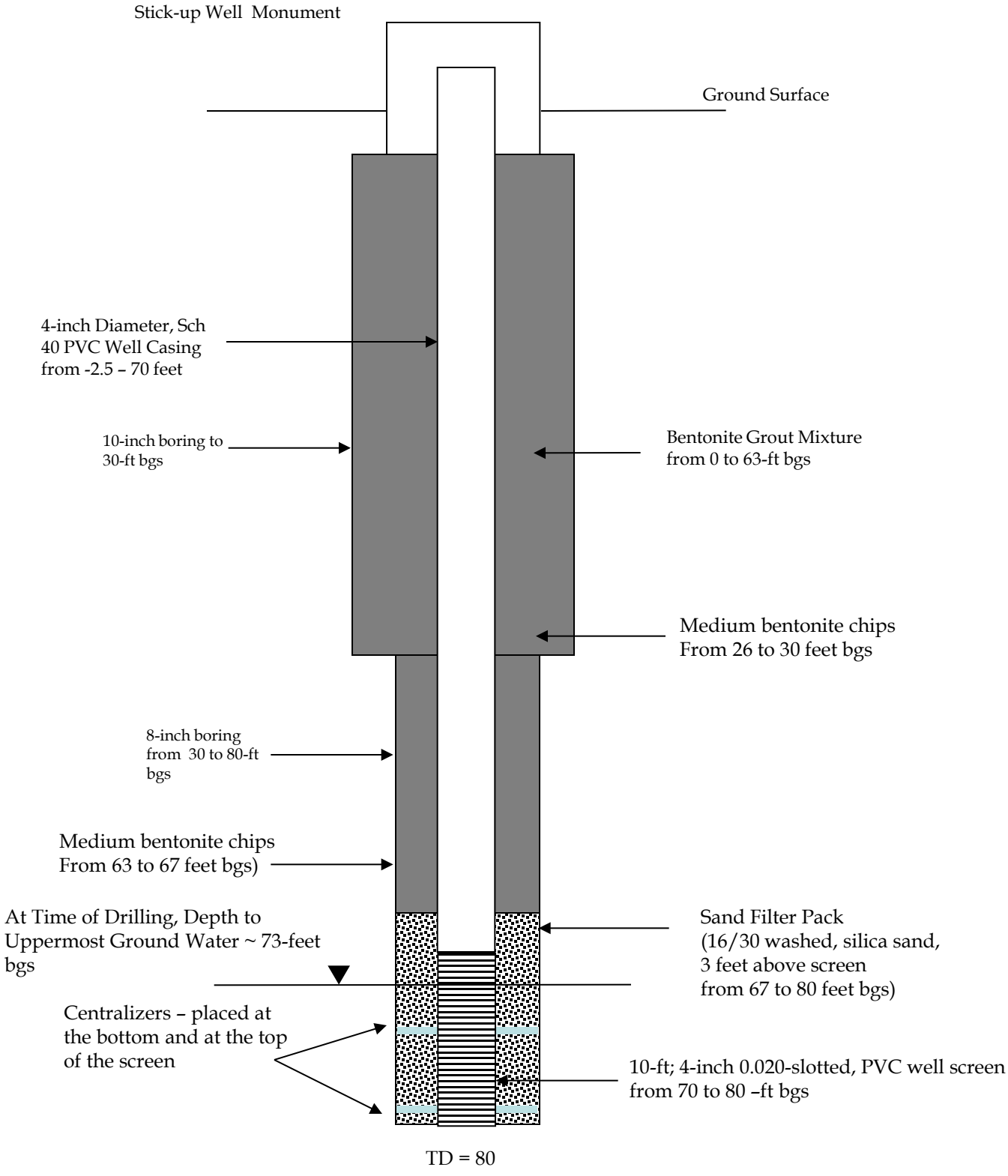
Delta, Utah

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

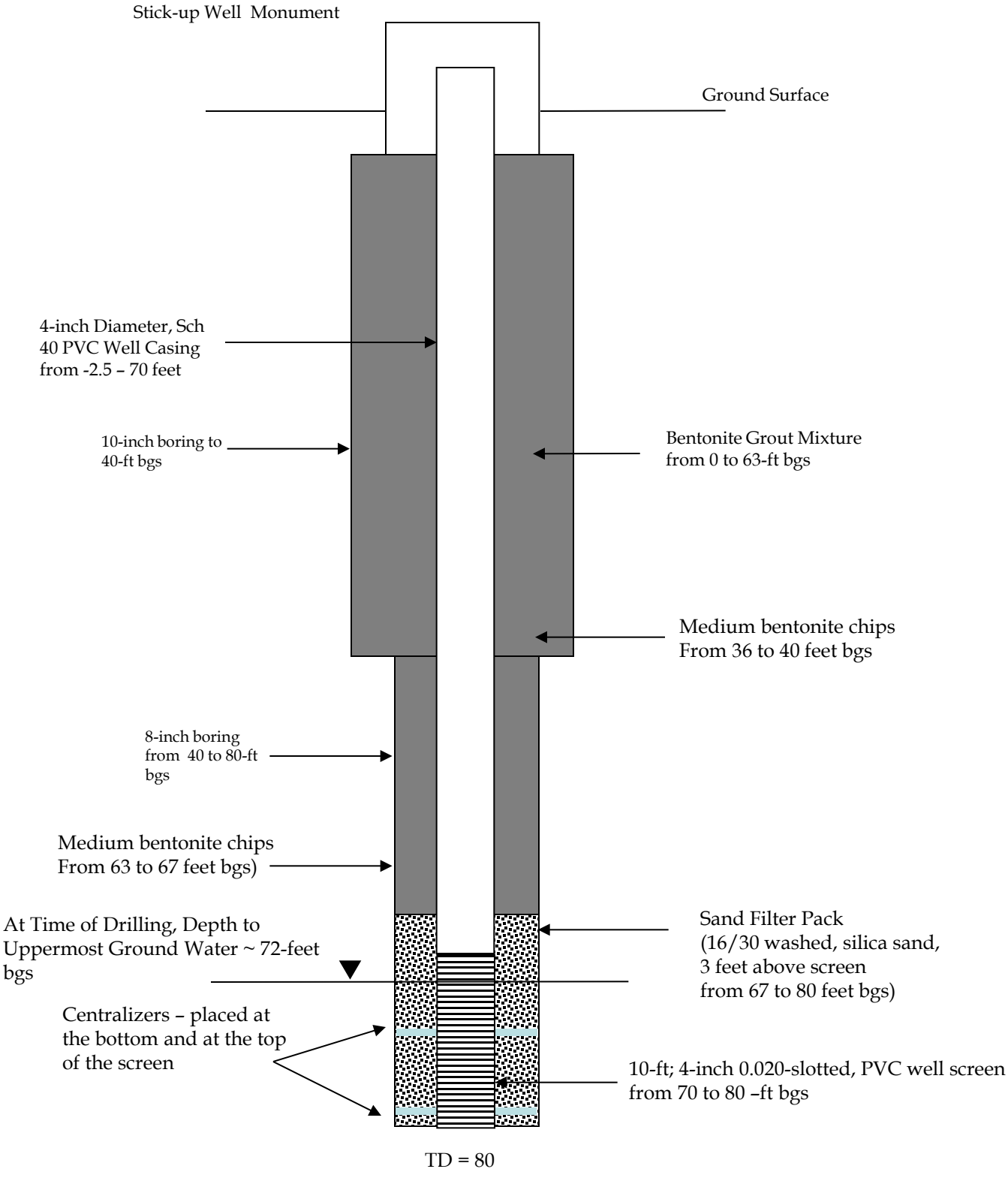
Delta, Utah

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



Stantec

ISPC– CB LANDFILL AREA
DELTA, UTAH

Figure 1 – CLW-3 Schematic

Design by	Drawn by	Scale	Date Drawn
			Last Revision Date

Boring Logs

IPSC

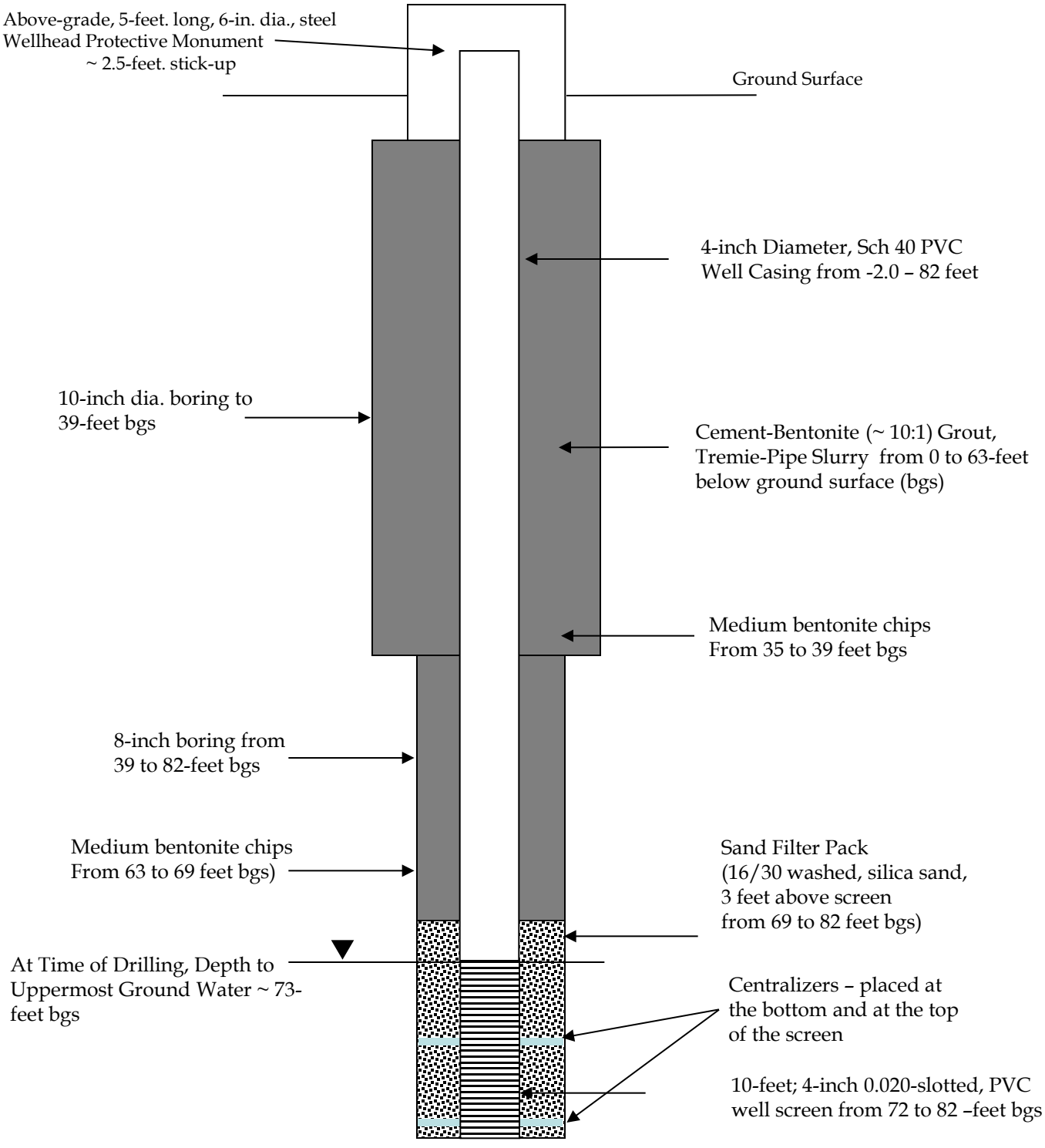
Delta, Utah

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

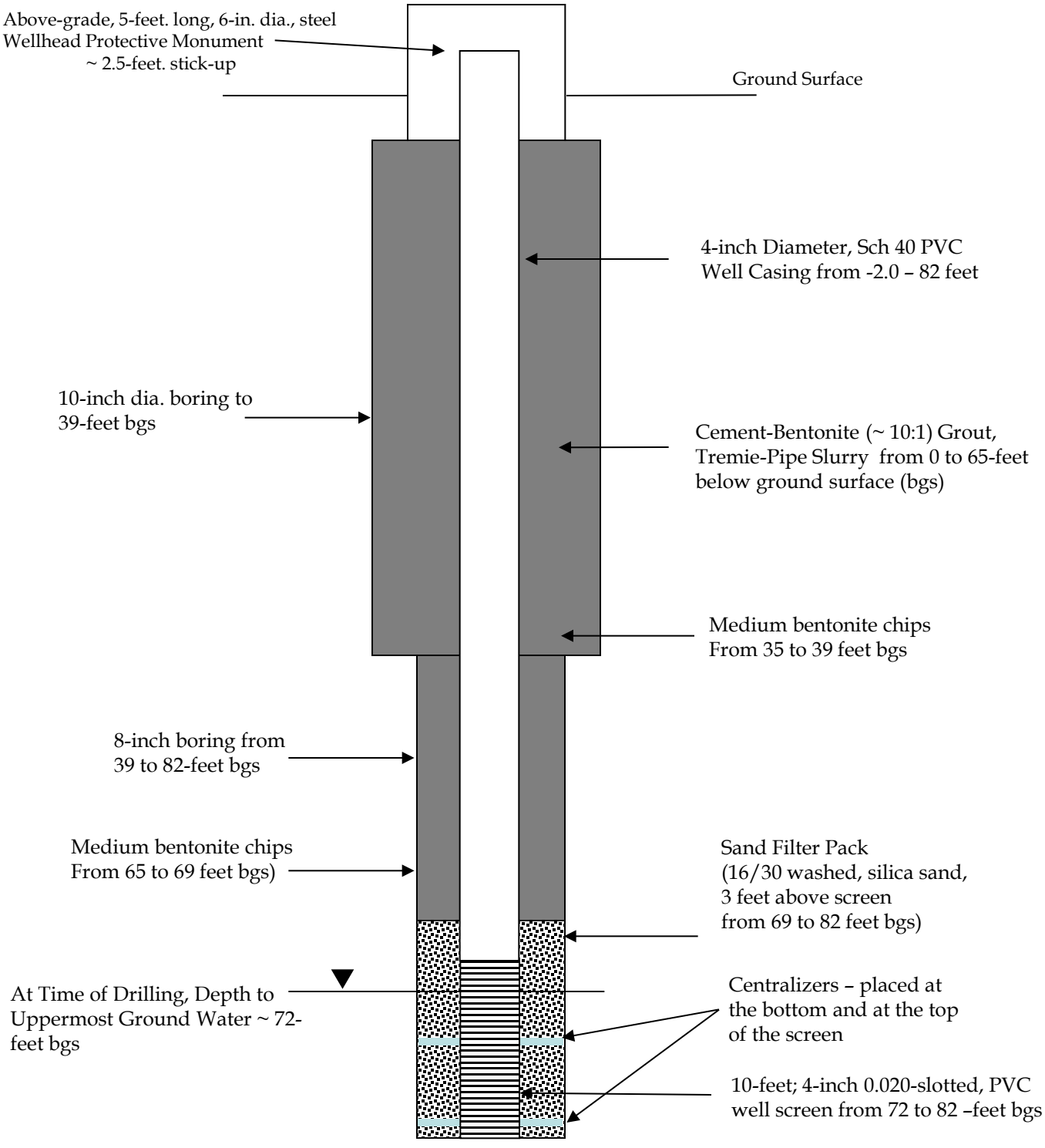
Delta, Utah

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

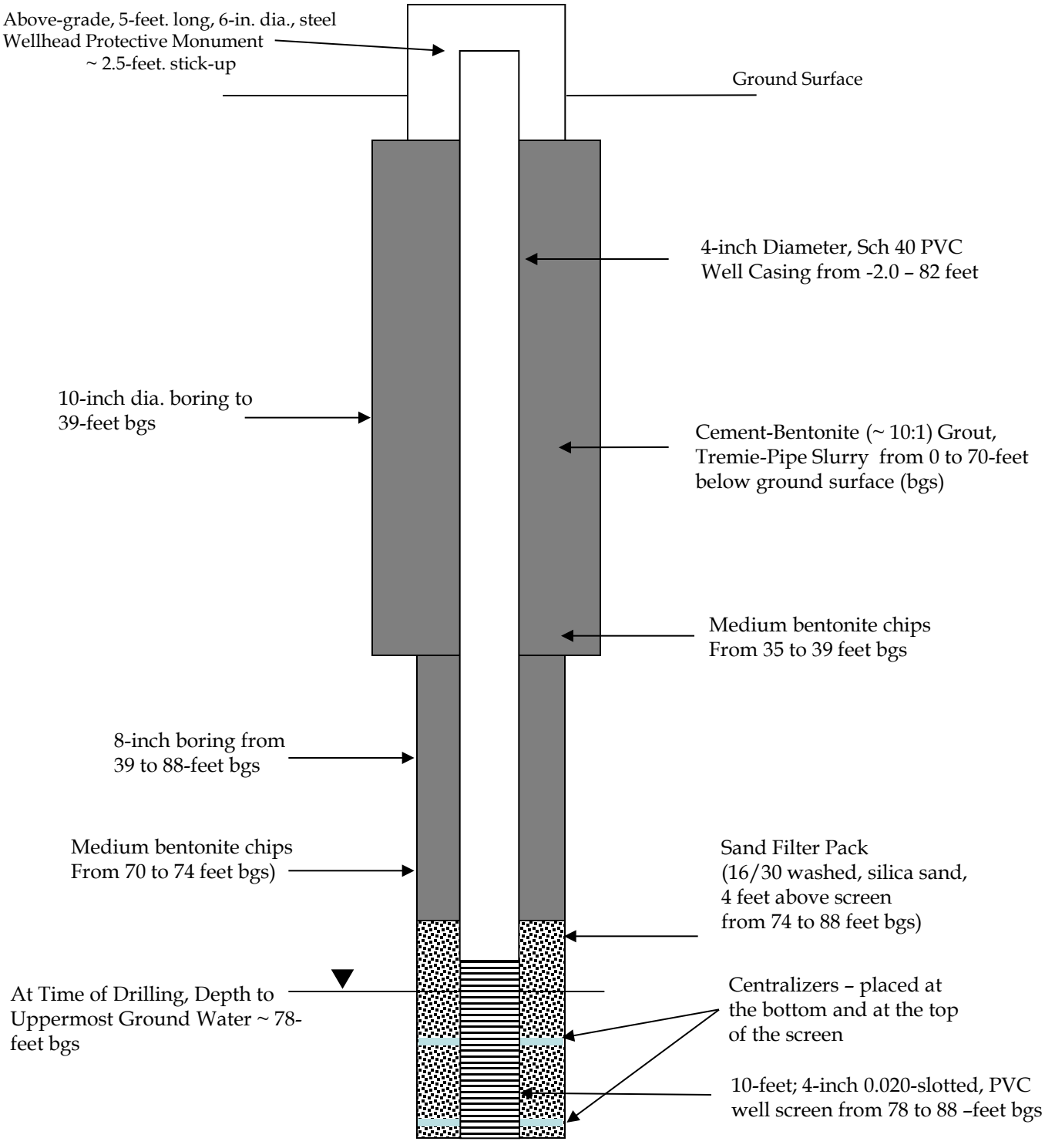
Delta, Utah

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

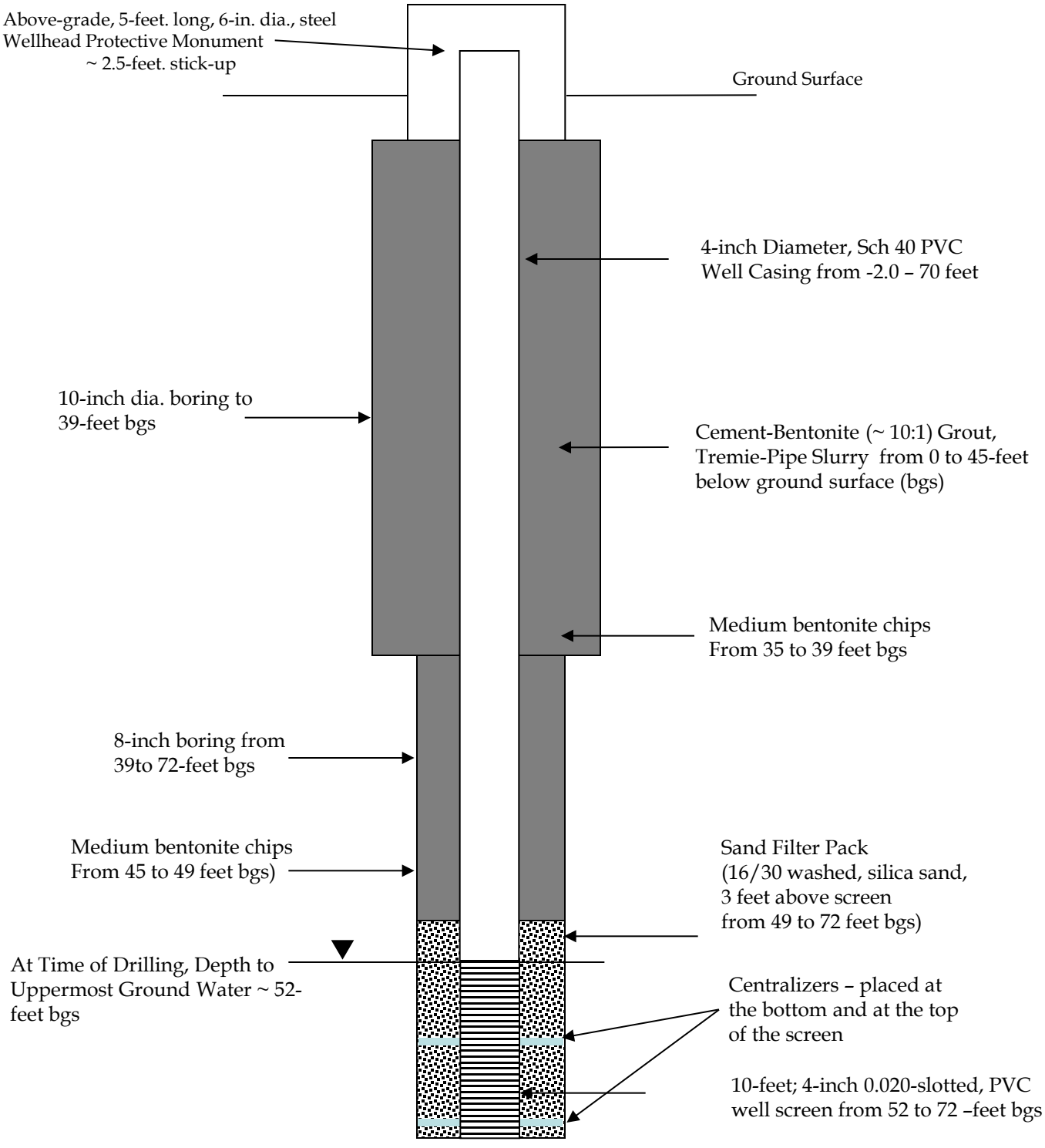
Delta, Utah

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

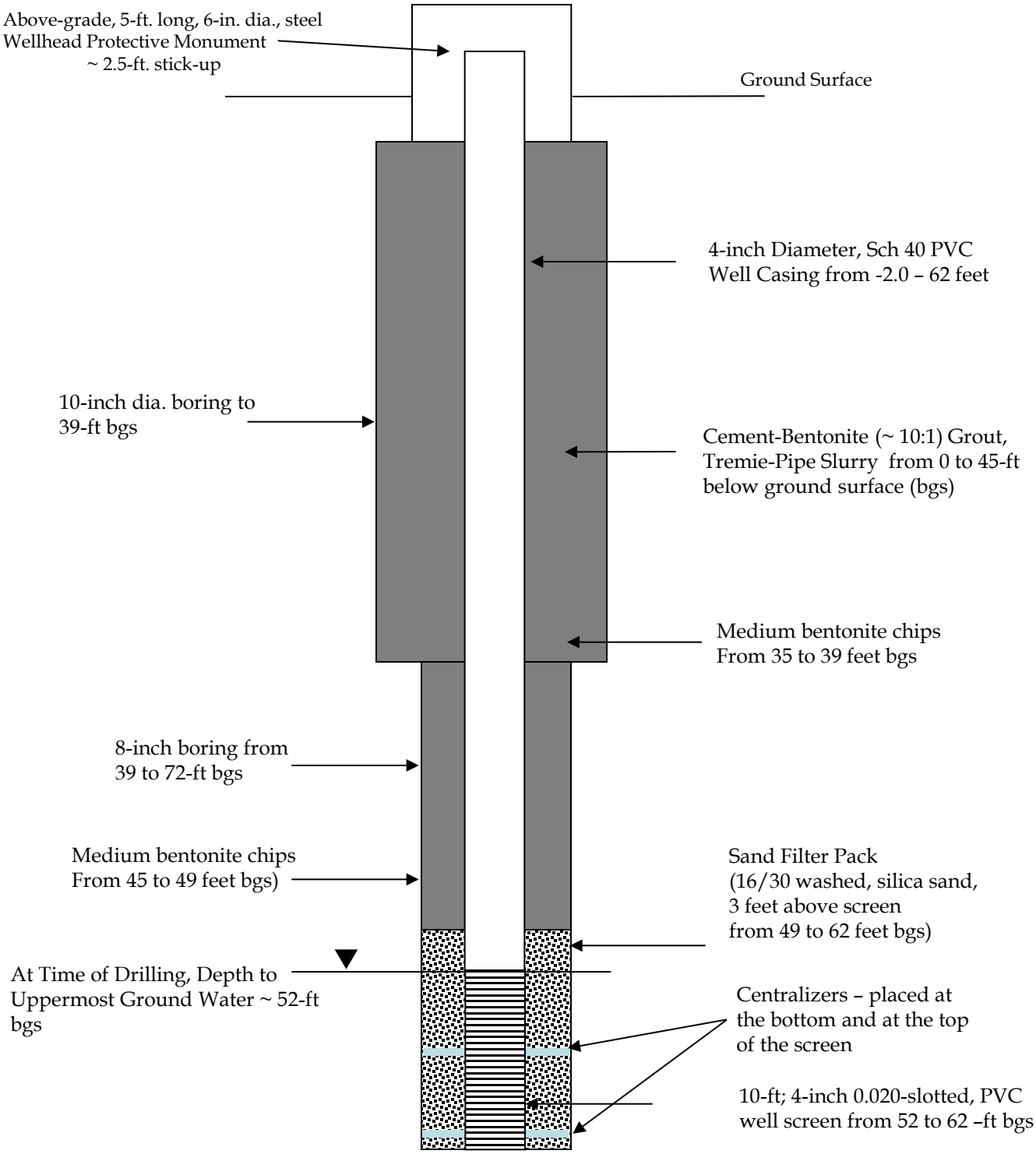
Delta, Utah

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

ISPC

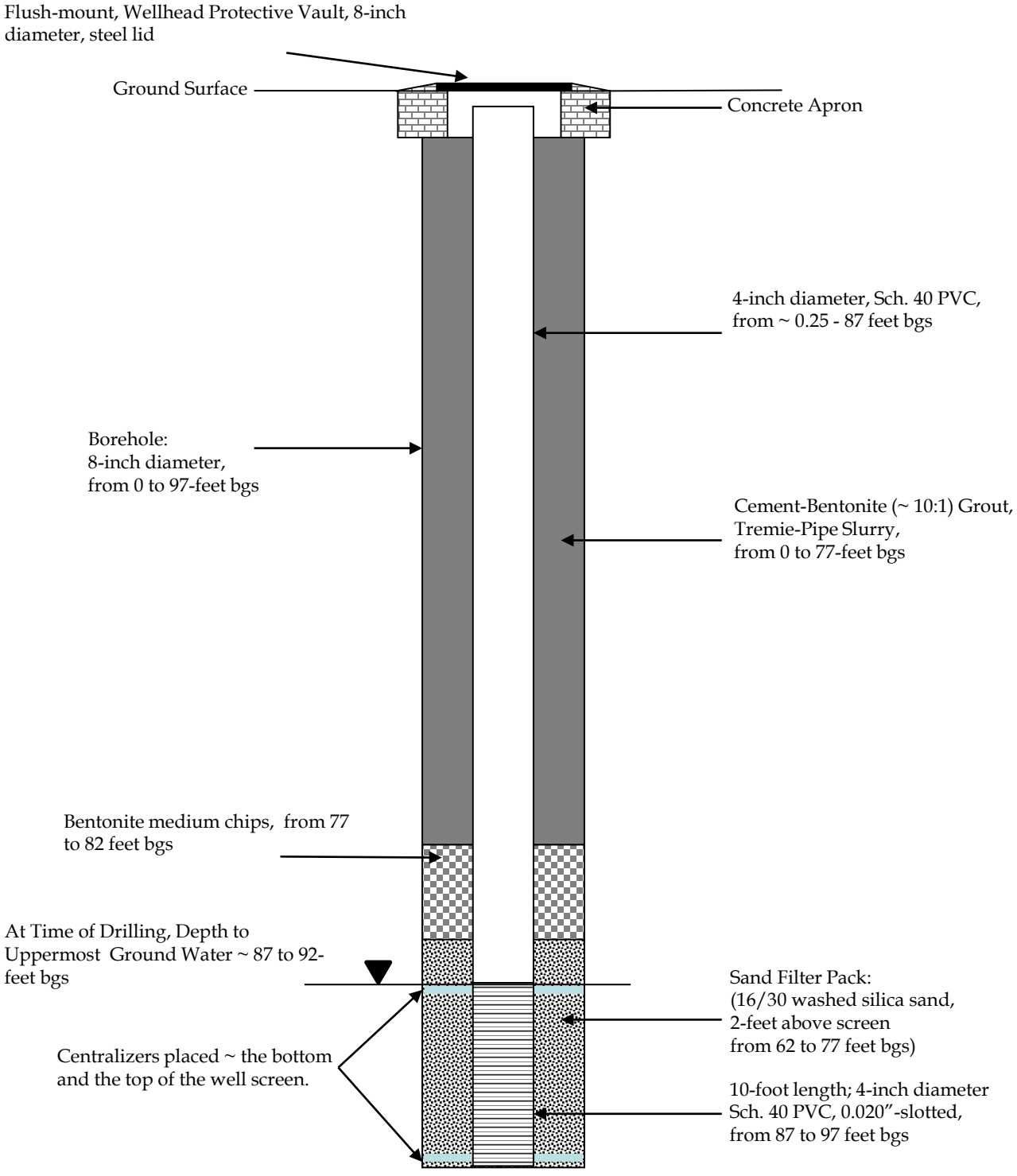
Delta, Utah

CL-W-9

Interval (feet)	Drilling Method	USCS	Sample Description
03/24/2018 - 03/25/2018			
0-1	8" Sonic	MW	Sandy silt
1-3.5	8" Sonic	SW	Sand, silt and grvel
3.5-4.5	8" Sonic	MH	Silt
4.5-7	8" Sonic	SW	Sand, silt and gravel
7-8.5	8" Sonic	SW	Sand and gravel
8.5-11.5	8" Sonic	SP	Sand, fine, dry
11.5-12.5	8" Sonic	SW	Sand and gravel
12.5-17	8" Sonic	SP	Sand, fine, dry
17-21	8" Sonic	SP	Sand, fine, dry
21-21.5	8" Sonic	CH	Clay, gray
21.5-22.5	8" Sonic	SP	Fine, sand, dry
22.5-27	8" Sonic	CH	Silty clay, red mottling in silt zones
27-37	8" Sonic	CH	Fat clay, firm, moist
37-38.5	8" Sonic	CH	Fat clay, firm moist
			38.5→ 47 drop out of cole barrel
38.5-49	8" Sonic	CH	Fat clay, firm, moist
49-55	8" Sonic	CH	Clay, firm; moist, gray
55-57	8" Sonic	CH	Silty clay, gray with black silt mottling
57-61	8" Sonic	CH	Silty clay, saturated
61-67	8" Sonic	CH	Clay, firm, moist
67-68.5	8" Sonic	MH	Silt, wet
68.5-75	8" Sonic	CH	Silty clay, moist
75-76	8" Sonic	MH	Silty, moist
76-77	8" Sonic	CH	Silty clay
77-78.5	8" Sonic	MH	Clay, firm, moist
78.5-84	8" Sonic	CH	Silty clay, moist
84-86.5	8" Sonic	CH	Clay, moist
86.5-87	8" Sonic	SP	Sand, coarse, saturated
87-89	8" Sonic	SP	Sandy, coarse, saturated
89-90	8" Sonic	CH	Silty clay
90-96.5	8" Sonic	MH	Silt with clay stringers, saturated
96.5-97	8" Sonic	CH	Clay

TD = 99; PVC sump 87-77; 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) = 97 feet bgs

Stantec

IPSC – BOTTOM ASH SURFACE IMPOUNDMENT AREA
DELTA, UTAH

Well CL-W-9 Schematic

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

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:

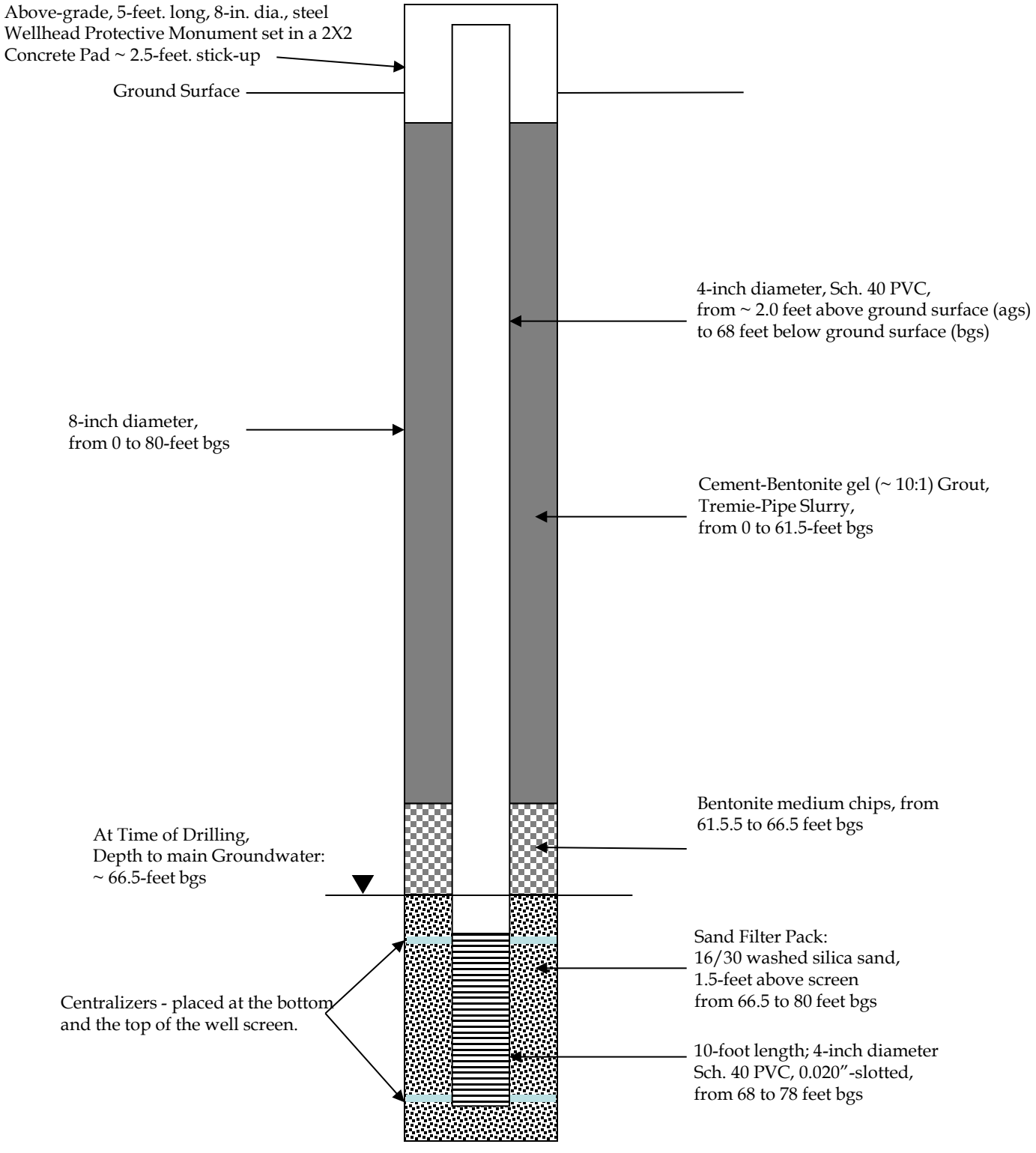
TD = 80'; PVC 4-inch screen from 68 to 78; PVC 4-inch riser from -2.5 to 68

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

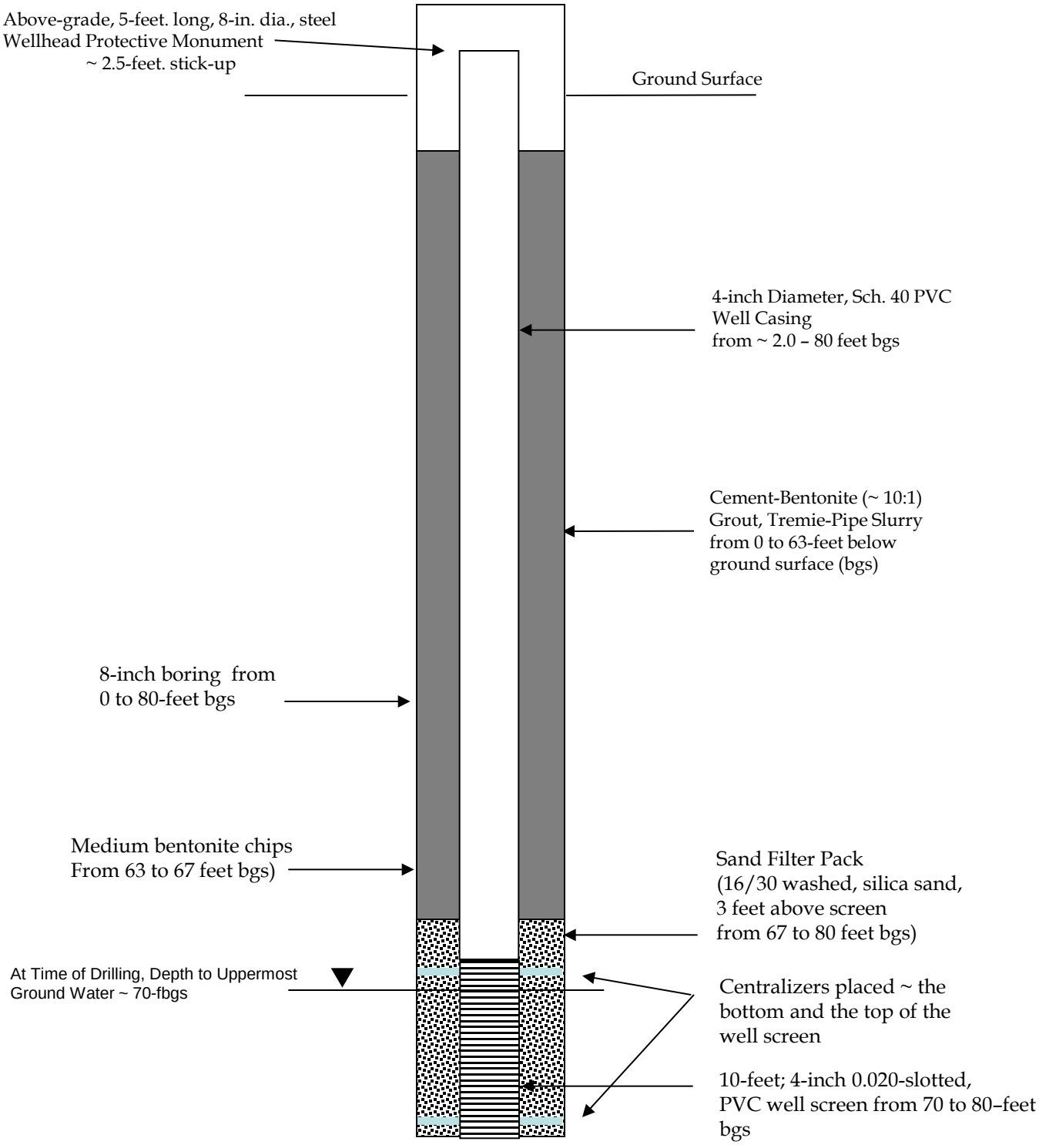
Delta, Utah

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

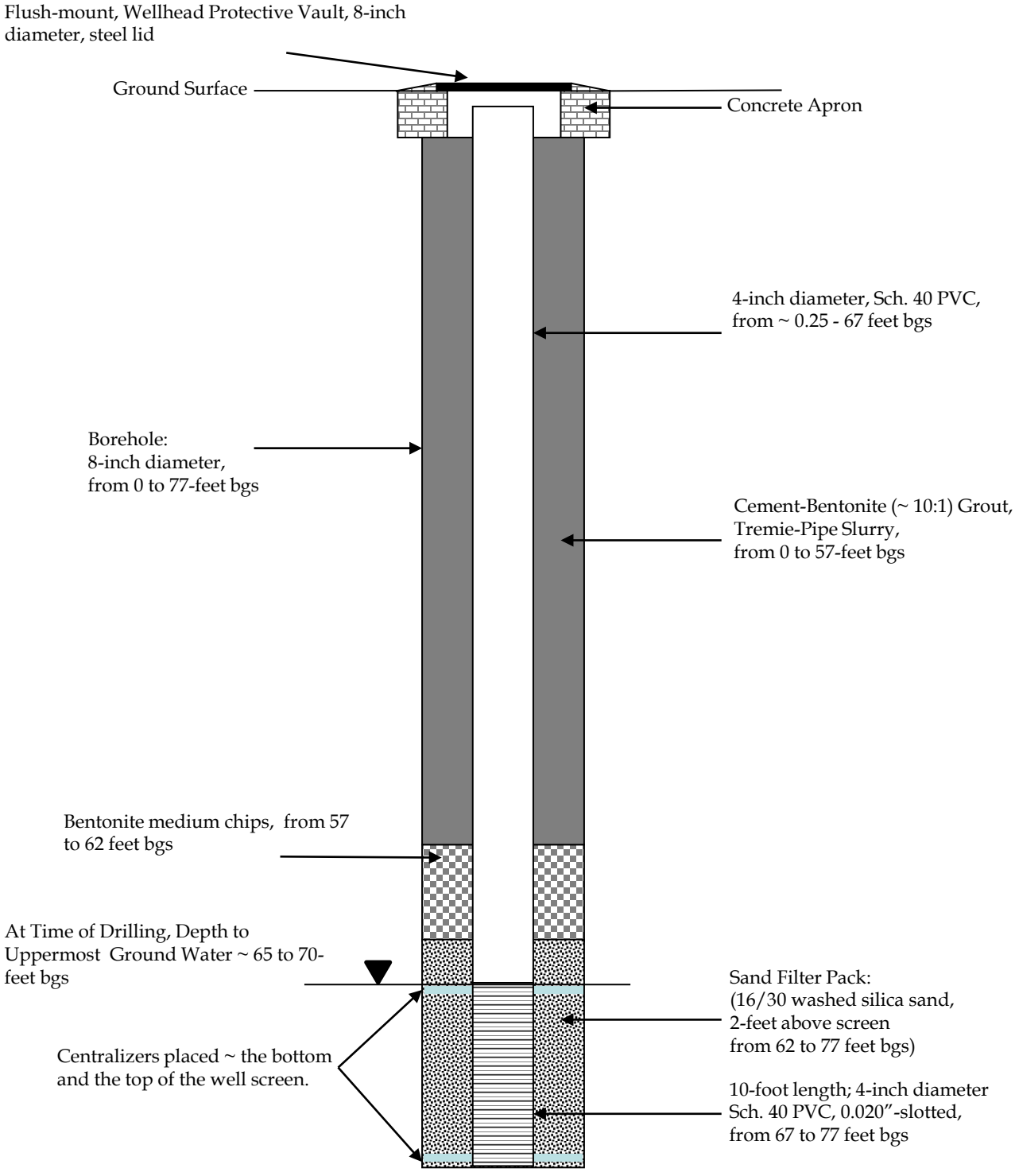
Delta, Utah

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

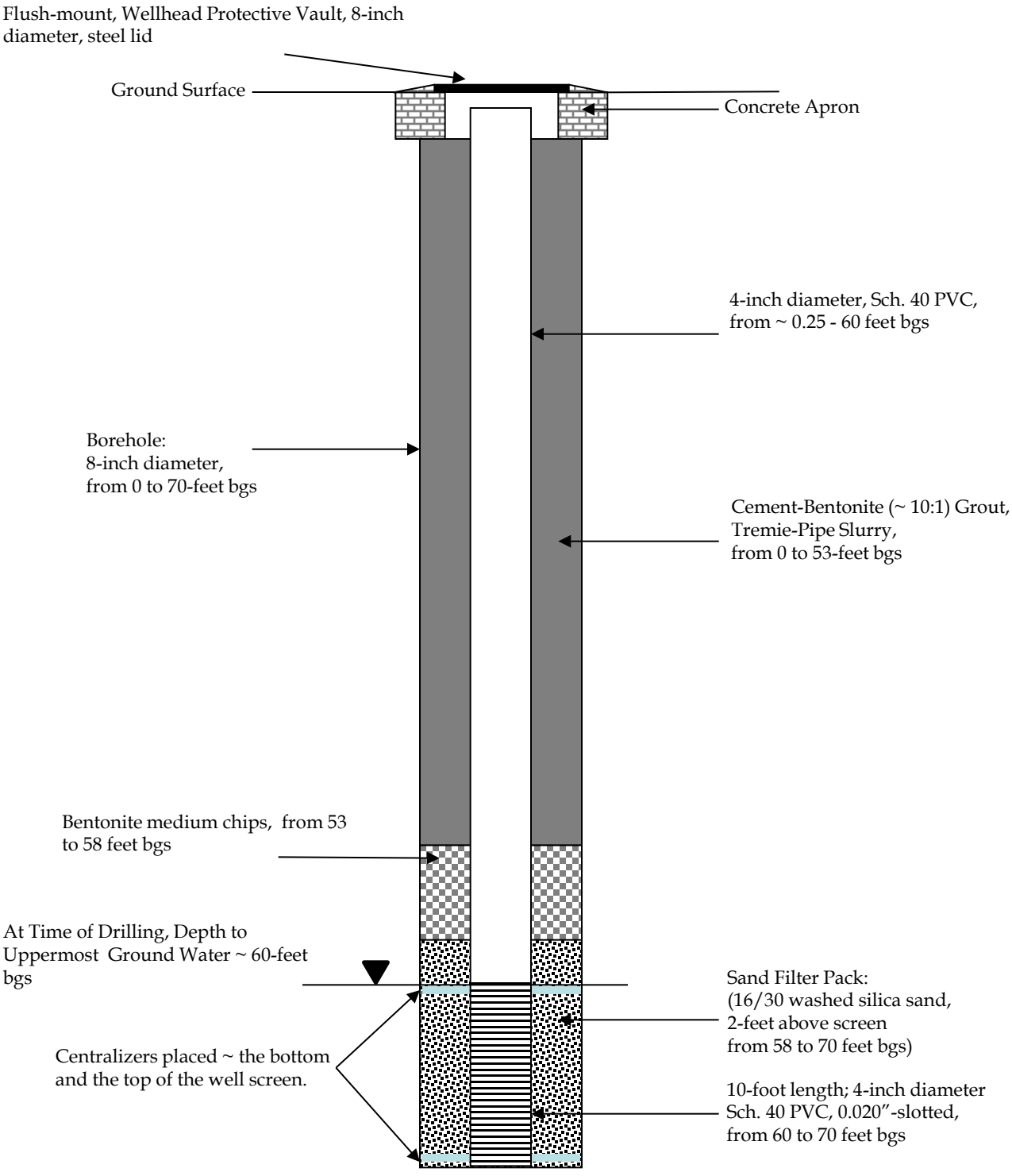
Boring Logs
ISPC
Delta, Utah

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

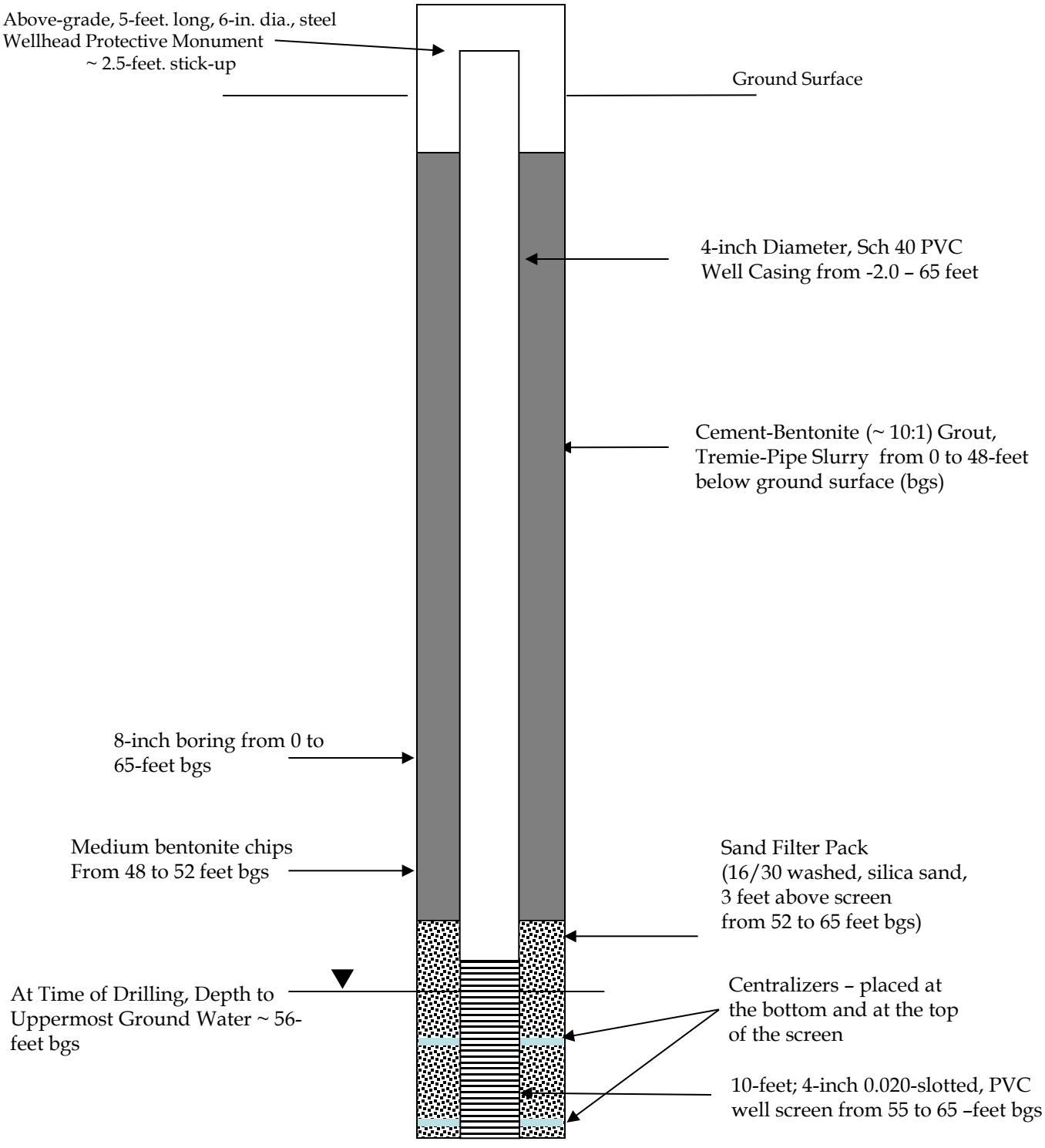
Delta, Utah

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

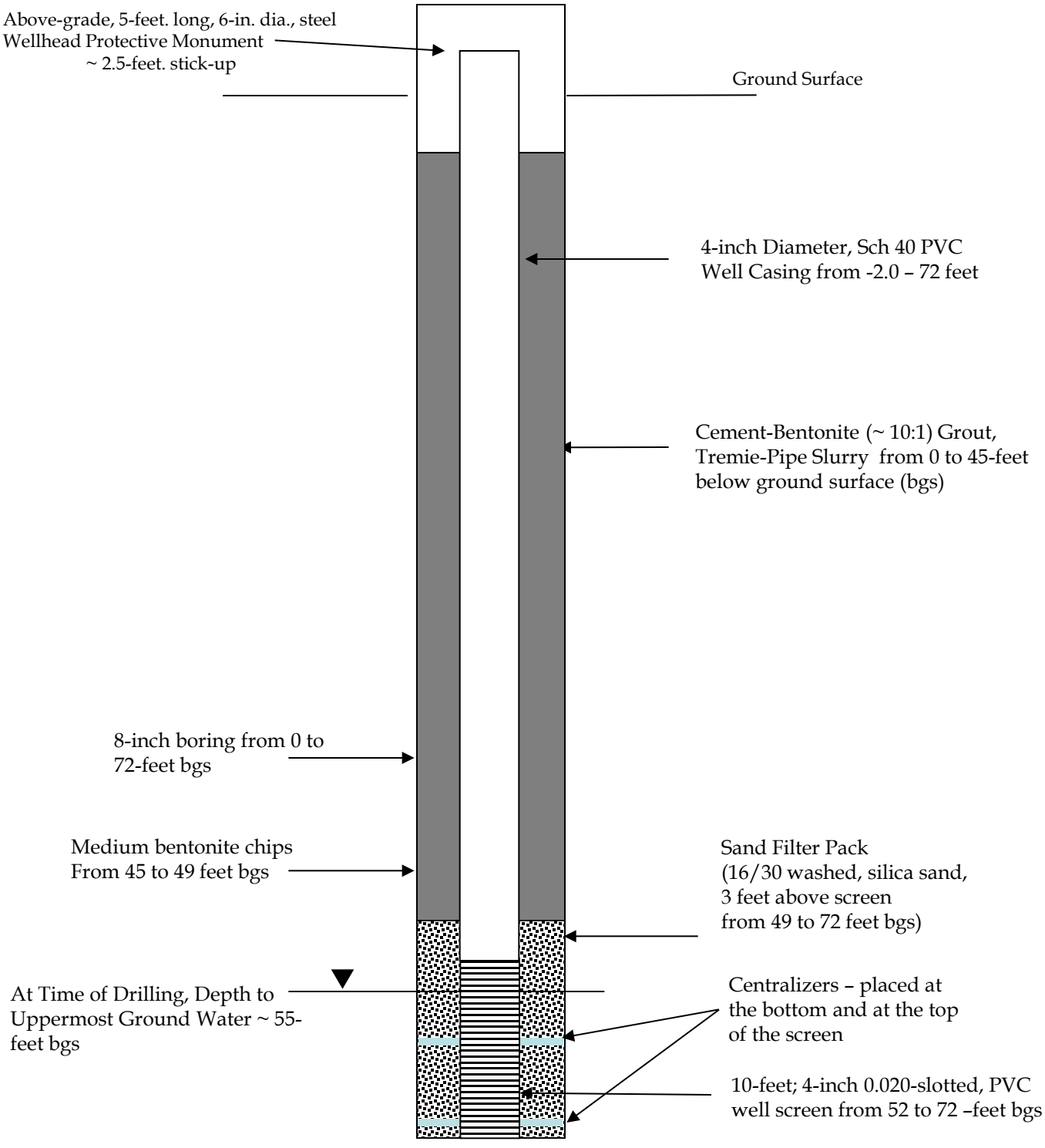
Delta, Utah

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	

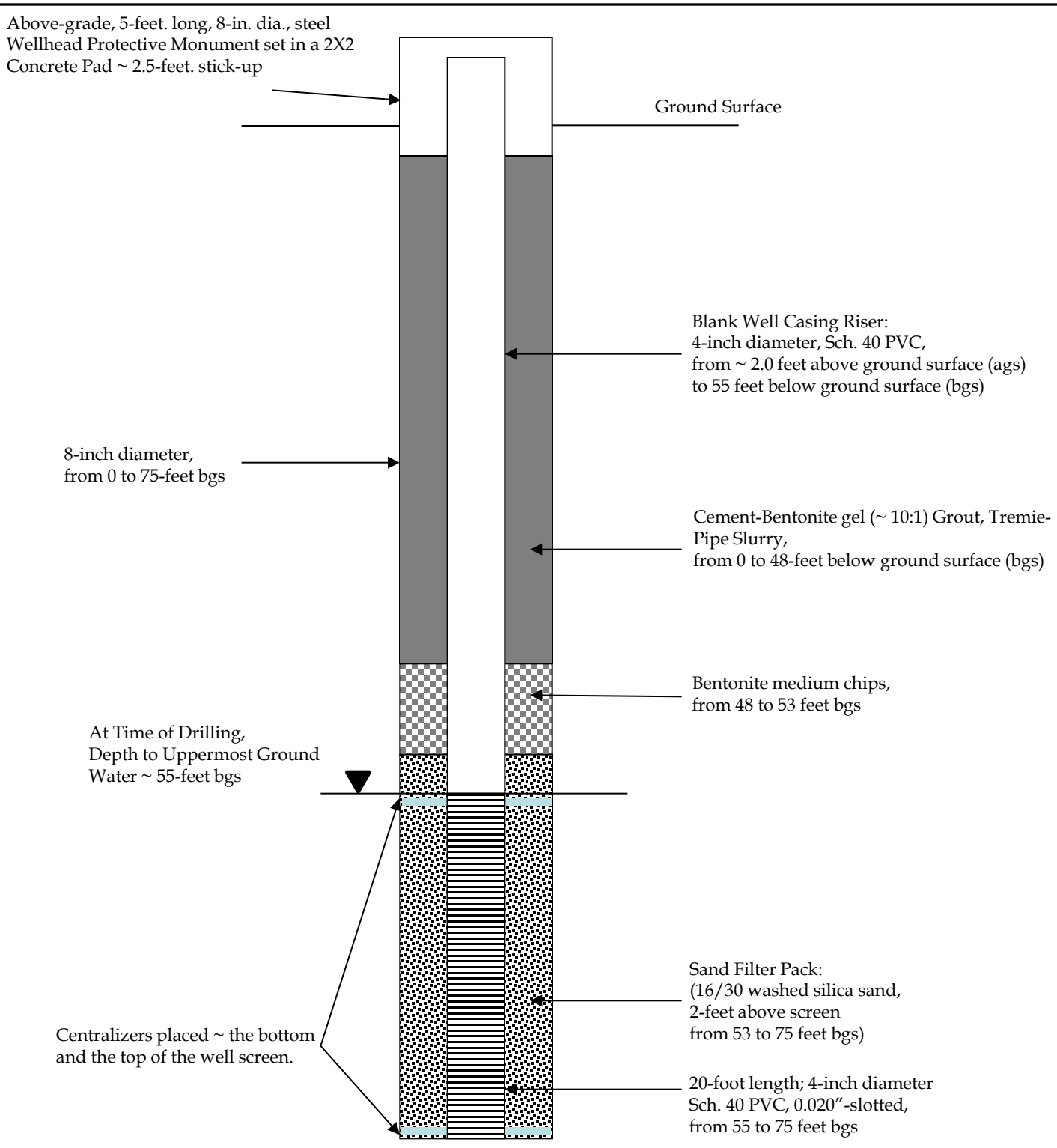
Boring Log
ISPC
Delta, Utah

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

Stantec

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	

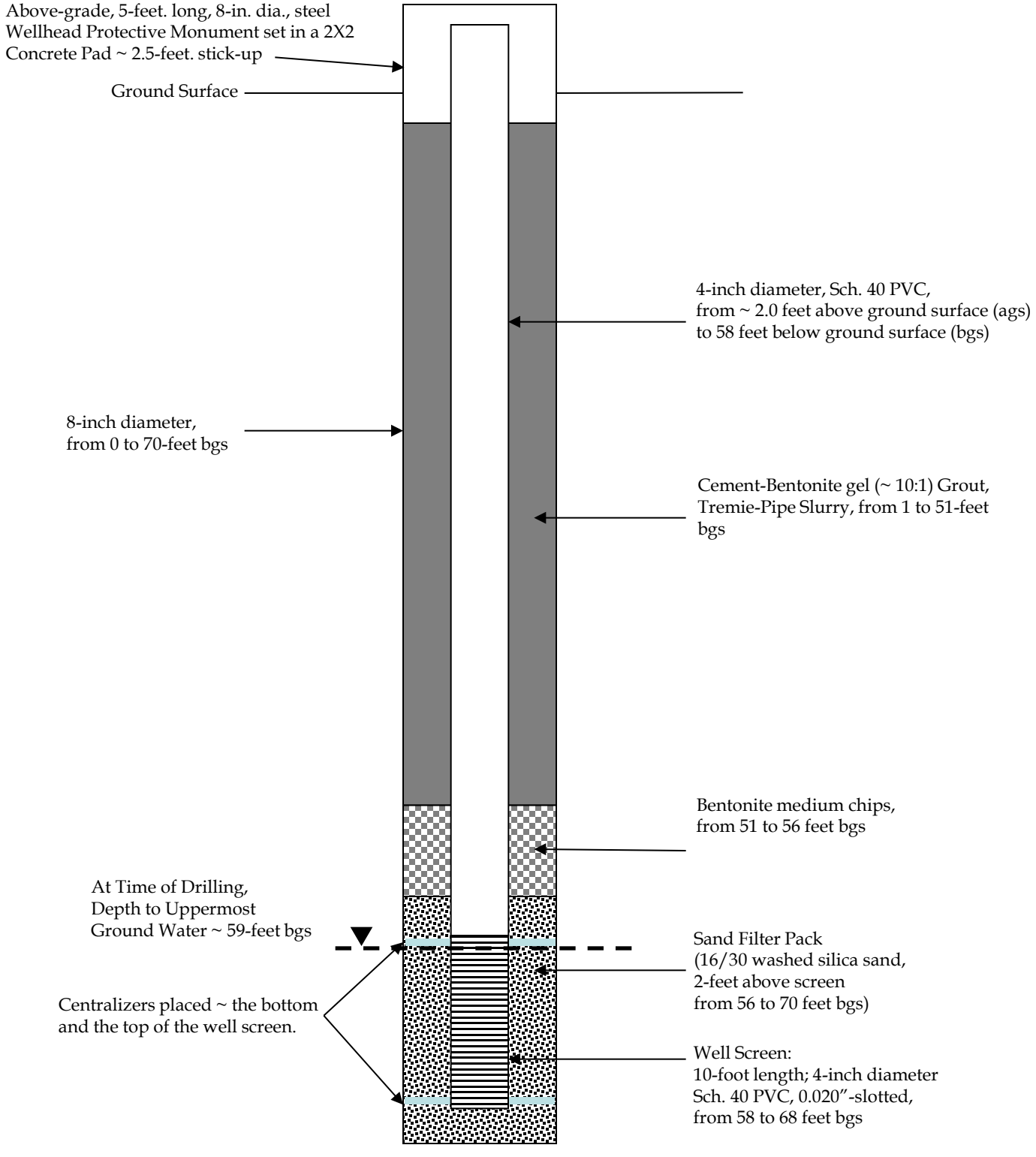
Boring Logs
ISPC
Delta, Utah

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



Stantec

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	

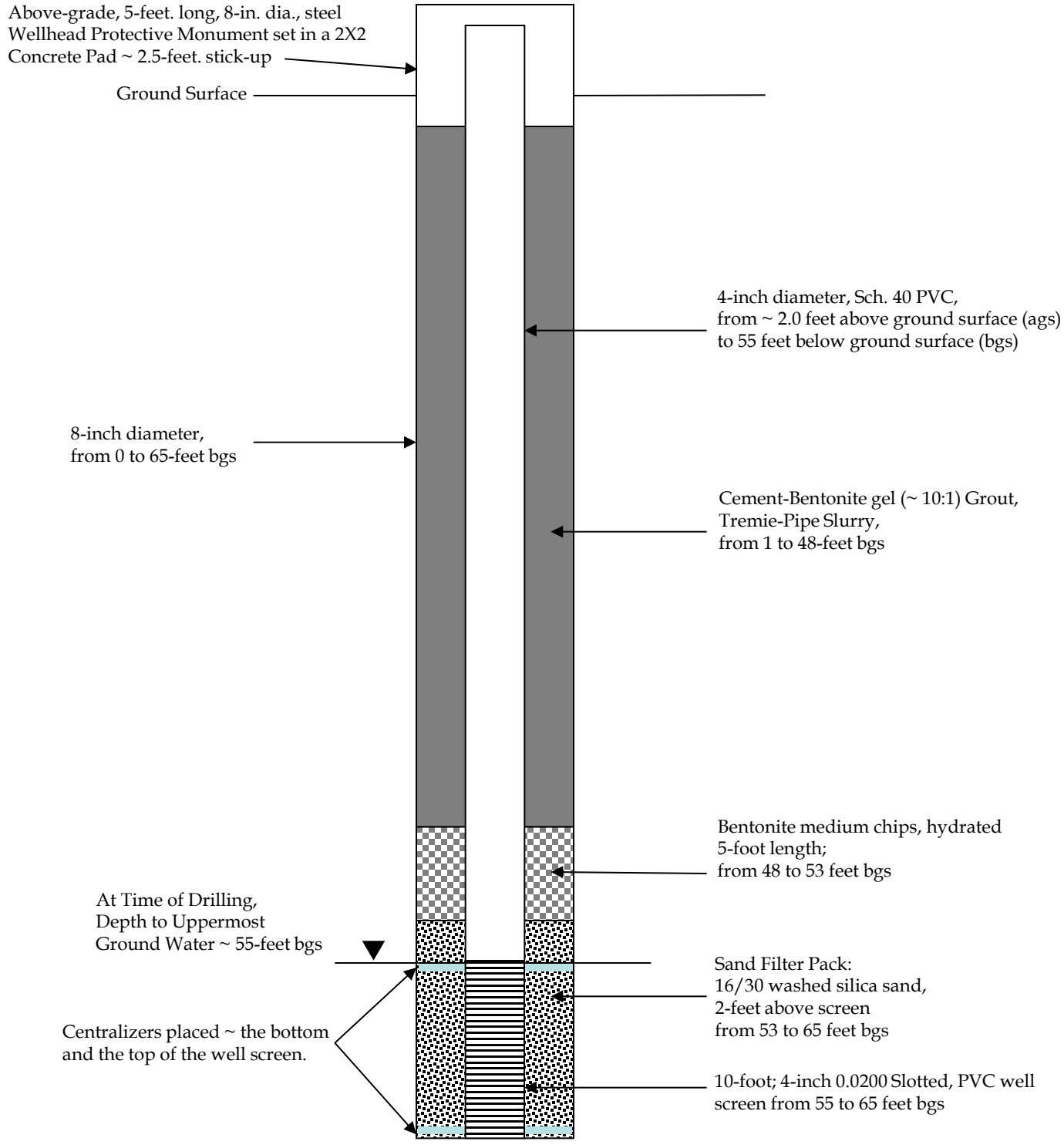
Boring Logs
ISPC
Delta, Utah

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

Stantec

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	

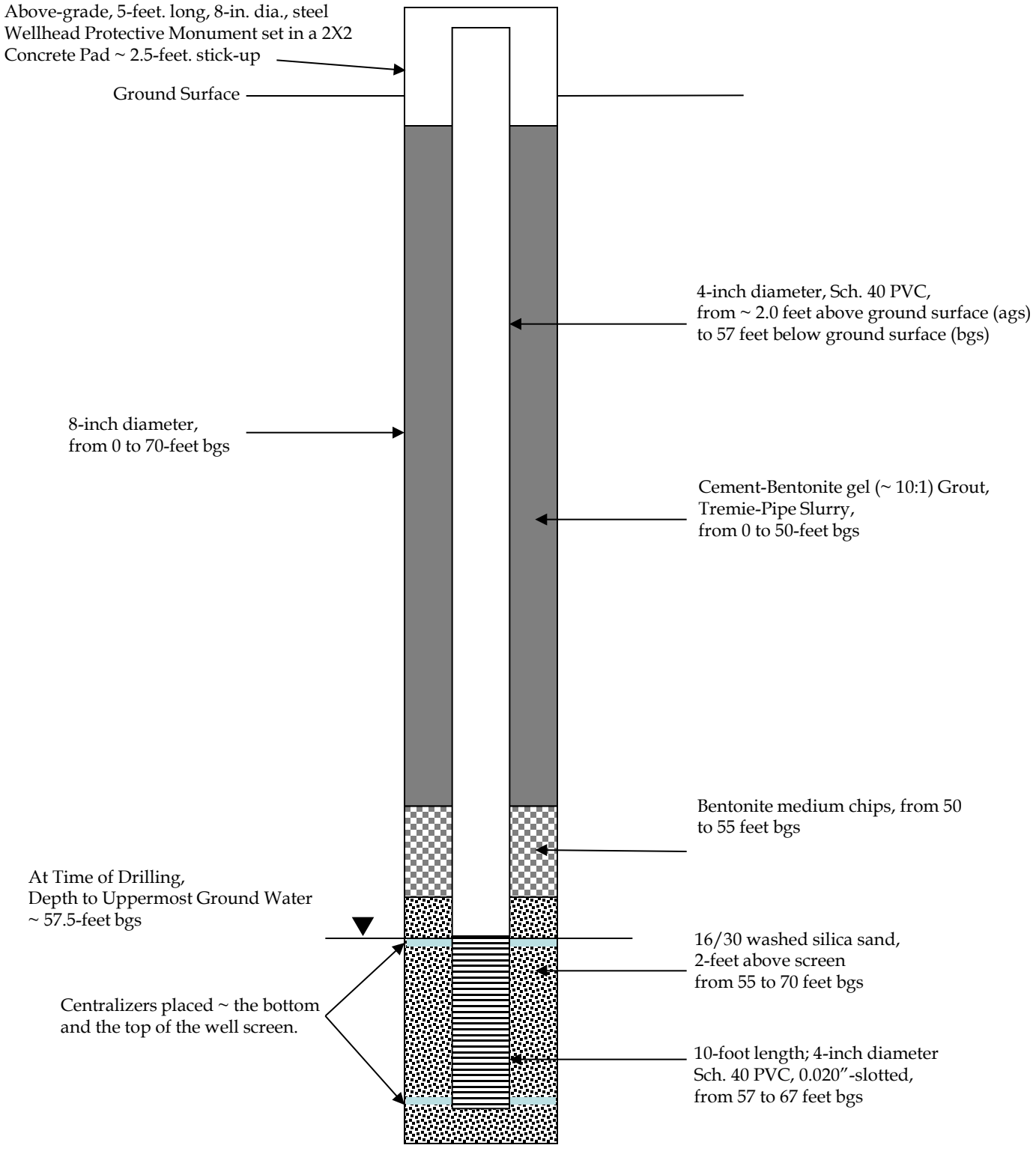
Boring Logs
ISPC
Delta, Utah

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

Stantec

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

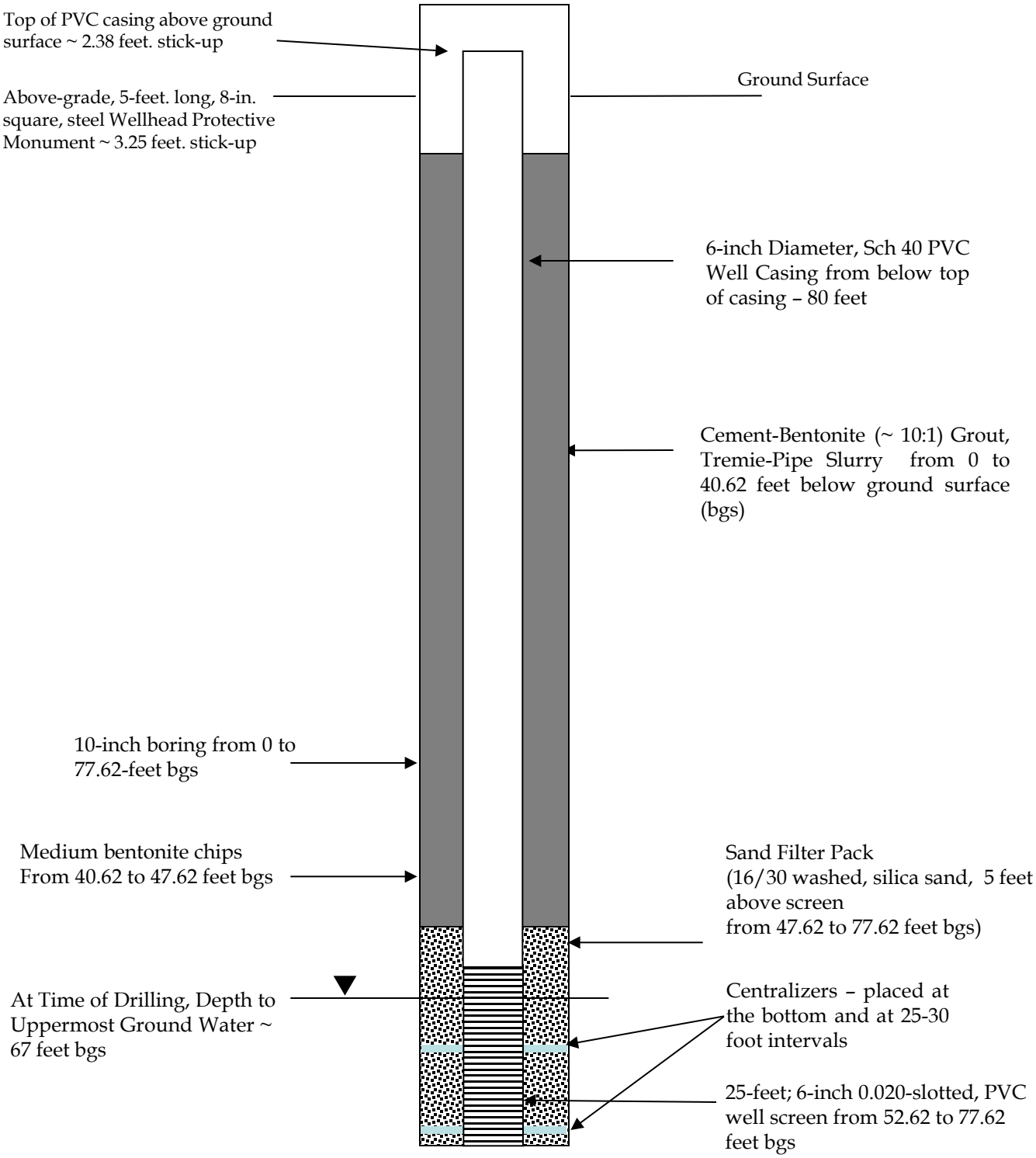
BAC-8

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

Stantec

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

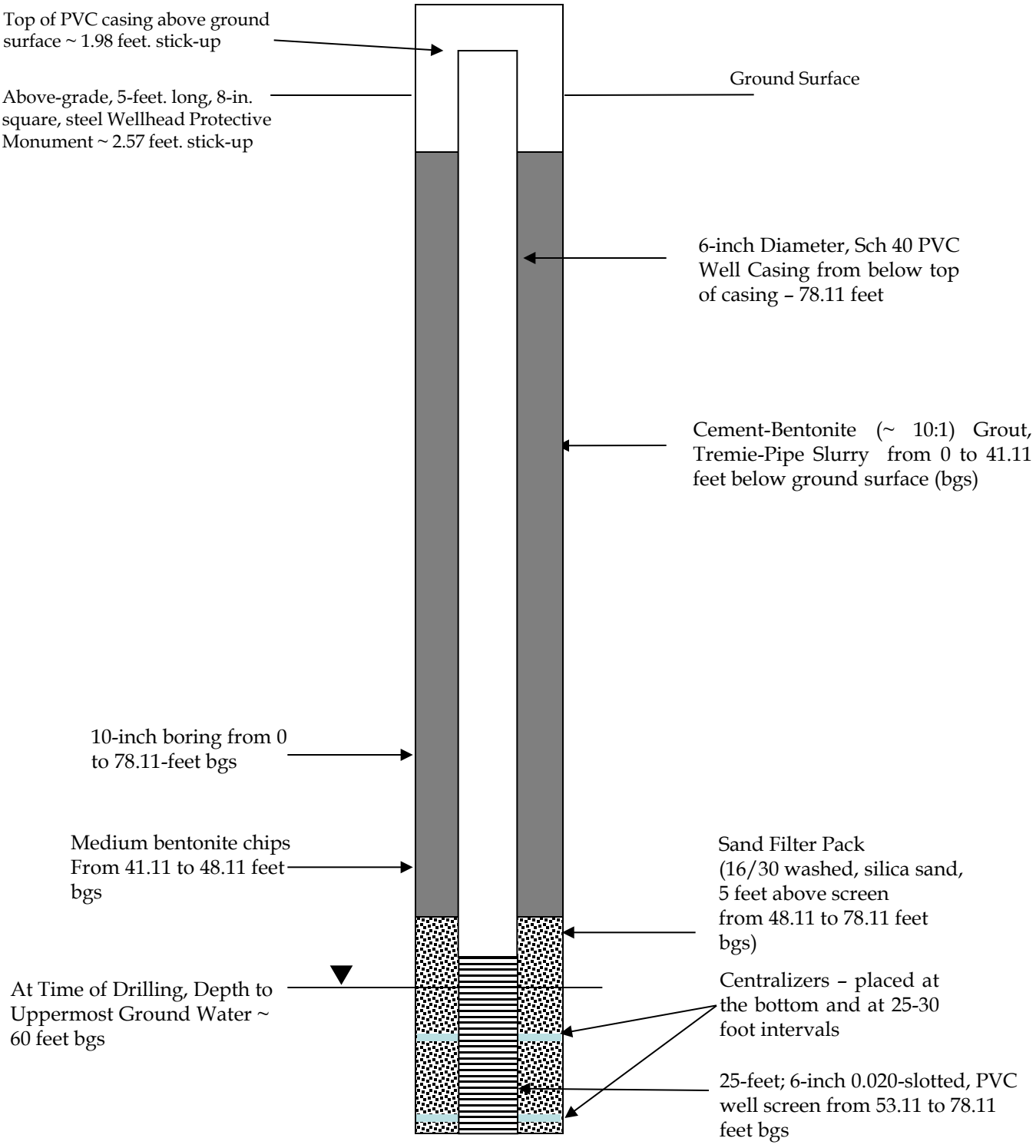
BAC-9

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

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

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

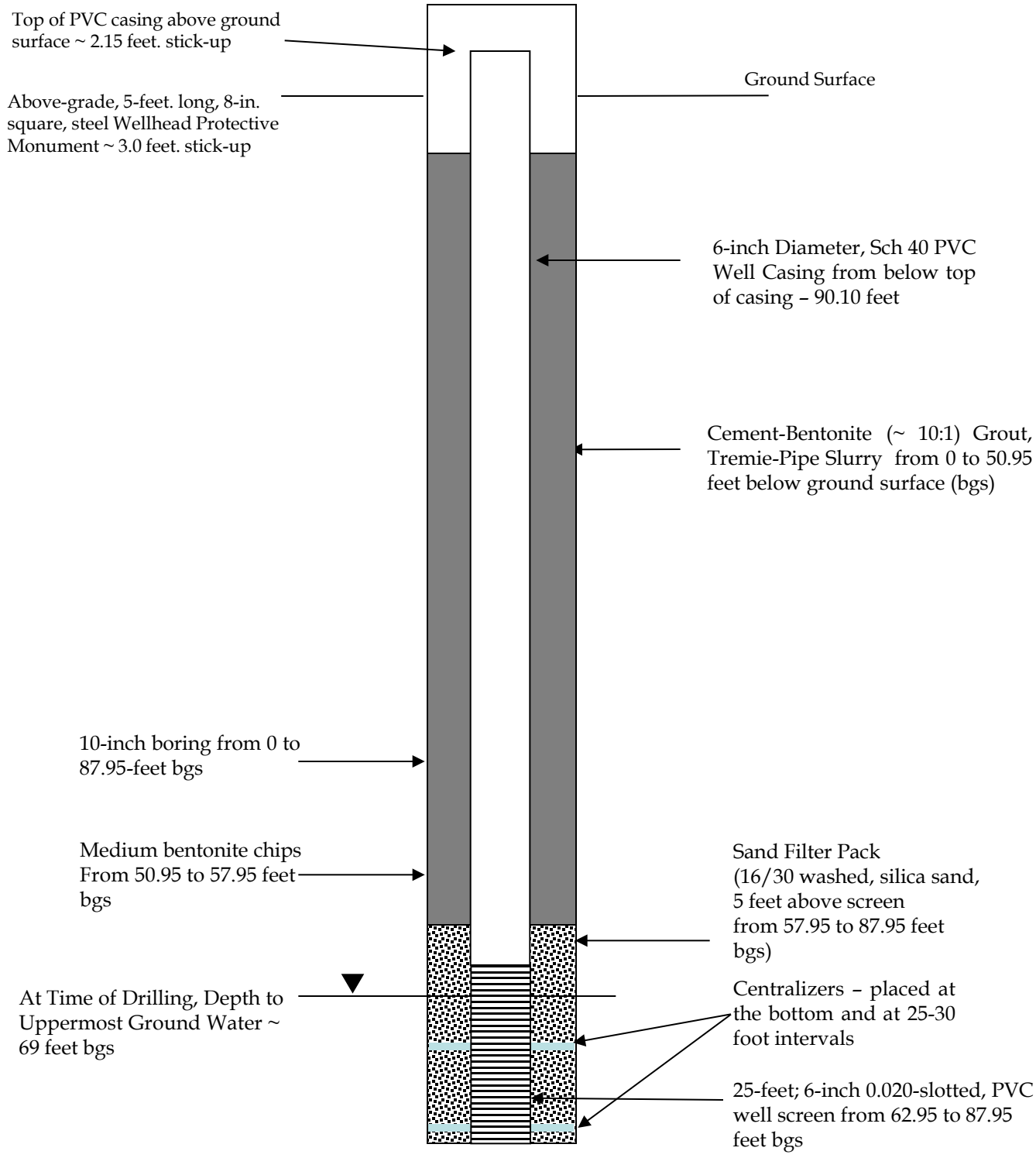
Screen (6 inch, 0.02 slotted, PVC): 62.95-87.95 feet

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

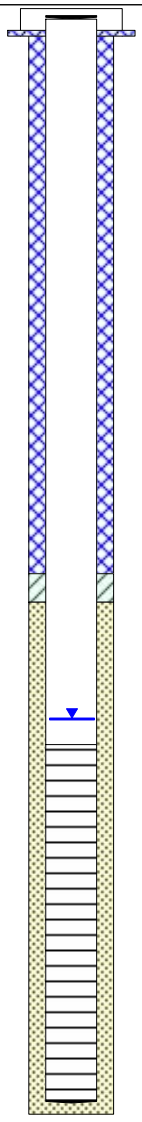
INTERMOUNTAIN POWER SERVICE CORP.

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).
60	Clay with Sand (CL), low plasticity, soft, wet, pale brown (10 YR 6/3). 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	
85	End of borehole at 81 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 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

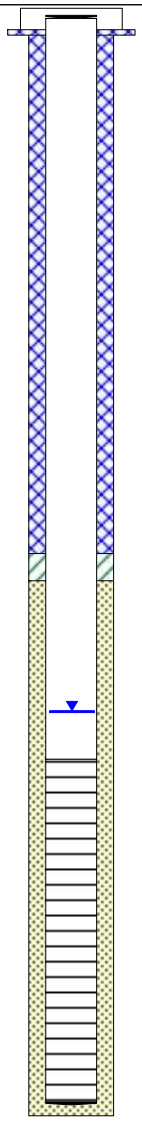
INTERMOUNTAIN POWER SERVICE CORP.

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

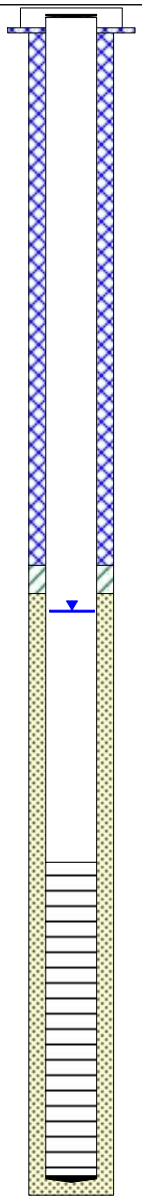
INTERMOUNTAIN POWER SERVICE CORP.

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).
60	Clay (CL), medium plasticity, medium dense, moist to wet, cohesive, light brownish gray (10 YR 6/2).
	Clay with Sand (CL), low to medium plasticity, soft to medium dense, wet, brown (10 YR 6/3).
65	Clay (CL), high plasticity, stiff, moist, cohesive, pale brown (10 YR 6/3).
	Clay (CL), medium plasticity, medium dense, moist to wet, cohesive, light brownish gray (10 YR 6/2).
70	Clay (CL), high plasticity, stiff, moist, cohesive, pale brown (10 YR 6/3).
	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.

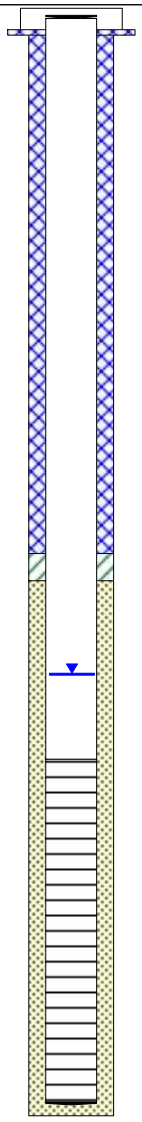
MONITORNG WELL ID:	**BAC-14**
CLIENT	Intermountain Power Service Corporation
PROJECT	Monitoring Well Installation
SITE LOCATION	Southwest of Bottom Ash Basin Surface Impoundment

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).
85	End of borehole at 81 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 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

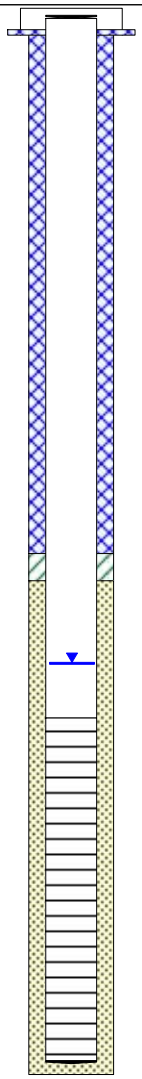
INTERMOUNTAIN POWER SERVICE CORP.

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

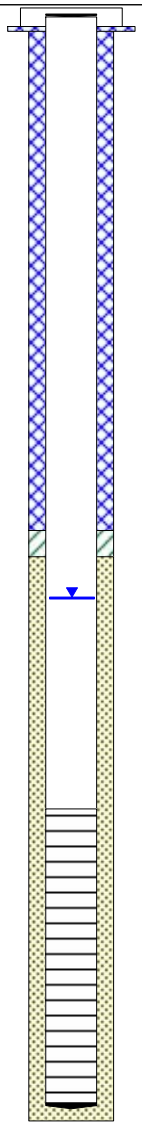
INTERMOUNTAIN POWER SERVICE CORP.

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 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).
30	Clay with Sand (CL), low to medium plasticity, soft to medium dense, dry, non cohesive, pale brown (10 YR 6/3).
	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

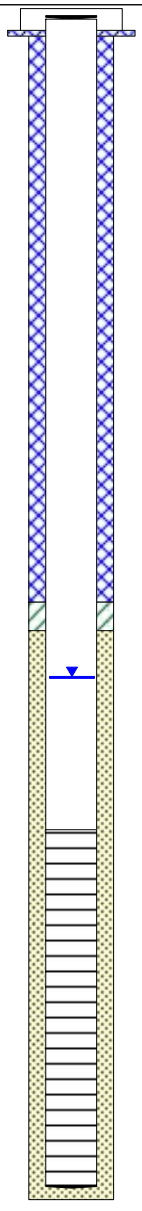
PROJECT: Monitoring Well Installation

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 GRAPHIC	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

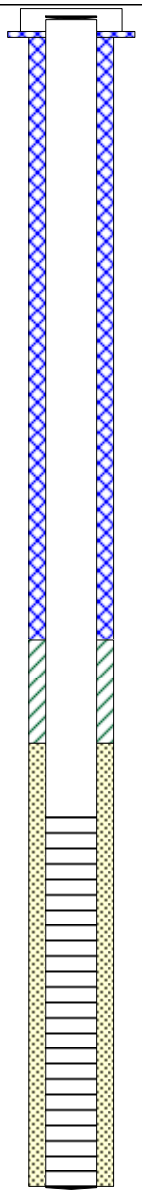
INTERMOUNTAIN POWER SERVICE CORP.

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

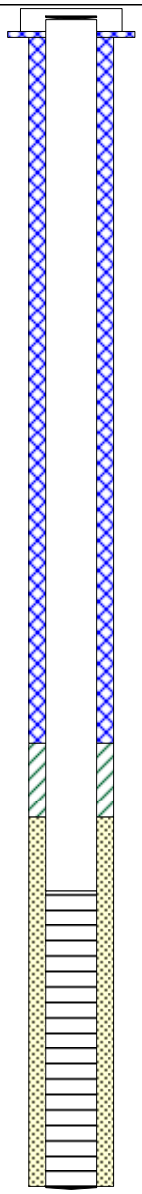
INTERMOUNTAIN POWER SERVICE CORP.

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

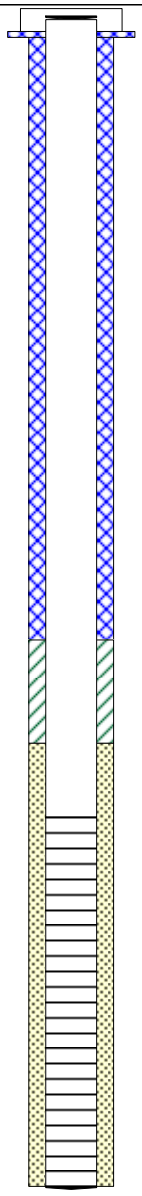
INTERMOUNTAIN POWER SERVICE CORP.

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

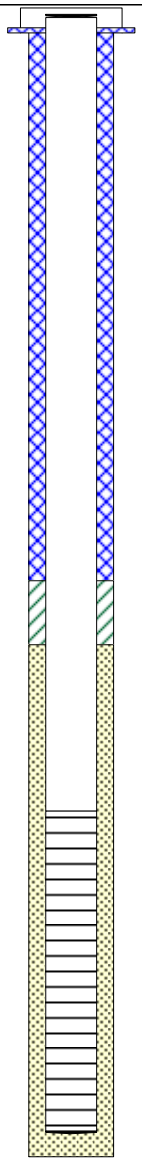
INTERMOUNTAIN POWER SERVICE CORP.

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

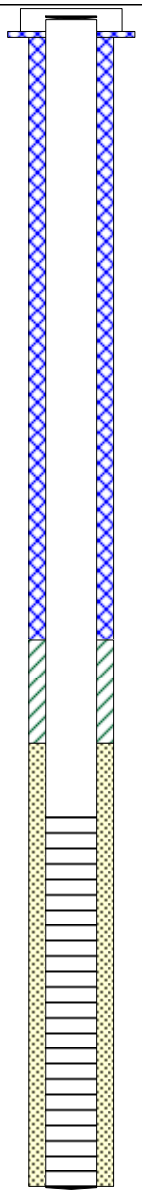
INTERMOUNTAIN POWER SERVICE CORP.

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.

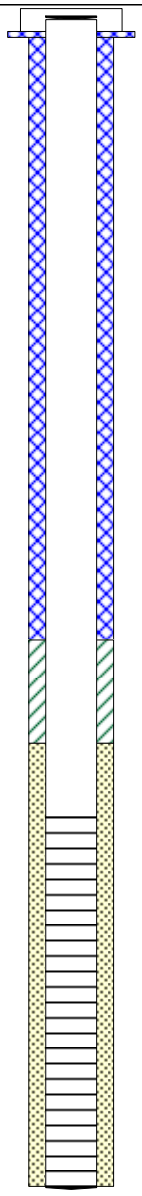
MONITORNG WELL ID: **BAC-23**
CLIENT: Intermountain Power Service Corporation
PROJECT: Monitoring Well Installation
SITE LOCATION: South Wells

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

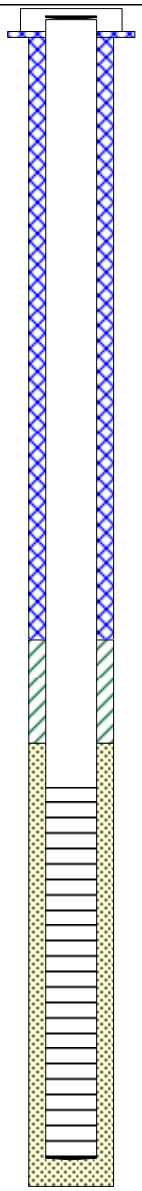
INTERMOUNTAIN POWER SERVICE CORP.

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

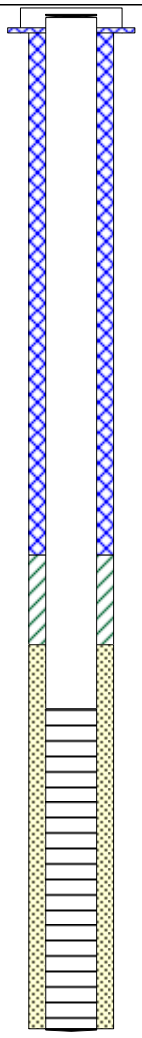
INTERMOUNTAIN POWER SERVICE CORP.

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

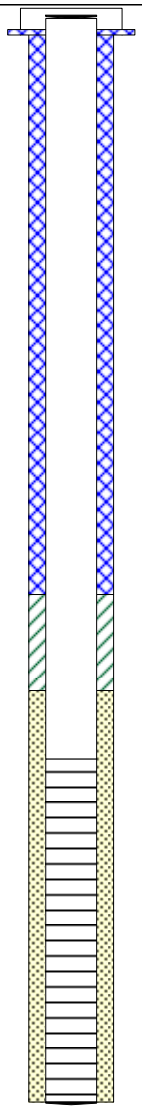
INTERMOUNTAIN POWER SERVICE CORP.

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.

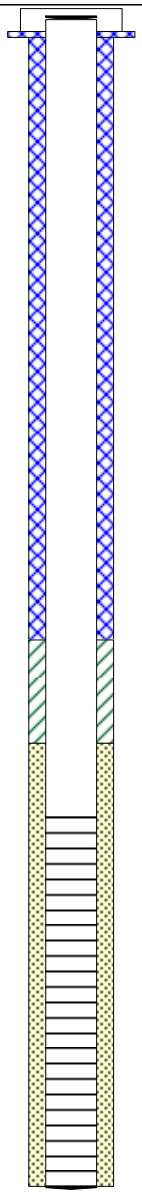
MONITORNG WELL ID:	**BAC-27**
CLIENT:	Intermountain Power Service Corporation
PROJECT:	Monitoring Well Installation
SITE LOCATION:	North Wells

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.

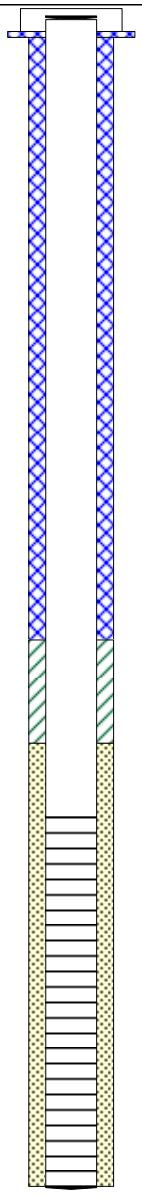
MONITORNG WELL ID: **BAC-28**
CLIENT: Intermountain Power Service Corporation
PROJECT: Monitoring Well Installation
SITE LOCATION: North Wells

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.

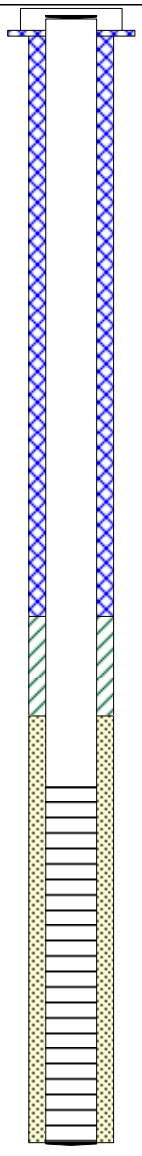
MONITORNG WELL ID: **BAC-29**
CLIENT: Intermountain Power Service Corporation
PROJECT: Monitoring Well Installation
SITE LOCATION: North Wells

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.

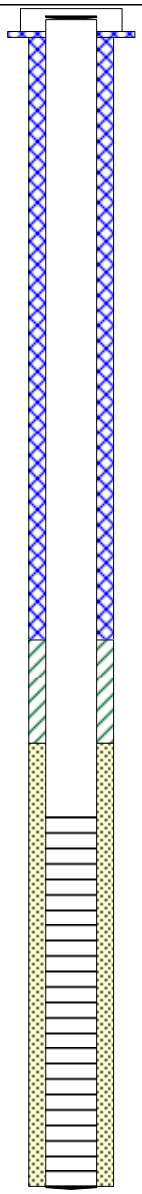
MONITORNG WELL ID: **BAC-30**
CLIENT: Intermountain Power Service Corporation
PROJECT: Monitoring Well Installation
SITE LOCATION: North Wells

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

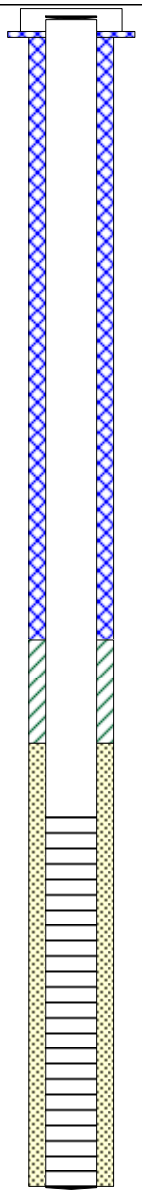
INTERMOUNTAIN POWER SERVICE CORP.

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

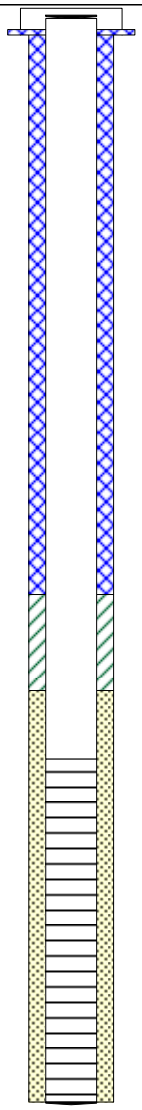
INTERMOUNTAIN POWER SERVICE CORP.

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

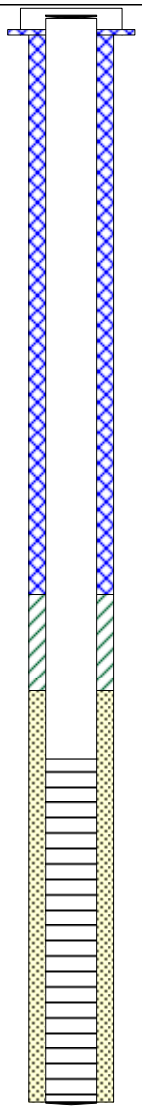
INTERMOUNTAIN POWER SERVICE CORP.

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

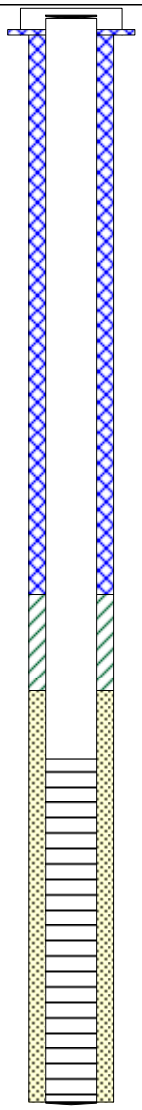
INTERMOUNTAIN POWER SERVICE CORP.

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

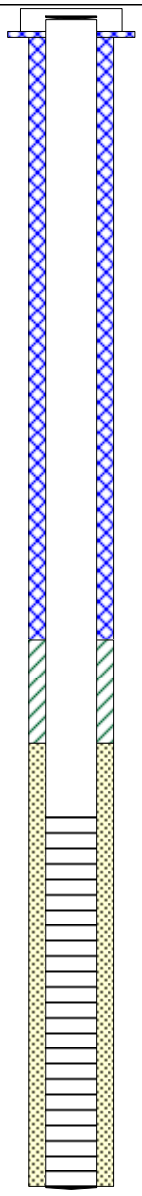
INTERMOUNTAIN POWER SERVICE CORP.

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

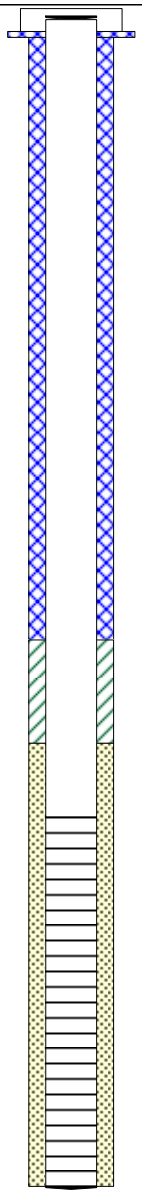
INTERMOUNTAIN POWER SERVICE CORP.

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

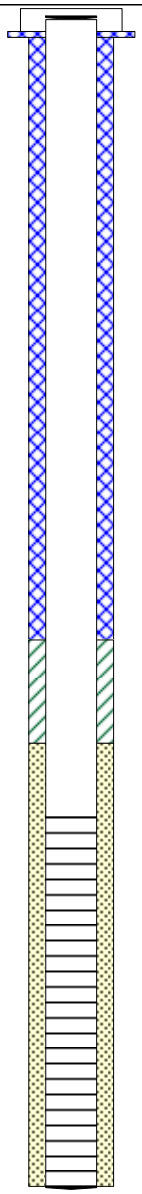
- Above ground monument with well cap
- Borehole diameter 10 inches from 0 to 78 ft bgs.
- Grout 0 to 41 ft bgs.
- 0 to 53 ft bgs., 6 in dia., Sch. 80 PVC riser
- Bentonite 41 to 48 ft bgs.
- Filter Pack Sand 48 to 78 ft bgs.
- 53 to 78 ft bgs., 6 in dia., Sch. 80 PVC screen with 0.02 inch slot aperture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

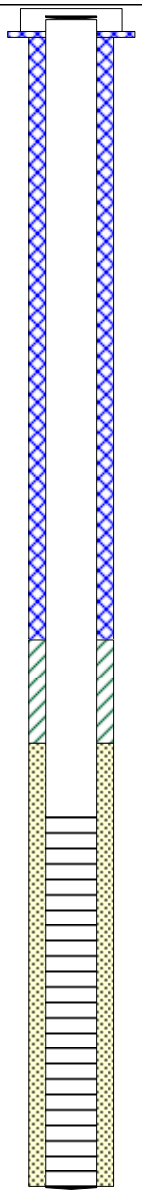
INTERMOUNTAIN POWER SERVICE CORP.

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

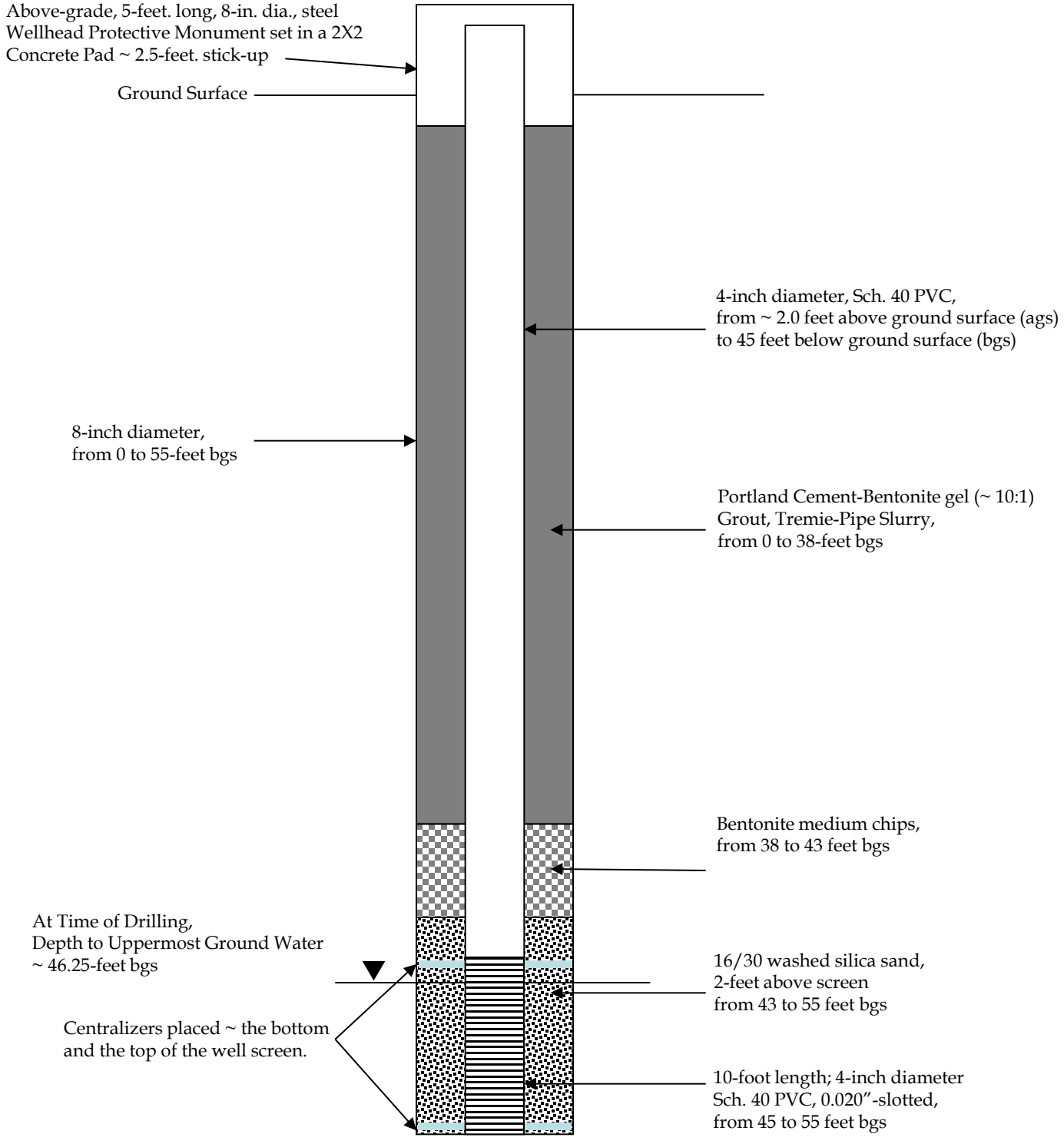
Boring Logs
ISPC
Delta, Utah

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

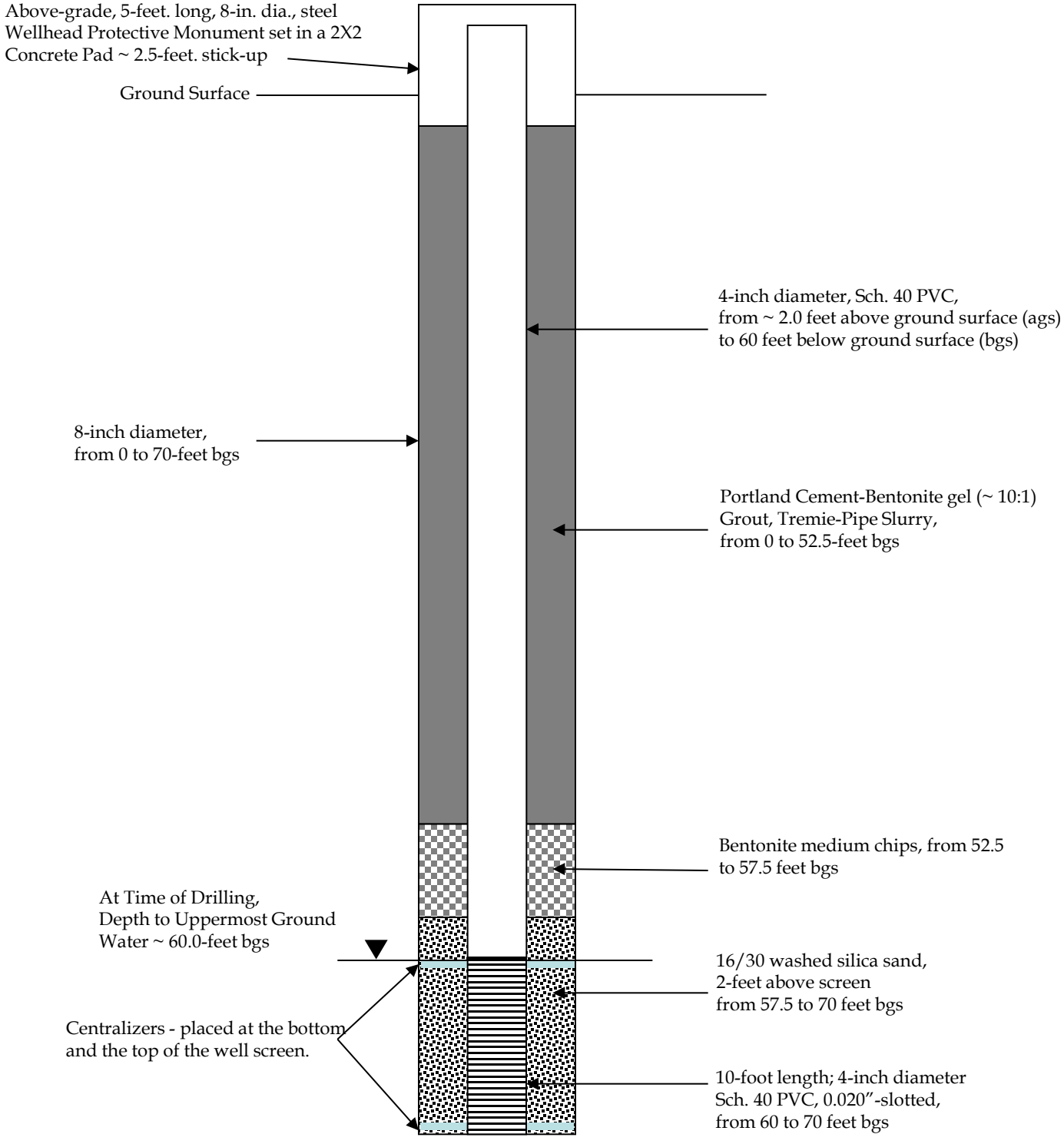
Boring Logs
ISPC
Delta, Utah

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	

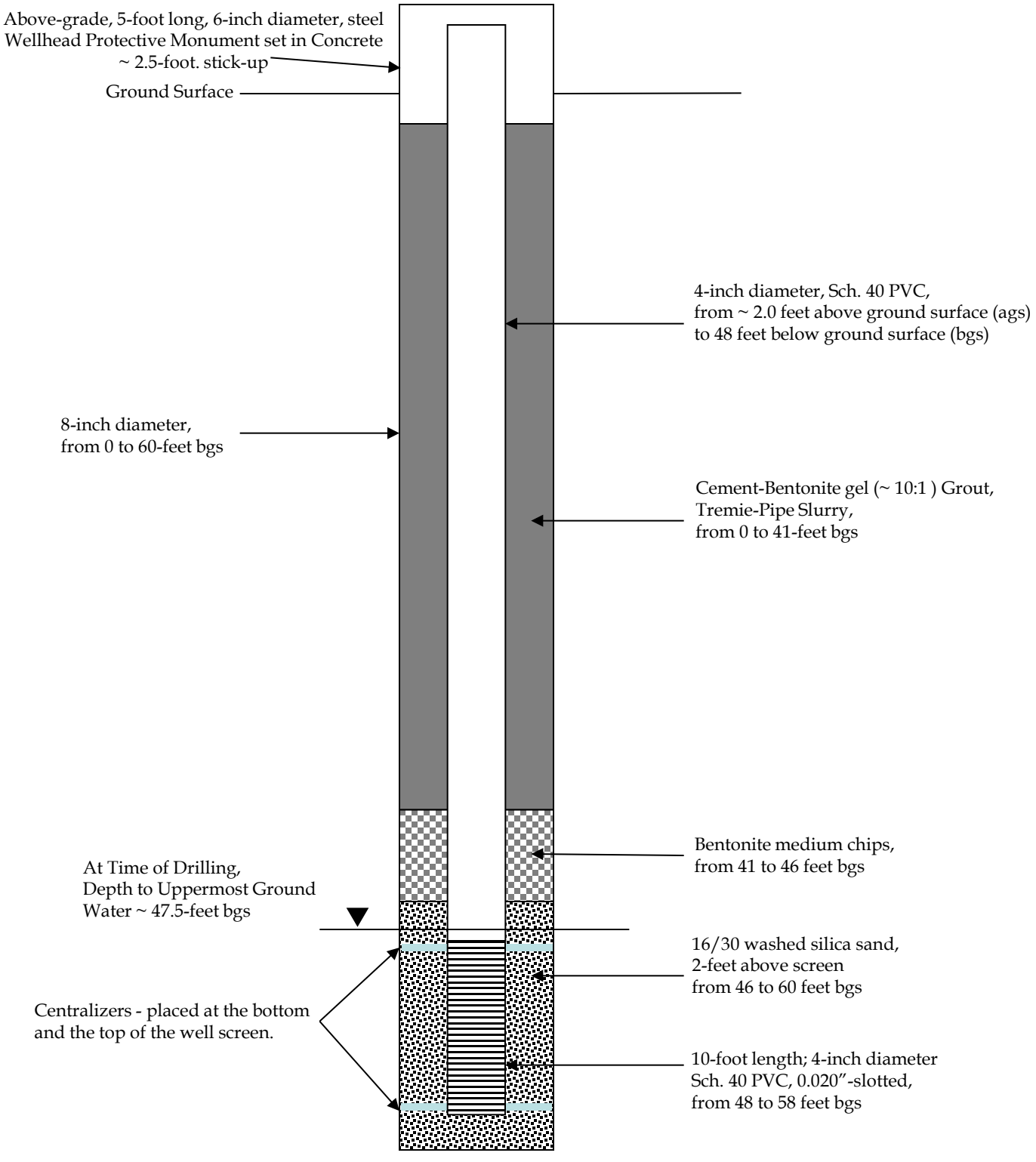
Boring Logs
IPSC
Delta, Utah

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	

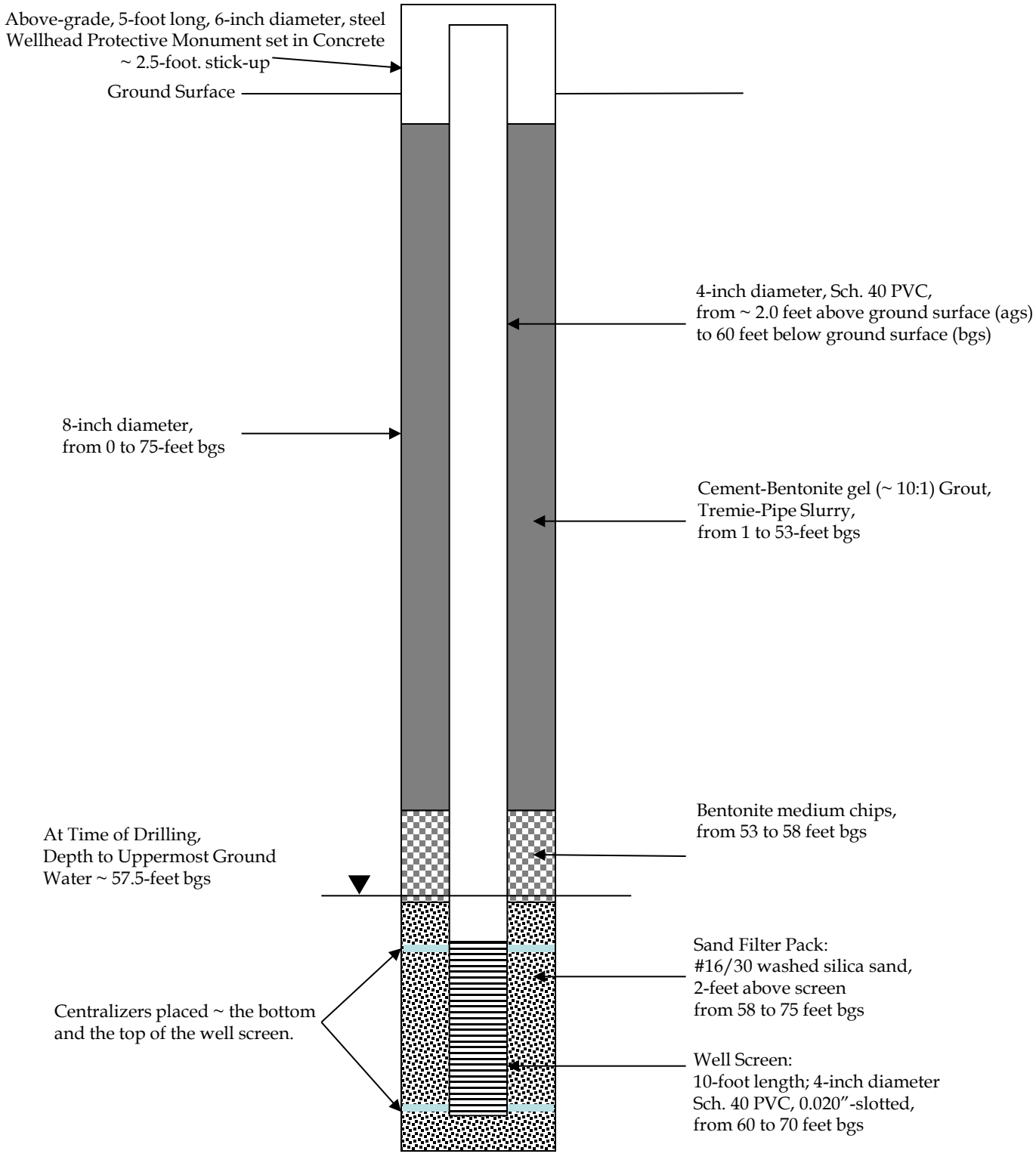
Boring Logs
IPSC
Delta, Utah

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

Stantec

IPSC – WASTEWATER SURFACE IMPOUNDMENT
DELTA, UTAH

Well WWC-2 Schematic

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

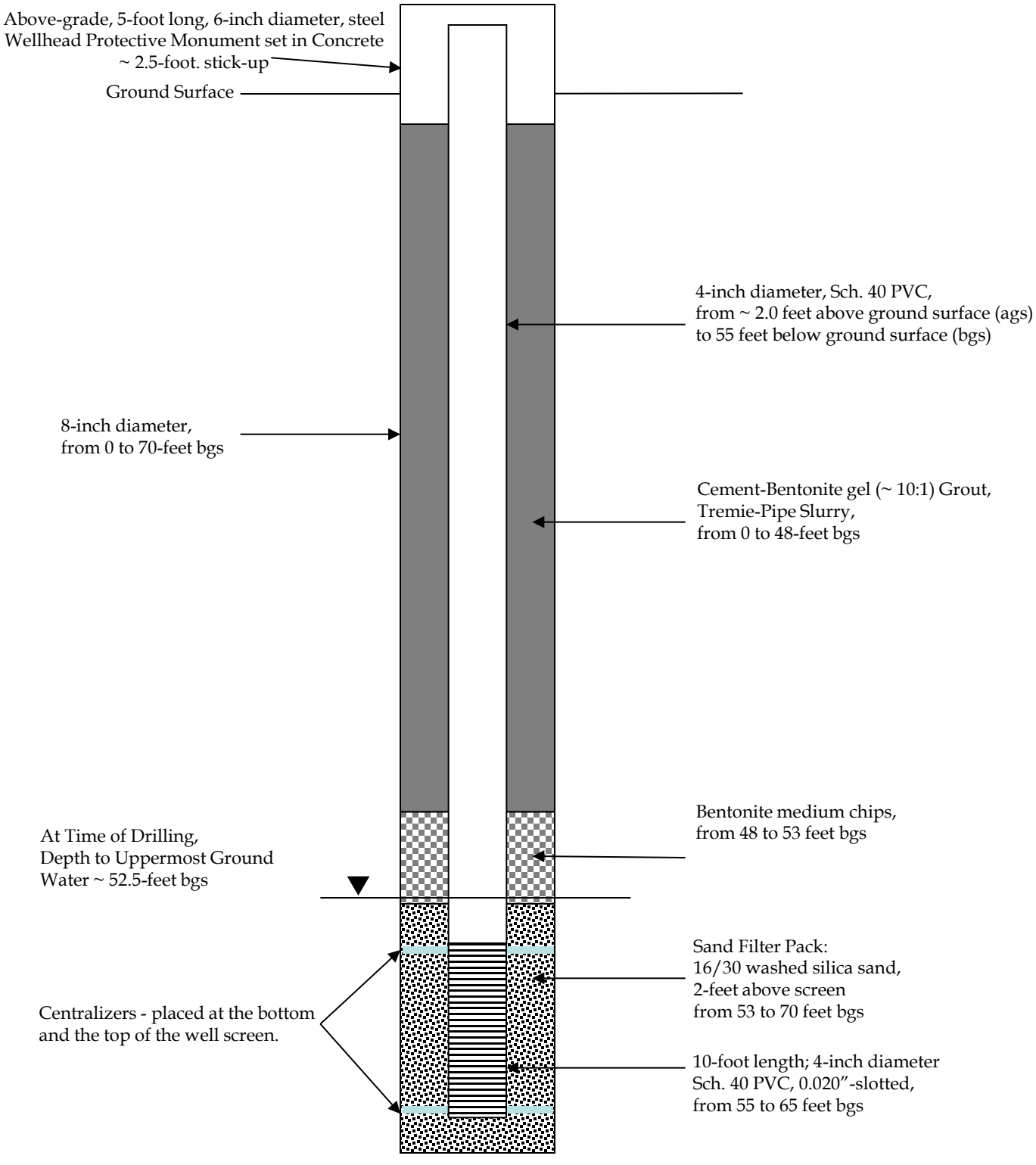
Boring Logs
ISPC
Delta, Utah

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

Stantec

IPSC – WASTEWATER SURFACE IMPOUNDMENT
DELTA, UTAH UTAH

Well WWC-3 Schematic

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

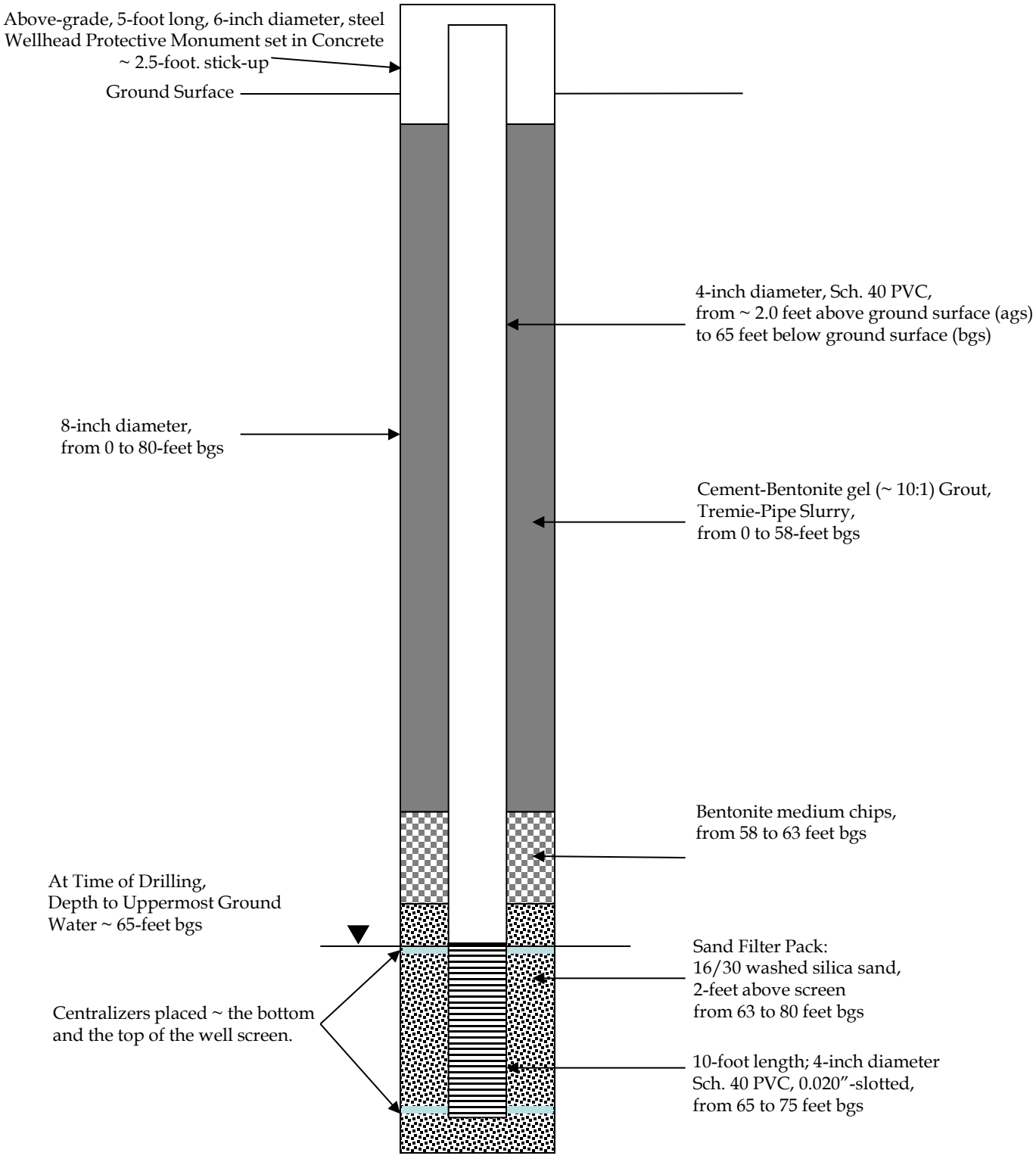
Boring Logs
ISPC
Delta, Utah

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

Stantec

IPSC – WASTEWATER SURFACE IMPOUNDMENT
DELTA, UTAH

Well WWC-4 Schematic

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

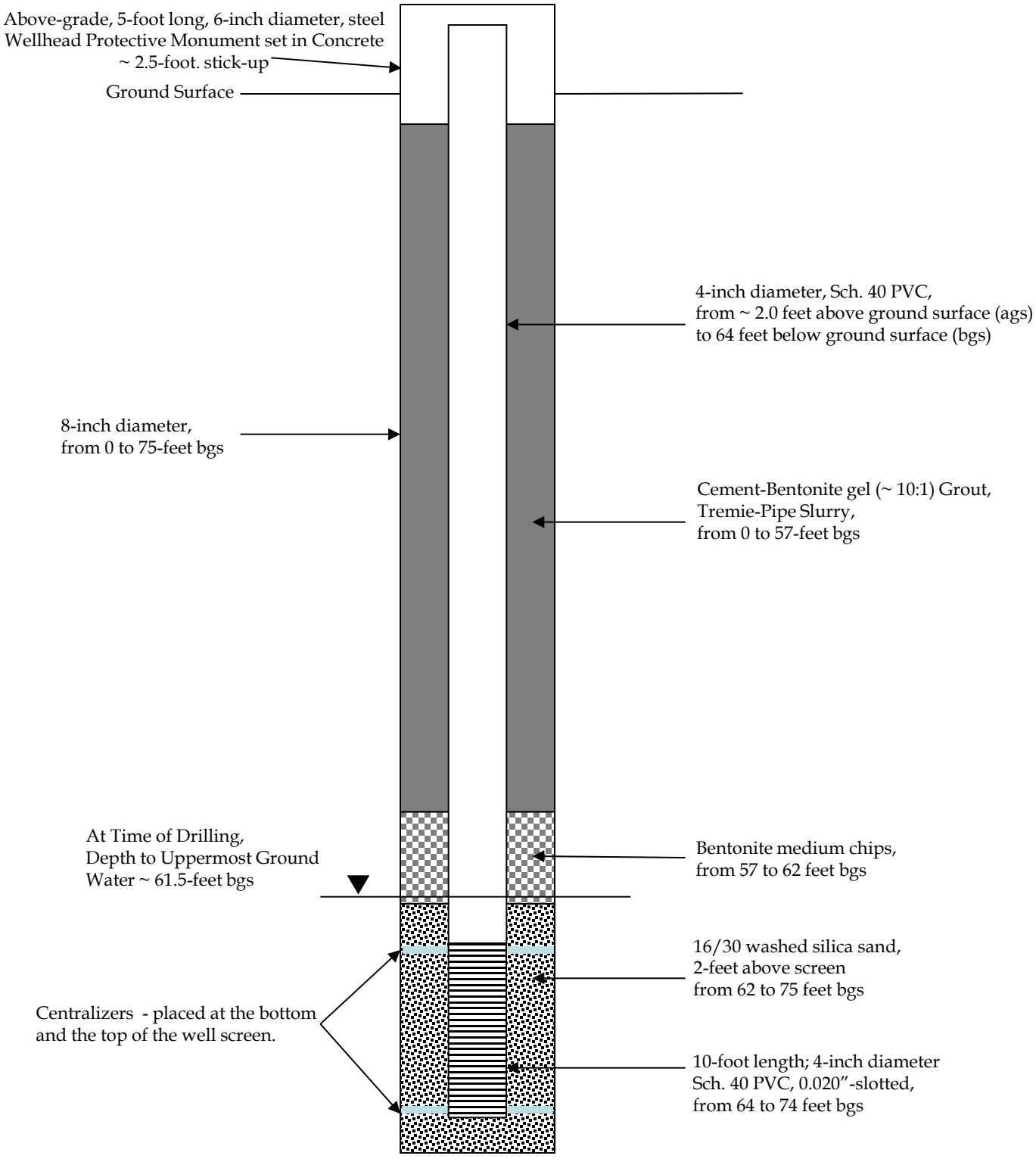
Boring Logs
ISPC
Delta, Utah

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

Stantec

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

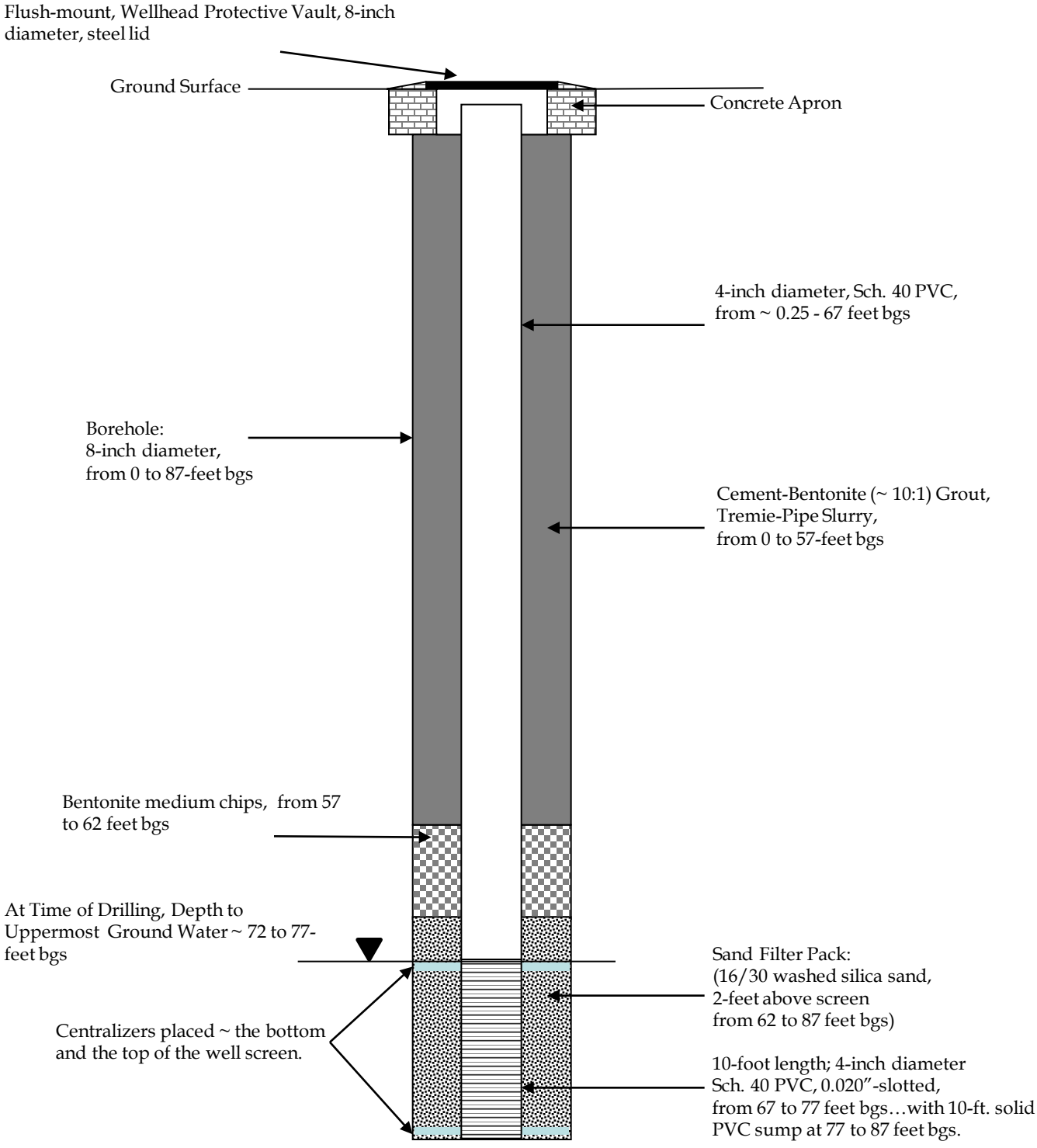
TD = 87'; PVC sump 87-77; 4" screen 77-67; sand 87-62 centralizers 67.5 and 76.5

Drilling Method: Sonic

Drilling Company - Cascade Drilling

Driller - David Donnely

Geologist - Tom Fendler



Total Depth (TD) = 87 feet bgs

Stantec

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

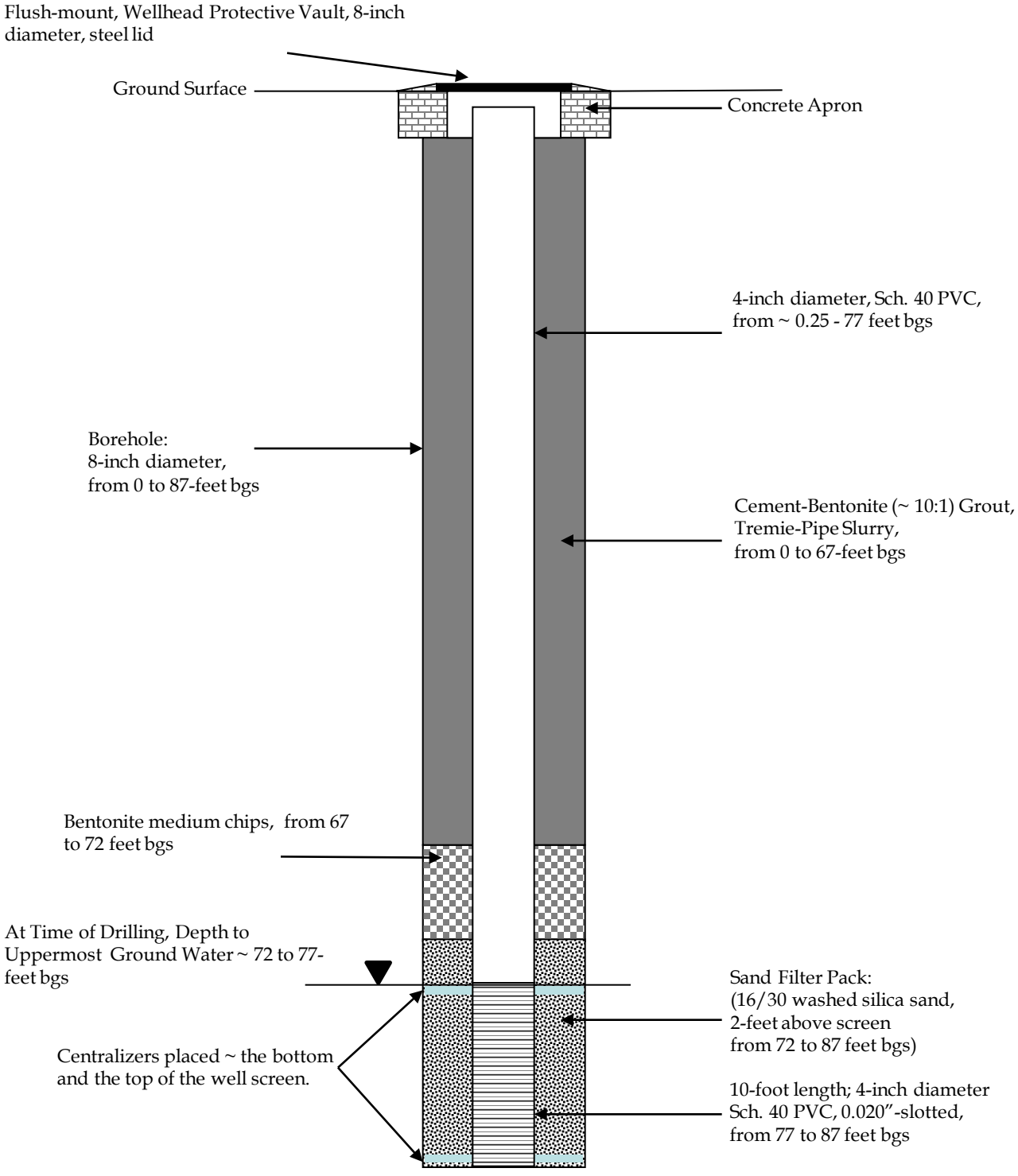
TD = 87'; PVC 4-inch screen from 77 to 87; sand pack 72-87; bentonite pellets 67-72; grout 67-grade

Drilling Method: Sonic

Drilling Company - Cascade Drilling

Driller - David Donnely

Geologist - Tom Fendler



Stantec	IPSC – WASTEWATER SURFACE IMPOUNDMENT DELTA, UTAH	
	Well WWC-7 Schematic	
		Date Drawn 10/24/18
Design by	Drawn by JR	Scale / 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

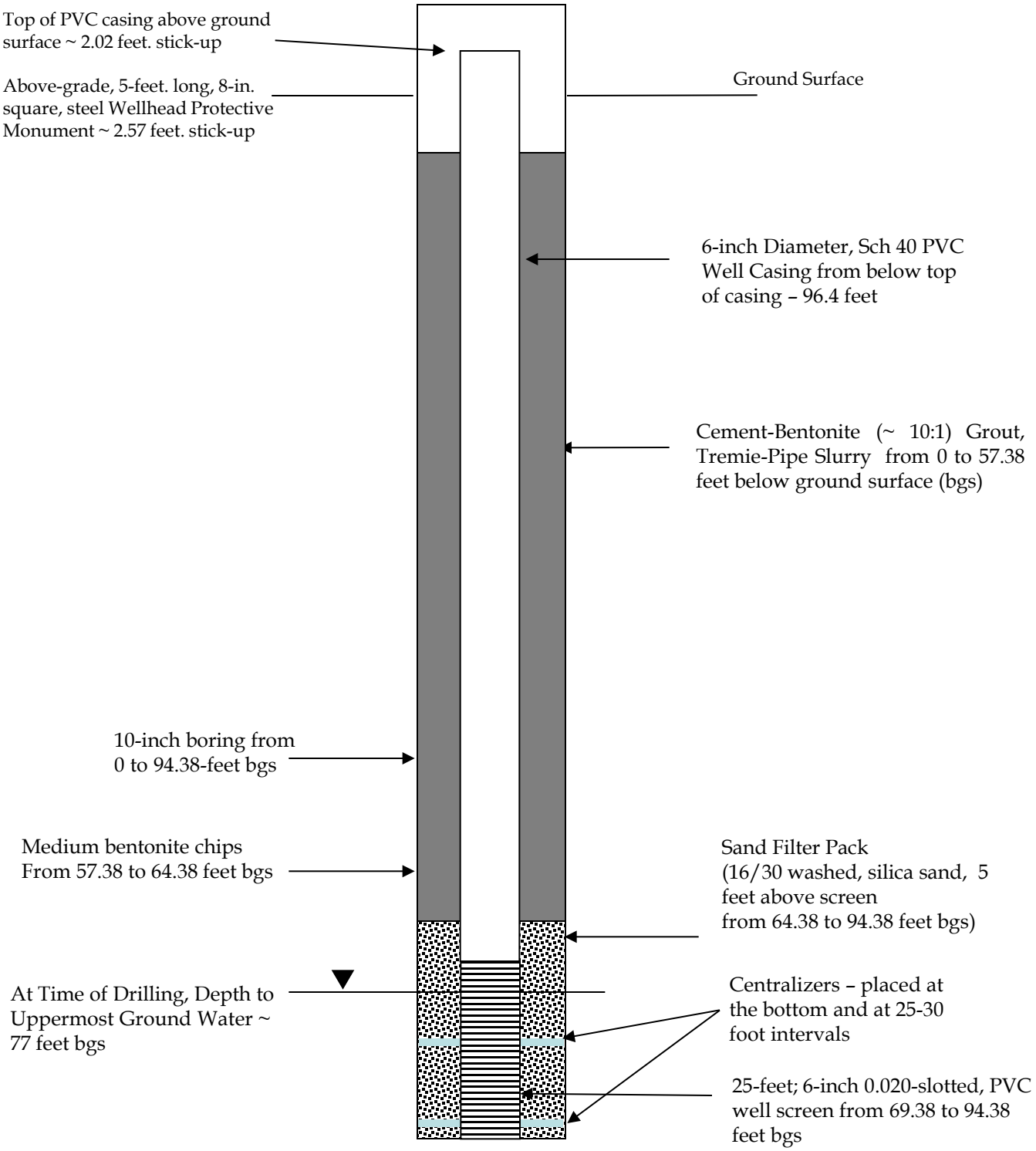
WWC-8

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

Stantec

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

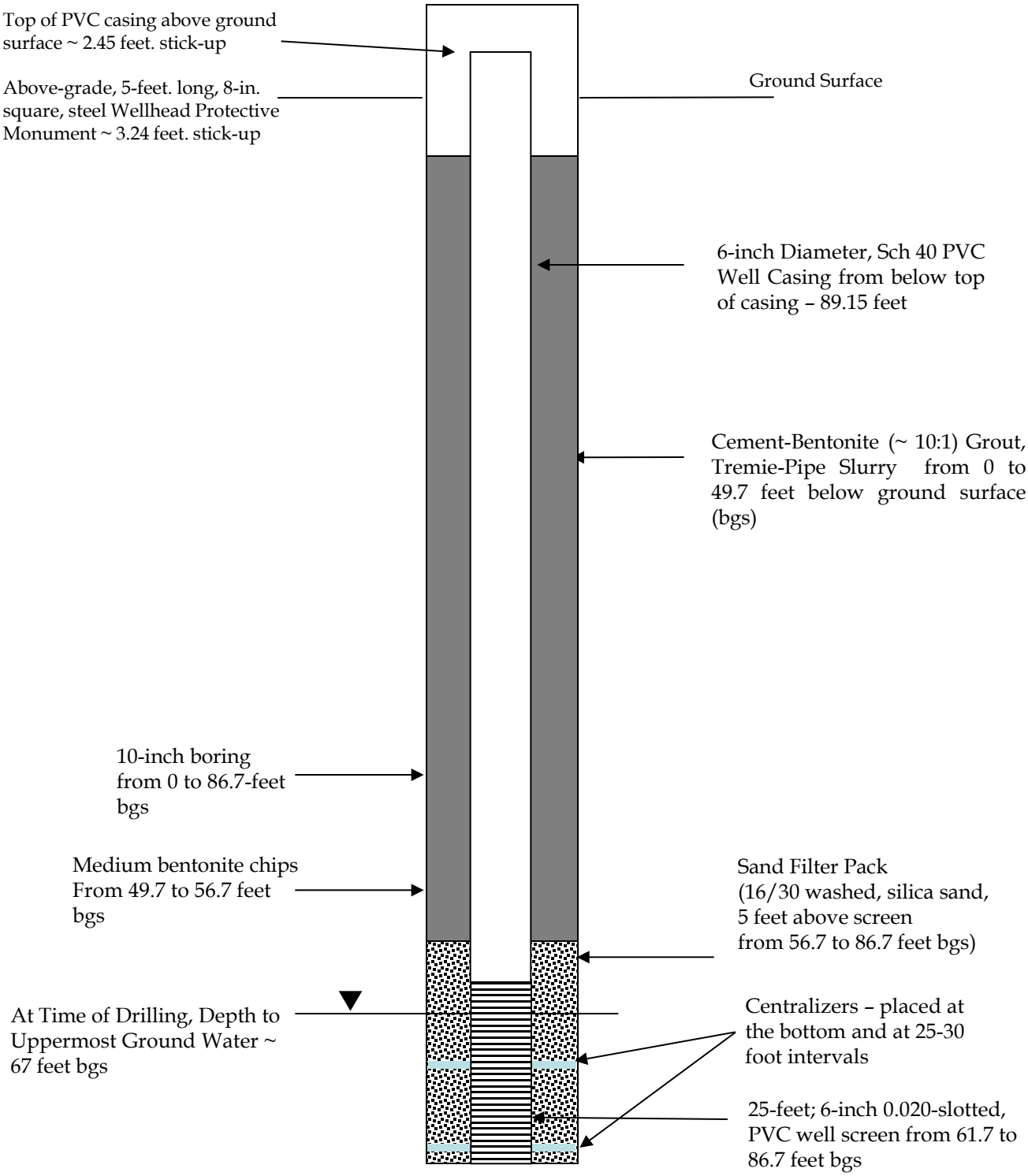
Screen (6 inch, 0.02 slotted, PVC): 61.7-86.7 feet

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

Stantec

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

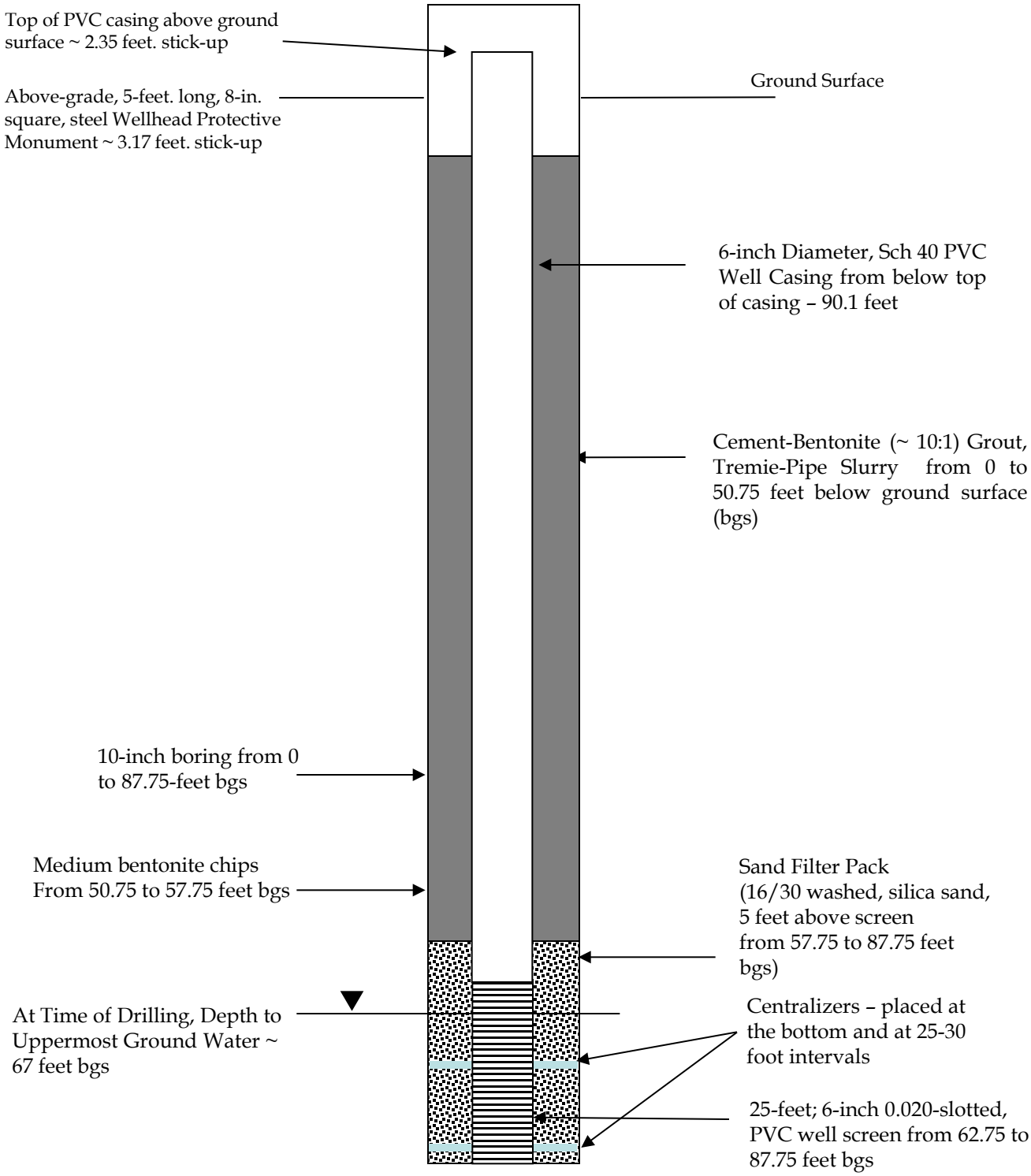
WWC-10

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	

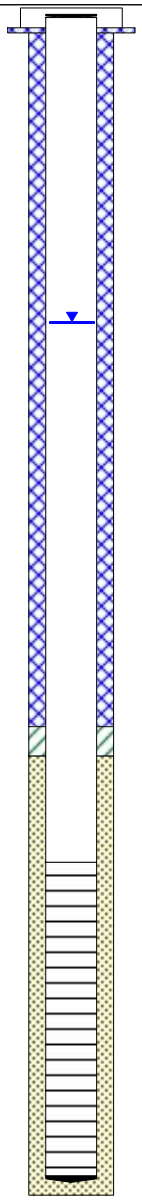
INTERMOUNTAIN POWER SERVICE CORP.

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

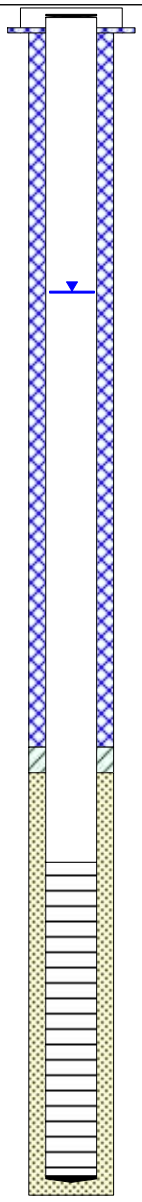
INTERMOUNTAIN POWER SERVICE CORP.

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.
	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.
20	
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	
	Poorly Graded Sand (SP), fine grained sand 100%, loose, soft, moist, brown (10YR 5/3).
35	
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

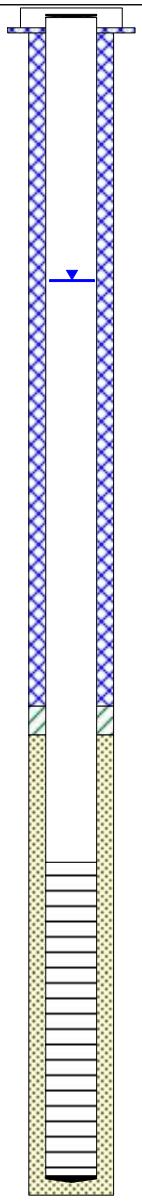
INTERMOUNTAIN POWER SERVICE CORP.

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

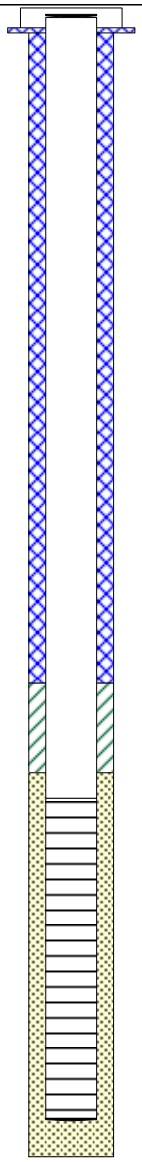
PROJECT: Monitoring Well Installation

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

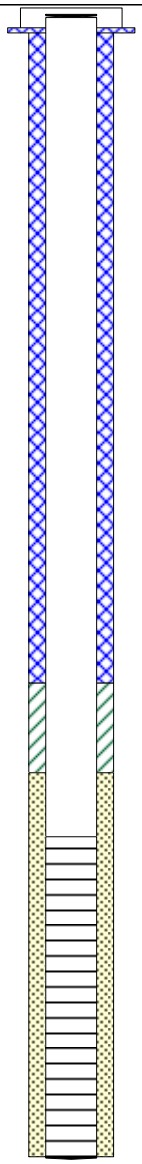
INTERMOUNTAIN POWER SERVICE CORP.

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

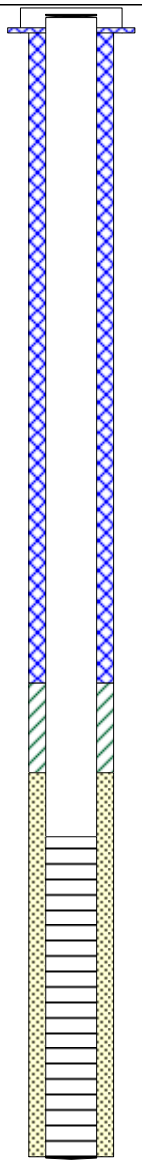
INTERMOUNTAIN POWER SERVICE CORP.

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 Well Graded Sand with Gravel (SW), light brown, moist
45	
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 Clay (CL), light brown, moist
70	
75	Well Graded Sand with Gravel (SW), light brown, moist
80	Clay (CL), light brown, moist Well Graded Sand with Gravel (SW), moist, brown Clay (CL), light brown, moist
85	
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.

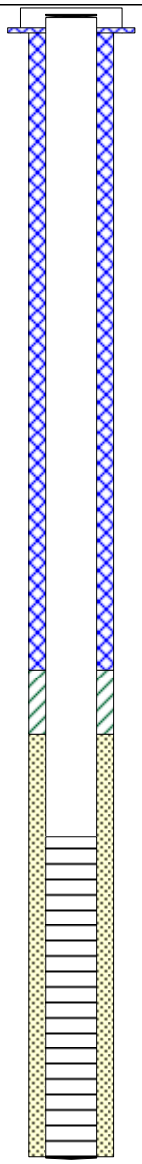
MONITORNG WELL ID:	**WWC-17**
CLIENT:	Intermountain Power Service Corporation
PROJECT:	Monitoring Well Installation
SITE LOCATION:	South of Waste Water Basin Surface Impoundment

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

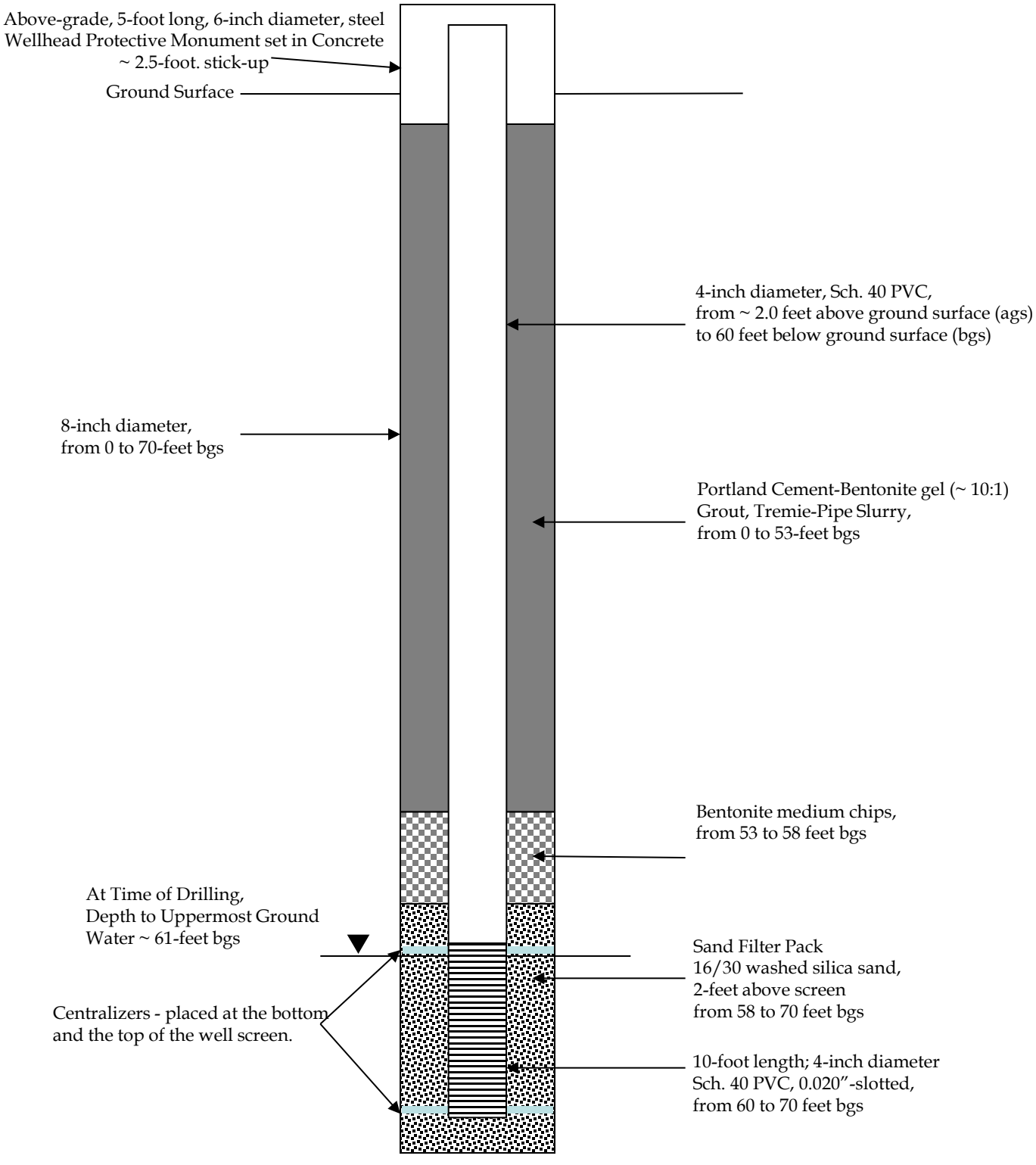
Boring Log
ISPC
Delta, Utah

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	

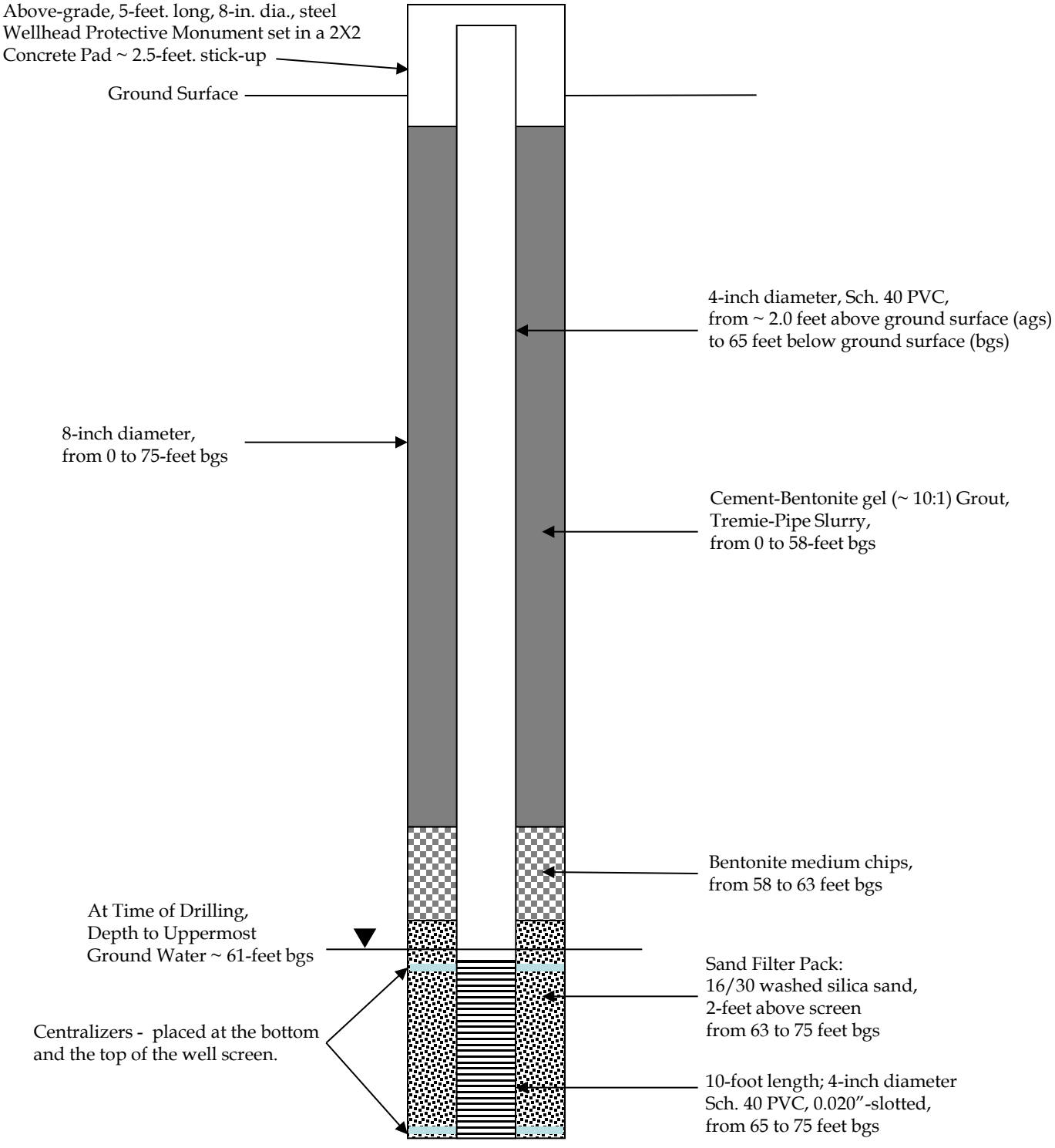
Boring Logs
ISPC
Delta, Utah

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

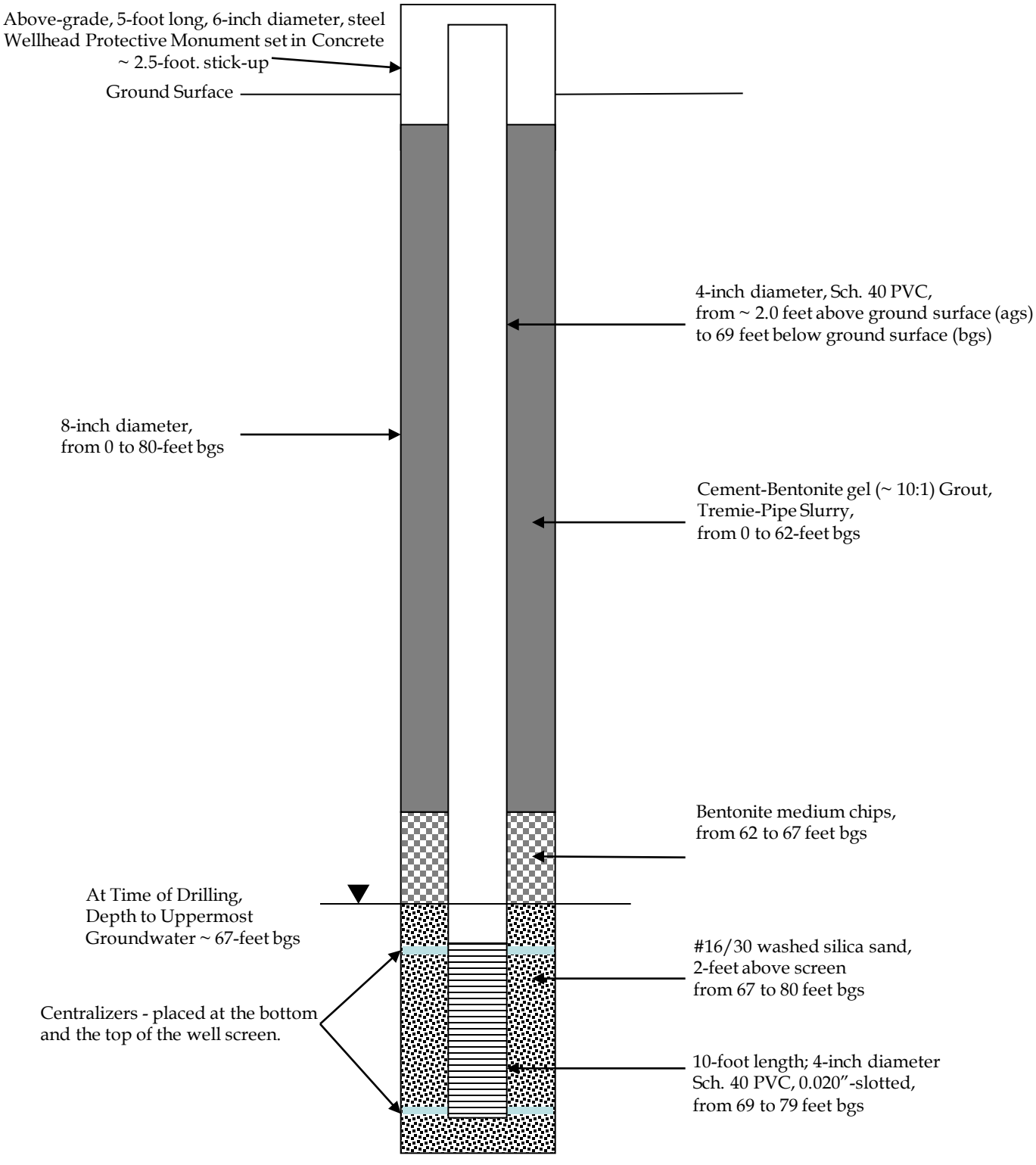
Delta, Utah

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

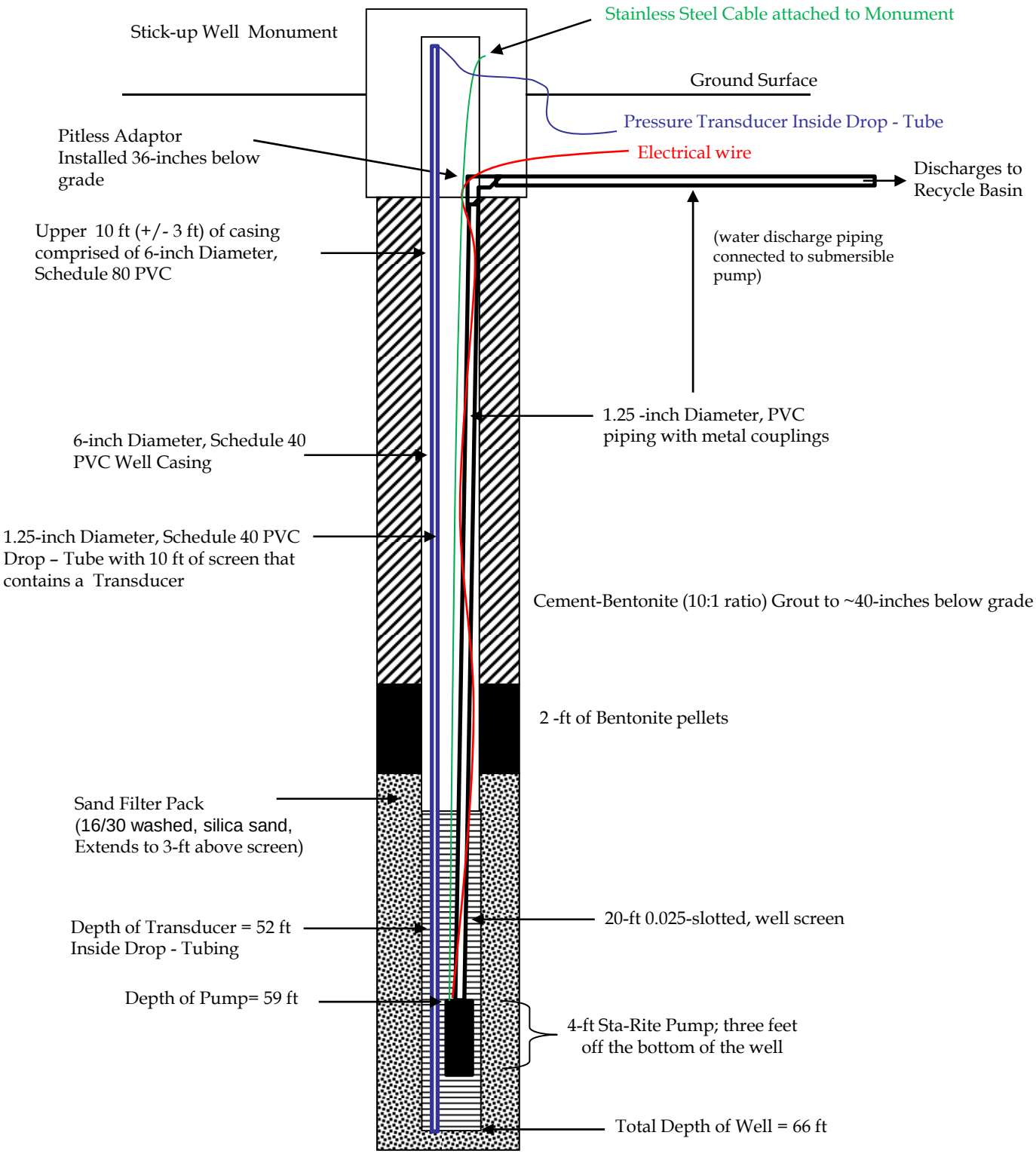
PROJECT No.: 07.00408.01
COMPLETION DATE: 12/11/2007
DRILLER: Robert
LOGGED BY: Thomas Hedrick
DEPTH TO WATER (at drilling): ~ 40 ft.
DEPTH TO WATER (static > 24-hrs.): 36.09 ft.

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

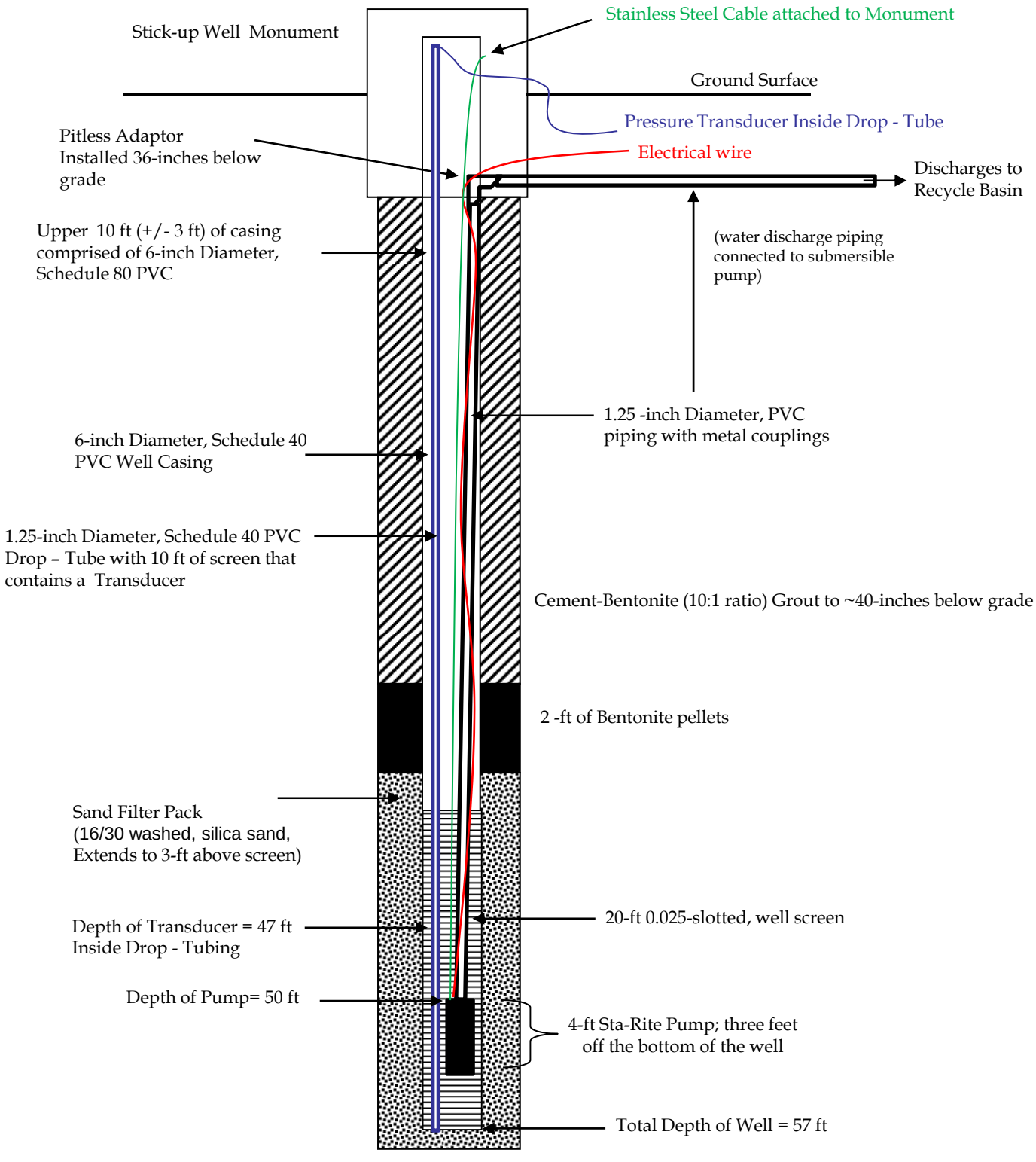
DRILLER: Chato
LOGGED BY: Thomas Hedrick
DEPTH TO WATER (at drilling): ~ 40 ft.
DEPTH TO WATER (static > 24-hrs.): ~ 27 ft.

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

			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-103

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

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

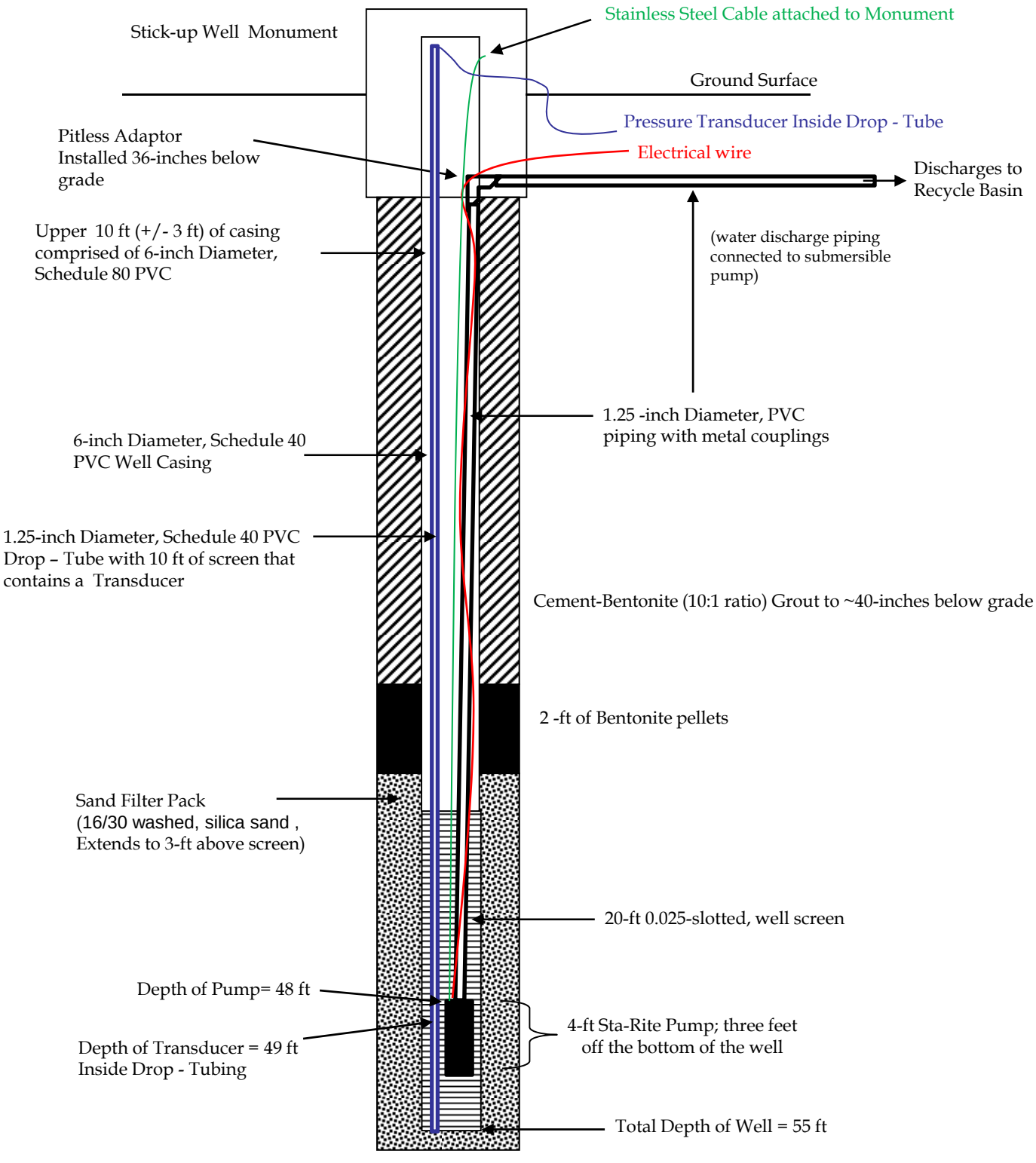
DRILLER: Chato
LOGGED BY: Thomas Hedrick
DEPTH TO WATER (at drilling): ~ 40 ft.
DEPTH TO WATER (static > 24-hrs.): ~ 30 ft.

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 B TABULATED GROUNDWATER MONITORING DATA

CCR Well Levels

Well	Depth	Date
WW-U-1	33.23	12/7/2015
WW-U-2	23.42	12/7/2015
SI-U-1	32.47	12/7/2015
CL-U-1	32.02	12/7/2015
CL-U-2	37.55	12/7/2015
CL-W-1	31.05	12/7/2015
CL-W-2	33.14	12/7/2015
CL-W-3	31.54	12/7/2015
CL-W-4	30.56	12/7/2015
CL-W-5	29.76	12/7/2015
CL-W-6	28.71	12/7/2015
CL-W-7	35.23	12/7/2015
CL-W-8	32.37	12/7/2015
BA-U-1	39.21	12/7/2015
BA-U-2	33.26	12/7/2015
BAC-1	39.32	12/7/2015
BAC-2	51.38	12/7/2015
BAC-3	51.02	12/7/2015
BAC-4	35.35	12/7/2015
BAC-5	32.62	12/7/2015
BAC-6	29.76	12/7/2015
BAC-7	31.26	12/7/2015
WWC-1	21.16	12/7/2015
WWC-2	22.16	12/7/2015
WWC-3	16.42	12/7/2015
WWC-4	17.85	12/7/2015
WWC-5	18.78	12/7/2015

CCR Well Levels

Well	Depth	Date
WW-U-1	33.08	3/3/2016
WW-U-2	23.52	3/3/2016
SI-U-1	32.45	3/3/2016
CL-U-1	31.53	3/3/2016
CL-U-2	37.09	3/3/2016
CL-W-1	31.56	3/3/2016
CL-W-2	32.59	3/3/2016
CL-W-3	30.91	3/3/2016
CL-W-4	30.02	3/3/2016
CL-W-5	28.17	3/3/2016
CL-W-6	28.13	3/3/2016
CL-W-7	34.75	3/3/2016
CL-W-8	31.89	3/3/2016
BA-U-1	38.82	3/3/2016
BA-U-2	33.05	3/3/2016
BAC-1	39.85	3/3/2016
BAC-2	51.31	3/3/2016
BAC-3	51.29	3/3/2016
BAC-4	34.97	3/3/2016
BAC-5	32.07	3/3/2016
BAC-6	29.27	3/3/2016
BAC-7	29.78	3/3/2016
WWC-1	20.92	3/3/2016
WWC-2	21.79	3/3/2016
WWC-3	16.12	3/3/2016
WWC-4	17.56	3/3/2016
WWC-5	18.5	3/3/2016

CCR Well Levels

Well	Depth	Date
WW-U-1	34.2	6/24/2016
WW-U-2	24.21	6/24/2016
SI-U-1	32.93	6/24/2016
CL-U-1	31.88	6/24/2016
CL-U-2	37.41	6/24/2016
CL-W-1	30.67	6/24/2016
CL-W-2	32.49	6/24/2016
CL-W-3	30.78	6/24/2016
CL-W-4	29.86	6/24/2016
CL-W-5	27.97	6/24/2016
CL-W-6	27.9	6/24/2016
CL-W-7	34.98	6/24/2016
CL-W-8	32.07	6/24/2016
BA-U-1	39.13	6/24/2016
BA-U-2	33.49	6/24/2016
BAC-1	40.42	6/24/2016
BAC-2	51.38	6/24/2016
BAC-3	51.35	6/24/2016
BAC-4	34.85	6/24/2016
BAC-5	31.79	6/24/2016
BAC-6	28.86	6/24/2016
BAC-7	30.26	6/24/2016
WWC-1	21.47	6/24/2016
WWC-2	22.33	6/24/2016
WWC-3	16.63	6/24/2016
WWC-4	18.07	6/24/2016
WWC-5	19.03	6/24/2016

CCR Well Levels

Well	Depth	Date
WW-U-1	34.42	8/30/2016
WW-U-2	24.57	8/30/2016
SI-U-1	33.49	8/30/2016
CL-U-1	32.74	8/30/2016
CL-U-2	38.31	8/30/2016
CL-W-1	31.52	8/30/2016
CL-W-2	33.5	8/30/2016
CL-W-3	31.81	8/30/2016
CL-W-4	30.89	8/30/2016
CL-W-5	28.99	8/30/2016
CL-W-6	28.95	8/30/2016
CL-W-7	35.84	8/30/2016
CL-W-8	32.93	8/30/2016
BA-U-1	39.95	8/30/2016
BA-U-2	34.24	8/30/2016
BAC-1	40.97	8/30/2016
BAC-2	52.1	8/30/2016
BAC-3	51.94	8/30/2016
BAC-4	35.68	8/30/2016
BAC-5	32.67	8/30/2016
BAC-6	29.64	8/30/2016
BAC-7	31.09	8/30/2016
WWC-1	22.4	8/30/2016
WWC-2	22.87	8/30/2016
WWC-3	17.17	8/30/2016
WWC-4	18.61	8/30/2016
WWC-5	19.6	8/30/2016

CCR Well Levels

Well	Depth	Date
WW-U-1	34.74	11/9/2016
WW-U-2	24.81	11/9/2016
SI-U-1	33.74	11/9/2016
CL-U-1	33.04	11/9/2016
CL-U-2	38.59	11/9/2016
CL-W-1	31.89	11/9/2016
CL-W-2	34.00	11/9/2016
CL-W-3	32.34	11/9/2016
CL-W-4	31.43	11/9/2016
CL-W-5	29.58	11/9/2016
CL-W-6	29.55	11/9/2016
CL-W-7	36.20	11/9/2016
CL-W-8	33.28	11/9/2016
BA-U-1	40.27	11/9/2016
BA-U-2	34.59	11/9/2016
BAC-1	41.51	11/9/2016
BAC-2	52.61	11/9/2016
BAC-3	52.10	11/9/2016
BAC-4	35.98	11/9/2016
BAC-5	32.90	11/9/2016
BAC-6	29.81	11/9/2016
BAC-7	30.92	11/9/2016
WWC-1	22.27	11/9/2016
WWC-2	23.22	11/9/2016
WWC-3	17.43	11/9/2016
WWC-4	18.88	11/9/2016
WWC-5	19.85	11/9/2016

CCR Well Levels

Well	Depth	Date
WW-U-1	33.88	3/30/2017
WW-U-2	22.19	3/30/2017
SI-U-1	32.89	3/30/2017
CL-U-1	31.99	3/30/2017
CL-U-2	37.56	3/30/2017
CL-W-1	32.84	3/30/2017
CL-W-2	32.72	3/30/2017
CL-W-3	31.08	3/30/2017
CL-W-4	30.25	3/30/2017
CL-W-5	28.41	3/30/2017
CL-W-6	28.40	3/30/2017
CL-W-7	35.15	3/30/2017
CL-W-8	32.04	3/30/2017
BA-U-1	39.29	3/30/2017
BA-U-2	33.67	3/30/2017
BAC-1	40.89	3/30/2017
BAC-2	51.32	3/30/2017
BAC-3	51.94	3/30/2017
BAC-4	34.73	3/30/2017
BAC-5	31.71	3/30/2017
BAC-6	28.74	3/30/2017
BAC-7	30.03	3/30/2017
WWC-1	18.91	3/30/2017
WWC-2	22.21	3/30/2017
WWC-3	16.53	3/30/2017
WWC-4	17.97	3/30/2017
WWC-5	17.94	3/30/2017

CCR Well Levels

Well	Depth	Date
WW-U-1	34.70	6/21/2017
WW-U-2	24.75	6/21/2017
SI-U-1	33.46	6/21/2017
CL-U-1	32.13	6/21/2017
CL-U-2	37.72	6/21/2017
CL-W-1	30.74	6/21/2017
CL-W-2	32.35	6/21/2017
CL-W-3	30.72	6/21/2017
CL-W-4	29.90	6/21/2017
CL-W-5	28.06	6/21/2017
CL-W-6	28.01	6/21/2017
CL-W-7	35.16	6/21/2017
CL-W-8	32.21	6/21/2017
BA-U-1	39.41	6/21/2017
BA-U-2	33.90	6/21/2017
BAC-1	41.29	6/21/2017
BAC-2	50.94	6/21/2017
BAC-3	51.14	6/21/2017
BAC-4	34.08	6/21/2017
BAC-5	30.98	6/21/2017
BAC-6	28.03	6/21/2017
BAC-7	29.30	6/21/2017
WWC-1	21.95	6/21/2017
WWC-2	22.74	6/21/2017
WWC-3	17.04	6/21/2017
WWC-4	18.48	6/21/2017
WWC-5	19.44	6/21/2017

CCR Well Levels

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

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

Well Levels		
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
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
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
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
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
RW-5	45.41	5/20/19

Well Levels		
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
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
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
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
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
RW-5	46.31	10/17/19

Well Levels		
Well	**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
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
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
EPW-15	43.84	3/23/2020
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
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
RW-5	45.88	3/23/2020

Well Levels		
Well	Level	Date
WW-U-1	35.28	10/20/2020
WW-U-2	25.96	10/20/2020
SI-U-1	35.19	10/20/2020
CL-U-1	35.06	10/20/2020
CL-U-2	40.63	10/20/2020
CL-U-3	42.93	10/20/2020
CL-W-1	34.22	10/20/2020
CL-W-2	36.27	10/20/2020
CL-W-3	34.42	10/20/2020
CL-W-4	33.48	10/20/2020
CL-W-5	31.62	10/20/2020
CL-W-6	31.61	10/20/2020
CL-W-7	38.26	10/20/2020
CL-W-8	35.51	10/20/2020
CL-W-9	37.75	10/20/2020
BA-U-1	42.35	10/20/2020
BA-U-2	36.54	10/20/2020
BAC-1	43.54	10/20/2020
BAC-2	55.01	10/20/2020
BAC-3	55.36	10/20/2020
BAC-4	38.61	10/20/2020
BAC-5	36.36	10/20/2020
BAC-6	33.72	10/20/2020
BAC-7	35.26	10/20/2020
WWC-1	23.98	10/20/2020
WWC-2	24.79	10/20/2020
WWC-3	19.12	10/20/2020
WWC-4	20.57	10/20/2020
WWC-5	21.58	10/20/2020
BAC-8	46.50	10/20/2020
BAC-9	47.62	10/20/2020
BAC-10	48.29	10/20/2020
BAC-11	48.82	10/20/2020
BAC-12	49.18	10/20/2020
BAC-13	45.95	10/20/2020
BAC-14	47.21	10/20/2020
BAC-15	46.34	10/20/2020
BAC-16	47.66	10/20/2020
BAC-17	46.43	10/20/2020
BAC-18	45.05	10/20/2020
BAC-19	41.31	10/20/2020
BAC-20	42.90	10/20/2020
BAC-21	44.74	10/20/2020
BAC-22	45.10	10/20/2020
BAC-23	44.60	10/20/2020
BAC-24	44.35	10/20/2020
BAC-25	44.49	10/20/2020
BAC-26	48.43	10/20/2020
BAC-27	47.85	10/20/2020
BAC-28	45.42	10/20/2020
BAC-29	44.86	10/20/2020
BAC-30	44.71	10/20/2020
BAC-31	44.34	10/20/2020
BAC-32	48.31	10/20/2020
BAC-33	48.14	10/20/2020
BAC-34	48.22	10/20/2020
BAC-35	48.08	10/20/2020
BAC-36	44.73	10/20/2020
BAC-37	43.67	10/20/2020
BAC-38	42.82	10/20/2020
WWC-6	19.84	10/20/2020
WWC-7	20.22	10/20/2020
WWC-8	28.57	10/20/2020
WWC-9	25.34	10/20/2020
WWC-10	19.57	10/20/2020
WWC-11	23.28	10/20/2020
WWC-12	20.97	10/20/2020
WWC-13	20.13	10/20/2020
WWC-14	18.90	10/20/2020
WWC-15	21.19	10/20/2020
WWC-16	19.52	10/20/2020
WWC-17	24.62	10/20/2020
RW-3	38.71	10/20/2020
RW-4	20.84	10/20/2020
RW-5	46.95	10/20/2020
RW-7	15.10	10/20/2020
RW-8	43.97	10/20/2020
EPW-15	44.53	10/20/2020
WDB-5	45.33	10/20/2020
WDB-17	40.46	10/20/2020
WR-101	54.61	10/20/2020
WR-102	44.76	10/20/2020
WR-103	45.40	10/20/2020
EP-W-19	34.23	10/20/2020
RW-6	45.11	10/20/2020
RW-9	43.61	10/20/2020
WDB-7	43.24	10/20/2020
EP-W-23	32.30	10/20/2020
EP-W-27	30.28	10/20/2020
WDB-19	29.84	10/20/2020
EMW-1	31.15	10/20/2020
EMW-3	39.99	10/20/2020
EMW-U4	38.04	10/20/2020
EMW-L4	34.08	10/20/2020
EMW-U5	35.74	10/20/2020
EMW-5L	31.81	10/20/2020
EMW-6	43.10	10/20/2020
EMW-7	44.33	10/20/2020
EMW-8	55.94	10/20/2020
EP-2	32.71	10/20/2020
EP-3	37.25	10/20/2020
EP-4	38.91	10/20/2020
EP-5	27.73	10/20/2020

WELL LEVELS 4/20/2021

Wells	Level	Date
WW-U-1	36.48	4/20/21
WW-U-2	26.49	4/20/21
SI-U-1	34.91	4/20/21
CL-U-1	34.21	4/20/21
CL-U-2	39.78	4/20/21
CL-U-3	42.23	4/20/21
CL-W-1	33.61	4/20/21
CL-W-2	35.61	4/20/21
CL-W-3	33.74	4/20/21
CL-W-4	32.79	4/20/21
CL-W-5	30.95	4/20/21
CL-W-6	30.90	4/20/21
CL-W-7	37.60	4/20/21
CL-W-8	34.91	4/20/21
CL-W-9	36.99	4/20/21
BA-U-1	41.84	4/20/21
BA-U-2	36.15	4/20/21
BAC-1	42.41	4/20/21
BAC-2	54.81	4/20/21
BAC-3	54.59	4/20/21
BAC-4	38.36	4/20/21
BAC-5	36.17	4/20/21
BAC-6	33.46	4/20/21
BAC-7	34.99	4/20/21
BAC-8	46.68	4/20/21
BAC-9	47.72	4/20/21

Wells	Level	Date
BAC-10	48.29	4/20/21
BAC-11	48.49	4/20/21
BAC-12	48.87	4/20/21
BAC-13	45.89	4/20/21
BAC-14	47.20	4/20/21
BAC-15	46.53	4/20/21
BAC-16	47.85	4/20/21
BAC-17	46.12	4/20/21
BAC-18	44.58	4/20/21
BAC-19	40.90	4/20/21
BAC-20	42.62	4/20/21
BAC-21	44.42	4/20/21
BAC-22	44.78	4/20/21
BAC-23	44.24	4/20/21
BAC-24	43.95	4/20/21
BAC-25	44.19	4/20/21
BAC-26	47.97	4/20/21
BAC-27	47.41	4/20/21
BAC-28	45.04	4/20/21
BAC-29	44.61	4/20/21
BAC-30	44.50	4/20/21
BAC-31	44.04	4/20/21
BAC-32	47.72	4/20/21
BAC-33	47.57	4/20/21
BAC-34	47.62	4/20/21
BAC-35	47.60	4/20/21

Wells	Level	Date
BAC-36	44.41	4/20/21
BAC-37	43.31	4/20/21
BAC-38	42.37	4/20/21
WWC-1	23.23	4/20/21
WWC-2	23.88	4/20/21
WWC-3	18.17	4/20/21
WWC-4	19.72	4/20/21
WWC-5	20.86	4/20/21
WWC-6	18.58	4/20/21
WWC-7	18.48	4/20/21
WWC-8	27.48	4/20/21
WWC-9	24.18	4/20/21
WWC-10	18.24	4/20/21
WWC-11	22.07	4/20/21
WWC-12	19.75	4/20/21
WWC-13	18.89	4/20/21
WWC-14	17.56	4/20/21
WWC-15	19.93	4/20/21
WWC-16	18.03	4/20/21
WWC-17	23.43	4/20/21
RW-1	43.69	4/20/21
RW-3	38.61	4/20/21
RW-4	20.31	4/20/21
RW-5	46.68	4/20/21
RW-6	45.20	4/20/21
RW-7	43.82	4/20/21

Wells	Level	Date
RW-8	43.92	4/20/21
RW-9	43.81	4/20/21
EMW-1	30.50	4/20/21
EMW-2	37.31	4/20/21
EMW-4L	33.28	4/20/21
EMW-5L	31.20	4/20/21
EMW-6	42.97	4/20/21
WDB-7	42.88	4/20/21
WDB-17	39.84	4/20/21
WDB-19	29.17	4/20/21
EP-W-19	33.78	4/20/21
EP-W-23	31.75	4/20/21
EP-W-27	29.98	4/20/21
WR-101	54.61	4/20/21
WR-102	45.16	4/20/21
WR-103	45.40	4/20/21

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	< 0.500	68.9	418	0.813	7.82	131	1040	<0.00200	0.0378	0.126	<0.00200	<0.000500	0.00537	<0.00400	<0.00200	0.346	<0.000150	0.00459	<0.00200	<0.00200	0.52	0.5	1.02
CL-U-2	< 0.500	73.8	404	0.611	7.73	132	1020	<0.00200	0.0317	0.129	<0.00200	<0.000500	0.00613	<0.00400	<0.00200	0.325	<0.000150	0.00406	<0.00200	<0.00200	0.55	1.2	1.75
CLW-1	< 0.500	55.7	322	0.844	7.95	76.5	832	<0.00200	0.0264	0.105	<0.00200	<0.000500	0.00814	<0.00400	<0.00200	0.3	<0.000150	0.00574	<0.00200	<0.00200	0.56	1.6	2.16
CLW-2	< 0.500	53.9	432	0.695	7.75	108	976	<0.00200	0.0283	0.0957	<0.00200	<0.000500	0.00576	<0.00400	<0.00200	0.36	<0.000150	0.00472	<0.00200	<0.00200	0.51	1.1	1.61
CLW-3	< 0.500	45	367	0.948	7.86	123	928	<0.00200	0.0375	0.111	<0.00200	<0.000500	0.00346	<0.00400	<0.00200	0.337	<0.000150	0.00492	<0.00200	<0.00200	0.4	1.3	1.7
CLW-4	< 0.500	44.5	320	1.37	7.87	73.3	828	<0.00200	0.0308	0.122	<0.00200	<0.000500	0.00336	<0.00400	<0.00200	0.319	<0.000150	0.00584	<0.00200	<0.00200	0.34	1.9	2.24
CLW-5	< 0.500	38.4	345	1.51	7.81	88.3	872	<0.00200	0.0188	0.0864	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.0325	<0.000150	0.00841	<0.00200	<0.00200	0.37	1.6	1.97
CLW-6	< 0.500	33.6	325	1.38	7.71	74.5	820	<0.00200	0.0249	0.0879	<0.00200	<0.000500	0.00335	<0.00400	<0.00200	0.316	<0.000150	0.0104	<0.00200	<0.00200	0.37	0.63	1
CLW-7	< 0.500	47.3	339	0.792	7.81	66.4	812	<0.00200	0.0234	0.0593	<0.00200	<0.000500	0.00421	<0.00400	<0.00200	0.282	<0.000150	0.00331	<0.00200	<0.00200	0.14	0.52	0.66
CLW-8	< 0.500	43.6	324	0.797	7.8	70.5	772	<0.00200	0.0155	0.107	<0.00200	<0.000500	0.00463	<0.00400	<0.00200	0.285	<0.000150	0.00626	<0.00200	<0.00200	0.4	0.74	1.14

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

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	< 0.500	51.4	430	1.21	8.06	121	984	<0.00200	0.0163	0.133	<0.00200	<0.000500	0.00305	<0.00400	<0.00200	0.313	<0.000150	0.0408	<0.00200	<0.00200	0.66	0.7	1.36
BA-U-2	< 0.500	53	343	0.727	8.9	48.9	82.4	<0.00200	0.0154	0.148	<0.00200	<0.000500	0.00971	<0.00400	<0.00200	0.297	<0.000150	0.0121	<0.00200	<0.00200	0.32	2.1	2.42
BAC-1	7.49	274	3280	0.299	7.37	3060	8860	0.00237	0.0146	0.1	<0.00200	<0.000500	0.00503	0.00605	<0.00200	1.52	<0.000150	0.143	0.0204	<0.00200	0.71	1.6	2.31
BAC-2	10.7	267	2000	0.741	7.29	3620	7820	<0.00200	0.0386	0.0472	<0.00200	<0.000500	0.0116	<0.00400	<0.00200	1.38	<0.000150	0.151	0.0164	<0.00200	0.48	0.94	1.42
BAC-3	6.09	387	2900	0.648	7.6	3840	9800	<0.00200	0.0191	0.0827	<0.00200	<0.000500	0.0615	<0.00400	<0.00200	2.13	<0.000150	0.0367	0.019	<0.00200	0.99	1.1	2.09
BAC-4	< 0.500	53	473	1.35	7.96	181	1150	<0.00200	0.0407	0.0821	<0.00200	<0.000500	0.0022	<0.00400	<0.00200	0.476	<0.000150	0.0104	<0.00200	<0.00200	0.19	0.5	0.69
BAC-5	< 0.500	51.1	483	1.11	7.83	129	1010	<0.00200	0.0357	0.0928	<0.00200	<0.000500	0.0161	<0.00400	<0.00200	0.479	<0.000150	0.00926	<0.00200	<0.00200	0.29	0.96	1.25
BAC-6	4.36	142	516	0.754	7.68	1080	2410	<0.00200	0.0134	0.0622	<0.00200	<0.000500	0.0363	<0.00400	<0.00200	0.599	<0.000150	0.0968	<0.00200	<0.00200	0.39	1.4	1.79
BAC-7	4.65	148	665	1.01	7.77	1360	2910	<0.00200	0.0191	0.0577	<0.00200	<0.000500	0.0264	<0.00400	<0.00200	0.681	<0.000150	0.0699	0.00276	<0.00200	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	<0.100	7.4	918	2300	<0.00200	0.00266	0.112	<0.00200	<0.000500	0.0099	<0.00400	<0.00200	0.49	<0.000150	0.00554	<0.00200	<0.00200	0.56	1.7	2.26
WW-U-1	1.05	374	2180	<0.100	7.06	1470	5430	<0.00200	0.00453	0.178	<0.00200	<0.000500	0.0032	<0.00400	<0.00200	0.983	<0.000150	0.00619	0.00549	<0.00200	1	2.3	3.3
WW-U-2	1.6	358	2430	<0.100	7.23	1370	5540	<0.00200	0.00309	0.123	<0.00200	<0.000500	0.00582	0.0072	<0.00200	0.934	<0.000150	0.0237	0.00543	<0.00200	0.84	2.1	2.94
WWC-1	9.62	561	4840	<0.100	7.19	3150	11800	<0.00200	0.0181	0.0536	<0.00200	<0.000500	0.0139	<0.00400	<0.00200	2.69	0.00031	0.00701	0.0152	<0.00200	0.31	0.83	1.14
WWC-2	< 0.500	66.5	381	0.158	7.91	147	940	<0.00200	0.0155	0.0511	<0.00200	<0.000500	0.00348	<0.00400	<0.00200	0.241	<0.000150	0.00383	<0.00200	<0.00200	0.12	1.1	1.22
WWC-3	< 0.500	34.5	284	1.01	8.11	82.2	688	<0.00200	0.0102	0.0638	<0.00200	<0.000500	0.00577	<0.00400	<0.00200	0.243	<0.000150	0.0459	<0.00200	<0.00200	0.32	0.55	0.87
WWC-4	1.09	247	1270	0.387	7.61	800	3250	<0.00200	0.0116	0.09	<0.00200	<0.000500	0.00877	<0.00400	<0.00200	0.909	<0.000150	0.00467	0.00207	<0.00200	0.5	0.45	0.95
WWC-5	2.4	345	1810	0.331	7.47	1610	5020	<0.00200	0.00783	0.103	<0.00200	<0.000500	0.00892	0.0055	<0.00200	4.41	<0.000150	0.0265	<0.00200	<0.00200	0.51	1.1	1.61

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

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	< 0.500	47.7	391	0.839	8.52	123	908	<0.00200	0.0415	0.0953	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.401	<0.000150	0.00733	<0.00200	<0.00200	0.27	1.6	1.87
CL-U-2	< 0.500	59.9	372	0.873	7.75	119	940	<0.00200	0.0243	0.0934	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.387	<0.000150	0.00414	<0.00200	<0.00200	0.28	1	1.28
CLW-1	< 0.500	35.1	301	0.834	7.89	71.6	808	<0.00200	0.0266	0.0648	<0.00200	<0.000500	0.00235	<0.00400	<0.00200	0.361	<0.000150	0.00506	<0.00200	<0.00200	0.36	1.5	1.86
CLW-2	< 0.500	45.9	378	1.18	7.66	90.5	936	<0.00200	0.0243	0.0882	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.438	<0.000150	0.00481	<0.00200	<0.00200	0.51	0.53	1.04
CLW-3	< 0.500	40.5	336	1.35	7.92	96	884	<0.00200	0.0437	0.103	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.435	<0.000150	0.0049	<0.00200	<0.00200	0.47	1.1	1.57
CLW-4	< 0.500	32.1	282	1.53	7.87	80.9	776	<0.00200	0.0271	0.109	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.375	<0.000150	0.00762	<0.00200	<0.00200	0.37	0.7	1.07
CLW-5	< 0.500	35.4	318	1.82	7.91	85.7	824	<0.00200	0.0214	0.0869	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.411	<0.000150	0.00922	<0.00200	<0.00200	0.27	0.32	0.59
CLW-6	< 0.500	32.1	306	1.72	7.97	75.4	816	<0.00200	0.0246	0.095	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.4	<0.000150	0.0117	<0.00200	<0.00200	0.02	0.96	0.98
CLW-7	< 0.500	42.8	290	0.825	7.65	67.6	832	<0.00200	0.0239	0.0794	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.327	<0.000150	0.146	<0.00200	<0.00200	0.14	0.29	0.43
CLW-8	< 0.500	41.5	293	0.782	7.8	70.3	808	<0.00200	0.022	0.0839	<0.00200	<0.000500	0.00224	<0.00400	<0.00200	0.35	<0.000150	0.00499	<0.00200	<0.00200	0.32	0.32	0.64

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	< 0.500	28.7	258	1.67	8.55	64.2	852	<0.00200	0.023	0.0969	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.376	<0.000150	0.0359	<0.00200	<0.00200	0.33	1.3	1.63
BA-U-2	< 0.500	67.4	529	0.938	8.02	55.7	1230	<0.00200	0.0199	0.175	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.514	<0.000150	0.00298	<0.00200	<0.00200	0.2	1	1.2
BAC-1	2.85	155	1730	<0.100	7.86	1390	5240	<0.00200	0.0174	0.39	<0.00200	<0.000500	0.00536	<0.00400	<0.00200	0.63	<0.000150	0.0607	0.0131	<0.00200	0.96	1.6	2.56
BAC-2	9.83	196	1600	<0.100	7.35	2900	7640	<0.00200	0.0411	0.0385	<0.00200	<0.000500	0.00742	<0.00400	0.00221	1.22	<0.000150	0.167	0.0128	<0.00200	0.4	2.5	2.9
BAC-3	6.55	406	3240	<0.100	7.62	3960	10400	<0.00200	0.0192	0.0553	<0.00200	<0.000500	0.00676	<0.00400	<0.00200	1.12	<0.000150	0.0337	0.0184	<0.00200	0.44	0.68	1.12
BAC-4	< 0.500	57.4	488	1.36	7.87	191	1290	<0.00200	0.0371	0.0806	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.532	<0.000150	0.0106	<0.00200	<0.00200	0.48	0.5	0.98
BAC-5	< 0.500	41.3	433	1.34	7.95	111	1010	<0.00200	0.0392	0.0736	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.476	<0.000150	0.00758	<0.00200	<0.00200	0.25	-0.03	0.22
BAC-6	2.67	98.4	491	0.734	7.72	636	1880	<0.00200	0.0144	0.0736	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.597	<0.000150	0.0569	<0.00200	<0.00200	0.61	0.6	1.21
BAC-7	4.43	132	623	1.07	7.89	1230	2980	<0.00200	0.0225	0.0372	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.699	<0.000150	0.0681	0.00274	<0.00200	0.16	0.51	0.67

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	< 0.500	168	752	0.557	7.65	665	2320	<0.00200	0.00781	0.0846	<0.00200	<0.000500	0.00346	<0.00400	<0.00200	0.634	<0.000150	0.00671	<0.00200	<0.00200	0.43	-0.16	0.27
WW-U-1	1.03	346	2430	<0.100	7.23	1440	5330	<0.00200	0.00446	0.123	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	1.33	<0.000150	0.00669	0.00432	<0.00200	1	2.2	3.2
WW-U-2	1.59	362	2410	<0.100	7.34	1370	5780	<0.00200	0.00846	0.0761	<0.00200	<0.000500	0.00735	<0.00400	<0.00200	1.35	<0.000150	0.0126	0.0108	<0.00200	0.51	1.2	1.71
WWC-1	6.01	458	4530	0.256	7.24	2710	10800	<0.00200	0.00331	0.072	<0.00200	<0.000500	0.00369	0.00842	<0.00200	1.08	<0.000150	0.0103	0.00919	<0.00200	0.91	1.6	2.51
WWC-2	< 0.500	61.3	352	0.208	7.97	131	932	<0.00200	0.0147	0.0421	<0.00200	<0.000500	0.00335	<0.00400	<0.00200	0.162	<0.000150	0.00391	<0.00200	<0.00200	0.18	1	1.18
WWC-3	< 0.500	29.2	203	0.845	8.2	78.5	660	<0.00200	0.021	0.0357	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.172	<0.000150	0.00593	<0.00200	<0.00200	0.16	0.52	0.68
WWC-4	0.826	185	1100	0.39	7.31	716	3100	<0.00200	0.00923	0.101	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.75	<0.000150	0.00783	<0.00200	<0.00200	0.6	0.84	1.44
WWC-5	1.59	320	1640	0.319	7.22	1210	4790	<0.00200	0.00371	0.0882	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	1.41	<0.000150	0.0205	0.00345	<0.00200	0.52	1.9	2.42

Date: 2/29/2016

Round 2

Landfill Wells	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

Bottom Ash	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	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

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	< 0.500	51.2	414	1.01	7.83	122	1080	<0.00200	0.0507	0.0887	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.378	<0.000150	0.00491	<0.00200	<0.00200	0.11	0.72	0.83
CL-U-2	< 0.500	53.7	390	1.14	7.75	121	976	<0.00200	0.0245	0.0933	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.346	<0.000150	0.00391	<0.00200	<0.00200	0.26	1.5	1.76
CLW-1	< 0.500	34.6	312	1.13	7.9	70.1	716	<0.00200	0.0285	0.0621	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.318	<0.000150	0.00438	<0.00200	<0.00200	0.28	0.89	1.17
CLW-2	< 0.500	43.9	402	1.21	7.84	87.9	976	<0.00200	0.0264	0.0819	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.396	<0.000150	0.00427	<0.00200	<0.00200	0.25	1.1	1.35
CLW-3	< 0.500	36.2	346	1.3	7.86	104	876	<0.00200	0.0402	0.0992	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.375	<0.000150	0.00463	<0.00200	<0.00200	0.35	1.2	1.55
CLW-4	< 0.500	30.6	294	1.58	7.79	77.9	748	<0.00200	0.0196	0.119	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.338	<0.000150	0.0092	<0.00200	<0.00200	0.45	0.72	1.17
CLW-5	< 0.500	33	336	1.81	7.86	84.9	848	<0.00200	0.0182	0.0851	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.352	<0.000150	0.00868	<0.00200	<0.00200	0.27	0.65	0.92
CLW-6	< 0.500	29.8	313	1.73	7.9	73.2	756	<0.00200	0.0181	0.0901	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.333	<0.000150	0.0105	<0.00200	<0.00200	0.34	1.4	1.74
CLW-7	< 0.500	39.3	328	1.16	7.64	67.4	732	<0.00200	0.0246	0.0581	<0.00200	<0.000500	0.00891	<0.00400	<0.00200	0.331	<0.000150	0.00638	<0.00200	<0.00200	0.19	0.55	0.74
CLW-8	< 0.500	40.3	312	1.08	7.82	69.7	808	<0.00200	0.0225	0.0797	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.32	<0.000150	0.00435	<0.00200	<0.00200	0.27	0.32	0.59

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	< 0.500	195	1130	0.801	7.63	339	2520	<0.00200	0.0177	0.0935	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.773	<0.000150	0.00317	0.00426	<0.00200	0.3	1.6	1.9
BA-U-2	< 0.500	15.9	284	0.865	12	40.6	720	<0.00200	<0.00200	0.128	<0.00200	<0.000500	0.0032	<0.00400	<0.00200	0.315	<0.000150	0.016	<0.00200	<0.00200	0.22	1.5	1.72
BAC-1	4.73	191	2240	0.402	7.59	1840	6420	<0.00200	0.0164	0.081	<0.00200	<0.000500	0.0033	<0.00400	<0.00200	1.3	<0.000150	0.0669	0.0168	<0.00200	0.51	1.3	1.81
BAC-2	11.2	216	1650	0.986	7.17	3220	7520	<0.00200	0.0416	0.0248	<0.00200	<0.000500	0.00488	<0.00400	<0.00200	1.32	<0.000150	0.14	0.0142	<0.00200	0.17	1.6	1.77
BAC-3	6.82	445	3230	0.794	7.42	4490	10900	<0.00200	0.0158	0.048	<0.00200	<0.000500	0.00707	<0.00400	<0.00200	2.53	<0.000150	0.0269	0.0198	<0.00200	0.25	1.6	1.85
BAC-4	< 0.500	66.1	551	1.38	7.73	223	1280	<0.00200	0.0334	0.0772	<0.00200	<0.000500	0.00461	<0.00400	<0.00200	0.509	<0.000150	0.0122	<0.00200	<0.00200	0.16	0.68	0.84
BAC-5	< 0.500	50.4	541	1.26	7.79	122	1220	<0.00200	0.0337	0.0839	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.494	<0.000150	0.00738	<0.00200	<0.00200	0.11	1.7	1.81
BAC-6	1.7	89.5	521	1.04	7.72	448	1560	<0.00200	0.0122	0.0859	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.542	<0.000150	0.0359	<0.00200	<0.00200	0.27	0.76	1.03
BAC-7	4.51	132	685	1.31	7.69	1370	2870	<0.00200	0.0234	0.0315	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.674	<0.000150	0.0749	0.00319	<0.00200	0.17	2.4	2.57

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	< 0.500	129	901	0.564	7.6	318	1880	<0.00200	0.00989	0.0929	<0.00200	<0.000500	0.0156	<0.00400	<0.00200	0.499	<0.000150	0.00411	<0.00200	<0.00200	0.45	0.64	1.09
WW-U-1	1.18	296	2030	0.386	7.21	1300	5820	<0.00200	0.0052	0.115	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	1	<0.000150	0.00888	0.00637	<0.00200	0.64	0.92	1.56
WW-U-2	1.49	412	2300	0.534	7.33	1180	5400	<0.00200	0.00538	0.0746	<0.00200	<0.000500	0.0114	<0.00400	<0.00200	1.08	<0.000150	0.0126	0.0107	<0.00200	0.64	1.1	1.74
WWC-1	3.59	526	3950	<0.100	7.12	1990	8820	<0.00200	0.00401	0.077	<0.00200	<0.000500	<0.00200	0.00532	<0.00200	2.18	<0.000150	0.00653	0.00824	<0.00200	0.47	2	2.47
WWC-2	< 0.500	59.1	369	0.833	7.79	145	956	<0.00200	0.0151	0.0408	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.225	<0.000150	0.00402	<0.00200	<0.00200	0.22	0.39	0.61
WWC-3	< 0.500	26.4	197	1.02	8.12	85.6	664	<0.00200	0.0213	0.0328	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.23	<0.000150	0.00574	<0.00200	<0.00200	0.13	3.3	3.43
WWC-4	0.627	138	902	0.576	7.57	406	2010	<0.00200	0.00498	0.0768	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.606	<0.000150	0.0082	<0.00200	<0.00200	0.27	1.7	1.97
WWC-5	1.65	406	1730	0.3	7.24	1140	5060	<0.00200	0.00608	0.067	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	1.4	<0.000150	0.0119	0.00363	<0.00200	0.42	0.85	1.27

Date: 6/13/2016

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

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	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

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	< 0.500	54.8	424	1.03	7.63	124	1030	<0.00200	0.0301	0.0911	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.375	<0.000150	0.00428	<0.00200	<0.00200	0.36	0.44	0.8
CL-U-2	< 0.500	57.7	406	1.17	7.69	113	948	<0.00200	0.0265	0.0961	<0.00200	<0.000500	0.00227	<0.00400	<0.00200	0.351	<0.000150	0.00508	<0.00200	<0.00200	0.31	1.1	1.41
CLW-1	< 0.500	35	315	1.18	7.89	65.4	832	<0.00200	0.0279	0.0594	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.316	<0.000150	0.00454	<0.00200	<0.00200	0.52	0.86	1.38
CLW-2	< 0.500	46.8	424	1.29	7.75	89.2	992	<0.00200	0.0284	0.0823	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.391	<0.000150	0.00462	<0.00200	<0.00200	0.31	0.62	0.93
CLW-3	< 0.500	38.7	349	1.33	7.75	109	896	<0.00200	0.0412	0.0995	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.368	<0.000150	0.00472	<0.00200	<0.00200	0.3	0.15	0.45
CLW-4	< 0.500	32.1	318	1.53	7.81	84.5	808	<0.00200	0.0316	0.104	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.336	<0.000150	0.00577	<0.00200	<0.00200	0.39	0.62	1.01
CLW-5	< 0.500	34.3	350	1.83	7.75	92.1	860	<0.00200	0.0189	0.0803	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.346	<0.000150	0.00798	<0.00200	<0.00200	0.24	0.27	0.51
CLW-6	< 0.500	31.5	331	1.73	7.84	77.1	812	<0.00200	0.0164	0.0966	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.342	<0.000150	0.011	<0.00200	<0.00200	0.2	1	1.2
CLW-7	< 0.500	42.1	336	1.1	7.71	70	760	<0.00200	0.024	0.0529	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.302	<0.000150	0.00396	<0.00200	<0.00200	0.17	0.33	0.5
CLW-8	< 0.500	40.1	327	1.08	7.73	75	720	<0.00200	0.0224	0.0761	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.308	<0.000150	0.00459	<0.00200	<0.00200	0.35	1	1.35

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

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	< 0.500	180	1170	0.888	7.62	327	2390	<0.00200	0.0191	0.0802	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.684	<0.000150	0.00386	0.00384	<0.00200	0.45	0.84	1.29
BA-U-2	< 0.500	10.4	317	0.975	11.8	39.9	748	<0.00200	0.00225	0.114	<0.00200	<0.000500	0.00216	<0.00400	<0.00200	0.337	<0.000150	0.0147	<0.00200	<0.00200	0.26	1.1	1.36
BAC-1	4.95	221	2520	0.401	7.52	2380	7210	<0.00200	0.0146	0.0643	<0.00200	<0.000500	0.0028	<0.00400	<0.00200	1.42	<0.000150	0.0603	0.0148	<0.00200	0.63	0.64	1.27
BAC-2	10.5	203	1640	1.03	7.22	3180	7620	<0.00200	0.0431	0.0237	<0.00200	<0.000500	0.0081	<0.00400	<0.00200	1.17	<0.000150	0.166	0.0136	<0.00200	0.33	0.23	0.56
BAC-3	6.77	399	3350	1.28	7.36	4630	11700	<0.00200	0.0213	0.0436	<0.00200	<0.000500	0.00386	<0.00400	<0.00200	2.37	<0.000150	0.0294	0.019	<0.00200	0.38	0.76	1.14
BAC-4	< 0.500	56.1	498	1.35	7.62	210	1460	<0.00200	0.0358	0.0757	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.508	<0.000150	0.0103	<0.00200	<0.00200	0.19	0.83	1.02
BAC-5	< 0.500	49.4	561	1.25	7.68	127	1200	<0.00200	0.0331	0.0879	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.538	<0.000150	0.0077	<0.00200	<0.00200	0.1	0.46	0.56
BAC-6	1.38	80.2	546	0.901	7.61	502	1540	<0.00200	0.0115	0.0781	<0.00200	0.000677	0.00283	<0.00400	<0.00200	0.54	<0.000150	0.034	<0.00200	<0.00200	0.31	0.24	0.55
BAC-7	3.96	126	612	1.28	7.68	1370	2770	<0.00200	0.0232	0.0274	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.669	<0.000150	0.0942	0.00257	<0.00200	0.37	-0.17	0.2

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	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	< 0.500	131	922	0.564	7.57	281	1880	<0.00200	0.00926	0.0858	<0.00200	<0.000500	0.00217	<0.00400	<0.00200	0.467	<0.000150	0.00295	<0.00200	<0.00200	0.45	0.96	1.41
WW-U-1	1.25	304	2200	0.327	7.21	1280	5270	<0.00200	0.00439	0.0916	<0.00200	<0.000500	0.00337	<0.00400	<0.00200	1.01	<0.000150	0.00835	0.00689	<0.00200	0.54	2	2.54
WW-U-2	0.641	308	2140	0.614	7.42	854	4550	<0.00200	0.00258	0.117	<0.00200	<0.000500	0.00424	<0.00400	<0.00200	0.994	<0.000150	0.0342	0.00617	<0.00200	0.82	1.6	2.42
WWC-1	10.2	457	4680	0.213	7.11	3130	12100	<0.00200	0.02	0.0335	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	2.41	0.00019	0.00966	0.0145	<0.00200	0.33	0.86	1.19
WWC-2	< 0.500	57.9	389	0.508	7.86	151	960	<0.00200	0.0152	0.0406	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.243	<0.000150	0.0034	<0.00200	<0.00200	0.69	1.2	1.89
WWC-3	< 0.500	27.3	220	1.03	8.02	78	628	<0.00200	0.0217	0.0342	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.241	<0.000150	0.00559	<0.00200	<0.00200	0.2	-0.34	-0.14
WWC-4	1.17	225	1330	0.422	7.37	868	3230	<0.00200	0.0131	0.065	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.879	<0.000150	0.00237	0.00238	<0.00200	0.27	0.48	0.75
WWC-5	2.87	326	1920	0.366	7.18	1700	5440	<0.00200	0.00717	0.0439	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	1.33	<0.000150	0.00742	0.00312	<0.00200	0.41	0.51	0.92

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

Date: 8/26/2016

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	< 0.500	57.4	424	0.959	7.7	115	912	<0.00200	0.037	0.089	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.217	<0.000150	0.00404	<0.00200	<0.00200	0.25	0.18	0.43
CL-U-2	< 0.500	59.5	395	0.99	7.73	113	864	<0.00200	0.0269	0.101	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.206	<0.000150	0.00401	<0.00200	<0.00200	0.36	0.84	1.2
CLW-1	< 0.500	38.9	325	1.15	7.8	67.8	824	<0.00200	0.0295	0.0668	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.189	<0.000150	0.0043	<0.00200	<0.00200	0.27	0.19	0.46
CLW-2	< 0.500	49.2	422	1.13	7.82	85.3	984	<0.00200	0.0258	0.0855	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.223	<0.000150	0.00456	<0.00200	<0.00200	0.31	0.34	0.65
CLW-3	< 0.500	40.8	366	1.19	7.83	100	944	<0.00200	0.0412	0.104	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.214	<0.000150	0.00508	<0.00200	<0.00200	0.35	0.13	0.48
CLW-4	< 0.500	34.6	335	1.39	7.84	85.9	828	<0.00200	0.0385	0.0932	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.203	<0.000150	0.00414	<0.00200	<0.00200	0.59	-0.37	0.22
CLW-5	< 0.500	35.3	339	1.69	7.89	82.1	928	<0.00200	0.0206	0.0812	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.204	<0.000150	0.00723	<0.00200	<0.00200	0.31	0.84	1.15
CLW-6	< 0.500	33.9	325	1.46	7.85	77.9	972	<0.00200	0.0287	0.0908	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.203	<0.000150	0.00638	<0.00200	<0.00200	0.35	0.18	0.53
CLW-7	< 0.500	42.8	343	1.14	7.9	68.6	796	<0.00200	0.0235	0.0551	<0.00200	<0.000500	0.00234	<0.00400	<0.00200	0.182	<0.000150	0.00413	<0.00200	<0.00200	0.27	0.32	0.59
CLW-8	< 0.500	41.7	334	1.11	7.77	68.9	744	<0.00200	0.0258	0.0797	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.189	<0.000150	0.00428	<0.00200	<0.00200	0.37	-0.28	0.09

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

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	< 0.500	16.7	327	1.65	9.08	60.2	832	<0.00200	0.0362	0.0679	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.215	<0.000150	0.0163	<0.00200	<0.00200	0.67	0.13	0.8
BA-U-2	< 0.500	38.1	357	1.02	8.56	51.9	824	<0.00200	0.0234	0.131	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.21	<0.000150	0.00449	<0.00200	<0.00200	0.57	0.42	0.99
BAC-1	3.42	131	1850	0.437	8.8	1610	7720	<0.00200	0.0103	0.049	<0.00200	<0.000500	0.00612	<0.00400	<0.00200	0.402	<0.000150	0.0498	0.00852	<0.00200	0.34	0.27	0.61
BAC-2	9.71	216	1620	1.11	7.34	2980	7040	<0.00200	0.0444	0.0228	<0.00200	<0.000500	0.00644	<0.00400	<0.00200	0.414	<0.000150	0.165	0.0131	<0.00200	0.25	-0.03	0.22
BAC-3	7.04	401	3160	0.76	7.39	4260	11400	<0.00200	0.0226	0.0404	<0.00200	<0.000500	0.00362	<0.00400	<0.00200	0.812	<0.000150	0.0275	0.0195	<0.00200	0.24	0.14	0.38
BAC-4	< 0.500	59.2	534	1.34	7.8	222	1230	<0.00200	0.0352	0.0723	<0.00200	<0.000500	0.00212	<0.00400	<0.00200	0.243	<0.000150	0.00992	<0.00200	<0.00200	0.09	0.4	0.49
BAC-5	< 0.500	40.5	479	1.33	7.85	110	1070	<0.00200	0.0359	0.0909	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.219	<0.000150	0.00715	<0.00200	<0.00200	0.2	-0.01	0.19
BAC-6	4.35	133	606	0.97	7.61	1080	2620	<0.00200	0.022	0.0287	<0.00200	<0.000500	0.00257	<0.00400	<0.00200	0.266	<0.000150	0.0858	0.00369	<0.00200	0.13	0.69	0.82
BAC-7	3.97	135	628	1.42	7.69	1340	2880	<0.00200	0.0241	0.026	<0.00200	<0.000500	0.00217	<0.00400	<0.00200	0.279	<0.000150	0.0944	0.00279	<0.00200	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	< 0.500	132	863	0.514	7.52	286	1850	<0.00200	0.00895	0.0871	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.254	<0.000150	0.00276	<0.00200	<0.00200	0.32	0.11	0.43
WW-U-1	1.23	348	2190	0.346	7.18	1230	5370	<0.00200	0.0041	0.0771	<0.00200	<0.000500	0.00538	<0.00400	<0.00200	0.479	<0.000150	0.00891	0.00579	<0.00200	0.73	0.17	0.9
WW-U-2	1.47	383	2340	0.416	7.22	1120	5540	<0.00200	0.00573	0.0704	<0.00200	<0.000500	0.00396	<0.00400	<0.00200	0.512	<0.000150	0.0111	0.0116	<0.00200	0.78	0.46	1.24
WWC-1	9.83	513	4540	0.133	7.04	2960	12500	<0.00200	0.0197	0.0317	<0.00200	<0.000500	0.00348	<0.00400	<0.00200	0.819	0.000198	0.00936	0.0153	<0.00200	0.23	0.73	0.96
WWC-2	< 0.500	58.5	369	0.42	7.88	140	960	<0.00200	0.0129	0.0543	<0.00200	<0.000500	0.0243	<0.00400	<0.00200	0.112	<0.000150	0.00809	<0.00200	<0.00200	0.1	0.45	0.55
WWC-3	< 0.500	27.7	224	1.08	8.01	86.1	612	<0.00200	0.0218	0.0332	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.123	<0.000150	0.00543	<0.00200	<0.00200	0.07	0.1	0.17
WWC-4	1.19	227	1200	0.509	7.32	763	3200	<0.00200	0.0136	0.0629	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.351	<0.000150	0.00222	0.00216	<0.00200	0.08	0.75	0.83
WWC-5	3.02	343	1850	0.401	0.71	1570	5300	<0.00200	0.00778	0.0389	<0.00200	<0.000500	0.00238	<0.00400	<0.00200	0.497	<0.000150	0.00498	0.0041	<0.00200	0.43	1.1	1.53

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

Date: 10/17/2016

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	< 0.500	57.1	403	0.876	7.83	113	908	<0.00200	0.0322	0.0867	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.214	<0.000150	0.00365	<0.00200	<0.00200	0.62	0.22	0.62
CL-U-2	< 0.500	61.2	374	0.903	7.89	110	852	<0.00200	0.0272	0.0976	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.208	<0.000150	0.00386	<0.00200	<0.00200	0.4	0.39	0.4
CLW-1	< 0.500	38.4	295	1.05	7.83	62.4	768	<0.00200	0.0309	0.0631	<0.00200	<0.000500	0.0187	<0.00400	<0.00200	0.185	<0.000150	0.00654	<0.00200	<0.00200	0.41	0.78	1.2
CLW-2	< 0.500	49.7	377	1.07	7.85	92.9	936	<0.00200	0.0277	0.0811	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.219	<0.000150	0.00437	<0.00200	<0.00200	0.31	0.72	1
CLW-3	< 0.500	42.4	333	1.23	7.87	94.4	876	<0.00200	0.0423	0.103	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.214	<0.000150	0.00473	<0.00200	<0.00200	0.35	0.7	1.1
CLW-4	< 0.500	35.2	306	1.27	8.02	79.1	808	<0.00200	0.0388	0.0898	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.202	<0.000150	0.00439	<0.00200	<0.00200	0.39	0.12	0.39
CLW-5	< 0.500	36	320	1.71	7.88	79.9	748	<0.00200	0.0216	0.0801	<0.00200	<0.000500	0.00214	<0.00400	<0.00200	0.025	<0.000150	0.00666	<0.00200	<0.00200	0.4	0.38	0.4
CLW-6	< 0.500	33.4	302	1.48	7.91	66	752	<0.00200	0.0164	0.0976	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.193	<0.000150	0.00805	<0.00200	<0.00200	0.25	-0.35	0.25
CLW-7	< 0.500	46.4	312	1.02	7.68	61	824	<0.00200	0.0257	0.0545	<0.00200	<0.000500	0.00772	<0.00400	<0.00200	0.182	<0.000150	0.00425	<0.00200	<0.00200	0.14	0.18	0.14
CLW-8	< 0.500	42.8	301	1.03	7.71	63.8	772	<0.00200	0.0255	0.0707	<0.00200	<0.000500	0.012	<0.00400	<0.00200	0.189	<0.000150	0.00526	<0.00200	<0.00200	0.25	0.29	0.25

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

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	< 0.500	24.5	259	1.57	8.59	48.8	648	<0.00200	0.0359	0.0856	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.193	<0.000150	0.0124	<0.00200	<0.00200	0.28	0.15	0.28
BA-U-2	< 0.500	3.76	328	0.886	12.1	39.2	728	<0.00200	0.00254	0.122	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.221	<0.000150	0.00986	<0.00200	<0.00200	0.3	0.47	0.3
BAC-1	4.01	188	2170	<0.100	7.47	1650	6320	<0.00200	0.0202	0.279	<0.00200	<0.000500	0.0412	<0.00400	<0.00200	0.429	<0.000150	0.0391	0.0152	<0.00200	1.1	1.5	2.6
BAC-2	10.5	193	1480	0.871	7.2	2780	7320	<0.00200	0.0469	0.022	<0.00200	<0.000500	0.0145	<0.00400	<0.00200	0.44	<0.000150	0.194	0.0144	<0.00200	0.34	0.22	0.56
BAC-3	7.57	408	3140	<0.100	7.36	4290	13000	<0.00200	0.0239	0.0376	<0.00200	<0.000500	0.00447	<0.00400	<0.00200	0.974	<0.000150	0.026	0.0211	<0.00200	0.2	0.5	0.7
BAC-4	< 0.500	59	461	1.13	7.68	206	1260	<0.00200	0.0362	0.0705	<0.00200	<0.000500	0.011	<0.00400	<0.00200	0.237	<0.000150	0.012	<0.00200	<0.00200	0.13	0.18	0.13
BAC-5	< 0.500	59.5	576	0.994	7.73	190	1430	<0.00200	0.032	0.0893	<0.00200	<0.000500	0.00204	<0.00400	<0.00200	0.277	<0.000150	0.00666	<0.00200	<0.00200	0.21	0.24	0.45
BAC-6	4.44	128	594	0.763	7.6	1040	2500	<0.00200	0.0237	0.0269	<0.00200	<0.000500	0.00205	<0.00400	<0.00200	0.28	<0.000150	0.0873	0.0045	<0.00200	0.12	-0.21	-0.09
BAC-7	3.31	151	591	0.936	7.43	1140	3120	<0.00200	0.0237	0.0253	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.327	<0.000150	0.0702	0.007	<0.00200	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	< 0.500	131	785	0.458	7.54	247	1760	<0.00200	0.00941	0.08	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.25	<0.000150	0.00227	<0.00200	<0.00200	0.33	0.24	0.33
WW-U-1	1.15	336	1880	0.2	7.26	1180	4890	<0.00200	0.00593	0.0568	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.477	<0.000150	0.00558	0.00583	<0.00200	0.53	0.89	1.42
WW-U-2	0.6	317	1860	0.438	7.38	734	4300	<0.00200	0.00355	0.095	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.479	<0.000150	0.021	0.00749	<0.00200	0.51	1.6	2.11
WWC-1	11.2	479	4510	<0.100	6.98	2940	12200	<0.00200	0.0213	0.0288	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.932	0.000328	0.00995	0.0149	<0.00200	0.26	1.1	1.36
WWC-2	< 0.500	52	318	0.405	7.79	125	856	<0.00200	0.0149	0.0361	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.122	<0.000150	0.00357	<0.00200	<0.00200	0.17	0.61	0.78
WWC-3	< 0.500	25.7	195	0.852	8.13	76	680	<0.00200	0.0227	0.0302	<0.00200	<0.000500	0.00309	<0.00400	<0.00200	0.137	<0.000150	0.00537	<0.00200	<0.00200	0.24	-0.21	0.03
WWC-4	1.3	233	1250	0.319	7.38	819	3230	<0.00200	0.0135	0.061	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.382	<0.000150	<0.00200	0.00239	<0.00200	0.18	-0.2	-0.02
WWC-5	1.72	318	1520	0.292	7.13	1190	4560	<0.00200	0.01	0.0501	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.555	<0.000150	0.00523	0.00399	<0.00200	0.23	0.95	1.18

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

Date: 3/23/2017

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	< 0.500	53	480	0.996	7.74	132	1010	<0.00200	0.0344	0.0826	<0.00200	0.00065	<0.00200	<0.00400	<0.00200	0.202	<0.000150	0.00402	<0.00200	<0.00200	0.36	0.95	1.31
CL-U-2	< 0.500	55.1	444	1	7.8	134	952	<0.00200	0.0247	0.0938	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.19	<0.000150	0.00408	<0.00200	<0.00200	2.7	1	3.7
CLW-1	< 0.500	36.4	322	1.06	7.85	68.2	772	<0.00200	0.0289	0.0615	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.173	<0.000150	0.00389	<0.00200	<0.00200	0.2	0.14	0.34
CLW-2	< 0.500	44.7	436	1.19	7.83	102	964	<0.00200	0.0246	0.0754	<0.00200	<0.000500	0.00411	<0.00400	<0.00200	0.211	<0.000150	0.00461	<0.00200	<0.00200	0.24	1	1.24
CLW-3	< 0.500	37.3	380	1.23	7.85	106	856	<0.00200	0.0378	0.0951	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.197	<0.000150	0.00498	<0.00200	<0.00200	0.27	0.29	0.56
CLW-4	< 0.500	30.6	345	1.44	7.89	86.3	816	<0.00200	0.0352	0.0885	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.189	<0.000150	0.00481	<0.00200	<0.00200	0.29	0.3	0.59
CLW-5	< 0.500	32.4	358	1.82	7.86	91.6	860	<0.00200	0.0203	0.0732	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.188	<0.000150	0.00572	<0.00200	<0.00200	1.4	1.2	2.6
CLW-6	< 0.500	31	336	1.61	7.9	77.5	768	<0.00200	0.02	0.0893	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	<0.100	0.183	<0.00200	0.0068	<0.00200	0.01	0.5	0.51
CLW-7	< 0.500	41.5	352	1.01	7.88	70.4	832	<0.00200	0.0241	0.0514	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.169	<0.000150	0.0033	<0.00200	<0.00200	0.14	0.75	0.89
CLW-8	< 0.500	38.4	339	1.02	7.81	73.1	812	<0.00200	0.0239	0.0681	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.176	<0.000150	0.00391	<0.00200	<0.00200	0.18	0.81	0.99

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

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	< 0.500	26.3	317	1.75	8.32	52.9	776	<0.00200	0.0323	0.0901	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.191	<0.000150	0.0109	<0.00200	<0.00200	0.15	0.73	0.88
BA-U-2	< 0.500	3.58	366	0.821	11.8	39.6	748	<0.00200	<0.00200	0.0899	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.215	<0.000150	0.0086	<0.00200	<0.00200	0.09	0.98	1.07
BAC-1	1.91	88.7	914	0.266	8.92	702	2920	<0.00200	0.0145	0.0563	<0.00200	<0.000500	0.00666	<0.00400	<0.00200	0.305	<0.000150	0.0317	0.00643	<0.00200	0.2	0.99	1.19
BAC-2	10.6	216	1730	<0.100	7.21	3260	7720	<0.00200	0.042	0.0211	<0.00200	<0.000500	0.00799	<0.00400	<0.00200	0.586	<0.000150	0.177	0.0138	<0.00200	0.14	0.64	0.78
BAC-3	7.76	401	3510	<0.100	7.29	4900	13200	<0.00200	0.0251	0.0316	<0.00200	<0.000500	0.00858	<0.00400	<0.00200	1.17	<0.000150	0.0292	0.0212	<0.00200	0.3	0.76	1.06
BAC-4	< 0.500	56.1	612	1.13	7.84	212	1220	<0.00200	0.0329	0.0666	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.228	<0.000150	0.0113	<0.00200	<0.00200	0.37	0.47	0.84
BAC-5	< 0.500	58.3	654	1.1	7.76	217	1180	<0.00200	0.0297	0.0881	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.259	<0.000150	0.00728	<0.00200	<0.00200	0.31	0.28	0.59
BAC-6	4.25	135	697	0.779	7.63	1110	2810	<0.00200	0.0229	0.0256	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.257	<0.000150	0.0921	0.00414	<0.00200	0.24	0.76	1
BAC-7	3.4	146	632	0.864	7.78	1290	3170	<0.00200	0.0154	0.0288	<0.00200	<0.000500	0.00398	<0.00400	<0.00200	0.36	<0.000150	0.0888	0.00457	<0.00200	2.5	0.88	3.38

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	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	< 0.500	116	763	0.522	7.56	427	1800	<0.00200	0.0101	0.0599	<0.00200	0.00128	0.00274	<0.00400	<0.00200	0.235	<0.000150	0.00233	<0.00200	<0.00200	0.2	1.3	1.5
WW-U-1	1.18	312	2340	0.181	7.41	1450	4540	<0.00200	0.00568	0.0521	<0.00200	<0.000500	0.00212	<0.00400	<0.00200	0.441	<0.000150	0.00556	0.00625	<0.00200	1.2	1.5	2.7
WW-U-2	0.741	338	2590	0.287	7.36	1040	12500	<0.00200	0.00325	0.0803	<0.00200	<0.000500	0.067	<0.00400	<0.00200	0.512	<0.000150	0.0226	0.00846	<0.00200	0.52	1.6	2.12
WWC-1	9.88	413	4410	<0.100	7.14	2770	11000	<0.00200	0.0173	0.0326	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	1.11	0.000175	0.0147	0.0147	<0.00200	0.39	1.5	1.89
WWC-2	< 0.500	49.5	326	0.447	7.85	134	832	<0.00200	0.0141	0.0339	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.138	<0.000150	0.00405	<0.00200	<0.00200	0.24	0.24	0.48
WWC-3	< 0.500	25.9	220	0.974	8.12	84.3	696	<0.00200	0.0214	0.0281	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.146	<0.000150	0.00504	<0.00200	<0.00200	0.1	0.45	0.55
WWC-4	1.33	229	1330	0.466	7.22	912	3060	<0.00200	0.013	0.0545	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.421	<0.000150	<0.00200	0.00241	<0.00200	0.22	0.74	0.96
WWC-5	2.25	287	1790	<0.100	7.49	1420	4810	<0.00200	0.00753	0.0379	<0.00200	<0.000500	0.00202	<0.00400	<0.00200	0.567	<0.000150	0.00531	0.00336	<0.00200	0.2	1.5	1.7

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

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	< 0.500	52.1	422	1.07	7.73	116	1130	<0.00200	0.0291	0.088	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.228	<0.000150	0.00398	<0.00200	<0.00200	0.25	1.6	1.85
CL-U-2	< 0.500	53.8	390	1.1	7.67	120	1060	<0.00200	0.0262	0.0941	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.212	<0.000150	0.00415	<0.00200	<0.00200	0.17	1.4	1.57
CLW-1	< 0.500	35.7	310	1.15	7.85	71.7	808	<0.00200	0.0308	0.0614	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.192	<0.000150	0.00407	<0.00200	<0.00200	0.21	1.7	1.91
CLW-2	< 0.500	43.5	407	1.23	7.76	97.3	1040	<0.00200	0.0257	0.0793	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.229	<0.000150	0.00467	<0.00200	<0.00200	0.12	3	3.12
CLW-3	< 0.500	36.2	347	1.34	7.8	100	884	<0.00200	0.0408	0.102	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.223	<0.000150	0.00474	<0.00200	<0.00200	0.16	1.1	1.26
CLW-4	< 0.500	30.5	313	1.6	7.81	85.1	856	<0.00200	0.0333	0.09	<0.00200	<0.000500	0.0516	<0.00400	<0.00200	0.199	<0.000150	0.0115	<0.00200	<0.00200	0.24	1.8	2.04
CLW-5	< 0.500	33.2	344	1.82	7.8	88.5	824	<0.00200	0.023	0.0727	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.211	<0.000150	0.0052	<0.00200	<0.00200	0.2	2.2	2.4
CLW-6	< 0.500	30.5	317	1.73	7.82	74.5	828	<0.00200	0.0143	0.0961	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.199	<0.000150	0.00721	<0.00200	<0.00200	0.29	1.7	1.99
CLW-7	< 0.500	45.5	319	1.11	7.7	64.5	868	<0.00200	0.0244	0.0539	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.189	<0.000150	0.00389	<0.00200	<0.00200	0.45	0.95	1.4
CLW-8	< 0.500	37.9	319	1.13	7.77	70.6	788	<0.00200	0.0252	0.0689	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.192	<0.000150	0.00431	<0.00200	<0.00200	0.25	1.6	1.85

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

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	< 0.500	169	1040	1.02	7.53	343	2310	<0.00200	0.0215	0.0745	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.368	<0.000150	0.00296	0.00375	<0.00200	0.07	1.3	1.37
BA-U-2	< 0.500	46.3	479	0.993	8.04	53.7	1140	<0.00200	0.0249	0.156	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.241	<0.000150	0.00294	<0.00200	<0.00200	0.24	1.5	1.74
BAC-1	4.86	229	2620	0.854	7.4	2150	8400	<0.00200	0.0148	0.702	<0.00200	<0.000500	0.114	0.00461	<0.00200	0.52	<0.000150	0.0467	0.0174	<0.00200	0.39	1.6	1.99
BAC-2	10.1	221	1690	1.33	7.62	2970	7940	<0.00200	0.0469	0.0202	<0.00200	<0.000500	0.00547	<0.00400	<0.00200	0.431	<0.000150	0.154	0.0149	<0.00200	0.11	0.14	0.25
BAC-3	8.76	353	3370	2.51	7.43	5340	12700	<0.00200	0.054	0.0306	<0.00200	<0.000500	0.0114	<0.00400	<0.00200	0.897	<0.000150	0.0525	0.0287	<0.00200	0.23	1.3	1.53
BAC-4	< 0.500	62.4	482	1.26	7.76	231	1280	<0.00200	0.0359	0.0703	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.262	<0.000150	0.0139	<0.00200	<0.00200	0.1	2.5	2.6
BAC-5	< 0.500	67.5	593	1.17	7.74	269	1450	<0.00200	0.0325	0.0877	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.294	<0.000150	0.00838	<0.00200	<0.00200	0.26	2.7	2.96
BAC-6	0.978	77.2	516	1.01	7.97	301	1510	<0.00200	0.0156	0.0833	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.265	<0.000150	0.0213	<0.00200	<0.00200	0.27	3.8	4.07
BAC-7	3.41	144	633	1.15	7.65	1220	2990	<0.00200	0.0191	0.0223	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.285	<0.000150	0.074	0.00446	<0.00200	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	< 0.500	110	820	0.618	7.55	263	1810	0.002	0.00969	0.0783	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.257	<0.000150	0.00251	<0.00200	<0.00200	0.44	0.56	1
WW-U-1	1.2	311	2130	0.539	7.23	1280	5260	<0.00200	0.0055	0.0545	<0.00200	<0.000500	0.003309	<0.00400	<0.00200	0.459	<0.000150	0.00792	0.00697	<0.00200	0.34	1.2	1.54
WW-U-2	1.66	314	2280	0.721	7.31	1220	5510	<0.00200	0.0104	0.0659	<0.00200	<0.000500	0.00415	<0.00400	<0.00200	0.485	<0.000150	0.00647	0.0122	<0.00200	0.24	1.3	1.54
WWC-1	9.55	492	4430	0.507	7.37	2990	11500	<0.00200	0.0177	0.0272	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.755	0.000262	0.0068	0.014	<0.00200	0.26	1.2	1.46
WWC-2	< 0.500	53.6	347	0.452	7.78	137	936	<0.00200	0.0142	0.0361	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.112	<0.000150	0.00341	<0.00200	<0.00200	0.04	1.2	1.24
WWC-3	< 0.500	25.3	207	1.13	8.14	84	704	<0.00200	0.0207	0.0242	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.127	<0.000150	0.00477	<0.00200	<0.00200	0.08	2	2.08
WWC-4	1.11	201	1100	0.57	7.38	744	3280	<0.00200	0.0135	0.0529	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.313	<0.000150	<0.00200	0.00214	<0.00200	0.38	0.4	0.78
WWC-5	1.48	327	1620	0.544	7.16	1240	4590	<0.00200	0.0104	0.0438	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.496	<0.000150	0.00395	0.00407	<0.00200	0.41	0.65	1.06

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

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	< 0.500	62.6	402	0.971	7.66	94.9	1090	<0.00200	0.0283	0.0758	<0.00200	<0.000500	0.000529	<0.00400	<0.00200	0.209	<0.000150	0.00359	<0.00200	<0.00200	0.18	0.81	0.99
CL-U-2	< 0.500	64.1	352	0.895	7.65	92.7	980	<0.00200	0.0236	0.0873	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.194	<0.000150	0.00376	<0.00200	<0.00200	0.34	0.16	0.5
CLW-1	< 0.500	37.8	318	1.02	7.67	59.5	720	<0.00200	0.0265	0.053	<0.00200	<0.000500	0.0271	<0.00400	<0.00200	0.179	<0.000150	0.0068	<0.00200	<0.00200	0.09	0.53	0.62
CLW-2	< 0.500	51.4	421	1.13	7.8	79.4	1020	<0.00200	0.0258	0.0711	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.212	<0.000150	0.00439	<0.00200	<0.00200	0.24	0.94	1.18
CLW-3	< 0.500	42.8	334	1.23	7.86	82.3	956	<0.00200	0.0364	0.089	<0.00200	<0.000500	0.000505	<0.00400	<0.00200	0.2	<0.000150	0.00464	<0.00200	<0.00200	0.37	0.94	1.31
CLW-4	< 0.500	35.8	301	1.35	7.77	70.4	864	<0.00200	0.0352	0.0788	<0.00200	<0.000500	0.000762	<0.00400	<0.00200	0.189	<0.000150	0.00477	<0.00200	<0.00200	0.46	0.59	1.05
CLW-5	< 0.500	37.4	354	1.71	7.66	79.9	876	<0.00200	0.021	0.0671	<0.00200	<0.000500	0.000712	<0.00400	<0.00200	0.194	<0.000150	0.0054	<0.00200	<0.00200	0.15	0.96	1.11
CLW-6	< 0.500	34.2	292	1.62	7.74	60.4	916	<0.00200	0.0104	0.0885	<0.00200	<0.000500	0.000612	<0.00400	<0.00200	0.182	<0.000150	0.00729	<0.00200	<0.00200	0.56	0.48	1.04
CLW-7	< 0.500	47	316	0.972	7.59	51.3	792	<0.00200	0.0215	0.0475	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.183	<0.000150	0.00341	<0.00200	<0.00200	0.28	0.22	0.5
CLW-8	< 0.500	44.1	303	0.981	7.63	54.2	792	<0.00200	0.0231	0.0609	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.188	<0.000150	0.00376	<0.00200	<0.00200	0.25	0.8	1.05

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

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	< 0.500	33.5	296	1.64	8.05	50.7	872	<0.00200	0.0276	0.0837	<0.00200	<0.000500	0.00126	<0.00400	<0.00200	0.199	<0.000150	0.00914	0.0022	<0.00200	0.07	0.31	0.38
BA-U-2	< 0.500	46.2	399	0.943	8.2	46.9	1080	<0.00200	0.0227	0.125	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.209	<0.000150	0.00311	0.000691	<0.00200	0.12	0.34	0.46
BAC-1	3.88	192	1890	0.507	7.63	1470	6120	0.00138	0.0127	0.0501	<0.00200	<0.000500	0.00451	<0.00400	<0.00200	0.581	<0.000150	0.028	0.00924	<0.00200	0.31	0.48	0.79
BAC-2	9.89	283	1940	1.32	7.72	3070	8590	<0.00200	0.0508	0.0238	<0.00200	<0.000500	0.00777	<0.00400	<0.00200	0.524	<0.000150	0.142	0.0173	<0.00200	0.29	0.89	1.18
BAC-3	7.91	417	3480	1.62	7.84	4460	13000	<0.00200	0.0441	0.0331	<0.00200	<0.000500	0.00468	<0.00400	<0.00200	1.05	<0.000150	0.0396	0.0228	<0.00200	0.28	1.25	1.53
BAC-4	< 0.500	67.4	489	1.14	7.74	221	1300	<0.00200	0.0316	0.0605	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.249	<0.000150	0.0143	<0.00200	<0.00200	0.1	0.81	0.91
BAC-5	< 0.500	74.8	524	1.07	7.68	234	1480	<0.00200	0.0275	0.0706	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.284	<0.000150	0.00915	<0.00200	<0.00200	0.24	0.5	0.74
BAC-6	4.58	145	595	1.15	7.48	1100	2600	<0.00200	0.0214	0.0227	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.28	<0.000150	0.0898	0.00249	<0.00200	0.08	0.72	0.8
BAC-7	4.51	137	1980	0.388	7.57	1100	2730	<0.00200	0.0235	0.0195	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.288	<0.000150	0.0752	0.0048	<0.00200	0.14	0.71	0.85

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	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	< 0.500	129	739	0.506	7.5	201	1840	<0.00200	0.00929	0.0741	<0.00200	<0.000500	0.00137	<0.00400	<0.00200	0.241	<0.000150	0.00227	<0.00200	<0.00200	0.04	0.73	0.77
WW-U-1	1.34	339	1900	0.406	7.05	1050	5280	<0.00200	0.005	0.0486	<0.00200	<0.000500	0.00193	<0.00400	<0.00200	0.436	<0.000150	0.00702	0.00653	<0.00200	0.45	0.91	1.36
WW-U-2	1.47	370	2010	0.532	7.16	925	5260	<0.00200	0.00642	0.0499	<0.00200	<0.000500	0.00144	<0.00400	<0.00200	0.475	<0.000150	0.00467	0.0115	<0.00200	0.34	0.94	1.28
WWC-1	11.9	638	4100	0.236	6.89	2640	12700	<0.00200	0.02	0.0209	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.805	0.000205	0.00596	0.015	<0.00200	0.25	1.21	1.46
WWC-2	< 0.500	57.2	308	0.41	7.62	111	784	<0.00200	0.014	0.031	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.104	<0.000150	0.00356	<0.00200	<0.00200	0.1	0.55	0.65
WWC-3	< 0.500	28.9	200	0.985	7.96	67.8	628	<0.00200	0.0214	0.0245	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.131	<0.000150	0.00464	<0.00200	<0.00200	0.07	0.27	0.34
WWC-4	1.19	200	1010	0.365	7.3	593	2790	<0.00200	0.0128	0.0463	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.355	<0.000150	<0.00200	<0.00200	<0.00200	0.22	0.58	0.8
WWC-5	2.86	321	1600	0.384	6.92	1450	5030	<0.00200	0.0096	0.0302	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.511	<0.000150	0.00301	0.00415	<0.00200	0.2	1.64	1.84

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

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	< 0.500	54.7	372	0.853	7.7	98	984	<0.00200	0.0272	0.0799	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.208	<0.000150	0.00361	<0.00200	<0.00200	0.18	0.67	0.85
CL-U-2	< 0.500	56.4	365	0.862	7.64	108	952	<0.00200	0.0242	0.09	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.195	<0.000150	0.0038	<0.00200	<0.00200	-0.02	0.67	0.65
CLW-1	< 0.500	35.2	298	1.02	7.93	57.8	748	<0.00200	0.0285	0.0568	<0.00200	<0.000500	0.00102	<0.00400	<0.00200	0.184	<0.000150	0.00388	0.000928	<0.00200	0.29	1.01	1.3
CLW-2	< 0.500	44.6	399	1.14	7.79	86.8	980	<0.00200	0.0247	0.072	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.222	<0.000150	0.00433	<0.00200	<0.00200	0.25	0.96	1.21
CLW-3	< 0.500	37.5	323	1.16	7.91	94.2	876	<0.00200	0.0382	0.0948	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.214	<0.000150	0.00483	<0.00200	<0.00200	0.18	0.55	0.73
CLW-4	< 0.500	31.8	289	1.35	7.91	76.4	836	<0.00200	0.0358	0.0801	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.204	<0.000150	0.00459	<0.00200	<0.00200	0.13	0.85	0.85
CLW-5	< 0.500	33.1	318	1.59	7.79	75.3	804	<0.00200	0.0215	0.0689	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.21	<0.000150	0.00519	<0.00200	<0.00200	0.11	0.76	0.87
CLW-6	< 0.500	29.9	292	1.45	7.88	66.3	796	<0.00200	0.0109	0.0902	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.199	<0.000150	0.00711	<0.00200	<0.00200	0.27	0.85	1.12
CLW-7	< 0.500	40.6	321	0.945	7.68	58.6	900	<0.00200	0.0234	0.0514	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.186	<0.000150	0.00329	<0.00200	<0.00200	0.16	0.97	0.97
CLW-8	< 0.500	38.8	314	0.933	7.73	63.5	768	<0.00200	0.0244	0.0632	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.188	<0.000150	0.00359	<0.00200	<0.00200	0.18	1.26	1.26

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

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	< 0.500	140	799	0.818	7.54	254	1970	<0.00200	0.0199	0.0636	<0.00200	<0.000500	0.000506	<0.00400	<0.00200	0.337	<0.000150	0.00279	0.00324	<0.00200	0.39	1.94	2.33
BA-U-2	< 0.500	70.1	578	0.73	7.68	63.5	1330	<0.00200	0.0208	0.145	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.279	<0.000150	0.00215	0.00201	<0.00200	0.16	1.13	1.13
BAC-1	2.16	113	1190	0.315	7.92	971	3120	0.00158	0.0141	0.0393	<0.00200	<0.000500	0.00714	<0.00400	<0.00200	0.314	<0.000150	0.0288	0.00694	<0.00200	0.24	1.06	1.3
BAC-2	8.44	263	2210	0.684	7.1	3430	7720	<0.00200	0.0445	0.021	<0.00200	<0.000500	0.00483	<0.00400	<0.00200	0.463	<0.000150	0.143	0.0154	<0.00200	0.12	1.03	1.03
BAC-3	7.26	347	3870	1.52	7.42	5080	12700	<0.00200	0.0588	0.0327	<0.00200	<0.000500	0.00511	<0.00400	<0.00200	0.944	<0.000150	0.0467	0.0229	<0.00200	0.27	1.44	1.71
BAC-4	< 0.500	62.8	510	1.01	7.95	221	1290	<0.00200	0.0322	0.0672	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.247	<0.000150	0.0165	<0.00200	<0.00200	0.06	0.92	0.98
BAC-5	< 0.500	73.5	591	0.916	7.82	302	1180	<0.00200	0.0292	0.0763	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.288	<0.000150	0.0128	<0.00200	<0.00200	0.19	1.56	1.75
BAC-6	4.12	134	694	0.582	7.65	1120	2980	<0.00200	0.0217	0.0235	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.25	<0.000150	0.0938	0.00229	<0.00200	0.14	1.02	1.02
BAC-7	4.36	130	709	1.09	7.74	1280	2760	<0.00200	0.0275	0.0204	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.269	<0.000150	0.0757	0.00541	<0.00200	0.06	0.87	0.93

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	< 0.500	123	873	0.499	7.62	209	2040	<0.00200	0.00839	0.0653	<0.00200	<0.000500	0.000602	<0.00400	<0.00200	0.254	<0.000150	0.00182	<0.00200	<0.00200	0.32	1.34	1.66
WW-U-1	1.19	289	1940	0.265	7.17	1140	5450	<0.00200	0.00477	0.0479	<0.00200	<0.000500	0.00124	<0.00400	<0.00200	0.443	<0.000150	0.00591	0.00663	<0.00200	0.23	1.49	1.72
WW-U-2	1.23	337	2130	1.01	7.3	985	5120	<0.00200	0.0102	0.0459	<0.00200	<0.000500	0.00137	<0.00400	<0.00200	0.508	<0.000150	0.00277	0.0112	<0.00200	0.05	0.93	0.93
WWC-1	8.22	504	4710	0.114	7.2	2730	11100	<0.00200	0.0173	0.0268	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.831	0.000168	0.00896	0.0139	<0.00200	0.25	1.16	1.16
WWC-2	< 0.500	50	340	0.358	7.91	119	852	<0.00200	0.0143	0.0338	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.11	<0.000150	0.00372	<0.00200	<0.00200	0.08	0.27	0.35
WWC-3	< 0.500	27.3	230	0.897	8.05	88.4	644	<0.00200	0.0226	0.0278	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.125	<0.000150	0.00527	<0.00200	<0.00200	-0.03	0.15	0.12
WWC-4	0.998	184	1080	0.435	7.43	620	2640	<0.00200	0.0129	0.0495	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.309	<0.000150	0.00215	0.00201	<0.00200	0.28	0.35	0.63
WWC-5	2.64	314	1820	0.219	7.26	1660	5200	<0.00200	0.0104	0.0327	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.472	<0.000150	0.00324	0.00395	<0.00200	0.1	1.58	1.58

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

Round 11 (all results ppm) Assessment Monitoring - October 8-18, 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	< 0.500	61.9	415	0.981	7.79	122	1060	<0.00200	0.029	0.0796	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.229	<0.000150	0.00383	<0.00200	<0.00200	0.09	0.32	0.41
CL-U-2	< 0.500	67.5	414	0.995	7.73	128	1010	<0.00200	0.0255	0.0919	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.212	<0.000150	0.00408	<0.00200	<0.00200	0.12	0.94	0.94
CLW-1	< 0.500	39.6	288	1.06	7.76	61.9	784	<0.00200	0.0298	0.0582	<0.00200	<0.000500	0.0157	<0.00400	<0.00200	0.194	<0.000150	0.00589	<0.00200	<0.00200	0.11	1.2	1.2
CLW-2	< 0.500	49.7	475	1.19	7.72	88.1	904	<0.00200	0.0244	0.0716	<0.00200	<0.000500	0.014	<0.00400	<0.00200	0.227	<0.000150	0.00593	<0.00200	<0.00200	0.17	0.39	0.56
CLW-3	< 0.500	42	325	1.27	7.79	95	888	<0.00200	0.0384	0.0941	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.217	<0.000150	0.0052	<0.00200	<0.00200	0.33	0.68	1.01
CLW-4	< 0.500	35.2	297	1.45	7.85	80.7	792	<0.00200	0.0375	0.0786	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.211	<0.000150	0.00525	<0.00200	<0.00200	1.89	0.65	1.89
CLW-5	< 0.500	36.9	320	1.7	7.72	85.3	852	<0.00200	0.0229	0.0714	<0.00200	<0.000500	0.00999	<0.00400	<0.00200	0.213	<0.000150	0.00679	<0.00200	<0.00200	1.87	0.17	1.87
CLW-6	< 0.500	33.8	292	1.6	7.82	73.3	804	<0.00200	0.0152	0.0873	<0.00200	<0.000500	0.0116	<0.00400	<0.00200	0.204	<0.000150	0.00746	<0.00200	<0.00200	0.18	0.41	0.59
CLW-7	< 0.500	46.5	399	1.02	7.65	73.2	780	<0.00200	0.0232	0.0491	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.19	<0.000150	0.00416	<0.00200	<0.00200	0.05	0.07	0.12
CLW-8	< 0.500	43	300	1.04	7.71	66.5	796	<0.00200	0.0254	0.0643	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.192	<0.000150	0.00503	<0.00200	<0.00200	0.19	1.2	1.2

Round 11

Landfill Wells	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
CL-U-1	17.4	7.85	-132	1800	40.9	0.61	1.15
CL-U-2	18.15	7.83	-97	1770	0	3.95	1.13
CLW-1	17.83	7.93	-114	1490	0	1.48	0.951
CLW-2	16.04	7.84	-184	1850	0.6	2.72	1.18
CLW-3	17.52	7.98	-178	1660	3.6	3.1	1.06
CLW-4	18.53	8.02	-192	1530	7.2	1.63	0.983
CLW-5	21	7.94	-175	1640	0	1.29	1.05
CLW-6	16.49	8.02	-210	1560	0	2.23	1
CLW-7	17.12	7.83	-81	1560	2.4	2.97	1
CLW-8	17.05	7.91	-130	1510	0	1.37	0.963

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	< 0.500	73.9	561	0.881	7.97	62.2	1050	<0.00200	0.0216	0.149	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.276	<0.000150	0.00237	<0.00200	<0.00200	0.44	0.74	1.18
BA-U-2	< 0.500	143	885	0.977	7.58	298	1750	<0.00200	0.0209	0.0728	<0.00200	<0.000500	0.0125	<0.00400	<0.00200	0.321	<0.000150	0.00574	<0.00200	<0.00200	0.22	0.62	0.84
BAC-1	4.87	225	1840	0.582	7.57	1760	6420	<0.00200	0.0129	0.0391	<0.00200	<0.000500	0.0184	<0.00400	<0.00200	0.629	<0.000150	0.0232	0.00818	<0.00200	0.45	0.88	1.33
BAC-2	9.98	255	1660	1.1	7.35	2730	7800	<0.00200	0.0565	0.0204	<0.00200	<0.000500	0.0111	<0.00400	<0.00200	0.472	<0.000150	0.156	0.0157	<0.00200	0.08	0.96	0.96
BAC-3	8.33	469	3280	1.63	7.31	4450	12300	<0.00200	0.0496	0.0317	<0.00200	<0.000500	0.00968	<0.00400	<0.00200	1.06	<0.000150	0.038	0.022	<0.00200	0.39	1.06	1.45
BAC-4	0.523	68.1	501	1.15	7.96	273	1300	<0.00200	0.00882	0.0171	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.267	<0.000150	0.017	<0.00200	<0.00200	-0.16	0.48	0.32
BAC-5	< 0.500	82.2	557	1.04	7.86	353	1460	<0.00200	0.0325	0.0714	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.323	<0.000150	0.0134	<0.00200	<0.00200	0.26	0.81	1.07
BAC-6	4.57	138	624	0.847	7.75	1080	2340	<0.00200	0.0248	0.0245	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.276	<0.000150	0.0842	<0.00200	<0.00200	0.17	1.02	1.19
BAC-7	4.24	143	649	1.51	7.75	1210	2830	<0.00200	0.0434	0.0214	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.303	<0.000150	0.075	0.00579	<0.00200	0.19	0.71	0.9

Bottom Ash	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
BA-U-1	16.4	7.71	-41	3010	0	0.7	1.94
BA-U-2	18.72	8.31	-138	2010	0	0.56	1.28
BAC-1	16.12	7.43	-228	9840	77.8	0.85	6.2
BAC-2	16.79	7.15	-22	11200	2.5	1.3	6.93
BAC-3	16.79	7.31	42	18300	7	5.15	11.3
BAC-4	15.08	7.77	-69	2500	0.2	0.61	1.6
BAC-5	16.95	7.88	-43	2860	0	0.52	1.83
BAC-6	17.13	7.74	-35	3970	0	0.49	2.54
BAC-7	17	7.76	-71	4420	1.9	0.48	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	< 0.500	139	805	0.533	7.63	394	1760	<0.00200	0.0103	0.0575	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.265	<0.000150	0.00241	<0.00200	<0.00200	0.07	0.85	0.85
WW-U-1	1.36	357	2150	0.41	7.28	1360	5090	<0.00200	<0.00200	0.0449	<0.00200	<0.000500	0.0258	<0.00400	<0.00200	0.456	<0.000150	0.0101	0.00682	<0.00200	0.43	1.2	1.63
WW-U-2	1.23	380	2160	0.604	7.31	1090	4570	<0.00200	0.0109	0.0446	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.519	<0.000150	0.00338	0.0105	<0.00200	0.14	0.83	0.83
WWC-1	12	607	4430	0.331	7.25	3210	13000	<0.00200	0.0243	0.0223	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.964	0.000312	0.00835	0.0145	<0.00200	0.15	1.2	1.35
WWC-2	< 0.500	59.5	344	0.448	7.85	139	832	<0.00200	0.0152	0.0344	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.124	<0.000150	0.00304	<0.00200	<0.00200	0.17	0.03	0.2
WWC-3	< 0.500	29.7	209	1.06	7.92	84.2	436	<0.00200	0.0247	0.0289	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.139	<0.000150	0.00482	<0.00200	<0.00200	0	0.76	0.76
WWC-4	1.34	219	1030	0.481	7.46	692	2880	<0.00200	0.0145	0.0507	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.36	<0.000150	<0.00200	<0.00200	<0.00200	0.03	0.8	0.83
WWC-5	3.07	364	1720	0.431	7.38	1620	5000	<0.00200	0.0131	0.034	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.523	<0.000150	0.0031	0.00478	<0.00200	0.2	-0.56	-0.36

Waste Water	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
SI-U-1	17.1	7.65	-6	3290	0	0.58	2.11
WW-U-1	16.29	7.25	-7	8350	0.6	0.87	5.27
WW-U-2	16.41	7.44	55	7730	0	1.5	4.87
WWC-1	16.6	7.11	40	19600	0	4.49	12.1
WWC-2	17.73	7.91	-84	1600	2.1	0.62	1.03
WWC-3	16.97	8.12	-179	1190	0.2	0.56	0.759
WWC-4	16.27	7.4	-32	4780	0.7	0.54	3.06
WWC-5	15.76	7.16	-11	7580	1	3.51	4.77

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	< 0.500	61.1	388	0.989	7.74	112	932	<0.00200	0.0279	0.0841	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.231	<0.000150	0.0036	<0.00200	<0.00200	0.13	0.4	0.53
CL-U-2	< 0.500	68.4	378	1.02	7.74	97.6	920	<0.00200	0.0254	0.0943	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.214	<0.000150	0.00405	<0.00200	<0.00200	0.31	0.94	1.25
CLW-1	< 0.500	39.4	303	1.12	7.88	64.5	692	<0.00200	0.002	0.0589	<0.00200	<0.000500	0.00742	<0.00400	<0.00200	0.203	<0.000150	0.00481	<0.00200	<0.00200	0	0.41	0.41
CLW-2	< 0.500	55.1	416	1.25	7.8	96.4	976	<0.00200	0.0259	0.0743	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.253	<0.000150	0.00423	<0.00200	<0.00200	0.21	0.75	0.96
CLW-3	< 0.500	44.5	351	1.34	7.83	98.4	884	<0.00200	0.0382	0.0970	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.243	<0.000150	0.00488	<0.00200	<0.00200	0.16	0.49	0.65
CLW-4	< 0.500	38.8	321	1.45	7.90	85.5	968	<0.00200	0.0376	0.0819	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.232	<0.000150	0.00425	<0.00200	<0.00200	0.47	0.54	1.01
CLW-5	< 0.500	38.5	340	1.85	7.93	85.6	936	<0.00200	0.0236	0.0707	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.226	<0.000150	0.00515	<0.00200	<0.00200	0.14	0.28	0.42
CLW-6	< 0.500	38.4	270	1.55	7.89	72.8	828	<0.00200	0.0271	0.0896	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.214	<0.000150	0.00478	<0.00200	<0.00200	0.2	0.78	0.98
CLW-7	< 0.500	51.3	336	1.07	7.76	68.9	792	<0.00200	0.0228	0.0511	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.205	<0.000150	0.00323	<0.00200	<0.00200	-0.09	0.54	0.45
CLW-8	< 0.500	44.3	317	1.11	7.81	67.2	776	<0.00200	0.0257	0.0621	<0.00200	<0.000500	0.00200	<0.00400	<0.00200	0.212	<0.000150	0.00358	<0.00200	<0.00200	0.27	0.22	0.49
CLW-9	< 0.500	26.2	298	2.02	7.91	86.4	760	<0.00200	0.0368	0.0462	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.168	<0.000150	0.00518	<0.00200	<0.00200	0.21	0.21	0.42
CL-U-3	< 0.500	59.6	390	0.872	7.83	114	984	<0.00200	0.0183	0.0495	<0.00200	<0.000500	0.00565	<0.00400	<0.00200	0.212	<0.000150	0.00372	<0.00200	<0.00200	0	0.48	0.48

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	< 0.500	174	934	0.919	7.61	271	2050	<0.00200	0.002	0.0776	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.354	<0.000150	0.00312	0.00458	<0.00200	0	0.4	0.4
BA-U-2	< 0.500	91.8	718	0.844	7.68	102	1350	<0.00200	0.0211	0.1670	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.300	<0.000150	0.0022	0.00234	<0.00200	0.18	0.62	0.8
BAC-1	1.31	72.4	431	0.197	8.42	404	1830	<0.00200	0.0121	0.0567	<0.00200	<0.000500	0.00359	<0.00400	<0.00200	0.172	<0.000150	0.142	0.00278	<0.00200	0.28	0.09	0.37
BAC-2	10.3	233	1700	1.11	7.2	2590	8310	<0.00200	0.0519	0.0180	<0.00200	<0.000500	0.00556	<0.00400	<0.00200	0.491	<0.000150	0.163	0.0145	<0.00200	0.17	0.48	0.65
BAC-3	8.64	417	3400	1.3	7.24	4090	12900	<0.00200	0.0472	0.0272	<0.00200	<0.000500	0.00593	<0.00400	<0.00200	1.030	0.000105	0.0388	0.0206	<0.00200	0.17	0.77	0.94
BAC-4	0.553	72.4	488	1.22	7.76	269	1270	<0.00200	0.0319	0.0641	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.281	<0.000150	0.0196	<0.00200	<0.00200	0.16	0.58	0.74
BAC-5	< 0.500	91.8	585	1.07	7.73	393	1540	<0.00200	0.0294	0.0594	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.334	<0.000150	0.0168	<0.00200	<0.00200	-0.1	0.27	0.17
BAC-6	4.4	137	536	0.866	7.84	963	2260	<0.00200	0.0248	0.0206	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.283	<0.000150	0.0923	<0.00200	<0.00200	-0.09	-0.38	-0.47
BAC-7	5.17	142	529	1.34	7.72	985	2760	<0.00200	0.0298	0.0184	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.284	<0.000150	0.0908	0.00388	<0.00200	0.09	0.34	0.43
BAC-8	< 0.500	27.8	266	1.61	7.92	81.1	708	<0.00200	0.0519	0.0732	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.165	<0.000150	0.0055	<0.00200	<0.00200	0.31	0.41	0.72
BAC-9	< 0.500	28.4	283	1.7	7.91	82.6	736	<0.00200	0.583	0.051	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.167	<0.000150	0.00451	<0.00200	<0.00200	0.06	0.53	0.59
BAC-10	< 0.500	31.1	273	1.66	7.91	85	788	<0.00200	0.0527	0.0612	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.171	<0.000150	0.00567	<0.00200	<0.00200	0.15	0.5	0.65

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	< 0.500	147	744	0.519	7.59	263	1840	<0.00200	0.00927	0.0634	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.271	<0.000150	0.00206	<0.00200	<0.00200	0.27	0.59	0.86
WW-U-1	1.39	323	1820	0.416	7.27	1140	5120	<0.00200	0.00592	0.0442	<0.00200	<0.000500	0.00432	<0.00400	<0.00200	0.431	<0.000150	0.00702	0.00748	<0.00200	0.38	0.89	1.27
WW-U-2	1.16	347	1170	0.633	7.45	872	4270	<0.00200	0.0114	0.0473	<0.00200	<0.000500	0.00237	<0.00400	<0.00200	0.484	<0.000150	0.00411	0.0113	<0.00200	0.19	0.54	0.73
WWC-1	12.9	584	4600	0.245	7.1	3190	13800	<0.00200	0.0215	0.0183	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	1.000	0.00018	0.00794	0.0146	<0.00200	0.13	0.82	0.95
WWC-2	< 0.500	54.2	316	0.534	7.75	128	824	<0.00200	0.0161	0.0296	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.128	<0.000150	0.00348	<0.00200	<0.00200	-0.06	0.5	0.44
WWC-3	< 0.500	35.3	244	1.14	7.79	86	764	<0.00200	0.0226	0.0306	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.151	<0.000150	0.00471	<0.00200	<0.00200	0.06	0.38	0.44
WWC-4	1.34	240	1030	0.449	7.97	673	2780	<0.00200	0.0133	0.0412	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.388	<0.000150	<0.00200	<0.00200	<0.00200	-0.03	0.56	0.53

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

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	< 0.500	58.9	432	0.753	7.94	109	976	<0.00200	0.0289	0.0799	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.239	<0.000150	0.0035	<0.00200	<0.00200	0.03	0.75	0.75
CL-U-2	< 0.500	60.6	424	0.792	7.87	112	968	<0.00200	0.0251	0.0935	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.229	<0.000150	0.00412	<0.00200	<0.00200	0.03	0.57	0.6
CLW-1	< 0.500	36	328	1.11	8.03	69.1	852	<0.00200	0.0295	0.0612	<0.00200	<0.000500	0.00742	<0.00400	<0.00200	0.187	<0.000150	0.00357	<0.00200	<0.00200	0.29	0.38	0.67
CLW-2	< 0.500	50.8	438	1.13	8.15	88.1	924	<0.00200	0.0283	0.1510	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.253	<0.000150	0.0102	<0.00200	<0.00200	0.08	0.56	0.64
CLW-3	< 0.500	47	363	1.24	7.99	90.8	828	<0.00200	0.039	0.0976	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.242	<0.000150	0.00504	<0.00200	<0.00200	0.6	0.43	1.03
CLW-4	< 0.500	34.6	332	1.55	7.97	75.6	768	<0.00200	0.0387	0.0797	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.235	<0.000150	0.00441	<0.00200	<0.00200	0.22	1.06	1.06
CLW-5	< 0.500	37.5	351	1.89	8	76.9	1060	<0.00200	0.0231	0.0685	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.237	<0.000150	0.00479	<0.00200	<0.00200	0.25	0.44	0.69
CLW-6	< 0.500	34.5	330	1.7	7.98	74.4	1110	<0.00200	0.0145	0.0936	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.239	<0.000150	0.00607	<0.00200	<0.00200	0.42	1.05	1.47
CLW-7	< 0.500	43.7	362	1	7.89	71.4	796	<0.00200	0.0238	0.0523	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.192	<0.000150	0.00402	<0.00200	<0.00200	0.12	-0.03	0.09
CLW-8	< 0.500	39.9	337	1.04	7.98	70.7	836	<0.00200	0.0266	0.0521	<0.00200	<0.000500	0.00000	<0.00400	<0.00200	0.196	<0.000150	0.00449	<0.00200	<0.00200	-0.05	0.32	0.27
CLW-9	< 0.500	26.9	288	1.94	8.12	88.7	792	<0.00200	0.0398	0.0469	<0.00200	<0.000500	0.00287	<0.00400	<0.00200	0.181	<0.000150	0.00573	<0.00200	<0.00200	0.36	0.02	0.38
CL-U-3	< 0.500	64.6	304	0.429	8.85	168	596	<0.00200	<0.00200	0.0342	<0.00200	<0.000500	0.0738	<0.00400	<0.00200	0.152	<0.000150	0.00964	<0.00200	<0.00200	2.13	0.21	2.13

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	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	< 0.500	173	1140	0.587	7.71	314	2290	<0.00200	0.0223	0.0770	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.385	<0.000150	0.00302	0.00502	<0.00200	0.16	0.73	0.73
BA-U-2	< 0.500	47.1	400	0.893	8.18	56.6	972	<0.00200	0.0283	0.1270	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.247	<0.000150	0.00332	<0.00200	<0.00200	0.26	0.7	0.96
BAC-1	1.43	93.7	801	0.307	8.16	701	2730	<0.00200	0.0126	0.0460	<0.00200	<0.000500	0.00163	<0.00400	<0.00200	0.259	<0.000150	0.128	0.00436	<0.00200	0	0.14	0.14
BAC-2	9.49	208	1730	1.07	7.45	2760	7240	<0.00200	0.0647	0.0192	<0.00200	<0.000500	0.0058	<0.00400	<0.00200	0.466	0.00028	0.19	0.0145	<0.00200	0.12	0.39	0.51
BAC-3	7.32	441	3500	0.675	7.49	4310	13900	0.0027	0.0356	0.0321	<0.00200	<0.000500	0.00449	<0.00400	<0.00200	0.957	<0.000150	0.0255	0.0236	<0.00200	0	0.45	0.45
BAC-4	0.606	66.7	573	1.13	7.95	330	1820	<0.00200	0.0322	0.0637	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.279	<0.000150	0.0218	<0.00200	<0.00200	0.15	0.16	0.31
BAC-5	< 0.500	66.2	568	1.11	8.07	250	1410	<0.00200	0.0321	0.0814	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.289	<0.000150	0.00941	<0.00200	<0.00200	0.25	0.36	0.61
BAC-6	2.66	119	625	0.796	7.86	646	1870	<0.00200	0.0223	0.0338	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.288	<0.000150	0.0651	0.00273	<0.00200	0.31	0.83	1.14
BAC-7	5.06	107	566	1.31	7.96	1170	2320	<0.00200	0.0314	0.0174	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.248	<0.000150	0.0887	0.00276	<0.00200	0.04	0.22	0.26
BAC-8	< 0.500	23.2	280	1.53	8.05	95.5	784	<0.00200	0.0639	0.0389	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.156	<0.000150	0.00545	<0.00200	<0.00200	0.03	1.21	1.21
BAC-9	< 0.500	27.1	299	1.45	8.06	87.6	788	<0.00200	0.0593	0.0388	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.16	<0.000150	0.00483	<0.00200	<0.00200	0.09	0	0.53
BAC-10	< 0.500	25.7	280	1.51	8.09	87.4	808	<0.00200	0.0595	0.045	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.16	<0.000150	0.00584	<0.00200	<0.00200	0.8	1	1.8

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	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	< 0.500	136	824	0.38	7.71	281	1850	<0.00200	0.00981	0.0599	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.277	<0.000150	<0.00200	<0.00200	<0.00200	0.19	1.61	1.61
WW-U-1	1.41	311	1010	<0.100	7.37	588	5720	<0.00200	0.00594	0.0419	<0.00200	<0.000500	0.00166	<0.00400	<0.00200	0.485	<0.000150	0.00689	0.0077	<0.00200	-0.08	1.42	1.42
WW-U-2	1.02	346	2020	<0.100	7.3	855	4400	<0.00200	0.00735	0.0499	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.54	<0.000150	0.00317	0.011	<0.00200	-0.2	1.36	1.36
WWC-1	13.2	473	4940	0.292	7.42	3570	14900	<0.00200	0.0264	0.0205	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.974	0.000278	0.0113	0.016	<0.00200	0.23	0.9	0.9
WWC-2	< 0.500	57.6	349	0.427	7.99	141	876	<0.00200	0.0166	0.0336	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.126	<0.000150	0.00327	<0.00200	<0.00200	-0.15	0.81	0.81
WWC-3	< 0.500	33.3	262	0.986	8.13	95.3	776	<0.00200	0.0236	0.0331	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.151	<0.000150	0.00477	<0.00200	<0.00200	3.1	0.58	3.1
WWC-4	1.06	176	968	0.453	7.61	594	3080	<0.00200	0.0154	0.0456	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.329	<0.000150	<0.00200	0.00177	<0.00200	0.72	0.57	1.29

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

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	< 0.500	57.6	429	0.979	7.70	122	916	<0.00200	0.0310	0.0800	<0.00200	<0.000500	0.00551	<0.00400	<0.00200	0.241	<0.000150	0.00505	<0.00200	<0.00200	0.36	0.93	1.29
CL-U-2	< 0.500	60.0	408	1.01	7.68	118	964	<0.00200	0.0266	0.0901	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.221	<0.000150	0.00404	<0.00200	<0.00200	0.09	1.23	1.23
CLW-1	< 0.500	36.6	304	0.979	7.91	61.0	856	<0.00200	0.0300	0.0612	<0.00200	<0.000500	0.00551	<0.00400	<0.00200	0.172	<0.000150	0.00527	<0.00200	<0.00200	0.25	0.12	0
CLW-2	< 0.500	47.0	418	1.23	7.84	86.0	992	<0.00200	0.0258	0.0770	<0.00200	<0.000500	0.00337	<0.00400	<0.00200	0.212	0.000278	0.00556	<0.00200	<0.00200	0.03	0.54	0
CLW-3	< 0.500	39.4	361	1.27	7.88	101	488	<0.00200	0.0387	0.0991	<0.00200	<0.000500	0.00251	<0.00400	<0.00200	0.206	<0.000150	0.00560	<0.00200	<0.00200	0.20	-0.04	0
CLW-4	< 0.500	33.6	323	1.34	7.88	85.5	960	<0.00200	0.0381	0.0822	<0.00200	<0.000500	0.00245	<0.00400	<0.00200	0.204	<0.000150	0.00508	<0.00200	<0.00200	-0.03	0.47	0
CLW-5	< 0.500	34.5	340	1.58	7.86	83.9	800	<0.00200	0.0227	0.0737	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.198	<0.000150	0.00585	<0.00200	<0.00200	0.15	0.62	0
CLW-6	< 0.500	33.0	312	1.48	7.94	81.2	544	<0.00200	0.0225	0.0878	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.203	<0.000150	0.00540	<0.00200	<0.00200	0.43	-0.06	0
CLW-7	< 0.500	44.3	329	1.03	7.79	60.5	1020	<0.00200	0.0242	0.0526	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.180	<0.000150	0.00392	<0.00200	<0.00200	0.20	-0.08	0
CLW-8	< 0.500	40.8	316	1.03	7.86	63.7	880	<0.00200	0.0267	0.0634	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.182	<0.000150	0.00400	<0.00200	<0.00200	0.12	0.12	0
CLW-9	< 0.500	25.2	296	1.90	7.96	83.5	932	<0.00200	0.0402	0.0499	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.170	<0.000150	0.00597	<0.00200	<0.00200	0.15	0.32	0
CL-U-3	< 0.500	57.7	386	0.889	7.75	116	1090	<0.00200	0.0206	0.0478	<0.00200	<0.000500	0.00553	<0.00400	<0.00200	0.205	<0.000150	0.00467	<0.00200	<0.00200	-0.06	0.95	0.95

Round 14

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	< 0.500	188	1090	0.817	7.50	367	3050	<0.00200	0.0226	0.0774	<0.00200	<0.000500	0.0711	<0.00400	<0.00200	0.375	<0.000150	0.0152	0.00519	<0.00200	0.28	1.20	1.2
BA-U-2	< 0.500	2.47	395	0.912	10.70	42.7	872	<0.00200	0.00683	0.0804	<0.00200	<0.000500	0.00611	<0.00400	<0.00200	0.327	<0.000150	0.00629	<0.00200	<0.00200	-0.03	0.70	0
BAC-1	3.00	239	1890	0.645	7.39	1300	5270	<0.00200	0.0154	0.0340	<0.00200	<0.000500	0.00219	<0.00400	<0.00200	0.547	<0.000150	0.0170	0.00791	<0.00200	0.09	0.83	0.83
BAC-2	8.38	210	1710	1.16	7.27	2440	6380	<0.00200	0.0609	0.0206	<0.00200	<0.000500	0.00986	<0.00400	<0.00200	0.431	0.000192	0.172	0.0128	<0.00200	0.33	1.21	1.21
BAC-3	7.47	447	3620	1.26	7.21	4380	12500	<0.00200	0.0321	0.0284	<0.00200	<0.000500	0.0150	<0.00400	<0.00200	0.913	<0.000150	0.0251	0.0204	<0.00200	0.16	0.51	0
BAC-4	0.613	70.5	541	1.09	7.89	295	1540	<0.00200	0.0330	0.0649	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.272	<0.000150	0.0211	<0.00200	<0.00200	-0.06	0.17	0
BAC-5	0.547	83.5	552	0.991	7.79	416	1760	<0.00200	0.0297	0.0560	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.306	<0.000150	0.0242	<0.00200	<0.00200	0.03	0.22	0
BAC-6	4.02	115	560	0.847	7.74	1020	2340	<0.00200	0.0255	0.0215	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.242	0.000278	0.0805	<0.00200	<0.00200	0.14	0.52	0
BAC-7	5.48	92.6	532	1.48	7.91	1090	2400	<0.00200	0.0350	0.0168	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.218	<0.000150	0.0805	0.00202	<0.00200	0.21	0.25	0
BAC-8	< 0.500	25.4	264	1.61	7.97	84.4	784	<0.00200	0.0596	0.0370	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.183	<0.000150	0.00581	<0.00200	<0.00200	0	0.16	0
BAC-9	< 0.500	31.4	305	1.47	7.94	77.5	824	<0.00200	0.0488	0.0400	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.185	<0.000150	0.00487	<0.00200	<0.00200	0.09	0.29	0
BAC-10	0.571	26.1	278	1.62	7.95	84.0	804	<0.00200	0.0531	0.0381	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.171	<0.000150	0.00617	<0.00200	<0.00200	0.22	0.19	0
BAC-11	< 0.500	84.4	676	0.984	7.71	147	1100	<0.00200	0.0312	0.1160	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.244	<0.000150	0.00345	<0.00200	<0.00200	0.36	0.09	0
BAC-12	< 0.500	25.9	210	1.24	7.99	71.7	360	<0.00200	0.0423	0.0938	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.132	<0.000150	0.00479	<0.00200	<0.00200	0.23	0.18	0
BAC-13	0.604	115	929	0.957	7.50	276	46400	<0.00200	0.0329	0.0773	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.285	<0.000150	0.00250	<0.00200	<0.00200	0.35	0.55	0
BAC-14	0.565	158	940	0.972	7.53	432	1180	<0.00200	0.0359	0.0542	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.321	<0.000150	0.00222	<0.00200	<0.00200	0.03	0.08	0
BAC-15	< 0.500	26.2	263	1.75	8.01	78.9	600	<0.00200	0.0539	0.0395	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.172	<0.000150	0.00827	<0.00200	<0.00200	0.08	0.18	0
BAC-16	< 0.500	24.2	304	1.89	8.15	77.8	900	<0.00200	0.0783	0.0346	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.183	<0.000150	0.00732	<0.00200	<0.00200	0.20	0.22	0

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	14.78	7.54	68	1510	0.8	0.89	0.969
BAC-9	15.30	7.55	-28	1590	2.4	1.12	1.02
BAC-10	15.23	7.60	-50	1540	3.2	0.92	0.991
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

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	< 0.500	113	699	0.511	7.70	279	1230	<0.00200	0.00865	0.0609	<0.00200	<0.000500	0.00305	<0.00400	<0.00200	0.239	<0.000150	0.00280	<0.00200	<0.00200	0.20	1.04	1.04
WW-U-1	1.42	286	1940	0.324	7.24	1270	4740	<0.00200	0.00653	0.0391	<0.00200	<0.000500	0.00544	<0.00400	<0.00200	0.412	<0.000150	0.00811	0.00724	<0.00200	0.21	1.38	1.38
WW-U-2	1.23	337	2020	0.473	7.42	981	4020	<0.00200	0.0108	0.0502	<0.00200	<0.000500	0.00696	<0.00400	<0.00200	0.498	<0.000150	0.00309	0.0112	<0.00200	0	1.08	1.08
WWC-1	13.4	464	4800	<0.100	7.29	3440	13000	<0.00200	0.0256	0.0207	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.936	0.000238	0.0136	0.0133	<0.00200	0.32	0.36	0
WWC-2	< 0.500	51.7	322	0.452	7.88	124	644	<0.00200	0.0159	0.0357	<0.00200	<0.000500	0.00332	<0.00400	<0.00200	0.119	<0.000150	0.00455	<0.00200	<0.00200	0.24	-0.15	0
WWC-3	< 0.500	31.8	254	1.06	7.96	85.8	712	<0.00200	0.0219	0.0304	<0.00200	<0.000500	0.00240	<0.00400	<0.00200	0.142	<0.000150	0.00536	<0.00200	<0.00200	-0.08	0.19	0
WWC-4	1.20	182	935	0.426	7.44	638	2730	<0.00200	0.0140	0.0437	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.314	<0.000150	0.00207	0.00228	<0.00200	0.47	0.27	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

Round 15 (all results ppm) Assessment Monitoring - October 6 - November 12, 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	< 0.500	56.7	423	1.23	8.02	118	1050	<0.00400	0.0367	0.0866	<0.00200	<0.000500	0.00537	<0.00400	<0.00200	0.227	<0.000150	0.00422	<0.00200	<0.00200	0.73	0.54	0
CL-U-2	< 0.500	59.3	408	1.09	7.98	123	1600	<0.00400	0.0278	0.0991	<0.00200	<0.000500	0.00613	<0.00400	<0.00200	0.21	<0.000150	0.00461	<0.00200	<0.00200	0.03	0.81	0.81
CLW-1	< 0.500	34.8	305	1.15	8.06	64.4	972	<0.00400	0.0340	0.0640	<0.00200	<0.000500	0.00814	<0.00400	<0.00200	0.183	<0.000150	0.00407	<0.00200	<0.00200	0.14	0.61	0
CLW-2	< 0.500	44.4	432	1.26	8.10	95.5	1040	<0.00400	0.0299	0.0825	<0.00200	<0.000500	0.00576	<0.00400	<0.00200	0.218	<0.000150	0.00482	<0.00200	<0.00200	0.10	0.66	0
CLW-3	< 0.500	37.1	356	1.57	8.04	103	904	<0.00400	0.0426	0.1040	<0.00200	<0.000500	0.00346	<0.00400	<0.00200	0.208	<0.000150	0.00554	<0.00200	<0.00200	0.31	1.71	2.02
CLW-4	< 0.500	30.8	316	1.69	8.14	85.8	844	<0.00400	0.0444	0.0837	<0.00200	<0.000500	0.00336	<0.00400	<0.00200	0.203	<0.000150	0.00519	<0.00200	<0.00200	0.15	0.52	0
CLW-5	< 0.500	32.6	345	2.03	8.11	88.5	952	<0.00400	0.0253	0.0740	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.202	<0.000150	0.00503	<0.00200	<0.00200	-0.05	1.07	1.07
CLW-6	< 0.500	30.7	320	1.84	8.13	83.5	884	<0.00400	0.0173	0.0985	<0.00200	<0.000500	0.00335	<0.00400	<0.00200	0.197	<0.000150	0.00645	<0.00200	<0.00200	0.04	0.76	0
CLW-7	< 0.500	41.7	338	1.24	8.04	70.4	880	<0.00400	0.0270	0.0558	<0.00200	<0.000500	0.00421	<0.00400	<0.00200	0.185	<0.000150	0.00348	<0.00200	<0.00200	0.09	0.66	0
CLW-8	< 0.500	38.4	315	1.13	7.99	68.3	872	<0.00400	0.0297	0.0666	<0.00200	<0.000500	0.00463	<0.00400	<0.00200	0.185	<0.000150	0.00377	<0.00200	<0.00200	0.26	0.75	0
CLW-9	2	36.1	287	1.37	8.09	80.7	832	<0.00400	0.0411	0.0489	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	1.230	<0.000150	0.0059	<0.00200	<0.00200	0.16	0.51	0
CL-U-3	< 0.500	56.3	374	1.08	7.89	115	1080	<0.00400	0.0202	0.0509	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.223	<0.000150	0.00351	<0.00200	<0.00200	0.10	1.1	1.1

Landfill Wells	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
CL-U-1	16.7	7.39	-168	1980	3.2	0.21	1.27
CL-U-2	16.77	7.3	-109	1920	0.8	3.13	1.23
CLW-1	17.12	7.41	-17	1560	1.1	2.97	1.00
CLW-2	17.25	7.56	-194	1980	0.9	0.18	1.26
CLW-3	17.34	7.6	-243	1770	1.8	4.44	1.14
CLW-4	16.23	7.53	-238	1660	1.6	0.23	1.06
CLW-5	16.56	7.49	-219	1760	4.9	0.30	1.13
CLW-6	16.65	7.62	-254	1640	2.0	0.34	1.05
CLW-7	16.77	7.43	-68	1660	1.5	2.14	1.06
CLW-8	16.98	-72	7.47	1580	1.7	2.39	1.01
CLW-9	14.93	7.62	-265	1570	1.4	0.26	1.01
CL-U-3	15.72	7.36	-496	1900	1.7	2.81	1.21

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	< 0.500	209	1220	1.1	7.59	510	2660	<0.00400	0.0223	0.0668	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.44	<0.0000900	0.00274	0.00518	<0.00200	0.10	1.28	1.28
BA-U-2	< 0.500	86.8	691	0.844	7.62	86.3	1780	<0.00400	0.0222	0.1470	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.321	<0.0000900	0	0.00227	<0.00200	0.13	0.88	0.88
BAC-1	2.28	177	1240	0.687	7.16	1010	3510	<0.00400	0.2	0.0528	<0.00200	<0.000500	0.00365	<0.00400	<0.00200	0.34	<0.0000900	0.0979	0.00798	<0.00200	0.08	1	1
BAC-2	7.08	205	1840	1.2	7.27	2670	6940	<0.00400	0.0632	0.0230	<0.00200	<0.000500	0.00573	<0.00400	<0.00200	0.436	<0.0000900	0.182	0.0137	<0.00200	0.02	1.27	1.27
BAC-3	7.17	410	3790	1.56	7.25	4940	13800	<0.00400	0.0398	0.0300	<0.00200	<0.000500	0.0055	<0.00400	<0.00200	0.996	<0.0000900	0.0311	0.0222	<0.00200	0.02	0.83	0.83
BAC-4	0.913	70.2	506	1.33	8.01	327	3500	<0.00400	0.0342	0.0656	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.29	<0.0000900	0.0262	<0.00200	<0.00200	-0.06	0.56	0
BAC-5	0.677	83.7	552	1.2	7.99	451	1030	<0.00400	0.0322	0.0556	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.329	<0.0000900	0.0276	<0.00200	<0.00200	0.07	0.6	0
BAC-6	4.26	115	507	1.09	7.88	958	1480	<0.00400	0.0270	0.0187	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.26	<0.0000900	0.0772	<0.00200	<0.00200	0.12	0.7	0
BAC-7	6.05	90.1	560	2.28	8.05	1110	2220	<0.00400	0.0418	0.0192	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.236	<0.0000900	0.0691	0.00239	<0.00200	0.21	1.21	1.42
BAC-8	< 0.500	24.1	254	1.63	7.99	91.9	724	<0.00400	0.0619	0.0368	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.154	<0.0000900	0.00644	<0.00200	<0.00200	0.04	1.16	1.16
BAC-9	< 0.500	30.6	298	1.44	7.95	100	744	<0.00400	0.0504	0.0427	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.16	<0.0000900	0.0045	<0.00200	<0.00200	-0.06	0.63	0
BAC-10	< 0.500	25.6	256	1.63	7.99	82.6	836	<0.00400	0.0559	0.0373	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.154	<0.0000900	0.00581	<0.00200	<0.00200	0	0.01	0
BAC-11	< 0.500	78.6	742	1.17	7.76	168	1490	<0.00400	0.0338	0.1270	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.237	<0.0000900	0.00314	<0.00200	<0.00200	0.13	0.61	0
BAC-12	< 0.500	30.9	291	1.45	7.92	77.8	832	<0.00400	0.0474	0.0983	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.15	<0.0000900	0.00454	<0.00200	<0.00200	-0.06	0.28	0
BAC-13	0.613	111	973	1.1	7.62	326	1980	<0.00400	0.0351	0.0613	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.278	<0.0000900	<0.00200	<0.00200	<0.00200	0	0.90	0.9
BAC-14	0.55	147	1040	1.05	7.50	465	2540	<0.00400	0.0313	0.0519	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.331	<0.0000900	0	<0.00200	<0.00200	0.19	0.47	0
BAC-15	< 0.500	25.5	248	1.76	7.89	79.5	720	<0.00400	0.0573	0.0399	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.147	<0.0000900	0.00707	<0.00200	<0.00200	0.04	0.30	0
BAC-16	< 0.500	23.1	477	1.88	8.00	206	730	<0.00400	0.0847	0.0354	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.167	<0.0000900	0.00651	<0.00200	<0.00200	0.04	0.70	0
BAC-17	< 0.500	24.1	123	0.799	8.16	99.6	400	<0.00400	0.0321	0.0316	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	<0.100	<0.0000900	0.00421	<0.00200	<0.00200	0	0.47	0
BAC-18	< 0.500	23.8	177	1.38	8.05	88.3	672	<0.00400	0.044	0.0618	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.109	<0.0000900	0.00544	<0.00200	<0.00200	0.04	0.36	0
BAC-19	< 0.500	28.4	238	1.27	7.93	86.7	768	<0.00400	0.0436	0.0471	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.124	<0.0000900	0.00432	<0.00200	<0.00200	0.06	0.46	0
BAC-20	< 0.500	26	178	1.12	8.08	88.2	720	<0.00400	0.0373	0.0604	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	<0.100	<0.0000900	0.00452	<0.00200	<0.00200	-0.06	0.92	0.92
BAC-21	< 0.500	29.1	233	1.3	8.04	81.5	776	<0.00400	0.0431	0.0822	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.128	<0.0000900	0.00429	<0.00200	<0.00200	0.05	0.81	0.81
BAC-22	< 0.500	27.7	221	1.34	7.97	93	780	<0.00400	0.0487	0.0344	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.13	<0.0000900	0.0047	<0.00200	<0.00200	0.16	2.03	2.03
BAC-23	< 0.500	29.2	226	1.24	7.95	89.9	628	<0.00400	0.0414	0.0430	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.117	<0.0000900	0.00419	<0.00200	<0.00200	0	2.48	2.48
BAC-24	< 0.500	28.9	260	1.52	7.89	79.3	724	<0.00400	0.0511	0.0642	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.15	<0.0000900	0.00415	<0.00200	<0.00200	-0.07	1.61	1.61
BAC-25	< 0.500	28	193	1.17	7.86	75.1	636	<0.00400	0.0335	0.1070	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.112	<0.0000900	0.00466	<0.00200	<0.00200	-0.15	1.91	1.91
BAC-26	< 0.500	20.8	200	1.89	7.97	64.5	628	<0.00400	0.0534	0.0777	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.131	<0.0000900	0.00494	<0.00200	<0.00200	0.12	1.15	1.15
BAC-27	< 0.500	25	266	1.68	7.93	65.6	864	<0.00400	0.0508	0.0790	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.152	<0.0000900	0.00514	<0.00200	<0.00200	-0.06	0.91	0.91
BAC-28	< 0.500	26.2	270	1.56	7.92	63.7	816	<0.00400	0.0487	0.0791	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.161	<0.0000900	0.00477	<0.00200	<0.00200	-0.04	1.72	1.72
BAC-29	< 0.500	62.3	581	1.22	7.74	145	1550	<0.00400	0.0351	0.0729	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.234	<0.0000900	0.00346	<0.00200	<0.00200	-0.03	1.24	1.24
BAC-30	< 0.500	57.3	553	1.21	7.78	134	1300	<0.00400	0.0385	0.0844	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.218	<0.0000900	0.00396	<0.00200	<0.00200	0.03	1.3	1.3
BAC-31	< 0.500	45.1	448	1.31	7.80	101	920	<0.00400	0.0397	0.0824	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.193	<0.0000900	0.0043	<0.00200	<0.00200	0	1.52	1.52
BAC-32	< 0.500	24.2	242	1.64	7.99	59.2	768	<0.00400	0.0461	0.0926	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.155	<0.0000900	0.00539	<0.00200	<0.00200	0.03	0.92	0.92
BAC-33	< 0.500	26.4	265	1.6	7.90	69.5	812	<0.00400	0.0509	0.1080	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.154	<0.0000900	0.00728	<0.00200	<0.00200	0.10	1.05	1.05
BAC-34	< 0.500	20.9	209	1.7	8.05	60.9	744	<0.00400	0.0542	0.0678	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.144	<0.0000900	0.00476	<0.00200	<0.00200	0.23	1.22	1.22
BAC-35	< 0.500	23.5	234	1.66	8.00	69.4	724	<0.00400	0.0556	0.0744	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.151	<0.0000900	0.00509	<0.00200	<0.00200	0.32	1.15	1.47
BAC-36	< 0.500	25.5	198	1.28	8.10	90.4	688	<0.00400	0.041	0.0810	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.109	<0.0000900	0.00502	<0.00200	<0.00200	0.25	0.33	0
BAC-37	< 0.500	24.4	176	1.27	8.04	89.5	668	<0.00400	0.0423	0.0541	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.103	<0.0000900	0.00511	<0.00200	<0.00200	-0.06	1.22	1.22
BAC-38	< 0.500	30.1	247	1.29	8.06	87.4	844	<0.00400	0.0361	0.0653	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.124	<0.0000900	0.00523	<0.00200	<0.00200	-0.03	1.12	1.12

Bottom Ash	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
BA-U-1	17.46	7.25	-37	4770	1.4	2.35	3.05
BA-U-2	16.52	7.45	-118	2730	0.0	0.39	1.75
BAC-1	17.54	6.80	-175	5330	1.5	0.29	3.36
BAC-2	19.40	7.14	-2	9990	7.6	6.61	6.29
BAC-3	17.87	7.13	-26	17200	1.9	4.81	10.7
BAC-4	18.04	7.59	-80	2680	1.4	0.16	1.71
BAC-5	17.47	7.58	-89	2950	0.7	0.14	1.89
BAC-6	15.98	7.44	-92	3720	3.3	0.18	2.38
BAC-7	17.02	7.71	-125	4120	2.7	0.87	2.64
BAC-8	14.65	7.66	7	1580	1.5	0.82	1.01
BAC-9	14.76	7.66	16	1690	2.0	1.31	1.08
BAC-10	14.79	7.70	17	1600	2.0	0.98	1.03
BAC-11	15.23	7.38	98	3050	2.7	7.47	1.95
BAC-12	15.06	7.36	125	1590	2.8	3.03	1.02
BAC-13	14.35	7.24	5	4190	4.0	1.29	2.69
BAC-14	15.80	7.38	46	4360	1.1	0.83	2.79
BAC-15	14.66	7.69	9	1570	6.6	1.37	1.01
BAC-16	14.40	7.60	15	1750	1.3	1.98	1.12
BAC-17	15.16	7.73	-102	0.907	2.6	0.20	0.58
BAC-18	15.29	7.56	-193	1230	2.2	4.38	0.789
BAC-19	15.26	7.61	-109	1420	1.8	1.05	0.909
BAC-20	15.21	7.32	-102	1150	0.0	3.21	0.737
BAC-21	15.61	7.58	-103	1390	0.8	6.18	0.89
BAC-22	16.07	7.57	-27	1380	1.2	1.62	0.883
BAC-23	15.93	7.56	-57	1360	0.3	0.16	0.868
BAC-24	15.25	7.60	-73	1540	1.2	5.00	0.987
BAC-25	15.31	7.25	-198	1220	0.0	0.33	0.783
BAC-26	15.68	7.59	-185	1290	1.3	0.14	0.826
BAC-27	15.77	7.61	-141	1500	1.9	0.12	0.96
BAC-28	15.8	7.63	-67	1570	1.3	0.13	1
BAC-29	15.64	7.58	-76	2680	1.3	0.11	1.72
BAC-30	16	7.58	-87	2500	1.4	0.11	1.6
BAC-31	15.71	7.59	-70	2120	1.3	0.19	1.36
BAC-32	15.5	7.45	-208	1400	0.0	0.2	0.893
BAC-33	16.27	7.37	-190	1430	0.0	0.18	0.917
BAC-34	15.36	7.47	-80	1280	0.0	5.29	0.818
BAC-35	16.15	7.41	-76	1350	0.0	0.17	0.864
BAC-36	15.88	7.48	-173	1200	0.0	2.79	0.767
BAC-37	15.18	7.47	-190	1170	0.0	6.89	0.746
BAC-38	15.42	7.60	-86	1440	2.5	0.34	0.923

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	< 0.500	90.5	512	0.779	7.69	366	1650	<0.00400	0.0123	0.0465	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.236	<0.0000900	0.00000	<0.00200	<0.00200	-0.02	1.47	1.47
WW-U-1	1.35	268	1860	0.444	7.48	1310	5280	<0.00400	0.00635	0.0381	<0.00200	<0.000500	0.00275	<0.00400	<0.00200	0.488	<0.0000900	0.00732	0.00717	<0.00200	0.25	1.1	1.1
WW-U-2	1.35	314	1860	0.67	7.47	1080	4780	<0.00400	0.0135	0.0497	<0.00200	<0.000500	0.00224	<0.00400	<0.00200	0.587	<0.0000900	0.00211	0.0107	<0.00200	0.12	1.31	1.31
WWC-1	13.9	508	4860	0.274	7.35	3680	13600	<0.00400	0.0264	0.0226	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	1.110	0.000212	0.0127	0.0139	<0.00200	0.10	1.83	1.83
WWC-2	< 0.500	57.2	347	0.506	8.08	133	920	<0.00400	0.016	0.0357	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.133	<0.0000900	0.00364	<0.00200	<0.00200	0.03	1.03	1.03
WWC-3	< 0.500	31	239	1.28	8.09	88	700	<0.00400	0.0235	0.0312	<0.00200	<0.000500	0.00000	<0.00400	<0.00200	0.152	<0.0000900	0.00486	<0.00200	<0.00200	0.06	0.96	0.96
WWC-4	1.40	204	1100	0.524	7.65	835	2820	<0.00400	0.0161	0.0489	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.374	<0.0000900	0	0.00229	<0.00200	0.06	0.58	0

Waste Water	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
SI-U-1	15.97	7.46	-10	2530	0.00	1.76	1.62
WW-U-1	16.15	7.14	-13	7490	0.00	1.95	4.72
WW-U-2	14.69	7.19	1	7140	0.00	2.32	4.5
WWC-1	16.07	6.88	16	19200	2.00	0.12	11.9
WWC-2	16.98	7.57	-24	1790	3.40	0.22	1.15
WWC-3	15.36	7.62	-201	1400	1.90	0.16	0.899
WWC-4	15.4	7.02	7	5040	1.80	0.82	3.18

Round 16

Landfill Wells	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
	Results																						
CL-U-1	<0.500	54.0	435	1.07	7.69	123	932	<0.00400	0.0319	0.0856	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.209	<0.0000900	0.00352	<0.00200	<0.00200	0.14	0.84	0.84
CL-U-2	<0.500	57.3	411	1.09	7.73	121	480	<0.00400	0.0271	0.0998	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.198	<0.0000900	0.00401	<0.00200	<0.00200	0.09	0.79	0.79
CLW-1	<0.500	34.7	301	1.11	8.73	62.4	892	<0.00400	0.0307	0.0622	<0.00200	<0.000500	0.00299	<0.00400	<0.00200	0.178	<0.0000900	0.00405	<0.00200	<0.00200	0.29	0.42	0
CLW-2	<0.500	45.8	456	1.29	7.75	99.7	1060	<0.00400	0.0275	0.0837	<0.00200	<0.000500	0.00224	<0.00400	<0.00200	0.218	<0.0000900	0.00477	<0.00200	<0.00200	-0.03	0.81	0.81
CLW-3	<0.500	37.5	377	1.43	7.81	104	952	<0.00400	0.0402	0.1040	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.203	<0.0000900	0.00533	<0.00200	<0.00200	0.24	0.41	0
CLW-4	<0.500	33.3	341	1.45	7.85	90.7	688	<0.00400	0.0404	0.0833	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.197	<0.0000900	0.00457	<0.00200	<0.00200	0.18	0.86	0.86
CLW-5	<0.500	33.7	358	1.91	7.87	88.9	944	<0.00400	0.0242	0.0745	<0.00200	<0.000500	0.00297	<0.00400	<0.00200	0.197	<0.0000900	0.00490	<0.00200	<0.00200	0.23	0.66	0
CLW-6	<0.500	31.9	342	1.56	7.92	91.1	1010	<0.00400	0.0324	0.0866	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.190	<0.0000900	0.00435	<0.00200	<0.00200	0.34	0.54	0
CLW-7	<0.500	41.0	335	1.07	8.18	66.1	376	<0.00400	0.0247	0.0532	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.185	<0.0000900	0.00382	<0.00200	<0.00200	0.08	0.53	0
CLW-8	<0.500	38.8	315	1.08	8.33	66.9	840	<0.00400	0.0279	0.0679	<0.00200	<0.000500	0.00622	<0.00400	<0.00200	0.184	<0.0000900	0.00389	<0.00200	<0.00200	0.3	0.67	0
CLW-9	0.332	24.9	288	1.87	8.01	87.3	856	<0.00400	0.0421	0.051	<0.00200	<0.000500	0.0156	<0.00400	<0.00200	0.160	<0.0000900	0.00738	<0.00200	<0.00200	0.06	0.39	0
CL-U-3	<0.500	54.8	414	0.938	7.78	123	1080	<0.00400	0.0213	0.0511	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.197	<0.0000900	0.00337	<0.00200	<0.00200	0.09	0.7	0

Landfill Wells	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
	Field Results						
CL-U-1	14.83	7.52	-134	1940	2.2	0.19	1.24
CL-U-2	15	7.47	-121	1880	1.5	3.16	1.20
CLW-1	16.40	7.13	-66	1500	0.4	1.38	0.96
CLW-2	15.54	7.53	-172	1920	1.1	1.50	1.23
CLW-3	15.65	7.56	-194	1710	2.6	0.37	1.10
CLW-4	15.61	7.57	-174	1620	2.5	0.28	1.04
CLW-5	15.13	7.5	-210	1720	7.5	0.25	1.10
CLW-6	14.82	7.36	-222	1620	0.5	0.40	1.04
CLW-7	16.01	7.29	-78	1610	0.8	3.81	1.03
CLW-8	15.98	7.24	-82	1530	7.2	0.64	0.98
CLW-9	14.74	7.46	-248	1580	0.0	0.32	1.01
CL-U-3	15.40	7.5	-185	1840	1.5	0.21	1.18

Bottom Ash	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
	Results																						
BA-U-1	0.559	197	1240	0.945	7.49	557	2760	<0.00400	0.023	0.0660	<0.00200	<0.000500	0.00314	<0.00400	<0.00200	0.367	<0.0000900	0.003	0.00599	<0.00200	-0.15	0.48	0
BA-U-2	<0.500	84.9	809	0.851	7.68	99.1	1620	<0.00400	0.0222	0.1500	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.287	<0.0000900	<0.00200	0.00253	<0.00200	0.22	1.09	1.09
BAC-1	3.20	267	2020	0.928	7.44	1480	5900	<0.00400	0.0163	0.0402	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.542	<0.0000900	0.011	0.00905	<0.00200	0.34	0.87	1.21
BAC-2	6.49	228	2070	1.37	7.42	2430	7140	<0.00400	0.0429	0.0213	<0.00200	<0.000500	0.00721	<0.00400	<0.00200	0.452	<0.0000900	0.129	0.012	<0.00200	-0.04	0.91	0.91
BAC-3	8.4	388	3890	1.9	7.46	5120	13900	<0.00400	0.0455	0.0285	<0.00200	<0.000500	0.00905	<0.00400	<0.00200	0.992	<0.0000900	0.0344	0.0222	<0.00200	-0.05	1.21	1.21
BAC-4	0.735	66	545	1.15	7.98	335	1560	<0.00400	0.0322	0.0637	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.265	<0.0000900	0.0246	<0.00200	<0.00200	0.11	-0.07	0
BAC-5	0.685	79.6	555	1.05	7.88	488	1780	<0.00400	0.0303	0.0466	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.301	<0.0000900	0.0325	<0.00200	<0.00200	0.08	0.32	0
BAC-6	4.15	97.8	519	0.98	7.76	941	2340	<0.00400	0.0268	0.0188	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.232	<0.0000900	0.0701	<0.00200	<0.00200	0.08	0.53	0
BAC-7	5.66	97.9	636	1.94	7.77	1150	3210	<0.00400	0.0389	0.0196	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.235	<0.0000900	0.0634	0.00299	<0.00200	-0.02	0.42	0
BAC-8	0.332	25.3	265	1.53	7.99	91.7	872	<0.00400	0.0668	0.0402	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.157	<0.0000900	0.0059	<0.00200	<0.00200	0.06	0.28	0
BAC-9	0.306	30.9	314	1.27	7.92	80.1	860	<0.00400	0.0546	0.0485	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.17	<0.0000900	0.00565	<0.00200	<0.00200	0.078	0.40	0
BAC-10	0.326	25.3	270	1.48	8.01	83.6	840	<0.00400	0.0588	0.0429	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.154	<0.0000900	0.00656	<0.00200	<0.00200	0.086	0.15	0
BAC-11	0.33	79.5	726	0.985	7.68	167	1560	<0.00400	0.0362	0.1340	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.272	<0.0000900	0.00384	<0.00200	<0.00200	0.11	0.91	0.91
BAC-12	0.27	25.5	212	1.25	7.96	74.6	688	<0.00400	0.0441	0.0684	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.13	<0.0000900	0.00491	<0.00200	<0.00200	0.12	0.98	1.1
BAC-13	0.667	130	1090	0.962	7.60	433	2960	<0.00400	0.0356	0.0571	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.312	<0.0000900	0.00201	<0.00200	<0.00200	0.05	0.66	0
BAC-14	0.587	160	1060	0.936	7.25	480	2470	<0.00400	0.0298	0.0494	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.344	<0.0000900	0.00213	<0.00200	<0.00200	0.02	0.61	0
BAC-15	0.307	25.1	258	1.69	7.86	84	1420	<0.00400	0.061	0.0419	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.145	<0.0000900	0.00743	<0.00200	<0.00200	0.06	-0.14	0
BAC-16	0.32	23.8	312	1.84	8.02	82.2	4720	<0.00400	0.0888	0.0381	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.165	<0.0000900	0.00653	<0.00200	<0.00200	0	0.40	0
BAC-17	<0.500	24.6	130	0.606	8.14	103	576	<0.00400	0.0338	0.0317	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	<0.100	<0.0000900	0.00425	<0.00200	<0.00200	0.09	0.41	0
BAC-18	0.266	24.5	199	1.18	8.03	93.5	676	<0.00400	0.0456	0.0549	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.112	<0.0000900	0.00494	<0.00200	<0.00200	0.09	0.9	0.9
BAC-19	0.28	30.2	243	1.17	7.95	86.2	696	<0.00400	0.0437	0.0448	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.13	<0.0000900	0.00436	<0.00200	<0.00200	0.13	1.29	1.42
BAC-20	0.249	28.2	199	0.904	8.02	94.1	744	<0.00400	0.0393	0.0515	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.103	<0.0000900	0.00644	<0.00200	<0.00200	0.14	0.86	0.86
BAC-21	0.276	27.5	194	1.09	8.08	82.5	640	<0.00400	0.0401	0.0769	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.106	<0.0000900	0.00547	<0.00200	<0.00200	0.041	0.93	0.93
BAC-22	0.266	29.4	240	1.2	7.95	97.5	668	<0.00400	0.0476	0.0371	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.125	<0.0000900	0.00552	<0.00200	<0.00200	0.067	1.74	1.74
BAC-23	0.272	30.5	243	1.13	7.88	87.9	760	<0.00400	0.0445	0.0374	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.138	<0.0000900	0.00496	<0.00200	<0.00200	0	0.7	0
BAC-24	0.299	30.1	271	1.36	7.88	83.1	824	<0.00400	0.0523	0.0644	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.169	<0.0000900	0.00416	<0.00200	<0.00200	0	1.03	1.03
BAC-25	0.27	29.8	187	0.891	7.99	96.3	560	<0.00400	0.0361	0.0748	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	<0.100	<0.0000900	0.0056	<0.00200	<0.00200	0.14	0.93	1.07
BAC-26	0.281	23.6	236	1.6	8.04	66.9	780	<0.00400	0.0469	0.0872	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.140	<0.0000900	0.00504	<0.00200	<0.00200	0.14	0.4	0
BAC-27	0.275	25.3	274	1.47	8.02	67.9	812	<0.00400	0.0521	0.0788	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.159	<0.0000900	0.00504	<0.00200	<0.00200	-0.03	0.34	0
BAC-28	0.283	28.4	297	1.4	8.06	71.3	732	<0.00400	0.05	0.0799	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.176	<0.0000900	0.00484	<0.00200	<0.00200	0.11	0.3	0
BAC-29	0.293	69	639	1.06	7.87	166	1560	<0.00400	0.0354	0.0721	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.257	<0.0000900	0.00354	<0.00200	<0.00200	-0.10	0.82	0
BAC-30	0.3	65.4	599	1.09	8.00	155	1340	<0.00400	0.0381	0.0891	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.243	<0.0000900	0.00407	<0.00200	<0.00200	0.13	0.39	0
BAC-31	0.293	50.2	487	1.15	7.40	115	1150	<0.00400	0.0379	0.0859	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.211	<0.0000900	0.00442	<0.00200	<0.00200	0.04	0.43	0
BAC-32	0.283	25.6	265	1.5	8.00	67.5	680	<0.00400	0.049	0.0876	<0.00200	<0.000500	0.00277	<0.00400	<0.00200	0.161	<0.0000900	0.00564	<0.00200	<0.00200	-0.03	0.77	0
BAC-33	0.279	30.6	317	1.34	7.89	76	848	<0.00400	0.045	0.1040	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.178	<0.0000900	0.00541	<0.00200	<0.00200	0.05	0.65	0
BAC-34	0.275	22.1	228	1.56	8.11	65.7	768	<0.00400	0.0554	0.0670	<0.00200	<0.000500	0.0097	<0.00400	<0.00200	0.148	<0.0000900	0.00625	<0.00200	<0.00200	0.19	-0.34	0
BAC-35	0.288	24.3	237	1.59	8.01	72.3	724	<0.00400	0.0566	0.0725	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.151	<0.0000900	0.00519	<0.00200	<0.00200	0.17	0.65	0
BAC-36	0.265	26.7	204	1.09	7.99	97.9	648	<0.00400	0.0423	0.0695	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.111	<0.0000900	0.00539	<0.00200	<0.00200	0.083	0.84	0
BAC-37	0.268	26.1	195	1.15	7.97	101	632	<0.00400	0.0447	0.0482	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.108	<0.0000900	0.00568	<0.00200	<0.00200	0.055	0.73	0
BAC-38	0.291	32	245	1.09	7.84	88.3	812	<0.00400	0.0418	0.0673	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.145	<0.0000900	0.00569	<0.00200	<0.00200	0.074	1.08	1.08

Bottom Ash	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
	Field Results						
BA-U-1	15.51	7.31	-66	4760	1.6	0.3	3.04
BA-U-2	14.72	7.37	-140	2830	1.6	0.59	1.81
BAC-1	16.61	7.13	-23	8440	7.7	0.21	5.31
BAC-2	16.2	7.17	-12	9900	2.2	0.25	6.24
BAC-3	15.67	7.13	14	17100	3	1.46	10.6
BAC-4	15.12	7.3	-69	2680	0	0.26	1.72
BAC-5	14.99	7.43	-67	2970	0.6	2.24	1.9
BAC-6	15.15	7.47	-47	3570	1	0.18	2.29
BAC-7	16.13	7.69	-91	4200	1	0.17	2.69
BAC-8	15.22	7.62	-5	1540	1.3	1.44	0.984
BAC-9	15.90	7.39	21	1670	0.9	3.18	1.07
BAC-10	14.99	7.52	36	1570	1.0	0.77	1
BAC-11	15.90	7.43	37	3020	4.0	3.37	1.94
BAC-12	15.06	7.60	-13	1280	1.0	0.20	0.821
BAC-13	14.99	7.28	-67	4390	2.5	2.57	2.81
BAC-14	15.56	7.35	36	4290	0.0	1.45	2.75
BAC-15	15.36	7.58	-6	1530	2.8	3.04	0.98
BAC-16	14.91	7.42	5	1720	0.5	4.42	1.1
BAC-17	15.22	7.76	-122	915	1.6	0.10	0.585
BAC-18	16.60	7.70	-193	1200	0.9	0.15	0.771
BAC-19	15.26	7.60	-147	1430	1.0	0.24	0.913
BAC-20	15.44	7.41	-118	1210	1.1	3.77	0.773
BAC-21	15.21	7.65	-194	1220	1.2	0.39	0.78
BAC-22	15.48	7.61	-67	1370	0.5	0.44	0.874
BAC-23	15.39	7.56	-63	1410	0.8	0.41	0.903
BAC-24	15.19	7.51	-71	1550	0.9	0.39	0.989
BAC-25	15.77	7.51	-95	1160	1.3	1.76	0.742
BAC-26	15.3	7.62	-217	1340	0.0	0.12	0.855
BAC-27	15.26	7.62	-135	1460	0.0	0.13	0.937
BAC-28	15.37	7.61	-69	1540	0.0	0.17	0.983
BAC-29	15.09	7.49	-98	2690	0.0	0.15	1.72
BAC-30	15.16	7.43	-115	2550	0.0	0.21	1.63
BAC-31	14.79	7.28	-68	2200	0.0	0.4	1.41
BAC-32	15.93	7.63	-208	1450	0.3	7.02	0.93
BAC-33	15.88	7.59	-186	1610	0.2	0.16	1.03
BAC-34	15.8	7.61	-153	1330	0.5	0.87	0.85
BAC-35	15.88	7.65	-140	1390	0.2	0.12	0.89
BAC-36	15.59	7.65	-155	1250	1.2	1.61	0.803
BAC-37	15.86	7.65	-171	1220	0.9	0.41	0.779
BAC-38	15.39	7.39	-51	1450	2.1	4.68	0.927

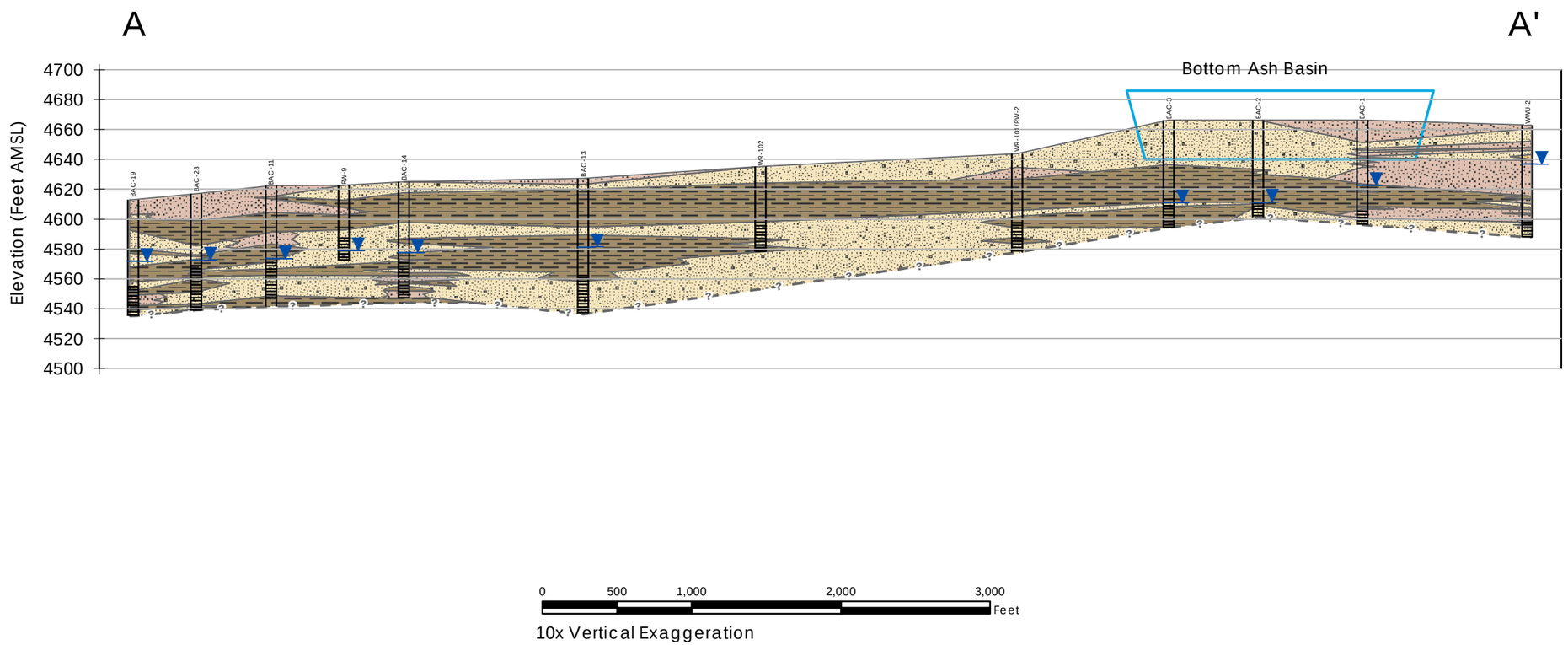
Waste Water	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined
	Results																						
SI-U-1	<0.500	85.9	517	0.617	7.63	405	1840	<0.00400	0.0131	0.0471	<0.00200	<0.000500	0.00293	<0.00400	<0.00200	0.207	<0.0000900	<0.00200	<0.00200	<0.00200	0.15	0.73	0
WW-U-1	1.4	246	1070	0.789	7.29	773	5100	<0.00400	0.0073	0.0383	<0.00200	<0.000500	0.00403	<0.00400	<0.00200	0.384	<0.0000900	0.00691	0.00738	<0.00200	0.2	1.25	1.25
WW-U-2	1.5	333	1460	0.659	7.25	808	4750	<0.00400	0.0123	0.0480	<0.00200	<0.000500	0.00459	<0.00400	<0.00200	0.498	<0.0000900	0.00223	0.0116	<0.00200	0.3	1.21	1.51
WWC-1	11.3	416	5310	0.593	7.00	3870	13400	<0.00400	0.0254	0.0216	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.936	0.000192	0.0135	0.0134	<0.00200	0.14	0.82	0.82
WWC-2	<0.500	36.4	251	0.525	7.79	108	796	<0.00400	0.0157	0.0310	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.114	<0.0000900	0.00378	<0.00200	<0.00200	0.18	0.38	0
WWC-3	<0.500	36.3	286	0.846	7.93	91.3	932	<0.00400	0.0203	0.0361	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.147	<0.0000900	0.00495	<0.00200	<0.00200	0	0.46	0
WWC-4	1.38	169	996	0.527	8.11	774	3000	<0.00400	0.0148	0.0397	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.323	<0.0000900	<0.00200	<0.00200	<0.00200	0.27	0.44	0
WWC-5	2.51	308	1590	0.473	7.26	1410	5020	<0.00400	0.0153	0.0369	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.472	<0.0000900	<0.00200	0.0057	<0.00200	0.11	0.91	0.91
WWC-6	0.579	137	1060	0.255	7.49	558	2720	<0.00400	0.0140	0.0825	<0.00200	<0.000500	0.00457	<0.00400	<0.00200	0.201	<0.0000900	0.00588	<0.00200	<0.00200	0.21	0.95	0.95
WWC-7	<0.500	42.1	205	0.366	7.96	129	780	<0.00400	0.0197	0.0316	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	<0.100	<0.0000900	0.00419	<0.00200	<0.00200	0.05	0.15	0
WWC-8	0.673	130	1110	0.453	7.46	559	2570	<0.00400	0.0161	0.0517	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.211	<0.0000900	0.00269	0.00366	<0.00200	0.88	0.42	0.88
WWC-9	<0.500	52.5	385	0.814	7.84	119	984	<0.00400	0.0282	0.0741	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.170	<0.0000900	0.00301	<0.00200	<0.00200	0.17	0.04	0
WWC-10	<0.500	52	382	0.53	7.93	171	1040	<0.00400	0.0242	0.0364	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.109	<0.0000900	0.00647	<0.00200	<0.00200	0.28	0.16	0
WWC-11	<0.500	37.6	209	0.395	8.01	114	608	<0.00400	0.01390	0.0767	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	<0.100	<0.0000900	0.00477	<0.00200	<0.00200	0.1	0.2	0
WWC-12	<0.500	82.4	505	0.414	7.81	194	1140	<0.00400	0.0315	0.0643	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.119	<0.0000900	0.00453	<0.00200	<0.00200	0.27	0	0.5
WWC-13	<0.500	72.3	427	0.372	7.83	168	708	<0.00400	0.0211	0.0489	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.108	<0.0000900	0.0036	<0.00200	<0.00200	0.17	0.19	0
WWC-14	<0.500	184	1290	0.314	7.59	796	3210	<0.00400	0.0127	0.0562	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.259	<0.0000900	0.00652	<0.00200	<0.00200	0.07	0.67	0
WWC-15	<0.500	95.3	428	0.375	7.58	192	1600	<0.00400	0.0188	0.0684	<0.00200	<0.000500	0.00511	<0.00400	<0.00200	0.119	<0.0000900	0.00307	<0.00200	<0.00200	-0.06	0.88	0.88
WWC-16	<0.500	50.3	281	0.399	7.95	136	724	<0.00400	0.0251	0.0405	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	<0.100	<0.0000900	0.0039	<0.00200	<0.00200	0	0.27	0
WWC-17	<0.500	54.4	351	0.597	7.80	159	764	<0.00400	0.0283	0.0590	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.13	<0.0000900	0.29800	<0.00200	<0.00200	0.05	0.31	0

Waste Water	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
	Field Results						
SI-U-1	14.72	7.25	-19	2550	1.00	0.76	1.63
WW-U-1	15.01	14.93	19	7.54	0.60	1.60	4.75
WW-U-2	13.88	7.13	25	8070	1.00	1.41	5.08
WWC-1	14.78	6.89	16	18600	1.10	0.30	11.5
WWC-2	14.46	7.31	-83	1390	0.60	1.79	0.885
WWC-3	15.32	7.66	-45	1500	0.10	0.17	0.96
WWC-4	15.48	7.24	-40	4740	1.60	0.11	3.03
WWC-5	15.43	7.05	-11	7120	0.00	0.15	4.49
WWC-6	14.08	7.18	-70	4250	0.70	0.37	2.72
WWC-7	13.82	7.51	-141	1.21	1.50	0.19	0.773
WWC-8	14.75	7.36	-36	4430	0.50	0.17	2.84
WWC-9	14.91	7.12	-39	1790	1.70	0.21	1.15
WWC-10	13.98	7.35	-47	1800	0.00	0.36	1.15
WWC-11	14.39	7.64	-196	1200	1.30	0.22	0.766
WWC-12	14.29	7.51	-151	2170	1.5	0.17	1.39
WWC-13	14.4	7.60	-47	1920	1.0	0.14	1.23
WWC-14	14.13	7.33	-111	5460	0.7	0.15	3.44
WWC-15	14.52	7.48	-175	2360	1.3	0.22	1.51
WWC-16	13.72	7.54	-57	1410	1.1	0.23	0.901
WWC-17	14.29	7.35	-68	1720	0.8	0.36	1.1

Additional Wells	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
	Results																						
RW-1	0.685	124	991	0.717	7.62	354.0	2360	<0.00400	0.027	0.0333	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.261	<0.0000900	0.00422	<0.00200	<0.00200	0.02	0.6	0
RW-4	0.941	80.3	714	0.864	7.73	357.0	1820	<0.00400	0.0281	0.0921	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.244	<0.0000900	0.00256	<0.00200	<0.00200	0.06	0.69	0
RW-5	<0.500	29.4	175	0.626	8.03	114	648	<0.00400	0.0318	0.0268	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	<0.100	<0.0000900	0.00469	<0.00200	<0.00200	0.09	0.3	0
RW-6	<0.500	23.2	258	1.54	7.96	82.3	692	<0.00400	0.0659	0.0388	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.152	<0.0000900	0.00623	<0.00200	<0.00200	0.04	0.14	0
RW-7	<0.500	44.7	329	0.584	7.94	133	960	<0.00400	0.0224	0.0351	<0.00200	<0.000500	0.00258	<0.00400	<0.00200	0.132	<0.0000900	0.00482	<0.00200	<0.00200	-0.019	0.72	0
RW-9	<0.500	84.7	736	1.06	7.78	237	1600	<0.00400	0.0337	0.0359	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.257	<0.0000900	0.00272	<0.00200	<0.00200	0.15	0.27	0
WDB-5	<0.500	22.7	209	1.52	8.04	70	568	<0.00400	0.054	0.0608	<0.00200	<0.000500	0.0133	<0.00400	<0.00200	0.148	<0.0000900	0.00606	<0.00200	<0.00200	0.29	0.96	1.25
WDB-7	<0.500	25.3	254	1.37	8.02	59.5	660	<0.00400	0.0446	0.0826	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.172	<0.0000900	0.00387	<0.00200	<0.00200	0.1	0.39	0
WDB-19	<0.500	37.4	325	1.42	8.03	84.4	868	<0.00400	0.0304	0.0606	<0.00200	<0.000500	0.00992	<0.00400	<0.00200	0.212	<0.0000900	0.00570	<0.00200	<0.00200	0.14	0.34	0

Additional Wells	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
	Field Results						
RW-1	16.81	7.21	119	3870	2.6	1.32	2.48
RW-4	15.45	7.54	3	3280	0.6	2.68	2.1
RW-5	15.46	7.66	-68	1110	1.9	0.3	0.711
RW-6	15.47	7.54	13	1510	1.4	1.04	0.968
RW-7	16.19	7.57	-45	1640	3.9	0.25	1.05
RW-9	17.35	7.40	61	3070	1.8	3.17	1.96
WDB-5	15.7	7.68	-96	1260	22.1	0.19	0.806
WDB-7	14.96	7.62	-6	1370	1.9	0.17	0.876
WDB-19	15.49	7.46	-194	1680	50.3	0.29	1.07

APPENDIX C STANTEC CROSS-SECTIONAL FIGURES



Stantec

Legend

- Groundwater Elevation (October 2020)
- Undefined
- Inferred

Well Construction

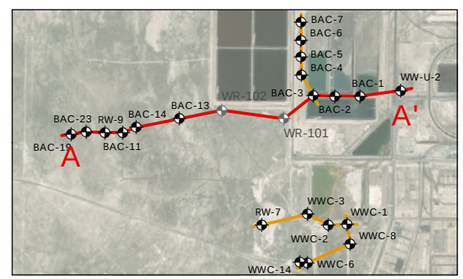
- Casing
- Screen

Lithology

- Clay
- Sand and Fines
- Sand
- Gravel and Sand-Gravel

Notes

1. Coordinate System: NAD 1983 State Plane Utah Central FIPS 1701 Feet
2. AMSL = Above Mean Sea Level
3. Fines: Clay and Silt
4. WR-101 and WR-102 are Groundwater Recovery Wells (pumping,water levels not measured)



Project Location: Delta, Utah

213470011

Prepared by CK on 2020-10-23
Technical Review by JT on 2020-10-23
Independent Review by JR on 2020-10-23

Client/Project

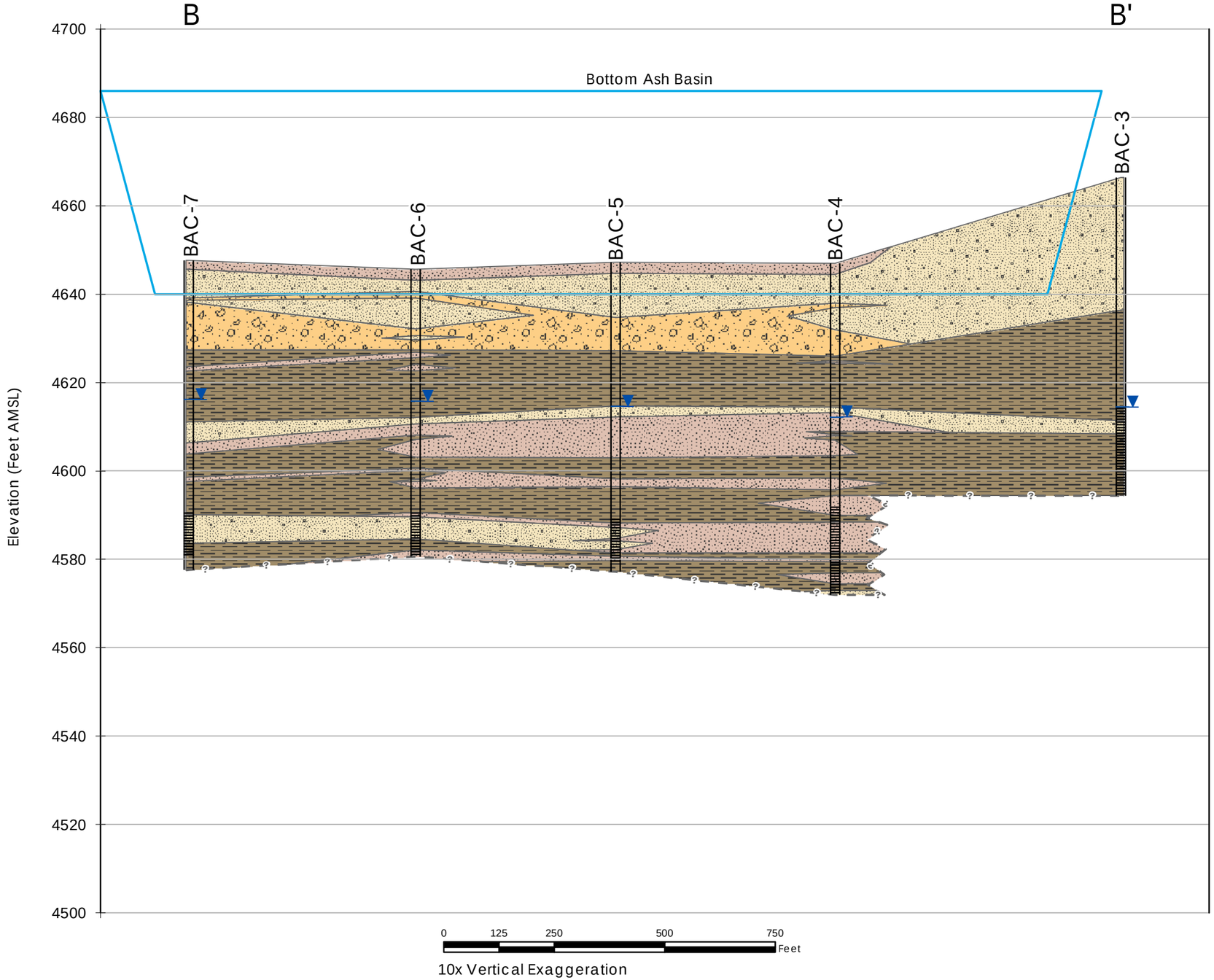
INTERMOUNTAIN POWER SERVICE CORP.
INTERMOUNTAIN GENERATION FACILITY
DELTA, UTAH

Figure No.

Title

Cross Section A-A'

C:\Users\ckwiatkowski\Desktop\209789098 intermountain Power\GIS\2020_12 Draft_fig03_CrossSection_A-A_DeltaUT_20201213_11x17.mxd Revised: 2021-01-26 By ckwiatkowski



Stantec

Legend

- Groundwater Elevation (October 2020)
- Undefined
- Inferred

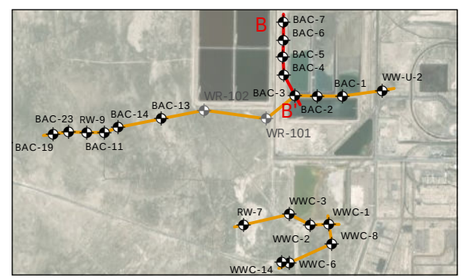
Well Construction

- Casing
- Screen

Lithology

- Clay
- Sand and Fines
- Sand
- Gravel and Sand-Gravel

Notes
1. Coordinate System: NAD 1983 State Plane Utah Central FIPS 1701 Feet
2. AMSL = Above Mean Sea Level
3. Fines: Clay and Silt



Project Location
Delta, Utah

213470011

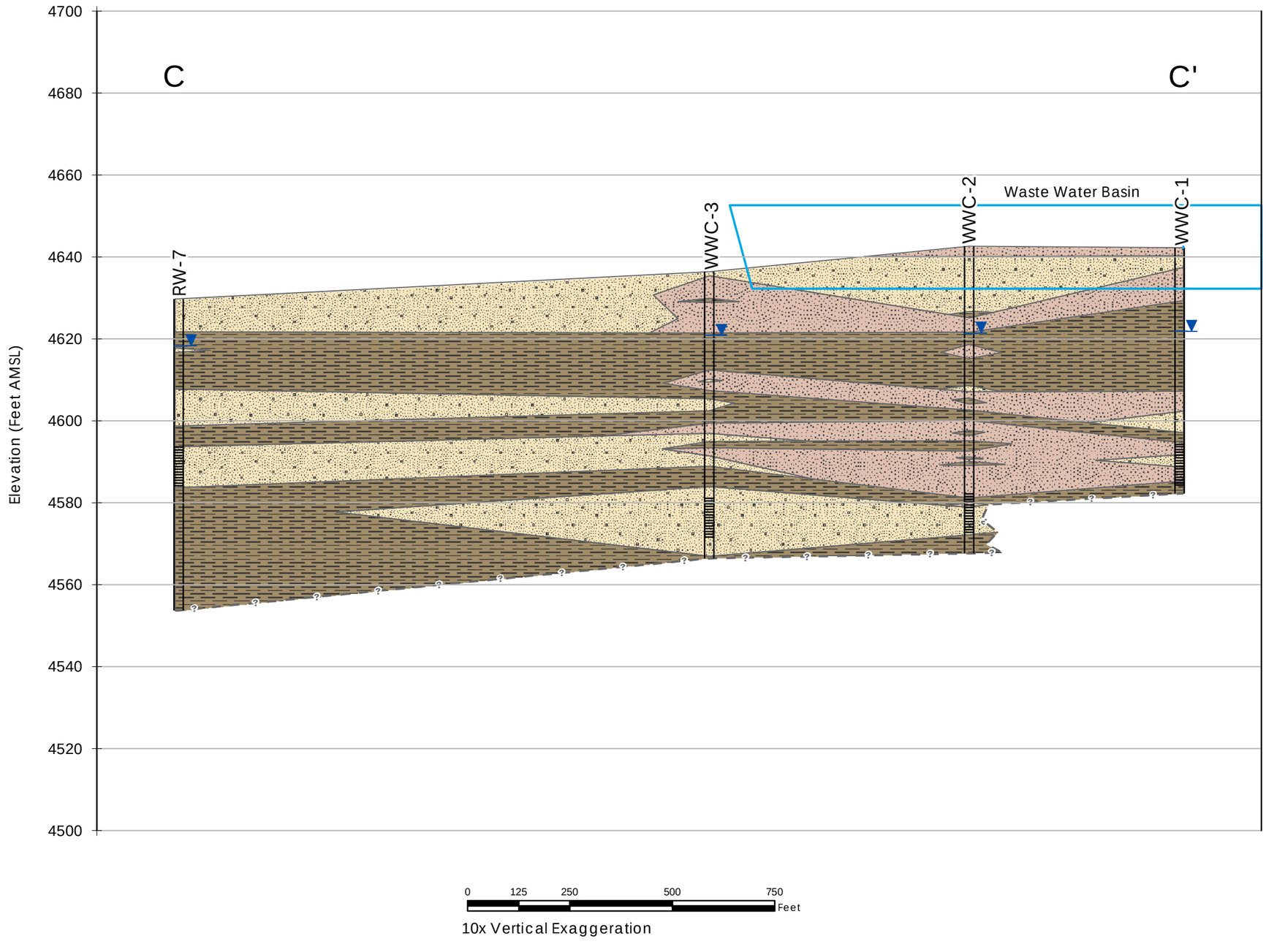
Prepared by CK on 2020-10-23
Technical Review by JT on 2020-10-23
Independent Review by JR on 2020-10-23

Client/Project
INTERMOUNTAIN POWER SERVICE CORP.
INTERMOUNTAIN GENERATION FACILITY
DELTA, UTAH

Figure No.

Title
Cross Section B-B'

C:\Users\ckwalkowski\Desktop\260709099 Intermountain Power\GIS\2020_12\Draft_fig04_CrossSection_B-B_Default_20201006_11x17.mxd Revised: 2020-01-28 By: ckwalkowski



Stantec

Legend

- Groundwater Elevation (October 2020)
- Undefined
- Inferred

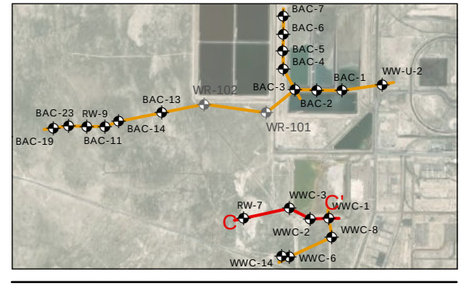
Well Construction

- Casing
- Screen

Lithology

- Clay
- Sand and Fines
- Sand
- Gravel and Sand-Gravel

Notes
1. Coordinate System: NAD 1983 State Plane Utah Central FIPS 1701 Feet
2. AMSL = Above Mean Sea Level
3. Fines: Clay and Silt



Project Location
Delta, Utah

213470011

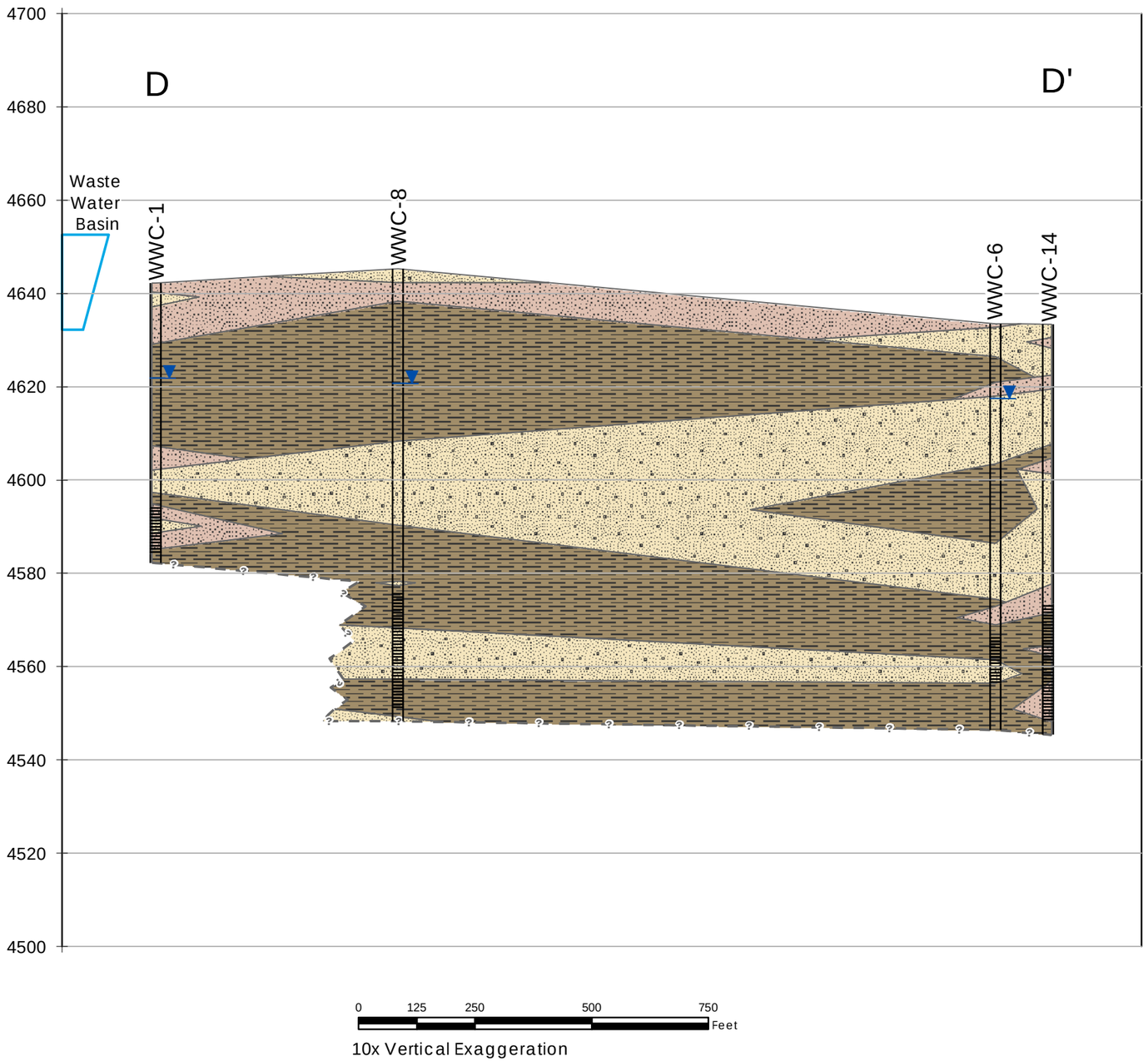
Prepared by CK on 2020-10-23
Technical Review by JT on 2020-10-23
Independent Review by JR on 2020-10-23

Client/Project
INTERMOUNTAIN POWER SERVICE CORP.
INTERMOUNTAIN GENERATION FACILITY
DELTA, UTAH

Figure No.

Title
Cross Section C-C'

C:\Users\ckwiatkowski\Desktop\193709098 Intermountain Power\GIS\2020_12\Draft_fig05_Cross Section_C-C_DeltaUT_20201006_11x17.mxd Revised: 2021-01-26 By: ckwiatkowski



Stantec

Legend

- Groundwater Elevation (October 2020)
- Undefined
- Inferred

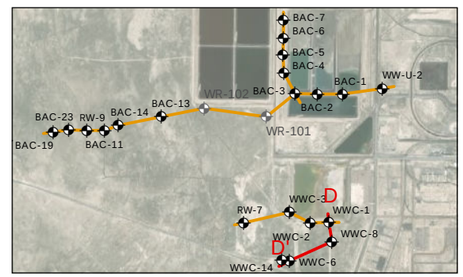
Well Construction

- Casing
- Screen

Lithology

- Clay
- Sand and Fines
- Sand
- Gravel and Sand-Gravel

Notes
1. Coordinate System: NAD 1983 State Plane Utah Central FIPS 1701 Feet
2. AMSL = Above Mean Sea Level
3. Fines: Clay and Silt



Project Location
Delta, Utah

213470011

Prepared by CK on 2020-10-23
Technical Review by JT on 2020-10-23
Independent Review by JR on 2020-10-23

Client/Project
INTERMOUNTAIN POWER SERVICE CORP.
INTERMOUNTAIN GENERATION FACILITY
DELTA, UTAH

Figure No.

Title
Cross Section D-D'

C:\Users\ckwiatkowski\Desktop\203709098 Intermountain Power\GIS\2020_12\Draft_fig06_CrossSection_D-D'draft_20201006_11x17.mxd Revised: 2021-01-26 By: ckwiatkowski

ATTACHMENT 1 UPDATED GROUNDWATER MODEL FINDINGS

UPDATED GROUNDWATER MODEL FINDINGS

Recently, Stantec updated its three-dimensional, numerical groundwater flow and fate and transport model of TDS in groundwater beneath the IGF site, utilizing data associated with dozens of groundwater monitoring wells that were pump tested during 2020. Numerous pump tests were performed for 12- to 24-hours in duration, with continuous monitoring of water levels in nearby monitoring wells utilizing dedicated electronic pressure-transducers. 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).

Typically, TDS tends to migrate at the same rate as the average linear groundwater flow velocity, and as such, Stantec utilized pump tests across the site to estimate average hydraulic conductivity values, which in turn were used to extrapolate linear groundwater flow velocities of the uppermost aquifer and TDS in the vicinity of and downgradient from the two surface impoundments. Hydraulic gradients observed during the operational lifespan of the basins (approximately 35 years, late-1986 through today) were also used in refining our CSM and estimations as to TDS plume migration patterns and flow velocities. All such data were used to help fashion IPSC's groundwater monitoring and remedial strategies, including IPSC's selected remedy which is discussed in detail within preceding report section *3.0 Corrective Measures Assessment and Selected Remedy*.

The following report subsections discuss TDS plume modeling results associated with each of the two respective surface impoundments.

BOTTOM ASH BASIN, MODEL RESULTS

2019 MODEL PREDICTIVE USE FOR MONITORING WELL PLACEMENTS

Stantec's past qualitative evaluation of historical migration of the downgradient, leading edge of the TDS plume located southwest of the Bottom Ash Basin, as indicated by comparison of sequential TDS concentrations in monitoring wells with time, indicated that the TDS plume located southwest of the Bottom Ash Basin appeared to be migrating at a rate of approximately 150 to 180 feet per year. This was a generalized plume migration rate estimate, considering the qualitative observations used for the evaluation and heterogeneous nature of the lithologic characteristics of the uppermost aquifer (highly-variable, intermixed clays, clay-rich sands, etc.), and as such, the qualitative TDS migration rate estimate should be compared with Stantec's recent groundwater model results.

Estimations of linear groundwater flow velocities are contingent upon localized hydraulic gradient, hydraulic conductivity, and effective porosity factors. Each of these factors varies across the IGF, depending on site-specific location. In particular, relatively-small changes in the

aquifer's effective porosity can have comparatively-significant impacts to groundwater flow velocities. In consideration of the heterogeneous clay, silt, and sand lithologic characteristics of the uppermost aquifer beneath the IGF, it is anticipated that effective porosity values vary significantly, over relatively-short, lateral distances across the IGF, thereby resulting in highly-variable, linear groundwater flow velocities as well.

In 2019, Stantec used its groundwater fate and transport model to help estimate the total number and locations of vertical groundwater recovery wells that might be installed to intercept the southwestern-most, downgradient leading edge of the TDS plume located southwest of the Bottom Ash Basin. At the time, the precise location of the western-most, downgradient leading edge of the plume had not been delineated (i.e., prior to 2020 installation of additional wells, etc.).

The 2019 groundwater model was used to help locate proposed drilling/installation locations of the 21 BAC-18 through BAC-38 wells that were installed subsequently during 2020 in the vicinity of the estimated western-most, downgradient leading edge of the TDS plume. The intent of the wells was for water quality monitoring and recovery of TDS-impacted groundwater if needed. Each well was constructed as a 6-inch diameter well, with 20- to 25-lineal feet of well screen at the bottom of each well. Figures 3 and 4 identify the locations of all monitoring/recovery wells as of 2021, including the BAC-18 through BAC-38 wells.

The model evaluated use of a line of equally-spaced, groundwater recovery wells located perpendicular to the natural, southwesterly groundwater flow direction and in close proximity to the estimated, TDS plume 1,100 ppm iso-concentration line (IPSC's Groundwater Discharge Permit TDS compliance concentration). Stantec's model indicated that the proposed "BAC" recovery wells be placed at 146-ft. lateral spacings to provide adequate TDS capture at individual recovery well yields of 10 gpm and at 188-ft. spacings for wells producing at 15 gpm.

Subsequently in 2020, Stantec installed the western-most, "BAC" recovery wells at approximate 100- to 125-ft. lateral spacings to provide more conservative spacing of wells for groundwater recovery, based on hopes of each proposed well yielding a recovery rate of at least 10 gpm. Additionally, it is anticipated that well recovery yields will most probably decline with time of use, as has been observed with IPSC's existing recovery wells WR-101, WR-102, and WR-103. Field and site accessing conditions also influenced the locations of some of the wells.

Since the precise downgradient leading edge of the TDS plume was unknown in 2019, Stantec and IPSC agreed to install two separate, horizontal lines of BAC recovery wells during 2020, in hopes of delineating the TDS plume more precisely while also providing TDS mass capture and recovery, if and where deemed warranted. Additionally, wells BAC-18 and BAC-19 were located farther southwest to provide monitoring of groundwater quality in areas located downgradient of the two separate lines of wells, respectively.

2021 MODEL RESULTS

As of the April 2021 sampling event, all BAC wells comprising the western-most line of recovery wells (immediately east of well BAC-19 on Figure 4) contained quantified TDS concentrations deemed representative of typical background TDS concentrations. Stantec anticipates that, as the TDS plume migrates in a southwesterly direction, one or more of the wells within the western-most line of recovery wells will most probably be needed for recovery of TDS-impacted groundwater, if and when needed in the future.

Pump tests conducted during 2020 at several of the western BAC monitoring wells indicated highly varied groundwater yields approximating two gallons per minute (gpm) to 15 gpm, with most wells producing approximately 10 to 15 gpm. Historical pump testing of wells located in closer proximity to the basin indicated similar well yields, with no individual well yield exceeding 15 gpm.

In consideration of the varied hydraulic conductivity and effective porosity characteristics of the aquifer, it is not surprising that groundwater linear velocity flow rates may vary considerably beneath the IGF. Stantec's most recent extrapolation of pump test results and corollary hydraulic conductivities indicates that average linear groundwater flow velocity values associated with various wells located throughout the TDS plume located southwest of the Bottom Ash Basin approximate a broad range, with estimates between 52 to 228 feet per year.

Figure 6 herein presents results of Stantec's most recent (May 2021) update to its groundwater fate and transport model, identifying particle-track, groundwater flow lines and corollary linear flow velocities. Flow lines are terminated where Stantec had no nearby pump test data to evaluate via the model. The figure also presents estimations of the lateral, linear distance to which groundwater is estimated to migrate/flow along individual flow lines during an average 10-year timeframe.

The figure presents the flow velocity data in 10-year intervals, so that data might be evaluated in terms of the fact that the Bottom Ash Basin was constructed and placed into operation sometime during 1986-1987 (i.e., approximately 34 to 35 years ago). As may be noted by review of Figure 6, different areas of the TDS plume are migrating toward the southwest at different rates. Average linear groundwater velocity values associated with migration of groundwater toward the southwest in relation to the Bottom Ash Basin were estimated to be between 52 to 228 feet per year. The wide range in velocity estimates is anticipated to be attributable primarily to the heterogenous lithologic characteristics of the uppermost aquifer.

The groundwater flow velocity data presented on Figure 6 should not be confused with TDS (or any contaminant constituent) iso-concentration data. Stantec's comparative analysis of the groundwater velocity data presented on Figure 6 and the TDS concentrations presented on Figure 4 indicates the following observations of particular interest:

- Groundwater flowing beneath the generalized, northwestern-most corner of the Bottom Ash Basin *may have* been impacted by TDS constituents, shortly following initial 'start-up' use of the basin 34 to 35 years ago (as TDS appears to have traveled as far southwest [in vicinity of wells BAC-11, BAC-29, BAC-30, BAC-31, and RW-9] as groundwater would have been expected to migrate in the past 35 years [advection], etc.);

- Groundwater flowing beneath the generalized, middle of the basin *may have* been impacted by TDS constituents, a few to several years after initial startup use of the basin (as TDS does not appear to have traveled as far southwest as groundwater would have been expected to migrate in the past 35 years, etc.); and

- Groundwater located north and south of the basin does not appear to be migrating as fast as the two above-mentioned areas (and specifically, as regards groundwater flowing beneath the southern-most portions and downgradient of the basin: TDS concentrations do not appear to have migrated very far south/southwest of the basin, evidently due to the comparatively-slower groundwater velocities, etc.).

It is possible that the faster groundwater flow velocity values associated with groundwater migrating beneath the northwestern-most corner and middle portions of the Bottom Ash Basin *may* be attributable in part to greater hydraulic gradients associated with past and/or recent release incidents in these general areas. Hypothetically, release of liquid-phase CCR constituents from localized areas of the impoundment might result in localized, subsurface mounding at the water table, which in turn might increase local hydraulic gradients thereby increasing corollary linear groundwater flow velocities, locally.

Model results indicate that use of some of the existing wells for groundwater recovery, as outlined in preceding report section *3.0 Corrective Measures Assessment and Selected Remedy*, should be effective in removing total TDS mass from the aquifer located downgradient of the Bottom Ash Basin, controlling the migration of the downgradient leading edge of the TDS plume located southwest of the basin, and providing ongoing protection to human health and the environment.

WASTE WATER BASIN, MODEL RESULTS

2019 MODEL PREDICTIVE USE FOR MONITORING WELL PLACEMENTS

As may be noted by review of Figure 4, there appear to be two TDS plumes located west and southwest of the Waste Water Basin, respectively. The TDS plume located near the northwestern-most corner of the basin is migrating toward the west, while the TDS plume located near the southeastern-most corner of the basin is migrating toward the southwest.

In 2019, Stantec used its groundwater fate and transport model to investigate optimal number, spacings, and locations of monitoring/recovery wells located downgradient of the TDS plume positioned southwest of the southeastern corner of the Waste Water Basin. At the time, the precise location of the southwestern-most, downgradient leading edge of the plume had not been delineated.

The model was used to help locate the WWC-12 through WWC-17 wells that were installed during 2020 in the vicinity of the estimated southwestern-most, downgradient leading edge of the TDS plume, based on water quality data associated with the monitoring wells present as of 2019. The intent of the wells was for water quality monitoring and recovery of TDS-impacted groundwater, if needed. Each well was constructed as a 6-inch diameter well, with 20- to 25-lineal feet of well screen at the bottom of each well.

The model evaluated use of a line of groundwater recovery wells located perpendicular to the natural, southwesterly groundwater flow direction and in close proximity to the estimated, TDS plume 1,100 ppm iso-concentration line (IPSC's Groundwater Discharge Permit TDS compliance concentration). Stantec's model indicated that the proposed "WWC" recovery wells be placed at 225-ft. lateral spacings to provide adequate TDS capture at individual recovery well yields of 10 gpm and at 280-ft. spacings for wells producing at 15 gpm.

Subsequently in 2020, Stantec installed the southwestern-most, "WWC" recovery wells at approximate 150- to 200-ft. lateral spacings to provide a more conservative spacing of wells for groundwater recovery, based on hopes of each well yielding a recovery rate of approximately 10 gpm and in anticipation that recovery yields may decline with time. Field and site accessing conditions influenced the locations of some of the wells.

2021 MODEL RESULTS

Figure 6 herein presents results of Stantec's most recent (May 2021) update to its groundwater fate and transport model, identifying particle-track, groundwater flow lines and corollary linear flow velocities. As may be noted by review of Figure 6, different areas of the TDS plume are migrating toward the west and southwest at different rates. In general, average linear groundwater velocity values associated with migration of groundwater toward the southwest in relation to the Waste Water Basin were estimated to be between 98 to 223 feet per year, while linear velocities associated with the smaller, western TDS plume approximate a velocity range

between 39 to 68 feet per year. The wide range in velocity estimates is anticipated to be attributable primarily to the heterogenous lithologic characteristics of the uppermost aquifer.

Reportedly, IPSC has never identified any definitive, historical release incidents associated with the Waste Water Basin. It is possible that the TDS plumes associated with the basin may be attributable to relatively-small volume and/or short-duration release incidents that were never observed/recognized historically.

Stantec's comparative analysis of the groundwater velocity data presented on Figure 6 and the TDS concentrations presented on Figure 4 indicates the following:

- Groundwater flowing beneath the generalized, southeastern-most corner of the Waste Water Basin appears to be migrating at a comparatively-faster velocity than cross-gradient groundwater to the west.
- The TDS plume associated with the southeastern-most corner of the basin may have been associated with a release incident that might have occurred approximately 10 years ago.
- Groundwater flowing beneath the generalized, northwestern-most corner of the basin appears to be migrating at a comparatively-slower velocity than cross-gradient groundwater to the north and south. The TDS plume associated with the northwestern-most corner of the basin may have been associated with a release incident that might have occurred approximately at least 15 years ago.

Model results indicate that use of some of the existing wells for groundwater recovery, as outlined in preceding report section *3.0 Corrective Measures Assessment and Selected Remedy*, should be effective in removing total TDS mass from the aquifer located downgradient of the Waste Water Basin, controlling the migration of the downgradient leading edges of the TDS plumes located west and southwest of the basin, and providing ongoing protection to human health and the environment.