2022 Annual Groundwater Monitoring and Corrective Action Summary Report

Intermountain Generating Facility
Delta, Utah

Prepared for:
Intermountain Power Service Corporation
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Delta, Utah 84624

Prepared by:
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Project No.: 203709098

January 18, 2023

Sign-off Sheet and Signatures of Environmental Professionals

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1.0 EXECUTIVE SUMMARY

1.1 PURPOSE OF THIS REPORT

On behalf of Intermountain Power Service Corporation ("IPSC"), Stantec Consulting Services Inc. ("Stantec") has prepared this report to summarize IPSC's 2022 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 ten miles north of Delta, Millard County, Utah. IPSC's 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; and §257.96 (R315-319-96) Assessment of Corrective Measures.

IPSC historical reports presented IPSC's approach for addressing requirements specified by the CCR Rules as well as the facility's Utah Department of Environmental Quality ("UDEQ"), Division of Water Quality ("DWQ") Groundwater Discharge Permit No. UGW270004. The UDEQ Division of Waste Management and Radiation Control ("DWMRC") also has regulatory oversight pursuant to the State CCR Rule, under which DWMRC issued a separate permit on November 23, 2020 for the CCR Units, Permit No. 1601. 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-mil High Density Polyethylene (HDPE) liner], and
- Waste Water Basin (surface impoundment underlain by 80-mil HDPE liner).

This annual summary report is formatted in general accordance with reporting requirements prescribed within §257.90(e) (R315-319-90(e)). The report provides an overview of groundwater monitoring and recovery activities conducted at the site during 2022 and ongoing activities designed to further assess and design corrective measures specified by IPSC's Groundwater Discharge Permit and the CCR Rules, as outlined in detail within IPSC's June 2021 *Selection of Remedy Report*.

1.2 BACKGROUND

The DWQ has regulatory oversight for IPSC's compliance with its Groundwater Discharge Permit, which prescribes operation, monitoring, maintenance, and corrective measure protocols for the Bottom Ash Basin and the Waste Water Basin. As detailed in historical reports, 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)-impacted groundwater located downgradient of, and in relatively-close proximity to, apparent historical release areas at the Bottom Ash Basin. IPSC's DWQ permit Groundwater Protection 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 as part of IPSC's Groundwater Discharge Permit compliance program (reference Figure 3 for well locations).

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 downgradient leading edge of the TDS plume located southwest of the Bottom Ash Basin. Following delineation of the downgradient leading edge of the TDS plume, then IPSC would evaluate how best to control the downgradient migration of the plume, remediate the plume to permit standards, and ensure ongoing protection to human health and the environment.

Once IPSC's groundwater quality monitoring program expanded under its CCR permit, IPSC identified that TDS had also impacted groundwater quality downgradient of the Waste Water Basin. As has been consistent since monitoring of water quality began at the IGF, TDS has been found to have migrated farther downgradient of the Bottom Ash Basin and Wastewater Basin than any other Groundwater Discharge Permit or CCR water quality analyte, including boron and CCR Appendix IV metals. Appendix IV metals have either not impacted groundwater quality, or as detailed herein, elevated metal concentrations have only been identified in samples from wells in close proximity to the apparent historical release areas.

As such, TDS is being used as the leading indicator parameter of impacted groundwater quality for fashioning a more expansive groundwater remediation program. No supplemental wells were deemed necessary downgradient of the Combustion By-Products Landfill, as all CCR constituent concentrations quantified to date represent typical background concentrations.

During 2020, as part of its corrective measure assessment, IPSC installed 25 wells to more definitively delineate the leading edges of TDS plumes located downgradient (southwest) of the Bottom Ash Basin and the Waste Water Basin. Several of the wells were pump-tested to investigate localized hydraulic characteristics. 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.

Stantec utilized the 2020 pump-test results and October 2020 groundwater quality data to update its site-specific groundwater fate and transport model. The model was used to help identify which wells might be used for groundwater recovery to help reduce total mass of CCR constituents in groundwater and control the downgradient migration of such constituents.

Final selection and design of the expanded groundwater remedy was documented in IPSC/Stantec's June 2021 *Selection of Remedy Report*. IPSC and Stantec finalized design for planned expansion of IPSC's existing groundwater recovery network by increasing the number of wells being used for groundwater recovery to help reduce total mass of CCR constituents in groundwater in pursuit of achieving Groundwater Protection Standards, control the downgradient migration of such constituents, and provide ongoing protection to human health and the environment.

Currently, IPSC is installing groundwater recovery pumps, recovered water conveyance piping, additional electricity capacity, and related equipment associated with the expanded groundwater recovery network. As additional groundwater quality data is generated and evaluated through statistical analysis, IPSC is prepared to further expand and/or enhance the groundwater monitoring and/or remedial approach, if warranted. Currently, and for the foreseeable future, the CCR constituent plumes downgradient of the two surface impoundments do not pose any unmitigated risk to human health, ecologic receptors, and/or the environment.

2.0 SPRING AND FALL 2022 MONITORING ACTIVITIES

2.1 MONITORING, PURGING, AND SAMPLING PROTOCOL

During each of the two sampling events conducted respectively during April/May and October/November 2022, all CCR compliance wells were purged and sampled, following measurement of static water levels. All water level monitoring and well purging and sampling activities were performed in accordance with measures outlined within IPSC's November 2015 *Ground Water Sampling and Analysis Plan*, a copy of which is posted on IPSC's public website. Groundwater samples were submitted to Chemtech-Ford Laboratories (CTF), a Utah-certified, analytical laboratory under strict Chain-of-Custody protocol.

Figures 3A and 3B present potentiometric maps based on water level measurements collected at CCR monitoring wells during April and September 2022. Groundwater potentiometric and apparent flow direction characteristics remain similar to those observed historically. The predominant groundwater flow direction in relatively close proximity to the Bottom Ash Basin and the Waste Water Basin is generally toward the southwest, with a more westerly component of flow due west of the northwestern corner of the Waste Water Basin. Groundwater flow in the vicinity of the CB Landfill is generally from the east toward the west.

Table 1 presents groundwater monitoring well construction details, including well completion dates, diameters, depths, screened intervals, and top of casing elevations (mean sea level-msl). Attachment 1 presents monitoring well drilling logs and schematic diagrams. Attachment 2 includes summaries of historical water level measurements including the Spring and Fall 2022 data.

2.2 ANALYTICAL RESULTS

2.2.1 TDS Results

Figures 4A and 4B herein identify TDS concentrations quantified during the Spring and Fall 2022 sampling events, superimposed atop the respective Spring and Fall 2021 groundwater flow potentiometric maps. As observed in the past, groundwater quality monitoring data at the boundaries and down-gradient of the CB Landfill are deemed representative of Background water quality conditions. The quantitative analytical results associated with monitoring of the two surface impoundments are relatively similar to those observed during past monitoring events.

TDS concentrations in excess of background concentrations and the DWQ Groundwater Discharge Permit Groundwater Protection Level for TDS of 1,100 ppm were detected in monitoring well WDB-5 (1,880 ppm) and well WWC-7 (1,220 ppm) for the first time since sampling began in 2015. Future ongoing monitoring of water quality at each well will be used to gauge whether these TDS results are representative of site-specific conditions or not. IPSC is prepared to install area-specific, supplemental groundwater monitoring and/or recovery wells, if needed.

2.2.2 CCR Appendix IV Results – Exploratory Data Analysis

The initial step of statistical analysis was the exploratory data analysis of CCR Appendix IV analytical results generated at the site to date. The process of the exploratory data analysis utilizes simple summary statistics (e.g., mean, median, standard deviation, and percentiles) and graphical representations to identify important characteristics of an analytical dataset, such as the center of the data (i.e., mean, median), variation, distribution, patterns, presence of outliers, and randomness.

Summary statistics were calculated for each well-constituent pair at each CCR-regulated unit (Tables 2A through 2C). These summary statistics include information such as total number of available samples, frequency of detection, and maximum detected concentrations for each well-constituent pair. Exploratory data plots for each well-constituent pair (i.e., box plots and time series plots, Attachments 3 and 4, respectively) were also constructed to support a visual review of the data and identify potential outliers.

2.2.3 CCR Appendix IV Results – Comparison of Groundwater Quality Data to Groundwater Protection Standards

Statistical methods consistent with US EPA document "Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities: Unified Guidance" (US EPA 2009; hereafter referred to as the Unified Guidance) were utilized to compare Appendix IV parameter concentrations in groundwater to their respective fixed standards known as the Groundwater Protection Standards (GWPS). GWPSs were established as the greater value between the US EPA Maximum Contaminant Level (MCL) or US EPA alternative standards (Cobalt, Lead, Lithium, and Molybdenum) or the Upper Tolerance Limit (UTL) calculated using historical background data collected from wells upgradient of the CCR units. Summary CCR unit-specific data are presented in Table 2D.

In the Unified Guidance, a confidence interval approach is recommended for comparing groundwater quality data to a GWPS. If the underlying population is stable (i.e., no trend is present), then the Unified Guidance indicates that comparison to the GWPS can be made based on a confidence interval around the mean. However, in the presence of a statistically significant trend, the Unified Guidance recommends constructing a confidence band around a trend line, where the comparison is made to the GWPS based on the confidence band as of the most recent sampling event, rather than a static confidence interval around the mean.

Initially, data from each constituent/well pair were screened to identify if there were detected concentrations greater than or equal to their respective GWPSs. If no detected concentrations exceeded the respective GWPS, the constituent/well pair was not evaluated further. If a detected concentration exceeded the GWPS for any constituent/well pair, then linear regression analysis was completed to identify constituent/well pairs with a statistically significant linear trend ($p<0.05$). As noted above, if no statistically significant linear trend was detected ($p\geq0.05$), a static confidence interval around the mean was used for comparison to the GWPS. If

a statistically significant linear trend was present ($p<0.05$), a confidence band around the linear regression trend line at the most recent evaluated sampling event was used for comparison to the GWPS. In both cases, 98% confidence intervals were constructed, which correspond to a lower confidence limit with 99% confidence. Non-detect values were conservatively represented at the reported detection limit. Trend lines with confidence bands are included in Attachment 5.

Table 3 is a graphical ("Stop-Light") presentation of the statistical findings that includes color-coded cells, as detailed herein. "Green" cells represent constituent/well pairs where no detected concentration exceeded their respective GWPS. "Yellow" cells represent constituent/well pairs where at least one detected concentration exceeded the respective GWPS, but the lower confidence limit/confidence band was below the GWPS (not a statistically significant level [SSL] above the GWPS). "Red" cells represent constituent/well pairs where at least one detected concentration exceeded the respective GWPS, and a lower confidence interval/confidence band exceeding the GWPS. "Red" cells represent SSLs above the GWPS.

Stantec's evaluation of 2022 quantitative analytical results associated with monitoring under the CCR Rule indicate the below-tabulated Appendix IV constituent/well pairs represent SSLs above their respective GWPSs. There have been no SSL exceedances associated with the CB Landfill to date.

CCR Appendix IV SSLs in excess of GWPSs			
CCR Unit	**Constituent/Well Pair**	**Lower Confidence Limit/Lower Confidence Band (LCL/LCB)**	**GWPS**
CB Landfill	No SSLs above GWPS		
Bottom Ash Basin	Molybdenum/BAC-2	0.156 mg/L	0.1 mg/L
Waste Water Basin	Arsenic/WWC-1	0.0219 mg/L	0.01514 mg/L
	Arsenic/WWC-3	0.0218 mg/L	0.01514 mg/L

It should be noted that historical statistical analyses before 2022 indicated that Arsenic and Lithium exhibited localized SSL exceedances above their respective GWPSs within monitoring wells located immediately adjacent to the two basins' unit boundaries, as follows: Lithium at wells WWC-1 and BAC-3 and Arsenic at wells BAC-2 and WWC-1 through WWC-5. However, when evaluating all historical data including the two sets of water quality results generated during 2022, only the three above-listed wells were identified as exhibiting GWPS exceedances, as of autumn 2022. As the cumulative volume of water quality data increases with additional future sampling events, it is anticipated that statistical analysis results should become increasingly more accurate.

Although it is well documented[1] that naturally-occurring Arsenic and Lithium can be present in soil and groundwater at elevated concentrations in basin-fill sediments and aquifers throughout the Basin and Range Physiographic Province of the western United States (including Lake Bonneville sediments similar to those underlying the IGF), attributable to volcanic rock source material and lacustrine and hot spring deposits, IPSC will continue monitoring these and other CCR Rule metal constituents in groundwater as part of its routine groundwater monitoring program. For reference, the IGF is located within a few miles of large volcanic topographic features, including Baker Hot Springs and the adjacent 9-mile by 6-mile Fumarole Butte/Crater Bench. Moreover, Stantec is aware of local Lithium mining operations located throughout Juab County, Utah and elsewhere within the footprint of historical Lake Bonneville basins similar to those within which the IGF is located.

However, as noted above, water quality data generated at the IGF to date (2015 through 2022) indicate that only two CCR Appendix IV metals (Arsenic and Molybdenum) exceed corollary GWPSs in wells located at the basin boundaries of the two surface impoundments. If the metal concentrations were 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 (decelerated) as a direct result of physical retardation atop and within the low-permeability clays as well as natural adsorption and cationic exchange within the porous, clay-rich soils. Likewise, given the relatively thick and impermeable clay-rich soils located below the water table (saturated, phreatic zone) characterizing the IGF subsurface, it is anticipated that similar retardation of metals is likely, historically and in the future. The clay-rich nature of soils and aquifers underlying the IGF and surface impoundments are discussed in detail in numerous preceding IPSC reports.

Typically, TDS 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 given the clay-rich nature of the uppermost aquifer beneath the site. Natural attenuation processes, such as adsorption, cationic exchange, dispersion, and biological degradation, tend to slow the lateral (saturated, phreatic zone) movement of metals in clay-rich aquifers. Accordingly, IPSC intends to continue to utilize TDS as a leading indicator parameter of impacted groundwater quality at the site.

As additional groundwater quality data is generated, CCR constituent concentrations will be evaluated through statistical analysis, in accordance with CCR Rule. Ongoing/future water quality data will be evaluated to determine whether additional monitoring and/or recovery

[1] United States Geological Survey (USGS) Professional Paper 918: "Lithium in Unconsolidated Sediments and Plants of the Basin and Range Province, Southern California and Nevada"; H.L Cannon, T. F. Harms, and J.C. Hamilton, 1975 and USGS' "Lithium Deposits in the United States"; N.A. Karl et al, 2019. USGS Scientific Investigations Report 2012-5065: "Predicted Nitrate and Arsenic Concentrations in Basin-fill Aquifers of the Southwestern United States"; D.W. Anning et al, 2012.

wells might be warranted for appropriate CCR constituent-impacted groundwater control and remediation.

3.0 ONGOING CORRECTIVE ACTIONS AND PROGRESS TOWARD INITIATING EXPANDED GROUNDWATER CORRECTIVE ACTION REMEDY

3.1 ONGOING GROUNDWATER RECOVERY AT EXISTING RECOVERY WELLS WR-101, WR-102, AND WR-103

IPSC intends to continue operation of existing groundwater recovery wells WR-101, WR-102, and WR-103. The three wells are recovering TDS-impacted groundwater from the generalized middle of the estimated TDS plume that is migrating southwest of the Bottom Ash Basin. Continued removal of TDS-impacted groundwater from each of these three wells is helping reduce the total mass of CCR constituents in the uppermost aquifer beneath areas of the site located downgradient of, and in close proximity to, the Bottom Ash Basin.

3.2 INSTALLATION OF SELECTED, EXPANDED GROUNDWATER REMEDY

Final selection and design of the expanded groundwater corrective action remedy was documented in IPSC/Stantec's June 2021 *Selection of Remedy Report*. The report provided detailed analysis of the extent and nature of impacted groundwater associated with the surface impoundments, a summary of corrective measures assessment, and evaluation of the selected remedy in terms of short- and long-term effectiveness and appropriate protection to human health and the environment.

Groundwater quality data to date, including the 2022 results, indicate that TDS has migrated farther down-gradient of the two surface impoundments than other CCR constituents, including Appendix IV metals. As discussed in detail in IPSC's November 2020 *Demonstration of Requirements for Alternative Closure Deadline under 40 C.F.R. §257.103(f)(2) Report* and IPSC's November 2020 *Amended Assessment of Corrective Measures* report, IPSC and Stantec anticipate that 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.

Currently, and until a new evaporation basin is constructed in 2023, 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 (anticipated to be 2023), 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, 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-18 through BAC-38.

- Waste Water Basin Plume Control:
  wells: WWC-1, WWC-4, WWC-5, RW-4, WWC-6, and WWC-7 through WWC-17 (excluding WWC-11).

In summary, groundwater will be recovered by means of dedicated, submersible pumps in recovery wells, as being implemented currently at existing recovery wells WR-101, WR-102, and WR-103. Each wellhead will be interconnected with a buried trunkline that will discharge recovered groundwater to the 80-mil, HDPE-lined Ash Recycle Basin located immediately south of the Bottom Ash Basin. The recovery network will be integrated with the existing recovery system and include all necessary equipment and appurtenances to transfer recovered groundwater from the wells to the Ash Recycle Basin and permit future monitoring and sampling of all the recovery wells.

As detailed in IPSC's *Selection of Remedy Report*, Stantec provided engineering and design services to IPSC for enhanced TDS plume control and associated groundwater recovery. Design elements included, for instance:

• Final basis of design;

• Process flow diagram supported by a hydraulic pumping and conveyance model;

• Piping and instrumentation (P&ID) drawings;

• Typical recovery well completion detail.

• Finalized hydraulic model of the pumping and conveyance system;

• Typical design details for the recovery wells and surface completions;

• Underground yard piping;

• Control philosophy for the system;

• Electrical single-line and termination drawings; and

• Equipment and construction specifications.

Currently, IPSC is installing equipment associated with the proposed expansion of the existing groundwater recovery well network that will include additional groundwater recovery wells and recovered water conveyance piping. IPSC is also providing additional localized, electrical power supply to service the new submersible pumps and water conveyance and monitoring appurtenances. Currently, and continuing into the 2023 construction season, IPSC is installing the expanded groundwater recovery system equipment and materials.

As detailed in IPSC's November 2020 *Demonstration of Requirements for Alternative Closure Deadline under 40 C.F.R. §257.103(f)(2) Report*, the CCR constituent plumes pose no unmitigated risk to on- and off-site human health. Given the vast real property acreage (4,614-acres) that is owned by the owner of the IGF, Intermountain Power Agency (IPA), as well as the relatively significant distances to off-site potential receptors who might use groundwater for potable and/or non-potable uses (approximately 2.5-miles away), IPSC anticipates that it can implement supplemental plume control measures so as to mitigate any such future potential exposures in a prompt and timely manner.

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Figure 1 Site Topographic Map

IPSC PROPERTY BOUNDARY

Combustion By-Products Landfill

Non-CCR Regulated, Evaporation Basins

Bottom Ash Basin

Waste Water Basin

Sugarville

Woodrow

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

1 0 1 2 3 4 KILOMETERS

1 0 1 2 MILES

N

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

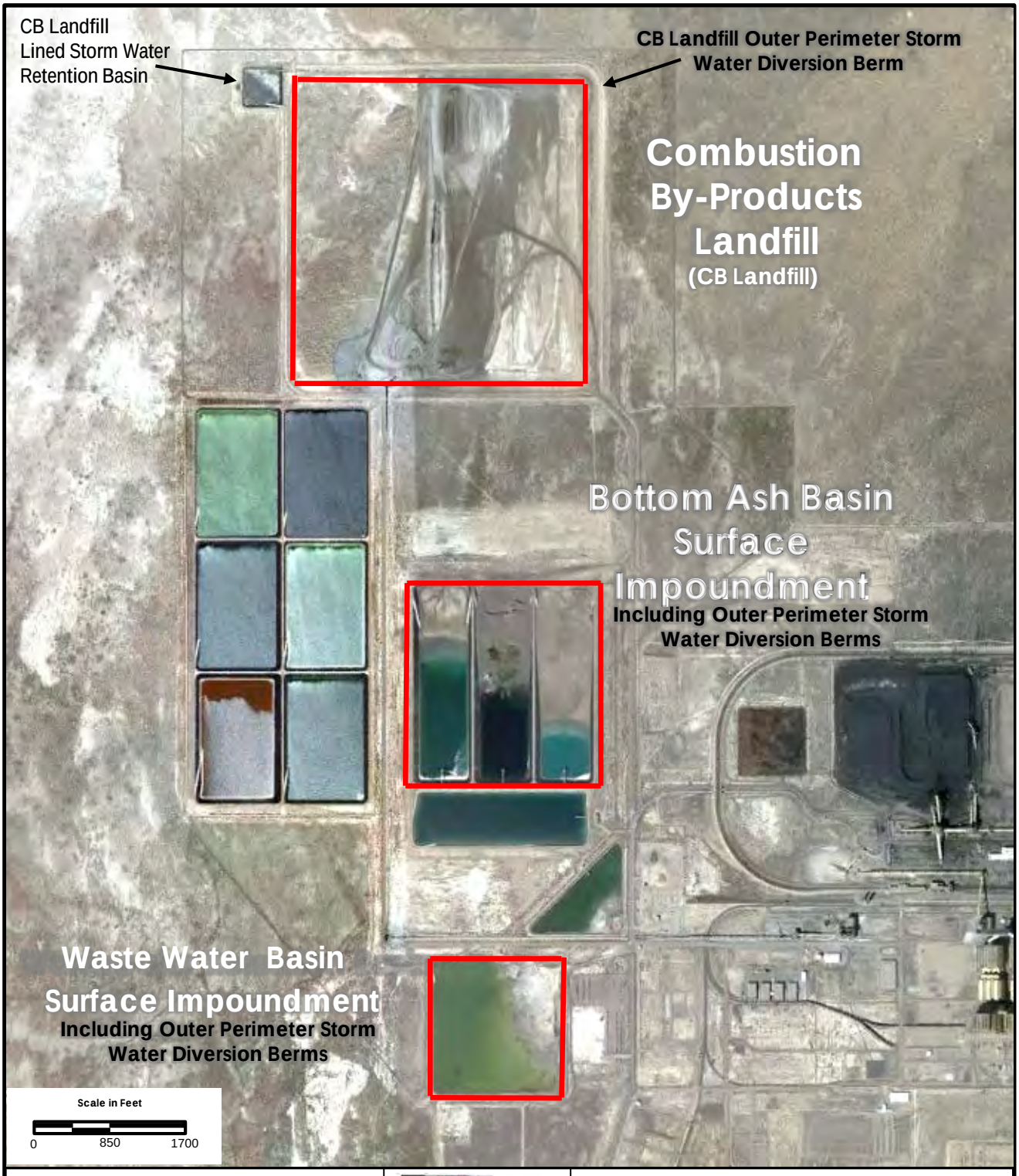
CCR-Regulated Units
DELTA, UTAH

FIGURE 1
SITE TOPOGRAHIC MAP

Stantec

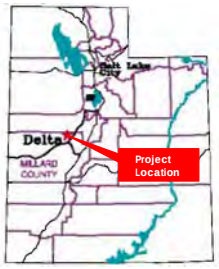
DESIGN BY	DRAWN BY	CH'D BY	SCALE	DATE DRAWN	REVISION
JR	CP		1"=1000'	1-26-17	

Figure 2. Site-Specific 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

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Figures 3A and 3B. Spring and Fall 2022 Groundwater Potentiometric and Flow Maps

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Combustion By-Products Landfill

Bottom Ash Basin

Waste Water Basin

CL-U-1 4622.90
CL-U-2 4623.31
CL-U-3 4622.74
CL-W-6 4608.58
CL-W-5 4609.91
CL-W-4 4609.93
CL-W-3 4610.13
CL-W-2 4612.45
CL-W-1 4619.65
CL-W-7 4621.43
CL-W-8 4620.51
CL-W-9 4579.38
WDB-19 4603.17
EP-W-27 4603.68
EMW-3 4577.75
EP-2 4594.45
EP-W-23 4604.36
EP-3 4591.86
BA-U-1 4623.53
BA-U-2 4624.64
BAC-34 4576.76
BAC-33 4578.74
BAC-32 4578.57
BAC-35 4576.94
BAC-26 4579.27
BAC-18 4576.58
BAC-27 4579.64
BAC-37 4574.76
BAC-28 4580.02
BAC-36 4574.47
BAC-29 4580.39
BAC-25 4574.74
BAC-30 4579.96
BAC-20 4574.89
BAC-31 4580.69
BAC-21 4574.89
BAC-22 4574.76
BAC-19 4574.30
BAC-23 4575.94
BAC-24 4574.88
BAC-38 4576.80
BAC-11 4576.04
BAC-14 4579.96
BAC-12 4575.79
BAC-13 4583.55
BAC-16 4582.17
BAC-15 4579.51
BAC-10 4577.55
BAC-9 4578.09
BAC-8 4579.30
RW-6 4575.89
BAC-17 4583.05
RW-5 4583.53
EP-4
EP-W-19 4604.81
WDB-7 4583.10
EP-W-15
WR-102 4593.02
WR-101 4591.66
WR-103 4604.42
BAC-7 4615.25
BAC-6 4614.83
BAC-5 4613.62
BAC-4 4611.05
BAC-3 4612.99
BAC-2 4613.57
BAC-1 4624.19
WW-U-2 4627.78
WW-U-1 4627.39
SI-U-1 4628.69
RW-4 4620.12
WWC-5 4622.21
WWC-4 4620.10
RW-7 4617.66
WWC-3 4619.95
WWC-2 4620.96
WWC-1 4620.61
WWC-11 4619.02
WWC-8 4619.61
WWC-7 4611.61
WWC-6 4616.69
WWC-16 4617.37
WWC-9 4617.72
WWC-10 4614.98
WWC-17 4617.39
WWC-12 4616.28
WWC-15 4616.30
WWC-13 4615.71
4580
4590
4600
4610
4620

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

LEGEND:

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

NOTES:
1) DATA COLLECTED SPRING 2022
2) ALL ELEVATIONS ARE FEET ABOVE MEAN SEA LEVEL (FT AMSL)

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

Stantec

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

SPRING 2022 POTENTIOMETRIC AND GROUNDWATER FLOW MAP

FIGURE: 3A

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
203709098	BRM	AH	JR	12/08/22

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LEGEND:

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

NOTES:
1) DATA COLLECTED SEPTEMBER 2022
2) ALL ELEVATIONS ARE FEET ABOVE MEAN SEA LEVEL (FT AMSL)

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

Stantec

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

FALL 2022
POTENTIOMETRIC AND GROUNDWATER FLOW MAP

FIGURE: 3B

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
203709098	BRM	AH	JR	12/08722

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Figures 4A and 4B. Spring and Fall 2022 Total Dissolved Solids (TDS) Concentrations Maps

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LEGEND:

MONITORING WELL TDS Concentration in milligrams per liter (mg/L)

4577.22 GROUNDWATER ELEVATION (FT AMSL) INFERRED

NOTES:

1) WATER LEVEL DATA COLLECTED SPRING 2022
2) ALL ELEVATIONS ARE FEET ABOVE MEAN SEA LEVEL (FT AMSL)
NS:NOT SAMPLED THIS EVENT.

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

Stantec

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

SPRING 2022
TOTAL DISSOLVED SOLIDS (TDS) CONCENTRATION MAP

FIGURE: 4A

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
203709098	BRM	AH	JR	12/08/22

C:\Users\bmcevers\OneDrive - Stantec\Desktop\Intrmtn Power\2022_10\fig3B_Fall2022GWE_NewWells_DeltaUT_20221031_11x17.mxd

Combustion By-Products Landfill

Bottom Ash Basin

Waste Water Basin

CL-U-1 1,180
CL-U-2 1,100
CL-U-3 1,050
CL-W-1 848
CL-W-2 1,110
CL-W-3 960
CL-W-4 916
CL-W-5 904
CL-W-6 980
CL-W-7 916
CL-W-8 832
CL-W-9 788
WDB-17 692
WDB-19 892
EP-W-27 8,070
EMW-3 708
EP-2 844
EP-W-23 872
EP-3 816
BA-U-1 3,080
BA-U-2 1,810
BAC-34 684
BAC-33 940
BAC-26 820
BAC-27 804
BAC-28 880
BAC-29 1,860
BAC-30 1,470
BAC-31 1,460
BAC-32 796
BAC-35 828
BAC-18 4575.17
BAC-37 600
BAC-36 860
BAC-25 580
BAC-20 700
BAC-21 620
BAC-22 860
BAC-19 760
BAC-23 780
BAC-24 840
BAC-38 780
WDB-5 1,880
WDB-7 720
BAC-7 3,090
EP-W-19 22,400
WR-103 4,140
BAC-6 2,430
BAC-5 1,820
BAC-4 1,620
BAC-2 8,200
BAC-1 5,400
BAC-3 11,600
WW-U-2 4,720
SI-U-1 1,390
WW-U-1 4,330
WR-102 17,400
WR-101 4,740
BAC-13 2,490
BAC-14 2,700
BAC-11 1,420
BAC-12 908
BAC-16 880
BAC-15 680
BAC-10 844
BAC-9 928
BAC-8 896
RW-1 2,690
RW-9 1,620
RW-6 804
RW-5 556
BAC-17 492
RW-4 2,330
WWC-5 4,560
WWC-4 1,800
WWC-3 832
WWC-2 932
WWC-1 12,700
WWC-8 2,270
WWC-11 628
WWC-7 1,220
RW-7 944
WWC-6 2,420
WWC-16 864
WWC-9 1,050
WWC-10 1,080
WWC-17 1,020
WWC-14 3,580
WWC-12 1,440
WWC-15 1,980
WWC-13 1,500
4580
4590
4600
4610
4620

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

LEGEND:

MONITORING WELL TDS Concentration in milligrams per liter (mg/L)

4577.22 GROUNDWATER ELEVATION (FT AMSL) INFERRED

NOTES:
1) DATA COLLECTED SEPTEMBER 2022
2) ALL ELEVATIONS ARE FEET ABOVE MEAN SEA LEVEL (FT AMSL)

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

Stantec

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

FALL 2022
TOTAL DISSOLVED SOLIDS (TDS) CONCRATION MAP

FIGURE: 4B

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
203709098	BRM	AH	JR	12/08722

January 18, 2023

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

January 18, 2023

TABLE 2A

SUMMARY STATISTICS, BOTTOM ASH BASIN SURFACE IMPOUNDMENT, 2015 -2022

Table 2A.
Summary Statistics - Bottom Ash Basin Surface Impoundment - 2015 -2022
Intermountain Power Service Corporation - Intermountain Generation Facility, Delta, Utah

CCR Constituent	Well ID	Frequency of Detection	Range of Reporting Limits	Mean	Standard Deviation	Minimum Detected Concentration	Maximum Detected Concentration	Median	95th Percentile
Antimony	BA-U-1	0/19	(0.00002 - 0.004)	-	-	-	-	0.002	0.004
Arsenic	BA-U-1	18/19	(0.005 - 0.005)	0.0163	0.0362	0.0226	0.00683	0.0216	0.0359
Barium	BA-U-1	19/19	-	0.061	0.149	0.0826	0.0234	0.0774	0.135
Beryllium	BA-U-1	0/19	(0.00004 - 0.002)	-	-	-	-	0.002	0.002
Cadmium	BA-U-1	0/19	(0.00002 - 0.001)	-	-	-	-	5.00E-04	5.50E-04
Chromium	BA-U-1	6/19	(0.0002 - 0.002)	5.06E-04	0.0711	0.00461	0.0157	0.002	0.00994
Cobalt	BA-U-1	1/19	(0.0003 - 0.004)	0.0015	0.0015	7.00E-04	5.66E-04	0.004	0.004
Fluoride	BA-U-1	19/19	-	0.587	1.75	1.078	0.382	0.919	1.678
Lead	BA-U-1	0/19	(0.00004 - 0.005)	-	-	-	-	0.002	0.0023
Lithium	BA-U-1	19/19	-	0.191	0.773	0.375	0.151	0.368	0.693
Mercury	BA-U-1	0/19	(0.0000396 - 0.00015)	-	-	-	-	1.50E-04	1.50E-04
Molybdenum	BA-U-1	18/19	(0.001 - 0.001)	0.00219	0.0408	0.00914	0.011	0.00312	0.0364
Radium-226+228	BA-U-1	18/18	--	1.079	0.567	0.35	2.33	1.035	1.965
Selenium	BA-U-1	13/19	(0.002 - 0.002)	0.0022	0.02	0.0046	0.00394	0.00384	0.00821
Thallium	BA-U-1	0/19	(0.00003 - 0.002)	-	-	-	-	0.002	0.002
Antimony	BA-U-2	0/19	(0.00002 - 0.004)	-	-	-	-	0.002	0.004
Arsenic	BA-U-2	16/19	(0.002 - 0.005)	0.00225	0.0283	0.0158	0.00911	0.0208	0.0252
Barium	BA-U-2	19/19	-	0.0728	0.175	0.132	0.0274	0.134	0.168
Beryllium	BA-U-2	0/19	(0.00004 - 0.002)	-	-	-	-	0.002	0.002
Cadmium	BA-U-2	0/19	(0.00002 - 0.001)	-	-	-	-	5.00E-04	5.50E-04
Chromium	BA-U-2	7/19	(0.00092 - 0.002)	0.002	0.0125	0.00299	0.00361	0.002	0.0103
Cobalt	BA-U-2	0/19	(0.00003 - 0.004)	-	-	-	-	0.004	0.004
Fluoride	BA-U-2	19/19	-	0.7	1.02	0.864	0.0993	0.865	0.996
Lead	BA-U-2	0/19	(0.00004 - 0.005)	-	-	-	-	0.002	0.0023
Lithium	BA-U-2	19/19	-	0.209	0.514	0.295	0.0698	0.3	0.357
Mercury	BA-U-2	0/19	(0.0000396 - 0.00015)	-	-	-	-	1.50E-04	1.50E-04
Molybdenum	BA-U-2	15/19	(0.000884 - 0.002)	0.0017	0.016	0.00526	0.00465	0.00311	0.0148
Radium-226+228	BA-U-2	18/18	--	1.119	0.475	0.46	2.42	1	1.842
Selenium	BA-U-2	7/19	(0.001 - 0.005)	6.91E-04	0.0035	0.00131	9.13E-04	0.002	0.00365
Thallium	BA-U-2	0/19	(0.00003 - 0.002)	-	-	-	-	0.002	0.002
Antimony	BAC-1	3/19	(0.000734 - 0.008)	0.00237	0.00258	0.00113	7.22E-04	0.002	0.0044
Arsenic	BAC-1	17/19	(0.005 - 0.01)	0.0103	0.0202	0.014	0.00397	0.0146	0.02
Barium	BAC-1	19/19	-	0.031	0.702	0.115	0.17	0.0501	0.421

Table 2A.
Summary Statistics - Bottom Ash Basin Surface Impoundment - 2015 -2022
Intermountain Power Service Corporation - Intermountain Generation Facility, Delta, Utah

CCR Constituent	Well ID	Frequency of Detection	Range of Reporting Limits	Mean	Standard Deviation	Minimum Detected Concentration	Maximum Detected Concentration	Median	95th Percentile
Beryllium	BAC-1	0/19	(0.000198 - 0.002)	-	-	-	-	0.002	0.002
Cadmium	BAC-1	0/19	(0.0000742 - 0.002)	-	-	-	-	5.00E-04	0.0011
Chromium	BAC-1	15/19	(0.0002 - 0.00092)	0.00163	0.114	0.0119	0.0257	0.00365	0.0485
Cobalt	BAC-1	2/19	(0.0003 - 0.006)	0.00461	0.00605	8.43E-04	0.00158	0.004	0.00601
Fluoride	BAC-1	17/19	(0.1 - 0.1)	0.197	0.928	0.476	0.24	0.437	0.861
Lead	BAC-1	0/19	(0.000588 - 0.01)	-	-	-	-	0.002	0.0055
Lithium	BAC-1	19/19	-	0.172	1.52	0.628	0.387	0.542	1.43
Mercury	BAC-1	0/19	(0.0000396 - 0.00015)	-	-	-	-	1.50E-04	1.50E-04
Molybdenum	BAC-1	18/19	(0.001 - 0.001)	0.011	0.143	0.0535	0.0428	0.0391	0.142
Radium-226+228	BAC-1	18/18	--	1.281	0.724	0.14	2.6	1.2	2.566
Selenium	BAC-1	18/19	(0.01 - 0.01)	0.00274	0.0204	0.0107	0.00515	0.00905	0.02
Thallium	BAC-1	0/19	(0.00003 - 0.002)	-	-	-	-	0.002	0.002
Antimony	BAC-2	0/19	(0.000734 - 0.008)	-	-	-	-	0.002	0.0044
Arsenic	BAC-2	17/19	(0.005 - 0.01)	0.0386	0.0647	0.0439	0.0153	0.0444	0.0634
Barium	BAC-2	19/19	-	0.018	0.0472	0.024	0.00701	0.022	0.0394
Beryllium	BAC-2	0/19	(0.000198 - 0.002)	-	-	-	-	0.002	0.002
Cadmium	BAC-2	0/19	(0.0000742 - 0.002)	-	-	-	-	5.00E-04	0.0011
Chromium	BAC-2	18/19	(0.0004 - 0.0004)	0.00483	0.0145	0.00719	0.00298	0.007	0.0119
Cobalt	BAC-2	0/19	(0.0003 - 0.006)	-	-	-	-	0.004	0.0042
Fluoride	BAC-2	17/19	(0.1 - 0.1)	0.684	1.38	0.979	0.358	1.1	1.371
Lead	BAC-2	1/19	(0.000588 - 0.01)	0.00221	0.00221	6.83E-04	3.82E-04	0.002	0.0055
Lithium	BAC-2	19/19	-	0.414	1.38	0.641	0.342	0.466	1.326
Mercury	BAC-2	4/19	(0.0000396 - 0.00015)	1.12E-04	2.80E-04	8.43E-05	6.49E-05	1.50E-04	2.01E-04
Molybdenum	BAC-2	19/19	-	0.08	0.194	0.155	0.0261	0.156	0.19
Radium-226+228	BAC-2	18/18	--	1.036	0.643	0.25	2.9	0.975	1.94
Selenium	BAC-2	18/19	(0.01 - 0.01)	0.012	0.02	0.0143	0.00209	0.0142	0.0176
Thallium	BAC-2	0/19	(0.00003 - 0.002)	-	-	-	-	0.002	0.002
Antimony	BAC-3	1/19	(0.000734 - 0.004)	0.0027	0.0027	8.74E-04	5.06E-04	0.002	0.004
Arsenic	BAC-3	18/19	(0.005 - 0.005)	0.0158	0.0588	0.0342	0.0147	0.0356	0.0545
Barium	BAC-3	19/19	-	0.0272	0.0827	0.0375	0.0134	0.0321	0.058
Beryllium	BAC-3	0/19	(0.000198 - 0.002)	-	-	-	-	0.002	0.002
Cadmium	BAC-3	0/19	(0.0000742 - 0.001)	-	-	-	-	5.00E-04	0.001
Chromium	BAC-3	19/19	-	0.00362	0.0615	0.00987	0.0128	0.00676	0.0196

Table 2A.
Summary Statistics - Bottom Ash Basin Surface Impoundment - 2015 -2022
Intermountain Power Service Corporation - Intermountain Generation Facility, Delta, Utah

CCR Constituent	Well ID	Frequency of Detection	Range of Reporting Limits	Mean	Standard Deviation	Minimum Detected Concentration	Maximum Detected Concentration	Median	95th Percentile
Cobalt	BAC-3	0/19	(0.0003 - 0.004)	-	-	-	-	0.004	0.004
Fluoride	BAC-3	16/19	(0.1 - 0.1)	0.4	2.51	1.076	0.661	1.26	1.961
Lead	BAC-3	0/19	(0.000588 - 0.005)	-	-	-	-	0.002	0.005
Lithium	BAC-3	19/19	-	0.328	2.53	1.171	0.556	0.996	2.386
Mercury	BAC-3	1/19	(0.0000396 - 0.00015)	1.05E-04	1.05E-04	4.78E-05	2.16E-05	1.50E-04	1.50E-04
Molybdenum	BAC-3	19/19	-	0.02	0.0525	0.033	0.00797	0.0311	0.0473
Radium-226+228	BAC-3	18/18	--	1.139	0.478	0.38	2.09	1.09	1.886
Selenium	BAC-3	18/19	(0.005 - 0.005)	0.0184	0.0287	0.0204	0.00429	0.0206	0.0241
Thallium	BAC-3	0/19	(0.00003 - 0.002)	-	-	-	-	0.002	0.002
Antimony	BAC-4	0/19	(0.00002 - 0.004)	-	-	-	-	0.002	0.004
Arsenic	BAC-4	18/19	(0.005 - 0.005)	0.00882	0.0407	0.0311	0.00867	0.0329	0.0375
Barium	BAC-4	19/19	-	0.0171	0.0821	0.065	0.0137	0.0656	0.0808
Beryllium	BAC-4	0/19	(0.00004 - 0.002)	-	-	-	-	0.002	0.002
Cadmium	BAC-4	0/19	(0.00002 - 0.001)	-	-	-	-	5.00E-04	5.50E-04
Chromium	BAC-4	5/19	(0.0002 - 0.002)	0.00212	0.011	0.00144	0.00266	0.002	0.00533
Cobalt	BAC-4	0/19	(0.00003 - 0.004)	-	-	-	-	0.004	0.004
Fluoride	BAC-4	19/19	-	1	1.38	1.189	0.13	1.15	1.362
Lead	BAC-4	0/19	(0.00004 - 0.005)	-	-	-	-	0.002	0.0023
Lithium	BAC-4	19/19	-	0.228	0.532	0.319	0.102	0.279	0.511
Mercury	BAC-4	0/19	(0.0000396 - 0.00015)	-	-	-	-	1.50E-04	1.50E-04
Molybdenum	BAC-4	19/19	-	0.00992	0.0262	0.0169	0.00574	0.0165	0.0255
Radium-226+228	BAC-4	18/18	--	0.709	0.559	0.11	2.6	0.63	1.257
Selenium	BAC-4	1/19	(0.000508 - 0.005)	0.0021	0.0021	5.96E-04	3.65E-04	0.002	0.00239
Thallium	BAC-4	0/19	(0.00003 - 0.002)	-	-	-	-	0.002	0.002
Antimony	BAC-5	0/19	(0.00002 - 0.004)	-	-	-	-	0.002	0.004
Arsenic	BAC-5	18/19	(0.005 - 0.005)	0.0275	0.0392	0.0305	0.00662	0.032	0.0362
Barium	BAC-5	19/19	-	0.039	0.0928	0.0704	0.0184	0.0736	0.0911
Beryllium	BAC-5	0/19	(0.00004 - 0.002)	-	-	-	-	0.002	0.002
Cadmium	BAC-5	0/19	(0.00002 - 0.001)	-	-	-	-	5.00E-04	5.50E-04
Chromium	BAC-5	3/19	(0.0002 - 0.002)	0.00204	0.0161	0.00134	0.0036	0.002	0.0053
Cobalt	BAC-5	0/19	(0.00003 - 0.004)	-	-	-	-	0.004	0.004
Fluoride	BAC-5	19/19	-	0.8	1.34	1.089	0.144	1.07	1.331
Lead	BAC-5	0/19	(0.00004 - 0.005)	-	-	-	-	0.002	0.0023

Table 2A.
Summary Statistics - Bottom Ash Basin Surface Impoundment - 2015 -2022
Intermountain Power Service Corporation - Intermountain Generation Facility, Delta, Utah

CCR Constituent	Well ID	Frequency of Detection	Range of Reporting Limits	Mean	Standard Deviation	Minimum Detected Concentration	Maximum Detected Concentration	Median	95th Percentile
Lithium	BAC-5	19/19	-	0.219	0.538	0.343	0.0881	0.323	0.498
Mercury	BAC-5	0/19	(0.0000396 - 0.00015)	-	-	-	-	1.50E-04	1.50E-04
Molybdenum	BAC-5	19/19	-	0.00666	0.0391	0.0163	0.0109	0.00941	0.0335
Radium-226+228	BAC-5	18/18	--	0.794	0.736	0.2	2.96	0.575	1.983
Selenium	BAC-5	1/19	(0.000508 - 0.005)	0.0021	0.0021	5.96E-04	3.65E-04	0.002	0.00239
Thallium	BAC-5	0/19	(0.00003 - 0.002)	-	-	-	-	0.002	0.002
Antimony	BAC-6	0/19	(0.00002 - 0.004)	-	-	-	-	0.002	0.004
Arsenic	BAC-6	18/19	(0.005 - 0.005)	0.0115	0.0295	0.0207	0.00653	0.0223	0.0284
Barium	BAC-6	19/19	-	0.017	0.0859	0.0368	0.0252	0.0245	0.0836
Beryllium	BAC-6	0/19	(0.00004 - 0.002)	-	-	-	-	0.002	0.002
Cadmium	BAC-6	1/19	(0.00002 - 0.001)	6.77E-04	6.77E-04	5.65E-05	1.50E-04	5.00E-04	7.09E-04
Chromium	BAC-6	6/19	(0.0002 - 0.002)	0.00205	0.0363	0.00269	0.00798	0.002	0.00618
Cobalt	BAC-6	1/19	(0.0003 - 0.004)	8.00E-04	8.00E-04	4.67E-04	2.36E-04	0.004	0.004
Fluoride	BAC-6	19/19	-	0.582	1.15	0.895	0.152	0.866	1.15
Lead	BAC-6	0/19	(0.00004 - 0.005)	-	-	-	-	0.002	0.0023
Lithium	BAC-6	19/19	-	0.232	0.599	0.328	0.129	0.269	0.597
Mercury	BAC-6	0/19	(0.0000396 - 0.00015)	-	-	-	-	1.50E-04	1.50E-04
Molybdenum	BAC-6	19/19	-	0.0213	0.0968	0.0728	0.0218	0.0805	0.0941
Radium-226+228	BAC-6	18/18	--	1.028	0.871	0	4.07	0.91	2.132
Selenium	BAC-6	7/19	(0.000508 - 0.005)	0.00229	0.0045	0.00158	0.00144	0.002	0.00455
Thallium	BAC-6	0/19	(0.00003 - 0.002)	-	-	-	-	0.002	0.002
Antimony	BAC-7	0/19	(0.00002 - 0.008)	-	-	-	-	0.002	0.0044
Arsenic	BAC-7	18/19	(0.01 - 0.01)	0.0154	0.0434	0.0278	0.00909	0.0241	0.042
Barium	BAC-7	19/19	-	0.0168	0.0577	0.0248	0.00956	0.0214	0.0393
Beryllium	BAC-7	0/19	(0.00004 - 0.002)	-	-	-	-	0.002	0.002
Cadmium	BAC-7	0/19	(0.00002 - 0.002)	-	-	-	-	5.00E-04	6.50E-04
Chromium	BAC-7	4/19	(0.0004 - 0.002)	0.00217	0.0264	0.00225	0.00581	0.002	0.00642
Cobalt	BAC-7	1/19	(0.0003 - 0.006)	0.002	0.002	7.25E-04	7.36E-04	0.004	0.0042
Fluoride	BAC-7	19/19	-	0.388	2.28	1.334	0.436	1.31	2.082
Lead	BAC-7	0/19	(0.00004 - 0.01)	-	-	-	-	0.002	0.0028
Lithium	BAC-7	19/19	-	0.218	0.699	0.366	0.171	0.288	0.683
Mercury	BAC-7	0/19	(0.0000396 - 0.00015)	-	-	-	-	1.50E-04	1.50E-04
Molybdenum	BAC-7	19/19	-	0.05	0.0944	0.075	0.0123	0.0749	0.0942

Table 2A.

Summary Statistics - Bottom Ash Basin Surface Impoundment - 2015 -2022

Intermountain Power Service Corporation - Intermountain Generation Facility, Delta, Utah

CCR Constituent	Well ID	Frequency of Detection	Range of Reporting Limits	Mean	Standard Deviation	Minimum Detected Concentration	Maximum Detected Concentration	Median	95th Percentile
Radium-226+228	BAC-7	18/18	--	1.02	0.813	0.24	3.38	0.875	2.692
Selenium	BAC-7	18/19	(0.01 - 0.01)	0.00202	0.0095	0.00406	0.00186	0.0035	0.00955
Thallium	BAC-7	0/19	(0.00003 - 0.002)	-	-	-	-	0.002	0.002
Antimony	BAC-8	0/8	(0.00002 - 0.004)	-	-	-	-	0.003	0.004
Arsenic	BAC-8	8/8	-	0.05	0.0668	0.0608	0.00654	0.0629	0.0668
Barium	BAC-8	8/8	-	0.036	0.0732	0.0423	0.0126	0.038	0.0617
Beryllium	BAC-8	0/8	(0.00004 - 0.002)	-	-	-	-	6.00E-04	0.002
Cadmium	BAC-8	1/8	(0.00002 - 0.001)	0.00129	0.00129	1.79E-04	4.20E-04	5.00E-04	0.00119
Chromium	BAC-8	2/8	(0.0002 - 0.002)	0.0034	0.00431	0.00111	0.0016	0.002	0.00399
Cobalt	BAC-8	0/8	(0.00003 - 0.004)	-	-	-	-	0.0025	0.004
Fluoride	BAC-8	8/8	-	1.4	1.8	1.579	0.116	1.57	1.741
Lead	BAC-8	0/8	(0.00004 - 0.005)	-	-	-	-	0.0015	0.00395
Lithium	BAC-8	8/8	-	0.154	0.183	0.165	0.0117	0.162	0.183
Mercury	BAC-8	0/8	(0.0000396 - 0.0001)	-	-	-	-	9.00E-05	1.00E-04
Molybdenum	BAC-8	7/8	(0.001 - 0.001)	0.00538	0.00644	0.00514	0.00159	0.00555	0.00625
Radium-226+228	BAC-8	3/3	--	0.697	0.525	0.16	1.21	0.72	1.161
Selenium	BAC-8	1/8	(0.000508 - 0.005)	0.0012	0.0012	6.81E-04	3.00E-04	0.0016	0.00395
Thallium	BAC-8	0/8	(0.00003 - 0.002)	-	-	-	-	7.09E-04	0.002
Antimony	BAC-9	0/8	(0.00002 - 0.004)	-	-	-	-	0.003	0.004
Arsenic	BAC-9	8/8	-	0.0488	0.0593	0.0529	0.00404	0.0511	0.059
Barium	BAC-9	8/8	-	0.0388	0.051	0.0447	0.00414	0.045	0.0501
Beryllium	BAC-9	0/8	(0.00004 - 0.002)	-	-	-	-	6.00E-04	0.002
Cadmium	BAC-9	1/8	(0.00002 - 0.001)	0.00172	0.00172	2.33E-04	5.62E-04	5.00E-04	0.00147
Chromium	BAC-9	1/8	(0.0002 - 0.002)	0.0035	0.0035	6.13E-04	0.00109	0.0015	0.00298
Cobalt	BAC-9	0/8	(0.00003 - 0.004)	-	-	-	-	0.0025	0.004
Fluoride	BAC-9	8/8	-	1.22	1.7	1.414	0.159	1.445	1.63
Lead	BAC-9	0/8	(0.00004 - 0.005)	-	-	-	-	0.0015	0.00395
Lithium	BAC-9	8/8	-	0.16	0.194	0.171	0.012	0.168	0.191
Mercury	BAC-9	0/8	(0.0000396 - 0.0001)	-	-	-	-	9.00E-05	1.00E-04
Molybdenum	BAC-9	7/8	(0.001 - 0.001)	0.0038	0.00565	0.00415	0.0013	0.00451	0.00538
Radium-226+228	BAC-9	7/7	--	0.487	0.249	0.09	0.88	0.478	0.805
Selenium	BAC-9	1/8	(0.000508 - 0.005)	0.0015	0.0015	7.56E-04	4.30E-04	0.00175	0.00395
Thallium	BAC-9	0/8	(0.00003 - 0.002)	-	-	-	-	7.09E-04	0.002

Table 2A.
Summary Statistics - Bottom Ash Basin Surface Impoundment - 2015 -2022
Intermountain Power Service Corporation - Intermountain Generation Facility, Delta, Utah

CCR Constituent	Well ID	Frequency of Detection	Range of Reporting Limits	Mean	Standard Deviation	Minimum Detected Concentration	Maximum Detected Concentration	Median	95th Percentile
Antimony	BAC-10	0/8	(0.00002 - 0.004)	-	-	-	-	0.003	0.004
Arsenic	BAC-10	8/8	-	0.05	0.0595	0.0553	0.00338	0.0551	0.0593
Barium	BAC-10	8/8	-	0.036	0.0612	0.0419	0.0084	0.038	0.0555
Beryllium	BAC-10	0/8	(0.00004 - 0.002)	-	-	-	-	6.00E-04	0.002
Cadmium	BAC-10	0/8	(0.00002 - 0.001)	-	-	-	-	3.75E-04	8.25E-04
Chromium	BAC-10	1/8	(0.0002 - 0.002)	0.0033	0.0033	5.88E-04	0.00103	0.0015	0.00285
Cobalt	BAC-10	0/8	(0.00003 - 0.004)	-	-	-	-	0.0025	0.004
Fluoride	BAC-10	8/8	-	1.46	1.8	1.586	0.114	1.575	1.751
Lead	BAC-10	0/8	(0.00004 - 0.005)	-	-	-	-	0.0015	0.00395
Lithium	BAC-10	8/8	-	0.134	0.171	0.158	0.0127	0.157	0.171
Mercury	BAC-10	0/8	(0.0000396 - 0.0001)	-	-	-	-	9.00E-05	1.00E-04
Molybdenum	BAC-10	7/8	(0.001 - 0.001)	0.00567	0.00656	0.00537	0.00167	0.00587	0.00642
Radium-226+228	BAC-10	7/7	--	0.551	0.587	0.01	1.8	0.41	1.455
Selenium	BAC-10	1/8	(0.000508 - 0.005)	0.0013	0.0013	7.06E-04	3.43E-04	0.00165	0.00395
Thallium	BAC-10	0/8	(0.00003 - 0.002)	-	-	-	-	7.09E-04	0.002
Antimony	BAC-15	0/8	(0.000734 - 0.02)	-	-	-	-	0.004	0.0144
Arsenic	BAC-15	7/8	(0.02 - 0.02)	0.05	0.061	0.0523	0.0126	0.0578	0.0603
Barium	BAC-15	8/8	-	0.036	0.0506	0.0414	0.00419	0.0405	0.0477
Beryllium	BAC-15	0/8	(0.000198 - 0.002)	-	-	-	-	0.0015	0.002
Cadmium	BAC-15	0/8	(0.0000742 - 0.005)	-	-	-	-	5.00E-04	0.0036
Chromium	BAC-15	0/8	(0.0002 - 0.002)	-	-	-	-	0.0015	0.002
Cobalt	BAC-15	0/8	(0.0003 - 0.02)	-	-	-	-	0.004	0.0144
Fluoride	BAC-15	8/8	-	1.49	2	1.715	0.145	1.715	1.916
Lead	BAC-15	0/8	(0.000588 - 0.02)	-	-	-	-	0.002	0.0148
Lithium	BAC-15	8/8	-	0.085	0.172	0.144	0.0255	0.147	0.166
Mercury	BAC-15	0/8	(0.0000396 - 0.0001)	-	-	-	-	9.00E-05	1.00E-04
Molybdenum	BAC-15	6/8	(0.001 - 0.005)	0.00705	0.00827	0.00582	0.0028	0.0072	0.00798
Radium-226+228	BAC-15	5/5	--	0.218	0.118	0.06	0.34	0.26	0.332
Selenium	BAC-15	0/8	(0.000508 - 0.02)	-	-	-	-	0.002	0.0148
Thallium	BAC-15	0/8	(0.00003 - 0.002)	-	-	-	-	0.00121	0.002
Antimony	BAC-16	0/8	(0.000734 - 0.004)	-	-	-	-	0.004	0.004
Arsenic	BAC-16	8/8	-	0.07	0.0888	0.0821	0.0059	0.0846	0.0877
Barium	BAC-16	8/8	-	0.034	0.0381	0.0357	0.00145	0.0359	0.0376

Table 2A.

Summary Statistics - Bottom Ash Basin Surface Impoundment - 2015 -2022

Intermountain Power Service Corporation - Intermountain Generation Facility, Delta, Utah

CCR Constituent	Well ID	Frequency of Detection	Range of Reporting Limits	Mean	Standard Deviation	Minimum Detected Concentration	Maximum Detected Concentration	Median	95th Percentile
Beryllium	BAC-16	0/8	(0.000198 - 0.002)	-	-	-	-	0.0011	0.002
Cadmium	BAC-16	0/8	(0.0000742 - 0.001)	-	-	-	-	5.00E-04	0.001
Chromium	BAC-16	0/8	(0.0002 - 0.002)	-	-	-	-	0.00146	0.002
Cobalt	BAC-16	0/8	(0.0003 - 0.004)	-	-	-	-	0.0035	0.004
Fluoride	BAC-16	8/8	-	1.69	2.2	1.861	0.15	1.825	2.092
Lead	BAC-16	0/8	(0.000588 - 0.005)	-	-	-	-	0.002	0.005
Lithium	BAC-16	8/8	-	0.144	0.183	0.167	0.0108	0.168	0.179
Mercury	BAC-16	0/8	(0.0000396 - 0.0001)	-	-	-	-	9.00E-05	1.00E-04
Molybdenum	BAC-16	6/8	(0.001 - 0.001)	0.00591	0.00732	0.00522	0.00247	0.00642	0.00727
Radium-226+228	BAC-16	5/5	--	0.404	0.21	0.19	0.74	0.4	0.676
Selenium	BAC-16	0/8	(0.000508 - 0.005)	-	-	-	-	0.002	0.005
Thallium	BAC-16	0/8	(0.00003 - 0.002)	-	-	-	-	0.00121	0.002

Notes:

All units micrograms per liter (mg/L)

Statistical Analyses were only conducted on wells with a minimum of 8 sampling results. Additional wells will be incorporated as more data is collected

The mean and standard deviation are represented by the Kaplan-Meier mean and standard deviation for constituent/well pairs with non-detects, reported at the laboratory reporting limit

"--": Not applicable

Well ID BA-U-1 and BA-U-2 are upgradient of the Bottom Ash Basin and represent background conditions, all other wells are downgradient of the Bottom

January 18, 2023

TABLE 2B

SUMMARY STATISTICS, WASTEWATER BASIN SURFACE IMPOUNDMENT, 2015 -2022

Table 2B.
Summary Statistics - Waste Water Basin Surface Impoundment - 2015 -2022
Intermountain Power Service Corporation - Intermountain Generation Facility, Delta, Utah

CCR Constituent	Well ID	Frequency of Detection	Range of Reporting Limits	Mean	Standard Deviation	Minimum Detected Concentration	Maximum Detected Concentration	Median	95th Percentile
Antimony	WW-U-1	0/19	(0.00002 - 0.008)	--	--	--	--	0.002	0.0044
Arsenic	WW-U-1	17/19	(0.002 - 0.01)	0.0041	0.0118	0.00577	0.00199	0.00568	0.0102
Barium	WW-U-1	19/19	--	0.028	0.178	0.0622	0.039	0.0479	0.129
Beryllium	WW-U-1	0/19	(0.00004 - 0.002)	--	--	--	--	0.002	0.002
Cadmium	WW-U-1	0/19	(0.00002 - 0.002)	--	--	--	--	5.00E-04	6.50E-04
Chromium	WW-U-1	14/19	(0.0004 - 0.002)	0.00124	0.0258	0.00393	0.00542	0.00275	0.00798
Cobalt	WW-U-1	1/19	(0.0003 - 0.006)	6.00E-04	6.00E-04	4.00E-04	1.41E-04	0.004	0.0042
Fluoride	WW-U-1	15/19	(0.1 - 1)	0.181	0.789	0.345	0.17	0.386	0.81
Lead	WW-U-1	0/19	(0.00004 - 0.01)	--	--	--	--	0.002	0.0028
Lithium	WW-U-1	19/19	--	0.328	1.33	0.571	0.282	0.459	1.042
Mercury	WW-U-1	0/19	(0.0000396 - 0.00015)	--	--	--	--	1.50E-04	1.50E-04
Molybdenum	WW-U-1	19/19	--	0.00556	0.0101	0.00759	0.00135	0.00732	0.00992
Radium-226+228	WW-U-1	18/18	--	1.746	0.723	0.67	3.3	1.55	3.215
Selenium	WW-U-1	18/19	(0.01 - 0.01)	0.00432	0.0158	0.00708	0.00221	0.00689	0.0106
Thallium	WW-U-1	0/19	(0.00003 - 0.002)	--	--	--	--	0.002	0.002
Antimony	WW-U-2	0/19	(0.00002 - 0.008)	--	--	--	--	0.002	0.0044
Arsenic	WW-U-2	18/19	(0.01 - 0.01)	0.00258	0.014	0.00828	0.00377	0.01	0.0136
Barium	WW-U-2	19/19	--	0.034	0.123	0.0633	0.0257	0.0499	0.118
Beryllium	WW-U-2	0/19	(0.00004 - 0.002)	--	--	--	--	0.002	0.002
Cadmium	WW-U-2	0/19	(0.00002 - 0.002)	--	--	--	--	5.00E-04	6.50E-04
Chromium	WW-U-2	14/19	(0.0004 - 0.002)	0.00137	0.067	0.00685	0.0145	0.00396	0.017
Cobalt	WW-U-2	2/19	(0.0003 - 0.006)	6.00E-04	0.0072	7.58E-04	0.00152	0.004	0.00612
Fluoride	WW-U-2	15/19	(0.1 - 1)	0.287	1.01	0.499	0.23	0.534	1.001
Lead	WW-U-2	0/19	(0.00004 - 0.01)	--	--	--	--	0.002	0.0028
Lithium	WW-U-2	19/19	--	0.415	1.35	0.629	0.258	0.512	1.107
Mercury	WW-U-2	0/19	(0.0000396 - 0.00015)	--	--	--	--	1.50E-04	1.50E-04
Molybdenum	WW-U-2	18/19	(0.000884 - 0.000884)	0.0013	0.0342	0.00913	0.00939	0.00411	0.0248
Radium-226+228	WW-U-2	18/18	--	1.529	0.567	0.73	2.94	1.395	2.498
Selenium	WW-U-2	18/19	(0.01 - 0.01)	0.00543	0.0128	0.0101	0.00207	0.0108	0.0123
Thallium	WW-U-2	0/19	(0.00003 - 0.002)	--	--	--	--	0.002	0.002
Antimony	SI-U-1	1/19	(0.00002 - 0.008)	0.002	0.002	1.61E-04	5.10E-04	0.002	0.0044
Arsenic	SI-U-1	18/19	(0.01 - 0.01)	0.00266	0.0135	0.00969	0.00237	0.00969	0.0131
Barium	SI-U-1	19/19	--	0.038	0.112	0.0675	0.0198	0.0634	0.0948
Beryllium	SI-U-1	0/19	(0.00004 - 0.002)	--	--	--	--	0.002	0.002
Cadmium	SI-U-1	1/19	(0.00002 - 0.002)	0.00128	0.00128	9.00E-05	2.89E-04	5.00E-04	0.00135
Chromium	SI-U-1	10/19	(0.0004 - 0.002)	6.02E-04	0.0156	0.00261	0.00374	0.002	0.0105

Table 2B.
Summary Statistics - Waste Water Basin Surface Impoundment - 2015 -2022
Intermountain Power Service Corporation - Intermountain Generation Facility, Delta, Utah

CCR Constituent	Well ID	Frequency of Detection	Range of Reporting Limits	Mean	Standard Deviation	Minimum Detected Concentration	Maximum Detected Concentration	Median	95th Percentile
Cobalt	SI-U-1	0/19	(0.00003 - 0.006)	--	--	--	--	0.004	0.0042
Fluoride	SI-U-1	17/19	(0.1 - 0.2)	0.38	0.779	0.499	0.157	0.522	0.634
Lead	SI-U-1	0/19	(0.00004 - 0.01)	--	--	--	--	0.002	0.0028
Lithium	SI-U-1	19/19	--	0.207	0.634	0.304	0.121	0.254	0.513
Mercury	SI-U-1	0/19	(0.0000396 - 0.00015)	--	--	--	--	1.50E-04	1.50E-04
Molybdenum	SI-U-1	15/19	(0.000884 - 0.002)	0.0017	0.00671	0.00255	0.00145	0.00227	0.00566
Radium-226+228	SI-U-1	18/18	--	1.127	0.494	0.43	2.26	1.045	1.869
Selenium	SI-U-1	1/19	(0.000508 - 0.01)	0.0055	0.0055	7.85E-04	0.00114	0.002	0.00595
Thallium	SI-U-1	0/19	(0.00003 - 0.002)	--	--	--	--	0.002	0.002
Antimony	WWC-1	0/19	(0.00002 - 0.02)	--	--	--	--	0.002	0.0056
Arsenic	WWC-1	18/19	(0.02 - 0.02)	0.00331	0.0343	0.0201	0.00738	0.02	0.0272
Barium	WWC-1	18/19	(0.005 - 0.005)	0.0183	0.077	0.0307	0.0176	0.0268	0.0725
Beryllium	WWC-1	0/19	(0.00004 - 0.002)	--	--	--	--	0.002	0.002
Cadmium	WWC-1	0/19	(0.00002 - 0.005)	--	--	--	--	5.00E-04	9.50E-04
Chromium	WWC-1	4/19	(0.00092 - 0.002)	0.0033	0.0139	0.00201	0.00295	0.002	0.00471
Cobalt	WWC-1	3/19	(0.0003 - 0.02)	0.0011	0.00842	0.00127	0.00208	0.004	0.00958
Fluoride	WWC-1	12/19	(0.02 - 0.4)	0.114	0.593	0.218	0.177	0.245	0.535
Lead	WWC-1	0/19	(0.00004 - 0.02)	--	--	--	--	0.002	0.0038
Lithium	WWC-1	19/19	--	0.755	2.69	1.2	0.565	0.974	2.438
Mercury	WWC-1	16/19	(0.0001 - 0.00015)	1.68E-04	5.00E-04	2.26E-04	9.28E-05	2.05E-04	3.45E-04
Molybdenum	WWC-1	19/19	--	0.00596	0.0176	0.0106	0.00328	0.00995	0.0154
Radium-226+228	WWC-1	18/18	--	1.371	0.531	0.65	2.51	1.27	2.476
Selenium	WWC-1	18/19	(0.02 - 0.02)	0.00824	0.0924	0.0179	0.0177	0.0145	0.0272
Thallium	WWC-1	0/19	(0.00003 - 0.002)	--	--	--	--	0.002	0.002
Antimony	WWC-2	0/19	(0.00002 - 0.004)	--	--	--	--	0.002	0.004
Arsenic	WWC-2	18/19	(0.005 - 0.005)	0.0129	0.0166	0.0145	0.00239	0.015	0.0162
Barium	WWC-2	19/19	--	0.0296	0.0543	0.0368	0.00662	0.0357	0.0514
Beryllium	WWC-2	0/19	(0.00004 - 0.002)	--	--	--	--	0.002	0.002
Cadmium	WWC-2	0/19	(0.00002 - 0.001)	--	--	--	--	5.00E-04	5.50E-04
Chromium	WWC-2	5/19	(0.0002 - 0.002)	0.00332	0.0243	0.00217	0.00539	0.002	0.00594
Cobalt	WWC-2	0/19	(0.00003 - 0.004)	--	--	--	--	0.004	0.004
Fluoride	WWC-2	18/19	(1 - 1)	0.158	0.833	0.443	0.134	0.448	0.85
Lead	WWC-2	0/19	(0.00004 - 0.005)	--	--	--	--	0.002	0.0023
Lithium	WWC-2	19/19	--	0.104	0.243	0.142	0.0439	0.126	0.241
Mercury	WWC-2	0/19	(0.0000396 - 0.00015)	--	--	--	--	1.50E-04	1.50E-04
Molybdenum	WWC-2	19/19	--	0.00304	0.00809	0.00387	0.00108	0.00357	0.0049

Table 2B.
Summary Statistics - Waste Water Basin Surface Impoundment - 2015 -2022
Intermountain Power Service Corporation - Intermountain Generation Facility, Delta, Utah

CCR Constituent	Well ID	Frequency of Detection	Range of Reporting Limits	Mean	Standard Deviation	Minimum Detected Concentration	Maximum Detected Concentration	Median	95th Percentile
Radium-226+228	WWC-2	18/18	--	0.714	0.455	0.08	1.89	0.585	1.338
Selenium	WWC-2	1/19	(0.000508 - 0.005)	0.001	0.001	6.31E-04	2.13E-04	0.002	0.0023
Thallium	WWC-2	0/19	(0.00003 - 0.002)	--	--	--	--	0.002	0.002
Antimony	WWC-3	0/19	(0.00002 - 0.004)	--	--	--	--	0.002	0.004
Arsenic	WWC-3	18/19	(0.005 - 0.005)	0.0102	0.0247	0.0203	0.00463	0.0214	0.0237
Barium	WWC-3	19/19	--	0.0242	0.0638	0.034	0.00879	0.0328	0.0469
Beryllium	WWC-3	0/19	(0.00004 - 0.002)	--	--	--	--	0.002	0.002
Cadmium	WWC-3	0/19	(0.00002 - 0.001)	--	--	--	--	5.00E-04	5.50E-04
Chromium	WWC-3	4/19	(0.0002 - 0.002)	0.0024	0.00577	9.35E-04	0.00154	0.002	0.00373
Cobalt	WWC-3	0/19	(0.00003 - 0.004)	--	--	--	--	0.004	0.004
Fluoride	WWC-3	19/19	--	0.786	1.28	0.979	0.133	0.986	1.154
Lead	WWC-3	0/19	(0.00004 - 0.005)	--	--	--	--	0.002	0.0023
Lithium	WWC-3	19/19	--	0.123	0.243	0.16	0.0372	0.151	0.241
Mercury	WWC-3	0/19	(0.0000396 - 0.00015)	--	--	--	--	1.50E-04	1.50E-04
Molybdenum	WWC-3	18/19	(0.001 - 0.001)	0.0043	0.0459	0.00699	0.00923	0.00495	0.00993
Radium-226+228	WWC-3	18/18	--	0.926	1.063	0.15	3.68	0.505	3.468
Selenium	WWC-3	1/19	(0.000508 - 0.005)	0.0015	0.0015	7.56E-04	4.30E-04	0.002	0.0023
Thallium	WWC-3	0/19	(0.00003 - 0.002)	--	--	--	--	0.002	0.002
Antimony	WWC-4	0/19	(0.00002 - 0.004)	--	--	--	--	0.002	0.004
Arsenic	WWC-4	18/19	(0.005 - 0.005)	0.00498	0.0164	0.0128	0.00316	0.0135	0.0163
Barium	WWC-4	19/19	--	0.035	0.101	0.0547	0.0181	0.0495	0.0911
Beryllium	WWC-4	0/19	(0.00004 - 0.002)	--	--	--	--	0.002	0.002
Cadmium	WWC-4	0/19	(0.00002 - 0.001)	--	--	--	--	5.00E-04	5.50E-04
Chromium	WWC-4	3/19	(0.00092 - 0.002)	5.00E-04	0.00877	0.00122	0.00216	0.002	0.00628
Cobalt	WWC-4	0/19	(0.00003 - 0.004)	--	--	--	--	0.004	0.004
Fluoride	WWC-4	19/19	--	0.319	0.623	0.466	0.0793	0.453	0.581
Lead	WWC-4	0/19	(0.00004 - 0.005)	--	--	--	--	0.002	0.0023
Lithium	WWC-4	19/19	--	0.258	0.909	0.437	0.197	0.355	0.882
Mercury	WWC-4	0/19	(0.0000396 - 0.00015)	--	--	--	--	1.50E-04	1.50E-04
Molybdenum	WWC-4	8/19	(0.000884 - 0.002)	0.00207	0.0082	0.00219	0.00221	0.002	0.00787
Radium-226+228	WWC-4	18/18	--	0.845	0.397	0.18	1.97	0.765	1.52
Selenium	WWC-4	11/19	(0.000508 - 0.005)	0.00177	0.00241	0.00166	7.70E-04	0.00207	0.00267
Thallium	WWC-4	0/19	(0.00003 - 0.002)	--	--	--	--	0.002	0.002
Antimony	WWC-5	0/19	(0.00002 - 0.004)	--	--	--	--	0.002	0.004
Arsenic	WWC-5	18/19	(0.005 - 0.005)	0.00371	0.0186	0.0108	0.00426	0.0104	0.0165
Barium	WWC-5	19/19	--	0.0294	0.103	0.0442	0.0203	0.0369	0.0897

Table 2B.
Summary Statistics - Waste Water Basin Surface Impoundment - 2015 -2022
Intermountain Power Service Corporation - Intermountain Generation Facility, Delta, Utah

CCR Constituent	Well ID	Frequency of Detection	Range of Reporting Limits	Mean	Standard Deviation	Minimum Detected Concentration	Maximum Detected Concentration	Median	95th Percentile
Beryllium	WWC-5	0/19	(0.00004 - 0.002)	--	--	--	--	0.002	0.002
Cadmium	WWC-5	0/19	(0.00002 - 0.001)	--	--	--	--	5.00E-04	5.50E-04
Chromium	WWC-5	5/19	(0.0002 - 0.002)	0.00202	0.00892	0.00125	0.00218	0.002	0.00478
Cobalt	WWC-5	2/19	(0.0003 - 0.004)	0.0011	0.0055	8.26E-04	0.00116	0.004	0.00415
Fluoride	WWC-5	18/19	(0.1 - 0.1)	0.219	0.668	0.379	0.123	0.366	0.556
Lead	WWC-5	0/19	(0.00004 - 0.005)	--	--	--	--	0.002	0.0023
Lithium	WWC-5	18/19	(0.1 - 0.1)	0.449	4.41	0.834	0.909	0.523	1.71
Mercury	WWC-5	0/19	(0.0000396 - 0.00015)	--	--	--	--	1.50E-04	1.50E-04
Molybdenum	WWC-5	16/19	(0.000884 - 0.001)	0.0013	0.0265	0.00571	0.00669	0.0031	0.0211
Radium-226+228	WWC-5	18/18	--	1.379	0.518	0.2	2.42	1.305	2.055
Selenium	WWC-5	18/19	(0.002 - 0.002)	0.00312	0.02	0.00558	0.00398	0.00415	0.0132
Thallium	WWC-5	0/18	(0.00003 - 0.002)	--	--	--	--	0.002	0.002
Antimony	WWC-6	0/9	(0.00002 - 0.008)	--	--	--	--	0.004	0.0064
Arsenic	WWC-6	8/9	(0.01 - 0.01)	0.0133	0.0149	0.0137	0.0014	0.014	0.0148
Barium	WWC-6	9/9	--	0.069	0.0925	0.0812	0.00724	0.0822	0.0904
Beryllium	WWC-6	0/9	(0.00004 - 0.002)	--	--	--	--	0.001	0.002
Cadmium	WWC-6	0/9	(0.00002 - 0.002)	--	--	--	--	5.00E-04	0.0014
Chromium	WWC-6	3/9	(0.0004 - 0.002)	0.0027	0.00457	0.0014	0.0015	0.002	0.00393
Cobalt	WWC-6	0/9	(0.00003 - 0.006)	--	--	--	--	0.004	0.0052
Fluoride	WWC-6	8/9	(1 - 1)	0.158	0.255	0.224	0.0345	0.244	0.702
Lead	WWC-6	0/9	(0.00004 - 0.01)	--	--	--	--	0.002	0.0068
Lithium	WWC-6	9/9	--	0.201	0.245	0.213	0.0135	0.208	0.235
Mercury	WWC-6	0/9	(0.0000396 - 0.00015)	--	--	--	--	9.00E-05	1.30E-04
Molybdenum	WWC-6	9/9	--	0.00484	0.0067	0.00578	5.04E-04	0.00588	0.00642
Radium-226+228	WWC-6	3/3	--	0.821	0.43	0.444	1.29	0.73	1.234
Selenium	WWC-6	1/9	(0.000508 - 0.01)	0.0041	0.0041	9.57E-04	0.00119	0.002	0.00764
Thallium	WWC-6	0/9	(0.00003 - 0.002)	--	--	--	--	0.001	0.002
Antimony	WWC-7	0/9	(0.00002 - 0.004)	--	--	--	--	0.004	0.004
Arsenic	WWC-7	8/9	(0.005 - 0.005)	0.0141	0.022	0.0173	0.0049	0.0188	0.0218
Barium	WWC-7	9/9	--	0.0297	0.059	0.0396	0.0105	0.032	0.0545
Beryllium	WWC-7	0/9	(0.00004 - 0.002)	--	--	--	--	0.001	0.002
Cadmium	WWC-7	0/9	(0.00002 - 0.001)	--	--	--	--	5.00E-04	8.00E-04
Chromium	WWC-7	3/9	(0.00092 - 0.002)	0.003	0.009	0.0024	0.00258	0.002	0.00703
Cobalt	WWC-7	0/9	(0.00003 - 0.004)	--	--	--	--	0.003	0.004
Fluoride	WWC-7	9/9	--	0.357	0.465	0.411	0.0338	0.416	0.456
Lead	WWC-7	0/9	(0.00004 - 0.005)	--	--	--	--	0.002	0.0038

Table 2B.
Summary Statistics - Waste Water Basin Surface Impoundment - 2015 -2022
Intermountain Power Service Corporation - Intermountain Generation Facility, Delta, Utah

CCR Constituent	Well ID	Frequency of Detection	Range of Reporting Limits	Mean	Standard Deviation	Minimum Detected Concentration	Maximum Detected Concentration	Median	95th Percentile
Lithium	WWC-7	5/9	(0.0239 - 0.1)	0.08	0.168	0.0838	0.0447	0.1	0.146
Mercury	WWC-7	0/9	(0.0000396 - 0.00015)	--	--	--	--	9.00E-05	1.30E-04
Molybdenum	WWC-7	8/9	(0.001 - 0.001)	0.00386	0.0067	0.00426	0.00139	0.0044	0.00593
Radium-226+228	WWC-7	3/3	--	0.323	0.0379	0.28	0.35	0.34	0.349
Selenium	WWC-7	1/9	(0.000508 - 0.005)	0.0016	0.0016	7.81E-04	4.73E-04	0.002	0.0038
Thallium	WWC-7	0/9	(0.00003 - 0.002)	--	--	--	--	0.001	0.002
Antimony	WWC-8	0/8	(0.00002 - 0.004)	--	--	--	--	0.003	0.004
Arsenic	WWC-8	7/8	(0.005 - 0.005)	0.0081	0.0172	0.0138	0.0043	0.0158	0.0171
Barium	WWC-8	8/8	--	0.046	0.173	0.0677	0.0428	0.0516	0.134
Beryllium	WWC-8	0/8	(0.00004 - 0.002)	--	--	--	--	6.00E-04	0.002
Cadmium	WWC-8	0/8	(0.00002 - 0.001)	--	--	--	--	3.75E-04	8.25E-04
Chromium	WWC-8	1/8	(0.0002 - 0.002)	0.0047	0.0047	7.63E-04	0.00149	0.0015	0.00376
Cobalt	WWC-8	0/8	(0.00003 - 0.004)	--	--	--	--	0.0025	0.004
Fluoride	WWC-8	7/8	(0.4 - 0.4)	0.353	0.472	0.415	0.0398	0.419	0.465
Lead	WWC-8	0/8	(0.00004 - 0.005)	--	--	--	--	0.0015	0.00395
Lithium	WWC-8	8/8	--	0.203	0.262	0.226	0.0206	0.227	0.256
Mercury	WWC-8	0/8	(0.0000396 - 0.0001)	--	--	--	--	9.00E-05	1.00E-04
Molybdenum	WWC-8	8/8	--	0.0026	0.00632	0.00332	0.00124	0.00282	0.00525
Radium-226+228	WWC-8	3/3	--	0.6	0.325	0.36	0.97	0.47	0.92
Selenium	WWC-8	7/8	(0.005 - 0.005)	0.00274	0.0045	0.00379	5.13E-04	0.00387	0.00483
Thallium	WWC-8	0/8	(0.00003 - 0.002)	--	--	--	--	7.09E-04	0.002
Antimony	WWC-9	0/8	(0.00002 - 0.004)	--	--	--	--	0.004	0.004
Arsenic	WWC-9	7/8	(0.005 - 0.005)	0.0231	0.0309	0.0251	0.00795	0.0278	0.0308
Barium	WWC-9	8/8	--	0.0629	0.0973	0.0763	0.0109	0.0761	0.0921
Beryllium	WWC-9	0/8	(0.00004 - 0.002)	--	--	--	--	6.00E-04	0.002
Cadmium	WWC-9	0/8	(0.00002 - 0.001)	--	--	--	--	3.75E-04	8.25E-04
Chromium	WWC-9	1/8	(0.0002 - 0.002)	0.002	0.002	4.25E-04	5.95E-04	0.0015	0.002
Cobalt	WWC-9	0/8	(0.00003 - 0.004)	--	--	--	--	0.0025	0.004
Fluoride	WWC-9	7/8	(0.4 - 0.4)	0.693	1.11	0.816	0.204	0.828	1.079
Lead	WWC-9	0/8	(0.00004 - 0.005)	--	--	--	--	0.0015	0.00395
Lithium	WWC-9	8/8	--	0.147	0.194	0.165	0.017	0.164	0.19
Mercury	WWC-9	0/8	(0.0000396 - 0.0001)	--	--	--	--	9.00E-05	1.00E-04
Molybdenum	WWC-9	8/8	--	0.0022	0.00538	0.00323	0.00102	0.0032	0.00473
Radium-226+228	WWC-9	3/3	--	0.28	0.131	0.19	0.43	0.22	0.409
Selenium	WWC-9	1/8	(0.000508 - 0.005)	0.0028	0.0028	8.35E-04	8.02E-04	0.002	0.00423
Thallium	WWC-9	0/8	(0.00003 - 0.002)	--	--	--	--	7.09E-04	0.002

Table 2B.
Summary Statistics - Waste Water Basin Surface Impoundment - 2015 -2022
Intermountain Power Service Corporation - Intermountain Generation Facility, Delta, Utah

CCR Constituent	Well ID	Frequency of Detection	Range of Reporting Limits	Mean	Standard Deviation	Minimum Detected Concentration	Maximum Detected Concentration	Median	95th Percentile
Antimony	WWC-10	0/8	(0.00002 - 0.008)	--	--	--	--	0.004	0.0066
Arsenic	WWC-10	7/8	(0.01 - 0.01)	0.024	0.0377	0.0253	0.00712	0.0256	0.0346
Barium	WWC-10	8/8	--	0.03	0.0615	0.0377	0.00985	0.0353	0.0527
Beryllium	WWC-10	0/8	(0.00004 - 0.002)	--	--	--	--	7.00E-04	0.002
Cadmium	WWC-10	1/8	(0.00002 - 0.002)	7.80E-04	7.80E-04	1.29E-04	2.66E-04	3.75E-04	0.00157
Chromium	WWC-10	1/8	(0.0004 - 0.002)	0.0028	0.0028	7.00E-04	7.94E-04	0.0015	0.00252
Cobalt	WWC-10	0/8	(0.00003 - 0.006)	--	--	--	--	0.003	0.0053
Fluoride	WWC-10	6/8	(0.02 - 1)	0.491	0.726	0.509	0.214	0.58	0.904
Lead	WWC-10	0/8	(0.00004 - 0.01)	--	--	--	--	0.0015	0.0072
Lithium	WWC-10	8/8	--	0.107	0.125	0.115	0.00568	0.115	0.123
Mercury	WWC-10	0/8	(0.0000396 - 0.0001)	--	--	--	--	9.00E-05	1.00E-04
Molybdenum	WWC-10	8/8	--	0.00647	0.00932	0.00738	0.00106	0.00704	0.00905
Radium-226+228	WWC-10	7/7	--	0.534	0.252	0.17	0.97	0.44	0.883
Selenium	WWC-10	1/8	(0.000508 - 0.01)	7.00E-04	7.00E-04	5.72E-04	9.05E-05	0.0015	0.0072
Thallium	WWC-10	0/8	(0.00003 - 0.002)	--	--	--	--	7.09E-04	0.002
Antimony	WWC-11	0/8	(0.00002 - 0.004)	--	--	--	--	0.004	0.004
Arsenic	WWC-11	7/8	(0.005 - 0.005)	0.00231	0.0172	0.00945	0.00572	0.00848	0.0171
Barium	WWC-11	8/8	--	0.054	0.15	0.092	0.0359	0.0765	0.145
Beryllium	WWC-11	0/8	(0.00004 - 0.002)	--	--	--	--	0.0011	0.002
Cadmium	WWC-11	0/8	(0.00002 - 0.001)	--	--	--	--	5.00E-04	8.25E-04
Chromium	WWC-11	2/8	(0.0002 - 0.002)	0.0017	0.00246	8.11E-04	8.71E-04	0.00185	0.0023
Cobalt	WWC-11	0/8	(0.00003 - 0.004)	--	--	--	--	0.0035	0.004
Fluoride	WWC-11	7/8	(0.4 - 0.4)	0.35	0.494	0.412	0.0452	0.4	0.485
Lead	WWC-11	0/8	(0.00004 - 0.005)	--	--	--	--	0.002	0.00395
Lithium	WWC-11	3/8	(0.013 - 0.1)	0.083	0.196	0.0669	0.059	0.0925	0.162
Mercury	WWC-11	0/8	(0.0000396 - 0.0001)	--	--	--	--	9.00E-05	1.00E-04
Molybdenum	WWC-11	8/8	--	0.0043	0.0119	0.006	0.00255	0.00502	0.0102
Radium-226+228	WWC-11	5/5	--	0.666	0.511	0.11	1.43	0.69	1.304
Selenium	WWC-11	1/8	(0.000508 - 0.005)	6.00E-04	6.00E-04	5.39E-04	4.34E-05	0.002	0.00395
Thallium	WWC-11	0/8	(0.00003 - 0.002)	--	--	--	--	0.00121	0.002
Antimony	WWC-12	0/8	(0.00002 - 0.004)	--	--	--	--	0.004	0.004
Arsenic	WWC-12	7/8	(0.005 - 0.005)	0.0264	0.0428	0.0294	0.0103	0.0316	0.0405
Barium	WWC-12	8/8	--	0.057	0.0761	0.0636	0.00582	0.0637	0.0722
Beryllium	WWC-12	0/8	(0.00004 - 0.002)	--	--	--	--	0.0011	0.002
Cadmium	WWC-12	0/8	(0.00002 - 0.001)	--	--	--	--	5.00E-04	8.25E-04
Chromium	WWC-12	2/8	(0.0002 - 0.002)	0.0037	0.00414	0.00113	0.00161	0.002	0.00399

Table 2B.
Summary Statistics - Waste Water Basin Surface Impoundment - 2015 -2022
Intermountain Power Service Corporation - Intermountain Generation Facility, Delta, Utah

CCR Constituent	Well ID	Frequency of Detection	Range of Reporting Limits	Mean	Standard Deviation	Minimum Detected Concentration	Maximum Detected Concentration	Median	95th Percentile
Cobalt	WWC-12	0/8	(0.00003 - 0.004)	--	--	--	--	0.0035	0.004
Fluoride	WWC-12	7/8	(0.2 - 0.2)	0.377	0.481	0.399	0.0834	0.417	0.476
Lead	WWC-12	0/8	(0.00004 - 0.005)	--	--	--	--	0.002	0.00395
Lithium	WWC-12	8/8	--	0.111	0.137	0.124	0.00947	0.122	0.137
Mercury	WWC-12	0/8	(0.0000396 - 0.0001)	--	--	--	--	9.00E-05	1.00E-04
Molybdenum	WWC-12	8/8	--	0.0041	0.005	0.00457	3.07E-04	0.00459	0.00496
Radium-226+228	WWC-12	5/5	--	0.598	0.261	0.27	0.97	0.64	0.908
Selenium	WWC-12	1/8	(0.000508 - 0.005)	9.00E-04	9.00E-04	6.39E-04	1.85E-04	0.002	0.00395
Thallium	WWC-12	0/8	(0.00003 - 0.002)	--	--	--	--	0.00121	0.002
Antimony	WWC-13	0/8	(0.00002 - 0.004)	--	--	--	--	0.004	0.004
Arsenic	WWC-13	7/8	(0.005 - 0.005)	0.018	0.0211	0.0183	0.00512	0.0207	0.021
Barium	WWC-13	8/8	--	0.0434	0.061	0.0513	0.00635	0.0505	0.0603
Beryllium	WWC-13	0/8	(0.00004 - 0.002)	--	--	--	--	0.0011	0.002
Cadmium	WWC-13	0/8	(0.00002 - 0.001)	--	--	--	--	5.00E-04	8.25E-04
Chromium	WWC-13	1/8	(0.0002 - 0.002)	0.0048	0.0048	7.75E-04	0.00152	0.002	0.00382
Cobalt	WWC-13	0/8	(0.00003 - 0.004)	--	--	--	--	0.0035	0.004
Fluoride	WWC-13	7/8	(0.2 - 0.2)	0.315	0.423	0.353	0.0669	0.369	0.421
Lead	WWC-13	0/8	(0.00004 - 0.005)	--	--	--	--	0.002	0.00395
Lithium	WWC-13	8/8	--	0.103	0.14	0.117	0.0135	0.115	0.135
Mercury	WWC-13	0/8	(0.0000396 - 0.0001)	--	--	--	--	9.00E-05	1.00E-04
Molybdenum	WWC-13	8/8	--	0.0031	0.00442	0.00365	4.41E-04	0.00363	0.00427
Radium-226+228	WWC-13	5/5	--	0.484	0.152	0.36	0.7	0.39	0.678
Selenium	WWC-13	1/8	(0.000508 - 0.005)	8.00E-04	8.00E-04	6.05E-04	1.38E-04	0.002	0.00395
Thallium	WWC-13	0/8	(0.00003 - 0.002)	--	--	--	--	0.00121	0.002
Antimony	RW-4	0/9	(0.00002 - 0.004)	--	--	--	--	0.002	0.004
Arsenic	RW-4	8/9	(0.005 - 0.005)	0.0237	0.0313	0.0257	0.00769	0.0281	0.0313
Barium	RW-4	9/9	--	0.0805	0.0921	0.0868	0.00364	0.087	0.0913
Beryllium	RW-4	0/9	(0.00004 - 0.002)	--	--	--	--	0.001	0.002
Cadmium	RW-4	0/9	(0.00002 - 0.001)	--	--	--	--	5.00E-04	8.00E-04
Chromium	RW-4	2/9	(0.0002 - 0.002)	7.00E-04	0.00278	7.09E-04	7.69E-04	0.001	0.00247
Cobalt	RW-4	0/9	(0.00003 - 0.004)	--	--	--	--	0.003	0.004
Fluoride	RW-4	9/9	--	0.556	0.919	0.786	0.114	0.804	0.914
Lead	RW-4	0/9	(0.00004 - 0.005)	--	--	--	--	0.002	0.0038
Lithium	RW-4	9/9	--	0.235	0.32	0.266	0.0328	0.247	0.315
Mercury	RW-4	0/9	(0.0000396 - 0.00015)	--	--	--	--	9.00E-05	1.50E-04
Molybdenum	RW-4	8/9	(0.001 - 0.001)	0.0017	0.00365	0.00262	8.03E-04	0.00292	0.00351

Table 2B.
Summary Statistics - Waste Water Basin Surface Impoundment - 2015 -2022
Intermountain Power Service Corporation - Intermountain Generation Facility, Delta, Utah

CCR Constituent	Well ID	Frequency of Detection	Range of Reporting Limits	Mean	Standard Deviation	Minimum Detected Concentration	Maximum Detected Concentration	Median	95th Percentile
Radium-226+228	RW-4	3/3	--	0.87	0.174	0.75	1.07	0.79	1.042
Selenium	RW-4	1/9	(0.000508 - 0.005)	0.0016	0.0016	7.81E-04	4.73E-04	0.002	0.0038
Thallium	RW-4	0/9	(0.00003 - 0.002)	--	--	--	--	0.001	0.002
Antimony	RW-7	0/8	(0.000734 - 0.004)	--	--	--	--	0.003	0.004
Arsenic	RW-7	7/8	(0.005 - 0.005)	0.0203	0.0227	0.0195	0.00553	0.0212	0.0226
Barium	RW-7	8/8	--	0.0311	0.0351	0.033	0.00144	0.0329	0.0349
Beryllium	RW-7	0/8	(0.000198 - 0.002)	--	--	--	--	0.0015	0.002
Cadmium	RW-7	0/8	(0.0000742 - 0.001)	--	--	--	--	5.00E-04	8.25E-04
Chromium	RW-7	3/8	(0.00092 - 0.002)	0.00258	0.008	0.00236	0.00234	0.002	0.00648
Cobalt	RW-7	0/8	(0.0003 - 0.004)	--	--	--	--	0.0035	0.004
Fluoride	RW-7	8/8	--	0.564	0.626	0.591	0.0238	0.583	0.626
Lead	RW-7	0/8	(0.000588 - 0.005)	--	--	--	--	0.002	0.00395
Lithium	RW-7	8/8	--	0.116	0.148	0.137	0.0106	0.14	0.147
Mercury	RW-7	0/8	(0.0000396 - 0.00015)	--	--	--	--	9.00E-05	1.50E-04
Molybdenum	RW-7	7/8	(0.001 - 0.001)	0.00399	0.00482	0.004	0.00116	0.00439	0.00478
Radium-226+228	RW-7	3/3	--	2.007	2.324	0.61	4.69	0.72	4.293
Selenium	RW-7	0/8	(0.000508 - 0.005)	--	--	--	--	0.002	0.00395
Thallium	RW-7	0/8	(0.00003 - 0.002)	--	--	--	--	0.0015	0.002

Notes:
All units micrograms per liter (mg/L)
Statistical Analyses were only conducted on wells with a minimum of 8 sampling results. Additional wells will be incorporated as more data is collected
The mean and standard deviation are represented by the Kaplan-Meier mean and standard deviation for constituent/well pairs with non-detects, reported at the laboratory reporting limit
"--": Not applicable
Well ID WW-U-1, WW-U-2 and SI-U-1 are upgradient of the Waste Water Basin and represent background conditions, all other wells are downgradient of the Waste Water Basin

2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION SUMMARY REPORT

January 18, 2023

TABLE 2C

SUMMARY STATISTICS, COMBUSTION BY-PRODUCTS LANDFILL, 2015 -2022

Table 2C.

Summary Statistics - Combustion By-Products Landfill - 2015 -2022

Intermountain Power Service Corporation - Intermountain Generation Facility, Delta, Utah

CCR Constituent	Well ID	Frequency of Detection	Range of Reporting Limits	Mean	Standard Deviation	Minimum Detected Concentration	Maximum Detected Concentration	Median	95th Percentile
Antimony	CL-U-1	0/19	(0.00002 - 0.004)	--	--	--	--	0.002	0.004
Arsenic	CL-U-1	18/19	(0.005 - 0.005)	0.0272	0.0507	0.0314	0.00843	0.0301	0.0424
Barium	CL-U-1	19/19	--	0.0758	0.126	0.0867	0.0106	0.0847	0.0984
Beryllium	CL-U-1	0/19	(0.00004 - 0.002)	--	--	--	--	0.002	0.002
Cadmium	CL-U-1	1/19	(0.00002 - 0.001)	6.50E-04	6.50E-04	5.50E-05	1.44E-04	5.00E-04	6.85E-04
Chromium	CL-U-1	4/19	(0.0002 - 0.002)	5.29E-04	0.00551	0.0011	0.00157	0.002	0.00538
Cobalt	CL-U-1	0/19	(0.00003 - 0.004)	--	--	--	--	0.004	0.004
Fluoride	CL-U-1	19/19	--	0.753	1.23	0.967	0.112	0.979	1.113
Lead	CL-U-1	0/19	(0.00004 - 0.005)	--	--	--	--	0.002	0.0023
Lithium	CL-U-1	19/19	--	0.202	0.401	0.257	0.0648	0.229	0.38
Mercury	CL-U-1	0/19	(0.0000396 - 0.00015)	--	--	--	--	1.50E-04	1.50E-04
Molybdenum	CL-U-1	18/19	(0.001 - 0.001)	0.00325	0.00733	0.00398	0.00113	0.00383	0.00528
Radium-226+228	CL-U-1	18/18	--	0.992	0.433	0.41	1.87	0.915	1.853
Selenium	CL-U-1	1/19	(0.000508 - 0.005)	0.001	0.001	6.31E-04	2.13E-04	0.002	0.0023
Thallium	CL-U-1	0/19	(0.00003 - 0.002)	--	--	--	--	0.002	0.002
Antimony	CL-U-2	0/19	(0.00002 - 0.004)	--	--	--	--	0.002	0.004
Arsenic	CL-U-2	18/19	(0.005 - 0.005)	0.0236	0.0317	0.025	0.00501	0.0255	0.0282
Barium	CL-U-2	19/19	--	0.0873	0.129	0.0959	0.00873	0.0938	0.104
Beryllium	CL-U-2	0/19	(0.00004 - 0.002)	--	--	--	--	0.002	0.002
Cadmium	CL-U-2	0/19	(0.00002 - 0.001)	--	--	--	--	5.00E-04	5.50E-04
Chromium	CL-U-2	3/19	(0.0002 - 0.002)	0.0016	0.00613	8.72E-04	0.00141	0.002	0.00266
Cobalt	CL-U-2	0/19	(0.00003 - 0.004)	--	--	--	--	0.004	0.004
Fluoride	CL-U-2	19/19	--	0.611	1.17	0.966	0.133	0.99	1.143
Lead	CL-U-2	0/19	(0.00004 - 0.005)	--	--	--	--	0.002	0.0023
Lithium	CL-U-2	19/19	--	0.19	0.387	0.24	0.0613	0.214	0.355
Mercury	CL-U-2	0/19	(0.0000396 - 0.00015)	--	--	--	--	1.50E-04	1.50E-04
Molybdenum	CL-U-2	18/19	(0.001 - 0.001)	0.00352	0.00508	0.0039	7.54E-04	0.00404	0.00466
Radium-226+228	CL-U-2	18/18	--	1.224	0.73	0.5	3.7	1.13	2.051
Selenium	CL-U-2	1/19	(0.000508 - 0.005)	9.00E-04	9.00E-04	6.39E-04	1.85E-04	0.002	0.0023
Thallium	CL-U-2	0/19	(0.00003 - 0.002)	--	--	--	--	0.002	0.002
Antimony	CL-U-3	0/8	(0.00002 - 0.004)	--	--	--	--	0.004	0.004
Arsenic	CL-U-3	6/8	(0.001 - 0.005)	0.0183	0.0272	0.0162	0.0091	0.02	0.0251
Barium	CL-U-3	8/8	--	0.0342	0.0511	0.0474	0.00546	0.0488	0.051
Beryllium	CL-U-3	0/8	(0.00004 - 0.002)	--	--	--	--	6.00E-04	0.002

Table 2C.

Summary Statistics - Combustion By-Products Landfill - 2015 -2022

Intermountain Power Service Corporation - Intermountain Generation Facility, Delta, Utah

CCR Constituent	Well ID	Frequency of Detection	Range of Reporting Limits	Mean	Standard Deviation	Minimum Detected Concentration	Maximum Detected Concentration	Median	95th Percentile
Cadmium	CL-U-3	0/8	(0.00002 - 0.001)	--	--	--	--	3.75E-04	8.25E-04
Chromium	CL-U-3	4/8	(0.0002 - 0.002)	0.0015	0.0738	0.011	0.0239	0.00175	0.0499
Cobalt	CL-U-3	0/8	(0.00003 - 0.004)	--	--	--	--	0.0025	0.004
Fluoride	CL-U-3	8/8	--	0.429	1.08	0.837	0.186	0.865	1.03
Lead	CL-U-3	0/8	(0.00004 - 0.005)	--	--	--	--	0.0015	0.00395
Lithium	CL-U-3	8/8	--	0.152	0.223	0.205	0.0234	0.211	0.223
Mercury	CL-U-3	0/8	(0.0000396 - 0.0001)	--	--	--	--	9.00E-05	1.00E-04
Molybdenum	CL-U-3	7/8	(0.001 - 0.001)	0.00292	0.00964	0.004	0.00234	0.00344	0.0079
Radium-226+228	CL-U-3	7/7	--	0.94	0.687	0.35	2.34	0.79	1.998
Selenium	CL-U-3	1/8	(0.0002 - 0.002)	0.02	0.02	0.00268	0.00655	0.0015	0.0137
Thallium	CL-U-3	0/8	(0.00003 - 0.002)	--	--	--	--	7.09E-04	0.002
Antimony	CL-W-1	0/19	(0.00002 - 0.004)	--	--	--	--	0.002	0.004
Arsenic	CL-W-1	18/19	(0.005 - 0.005)	0.0264	0.034	0.0282	0.00578	0.0295	0.0326
Barium	CL-W-1	19/19	--	0.053	0.105	0.0634	0.0105	0.0615	0.0706
Beryllium	CL-W-1	0/19	(0.00004 - 0.002)	--	--	--	--	0.002	0.002
Cadmium	CL-W-1	0/19	(0.00002 - 0.001)	--	--	--	--	5.00E-04	5.50E-04
Chromium	CL-W-1	11/19	(0.00092 - 0.002)	0.00102	0.0271	0.00575	0.00712	0.00235	0.0195
Cobalt	CL-W-1	0/19	(0.00003 - 0.004)	--	--	--	--	0.004	0.004
Fluoride	CL-W-1	19/19	--	0.834	1.2	1.065	0.1	1.06	1.182
Lead	CL-W-1	0/19	(0.00004 - 0.005)	--	--	--	--	0.002	0.0023
Lithium	CL-W-1	19/19	--	0.172	0.361	0.217	0.0584	0.192	0.322
Mercury	CL-W-1	0/19	(0.0000396 - 0.00015)	--	--	--	--	1.50E-04	1.50E-04
Molybdenum	CL-W-1	18/19	(0.001 - 0.001)	0.00344	0.0068	0.00451	0.00125	0.0043	0.00657
Radium-226+228	CL-W-1	18/18	--	0.986	0.574	0.34	2.16	0.73	1.948
Selenium	CL-W-1	2/19	(0.000508 - 0.005)	9.28E-04	0.0019	8.98E-04	5.31E-04	0.002	0.0023
Thallium	CL-W-1	0/19	(0.00003 - 0.002)	--	--	--	--	0.002	0.002
Antimony	CL-W-2	0/19	(0.00002 - 0.004)	--	--	--	--	0.002	0.004
Arsenic	CL-W-2	18/19	(0.005 - 0.005)	0.0243	0.0299	0.0253	0.00502	0.0258	0.0286
Barium	CL-W-2	19/19	--	0.0711	0.151	0.0838	0.0174	0.0811	0.101
Beryllium	CL-W-2	0/19	(0.00004 - 0.002)	--	--	--	--	0.002	0.002
Cadmium	CL-W-2	0/19	(0.00002 - 0.001)	--	--	--	--	5.00E-04	5.50E-04
Chromium	CL-W-2	6/19	(0.0002 - 0.002)	0.00224	0.014	0.00181	0.00329	0.002	0.00658
Cobalt	CL-W-2	0/19	(0.00003 - 0.004)	--	--	--	--	0.004	0.004
Fluoride	CL-W-2	19/19	--	0.695	1.29	1.156	0.129	1.18	1.29

Table 2C.

Summary Statistics - Combustion By-Products Landfill - 2015 -2022

Intermountain Power Service Corporation - Intermountain Generation Facility, Delta, Utah

CCR Constituent	Well ID	Frequency of Detection	Range of Reporting Limits	Mean	Standard Deviation	Minimum Detected Concentration	Maximum Detected Concentration	Median	95th Percentile
Lead	CL-W-2	0/19	(0.00004 - 0.005)	--	--	--	--	0.002	0.0023
Lithium	CL-W-2	19/19	--	0.211	0.438	0.266	0.0724	0.229	0.4
Mercury	CL-W-2	0/19	(0.0000396 - 0.00015)	--	--	--	--	1.50E-04	1.50E-04
Molybdenum	CL-W-2	18/19	(0.001 - 0.001)	0.00415	0.0102	0.00476	0.00158	0.00461	0.00636
Radium-226+228	CL-W-2	18/18	--	1.098	0.595	0.56	3.12	0.995	1.837
Selenium	CL-W-2	1/19	(0.000508 - 0.005)	0.0012	0.0012	7.39E-04	3.26E-04	0.002	0.0023
Thallium	CL-W-2	0/19	(0.00003 - 0.002)	--	--	--	--	0.002	0.002
Antimony	CL-W-3	0/20	(0.00002 - 0.004)	--	--	--	--	0.002	0.004
Arsenic	CL-W-3	19/20	(0.005 - 0.005)	0.0364	0.0437	0.038	0.00779	0.0395	0.0427
Barium	CL-W-3	20/20	--	0.089	0.111	0.0998	0.00473	0.0998	0.104
Beryllium	CL-W-3	0/20	(0.00004 - 0.002)	--	--	--	--	0.002	0.002
Cadmium	CL-W-3	0/20	(0.00002 - 0.001)	--	--	--	--	5.00E-04	5.25E-04
Chromium	CL-W-3	5/20	(0.0002 - 0.002)	5.05E-04	0.00346	9.46E-04	9.82E-04	0.002	0.00261
Cobalt	CL-W-3	0/20	(0.00003 - 0.004)	--	--	--	--	0.004	0.004
Fluoride	CL-W-3	20/20	--	0.948	1.6	1.288	0.139	1.26	1.572
Lead	CL-W-3	0/20	(0.00004 - 0.005)	--	--	--	--	0.002	0.00215
Lithium	CL-W-3	20/20	--	0.197	0.435	0.251	0.0689	0.222	0.378
Mercury	CL-W-3	0/20	(0.0000396 - 0.00015)	--	--	--	--	1.50E-04	1.50E-04
Molybdenum	CL-W-3	19/20	(0.001 - 0.001)	0.00463	0.0056	0.0048	9.13E-04	0.00491	0.00554
Radium-226+228	CL-W-3	18/18	--	0.956	0.518	0.2	2.02	0.87	1.748
Selenium	CL-W-3	1/20	(0.000508 - 0.005)	0.001	0.001	6.31E-04	2.13E-04	0.002	0.00215
Thallium	CL-W-3	0/20	(0.00003 - 0.002)	--	--	--	--	0.002	0.002
Antimony	CL-W-4	0/20	(0.00002 - 0.004)	--	--	--	--	0.002	0.004
Arsenic	CL-W-4	19/20	(0.005 - 0.005)	0.0196	0.0444	0.0336	0.00843	0.0355	0.0406
Barium	CL-W-4	20/20	--	0.076	0.122	0.0889	0.0138	0.0828	0.119
Beryllium	CL-W-4	0/20	(0.00004 - 0.002)	--	--	--	--	0.002	0.002
Cadmium	CL-W-4	0/20	(0.00002 - 0.001)	--	--	--	--	5.00E-04	5.25E-04
Chromium	CL-W-4	6/20	(0.0002 - 0.002)	7.62E-04	0.0516	0.00352	0.0111	0.002	0.00577
Cobalt	CL-W-4	0/20	(0.00003 - 0.004)	--	--	--	--	0.004	0.004
Fluoride	CL-W-4	20/20	--	1.27	1.69	1.447	0.104	1.435	1.605
Lead	CL-W-4	0/20	(0.00004 - 0.005)	--	--	--	--	0.002	0.00215
Lithium	CL-W-4	20/20	--	0.189	0.375	0.236	0.0566	0.213	0.34
Mercury	CL-W-4	0/20	(0.0000396 - 0.00015)	--	--	--	--	1.50E-04	1.50E-04
Molybdenum	CL-W-4	19/20	(0.001 - 0.001)	0.00414	0.0115	0.00536	0.00205	0.00481	0.00932

Table 2C.

Summary Statistics - Combustion By-Products Landfill - 2015 -2022

Intermountain Power Service Corporation - Intermountain Generation Facility, Delta, Utah

CCR Constituent	Well ID	Frequency of Detection	Range of Reporting Limits	Mean	Standard Deviation	Minimum Detected Concentration	Maximum Detected Concentration	Median	95th Percentile
Radium-226+228	CL-W-4	18/18	--	1.049	0.641	0.21	2.54	1.01	2.285
Selenium	CL-W-4	1/20	(0.000508 - 0.005)	8.00E-04	8.00E-04	6.05E-04	1.38E-04	0.002	0.00215
Thallium	CL-W-4	0/20	(0.00003 - 0.002)	--	--	--	--	0.002	0.002
Antimony	CL-W-5	0/19	(0.00002 - 0.004)	--	--	--	--	0.002	0.004
Arsenic	CL-W-5	18/19	(0.005 - 0.005)	0.0182	0.0253	0.021	0.00422	0.0216	0.0243
Barium	CL-W-5	19/19	--	0.067	0.0869	0.0748	0.00654	0.0732	0.0865
Beryllium	CL-W-5	0/19	(0.00004 - 0.002)	--	--	--	--	0.002	0.002
Cadmium	CL-W-5	0/18	(0.00002 - 0.001)	--	--	--	--	5.00E-04	5.75E-04
Chromium	CL-W-5	5/19	(0.0002 - 0.002)	7.12E-04	0.00999	0.00141	0.00233	0.002	0.00532
Cobalt	CL-W-5	0/19	(0.00003 - 0.004)	--	--	--	--	0.004	0.004
Fluoride	CL-W-5	19/19	--	1.51	2.03	1.764	0.125	1.8	1.922
Lead	CL-W-5	0/19	(0.00004 - 0.005)	--	--	--	--	0.002	0.0023
Lithium	CL-W-5	19/19	--	0.025	0.411	0.217	0.0903	0.211	0.358
Mercury	CL-W-5	0/19	(0.0000396 - 0.00015)	--	--	--	--	1.50E-04	1.50E-04
Molybdenum	CL-W-5	18/19	(0.001 - 0.001)	0.00416	0.00922	0.00589	0.00186	0.0054	0.00873
Radium-226+228	CL-W-5	18/18	--	1.121	0.664	0.42	2.6	0.88	2.43
Selenium	CL-W-5	1/19	(0.000508 - 0.005)	9.00E-04	9.00E-04	6.39E-04	1.85E-04	0.002	0.0023
Thallium	CL-W-5	0/19	(0.00003 - 0.002)	--	--	--	--	0.002	0.002
Antimony	CL-W-6	0/19	(0.00002 - 0.004)	--	--	--	--	0.002	0.004
Arsenic	CL-W-6	18/19	(0.005 - 0.005)	0.0104	0.0364	0.0198	0.00768	0.0181	0.0328
Barium	CL-W-6	19/19	--	0.083	0.0985	0.091	0.00419	0.0901	0.0977
Beryllium	CL-W-6	0/19	(0.00004 - 0.002)	--	--	--	--	0.002	0.002
Cadmium	CL-W-6	0/19	(0.00002 - 0.001)	--	--	--	--	5.00E-04	5.50E-04
Chromium	CL-W-6	4/19	(0.0002 - 0.002)	6.12E-04	0.0116	0.00126	0.00256	0.002	0.00417
Cobalt	CL-W-6	0/19	(0.00003 - 0.004)	--	--	--	--	0.004	0.004
Fluoride	CL-W-6	19/19	--	1.32	1.84	1.587	0.14	1.6	1.741
Lead	CL-W-6	0/19	(0.00004 - 0.005)	--	--	--	--	0.002	0.0023
Lithium	CL-W-6	18/19	(0.1 - 0.1)	0.182	0.4	0.23	0.0679	0.204	0.348
Mercury	CL-W-6	1/19	(0.0000396 - 0.00015)	1.50E-04	1.50E-04	4.54E-05	2.47E-05	1.50E-04	1.50E-04
Molybdenum	CL-W-6	17/19	(0.001 - 0.002)	0.0043	0.0117	0.00658	0.00291	0.00645	0.0111
Radium-226+228	CL-W-6	18/18	--	0.953	0.447	0.25	1.99	0.93	1.778
Selenium	CL-W-6	2/19	(0.000508 - 0.005)	9.00E-04	0.0068	9.63E-04	0.00139	0.002	0.00518
Thallium	CL-W-6	0/19	(0.00003 - 0.002)	--	--	--	--	0.002	0.002
Antimony	CL-W-7	0/19	(0.00002 - 0.004)	--	--	--	--	0.002	0.004

Table 2C.

Summary Statistics - Combustion By-Products Landfill - 2015 -2022

Intermountain Power Service Corporation - Intermountain Generation Facility, Delta, Utah

CCR Constituent	Well ID	Frequency of Detection	Range of Reporting Limits	Mean	Standard Deviation	Minimum Detected Concentration	Maximum Detected Concentration	Median	95th Percentile
Arsenic	CL-W-7	18/19	(0.005 - 0.005)	0.0215	0.027	0.0231	0.00443	0.024	0.0258
Barium	CL-W-7	19/19	--	0.0475	0.0794	0.0545	0.00664	0.053	0.0613
Beryllium	CL-W-7	0/19	(0.00004 - 0.002)	--	--	--	--	0.002	0.002
Cadmium	CL-W-7	0/18	(0.00002 - 0.001)	--	--	--	--	5.00E-04	5.75E-04
Chromium	CL-W-7	6/19	(0.00092 - 0.002)	0.00234	0.016	0.00298	0.00391	0.002	0.00962
Cobalt	CL-W-7	0/19	(0.00003 - 0.004)	--	--	--	--	0.004	0.004
Fluoride	CL-W-7	19/19	--	0.792	1.24	1.021	0.11	1.02	1.168
Lead	CL-W-7	0/19	(0.00004 - 0.005)	--	--	--	--	0.002	0.0023
Lithium	CL-W-7	19/19	--	0.169	0.331	0.216	0.0525	0.19	0.327
Mercury	CL-W-7	0/19	(0.0000396 - 0.00015)	--	--	--	--	1.50E-04	1.50E-04
Molybdenum	CL-W-7	18/19	(0.001 - 0.001)	0.00301	0.146	0.0112	0.0318	0.00382	0.0203
Radium-226+228	CL-W-7	18/18	--	0.603	0.336	0.12	1.4	0.565	1.171
Selenium	CL-W-7	1/19	(0.000508 - 0.005)	9.00E-04	9.00E-04	6.39E-04	1.85E-04	0.002	0.0023
Thallium	CL-W-7	0/19	(0.00003 - 0.002)	--	--	--	--	0.002	0.002
Antimony	CL-W-8	0/19	(0.00002 - 0.004)	--	--	--	--	0.002	0.004
Arsenic	CL-W-8	18/19	(0.005 - 0.005)	0.0155	0.0391	0.0244	0.00631	0.0254	0.0306
Barium	CL-W-8	19/19	--	0.0521	0.107	0.0694	0.012	0.0666	0.0862
Beryllium	CL-W-8	0/19	(0.00004 - 0.002)	--	--	--	--	0.002	0.002
Cadmium	CL-W-8	0/19	(0.00002 - 0.001)	--	--	--	--	5.00E-04	5.50E-04
Chromium	CL-W-8	6/19	(0.0002 - 0.002)	0.00206	0.012	0.00185	0.00306	0.002	0.0068
Cobalt	CL-W-8	0/19	(0.00003 - 0.004)	--	--	--	--	0.004	0.004
Fluoride	CL-W-8	19/19	--	0.782	1.2	1.032	0.105	1.04	1.137
Lead	CL-W-8	0/19	(0.00004 - 0.005)	--	--	--	--	0.002	0.0023
Lithium	CL-W-8	19/19	--	0.176	0.35	0.219	0.0538	0.192	0.323
Mercury	CL-W-8	0/19	(0.0000396 - 0.00015)	--	--	--	--	1.50E-04	1.50E-04
Molybdenum	CL-W-8	18/19	(0.001 - 0.001)	0.00322	0.00626	0.00418	0.00103	0.00428	0.00536
Radium-226+228	CL-W-8	18/18	--	0.882	0.457	0.24	1.85	0.98	1.502
Selenium	CL-W-8	1/19	(0.000508 - 0.005)	0.0018	0.0018	8.31E-04	5.59E-04	0.002	0.0023
Thallium	CL-W-8	0/19	(0.00003 - 0.002)	--	--	--	--	0.002	0.002
Antimony	CL-W-9	0/8	(0.00002 - 0.004)	--	--	--	--	0.004	0.004
Arsenic	CL-W-9	7/8	(0.005 - 0.005)	0.0368	0.0421	0.0358	0.0117	0.0404	0.0418
Barium	CL-W-9	8/8	--	0.046	0.051	0.0481	0.00184	0.048	0.0506
Beryllium	CL-W-9	0/8	(0.00004 - 0.002)	--	--	--	--	0.0015	0.002
Cadmium	CL-W-9	0/8	(0.00002 - 0.001)	--	--	--	--	5.00E-04	8.25E-04

Table 2C.

Summary Statistics - Combustion By-Products Landfill - 2015 -2022

Intermountain Power Service Corporation - Intermountain Generation Facility, Delta, Utah

CCR Constituent	Well ID	Frequency of Detection	Range of Reporting Limits	Mean	Standard Deviation	Minimum Detected Concentration	Maximum Detected Concentration	Median	95th Percentile
Chromium	CL-W-9	3/8	(0.0002 - 0.002)	0.0025	0.0156	0.00275	0.00497	0.002	0.0111
Cobalt	CL-W-9	0/8	(0.00003 - 0.004)	--	--	--	--	0.0035	0.004
Fluoride	CL-W-9	8/8	--	1.37	2.08	1.863	0.217	1.91	2.059
Lead	CL-W-9	0/8	(0.00004 - 0.005)	--	--	--	--	0.002	0.00395
Lithium	CL-W-9	8/8	--	0.16	0.195	0.174	0.0105	0.17	0.19
Mercury	CL-W-9	0/8	(0.0000396 - 0.0001)	--	--	--	--	9.00E-05	1.00E-04
Molybdenum	CL-W-9	7/8	(0.001 - 0.001)	0.00518	0.00738	0.00526	0.00173	0.00568	0.00689
Radium-226+228	CL-W-9	7/7	--	0.456	0.148	0.21	0.67	0.45	0.646
Selenium	CL-W-9	1/8	(0.000508 - 0.005)	0.0015	0.0015	8.39E-04	4.68E-04	0.002	0.00395
Thallium	CL-W-9	0/8	(0.00003 - 0.002)	--	--	--	--	0.0015	0.002
Antimony	WDB-19	0/9	(0.00002 - 0.004)	--	--	--	--	0.002	0.004
Arsenic	WDB-19	9/9	--	0.0287	0.0326	0.03	0.00114	0.0302	0.0317
Barium	WDB-19	9/9	--	0.0476	0.0606	0.0522	0.00442	0.0519	0.0593
Beryllium	WDB-19	0/9	(0.00004 - 0.002)	--	--	--	--	0.002	0.002
Cadmium	WDB-19	1/9	(0.00002 - 0.0005)	0.0016	0.0016	1.96E-04	4.97E-04	5.00E-04	0.00116
Chromium	WDB-19	3/9	(0.00092 - 0.002)	0.0013	0.016	0.00374	0.00513	0.002	0.0136
Cobalt	WDB-19	0/9	(0.00003 - 0.004)	--	--	--	--	0.004	0.004
Fluoride	WDB-19	9/9	--	1.3	1.46	1.391	0.0662	1.41	1.46
Lead	WDB-19	0/9	(0.00004 - 0.002)	--	--	--	--	0.002	0.002
Lithium	WDB-19	9/9	--	0.189	0.224	0.211	0.00937	0.212	0.22
Mercury	WDB-19	0/9	(0.0000396 - 0.00015)	--	--	--	--	9.00E-05	1.50E-04
Molybdenum	WDB-19	9/9	--	0.00417	0.00675	0.00507	9.26E-04	0.00471	0.00654
Radium-226+228	WDB-19	3/3	--	0.743	0.779	0.13	1.62	0.48	1.506
Selenium	WDB-19	0/9	(0.0002 - 0.002)	--	--	--	--	0.002	0.002
Thallium	WDB-19	0/9	(0.00003 - 0.002)	--	--	--	--	0.002	0.002

Notes:

All units micrograms per liter (mg/L)

The mean and standard deviation are represented by the Kaplan-Meier mean and standard deviation for constituent/well pairs with non-detects, reported at the laboratory reporting limit

Statistical Analyses were only conducted on wells with a minimum of 8 sampling results. Additional wells will be incorporated as more data is collected

"--": Not applicable

Well ID CL-U-1, CL-U-2 and CL-U-3 are upgradient of the Combustion By-Products Landfill and represent background conditions, all other wells are downgradient of the Combustions By-Products Landfill

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TABLE 2D

MAXIMUM CONTAMINANT LEVELS, UPPER TOLERANCE LIMITS, AND GROUNDWATER PROTECTION STANDARDS, 2015 – 2022

Table 2D.

Maximum Contaminant Levels, Upper Tolerance Limits, and Groundwater Protection Standards 2015 - 2022

Intermountain Power Service Corporation - Intermountain Generation Facility, Delta, Utah

Constituent	MCL	Bottom Ash Basin		Waste Water Basin		CB Landfill	
		UTL	GWPS	UTL	GWPS	UTL	GWPS
Antimony	0.006	0.004	0.006	0.002	0.006	0.004	0.006
Arsenic	0.01	0.0362	0.0362	0.01514	0.01514	0.0507	0.0507
Barium	2	0.175	2	0.1274	2	0.129	2
Beryllium	0.004	0.002	0.004	0.002	0.004	0.002	0.004
Cadmium	0.005	0.0002	0.005	0.00128	0.005	0.00065	0.005
Chromium	0.1	0.0711	0.1	0.067	0.1	0.0738	0.1
Cobalt	0.006	0.0015	0.006	0.0072	0.006	0.004	0.006
Fluoride	4	1.75	4	1.01	4	1.239	4
Lead	0.015	0.005	0.015	0.01	0.015	0.005	0.015
Lithium	0.04	0.614	0.614	1.35	1.35	0.401	0.401
Mercury	0.002	0.00015	0.002	0.00015	0.002	0.00015	0.002
Molybdenum	0.1	0.0408	0.1	0.0342	0.1	0.00964	0.1
Radium 226 + 228	5	2.409	5	3.018	5	2.793	5
Selenium	0.05	0.02	0.05	0.0158	0.05	0.02	0.05
Thallium	0.02	0.002	0.02	0.002	0.02	0.002	0.02

All units microgram per liter (mg/L)

MCL: US EPA Maximum Contaminant Level

UTL: Upper Tolerance Limit

GWPS: Groundwater Protection Standard, the higher of the UTL or the MCL/US EPA alternate standard

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TABLE 3

ASSESSMENT MONITORING - STOPLIGHT PLOT - STATISTICALLY SIGNIFICANT LEVELS ABOVE GROUNDWATER PROTECTION STANDARDS 2015 - 2022

Table 3.

Assessment Monitoring - Stoplight Plot - Statistically Significant Levels above Groundwater Protection Standards - 2015 - 2022

Intermountain Power Service Corporation - Intermountain Generation Facility, Delta, Utah

	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt (AS)	Fluoride	Lead (AS)	Lithium (AS)	Mercury	Molybdenum (AS)	Radium 226+228	Selenium	Thallium
Bottom Ash Basin															
UTL	0.004	0.0362	0.175	0.002	0.0002	0.0711	0.0015	1.75	0.005	0.614	0.00015	0.0408	2.409	0.02	0.002
MCL	0.006	0.01	2	0.004	0.005	0.1	0.006	4	0.015	0.04	0.002	0.1	5	0.05	0.02
GWPS	0.006	0.0362	2	0.004	0.005	0.1	0.006	4	0.015	0.614	0.002	0.1	5	0.05	0.02
BAC-1															
BAC-2															
BAC-3															
BAC-4															
BAC-5															
BAC-6															
BAC-7															
Waste Water Basin															
UTL	0.002	0.01514	0.1274	0.002	0.00128	0.067	0.0072	1.01	0.01	1.35	0.00015	0.0342	3.018	0.0158	0.002
MCL	0.006	0.01	2	0.004	0.005	0.1	0.006	4	0.015	0.04	0.002	0.1	5	0.05	0.02
GWPS	0.006	0.01514	2	0.004	0.005	0.1	0.0072	4	0.015	1.35	0.002	0.1	5	0.05	0.02
WWC-1															
WWC-2															
WWC-3															
WWC-4															
WWC-5															
COMBUSTION BY-PRODUCTS LANDFILL															
UTL	0.004	0.0507	0.129	0.002	0.00065	0.0738	0.004	1.239	0.005	0.401	0.00015	0.00964	2.793	0.02	0.002
MCL	0.006	0.01	2	0.004	0.005	0.1	0.006	4	0.015	0.04	0.002	0.1	5	0.05	0.02
GWPS	0.006	0.0507	2	0.004	0.005	0.1	0.006	4	0.015	0.401	0.002	0.1	5	0.05	0.02
CLW-1															
CLW-2															
CLW-3															
CLW-4															
CLW-5															
CLW-6															
CLW-7															
CLW-8															

All units micrograms per liter (mg/L), except for Radium 226+228 which has units of picocuries per liter (pCi/L)

UTL: 95% Upper Tolerance Limit with 95% coverage

MCL: US EPA Maximum Contaminant Level

AS: US EPA Alternative Standards establish for cobalt, lead, lithium, & molybdenum as these constituents do not have an MCLs

GWPS: Groundwater protection standard is the greater of the site specific UTL or the MCL/AS.

LCL: Lower confidence limit of the mean

LCB: Lower confidence band around trend line

Green Shading indicates that no detected concentration in the constituent/well pair exceed the GWPS

Yellow Shading indicates that the at least one detected concentration in the constituent/well pair exceeded GWPS, but the LCL/LCB is below the GWPS (e.g. No Statistical Evidence of a statistical significant level (SSL) above the GWPS)

Red Shading indicates that the LCL exceeds the GWPS or the LCB exceeds the GWPS at the last round of sampling. Evidence of a statistically significant level above the GWPS for the constituent/well pair.

ATTACHMENT 1 DRILLING LOGS AND WELL SCHEMATIC DIAGRAMS

Boring Logs

IPSC

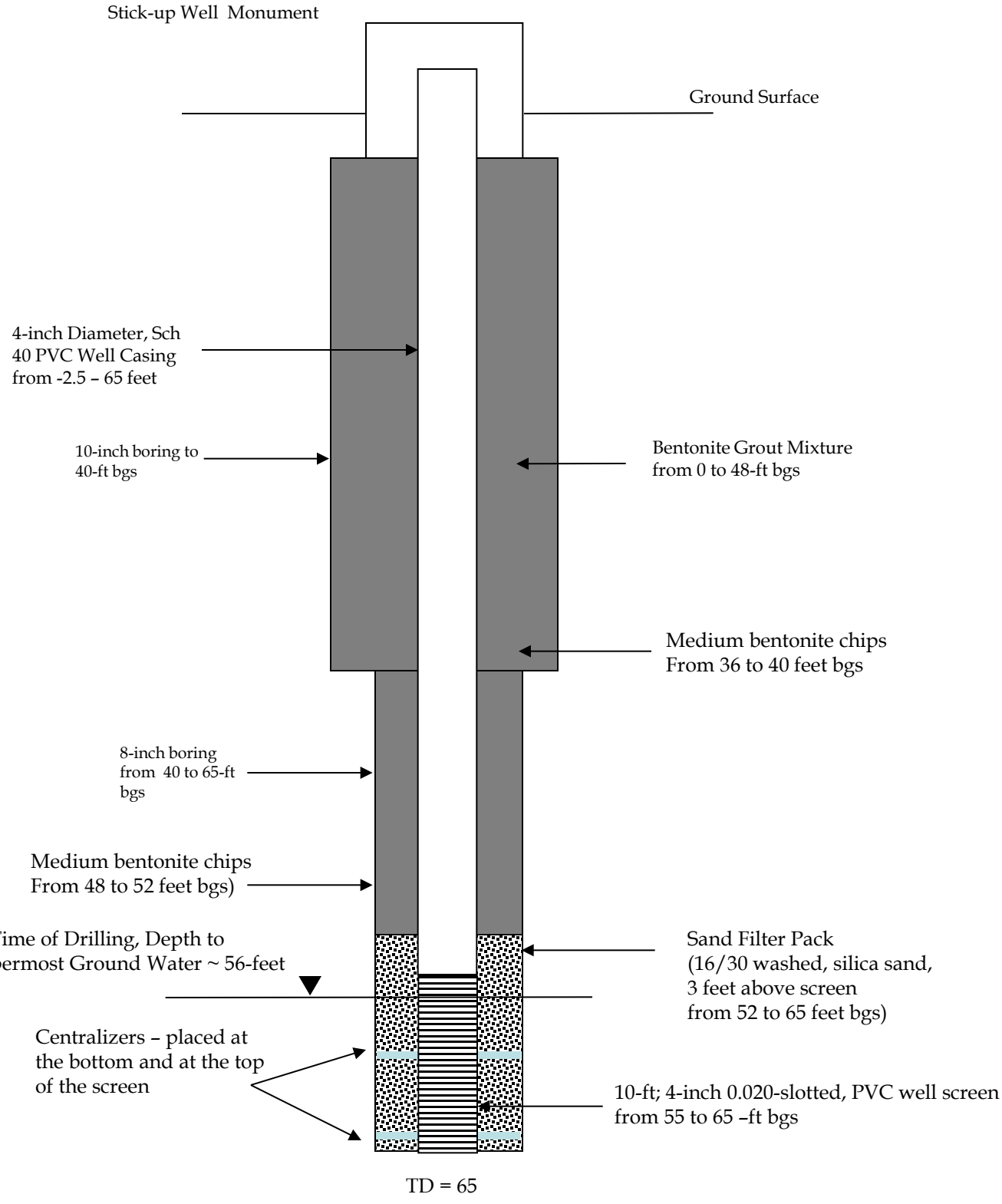
Delta, Utah

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

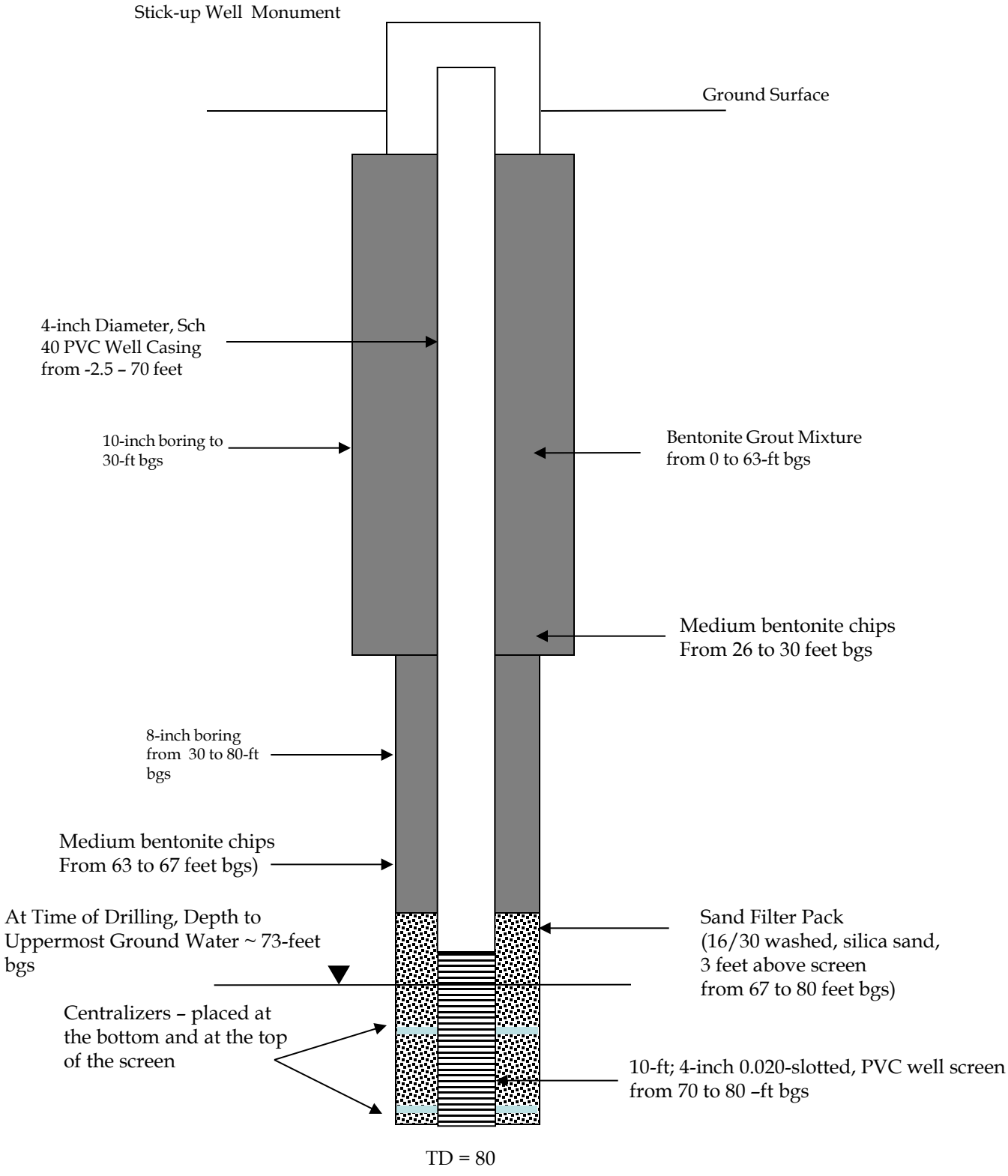
Delta, Utah

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			
				Date Drawn
	Design by	Drawn by	Scale	Last Revision Date

Boring Logs

IPSC

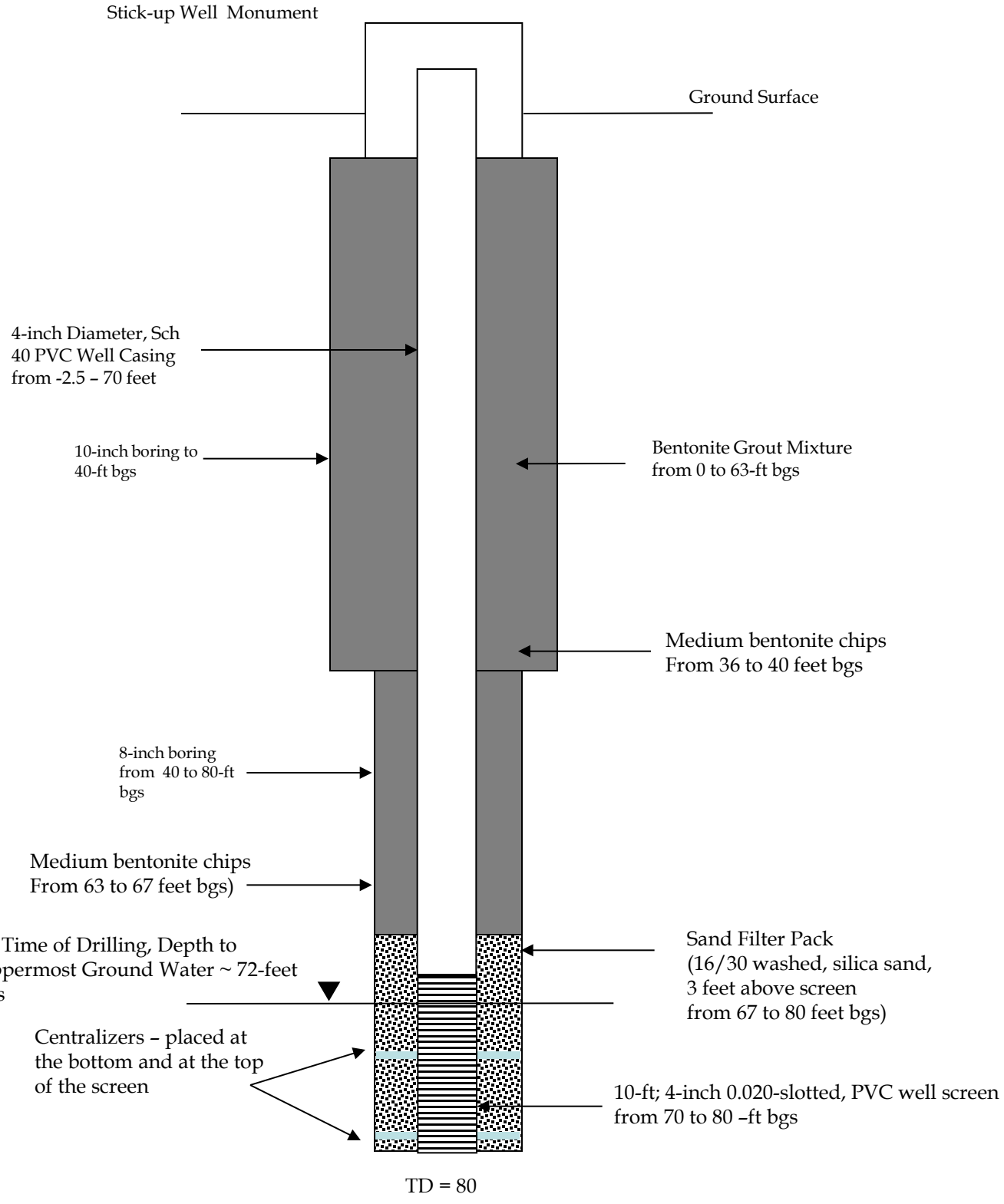
Delta, Utah

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

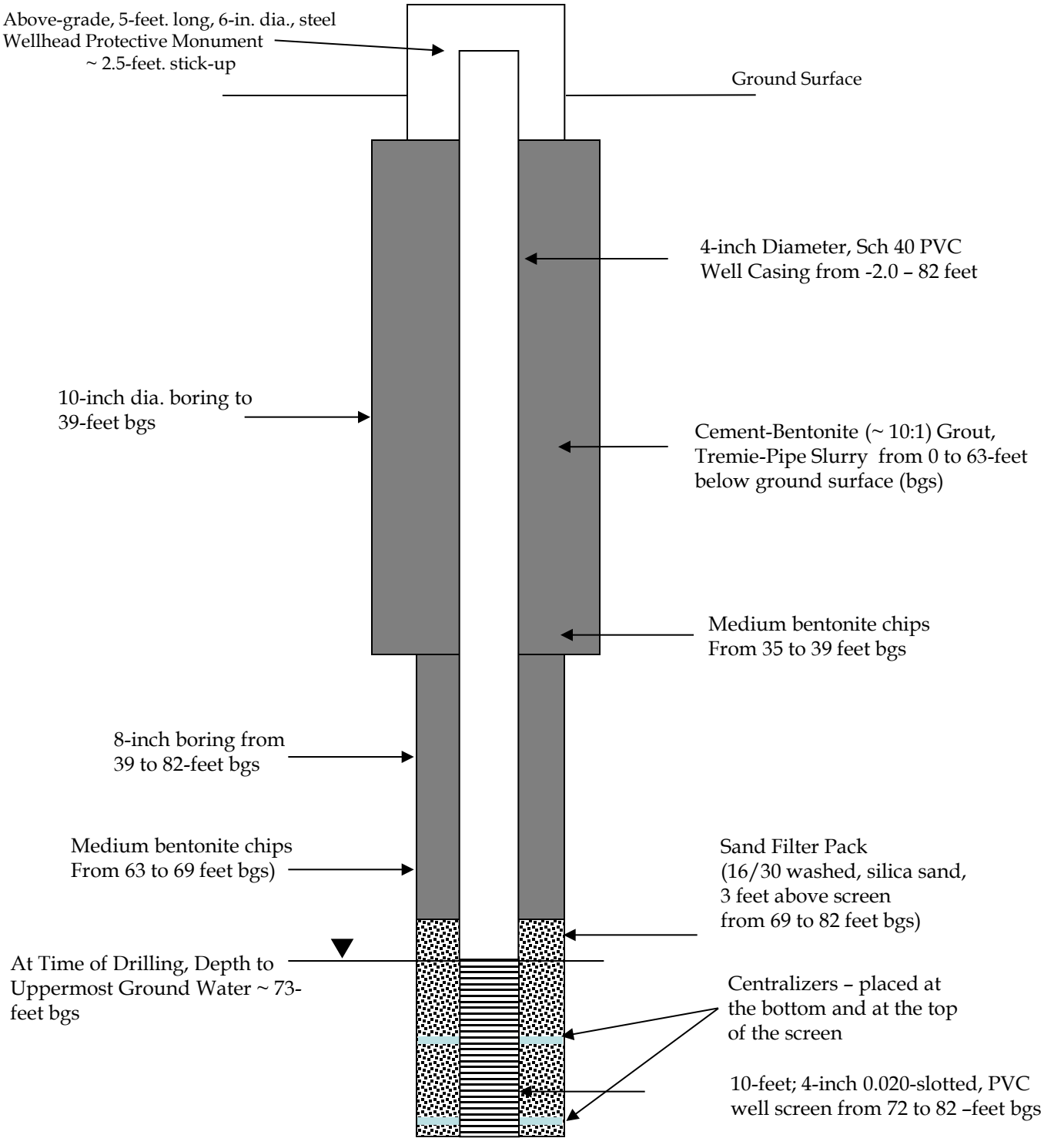
Delta, Utah

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

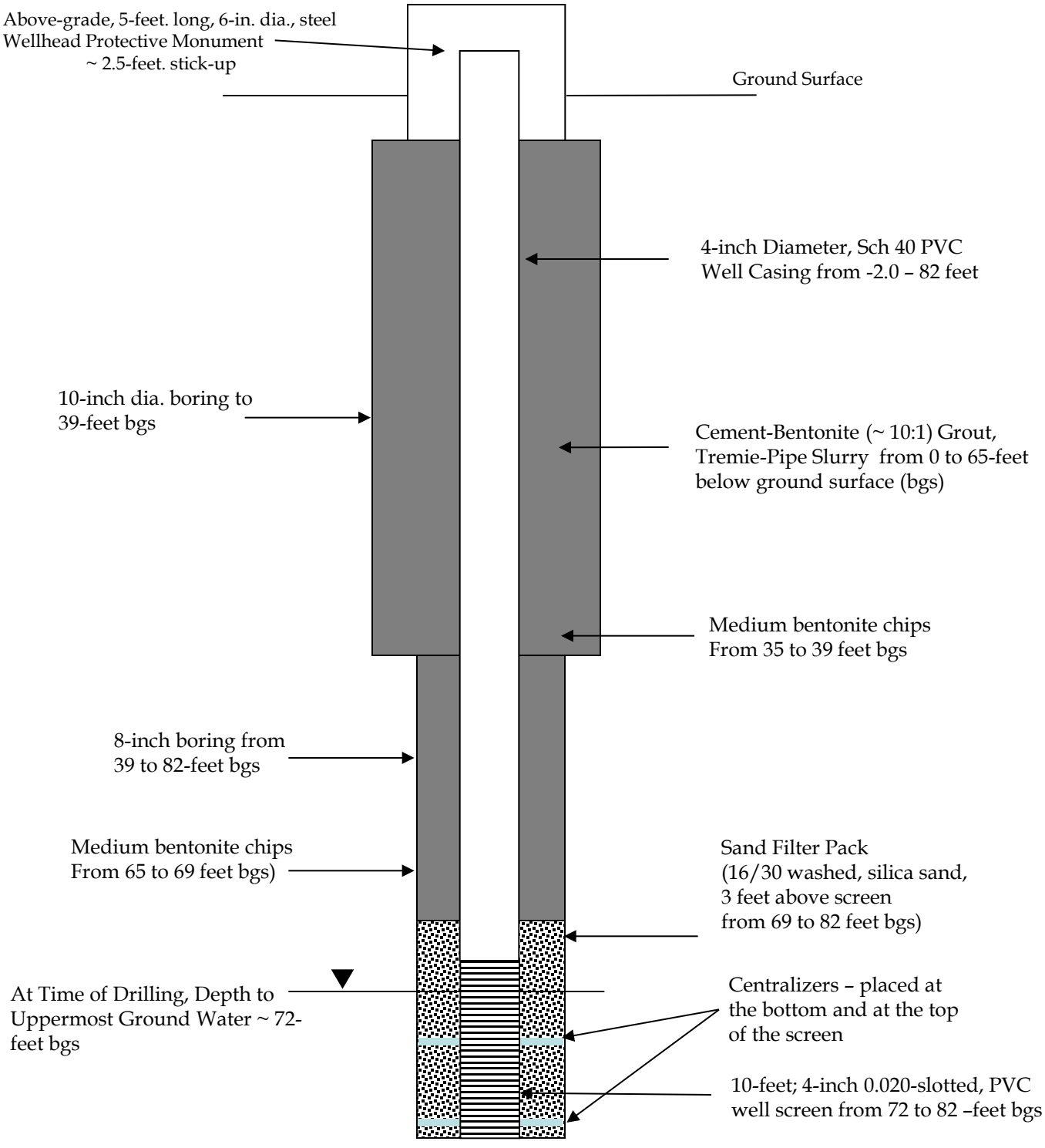
Delta, Utah

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

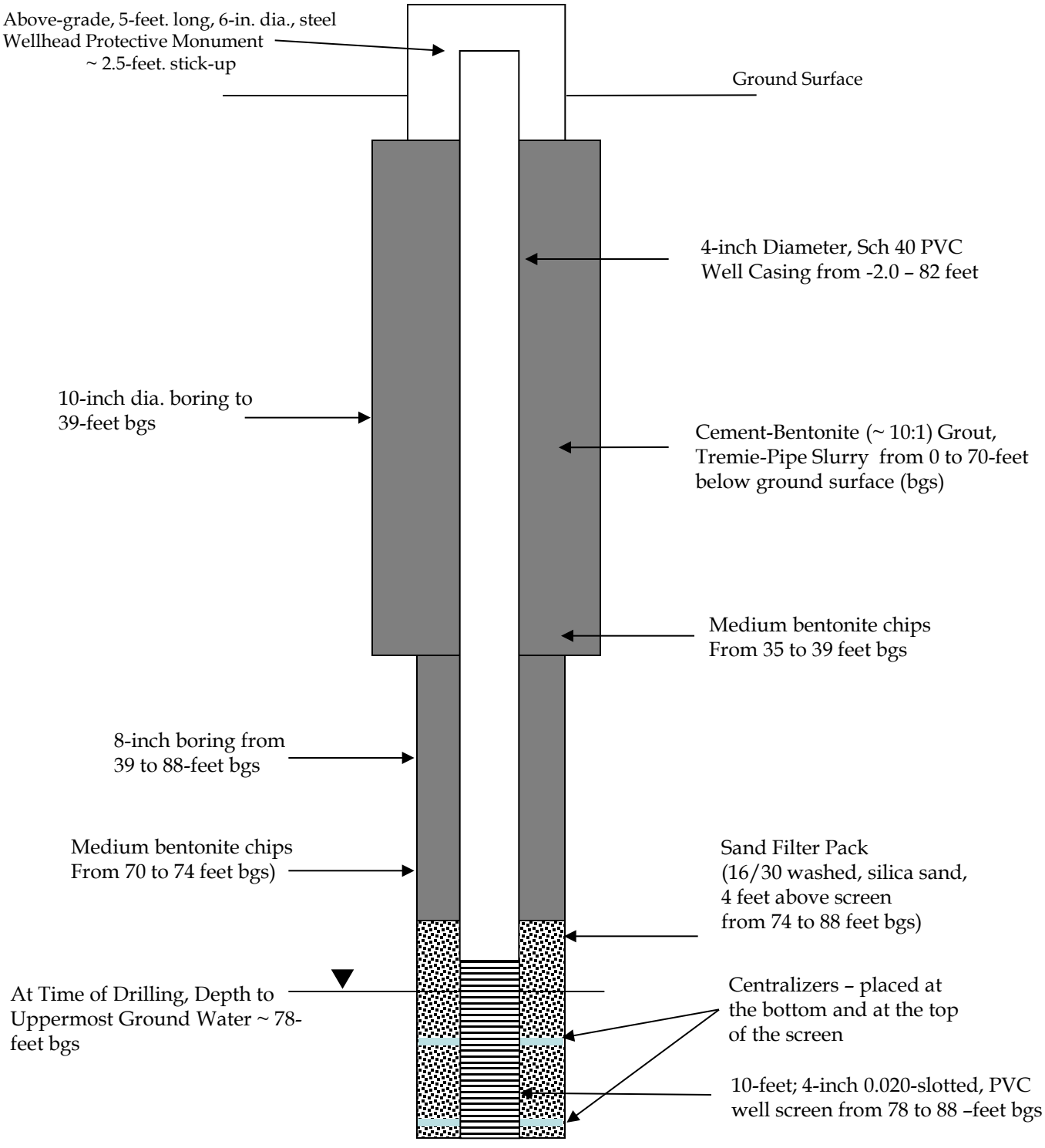
Delta, Utah

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

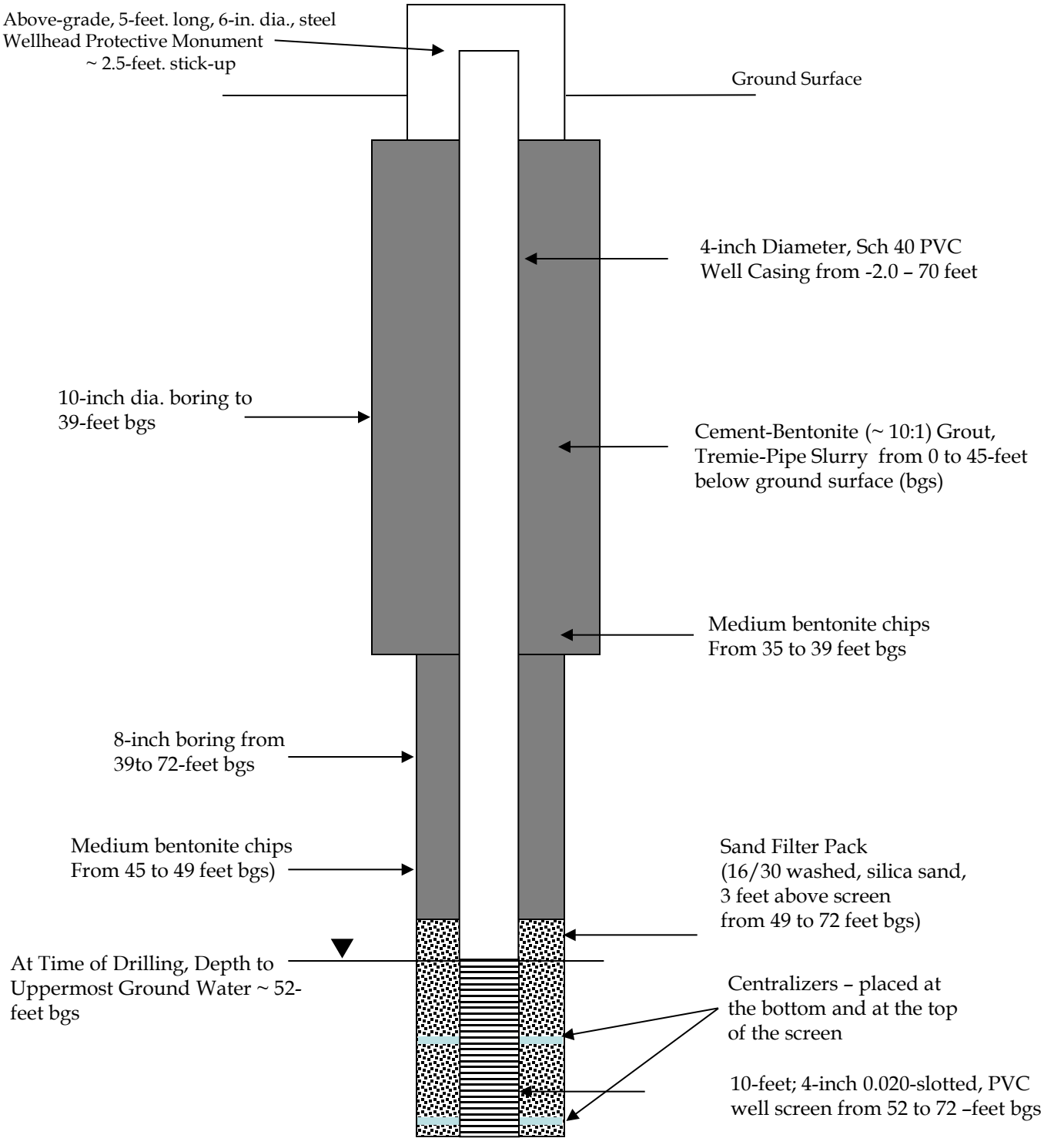
Delta, Utah

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

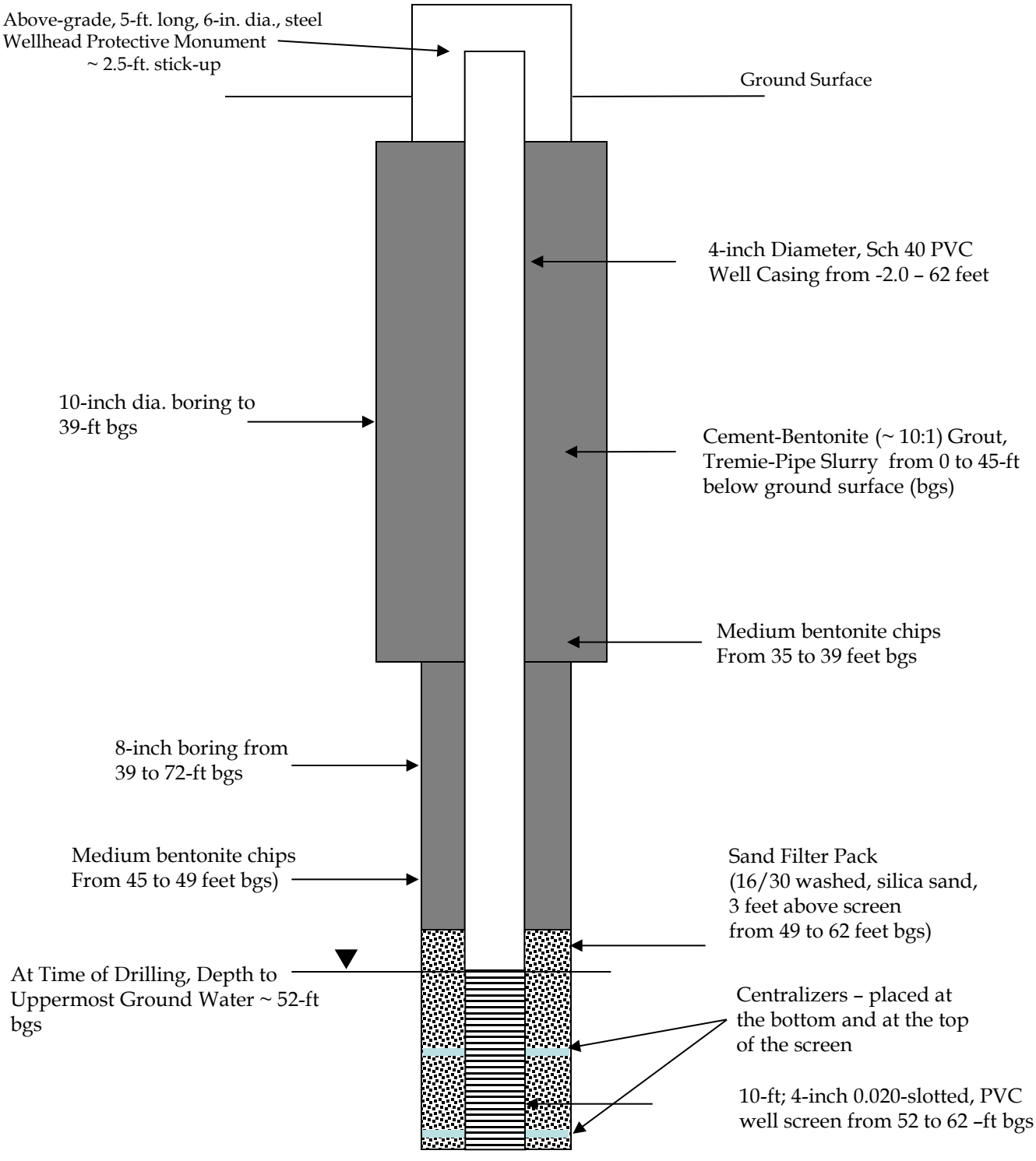
Delta, Utah

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



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

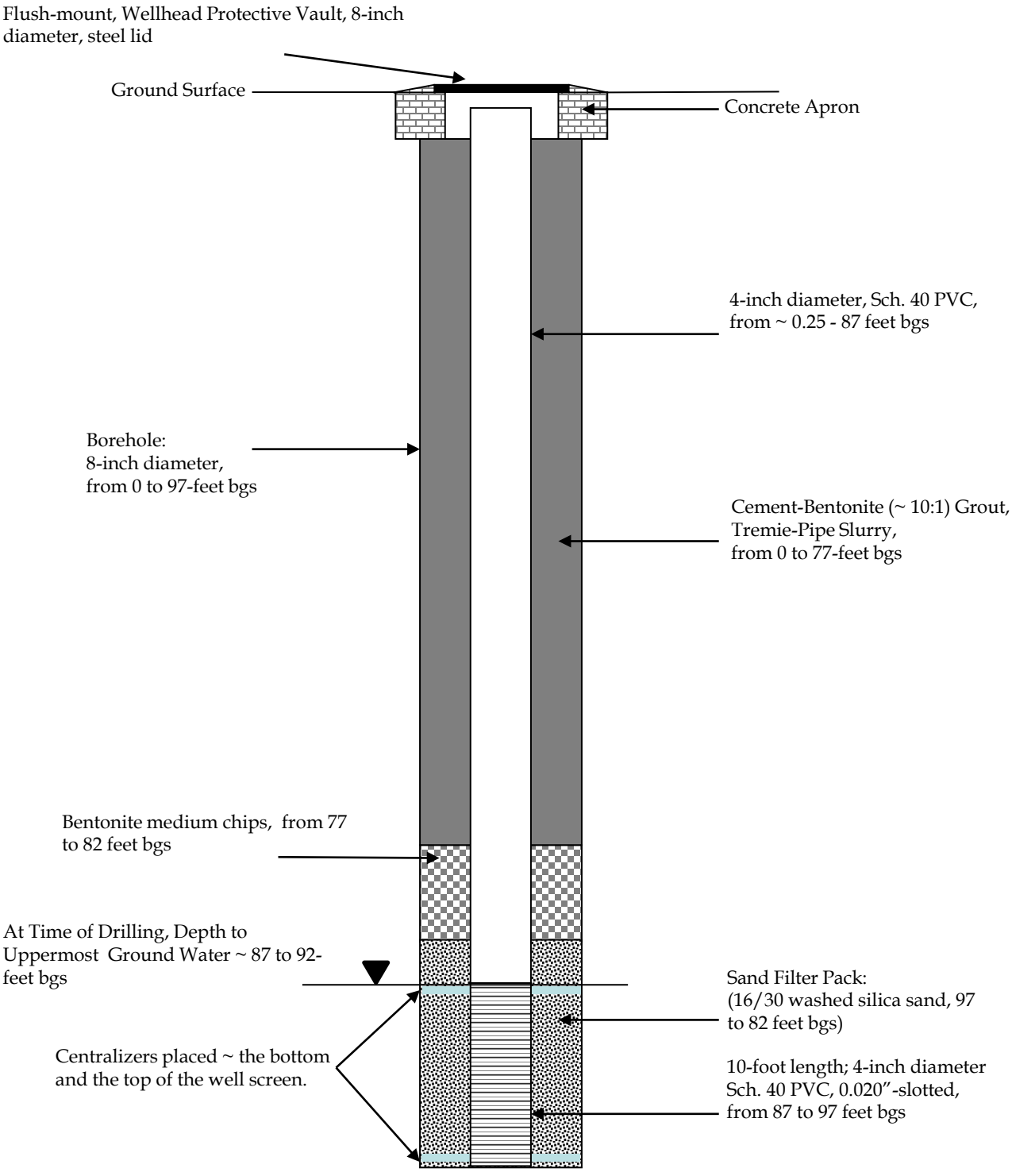
Delta, Utah

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 99 to 97; screen 97-87; sand 97-62 centralizers 87.5 and 96.5

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

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:

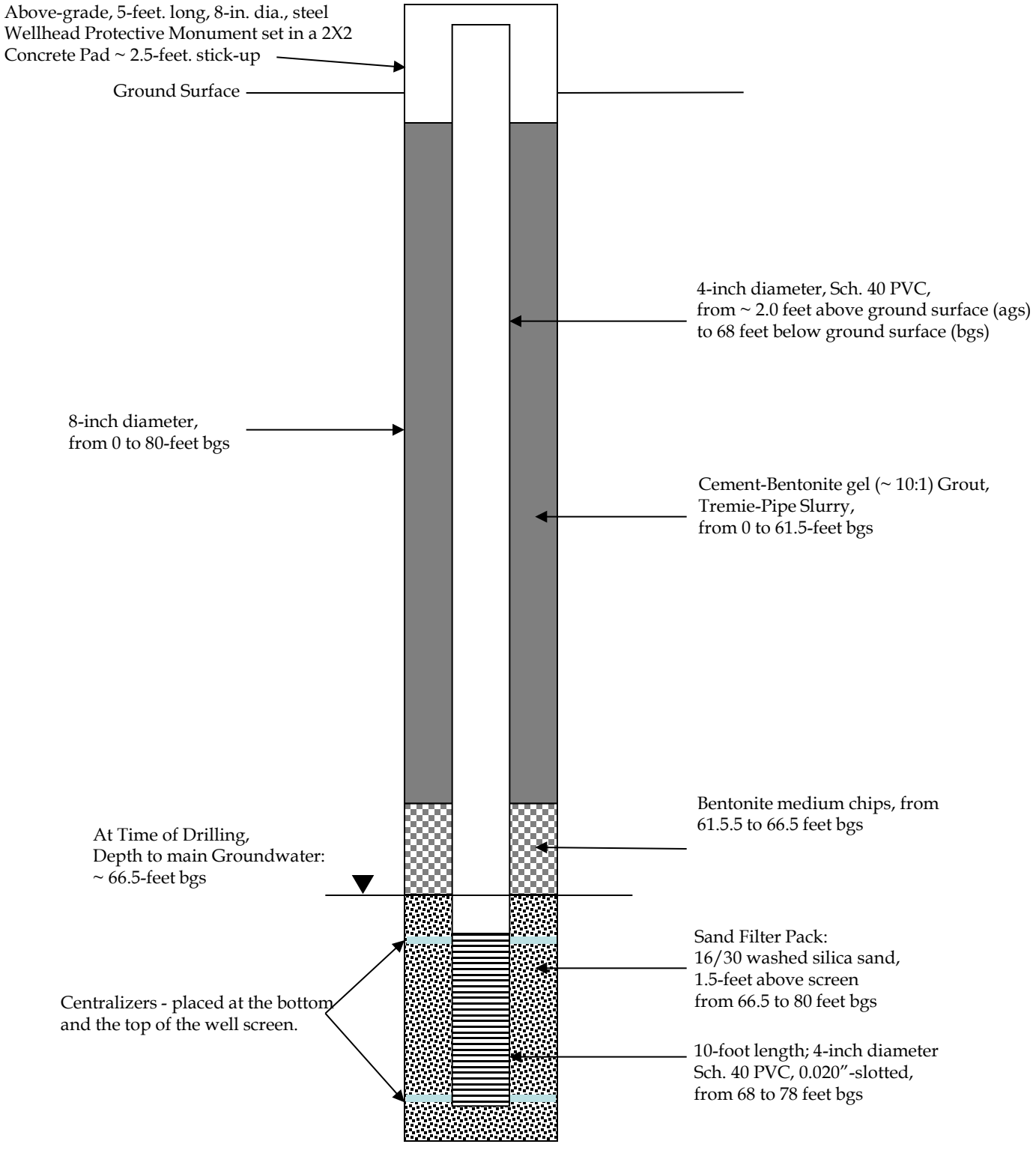
TD = 80'; PVC 4-inch screen from 68 to 78; PVC 4-inch riser from -2.5 to 68

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

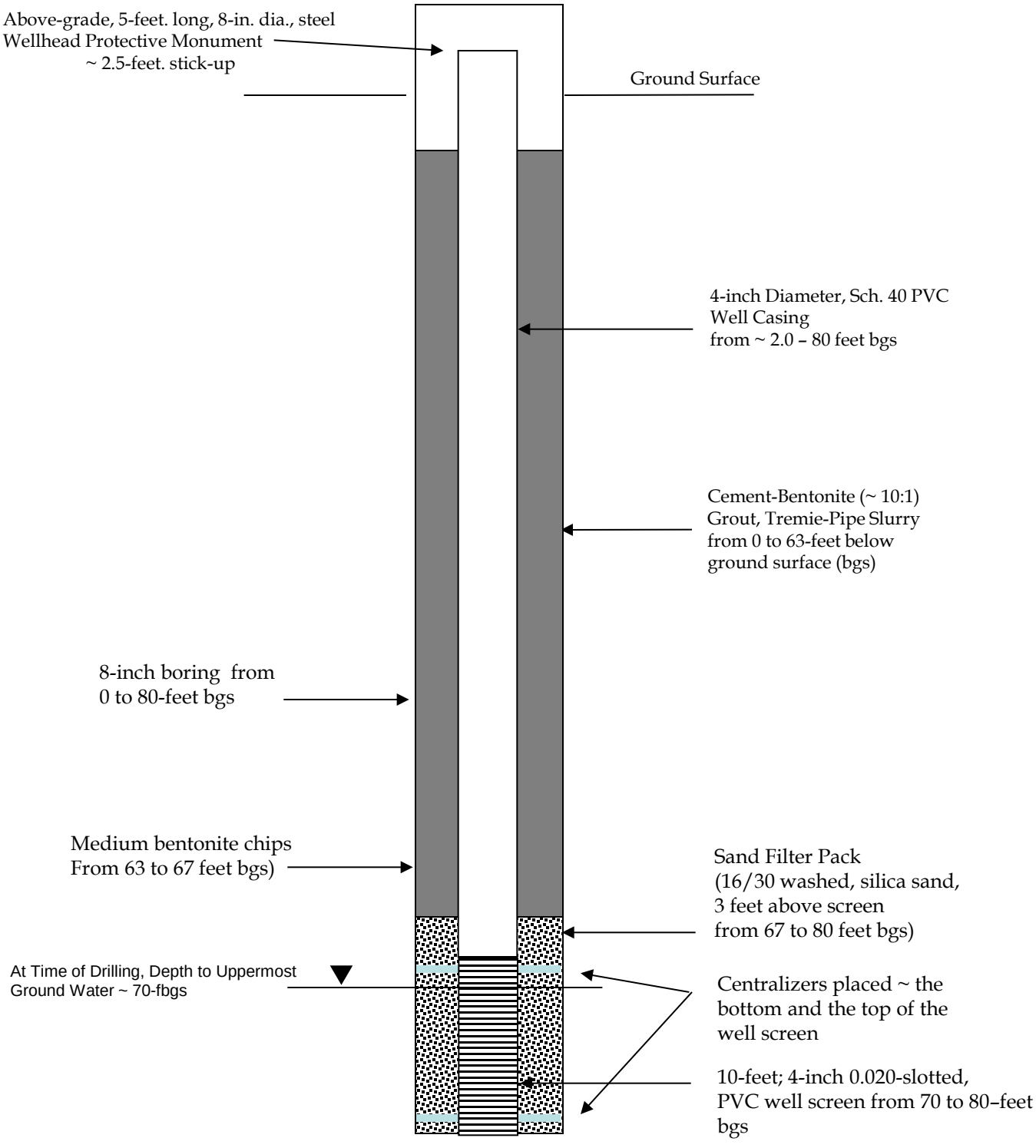
Delta, Utah

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

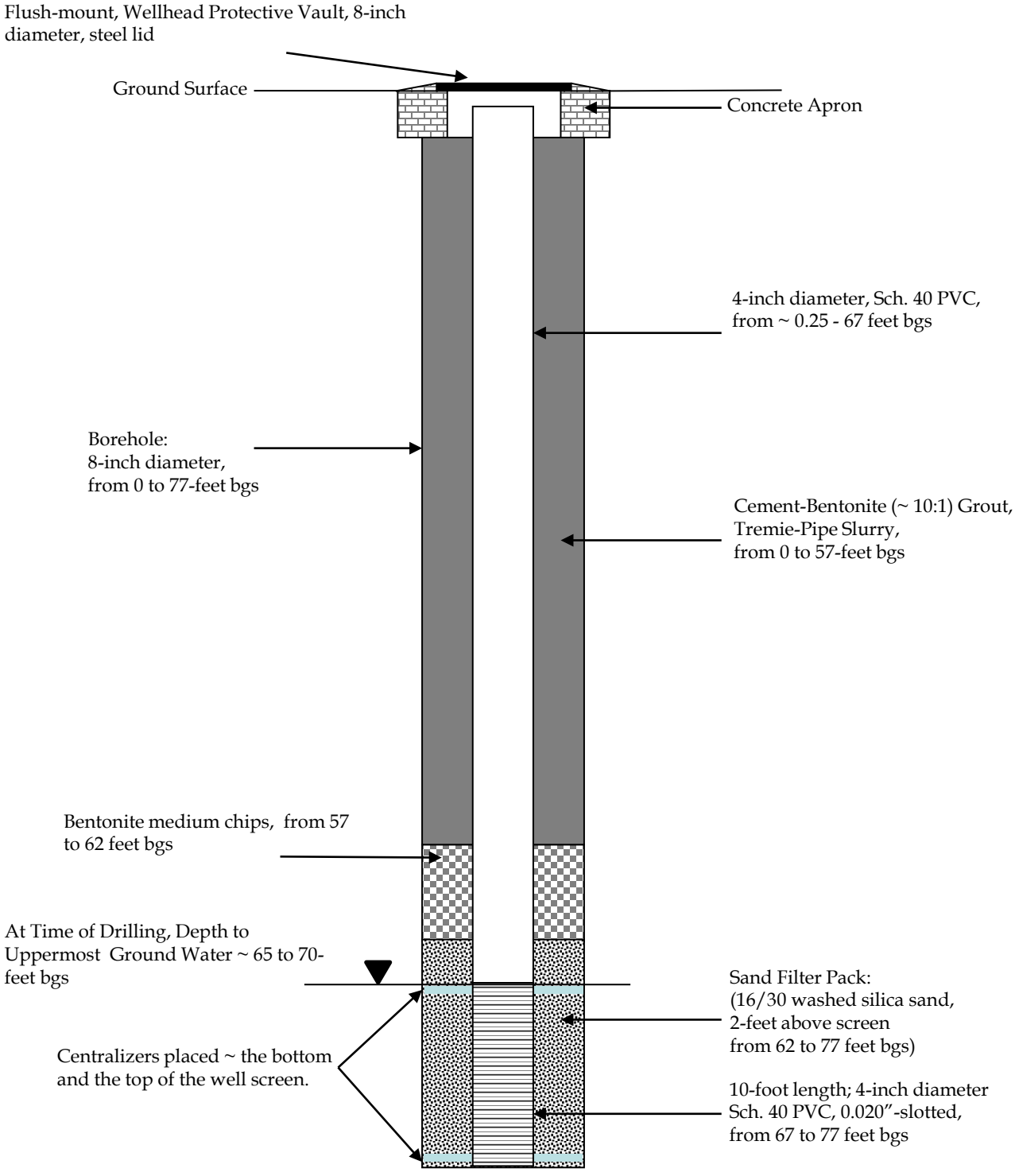
Delta, Utah

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

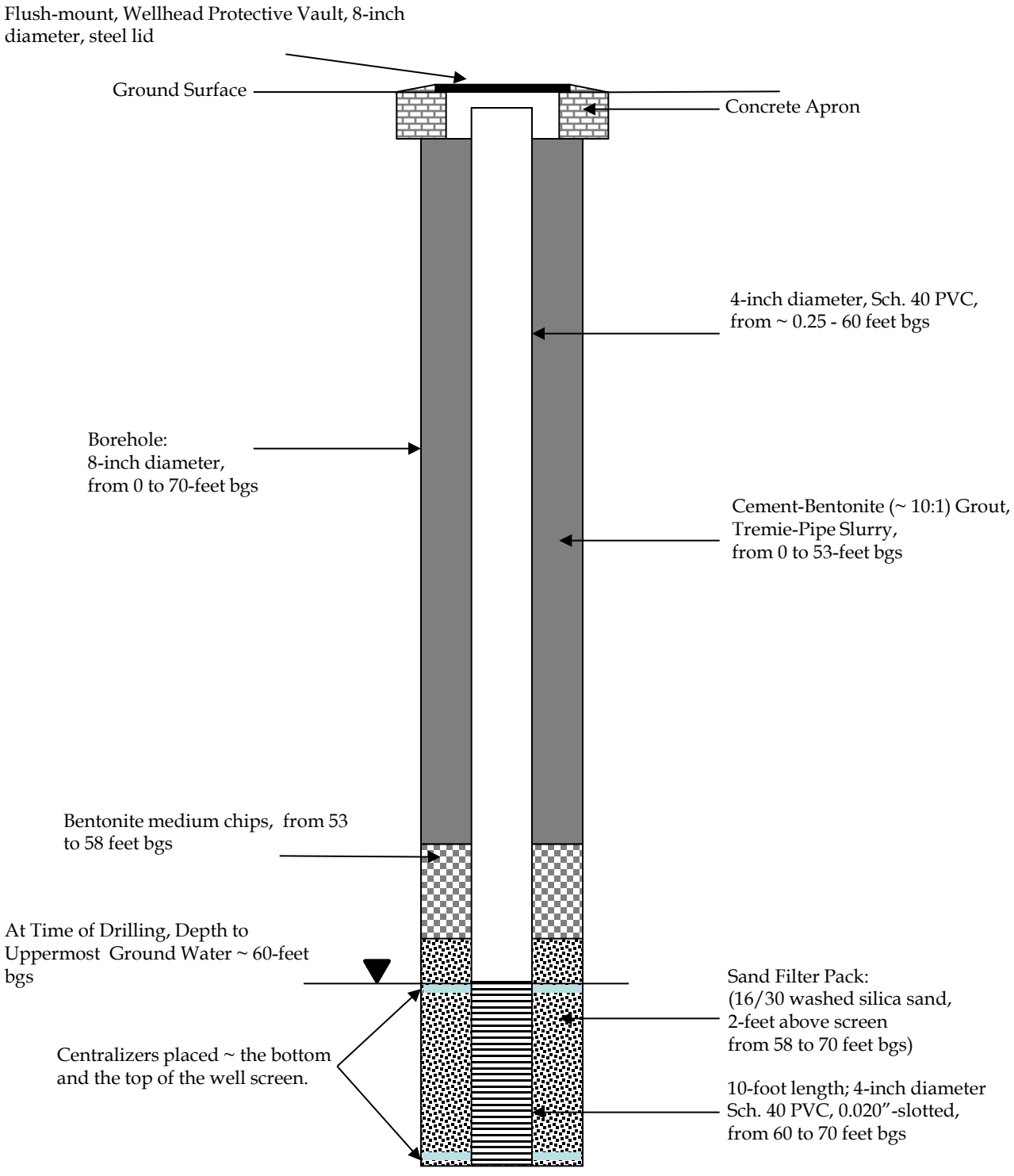
Boring Logs
ISPC
Delta, Utah

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

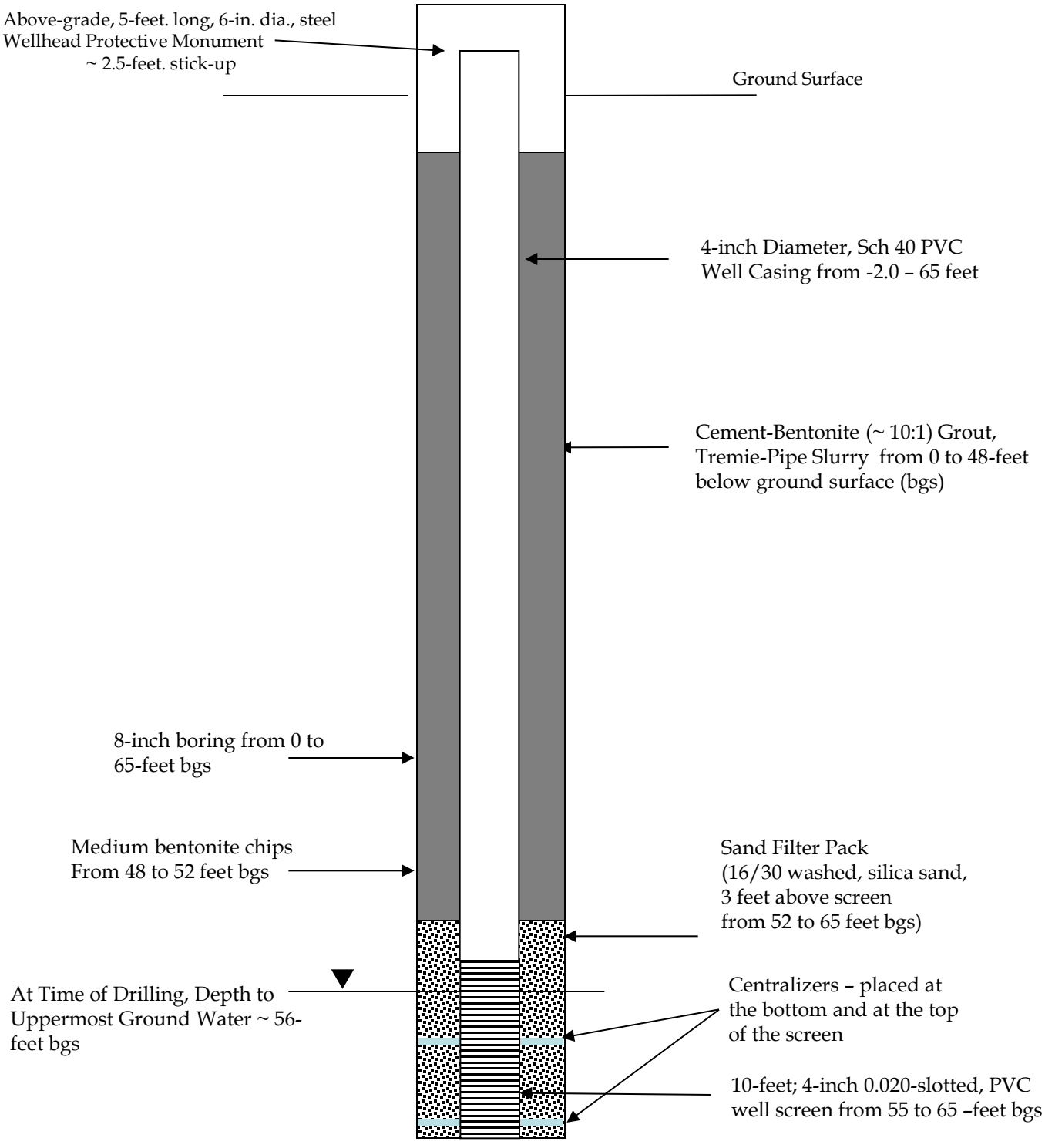
Delta, Utah

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

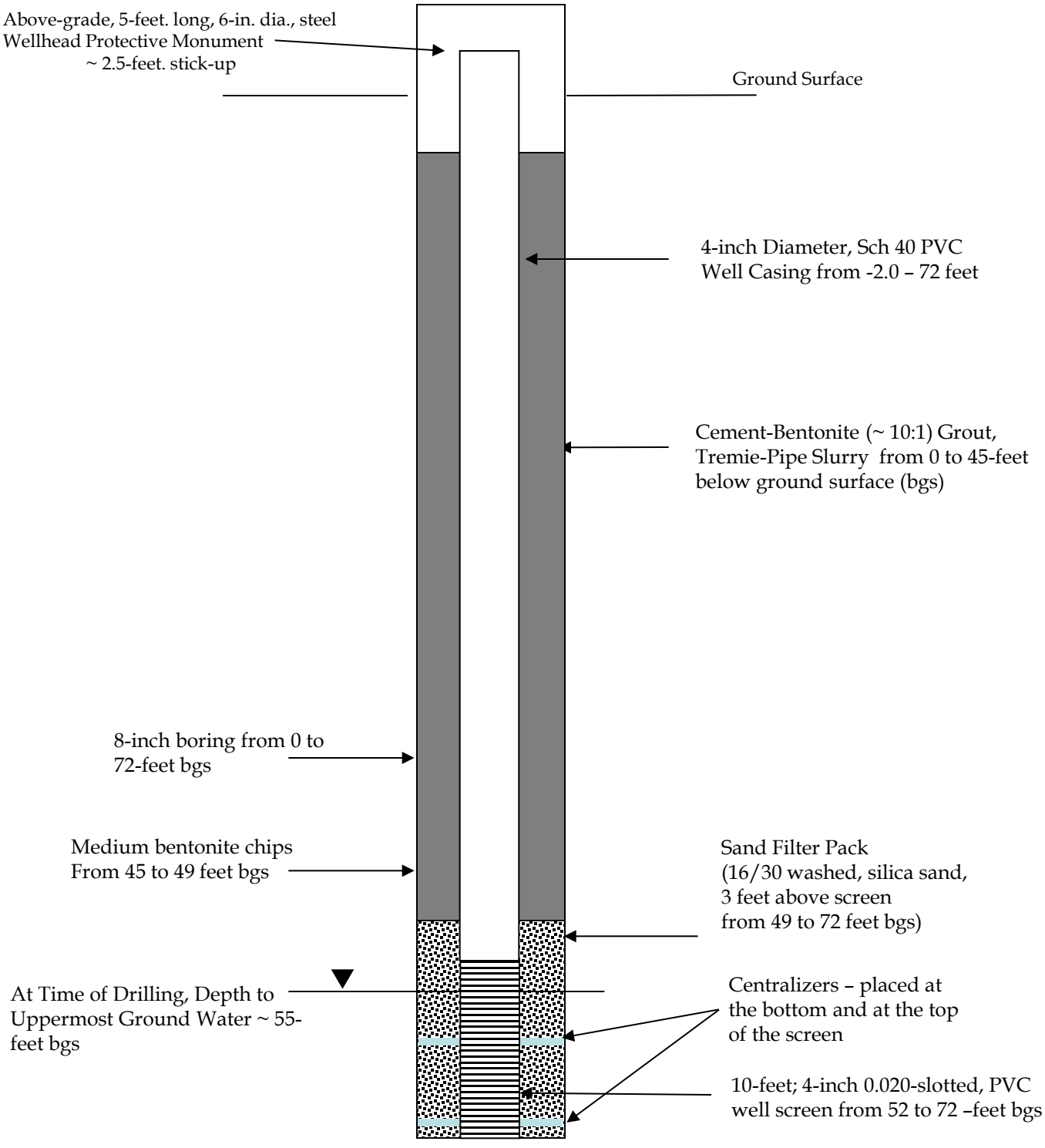
Delta, Utah

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	

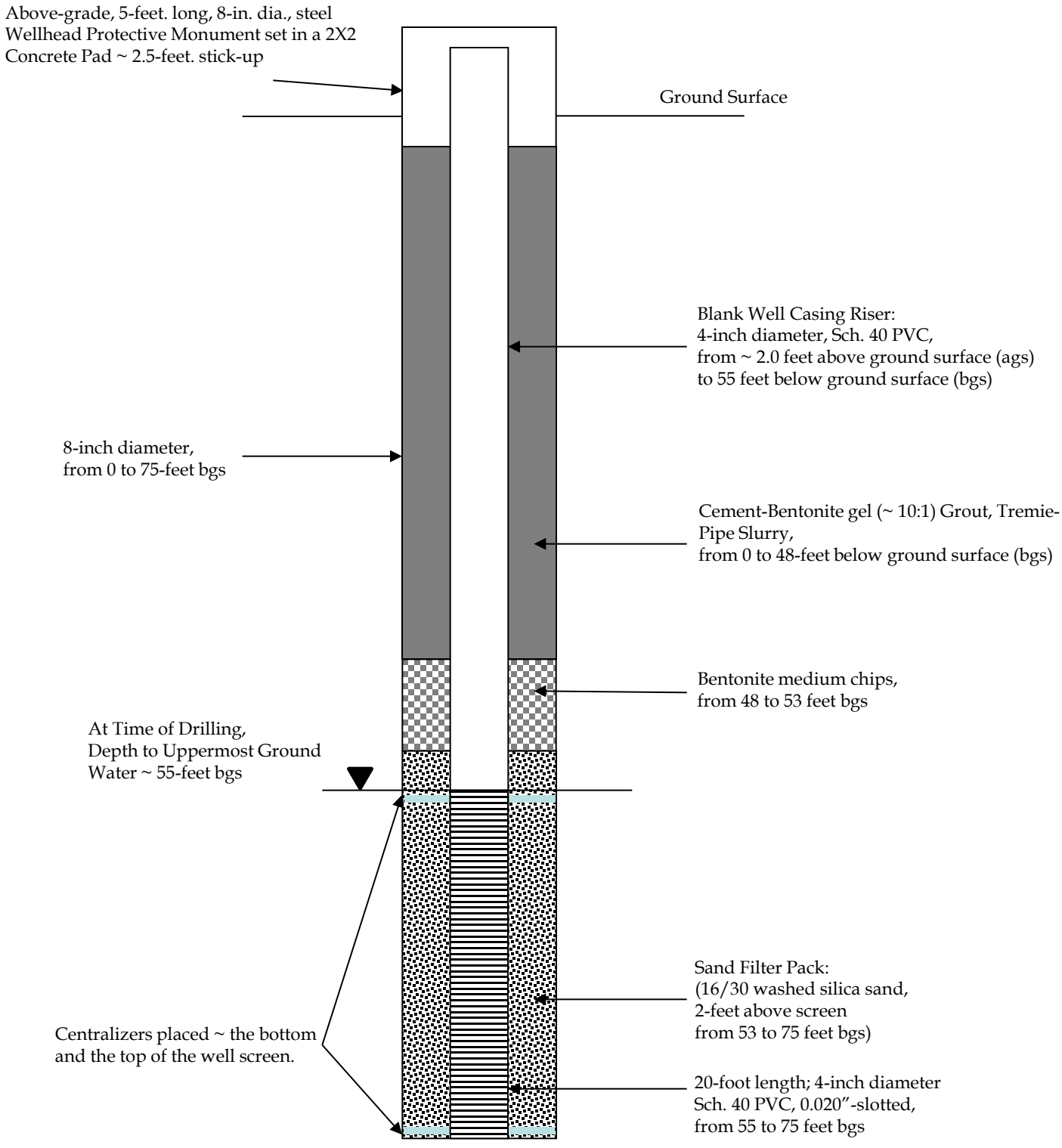
Boring Log
ISPC
Delta, Utah

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	

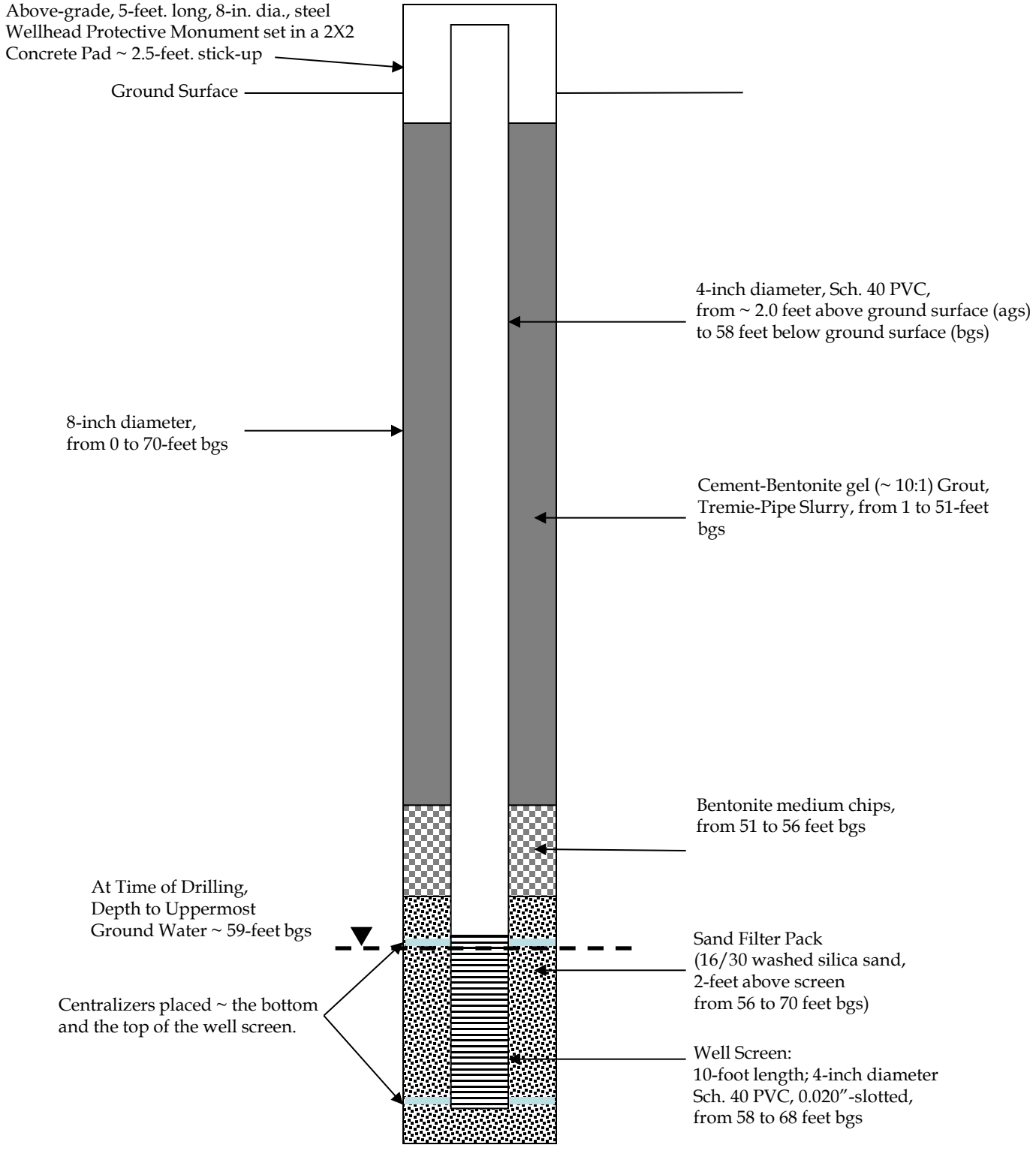
Boring Logs
ISPC
Delta, Utah

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



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IPSC – BOTTOM ASH SURFACE IMPOUNDMENT
DELTA, UTAH

Well BAC-5 Schematic

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

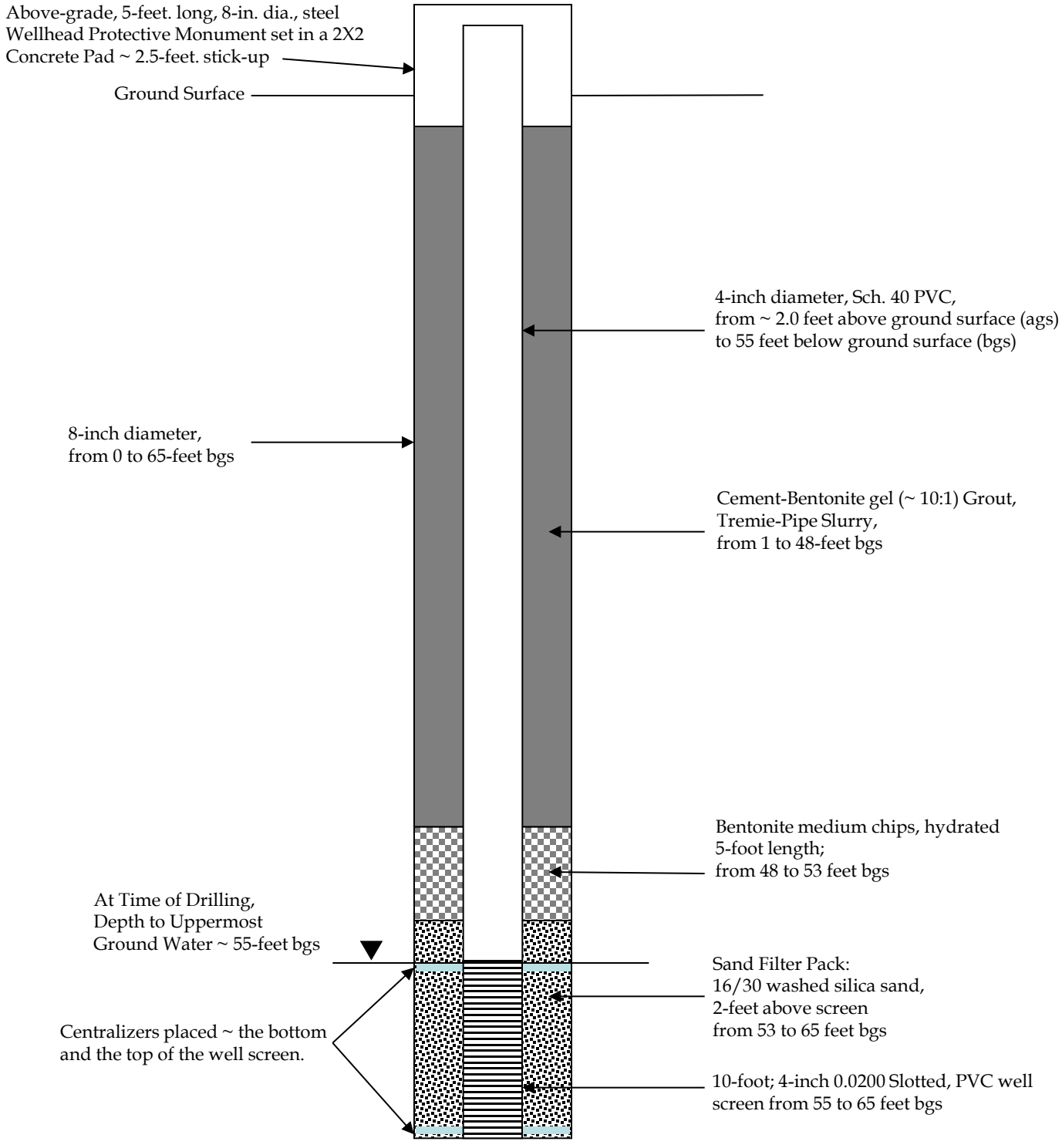
Boring Logs
ISPC
Delta, Utah

BAC-6

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

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

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



Total Depth (TD) = 65 feet bgs

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IPSC – BOTTOM ASH SURFACE IMPOUNDMENT
DELTA, UTAH

Well BAC-6 Schematic

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

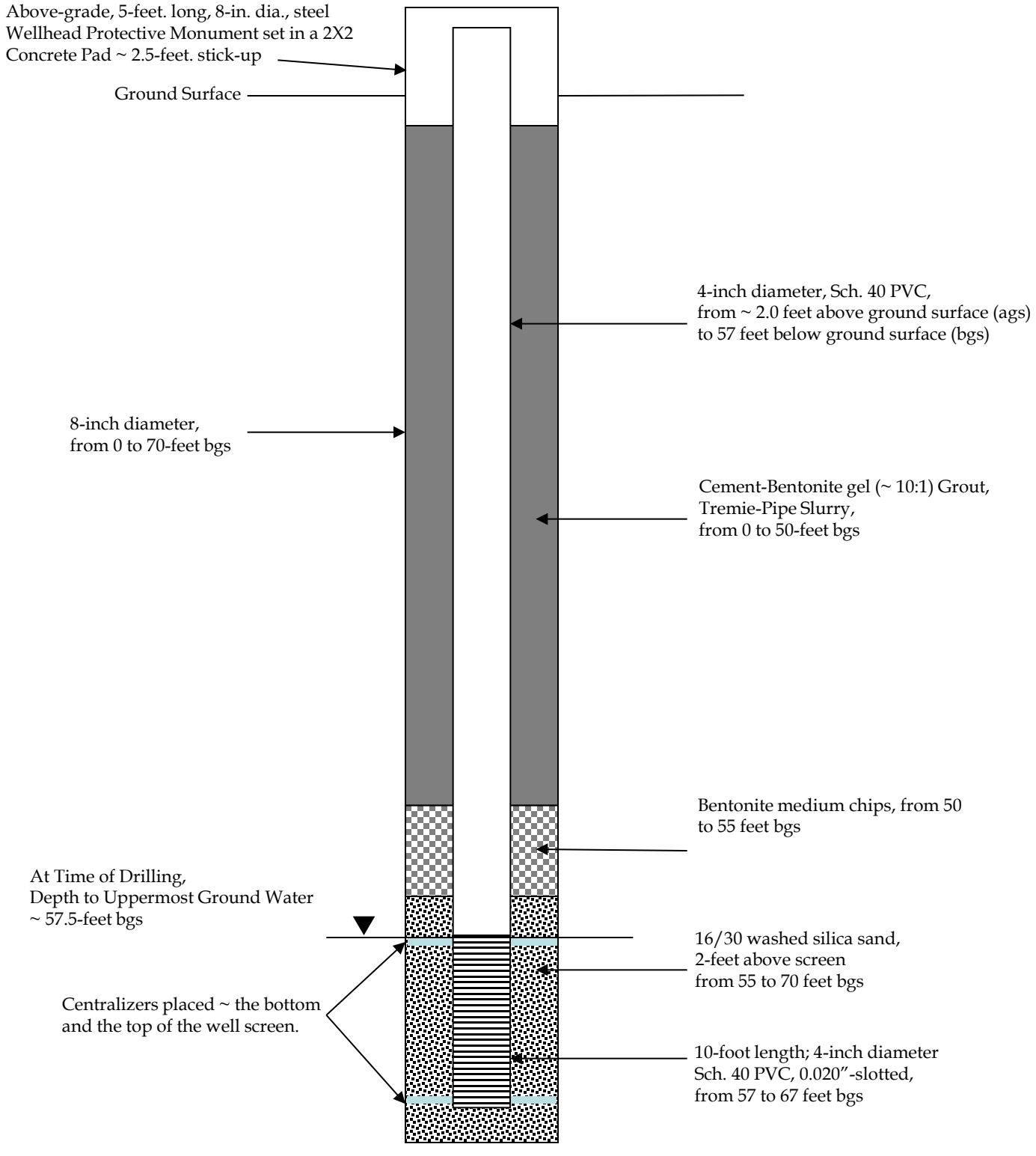
Boring Logs
ISPC
Delta, Utah

BAC-7

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

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

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



Total Depth (TD) = 70 feet bgs

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

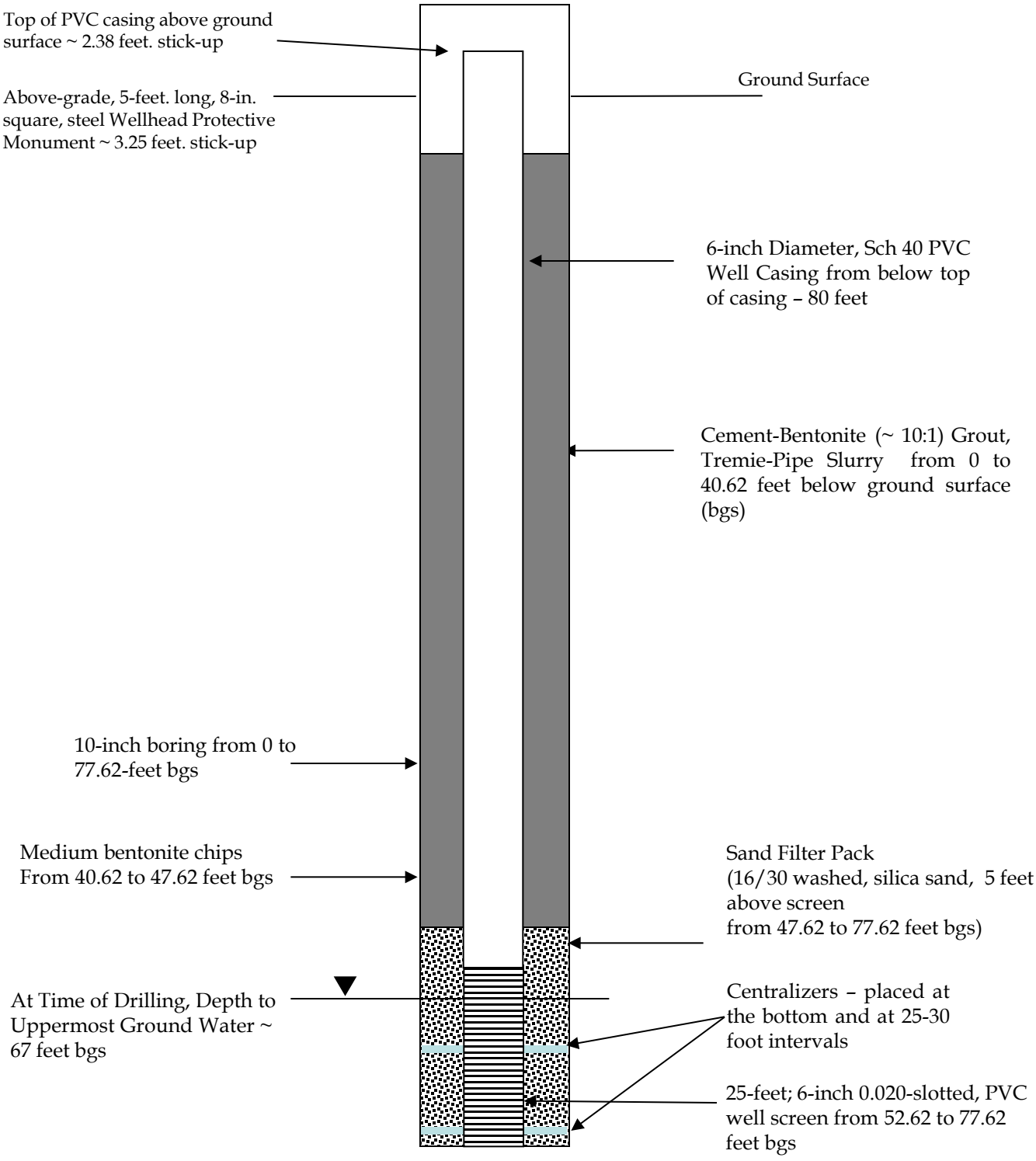
BAC-8

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

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ISPC BOTTOM ASH SURFACE IMPOUNDMENT
DELTA, UTAH

BAC-8 Schematic

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

Project Name: Intermountain Power Service Corporation

Project No.: 203709098

Boring Monitor Well: BAC-9

Completion Date: 2019-05-1

Drilling Firm: Cascade

Driller: Ryan Miller

Boring Method: Sonic

Logged by: John Russell

Boring Diameter: 10 inches

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

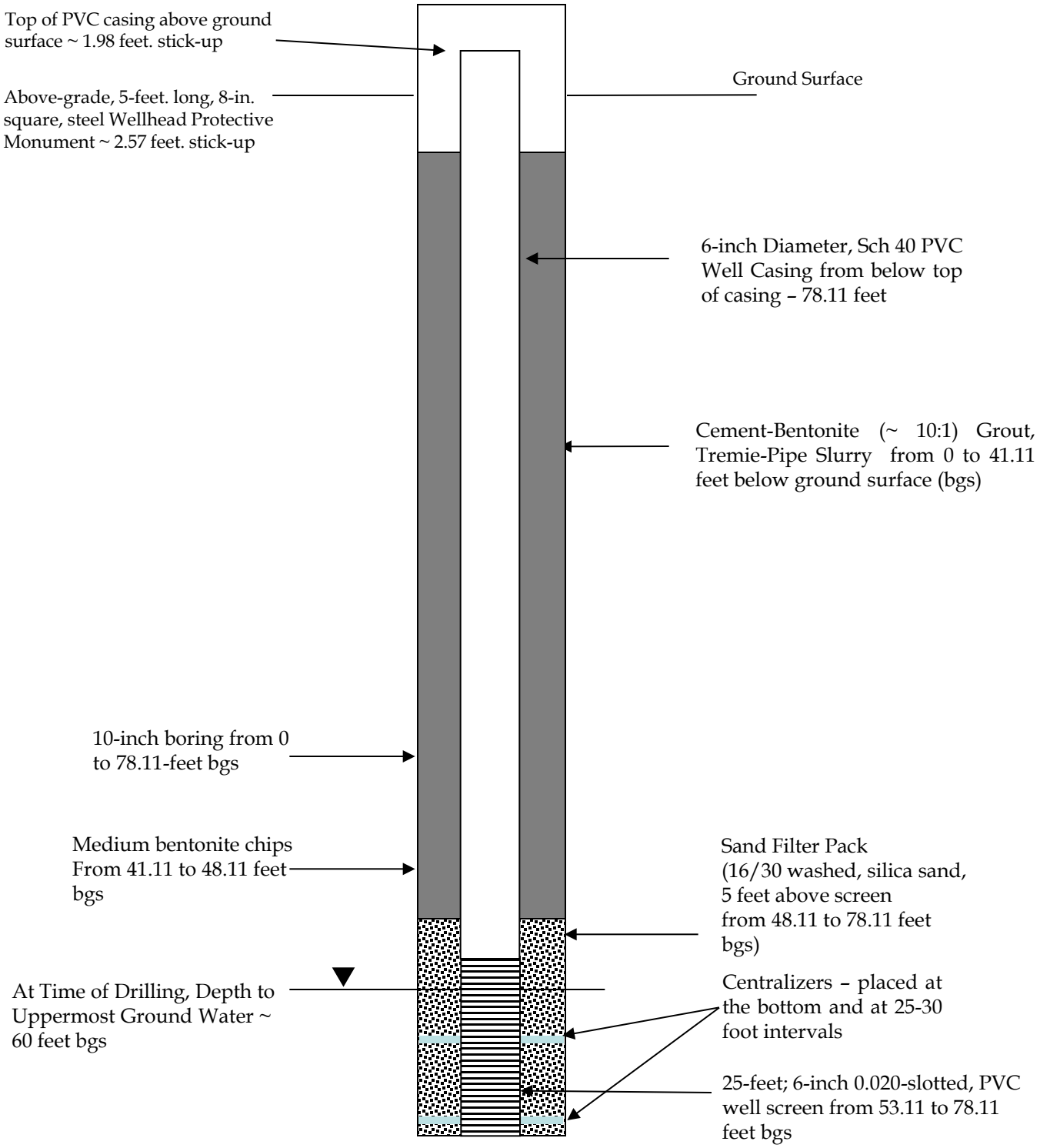
Screen (6 inch, 0.02 slotted, PVC): 53.11-78.11 feet

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



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

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

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

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

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

BAC-10

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

85 - 87	Medium brown clay, moist

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

Surface Completion: Stick-up

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

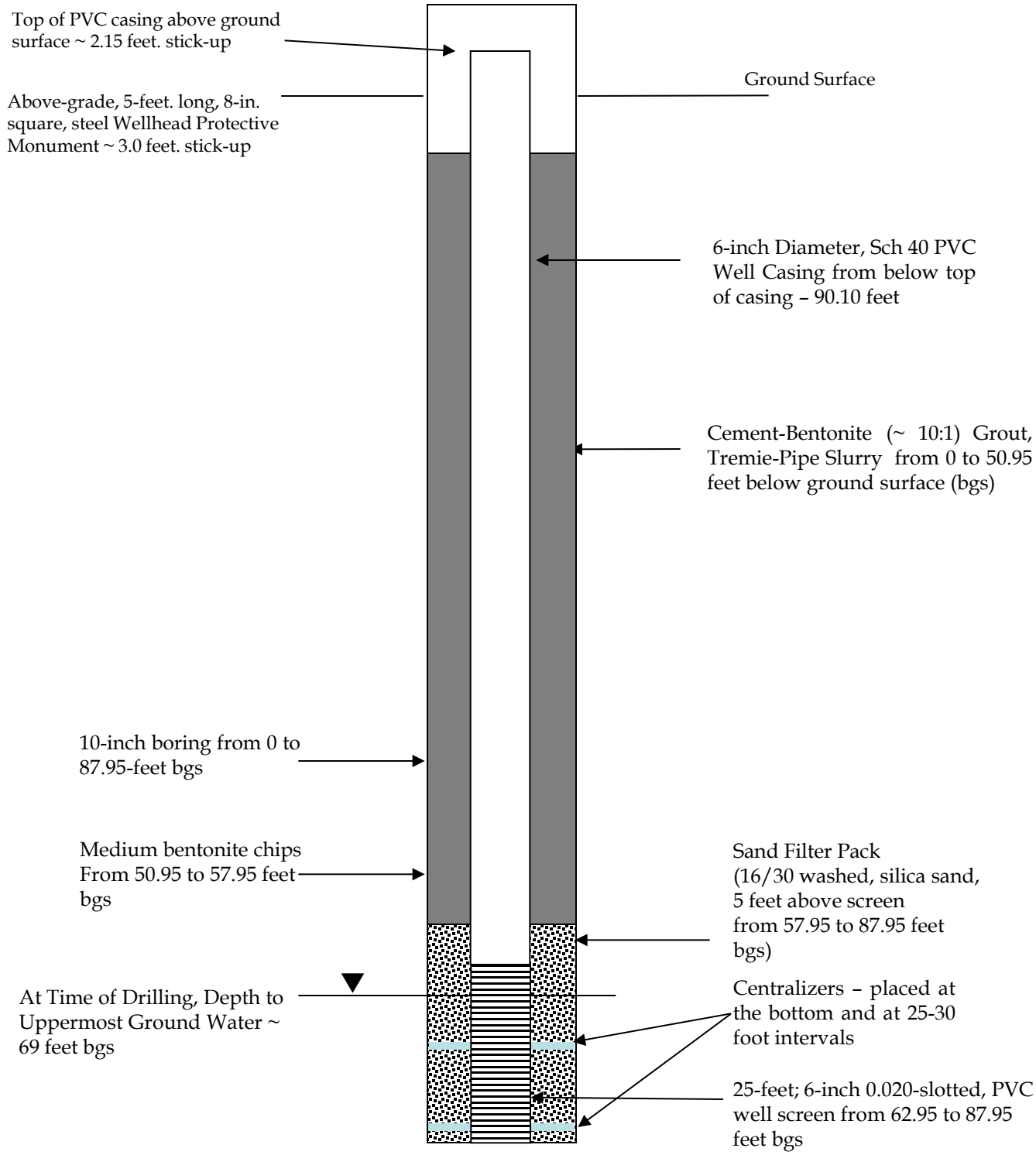
Screen (6 inch, 0.02 slotted, PVC): 62.95-87.95 feet

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

Bentonite Seal: Hydrolyzed bentonite pellet seal 50.95-57.95 feet

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

Top of Manhole Cover (Relative Datum Survey): NA



Stantec

IPSC – BOTTOM ASH SURFACE IMPOUNDMENT
DELTA, UTAH

BAC-10 Schematic

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

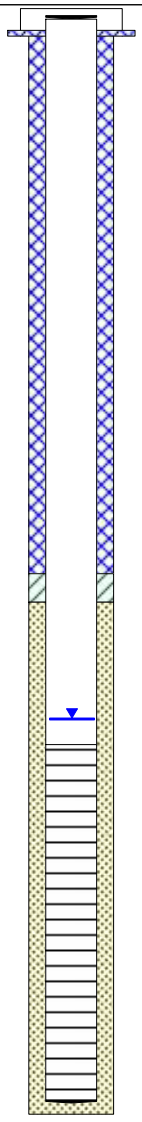
INTERMOUNTAIN POWER SERVICE CORP.

MONITORNG WELL ID:	**BAC-11**
CLIENT	Intermountain Power Service Corporation
PROJECT	Monitoring Well Installation
SITE LOCATION	Southwest of Bottom Ash Basin Surface Impoundment

Stantec

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

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



WELL CONSTUCTION DIAGRAM

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

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

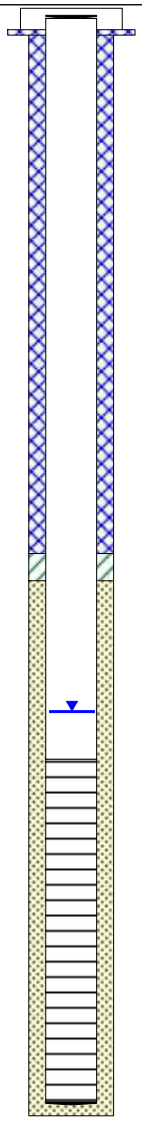
INTERMOUNTAIN POWER SERVICE CORP.

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

Stantec

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

DEPTH (feet)	LITHOLOGICAL GRAPHIC	LITHOLOGICAL DESCRIPTION
0		Poorly Graded Sand with Silt (SP-SM), fine grained sand 95%, loose, soft, dry, pale brown (10 YR 6/3).
5		
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.
15		
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.
35		
40		Clay with Sand (CL), medium plasticity, medium dense, moist, light yellowish brown (10 YR 6/3).
		Clay (CL), medium plasticity, stiff, moist, cohesive, pale brown (10 YR 6/2).
45		Clay with Sand (CL), low plasticity, soft, non cohesive, wet, brown (10 YR 5/3).
		Clay (CL), Same as 39.5 ft bgs.
		Clay with Sand (CL), Same as 38.5 ft bgs.
50		Clay (CL), Same as 41.5 ft bgs.
		Clay with Sand (CL), low plasticity, soft, non cohesive, wet, brown (10 YR 5/3).
55		Clay (CL), medium plasticity, medium dense, cohesive , moist, brown (10 YR 5/3), mottled with yellowish brown (10 YR 5/6).
60		Clay with Sand (CL), low plasticity, soft, non cohesive, wet, brown (10 YR 5/3).
		Well Graded Sand (SW) fine to coarse sand 98%, loose, soft, wet, brown (10 YR 5/3), trace gravel.
65		Clay with Sand (CL), low to medium plasticity, medium dense, wet, non cohesive, brown (10 YR 5/3), mottled with light brownish gray (10 YR 6/2).
70		Well Graded Sand with Clay (SW-SC), fine grained sand 90%, loose, soft, wet, brown (10 YR 5/3): clay 10%, low plasticity, non cohesive.
75		Clay (CL), medium plasticity, medium dense, cohesive , moist, brown (10 YR 5/3).
80		
		End of borehole at 81 ft bgs. Installed monitoring well per scope of work.
85		



WELL CONSTUCTION DIAGRAM

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

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

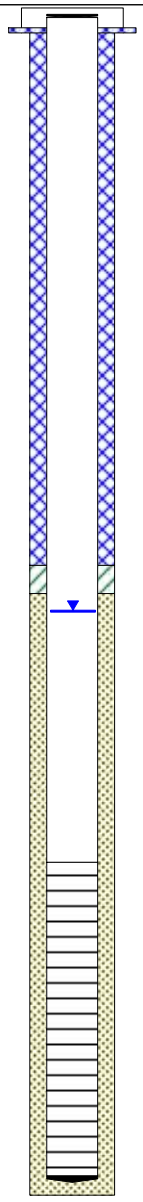
INTERMOUNTAIN POWER SERVICE CORP.

MONITORNG WELL ID:	**BAC-13**
CLIENT	Intermountain Power Service Corporation
PROJECT	Monitoring Well Installation
SITE LOCATION	Southwest of Bottom Ash Basin Surface Impoundment

Stantec

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

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



WELL CONSTUCTION DIAGRAM

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

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

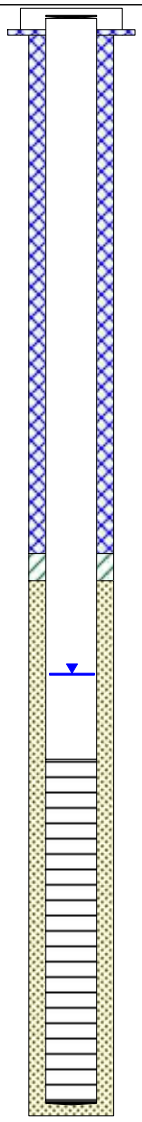
MONITORNG WELL ID:	**BAC-14**
CLIENT	Intermountain Power Service Corporation
PROJECT	Monitoring Well Installation
SITE LOCATION	Southwest of Bottom Ash Basin Surface Impoundment

INTERMOUNTAIN POWER SERVICE CORP.

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



WELL CONSTUCTION DIAGRAM

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

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

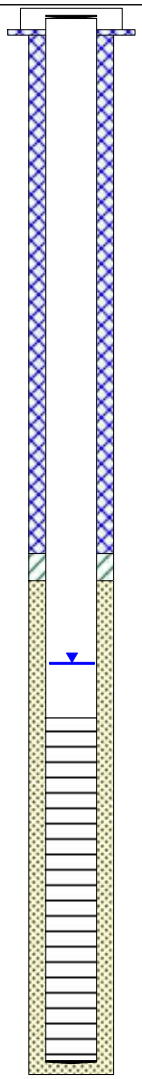
INTERMOUNTAIN POWER SERVICE CORP.

MONITORNG WELL ID:	**BAC-15**
CLIENT	Intermountain Power Service Corporation
PROJECT	Monitoring Well Installation
SITE LOCATION	Southwest of Bottom Ash Basin Surface Impoundment

Stantec

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

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



WELL CONSTUCTION DIAGRAM

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

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

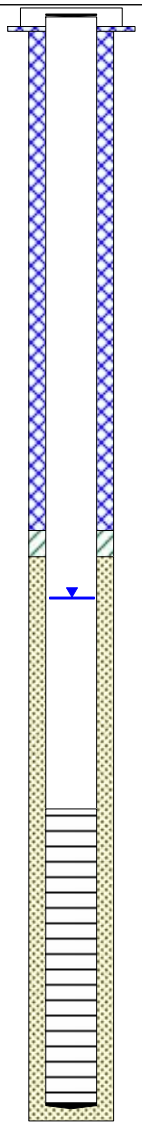
INTERMOUNTAIN POWER SERVICE CORP.

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

Stantec

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

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

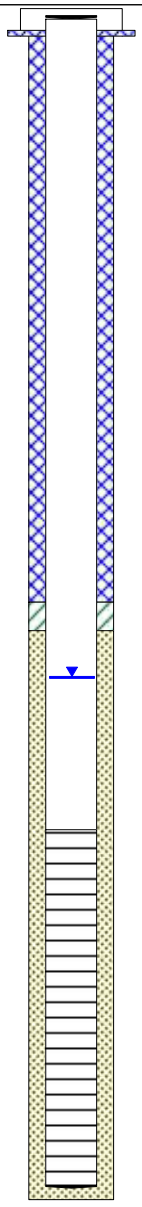
INTERMOUNTAIN POWER SERVICE CORP.

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.

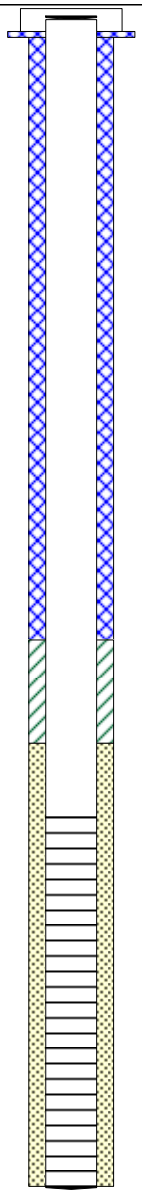
MONITORNG WELL ID:	**BAC-18**
CLIENT:	Intermountain Power Service Corporation
PROJECT:	Monitoring Well Installation
SITE LOCATION:	Down Gradient North

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 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

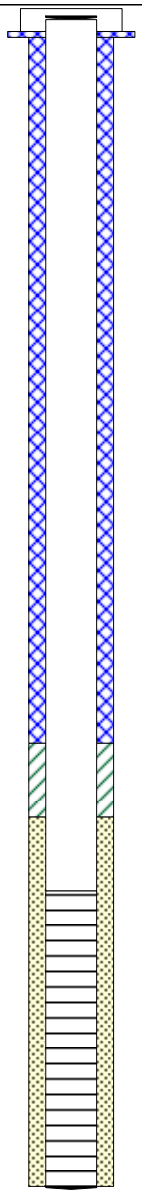
INTERMOUNTAIN POWER SERVICE CORP.

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).
80	End of borehole at 78 ft bgs. Installed monitoring well per scope of work.



WELL CONSTUCTION DIAGRAM

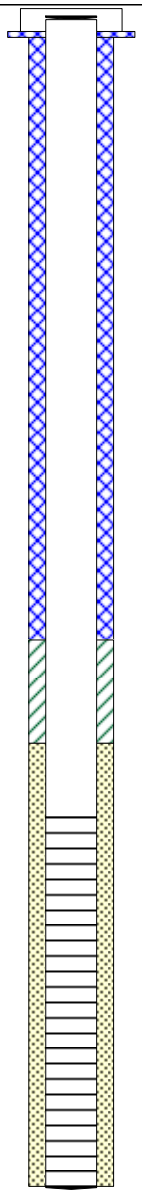
- Above ground monument with well cap
- Borehole diameter 10 inches from 0 to 78 ft bgs.
- Grout 0 to 48 ft bgs.
- 0 to 58 ft bgs., 6 in dia., Sch. 80 PVC riser
- Bentonite 48 to 53 ft bgs.
- Filter Pack Sand 53 to 78 ft bgs.
- 58 to 78 ft bgs., 6 in dia., Sch. 80 PVC screen with 0.02 inch slot aperture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

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

MONITORNG WELL ID:	**BAC-20**
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: 5/9/2020	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
65	Clay (CL), light brown, moist
70	Well Graded Sand with Gravel (SW), wet, light brown
	Clay (CL), light brown, moist
75	Well Graded Sand with Gravel (SW), wet, 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

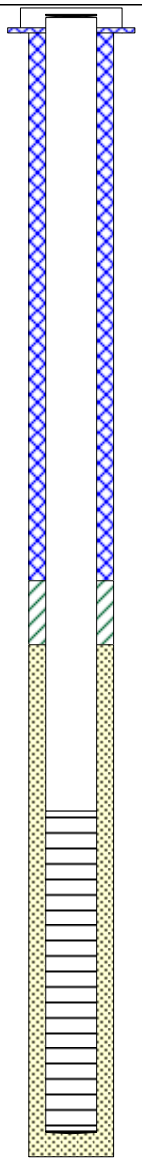
INTERMOUNTAIN POWER SERVICE CORP.

MONITORNG WELL ID: **BAC-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

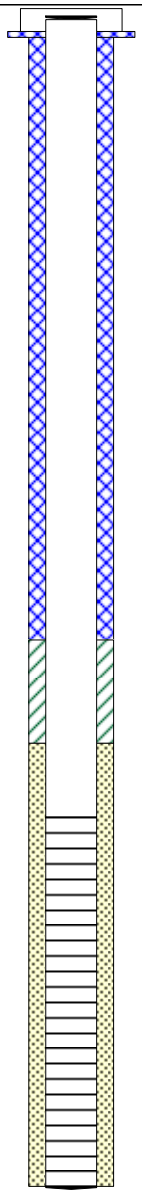
INTERMOUNTAIN POWER SERVICE CORP.

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
55	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 Clay (CL), light brown, moist
65	Well Graded Sand with Clay (SW), light brown, moist Well Graded Sand with Gravel (SW), moist, light brown
70	Well Graded Sand with Gravel (SW), wet, light brown 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

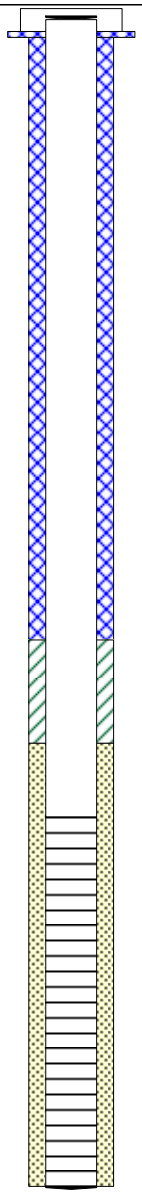
- Above ground monument with well cap
- Grout 0 to 41 ft bgs. Borehole diameter 10 inches from 0 to 78 ft bgs.
- 0 to 53 ft bgs., 6 in dia., Sch. 80 PVC riser
- Bentonite 41 to 48 ft bgs.
- Filter pack sand 48 to 78 ft bgs.
- 53 to 78 ft bgs., 6 in dia., Sch. 80 PVC screen with 0.02 inch slot aperture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

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

MONITORNG WELL ID:	**BAC-23**
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: 5/11/2020	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

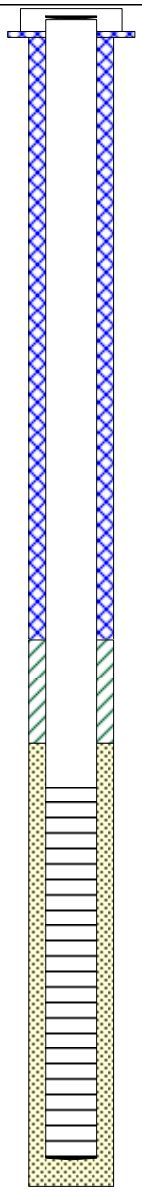
INTERMOUNTAIN POWER SERVICE CORP.

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

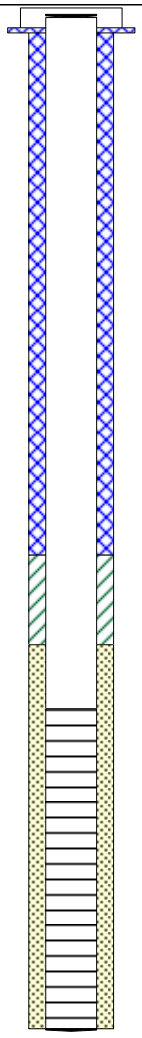
INTERMOUNTAIN POWER SERVICE CORP.

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 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

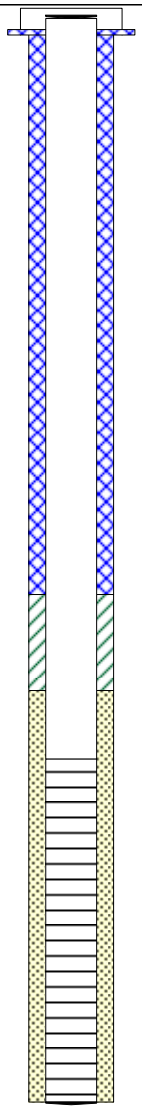
INTERMOUNTAIN POWER SERVICE CORP.

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 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	



- 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

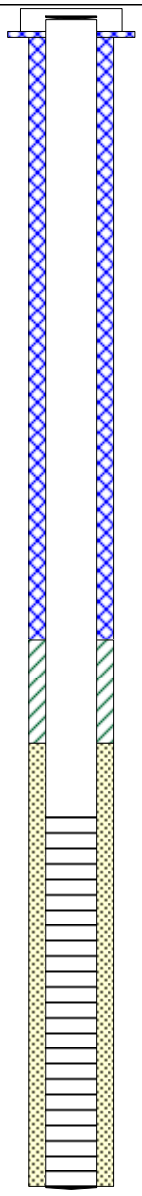
Notes: bgs. = below ground surface; dia. = diameter; ft = feet; Sch. = Schedule; YR = Yellow-Red

MONITORNG WELL ID:	**BAC-27**
CLIENT:	Intermountain Power Service Corporation
PROJECT:	Monitoring Well Installation
SITE LOCATION:	North 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: 5/13/2020	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

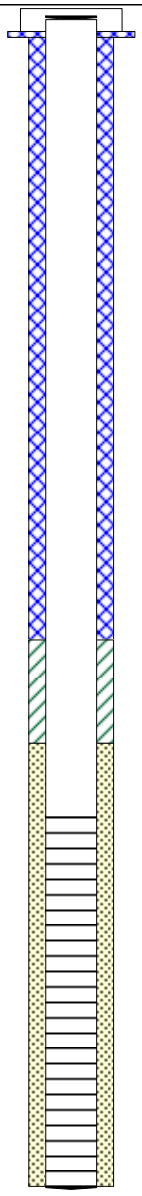
MONITORNG WELL ID:	**BAC-28**
CLIENT:	Intermountain Power Service Corporation
PROJECT:	Monitoring Well Installation
SITE LOCATION:	North Wells

INTERMOUNTAIN POWER SERVICE CORP.

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

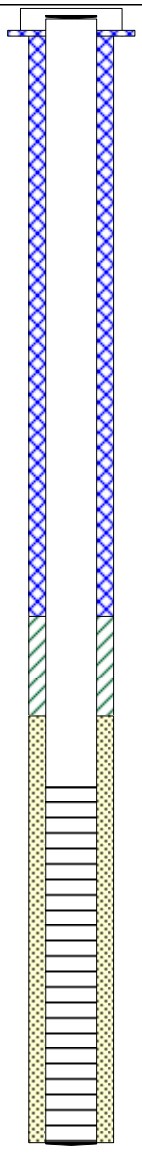
- Above ground monument with well cap
- Grout 0 to 41 ft bgs. Borehole diameter 10 inches from 0 to 78 ft bgs.
- 0 to 53 ft bgs., 6 in dia., Sch. 80 PVC riser
- Bentonite 41 to 48 ft bgs.
- Filter pack sand 48 to 78 ft bgs.
- 53 to 78 ft bgs., 6 in dia., Sch. 80 PVC screen with 0.02 inch slot aperture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

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

MONITORNG WELL ID:	**BAC-29**
CLIENT:	Intermountain Power Service Corporation
PROJECT:	Monitoring Well Installation
SITE LOCATION:	North 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: 5/15/2020	DATE FINISHED: 5/15/2020
		LOGGED BY: Rich Pratt	

DEPTH (feet)	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
65	Well Graded Sand with Gravel (SW), moist, light brown
	Clay (CL), light brown, moist
70	Well Graded Sand with Clay (SW), light brown, moist
	Clay (CL), light brown, moist
75	Well Graded Sand with Clay (SW), light brown, moist
	Clay (CL), light brown, moist
80	Well Graded Sand with Clay (SW), 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

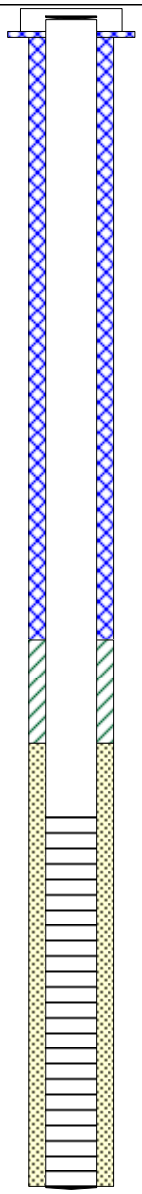
INTERMOUNTAIN POWER SERVICE CORP.

MONITORNG WELL ID: **BAC-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 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

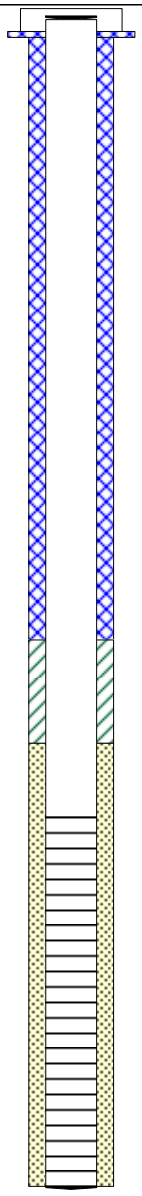
INTERMOUNTAIN POWER SERVICE CORP.

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.,	TOTAL DEPTH (ft.): 78	GROUNDWATER LEVEL (ft. btoc.):
	10 inch sonic core barrel 0 to 78 ft bgs.,	DATE STARTED: 5/15/2020	DATE FINISHED: 5/18/2020
		LOGGED BY: Joel Pierson	

DEPTH (feet)	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
	Clay (CL), fines 100%, moist, very hard, olive brown 2.5Y 4/3
45	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

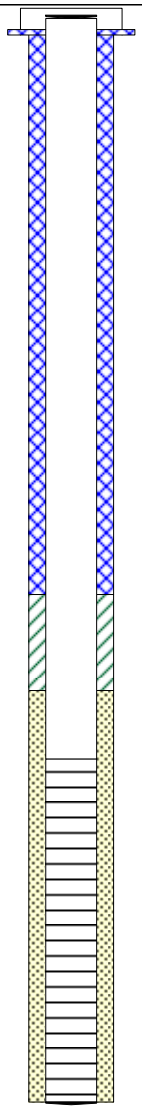
MONITORNG WELL ID:	**BAC-32**
CLIENT:	Intermountain Power Service Corporation
PROJECT:	Monitoring Well Installation
SITE LOCATION:	North Wells

INTERMOUNTAIN POWER SERVICE CORP.

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 GRAPHIC	LITHOLOGICAL DESCRIPTION
0		Lithological Description infered from BAC-26. Poorly graded Sand with Silt (SP), light brown, dry
5		
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
25		
30		Clay (CL), light brown, moist
35		
40		
45		
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

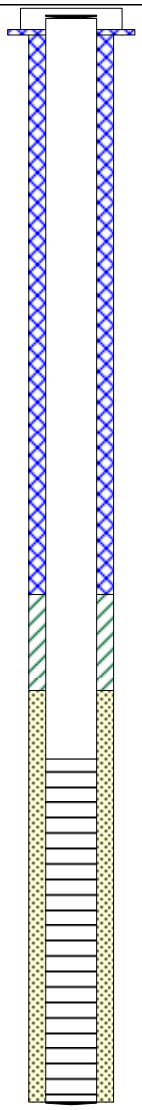
- Above ground monument with well cap
- Borehole diameter 10 inches from 0 to 78 ft bgs.
- Grout 0 to 41 ft bgs.
- 0 to 53 ft bgs., 6 in dia., Sch. 80 PVC riser
- Bentonite 41 to 48 ft bgs.
- Filter Pack Sand 48 to 78 ft bgs.
- 53 to 78 ft bgs., 6 in dia., Sch. 80 PVC screen with 0.02 inch slot aperture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

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

MONITORNG WELL ID:	**BAC-33**
CLIENT:	Intermountain Power Service Corporation
PROJECT:	Monitoring Well Installation
SITE LOCATION:	North 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: 5/18/2020	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	
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

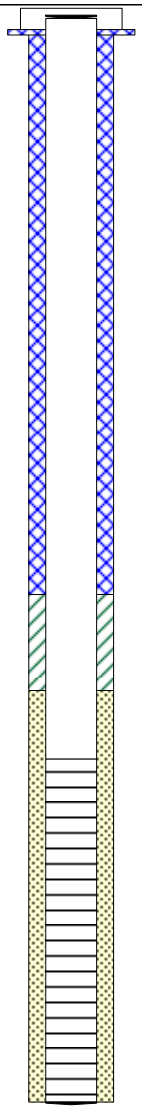
INTERMOUNTAIN POWER SERVICE CORP.

MONITORNG WELL ID:	**BAC-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
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

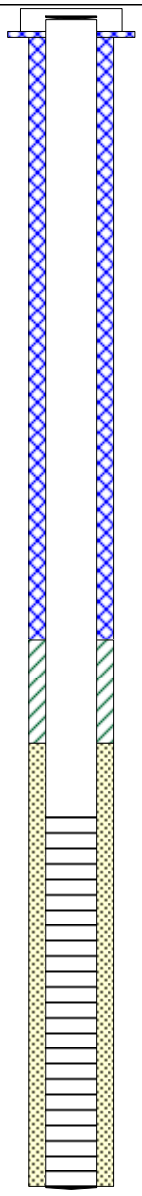
- Above ground monument with well cap
- Borehole diameter 10 inches from 0 to 78 ft bgs.
- Grout 0 to 41 ft bgs.
- 0 to 53 ft bgs., 6 in dia., Sch. 80 PVC riser
- Bentonite 41 to 48 ft bgs.
- Filter Pack Sand 48 to 78 ft bgs.
- 53 to 78 ft bgs., 6 in dia., Sch. 80 PVC screen with 0.02 inch slot aperture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

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

MONITORNG WELL ID:	**BAC-35**
CLIENT:	Intermountain Power Service Corporation
PROJECT:	Monitoring Well Installation
SITE LOCATION:	North 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: 5/28/2020	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
25	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.

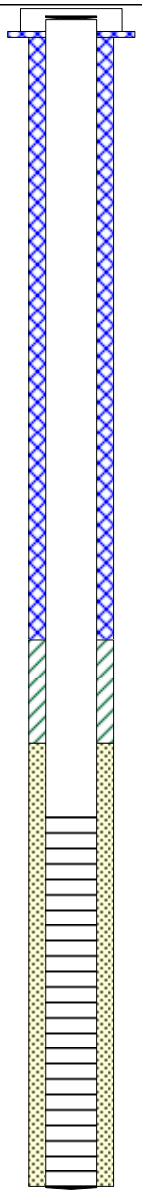
MONITORNG WELL ID:	**BAC-36**
CLIENT:	Intermountain Power Service Corporation
PROJECT:	Monitoring Well Installation
SITE LOCATION:	South Wells

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



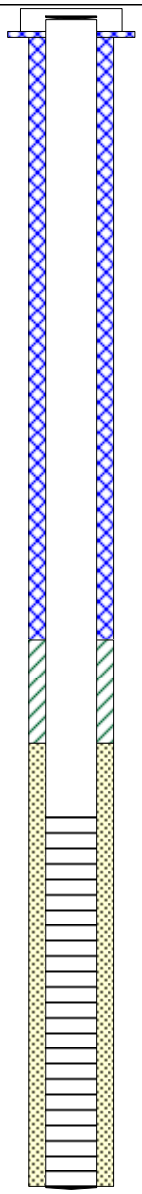
- Above ground monument with well cap
- Borehole diameter 10 inches from 0 to 78 ft bgs.
- Grout 0 to 41 ft bgs.
- 0 to 53 ft bgs., 6 in dia., Sch. 80 PVC riser
- Bentonite 41 to 48 ft bgs.
- Filter Pack Sand 48 to 78 ft bgs.
- 53 to 78 ft bgs., 6 in dia., Sch. 80 PVC screen with 0.02 inch slot aperture
- 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 DESCRIPTION
0	Silty Fine Sand (SM), sand 80%, fines 20%, dry, loose, light gray (2.5Y 7/2)
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)
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
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

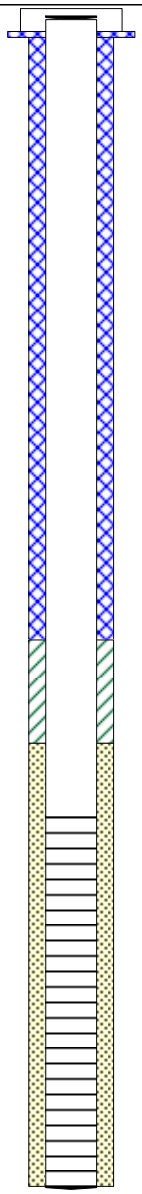
- Above ground monument with well cap
- Borehole diameter 10 inches from 0 to 78 ft bgs.
- Grout 0 to 41 ft bgs.
- 0 to 53 ft bgs., 6 in dia., Sch. 80 PVC riser
- Bentonite 41 to 48 ft bgs.
- Filter Pack Sand 48 to 78 ft bgs.
- 53 to 78 ft bgs., 6 in dia., Sch. 80 PVC screen with 0.02 inch slot aperture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

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

MONITORNG WELL ID:	**BAC-38**
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: 5/31/2020	DATE FINISHED: 5/31/2020
		LOGGED BY: Joel Pierson	

DEPTH (feet)	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	Silty Clay (CL), fines 100%, slightly moist, low plasticity, dense, red (2.5YR 5/8)
30	Silty Sand (SP), sand 90%, fines 10%, loose, moist, light olive brown (2.5Y 5/3)
35	Silty Clay (CL), fines 100%, moist, medium-high plasticity, dense, red (2.5YR 5/4)
40	Silty Sand (SM), sand 80%, fines 20%, loose, moist, light olive brown (2.5Y 5/3)
45	Silty Clay (CL), transitioning from fines 90%, sand 10% to fines 60%, sand 40%, moist, medium-high plasticity, dense, red (2.5YR 5/8)
50	Fine sand (SP), sand 100%, moist, very loose, dark grayish brown (2.5Y 3/2)
55	
60	
65	
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

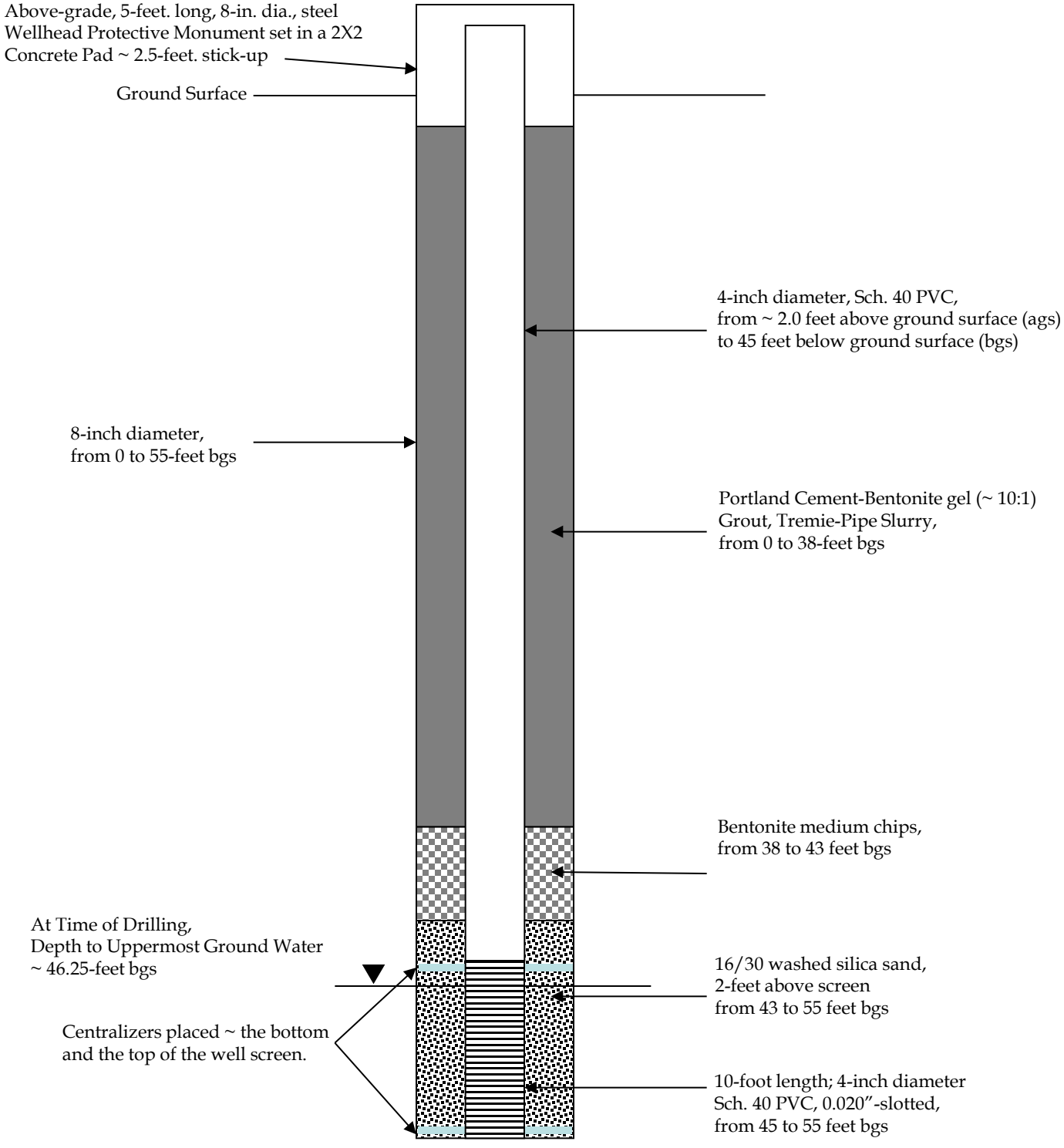
Boring Logs
ISPC
Delta, Utah

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

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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	

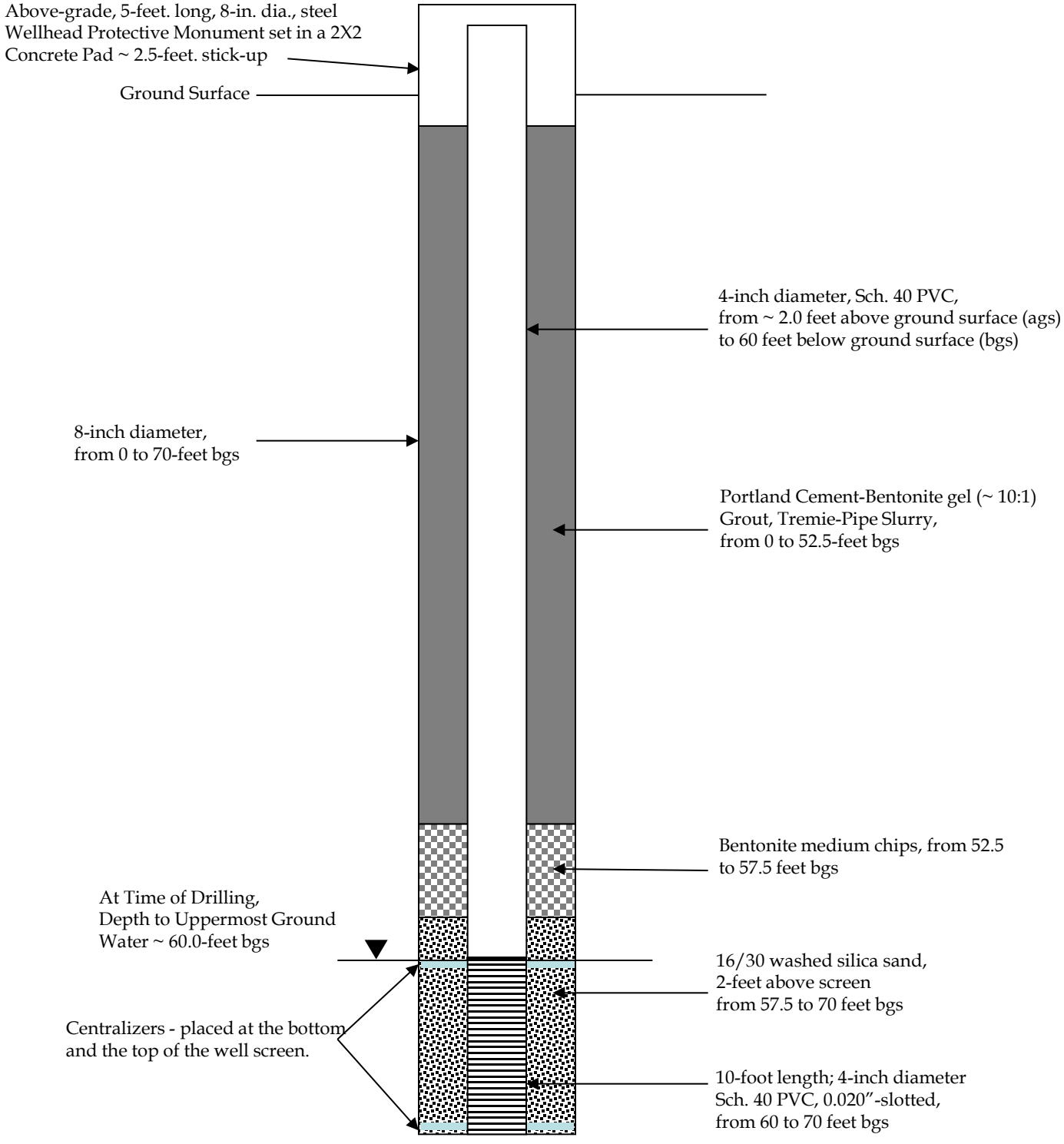
Boring Logs
ISPC
Delta, Utah

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	

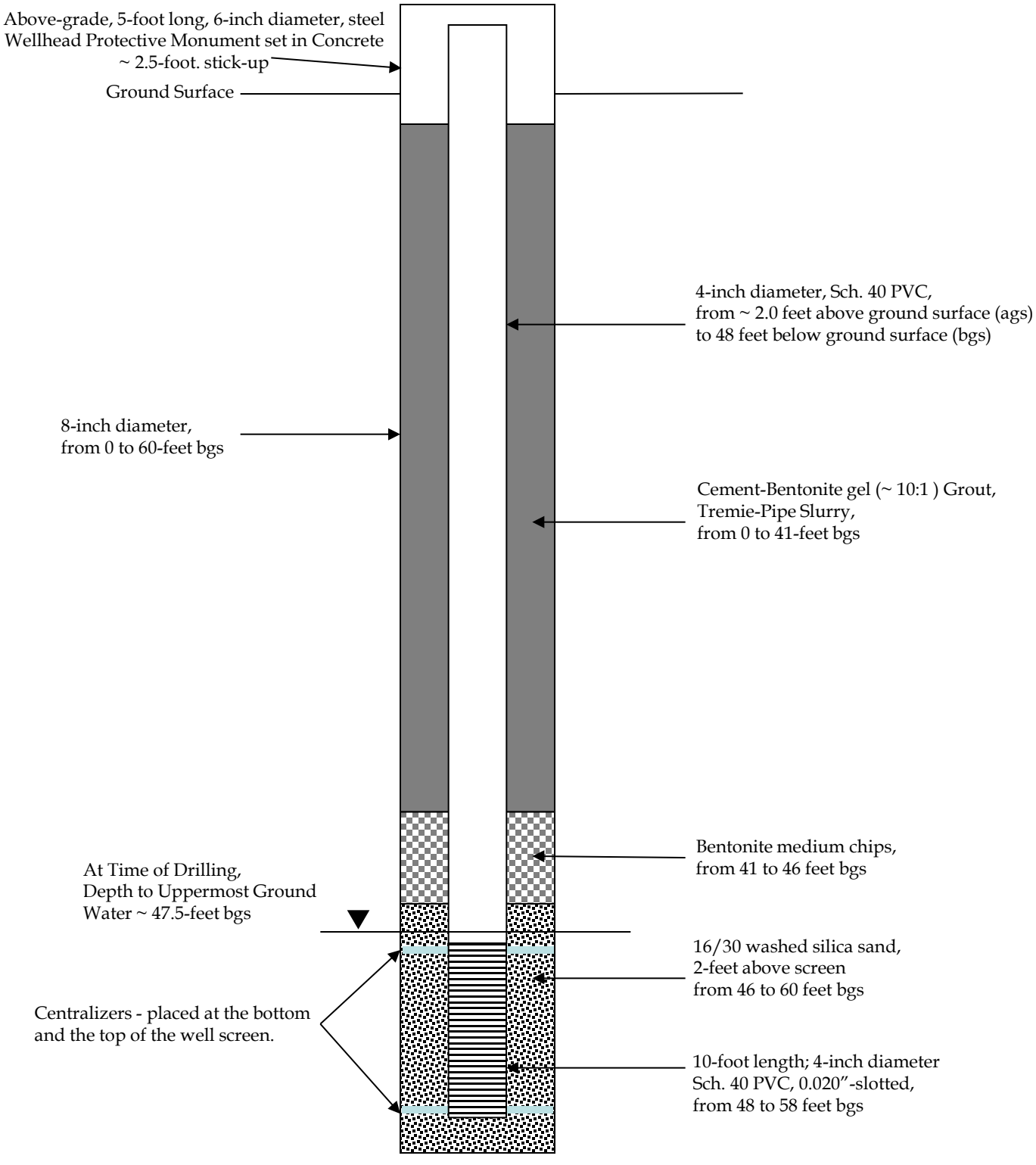
Boring Logs
IPSC
Delta, Utah

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	

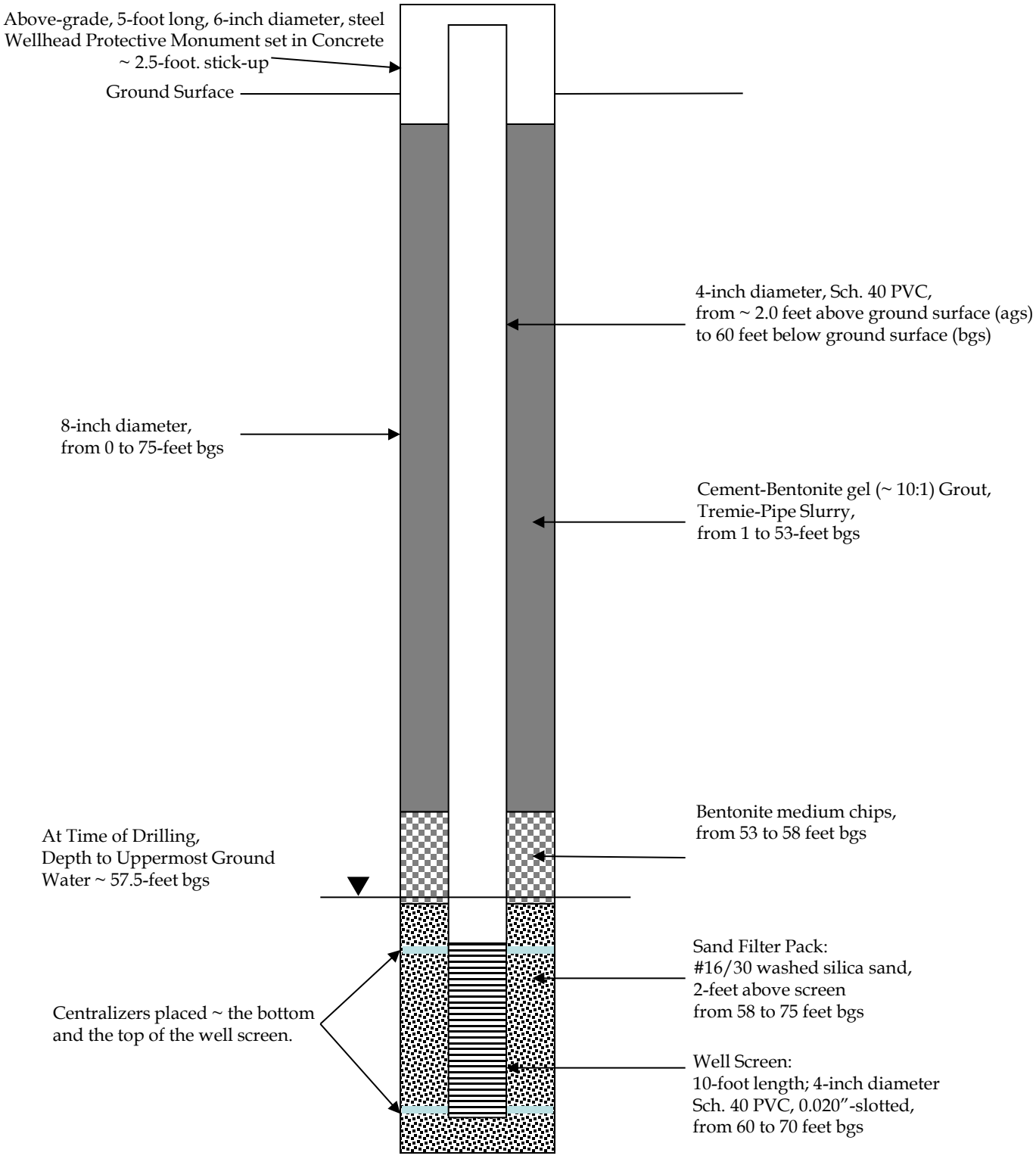
Boring Logs
IPSC
Delta, Utah

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

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IPSC – WASTEWATER SURFACE IMPOUNDMENT
DELTA, UTAH

Well WWC-2 Schematic

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

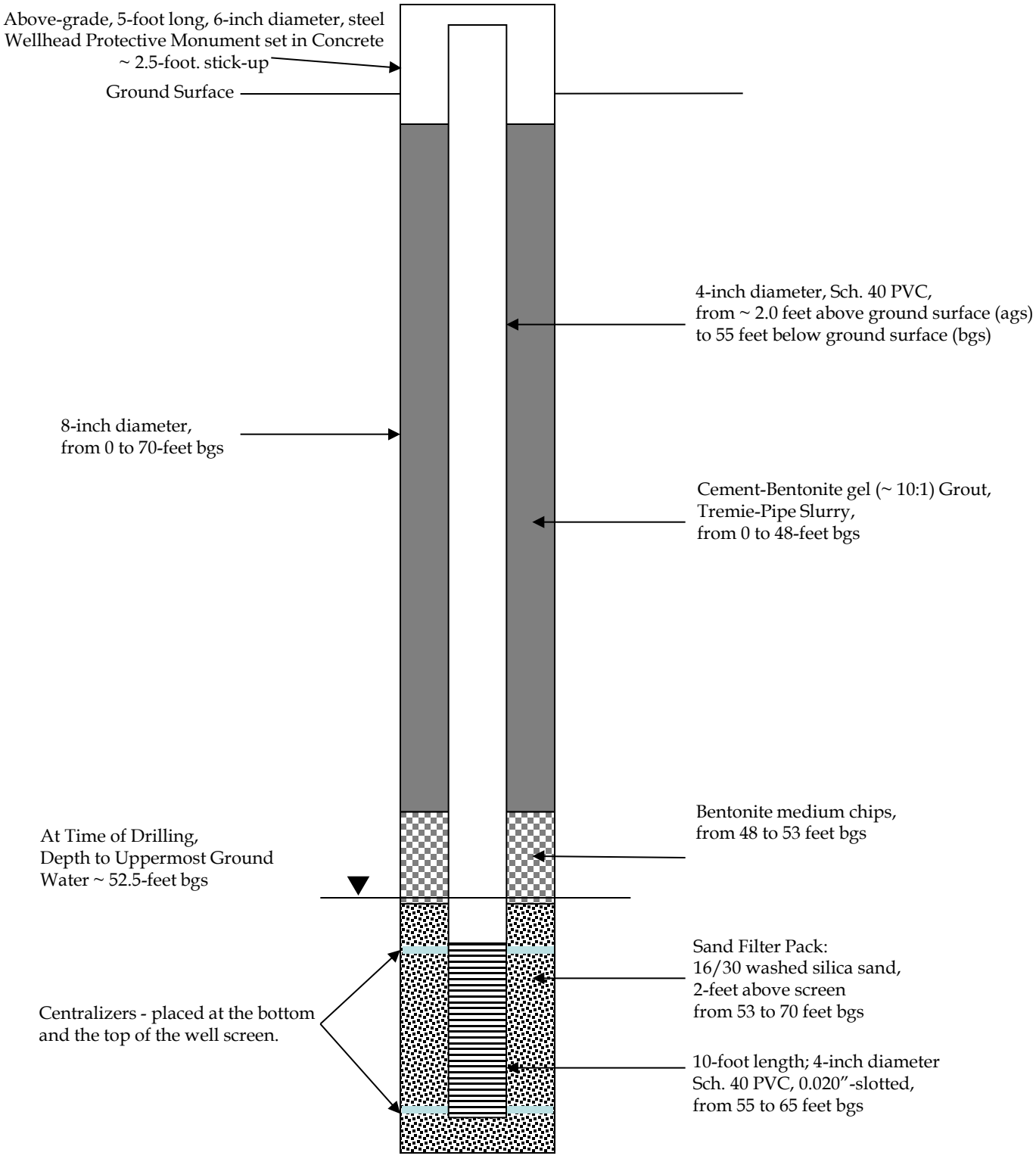
Boring Logs
ISPC
Delta, Utah

WWC-3

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

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

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



Total Depth (TD) = 70 feet bgs

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IPSC – WASTEWATER SURFACE IMPOUNDMENT
DELTA, UTAH UTAH

Well WWC-3 Schematic

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

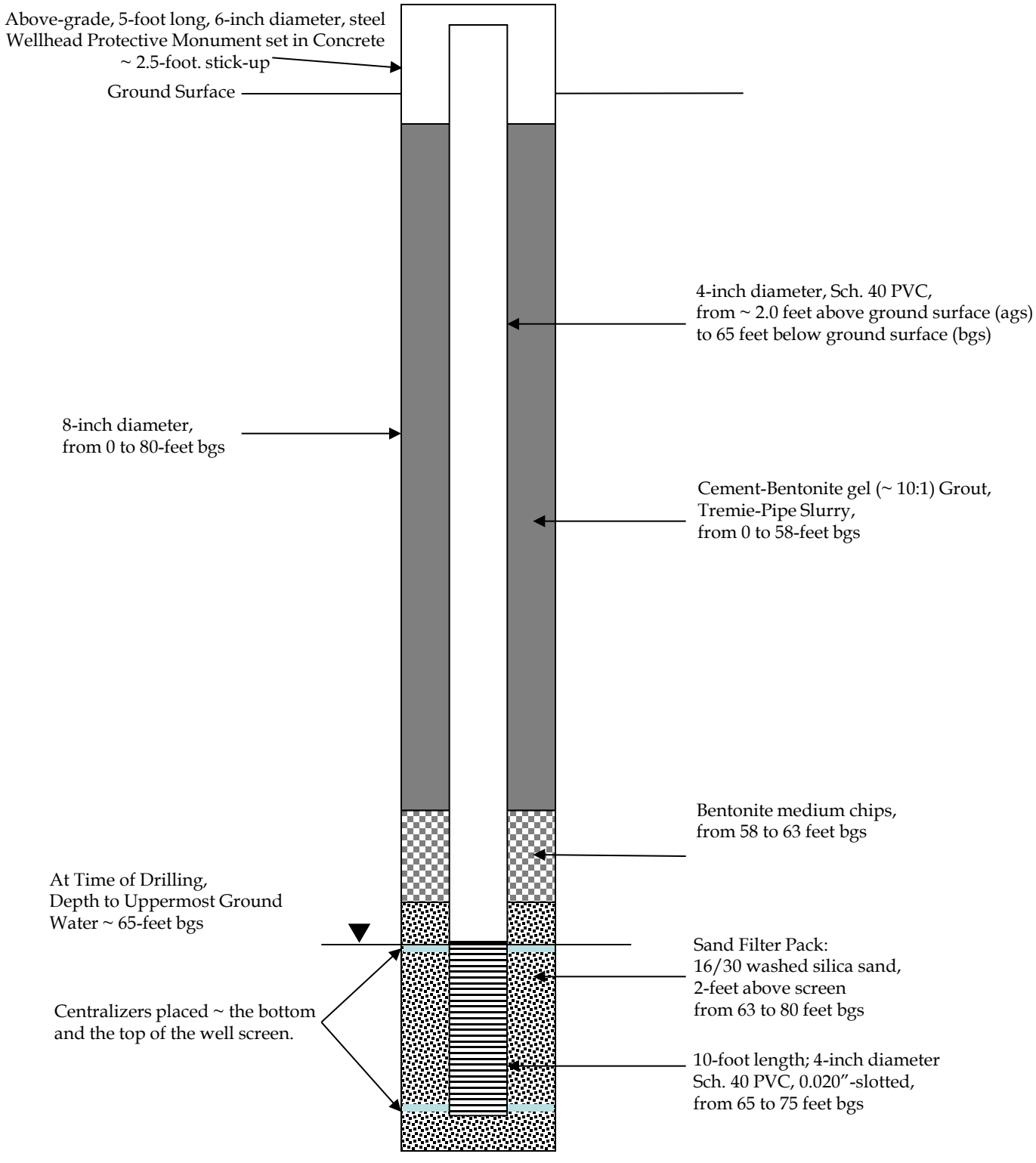
Boring Logs
ISPC
Delta, Utah

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



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IPSC – WASTEWATER SURFACE IMPOUNDMENT
DELTA, UTAH

Well WWC-4 Schematic

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

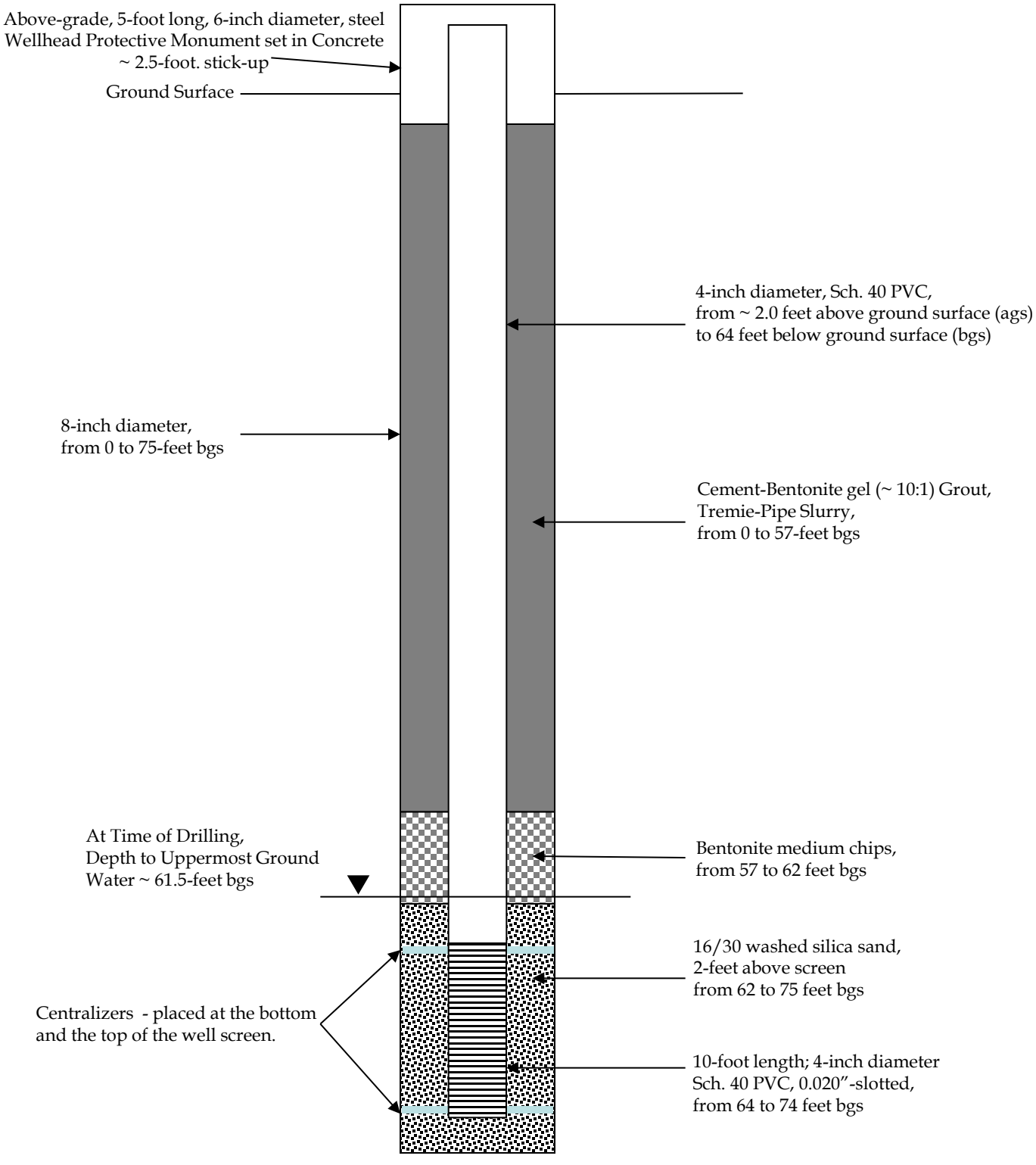
Boring Logs
ISPC
Delta, Utah

WWC-5

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

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

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



Total Depth (TD) = 75 feet bgs

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IPSC – WASTEWATER SURFACE IMPOUNDMENT
DELTA, UTAH

Well WWC-5 Schematic

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

Boring Logs

ISPC

Delta, Utah

WWC-6

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

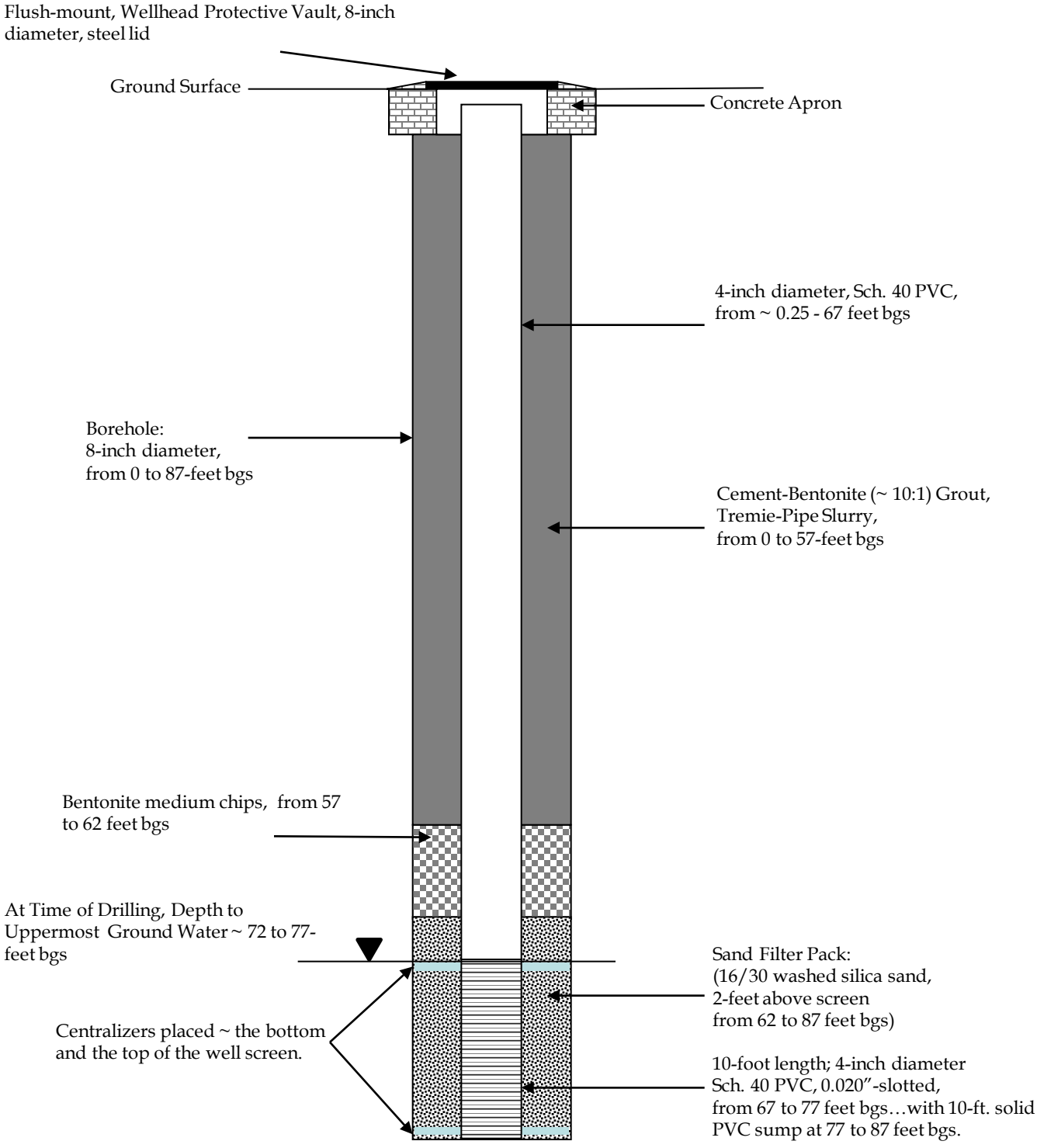
TD = 87'; PVC sump 87-77; 4" screen 77-67; sand 87-62 centralizers 67.5 and 76.5

Drilling Method: Sonic

Drilling Company - Cascade Drilling

Driller - David Donnely

Geologist - Tom Fendler



Total Depth (TD) = 87 feet bgs

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IPSC – WASTEWATER SURFACE IMPOUNDMENT
Delta, Utah

Well WWC-6 Schematic

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

Boring Logs

ISPC

Delta, Utah

WWC-7

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

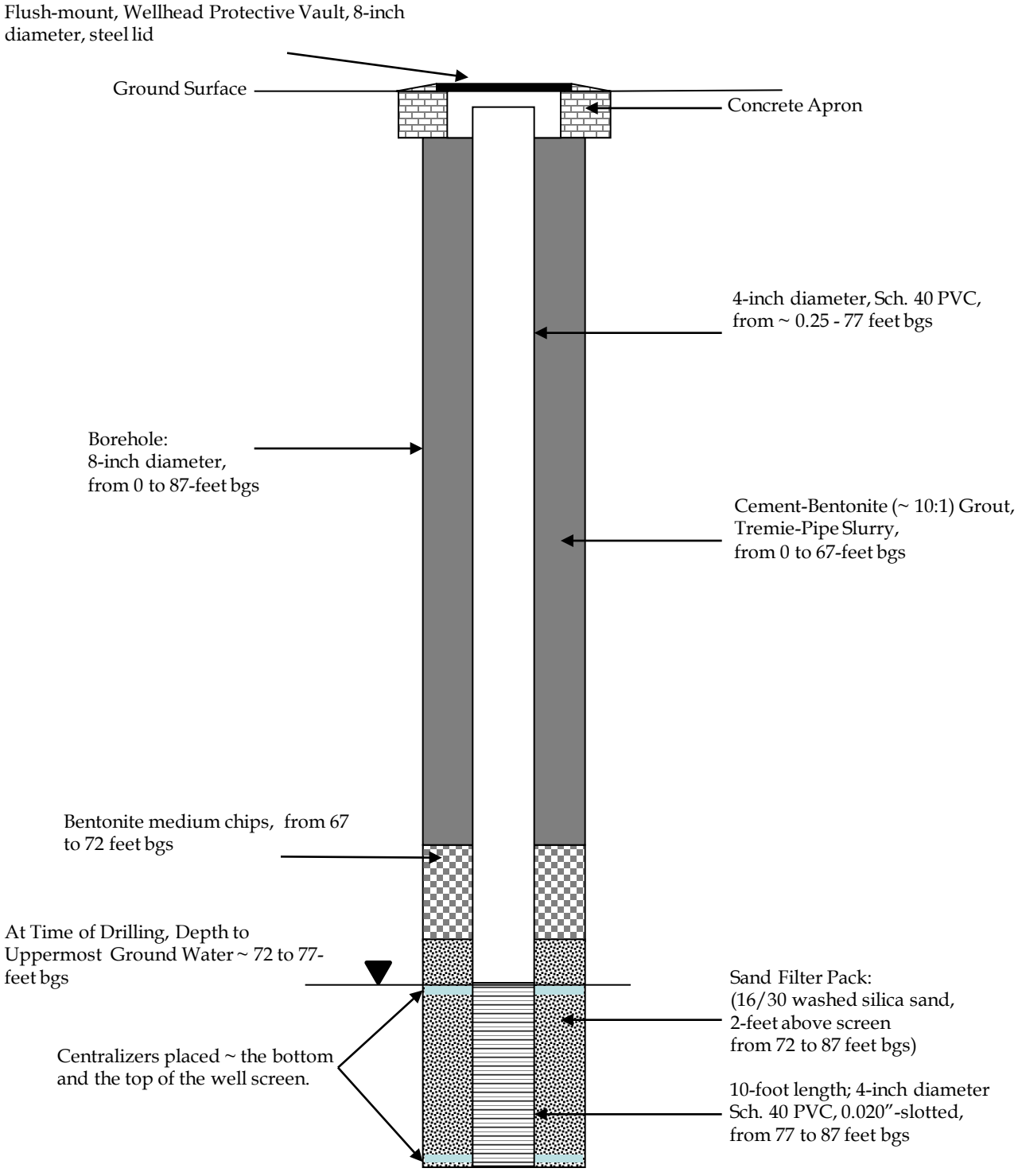
TD = 87'; PVC 4-inch screen from 77 to 87; sand pack 72-87; bentonite pellets 67-72; grout 67-grade

Drilling Method: Sonic

Drilling Company - Cascade Drilling

Driller - David Donnely

Geologist - Tom Fendler



Total Depth (TD) = 87 feet bgs

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IPSC – WASTEWATER SURFACE IMPOUNDMENT
DELTA, UTAH

Well WWC-7 Schematic

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

Project Name: Intermountain Power Service Corporation

Project No.: 203709098

Boring Monitor Well: WWC-8

Completion Date: 2019-04-25

Drilling Firm: Cascade

Driller: Ryan Miller

Boring Method: Sonic

Logged by: Rich Pratt

Boring Diameter: 10 inches

Depth to Water at Drilling: 77 feet

Depth to Water at Drilling (static at 24 hours): 27 feet

WWC-8

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

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

Surface Completion: Stick-up

Casing, solid (6-inch PVC): 0-69.38 feet

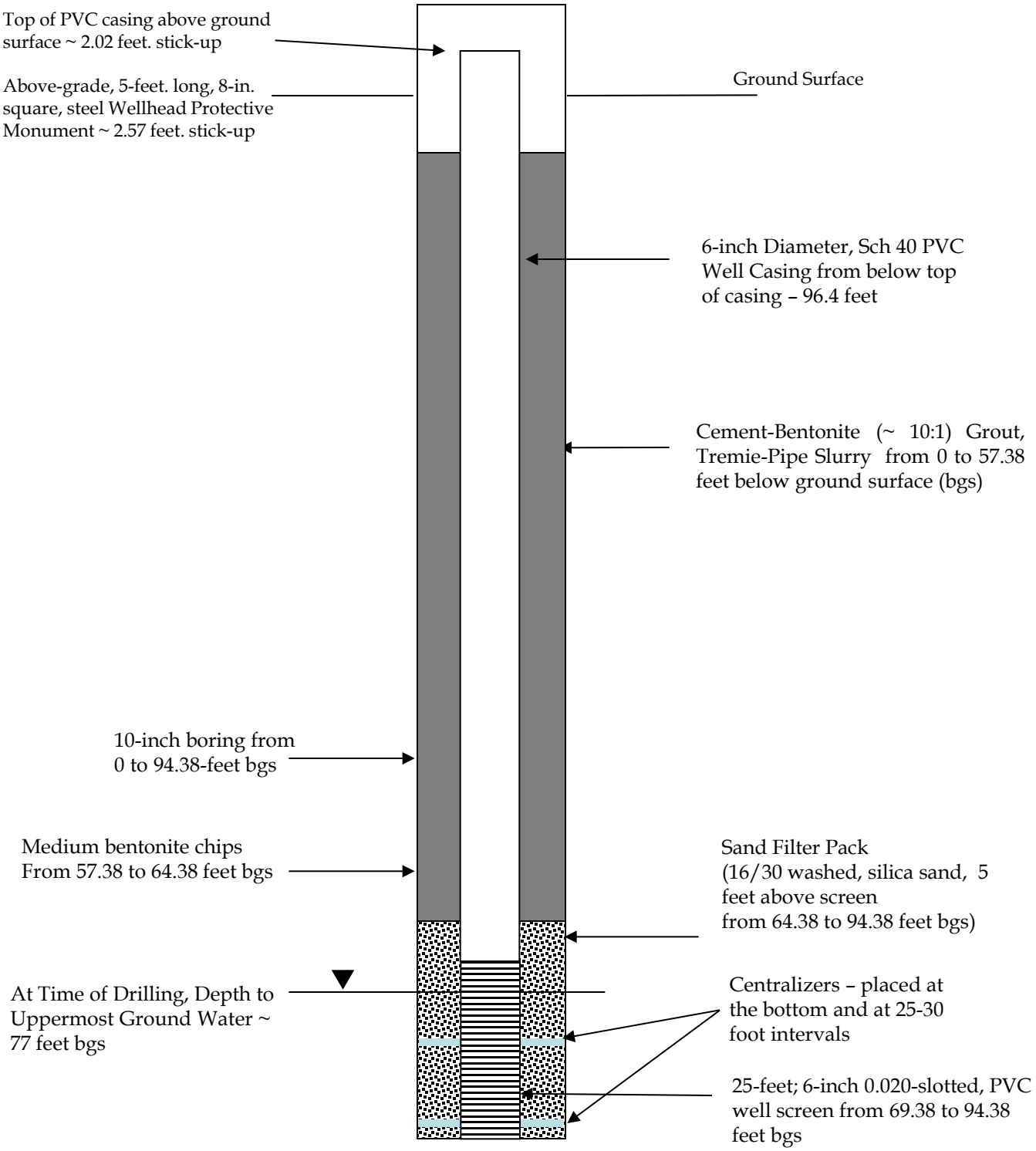
Screen (6 inch, 0.02 slotted, PVC): 69.38-94.38 feet

Sand Pack: 16/30 sand, 64.38-94.38 feet

Bentonite Seal: Hydrolyzed bentonite pellet seal 57.38-64.38 feet

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

Top of Manhole Cover (Relative Datum Survey): NA



Total Depth (TD) = 94.38 feet bgs

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IPSC – WASTEWATER SURFACE IMPOUNDMENT
DELTA, UTAH

WWC-8 Schematic

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

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

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

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

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

WWC-9

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

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

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

Surface Completion: Stick-up

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

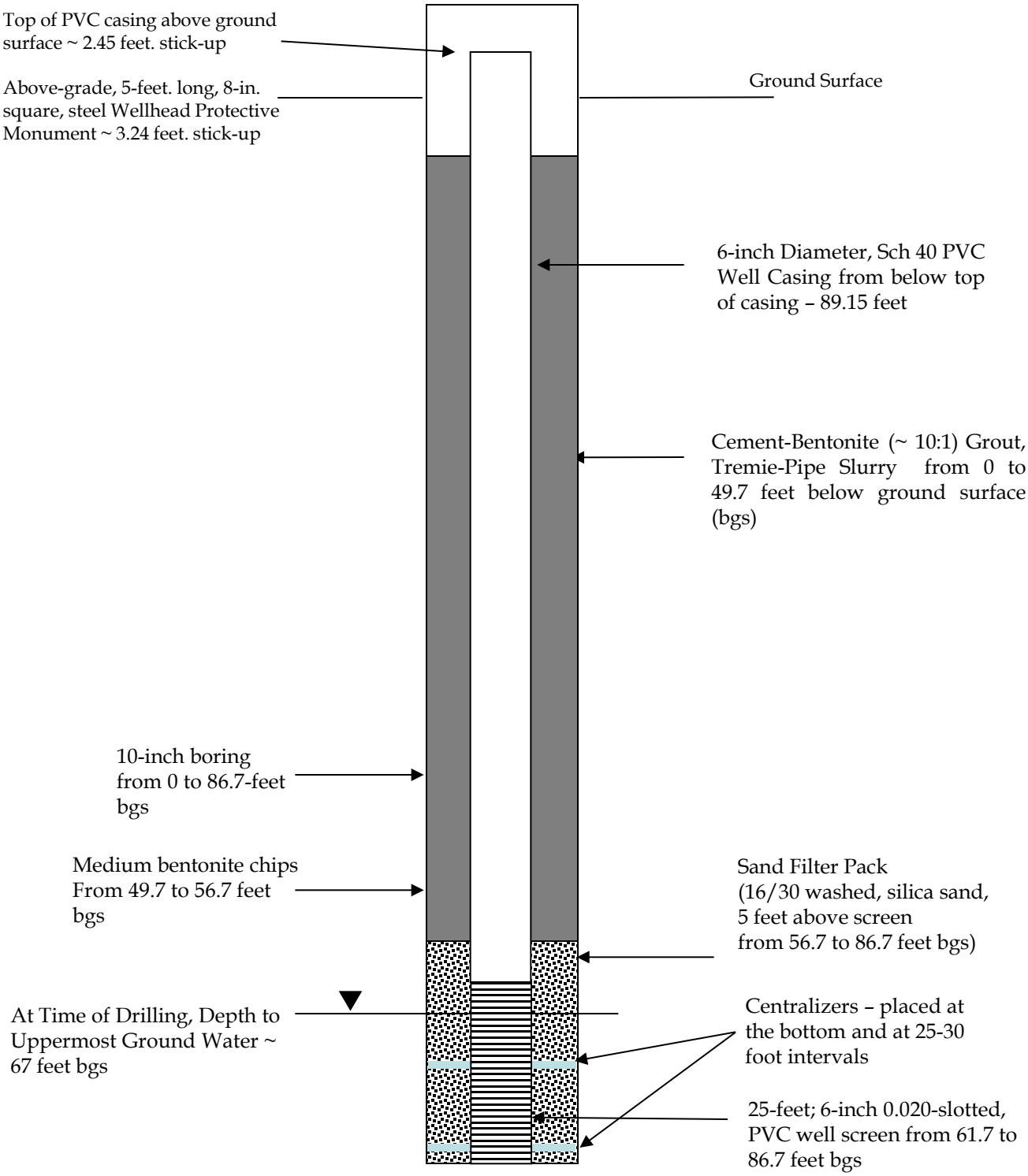
Screen (6 inch, 0.02 slotted, PVC): 61.7-86.7 feet

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

Bentonite Seal: Hydrolyzed bentonite pellet seal 49.7-56.7 feet

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

Top of Manhole Cover (Relative Datum Survey): NA



Total Depth (TD) = 86.7 feet bgs

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

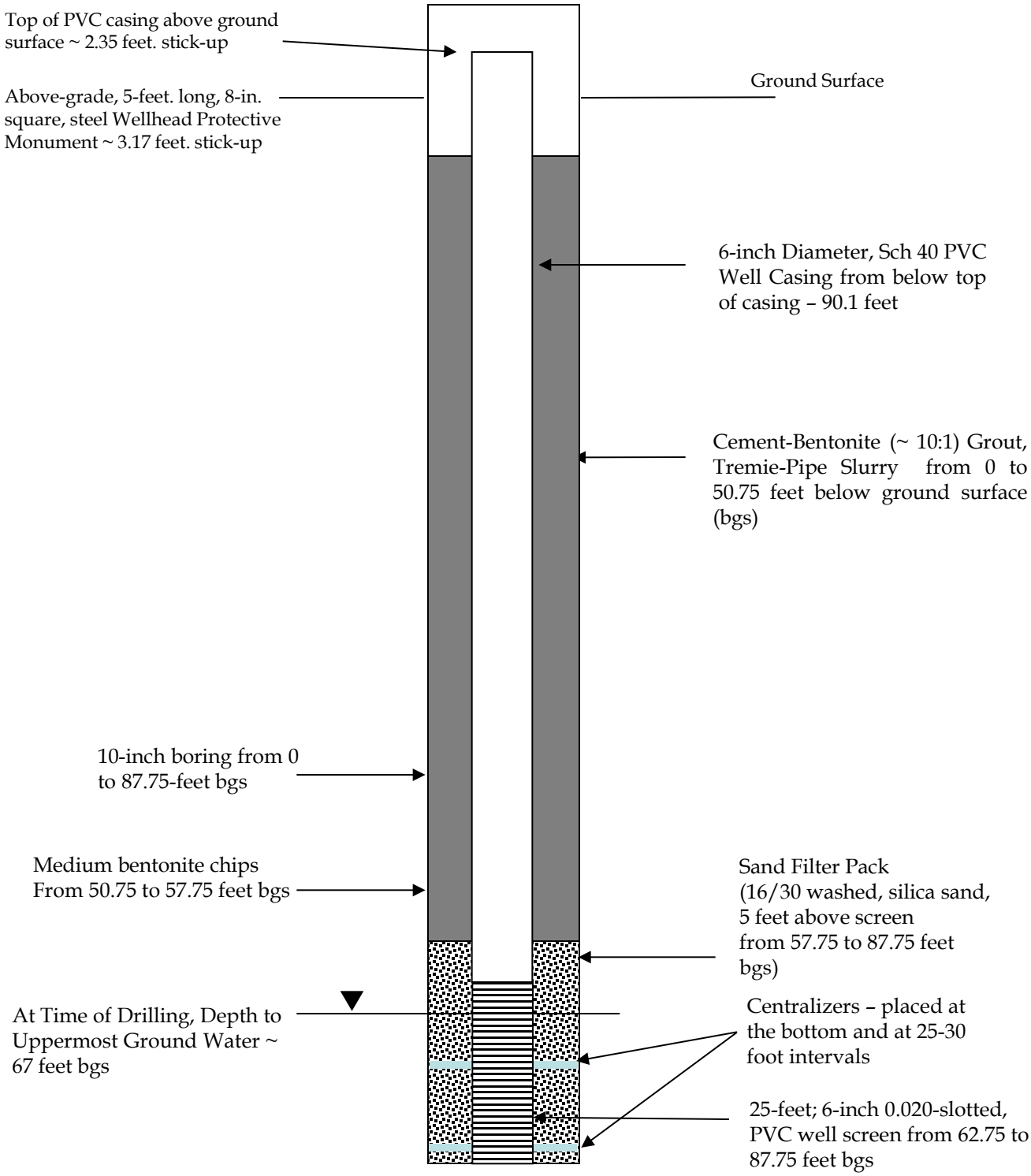
WWC-10

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	

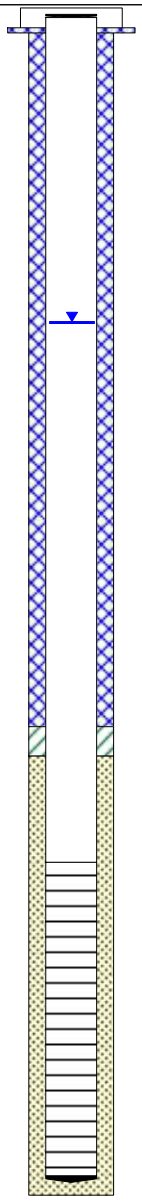
INTERMOUNTAIN POWER SERVICE CORP.

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

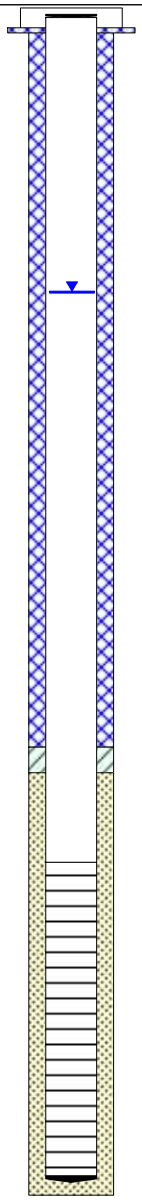
INTERMOUNTAIN POWER SERVICE CORP.

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.



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

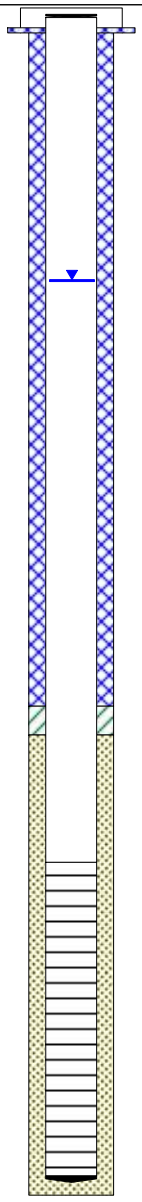
MONITORNG WELL ID:	**WWC-13**
CLIENT	Intermountain Power Service Corporation
PROJECT	Monitoring Well Installation
SITE LOCATION	South of Waste Water Basin Surface Impoundment

INTERMOUNTAIN POWER SERVICE CORP.

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



WELL CONSTUCTION DIAGRAM

- 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

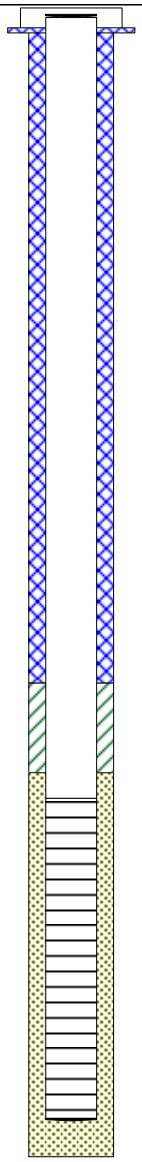
SITE LOCATION: South of Waste Water Basin Surface Impoundment

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
75		Clay (CL), light brown, moist
		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

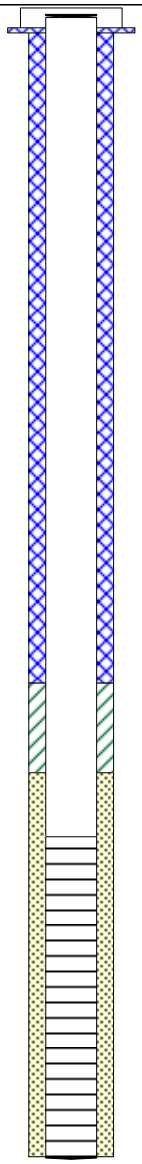
PROJECT: Monitoring Well Installation

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 GRAPHIC	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		Clay with Sand (CL), wet, non cohesive, low plasticity, 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 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

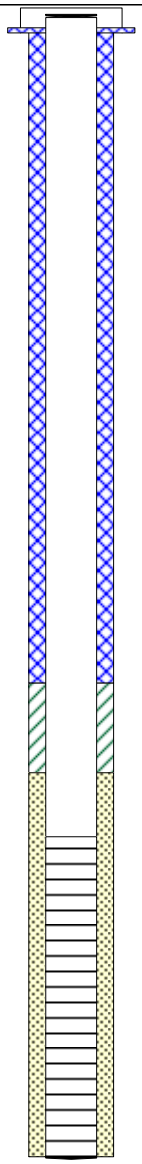
INTERMOUNTAIN POWER SERVICE CORP.

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	
	Well Graded Sand with Clay (SW-SC), light brown, moist
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 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.

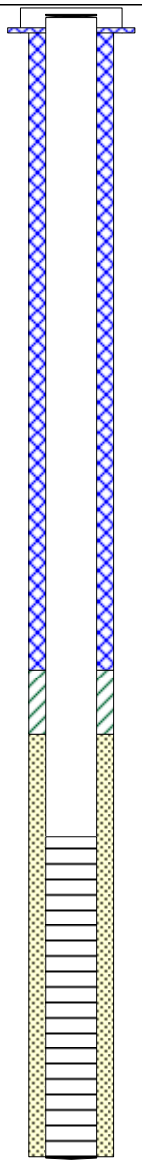
MONITORNG WELL ID:	**WWC-17**
CLIENT:	Intermountain Power Service Corporation
PROJECT:	Monitoring Well Installation
SITE LOCATION:	South of Waste Water Basin Surface Impoundment

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

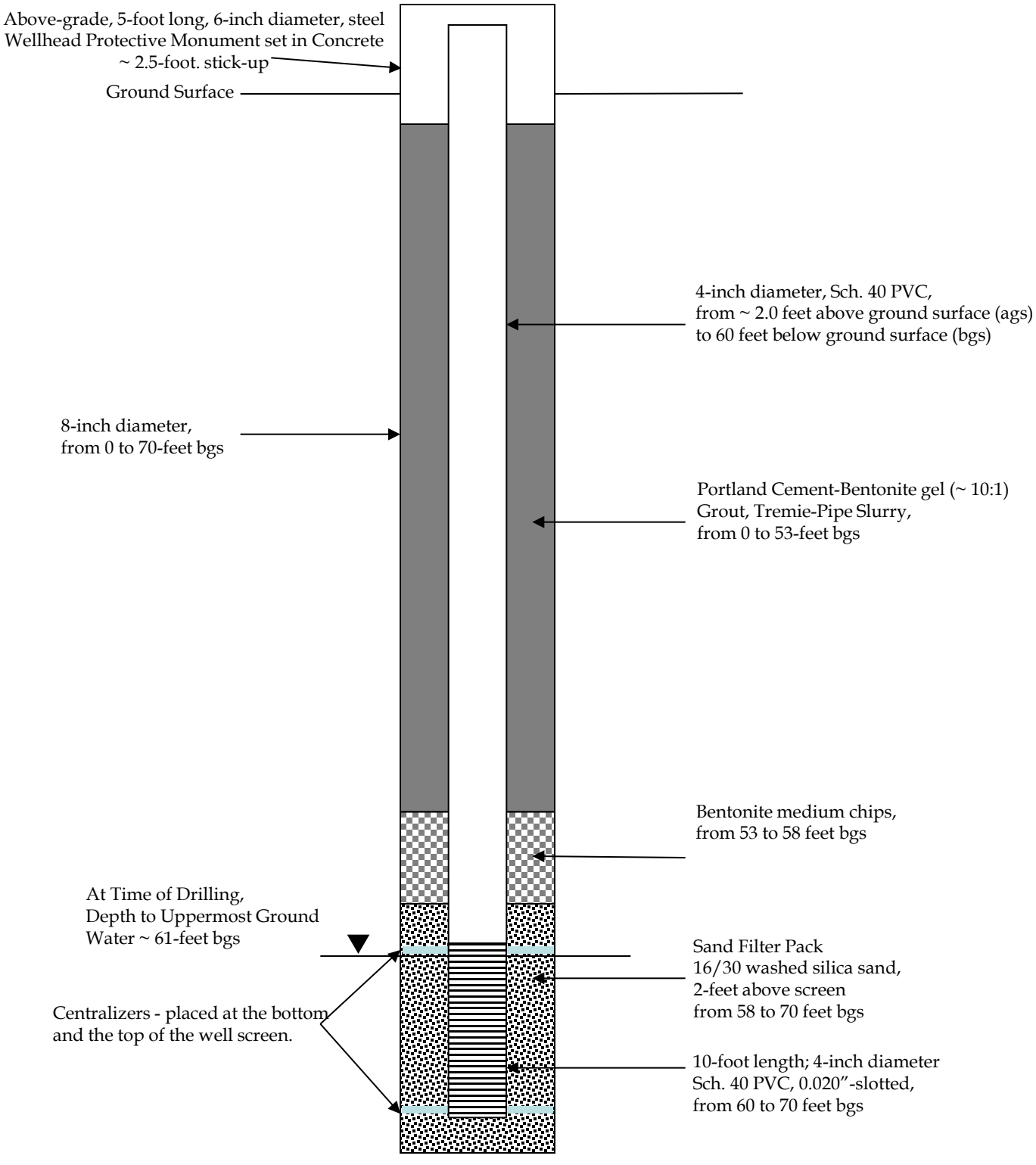
Boring Log
ISPC
Delta, Utah

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	

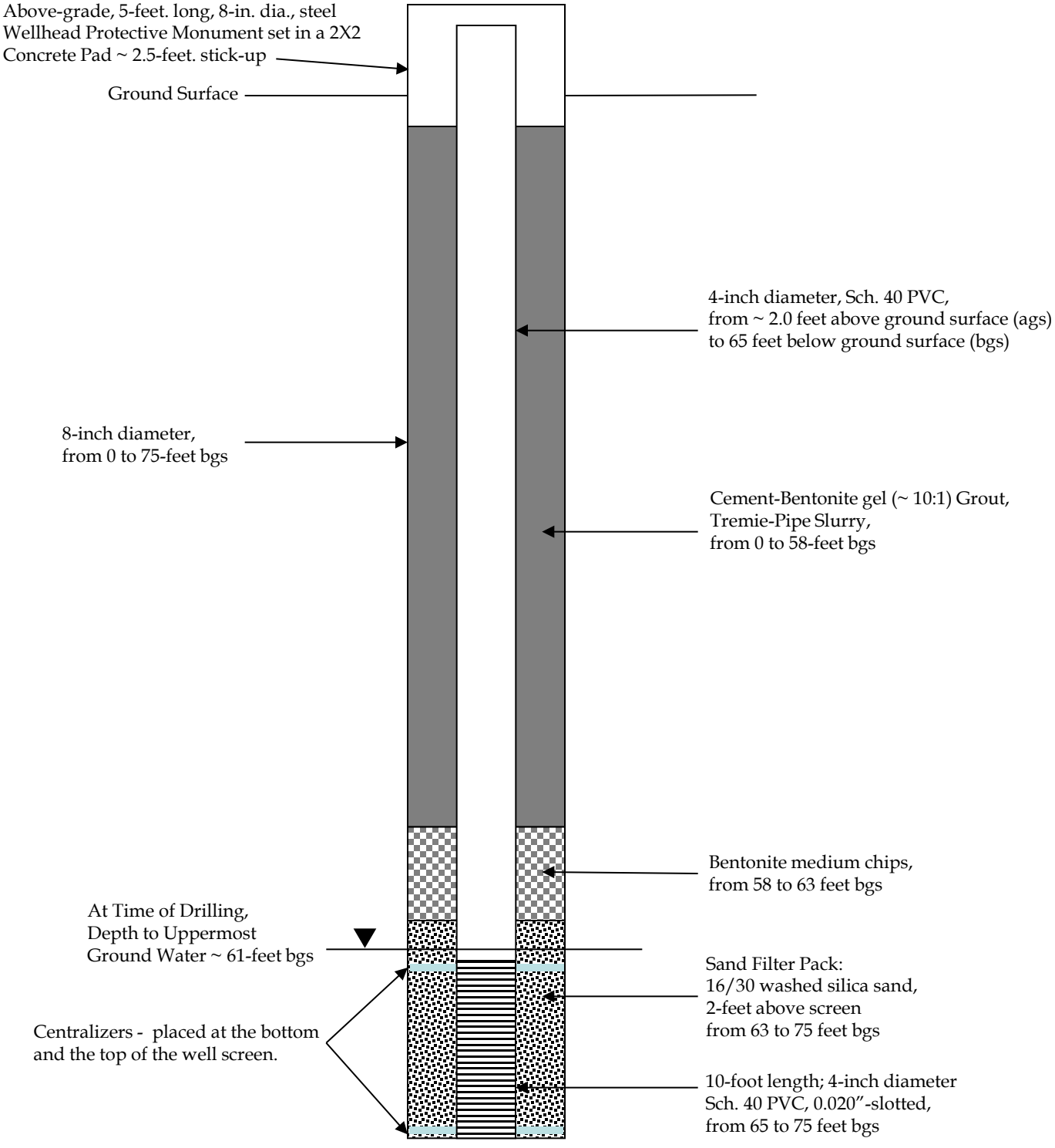
Boring Logs
ISPC
Delta, Utah

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

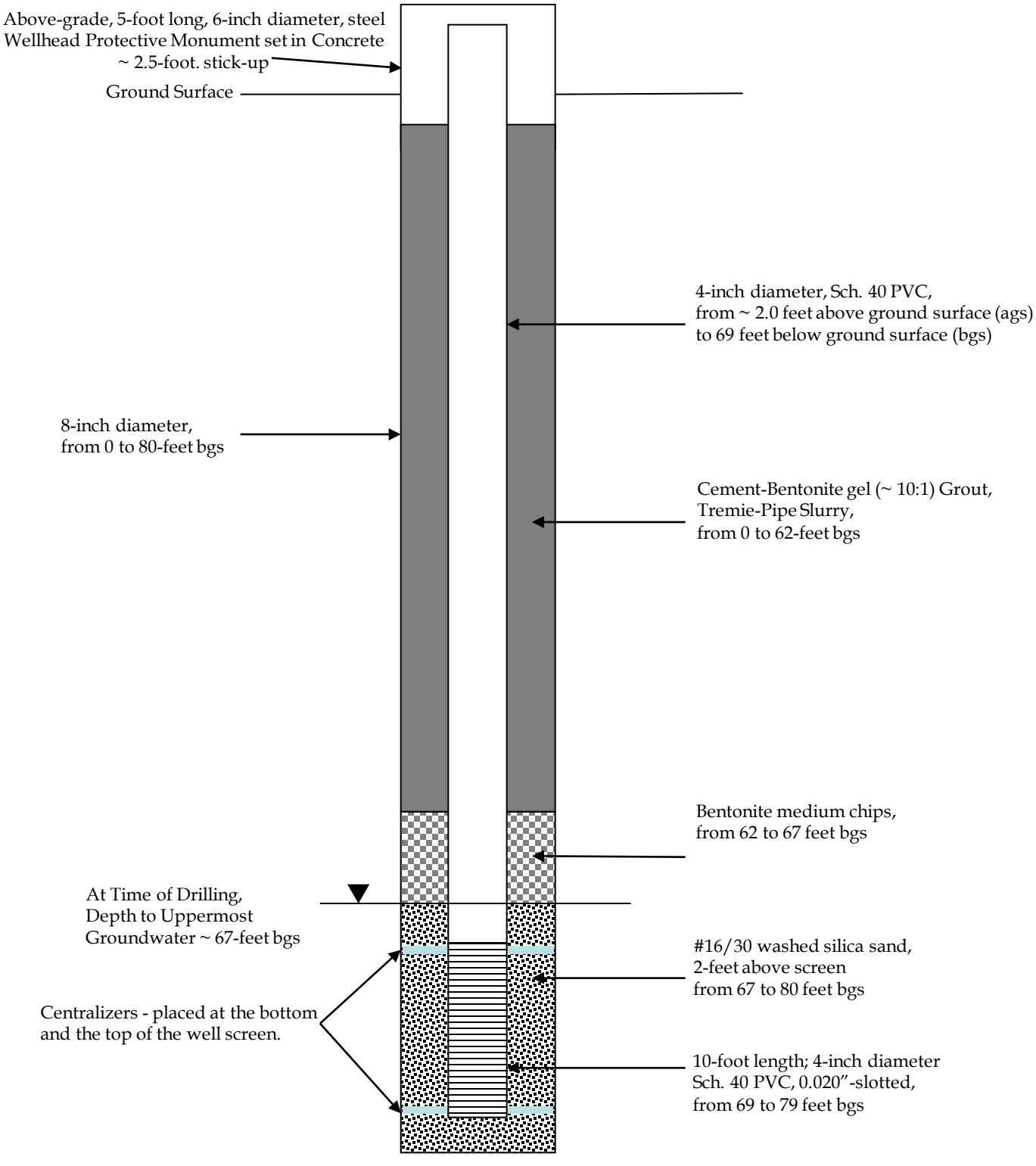
Delta, Utah

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

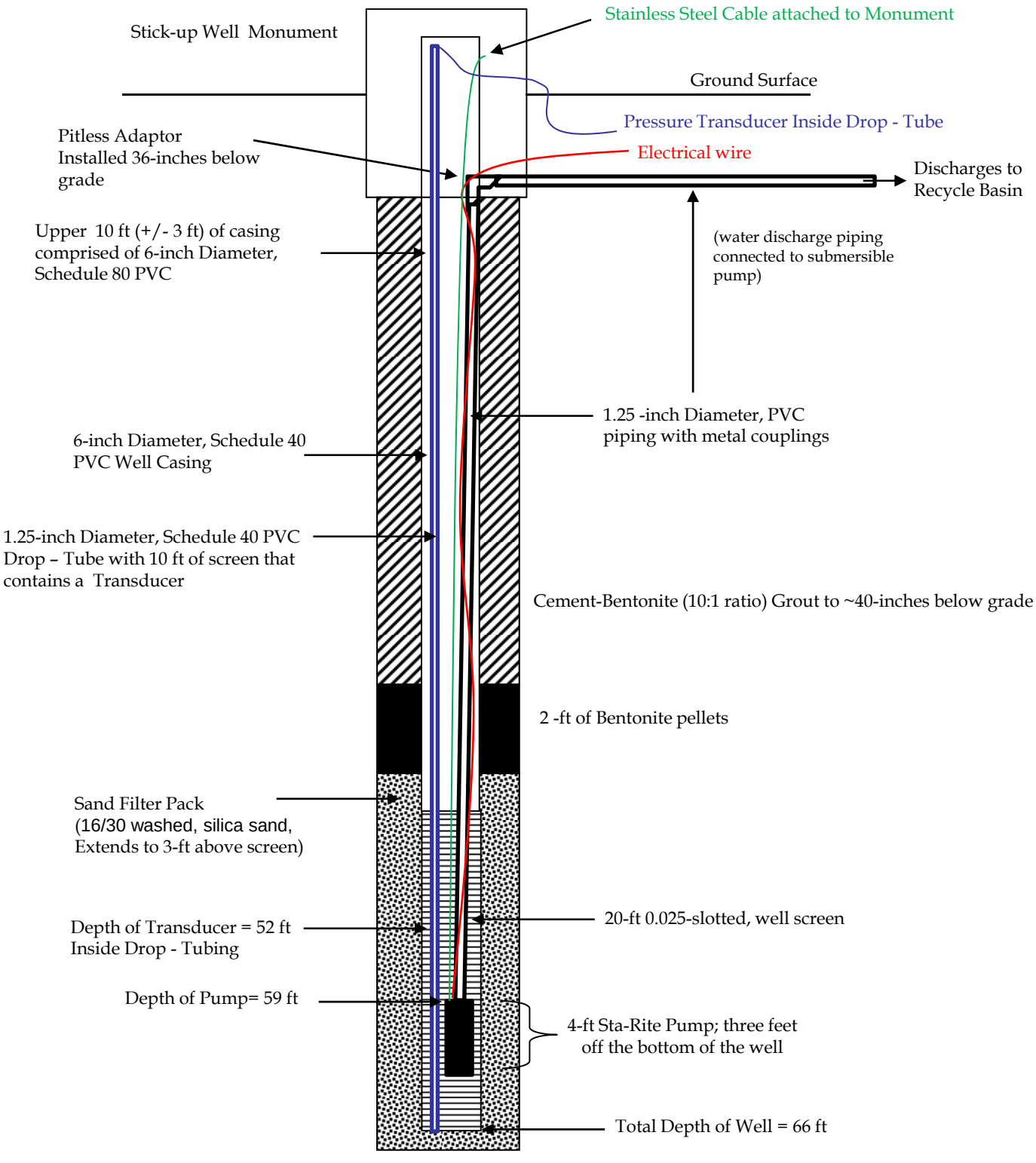
PROJECT No.: 07.00408.01
COMPLETION DATE: 12/11/2007
DRILLER: Robert
LOGGED BY: Thomas Hedrick
DEPTH TO WATER (at drilling): ~ 40 ft.
DEPTH TO WATER (static > 24-hrs.): 36.09 ft.

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

Design by	Drawn by	Scale	Date Drawn
			Last Revision Date

jbr environmental consultants, inc.

DRILLING LOG

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

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

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

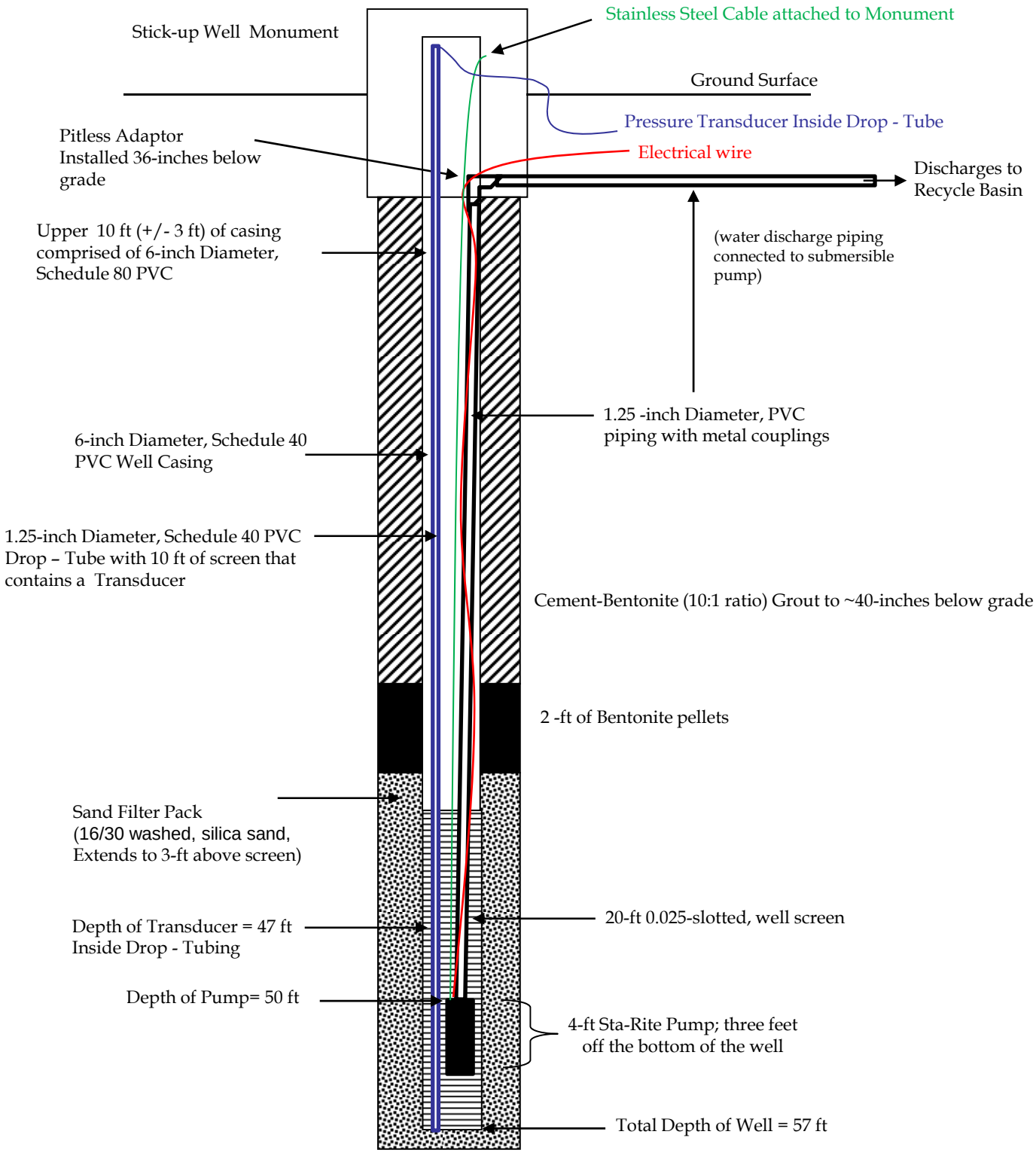
DRILLER: Chato
LOGGED BY: Thomas Hedrick
DEPTH TO WATER (at drilling): ~ 40 ft.
DEPTH TO WATER (static > 24-hrs.): ~ 27 ft.

WR-102

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

Well Completion Materials and Depth Intervals (ft.)

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



JBR

INTERMOUNTAIN POWER PLANT

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

Ground Water Recovery Well WR-102 Schematic

Design by	Drawn by	Scale	Date Drawn
			Last Revision Date

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

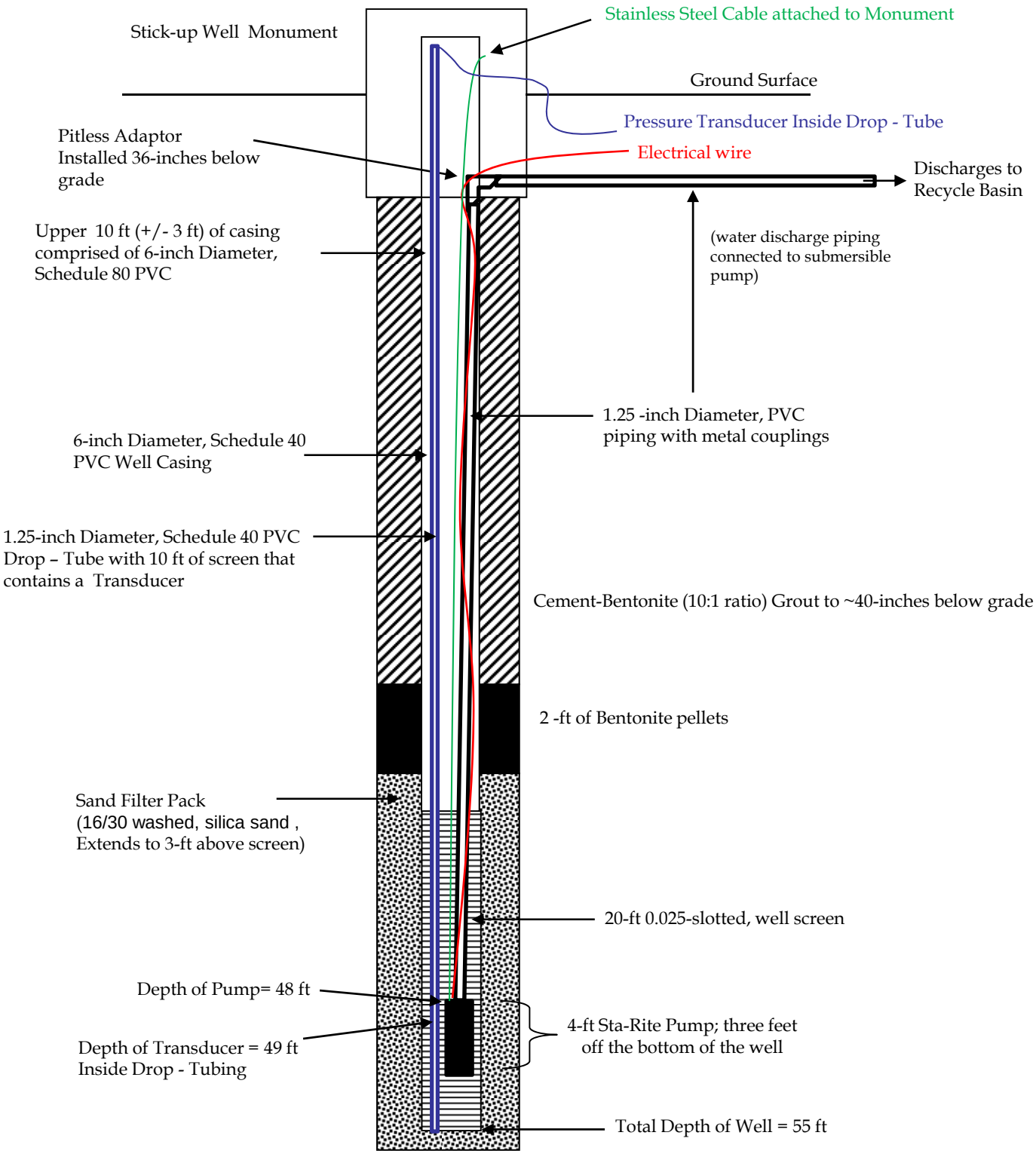
DRILLER: Chato
LOGGED BY: Thomas Hedrick
DEPTH TO WATER (at drilling): ~ 40 ft.
DEPTH TO WATER (static > 24-hrs.): ~ 30 ft.

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

January 18, 2023

ATTACHMENT 2 TABULATED GROUND WATER MONITORING DATA

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
WWC-5	3	388	1600	0.493	7.12	1440	5160	<0.00200	0.0134	0.0309	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.557	<0.000150	0.00203	0.00448	<0.00200	0.18	1.12	1.12
WWC-6	0.535	137	943	0.25	7.54	451	2470	<0.00200	0.0133	0.0822	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.204	<0.000150	0.00484	<0.00200	<0.00200	0.48	0.81	1.29
WWC-7	< 0.500	42.8	187	0.422	7.93	119	640	<0.00200	0.0165	0.0314	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	<0.100	<0.000150	0.00386	<0.00200	<0.00200	0.16	0.18	0.34
WWC-8	0.561	151	943	0.391	7.54	537	440	<0.00200	0.0081	0.173	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.23	<0.000150	0.00632	0.00274	<0.00200	0.29	0.68	0.97
WWC-9	< 0.500	42.6	212	1.11	8.01	78.2	560	<0.00200	0.0261	0.0973	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.147	<0.000150	0.00538	<0.00200	<0.00200	0.16	0.27	0.43
WWC-10	< 0.500	52.3	328	0.651	7.85	141	1070	<0.00200	0.0265	0.0615	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.115	<0.000150	0.00854	<0.00200	<0.00200	0.13	0.49	0.62

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

Date	Oct. 2018

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

Landfill Wells	Results																					Round 13 Field Results						
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined		Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
CL-U-1	< 0.500	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-1	15.85	7.75	-159	777	0	1.62	0.497
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	CL-U-2	15.96	7.7	-158	743	0	1.01	0.476
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-1	15.83	7.73	-48	1480	1.3	2.01	0.948
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-2	16.6	7.79	-191	760	0	2	0.488
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-3	17.14	7.84	-215	1730	0.5	1.43	1.11
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-4	16.47	7.88	-233	1600	2.7	1.61	1.03
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-5	17.05	7.83	-220	1700	1.9	1.84	1.09
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-6	16.65	7.7	-229	1590	1.6	2.69	1.02
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-7	17.74	7.76	-57	1580	0.6	1.24	1.01
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-8	16.37	7.81	-36	1520	1	1.51	0.969
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	CLW-9	16.03	7.72	-299	1610	0.2	7.56	1.03
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	CL-U-3	16.1	9.08	-76	503	0	1.84	0.322

Bottom Ash	Results																					Round 13 Field Results						
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined		Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
BA-U-1	< 0.500	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-1	16.68	7.47	-58	1610	0	1.29	1.03
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	BA-U-2	16.37	8.94	-255	1550	1.4	0.8	0.99
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-1	17.09	7.98	-50	3950	1.32	3.4	2.53
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-2	16.92	7.19	28	10600	3.3	2.45	6.59
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-3	17.34	7.1	20	16700	2	0.61	10.4
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-4	16.73	7.81	-57	2570	0.6	1.18	1.64
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-5	17.52	7.84	-50	2540	0.4	1.33	1.63
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-6	16.78	7.74	-52	2670	0.7	0.87	1.71
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-7	17.16	7.83	-156	4000	3.1	0.86	2.56
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-8	15.03	7.65	-41	1540	0.2	5.45	0.989
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-9	15.03	7.68	-23	1560	0.3	1.2	0.993
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	BAC-10	14.98	7.65	-31	1560	0.1	1.15	0.999

Waste Water	Results																					Round 13 Field Results						
	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228	Radium 226 and 228 combined		Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
SI-U-1	< 0.500	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	SI-U-1	16.51	7.63	-12	3290	0.1	0.78	2.11
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-1	16.11	7.19	14	8000	2.8	1.93	5.04
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	WW-U-2	16.06	7.38	22	7390	0.6	1.32	4.66
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-1	15.13	6.79	36	1910	0	3.67	11.8
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-2	14.82	7.31	-29	1720	0.3	0.47	1.1
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-3	15.96	7.72	-244	1420	0	0.2	0.909
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	WWC-4	14.38	7.21	-34	4460	0	2.35	2.86
WWC-5	2.11	344	1530	0.448	7.39	1290	4740	<0.00200	0.0154	0.0382	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.538	<0.000150	0.00256	0.00596	<0.00200	0.26	1.05	1.05	WWC-5	16.43	6.92	13	7170	0	0.21	4.52
WWC-6	0.548	125	855	0.23	7.66	451	2340	<0.00200	0.0138	0.0852	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.204	<0.000150	0.00595	<0.00200	<0.00200	0.034	0.41	0.444	WWC-6	14.67	7.23	-190	3970	0.3	1.64	2.54
WWC-7	< 0.500	46.7	186	0.418	8.12	129	652	<0.00200	0.0187	0.0316	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	<0.100	<0.000150	0.00414	<0.00200	<0.00200	0.14	0.21	0.35	WWC-7	14.97	7.79	-200	1150	1.7	0.28	0.736
WWC-8	0.803	144	1230	0.353	7.7	579	3670	<0.00200	0.0145	0.0627	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.246	<0.000150	0.00284	0.00422	<0.00200	0.05	0.42	0.47	WWC-8	15.01	7.23	-60	4920	0.6	0.32	3.15
WWC-9	< 0.500	47.1	309	0.909	8.04	107	780	<0.00200	0.0309	0.0643	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.153	<0.000150	0.00351	<0.00200	<0.00200	0.14	0.05	0.19	WWC-9	15.26	7.79	-96	1540	1.4	1.72	0.99
WWC-10	< 0.500	54.4	380	0.629	8.02	177	988	<0.00200	0.0289	0.0347	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.125	<0.000150	0.00932	<0.00200	<0.00200	0.03	0.14	0.17	WWC-10	14.48	7.49	-132	1880	0.6	5.51	

Date	Oct. 2018

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

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

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
WWC-5	2.23	322	1580	0.295	7.15	1340	4670	<0.00200	0.0144	0.0367	<0.00200	<0.000500	0.00432	<0.00400	<0.00200	0.487	0.000278	0.00283	0.00560	<0.00200	0.04	0.96	0.96
WWC-6	0.589	154	925	0.175	7.55	480	2490	<0.00200	0.0140	0.0925	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.213	<0.000150	0.00566	<0.00200	<0.00200	0.60	0.13	0
WWC-7	< 0.500	41.0	186	0.357	7.96	122	596	<0.00200	0.0194	0.0297	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	<0.100	<0.000150	0.0044	<0.00200	<0.00200	0.11	0.17	0
WWC-8	0.652	154	1040	0.472	7.58	593	2700	<0.00200	0.0155	0.0564	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.229	<0.000150	0.00322	0.00385	<0.00200	0.18	0.18	0
WWC-9	< 0.500	40.5	302	0.843	7.99	98.8	652	<0.00200	0.0305	0.0629	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.147	<0.000150	0.00350	<0.00200	<0.00200	0.13	0.09	0
WWC-10	< 0.500	55.2	369	0.491	7.85	164	804	<0.00200	0.0240	0.0361	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.107	<0.000150	0.00656	<0.00200	<0.00200	0.03	0.40	0
WWC-11	< 0.500	34.9	197	0.467	8.64	97.8	280	<0.00200	0.00470	0.150	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	<0.100	<0.000150	0.00718	<0.00200	<0.00200	0.21	0.48	0
WWC-12	< 0.500	77.1	382	0.453	8.85	143	320	<0.00200	0.0428	0.0761	<0.00200	<0.000500	0.00414	<0.00400	<0.00200	0.111	<0.000150	0.00423	<0.00200	<0.00200	0.03	0.42	0
WWC-13	< 0.500	66.4	350	0.389	7.94	138	360	<0.00200	0.0207	0.0450	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.103	<0.000150	0.00382	<0.00200	<0.00200	0.15	0.24	0

Date Oct. 2018

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

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

Round 15

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 +/- 0.46	0.54 +/- 0.42	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 +/-0.15	0.81 +/- 0.44	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 +/- 0.16	0.61 +/- 0.36	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 +/- 0.11	0.66 +/- 0.39	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 +/- 0.21	1.71 +/- 0.58	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 +/- 0.21	0.52 +/- 0.36	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 +/- 0.23	1.07 +/- 0.49	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 +/- 0.17	0.76 +/- 0.43	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 +/- 0.13	0.66 +/- 0.42	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 +/- 0.18	0.75 +/- 0.42	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 +/- 0.24	0.51 +/- 0.39	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 +/- 0.20	1.10 +/- 0.46	1.1

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 +/- 0.17	1.28 +/- 0.49	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 +/- 0.15	0.88 +/- 0.42	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 +/- 0.12	1.00 +/- 0.46	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 +/-0.16	1.27 +/- 0.50	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 +/- 0.11	0.83 +/- 0.44	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 +/- 0.15	0.56 +/- 0.38	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 +/- 0.15	0.60 +/- 0.41	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 +/- 0.15	0.70 +/- 0.40	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 +/- 0.17	1.21 +/- 0.47	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 +/- 0.16	1.16 +/- 0.47	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 +/- 0.21	0.63 +/- 0.44	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 +/- 0.18	0.01 +/- 0.33	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 +/- 0.18	0.61 +/- 0.40	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 +/- 0.14	0.28 +/- 0.34	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 +/- 0.099	0.90 +/- 0.43	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 +/- 0.20	0.47 +/- 0.35	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 +/- 0.18	0.30 +/- 0.35	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 +/- 0.16	0.70 +/- 0.42	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 +/- 0.12	0.47 +/- 0.35	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 +/- 0.22	0.36 +/- 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 +/- 0.31	0.46 +/- 0.37	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 +/- 0.16	0.92 +/- 0.43	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 +/- 0.25	0.81 +/- 0.40	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 +/- 0.17	2.03 +/- 0.66	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 +/- 0.17	2.48 +/- 0.75	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 +/- 0.18	1.61 +/- 0.58	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 +/- 0.25	1.91 +/- 0.64	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 +/- 0.17	1.15 +/- 0.48	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 +/- 0.25	0.91 +/- 0.43	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 +/- 0.32	1.72 +/- 0.59	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 +/- 0.13	1.24 +/- 0.50	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 +/- 0.14	1.30 +/- 0.53	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 +/- 0.26	1.52 +/- 0.54	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 +/- 0.16	0.92 +/- 0.42	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 +/- 0.24	1.05 +/- 0.44	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 +/- 0.22	1.22 +/- 0.50	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 +/- 0.24	1.15 +/- 0.48	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 +/- 0.21	0.33 +/- 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 +/- 0.15	1.22 +/- 0.48	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 +/- 0.16	1.12 +/- 0.48	1.12

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 +/- 0.18	1.47 +/- 0.56	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 +/- 0.21	1.10 +/- 0.47	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 +/- 0.15	1.31 +/- 0.51	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 +/- 0.18	1.83 +/- 0.60	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 +/- 0.12	1.03 +/- 0.46	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 +/- 0.17	0.96 +/- 0.47	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 +/- 0.10	0.58 +/- 0.37	0
WWC-5	< 0.500	277	1510	0.668	7.25	1450	10400	<0.00400	0.0153	0.0359	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	<0.100	<0.0000900	0.00207	0.00600	<0.00200	0.12 +/- 0.20	1.82 +/- 0.59	1.82
WWC-6	0.533	147	941	0.25	7.86	502	1730	<0.00400	0.0147	0.0872	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.221	<0.0000900	0.00601	<0.00200	<0.00200	0.33 +/- 0.21	0.68 +/- 0.40	0
WWC-7	< 0.500	61.6	333	0.465	7.93	163	940	<0.00400	0.0188	0.0477	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.109	<0.0000900	0.00477	<0.00200	<0.00200	0.11 +/- 0.15	0.81 +/- 0.40	0.81
WWC-8	0.599	137	2480	0.443	7.78	1290	2270	<0.00400	0.0166	0.0514	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.224	<0.0000900	0.00325	0.00388	<0.00200	0.09 +/- 0.16	0.83 +/- 0.43	0.83
WWC-9	< 0.500	45.5	347	1.02	8.09	110	1890	<0.00400	0.0295	0.0724	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.160	<0.0000900	0.00338	<0.00200	<0.00200	-0.05 +/- 0.16	0.67 +/- 0.42	0
WWC-10	< 0.500	48.9	349	0.726	8.07	160	204	<0.00400	0.0262	0.0338	<0.00200	0.00078	<0.00200	<0.00400	<0.00200	0.115	<0.0000900	0.00747	<0.00200	<0.00200	0.18 +/- 0.16	0.25 +/- 0.35	0
WWC-11	< 0.500	37.4	202	0.494	8.24	111	552	<0.00400	0.01100	0.111	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	<0.100	<0.0000900	0.00475	<0.00200	<0.00200	0.15 +/- 0.19	0.65 +/- 0.43	0
WWC-12	< 0.500	78.8	441	0.468	7.99	163	1060	<0.00400	0.0327	0.0639	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.118	<0.0000900	0.0041	<0.00200	<0.00200	0.06 +/- 0.13	0.60 +/- 0.41	0
WWC-13	< 0.500	68.6	382	0.423	7.91	147	908	<0.00400	0.0207	0.0474	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.103	<0.0000900	0.00366	<0.00200	<0.00200	0.13 +/- 0.20	0.25 +/- 0.40	0
WWC-14	0.729	168	1300	0.201	7.54	757	3350	<0.00400	0.0118	0.0577	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.239	<0.0000900	0.00683	<0.00200	<0.00200	0.25 +/- 0.22	0.86 +/- 0.47	0.86
WWC-15	< 0.500	85.2	479	0.401	7.83	223	1100	<0.00400	0.0193	0.0676	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.11	<0.0000900	0.00283	<0.00200	<0.00200	0.18 +/- 0.24	0.73 +/- 0.40	0.73
WWC-16	< 0.500	48	254	0.454	7.97	125	672	<0.00400	0.023	0.0383	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	<0.100	<0.0000900	0.00364	<0.00200	<0.00200	0.05 +/- 0.15	0.44 +/- 0.38	0
WWC-17	< 0.500	53.4	336	0.803	7.91	147	852	<0.00400	0.0271	0.0575	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.129	<0.0000900	0.00272	<0.00200	<0.00200	0.14 +/- 0.15	0.39 +/- 0.37	0

Additional 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
RW-1	0.628						3060																
RW-4	0.755						1690																
RW-5	0.5						596																
RW-6	0.33	24.1	254			82.1	804																
RW-7	< 0.500						868																
RW-9	0.34	88.1	754			235	1550																
WDB-5	< 0.500						556																
WDB-7	0						596																
WDB-19	0.29						836																

Round 15

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	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
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	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
WWC-5	15.86	7.03	6	7330	1.00	0.16	4.62
WWC-6	15.6	7.15	-436	4220	1.50	0.23	2.71
WWC-7	14.02	7.66	-111	1750	3.00	5.08	1.11
WWC-8	15.54	7.27	-56	4360	1.70	0.17	2.79
WWC-9	15.61	7.45	-456	1730	1.70	0.19	1.11
WWC-10	14.9	7.38	-541	1810	1.40	0.22	1.16
WWC-11	15.45	7.67	-451	1220	2.90	2.29	0.78
WWC-12	14.73	7.77	-181	2120	6.5	0.13	1.36
WWC-13	14.74	7.69	-71	1870	3.3	0.51	1.20
WWC-14	15.13	6.68	-426	5820	0.2	1.18	3.66
WWC-15	15.26	6.90	-335	2340	0.7	4.62	1.5
WWC-16	14.41	7.68	-148	1400	2.8	2.06	0.899
WWC-17	14.36	7.55	-40	1760	1.7	1.37	1.13

Additional Wells	Field Results						
	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
RW-1	19.68	7.24	-79	3740	4.0	5.76	2.38
RW-4	15.36	7.47	-72	3170	1.6	0.26	2.03
RW-5	15.45	7.55	-18	1150	1.3	3.76	0.736
RW-6	15.37	7.56	9	2050	2.0	2.21	1.31
RW-7	15.06	7.64	-41	1630	0.4	0.15	1.04
RW-9	15.76	7.43		3060	3.4		1.96
WDB-5	15.45	7.55	-18	1150	1.3	3.76	0.736
WDB-7	15.45	7.55	-18	1150	1.3	3.76	0.736
WDB-19	15.03	7.59	-180	1700	2.0	0.21	1.09

Round 16

Landfill Wells

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

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

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

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

Round 17

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	0.287	59.0	421	0.939	7.93	121	956	<0.00400	0.0287	0.0847	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.249	<0.0000900	0.00325	<0.00200	<0.00200	0.30	1.03	0
CL-U-2	0.279	60.4	402	0.979	7.77	120	924	<0.00400	0.0254	0.0943	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.224	<0.0000900	0.00352	<0.00200	<0.00200	0.22	0.47	0
CLW-1	0.254	38.0	294	1.04	7.95	62.0	836	<0.00400	0.0308	0.0629	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.206	<0.0000900	0.00344	<0.00200	<0.00200	0.14	0.56	0
CLW-2	0.302	50.9	435	1.14	7.88	94.5	1050	<0.00400	0.0251	0.0809	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.258	<0.0000900	0.00415	<0.00200	<0.00200	0.05	0.6	0
CLW-3	0.322	40.7	352	1.25	7.90	98.8	876	<0.00400	0.0389	0.1010	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.24	<0.0000900	0.00484	<0.00200	<0.00200	0.15	0.21	0
CLW-4	0.308	36.7	322	1.38	7.99	84.9	916	<0.00400	0.0307	0.0818	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.227	<0.0000900	0.0046	<0.00200	<0.00200	0.12	0.09	0
CLW-5	0.367	35.8	340	1.73	8.00	86.5	860	<0.00400	0.0227	0.0705	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.228	<0.0000900	0.00416	<0.00200	<0.00200	0.27	0.44	0
CLW-6	0.313	33.6	315	1.49	7.99	84.6	800	<0.00400	0.0205	0.0924	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.224	<0.0000900	0.00466	<0.00200	<0.00200	0.33	0.51	0
CLW-7	0.25	46.1	337	1.01	7.85	67.8	808	<0.00400	0.0254	0.0544	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.210	<0.0000900	0.00301	<0.00200	<0.00200	0.17	0.28	0
CLW-8	0.252	41.4	310	1.03	7.93	67.5	808	<0.00400	0.0278	0.0625	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.201	<0.0000900	0.00322	<0.00200	<0.00200	0.12	0.99	0.99
CLW-9	0.359	27.8	280	1.84	7.96	84.3	892	<0.00400	0.0412	0.0479	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.177	<0.0000900	0.00511	<0.00200	<0.00200	0.09	0.12	0
CL-U-3	0.257	58.7	391	0.858	7.84	119	1020	<0.00400	0.0272	0.0485	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.223	<0.0000900	0.00292	<0.00200	<0.00200	0	0.47	0

Landfill Wells	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
	Field Results						
CL-U-1	14.68	7.5	-110	2050	1.4	0.25	1.31
CL-U-2	14.97	7.46	-73	1970	1.4	2.81	1.26
CLW-1	16.16	7.41	-59	1550	0.0	0.41	0.99
CLW-2	15.57	7.29	-145	2020	0.0	0.48	1.29
CLW-3	15.98	7.57	-211	1780	0.0	0.64	1.14
CLW-4	15.99	7.57	-98	1670	0.0	1.50	1.07
CLW-5	16.30	7.52	-209	1760	6.6	0.30	1.13
CLW-6	15.52	7.51	-219	1660	0.0	0.29	1.06
CLW-7	16.18	7.39	-48	1670	2.2	0.36	1.06
CLW-8	15.66	7.42	-29	1590	1.0	1.88	1.02
CLW-9	14.23	7.37	-309	1570	0.0	2.70	1
CL-U-3	15.65	7.2	-142	1870	0.0	0.46	1.20

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	0.567	235	1280	0.772	7.68	637	2900	<0.00400	0.0209	0.0610	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.467	<0.0000900	0.00219	0.00518	<0.00200	0.06	0.83	0
BA-U-2	0.339	91	735	0.798	7.80	81.2	1580	<0.00400	0.0212	0.1460	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.339	<0.0000900	<0.00200	0.0026	<0.00200	0.09	0.76	0
BAC-1	2.68	296	1890	0.711	7.24	1400	5160	<0.00400	0.0178	0.0411	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.669	<0.0000900	0.0112	0.00692	<0.00200	0.13	0.98	0.98
BAC-2	6.34	250	1940	1.38	7.69	2380	7080	<0.00400	0.0435	0.0225	<0.00200	<0.000500	0.00499	<0.00400	<0.00200	0.632	0.000128	0.128	0.128	<0.00200	0.16	1.17	1.33
BAC-3	7.06	405	3230	1.67	7.44	4310	13100	<0.00400	0.0418	0.0284	<0.00200	<0.000500	0.00585	<0.00400	<0.00200	1.180	<0.0000900	0.0366	0.0192	<0.00200	0.13	0.92	0
BAC-4	0.74	77.5	552	1.07	7.77	366	1610	<0.00400	0.0292	0.0576	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.311	<0.0000900	0.0239	<0.00200	<0.00200	0.43	0.14	0
BAC-5	0.721	80.3	558	0.96	7.84	505	1780	<0.00400	0.0284	0.0425	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.352	<0.0000900	0.0329	<0.00200	<0.00200	0.03	0.17	0
BAC-6	4.04	119	514	1.15	7.77	989	2240	<0.00400	0.0283	0.0176	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.262	<0.0000900	0.0685	<0.00200	<0.00200	0.16	0.98	0.98
BAC-7	5.34	134	670	2.06	7.81	1240	3280	<0.00400	0.0388	0.0208	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.299	<0.0000900	0.0615	0.0035	<0.00200	-0.07	0.82	0
BAC-8	0.322	24.5	257	1.4	7.96	84.5	836	<0.00400	0.0667	0.0393	<0.00200	0.00129	0.00431	<0.00400	<0.00200	0.167	<0.0000900	0.00538	<0.00200	<0.00200	0.05	0.23	0
BAC-9	0.303	31.8	332	1.22	7.95	83.2	868	<0.00400	0.0518	0.0464	<0.00200	0.00172	<0.00200	<0.00400	<0.00200	0.169	<0.0000900	0.00402	<0.00200	<0.00200	0.05	0.31	0
BAC-10	0.31	24.1	257	1.46	7.99	81.2	856	<0.00400	0.0543	0.0379	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.134	<0.0000900	0.006	<0.00200	<0.00200	0.16	0.11	0
BAC-11	0.319	77.6	717	1	7.63	169	1770	<0.00400	0.031	0.1180	<0.00200	<0.000500	<0.00200	<0.00400	0.00288	0.25	<0.0000900	0.00287	<0.00200	<0.00200	0.11	0.32	0
BAC-12	0.288	30.7	308	1.2	7.77	82.3	1010	<0.00400	0.0427	0.0776	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.158	<0.0000900	0.00464	<0.00200	<0.00200	0.47	0.18	0
BAC-13	0.601	120	995	0.988	7.55	373	2460	<0.00400	0.0367	0.0517	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.307	<0.0000900	0.00202	<0.00200	<0.00200	0.31	0.98	0
BAC-14	0.516	152	1020	0.884	7.43	470	2650	<0.00400	0.0289	0.047	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.355	<0.0000900	<0.00200	<0.00200	<0.00200	0.21	0.57	0
BAC-15	0.305	24.6	259	1.63	8.06	83.7	840	<0.00400	0.0583	0.0409	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.147	<0.0000900	0.00739	<0.00200	<0.00200	0.09	0.21	0
BAC-16	0.306	22.5	308	1.79	8.17	79.1	924	<0.00400	0.0845	0.0367	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.171	<0.0000900	0.00718	<0.00200	<0.00200	-0.02	0.19	0
BAC-17	0.193	25	129	0.587	8.13	102	480	<0.00400	0.0353	0.0306	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	<0.100	<0.0000900	0.00407	<0.00200	<0.00200	-0.02	-0.18	0
BAC-18	0.252	23.3	194	1.13	8.15	92.4	660	<0.00400	0.0417	0.0488	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.114	<0.0000900	0.005	<0.00200	<0.00200	0.06	-0.02	0
BAC-19	0.273	29.4	247	1.12	8.04	90	720	<0.00400	0.0408	0.0418	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.128	<0.0000900	0.00447	<0.00200	<0.00200	0.16	0.35	0
BAC-20	0.231	26.3	200	0.871	8.02	98.3	636	<0.00400	0.0359	0.0467	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.103	<0.0000900	0.00462	<0.00200	<0.00200	-0.05	0.24	0
BAC-21	0.259	28.3	239	1.08	8.08	91.6	692	<0.00400	0.0404	0.0579	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.132	<0.0000900	0.00424	<0.00200	<0.00200	0.03	0.76	0
BAC-22	0.263	29.8	247	1.1	8.01	101	752	<0.00400	0.0418	0.0337	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.13	<0.0000900	0.00414	<0.00200	<0.00200	0.06	0.43	0
BAC-23	0.259	31.7	255	0.972	7.99	98.8	764	<0.00400	0.037	0.0449	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.125	<0.0000900	0.0044	<0.00200	<0.00200	-0.06	0.71	0
BAC-24	0.297	30.8	270	1.28	8.27	83.2	772	<0.00400	0.0478	0.0645	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.169	<0.0000900	0.00401	<0.00200	<0.00200	0.02	0.37	0
BAC-25	0.257	27.2	202	1.12	8.16	77.3	664	<0.00400	0.0363	0.0802	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.121	<0.0000900	0.00425	<0.00200	<0.00200	0	0.56	0
BAC-26	0.277	20.7	197	1.61	8.21	61.1	632	<0.00400	0.0498	0.0712	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.134	<0.0000900	0.00476	<0.00200	<0.00200	0.02	0.68	0
BAC-27	0.272	24.7	263	1.41	8.15	64.1	752	<0.00400	0.0468	0.0759	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.162	<0.0000900	0.0049	<0.00200	<0.00200	0.05	0.63	0
BAC-28	0.27	26.9	288	1.34	8.11	66.9	808	<0.00400	0.0478	0.0755	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.173	<0.0000900	0.00426	<0.00200	<0.00200	0.15	0.45	0
BAC-29	0.294	73.8	661	1.02	7.91	177	1550	<0.00400	0.0331	0.0688	<0.00200	0.0019	<0.00200	<0.00400	<0.00200	0.27	<0.0000900	0.00269	<0.00200	<0.00200	0.22	0.99	1.21
BAC-30	0.298	63.9	582	1.03	7.86	152	1290	<0.00400	0.0361	0.8210	<0.00200	0.00165	<0.00200	<0.00400	<0.00200	0.256	<0.0000900	0.00376	<0.00200	<0.00200	0.04	0.72	0
BAC-31	0.289	52.3	501	1.08	7.95	120	1290	<0.00400	0.0365	0.0834	<0.00200	0.00133	<0.00200	<0.00400	<0.00200	0.23	<0.0000900	0.00384	<0.00200	<0.00200	0.06	0.33	0
BAC-32	0.273	24.2	251	1.43	7.77	65.6	812	<0.00400	0.0471	0.0837	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.165	<0.0000900	0.00492	<0.00200	<0.00200	0.20	0.37	0
BAC-33	0.275	30.6	308	1.27	7.78	72.3	936	<0.00400	0.042	0.1020	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.181	<0.0000900	0.00507	<0.00200	<0.00200	0.09	0.53	0
BAC-34	0.265	21.1	216	1.47	7.90	60.5	708	<0.00400	0.0529	0.0668	<0.00200	0.00264	<0.00200	<0.00400	<0.00200	0.154	<0.0000900	0.00442	<0.00200	<0.00200	0.09	0.42	0
BAC-35	0.283	25	243	1.44	7.90	69.4	692	<0.00400	0.0542	0.0734	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.162	<0.0000900	0.00503	<0.00200	<0.00200	0.07	1.11	1.11
BAC-36	0.255	25.6	187	1.03	7.91	94.5	664	<0.00400	0.0372	0.0529	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.112	<0.0000900	0.0051	<0.00200	<0.00200	0.05	0.38	0
BAC-37	0.259	25.2	177	1.05	7.91	93.2	640	<0.00400	0.0416	0.0424	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.109	<0.0000900	0.00632	<0.00200	<0.00200	0.23	0.98	0
BAC-38	0.276	30.4	232	1.04	7.89	86.8	828	<0.00400	0.0346	0.0641	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.128	<0.0000900	0.00493	<0.00200	<0.00200	0.10	0.66	0

Bottom Ash	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
	Field Results						
BA-U-1	15.15	7.25	-27	5320	1	0.65	3.38
BA-U-2	15.02	7.39	-110	2810	1.2	0.48	1.79
BAC-1	17.23	6.93	138	8260	4.6	6.37	5.21
BAC-2	16.82	7.07	82	10200	0.5	6.1	6.81
BAC-3	16.95	7.14	84	15700	0.6	1.04	9.72
BAC-4	16.74	7.51	-35	2780	0	0.25	1.78
BAC-5	16.93	7.51	-41	3000	0	2.45	1.92
BAC-6	16.83	7.53	-10	3660	0	0.2	2.34
BAC-7	15.62	7.41	-89	4610	0	0.83	2.95
BAC-8	16.85	7.59	-12	1540	4.8	1.23	0.987
BAC-9	15.81	7.55	21	1700	2.7	2.67	1.09
BAC-10	16.21	7.80	73	1560	1.6	6.85	0.996
BAC-11	15.49	7.39	15	3070	6.0	4.33	1.96
BAC-12	15.21	7.56	13	1640	2.2	3.40	1.05
BAC-13	15.69	7.41	-94	4240	7.0	0.47	2.72
BAC-14	15.84	7.30	18	4470	1.4	4.21	2.86
BAC-15	16.20	7.73	62	1520	4.7	1.11	0.972
BAC-16	16.39	7.69	-12	1710	2.2	1.31	1.09
BAC-17	15.62	7.63	-109	940	0.6	0.26	0.604
BAC-18	15.28	7.66	-196	1230	1.4	0.22	0.785
BAC-19	15.15	7.54	-157	1430	1.9	4.83	0.913
BAC-20	15.28	7.65	-146	1220	1.6	0.17	0.779
BAC-21	14.46	7.22	-159	1390	0.2	0.57	0.888
BAC-22	14.79	7.36	-60	1430	0.5	2.16	0.914
BAC-23	14.62	7.41	-17	1440	1.5	5.18	0.92
BAC-24	15.01	7.48	-58	1580	3.1	0.35	1.01
BAC-25	15.43	7.57	-207	1300	1.5	0.18	0.834
BAC-26	16.17	7.60	-204	1300	0.8	5.59	0.835
BAC-27	16.67	7.59	-153	1520	1.9	0.21	0.97
BAC-28	17.08	7.60	-86	1590	1.7	0.22	1.02
BAC-29	15.02	7.18	-2	2900	0.0	1.05	1.86
BAC-30	15.3	7.32	-33	2650	0.1	0.81	1.69
BAC-31	15.32	7.40	-56	2370	0.9	0.37	1.51
BAC-32	15.76	7.55	-193	1480	0.3	0.44	0.947
BAC-33	16.86	7.52	-177	1660	1.5	0.29	1.06
BAC-34	15.68	7.43	48	1360	0.0	5.56	0.87
BAC-35	16.82	7.61	-72	1460	1.6	0.25	0.935
BAC-36	15.41	7.66	-174	1240	1.3	0.19	0.792
BAC-37	15.49	7.63	-163	1210	1.4	0.2	0.777
BAC-38	15	7.54	-138	1460	2.2	0.24	0.934

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	0.379	92.4	474	0.595	7.73	375	1410	<0.00400	0.0131	0.0454	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.248	<0.0000900	<0.00200	<0.00200	<0.00200	0.12	0.61	0
WW-U-1	1.35	220	1530	0.489	7.72	1290	5120	<0.00400	0.0088	0.0340	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.474	<0.0000900	0.00856	0.00724	<0.00200	0.16	0.51	0
WW-U-2	1.35	292	1760	0.641	7.54	1030	4300	<0.00400	0.013	0.0401	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.575	<0.0000900	<0.00200	0.00931	<0.00200	0.02	1.29	1.29
WWC-1	13.3	511	4900	0.528	7.21	3660	12000	<0.00400	0.0252	0.0203	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	1.260	0.000237	0.0122	0.0131	<0.00200	-0.02	1.17	1.17
WWC-2	0.225	61.8	349	0.451	7.99	136	996	<0.00400	0.0145	0.0326	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.119	<0.0000900	0.00328	<0.00200	<0.00200	0.08	-1.27	0
WWC-3	0.278	40.2	290	0.827	7.77	90.2	796	<0.00400	0.0202	0.0377	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.154	<0.0000900	0.00436	<0.00200	<0.00200	0.09	0.31	0
WWC-4	1.01	168	860	0.523	7.58	665	2410	<0.00400	0.0163	0.0380	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.345	<0.0000900	<0.00200	<0.00200	<0.00200	0.018	0.69	0
WWC-5	2.97	336	1500	0.479	7.38	1530	4800	<0.00400	0.0163	0.0294	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.612	<0.0000900	<0.00200	0.00528	<0.00200	-0.05	1.99	1.99
WWC-6	0.494	141	943	0.228	8.04	500	2500	<0.00400	0.0149	0.0805	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.245	<0.0000900	0.00596	<0.00200	<0.00200	0	1.64	1.64
WWC-7	0.282	59.3	353	0.416	8.09	172	912	<0.00400	0.0215	0.0471	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.105	<0.0000900	0.00458	<0.00200	<0.00200	0.13	1.03	1.03
WWC-8	0.578	150	1040	0.435	7.62	510	2590	<0.00400	0.017	0.0506	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.262	<0.0000900	0.0026	0.00365	<0.00200	0.07	-0.54	0
WWC-9	0.206	58.5	422	0.74	7.96	134	980	<0.00400	0.0274	0.0825	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.168	<0.0000900	0.00256	<0.00200	<0.00200	0.058	1	1
WWC-10	0.274	53.2	359	0.516	8.30	166	1040	<0.00400	0.0377	0.0359	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.115	<0.0000900	0.00747	<0.00200	<0.00200	0.07	0.90	0
WWC-11	0.181	38.8	203	0.4	8.50	115	656	<0.00400	0.01720	0.7170	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	<0.100	<0.0000900	0.00527	<0.00200	<0.00200	0.13	1.3	1.3
WWC-12	0.272	88.7	503	0.481	7.96	198	1200	<0.00400	0.0317	0.0649	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.124	<0.0000900	0.00464	<0.00200	<0.00200	0.06	0.91	0
WWC-13	0.22	85.2	469	0.417	8.00	191	1160	<0.00400	0.0209	0.0540	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.12	<0.0000900	0.00353	<0.00200	<0.00200	0.17	0.53	0
WWC-14	0.701	171	1260	0.313	7.75	782	3450	<0.00400	0.0132	0.0528	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.328	<0.0000900	0.00618	<0.00200	<0.00200	0.08	0.64	0
WWC-15	0.25	114	616	0.305	8.08	308	1520	<0.00400	0.019	0.0799	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.143	<0.0000900	0.00241	<0.00200	<0.00200	0.24	0.34	0
WWC-16	0.183	54.8	289	0.393	8.30	140	872	<0.00400	0.0239	0.0397	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	<0.100	<0.0000900	0.00338	<0.00200	<0.00200	0.10	0.62	0
WWC-17	0.213	55.4	342	0.587	8.13	162	896	<0.00400	0.0291	0.0551	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.13	<0.0000900	0.00275	<0.00200	<0.00200	0.03	0.55	0

Waste Water	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
	Field Results						
SI-U-1	15.2	7.35	-6	2660	0.90	0.90	1.7
WW-U-1	14.15	7.11	-35	7350	0.00	2.86	4.63
WW-U-2	13.43	7.10	19	7310	0.00	1.33	4.61
WWC-1	15.09	6.84	70	19100	0.00	0.32	11.8
WWC-2	15.15	7.31	-52	1810	0.10	0.58	1.17
WWC-3	15.27	7.63	-17	1570	0.00	0.24	1.01
WWC-4	15.14	7.24	-4	4090	0.00	0.18	2.61
WWC-5	15.79	6.92	64	7460	0.00	1.93	4.7
WWC-6	14.66	7.31	-50	4260	1.00	0.21	2.72
WWC-7	14.78	7.52	-103	1850	0.00	0.23	1.18
WWC-8	14.89	7.31	18	4550	0.00	5.74	2.91
WWC-9	14.88	7.50	-44	1980	0.70	0.26	1.27
WWC-10	14.92	7.31	-41	1860	0.70	3.61	1.19
WWC-11	15.16	7.70	-205	1220	1.30	0.23	0.778
WWC-12	15.36	7.36	-115	2290	1.4	0.59	1.47
WWC-13	14.83	7.53	-45	2150	0.1	0.18	1.38
WWC-14	15.09	7.11	-62	5600	0.0	0.53	3.53
WWC-15	15.19	7.47	-173	2760	2.1	0.19	1.76
WWC-16	15.21	7.39	-42	1510	0.0	0.39	0.964
WWC-17	14.86	7.42	-15	1730	0.7	0.34	1.11

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	0.639	126						<0.00400	0.0243	0.0347	<0.00200	<0.000500	0.00326	<0.00400	<0.00200	0.27	<0.0000900	0.00471	<0.00200	<0.00200			
RW-4	0.751	89.9	740	0.804	7.79	374.0	1880	<0.00400	0.0261	0.0866	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.308	<0.0000900	0.00216	<0.00200	<0.00200	0.19	0.88	0
RW-5	0.222	29.9	174	0.609	8.04	114	620	<0.00400	0.0344	0.0277	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	<0.100	<0.0000900	0.00475	<0.00200	<0.00200	0.13	1.01	1.01
RW-6	0.326	24.1	297	1.43	7.93	94.7	788	<0.00400	0.0634	0.0387	<0.00200	0.00123	0.013	<0.00400	<0.00200	0.157	<0.0000900	0.00579	<0.00200	<0.00200	0.15	0.48	0
RW-7	0.222	44.6	323	0.572	7.90	129	864	<0.00400	0.0227	0.0345	<0.00200	<0.000500	0.00258	<0.00400	<0.00200	0.116	<0.0000900	0.00441	<0.00200	<0.00200	0.07	4.62	1.62
RW-9	0.451	98.8	868	1.25	7.59	244	1980	<0.00400	0.0376	0.0497	<0.00200	0.00479	<0.00200	<0.00400	<0.00200	0.358	<0.0000900	0.00386	<0.00200	<0.00200	0.14	0.31	0
WDB-5	0.269	21.3	218	1.4	8.00	74.7	624	<0.00400	0.0512	0.0562	<0.00200	0.00107	<0.00200	<0.00400	<0.00200	0.145	<0.0000900	0.00444	<0.00200	<0.00200	0.12	0.48	0
WDB-7	0.249	26.6	255	1.18	7.87	59.8	700	<0.00400	0.0443	0.0808	<0.00200	<0.000500	<0.00200	<0.00400	<0.00200	0.18	<0.0000900	0.00416	<0.00200	<0.00200	0.30	0.43	0
WDB-19	0.305	33.6	319	1.32	7.89	82.8	820	<0.00400	0.0293	0.0574	<0.00200	0.0016	<0.00200	<0.00400	<0.00200	0.211	<0.0000900	0.00444	<0.00200	<0.00200	0.13	-0.11	0

Additional Wells	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
	Field Results						
RW-1							
RW-4	15.06	7.51	-7	3390	0.5	0.18	2.17
RW-5	17.18	7.40	128	1140	0.9	3.73	0.726
RW-6	16.3	7.57	-31	1560	3.1	5.18	0.999
RW-7	15.93	7.51	-31	1690	0.4	0.22	1.09
RW-9	17.79	7.21	50	3650	1.4	1.09	2.32
WDB-5	16.46	7.54	-34	1280	3.7	0.35	0.818
WDB-7	15.43	7.37	-22	1400	0.7	0.36	0.894
WDB-19	15.29	7.25	-142	1700	0.0	0.42	1.09

Round 18

Landfill Wells — Results

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
CL-U-1	0.26	52.2	441	1.1	7.10	116	1040	<0.00050	<0.10	0.0800	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.228	<0.000200	<0.01	<0.00050	<0.00020	0.19	0.28
CL-U-2	0.25	53.7	415	0.9	7.30	114	1030	<0.00050	<0.10	0.0920	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.214	<0.000200	<0.01	<0.00050	<0.00020	0.15	0.61
CLW-1	0.23	34.2	317	1.2	7.60	58.5	784	<0.00050	<0.10	0.0610	<0.00050	<0.000200	0.05	<0.00050	<0.00050	0.198	<0.000200	<0.01	<0.00050	<0.00020	0.03	0.4
CLW-2	0.27	45.0	451	1.1	7.60	89.6	1020	<0.00050	<0.10	0.0770	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.242	<0.000200	<0.01	<0.00050	<0.00020	0.53	0.93
CLW-3	0.29	35.5	368	1.6	7.80	92.5	884	<0.00050	<0.10	0.0970	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.22	<0.000200	<0.01	<0.00050	<0.00020	0.59	0.03
CLW-4	0.28	32.0	343	1.4	7.80	82.6	860	<0.00050	<0.10	0.0760	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.214	<0.000200	<0.01	<0.00050	<0.00020	0.07	0.35
CLW-5	0.32	30.8	357	1.8	7.80	80.6	868	<0.00050	<0.10	0.0670	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.212	<0.000200	<0.01	<0.00050	<0.00020	0.23	0.45
CLW-6	0.28	29.4	328	1.7	6.70	81.1	820	<0.00050	<0.10	0.0890	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.206	<0.000200	<0.01	<0.00050	<0.00020	0.25	0.55
CLW-7	0.23	40.8	360	0.9	7.60	63.9	848	<0.00050	<0.10	0.0510	<0.00050	<0.000200	0.016	<0.00050	<0.00050	0.198	<0.000200	<0.01	<0.00050	<0.00020	0.23	0.68
CLW-8	0.23	36.8	324	1.2	7.50	61.7	844	<0.00050	<0.10	0.0600	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.193	<0.000200	<0.01	<0.00050	<0.00020	0.08	0.31
CLW-9	0.31	22.5	290	1.80	7.70	80.1	776	<0.00050	<0.10	0.046	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.170	<0.000200	<0.01	<0.00050	<0.00020	0.13	0.46
CL-U-3	0.23	51.7	402	0.8	7.40	110	1020	<0.00050	<0.10	0.048	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.210	<0.000200	0.02000	<0.00050	<0.00020	0.32	0.03

Landfill Wells — Field Results

Landfill Wells	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
CL-U-1	15.8	7.35	-155	1980	1.5	1.06	1.27
CL-U-2	15.27	7.25	-100	1910	0.0	3.07	1.22
CLW-1	17.28	7.46	-112	1560	0.9	0.51	1.00
CLW-2	16.26	7.48	-185	2030	0.0	4.81	1.30
CLW-3	16.50	7.5	-236	1750	1.7	2.05	1.12
CLW-4	16.09	7.58	-97	1660	2.0	6.20	1.06
CLW-5	16.64	7.5	-228	1740	3.8	3.94	1.11
CLW-6	15.83	7.52	-248	1630	0.6	2.75	1.04
CLW-7	16.91	7.4	-61	1680	0.0	0.34	1.07
CLW-8	16.41	7.44	-113	1590	1.3	0.28	1.02
CLW-9	15.04	7.58	-317	1570	0.8	1.71	1
CL-U-3	15.14	7.13	-167	1850	0.0	0.48	1.18

Bottom Ash — Results

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
BA-U-1	0.5	183	1140	0.7	7.30	587	2810	<0.00050	<0.10	0.0620	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.388	<0.000200	<0.01	0.02	<0.00020	0.24	0.11
BA-U-2	0.3	82.9	887	0.7	7.40	88.9	1660	<0.00050	<0.10	0.1340	<0.00050	<0.000200	0.01	<0.00050	<0.00050	0.306	<0.000200	<0.01	<0.00050	<0.00020	0.13	0.52
BAC-1	5.67	372	4500	0.8	7.20	4730		<0.00050	<0.10	0.031	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.856	<0.000200	<0.01	<0.00050	<0.00020	0.05	0.42
BAC-2	6.45	184	1920	1.1	7.40	2100	6420	<0.00050	<0.10	0.0230	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.435	<0.000200	0.15	<0.00050	<0.00020	0.09	0.47
BAC-3	2.04	155	1560	0.4	7.30	1110	4090	<0.00050	<0.10	0.0420	<0.00050	<0.000200	0.007	<0.00050	<0.00050	0.328	<0.000200	0.03	<0.00050	<0.00020	0.12	0.65
BAC-4	0.64	69.2	590	1	7.60	377	1670	<0.00050	<0.10	0.0580	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.294	<0.000200	0.02	<0.00050	<0.00020	0.10	0.06
BAC-5	0.67	77.8	580	0.8	7.60	500	1670	<0.00050	<0.10	0.0450	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.328	<0.000200	0.03	<0.00050	<0.00020	0.02	0.24
BAC-6	3.92	98.3	535	0.8	7.70	989	2310	<0.00050	<0.10	0.0170	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.251	<0.000200	0.07	<0.00050	<0.00020	-0.03	0.39
BAC-7	4.63	97.2	737	1.5	7.70	1180	2920	<0.00050	<0.10	0.019	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.265	<0.000200	0.05	<0.00050	<0.00020	-0.08	0.24
BAC-8	0.29	20.8	267	1.8	7.40	74.7	856	<0.00050	0.05	0.0360	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.158	<0.000200	<0.01	<0.00050	<0.00020	0.03	0.30
BAC-9	0.28	27.5	338	1.5	7.40	69.5	884	<0.00050	0.05	0.0440	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.166	<0.000200	<0.01	<0.00050	<0.00020	0.16	0.72
BAC-10	0.29	21.7	264	1.8	7.60	69.4	800	<0.00050	0.05	0.036	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.152	<0.000200	<0.01	<0.00050	<0.00020	0.20	0.28
BAC-11	0.29	64.6	718	1.1	7.40	140	1630	<0.00050	<0.10	0.1020	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.245	<0.000200	<0.01	<0.00050	<0.00020	0.11	0.02
BAC-12	0.24	21.9	211	1.4	7.60	62.8	1300	<0.00050	<0.10	0.049	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.126	<0.000200	<0.01	<0.00050	<0.00020	0.16	0.34
BAC-13	0.63	124	1070	0.8	7.40	373	2560	<0.00050	<0.10	0.0480	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.317	<0.000200	<0.01	<0.00050	<0.00020	0	0.89
BAC-14	0.5	135	1120	1	7.30	476	2670	<0.00050	<0.10	0.043	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.332	<0.000200	<0.01	<0.00050	<0.00020	0.11	0.14
BAC-15	0.27	20.9	257	2	7.70	68.9	800	<0.00050	0.05	0.036	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.143	<0.000200	<0.01	<0.00050	<0.00020	0	0.13
BAC-16	0.29	20.3	325	2.2	7.70	66.8	896	<0.00050	0.07	0.034	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.168	<0.000200	<0.01	<0.00050	<0.00020	0.06	0.21
BAC-17	0.18	22.9	137	0.5	7.40	99.7	468	<0.00050	<0.10	0.028	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.061	<0.000200	<0.01	<0.00050	<0.00020	0.22	0.91
BAC-18	0.24	21.1	198	1.4	7.80	82.3	608	<0.00050	<0.10	0.0460	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.113	<0.000200	<0.01	<0.00050	<0.00020	-0.08	0.14
BAC-19	0.25	26.1	245	1.3	7.70	87.5	696	<0.00050	<0.10	0.0380	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.132	<0.000200	<0.01	<0.00050	<0.00020	0.03	0.37
BAC-20	0.24	26.5	183	<5.0	7.80	75.5	624	<0.00050	<0.10	0.0440	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.124	<0.000200	0.0041	<0.00050	<0.00020	0.08	0.11
BAC-21	0.27	25	168	<5.0	7.00	60.5	628	<0.00050	<0.10	0.0580	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.125	<0.000200	0.0044	<0.00050	<0.00020	0.32	0.86
BAC-22	0.23	25	222	1.2	7.60	86.6	668	<0.00050	<0.10	0.0310	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.124	<0.000200	<0.01	<0.00050	<0.00020	0.07	0.48
BAC-23	0.25	26.9	249	1.3	7.50	90.5	728	<0.00050	<0.10	0.0330	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.13	<0.000200	<0.01	<0.00050	<0.00020	0.13	0.74
BAC-24	0.27	26.4	283	1.40	7.60	76.3	816	<0.00050	<0.10	0.0580	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.163	<0.000200	<0.01	<0.00050	<0.00020	-0.04	0.23
BAC-25	0.24	25.8	173	<5.0	7.80	77.3	620	<0.00050	<0.10	0.0590	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.114	<0.000200	0.0044	<0.00050	<0.00020	0.19	0.45
BAC-26	0.26	21.4	266	1.6	7.80	64	764	<0.00050	<0.10	0.0900	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.160	<0.000200	<0.01	<0.00050	<0.00020	-0.09	0.57
BAC-27	0.25	21.8	282	1.5	7.80	64.7	760	<0.00050	<0.10	0.0690	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.163	<0.000200	<0.01	<0.00050	<0.00020	0.10	0.07
BAC-28	0.25	24.1	315	1.4	7.80	59.8	772	<0.00050	<0.10	0.0700	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.175	<0.000200	<0.01	<0.00050	<0.00020	0	0.41
BAC-29	0.27	73.8	781	0.9	7.60	194	1640	<0.00050	<0.10	0.0620	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.281	<0.000200	<0.01	<0.00050	<0.00020	0.15	0.65
BAC-30	0.27	58.1	632	1.00	7.60	150	1460	<0.00050	<0.10	0.0710	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.242	<0.000200	<0.01	<0.00050	<0.00020	0.21	0.64
BAC-31	0.27	50.1	578	1	7.60	121	1300	<0.00050	<0.10	0.0790	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.227	<0.000200	<0.01	<0.00050	<0.00020	0.29	0.63
BAC-32	0.26	21.8	273	1.6	7.80	57.9	752	<0.00050	<0.10	0.0780	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.164	<0.000200	<0.01	<0.00050	<0.00020	0.08	0.26
BAC-33	0.26	30.1	377	1.3	7.40	67.5	864	<0.00050	<0.10	0.1030	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.197	<0.000200	<0.01	<0.00050	<0.00020	0.21	0.52
BAC-34	0.25	19	234	1.6	7.50	61.8	672	<0.00050	0.05	0.063	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.153	<0.000200	<0.01	<0.00050	<0.00020	0.19	0.42
BAC-35	0.26	21.6	254	1.60	7.60	61.9	720	<0.00050	0.05	0.0660	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.16	<0.000200	<0.01	<0.00050	<0.00020	0.08	0.21
BAC-36	0.26	25.1	180	1.1	7.80	90.9	628	<0.00050	<0.10	0.0570	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.132	<0.000200	0.0047	<0.00050	<0.00020	0.08	0.31
BAC-37	0.26	24.5	173	1.1	7.80	90.5	612	<0.00050	<0.10	0.0410	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.129	<0.000200	0.0047	<0.00050	<0.00020	-0.02	0.33
BAC-38	0.27	29	235	1.1	7.70	83.9	732	<0.00050	<0.10	0.0570	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.147	<0.000200	0.004	<0.00050	<0.00020	0.02	0.16

Bottom Ash — Field Results

Bottom Ash	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
BA-U-1	16.15	7.33	-51	4780	0	0.54	3.05
BA-U-2	16.63	7.45	-198	2980	0	0.47	1.9
BAC-1	17.63	7.23	-21	13600	7.6	0.71	8.47
BAC-2	18.45	7.11	3	9960	0	1.33	6.27
BAC-3	18.11	6.98	-86	5890	2.9	0.32	3.78
BAC-4	16.44	7.45	-69	2830	0.3	0.31	1.81
BAC-5	15.93	7.41	-62	3030	0.6	0.32	1.94
BAC-6	15.56	7.41	-57	3690	0.6	0.4	2.36
BAC-7	16.63	7.46	-188	4580	0.6	0.47	2.93
BAC-8	15.53	7.53	-1	1500	0.0	0.96	0.964
BAC-9	15.27	7.45	-12	1680	1.0	1.65	1.07
BAC-10	15.06	7.40	-24	1540	0.0	1.03	0.983
BAC-11	15.22	7.37	19	2990	1.8	3.41	1.91
BAC-12	14.99	7.52	-63	1310	1.9	0.33	0.839
BAC-13	16.37	7.19	-128	4260	4.5	0.55	2.73
BAC-14	15.16	7.09	-10	4480	0.0	1.44	2.87
BAC-15	15.27	7.53	-4	1490	3.2	1.28	0.95
BAC-16	15.83	7.55	-34	1680	0.0	1.50	1.08
BAC-17	16.03	7.71	-144	920	0.3	0.36	0.589
BAC-18	15.40	7.36	-214	1180	0.0	0.40	0.758
BAC-19	14.14	7.22	-136	1430	0.0	1.17	0.917
BAC-20	16	7.59	-123	1230	0.8	0.26	0.786
BAC-21	15.71	7.58	-172	1200	0.9	0.21	0.799
BAC-22	14.53	7.39	-83	1350	0.3	4.96	0.876
BAC-23	14.89	7.41	-69	1420	1.3	0.78	0.905
BAC-24	14.91	7.47	-80	1550	1.9	0.36	0.994
BAC-25	15.98	7.56	-76	1180	1.1	0.48	0.752
BAC-26	15.83	7.59	-173	1460	0.0	0.21	0.934
BAC-27	16.52	7.57	-141	1480	0.0	1.99	0.944
BAC-28	15.69	7.43	-84	1570	0.0	0.36	1.01
BAC-29	16.69	7.42	-84	3050	0.6	0.30	1.95
BAC-30	16.27	7.46	-59	2640	0.3	3.81	1.69
BAC-31	16.08	7.48	-85	2420	0.0	0.54	1.55
BAC-32	15.89	7.57	-125	1460	0.1	6.19	9.33
BAC-33	15.93	7.52	-189	1760	0.0	0.21	1.13
BAC-34	15.43	7.55	-47	1340	0.0	0.26	0.857
BAC-35	15.68	7.36	-121	1420	0.0	0.66	0.905
BAC-36	16.3	7.58	-184	1240	1.3	0.26	0.791
BAC-37	16.14	7.54	-156	1220	1.8	3.29	0.78
BAC-38	15.64	7.43	-72	1450	0.9	0.32	0.931

Waste Water — Results

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
SI-U-1	0.31	79.5	515	<5.0	7.50	491	1540	<0.00050	<0.10	0.0380	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.222	<0.000200	0.0017	<0.00050	<0.00020	0.16	1.1
WW-U-1	1.07	172	1410	<5.0	7.40	1190	4760	<0.00050	<0.10	0.0280	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.328	<0.000200	0.0084	<0.00050	<0.00020	0.21	1.6
WW-U-2	1.15	247	1840	<5.0	7.30	1020	4890	<0.00050	<0.10	0.0340	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.415	<0.000200	0.0013	<0.00050	<0.00020	0.14	0.91
WWC-1	13	412	4660	<5.0	7.00	3240	13700	<0.00050	<0.10	<0.025	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	1.040	0.0005	0.0151	<0.00050	<0.00020	0.17	0.48
WWC-2	0.21	48.1	308	<5.0	7.60	105	892	<0.00050	<0.10	0.0300	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.134	<0.000200	0.0035	<0.00050	<0.00020	0.15	0.3
WWC-3	0.25	35.7	303	0.8	7.40	76.2	804	<0.00050	<0.10	0.0390	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.162	<0.000200	<0.01	<0.00050	<0.00020	0.20	0.8
WWC-4	1.05	149	860	0.4	7.10	666	2690	<0.00050	<0.10	0.0360	<0.00050	<0.000200	0.006	<0.00050	<0.00050	0.33	<0.000200	<0.01	<0.00050	<0.00020	0.12	0.32
WWC-5	2.99	307	1550	0.3	6.90	1530	5160	<0.00050	<0.10	0.0310	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.459	<0.000200	<0.01	0.02	<0.00020	0.21	0.65
WWC-6	0.45	128	996	<5.0	7.40	514	2660	<0.00050	<0.10	0.069	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.215	<0.000200	0.0056	<0.00050	<0.00020	0.17	0.62
WWC-7	0.2	40.7	209	0.4	6.80	131	680	<0.00050	<0.10	0.032	<0.00050	<0.000200	0.009	<0.00050	<0.00050	0.08	<0.000200	<0.01	<0.00050	<0.00020	0.09	0.48
WWC-8	0.46	110	942	<5.0	7.30	404	2430	<0.00050	<0.10	0.046	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.203	<0.000200	0.0028	<0.00050	<0.00020	0.17	0.42
WWC-9	0.2	58.4	427	<5.0	7.50	120	1080	<0.00050	<0.10	0.078	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.194	<0.000200	0.00230	<0.00050	<0.00020	0.05	-0.09
WWC-10	0.24	46	376	<5.0	7.80	149	1050	<0.00050	<0.10	0.03	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.114	<0.000200	0.0066	<0.00050	<0.00020	0.43	0.25
WWC-11	0.17	35.3	196	<5.0	7.60	94.7	652	<0.00050	<0.10	0.6000	<0.00050	<0.000200	<0.0.10	<0.00050	<0.00050	0.085	<0.000200	0.0043	<0.00050	<0.00020	0.05	0.06
WWC-12	0.26	81	598	<5.0	7.70	262	1300	<0.00050	<0.10	0.057	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.13	<0.000200	0.0047	<0.00050	<0.00020	0.16	0.48
WWC-13	0.21	84.8	517	<5.0	7.70	213	1280	<0.00050	<0.10	0.0520	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.127	<0.000200	0.0031	<0.00050	<0.00020	0.18	0.41
WWC-14	0.64	167	1230	<5.0	7.40	713	3480	<0.00050	<0.10	0.0500	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.27	<0.000200	0.0061	<0.00050	<0.00020	0.15	0.76
WWC-15	0.26	128	711	<5.0	7.60	365	1860	<0.00050	<0.10	0.0740	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.141	<0.000200	0.0023	<0.00050	<0.00020	-0.02	0.71
WWC-16	0.18	57.5	309	<5.0	7.40	124	856	<0.00050	<0.10	0.0410	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.101	<0.000200	0.0031	<0.00050	<0.00020	0.25	0.12
WWC-17	0.21	61.7	386	<5.0	7.30	147	1040	<0.00050	<0.10	0.0620	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.154	<0.000200	0.00240	<0.00050	<0.00020	0.18	-0.02

Waste Water — Field Results

Waste Water	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
SI-U-1	14.99	7.32	2	2590	1.20	1.44	1.65
WW-U-1	14.46	7.09	38	7050	0.00	5.71	4.44
WW-U-2	13.96	7.08	25	7740	0.00	1.78	4.88
WWC-1	16.5	7.00	12	18800	0.60	0.16	11.6
WWC-2	14.95	7.28	-140	1680	0.00	0.43	1.07
WWC-3	14.72	7.53	-81	1570	0.70	0.25	1
WWC-4	14.64	7.18	-33	4250	0.00	0.29	2.72
WWC-5	1484	6.87	20	7190	0.00	0.57	4.53
WWC-6	14.26	7.17	-40	4570	0.00	0.26	2.92
WWC-7	14.06	7.48	-168	1240	0.00	0.57	0.797
WWC-8	15.5	7.32	-56	4230	0.00	3.71	2.7
WWC-9	14.78	7.38	-52	2080	0.00	0.33	1.33
WWC-10	14.34	7.28	-62	1980	0.00	0.32	1.26
WWC-11	14.97	7.66	-238	1230	0.00	0.21	0.786
WWC-12	15.02	7.43	-159	2410	1.6	0.25	1.54
WWC-13	14.64	7.50	-41	2400	1.2	0.20	1.54
WWC-14	14.43	7.25	-61	5620	0.6	6.44	3.54
WWC-15	14.45	7.33	-155	3160	0.6	0.30	2.02
WWC-16	14.19	7.27	1	1660	0.0	0.46	1.06
WWC-17	15.18	7.45	-1	1970	0.0	0.25	1.26

Additional Wells — Results

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
RW-1	0.6	117	1040	0.5	7.60	341.0	2170	<0.00050	<0.10	0.0310	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.276	<0.000200	<0.01	<0.00050	<0.00020	0.14	0.98
RW-4	0.72	86.9	762	0.7	7.40	360.0	1940	<0.00050	<0.10	0.0870	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.296	<0.000200	<0.01	<0.00050	<0.00020	0.20	59
RW-5	0.21	27.8	176	0.6	7.90	103	564	<0.00050	<0.10	0.0260	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.084	<0.000200	<0.01	<0.00050	<0.00020	0.21	0.41
RW-6	0.31	21.4	270	2.5	7.90	75	860	<0.00050	0.0631	0.0370	<0.00050	<0.000200	0.0026	<0.00050	<0.00050	0.148	<0.000200	0.00620	0.0009	<0.00020	0.15	0.39
RW-7	0.22	41.7	323	0.6	7.50	110	856	<0.00050	<0.10	0.0340	<0.00050	<0.000200	0.008	<0.00050	<0.00050	0.145	<0.000200	<0.01	<0.00050	<0.00020	0.20	0.41
RW-9	0.32	76.6	731	1	7.70	218	1810	<0.00050	0.0298	0.0340	<0.00050	<0.000200	0.002	<0.00050	<0.00050	0.256	<0.000200	0.00280	0.0026	<0.00020	0.04	0.42
WDB-5	0.26	20	203	1.4	7.90	68.4	628	<0.00050	0.05	0.0520	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.16	<0.000200	<0.01	<0.00050	<0.00020	0.14	1.5
WDB-7	0.23	22.6	257	2	8.00	51.3	768	<0.00050	0.0418	0.0720	<0.00050	<0.000200	0.0009	<0.00050	<0.00050	0.16	<0.000200	0.00380	0.0007	<0.00020	0.03	0.39
WDB-19	0.28	29.0	327	1.3	7.80	76.1	888	<0.00050	0.0302	0.0520	<0.00050	<0.000200	0.0013	<0.00050	<0.00050	0.189	<0.000200	0.00460	<0.00050	<0.00020	0.12	1.5
EP-2	0.3	23.1	290	1.9	7.8	76.4	772	<0.00050	<0.10	0.071	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.198	<0.000200	<0.01	<0.00050	<0.00020		
EP-3	0.27	27.5	291	1.4	7.8	68.6	748	<0.00050	<0.10	0.078	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.211	<0.000200	<0.01	<0.00050	<0.00020		
EP-5	0.35	26.7	295	2.1	7.8	80.6	784	<0.00050	<0.10	0.066	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.198	<0.000200	<0.01	<0.00050	<0.00020		
EP-6	0.31	25.9	275	1.8	7.8	86.4	752	<0.00050	0.05	0.046	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.177	<0.000200	<0.01	<0.00050	<0.00020	0	0.93
EP-7	0.39	27.7	349	1.8	7.8	87.3	828	<0.00050	<0.10	0.054	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.195	<0.000200	<0.01	<0.00050	<0.00020	0	1.2
EP-8	0.34	26.4	339	1.8	8	89.8	836	<0.00050	<0.10	0.076	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.182	<0.000200	<0.01	<0.00050	<0.00020	0	0.82
EP-9	0.34	27.8	407	1.6	7.9	99.8	936	<0.00050	<0.10	0.072	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.185	<0.000200	<0.01	<0.00050	<0.00020	0.32	0.31
EP-10	0.53	36.3	819	2.1	7.8	84.5	1360	<0.00050	<0.10	0.128	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.275	<0.000200	<0.01	<0.00050	<0.00020	0.32	0.69
EP-11	0.32	21	255	2.1	7.9	67.6	688	<0.00050	0.05	0.055	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.173	<0.000200	<0.01	<0.00050	<0.00020	0.04	0.53
EMW-3	0.3	19.4	238	2	7.8	70	696	<0.00050	<0.10	0.047	<0.00050	<0.000200	<0.010	<0.00050	<0.00050	0.166	<0.000200	<0.01	<0.00050	<0.00020	0.58	1.4

Additional Wells — Field Results

Additional Wells	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
RW-1	24.32	7.23	-11	3800	0.0	0.94	2.44
RW-4	15.37	7.42	-32	3460	1.4	0.7	2.21
RW-5	15.83	7.64	-89	1110	0.0	0.24	0.713
RW-6	14.68	7.50	33	1550	0.7	1.21	0.994
RW-7	14.63	7.29	-99	1670	0.0	2.18	1.07
RW-9	14	7.29	52	3160	2.0	6.41	2.02
WDB-5	16.57	7.37	-102	1260	0.0	0.33	0.804
WDB-7	14.05	7.30	-49	1410	0.0	0.4	0.901
WDB-19	15.1	7.38	-192	1720	0.0	0.28	1.1
EP-2	18.66	7.52	-178	1550	4	1.17	0.994
EP-3	21.88	7.44	-127	1520	2.4	1.1	0.971
EP-5	18.33	7.36	-169	1600	49.5	2.41	1.02
EP-6	**14.29**	**7.69**	**-188**	**1440**	**18.2**	**0.09**	0.923
EP-7	14.47	7.72	-278	1720	1.1	0.29	1.1
EP-8	16.06	8.05	-306	1710	0.5	1.72	1.09
EP-9	15.87	7.66	-284	1910	1.7	1.57	1.22
EP-10	14.63	7.53	-270	2900	1.4	0.46	1.83
EP-11	14.61	7.36	-225	1430	6.2	0.31	0.917
EMW-3	14.52	7.5	-148	1380	0	0.51	0.884

Round 19

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
CL-U-1	0.27	58.2	457	0.912	7.60	116	1180	<0.02	0.0296	0.0840	<0.001	<0.005	0.0017	<0.01	<0.02	0.247	<0.00015	0.0036	0.001	<0.00020	0.33	0.56
CL-U-2	0.26	58.3	436	0.934	7.60	115	1100	<0.02	0.0264	0.0920	<0.001	<0.005	0.0016	<0.01	<0.02	0.227	<0.00015	0.0039	0.0009	<0.00020	0.37	0.55
CLW-1	0.24	37.2	333	1.02	7.80	62.7	848	<0.02	0.0324	0.0620	<0.001	<0.005	0.0078	<0.01	<0.02	0.208	<0.00015	0.0043	0.0019	<0.00020	0.34	0.06
CLW-2	0.29	51.1	536	1.1	7.70	94.5	1110	<0.02	0.0267	0.0820	<0.001	<0.005	0.0023	<0.01	<0.02	0.264	<0.00015	0.0044	0.0012	<0.00020	0.37	0.41
CLW-3	0.31	39.7	392	1.24	7.80	98.4	960	<0.02	0.0405	0.1000	<0.001	<0.005	0.0019	<0.01	<0.02	0.234	<0.00015	0.00510	0.001	<0.00020	0.24	0.9
CLW-4	0.29	35.3	360	1.38	7.80	84.7	916	<0.02	0.0334	0.0760	<0.001	<0.005	0.0029	<0.01	<0.02	0.23	<0.00015	0.0048	0.0008	<0.00020	0.37	0.49
CLW-5	0.34	34.0	419	1.72	7.80	86.1	904	<0.02	0.0242	0.0690	<0.001	<0.005	0.0048	<0.01	<0.02	0.229	<0.00015	0.00460	0.0009	<0.00020	0.50	0.54
CLW-6	0.29	34.4	352	1.32	7.80	87.8	980	<0.02	0.0364	0.0830	<0.001	<0.005	0.0024	<0.01	<0.02	0.233	<0.00015	0.00430	0.0009	<0.00020	0.74	0.02
CLW-7	0.24	45.5	384	0.987	7.40	71.1	916	<0.02	0.0252	0.0530	<0.001	<0.005	0.0055	<0.01	<0.02	0.222	<0.00015	0.00370	0.0009	<0.00020	0.85	-0.55
CLW-8	0.25	41.4	335	1.01	7.60	66.7	832	<0.02	0.0391	0.0620	<0.001	<0.005	0.0054	<0.01	<0.02	0.224	<0.00015	0.00510	0.0018	<0.00020	0.86	1.3
CLW-9	0.32	24.6	294	2.08	7.80	83.5	788	<0.02	0.041	0.047	<0.001	<0.005	0.0025	<0.01	<0.02	0.170	<0.00015	0.0053	0.0015	<0.00020	0.14	0.33
CL-U-3	0.24	57.5	417	0.827	7.70	115	1050	<0.02	0.0198	0.049	<0.001	<0.005	0.0015	<0.01	<0.02	0.220	<0.00015	0.00320	<0.00050	<0.00020	0.17	0.74

Landfill Wells	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
CL-U-1	15.25	7.25	-149	1960	0.0	0.24	1.25
CL-U-2	14.86	7.11	-191	1910	0.0	0.17	1.23
CLW-1	14.50	7.44	-160	1560	0.9	0.36	1.00
CLW-2	14.50	7.42	-203	2050	1.0	0.59	0.31
CLW-3	14.13	7.47	-233	1780	1.1	0.73	1.14
CLW-4	14.11	7.5	-115	1680	1.2	1.91	1.08
CLW-5	13.12	7.49	-234	1740	1.8	0.92	1.11
CLW-6	14.31	7.48	-262	1670	0.9	1.00	1.07
CLW-7	15.26	7.37	-151	1680	0.7	0.80	1.07
CLW-8	15.34	7.43	-117	1570	0.1	0.12	1.01
CLW-9	14.55	7.49	-305	1570	2.5	0.36	1
CL-U-3	16.11	7.43	-192	1900	0.0	5.31	1.21

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
BA-U-1	0.58	213	1490	0.74	7.40	793	3080	<0.02	0.0205	0.0640	<0.001	<0.005	0.0012	0.0015	<0.02	0.415	<0.00015	0.0028	0.0069	<0.00020	0.10	0.74
BA-U-2	0.33	94.9	867	0.705	7.60	93.2	1810	<0.02	0.0202	0.1460	<0.001	<0.005	0.002	<0.01	<0.02	0.328	<0.00015	0.0017	0.0035	<0.00020	0.03	0.26
BAC-1	2.56	248	2080	0.502	7.20	1540	5400	<0.02	<0.05	0.037	<0.001	<0.005	<0.005	<0.01	<0.02	0.494	<0.00015	<0.01	0.0002	<0.00020	0.07	1.9
BAC-2	4.75	233	1320	0.839	7.20	1420	8200	<0.02	<0.05	0.0220	<0.001	<0.005	0.007	<0.01	<0.02	0.425	<0.00015	0.08	0.02	<0.00020	-0.07	1.8
BAC-3	5.35	372	3220	0.617	7.30	3840	11600	<0.02	0.05	0.0280	<0.001	<0.005	0.008	<0.01	<0.02	0.796	<0.00015	0.02	0.02	<0.00020	0.62	0.89
BAC-4	0.7	76.2	703	1.01	7.60	464	1620	<0.02	0.0329	0.0580	<0.001	<0.005	0.0047	<0.01	<0.02	0.314	<0.00015	0.0254	0.0021	<0.00020	0.51	0.36
BAC-5	0.77	88.1	765	0.931	7.60	732	1820	<0.02	0.0310	0.0390	<0.001	<0.005	0.0041	<0.01	<0.02	0.351	<0.00015	0.0391	0.0021	<0.00020	0.80	0.31
BAC-6	4.2	106	527	0.953	7.60	1070	2430	<0.02	0.0295	0.0170	<0.001	<0.005	0.0022	0.0008	<0.02	0.269	<0.00015	0.0808	0.0031	<0.00020	0.50	0.1
BAC-7	4.44	127	802	1.41	7.50	1320	3090	<0.02	0.0367	0.022	<0.001	<0.005	0.0042	0.002	<0.02	0.332	<0.00015	0.0597	0.0095	<0.00020	0.0	0.78
BAC-8	0.31	24.4	275	1.52	7.80	88.1	896	<0.02	0.0653	0.0370	<0.001	<0.005	0.0034	<0.01	<0.02	0.183	<0.00015	0.0056	0.0012	<0.00020	0.24	0.26
BAC-9	0.3	32.7	356	1.26	7.70	81.6	928	<0.02	0.05	0.0460	<0.001	<0.005	0.0035	<0.01	<0.02	0.194	<0.00015	0.0038	0.0015	<0.00020	0.39	0.76
BAC-10	0.31	24.8	283	1.53	7.80	83.3	844	<0.02	0.0583	0.037	<0.001	<0.005	0.0033	<0.01	<0.02	0.17	<0.00015	0.0059	0.0013	<0.00020	0.38	-0.18
BAC-11	0.29	64.2	719	0.977	7.70	163	1420	<0.02	<0.05	0.0930	<0.001	<0.005	<0.005	<0.01	<0.02	0.205	<0.00015	<0.01	<0.02	<0.00020	0.41	1.00
BAC-12	0.3	33.3	364	1.23	7.80	79.2	908	<0.02	0.042	0.072	<0.001	<0.005	0.002	<0.01	<0.02	0.181	<0.00015	0.004	0.0009	<0.00020	0.11	0.27
BAC-13	0.62	131	1180	0.888	7.50	364	2490	<0.02	0.034	0.0480	<0.001	<0.005	0.0028	<0.01	<0.02	0.319	<0.00015	0.0017	0.0039	<0.00020	0.16	1.00
BAC-14	0.54	157	1190	0.668	7.40	533	2700	<0.02	0.0285	0.045	<0.001	<0.005	0.0024	<0.01	<0.02	0.365	<0.00015	0.0017	0.0032	<0.00020	-0.03	0.26
BAC-15	0.32	25.1	240	1.74	7.90	80.6	680	<0.02	<0.05	0.04	<0.001	<0.005	<0.025	<0.01	<0.02	0.085	<0.00015	<0.05	<0.10	<0.00020	1.1	1.00
BAC-16	0.29	21.9	330	1.81	7.90	78.4	880	<0.02	0.08	0.034	<0.001	<0.005	<0.005	<0.01	<0.02	0.144	<0.00015	<0.01	<0.02	<0.00020	0.52	1.60
BAC-17	0.19	24.8	147	0.672	7.90	101	492	<0.02	0.0345	0.029	<0.001	<0.005	0.0016	<0.01	<0.02	0.065	<0.00015	0.004	0.0005	<0.00020	0.05	-0.14
BAC-18	0.24	22.1	187	1.14	7.90	90.3	1160	<0.02	<0.05	0.0450	<0.001	<0.005	<0.005	<0.01	<0.02	0.086	<0.00015	<0.01	<0.02	<0.00020	0.04	0.38
BAC-19	0.25	27.9	255	1.09	7.80	87.7	760	<0.02	<0.05	0.0400	<0.001	<0.005	<0.005	<0.01	<0.02	0.101	<0.00015	<0.01	<0.02	<0.00020	-0.04	0.95
BAC-20	0.22	25	213	0.839	7.70	95.8	700	<0.02	<0.05	0.0390	<0.001	<0.005	<0.005	<0.01	<0.02	0.083	<0.00015	<0.01	<0.02	<0.00020	0.09	0.93
BAC-21	0.24	26.9	233	1.04	7.70	87.2	620	<0.02	<0.05	0.0460	<0.001	<0.005	<0.005	<0.01	<0.02	0.106	<0.00015	<0.01	<0.02	<0.00020	0.12	1.1
BAC-22	0.24	27.8	273	1.08	7.80	99.1	860	<0.02	0.05	0.0320	<0.001	<0.005	<0.005	<0.01	<0.02	0.111	<0.00015	<0.01	<0.02	<0.00020	0.13	1.7
BAC-23	0.25	31	247	0.969	7.70	93.2	780	<0.02	<0.05	0.0410	<0.001	<0.005	<0.005	<0.01	<0.02	0.116	<0.00015	<0.01	<0.02	<0.00020	0.38	1.9
BAC-24	0.27	27.9	273	1.28	7.80	84.6	840	<0.02	0.05	0.0570	<0.001	<0.005	<0.005	<0.01	<0.02	0.139	<0.00015	<0.01	<0.02	<0.00020	0.08	1.9
BAC-25	0.25	26.1	247	1.13	7.90	83.4	580	<0.02	<0.05	0.0680	<0.001	<0.005	<0.005	<0.01	<0.02	0.107	<0.00015	<0.01	<0.02	<0.00020	0.46	1.4
BAC-26	0.27	24.1	353	1.47	8.00	72.4	820	<0.02	0.049	0.0880	<0.001	<0.005	0.0019	<0.01	<0.02	0.173	<0.00015	0.0046	0.0007	<0.00020	0.17	0.52
BAC-27	0.27	24.8	299	1.43	7.80	63.1	804	<0.02	0.0479	0.0720	<0.001	<0.005	0.0019	<0.01	<0.02	0.178	<0.00015	0.0045	0.0009	<0.00020	0.22	0.51
BAC-28	0.25	0.147	336	1.3	7.80	68.3	880	<0.02	<0.05	0.0700	<0.001	<0.005	<0.005	<0.01	<0.02	0.147	<0.00015	<0.01	<0.02	<0.00020	0.28	1.7
BAC-29	0.3	94.5	908	0.713	7.60	232	1860	<0.02	0.0298	0.0670	<0.001	<0.005	0.0018	<0.01	<0.02	0.314	<0.00015	0.0028	0.0027	<0.00020	0.32	0.96
BAC-30	0.3	65.0	623	1.05	7.70	137	1470	<0.02	0.0356	0.0720	<0.001	<0.005	0.0012	<0.01	<0.02	0.259	<0.00015	0.0036	0.0024	<0.00020	0.06	0.37
BAC-31	0.29	63	648	1.02	7.70	138	1460	<0.02	0.0327	0.0840	<0.001	<0.005	0.0044	<0.01	<0.02	0.248	<0.00015	0.0037	0.0023	<0.00020	0.44	0.16
BAC-32	0.27	24.4	302	1.45	7.80	61.6	796	<0.02	0.0476	0.0790	<0.001	<0.005	0.0016	<0.01	<0.02	0.175	<0.00015	0.0045	0.0005	<0.00020	0.31	0.79
BAC-33	0.27	34.6	416	1.21	7.70	70.9	940	<0.02	0.0388	0.1060	<0.001	<0.005	0.0015	<0.01	<0.02	0.209	<0.00015	0.0039	0.001	<0.00020	0.54	0.63
BAC-34	0.26	21.3	252	1.5	7.90	56.3	684	<0.02	0.0509	0.065	<0.001	<0.005	0.0015	<0.01	<0.02	0.165	<0.00015	0.004	0.0005	<0.00020	0.15	0.69
BAC-35	0.27	26.4	306	1.41	7.80	65.3	828	<0.02	0.0491	0.0740	<0.001	<0.005	0.0019	<0.01	<0.02	0.181	<0.00015	0.0043	0.0008	<0.00020	0.48	-0.05
BAC-36	0.24	24.2	185	1.01	7.90	97.8	860	<0.02	<0.05	0.0530	<0.001	<0.005	<0.005	<0.01	<0.02	0.088	<0.00015	<0.01	<0.02	<0.00020	1.0	1.3
BAC-37	0.24	23.5	197	1.06	8.00	97.8	600	<0.02	<0.05	0.0380	<0.001	<0.005	<0.005	<0.01	<0.02	<0.005	<0.00015	<0.01	<0.02	<0.00020	0.54	1.5
BAC-38	0.25	28.1	241	1.03	7.80	92.5	780	<0.02	<0.05	0.0630	<0.001	<0.005	<0.005	<0.01	<0.02	0.105	<0.00015	<0.01	<0.02	<0.00020	0.44	2.2

Bottom Ash	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
BA-U-1	15.82	7.25	-50	5110	0.2	0.3	3.22
BA-U-2	16.08	7.31	-228	3080	0.5	0.43	1.97
BAC-1	16.32	6.87	-37	8440	0.2	0.16	5.32
BAC-2	15.51	6.99	-15	10300	0	0.62	6.37
BAC-3	15.46	7.05	1	15700	0	0.74	9.73
BAC-4	16.52	7.19	-103	2530	1.3	0.19	1.62
BAC-5	15.13	7.31	-88	3040	0	0.15	1.95
BAC-6	14.42	7.43	-59	3690	0	0.15	2.36
BAC-7	15.79	7.57	-203	4150	0.5	0.08	3.04
BAC-8	15.51	7.23	2	1560	0.0	2.72	0.997
BAC-9	15.42	7.33	-29	1730	0.0	1.77	1.11
BAC-10	15.15	7.44	-43	1560	0.0	0.95	0.996
BAC-11	15.06	7.45	23	2800	0.0	4.29	1.79
BAC-12	15.71	7.35	-38	1650	0.8	2.79	1.05
BAC-13	14.35	6.97	-118	4320	0.0	0.93	2.76
BAC-14	15.21	7.16	-26	4340	0.3	1.10	2.78
BAC-15	15.27	7.61	-8	1500	0.9	1.24	0.957
BAC-16	15.07	7.60	-46	1730	0.0	1.52	1.1
BAC-17	14.57	7.64	-148	958	0.0	0.34	0.613
BAC-18	14.97	7.62	-113	1220	0.8	0.15	0.781
BAC-19	14.98	7.48	-261	1400	0.9	0.09	0.898
BAC-20	15.98	7.47	-146	1180	0.5	0.10	0.753
BAC-21	14.67	7.44	-141	1370	1.1	0.18	0.877
BAC-22	14.72	7.46	-98	1390	0.7	0.30	0.888
BAC-23	14.44	7.43	-55	1470	0.8	1.11	0.945
BAC-24	14.81	7.47	-88	1520	1.0	0.90	0.975
BAC-25	14.81	7.39	-203	1360	0.0	0.25	0.868
BAC-26	15.25	7.38	-156	1440	0.0	0.23	0.924
BAC-27	14.46	7.42	-156	1470	0.2	0.15	0.944
BAC-28	14.99	7.52	-123	1630	0.7	0.10	1.04
BAC-29	15.82	7.42	-71	3220	0.0	0.34	2.06
BAC-30	17.08	7.45	-154	2560	0.0	0.2	1.64
BAC-31	15.27	7.17	-90	2600	0.0	0.31	1.66
BAC-32	15.15	7.50	-138	1450	0.7	0.11	0.926
BAC-33	15.36	7.45	-190	1780	0.6	0.14	1.14
BAC-34	14.73	7.46	-34	1340	0.5	0.11	0.853
BAC-35	15.35	7.50	-120	1490	0.6	0.1	0.956
BAC-36	15.18	7.39	-261	1200	0.0	0.12	0.771
BAC-37	15.46	7.24	-144	1190	0.0	0.18	0.764
BAC-38	15.44	750.00	-165	1390	0.9	0.15	0.892

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
SI-U-1	0.4	84.1	511	0.547	7.70	418	1390	<0.02	0.0135	0.0430	<0.001	<0.005	0.0023	<0.01	<0.02	0.221	<0.00015	0.0017	0.0055	<0.00020	0.25	0.13
WW-U-1	1.19	180	1490	0.392	7.50	1430	4330	<0.02	0.0118	0.0290	<0.001	<0.005	0.006	0.0006	<0.02	0.34	<0.00015	0.0099	0.0158	<0.00020	0.19	0.04
WW-U-2	1.34	299	1840	0.478	7.40	1260	4720	<0.02	0.014	0.0400	<0.001	<0.005	0.0044	0.0006	<0.02	0.503	<0.00015	0.0014	0.0128	<0.00020	0.18	1.7
WWC-1	12.2	364	4460	<0.100	7.10	3040	12700	<0.02	0.0343	0.0270	<0.001	<0.005	0.0033	0.0011	<0.02	0.961	<0.00015	0.0176	0.0924	<0.00020	0.27	0.5
WWC-2	0.21	56.4	382	0.429	7.70	130	932	<0.02	0.015	0.0360	<0.001	<0.005	0.0039	<0.01	<0.02	0.138	<0.00015	0.0034	0.001	<0.00020	-0.04	-0.39
WWC-3	0.26	40.2	364	0.786	7.50	99.3	832	<0.02	0.0185	0.0450	<0.001	<0.005	0.0035	<0.01	<0.02	0.162	<0.00015	0.0043	0.0015	<0.00020	0.15	0.08
WWC-4	0.45	108	908	0.623	7.80	454	1800	<0.02	0.0164	0.0350	<0.001	<0.005	0.0005	<0.01	<0.02	0.258	<0.00015	0.0024	0.0023	<0.00020	0.30	0.37
WWC-5	2.14	265	1650	0.353	7.20	1520	4560	<0.02	0.0186	0.0320	<0.001	<0.005	0.0034	0.0011	<0.02	0.449	<0.00015	0.0013	0.0124	<0.00020	0.23	1.08
WWC-6	0.48	136	1100	0.158	7.50	508	2420	<0.02	0.0146	0.072	<0.001	<0.005	0.0027	<0.01	<0.02	0.208	<0.00015	0.0067	0.0041	<0.00020	0.32	1.1
WWC-7	0.38	74.0	503	0.442	7.50	214	1220	<0.02	0.022	0.059	<0.001	<0.005	0.003	<0.01	<0.02	0.168	<0.00015	0.0067	0.0016	<0.00020	0.63	0.44
WWC-8	0.46	116	1040	0.402	7.40	452	2270	<0.02	0.0172	0.05	<0.001	<0.005	0.0047	<0.01	<0.02	0.204	<0.00015	0.0028	0.0045	<0.00020	0.09	1.6
WWC-9	0.21	61.5	481	0.693	7.60	153	1050	<0.02	0.0231	0.079	<0.001	<0.005	0.002	<0.01	<0.02	0.183	<0.00015	0.00220	0.0028	<0.00020	0.23	1.3
WWC-10	0.26	51.7	414	<0.100	7.80	172	1080	<0.02	0.0249	0.033	<0.001	<0.005	0.0028	<0.01	<0.02	0.12	<0.00015	0.0066	0.0007	<0.00020	0.07	0.76
WWC-11	0.17	38.5	240	0.389	7.70	123	628	<0.02	0.01700	0.0540	<0.001	<0.005	0.0017	<0.01	<0.02	0.083	<0.00015	0.0044	0.0006	<0.00020	0.12	0.52
WWC-12	0.28	89.8	569	0.377	7.60	209	1440	<0.02	0.0285	0.061	<0.001	<0.005	0.0037	<0.01	<0.02	0.136	<0.00015	0.005	0.0009	<0.00020	0.10	-0.46
WWC-13	0.23	102	593	0.315	7.60	251	1500	<0.02	0.018	0.0610	<0.001	<0.005	0.0048	<0.01	<0.02	0.14	<0.00015	0.0031	0.0008	<0.00020	0.38	1.1
WWC-14	0.67	173	1400	0.257	7.40	832	3580	<0.02	0.0131	0.0490	<0.001	<0.005	0.0053	0.0005	<0.02	0.285	<0.00015	0.0056	0.0027	<0.00020	0.22	0.57
WWC-15	0.28	140	784	0.254	7.40	391	1980	<0.02	0.0156	0.0780	<0.001	<0.005	0.0036	<0.01	<0.02	0.16	<0.00015	0.0023	0.0011	<0.00020	0.51	-0.49
WWC-16	0.18	61.9	358	0.292	7.70	151	864	<0.02	0.0229	0.0420	<0.001	<0.005	0.0022	<0.01	<0.02	0.103	<0.00015	0.0034	0.0011	<0.00020	0.23	-0.29
WWC-17	0.21	61.8	423	0.54	7.60	174	1020	<0.02	0.0268	0.0590	<0.001	<0.005	0.0022	<0.01	<0.02	0.141	<0.00015	0.00250	0.0018	<0.00020	0.36	0.31

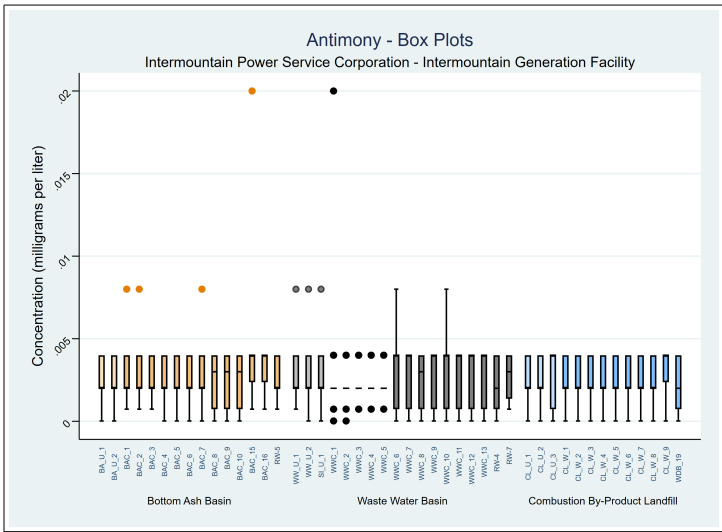
Waste Water	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
SI-U-1	15.58	7.33	-2	2510	0.70	3.06	1.6
WW-U-1	14.26	7.17	10	6800	0.00	5.17	4.28
WW-U-2	13.92	6.87	-1	7630	0.00	5.98	4.81
WWC-1	20.11	6.97	110	17700	0.00	2.35	11.0
WWC-2	15.01	7.25	-104	1810	0.00	0.14	1.16
WWC-3	14.6	7.18	-114	1670	0.00	0.40	1.07
WWC-4	13.12	7.26	-130	3050	0.00	3.52	1.95
WWC-5	12.75	7.00	13	7060	0.00	1.40	4.45
WWC-6	51.52	7.25	-9	4250	0.00	1.06	2.72
WWC-7	13.8	7.45	-97	2290	1.00	0.13	1.47
WWC-8	13.84	7.08	-55	3950	0.00	0.35	2.53
WWC-9	14.52	7.37	-109	2060	0.00	0.47	1.32
WWC-10	14.52	7.53	-130	1910	0.60	0.13	1.22
WWC-11	14.26	7.44	-211	1250	0.00	0.79	0.799
WWC-12	12.92	7.24	-125	2500	0.0	5.13	1.6
WWC-13	14.3	7.39	-83	2540	0.5	0.16	1.62
WWC-14	14.56	7.23	-94	5660	0.3	0.21	3.57
WWC-15	14.19	7.34	-165	3350	0.3	0.10	2.14
WWC-16	14.26	7.45	-75	1640	0.0	0.50	1.05
WWC-17	14.14	7.40	-73	1930	0.0	0.34	1.23

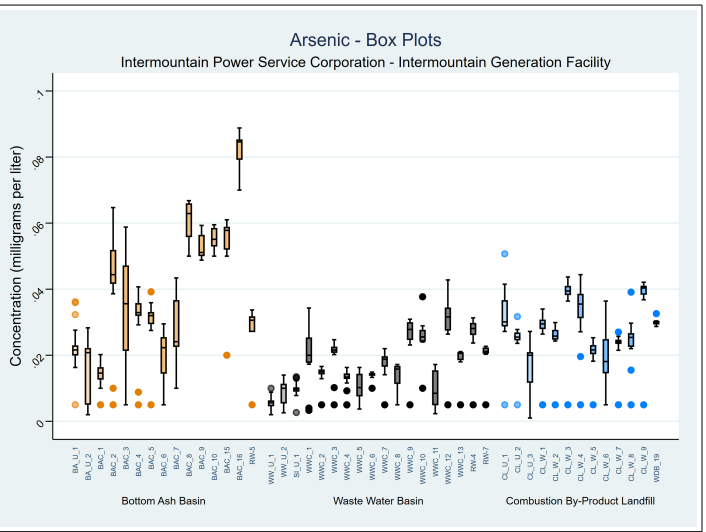
Additional Wells	Boron	Calcium	Chloride	Fluoride	pH	Sulfate	TDS	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226	Radium 228
RW-1	0.67						2690															
RW-4	0.74	122	1070	0.732	7.60	538.0	2330	<0.02	0.0237	0.0900	<0.001	<0.005	0.0007	<0.01	<0.02	0.32	<0.00015	0.00170	0.0016	<0.00020	0.32	0.4
RW-5	0.21						556															
RW-6	0.31						804															
RW-7	0.22						944															
RW-9	0.35						1940															
WDB-5	0.25						1880															
WDB-17	0.25						692															
WDB-7	0.24						720															
EP-2	0.31						844															
EP-3	0.26						816															
EP-5	0.38						956															
EP-6	0.31						752															
EP-7	<0.50						896															
EP-8	0.37						868															
EP-9	0.36						1050															
EP-10	0.51						1450															
EP-11	0.42						724															
EMW-1	<0.05						748															
EMW-3	<0.05						708															

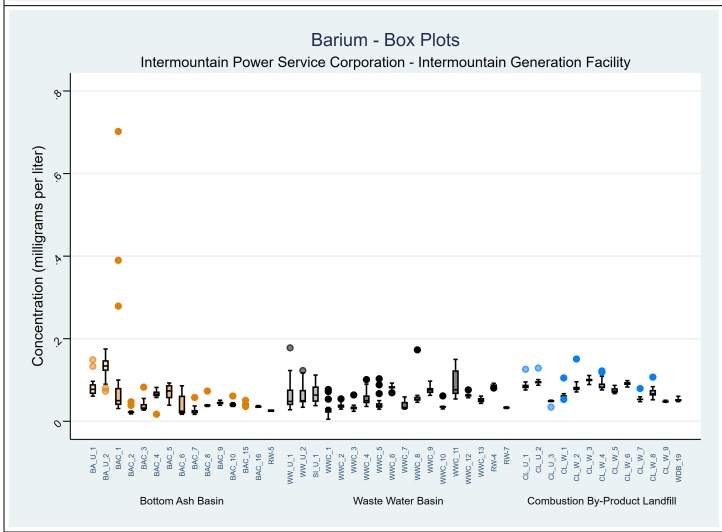
Additional Wells	Temp	pH	REDOX	Conductance	Turbidity (NTUs)	DO	TDS
RW-1	13.1	7.20	-30	4430	0.0	0.57	28.3
RW-4	15.3	7.36	-137	3630	0.0	5.4	2.33
RW-5	14.99	7.59	-106	1140	0.0	0.42	0.734
RW-6	16.81	7.70		1560	4.1		1
RW-7	14.11	7.50	-101	1730	0.7	1.36	1.11
RW-9	17.57	7.47		3980	0.5		2.55
WDB-5	16.1	7.49	-125	1270	2.4	1.09	0.815
WDB-17	15.04	7.38	-238	3490	0.0	0.81	2.23
WDB-19	17.57	7.51		1740	0.7		1.11
EP-2	10.34	7.53	-38	1620	1.6	6.26	1.04
EP-3	10.32	7.5	-97	1540	1.8	6.24	0.988
EP-5	13.76	7.28	-153	1670	0	3.14	1.07
EP-6	**13.52**	**7.54**	**-144**	**1370**	**7.6**	**0.22**	0.88
EP-7	14.77	7.79	0.244	1580	0	0.18	1.01
EP-8	15.46	7.91	-275	1610	0	0.19	1.03
EP-9	14.45	7.57	-268	2210	5.3	0.31	1.41
EP-10	14.25	7.47	-227	2830	0	0.39	1.8
EP-11	14.42	7.39	-217	1460	5.8	0.35	0.933
EMW-1	16.01	7.78	-123	1330	0	0.14	0.848
EMW-3	14.26	7.47	-186	1400	0	0.39	0.895

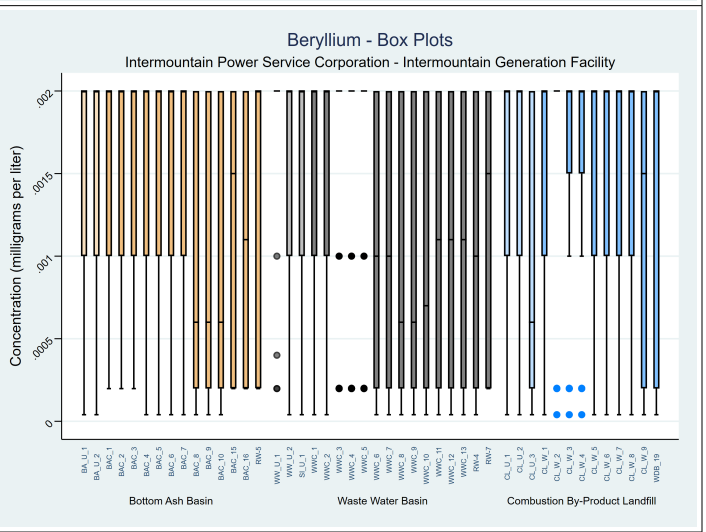
ATTACHMENT 3 BOX PLOTS

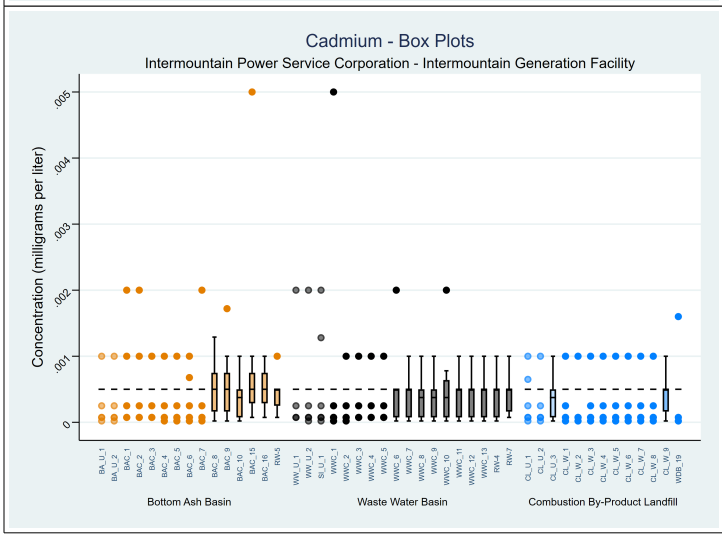
Box Plots
Intermountain Power Service Corporation - Intermountain Generation Facility
Delta, Utah

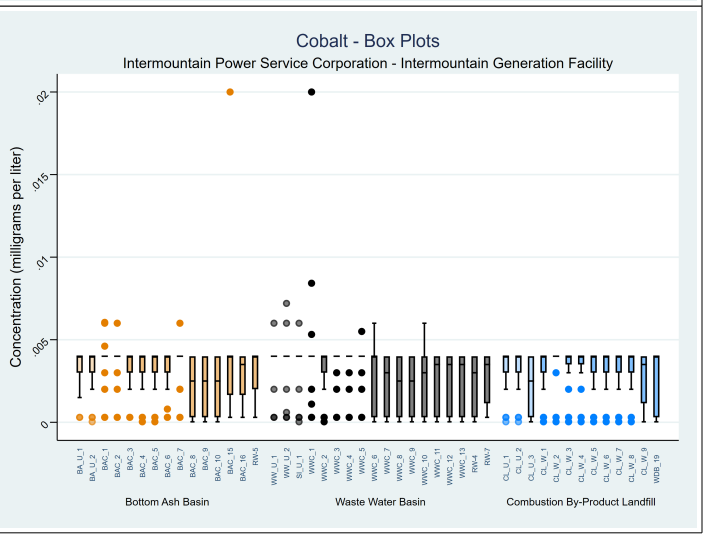


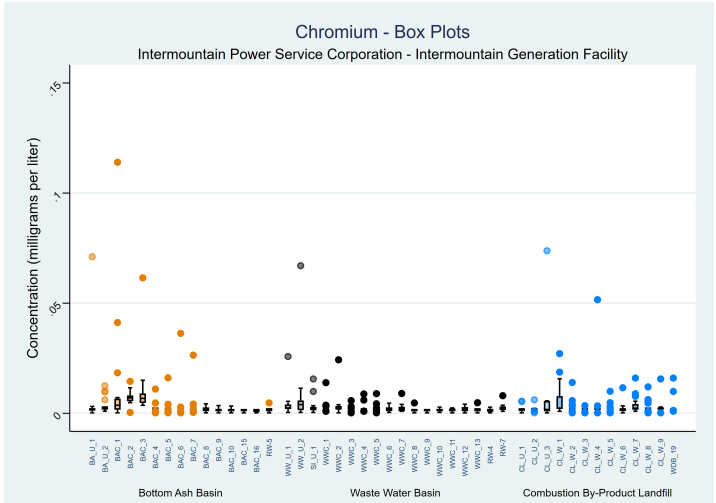


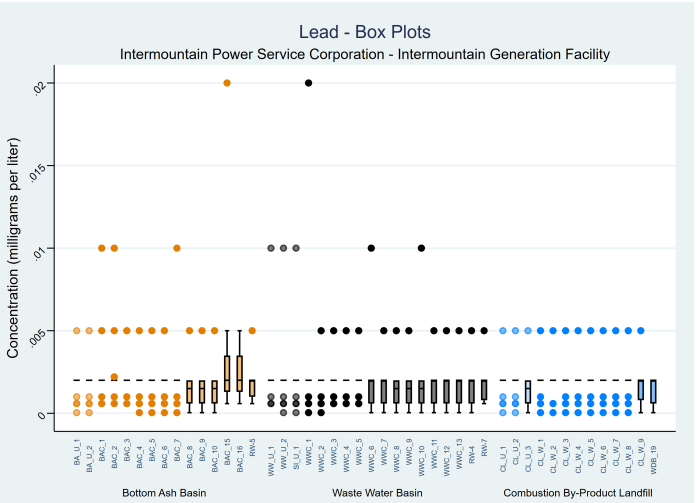


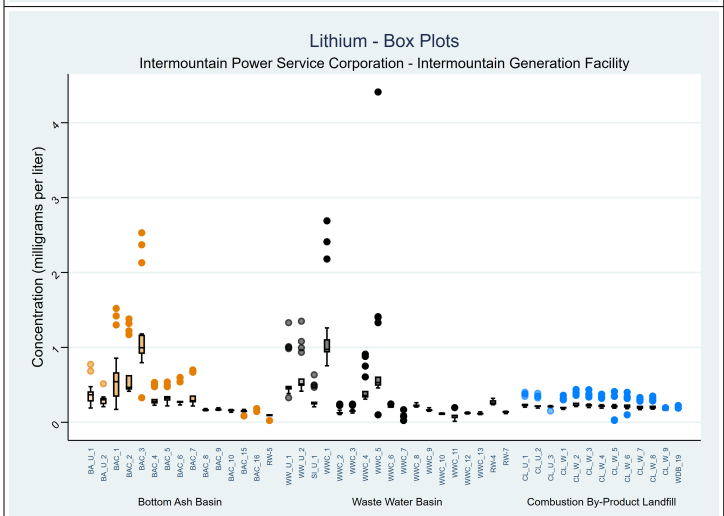


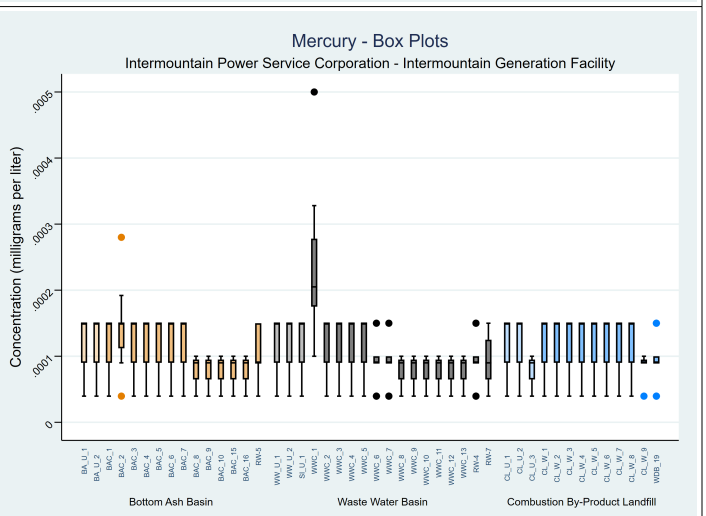


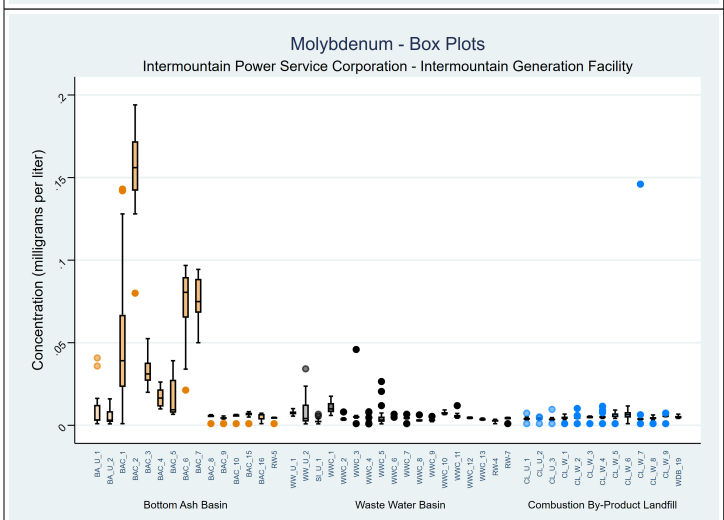




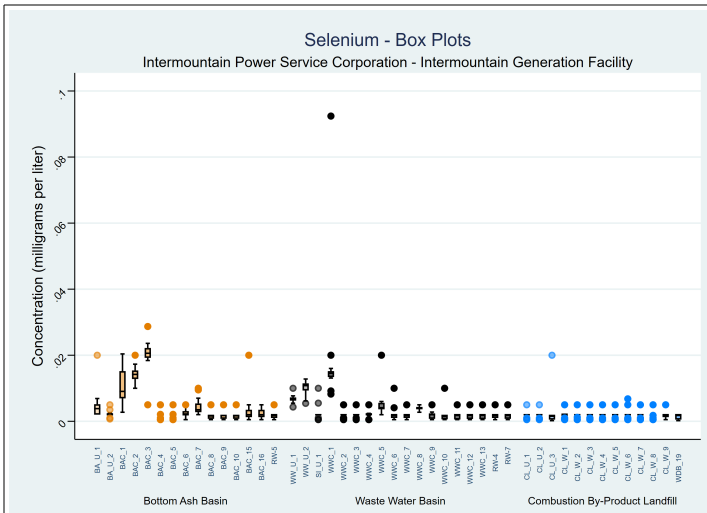


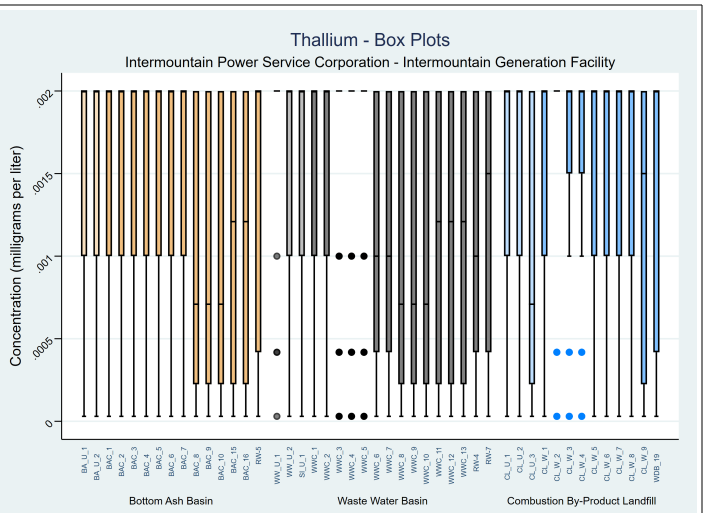




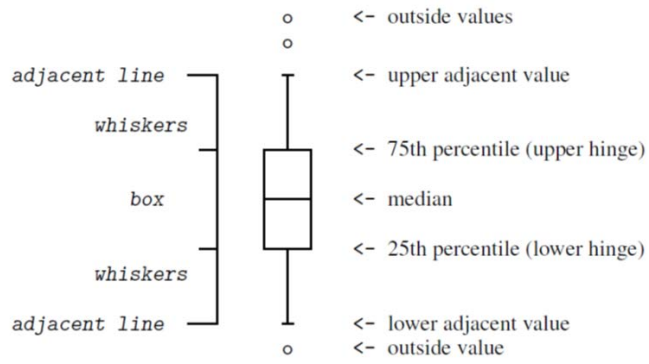


C:\Users\chlalonde\OneDrive - Stantec Office 365\IMP\2022_Analysis\deliverable\20221215_IMP_BP_Rad.png


Selenium - Box Plots
Intermountain Power Service Corporation - Intermountain Generation Facility
Concentration (milligrams per liter)
0
.02
.04
.06
.08
.1
BA_U_1
BA_U_2
BAC_1
BAC_2
BAC_3
BAC_4
BAC_5
BAC_6
BAC_7
BAC_8
BAC_9
BAC_10
BAC_15
BAC_16
RW-5
WW_U_1
WW_U_2
SI_U_1
WWC_1
WWC_2
WWC_3
WWC_4
WWC_5
WWC_6
WWC_7
WWC_8
WWC_9
WWC_10
WWC_11
WWC_12
WWC_13
RW-4
RW-7
CL_U_1
CL_U_2
CL_U_3
CL_W_1
CL_W_2
CL_W_3
CL_W_4
CL_W_5
CL_W_6
CL_W_7
CL_W_8
CL_W_9
WDB_19
Bottom Ash Basin
Waste Water Basin
Combustion By-Product Landfill


Thallium - Box Plots
Intermountain Power Service Corporation - Intermountain Generation Facility
Concentration (milligrams per liter)
0
.0005
.001
.0015
.002
BA_U_1
BA_U_2
BAC_1
BAC_2
BAC_3
BAC_4
BAC_5
BAC_6
BAC_7
BAC_8
BAC_9
BAC_10
BAC_15
BAC_16
RW-5
WW_U_1
WW_U_2
SI_U_1
WWC_1
WWC_2
WWC_3
WWC_4
WWC_5
WWC_6
WWC_7
WWC_8
WWC_9
WWC_10
WWC_11
WWC_12
WWC_13
RW-4
RW-7
CL_U_1
CL_U_2
CL_U_3
CL_W_1
CL_W_2
CL_W_3
CL_W_4
CL_W_5
CL_W_6
CL_W_7
CL_W_8
CL_W_9
WDB_19
Bottom Ash Basin
Waste Water Basin
Combustion By-Product Landfill

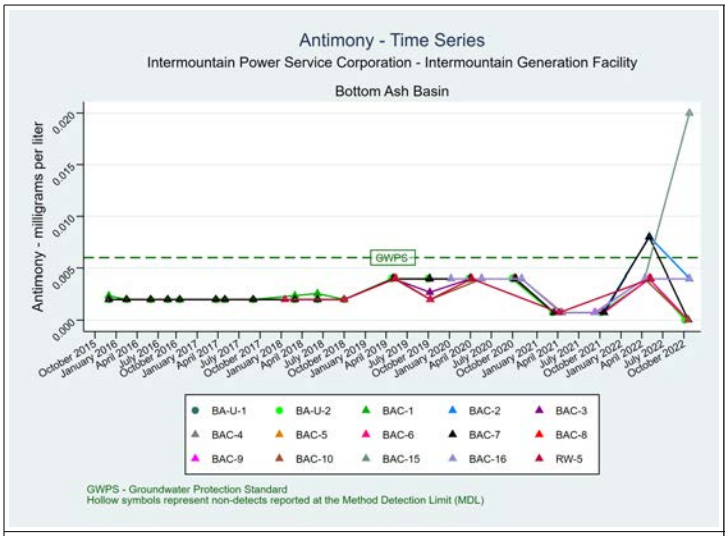
The diagram below graphically depicts the basics of the construction of the box plots (StataCorp LLC 2017).

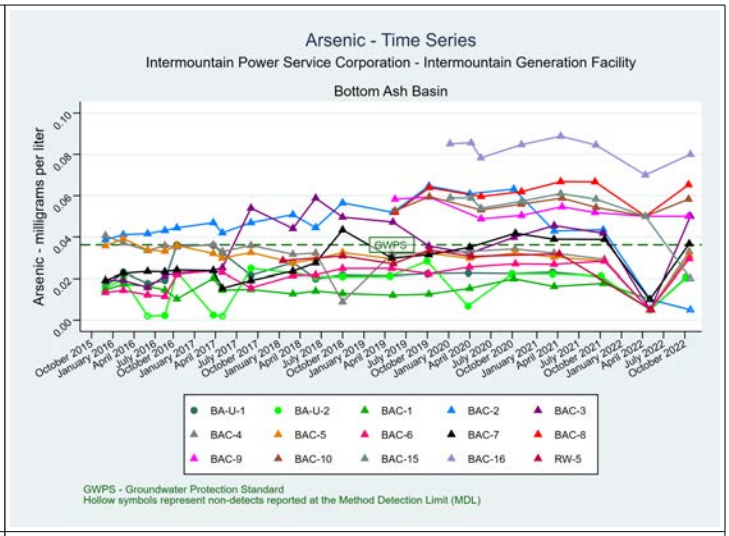


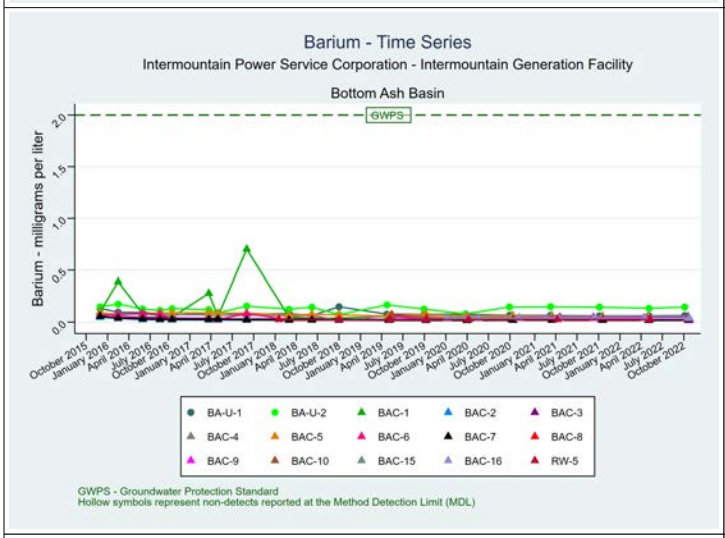
The box portion of the plot is the interquartile range (IQR), which represents the middle 50 percent of data, with the bottom of the box being the 25th percentile and the top of the box being the 75th percentile. The line inside the box is the median concentration. The top of the upper “whisker” represents the first observed concentration above the 75th percentile, whereas the bottom of the lower “whisker” represents the first observed concentration below the 25th percentile (upper adjacent value and lower adjacent value, respectively). Values that lie outside of the adjacent values represent outside (or outlier) concentrations (i.e. concentrations at the upper and lower ends of the distribution of the data). The method detection limit (MDL) was used as the reported value in order to construct the box plot when analytical results were reported as non-detects.

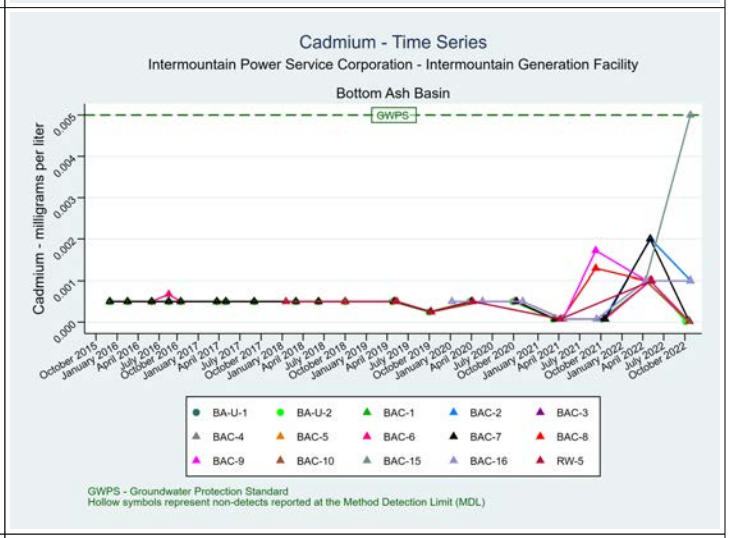
ATTACHMENT 4 TIME SERIES PLOTS

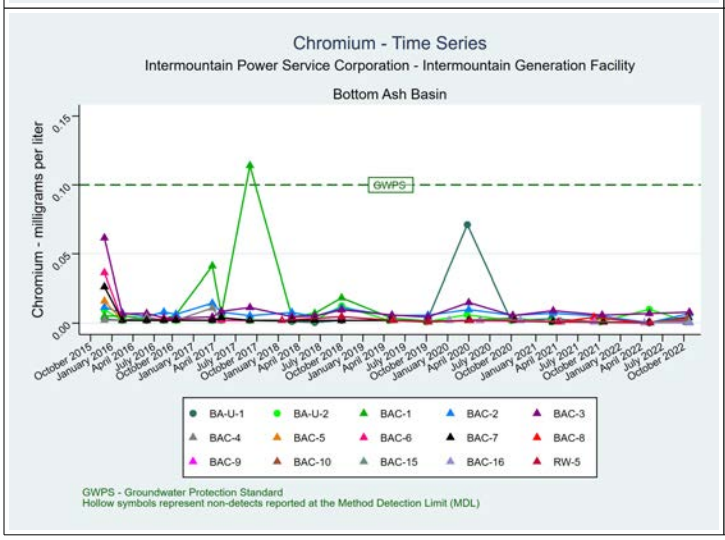
Time Series Plots
Bottom Ash Basin
Intermountain Power Service Corporation - Intermountain Generation Facility, Delta, Utah

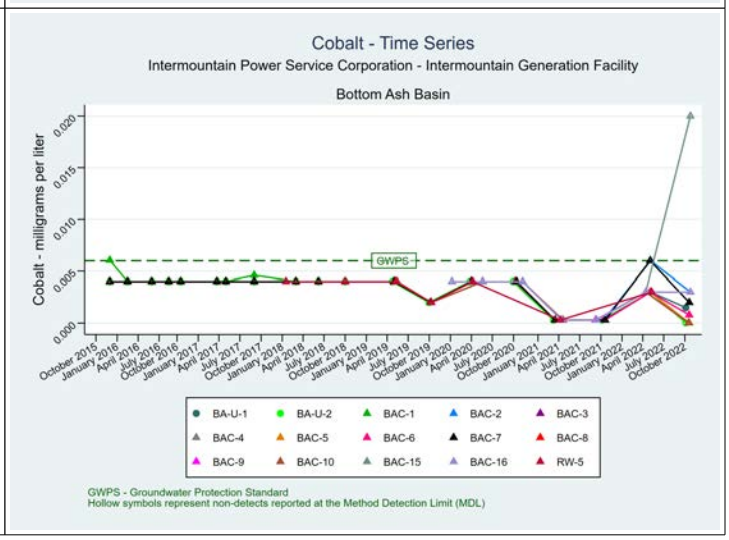


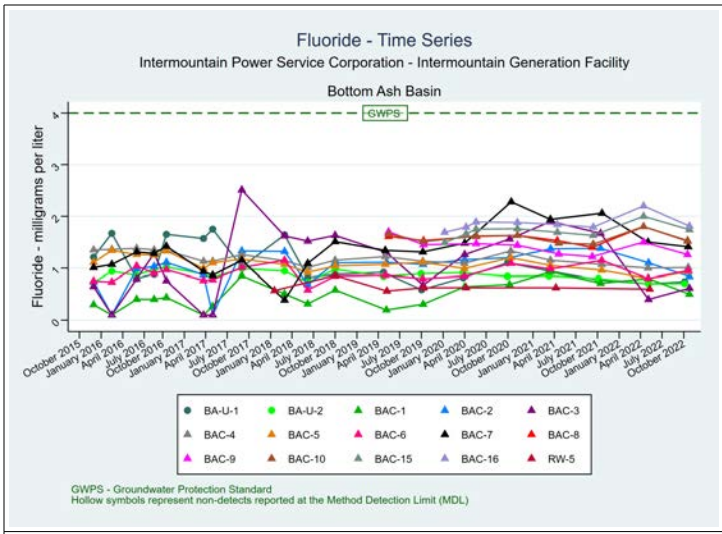


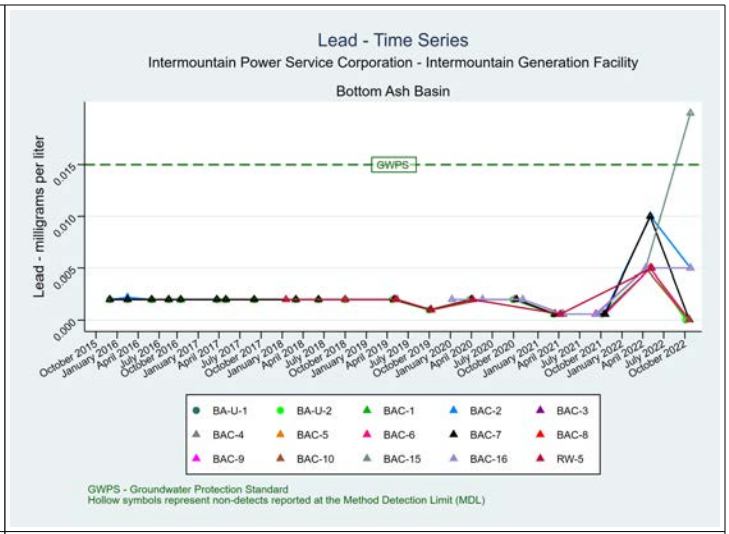


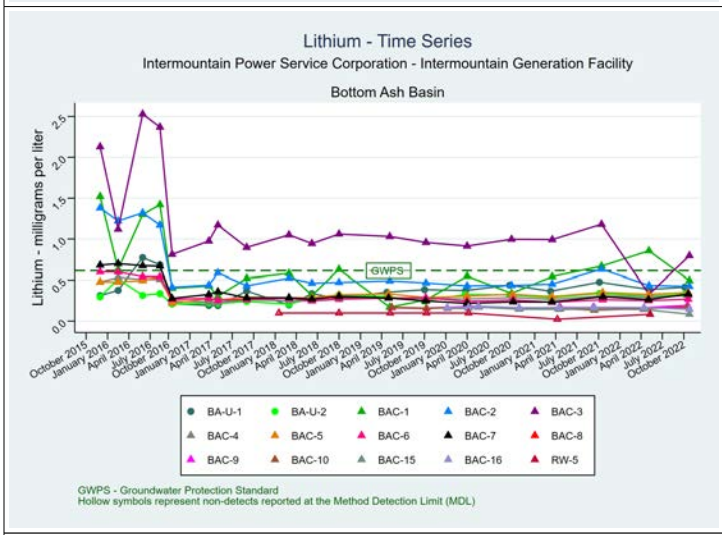


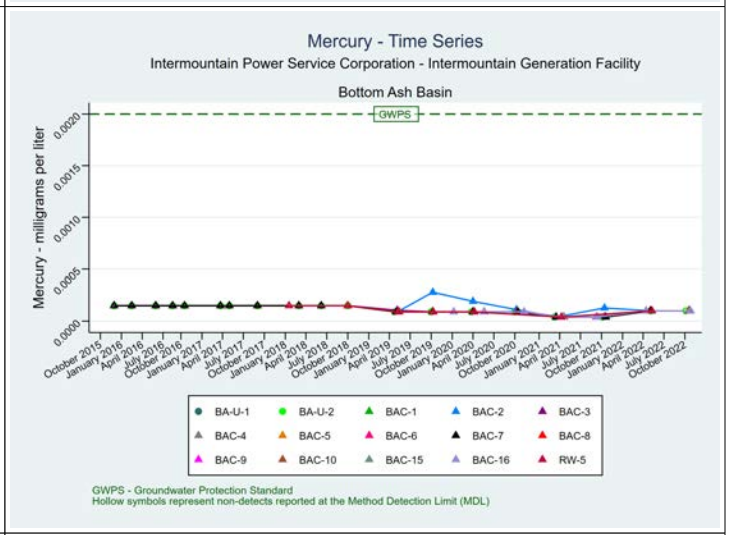


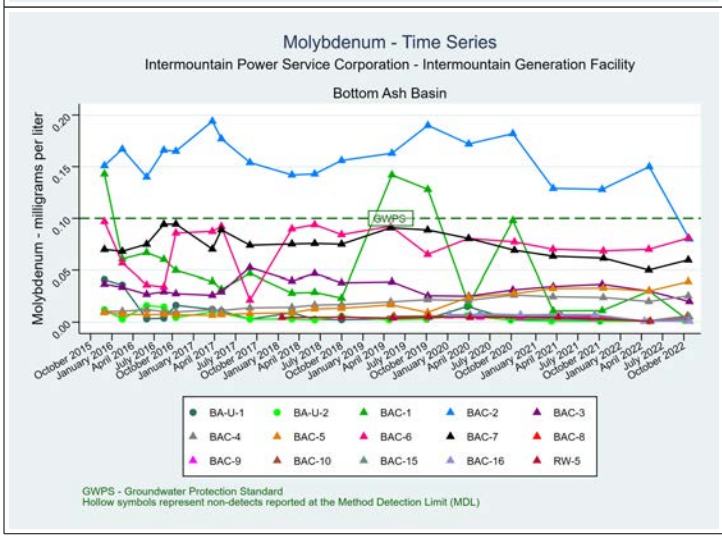


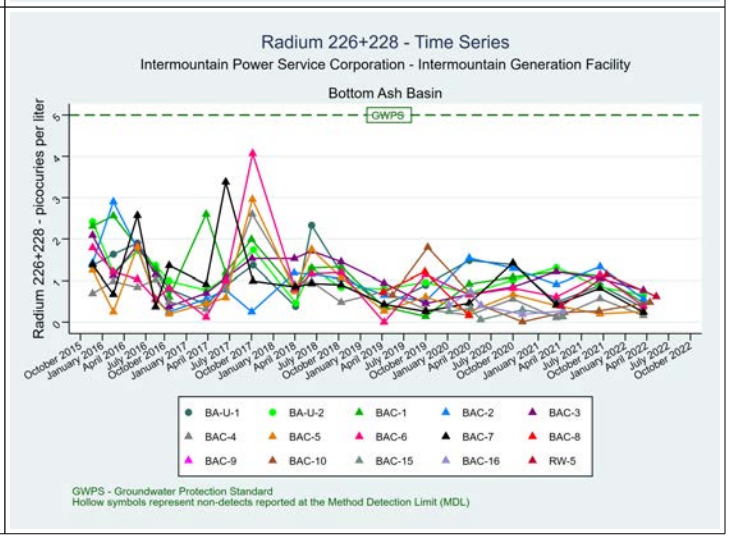

Fluoride - Time Series
Intermountain Power Service Corporation - Intermountain Generation Facility
Bottom Ash Basin
Fluoride - milligrams per liter
GWPS
BA-U-1 BA-U-2 BAC-1 BAC-2 BAC-3
BAC-4 BAC-5 BAC-6 BAC-7 BAC-8
BAC-9 BAC-10 BAC-15 BAC-16 RW-5
GWPS - Groundwater Protection Standard
Hollow symbols represent non-detects reported at the Method Detection Limit (MDL)

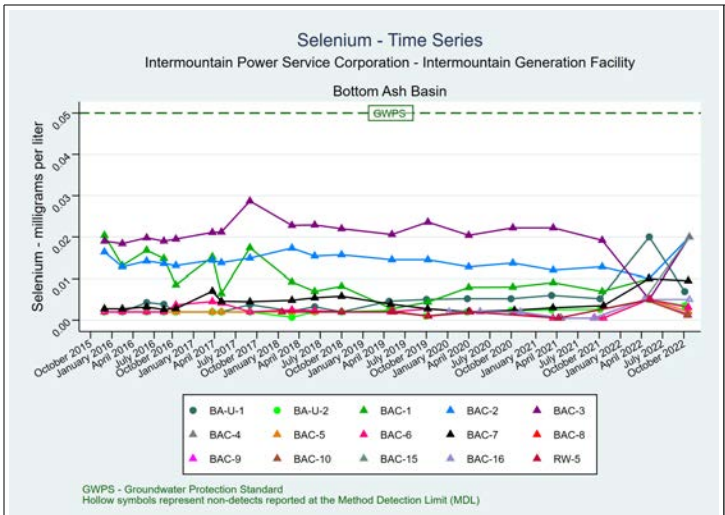

Lead - Time Series
Intermountain Power Service Corporation - Intermountain Generation Facility
Bottom Ash Basin
Lead - milligrams per liter
GWPS
BA-U-1 BA-U-2 BAC-1 BAC-2 BAC-3
BAC-4 BAC-5 BAC-6 BAC-7 BAC-8
BAC-9 BAC-10 BAC-15 BAC-16 RW-5
GWPS - Groundwater Protection Standard
Hollow symbols represent non-detects reported at the Method Detection Limit (MDL)

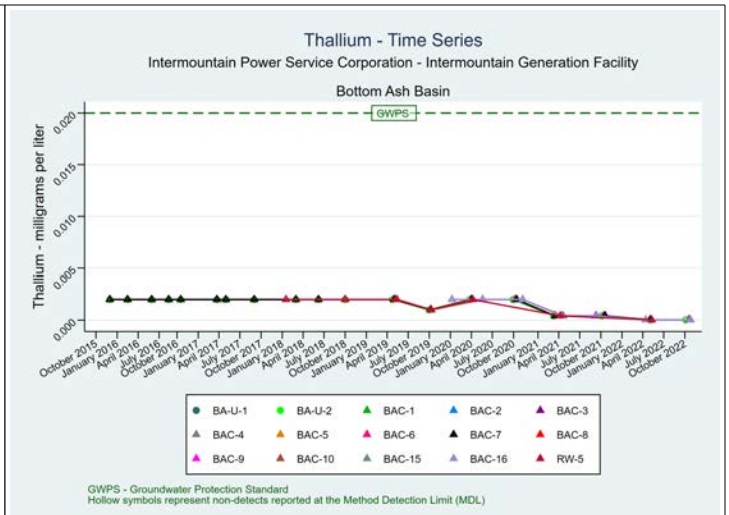

Lithium - Time Series
Intermountain Power Service Corporation - Intermountain Generation Facility
Bottom Ash Basin
Lithium - milligrams per liter
GWPS
BA-U-1 BA-U-2 BAC-1 BAC-2 BAC-3
BAC-4 BAC-5 BAC-6 BAC-7 BAC-8
BAC-9 BAC-10 BAC-15 BAC-16 RW-5
GWPS - Groundwater Protection Standard
Hollow symbols represent non-detects reported at the Method Detection Limit (MDL)


Mercury - Time Series
Intermountain Power Service Corporation - Intermountain Generation Facility
Bottom Ash Basin
Mercury - milligrams per liter
GWPS
BA-U-1 BA-U-2 BAC-1 BAC-2 BAC-3
BAC-4 BAC-5 BAC-6 BAC-7 BAC-8
BAC-9 BAC-10 BAC-15 BAC-16 RW-5
GWPS - Groundwater Protection Standard
Hollow symbols represent non-detects reported at the Method Detection Limit (MDL)

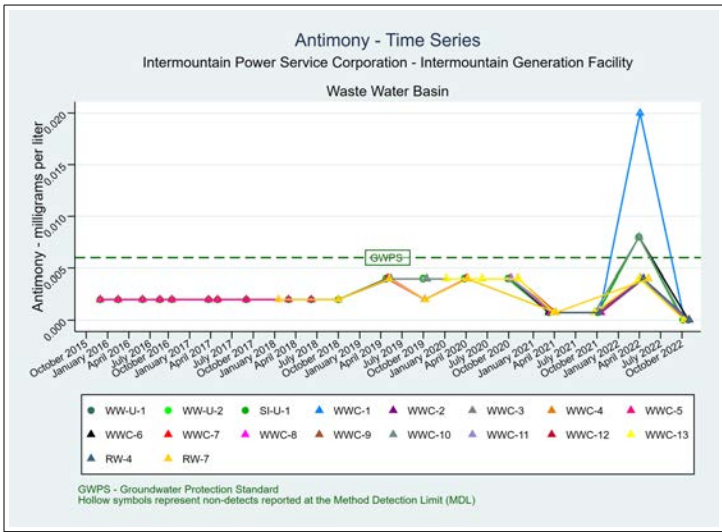

Molybdenum - Time Series
Intermountain Power Service Corporation - Intermountain Generation Facility
Bottom Ash Basin
Molybdenum - milligrams per liter
GWPS
BA-U-1 BA-U-2 BAC-1 BAC-2 BAC-3
BAC-4 BAC-5 BAC-6 BAC-7 BAC-8
BAC-9 BAC-10 BAC-15 BAC-16 RW-5
GWPS - Groundwater Protection Standard
Hollow symbols represent non-detects reported at the Method Detection Limit (MDL)

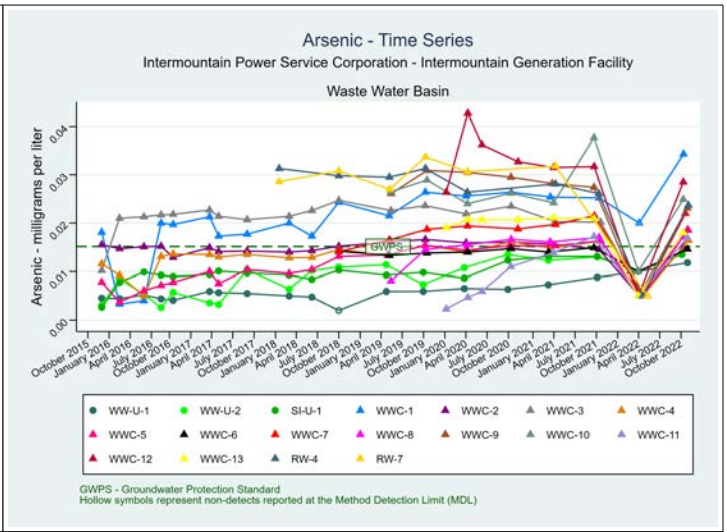

Radium 226+228 - Time Series
Intermountain Power Service Corporation - Intermountain Generation Facility
Bottom Ash Basin
Radium 226+228 - picocuries per liter
GWPS
BA-U-1 BA-U-2 BAC-1 BAC-2 BAC-3
BAC-4 BAC-5 BAC-6 BAC-7 BAC-8
BAC-9 BAC-10 BAC-15 BAC-16 RW-5
GWPS - Groundwater Protection Standard
Hollow symbols represent non-detects reported at the Method Detection Limit (MDL)

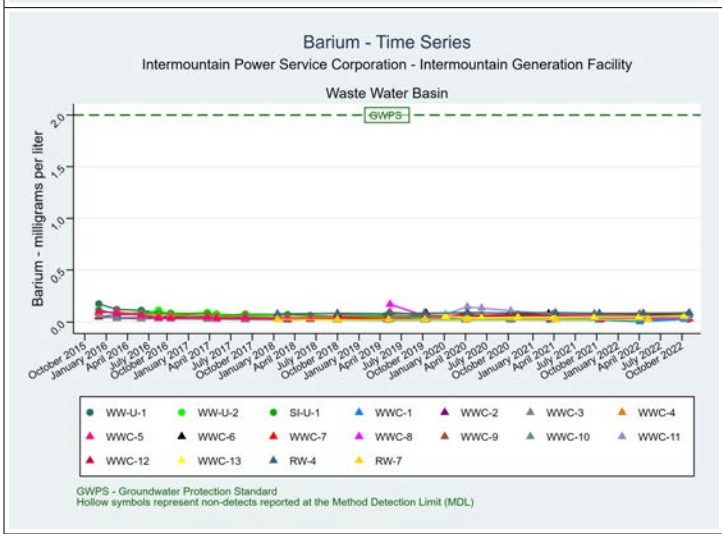

Selenium - Time Series
Intermountain Power Service Corporation - Intermountain Generation Facility
Bottom Ash Basin
GWPS
Selenium - milligrams per liter
0.00
0.01
0.02
0.03
0.04
0.05
October 2015
January 2016
April 2016
July 2016
October 2016
January 2017
April 2017
July 2017
October 2017
January 2018
April 2018
July 2018
October 2018
January 2019
April 2019
July 2019
October 2019
January 2020
April 2020
July 2020
October 2020
January 2021
April 2021
July 2021
October 2021
January 2022
April 2022
July 2022
October 2022
BA-U-1
BA-U-2
BAC-1
BAC-2
BAC-3
BAC-4
BAC-5
BAC-6
BAC-7
BAC-8
BAC-9
BAC-10
BAC-15
BAC-16
RW-5
GWPS - Groundwater Protection Standard
Hollow symbols represent non-detects reported at the Method Detection Limit (MDL)

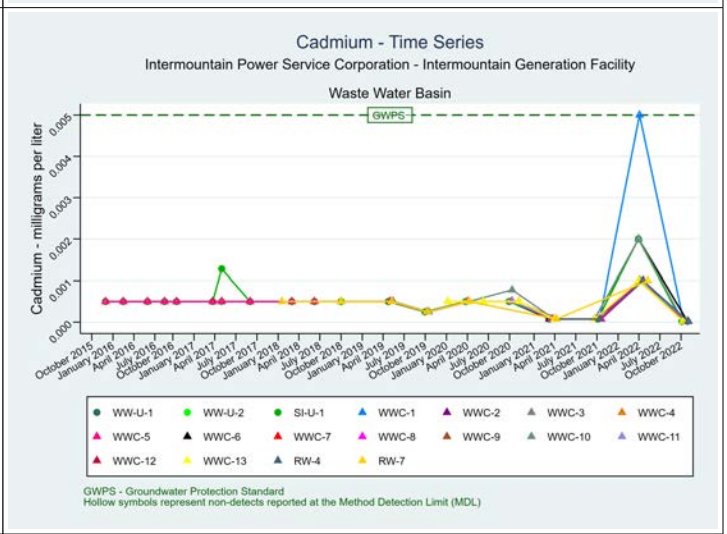

Thallium - Time Series
Intermountain Power Service Corporation - Intermountain Generation Facility
Bottom Ash Basin
GWPS
Thallium - milligrams per liter
0.000
0.005
0.010
0.015
0.020
October 2015
January 2016
April 2016
July 2016
October 2016
January 2017
April 2017
July 2017
October 2017
January 2018
April 2018
July 2018
October 2018
January 2019
April 2019
July 2019
October 2019
January 2020
April 2020
July 2020
October 2020
January 2021
April 2021
July 2021
October 2021
January 2022
April 2022
July 2022
October 2022
BA-U-1
BA-U-2
BAC-1
BAC-2
BAC-3
BAC-4
BAC-5
BAC-6
BAC-7
BAC-8
BAC-9
BAC-10
BAC-15
BAC-16
RW-5
GWPS - Groundwater Protection Standard
Hollow symbols represent non-detects reported at the Method Detection Limit (MDL)

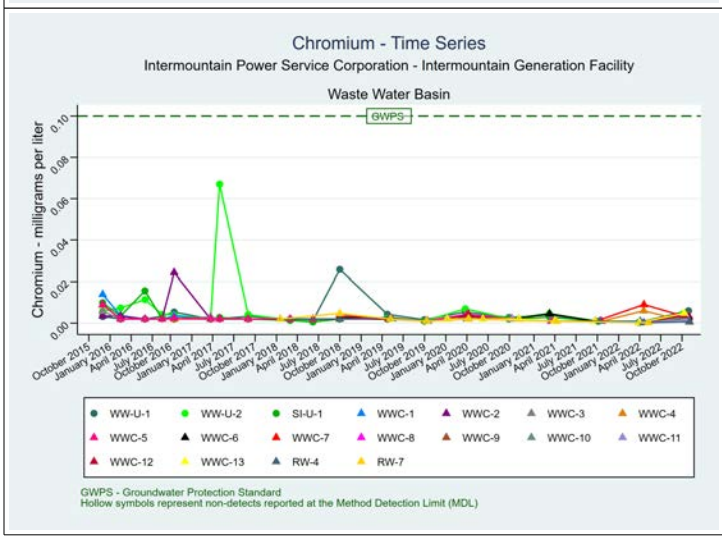
Time Series Plots
Waste Water Basin
Intermountain Power Service Corporation - Intermountain Generation Facility, Delta, Utah

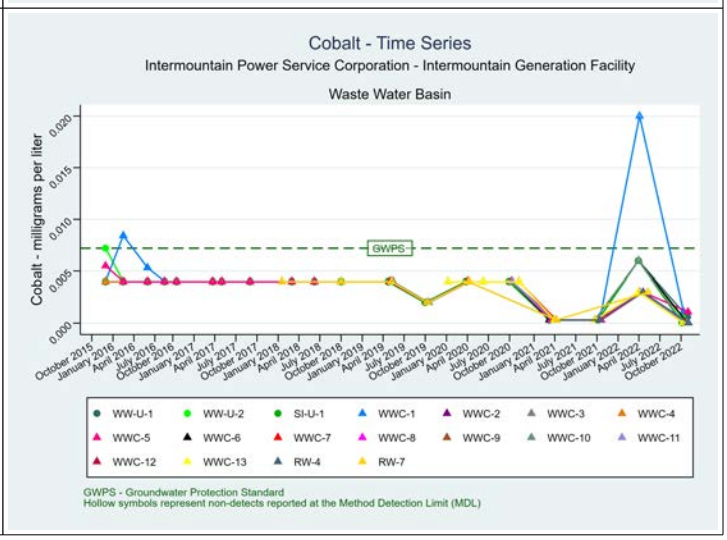








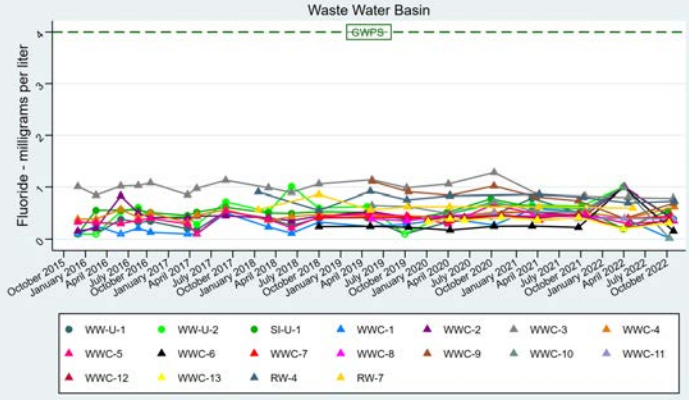


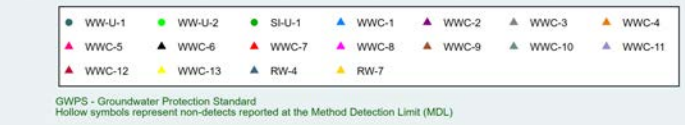


Fluoride - Time Series

Intermountain Power Service Corporation - Intermountain Generation Facility

Waste Water Basin





GWPS - Groundwater Protection Standard
Hollow symbols represent non-detects reported at the Method Detection Limit (MDL)

Lead - Time Series

Intermountain Power Service Corporation - Intermountain Generation Facility

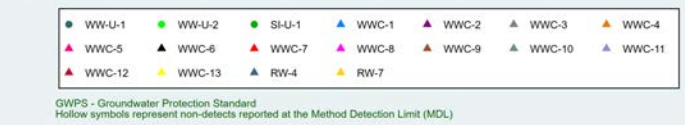
Waste Water Basin

GWPS - Groundwater Protection Standard
Hollow symbols represent non-detects reported at the Method Detection Limit (MDL)

Lithium - Time Series

Intermountain Power Service Corporation - Intermountain Generation Facility

Waste Water Basin

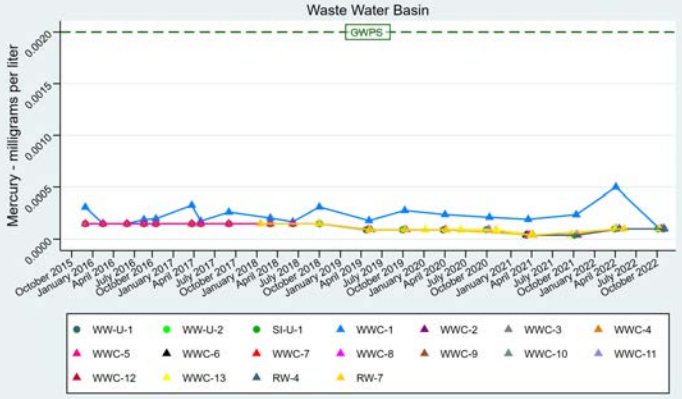


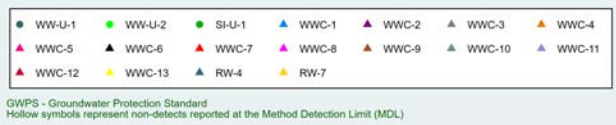
GWPS - Groundwater Protection Standard
Hollow symbols represent non-detects reported at the Method Detection Limit (MDL)

Mercury - Time Series

Intermountain Power Service Corporation - Intermountain Generation Facility

Waste Water Basin



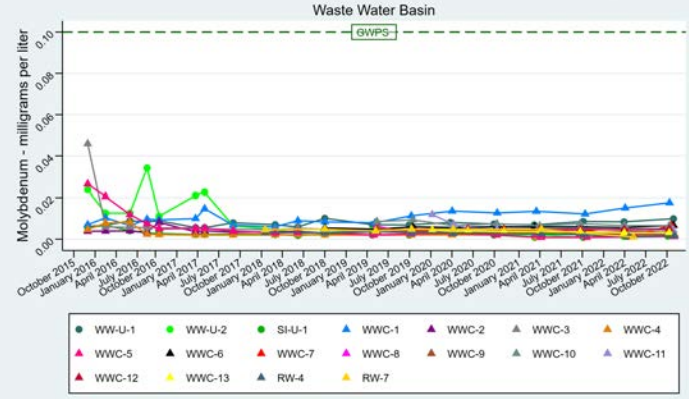


GWPS - Groundwater Protection Standard
Hollow symbols represent non-detects reported at the Method Detection Limit (MDL)

Molybdenum - Time Series

Intermountain Power Service Corporation - Intermountain Generation Facility

Waste Water Basin

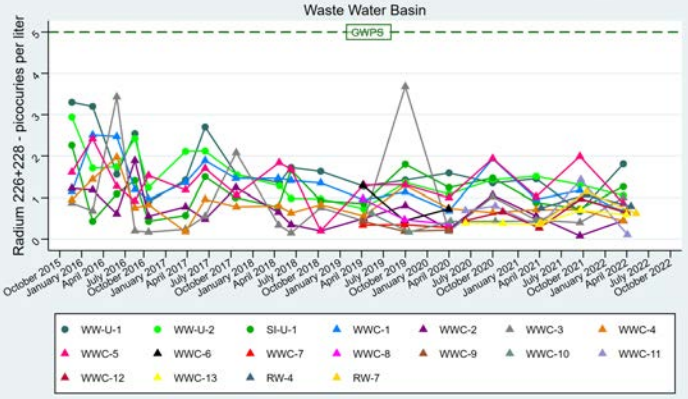


GWPS - Groundwater Protection Standard
Hollow symbols represent non-detects reported at the Method Detection Limit (MDL)

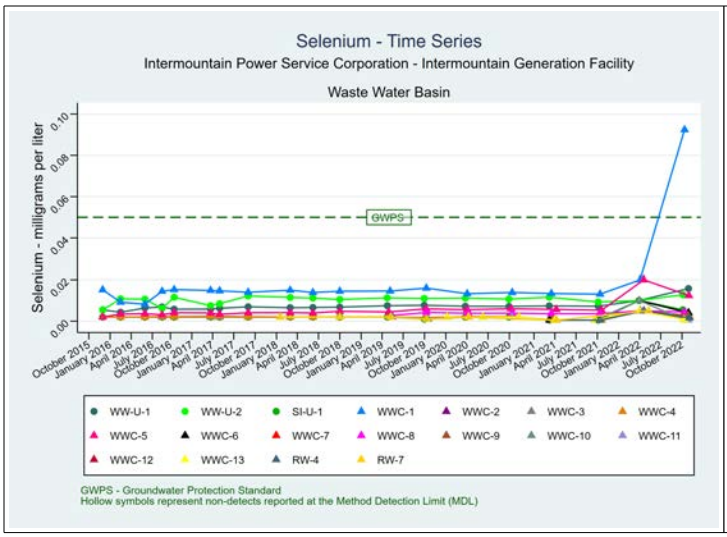
Radium 226+228 - Time Series

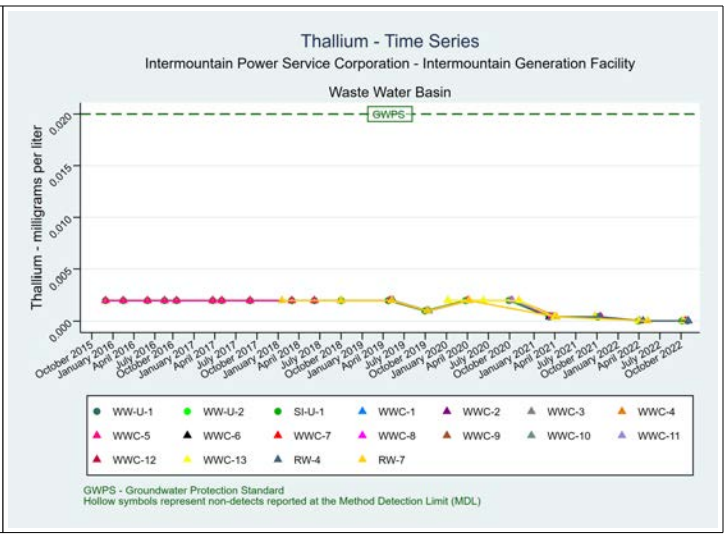
Intermountain Power Service Corporation - Intermountain Generation Facility

Waste Water Basin

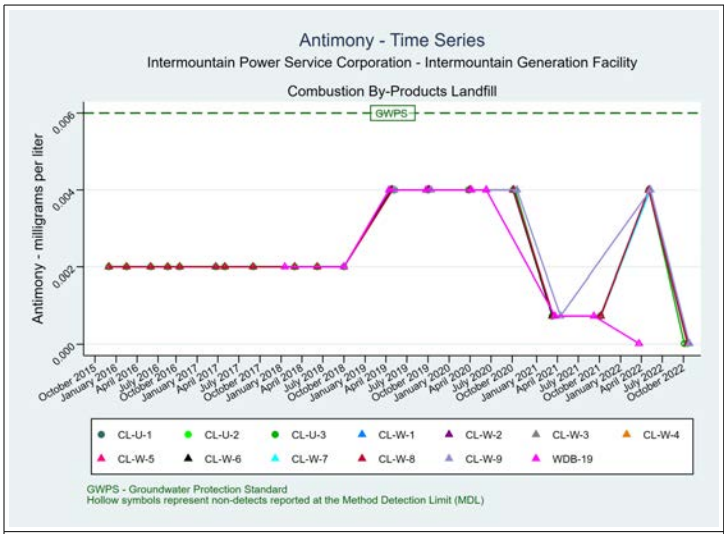


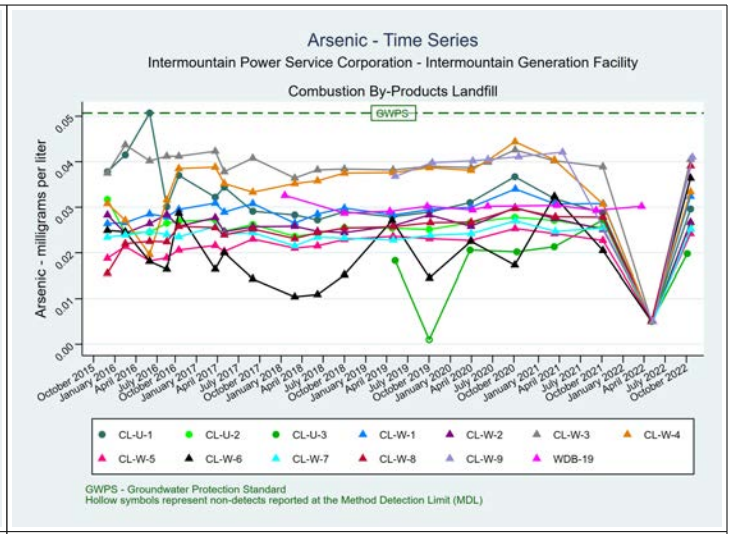
GWPS - Groundwater Protection Standard
Hollow symbols represent non-detects reported at the Method Detection Limit (MDL)

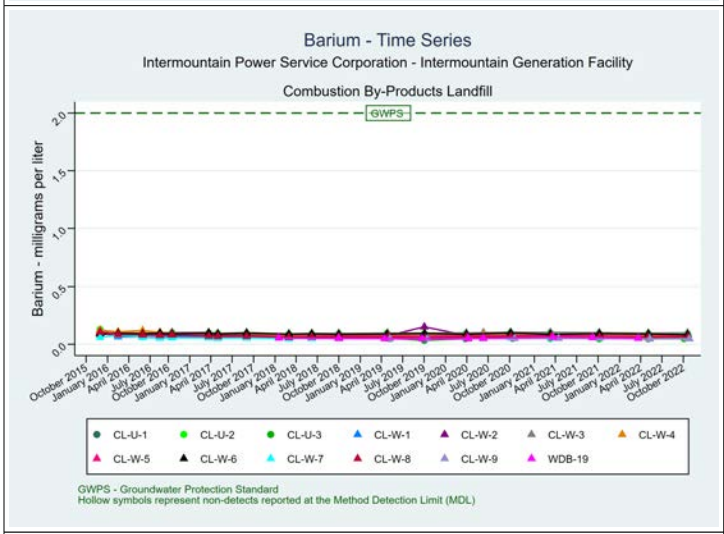

Selenium - Time Series
Intermountain Power Service Corporation - Intermountain Generation Facility
Waste Water Basin
Selenium - milligrams per liter
0.00
0.02
0.04
0.06
0.08
0.10
GWPS
October 2015
January 2016
April 2016
July 2016
October 2016
January 2017
April 2017
July 2017
October 2017
January 2018
April 2018
July 2018
October 2018
January 2019
April 2019
July 2019
October 2019
January 2020
April 2020
July 2020
October 2020
January 2021
April 2021
July 2021
October 2021
January 2022
April 2022
July 2022
October 2022
WW-U-1
WW-U-2
SI-U-1
WWC-1
WWC-2
WWC-3
WWC-4
WWC-5
WWC-6
WWC-7
WWC-8
WWC-9
WWC-10
WWC-11
WWC-12
WWC-13
RW-4
RW-7
GWPS - Groundwater Protection Standard
Hollow symbols represent non-detects reported at the Method Detection Limit (MDL)

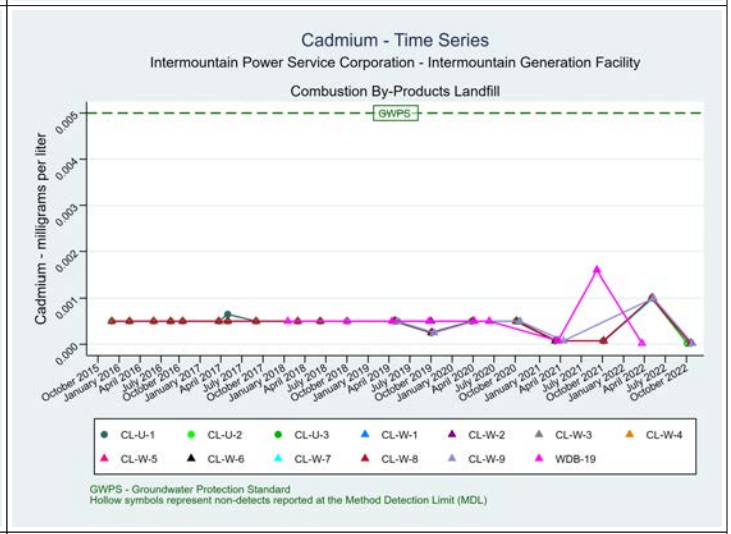

Thallium - Time Series
Intermountain Power Service Corporation - Intermountain Generation Facility
Waste Water Basin
Thallium - milligrams per liter
0,000
0,005
0,010
0,015
0,020
GWPS
October 2015
January 2016
April 2016
July 2016
October 2016
January 2017
April 2017
July 2017
October 2017
January 2018
April 2018
July 2018
October 2018
January 2019
April 2019
July 2019
October 2019
January 2020
April 2020
July 2020
October 2020
January 2021
April 2021
July 2021
October 2021
January 2022
April 2022
July 2022
October 2022
WW-U-1
WW-U-2
SI-U-1
WWC-1
WWC-2
WWC-3
WWC-4
WWC-5
WWC-6
WWC-7
WWC-8
WWC-9
WWC-10
WWC-11
WWC-12
WWC-13
RW-4
RW-7
GWPS - Groundwater Protection Standard
Hollow symbols represent non-detects reported at the Method Detection Limit (MDL)

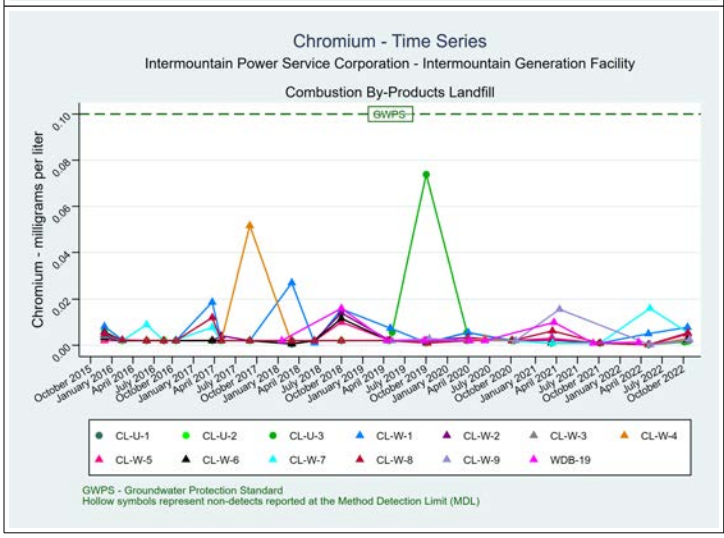
Time Series Plots
Combustion By-Product Landfill
Intermountain Power Service Corporation - Intermountain Generation Facility, Delta, Utah

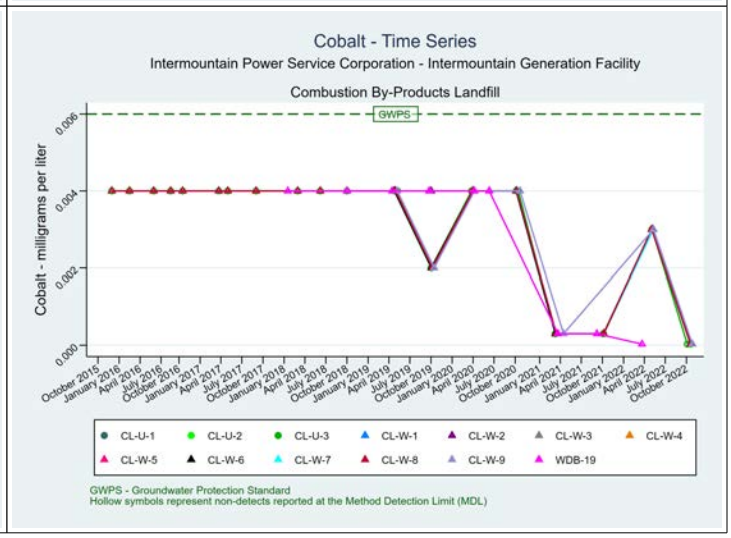


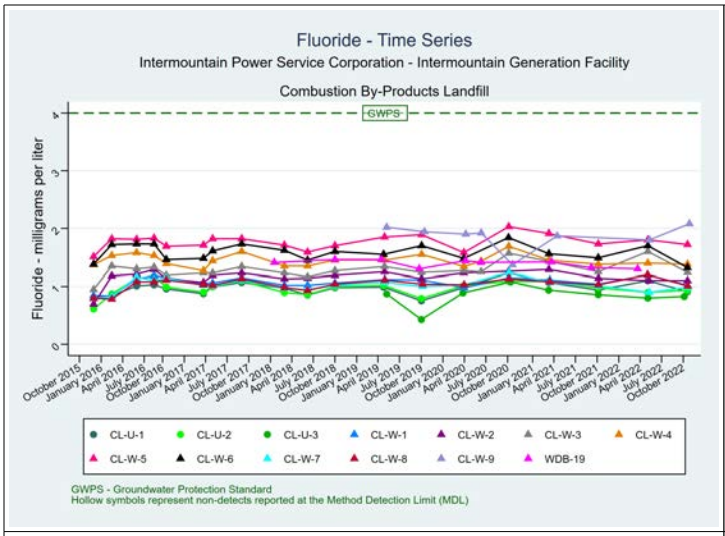


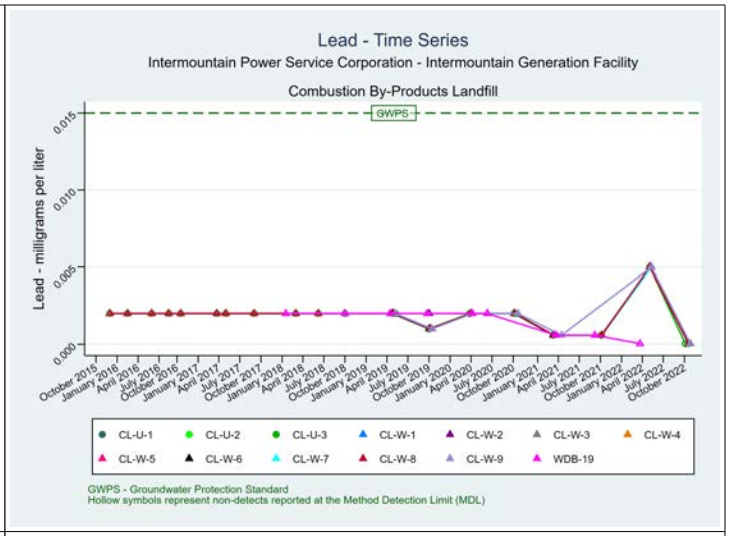


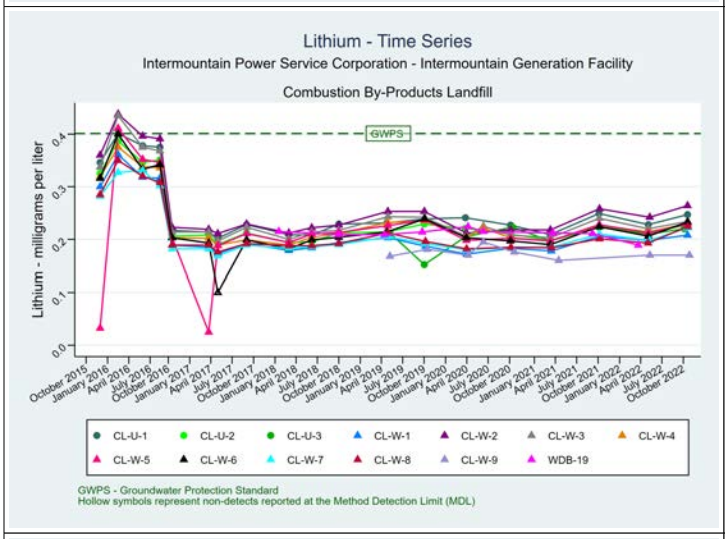


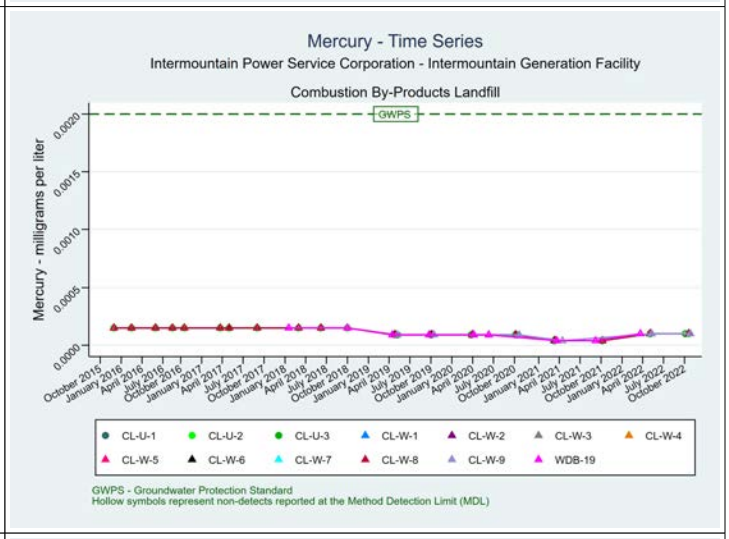


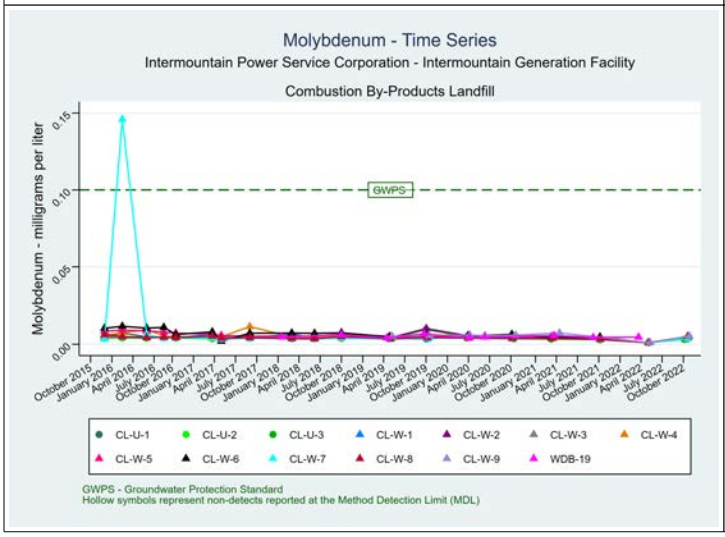


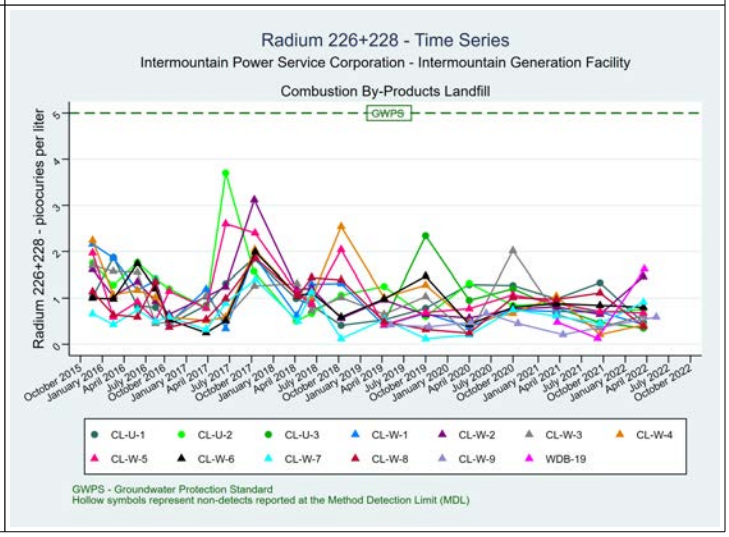

Fluoride - Time Series
Intermountain Power Service Corporation - Intermountain Generation Facility
Combustion By-Products Landfill
Fluoride - milligrams per liter
GWPS
CL-U-1 CL-U-2 CL-U-3 CL-W-1 CL-W-2 CL-W-3 CL-W-4
CL-W-5 CL-W-6 CL-W-7 CL-W-8 CL-W-9 WDB-19
GWPS - Groundwater Protection Standard
Hollow symbols represent non-detects reported at the Method Detection Limit (MDL)

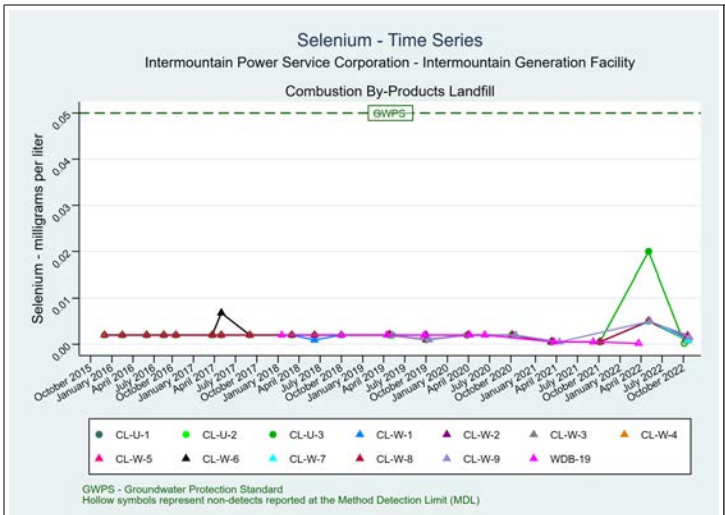

Lead - Time Series
Intermountain Power Service Corporation - Intermountain Generation Facility
Combustion By-Products Landfill
Lead - milligrams per liter
GWPS
CL-U-1 CL-U-2 CL-U-3 CL-W-1 CL-W-2 CL-W-3 CL-W-4
CL-W-5 CL-W-6 CL-W-7 CL-W-8 CL-W-9 WDB-19
GWPS - Groundwater Protection Standard
Hollow symbols represent non-detects reported at the Method Detection Limit (MDL)

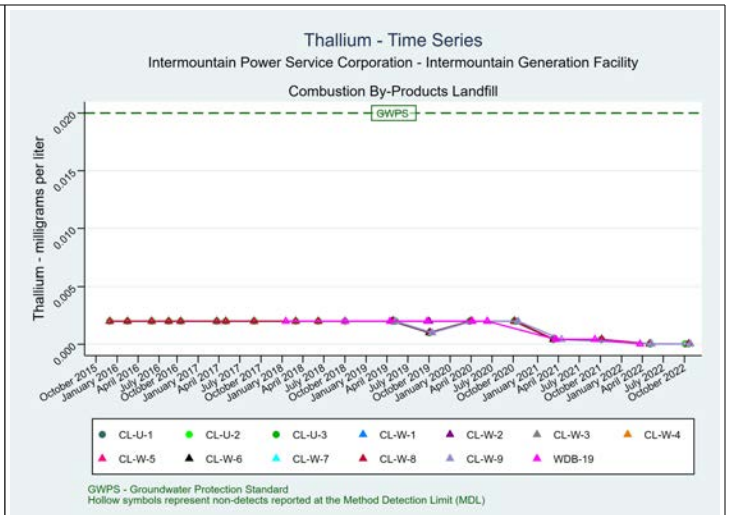

Lithium - Time Series
Intermountain Power Service Corporation - Intermountain Generation Facility
Combustion By-Products Landfill
Lithium - milligrams per liter
GWPS
CL-U-1 CL-U-2 CL-U-3 CL-W-1 CL-W-2 CL-W-3 CL-W-4
CL-W-5 CL-W-6 CL-W-7 CL-W-8 CL-W-9 WDB-19
GWPS - Groundwater Protection Standard
Hollow symbols represent non-detects reported at the Method Detection Limit (MDL)


Mercury - Time Series
Intermountain Power Service Corporation - Intermountain Generation Facility
Combustion By-Products Landfill
Mercury - milligrams per liter
GWPS
CL-U-1 CL-U-2 CL-U-3 CL-W-1 CL-W-2 CL-W-3 CL-W-4
CL-W-5 CL-W-6 CL-W-7 CL-W-8 CL-W-9 WDB-19
GWPS - Groundwater Protection Standard
Hollow symbols represent non-detects reported at the Method Detection Limit (MDL)


Molybdenum - Time Series
Intermountain Power Service Corporation - Intermountain Generation Facility
Combustion By-Products Landfill
Molybdenum - milligrams per liter
GWPS
CL-U-1 CL-U-2 CL-U-3 CL-W-1 CL-W-2 CL-W-3 CL-W-4
CL-W-5 CL-W-6 CL-W-7 CL-W-8 CL-W-9 WDB-19
GWPS - Groundwater Protection Standard
Hollow symbols represent non-detects reported at the Method Detection Limit (MDL)

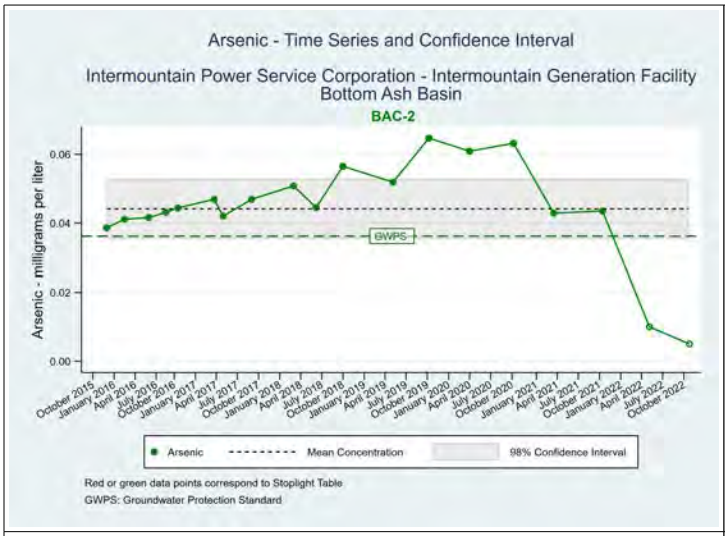

Radium 226+228 - Time Series
Intermountain Power Service Corporation - Intermountain Generation Facility
Combustion By-Products Landfill
Radium 226+228 - picocuries per liter
GWPS
CL-U-1 CL-U-2 CL-U-3 CL-W-1 CL-W-2 CL-W-3 CL-W-4
CL-W-5 CL-W-6 CL-W-7 CL-W-8 CL-W-9 WDB-19
GWPS - Groundwater Protection Standard
Hollow symbols represent non-detects reported at the Method Detection Limit (MDL)

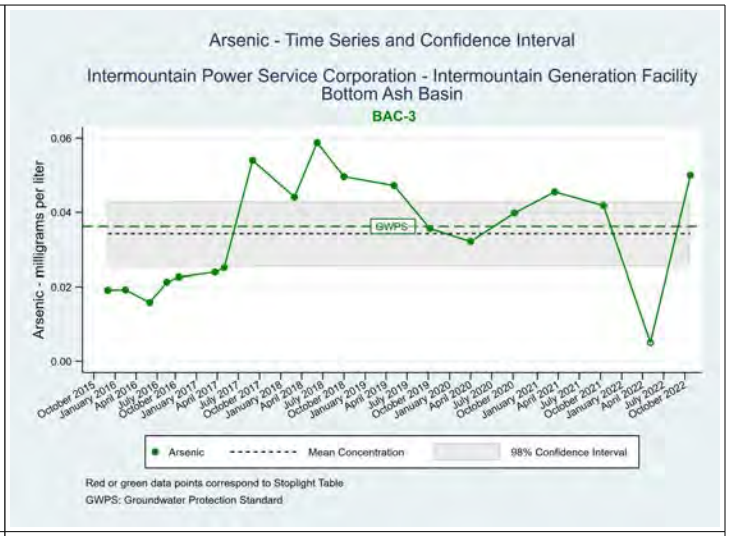

Selenium - Time Series
Intermountain Power Service Corporation - Intermountain Generation Facility
Combustion By-Products Landfill
Selenium - milligrams per liter
GWPS
CL-U-1
CL-U-2
CL-U-3
CL-W-1
CL-W-2
CL-W-3
CL-W-4
CL-W-5
CL-W-6
CL-W-7
CL-W-8
CL-W-9
WDB-19
GWPS - Groundwater Protection Standard
Hollow symbols represent non-detects reported at the Method Detection Limit (MDL)

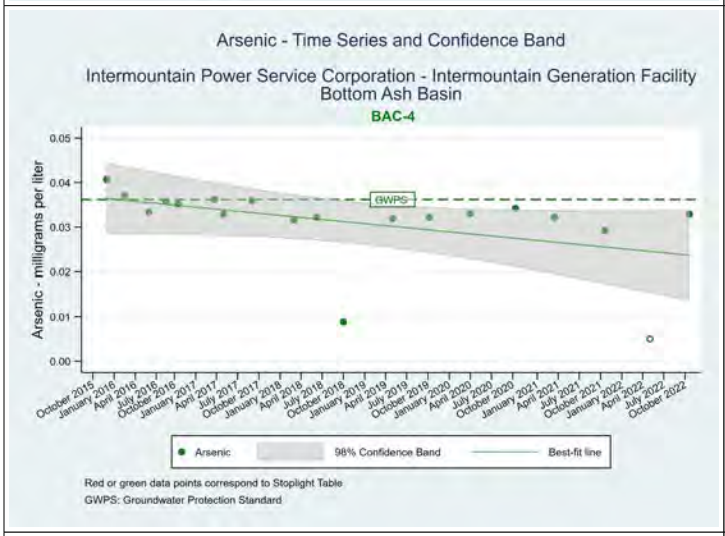

Thallium - Time Series
Intermountain Power Service Corporation - Intermountain Generation Facility
Combustion By-Products Landfill
Thallium - milligrams per liter
GWPS
CL-U-1
CL-U-2
CL-U-3
CL-W-1
CL-W-2
CL-W-3
CL-W-4
CL-W-5
CL-W-6
CL-W-7
CL-W-8
CL-W-9
WDB-19
GWPS - Groundwater Protection Standard
Hollow symbols represent non-detects reported at the Method Detection Limit (MDL)

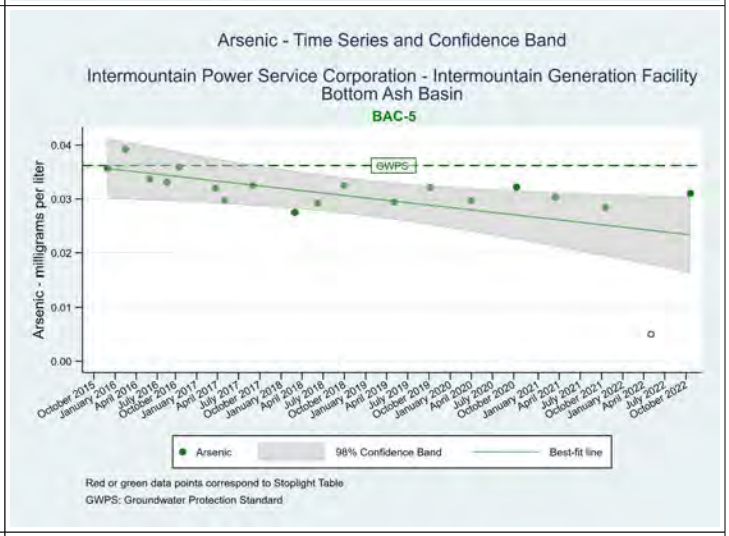
ATTACHMENT 5 REGRESSIONAL AND CONFIDENCE INTERVAL/BAND PLOTS

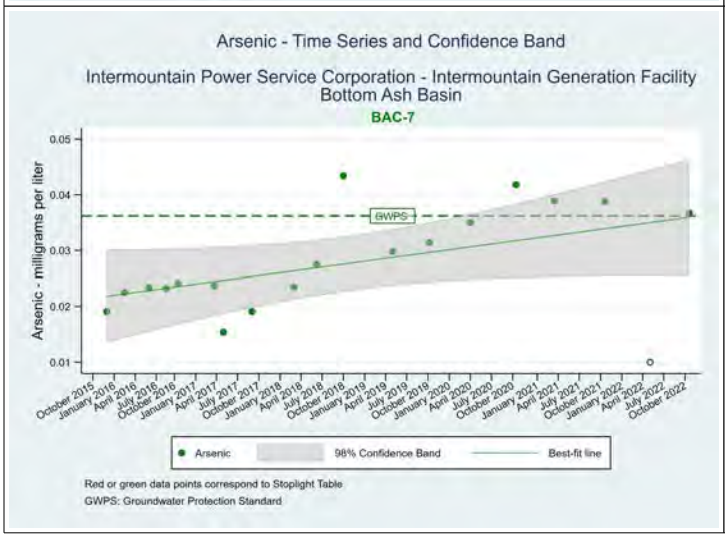
Regression and Confidence Interval/Band Plots
Bottom Ash Basin
Intermountain Power Service Corporation - Intermountain Generation Facility, Delta, Utah

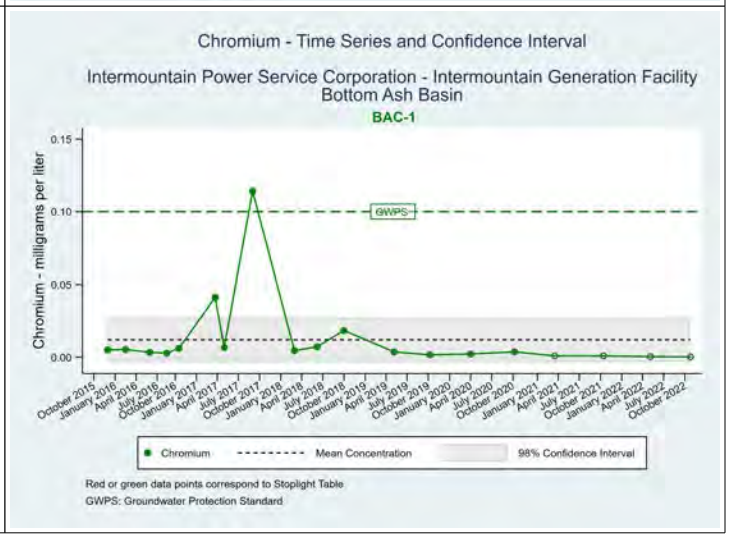


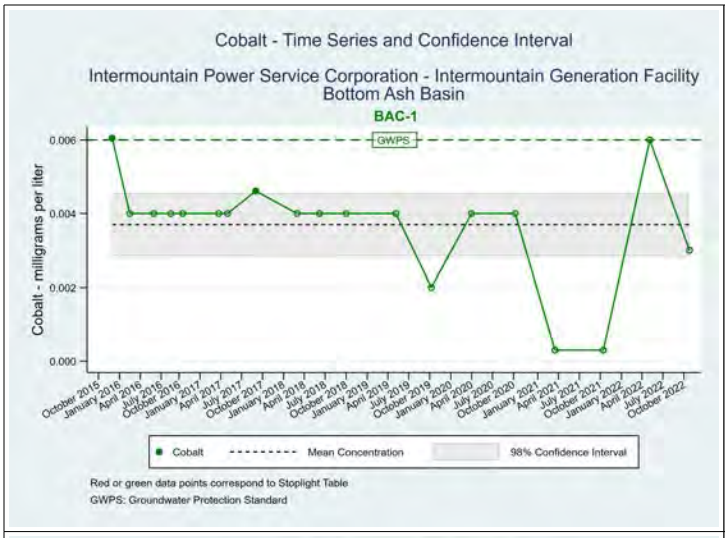


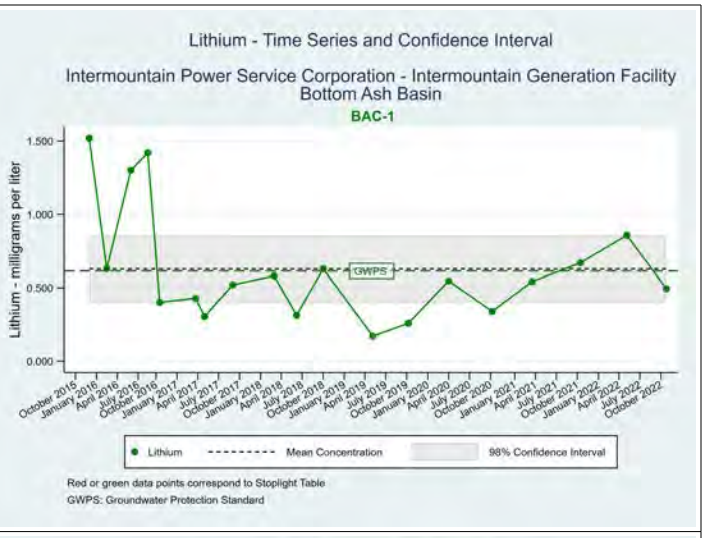


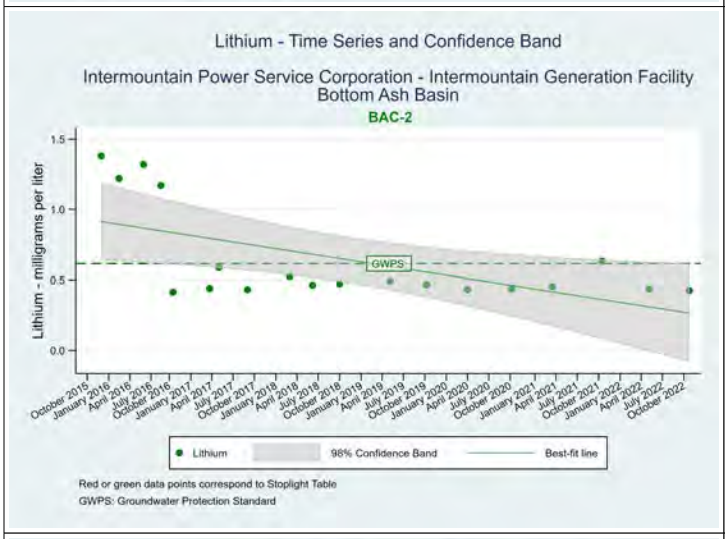


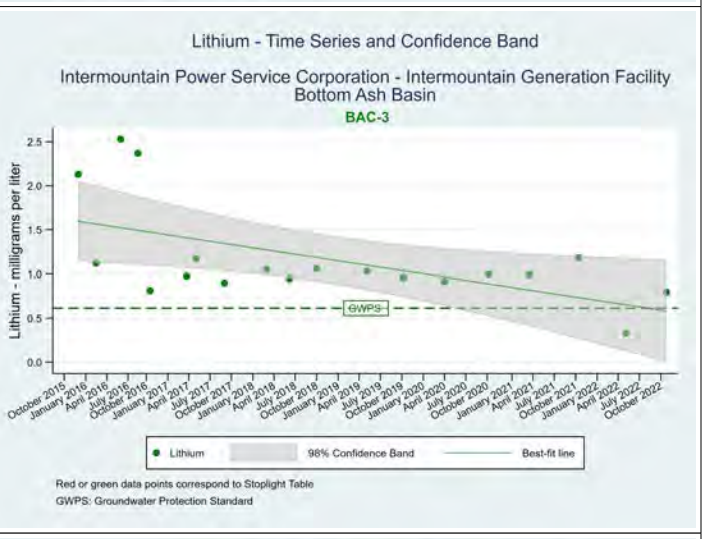


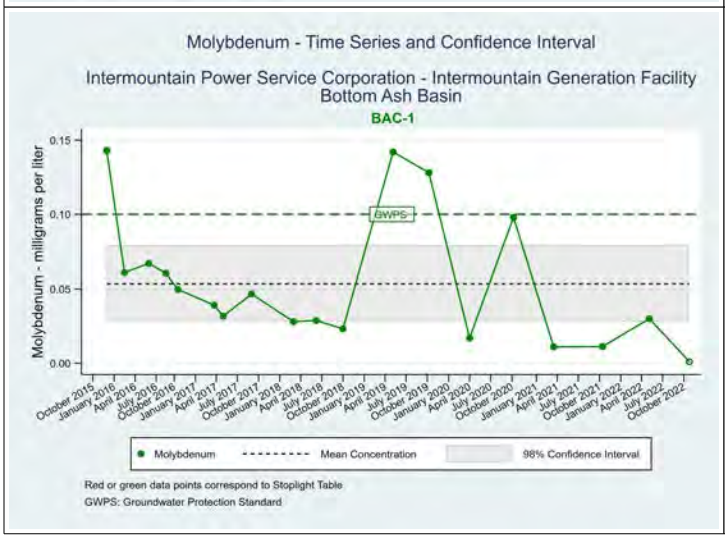


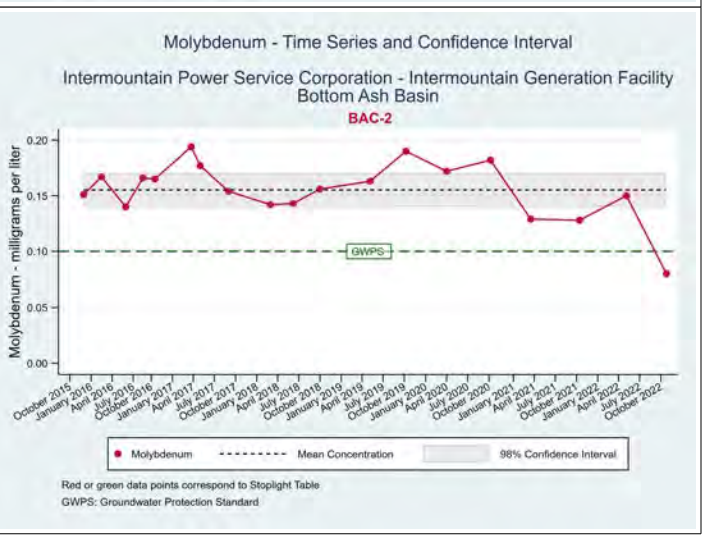

Cobalt - Time Series and Confidence Interval
Intermountain Power Service Corporation - Intermountain Generation Facility
Bottom Ash Basin
BAC-1
GWPS
Cobalt - milligrams per liter
0.006
0.004
0.002
0.000
Cobalt
Mean Concentration
98% Confidence Interval
Red or green data points correspond to Stoplight Table
GWPS: Groundwater Protection Standard


Lithium - Time Series and Confidence Interval
Intermountain Power Service Corporation - Intermountain Generation Facility
Bottom Ash Basin
BAC-1
GWPS
Lithium - milligrams per liter
1.500
1.000
0.500
0.000
Lithium
Mean Concentration
98% Confidence Interval
Red or green data points correspond to Stoplight Table
GWPS: Groundwater Protection Standard

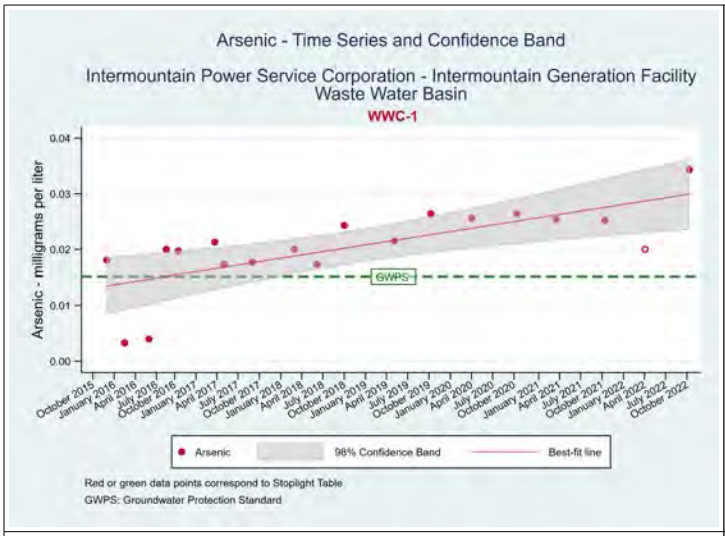

Lithium - Time Series and Confidence Band
Intermountain Power Service Corporation - Intermountain Generation Facility
Bottom Ash Basin
BAC-2
GWPS
Lithium - milligrams per liter
1.5
1.0
0.5
0.0
Lithium
98% Confidence Band
Best-fit line
Red or green data points correspond to Stoplight Table
GWPS: Groundwater Protection Standard

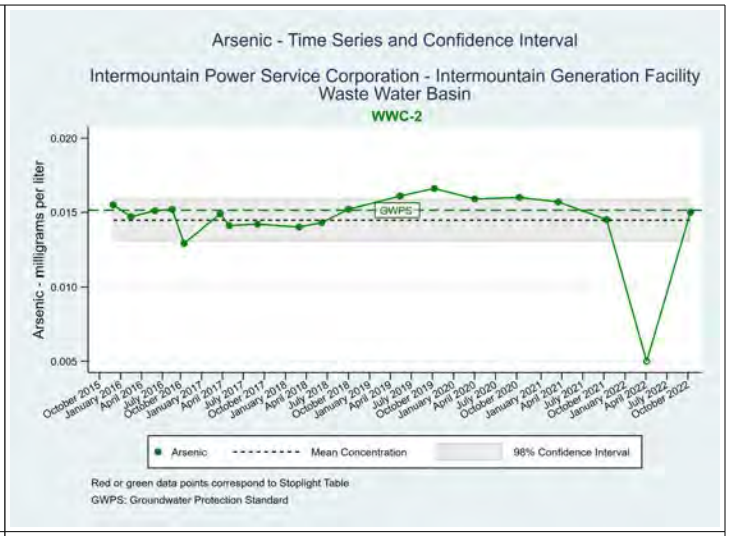

Lithium - Time Series and Confidence Band
Intermountain Power Service Corporation - Intermountain Generation Facility
Bottom Ash Basin
BAC-3
GWPS
Lithium - milligrams per liter
2.5
2.0
1.5
1.0
0.5
0.0
Lithium
98% Confidence Band
Best-fit line
Red or green data points correspond to Stoplight Table
GWPS: Groundwater Protection Standard

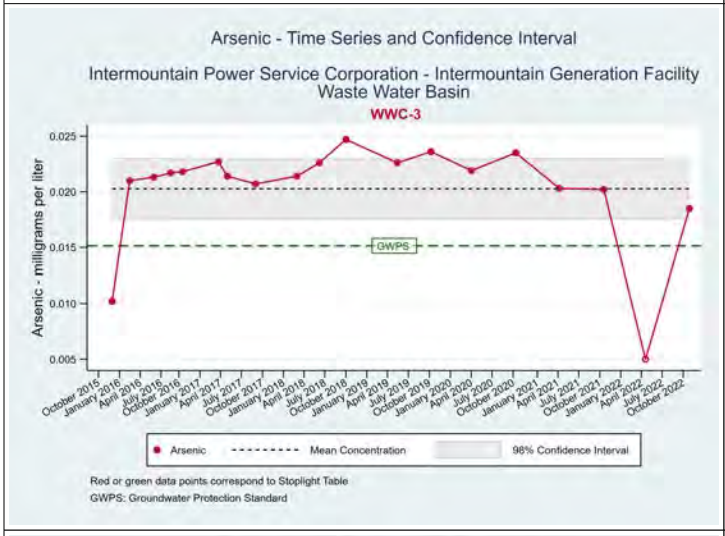

Molybdenum - Time Series and Confidence Interval
Intermountain Power Service Corporation - Intermountain Generation Facility
Bottom Ash Basin
BAC-1
GWPS
Molybdenum - milligrams per liter
0.15
0.10
0.05
0.00
Molybdenum
Mean Concentration
98% Confidence Interval
Red or green data points correspond to Stoplight Table
GWPS: Groundwater Protection Standard

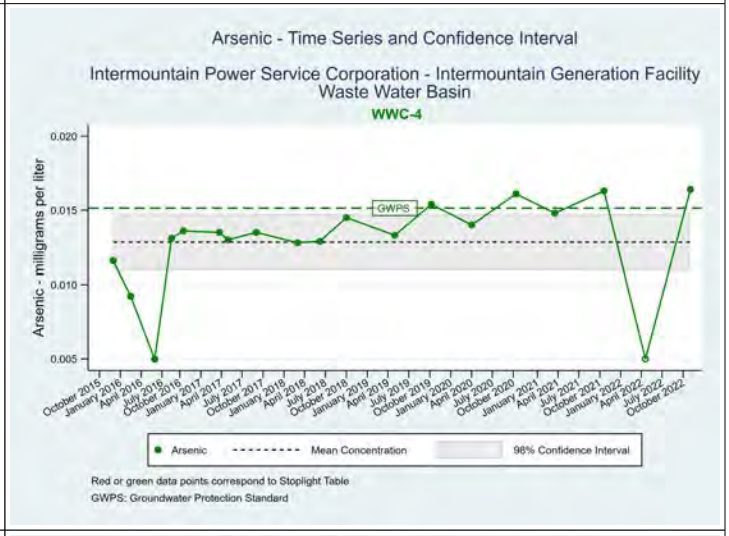

Molybdenum - Time Series and Confidence Interval
Intermountain Power Service Corporation - Intermountain Generation Facility
Bottom Ash Basin
BAC-2
GWPS
Molybdenum - milligrams per liter
0.20
0.15
0.10
0.05
0.00
Molybdenum
Mean Concentration
98% Confidence Interval
Red or green data points correspond to Stoplight Table
GWPS: Groundwater Protection Standard

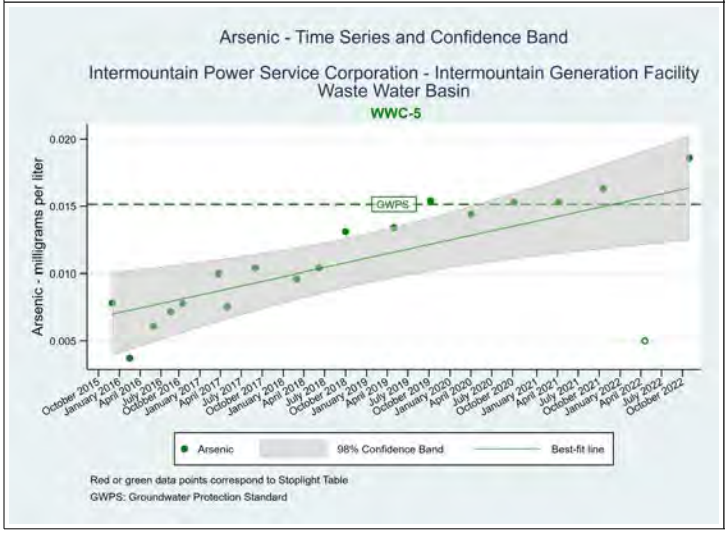
Regression and Confidence Interval/Band Plots
Waste Water Basin
Intermountain Power Service Corporation - Intermountain Generation Facility, Delta, Utah

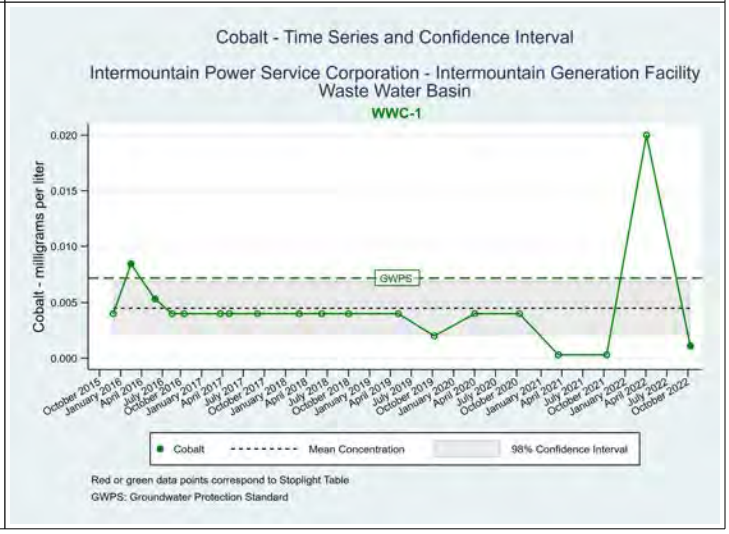


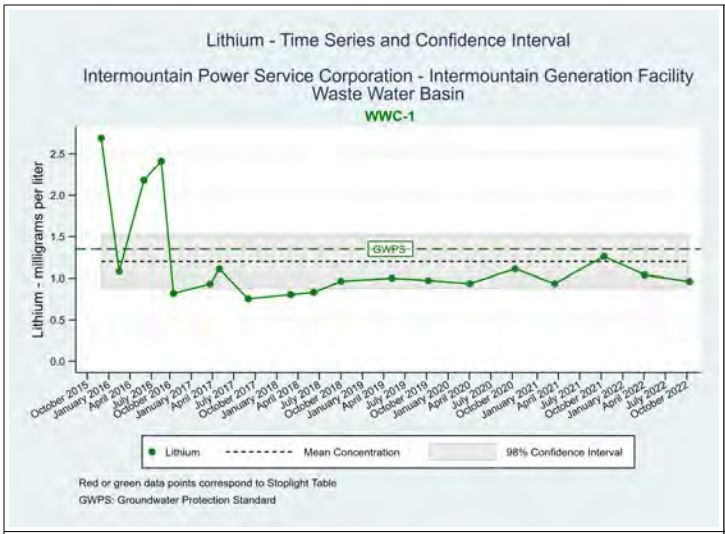


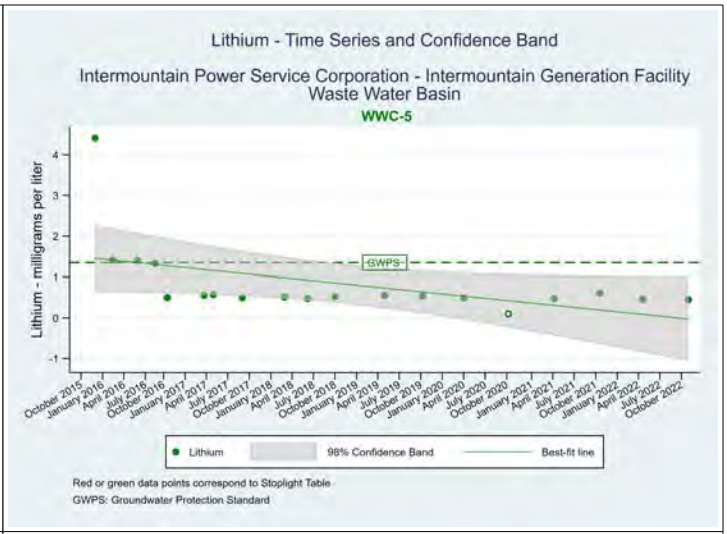


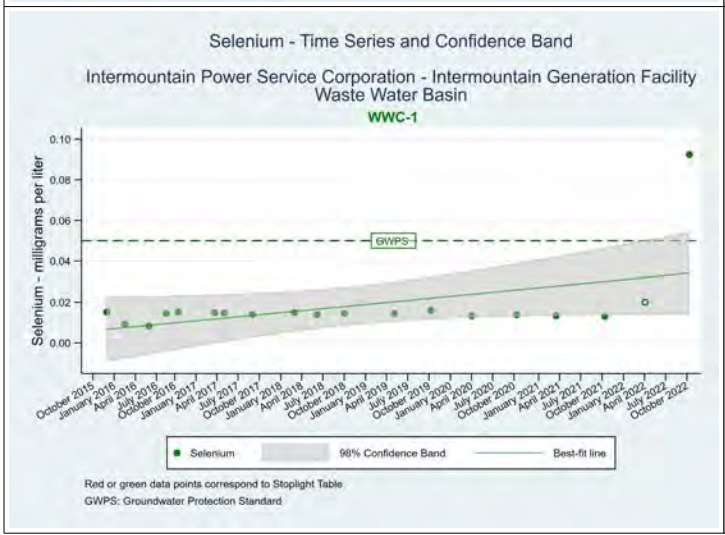












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Regression and Confidence Interval/Band Plots
Combustion By-Product Landfill
Intermountain Power Service Corporation - Intermountain Generation Facility, Delta, Utah