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2014 Annual
Compliance Monitoring Report
Lawrence Livermore National Laboratory
Site 300

Technical Editors

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March 31, 2015

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Environmental Restoration Department

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Acknowledgements

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1. Introduction

This Compliance Monitoring Report (CMR) summarizes the Lawrence Livermore National Laboratory (LLNL) Site 300 Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Remedial Action compliance monitoring activities performed during January through December 2014. The report is submitted in compliance with the Compliance Monitoring Plan (CMP)/Contingency Plan (CP) for Environmental Restoration at Lawrence Livermore National Laboratory Site 300 (Dibley et al., 2009a) and CMP/CP Addendum (MacQueen et al., 2013).

During the reporting period of January through December 2014, approximately eight million gallons of ground water and 100 million cubic feet of soil vapor were treated at Site 300, removing approximately 9 kilograms (kg) of VOCs, 110 grams (g) of perchlorate, 1,300 kg of nitrate, 120 g of Research Department Explosive (RDX), 5.4 g of a mixture of tetrabutyl orthosilicate (TBOS) and tetrakis (2-ethylbutyl) silane (TKEBS) and 5.5 g of total uranium (Table Summ-1).

Since remediation began in 1991, approximately 426 million gallons of ground water and 920 million cubic feet of soil vapor have been treated, removing approximately 600 kg of VOCs, 1.5 kg of perchlorate, 15,000 kg of nitrate, 2.1 kg of RDX, 9.5kg of TBOS/TKEBs, and 0.047 kg of total uranium (Table Summ-2).

2. Extraction and Treatment System Monitoring and Ground and Surface Water Monitoring Programs

Section 2 presents the monitoring results for the Site 300 remediation systems, ground water monitoring network, and surface water sampling and analyses. These results are presented and discussed by operable unit (OU) as follows:

2.1. General Services Area OU 1

2.2. Building 834 OU 2

2.3. Pit 6 Landfill OU 3

2.4. High Explosives Process Area (HEPA) OU 4

2.5. Building 850/Pit 7 Complex OU 5

2.6. Building 854 OU 6

2.7. Building 832 Canyon OU 7

2.8. Site-Wide OU 8 (Building 833, Building 801/Pit 8, Building 845/Pit 9, and Building 851)

The locations of the Site 300 OUs 1 through 8 are shown on Figure 2-1. The Pit 2, 8, and 9 Landfills (OU 8) are discussed in Section 3.

Treatment facility operations and maintenance issues that occurred during second semester 2014 and influent and effluent analytical data collected during second semester 2014 are included in this report. Treatment facility pH data collected during second semester 2014 are presented in Appendix A. Ground and surface water monitoring analytical data and ground water elevation measurements for the entire calendar year 2014 are presented in Appendices B and C, respectively. Analytical data from the analysis of soil samples collected during 2014 drilling operations are presented in Appendix E. New wells and boreholes installed during 2014 are presented in Table 2-1. An acronym list is located in the Table Section of this report.

In accordance with the 2009 CMP/CP requirements, post-only concentration maps and isoconcentration contour maps depicting primary and secondary contaminant of concern (COC) data are presented in this annual CMR report along with hydraulic capture zones for all hydrostratigraphic units (HSUs) where ground water elevation and concentration data are contoured.

Total VOC isoconcentration contour maps were constructed by contouring the sum of the results of the following VOCs: trichloroethene (TCE); tetrachloroethene (PCE); cis-1,2-dichloroethene (cis-1,2-DCE); trans-1,2-dichloroethene (trans-1,2-DCE); carbon tetrachloride; chloroform; 1,1-dichlorethane (1,1-DCA); 1,2-dichlorethane (1,2-DCA); 1,1-dichloroethene (1,1-DCE); 1,1,1-trichloroethane (1,1,1-TCA); trichlorofluoromethane (Freon 11); 1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113); 1,1,2-trichloroethane (1,1,2-TCA); and vinyl chloride. The individual VOCs that make up these total VOC concentrations are also posted on these maps. VOC concentrations presented in the text are total VOCs described above unless a specific VOC is indicated. Isoconcentration contour maps and post-only maps for the primary COCs were constructed using second semester 2014 data. Isoconcentration contour maps and post-only maps for the secondary COCs were constructed using first semester 2014 data. To create a snapshot in time, hydraulic capture zones and extents of saturation are based on ground water elevation data collected during the same semester as the same COC data. For collocated wells, the highest concentration was used for contouring.

As a result, in some rare instances, the maximum COC concentrations reported in the text might not agree with the value posted on the contour map. The two values would not agree if the annual maximum concentration sample was collected during a different semester. The two values would also not agree if the maximum concentration sample was collected during the same semester, but during a different quarter. All COC and ground water elevation maps were constructed using a single quarterly sampling data set selected because it contained the most complete geographic coverage for the 6-month reporting period. Specific ground water monitoring data are discussed within each OU section and all ground water analytical data are included in the data tables presented in Appendix B of this report.

Hydraulic capture and injection zones are also presented in this report. The capture zones are defined only for extraction and injection wells that were active during the time period when the ground water elevations were measured. The CMR capture zones are based primarily on the equipotentials of the ground water elevation contour maps. These equipotential-based CMR capture zones may differ from the capture zones presented in the Site-Wide Remediation Evaluation Summary Report (SWESR) (Ferry et al., 2006), because the SWESR capture zones were estimated using computer models such as Winflow or FEFLOW. As a general rule, the CMR capture zones were extended to two upgradient ground water elevation contours. For cases where there were few observation wells located nearby, a Thiem solution for steady-state radial flow in the vicinity of a pumping well was used to control the ground water elevation contours. Hydraulic capture and injection zones are displayed on ground water elevation contour maps and primary and secondary COC isoconcentration contour maps for all OUs where active ground water remediation is occurring (i.e., OU 1, OU 2, OU 4, OU 5, OU 6 and OU 7). As previously mentioned, hydraulic capture zones are based on ground water elevation data collected during the same semester the COC data was collected.

During 2014, it was discovered that the check valves were not functioning properly in some low-yield and cyclic-operating extraction wells. These check valves allowed extracted ground water to back-flow into the same well during non-pumping periods. This resulted in some overestimates of extracted ground water volumes and, therefore, overestimates of the total contaminant mass removed from the effected extraction wells. Work is currently underway to identify all extraction wells with this problem, and to install additional check valves in pump discharge lines to prevent ground water from back-flowing into the wells. When this work is completed and more accurate discharge volumes have been determined, the revised extracted ground water volumes and contaminant mass removed, will be presented in a future report.

During 2014, shallow water-bearing zones throughout Site 300 continued to be dewatered by pumping extraction wells and prevailing drought conditions.

In this report, concentrations for most organic compounds are reported in μg/L. The primary exception is nitrate, which is reported in mg/L.

2.1. General Services Area (GSA) OU 1

The GSA OU consists of the Eastern and Central GSA areas.

The source of contamination in the Eastern GSA was abandoned debris burial trenches that received craft shop debris. Leaching of solvents in the debris resulted in the release of volatile organic compounds (VOCs) to ground water.

A ground water extraction and treatment system (GWTS) was operated in the Eastern GSA from 1991 to 2007 to remove VOCs from ground water. VOC-contaminated ground water was extracted from three wells (W-26R-03, W-25N01 and W-25N-24), located downgradient of the debris burial trenches, at a combined flow rate of 45 gallons per minute (gpm). The extracted ground water was treated in three 1,000-pound (lb) granular activated carbon (GAC) units that removed VOCs through adsorption. The treated effluent water was discharged to nearby Corral Hollow Creek.

Remediation efforts in the Eastern GSA successfully reduced concentrations of TCE and other VOCs in ground water to below their respective Maximum Contaminant Level (MCL) cleanup standards set in the GSA Record of Decision (ROD) (United States [U.S.] Department of Energy [DOE], 1997). The Eastern GSA ground water extraction and treatment system was shut off on February 15, 2007 with the U.S. Environmental Protection Agency (EPA), Regional Water Quality Control Board (RWQCB) and California Department of Toxic Substances Control (DTSC) approval. As required by the GSA ROD, ground water monitoring was conducted for five years after treatment facility shutdown to determine if VOC concentrations rose or "rebounded" above MCL cleanup standards. The results of the monitoring, indicating that VOC concentrations had remained below cleanup standards during the five-year post shutdown-monitoring period, were presented at the February 24, 2012 Remedial Project Manager's (RPM) Meeting. The regulatory agencies agreed that cleanup of the Eastern GSA was complete, monitoring and reporting could cease, and that close out documentation should be submitted. Therefore, the Eastern GSA is no longer discussed in the CMRs (Dibley et al., 2012).

At the Central GSA, chlorinated solvents, mainly TCE, were historically used as degreasing agents in craft shops, such as Building 875. Rinse water from these degreasing operations was disposed of in dry wells. Typically, the dry wells were gravel-filled holes about three to four feet deep and two feet in diameter. The Central GSA dry wells were used until 1982. In 1983 and 1984, these dry wells were decommissioned and excavated.

The Central GSA GWTS has been operating since 1992 removing VOCs from ground water. The current ground water extraction wellfield consists of eight wells (W-7I, W-7O, W-7P, W-7R, W-872-02, W-873-07, W-875-07 and W-875-08). However, due to declining water levels resulting from extraction and regional drought conditions, only four of these wells (W-7R, W-872-02, W-873-07, and W-875-08) contributed to the volumes extracted during second semester 2014. The combined flow rates declined from approximately 2.0 gpm to 0.2 gpm by the end of 2014 The Central GSA GWTS began receiving partially treated water from the Building 830-Distal South (830-DISS) facility at the end of first semester 2007. The current ground water extraction wellfield from 830-DISS connected to the Central GSA GWTS consists of W-830-2216, W-830-51, W-830-52 and W-830-53. During second semester 2014, the flow rates also decreased from these wells to a combined flow rate of 3.3 gpm from only two extraction wells, W-830-2216 and W-830-51. Therefore, most of the water undergoing treatment at the Central GSA GWTS by the end of second semester 2014 (declining from 3.3 gpm vs. 0.2 gpm) derived from the 830-DISS extraction wellfield. The current GWTS configuration includes particulate filtration, air stripping to remove VOCs from extracted water, and GAC to treat vapor effluent from the air stripper. Treated ground water is discharged to the surrounding natural vegetation using misting towers.

The Central GSA soil vapor extraction and treatment system (SVTS) began operation in 1994, in the GSA adjacent to the Building 875 dry well contaminant source area, removing VOCs from soil vapor. Soil vapor is currently extracted from seven wells (W-7I, W-875-07, W-875-08, W-875-09, W-875-10, W-875-11 and W-875-15) at a combined total flow rate of approximately 32 to 39 standard cubic feet per minute (scfm). This flow rate has been fairly consistent over the operational history of this system. Simultaneous ground water extraction in the vicinity lowers the elevation of the water table and maximizes the volume of unsaturated soil influenced by vapor extraction. The current SVTS configuration includes a water knockout chamber, a rotary vane blower, and four 140-lb vapor-phase GAC columns arranged in series. Treated vapors are discharged to the atmosphere under a regulatory permit from the San Joaquin Valley Unified Air Pollution Control District.

A map of the Central GSA, showing the locations of monitor and extraction wells and treatment facilities is presented on Figure 2.1-1.

2.1.1. GSA Ground Water and Soil Vapor Extraction and Treatment System Operations and Monitoring

This section is organized into five subsections: facility performance assessment; operations and maintenance issues; compliance summary; and sampling plan evaluation and modifications.

2.1.1.1. GSA Facility Performance Assessment

The monthly ground water and soil vapor discharge volumes and rates and operational hours for second semester 2014 are summarized in Table 2.1-1. The total volume of ground water and vapor extracted and treated and masses removed during the reporting period is presented in

Table Summ-1. The cumulative volume of ground water and soil vapor treated and discharged and masses removed are summarized in Table Summ-2. Analytical results for influent and effluent samples collected during second semester 2014 are presented in Table 2.1-2. The pH measurement results are presented in Appendix A.

2.1.1.2. GSA Operations and Maintenance Issues

The following maintenance and operational issues interrupted continuous operations of the Central GSA GWTS and SVTS during second semester 2014:

- The GWTS was offline from July 7 until July 22 due to electrical breaker issues and condensate problems with the compressor.
- The GWTS was offline from September 19 until September 22 to repair a break in the treated water line between misting towers.
- Changed the operations of the misting towers from using both misting heads on towers #1 and #4 to both heads on towers #2 and #3.
- The GWTS was offline from October 16 until October 28 to repair the effluent transfer pump.
- Changed the operations of the misting towers from using both misting heads on towers #2 and #3 to the use of a single misting head on all four misting towers.
- The GWTS was taken offline for freeze protection on December 8 for the remainder of the reporting period.

2.1.1.3. GSA Compliance Summary

The Central GSA GWTS operated in compliance with the RWQCB Substantive Requirements for Wastewater Discharge during second semester 2014. The Central GSA SVTS system operated in compliance with San Joaquin Valley Air Pollution Control District permit limitations.

2.1.1.4. GSA Facility Sampling Plan Evaluation and Modifications

The Central GSA treatment facility sampling and analysis plan complies with the monitoring requirements in the CMP/CP. The treatment facility sampling and analysis plan is presented in Table 2.1-3. No modifications were made to the plan during this reporting period.

2.1.1.5. GSA Treatment Facility and Extraction Wellfield Modifications

No modifications were made to the Central GSA GWTS, SVTS, or the extraction wellfield during this reporting period.

2.1.2. GSA Surface Water and Ground Water Monitoring

The sampling and analysis plan for ground water monitoring at the Central GSA is presented in Table 2.1-4. This table delineates and explains deviations from the sampling plan and indicates any additions that were made to the CMP. The sampling and analysis plans for the three Eastern GSA offsite water-supply wells and for the three Eastern GSA wells retained for CMP monitoring downgradient of the Central GSA, have been incorporated into Table 2.1-4.

During the reporting period, ground water monitoring was conducted in accordance with the CMP monitoring requirements with the following exceptions; a total of 20 required analyses were not performed in 14 different wells because the wells were dry or there was insufficient water to collect the samples, a total of five required analyses were not performed in three different wells due to an inoperable pump, a total of 14 required analyses were not performed in 12 different wells due to unsafe conditions (muddy impassable roads) making the wells inaccessible, and one analysis was not performed due to an error by the analytical laboratory. A total of six required analyses were not performed in six different extraction wells (one per well) that were turned off for winter freeze protection.

Of the 14 required analyses that were not performed in 12 wells due to unsafe conditions making the wells inaccessible, access was available and sampling successfully conducted for 12 of the 14 required analyses, in 11 of the 12 wells, during other quarters of 2014, fulfilling CMP requirements.

Of the three wells with an inoperable pump, one was repaired in April 2014 and used for subsequent sampling (well CDF1) and two others (wells W-7B and W-7C) are scheduled for repair and should be operational for planned second quarter 2015 sampling.

Analytical results and ground water elevation measurements obtained during 2014 are presented in Appendices B and C, respectively.

For the Central GSA, ground water elevations and the potentiometric surface contour map, based on second semester 2014 data, for the Qt-Tnsc$_1$ and Qal-Tnbs$_1$ HSUs, including hydraulic capture zones, are presented on Figure 2.1-2.

2.1.3. GSA Remediation Progress Analysis

This section is organized into four subsections: mass removal; analysis of contaminant distribution and concentration trends; remediation optimization evaluation; and performance issues.

2.1.3.1. GSA Mass Removal

The monthly ground water and soil vapor mass removal estimates for second semester of 2014 are summarized in Table 2.1-5. The total mass removed during the reporting period and cumulative mass estimates are summarized in Table Summ-1 and Table Summ-2, respectively.

2.1.3.2. GSA Contaminant Concentrations and Distribution

At the Central GSA, VOCs are the only COCs in ground water and soil vapor. TCE is the most prevalent VOC detected in Central GSA ground water, comprising approximately 90% of the total VOCs. Other VOC COCs identified in the Central GSA include tetrachloroethene (PCE), cis-1,2-dichloroethene (DCE), 1,1-dichloroethene (1,1-DCE), 1,1,1-trichloroethane (TCA), benzene, bromodichloromethane, and chloroform. The HSUs in the Central GSA are the: Qt-Tnsc$_1$ HSU (western part of the Central GSA), Qal-Tnbs$_1$ HSU (eastern part of the Central GSA), and underlying Upper and Lower Tnbs$_1$ HSUs.

For the Qt-Tnsc$_1$ and Qal-Tnbs$_1$ HSUs, isoconcentration contours and individual concentrations for total VOCs, based mostly on second semester 2014 data, are presented on Figure 2.1-3. Because each CMR map is representative of contaminant concentrations during a particular semester, the maximum concentration shown on the CMR map may not match the maximum concentration for 2014 described in the text.

Dry Well Pad Area

A VOC plume is present in $Qt\text{-}Tnsc_1$ and $Qal\text{-}Tnbs_1$ HSU ground water in the Central GSA dry well pad area. The highest VOC and TCE concentrations have been detected in wells screened in the $Qt\text{-}Tnsc_1$ HSU within the Building 875 dry pad area. Prior to remediation, the historic maximum total VOC (mostly TCE) concentration detected in Central GSA ground water was 272,000 µg/L (in a bailed ground water sample collected during drilling of the Building 875 dry well pad area extraction well W-875-07 in March 1992). Total VOC concentrations in the Building 875 dry well area have decreased to a 2014 maximum of 364 µg/L (W-7I, April). While most of the VOCs detected in the Building 875 dry well area well samples consist of TCE, other VOCs in this area detected in 2014 included PCE, 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, 1,1-DCA and 1,2-DCA. Of these VOCs, only TCE, PCE and cis-1,2-DCE were present at concentrations that significantly exceeded their MCL cleanup standards while 1,1-DCE and 1,2-DCA were present at concentrations slightly above their MCL cleanup standards. During 2014, Freon 11, bromodichloromethane and chloroform were not detected in this area. Several Building 875 dry well pad area wells were not sampled during 2014 due to insufficient water.

TCE concentrations in this area have decreased from a historic maximum of 240,000 µg/L (W-875-07, 1993) to a 2014 maximum of 290 µg/L (W-7I, April and W-875-08, October). PCE concentrations have decreased from a historic maximum of 25,000 µg/L (W-875-07, 1993) to a 2014 maximum of 37 µg/L (W-7I, April). Cis-1,2-DCE concentrations have decreased from a historic maximum of 16,000 µg/L (W-7I, 1993) to a 2014 maximum of 53 µg/L in the same well (W-875-08, October). Concentrations of 1,1-DCE have decreased from a historic maximum of 860 µg/L (W-7I, 1993) to a 2014 maximum of 6.3 µg/L (W-875-08, October). Concentrations of 1,2-DCA have decreased from a historic maximum of 38 µg/L (W-875-08, 1993 and W-7I, 1993) to a 2014 maximum of 0.68 µg/L (W-7I, April). 1,1-DCA concentrations have decreased from a historic maximum of 38 µg/L (W-7I, 1993) to a 2014 maximum of 0.59 µg/L (W-7I, April). Overall, a decreasing trend of VOC concentrations in ground water continued in 2014.

During 2014, TCE soil vapor concentrations in the Building 875 dry well pad area (wells W-7I, W-875-07, W-875-08, W-875-09, W-875-10, W-875-11, W-875-12 and W-875-15 ranged from 0.19 to 1.8 parts per million on a volume per volume basis ($ppm_{v/v}$). These vapor concentrations have decreased significantly from the historic maximum TCE vapor concentration of 530 $ppm_{v/v}$ measured in extraction well W-875-07, in 1994.

Outside the Dry Well Pad Area

Outside the Building 875 dry well pad area, wells monitor the (1) $Qt\text{-}Tnsc_1$ and the $Qal\text{-}Tnbs_1$ HSUs, (2) Upper $Tnbs_1$ HSU and (3) Lower $Tnbs_1$ HSU.

$Qt\text{-}Tnsc_1$ and $Qal\text{-}Tnbs_1$ HSUs

For monitor wells screened in the $Qt\text{-}Tnsc_1$ and the $Qal\text{-}Tnbs_1$ HSUs, the historic maximum total VOC concentration was detected in well W-7O (screened in the $Qt\text{-}Tnsc_1$ HSU) at 920 µg/L (1994) declining to 91 µg/L (April) representing the 2014 maximum total VOC concentration detected in wells outside the Building 875 dry well area. Most of VOCs detected for both maxima in well W-7O consisted of TCE (870 µg/L in 1994 and 83 µg/L in April 2014) and these represent the historic and 2014 maximum TCE concentrations detected in wells outside the Building 875 dry well area. During 2014, VOCs detected in wells outside the Building 875 dry well area consisted primarily of TCE, with minor concentrations of PCE, 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE and Freon 11. Of these VOCs, only TCE and PCE (at 6.2 µg/L) were present above their MCL cleanup standards of 5 µg/L (both compounds).

Lower Tnbs$_1$ HSU

Five monitor wells are screened in the deeper Lower Tnbs$_1$ HSU. The historic maximum total VOC concentration was detected in well W-7G at 47 µg/L (primarily TCE, 1989) declining to less than the reporting limit in all five wells, during 2014. No VOCs above the reporting limit have been detected in Lower Tnbs$_1$ Central GSA wells located on LLNL property since 2001.

South of the Site 300 Boundary

South of the Site 300 boundary, 17 wells monitor the (1) Qt-Tnsc$_1$ HSU, (2) Upper Tnbs$_1$ HSU and (3) Lower Tnbs$_1$ HSU.

South of the Site 300 boundary, seven monitor wells and two guard wells are screened in the Qt/Tnsc$_1$ HSU. During 2014, VOCs (mostly TCE) were detected in only two Qt-Tnsc$_1$ HSU offsite monitor wells, W-35A-01 (39 µg/L, November) and W-35A-10 (15 µg/L, November). The historic maximum total VOC concentration observed in Qt/Tnsc$_1$ HSU ground water south of the Site 300 boundary was detected in well W-35A-01 at 545 µg/L (comprised of 510 µg/L TCE and 30 µg/L PCE, 1991). Total VOC concentrations in this well have declined to 39 µg/L (November, 2014), consisting of TCE (36 µg/L), PCE (2.3 µg/L) and 1,1-DCE (0.71 µg/L). Of these VOCs, only TCE was detected above its MCL cleanup standard (5 µg/L). During 2014, well W-35A-10 yielded a maximum total VOC concentration of 15 µg/L, comprised of TCE (9.6 µg/L) and Freon 11 (5.8 µg/L). Only the TCE concentration exceeded its MCL cleanup standard of 5 µg/L. The historic maximum total VOC concentration in this well was 86 µg/L (1994). During 2014, no VOCs were detected above the reporting limit in the remaining Qt/Tnsc$_1$ HSU Central GSA wells located south of the Site 300 boundary including guard wells W-35A-08 and W-35A-14, neither of which has had detectable VOCs since their construction in 1994.

Upper Tnbs$_1$ HSU

In 2014, no VOCs were detected in the three ground water monitor wells (W-35A-05, -12 and -13) screened in the Upper Tnbs$_1$ HSU, south of the Site 300 boundary. No VOCs have been detected in this HSU south of the Site 300 boundary since 1996 (2.4 µg/L, W-35A-13).

Lower Tnbs$_1$ HSU

Except for a very small detection of chloroform (CDF1, 0.81 μg/L, November), no VOCs above the reporting limit were detected in the five Lower Tnbs$_1$ Central GSA wells located south of the Site 300 boundary, in 2014. No VOCs have been detected in this HSU south of the Site 300 boundary since 2001 (CDF, 1.96 μg/L, the historic maximum, and CON1, 1.3 μg/L).

2.1.3.3. GSA Remediation Optimization Evaluation

Ground water extraction and drought conditions continue to lower the ground water table within the GSA OU. At the Central GSA, ground water extraction continues to capture the highest concentrations in ground water. Remediation efforts have reduced VOC concentrations in Central GSA ground water from a historic maximum of 272,000 µg/L in 1992 (W-875-07) to a 2014 maximum of 364 µg/L (W-7I, April). This follows a declining trend from the 2013 maximum concentration of 450 µg/L in the same well. At the eastern edge of the VOC plume, VOC concentrations continue to decrease in monitor wells W-26R-06 and W-26R-11.

Ground water remediation continues to reduce VOC concentrations in the two offsite wells in which VOCs have recently been detected. Wells W-35A-01 and W-35A-10 are located within 50 and 100 feet of the southern site boundary, respectively. Monitor well W-35A-01 appears to be within the hydraulic capture zone of the Central GSA extraction well W-875-08 based on capture zone analysis. Although monitor well W-35A-10 does not appear to be within the hydraulic capture zone of the Central GSA extraction wellfield, VOC and TCE concentrations continue to exhibit a long-term declining trend. TCE concentrations in this well, with a historic maximum of 86 µg/L (1994) remained low at 9.6 µg/L in November 2014; just above its 5 µg/L MCL cleanup standard. No other VOCs are detected above their MCL cleanup standard in well W-35A-10.

Historically and during 2014, substantially more VOC mass was removed by soil vapor extraction than by ground water extraction. Of the 622 grams (g) of VOCs removed during 2014 at the Central GSA treatment facility, 570 g (92%) were removed in the vapor phase. For ground water and soil vapor combined, an approximate 12% decline in VOC mass removed occurred in 2014 (622 g) compared with 2013 (710 g). A comparison from 2013 to 2014 indicates the volume of treated soil vapor decreased by approximately 10% from 19.8 million cf (2013) to 17.7 million cf (2014) and the volume of treated ground water decreased by 80% from 1,751,000 gallons (2013) to 354,000 gallons (2014). The decrease in treated ground water volume is due the lack of water available from extraction wells W-7O (which dried out in June 2014) and W-7I (which dried out in August 2014) and the overall declining ground water table as the field continues to be dewatered by pumping and drought. Table Summ-1 lists the mass removed by each individual treatment facility.

The third GSA Five-Year Review (Valett et al., 2011) included a recommendation to track VOC concentrations in monitor well W-889-01 (located in the northern plume area) and if concentrations increase, the well should be considered for conversion to an extraction well. During 2014, total VOC concentrations in W-889-01 were 8.1 µg/L (June) continuing a declining trend since 1998 (75 µg/L) and 2011 (28 µg/L). In 2012, a new extraction well (W-CGSA-2708) was installed in the northern plume area, in lieu of converting well W-889-01 to an extraction well. Due to the dense infrastructure in the area that precluded constructing a pipeline from the new extraction well to the Central GSA treatment facility, DOE instead plans to install a new treatment facility (CGSA-North) to address VOCs in the northern plume. During 2013, a new injection well (W-CGSA-2907) was installed in the vadose zone portion of the Qt-$Tnsc_1$ HSU, upgradient of planned extraction well W-CGSA-2708. The well was developed and tested during first semester 2014; test results indicate this well has sufficient capacity to accept ground water extracted from W-CGSA-2708.

2.1.3.4. GSA OU Remedy Performance Issues

Ground water extraction activities and prevailing drought conditions continued to lower the ground water table and dewater the Central GSA dry well pad area, resulting in a decreased volume of ground water that can be extracted for treatment. Otherwise, there were no new issues that affect the performance of the cleanup remedy for the GSA OU during this reporting period. The remedy continues to be effective and protective of human health and the environment, and to make progress toward cleanup.

2.2. Building 834 OU 2

The Building 834 Complex has been used to test the stability of weapons and weapon components under various environmental conditions since the 1950s. Past spills and piping leaks at the Building 834 Complex have resulted in soil and ground water contamination with VOCs and TBOS/TKEBs. Nitrate concentrations in Building 834 ground water that exceed the MCL cleanup standard (45 milligrams per liter [mg/L]) are likely the result of a combination of natural sources and septic system leachate. In addition, a former underground diesel storage tank released diesel to the subsurface.

The Building 834 OU is informally divided into three areas: the core, leachfield (septic system), and distal areas (Figure 2.2-1). The core area generally refers to the vicinity of the buildings and test cells in the center of the Building 834 Complex where the majority of contaminant releases occurred. The leachfield area is located immediately southwest of the core area. The distal (T2) area refers to the area downgradient (south) of the core and leachfield areas. A map of Building 834 OU showing the locations of monitor and extraction wells and treatment facilities is presented on Figure 2.2-1.

The Building 834 GWTS and SVTS began operation in 1995 and 1998, respectively. These systems are located in the Building 834 core area. The ground water extraction wellfield removes VOCs nitrate and TBOS/TKEBs from ground water within the Tpsg HSU and the SVTS removes VOCs from soil vapor. Due to the very low ground water yield from individual ground water extraction wells (<0.1 gpm), the GWTS and SVTS have been operated simultaneously in batch mode. Although the GWTS can be operated alone, the SVTS is not operational without ground water extraction due to the upconing of the ground water in the well that covers the well screen and prevents soil vapor flow.

The current extraction wellfield consists of 13 dual extraction wells for both ground water and soil vapor. Nine extraction wells (W-834-B2, -B3, -D4, -D6, -D7, -D12, -D13, -J1, and -2001) are located within the core area and three (W-834-S1, -S12A, and -S13) within the leachfield area. The GWTS extracts ground water at an approximate combined flow rate of between 0.12 and 0.31 gpm and the SVTS extracts soil vapor at a combined flow rate of approximately 116 to 155 scfm. The current GWTS configuration includes floating hydrocarbon adsorption devices to remove the floating silicon oil, TBOS/TKEBs, and floating diesel (if any), followed by aqueous-phase GAC to remove VOCs, dissolved-phase TBOS/TKEBs, and diesel from ground water. Nitrate-bearing treated effluent is then discharged via a misting tower onto the landscape for uptake and utilization of the nitrate by indigenous grasses. The current SVTS configuration includes vapor-phase GAC for VOC removal. Treated vapors are discharged to the atmosphere under an air permit issued by the San Joaquin Valley Unified Air Pollution Control District.

Since 2005, a long-term enhanced *in situ* bioremediation treatability test has been conducted at the distal T2 Area. This testing has included biostimulation to transform ground water from oxidizing to reducing conditions and bioaugmentation with KB-1™, a natural non-pathogenic microbial consortium capable of complete dechlorination of TCE to ethene. This long-term test is described in Sections 2.2.3.3 and 2.2.3.4.

2.2.1. Building 834 OU Ground Water and Soil Vapor Extraction and Treatment System Operations and Monitoring

This section is organized into four subsections: facility performance assessment; operations and maintenance issues; compliance summary; and sampling plan evaluation and modification.

2.2.1.1. Building 834 OU Facility Performance Assessment

The monthly ground water and soil vapor discharge volumes and rates and operational hours for second semester 2014 are summarized in Table 2.2-1. The total volumes of ground water and vapor extracted and treated and masses removed during 2014 are presented in Table Summ-1. The cumulative volume of ground water and soil vapor treated and discharged and masses removed are summarized in Table Summ-2. Analytical results for influent and effluent samples collected during second semester 2014 are presented in Tables 2.2-2 through 2.2-4. The pH measurement results are presented in Appendix A.

2.2.1.2. Building 834 OU Operations and Maintenance Issues

The following maintenance and operational issues interrupted continuous operations of the Building 834 GWTS and SVTS during second semester 2014:

- Both the GWTS and SVTS were offline from July 25 until July 28 due to high temperature interlock shutdown on the SVE system.
- The GWTS was taken offline for one day on October 1 for upgrades to the electronic interlock system.
- Both the GWTS and SVTS were taken offline on December 8 through the remainder of the year for freeze protection.

2.2.1.3. Building 834 OU Compliance Summary

The Building 834 GWTS operated in compliance with the RWQCB Substantive Requirements for Wastewater Discharge during second semester 2014. The Building 834 SVTS system also operated in compliance with San Joaquin Valley Air Pollution Control District permit limitations during second semester 2014.

2.2.1.4. Building 834 OU Facility Sampling Plan Evaluation and Modifications

The Building 834 treatment facility sampling and analysis plan complies with the monitoring requirements in the CMP/CP. The sampling and analysis plan is presented in Table 2.2-5. No modifications were made to the plan during 2014.

2.2.1.5. Building 834 OU Treatment Facility and Extraction Wellfield Modifications

No modifications to the treatment facility or to the extraction wellfield were made during this reporting period.

2.2.2. Building 834 OU Ground Water Monitoring

The sampling and analysis plan for ground water monitoring is presented in Table 2.2-6. This table also delineates and explains deviations from the sampling plan and indicates any additions made to the CMP.

During this reporting period, ground water monitoring was conducted in accordance with the CMP monitoring requirements with the following exceptions; a total of 116 required analyses in 34 different wells were not performed because the wells were dry or there was insufficient water in the wells to collect the samples and a total of seven required analyses in two different wells were not performed because of an inoperable pump. Of the two wells with an inoperable pump, one well (W-834-T1) was repaired in time for scheduled sampling in December 2014 and the second well (W-834-T3) is scheduled for repair.

Analytical results and ground water elevation measurements obtained during 2014 are presented in Appendices B and C, respectively.

The ground water elevation contour map for the Tpsg HSU is presented on Figure 2.2-2. Ground water elevations for the Tps-$Tnsc_2$ HSU are posted on Figure 2.2-3.

2.2.3. Building 834 OU Remediation Progress Analysis

This section is organized into four subsections: mass removal, analysis of contaminant distribution and concentration trends, remediation optimization evaluation, and performance issues.

2.2.3.1. Building 834 OU Mass Removal

The monthly ground water and soil vapor mass removal estimates for second semester 2014 are summarized in Table 2.2-7. The total mass removed during the reporting period and cumulative mass estimates are summarized in Table Summ-1 and Table Summ-2, respectively.

2.2.3.2. Building 834 OU Contaminant Concentrations and Distribution

At the Building 834 OU, VOCs (primarily TCE but also PCE, cis-1,2-DCE, 1,1,1-TCA and chloroform) are the primary COCs detected in ground water; TBOS/TKEBs and nitrate are the secondary COCs. These COCs have been identified in two shallow HSUs: (1) the Tpsg perched water-bearing gravel zone, and (2) the underlying Tps-$Tnsc_2$ perching horizon. Figure 2.2-1 shows the location of wells and treatment facilities in the Building 834 OU.

For the Tpsg HSU: (1) isoconcentration contour and individual concentration maps for total VOCs, based on second semester data, are presented on Figure 2.2-4; (2) first semester TBOS/TKEBS concentrations are posted on Figure 2.2-5; and (3) first semester nitrate concentrations are posted on Figure 2.2-6. For the Tps-$Tnsc_2$ HSU, individual VOC, TBOS/TKEBS and nitrate concentrations are posted on Figure 2.2-3. Because each CMR map is representative of contaminant concentrations during a particular semester, the maximum concentration shown on the CMR map may not match the maximum concentration for 2014 described in the text.

2.2.3.2.1. VOCs Concentrations and Distribution

Although the overall extent of VOCs in the Building 834 OU ground water and soil vapor have not changed significantly, the maximum concentrations have decreased by more than one order-of-magnitude since remediation began in the mid 1990s. VOCs detected in Building 834 area ground water consist primarily of TCE and cis-1,2-DCE. Other VOCs including PCE, 1,1-DCE, 1,1,2-TCA, trans-1,2-DCE, Freon 113, vinyl chloride and chloroform as well as ethane and ethene have also been detected, albeit in much lower concentrations during 2014. The compounds cis-1,2-DCE, vinyl chloride, ethene and ethane are the TCE microbial dechlorination breakdown products under anaerobic conditions.

Core Area

The Building 834 core area continues to exhibit the highest VOC concentrations in ground water and soil vapor. VOC concentrations and distribution in ground water and soil vapor in the Tpsg and Tps-Tnsc$_2$ HSUs in the Building 834 core area are discussed below.

Tpsg HSU

Twenty-six wells (18 monitor and eight dual extraction) are screened in the Tpsg HSU, where active remediation has reduced total VOC ground water concentrations from a historic maximum of 1,100,000 µg/L (all TCE, W-834-D5, 1988) to a 2014 maximum of 54,000 µg/L (July) in extraction well W-834-C5, located approximately 100 ft south of W-834-D5. The highest 2013 concentration of total VOCs in core area Tpsg HSU wells was 60,000 µg/L in extraction well W-834-C5.

TCE concentrations have decreased from a historic maximum of 1,100,000 µg/L in W-834-D5 (1988) to a 2014 maximum of 34,000 µg/L (July) in W-834-C5. In 2013, the highest TCE concentration measured in core area Tpsg HSU wells was 37,000 µg/L, also in W-834-C5.

In the core area, cis-1,2-DCE and vinyl chloride are microbial dechlorination products of TCE in wells that contain TBOS/TKEBS as co-contaminants. Cis-1,2-DCE concentrations have decreased from a historic maximum of 540,000 µg/L (W-834-D4, 1990) to a 2014 maximum of 20,000 µg/L (W-834-B5, July). In 2014, the only vinyl chloride detections above the reporting limit in core area Tpsg HSU wells, were observed in extraction well W-834-B3 (14 µg/L, April), monitor well W-834-D3 (7.1 µg/L, February), and extraction well W-834-D5 (2.7 µg/L, March). Very low concentrations of ethene recently detected in monitor well W-834-J2 (0.74 µg/L, 2012), monitor well W-834-D3 (0.66 µg/L, 2012) and extraction well W-834-B3 (0.27 µg/L, 2012) indicate at least partial degradation under biotic or abiotic processes to a benign end product.

PCE concentrations have decreased from a historic maximum of 10,000 µg/L (W-834-D3, 1993) to a 2014 maximum of 120 µg/L (W-834-C5, July). Although 1,1,1-TCA was detected at 33,000 µg/L in extraction well W-834-J1 (1991), this compound was not detected above the reporting limit in this or any other well in the Building 834 OU during 2014, as well as in 2013. The compound 1,1-DCE was detected in two area wells above its 6 µg/L MCL cleanup level at 58 µg/L (W-834-C5, July) and 15 µg/L (W-834-B3, August); two other area wells had very low concentrations or were below the reporting limit. The compounds 1,1,2-TCA, trans-1,2-DCE and Freon 113 were detected at very low concentrations or were below reporting limits.

During 2014, TCE soil vapor concentrations from the core area SVE wells ranged from 0.068 to 12 ppm$_{v/v}$. The highest detection (12 ppm$_{v/v}$) is representative of ongoing vapor extraction operations not rebound conditions, as it was collected from extraction well W-834-B3, 28 days after the resumption of treatment facility operations following the freeze protection shut down period. Higher vapor concentrations could be measured after an extended rebound period. These TCE vapor concentrations have decreased by three orders-of-magnitude from a pre-remediation maximum core area concentration of 3,200 ppm$_{v/v}$ (extraction well W-834-D4, 1989). Well W-834-D4 is located approximately 10 feet from well W-834-D5, where the historic maximum ground water VOC concentration in the Tpsg HSU was observed.

Tps-Tnsc$_2$ HSU

In the core area, underlying the Tpsg HSU, the Tps-Tnsc$_2$ HSU continues to yield the highest VOC ground water concentrations in the Building 834 OU and at Site 300. Five wells (four monitor and one dual extraction) are screened in the Tps-Tnsc$_2$ HSU. Total VOC concentrations in this HSU, comprised mostly of TCE, have decreased from a historic maximum of 250,000 µg/L (2002) to a 2014 maximum of 180,000 µg/L (February) and PCE concentrations have decreased from a historic maximum of 7,900 µg/L (2001) to a 2014 maximum of 940 µg/L (April); both TCE and PCE maxima were at monitor well W-834-A1. Chloroform concentrations have decreased from a historic maximum of 42 µg/L (W-834-A1 and monitor well W-834-U1, 2000) to below reporting limits in all core area Tps-Tnsc$_2$ HSU wells in 2014. The historic maximum for cis-1,2-DCE was 11,000 µg/L (W-834-U1, 2009).

In a July 2014 sample from well W-834-A1, cis-1,2-DCE was reported at 33,000 µg/L by the analytical laboratory. This measurement is anomalously high, by an order-of-magnitude, compared with historic results and suspect. Previously, the maximum cis-1,2-DCE detection in this well was 9,700 µg/L (February 2008) and typical detections of cis-1,2-DCE have been in the range of 1,500 to 9,000 µg/L, since 2010. Furthermore, when the well was previously and subsequently sampled in February 2014 and February 2015, cis-1,2-DCE was detected at 2,200 µg/L and 2,400 µg/L, respectively. Both of these detections are consistent with historic results while the July 2014 result of 33,000 µg/L is not. Future cis-1,2-DCE concentrations will be closely monitored for this well.

During 2014, vinyl chloride, 1,1-DCE, 1,1,2-TCA, trans-1,2-DCE and Freon 113 were not detected above the reporting limit, in any Tps-Tnsc$_2$ HSU well in the core area.

During the reporting period, TCE soil vapor concentrations from the sole core area Tps-Tnsc$_2$ HSU SVE well W-834-2001 ranged from 0.37 to 1.7 $ppm_{v/v}$. The highest detection (1.7 $ppm_{v/v}$) is representative of ongoing vapor extraction operations, not rebound conditions, as it was collected in November, before the freeze protection shut down period. The historic maximum TCE vapor concentration from this well was 30 $ppm_{v/v}$ (April 2011), and representative of rebound conditions following a prolonged period of treatment facility shutdown.

Leachfield Area

VOC concentrations and distribution in ground water and soil vapor in the Tpsg and Tps-Tnsc$_2$ HSUs in the Building 834 leachfield area are discussed below.

Tpsg HSU

In the leachfield area, six wells (three monitor and three dual extraction) are screened in the Tpsg HSU. Total VOCs in this HSU have decreased from a pre-remediation maximum of 179,200 µg/L (mostly TCE, W-834-S1, 1988) to a 2014 maximum of 9,300 µg/L (almost entirely TCE) detected in monitor well W-834-2113 (August). The historic maximum PCE detection was 6,300 µg/L (W-834-S1, 1986) declining to a 2014 maximum of 48 µg/L (March) observed in the same well. Cis-1,2-DCE concentrations have decreased from a historic maximum of 3,900 µg/L (W-834-S13, 2003) to a 2014 maximum of 240 µg/L (W-834-S1, April). The historic maximum chloroform detection was 950 µg/L (W-834-S1, 1989); during 2014, chloroform was not detected in any leachfield area Tpsg HSU wells. Vinyl chloride, 1,1-DCE, 1,1,2-TCA, trans-1,2-DCE and Freon 113 were also not detected in any leachfield area Tpsg HSU wells.

During 2014, TCE soil vapor concentrations in the leachfield area Tpsg HSU ranged from 0.18 to 1.2 $ppm_{v/v}$, significantly lower than the 710 $ppm_{v/v}$ maximum pre-remediation concentration measured in 2004 in well W-834-S13. The highest detection (1.2 $ppm_{v/v}$) is representative of ongoing dual extraction operations, not rebound conditions, as it was collected from extraction well W-834-S1, 28 days after the resumption of treatment facility operations following the freeze protection shut down period.

Tps-Tnsc$_2$ HSU

In the leachfield area, the underlying Tps-Tnsc$_2$ HSU (monitored by two wells, W-834-S8 and -S9) exhibits VOCs concentrations significantly lower than in the overlying Tpsg HSU or in the core area. Total VOC concentrations in Tps-Tnsc$_2$ HSU ground water have decreased from a historic maximum of 16,000 µg/L (entirely TCE, W-834-S8, 1992) to a 2014 maximum of 1,800 µg/L (entirely TCE, W-834-S9, February). The 2013 maximum total VOC concentration of 3,100 µg/L was detected in well W-834-S8. However, this well was dry and not sampled during 2014.

PCE concentrations have declined from a historic maximum of 170 µg/L (W-834-S8, 1993) to a 2014 maximum of 3.6 µg/L (W-834-S9, February). Cis-1,2-DCE concentrations have decreased from a historic maximum of 130 µg/L (W-834-S8, 1991) to a 2014 maximum of 2.8 µg/L (W-834-S9, February). 1,1,1-TCA concentrations have declined from a historic maximum of 260 µg/L (W-834-S8, 1991) to below the reporting limit since 2013. Chloroform concentrations have decreased from a historic maximum of 6.1 µg/L (W-834-S8, 1993) to below the reporting limit since first semester 2013.

The Tps-Tnsc$_2$ HSU in the leachfield area has exhibited declining VOC trends since monitoring began in 1989.

Distal Area

VOC concentrations and distribution in ground water in the Tpsg, Tps-Tnsc$_2$, and Tnbs$_1$ HSUs in the Building 834 distal area are discussed below.

Tpsg HSU

The distal area contains 20 monitor wells completed in the Tpsg HSU. Since 2005, this HSU (in the T2 area) has been the target of a long-term enhanced *in situ* bioremediation treatability study, discussed in Section 2.2.3.4 of this report.

Total VOC concentrations in this area have decreased from a historic maximum of 86,000 µg/L (entirely TCE) in well W-834-T2A (1988) to a 2014 maximum of 7,600 µg/L (entirely TCE) in monitor well W-834-2117 (February).

PCE concentrations have decreased from a historic maximum of 160 µg/L (W-834-S6, 1987) to a 2014 maximum of 18 µg/L (W-834-T2A, August). Except for this well and wells W-834-T2D (6.5 µg/L, February), W-834-1833 (0.89 µg/L, August) and W-834-1824 (0.71 µg/L, February), PCE concentrations were below the reporting limit in all distal area Tpsg HSU wells during 2014. Cis-1,2-DCE has decreased from a historic maximum concentration of 6,200 µg/L in W-834-T2 (2008) to a 2014 maximum of 1,000 µg/L in the same well (February). 1,1,1-TCA concentrations have decreased from a historic maximum of 200 µg/L in well W-834-T2D (1991) to below the reporting limit in all wells during 2014. During the reporting period, chloroform decreased from a historic maximum concentration of 270 µg/L (W-834-M1, 1999) to 0.93 µg/L (March 2014) in the same well. This concentration (0.93 µg/L) is far below its MCL cleanup standard of 80 µg/L and was one of only three detectable chloroform detections (also 1.6 µg/L in W-834-T2A and 1 µg/L in W-834-T2D) above the reporting limit in all distal area Tpsg HSU wells. During 2014, the only vinyl chloride detections above the reporting limit in distal area Tpsg HSU wells, were observed in wells W-834-T2 (330 µg/L, February) and W-834-1824 (8.1 µg/L, February). These vinyl chloride detections are within the range of concentrations observed in these wells in recent years. In distal area Tpsg HSU wells, 1,1-DCE and 1,1,2-TCA were detected at very low concentrations in (1) four wells for 1,1-DCE (W-834-T2, -1824, -T2A and -T2D) and (2) two wells for 1,1,2-TCA (W-834-T2A and -T2D). Trans-1,2-DCE and Freon 113 were not detected in any wells.

In 2014, the Tpsg HSU in the distal area has continued to exhibit declining VOC trends since monitoring began in 1989.

Tps-Tnsc$_2$ HSU

The underlying Tps-Tnsc$_2$ HSU is monitored by well W-834-2119, which contained a 2014 maximum total VOC concentration of 13,000 µg/L (all TCE, February). After an initial increase between 2005 (when monitoring began) and 2007, VOC concentrations in this well have since been relatively stable in a range between 11,000 µg/L and 16,700 µg/L.

Tnbs$_1$ HSU

In the distal area, the deeper Tnbs$_1$ HSU is monitored by well W-834-T1. VOCs have not been detected since 1986 and 1987 when very low concentrations (<4 µg/L) were detected immediately following well installation and were likely due to some cross contamination from shallow soil, during drilling.

2.2.3.2.2. TBOS/TKEBS Concentrations and Distribution

TBOS/TKEBS concentrations in ground water have decreased from a historic maximum of 7,300,000 µg/L (core area Tpsg HSU monitor well W-834-D3, 1995) to 91 µg/L (core area Tpsg HSU extraction well W-834-B2, February 2014). Over the past five years, maximum TBOS/TKEBS concentrations in well W-834-D3 ranged from 96,000 µg/L to 13,000 µg/L. The February 2014 sample from this well was below the detection limit (<50 µg/L) a result verified by the analytical laboratory. Also, a recent sample collected in February 2015 had 25 µg/L.

In the core area, seven Tpsg HSU wells yielded detectable TBOS/TKEBS in 2014 (all in August) ranging from 17 to 91 µg/L (extraction wells W-834-B2, -D4, -D12, -D7, -D6, -D13 and W-834-J1).

This compound is a light, non-aqueous phase liquid (LNAPL) that is found primarily in the core area, with the highest concentrations in the Tpsg HSU. TBOS/TKEBS concentrations differ significantly from one sampling event to the next. Although several attempts have been made to identify and measure TBOS/TKEBS as a floating product, it was last observed in some core area wells in the mid-1990s. Wells that contain TBOS/TKEBS as co-contaminants with TCE, generally exhibit the highest concentrations of degradation products, such as cis-1,2 DCE and vinyl chloride.

Because TBOS/TKEBS concentrations in Tpsg HSU wells in the leachfield and distal areas have historically been low or below reporting limits, sampling for TBOS/TKEBS in the leachfield and distal areas are performed biennially, with approximately half the wells sampled during even numbered years and half sampled during odd numbered years. In the leachfield and distal area Tpsg HSU wells sampled during 2014, TBOS/TKEBS concentrations were below reporting limits, with the exception of two wells. In the leachfield area, TBOS/TKEBS were detected in Tpsg HSU extraction wells W-834-13 (52 µg/L, August) and W-834-S1 (33 µg/L, February). Historically, these wells have been below reporting limits for TBOS/TKEBS.

The concentration and extent of TBOS/TKEBS in ground water are greater in the Tpsg HSU than the underlying Tps-Tnsc$_2$ HSU. The historic maximum TBOS/TKEBS detection in the Tps-Tnsc$_2$ HSU is 110 µg/L (W-834-U1, 2009). During the reporting period, TBOS/TKEBS were detected in two wells screened in the Tps-Tnsc$_2$ HSU, leachfield area well W-834-S9 (75 µg/L, February) and core area well W-834-A1 (31 µg/L, February). In 2014, TBOS/TKEBS remained below the reporting limit in guard wells W-834-T1 and W-834-T3.

2.2.3.2.3. Nitrate Concentrations and Distribution

During 2014, nitrate concentrations in ground water exceeded the 45 mg/L MCL cleanup standard in the Building 834 core, leachfield and distal areas in the Tpsg HSU. During 2014, nitrate in Tpsg HSU ground water ranged from a maximum concentration of 300 mg/L (February) in monitor well W-834-M1 (located about 400 feet east of the leachfield area) to below the 0.5 mg/L reporting limit.

In the core area, nitrate concentrations in the Tpsg HSU varied spatially and temporally due to denitrification associated with the ongoing intrinsic *in situ* biodegradation of TCE. In core area Tpsg HSU wells, nitrate concentrations in ground water exceeded the 45 mg/L MCL cleanup standard in (1) seven core area wells at concentrations ranging from 60 to 210 mg/L (W-834-D12, -J1, -J2, -C4, -C5, -D7, and -B2), (2) four leachfield area wells at concentrations ranging from 73 to 150 mg/L (W-834-S1, -S12A, -S13, and -2113), and (3) six distal area wells at concentrations ranging from 66 to 300 mg/L (W-834-J3, -M2, -T2A, -T2D, -2117, and -2118). All of these detections were within the historical range of nitrate concentrations observed in these wells since 2006. All other Tpsg HSU wells were below the 0.5 mg/L reporting limit.

In the Tps-Tnsc$_2$ HSU, nitrate concentrations in ground water exceeded the 45 mg/L MCL cleanup standard in (1) no core area wells, (2) one leachfield area well (W-834-S9, 95 mg/L, February), (3) one distal area well (W-834-2119, 84 mg/L, February), and (4) one well south of the distal area (W-834-T5, 93 mg/L, February). All of these detections were within the historical range of nitrate concentrations observed in these wells since 2006. All other Tps-Tnsc$_2$ HSU wells were below the 0.5 mg/L reporting limit.

Nitrate concentrations in ground water have decreased from a historic maximum of 749 mg/L (monitor well W-834-K1A, 2000 mg/L) to a 2014 maximum of 300 mg/L. However, the continued presence of elevated nitrate indicates that an ongoing source of nitrate to ground water exists, likely due to a combination of both natural and anthropogenic sources. During 2014, nitrate was not detected in guard wells W-834-T1 and W-834-T3.

2.2.3.2.4. Other Contaminant Concentrations and Distribution

The extent of diesel in ground water in the Building 834 area is limited to the vicinity of a former underground storage tank located beneath the paved portion of the core area. Diesel concentrations have decreased from a historic maximum of 3,900,000 µg/L (W-834-2001, 2004) to a 2014 maximum of 2,300 µg/L (W-834-2001, March). Diesel concentrations measured in ground water tend to vary from one sampling event to the next, likely due to varying amounts of free-phase product in the subsurface and fluctuating ground water levels. No floating product was detected in ground water during 2014.

Perchlorate concentrations have decreased from a historic maximum of 11 µg/L (W-834-2118, 2005) to below the 4 µg/L reporting limit during 2014. However, attempts to sample ground water for perchlorate from monitor well W-834-S7, which has historically contained perchlorate at concentrations ranging from 8.8 to 11 µg/L, were unsuccessful because the well was dry. Monitoring for perchlorate will continue for wells W-834-2118, W-834-S7 and W-834-A2.

2.2.3.3. Building 834 OU Remediation Optimization Evaluation

Ground water extraction and drought conditions continue to lower the ground water table within the Building 834 OU. The number of wells throughout the OU that were dry or did not have enough available water to perform sampling increased from 29 in 2013 to 34 during 2014.

During 2014, no modifications were made to the core or leachfield area extraction wellfields. As in years past, during 2014, substantially more VOC mass was removed by soil vapor extraction than by ground water extraction. Of the 6,520 g of VOCs removed during 2014, 6,100 g (94%) were removed in the vapor phase. For ground water and soil vapor combined, an approximate 13% decline in VOC mass removed occurred in 2014 (6,520 g) compared with 2013 (7,460 g). In 2014, the volume of treated ground water decreased by approximately 5% from 111,500 gallons (2013) to 106,300 gallons (2014) while the volume of treated soil vapor increased by 13% from 50,534,000 cf (2013) to 57,069,000 cf (2014). This is due to the lowering ground water table as the field is dewatered by pumping and drought conditions. During 2014, the total nitrate mass removed was 33 kg and the total TBOS/TKEBS mass removed was 5.4 g, similar to previous years. Table Summ-1 lists the mass removed by each individual treatment facility.

Core Area

Dual extraction operations in the core area and regional drought conditions continue to dewater the Tpsg HSU. TCE biodegradation continues within the core area where significant amounts of TBOS/TKEBS are present and, when hydrolyzed, serves as an electron donor for biodegradation. Historically, the primary biodegradation byproduct has been cis-1,2-DCE, although vinyl chloride and trace detections of ethene have also been historically detected in some wells, especially in well W-834-D3. Cis-1,2-DCE and vinyl chloride are degradation products of intrinsic anaerobic biodegradation of TCE, in the core area. Low concentrations of ethene (0.74 µg/L in W-834-J2 and 0.66 µg/L in W-834-D3, both 2012) suggest at least partial degradation to a benign end product.

During 2014, both cis-1,2-DCE and vinyl chloride were observed in core area Tpsg HSU ground water at maximum concentrations of 20,000 µg/L (W-834-C5, July) and 14 µg/L (W-834-B3, August), respectively. Ethane and ethene were not measured in core area wells in 2014.

A post freeze protection evaluation was conducted in February 2014 that entailed monitoring water chemistry parameters (including oxidation-reduction potential [ORP]) after the prolonged freeze protection shutdown period from December 2013 to February 2014. The results of this evaluation indicated reducing conditions in one well (Tps extraction well W-834-2001, -19 mV) and positive ORP in the nine other extraction wells with available water.

During first semester 2014, the treatment system was restarted on February 4, after having been off since December 2, 2013 to protect against freeze damage. Ideally, data regarding the accumulation of VOCs, TCE, cis-1,2-DCE and vinyl chloride during the shutdown period could serve as indicators of *in situ* biodegradation. Typically, increases in cis-1,2-DCE are expected during the treatment facility shutdown period when subsurface conditions become anaerobic. Field oxidation reduction potential (ORP) measurements of ground water during the February 2014 sampling episode indicated reducing conditions at W-834-D3 (-254 mV) and at a deeper Tps well W-834-2001 (-19 mV). No other core area wells had ORP measurements indicating reducing conditions but many that have historically exhibited reducing conditions such as W-834-D14 and W-834-J2 were dry or had insufficient water.

The Tpsg HSU extraction wellfield within the core area continues to adequately capture the highest VOC concentrations in ground water. Per the recommendations presented in the third Five-Year Review Report for the Building 834 Operable Unit (Valett et al., 2012), VOC concentrations in monitor well W-834-C5 and nearby well W-834-B4 will continue to be observed closely during the next five years. If these wells exhibit increasing VOC trends, installation of extraction wells in the vicinity of these wells may be considered. Since both wells were installed in 2000, VOCs in W-834-C5 have fluctuated seasonally with no apparent increasing or decreasing long-term trend and W-834-B4 has remained generally stable.

VOC concentration trends in the underlying Tps-$Tnsc_2$ HSU will also continue to be monitored closely during the next five years. Per the recommendations presented in the Building 834 Five-Year Review, if well W-834-A1 exhibits increasing VOC trends, installation of additional extraction wells in this area may be considered. Total VOC concentrations in this HSU have decreased from a historic maximum of 250,000 µg/L (W-834-A1, 2002) to a 2014 maximum of 180,000 µg/L (W-834-A1, February). However, there has been no notable increasing or decreasing VOC concentration trend in this well since it was installed in 2000. A detection of cis-1,2-DCE at 33,000 µg/L reported by the laboratory in a February 2014 sample from well W-834-A1 is very suspect and anomalously high (by an order-of-magnitude), compared to historic results for this well. Future cis-1,2-DCE concentrations will be closely monitored for this well.

Leachfield Area

In the leachfield area, the extraction wellfield continues to capture some portions of the VOC plume in Tpsg HSU ground water. However, the areas with the highest concentrations (in the vicinity of monitor well W-834-2113) are not fully captured. In accordance with recommendations presented in the Building 834 Five Year Review, the leachfield area will undergo an extraction wellfield expansion by converting W-834-2113 from a monitor to extraction well during fiscal year 2015.

VOC concentration trends in the underlying Tps-$Tnsc_2$ HSU will also continue to be monitored closely during the next five years. Per the recommendations presented in the Building 834 Five-Year Review, if distal area monitor well W-834-2119 exhibits increasing VOC trends, installation of additional extraction wells in this area may be considered. Since well W-834-2119 was constructed in 2005, VOC concentrations in have remained generally flat, in a range between 6,300 to 16,700 µg/L.

VOCs in ground water are expected to continue to decrease as remediation progresses. The deep regional $Tnbs_1$ aquifer continues to be free of contaminants as demonstrated by quarterly analyses of ground water as recently as first semester 2014 from guard wells W-834-T1 and W-834-T3, both screened in the Lower $Tnbs_1$ HSU.

2.2.3.4. T2 Treatability Study

Since 2005, the Tpsg HSU in the distal area has been the target of a long-term enhanced *in situ* bioremediation treatability study, including biostimulation using sodium lactate and bioaugmentation using KB-1, a consortium of dechlorinating bacteria that contain Dehalococcoides. This treatability study continued during 2014 in the form of post-biostimulation rebound monitoring. The primary objective of this pilot-scale treatability study was to assess the performance of enhanced *in situ* bioremediation of TCE at concentrations greater than 10,000 µg/L in a water-bearing zone typical of TCE contaminant source areas at Site 300. Since 2005, progress of this test has been reported semi-annually in the CMRs.

During 2014, a draft Phase 2 pilot study work plan describing enhanced *in situ* bioremediation of TCE was submitted to regulators for review (LLNL, 2014). Planned activities include expansion of the original *in situ* bioremediation treatment zone at T2 by implementing a small-scale recirculation cell extracting ground water from two nearby wells, W-834-T2A and W-834-T2D, and continuing to use W-834-1824 as an injection well for biostimulation using a more effective form of lactate (ethyl lactate). In February 2014, wells W-834-1824, W-834-1833 and W-834-T2 were sampled for bacterial, volatile fatty acids and light hydrocarbons (W-834-1825 did not have sufficient water for sampling during 2014). The results indicate that Phase 1 *in situ* bioremediation continues to be successful and ideal conditions for Phase 2 implementation are present, with the exception that water levels in this area have declined significantly. Ethene production is ongoing, significant lactate is still present, and dechlorinating bacteria remain in the subsurface at high levels. Performance during Phase 2 will be measured by how effectively the treatment zone can be expanded by the recirculation cells beyond the original Phase 1 treatment zone.

In the T2 area, Tpsg HSU well W-834-1833 had notable VOC concentrations in 2013 of 4,100 µg/L (entirely TCE) dropping to 340 µg/L (almost all TCE) in 2014. This continues a steady decline from a historic maximum total VOC concentration of 21,000 µg/L (comprised entirely of TCE in 2004 in this well). Ethene was slightly above the reporting limit and had an ORP of -54 mV in February. This well was not sampled for VOCs during first semester 2014, due to insufficient water.

Concentrations of cis-1,2-DCE and vinyl chloride during 2014 were highest in well W-834-T2 at 1,000 µg/L and 330 µg/L, respectively (February). Ethene was detected in this well at 200 µg/L in February. The total VOC concentration in this sample was 1,390 µg/L, declining steadily from 30,000 µg/L (entirely TCE) in 2004. The trend demonstrates the dechlorination of TCE to its degradation end product ethene through bioaugmentation with KB-1. Well W-834-T2 had an ORP of -169 mV in February.

During 2014, well W-834-1824 had 650 µg/L total VOCs comprised of 450 µg/L TCE, 190 µg/L cis-1,2-DCE and 8.1 µg/L vinyl chloride; ethene was detected at 3 µg/L and ORP measured in the field during sampling was -230 mV (February). In 2004, this well yielded 26,000 µg/L total VOCs (mostly TCE). The trend also shows the dechlorination of TCE to its degradation end product ethene through bioaugmentation with KB-1.

In 2013, well W-834-1825 had 80 µg/L total VOCs comprised of 54 µg/L TCE, 19 µg/L cis-1,2-DCE and 7.3 µg/L vinyl chloride; ORP measured in the field during sampling was -126 mV (August 2013). In January 2013, ethene was detected in this well at 100 µg/L with an ORP of -81 mV. This well was not sampled during 2014 due to insufficient water. In 2004, this well yielded 19,000 µg/L total VOCs (mostly TCE). The trend also shows the dechlorination of TCE to its degradation end product ethene through bioaugmentation with KB-1.

During 2014, well W-834-T2A yielded 5,500 µg/L total VOCs (mostly TCE, February) continuing a steady decline from 86,000 µg/L in 1988. Although this well was outside the treatment zone of the treatability test, a 2013 ground water sample from this well contained 0.48 µg/L ethene and 22 µg/L ethane. The presence of ethane indicates continued biodegradation of ethene under highly anaerobic conditions most likely in the T2 treatment zone upgradient of W-834-T2A.

The cumulative 2014 data presented above, especially the continued presence of ethene, the overall reduction in total VOCs, and redox conditions indicate that enhanced *in situ* bioremediation of TCE continues in the T2 area, particularly in the vicinity of wells W-834-T2, W-834-1824 and W-834-1825 (based on 2013 data). Initially, VOCs exhibited some rebound in the treatment zone for several months following the end of Phase 1 biostimulation in 2008 but they now exhibit a decreasing trend to the lowest historical VOC levels. Additionally, total VOC concentrations in well W-834-2117, located upgradient of the T2 treatment zone, have declined steadily from 22,000 µg/L in 2005 to 6,000 µg/L in August 2014. Total VOC concentrations in well W-834-2118, located downgradient of the T2 treatment zone, have similarly decreased from 600 µg/L in 2005 to 130 µg/L in August 2014.

2.2.3.5. Building 834 OU Remedy Performance Issues

During the reporting period, there were no new issues that affect the performance of the cleanup remedy for the Building 834 OU. Although declining water levels have impacted the ability to collect ground water samples and implement the second phase of the T2 enhanced bioremediation treatability test, soil vapor extraction in the core area continues to be an effective VOC mass removal method and continues to be protective of human health and the environment. Per the recommendations presented in the Building 834 Five Year Review, VOC trends are being monitored in Tps-Tnsc$_2$ HSU wells and installation of additional extraction wells in this HSU may be considered to increase the effectiveness of remediation of VOCs in the Tps-Tnsc$_2$ HSU beneath the core area. Perched ground water beneath the 834 area in the Tpsg and Tps/Tnsc$_2$ HSUs continues to decline as a result of extraction operations and ongoing regional drought conditions.

2.3. Pit 6 Landfill (Pit 6) OU 3

The Pit 6 Landfill covers an area of 2.6 acres near the southern boundary of Site 300. This landfill was used from 1964 to 1973 to bury waste in nine unlined debris trenches and animal pits. The buried waste, which includes shop and laboratory equipment and biomedical waste, is located on or adjacent to the Corral Hollow-Carnegie Fault. Farther east, the fault trends to the south of two nearby water-supply wells CARNRW1 and CARNRW2. These active water-supply wells are located about 1,000 feet east of the Pit 6 Landfill. They provide water for the nearby Carnegie State Vehicular Recreation Area and are monitored on a monthly basis.

The Pit 6 Landfill was capped and closed in 1997 under CERCLA to prevent further leaching of contaminants resulting from percolation of rainwater through the buried waste. The engineered, multi-layer cap is intended to prevent rainwater infiltration into the landfill, mitigate potential damage by burrowing animals and vegetation, prevent potential hazards from the collapse of void spaces in the buried waste, and prevent the potential flux of VOC vapors through the soil. Surface water flow onto the landfill is minimized by a diversion channel on the north side and drainage channels on the east, west, and south sides of the engineered cap. A map of Pit 6 Landfill OU showing the locations of monitor and water-supply wells are presented on Figure 2.3-1.

2.3.1. Pit 6 Landfill OU Surface Water and Ground Water Monitoring

The sampling and analysis plan for ground water and surface water monitoring is presented in Table 2.3-1. This table also delineates and explains deviations from the sampling plan and indicates any additions made to the CMP.

During the reporting period, ground water monitoring was conducted in accordance with the CMP monitoring and post-closure requirements with the following exceptions; a total of 31 required analyses in seven different wells were not performed because the wells were dry or there was insufficient water to collect the samples and a total of 14 required analyses were not performed due to inoperable pumps in four different wells (K6-03, K6-04, K6-25 and K6-34).

The pump issues have been resolved in the following manner:

- K6-03 and K6-34 pumps have been replaced.
- K6-04 pump was removed and the well will now be sampled with a bailer.
- K6-25 pump was repaired prior to third quarter 2014 sampling.

The seven wells that were dry or had insufficient water to sample during 2014, have been dry, for several years. Of these wells:

- BC6-13 (dry since 2000) is screened from 0-5 ft bgs and used to monitor contaminants in Spring 7.
- K6-15 (dry since 1999) and K6-32 (dry since 2006) are located upgradient of the Pit 6 Landfill and have never had detectable VOCs.
- K6-21 (dry since 2000) has a nearby existing well (EP6-09) screened at a greater depth within the same HSU, which had available ground water and was successfully sampled for the same required analytes.
- K6-24 (dry since 2011) has a nearby existing well (W-PIT6-2817) screened at a greater depth within the same HSU, which had available ground water and was successfully sampled for the same required analytes.
- K6-33 had insufficient water to collect a sample in September 2014. This well has been sporadically dry or had insufficient water to sample, since 2007.
- W-33C-01 went dry in 2014.

Analytical results and ground water elevation measurements obtained during 2014 are presented in Appendices B and C, respectively. The ground water elevation contour map for the Qt-$Tnbs_1$ HSU is presented on Figure 2.3-2.

2.3.2. Pit 6 Landfill OU Remediation Progress Analysis

This section is organized into three subsections: analysis of contaminant distribution and concentration trends; remediation optimization evaluation; and performance issues.

2.3.2.1. Pit 6 Landfill OU Contaminant Distribution and Concentration

At the Pit 6 Landfill OU, VOCs and tritium are the primary COCs detected in ground water. Perchlorate and nitrate are secondary COCs. These constituents have historically been identified within the Qt-$Tnbs_1$ HSU. The concentrations of COCs have significantly declined below historic maximum levels in Pit 6 ground water.

As part of the recent Five-Year Review for OUs 3 (Pit 6 Landfill) and 8 (Buscheck et al., 2013) the Qt-$Tnbs_1$ HSU was formally divided into the Qt-$Tnbs_1$ North HSU (portion north of the Corral Hollow-Carnegie Fault Zone) and the Qt-$Tnbs_1$ South HSU (portion within the Corral Hollow-Carnegie Fault Zone) due to the difference in hydraulic response to pumping from private CARNRW water-supply wells and seasonal rainfall events on either side of this regional fault. A deeper water-bearing zone ($Tnbs_1$ Deep HSU) occurs beneath a low permeability-confining layer at an approximate depth of 170 feet within the $Tnbs_1$ stratigraphic unit in the northern fault block. Transducers in guard wells K6-34 and W-PIT6-1819 continuously monitor water levels in the Qt-$Tnbs_1$ North HSU. During 2014, water level data from these wells (K6-34 and W-PIT6-1819) indicated an ongoing hydraulic response from sporadic pumping in nearby private water-supply wells CARNRW1 and CARNRW2 (approximately 200 to 400 ft to the east). The pumping schedule of the nearby private water-supply wells is not controlled by LLNL. The ground water potentiometric surface depicted on Figure 2.3-2 is based on 2014 water level data collected when these nearby CARNRW water-supply wells were not pumping at the same rate as in previous years. Therefore, the potentiometric surface north of the Corral Hollow-Carnegie Fault Zone is higher than the surface shown on the same figure, in recent CMRs.

2.3.2.1.1. VOC Concentrations and Distribution

The VOC COCs in Pit 6 Landfill ground water identified in the Site-Wide ROD included chloroform, 1,2-DCA, cis-1,2-DCE, trans-1,2-DCE, PCE, 1,1,1-TCA and TCE. In the 2013 Five-Year Review for OUs 3 (Pit 6 Landfill) and 8, 1,2-DCA, cis- and trans-1,2-DCE, PCE and 1,1,1-TCA were removed as COCs in Pit 6 ground water (Buscheck et al., 2013). Per the Five-Year Review, these VOCs will no longer be discussed in this section unless they are detected in a well. Only TCE, cis-1,2-DCE and PCE were detected in four Pit 6 Landfill ground water monitor wells at concentrations above the 0.5 µg/L reporting limit during 2014. TCE was detected at a concentration above its 5 µg/L MCL cleanup standard in only one well (5.2 µg/L, Qt-$Tnbs_1$ South HSU monitor well EP6-09, January 2014); a routine and duplicate sample collected from the same well in July both yielded 4.8 µg/L TCE (below the 5 µg/L MCL cleanup standard). Cis-1,2-DCE concentrations were below the reporting limit in 28 of the 30 wells currently monitored. In the two wells where this compound was detected, historic concentrations have: (1) been below its cleanup standard (6 µg/L) since 1993 in well K6-01S and (2) have never been higher than 0.9 µg/L in well K6-18. PCE was detected in one well, Qt-$Tnbs_1$ North HSU monitor well W-PIT6-2816, at concentration of 0.6 µg/L, slightly above the reporting limit of 0.5 µg/L, but well below its 5 µg/L MCL cleanup standard.

In the Qt-$Tnbs_1$ North HSU, TCE concentrations have decreased from a historic maximum of 1.4 µg/L (monitor well K6-36, 2001) to below the 0.5 µg/L reporting limit during 2014. Except for a single detection of 0.6 µg/L PCE in one Qt-$Tnbs_1$ North HSU well (W-PIT-2816), no other VOCs were detected in the Qt-$Tnbs_1$ North HSU during the reporting period. Due to insufficient water, ground water samples have not been collected from monitor wells EP6-08 (since April 2008) and K6-24 (since January 2011). In 2012, to help resolve this problem, two new monitor wells were drilled in the Qt-$Tnbs_1$ HSU with screens at greater depths in the saturated $Tnbs_1$, north of the fault, in the vicinity of EP6-08 and K6-24. As shown on Figure 2.3-1, well W-PIT6-2816 is located 30 feet east-southeast of well EP6-08 and W-PIT6-2817 is located 50 feet east-southeast of well K6-24. Sampled semi-annually (first and third quarters beginning in 2013), except for the aforementioned detection of low PCE concentrations in one well (W-PIT6-2816, 0.6 µg/L, January), VOCs have not been detected above the reporting limit in these wells since their installation in 2012.

In the Qt-$Tnbs_1$ South HSU, TCE concentrations have decreased from a historic maximum of 250 µg/L (K6-19, 1988) to a 2014 maximum concentration of 5.2 µg/L (monitor well EP6-09, January). During 2014, TCE was detected in three wells in the Qt-$Tnbs_1$ South HSU (EP6-09, K6-18 and K6-19) at concentrations above the reporting limit, barely exceeding the 5 µg/L MCL cleanup standard in only one well, EP6-09 (5.2 µg/L in January). During 2014, only two Qt-$Tnbs_1$ South HSU wells had detectable cis-1,2-DCE at 2.7 µg/L (monitor well K6-01S, January) and 0.9 µg/L (monitor well K6-18, January); both significantly below the 6 µg/L MCL cleanup standard. The presence of cis-1,2-DCE, a common anaerobic degradation product of TCE, suggests that some natural dechlorination may be occurring. Historic maximum cis-1,2-DCE concentrations for these wells are 9.8 µg/L (K6-01S, 1992) and 0.9 µg/L (K6-18, 2008).

No VOCs, including TCE, were detected in the $Tnbs_1$ Deep HSU during 2014. During the reporting period, VOCs were not detected in guard wells W-PIT6-1819, K6-17, K6-22 and K6-34 nor from the two active CARNRW water-supply wells and two inactive CARNRW water-supply wells.

2.3.2.1.2. Tritium Concentrations and Distribution

During 2014, tritium was detected above the 100 picoCuries per liter (pCi/L) reporting limit in samples from six wells completed in both the Qt-$Tnbs_1$ North and Qt-$Tnbs_1$ South HSUs. Tritium has never been detected in Pit 6 Landfill ground water at activities exceeding the 20,000 pCi/L MCL cleanup standard.

In the Qt-$Tnbs_1$ North HSU, tritium activities have decreased from a historic maximum of 2,150 pCi/L (monitor well K6-36, 2000) to a 2014 maximum of 183 pCi/L (CARNRW-3, July). Well K6-36 has not been sampled since 2006 due to insufficient water. However, tritium was not detected in an adjacent monitor well K6-35 (screened in a deeper interval) above the 100 pCi/L reporting limit since 2009.

In the Qt-$Tnbs_1$ South HSU, tritium activities have decreased from a historic maximum of 3,420 pCi/L (monitor well BC6-13, 2000) to a 2014 maximum of 150 pCi/L (K6-19, January). Well BC6-13, which is screened from 0 to 5 feet below ground surface and was used to monitor for contaminants in Spring 7, has been dry since 2000.

Tritium was not detected above 100 pCi/L in the $Tnbs_1$ Deep HSU during 2014. The historic maximum tritium activity in this HSU is 1,680 pCi/L (monitor well K6-26, 1999), well below its 20,000 pCi/L MCL cleanup standard.

In 2014, the tritium activity was less than the reporting limit (<100 pCi/L) in guard well W-PIT6-1819, that is used to define the downgradient extent of tritium in Pit 6 ground water with activities above the 100 pCi/L background level; in 2013, this well yielded 149 pCi/L. This well is located approximately 100 feet west of the Site 300 boundary within the Carnegie SVRA residence area and about 200 feet west of the CARNRW1 and CARNRW2 water-supply wells. Prior to 2014, tritium activities in well W-PIT6-1819 ranged from <100 pCi/L to 295 pCi/L (2007). During 2014, tritium was not detected in guard wells K6-34, K6-22 or K6-17 nor at activities above the 100 pCi/L reporting limit in any of the monthly ground water samples from two of the four CARNRW offsite wells. Overall, the areal extent of the tritium plume with activities above the 100 pCi/L reporting limit, both north and south of the fault, in both the Qt-$Tnbs_1$ North and Qt-$Tnbs_1$ South HSUs, has decreased significantly from last year (Figure-2.3-4).

2.3.2.1.3. Perchlorate Concentrations and Distribution

In the 2013 Five-Year Review for OUs 3 (Pit 6 Landfill) and 8, perchlorate was removed as a COC in Pit 6 ground water. Per the Five-Year Review, perchlorate will no longer be discussed in this section unless it is detected in a well. During 2014, perchlorate was detected in a duplicate sample from well K6-18 at 8.7 µg/L (January), above the MCL cleanup standard of 6 µg/L. However, the perchlorate concentration in the coincident routine sample collected from this well on the same day/time was below the reporting limit of 4 µg/L. Aside from this well, perchlorate was not detected at or above the 4 µg/L reporting limit in any Qt-$Tnbs_1$ North, Qt-$Tnbs_1$ South, or $Tnbs_1$ Deep HSU ground water samples, including samples collected from guard wells and the CARNRW water-supply wells.

2.3.2.1.4. Nitrate Concentrations and Distribution

During 2014, nitrate was detected in samples collected from wells completed within the Qt-$Tnbs_1$ North and South HSUs.

In the Qt-$Tnbs_1$ North HSU, nitrate was detected in four wells during 2014, including K6-03 (3.8 mg/L, January), CARNRW-2 (1.6 mg/L, May), guard well W-PIT6-1819 (1.4 mg/L, January) and W-PIT6-2817 (0.7 mg/L, January). Nitrate concentrations in these four Qt-$Tnbs_1$ North HSU wells were well below its 45 mg/L MCL cleanup standard and within the range of background. Nitrate was not detected in ground water samples from any wells completed in the Qt-$Tnbs_1$ North HSU at concentrations above the MCL cleanup standard or outside the range of nitrate background levels.

In the Qt-$Tnbs_1$ South HSU, nitrate was detected during 2014, in ground water above the 45 mg/L MCL cleanup standard in one well, monitor well K6-23 (130 mg/L, January). The historic maximum nitrate concentration detected in well K6-23 was 240 mg/L (2000). This well consistently yields ground water nitrate concentrations in excess of the MCL cleanup standard and is located in close proximity to the Building 899 septic system, which is recognized as a likely source of the nitrate at this location (Dibley et al., 2013). Four other wells completed in the Qt-$Tnbs_1$ South HSU contained detectable but low nitrate concentrations well below the 45 mg/L MCL cleanup standard including K6-18 (16 mg/L, January), K6-16 (11 mg/L, January), EP6-09 (8.7 mg/L, January) and CARNRW-4 (1.8 mg/L, December). Except for the aforementioned well K6-23, nitrate was not detected in ground water samples from any wells completed in the Qt-Tnbs$_1$ South HSU at concentrations above the MCL cleanup standard or outside the range of nitrate background levels.

During 2014, nitrate was detected (at very low concentrations) in only two Tnbs$_1$ Deep HSU above the 0.5 mg/L reporting limit (BC6-10, 1.5 mg/L, January and K6-14, 0.55 mg/L, January). Nitrate has never been detected in this HSU above its 45 mg/L MCL cleanup standard.

During 2014, nitrate was detected in guard well W-PIT6-1819 at a very low concentration of 1.4 mg/L (January). Nitrate was not detected in: (1) guard wells K6-34, K6-22 or K6-17, (2) water-supply well CARNRW1 or (3) inactive water-supply well CARNRW3 above the reporting limit. During 2014, nitrate was detected in water-supply well CARNRW2 (1.6 mg/L, May) and inactive water-supply well CARNRW4 (1.8 mg/L, December) at concentrations well below its MCL cleanup standard of 45 mg/L.

2.3.2.2. Pit 6 Landfill OU Remediation Optimization Evaluation

The remedy for tritium and VOCs in ground water at the Pit 6 Landfill is MNA. Ground water levels and contaminants are monitored on a regular basis to: (1) evaluate the efficacy of the natural attenuation in reducing contaminant concentrations, and (2) detect any new chemical releases from the landfill. In general, the primary ground water COCs (VOCs and tritium) at the Pit 6 Landfill OU continue to decline and ground water levels beneath the landfill remain approximately 50 ft below the buried waste.

In general, VOCs in ground water near Pit 6 continue to exhibit decreasing trends and the VOC plume extent is generally decreasing. Concentrations of the VOC COCs 1,2-DCA, trans-1,2-DCE, 1,1,1-TCA, PCE (except for one small detection), and chloroform are all below reporting limits in all Pit 6 wells. Concentrations of cis-1,2-DCE have been below its 6 µg/L cleanup standard since 1993. TCE concentrations in ground water remain below the 5 µg/L MCL cleanup standard in samples from all Pit 6 Landfill OU wells except for one well, EP6-09, where it was detected slightly above the 5 µg/L cleanup standard during January (5.2 µg/L) then dropped to 4.8 µg/L in July. As recommended in the recent Five-Year Review for OUs 3 and 8 (Buscheck et al., 2013), TCE concentrations will be monitored in ground water from well EP6-09 over the next five years and if concentrations increase or remain above 5 µg/L, remedial measures such as pump-and-treat or enhanced *in situ* bioremediation will be considered for this well.

Tritium activities in ground water continue to decrease toward background levels and remain far below the 20,000 pCi/L MCL cleanup standard and the tritium plume extent is decreasing. During 2014, tritium was detected at concentrations slightly above the 100 pCi/L reporting limit in wells W-PIT6-2817, K6-18, K6-19, K-33, CARNRW-3 and CARNRW-2. These low activities indicate that the MNA remedy for tritium in ground water at the Pit 6 Landfill OU 3 continues to be effective.

Perchlorate concentrations in Pit 6 area ground water have decreased from a maximum of 65 µg/L (following the 1998 El Niño in well K6-19) to below its reporting limit (4 µg/L) in all but one Pit 6 Landfill OU wells (K6-18, 8.7 µg/L, January). However, the perchlorate concentration in the coincident routine sample collected from this well on the same day/time was below the reporting limit of 4 µg/L. Except for this detection in the one duplicate sample, perchlorate concentrations have remained below its reporting limit (and its 6 µg/L MCL cleanup standard) in all Pit 6 wells since March 2009.

Nitrate continues to be consistently detected in a single Pit 6 well (K6-23) above its 45 mg/L MCL cleanup standard. During 2014, nitrate was detected at 130 mg/L (January) in this well, declining from 180 mg/L in July 2013. As stated above, well K6-23 is located in close proximity to the Building 899 septic system, which is the likely source of the nitrate at this location.

2.3.2.3. Pit 6 Landfill OU Performance Issues

Currently, there is very little contamination above ground water cleanup standards at the Pit 6 Landfill OU. Based on these results, the remedy continues to be effective and protective of human health and the environment, and to make progress toward cleanup.

2.4. High Explosives Process Area (HEPA) OU 4

The HEPA has been used since the 1950s for the chemical formulation, mechanical pressing, and machining of high explosives (HE) compounds into shaped detonation charges. Surface spills from 1958 to 1986 resulted in the release of contaminants at the former Building 815 steam plant. Subsurface contamination is also attributed to HE waste water discharges into former unlined rinse water lagoons. Another minor source of contamination in ground water resulted from leaking contaminated waste stored at the former Building 829 Waste Accumulation Area (WAA) located near Building 829.

Five GWTSs operate in the HEPA: Building 815-Source (815-SRC), Building 815-Proximal (815-PRX), Building 815-Distal Site Boundary (815-DSB), Building 817-Source (817-SRC), and Building 817-Proximal (817-PRX). A sixth GWTS, Building 829-Source (829-SRC), was dismantled in 2013 following approval by the regulatory agencies. As approved, water is still extracted from the same extraction well previously used at 829-SRC, but the water is now collected in a portable tank and transported to the 815-SRC GWTS for treatment. The details of this change are described below. A map of the HEPA OU showing the locations of monitor and extraction wells and treatment facilities is presented on Figure 2.4-1.

The 815-SRC GWTS began operation in September 2000 removing VOCs (primarily TCE), HE compounds (RDX and High Melting Explosive [HMX]), and perchlorate from ground water. Ground water is extracted from wells W-815-02, W-815-04 and W-815-2803 with a current combined flow rate of approximately 1.5 gpm. The current GWTS configuration includes two ion-exchange resin columns connected in series for perchlorate removal, and three aqueous-phase GAC canisters (also connected in series) for VOC and HE compound removal. The treated effluent is injected into well W-815-1918 for *in situ* denitrification in the $Tnbs_2$ HSU.

The 815-PRX GWTS began operation in October 2002 removing TCE and perchlorate from ground water. Ground water is extracted from wells W-818-08 and W-818-09 at a current combined flow rate of approximately 1.0 gpm. The current GWTS configuration includes a Cuno filter to remove particulates, two ion-exchange resin columns connected in series for perchlorate removal, and three aqueous-phase GAC canisters (also connected in series) for TCE removal. The treated effluent is injected into well W-815-2134 where an *in situ* natural denitrification process reduces the nitrate to nitrogen in the $Tnbs_2$ HSU.

The 815-DSB GWTS began operation in September 1999 removing low concentrations (less than 10 µg/L) of TCE from ground water extracted near the Site 300 boundary. Ground water is extracted from wells W-35C-04, W-6ER and W-815-2608 at a combined flow rate of approximately 4 gpm. The current GWTS configuration includes a Cuno filter to remove particulates and three aqueous-phase GAC canisters connected in series for TCE removal. The treated effluent is discharged to an infiltration trench.

The 817-SRC GWTS began operation in September 2003 removing HE compounds (RDX and HMX) and perchlorate from ground water. Well W-817-01 extracts ground water from a very low yield portion of the $Tnbs_2$ aquifer. It pumps ground water intermittently using solar power at current flow rates ranging from 400 to 700 gallons per month, averaging approximately 0.01 gpm. The current GWTS configuration includes a Cuno filter to remove particulates, two ion-exchange resin columns connected in series for perchlorate removal, and three aqueous-phase GAC canisters (also connected in series) for HE compound removal. Treated ground water is injected into upgradient injection well W-817-06A where an *in situ* natural denitrification process reduces the nitrate to nitrogen in the $Tnbs_2$ HSU.

The 817-PRX GWTS began operation in September 2005 removing VOCs, RDX and perchlorate from ground water. Ground water is currently extracted from wells W-817-03 and W-817-2318 at a combined flow rate of approximately 1.7 to 2.0 gpm, with about 75% from W-817-03. The current GWTS configuration includes a Cuno filter to remove particulates, two ion-exchange resin columns connected in series for perchlorate removal, and three aqueous-phase GAC canisters (also connected in series) for removal of VOCs and HE compounds. Treated ground water containing nitrate is injected into upgradient injection wells W-817-2109 and W-817-02, where an *in situ* denitrification process reduces the nitrate to nitrogen in the $Tnbs_2$ HSU.

The 829-SRC GWTS began operation in August 2005 removing VOCs, nitrate and perchlorate from ground water. Solar power was used to extract ground water from well W-829-06 at a flow rate of approximately 1 to 10 gallons per day (gpd). The previous configuration included two ion-exchange resin columns connected in series for perchlorate removal and three aqueous phase GAC canisters (also connected in series) for VOC removal. Treated effluent was injected into upgradient well W-829-08. Currently, ground water is extracted from W-829-06 and transported to, and treated at, the 815-SRC ground water treatment system.

2.4.1. HEPA OU Ground Water Extraction and Treatment System Operations and Monitoring

This section is organized into four subsections: facility performance assessment; operations and maintenance issues; compliance summary; and sampling plan evaluation and modifications.

2.4.1.1. HEPA OU Facility Performance Assessment

The monthly ground water discharge volumes, extraction flow rates, and operational hours during second semester 2014 are summarized in Tables 2.4-1 through 2.4-6. The total volume of ground water extracted and treated and the total contaminant mass removed during the reporting period are presented in Table Summ-1. The total volume of ground water treated and discharged and the total contaminant mass removed are summarized in Table Summ-2. Analytical results for influent and effluent samples collected during second semester 2014 are presented in Tables 2.4-7 through 2.4-9. The pH measurement results are presented in Appendix A.

2.4.1.2. HEPA OU Operations and Maintenance Issues

The following maintenance activities and operational issues occurred at the 815-SRC, 815-PRX, 815-DSB, 817-SRC and 817-PRX GWTS, and the 829-SRC extraction well during second semester 2014:

815-SRC GWTS

- The GWTS was shut down on August 18 to replace a flow meter.
- The GWTS was shut down on December 8 and remained down for the rest of the reporting period for freeze protection.

815-PRX GWTS

- The GWTS was shut down for several hours on July 31 to repair a leak at the treatment system. A very small volume of water (<1 gallon) leaked from a Cuno filter, and was confined to the cement pad at the facility.
- The GWTS was shut down from October 6 to October 9 to perform maintenance on the extraction wells.
- The GWTS was shut down on December 8 and remained down for the rest of the reporting period for freeze protection.

815-DSB GWTS

- No ground water was extracted from W-6ER from September 11 to September 17 due to interlock problems, and was then operated intermittently through October.
- The GWTS was shut down from October 24 to October 30 due to electronic interlock issues, and then was operated intermittently through November 7 until the problem could be addressed.
- The GWTS was offline from December 30 for the remainder of the reporting period due to a power outage.

817-SRC GWTS

- The GWTS operated without interruption through December 8, at which time it was shut down for the remainder of the reporting period for freeze protection.

817-PRX GWTS

- The extraction well W-817-2318 was only operated for a couple days per week throughout the reporting period to protect the pump from sustaining damage if allowed to run dry. The pumping strategy needs to be changed to cyclic pumping.
- The GWTS was shut down from August 11 until August 13 for perchlorate ion exchange resin change out.
- The GWTS was shut down on December 8 through the remainder of the reporting period for freeze protection.

829-SRC Extraction Well

- No ground water extraction was conducted on August 8 while the collected water was transferred to 815-SRC for treatment.
- No ground water extraction was conducted after December 8 when the system was shut down for freeze protection through the end of the year.

2.4.1.3. HEPA OU Compliance Summary

The 815-SRC, 815-PRX, 815-DSB, 817-PRX and 817-SRC GWTSs operated in compliance with the RWQCB Substantive Requirements for Wastewater Discharge.

2.4.1.4. HEPA OU Facility Sampling Plan Evaluation and Modifications

The HEPA OU facility sampling and analysis plan complies with the monitoring requirements in the CMP/CP. The sampling and analysis plan is presented in Table 2.4-10. The only modifications made to the plan included the following:

1) Modification of monitoring requirements for 829-SRC due to the discontinuation of ground water treatment at this location. Since water extracted at this system began being treated at the 815-SRC GWTS, only the influent (extraction well) samples were collected from this area. No effluent samples were collected at 829-SRC, since extracted ground water from this area is treated at the 815-SRC facility. There is no longer a treatment system at 829-SRC.

2.4.1.5. HEPA OU Treatment Facility and Extraction Wellfield Modifications

No modifications were made to any of the HEPA OU GWTSs or their associated extraction wellfield during this reporting period.

2.4.2. HEPA OU Ground Water and Surface Water Monitoring

The sampling and analysis plan for ground water and surface water monitoring is presented in Table 2.4-11. This table also explains deviations from the sampling plan and indicates any additions made to the CMP.

During the reporting period, ground water monitoring was conducted in accordance with the CMP monitoring requirements with the following exceptions: a total of 48 required analyses in 12 different wells and one spring were not performed because the wells/springs were dry or contained insufficient water to collect the samples; a total of 14 required analyses were not performed due to unsafe conditions at nine different monitor wells (high grass surrounding W-35B-01 [fire hazard for vehicle access], erosion near W-815-05, and muddy trail conditions at wells W-815-2110, W-6J, W-6H, W-35B-01, W-35B-02, W-35B-03, W-35B-04 and W-35B-05); and, a total of 18 required analyses from 12 different wells were not performed due to inoperable pumps in the wells.

Analytical results and ground water elevation measurements obtained during 2014 are presented in Appendices B and C, respectively.

Ground water elevations for the Tpsg-Tps and $Tnsc_{1b}$ HSUs are posted on Figures 2.4-2 and 2.4-8, respectively. The ground water elevation contour map, including hydraulic capture zones, for the $Tnbs_2$ HSU is presented on Figure 2.4-3.

2.4.3. HEPA OU Remediation Progress Analysis

This section is organized into four subsections: mass removal; contaminant concentrations and distribution; remediation optimization evaluation; and performance issues.

2.4.3.1. HEPA OU Mass Removal

The monthly ground water mass removal estimates for second semester 2014 are summarized in Tables 2.4-12 through 2.4-17. The total mass removed during the reporting period and cumulative mass estimates are summarized in Table Summ-1 and Table Summ-2, respectively.

2.4.3.2. HEPA OU Contaminant Concentrations and Distribution

At the HEPA OU, VOCs (mainly TCE) are the primary COCs detected in ground water; RDX, HMX, 4-ADNT, perchlorate and nitrate are secondary COCs. Most of the ground water contamination in the HEPA OU occurs in the $Tnbs_2$ HSU. Some COCs (TCE, RDX, HMX, perchlorate and nitrate) have also been detected in perched ground water of the Tpsg-Tps HSU in the vicinity of Buildings 815 and 817. Minor concentrations of VOCs, perchlorate and nitrate are also present in perched ground water located in the $Tnsc_{1b}$ HSU beneath the former Building 829 WAA. The WAA is located in the northwest portion of HEPA. No contamination has been detected in the Upper and Lower $Tnbs_1$ HSUs in the HEPA OU. Figure 2.4-1 shows the location of wells in the HEPA OU.

Total VOC concentration data are contoured for the $Tnbs_2$ HSU (Figure 2.4-4) and posted for Tpsg- Tps and $Tnsc_{1b}$ HSUs on Figures 2.4-2 and 2.4-8, respectively. Isoconcentration contour and posted concentration maps for the secondary COCs are presented on: (1) Figure 2.4-2 for the Tpsg- Tps HSU, (2) Figures 2.4-5 through 2.4-7 for the $Tnbs_2$ HSU, and (3) Figure 2.4-8 for the $Tnsc_{1b}$ HSU located in the Building 829 former burn pit area. Because each CMR map is representative of contaminant concentrations during a particular semester, the maximum concentration shown on the CMR map may not match the maximum concentration for 2014 described in the text.

2.4.3.2.1. VOC Concentrations and Distribution

VOC concentrations and distribution in ground water in the Tpsg-Tps, $Tnbs_2$, and $Tnsc_{1b}$ HSUs in the HE Process Area are discussed below.

Tpsg-Tps HSU

VOCs, primarily TCE, but also 1,1-DCE, chloroform, cis-1,2-DCE, 1,2-DCA and carbon tetrachloride have been detected in the sands and gravels of the Tpsg-Tps HSU. Total VOC concentrations in Tpsg-Tps HSU ground water have decreased from a historic maximum of 450 µg/L (W-815-01, 1992) to a 2014 maximum of 25 µg/L (comprised entirely of TCE) in the February sample collected from 817-PRX extraction well W-817-2318. TCE concentrations in samples collected from well W-817-2318 in April, July and October were 23 µg/L, 23 µg/L and 19 µg/L, respectively. VOCs have remained below the 0.5 µg/L reporting limit in Tpsg-Tps well W-35C-05, located near the site boundary. Drought conditions and limited recharge have led to insufficient to no ground water available for sampling in some wells screened in the Tps-Tpsg HSU, including well W-815-01, which has not been sampled since 1999.

During 2014, VOCs other than TCE were only detected at concentrations above the 0.5 µg/L reporting limit in wells W-809-01 and W-814-01. Samples collected in March and August from well W-809-01 contained chloroform and 1,1-DCE with maximum concentrations of 1.6 µg/L and 1.7 µg/L, respectively, well below their MCL cleanup standards. Samples collected in March and September from W-814-01 contained cis-1,2-DCE, carbon tetrachloride, chloroform, and 1,2-DCA with maximum concentrations of 1.1 µg/L, 0.6 µg/L, 0.7 µg/L and 0.8 µg/L, respectively. The carbon tetrachloride detected in well W-814-01 exceeded the 0.5 µg/L State MCL but not the 5 µg/L Federal MCL, and the 1,2-DCA concentration was slightly above the 0.5 µg/L MCL cleanup standard. Similar concentrations of the aforementioned VOCs were detected in these wells during 2013.

$Tnbs_2$ HSU

In the $Tnbs_2$ HSU, the highest VOC concentrations are found downgradient of Building 815 in the 815-PRX extraction wellfield. Total VOC concentrations in $Tnbs_2$ HSU ground water have decreased from a historic maximum of 110 µg/L in extraction well W-818-08 (1992) to a 2014 maximum of 40 µg/L in monitor well W-818-11 (March). The 2013 maximum total VOC concentration of 45 µg/L was also measured in a ground water sample collected from well W-818-11.

During 2014, TCE was the main VOC detected in the $Tnbs_2$ HSU with concentrations in samples from 20 wells exceeding the 5 µg/L MCL cleanup standard. Several wells also contained 1,1-DCE and/or chloroform at concentrations slightly above the 0.5 µg/L reporting limit. Samples collected from well W-815-02 in January, April, July and October contained 0.8 µg/L, 0.78 µg/L, 0.69 µg/L and 0.61 µg/L of 1,1-DCE, respectively; the September sample collected from well W-818-07 contained 0.6 µg/L of chloroform; the March sample from well W-818-01 contained 0.8 µg/L of chloroform; the March sample from well W-818-11 yielded 0.7 µg/L of chloroform and 0.5 µg/L of 1,1-DCE; and, the routine and duplicate samples collected in September from well W-818-11 both contained 0.6 µg/L of 1,1-DCE.

VOCs continue to be detected in ground water from the $Tnbs_2$ HSU at the southern end of Building 832 Canyon. This contamination probably originates from sources located in both the Building 832 Canyon OU and the HEPA OU. Since June 2007, when extraction well W-830-2216 began pumping ground water, total VOC concentrations have steadily decreased from a historic maximum of 20 µg/L in 2007 to a 2014 maximum of 4.2 µg/L (May). A similar decrease in VOC concentrations has been observed in nearby monitor well W-830-13. During first semester 2014, VOCs detected in wells W-830-2216 and W-830-13 were comprised entirely of TCE.

During 2014, TCE was detected at concentrations below the 5 µg/L MCL cleanup standard in ten samples collected from $Tnbs_2$ onsite guard wells W-815-2110 and W-815-2111, located near the Site 300 boundary. The maximum TCE concentrations in these samples were 1.8 µg/L and 1.2 µg/L for wells W-815-2110 and W-815-2111, respectively. Similar TCE concentrations were detected in these wells in 2013. VOCs were not detected in samples from any other onsite or offsite HEPA $Tnbs_2$ HSU guard wells. In addition, VOCs were not detected in all 32 routine and duplicate samples collected monthly from offsite water-supply well GALLO1.

Overall, total VOC concentrations in the $Tnbs_2$ HSU, remained stable or decreased slightly in 2014, and the extents of ground water containing total VOCs at concentrations above the 0.5µg/L reporting limit and 5 µg/L and 10 µg/L remain similar to 2013.

$Tnsc_{1b}$ HSU

Ground water in two wells (extraction well W-829-06 and monitor well W-829-08) screened in the $Tnsc_{1b}$ HSU yielded TCE at concentrations exceeding the 5 µg/L MCL cleanup standard during 2014. The 2014 maximum TCE concentration of 20 µg/L was detected in a November sample from extraction well W-829-06. The historic maximum of 1,013 µg/L was also detected in a 1993 ground water sample collected from W-829-06. During first semester 2014, TCE was the only VOC detected at concentrations above the 0.5 µg/L reporting limit. During second semester 2014, the September sample collected from W-829-08 contained 0.6 µg/L of cis-1,2-DCE in addition to 5.7 µg/L of TCE. VOCs have never been detected in ground water from nearby monitor well W-829-1940 or in nearby monitor wells screened in the Lower $Tnbs_1$ HSU.

2.4.3.2.2. HE Compound Concentrations and Distribution

During 2014, the HE compounds HMX, RDX and 4-Amino-2,6-dinitrotoluene (4-ADNT) were detected at concentrations exceeding reporting limits in ground water only from wells screened in the $Tnbs_2$ HSU. All three HE compounds were detected in March and August samples collected from monitor well W-809-03, a July duplicate sample collected from extraction well W-815-04, and a July duplicate sample collected from extraction well W-815-2803. Samples collected from (1) extraction wells W-815-02 and W-817-01 contained both HMX and RDX, and (2) four wells (monitor wells W-815-06, W-817-04 and W-818-11, and extraction well W-817-03) contained only RDX.

RDX concentrations in $Tnbs_2$ HSU ground water in the HEPA OU have decreased from a historic maximum of 204 µg/L (817-SRC extraction well W-817-01, 1992) to a 2014 maximum of 87 µg/L in monitor well W-809-03 (March).

During 2014, RDX concentrations in 815-SRC extraction wells W-815-02 and W-815-04 decreased to 41 µg/L and 30 µg/L from their 2013 concentrations of 47 µg/L and 34 µg/L, respectively. Extraction well W-815-2803, intended to increase hydraulic capture of HE compounds and perchlorate in the 815 source area, was connected to the 815-SRC facility in second semester 2012 and may be contributing to the decreasing RDX concentrations observed in extraction wells W-815-02 and W-815-04 during 2013 and 2014.

HMX concentrations in $Tnbs_2$ HSU ground water in the HEPA OU have decreased from a historic maximum of 57 µg/L (W-817-01, 1995) to a 2014 maximum of 21 µg/L (W-809-03, August), significantly below the Regional Tapwater Screening Level of 780 µg/L.

4-ADNT concentrations in $Tnbs_2$ HSU ground water have decreased from a historic maximum of 24 µg/L (W-817-01, 1997) to a 2014 maximum of 9.8 µg/L (W-809-03, August).

As stated previously, during 2014, HE compounds were only detected at concentrations exceeding the reporting limit in wells screened in the $Tnbs_2$ HSU. During 2013, ground water samples from Tpsg-Tps HSU monitor wells W-809-04 and W-815-1928, located near the Building 809 Complex, contained HMX, RDX and 4-ADNT at concentrations above the reporting limits. It is now believed that, due to an error in the field or laboratory, the March 2013 RDX and HMX detections in well W-809-04 were actually results for well W-809-03, and that HE compounds were not present in well W-809-04. HE compounds were not detected in ground water collected from well W-809-04 in March 2014. The March 2013 sample collected from well W-815-1928 contained 78 µg/L of RDX and 14 µg/L of HMX. During 2014, well W-815-1928 contained insufficient water for sampling.

During 2014, ground water samples from monitor well W-809-03, screened in the $Tnbs_2$ HSU and located approximately 250 feet northeast of the 815-SRC treatment facility, contained the maximum concentrations of RDX, HMX and 4-ADNT. The extent of RDX at concentrations exceeding the 1 µg/L cleanup standard has not changed significantly, and concentrations in most wells have decreased since 2013.

2.4.3.2.3. Perchlorate Concentrations and Distribution

Perchlorate concentrations and distribution in ground water in the Tpsg-Tps, $Tnbs_2$, and $Tnsc_{1b}$ HSUs in the HE Process Area are discussed below.

Tpsg-Tps HSU

During 2014, ground water samples from only one Tpsg-Tps HSU well, extraction well W-817-2318, contained perchlorate at concentrations exceeding the 6 µg/L MCL cleanup standard. The February sample and the routine and duplicate samples collected in July contained 13 µg/L, 15 µg/L and 14 µg/L, respectively. This represents a slight decrease from the historic maximum perchlorate concentration of 18 µg/L detected in monitor well W-6CS.

$Tnbs_2$ HSU

In the $Tnbs_2$ HSU, eleven wells yielded ground water with perchlorate concentrations exceeding the 6 µg/L MCL cleanup standard during 2014. Wells with the highest perchlorate concentrations are located in the vicinity of the 817-SRC and 817-PRX treatment facilities. The 2014 maximum perchlorate concentration of 29 µg/L was measured in February and July ground water samples from extraction well W-817-01. Ground water samples from well W-817-01 also contained the 50 µg/L historic maximum (1998) and the 2013 maximum of 31 µg/L. Since 2013, perchlorate concentrations in almost all wells have decreased and the extent of ground water containing perchlorate at concentrations exceeding the 4 µg/L reporting limit has also decreased. Perchlorate was not detected in any of the $Tnbs_2$ HSU guard wells or other monitor wells located near the Site 300 boundary.

$Tnsc_{1b}$ HSU

Perchlorate concentrations in the $Tnsc_{1b}$ HSU have decreased from a historic maximum of 29 µg/L (extraction well W-829-06, 2000) to a 2014 maximum of 13 µg/L in the same well. This was the only $Tnsc_{1b}$ HSU well with perchlorate concentrations exceeding the 6 µg/L MCL cleanup standard and 4 µg/L reporting limit during 2014.

2.4.3.2.4. Nitrate Concentrations and Distribution

Nitrate concentrations and distribution in ground water in the Tpsg-Tps, $Tnbs_2$, and $Tnsc_{1b}$ HSUs in the HE Process Area are discussed below.

Tpsg-Tps HSU

Nitrate concentrations in Tpsg-Tps HSU ground water have decreased from a historic maximum of 720 mg/L (W-6CS) to a 2014 maximum of 510 mg/L in the same well. As there are no known nitrate sources associated with Site 300 operations located near this well, it is possible that a sheep ranch that predates Site 300 discovered in a historic photo of the area may be the source of this localized elevated nitrate. Ground water samples from other wells screened in the Tpsg-Tps HSU have significantly lower nitrate concentrations; the maximum during 2014 in these other wells was 120 mg/L (February, extraction well W-817-2318).

$Tnbs_2$ HSU

During 2014, nitrate concentrations in ground water collected from the $Tnbs_2$ HSU ranged from <0.5 mg/L in the vicinity of the Site 300 boundary to a maximum of 110 mg/L in monitor wells W-809-03 and W-817-2609. During 2014, nitrate was not detected above the reporting limit in 24 routine and duplicate samples collected from offsite water-supply well GALLO1. Nitrate was not detected above the 45 mg/L MCL cleanup standard in ground water from any of the $Tnbs_2$ HSU guard wells sampled during 2014. The 2014 nitrate data from $Tnbs_2$ HSU wells continue to support the interpretation that nitrate is being degraded *in situ* by natural processes consistent with MNA. Due to microbial denitrification, nitrate concentrations remain below the 45 mg/L cleanup standard in all wells near the southern site boundary where ground water is present under oxygen depleted, confined conditions.

$Tnsc_{1b}$ HSU

The maximum 2014 nitrate concentration measured in ground water sample from a well screened in the $Tnsc_{1b}$ HSU was 73 mg/L, in an April sample from extraction well W-829-06, located near Building 829. The 2013 maximum nitrate concentration of 75 mg/L was also measured in a sample from W-829-06.

Nitrate concentrations, many of which are slightly lower than in 2013, and distribution, remain similar to those seen in 2013.

2.4.3.3. HEPA OU Remediation Optimization Evaluation

Remediation at the HEPA OU is managed by balancing ground water extraction at the site boundary with pumping upgradient in the source and proximal areas. This strategy is designed to capture the leading edge of the VOC plume while minimizing the migration of multiple, co-mingled plumes from the source areas. To date, the non-VOC comingled plumes remain in the source and proximal areas and the overall spatial extent of total VOCs, perchlorate and nitrate in the HEPA did not change significantly during 2014.

Contaminants in the Tpsg-Tps HSU, although limited in areal extent, include VOCs, perchlorate, HE compounds and nitrate. During 2014, COC concentrations in most wells were similar to those seen during 2013. Extraction well W-817-2318 extracts ground water from the Tpsg-Tps HSU in the area of highest COC concentrations near Spring 5. Although declining water levels due to drought conditions and the low permeability of the HSU have hampered remediation efforts, the TCE concentrations in extraction well W-817-2318 decreased to 25 µg/L during 2014, compared to 38 µg/L in 2013. During 2014, HE compounds were not detected in any wells screened in the Tpsg-Tps HSU. RDX and HMX, detected during 2013 for the first time in Tpsg-Tps HSU monitor well W-809-04 (110 µg/L of RDX and 21 µg/L of HMX, March 13, 2013), were not detected in the March 2014 ground water sample. Due to an error in the field or laboratory, the March 2013 RDX and HMX detections in well W-809-04 were most likely switched with results for well W-809-03, and HE compounds were not present in well W-809-04. Monitor well W-815-3024 was installed during first semester 2014 to investigate contaminant concentrations in the deeper portion of the Tpsg-Tps HSU. The well was dry at the time of drilling. Soil vapor sampling is planned, and the well will be monitored for the presence of ground water and samples will be collected when ground water is available.

During 2014, $Tnbs_2$ HSU extraction wells W-818-08 and W-818-09 continued to exhibit declining COC trends and capture ground water in the areas with the highest VOC concentrations, and extraction wells W-6ER, W-35C-04 and W-815-2608 continued to capture VOCs along the southern site boundary at the leading edge of the plume preventing any detectable VOCs from reaching water-supply well GALLO1.

The overall footprint of the RDX plume in the $Tnbs_2$ HSU did not change significantly during 2014. RDX concentrations continue to fluctuate above and below the 1 µg/L reporting limit near the leading edge of the plume. Extraction wells W-815-02, W-815-04 and W-815-2803 (connected to the 815-SRC GWTS) and extraction well W-817-01 (connected to the 817-SRC GWTS) extract ground water from the areas with the highest RDX concentrations. During 2014, the RDX concentrations in ground water samples collected from extraction wells W-815-02 and W-815-04 had decreased significantly from their 2013 maximum concentrations. RDX concentrations decreased from 60 µg/L to 41 µg/L in W-815-02, and from 45 µg/L to 30 µg/L in W-815-04. RDX concentrations in extraction wells W-815-2803 and W-817-01 remained stable.

Perchlorate concentrations in the $Tnbs_2$ HSU have decreased steadily since monitoring for this COC began in 1998 and the trend continued during 2014 with lower concentrations in almost all of the wells sampled. The areas with the highest perchlorate concentrations continue to be located in the vicinity of the 817-SRC and 817-PRX treatment facilities.

Nitrate concentrations in the confined portions of the $Tnbs_2$ HSU near the Site 300 boundary continue to be near or below the reporting limit, demonstrating the continued effectiveness of MNA of nitrate even under pumping conditions.

Hydraulic testing involving $Tnbs_2$ HSU extraction wells W-818-08 and W-818-09 (815-PRX GWTS), and W-6ER, W-35C-04 and W-815-2608 (815-DSB GWTS), was conducted during first semester 2014 to better determine drawdown, radius of influence, and hydraulic capture associated with each extraction well. During testing of the 815-PRX extraction wells, W-818-08 and W-818-09, each well was pumped individually for four days with the non-pumping well observed for response to pumping. During the duration of the test neither well showed a response to pumping. Testing of the 815-DSB extraction wells was conducted by initiating pumping (at operational flow rates) in the following order: W-6ER, W-35C-04 and W-815-2608. Pumping of W-6ER resulted in a drawdown of approximately 2 ft in well W-35C-04. None of the other nearby wells responded to pumping of W-6ER. Initiating pumping of W-35C-04 also produced no response in nearby wells. With both W-6ER and W-35C-04 operating at their normal pumping rates and water levels, pumping of well W-815-2608 was initiated. An almost immediate response was observed in guard wells W-815-2110 and W-815-2111, with slower, more gradual responses observed in guard wells W-6H and W-6J. Drawdowns of 6 ft, 7 ft, 2.5 ft and 2 ft were observed in W-815-2110, W-815-2111, W-6H and W-6J, respectively. This information was used to more accurately locate the location and extent of hydraulic capture from the 815-DSB extraction wellfield.

Throughout the reporting period, pumping from HEPA extraction wells has been effective in capturing COCs and preventing farther migration of contaminated ground water towards the Site 300 southern boundary. During 2014, VOCs were not detected at offsite water-supply well GALLO1 and VOCs in onsite guard wells W-815-2110 and W-815-2111 remained stable at very low concentrations. Upgradient and downgradient pumping will continue to be balanced so that hydraulic capture at the Site 300 boundary is maintained without accelerating migration from upgradient sources. Close monitoring of VOC concentrations in the southern site boundary area will also continue, especially near offsite water-supply well GALLO1.

During 2014, the total mass removed from all HEPA treatment facilities included 127 g of VOCs; 75 g of perchlorate; and 116 g of RDX. Table Summ-1 lists the mass removed by each individual HEPA treatment facility. Nitrate in the $Tnbs_2$ HSU undergoes *in situ* biotransformation to benign nitrogen gas by anaerobic-denitrifying bacteria.

During 2014, four new wells were installed in the HEPA OU: monitor wells W-817-3023 and W-817-3024, and planned injection wells W-817-3025 and W-817-3026 (Figure 2.4-1). Monitor well W-817-3023, located near the 817-SRC GWTS, is intended to monitor COC concentrations between extraction well W-817-01 and injection well W-817-06A. Monitor well W-817-3024, located near extraction well W-815-2803, was dry at time of drilling and will be used as a vadose zone monitor well, but will also be monitored for the presence of ground water. Vapor sample collection is planned and ground water samples will also be collected if ground water is detected. Planned injection wells W-817-3025 and W-817-3026 were installed to replace/augment existing 817-PRX GWTS effluent injection wells W-817-02 and W-817-2109.

2.4.3.4. HEPA OU Remedy Performance Issues

There were no new issues that affect the performance of the cleanup remedy for the HEPA OU during this reporting period. The remedy continues to be effective and protective of human health and the environment.

2.5. Building 850/Pit 7 Complex OU 5

High explosive experiments were conducted at the Building 850 Firing Table from the 1950s until 2008. While explosives tests were conducted at Building 850, the firing table was covered with gravel to absorb the shock. The Building 850 Firing Table was routinely rinsed down with water after each experiment to reduce dust. Infiltrating water mobilized chemicals from the contaminated gravel to the underlying bedrock and ground water, however this practice was discontinued in 2004. Until 1989, gravels from the firing table surface were periodically removed and disposed of in several pits in the northwest part of the site.

A Corrective Action Management Unit (CAMU) was constructed in the Building 850 area of OU 5 in 2009 as part of the Building 850 Removal Action. A total of 27,592 cubic yards of polychlorinated biphenyl-, dioxin-, and furan-contaminated soil were excavated from the Building 850 Firing Table area, mixed with Portland cement and water, and consolidated and compacted to form the CAMU. Additional information on the Building 850 Removal Action is presented in the Building 850 Action Memorandum (Dibley et al., 2008). Design information for the CAMU is presented in the construction subcontractor's 100% design submittal (SCS Engineers, 2009). The inspection and maintenance program for the CAMU program is described in Section 3. A map of the Building 850 area within OU 5 showing the locations of Building 850, the CAMU, and monitor wells are presented on Figure 2.5-1.

An *in situ* bioremediation treatability study for reduction of perchlorate in ground water immediately downgradient of Building 850 commenced in September 2011. A summary of the current status and preliminary results of the treatability study is presented in Section 2.5.2.2. Results indicate that the injection of ethyl lactate has resulted in bacterially-motivated reduction of perchlorate and nitrate in the treatment zone to concentrations below reporting limits.

The Pit 7 Complex area within OU 5 consists of the Pit 3, 4, 5 and 7 Landfills. The Pit 7 Complex landfills were used to dispose of firing table debris and gravel. These pits were constructed by excavating topsoil and alluvial materials to an average depth of 15 to 20 feet (Taffet et al., 1989). The majority of the waste material in the pits came from the firing tables at

Buildings 850 and 851, where aboveground detonations were conducted. The waste placed in the pits included wood, plastic, material, and debris from tent structures, pea gravel, and exploded test assemblies, some of which contained tritium and depleted uranium.

When rainfall increased to above normal levels, such as during El Niño years, the pit waste and underlying bedrock were often inundated and residual contamination came into contact with shallow subsurface ground water. Ground water contaminants include tritium, uranium, perchlorate, nitrate and VOCs.

In 1992, an engineered cap was constructed over the Pit 7 Landfill (referred to as the Pit 7 Cap) in compliance with Resource Conservation and Recovery Act (RCRA) requirements. The design included interceptor trenches and surface water drainage channels, a top vegetative layer to prevent erosion, a biotic barrier layer to minimize animal burrowing, and a clay layer of very low permeability to prevent infiltration of precipitation and shallow subsurface interflow that could result in leaching of contaminants. The Pit 7 cap also covers 100% of Pit 4 and approximately 25 to 30% of Pit 3. The original compacted native soil cover on most of Pit 3 and all of Pit 5 remains intact.

The Pit 7 Drainage Diversion System, completed in March 2008, was designed to prevent additional releases of COCs from the pits and underlying bedrock to ground water. There are four components that comprise the drainage diversion system:

1. A subsurface drainage network on the western hillslope.
2. Upgraded riprap at the end of the existing north-flowing concrete channel for the Pit 7 Landfill cap.
3. A vegetated surface water diversion swale along the base of the eastern hillslope, along the paved road (Route 4), including several culverts under Route 4 and dirt fire trails.
4. An upgraded surface water-settling basin at the south end of the existing south-flowing concrete channel for the Pit 7 Landfill cap.

Additional information on the Pit 7 cap and Drainage Diversion System design is presented in the Remedial Design Document for the Pit 7 Complex (Taffet et al., 2008). The detection monitoring, inspection, and maintenance program for the Pit 7 Complex Landfills and the inspection and maintenance program for the Drainage Diversion System are described in Section 3.

The Pit 7-Source (PIT7-SRC) GWTS began operation in May 2010. Ground water is currently extracted from Quaternary alluvium/Weathered bedrock (Qal/WBR) HSU wells, NC7-64, W-PIT7-2306, W-PIT7-2703, W-PIT7-2704 and W-PIT7-2705; $Tnbs_1/Tnbs_0$ bedrock HSU wells NC7-25 and W-PIT7-2307; and from well W-PIT7-2305, which is completed in both HSUs. The current GWTS configuration includes three ion-exchange resin canisters for the removal of uranium followed by three ion-exchange resin canisters containing a perchlorate-selective resin. An additional ion exchange column for removal of nitrate has been added in series after the perchlorate removal columns because the latter became saturated with nitrate and are not effective in removing nitrate. Ground water that has been treated to remove uranium, perchlorate and nitrate is then piped through three aqueous-phase GAC canisters to remove VOCs. The treated water, which still contains tritium, is discharged to an infiltration trench.

A map of the Pit 7 Complex area within OU 5 showing the locations of the landfills, drainage diversion system, extraction and monitor wells, and the treatment system is presented on Figure 2.5-1.

The Building 850 area of OU 5 is discussed in Sections 2.5.1 and 2.5.2. The Pit 7 Complex area of OU 5 is discussed in Sections 2.5.3 through 2.5.5.

2.5.1. Building 850 Area of OU 5 Ground Water Monitoring

The sampling and analysis plan for ground water and surface water monitoring is presented in Table 2.5-1. This table also delineates and explains deviations from the sampling plan and indicates any additions made to the CMP.

During the reporting period, ground water monitoring was conducted in accordance with the CMP monitoring requirements with the following exceptions: a total of 69 required analyses from 11 different wells and two springs were not performed because the wells/springs were dry or contained insufficient water to collect the samples, a total of 68 required analyses from seven different wells (K1-01C, K1-02B, K1-04, NC2-10, NC2-12D, NC7-59 and W-PIT7-16) were not performed due to inoperable pumps, and four required analyses from well W-PIT1-2225 were not performed due to unsafe conditions (muddy fire trail). The pumps in wells K1-01C, K1-02B and K1-04 have been replaced, but replacement of pumps in NC2-10, NC2-12D and W-PIT7-16 has been delayed due to issues with the pump truck (GFCI trip) that are being resolved. Well NC7-59 has a damaged casing and will be decommissioned.

Analytical results and ground water elevation measurements obtained during 2014 are presented in Appendices B and C, respectively.

Ground water elevation contour maps for the Qal/WBR and $Tnbs_1/Tnbs_0$ HSUs within the OU are presented on Figures 2.5-2 and 2.5-3, respectively. Ground water elevations in both HSUs have generally declined since Spring 2011 due to lower than average rainfall during water years 2012, 2013 and 2014.

2.5.2. Building 850 Area of OU 5 Remediation Progress Analysis

This section is organized into three subsections: analysis of contaminant distribution and concentration trends; remediation optimization evaluation; and performance issues.

2.5.2.1. Building 850 Area of OU 5 Contaminant Concentrations and Distribution

In the Building 850 area of OU 5, tritium and perchlorate are the primary COCs detected in ground water; depleted uranium and nitrate are secondary COCs. These constituents have been identified within the Qal/WBR and $Tnbs_1/Tnbs_0$ HSUs. The distribution of tritium in the Qal/WBR and $Tnbs_1/Tnbs_0$ HSUs, based on data collected during second semester 2014 (primarily the fourth quarter), is contoured on Figures 2.5-4 and 2.5-5, respectively. The distribution of perchlorate in the Qal/WBR and $Tnbs_1/Tnbs_0$ HSUs, based on data collected during first semester 2014 (primarily the second quarter), is contoured on Figures 2.5-10 and 2.5-11, respectively. Concentrations of uranium and nitrate in Qal/WBR and $Tnbs_1/Tnbs_0$ ground water, based on data collected during first semester 2014 (primarily the second quarter), are presented on Figures 2.5-6 through 2.5-9. The COC data presented on Figures 2.5-4 through 2.5-11 represent specific time periods during 2014, and therefore, some of the data discussed in the text are not displayed on the figures.

2.5.2.1.1. Tritium Activities and Distribution

The maximum tritium activities in ground water downgradient of Building 850 have decreased from an historic maximum of 566,000 pCi/L (monitor well NC7-28, 1985) to the 2014 maximum of 25,100 pCi/L in the sample from Qal/WBR HSU monitor well NC7-70. During 2014, the 20,000 pCi/L MCL cleanup standard for tritium activity was exceeded only in ground water samples collected from well NC7-70. Tritium activities and distribution in ground water in the Qal/WBR and $Tnbs_1/Tnbs_0$ HSUs in the Building 850 Area are discussed below.

Qal/WBR HSU

Tritium activity exceeding the 20,000 pCi/L MCL cleanup standard was detected only in ground water samples collected from Qal/WBR HSU monitor well NC7-70 during 2014. Well NC7-70 is located approximately 20 feet downgradient (east) of the Building 850 Firing Table. Samples collected in April and October contained 25,100 pCi/L and 23,200 pCi/L, respectively. Overall, tritium activities continue to decline in most portions of the Building 850 plume.

Wells W-PIT2-2301 and W-PIT2-2302, located in Elk Ravine downgradient of the Pit 2 Landfill, are monitored to determine the downgradient extent of tritium in the Qal/WBR HSU. However, neither well contained sufficient water for sampling during 2014. The most recent samples from these wells, collected in 2012, yielded tritium activities within background range (<100 pCi/L). Given the background activities of tritium in the Qal/WBR HSU samples from previous years, tritium from Building 850 is apparently not present in this HSU downgradient of the Pit 2 Landfill.

Since 2013, the extent of tritium exceeding the 20,000 pCi/L MCL cleanup standard has decreased significantly and is now limited to one well (NC7-70) located immediately downgradient of the Building 850 Firing Table. The extent of ground water with tritium in excess of background is stable (similar to that of previous years).

$Tnbs_1/Tnbs_0$ HSU

During 2014, tritium activity exceeding the 20,000 pCi/L MCL cleanup standard was not detected in any ground water samples collected from wells screened in the $Tnbs_1/Tnbs_0$ HSU. The maximum 2014 and 2013 tritium activity in ground water collected from the $Tnbs_1/Tnbs_0$ HSU was 8,560 pCi/L in both the November 2014 and May 2013 samples from monitor well W-850-2145. Well W-850-2145 is located approximately 3,000 feet downgradient (east) of the Building 850 Firing Table. Overall, tritium activities in most $Tnbs_1/Tnbs_0$ HSU monitor wells have decreased since 2013 and the extent of ground water with tritium in excess of background is similar to that of previous years.

2.5.2.1.2. Uranium Concentrations and Distribution

During 2014, uranium analyses were performed primarily by alpha spectroscopy with selected samples analyzed by Inductively Coupled Plasma - Mass Spectrometry (ICP-MS). High precision uranium isotope data (uranium-235/uranium-238 [$^{235}U/^{238}U$] atom ratio) for determining the presence of depleted uranium are only available by ICP-MS analysis. The presence of depleted uranium is indicated by a $^{235}U/^{238}U$ atom ratio of less than 0.007. Historic uranium isotope data indicate that regions of ground water containing some added depleted uranium extend downgradient about 1,200 feet within the Qal/WBR HSU, and 700 feet within the $Tnbs_1/Tnbs_0$ HSU, from the Building 850 Firing Table and have remained relatively stable.

Uranium activities and distribution in ground water in the Qal/WBR and $Tnbs_1/Tnbs_0$ HSUs in the Building 850 Area are discussed below.

Qal/WBR HSU

The historic and 2014 maximum total uranium activity measured in ground water samples collected from wells in the Building 850 area is 24 pCi/L, measured in both the January 2013 sample from Qal/WBR HSU well NC7-28 and the April 2014 sample from $Tnbs_1/Tnbs_0$ HSU well W-850-2315. During 2014, total uranium activities exceeding the 20 pCi/L MCL cleanup standard were not detected in any ground water samples collected from Qal/WBR HSU. The 2014 maximum total uranium activity in the Qal/WBR HSU was 9.6 pCi/L, measured in the October sample from well NC7-28. Well NC7-28 is located immediately downgradient of the Building 850 firing table and the ethyl lactate injection wells W-850-2417 and NC7-70. The total uranium activities of ground water samples collected from well NC7-28 in January, April, August and October were 9.6 pCi/L, 5.4 pCi/L, 4.9 pCi/L, and 6.3 pCi/L, respectively. Prior to ethyl lactate injection, which began in September 2011, uranium activity in the July 2011 ground water sample from this well was 9.8 pCi/L. After ethyl lactate injection began, uranium activities in samples from this well have ranged from 2 pCi/L to 24 pCi/L. Injection of ethyl lactate lowers the pH of the ground water and creates reducing conditions. Short-term decreases in total uranium activity in ground water are a product of the reducing conditions that lower the solubility of uranium. Uranium activities can rebound as dissolved oxygen concentrations rise, and uranium activities in excess of pre-injection activities may result due to the lowered pH and oxidizing conditions that increase uranium solubility and may mobilize depleted and natural uranium sorbed/precipitated onto aquifer mineral surfaces.

$Tnbs_1/Tnbs_0$ HSU

During 2014, total uranium activities in ground water samples from two $Tnbs_1/Tnbs_0$ HSU wells in the Building 850 area exceeded the 20 pCi/L MCL cleanup standard. Samples collected during first semester 2014 from wells W-850-2315 and NC7-29 had activities of 24 pCi/L and 21 pCi/L, respectively. The total uranium activities of ground water samples collected from these wells during second semester 2014 decreased to 20 pCi/L and 18 pCi/L for W-850-2315 and NC7-29, respectively. The uranium analyses of second semester samples were performed using ICP-MS. The $^{235}U/^{238}U$ atom ratios measured were 0.0073 for both wells, indicating natural uranium. Both wells exhibit increasing uranium trends with historic maxima of 24 pCi/L (April 2014) and 22 pCi/L (April 2008) for W-850-2315 and NC7-29, respectively. The wells are located approximately 1,400 feet south-southeast (cross-gradient) of Building 850 and are completed in the $Tnbs_1/Tnbs_0$ HSU.

2.5.2.1.3. Nitrate Concentrations and Distribution

Nitrate was detected at concentrations at or above the 45 mg/L MCL cleanup standard in samples from six Building 850 area wells during 2014. Nitrate concentrations and distribution in ground water in the Qal/WBR and $Tnbs_1/Tnbs_0$ HSUs in the Building 850 Area are discussed below.

Qal/WBR HSU

During 2014, two wells located in the vicinity of the Building 850 firing table contained ground water with nitrate concentrations that exceeded the 45 mg/L MCL cleanup standard. Routine and duplicate samples collected in May from monitor well NC7-44, located upgradient of the firing table and the *in situ* bioremediation treatment zone, contained 53 mg/L and 57 mg/L of nitrate, respectively, and routine and duplicate samples collected in May from monitor well NC7-61, located downgradient of the firing table and the *in situ* bioremediation treatment zone, both contained 49 mg/L of nitrate. Nitrate concentrations in ground water samples from wells NC7-28, NC7-70 and W-850-2417, located within the *in situ* bioremediation treatment zone, remained below the 0.5 mg/L reporting limit during 2014 as a result of denitrification related to ethyl lactate injection in wells W-850-2417 and NC7-70 (see Section 2.5.2.3 for details on the treatability study).

$Tnbs_1/Tnbs_0$ HSU

The 2014 maximum nitrate concentration in the Building 850 Area was 160 mg/L in the April ground water sample from monitor well NC7-29. The historic local maximum nitrate concentration of 190 mg/L was detected in the April 2013 ground water sample collected from this well. Well NC7-29 is located south and crossgradient of Building 850. The other $Tnbs_1/Tnbs_0$ HSU wells with nitrate concentrations exceeding the 45 mg/L MCL cleanup standard are located southeast of the Pit 2 Landfill (NC2-12S and NC2-20) and east of the Pit 1 Landfill (W-PIT1-2209).

Historic data indicate that ground water nitrate concentrations in the Qal/WBR and $Tnbs_1/Tnbs_0$ HSUs are limited in extent and relatively stable. Overall, except for the *in situ* bioremediation treatment zone, the distribution and concentrations of nitrate in ground water are generally consistent, or have declined slightly from those observed in previous years.

2.5.2.1.4. Perchlorate Concentrations and Distribution

During 2014, perchlorate concentrations exceeding the 6 µg/L MCL cleanup standard were detected in ground water samples from 16 wells east and south (downgradient) of Building 850 and south and east (downgradient) of Pit 1 and Pit 2, in and immediately north of Elk Ravine. Perchlorate concentrations are similar to or have decreased slightly from 2013. Wells downgradient of the Building 850 Firing Table, with the exception of three wells (NC7-28, W-850-2417 and NC7-70) located within the *in situ* bioremediation treatment zone, continue to exhibit the highest perchlorate concentrations in the Building 850 area. Perchlorate concentrations and distribution in ground water in the Qal/WBR and $Tnbs_1/Tnbs_0$ HSUs in the Building 850 Area are discussed below.

Qal/WBR HSU

The 2014 maximum perchlorate concentration of 44 µg/L was detected in the March and August samples collected from well NC7-61. The maximum concentration detected in samples collected during 2013 from well NC7-61 was also 44 µg/L. Well NC7-61 is located 500 feet east of the firing table and directly downgradient of the *in situ* bioremediation treatment zone and is screened in the Qal/WBR and $Tnbs_1/Tnbs_0$ HSUs. The 2013 maximum perchlorate concentration of 52 µg/L was detected in the July sample from well NC7-70. Following the injection of ethyl lactate into well NC7-70, beginning in September 2013, perchlorate concentrations in all samples collected from the well have been below the 4 µg/L reporting limit. During 2014, perchlorate concentrations in ground water samples from all wells located upgradient (west) of well NC7-61, with the exception of one sample from well NC7-28 (4.3 µg/L, May), were below the 4 µg/L reporting limit. Ground water in the Qal/WBR HSU that contains perchlorate with concentrations in excess of the 6 µg/L MCL cleanup standard extends approximately 2,200 feet downgradient of the Building 850 firing table. The extent is similar to that of 2013, with the exception of the wells located upgradient (west) of well NC7-61 where ethyl lactate injection into wells NC7-70 and W-850-2417 has reduced perchlorate concentrations to below the 4 µg/L reporting limit.

$Tnbs_1/Tnbs_0$ HSU

The 2014 maximum perchlorate concentration in ground water samples from wells screened in the $Tnbs_1/Tnbs_0$ HSU was 11 µg/L in monitor well NC7-27 (both April and October samples), and monitor well NC7-29 (both April and November samples). Wells NC7-27 and NC7-29 are located approximately 900 feet east (downgradient) and 1,500 feet south (cross-gradient) of the Building 850 firing table, respectively. Other $Tnbs_1/Tnbs_0$ HSU wells containing ground water with perchlorate concentrations exceeding the 6 µg/L MCL cleanup standard during 2014 are located east of the Building 850 firing table (NC2-18 and W-850-2145), southeast of the Pit 2 Landfill (NC2-05A, NC2-12I and NC2-17), and east of the Pit 1 Landfill (K1-02B, W-PIT1-2326 and W-PIT1-2620). During 2014, the extent of ground water containing perchlorate at concentrations greater than the 4 µg/L reporting limit remained similar to 2013.

2.5.2.1.5. HE Compound Concentrations and Distribution

During 2014, ground water samples from 21 wells located in the vicinity of Building 850 or downgradient of the Building 850 Firing Table were analyzed for HE compounds at a reporting limit, generally, of 1 µg/L. Only HMX and RDX were detected at concentrations exceeding the reporting limits. The source appears to be the Building 850 Firing Table. HE compound concentrations and distribution in ground water in the Qal/WBR and $Tnbs_1/Tnbs_0$ HSUs in the Building 850 Area are discussed below.

Qal/WBR HSU

During 2014, only ground water samples collected from well NC7-61 (January, April, August, October and November) consistently contained RDX at concentrations that exceeded its 1 µg/L MCL cleanup standard. The 2014 maximum RDX concentration of 5.7 µg/L was detected in the November sample, a slight increase from the 2013 maximum of 4.2 µg/L, also in well NC7-61. The only other detection of RDX during 2014 that exceeded the cleanup standard was 2.6 µg/L in an October sample collected from well NC7-28, the first detection of RDX in this well since ethyl lactate injection into well W-850-2417, immediately upgradient of well NC7-28, began in September 2011. Prior to September 2011, RDX concentrations in ground water samples from wells NC7-28 and W-850-2417 exceeded the 1 µg/L cleanup standard. After September 2011, RDX concentrations in samples from these wells have not exceeded the reporting limit until the October 2014 detection in well NC7-28. The decrease in RDX concentrations at these wells is likely related to degradation of RDX caused by reducing conditions created following ethyl lactate injection into well W-850-2417. Wells W-850-2417 and NC7-28 are located immediately downgradient (east) of the Building 850 Firing Table, and well NC7-61 is located approximately 500 feet downgradient of the Building 850 Firing Table.

During 2014, samples collected from wells NC7-28, NC7-61 and W-850-2417, all located immediately downgradient of the Building 850 Firing Table, contained HMX at concentrations above the reporting limit with the maximum of 6.8 µg/L detected in a November sample from well NC7-61. The 2013 maximum HMX concentration of 8.1 µg/L was also detected in well NC7-61. These concentrations are all significantly below the Regional Tapwater Screening Level for HMX (780 µg/L).

The extent of HE compounds in ground water at Building 850 has decreased since 2008, when regular sampling and analysis for these compounds commenced, and during 2014 was limited to only three wells located within 500 feet (east, downgradient) of the Building 850 Firing Table.

$Tnbs_1$/$Tnbs_0$ HSU

During 2014, HE compounds were not detected above the reporting limit, in ground water from wells screened in the $Tnbs_1$/$Tnbs_0$ HSU downgradient of Building 850 or from wells screened in the underlying $Tnsc_0$ HSU.

2.5.2.2. Building 850 Area of OU 5 Remediation Optimization Evaluation

Data collected during the reporting period continue to support that natural attenuation (dispersion, radioactive decay and a decreasing source term) continues to be effective in reducing tritium activities in ground water to levels below the 20,000 pCi/L MCL cleanup standard. The highest tritium activities in ground water continue to be located directly downgradient of the tritium sources at the Building 850 Firing Table and continue to decline. The extent of the 20,000 pCi/L MCL cleanup standard tritium activity contour is limited to a small area immediately downgradient of the firing table. Since 2013, only well NC7-70 has contained ground water with tritium activities that exceeds the 20,000 pCi/L MCL cleanup standard. In general, the footprint of the ground water tritium plume remains stable and activities continue to decline and are significantly below historic highs throughout the Building 850 plume. The leading edge of the tritium plume is stable, within the Site 300 interior, and is expected to completely attenuate within the boundaries of Site 300.

During first semester 2014, two wells in the Building 850 area had total uranium activities that exceeded the 20 pCi/L MCL cleanup standard. Samples collected in April from wells NC7-29 and W-850-2315 contained total uranium activities of 21 pCi/L and 24 pCi/L, respectively. Wells NC7-29 and W-850-2315 are approximately 20 feet apart, are completed in the $Tnbs_1$/$Tnbs_0$ HSU, and are located 1,400 feet south-southeast and cross-gradient of Building 850. Samples from these wells during second semester 2014 and analyzed by ICP-MS contained uranium activities of 18 pCi/L and 20 pCi/L for NC7-29 and W-850-2315, respectively, and yielded $^{235}U/^{238}U$ atom ratios indicative of natural uranium. The monitoring-only strategy for uranium at Building 850 continues to be protective given that: (1) total uranium activities in ground water at and downgradient from Building 850 are below the 20 pCi/L MCL cleanup standard, (2) $^{235}U/^{238}U$ atom ratios are indicative of natural uranium and (3) the areal extent of depleted uranium has not changed during the period of monitoring. Temporal trends in $^{235}U/^{238}U$ isotope ratios from past samples have remained stable.

During 2014, the overall extent and maximum concentrations of nitrate and perchlorate in ground water are also similar to those observed in 2013. Within the *in situ* perchlorate bioremediation treatment zone, perchlorate and nitrate concentrations in ground water samples from wells NC7-28, NC7-70 and W-850-2417 remained below reporting limits.

2.5.2.3. Building 850 Area of OU 5 Enhanced Bioremediation Treatability Study

The *in situ* perchlorate bioremediation treatability study commenced at Building 850 during second semester 2011. The objective of this study is to evaluate the efficacy of *in situ* enhanced bioremediation methods in reducing perchlorate concentrations in Building 850 ground water. To date, the test has consisted of injecting ethyl lactate mixed with ground water in wells W-850-2417 and NC7-70 to facilitate the *in situ* bioremediation of perchlorate by indigenous bacteria, while monitoring these and nearby wells NC7-28 and W-850-2416 to evaluate bioremediation performance.

Monitoring results indicate that microbial reduction reduced perchlorate concentrations in well W-850-2417 from a pre-test 2011 maximum of 74 µg/L to below the 4 µg/L reporting limit by 2012. Perchlorate concentrations remain below reporting limits in samples collected from this well during 2014. Perchlorate concentrations have also been reduced in well NC7-28 from a pre-test 2011 maximum of 71 µg/L to below the 4 µg/L reporting limit by 2012. Perchlorate concentrations remain below reporting limits in samples collected from this well since then, with the exception of the February 2013 sample (5.8 µg/L) and the May 2014 sample (4.3 µg/L). Perchlorate in injection well NC7-70 has been reduced from a pre-injection concentration of 52 µg/L to below the reporting limit.

During 2014, perchlorate concentrations in ground water samples from all wells located in the treatment area, with the exception of well NC7-61 (located farther downgradient of the lactate injection wells) and one sample from well NC7-28 (4.3 µg/L, May), were below the 4 µg/L reporting limit.

Although not specifically targeted for bioremediation, nitrate concentrations and uranium activities were also monitored in the injection well W-850-2417 and performance monitor well NC7-28. Nitrate concentrations in wells W-850-2417 and NC7-28 decreased from pre-test 2011 maximum concentrations of 52 mg/L and 57 mg/L, respectively, to below the 0.5 mg/L reporting limit following ethyl lactate injection in 2011. Nitrate in well NC7-70 decreased from a pre-injection concentration of 32 mg/L (January 2013) to below the 0.5 mg/L reporting limit. Nitrate concentrations have remained below the reporting limit in all samples (with the exception of the January 2013 sample from well NC7-28 with a nitrate detection of 0.54 mg/L) collected from these wells during 2012, 2013 and 2014.

Total uranium activities in samples from wells W-850-2417 and NC7-28 also decreased from pre-injection 2011 maximum activities of 9.1 pCi/L and 9.8 pCi/L, respectively, to 2011 post-injection activities of 3.5 pCi/L and 2 pCi/L, respectively. Uranium activities in ground water samples collected from well W-850-2417 have remained below pre-injection activities with a maximum 2014 activity of 1.1 pCi/L (January). Uranium activities in well NC7-28 increased throughout 2012 and reached a maximum activity of 24 pCi/L (a new historic maximum) in the January 2013 ground water sample. The uranium activities in subsequent samples collected from well NC7-28 have decreased. The 2014 maximum uranium activity in a ground water sample collected from well NC7-28 was 9.6 pCi/L (January). Uranium in ground water at well NC7-70 decreased from a pre-injection activity of 1.3 pCi/L (January 2013) to <0.063 pCi/L (April 2014), and then increased to 1.9 pCi/L (August and October 2014). Following ethyl lactate injection, decreasing uranium activities appear to result from concurrent reduction of U^{+6} species in ground water to U^{+4} species, which form insoluble mineral solids. Later increases likely arise from a combination of dissolution of natural U under low pH conditions and oxidation of reduced uranium from solids on mineral surfaces back into solution, coupled with arrival of pre-existing dissolved uranium from upgradient of the treatment area.

In March 2013, fluorescein, a non-toxic tracer, mixed with ground water was injected into NC7-70 to independently track the migration of injected fluids along the flow path from well NC7-70 downgradient through the treatment zone to wells W-850-2417 and NC7-28. Tracer was first detected in the December 4, 2013 ground water sample from well W-850-2417. In the first semester 2014, fluorescein tracer dye was detected in wells W-850-2417 and NC7-28, located downgradient of well NC7-70. Monitoring of the tracer test continued through 2014 and a complete analysis of the results will be presented in the Building 850 Focused Feasibility Study report.

2.5.2.4. Building 850 Area of OU 5 Remedy Performance Issues

There were no new issues that affect the performance of the MNA cleanup remedy for tritium in the Building 850 area during this reporting period. The remedy for tritium continues to be effective and protective of human health and the environment, and to make progress toward cleanup. Perchlorate, uranium and RDX distribution in ground water downgradient of the Building 850 Firing Table will continue to be closely monitored and reported. The *in situ* bioremediation treatability study analytical results will continue to be evaluated and reported in future reports. The performance of this technology with respect to uranium and RDX remediation or stabilization will also be evaluated. A work plan is currently being prepared for the installation of three boreholes within the footprint of the Building 850 Firing Table to determine if residual perchlorate exists in the unsaturated zone beneath the firing table. Ground water samples from these boreholes will also be analyzed for perchlorate.

2.5.3. Pit 7 Complex Area of OU 5 Ground Water Treatment System Operations and Monitoring

This section is organized into five subsections: facility performance assessment; operations and maintenance issues; compliance summary; facility sampling plan evaluation and modifications; and treatment facility and extraction wellfield modifications.

2.5.3.1. Pit 7 Complex Area of OU 5 Facility Performance Assessment

The monthly ground water discharge volumes and rates and operational hours for second semester 2014 are summarized in Table 2.5-2. The total volume of ground water extracted and treated, and masses removed during the reporting period are presented in Table Summ-1. The cumulative volume of ground water treated and discharged and masses removed are summarized in Table Summ-2. Analytical results for influent and effluent samples collected during second semester 2014 are presented in Tables 2.5-3 through 2.5-6. The pH measurement results are presented in Appendix A.

2.5.3.2. Pit 7 Complex Area of OU 5 Operations and Maintenance Issues

The following maintenance activities and operational issues occurred at the PIT7-SRC GWTS during second semester 2014:

- Ground water extraction wells NC7-25 and NC7-64 were taken offline on August 27 for check valve installations and water level verification. Both wells were brought back online on September 4.
- The GWTS was taken offline on October 6 to allow for well recovery to facilitate quarterly sampling of extraction wells. The system was restarted upon completion of the sampling on October 13.

2.5.3.3. Pit 7 Complex Area of OU 5 Compliance Summary

The PIT7-SRC GWTS operated within compliance with the RWQCB Substantive Requirements for Wastewater Discharge throughout the reporting period.

2.5.3.4. Pit 7 Complex Area of OU 5 Facility Sampling Plan Evaluation and Modifications

The PIT7-SRC treatment facility sampling and analysis plan complies with the monitoring requirements in the CMP/CP. The treatment facility sampling and analysis plan is presented in Table 2.5-7. No modifications to the plan were made during this reporting period.

2.5.3.5. Pit 7 Complex Area of OU 5 Treatment Facility and Extraction Wellfield Modifications

During second semester 2014, a double check valve was installed in wells NC7-25 and NC7-64 to prevent backflow of extracted ground water. Double check valves have now been installed in all operational PIT7-SRC extraction wells.

2.5.4. Pit 7 Complex Area of OU 5 Ground Water Monitoring

The sampling and analysis plan for ground water and surface water monitoring is presented in Table 2.5-8. This table also delineates and explains deviations from the sampling plan and indicates any additions made to the CMP.

During the reporting period, ground water monitoring was conducted in accordance with the CMP monitoring requirements with the following exceptions: a total of 106 required analyses in 20 different wells were not performed because the wells were dry or there was insufficient water in the wells to collect the samples, and one required analysis from well W-PIT7-13 was not performed due to an inoperable pump.

Analytical results and ground water elevation measurements obtained during 2014 are presented in Appendices B and C, respectively.

Ground water elevation contour maps for the Qal/WBR and $Tnbs_1/Tnbs_0$ HSUs within the OU, based on data collected during second semester 2014, are presented on Figures 2.5-2 and 2.5-3, respectively. Ground water elevations in both HSUs have generally declined since spring 2011 due to lower than average rainfall during water years 2012, 2013 and 2014.

2.5.5. Pit 7 Complex Area of OU 5 Remediation Progress Analysis

This section is organized into three subsections: analysis of contaminant distribution and concentration trends; remediation optimization evaluation; and performance issues.

2.5.5.1. Pit 7 Complex Area of OU 5 Mass Removal

The monthly ground water mass removal estimates for second semester 2014 are summarized in Table 2.5-9. The total mass removed during the reporting period and cumulative mass estimates are summarized in Table Summ-1 and Table Summ-2, respectively.

2.5.5.2. Pit 7 Complex Area of OU 5 Contaminant Concentrations and Distribution

In the Pit 7 Complex area of OU 5, tritium is the primary COC in ground water, and uranium, perchlorate, nitrate and VOCs are secondary COCs. These constituents have been identified within the Qal/WBR and $Tnbs_1/Tnbs_0$ HSUs. The distribution of tritium in the Qal/WBR and

$Tnbs_1/Tnbs_0$ HSUs, based on data collected during second semester 2013 (primarily the fourth quarter), is contoured on Figures 2.5-4 and 2.5-5, respectively. The distribution of perchlorate in the Qal/WBR and $Tnbs_1/Tnbs_0$ HSUs, based on data collected during first semester 2013 (primarily the second quarter), is contoured on Figures 2.5-10 and 2.5-11, respectively. Concentrations of uranium and nitrate in Qal/WBR and $Tnbs_1/Tnbs_0$ ground water, based on data collected during first semester 2013 (primarily the second quarter), are presented on Figures 2.5-6 through 2.5-9. The COC data presented on Figures 2.5-4 through 2.5-11 represent specific time periods during 2013; therefore, some of the data discussed in the text are not displayed on the figures.

2.5.5.2.1. Tritium Activities and Distribution

Commingled plumes of tritium in ground water extend from Pit 3 and Pit 5 Landfill sources. The Pit 7 Landfill is not an apparent source of tritium to ground water as most of the tritium-bearing experiments at Site 300 were conducted prior to its opening in 1979 (Taffet et al., 2008) and monitor well NC7-48, located directly downgradient of Pit 7 and upgradient of Pit 3, has generally yielded ground water samples that contain tritium activities within background ranges. Tritium activities in the ground water samples collected from well NC7-48 during 2014 were below the 100 pCi/L reporting limit for tritium. Tritium activities and distribution in ground water in the Qal/WBR and $Tnbs_1/Tnbs_0$ HSUs in the Pit 7 Complex Area are discussed below.

Qal/WBR HSU

Tritium activities in the Qal/WBR HSU ground water in the Pit 7 Complex area have decreased from a historic maximum of 2,660,000 pCi/L (NC7-63, 1998) to a 2014 maximum activity of 134,000 pCi/L in the duplicate sample collected from monitor well NC7-51 in January (the routine sample contained 126,000 pCi/L). Subsequent samples collected from this well in April, July and October contained 120,000 pCi/L, 129,000 pCi/L (duplicate sample, the routine sample yielded 119,000 pCi/L), and 115,000 pCi/L (routine and duplicate samples), respectively. The 2013 maximum tritium activity of 144,000 pCi/L was also from monitor well NC7-51 (July). Well NC7-51 is located about 40 feet northeast of Pit 5 and 60 feet east of Pit 3. Overall, most tritium activities in Qal/WBR ground water have declined slightly since 2013. In the Qal/WBR HSU, the region of ground water containing tritium in excess of the MCL cleanup standard extends about 1,600 feet southeast from the eastern edge of Pit 3. The extent of the 20,000 pCi/L MCL cleanup standard ground water tritium activities in the Qal/WBR HSU in the Pit 7 Complex area is similar to that observed for 2013.

$Tnbs_1/Tnbs_0$ HSU

In the Pit 7 Complex area, tritium activities in $Tnbs_1/Tnbs_0$ HSU ground water have decreased from a historic maximum of 770,000 pCi/L (1999) to a 2014 maximum of 182,000 pCi/L (October). Both the historic and 2014 maximum tritium activities were detected in samples from extraction well NC7-25, located about 250 feet downgradient (northeast) of the Pit 3 Landfill. In general, tritium activities in the $Tnbs_1/Tnbs_0$ HSU are similar or have declined slightly compared to 2013 measurements. The highest tritium activities observed in the $Tnbs_1/Tnbs_0$ HSU in Pit 7 Complex area ground water, in excess of the 20,000 pCi/L MCL cleanup standard, continue to extend about 800 feet northeast of Pit 3 and Pit 5. The extent of tritium in excess of the 20,000 pCi/L MCL cleanup standard in the $Tnbs_1/Tnbs_0$ HSU in the Pit 7 Complex area is also similar to 2013 observations.

Overall, the extent of tritium in ground water with activities in excess of the 100 pCi/L background level remains stable, and is similar to that observed in 2013.

2.5.5.2.2. Uranium Concentrations and Distribution

Uranium activities and distribution in ground water in the Qal/WBR and $Tnbs_1/Tnbs_0$ HSUs in the Pit 7 Complex Area are discussed below.

Qal/WBR HSU

Uranium activities in Qal/WBR HSU ground water in the Pit 7 Complex area have decreased from a historic maximum of 781 pCi/L (monitor well NC7-40, 1998) to a 2014 maximum of 109 pCi/L (extraction well W-PIT7-2703, April). The 2013 and 2012 maximum uranium activities of 106 pCi/L and 94 pCi/L, respectively, were detected in samples collected from extraction well NC7-64. Both extraction wells, W-PIT7-2703 and NC7-64 are located directly downgradient (east) of Pit 3. Uranium activities exceeded the 20 pCi/L MCL cleanup standard in samples from seven wells in the Qal/WBR HSU in 2014. During 2014, six other wells (W-PIT7-1903, W-PIT7-1904, W-PIT7-1905, W-PIT7-1916, W-PIT7-1917 and W-PIT7-1919) that have consistently yielded ground water with uranium activities exceeding the 20 pCi/L MCL cleanup standard were not sampled due to being dry or not having sufficient water for sampling.

All of the wells with uranium activities exceeding the 20 pCi/L MCL cleanup standard are proximal to the landfills and have historically shown $^{235}U/^{238}U$ isotopic ratios indicating some depleted uranium. The extent of uranium in excess of the MCL cleanup standard in the Qal/WBR HSU is confined to an area directly east of Pit 3 and another area that extends about 500 feet southeast from the center of Pit 5. The spatial extent of shallow ground water impacted with depleted uranium has been stable since the mid-1990s. Areas of depleted uranium in ground water are bounded by wells that exhibit $^{235}U/^{238}U$ atom ratios indicative of natural uranium. Sorption and ion-exchange are likely responsible for retarding the migration of depleted uranium in ground water compared to conservative contaminants such as tritium.

$Tnbs_1/Tnbs_0$ HSU

During 2014, uranium activities in the $Tnbs_1/Tnbs_0$ HSU increased to a historic maximum of 100 pCi/L in an October ground water sample collected from extraction well NC7-25. The previous historic maximum of 51 pCi/L (October 1998) was also measured in a sample from well NC7-25. Well NC7-25 is the only $Tnbs_1/Tnbs_0$ HSU well that historically and currently yields ground water with uranium in excess of the MCL cleanup standard, and all $^{235}U/^{238}U$ atom ratio data, until the October 2014 sample, indicated that the uranium in NC7-25 ground water was natural. The $^{235}U/^{238}U$ atom ratio measured in the October sample was 0.0066, indicating the presence of some depleted uranium. After two years of ground water extraction from well NC7-25 (began in August 2012), uranium activities in the extracted ground water have increased significantly and, for the first time, the $^{235}U/^{238}U$ atom ratio data indicate the presence of depleted uranium. The presence of some depleted uranium in the recent sample may be a result of migration of Qal/WBR water into the well capture zone. The increase in overall activity suggests movement of largely natural uranium-bearing water into the vicinity of this pumping well.

The maximum uranium activity in a 2014 sample from a well screened in both the Qal/WBR and $Tnbs_1/Tnbs_0$ HSUs was 21 pCi/L in an April sample, from extraction well W-PIT7-2307.

As is the case for the Building 850 portion of OU 5, uranium activity analyses for 2014 were performed primarily by alpha spectroscopy with selected samples analyzed by Inductively Coupled Plasma-Mass Spectrometry (ICP-MS).

2.5.5.2.3. Nitrate Concentrations and Distribution

Nitrate concentrations and distribution in ground water in the Qal/WBR and $Tnbs_1/Tnbs_0$ HSUs in the Pit 7 Complex Area are discussed below.

Qal/WBR HSU

During 2014, extraction well NC7-64 was the only Qal/WBR HSU well with nitrate at or above the 45 mg/L MCL cleanup standard. Nitrate concentrations in the Qal/WBR HSU have decreased from the historic maximum of 90 mg/L in a sample from well NC7-63 (April 2011) to the 2014 maximum nitrate concentration of 45 mg/L (April) in a sample from well NC7-64, located immediately downgradient of Pit 3. Well NC7-64 is located 17 feet southwest of well NC7-63 (nearer to Pit 3) and is screened 13 feet deeper. Well NC7-63 was dry during 2014.

$Tnbs_1/Tnbs_0$ HSU

During 2014, nitrate was detected at concentrations at or above the 45 mg/L MCL cleanup standard in samples from $Tnbs_1/Tnbs_0$ HSU wells NC7-47 and W-PIT7-13, both located downgradient and northeast of the Pit 7 Complex area. The 2014 maximum nitrate concentration detected in the Pit 7 Complex area was 66 mg/L in well NC7-47 (May). Well NC7-47 is also the location of the historic maximum nitrate concentration of 85 mg/L (2003) and the 2013 and 2012 maximum nitrate concentrations of 64 mg/L and 65 mg/L, respectively. The April routine and duplicate samples collected from well W-PIT7-13 contained 51 mg/L and 55 mg/L, respectively.

The 2014 maximum nitrate concentration in a well screened in both the Qal/WBR and $Tnbs_1/Tnbs_0$ HSUs was 46 mg/L in a April routine sample from monitor well K7-01; the duplicate sample contained 38 mg/L. Well K7-01 is located immediately downgradient of Pit 5.

Historic data indicate that nitrate concentrations in the Qal/WBR and $Tnbs_1/Tnbs_0$ HSU ground water are limited in extent and relatively stable. The distribution and concentrations of nitrate in ground water during 2014 are generally similar to what was observed in 2013.

2.5.5.2.4. Perchlorate Concentrations and Distribution

During 2014, perchlorate was detected at concentrations exceeding the 6 µg/L MCL cleanup standard in samples from 10 wells downgradient (east) of the landfills. The perchlorate concentrations in ground water samples from several wells containing perchlorate exceeding the 6 µg/L MCL cleanup standard during 2013 were below the cleanup standard in 2014 (NC7-40, NC7-68, W-PIT7-03 and W-PIT7-2141) or were dry or contained insufficient water for sampling (NC7-34 and W-PIT7-2309). Perchlorate concentrations and distribution in ground water in the Qal/WBR and $Tnbs_1/Tnbs_0$ HSUs in the Pit 7 Complex Area are discussed below.

Qal/WBR HSU

Perchlorate concentrations in the Qal/WBR HSU ground water in the Pit 7 Complex area have decreased from a historic maximum of 40 µg/L (extraction well W-PIT7-2306, 2009) to a 2014 maximum concentration of 14 µg/L in an April sample from extraction well W-PIT7-2305, located immediately downgradient of Pit 5. A subsequent sample from well W-PIT7-2305 in October contained 13 µg/L. Well W-PIT7-2306 has not contained sufficient water for sampling since May 2012. Other Qal/WBR HSU wells with samples containing perchlorate at concentrations exceeding the 6 µg/L MCL cleanup standard during 2014 were monitor well NC7-51 and extraction wells NC7-64 and W-PIT7-2703, located immediately downgradient of Pit 3, and monitor well W-PIT7-1918 and extraction wells W-PIT7-2305 and W-PIT7-2705, located immediately downgradient of Pit 5.

$Tnbs_1$/$Tnbs_0$ HSU

Perchlorate concentrations in $Tnbs_1$/$Tnbs_0$ HSU ground water have decreased from a historic maximum of 29 µg/L in monitor well K7-03 (April 2005) to the 2014 maximum concentration of 10 µg/L, in extraction well W-PIT7-2307 (April). During 2014, samples collected from monitor well K7-03 and extraction well NC7-25 also contained perchlorate at concentrations exceeding the 6 µg/L MCL cleanup standard. Well NC7-25 is located immediately downgradient of Pit 3, and wells K7-03 and W-PIT7-2307 are located immediately downgradient of Pit 5.

The maximum perchlorate concentration in a 2014 sample from a well screened in both the Qal/WBR and $Tnbs_1$/$Tnbs_0$ HSUs was 14 µg/L in a April duplicate sample from monitor well K7-01. The routine sample from K7-01 contained 9.9 µg/L. Well K7-01 is located immediately downgradient of Pit 5.

Overall, with the exception of the perchlorate concentration of ground water in $Tnbs_1$/$Tnbs_0$ HSU well W-PIT7-2141 decreasing to below the cleanup standard, the extent of perchlorate at concentrations exceeding the 6 µg/L MCL cleanup standard in ground water in the Pit 7 Complex area did not change significantly from 2013 to 2014.

2.5.5.2.5. VOC Concentrations and Distribution

The VOC COCs in Pit 7 Complex Area ground water include TCE and 1,1-DCE. VOCs were detected in ground water samples from six Pit 7 Complex area wells during 2014. Individual VOC concentrations were below MCL cleanup standards in all six wells in 2014 and since 2011. VOC concentrations and distribution in ground water in the Qal/WBR and $Tnbs_1$/$Tnbs_0$ HSUs in the Pit 7 Complex Area are discussed below.

Qal/WBR HSU

During 2014, VOCs were detected in monitor wells NC7-12, NC7-21 and NC7-51. Total VOC concentrations in Qal/WBR HSU ground water in the Pit 7 Complex area have decreased from a historic maximum of 21 µg/L in 1995 (monitor well NC7-51, comprised of 15 µg/L TCE and 6.2 µg/L 1,1-DCE) to a 2014 maximum of 0.9 µg/L (NC7-51, April, comprised entirely of TCE). The 2013 maximum of 1.2 µg/L (also comprised entirely of TCE) was also detected in well NC7-51. During 2014, 1,1-DCE was not detected at concentrations above the 0.5 µg/L reporting limit in any wells completed in the Qal/WBR HSU. Wells NC7-12 and NC7-21 contained only chloroform at concentrations slightly above the 0.5 µg/L reporting limit and well below the 80 µg/L MCL for total trihalomethanes. Well NC7-51 is located immediately downgradient of Pit 3, and wells NC7-12 and NC7-21 are located approximately 1,000 ft and 500 ft southeast (downgradient) of Pit 5, respectively.

$Tnbs_1$/$Tnbs_0$ HSU

During 2014, VOCs were detected in monitor well K7-03 and extraction well W-PIT7-2307, both located immediately downgradient of Pit 5. The 2014 maximum total VOC concentration in a Pit 7 Complex well was 5.8 µg/L (comprised of 4.4 µg/L TCE and 1.4 µg/L 1,1-DCE) in extraction well W-PIT7-2307 (April). During 2014, the ground water level in extraction well W-PIT7-2307 remained below the Qal/WBR contact and entirely in the $Tnbs_1/Tnbs_0$ HSU. Well W-PIT7-2307 was the only well with samples in the Pit 7 Complex area that contained concentrations of 1,1-DCE above the 0.5 µg/L reporting limit during 2014. Well K7-03 contained only TCE at a concentration of 0.68 µg/L (April).

Monitor well K7-01, completed in both HSUs, yielded TCE at concentrations of 0.82 µg/L and 0.9 µg/L in the routine and duplicate April samples, respectively.

2.5.5.3. Pit 7 Complex Area of OU 5 Remediation Optimization and Performance Evaluation

Ground water extraction and treatment at the PIT7-SRC facility began in March 2010. A wellfield expansion in second semester 2012 added wells W-PIT7-2703, W-PIT7-2704 and W-PIT7-2705 to the Pit 7 extraction wellfield. In addition to the new extraction wells, extraction of ground water from NC7-25, screened in the $Tnbs_1/Tnbs_0$ bedrock HSU, was initiated and the pump intake in well W-PIT7-2307 was raised to target the Qal/WBR HSU. Well W-PIT7-2305 contributes most of the flow to the PIT7-SRC facility. Concentrations of COCs in well W-PIT7-2305 ground water have fluctuated since pumping started in 2010, but have shown decreases from pre-pumping conditions to present. For example:

- Tritium activities decreased from 73,900 pCi/L (January 2010) to 30,900 pCi/L (October 2014).
- Uranium activities decreased from 21 pCi/L (January 2010) to 13 pCi/L (October 2014). Since 2008, the ground water from this well has contained only natural uranium.
- TCE concentrations were below the 0.5 µg/L reporting limit (January 2010), were reported at 0.63, 0.67 and 0.52 µg/L in May 2010, October 2010 and April 2011, respectively, and have remained below the 0.5 µg/L reporting limit since October 2011.

To increase uranium mass removal, pumping of $Tnbs_1/Tnbs_0$ HSU well NC7-25 was initiated in August 2012. Until 2014, uranium in this well had historically always exhibited a natural $^{235}U/^{238}U$ atom ratio but exceeded its MCL cleanup standard. After two years of ground water extraction, the October 2014 ground water sample yielded a total uranium activity of 100 pCi/L, a significant increase and historic maximum for this well, with a $^{235}U/^{238}U$ ratio of 0.0066, indicating the presence of some depleted uranium for the first time in a sample from this well.

An assessment of water levels and ground water COC trends at well W-PIT7-2307 during the first year of ground water extraction and treatment at PIT7-SRC (March 2010 to March 2011) indicated that the extracted ground water from well W-PIT7-2307 was derived primarily from the $Tnbs_1/Tnbs_0$ bedrock HSU. Pumping was suspended in early March 2011 to avoid drawing contaminants from Qal/WBR HSU ground water into the $Tnbs_1/Tnbs_0$ HSU. In early February 2013, the pump intake was raised to target the Qal/WBR HSU. Approximately 200 gallons of water were extracted and treated during February and March of 2013 before water levels dropped below the pump intake. Due to below average precipitation during rainfall years 2011-2012, 2012-2013, and 2013-2014, water levels have remained below the pump intake. Since 2011, COC concentrations and activities in this well have remained constant or decreased slightly with the exception of uranium. Since 2012, the uranium activities in four out of five ground water samples collected from this well have exceeded the 20 pCi/L MCL cleanup standard and the $^{235}U/^{238}U$ atom ratios indicate a small component of depleted uranium. It may become necessary to re-evaluate the pumping scheme for this well if uranium activities continue to exceed the MCL cleanup standard.

Extraction wells W-PIT7-2306 and W-PIT7-2704 have had insufficient water for pumping during 2013 and 2014, and have not been sampled since 2012.

Following wellfield expansion work in 2012, the volume of extracted ground water increased and mass removal of COCs, except for VOCs, also increased with the additional ground water extracted. There has been no VOC mass removal since 2013 because the water level is below the pump intake in well W-PIT7-2307, the only extraction well containing detectable VOCs.

2.5.5.4. Pit 7 Complex Area of OU 5 Remedy Performance Issues

MNA for tritium continues to be effective and protective of human health and the environment, and to make progress toward cleanup. The extraction and treatment of uranium, perchlorate, VOCs and nitrate continue to reduce the concentrations and masses of these contaminants in Pit 7 Complex ground water. Continued operation of the PIT7-SRC facility and wellfield expansion in 2012 (extraction from four additional wells) have increased the volume of extracted ground water and mass removed, but not as much as previously reported. During 2014, it was discovered that the check valves in some low-yield and cyclic-operating extraction wells located throughout Site 300 were not functioning properly. These check valves allowed extracted ground water to back-flow into the same well during non-pumping periods. This has resulted in some amount of over-estimates of extracted ground water volumes and, therefore, over-estimates of total contaminant mass removed from these extraction wells. Starting with extraction well W-PIT7-2305 in May, additional check valves were installed in all operational PIT7-SRC extraction wells. For example, during the first four months of 2014, prior to installation of a new check valve, the average extracted ground water volume per month from well W-PIT7-2305 was 6,500 gallons. After installation of the check valve, the average extracted volume per month from well W-PIT7-2305 was slightly more than 500 gallons. Revised volume and contaminant mass removed estimates for the PIT7-SRC GWTS will be presented in the upcoming OU5 Five Year Review.

During 2014, tritium activities in treated effluent from PIT7-SRC were in the range of 35,800 pCi/L to 53,900 pCi/L. Tritium activities in performance monitor wells K7-01 (2014 maximum of 32,700 pCi/L), NC7-16 (contained insufficient water for sampling in first semester 2014) and NC7-21 (2014 maximum of 34,000 pCi/L), located near the effluent discharge trench are lower than the treated effluent activities and continue to exhibit decreasing tritium trends. The tritium activities in these wells will continue to be closely monitored to assess any negative impacts to the distribution of tritium in ground water.

The performance summary of PIT7-SRC indicates that:

- Progress has been made in reducing COC concentrations towards cleanup standards. Uranium activities to date have remained relatively stable, and those in excess of MCL cleanup standards are limited in extent. TCE concentrations have dropped below the MCL cleanup standard. Perchlorate concentrations are stable to decreasing. Nitrate concentrations and distribution have decreased from historic maxima.
- The extent of uranium in excess of the MCL cleanup standard in the Qal/WBR HSU continues to be confined to an area immediately east of Pit 3 and another area that extends from Pit 5 southeast about 500 feet. The extents of both these regions have remained stable

and similar to what has been observed over the last few years. The most recent sample results from extraction well W-PIT7-2704, completed at the northeast corner of Pit 5, indicate that the uranium in Qal/WBR HSU ground water in excess of the cleanup level is less extensive than previously depicted.

- Generally, tritium activities in wells downgradient of the infiltration trench are stable or decreasing, indicating that the discharge of tritium-bearing water is not adversely impacting downgradient ground water.

As discussed in the Remedial Design (RD) for the Pit 7 Complex (Taffet et al., 2008), the drainage diversion system design was not intended to capture 100% of the precipitation that falls in the Pit 7 Complex area. Rather, it was designed to divert excess surface water runoff and shallow subsurface recharge from the hillslopes to the west and east of the Pit 7 Complex landfills during high intensity storms and periods of extreme rainfall (i.e., the 1997-1998 El Niño) to minimize ground water contact with the pit waste and underlying contaminated bedrock. Thus, the drainage diversion system performance can best be evaluated during a future El Niño season or other period of very high rainfall.

Criteria indicating that the drainage diversion system is not operating as intended and corresponding recent performance include:

1. Ground water elevation responses to rainfall events observed in key monitoring wells are similar to those observed before the installation of the drainage diversion system:
   - Drainage diversion system performance is evaluated by 22 monitor wells outfitted in April 2010 with dedicated pressure transducers that measure ground water elevations.
   - Review of these data indicates that ground water elevation responses to rainfall are less than those observed prior to drainage diversion system installation in several wells. For example, in 2005, prior to installation of the drainage diversion system, ground water elevation in well NC7-17, located downgradient of the drainage diversion system at the south end of Pit 7, increased 5 inches per inch of rain received. In 2011, after installation of the drainage diversion system, ground water elevation increased less than 4 inches per inch of rain received for the same time period during the water year. These data indicate a 20% reduction in ground water elevation response to rainfall in well NC7-17 after installation of the drainage diversion system. Total precipitation received during water years 2004-2005 and 2010-2011 was greater than average and almost identical at 13.7 inches and 13.5 inches, respectively. Precipitation received during rainfall years 2011-2012, 2012-2013, and 2013-2014 was below average and water elevation response evaluations have not been performed for these time periods.
2. Maximum ground water rises into the pit waste and underlying contaminated bedrock as indicated by ground water elevation data:
   - Ground water levels have remained well below the bottoms of the Pit 7 Complex Landfills. Ground water elevations in the Qal/WBR HSU have decreased since spring 2011 due to below average rainfall (average is approximately 10.2 inches for Site 300) received during rainfall years 2011-2012 (approximately 7 inches), 2012-2013 (approximately 8 inches), and 2013-2014 (approximately 5 inches).

3. Increasing trends in tritium, uranium, VOCs or perchlorate activities/concentrations are observed over a period of at least four quarters in ground water samples from key wells downgradient of the landfills:
   - COC trends in Pit 7 Complex ground water are decreasing:
     - Tritium activities decreased from a historic maximum of 2,660,000 pCi/L in 1998 to a 2014 maximum tritium activity of 182,000 pCi/L.
     - Uranium activities have decreased from a historic maximum of 781 pCi/L in 1998 to a 2014 maximum of 109 pCi/L.
     - Nitrate concentrations have decreased from the historic maximum of 363 mg/L in 2003 to a 2014 maximum of 66 mg/L.
     - Perchlorate concentrations have decreased from a historic maximum of 40 µg/L in 2009 to a 2014 maximum of 14 µg/L.
     - Total VOC concentrations have decreased from a historic maximum of 21.2 µg/L in 1995 to a 2014 maximum of 5.8 µg/L, with concentrations of all VOC COCs below cleanup standards.

Based on the evaluation of ground water elevation and contaminant activity/concentration data collected from Pit 7 Complex area wells against the performance criteria, the drainage diversion system appears to be operating as intended. However, it is important to note that the drainage diversion system is designed to divert recharge during peak events and has not yet been tested under the conditions for which it was designed.

2.6. Building 854 OU 6

The Building 854 Complex has been used to test the stability of weapons and weapon components under various environmental conditions and mechanical and thermal stresses. A map of the Building 854 OU showing the locations of monitor and extraction wells and treatment facilities is presented on Figure 2.6-1.

Three GWTSs are currently operated in the Building 854 OU; Building 854-Source (854-SRC), Building 854-Proximal (854-PRX), and Building 854-Distal (854-DIS). One SVTS is also operated at the 854-SRC facility.

The 854-SRC GWTS began operation in December 1999 removing VOCs and perchlorate from ground water. During 2014, ground water was extracted from wells W-854-02 and W-854-2218 at an approximate combined flow rate of 3.5 to 4.5 gpm. Operational flow rates will be higher in the future once interlock issues are addressed (discussed in Section 2.6.1.2). The GWTS configuration includes a particulate filtration system, two ion-exchange resin columns connected in series for perchlorate removal, and three aqueous-phase GAC units connected in series for VOC removal. Nitrate-bearing treated effluent is then discharged via a misting tower onto the landscape for uptake and utilization of the nitrate by indigenous grasses.

A SVTS began operation at the 854-SRC in November 2005. Soil vapor is currently extracted from well W-854-1834 at an approximate flow rate of 45 to 50 scfm. This system consists of vapor-phase GAC to remove VOCs from extracted soil vapor. Treated vapors are discharged to the atmosphere under a permit issued by the San Joaquin Valley Air Pollution Control District.

The 854-PRX GWTS began removing VOCs, nitrate and perchlorate from ground water in November 2000. During first semester 2014, upgrades to the 854-PRX GWTS were initiated to improve operational effectiveness and are discussed in detail in Section 2.6.1.5. Following completion of facility upgrades on October 20, 2014, ground water was extracted at an approximate flow rate of 5.3 gpm from well W-854-03, located southeast of the Building 854 complex. This is a significant increase from the extraction rate of 1.5 gpm in previous years.

The 854-DIS GWTS is solar-powered and began operation in July 2006 removing VOCs and perchlorate from ground water. Ground water is extracted from well W-854-2139 and operates cyclically. The current operational flow rate averages approximately 400 gallons per month, with a sustained flow rate of approximately 0.003 gpm. The GWTS configuration includes two ion-exchange resin columns connected in series for perchlorate treatment followed by three aqueous-phase GAC units connected in series for VOC removal prior to discharge to an infiltration trench. Nitrate concentrations are low at this location, so no nitrate removal is currently needed at this GWTS.

2.6.1. Building 854 OU Ground Water Treatment System Operations and Monitoring

This section is organized into five subsections: facility performance assessment; operations and maintenance issues; receiving water monitoring; compliance summary; and sampling plan evaluation and modifications.

2.6.1.1. Building 854 OU Facility Performance Assessment

The monthly ground water discharge volumes, rates and operational hours for second semester 2014 are summarized in Tables 2.6-1 through 2.6-3. The total volume of ground water treated and masses removed during the reporting period are presented in Table Summ-1. The cumulative volume of ground water treated and discharged and the masses removed are summarized in Table Summ-2. Analytical results for influent and effluent samples collected during second semester 2014 are presented in Tables 2.6-4 and 2.6-5. The pH measurement results are presented in Appendix A.

2.6.1.2. Building 854 OU Operations and Maintenance Issues

The following maintenance activities and operational issues occurred at the 854-SRC GWTS and SVTS, and 854-PRX and 854-DIS GWTSs during second semester 2014:

<u>854-SRC GWTS and SVTS</u>

- The GWTS was shut down on July 30 for change out of the GAC. Due to problems found with the replacement GAC vessels, the system was not restarted until August 11.
- Both the GWTS and the SVTS were offline from August 20 to August 25 for a scheduled power outage.
- The GWTS was shut down on October 9 for operation strategy and interlock evaluations. The system was restarted on October 22 with only one extraction well, W-854-02, in operation. The system remained in single well operational mode for the remainder of second semester, 2014. Extraction from W-854-2218 will resume once interlock issues have been addressed.

- Both the GWTS and the SVTS were offline from October 28 to October 29 due to a power outage.
- The GWTS was shut down on December 8 and remained down for the remainder of 2014, for freeze protection.

<u>854-PRX GWTS</u>

- The GWTS was shut down from the start of second semester 2014, until October 8 for facility upgrade work. The GWTS was operated in day-only operations from October 8 until October 20, when the second set of compliance startup sampling results indicated all operations were within compliance. Normal operations were initiated at that time.
- The GWTS was shut down from October 27 to October 29 for electronic validation and nitrate sensor maintenance.

<u>854-DIS GWTS</u>

- The GWTS was offline from July 9 until August 4, due to a faulty extraction well pump.
- The GWTS was offline from offline from October 28 to October 29, due to a power outage.
- The GWTS was shut down on December 8 and remained down for the rest of 2014, for freeze protection.

2.6.1.3. Building 854 OU Compliance Summary

The 854-SRC, 854-PRX and 854-DIS GWTSs all operated in compliance with the RWQCB Substantive Requirements for Wastewater Discharge. The 854-SRC SVTS operated in compliance with San Joaquin Valley Air Pollution Control District permit limitations.

2.6.1.4. Building 854 OU Facility Sampling Plan Evaluation and Modifications

The Building 854 OU facility sampling and analysis plan complies with the monitoring requirements in the CMP/CP. The sampling and analysis plan is presented in Table 2.6-6. There were no modifications to the plan during this reporting period.

2.6.1.5. Building 854 OU Treatment Facility and Extraction Wellfield Modifications

There were no treatment facility or extraction wellfield modifications performed for the 854-DIS, 854-SRC GWTSs, or the 854-SRC SVTS, during the reporting period.

During second semester 2014, upgrades to the 854-PRX GWTS were completed. Due to decreasing nitrate concentrations in the 854-PRX extraction well (<45 mg/L cleanup standard and effluent limitation), the containerized wetland biotreatment units were removed. The removal of the biotreatment units, which limited the treatment flow rate, allows the extraction flow rate to be increased to 5 gpm. The treatment system now includes an in-line nitrate sensor and one additional nitrate specific ion exchange column, flow to which is controlled by a diverter valve dependent on data from the nitrate sensor. In the event nitrate concentrations increase and approach the discharge limit, flow will be diverted through an additional nitrate-selective ion-exchange resin column to remove the nitrate. The upgraded system will also be able to operate during cold weather periods without shutting down for freeze protection. These upgrades are intended to increase hydraulic capture and contaminant mass removal. The 854-PRX upgrades were completed and the facility was fully operational, on October 20, 2014.

2.6.2. Building 854 OU Ground Water Monitoring

The sampling and analysis plan for ground water and surface water monitoring is presented in Table 2.6-7. This table also explains any deviations from the sampling plan and indicates any additions made to the CMP.

During the reporting period, ground water monitoring was conducted in accordance with the CMP monitoring requirements with the following exceptions:

- two analyses in one well were not performed because of an inoperable pump.
- A total of 35 analyses in six different wells and one spring were not performed because the wells/spring were dry or contained insufficient water for sample collection.

Analytical results and ground water elevation measurements obtained during 2014 are presented in Appendices B and C, respectively.

A ground water elevation contour map for the $Tnbs_1/Tnsc_0$ HSU, based on data collected during second semester 2014, is presented on Figure 2.6-2. Ground water elevations measured during second semester 2014 are posted for the Qls and $Tnbs_1$ HSUs on Figure 2.6-6. Ground water elevations measured in both HSUs were similar to those observed in previous years.

2.6.3. Building 854 OU Remediation Progress Analysis

This section is organized into four subsections: mass removal; analysis of contaminant distribution and concentration trends; remediation optimization evaluation; and performance issues.

2.6.3.1. Building 854 OU Mass Removal

The monthly ground water mass removal estimates for second semester 2014 are summarized in Tables 2.6-8 through 2.6-10. The total mass removed during the reporting period and cumulative mass estimates are summarized in Table Summ-1 and Table Summ-2, respectively.

2.6.3.2. Building 854 OU Contaminant Concentrations and Distribution

At the Building 854 OU, the VOCs, TCE and perchlorate, are the primary COCs detected in ground water; nitrate is a secondary COC. These COCs have been detected primarily in the $Tnbs_1/Tnsc_0$ HSU. The locations of the wells discussed in the following text are shown on the Building 854 OU site map (Figure 2.6-1). The distributions of VOCs and perchlorate in the $Tnbs_1/Tnsc_0$ HSU, based on data collected during second semester 2014 (primarily the fourth quarter), are contoured on Figures 2.6-3 and 2.6-4, respectively. Concentrations of nitrate in $Tnbs_1/Tnsc_0$ ground water, based on data collected during first semester 2014 (primarily the second quarter), are posted on Figure 2.6-5. Individual VOC and perchlorate concentrations, measured during second semester 2013, and nitrate concentrations, measured during first semester 2013, are posted for the Qls and $Tnbs_1$ HSUs on Figure 2.6-6. The COC data presented on Figures 2.6-3 through 2.6-6 represent specific time intervals during 2014; therefore, some data discussed in the text are not displayed on the figures. Hydraulic capture zones are presented on the $Tnbs_1/Tnsc_0$ HSU ground water elevation and total VOC and perchlorate maps (Figures 2.6-2, 2.6-3 and 2.6-4). The hydraulic capture zones depicted for extraction wells

W-854-02, W-854-2218, W-854-03 and W-854-2139 are based upon porous media flow using conservative assumptions and are realistic for the current flow rates from these wells. However, the response of monitor well W-854-11 to pumping of extraction well W-854-02 (854 Source Treatment Area) during hydraulic tests conducted in 1999 and 2000 suggests that flow is dominated by discrete fractures. The hydraulic capture zone for extraction well W-854-02 clearly extends much farther upgradient than shown on Figures 2.6-2, 2.6-3 and 2.6-4, but due to the unknown extent, geometry, and interconnectedness of fractures, the hydraulic capture for this extraction well will continue to be depicted as an equivalent porous media. A more in-depth discussion of hydraulic capture in the Building 854 OU can be found in Attachments C-2 and C-3 of the Second Five-Year Review for the Building 854 OU (Valett et al., 2013).

2.6.3.2.1. VOC Concentrations and Distribution

Total VOC concentrations in $Tnbs_1/Tnsc_0$ HSU ground water have been reduced from a historic pre-remediation maximum of 2,900 µg/L (extraction well W-854-02, 1997) to a 2014 maximum concentration of 92 µg/L in the same well (February). TCE comprises all of the VOCs observed in ground water at Building 854, except for low cis-1,2-DCE concentrations detected in two wells. The 2014 maximum cis-1,2-DCE concentrations in these wells were 11 µg/L in monitor well W-854-17 (October, slightly higher than the 6 µg/L MCL cleanup standard) and 0.74 µg/L in extraction well W-854-2139 (April).

Two VOC plumes exist in the $Tnbs_1/Tnsc_0$ HSU: a northern plume and a less extensive southern plume. The plumes are separated by two wells that have not shown concentrations above the reporting limit since sampling began at these locations, in 2002. The northern plume encompasses the 854-SRC and 854-PRX areas and is separated from the southern plume by a region where VOC concentrations are below the 0.5 µg/L reporting limit (at wells W-854-1902 and W-854-1822). The southern plume is in the vicinity of Well 13, a former water-supply well. While the extent of VOCs impacting Building 854 ground water with concentrations above the 0.5 µg/L reporting limit has remained relatively stable since remediation began: (1) the portion of the northern VOC plume with concentrations greater than 50 µg/L has decreased and is currently limited to the immediate vicinity of the Building 854 source area; (2) the extent of the southern VOC plume with concentrations greater than 10 µg/L has decreased; and (3) VOC concentrations in the southern plume, although they fluctuate considerably, are still decreasing.

During 2014, total VOCs at a concentration of 10 µg/L (May) were also detected in shallow perched ground water in monitor well W-854-10 (screened in the $Tnbs_1$ unit but above the $Tnbs_1/Tnsc_0$ HSU), located in the Building 854 source area. Later in 2014, the total VOC concentration at this well decreased to 2.3 µg/L (October).

The maximum historic total VOC vapor concentration (entirely TCE) in the Building 854 source area was measured in 854-SRC SVTS extraction well W-854-1834 (4.4 $ppm_{v/v,}$ November 2005). The 2014 maximum TCE vapor concentration for this well was 0.21 $ppm_{v/v}$, measured in the May sample collected during normal vapor extraction operation. In second semester 2014, the TCE vapor concentration for this well was <0.005 $ppm_{v/v}$ (October). This is the first time since 2007 (August) that the vapor concentration at W-854-1834 dropped below the reporting limit for TCE vapor. This decline in TCE concentration indicates significant progress in remediation of VOC in vapor, in this area.

2.6.3.2.2. Perchlorate Concentrations and Distribution

During 2014, perchlorate concentrations at or exceeding its 6 µg/L MCL cleanup standard were detected in five $Tnbs_1$/$Tnsc_0$ HSU wells (extraction wells W-854-02 and W-854-03, and monitor wells W-854-07, W-854-45 and W-854-1823). Perchlorate concentrations in $Tnbs_1$/$Tnsc_0$ HSU ground water have decreased from a historic maximum of 27 µg/L (W-854-1823, 2003) to a 2014 maximum of 15 µg/L in W-854-1823 (May). Monitor well W-854-1823 is located downgradient of the 854-PRX facility and perchlorate concentrations have been slightly declining in this well since 2003. Perchlorate at 854-DIS, and near W-854-45 is not currently captured by any ground water extraction well(s). The distribution and concentrations of perchlorate in $Tnbs_1$/$Tnsc_0$ HSU ground water during 2014 are similar to those observed in previous years.

During 2014, perchlorate concentrations were below the 4 µg/L reporting limit in all ground water samples from wells screened in the Qls HSU or perched $Tnbs_1$ water-bearing zones.

2.6.3.2.3. Nitrate Concentrations and Distribution

During 2014, the maximum nitrate concentration in Building 854 OU area ground water was 130 mg/L in monitor well W-854-14 (May), screened in the Qls HSU. The 2013 maximum concentration of 140 mg/L was also detected in well W-854-14. Four additional wells contained nitrate above the 45 mg/L MCL cleanup standard in 2014: $Tnbs_1$/$Tnsc_0$ extraction well W-854-02 (53 mg/L, April), $Tnbs_1$/$Tnsc_0$ monitor wells W-854-2611 (51 mg/L, May) and W-854-45 (54 mg/L, May), and Qls monitor well W-854-05 (57 mg/L, May). These 2014 concentrations have decreased from 2013 and all wells have shown stable concentrations over time except W-854-45, which has shown a steadily increasing trend since 2004. All of the wells containing ground water with nitrate concentrations exceeding the 45 mg/L MCL cleanup standard were located in the vicinity of the Building 854 complex or Building 858. The distribution and concentrations of nitrate in ground water during 2014, having decreased slightly, are generally similar to what was observed in 2013.

2.6.3.3. Building 854 OU Remediation Optimization Evaluation

During 2014, the 854-SRC GWTS removed 130 g of VOC mass, 5.9 g of perchlorate, and 170 kg of nitrate, approximately the same as during 2013. In first semester 2014, installation of a new pump in extraction well W-854-2218 increased the combined flow rate to approximately 4.5 gpm, compared to approximately 2.5 gpm during first semester 2013. However, W-854-2218 was shut down due to interlock issues in October 2014. The 854-SRC GWTS continued to operate with only W-854-02 pumping until it was shut down for freeze protection in December. Significantly reduced GWTS operational hours for 854-SRC extraction wells resulted in lower VOC and perchlorate mass removal during the 2014 reporting period than in 2013. Lower flow rates from October to December have decreased the total volume of ground water treated and VOC mass removal at 854-SRC. Ground water extraction continues to adequately capture the highest VOC concentrations. An evaluation of the 854-SRC GWTS is underway and will address performance issues of W-854-2218 and contribute to more continuous operation of the GWTS.

At 854-SRC SVTS, the routine quarterly samples collected July 7 contained 0.18 $ppm_{v/v}$ and on October 6 contained <0.005 $ppm_{v/v}$ of VOCs. The October 6 sample is the first time since 2007 (August) that the vapor concentration at W-854-1834 dropped below the reporting limit for TCE vapor. During 2013, VOC vapor concentrations ranged between 0.024 $ppm_{v/v}$ and

0.32 $ppm_{v/v}$. At 854-SRC SVTS, 270 g of VOC vapor mass were removed during 2014, compared to 820 g in 2013. These estimates are lower than in 2013 due to the lower concentrations present in the well during the reporting period. Despite low VOC vapor concentrations, VOC mass continues to be removed from the source area due to relatively high vapor flow rates. This VOC mass is volatilizing from vadose zone sources beneath the Building 854 source area and VOC vapors from the underlying dissolved VOC plume in $Tnbs_1$/$Tnsc_0$ ground water. Due to continued removal of VOC mass, DOE/LLNL plan to operate the 854-SRC SVTS until vapor concentrations remain below reporting limits after extended shutdown periods and SVE shutoff criteria have been met. Over the next several years, it will be determined if prerequisites to begin a SVE system shut-off evaluation have been attained as described in Appendix C of the Site 300 Site-Wide Record of Decision (U.S. DOE, 2008). This process will begin in 2015 with a planned one-month vapor-rebound test.

During 2014, the 854-PRX GWTS removed 22 g of VOC mass, 12 g of perchlorate, and 61 kg of NO_3 compared to 2013, where the system removed 24 g of VOC mass, 9.8 g of perchlorate, and 54 kg of nitrate. Even though 854-PRX GWTS was offline for much of 2014 for facility upgrades, mass removal was near equal to or higher compared to 2013 due to increased flow rate in second semester 2014 after facility and well upgrades were completed. Although the GWTS operated for less time in second semester 2014 than in second semester 2013, the increased flow rate resulted in a 450% increase in the volume of ground water extracted from November 2013 (35,500 gallons) to November 2014 (198,000 gallons). The 854-PRX GWTS was in operation beginning October 20, after freeze protection shutdown, and operated for the remainder of the reporting period. After completion of the facility upgrades, pumping from extraction well W-854-03 was increased from 1.5 gpm to approximately 5.3 gpm. The long-term impact of increased flow rate on plume capture and mass removal is being evaluated and will be reported in future CMRs.

During 2014, the operational flow rate for the 854-DIS GWTS was approximately 300 gallons per month. The one extraction well at the 854-DIS GWTS (W-854-2139) pumps at a low rate because the formation around the well becomes rapidly dewatered and the well cannot sustain prolonged pumping. During 2014 the 854-DIS GWTS removed 0.39 g of VOC mass, 0.033 g of perchlorate, and 180 g of nitrate. This is lower than in 2013, where the 854-DIS GWTS removed 0.92 g of VOC mass, 0.13 g of perchlorate, and 620 g of nitrate. This is in part due to decreasing concentration trends and occasional non-detections of these contaminants at these wells.

2.6.3.4. Building 854 OU Remedy Performance Issues

There were no new issues that affect the performance of the cleanup remedy for the Building 854 OU during this reporting period. The overall remedy continues to be effective and protective of human health and the environment, and to make progress toward cleanup.

2.7. Building 832 Canyon OU 7

Building 832 Canyon facilities were used to test the stability of weapons and associated components under various environmental conditions. Contaminants were released from Buildings 830 and 832 through piping leaks and surface spills during testing activities at these buildings.

Three GWTSs and two SVTS are operated in the Building 832 Canyon OU: Building 832-Source (832-SRC), Building 830-Source (830-SRC), and Building 830-Distal South (830-DISS). The 832-SRC and 830-SRC facilities extract and treat both ground water and soil vapor, while the 830-DISS facility extracts and treats ground water only.

A map of Building 832 OU showing the locations of monitor and extraction wells and treatment facilities is presented on Figure 2.7-1.

The 832-SRC GWTS removes VOCs and perchlorate from ground water and the SVTS removes VOCs from soil vapor. The GWTS and SVTS began operation in September and October 1999, respectively. In 2014, ground water was extracted from wells W-832-01, W-832-12, W-832-15 and W-832-25 at an approximate combined flow rate averaging at 0.035 gpm. Due to declining water levels, extraction wells W-832-10 produced negligible amounts of water in 2014 and extraction well W-832-11 produced no water during the same time. Soil vapor was extracted from wells W-832-12 and W-832-15 at an approximate combined flow rate of approximately 3.2 to 5.1 scfm. The current GWTS configuration includes two ion-exchange resin columns connected in series to remove perchlorate, and three aqueous-phase GAC units (also connected in series) to remove VOCs. Nitrate-bearing treated effluent is then discharged via a misting tower over the landscape for uptake and utilization of the nitrate by indigenous grasses. A positive displacement rotary lobe blower is used to create a vacuum at selected wellheads through a system of piping manifolds. The contaminated vapors are treated using three vapor-phase GAC units connected in series. Treated soil vapors are then discharged to the atmosphere under a permit issued by the San Joaquin Valley Air Pollution Control District.

The 830-SRC GWTS removes VOCs and perchlorate from ground water and the SVTS removes VOCs from soil vapor. The GWTS and SVTS began operation in February and May 2003, respectively. In 2014, ground water was extracted from wells W-830-19, W-830-49, W-830-57, W-830-59, W-830-60, W-830-1807, W-830-2214, and W-830-2215 at a combined flow rate of approximately 6 to 11 gpm, at an average of 8.1 gpm, prior to the shut down for facility upgrades on August 19. The GWTS configuration includes a Cuno filter for particulate filtration, two ion-exchange resin columns connected in-series to remove perchlorate, and three in-series aqueous-phase GAC units to remove VOCs. Ground water extracted from higher flow Upper $Tnbs_1$ HSU extraction wells (W-830-2215, W-830-60 and W-830-57) and from $Tnsc_{1a}$ HSU extraction well W-830-2701 is routed around the 830-SRC ion-exchange canisters as perchlorate has not been detected above the reporting limit (4 µg/L) since 2005 in W-830-57 and has never been detected above the reporting limit in W-830-2215 or W-830-60. This bypass improves the operation of the treatment facility by decreasing backpressure, allowing for increased ground water flow and mass removal rates. Ground water extracted from low-flow $Tnsc_{1a}$ wells W-830-1807, W-830-19, W-830-2214, W-830-49 and W-830-59 still contain perchlorate above the discharge limit and do not bypass the perchlorate treatment system. Nitrate-bearing treated effluent is then discharged via a misting tower over the landscape for uptake and utilization of the nitrate by indigenous grasses. Soil vapor is extracted from wells W-830-1807 and W-830-49 using a liquid ring vacuum pump at a current combined flow rate of approximately 21 to 34 scfm. The contaminated vapors are treated using three vapor-phase GAC units connected in series. Treated soil vapors are then discharged to the atmosphere under a permit issued by the San Joaquin Valley Unified Air Pollution Control District. Both the 830-SRC GWTS and the SVTS are in the process of being upgraded. Changes to the extraction well field or treatment systems will be discussed below in Section 2.7.1.5.

The 830-DISS GWTS began operation in July 2000, removing VOCs, perchlorate and nitrate from ground water. Ground water is currently extracted from wells W-830-51, W-830-52, W-830-53 and W-830-2216 at a combined flow rate of approximately 2 to 6 gpm. During a typical year, approximately 1 to 2.5 gpm of ground water flows naturally from extraction wells W-830-51 and W-830-52, and less than 0.5 gpm from well W-830-53 under artesian pressure. W-830-2216 is actively pumped at a flow rate of approximately 1 to 2 gpm. During the current period, the combined flow rate was approximately 3.8 gpm, with about half the flow coming from W-830-51 and half from W-830-2216. During second semester 2014, no flow was measured from W-830-53 and only negligible flow from W-830-52. Currently, extracted ground water flows through ion-exchange canisters to remove perchlorate at the 830-DISS location. The water is then piped to the Central GSA GWTS for VOC removal. Nitrate-bearing treated effluent is then discharged via a misting tower over the landscape for uptake and utilization of the nitrate by indigenous grasses.

2.7.1. Building 832 Canyon OU Ground Water and Soil Vapor Extraction and Treatment System Operations and Monitoring

This section is organized into four subsections: facility performance assessment; operations and maintenance issues; compliance summary; and sampling plan evaluation and modifications.

2.7.1.1. Building 832 Canyon OU Facility Performance Assessment

For second semester 2014, monthly ground water and soil vapor discharge volumes, rates, and operational hours are summarized in Tables 2.7-1 through 2.7-3. The total volume of ground water and vapor extracted and treated and mass removed during the reporting period are presented in Table Summ-1. The cumulative volume of ground water and soil vapor treated and discharged and mass removed are summarized in Table Summ-2. Analytical results for influent and effluent samples collected during second semester 2014, are presented in Tables 2.7-4 and 2.7-5. The pH measurement results are presented in Appendix A.

2.7.1.2. Building 832 Canyon OU Operations and Maintenance Issues

The following maintenance activities and operational issues occurred at the 832-SRC GWTS and SVTS, 830-SRC GWTS and SVTS and 830-DISS GWTS during second semester 2014:

<u>830-SRC GWTS and SVTS</u>

- Both the GWTS and the SVTS were shut down on August 19 for a complete system rebuild and remained offline for the rest of 2014.

<u>832-SRC GWTS and SVTS</u>

- The GWTS was taken offline on October 9 due to a leak found in the treated effluent line to the misting towers. Due to needed upgrades and budget issues, along with problems obtaining Laboratory MUSD support, the GWTS remained offline for the remainder of 2014. The SVTS was then secured on October 23 and also remained offline for the rest of 2014.

<u>830-DISS GWTS</u>

- The GWTS was offline from July 7 to July 21 due to no operations at the CGSA GWTS.

- The GWTS was offline from September 19 to September 22 due to no operations at the CGSA GWTS.
- The GWTS was shut down on December 8 through the end of 2014, for freeze protection.

2.7.1.3. Building 832 Canyon OU Compliance Summary

The 830-SRC, 832-SRC and 830-DISS GWTSs operated in compliance with RWQCB Substantive Requirements during the reporting period. The 830-SRC SVTS operated in compliance with the San Joaquin Valley Air Pollution Control District permit limitations.

2.7.1.4. Building 832 Canyon OU Facility Sampling Plan Evaluation and Modifications

The Building 832 Canyon OU treatment facility sampling and analysis plan complies with the monitoring requirements in the CMP/CP. The sampling and analysis plan is presented in Table 2.7-6. No modifications were made to any of the plans during this reporting period.

2.7.1.5. Building 832 Canyon OU Treatment Facility and Extraction Wellfield Modifications

During first semester 2014, two new wells, W-832-3019 and W-832-3020, were drilled near the Building 832 source area and completed in the $Tnsc_{1a}$ HSU. Well W-832-3019 is planned as a dual-extraction well to be connected to the 832-SRC treatment facility in FY15. The well is screened from 32 to 42 feet below ground surface. Well W-832-3020 was installed near existing $Tnsc_{1b}$ extraction well W-832-11 which has gone dry due to a decline in the water table under drought conditions. Well W-832-3020 was completed in the $Tnsc_{1a}$ HSU just below the screened interval of nearby well W-832-11.

The Building 830-SRC GWTS and SVTS are currently undergoing construction to upgrade both systems. All new piping, media vessels, and electronic controls are being installed. The main components and configuration of the treatment system will be very similar to the previous system, although the SVTS will be moved and placed adjacent to the GWTS and the extraction well W-830-2701 was hooked up to the treatment facility. Details of the changes will be included in the First Semester 2015 CMR.

Four new shallow monitor wells were installed in second semester 2014 in 832 Canyon. Wells W-832-3015, W-832-3016, W-832-3017 and W-832-3018 were drilled in late October, to maximum depths of 10 ft bgs (or shallower, due to auger refusal), using hand-auger methods and completed in the Qal/WBR HSU. Soil samples were collected and analyzed for VOCs at each location, at 3 ft below ground surface. Soil analytical results for all samples were all below the reporting limit.

Monitor well W-832-3015 is located 10 feet northwest of monitor well W-830-07 and was screened at a depth of 3.0 – 5.5 ft below ground surface. No ground water was encountered while drilling at this boring location.

Monitor well W-832-3016 is located approximately 200 ft southwest of extraction well W-830-2215 along the canyon bottom and was screened at a depth of 4.5 to 9.5 ft below ground surface. No ground water was encountered at this location.

Monitor well W-832-3017 is located approximately 200 ft south of monitor well W-830-04A and midway between monitor wells W-832-SC1 and W-832-SC2 along the 832 canyon bottom and was screened at a depth of 4.5 to 9.5 ft below ground surface. Ground water was encountered during drilling activities at 3 ft bgs and a grab sample was taken at the conclusion of drilling activities from the open borehole. Results for the ground water sample taken at W-832-3017 at conclusion of drilling activities from the open borehole contained 5.6 µg/L TCE. A post-development ground water sample also contained TCE, at a concentration of 6.9 µg/L. No other VOC constituents were detected, in either ground water at this location.

Monitor well W-832-3018 is located approximately 100 ft south of artesian extraction well W-830-53 in the 832 canyon bottom and was screened at a depth of 1.5 to 3.5 ft below ground surface. Although no ground water was encountered in this boring, this well should be a strategic sampling location when ground water levels rise again in this HSU during wet years.

2.7.2. Building 832 Canyon OU Ground Water Monitoring

The sampling and analysis plan for ground water and surface water monitoring is presented in Table 2.7-7. This table explains deviations from the sampling plan and indicates any additions made to the CMP.

During the reporting period, ground water monitoring was conducted in accordance with the CMP monitoring requirements with the following exceptions:

- A total of 15 analyses in eight different wells were not performed because of an inoperable pump.
- A total of 92 analyses in 24 different wells were not performed because the wells were dry or contained insufficient water for sample collection.
- A total of two analyses in two artesian wells were not performed because the artesian wells did not have sufficient head to flow at the surface and are not equipped with ground water pumps.
- A total of 13 analyses in four different wells and one spring were not performed due to unsafe conditions at the sampling locations.
- A total of nine analyses in three different wells were not performed because the associated treatment facilities were turned off for freeze protection.

Analytical results and ground water elevation measurements obtained during 2014 are presented in Appendices B and C, respectively.

Ground water elevations and flow directions for the Qal/WBR and $Tnsc_{1a}$ HSUs are presented on Figures 2.7-2 and 2.7-4, respectively. Ground water elevation contour maps including hydraulic capture zones for the $Tnsc_{1b}$ and Upper $Tnbs_1$ HSUs are presented on Figures 2.7-3 and 2.7-5, respectively.

2.7.3. Building 832 Canyon OU Remediation Progress Analysis

This section is organized into four subsections: mass removal; contaminant concentrations and distribution; remediation optimization evaluation; and performance issues.

2.7.3.1. Building 832 Canyon OU Mass Removal

The monthly ground water and soil vapor mass removal estimates for second semester of 2014 are summarized in Tables 2.7-8 through 2.7-10. The total masses removed during the reporting period and cumulative mass estimates are summarized in Table Summ-1 and Table Summ-2, respectively.

2.7.3.2. Building 832 Canyon OU Contaminant Concentrations and Distribution

At the Building 832 Canyon OU, VOCs (mostly TCE) are the primary COCs detected in ground water. The compound cis-1,2-DCE is a COC at both the Building 830 and 832 source areas; chloroform and PCE are COCs at the Building 830 source area. Perchlorate and nitrate are the secondary COCs. These constituents have been detected primarily in the Qal/WBR HSU, $Tnsc_{1b}$ HSU and $Tnsc_{1a}$ HSU. VOCs have also been detected at relatively low concentrations in the $Tnbs_2$ and Upper $Tnbs_1$ HSUs.

2.7.3.2.1. VOC Concentrations and Distribution

VOCs detected in Building 830 area ground water consist primarily of TCE. During 2014, the other VOCs present above the reporting limit in the Building 830 area were chloroform, PCE, cis-1,2-DCE and trans-1,2-DCE. Of these VOCs, only TCE, cis-1,2-DCE and trans-1,2-DCE were detected at concentrations above their MCL cleanup standards of 5 µg/L, 6 µg/L and 10 µg/L, respectively.

VOCs detected in Building 832 area ground water consist primarily of TCE. During 2014, VOCs other than TCE present above the reporting limit in the Building 832 source area were cis-1,2-DCE, chloroform and Freon 11. Of these VOCs, only TCE and cis-1,2-DCE were present in the Building 832 area at concentrations above their MCL cleanup standards of 5 µg/L and 6 µg/L, respectively.

VOC concentrations and distribution are discussed by HSU, below.

Qal/WBR HSU

Since remediation began in 2000, in the Building 830 source area, total VOC concentrations in Qal/WBR HSU ground water near 830-SRC have decreased by two orders-of-magnitude from a historic maximum of 10,000 µg/L (piezometer SVI-830-035, 2003) to a 2014 maximum concentration of 580 µg/L (entirely TCE, piezometer SVI-830-035, February).

Total VOC concentrations detected in soil vapor continue to decline in the Building 830 source area. Total VOC concentrations detected in dual extraction well W-830-1807 have decreased from a historic maximum concentration of 35 $ppm_{v/v}$ in 2004 to a 2014 maximum concentration of 0.4 $ppm_{v/v}$ (August). In W-830-1807, total VOC concentrations have not been detected above 1 $ppm_{v/v}$ since 2007 (September) except for one occurrence in 2013 as part of a vapor rebound test (1.012 $ppm_{v/v}$, February). Total VOC concentrations detected in dual extraction well W-830-49 have decreased from a historic maximum of 259 $ppm_{v/v}$ in 2007 to a 2014 maximum of 2.8 $ppm_{v/v}$ (March). The total VOC concentrations of the August 2014 sample were below the detection limit of 0.005 $ppm_{v/v}$ for all VOCs.

Since remediation began in 1999 in the Building 832 source area, ground water total VOC concentrations in wells screened in the Qal/WBR HSU have decreased from a historic maximum of 1,800 µg/L (well W-832-18, 1998) to a 2014 maximum concentration of 510 µg/L in monitor well W-832-23 (August). Well W-832-23 is screened in the Qal/WBR and $Tnsc_{1b}$ HSUs. This well has seen seasonal fluctuations in total VOC concentrations since 1999 in a range between 690 and 23 µg/L. During first semester 2014, ground water samples for VOC analyses were not collected from several other wells located in the Building 832 source area because the water table dropped below the screened intervals in these wells.

Total VOC concentrations in soil vapor are also declining in the Building 832 source area. Total VOC concentrations detected in soil vapor in well W-832-15 have decreased from a historic maximum concentration of 1.8 $ppm_{v/v}$ in 2001 to a 2014 maximum of 0.24 $ppm_{v/v}$ (May). Total VOCs detected in soil vapor in well W-832-12 have decreased from a maximum concentration of 1.1 $ppm_{v/v}$ in 2008 to a 2014 maximum concentration of 0.18 $ppm_{v/v}$ (May).

During the reporting period, total VOC concentrations in ground water samples taken from Qal/WBR HSU guard wells W-35B-01 and W-880-02, located south of Building 832 Canyon near the Site 300 southern boundary, were below reporting limits (<0.5 µg/L), except on one occasion when PCE was detected in a June ground water sample from guard well W-880-02 at 0.52 µg/L, slightly above the reporting limit but well below its MCL cleanup level of 5 µg/L. Beginning in 1998, TCE and PCE were routinely detected at concentrations slightly above the reporting limit in this guard well but never above the respective MCL cleanup levels for both compounds (5 µg/L). Since 2006, only PCE has been detected above the reporting limit in this guard well. Total VOC concentrations in these two guard wells have decreased from a historic maximum of 1.9 µg/L in well W-35B-01 in 2001.

***$Tnbs_2$* HSU**

As described in the HEPA section, well W-830-2216 extracts ground water from the $Tnbs_2$ HSU. Contamination in this well is likely due to a combination of sources located in the HEPA and Building 832 Canyon OUs. Since extraction began in 2007, VOC concentrations in W-830-2216 have consistently declined. During 2014, the maximum TCE concentration in W-830-2216 was 4.2 µg/L (May) continuing a downward trend from the historic maximum in this well of 20 µg/L (2007). In 2014, the maximum TCE concentration in nearby monitor well W-830-13 was 4.4 µg/L (March and August); the historic maximum in this well was 26 µg/L (2002). TCE was the only VOC detected in W-830-2216 and W-830-13, during 2014. The extracted ground water is treated at the 830-DISS and CGSA treatment facilities.

***$Tnsc_{1b}$* HSU**

Since remediation began in 2000 in the Building 830 source area, total VOC concentrations in ground water in the $Tnsc_{1b}$ HSU have decreased from a historic maximum of 13,000 µg/L in extraction well W-830-49 (2003) to a 2014 maximum of 2,100 µg/L in monitor well W-830-1830 (August). Well W-830-49 has gone dry in recent years and well W-830-19 was inoperable for sampling due to treatment facility upgrades in progress, at the time of sampling. In the 830-DISS area, total VOC concentrations in $Tnsc_{1b}$ HSU artesian wells W-830-51, W-830-52 and W-830-53, have decreased from a historic maximum of 170 µg/L (extraction well W-830-51, 2002) to a 2014 maximum of 21 µg/L in W-830-51 (October). Farther south along Building 832 Canyon, the leading edge of the $Tnsc_{1b}$ VOC plume continues to be contained within the Site 300 boundary based on total VOC concentrations below the 0.5 µg/L reporting limit in guard wells W-880-03, W-830-1730 and W-4C. During 2012, a new monitor well, W-830-2806, was installed to the southwest of the Building 830 source area in the $Tnsc_{1a}$ HSU. Since installation, VOCs have not been detected in this monitor well.

***$Tnsc_{1a}$* HSU**

Since remediation of the $Tnsc_{1a}$ HSU began in early 2007, total VOC concentrations in ground water have generally decreased from 1,700 µg/L (monitor well W-830-27, 1998) to a 2014 maximum of 1,100 µg/L in extraction well W-830-2214 (detected twice, January, April).

Extraction well W-830-2214 was installed in 2006 and has exhibited an increasing TCE trend from 2009 to 2012. From 2012 to present, TCE concentrations in this well appear to be stabilizing, although they remain high, ranging from 820 µg/L to 1200 µg/L. Because of the low yields and limited recharge of this extraction well, increased pumping and hydraulic capture from this well are not possible. As recommended in the 2011 Five-Year Review for this OU (Helmig et al., 2011), a downgradient $Tnsc_{1a}$ well, W-830-2701, was installed in 2011. Ground water total VOC concentrations in W-830-2701 reached a 2014 maximum of 14 µg/L (mostly TCE, March). Well W-830-2701 is currently being converted to an extraction well as part of the treatment facility and wellfield upgrades for 830-SRC area.

Upper $Tnbs_1$ HSU

Since remediation began in the Upper $Tnbs_1$ HSU, total VOC concentrations in ground water have decreased from a historic maximum of 100 µg/L (monitor well W-830-28, 1998) to a 2014 maximum of 27 µg/L in monitor well W-830-18 (February). Before 2012, the highest VOC concentrations detected in this area were detected in well W-830-28. Since 2012 however, well W-830-18 has had the highest total VOC concentrations. Since 2006, total VOC concentrations in monitor well W-830-18 have remained relatively stable with a slight increasing trend. However, total VOC concentrations in the adjacent extraction well, W-830-2215, remain stable to slightly decreasing. During 2014, VOCs were not detected above the 0.5 µg/L reporting limit in Upper $Tnbs_1$ guard wells W-830-15 and W-832-2112. VOCs have never been detected in these wells since installation in 1995 and 2005, respectively.

2.7.3.2.2. HE Compound Concentrations and Distribution

Including 2014, HE compounds have never been detected in ground water in any Building 832 Canyon OU wells.

2.7.3.2.3. Perchlorate Concentrations and Distribution

In Building 832 Canyon OU, perchlorate has historically been detected in the Qal/WBR HSU, $Tnsc_{1b}$ HSU, $Tnsc_{1a}$ HSU and Upper $Tnbs_1$ HSU.

Qal/WBR HSU

Perchlorate concentrations in the Qal/WBR HSU have decreased from a historic maximum of 51 µg/L in Building 830 source monitor well W-830-34 (1998) to a 2014 maximum of 9.7 µg/L (monitor well W-832-23, February). In 2013, the maximum perchlorate concentration detected in monitor well W-832-13 was 13 µg/L (February), but samples for perchlorate analyses were not collected from this well during 2014 because the water table remained below the screened interval of the well. During 2014, perchlorate was not detected above the 4 µg/L reporting limit near the Building 830 source area or in the Qal/WBR HSU guard well W-35B-01. As is the case with several Building 832 Source area wells, many wells that had previously shown detections of perchlorate were not sampled due to the ground water table lowering beneath the well screens.

$Tnsc_{1b}$ HSU

During 2014, the maximum perchlorate concentration detected in ground water in the $Tnsc_{1b}$ HSU was 9.7 µg/L (monitor well W-832-23, February), slightly above the MCL cleanup level of 6 µg/L. Monitor well W-832-23 is completed in both the Qal/WBR and $Tnsc_{1b}$ HSUs. Historically, monitor well W-830-58 has exhibited the highest perchlorate ground water concentration (26 µg/L, 2001) in the $Tnsc_{1b}$ HSU but has remained stable at between 5 and 10 µg/L since 2002. Perchlorate was not detected above the reporting limit in $Tnsc_{1b}$ HSU guard wells W-830-1730 and W-4C, during 2014. However, perchlorate was potentially detected in $Tnsc_{1b}$ guard well W-880-03 at a concentration of 7.3 µg/L (August). The results for this sample are currently under review with additional samples planned for verification, and will be discussed in the First Semester 2015 CMR.

$Tnsc_{1a}$ HSU

During 2014, the maximum perchlorate ground water concentration detected in the $Tnsc_{1a}$ HSU was 8.1 µg/L in extraction well W-832-25 (March). The historic maximum perchlorate concentration (13 µg/L) was observed in 1999 in this same extraction well. During 2014, perchlorate was not detected above the 4 µg/L reporting limit in either monitor well W-830-2806 (installed in 2012) or new planned extraction well W-830-2701.

Upper $Tnbs_1$ HSU

During the reporting period, perchlorate was potentially detected above the reporting limit of 4 µg/L in one ground water sample collected from the Upper $Tnbs_1$ HSU, in guard well W-830-15 (86 µg/L, August). The results for this sample are currently under review with additional samples planned for verification, and will be discussed in the First Semester 2015 CMR. This result is likely a lab error due to "matrix interference" which is a common problem with perchlorate analyses. Historically, the only detections of perchlorate in the Upper $Tnbs_1$ HSU above the reporting limit of 4 µg/L were 15 µg/L (2004) and 6.4 µg/L (2005) in monitor well W-830-57 and perchlorate detections since then have all been below the 4 µg/L reporting limit.

2.7.3.2.4. Nitrate Concentrations and Distribution

During 2014, nitrate concentrations in ground water remained high in the vicinity of the Building 832 and 830 source areas and low or below the reporting limit (<0.1 mg/L) in the downgradient, deeper parts of all Building 832 Canyon HSUs.

Qal/WBR HSU

During 2014, nitrate ground water concentrations detected in the Qal/WBR HSU ranged from the <0.5 mg/L reporting limit in guard wells located near the site boundary to 120 mg/L in monitor wells W-832-12 (January) and W-832-15 (January, August), located in the Building 832 source area. In the Qal/WBR HSU, the historic maximum nitrate concentration was 240 mg/L detected in piezometer SVI-830-033 (2008). During 2014, this piezometer contained a maximum nitrate concentration of 98 mg/L (February), still exceeding the MCL cleanup level of 45 mg/L. This piezometer is located in the Building 830 source area near monitor well W-830-34 and piezometer SVI-830-035, where the maximum concentrations detected during the 2014 were 96 mg/L, at both locations.

$Tnsc_{1b}$ HSU

Nitrate concentrations in the $Tnsc_{1b}$ HSU have decreased from a historic maximum of 500 mg/L in Building 830 source extraction well W-830-49 (1998) to a 2014 maximum of 150 mg/L in the same well (January). Nitrate concentrations in the $Tnsc_{1b}$ guard wells during 2014 were all below the reporting limit of <1 mg/L. Since 2005, only guard well W-830-1730 has contained nitrate above 1 mg/L reporting limit, ranging from 0.5 mg/L in several instances to a maximum of 5.8 mg/L (2005) and not exceeded 3.1 mg/L since 2006.

$Tnsc_{1a}$ HSU

Nitrate concentrations in the $Tnsc_{1a}$ HSU have decreased from a historic maximum of 160 mg/L (monitor well W-830-27, 2002) to a 2014 maximum of 99 mg/L in the 830-SRC area (extraction well W-830-2214, January) and 82 mg/L in the 832-SRC area (extraction well W-832-25, March).

Upper Tnbs$_1$ HSU

Historically, the highest nitrate concentration in the Upper Tnbs$_1$ HSU was 21 mg/L in monitor well W-830-28 (1997). The 2014 maximum concentration of nitrate detected in the UTnbs$_1$ HSU was 3 mg/L in extraction well W-830-2215 (January), well below its 45 mg/L MCL cleanup standard. During 2014, nitrate was not detected in guard wells W-830-15 or W-832-2112 above the reporting limit of 0.5 mg/L. The very low nitrate concentrations in the downgradient areas and the absence of detectable nitrate in the southern site boundary guard wells are consistent with the interpretation that nitrate is naturally attenuating *in situ*.

2.7.3.3. Building 832 Canyon OU Remediation Optimization Evaluation

During 2014, ground water and soil vapor extraction wellfield operations continued in the Building 832 Canyon OU to prevent offsite plume migration, reduce source area concentrations, and remove contaminant mass. The expanded 832-SRC and 830-SRC extraction wellfields have increased hydraulic capture, while preventing the downward migration of contaminants into deeper HSUs and/or laterally toward the site boundary and Site 300 water-supply wells, Well 18 and Well 20. Ground water yield from many 830-SRC and 832-SRC extraction wells continues to be low and hydraulic capture is difficult to assess in some areas because these wells cannot maintain continuous operation. The low yields are due to a combination of geologic materials with low hydraulic conductivity, dewatering and limited recharge due to drought conditions.

Qal/WBR and Tnsc$_{1b}$ HSUs

In the Qal/WBR and Tnsc$_{1b}$ HSUs, the extraction wellfield targets the highest VOC plume concentrations emanating from the Building 832 and Building 830 source areas, but steep terrain and unstable canyon bottom soil conditions limit the availability of sites for new wells. Ground water extraction is further constrained by limited recharge and declining water levels in both source areas. During part of second semester 2014, some extraction wells were offline due to pump repairs, treatment facility repairs, and freeze protection. No long-term impact is expected as a result of these shutdowns.

Tnsc$_{1a}$ HSU

Active remediation of the Tnsc$_{1a}$ HSU began in 2007 and the extraction wellfield currently consists of two wells: W-830-2214 located near the 830-SRC treatment facility and W-832-25 located downgradient of the 832-SRC treatment facility in the distal area of this plume. Since 2007, VOC ground water concentrations have remained stable in extraction well W-832-25. Since 2012, VOC concentrations have also been stabilizing in extraction well W-830-2214, although concentrations remain high (>1 µg/L). Water levels continue to decline in both the 830-SRC and 832-SRC areas, limiting continuous extraction from the Tnsc$_{1b}$ and Tnsc$_{1a}$ HSUs.

The 830-SRC is currently undergoing an engineering evaluation and upgrade to improve treatment facility performance and to connect Tnsc$_{1a}$ HSU well W-830-2701 to function as an extraction well. New extraction well W-830-2701 will be operated at constant rate of approximately 3 gpm. Using W-830-2701 as an extraction well will increase hydraulic capture in the Tnsc$_{1a}$ HSU downgradient of extraction well W-830-2214.

Upper Tnbs₁ HSU

Extraction wells in the Upper $Tnbs_1$ target areas with the highest total VOC concentrations. Since remediation began in this HSU, the overall extent of VOCs has also decreased significantly and concentrations in monitor well W-830-1832 have been below the reporting limit since March 2010. Ground water in Upper $Tnbs_1$ guard wells W-830-15 and W-832-2112, located downgradient of well W-830-1832 and upgradient of water-supply Well 20, continues to show analytical results below reporting limits for all COCs and significantly below the 45 mg/L MCL cleanup standard for nitrate. An August sample from guard well W-830-15 showed an anomalously high concentration of perchlorate. As discussed in Section 2.7.3.2.3 of this report, the results for this sample are currently under review and additional samples are planned for verification. The results of this review will be discussed in the First Semester 2015 CMR.

In October 2013, Upper $Tnbs_1$ monitor well W-832-2906 was installed downgradient of the 832-source area and to the north of extraction well W-830-57. During December 2013, TCE was detected at a maximum concentration of 12 µg/L in ground water in this well. Over the past year, the size of the VOC plume in the Upper $Tnbs_1$ HSU has remained relatively steady (Figure 2.7-9). The source of this contamination and its impact of the long-term performance of the cleanup remedy for the Building 832 Canyon OU are still being evaluated.

$Tnbs_2$ HSU

In the $Tnbs_2$ HSU, Building 832 Canyon, remediation continues via extraction well W-830-2216. The source of contamination in this area is likely a combination of sources located in both the HEPA and the Building 832 Canyon area. Decreasing concentration trends in this extraction well and nearby monitor well W-830-13 suggest that remediation has been effective in removing mass in this area.

Mass Removal

In the Building 832-SRC area, concentration trends in extraction wells have remained stable for several years as declining water levels and low yields limit ground water extraction. In Building 832-SRC area, the volume of treated water decreased by 69% from 79,000 gallons (first semester 2013) to 24,000 gallons (first semester 2014). This difference may be in part due to the check valve issue discussed in the First Semester 2014 CMR (Ferry et al., 2014), as the wells that were repaired (W-832-12 and W-832-15) usually account for a large percentage of the flow volume. The difference is also due to facility downtime from maintenance and upgrades to the misting tower. The volume of treated soil vapor increased by 2% from 1.6 million cf (2013) to 1.8 million cf (2014). This represents a 73% increase between first semesters 2013 and 2014 but a 57% decrease between second semesters 2013 and 2014 due to facility downtime. Soil vapor extraction accounts for most of the VOC mass extracted from this area. Of the 55.7 g of total VOC mass removed from the 832-SRC area during 2014, approximately 7% or 3.7 g were removed by the 832-SRC GWTS and 93% or 52 g were removed by the 832-SRC SVTS. This represents a 71% decrease from 14 g in 2013 for the 832-SRC GWTS and an 11% increase from 47 g in 2013 for the 832-SRC SVTS.

At the 830-SRC treatment facility, both ground water and soil vapor extraction play an important role in removing VOC mass. During 2014, 1.246 million gallons of water were treated by 830-SRC GWTS. This is a 42% decrease in volume of treated ground water from 2013 (2.144 million gallons). The significant decrease in treated water volume is largely due to the shutdown of 830-SRC GWTS for facility upgrades. During 2014, 8.314 million cf of soil vapor were treated at 830-SRC SVTS. This represents a small increase of 2% from 2013 (8.132 million cf). At the 830-SRC treatment facility, of the 1,470 g of total VOC mass removed during 2014, 34% or 510 g were removed by the GWTS and 66% or 960 g were removed by the SVTS. This represents a VOC mass removal decrease of 55% from 2013 (1,100 g) for the GWTS and an increase of 72% from 2013 (560 g) for the SVTS and an overall 12 percent decrease from 2013.

At 830-DISS GWTS, 48 g of VOC mass were removed during 2014. This is a 16% decrease from 2013 (57 g) and is due, in part, by the 10% decrease in volume of water treated at this facility. In addition, 297 kg of nitrate and 10.2 g of perchlorate were removed by the 832-SRC, 830-SRC and 830-DISS GWTSs, during 2014. Table Summ-1 summarizes the mass removed by each individual treatment facility.

As remediation proceeds from the 832-SRC, 830-SRC and 830-DISS extraction wells, it is expected that concentrations in all Building 832 Canyon HSUs will continue to decline and that declining water levels will have an impact on long term performance of extraction wells. VOC concentration trends in the Upper $Tnbs_1$ HSU continue to be monitored closely because of pumping of water-supply Well 20 and backup water-supply Well 18 has the potential to influence the distribution of contaminants. After Site 300 begins using the Hetch-Hetchy reservoir as its primary water supply, Well 20 will become a backup water-supply well and Well 18 will no longer be used.

2.7.3.4. Building 832 Canyon OU Remedy Performance Issues

The potential perchlorate detections at guard wells W-880-03 and W-830-15 are currently under review and yet to be verified. Declining water levels due to regional drought conditions continue to impact the amount of ground water available for extraction and treatment. No other new issues were identified during this reporting period that could impact the long-term performance of the cleanup remedy for the Building 832 Canyon OU. The remedy continues to make progress toward cleanup and to be protective of human health and of the environment.

2.8. Site 300 Site-Wide OU 8

The Site 300 Site-Wide OU is comprised of release sites at which no significant impacts to ground water and no unacceptable risk to human health or the environment are present. For this reason, a monitoring interim remedy was selected for the release sites in the Site-Wide Record of Decision (U.S. DOE, 2008). The monitoring conducted during the reporting period for these release sites is discussed below. Analytical results and ground water elevation measurements obtained during 2014 from the OU 8 locations are presented in Appendices B and C, respectively.

2.8.1. Building 801 and Pit 8 Landfill

The Building 801 Firing Table was used for explosives testing until it was discontinued in 1998, and the firing table gravel and some underlying soil were removed. Waste fluid discharges to the Building 801 Dry Well from the late 1950s to 1984, resulted in VOC contamination of the soil and ground water. Debris from the firing table was buried in the nearby Pit 8 Landfill until 1974. A map of the Building 801 and Pit 8 Landfill area showing the locations of the building, firing table, landfill, and monitor wells is presented on Figure 2.8-1.

2.8.1.1. Building 801 and Pit 8 Landfill Ground Water Monitoring

Wells K8-01, -02B, -03B, -04, and -05 monitor Building 801 ground water contaminants that were released from the Building 801 dry well. Wells K8-02B, K8-04 and K8-05 are also used as monitor wells to detect any releases from the Pit 8 Landfill. Detection monitoring of this landfill, which is discussed in Section 3.2, is conducted to determine if releases have occurred.

The sampling and analysis plan for ground water monitoring is presented in Table 2.8-1. This table delineates any additions made to the CMP.

During the reporting period, ground water monitoring was conducted in accordance with the CMP monitoring requirements with the following exceptions; a total of eight required analyses were not performed due to an inoperable pump in K8-01 and a total of 15 required analyses were not performed due to an inoperable pump in well K8-02B during the second, third and fourth quarters. The pumps in both wells have been repaired and it is anticipated that all samples for the Pit 8 Landfill Detection Monitoring will be collected during 2015. Lastly, two required analyses were not performed for well K8-04 due to poor road conditions rendering the well inaccessible during a planned November sampling event.

The approximate generalized ground water flow direction, ground water elevations, and individual VOC concentrations, nitrate, and perchlorate for the $Tnbs_1/Tnbs_0$ HSU are posted on Figure 2.8-1.

2.8.1.2. Building 801 and Pit 8 Landfill Contaminant Concentrations and Distribution

At Building 801, VOCs, comprised of chloroform, 1,2-DCA and TCE are the primary COCs detected in ground water; perchlorate and nitrate are the secondary COCs. There are no COCs in ground water at the Pit 8 Landfill. The results of the detection monitoring of the Pit 8 Landfill are discussed in Section 3.2.

In the Building 801/Pit 8 Landfill area, five monitor wells are screened in the $Tnbs_1/Tnbs_0$ HSU. Wells K8-03B and K8-04 were successfully sampled, as scheduled during 2014. Well K8-05 has been dry since installation in 1988.

During 2014, the maximum total VOC concentrations detected in $Tnbs_1/Tnbs_0$ HSU ground water remained low at 2.2 µg/L (monitor well K8-04, May) comprised of 1.4 µg/L of TCE and 0.8 µg/L of 1,2-DCA. Of these COCs, only 1,2-DCA was detected above its MCL cleanup standard of 0.5 µg/L during 2014. Well K8-04 is downgradient of the Building 801 dry well VOC release site and Pit 8. Ground water sampled from Well K8-03B (located downgradient of the dry well VOC release site and upgradient of Pit 8) did not have detectable total VOCs. In 2013, monitor well K8-01 had the maximum total VOC concentration of 5.5 µg/L; this well was not sampled during 2014 due to an inoperable pump that has now been replaced. Well K8-01 is downgradient of the Building 801 dry well VOC release site and upgradient of the Pit 8 Landfill.

TCE was not detected above its 5 µg/L MCL cleanup standard and chloroform was not detected in any wells above its 0.5 µg/L reporting limit. Overall, total VOC concentrations detected in ground water samples collected from wells downgradient of Building 801 have decreased from a historic maximum of 10 µg/L (well K8-01, 1990).

During 2014, perchlorate was not detected above its 4 µg/L reporting limit in ground water samples from any Building 801/Pit 8 monitor wells.

Nitrate concentrations in ground water in the vicinity of Building 801/Pit 8 Landfill have been relatively stable over time. The 2014 maximum nitrate concentration was 69 mg/L (monitor well K8-04, May) and is also the historic maximum nitrate concentration detected in the area. This concentration is within the range of 51 to 69 mg/L of nitrate observed in ground water samples from this well since 2004. This detection at well K8-04 was the only 2014 concentration in the Pit 8 area that exceeded the 45 mg/L MCL cleanup standard for nitrate. Nitrate concentrations detected in ground water during 2014 at the Building 801/Pit 8 Landfill are generally similar to previous years.

Nitrate and 1,2-DCA are the only COCs remaining above their MCL cleanup standards at Building 801.

2.8.2. Building 833

TCE was used as a heat-exchange fluid at Building 833 from 1959 to 1982 and was released through spills and rinse water disposal, resulting in TCE-contamination of soil and shallow perched ground water. A map showing the locations of the building and monitor wells is presented on Figure 2.8-2.

2.8.2.1. Building 833 Ground Water Monitoring

The sampling and analysis plan for ground water monitoring is presented in Table 2.8-2. This table delineates any additions made to the CMP.

During the reporting period, ground water monitoring was conducted in accordance with the CMP monitoring requirements with the following exceptions; a total of seven required analyses in seven different wells were not performed because the wells were dry or there was insufficient water to collect the samples and one analysis in well W-841-01 was not performed due to an inoperable pump.

The approximate generalized ground water flow direction, ground water elevations and individual VOC concentrations for the Tpsg HSU are posted on Figure 2.8-2.

2.8.2.2. Building 833 Contaminant Concentrations and Distribution

At Building 833, the VOCs TCE and cis-1,2-DCE are the primary COCs in ground water; there are no secondary COCs.

The Tpsg HSU is a shallow, highly ephemeral, perched water-bearing zone. During heavy rainfall events, this HSU may become saturated, but quarterly monitoring of the wells from 1993 to present has shown variable levels of saturation, including many wells that are now dry (W-833-03 and W-833-18). When saturated, monitoring conducted since 1988 has shown a significant decline in VOC concentrations in Tpsg HSU ground water compared to the highest levels in the early 1990s.

In the Building 833 area, eight monitor wells are screened in the Tpsg HSU and one well (W-833-30) is screened in the deeper Lower $Tnbs_1$ HSU.

The historic maximum concentration of total VOCs measured in the Tpsg HSU in the Building 833 area was 2,100 µg/L (entirely TCE) detected in monitor well W-833-03 in 1992. This well has not been sampled, due to insufficient water, since June 2000, when 20 µg/L of total VOCs (entirely TCE), were detected. During 2014, the only Tpsg HSU well with sufficient ground water to collect a sample was W-833-33; the collected sample contained 110 µg/L of total VOCs (entirely TCE, March). In 2013 and 2012, this well yielded samples containing 110 µg/L and 120 µg/L of total VOCs (entirely TCE), respectively. The historic maximum total VOC concentration detected in well W-833-33 was 170 µg/L (entirely TCE) in 2008.

The other primary COC, cis-1,2-DCE, was not detected in samples from any Building 833 area wells, during 2014. This compound has only been detected five times and most recently in 1993, all in well W-833-12. The historic maximum cis-1,2-DCE concentration was 58 µg/L, detected in 1993. This compound has never been detected in any other Building 833 area wells.

During 2014, VOCs were not detected in either routine or duplicate ground water samples collected in March and September from monitor well W-833-30, screened in the deeper Lower $Tnbs_1$ HSU, indicating that VOC contamination continues to be confined to the shallow Tpsg perched water-bearing zone.

TCE in Tpsg HSU ground water is the only COC remaining above its cleanup standard (5 µg/L) at Building 833.

2.8.3. Building 845 Firing Table and Pit 9 Landfill

The Building 845 Firing Table was used from 1958 until 1963 to conduct explosives experiments. Leaching from Building 845 Firing Table debris resulted in minor contamination of subsurface soil with depleted uranium and HMX detected in samples collected from boreholes drilled in 1989. A map showing the locations of the building, landfill, and monitor wells are presented on Figure 2.8-3.

2.8.3.1. Building 845 and Pit 9 Landfill Ground Water Monitoring

No ground water COCs have been identified for the Building 845/Pit 9 Landfill area. Wells K9-01 through K9-04 monitor ground water in the Building 845 and Pit 9 Landfill area to:

- Detect any future releases from the Pit 9 Landfill, and
- Detect any impacts to ground water from HMX and uranium in subsurface soil and rock.

These monitor wells are screened in the lower Neroly Formation $Tnbs_1$/$Tnbs_0$ HSU. Detection monitoring of the Pit 9 Landfill is discussed in Section 3.3.

The sampling and analysis plan for ground water monitoring is presented in Table 2.8-3. This table delineates any additions made to the CMP.

During the reporting period, ground water monitoring was conducted in accordance with the CMP monitoring requirements for all wells in this subarea.

The approximate generalized ground water flow direction, ground water elevations, HMX concentrations, uranium activities, and $^{235}U/^{238}U$ atom ratios for the $Tnbs_1$/$Tnbs_0$ HSU are presented on Figure 2.8-3.

2.8.3.2. Building 845 and Pit 9 Landfill Contaminant Concentrations and Distribution

In the Building 845 and Pit 9 Landfill area, four landfill detection monitor wells are screened in the $Tnbs_1$/$Tnbs_0$ HSU.

There are no ground water COCs at the Building 845 and the Pit 9 Landfill. The detection monitoring constituents: VOCs, nitrate, tritium, perchlorate, HE compounds, uranium isotopes, Title 26 metals, lithium, and fluoride concentrations/activities in samples collected during 2014 were either below reporting limits or within the range of background concentrations. Because uranium and the HE compound HMX were identified as COCs in subsurface soil at Building 845/Pit 9 Landfill, ground water in this area is monitored for these constituents.

During 2014, HMX concentrations in ground water samples remained below the 1 µg/L reporting limit. Historically, HMX has not been detected above its reporting limit since the four area monitor wells were installed in 1989.

During 2014, uranium activities in ground water samples remained very low (<1 pCi/L) and $^{235}U/^{238}U$ atom ratios indicate the presence of only natural uranium. The results of the detection monitoring of the Pit 9 Landfill are discussed in Section 3.2.

These 2014 data continue to indicate no releases from the Pit 9 Landfill, nor impacts to ground water from HMX and uranium in subsurface soil.

2.8.4. Building 851 Firing Table

The Building 851 Firing Table has been used since 1962 to conduct explosives experiments. A map depicting the locations of the firing table and monitor wells is presented on Figure 2.8-4.

2.8.4.1. Building 851 Ground Water Monitoring

The sampling and analysis plan for ground water monitoring is presented in Table 2.8-4. This table delineates any additions made to the CMP.

During the reporting period, ground water monitoring was conducted in accordance with the CMP monitoring requirements with the following exceptions; sample collection for two analyses (one each in wells W-851-06 and W-851-07) were not performed due to an inoperable pump.

Ground water elevations, total uranium activities, and $^{235}U/^{238}U$ atom ratios for the Tmss HSU are posted on Figure 2.8-4.

2.8.4.2. Building 851 Contaminant Concentrations and Distribution

In the Building 851 Firing Table area, four monitor wells are screened in the Tmss HSU.

At the Building 851 Firing Table, uranium is the primary and only COC detected in ground water; there are no secondary COCs.

Uranium activities in Tmss HSU ground water in the Building 851 Firing Table area have always been well below the 20 pCi/L MCL cleanup standard for total uranium and within the range of background levels. Although background uranium activity at Site 300 may vary based on ground water age, major-ion chemistry, and aquifer lithology, single-digit uranium activities are clearly within the range of Site 300 background. However, ground water continues to be monitored to detect any impacts to ground water from uranium in subsurface soil and rock.

During 2014, the maximum total uranium activity detected in ground water samples (collected in April) from wells in the Building 851 area was 1.1 pCi/L in well W-851-08; the historic maximum uranium activity in this well was 2.06 pCi/L observed in 1993. April samples from the three remaining wells contained uranium activities at 0.16 pCi/L in well W-851-07, 0.14 pCi/L in well W-851-06, and below the reporting limit of <0.0627 in well W-851-05. The historic maximum uranium activity in Tmss HSU ground water at Building 851 was 3.2 pCi/L (well W-851-07, 1991); as mentioned previously, the 2014 activity for this well was 0.16 pCi/L.

During 2014, the atom ratio of $^{235}U/^{238}U$ indicated the presence of only natural uranium in the samples (collected in April) from wells W-851-05, W-851-07 and W-851-08. The atom ratio of $^{235}U/^{238}U$ in the sample from well W-851-06 (0.0057) indicated the presence of depleted uranium. Overall, uranium activities in ground water during 2014 are similar to previous years and remain well below the 20 pCi/L MCL cleanup standard and within the range of natural background levels.

3. Detection Monitoring, Inspection, and Maintenance Program for the Pits 2, 3, 4, 5, 6, 7, 8, and 9 Landfills and Inspection and Maintenance Program for the Drainage Diversion System and Building 850 CAMU

The Detection Monitoring Program is designed to detect any future releases of contaminants from the Pit 2, 3, 4, 5, 6, 7, 8, and 9 Landfills. This section presents the results for ground water detection monitoring of these landfills, and any landfill inspections or maintenance conducted during the reporting period. This section also includes any inspection and maintenance activities conducted for the Pit 7 Drainage Diversion System and Building 850 CAMU during the reporting period.

3.1. Pit 2 Landfill

The Pit 2 Landfill was used from 1956 until 1960 to dispose of firing table debris from Buildings 801 and 802. Ground water data indicate that a past discharge of potable water to support a red-legged frog habitat located upgradient from the landfill may have leached depleted uranium from the buried waste. The frogs were relocated and the water discharge was discontinued, thereby removing the leaching mechanism. No contaminants were identified in surface or subsurface soil at the Pit 2 Landfill. No risk to human or ecological receptors has been identified at the Pit 2 Landfill.

3.1.1. Sampling and Analysis Plan Modifications

Detection monitoring of detection monitor wells located downgradient of the Pit 2 Landfill, is conducted annually for VOCs, nitrate, tritium, perchlorate, HE compounds, uranium isotopes, Title 26 metals, lithium, and fluoride. Detection monitoring wells for the Pit 2 Landfill include W-PIT2-1934, W-PIT2-1935, K2-01C and NC2-08.

The sampling and analysis plan for the Pit 2 Landfill ground water Detection Monitoring Program is presented in Table 3.1-1.

During the reporting period ground water monitoring was conducted in accordance with CMP monitoring requirements with the following exceptions: a total of 24 required analyses in four wells were not performed because the wells were dry or there was insufficient water in the wells to collect the samples, 11 required analyses were not performed due to an inoperable pump in K2-01C, and four required analyses from well W-PIT2-2226 were not performed due to unsafe conditions (muddy roads). The replacement of the pump in well K2-01C is scheduled but has been delayed by pump truck issues.

3.1.2. Contaminant Detection Monitoring Results

A map showing the locations of monitor wells and the Pit 2 Landfill is presented on Figure 2.5-1. Depth to ground water within the $Tnbs_1/Tnbs_0$ HSU beneath the Pit 2 Landfill currently ranges from over 50 feet to over 70 feet.

The maximum 2014 tritium activity within the $Tnbs_1/Tnbs_0$ HSU in the area immediately south of the Pit 2 Landfill was 2,950 pCi/L in detection monitor well NC2-08 (May), a decrease from the maximum 2013 tritium activity of 3,330 pCi/L and the historic maximum for this well (41,100 pCi/L, 1988). The historic maximum tritium activity of 49,100 pCi/L was detected in 1986 samples from detection monitor well K2-01C. Well K2-01C was not sampled during 2014 due to an inoperable pump. Replacement of the pump is scheduled. Tritium activities in detection monitor well W-PIT2-1934 increased slightly during 2014 (1,170 pCi/L, May and 1,250 pCi/L, November) compared to the 2013 maximum activity of 1,120 pCi/L (November), but still represented a decrease from the maximum tritium activity of 1,630 pCi/L measured in the September 2004 collected from this well. Tritium activities in detection monitor wells W-PIT2-1934 and W-PIT2-1935 increased slightly in 2014 (1,250 pCi/L and 1,830 pCi/L for W-PIT2-1934 and W-PIT2-1935, respectively) compared to 2013 (1,120 pCi/L and 1,740 pCi/L for W-PIT2-1934 and W-PIT2-1935, respectively), but still represented a decrease from the maximum tritium activities measured in the 2004 samples collected from these wells (1,630 pCi/L and 3,660 pCi/L for W-PIT2-1934 and W-PIT2-1935, respectively). These data indicate that tritium activities in $Tnbs_1/Tnbs_0$ HSU ground water immediately downgradient of the landfill are decreasing and are currently a fraction of the historic maximum.

The maximum 2014 uranium activity detected in a ground water sample from the Pit 2 area was 3.9 pCi/L (monitor well W-PIT2-1934, May). The uranium activities in the ground water samples collected from the Pit 2 detection monitor wells are all within the range of natural uranium background. Prior to 2005, to maintain a wetland habitat for red-legged frogs (a Federally-listed endangered species) potable water was discharged within a drainage channel that extends along the northern and eastern margin of the Pit 2 Landfill. While this discharge occurred, increased uranium activities in wells in the Pit 2 area were observed. The release of depleted uranium from Pit 2 appears to have occurred during this time period as a result of this discharge. This discharge was discontinued in 2005 and since then, total uranium activities have decreased in ground water from detection monitor wells W-PIT2-1934 and W-PIT2-1935, both located along the northern margin of the Pit 2 Landfill. Although depleted uranium has been detected in ground water downgradient of the Pit 2 Landfill, total uranium activities in recent years have been well below the 20 pCi/L MCL cleanup standard. The samples collected from detection wells W-PIT2-1934 and W-PIT2-1935 during 2014 (May) and analyzed by mass spectrometry contained 3.9 pCi/L and 2.8 pCi/L of uranium, respectively. The sample from well W-PIT2-1934 contained some added depleted uranium; however, this most recent result continues an increasing trend toward a natural $^{235}U/^{238}U$ atom ratio. The sample from well W-PIT2-1935 contained only natural uranium. Uranium activities in the 2014 sample from detection monitor well NC2-08 (2.6 pCi/L) represent a decrease from the maximum uranium activities detected in this well since its historic maximum activity of 4.2 pCi/L in 2000. The $^{235}U/^{238}U$ atom ratio in this well indicate the presence of natural uranium (0.007). Well K2-01C was not sampled during first semester 2014 due to an inoperable pump. However, uranium activities have generally been decreasing since its historic maximum of 27.3 pCi/L in 1994.

During 2014, only one ground water sample collected from the Pit 2 detection monitor wells contained perchlorate with a concentration exceeding the 4 µg/L reporting limit. The May ground water sample collected from well NC2-08 contained 4.1 µg/L of perchlorate. Perchlorate in the subsequent October sample collected from well NC2-08 was not detected above the 4 µg/L reporting limit.

The other detection monitoring constituents: VOCs, nitrate, HE compounds, Title 26 metals, lithium, and fluoride concentrations/activities in samples collected during 2014 were either below reporting limits or within the range of background concentrations.

There was no evidence of new contaminant releases from the Pit 2 Landfill indicated by the 2014 ground water detection monitoring data.

3.1.3. Landfill Inspection Results

During 2014, the Pit 2 Landfill was inspected on January 29, June 24, September 23, and December 30. No problems were identified.

3.1.4. Annual Subsidence Monitoring Results

Annual subsidence monitoring was conducted during second semester 2014. No evidence of subsidence was detected.

3.1.5. Maintenance

No maintenance was necessary or conducted on Pit 2 during 2014.

3.2. Pit 6 Landfill

The Pit 6 Landfill was used from 1964 to 1973 to bury waste in nine unlined debris trenches and animal pits, including shop and laboratory equipment and biomedical waste. The Pit 6 Landfill was capped and closed in 1997 to prevent further leaching of contaminants that likely resulted from percolation of rainwater through the buried waste. Detection monitoring of the Pit 6 Landfill is conducted to identify any future releases to ground water in accordance with the requirements of the Pit 6 Post-Closure Plan.

3.2.1. Sampling and Analysis Plan Modifications

Detection monitoring of detection monitor wells located downgradient of the Pit 6 Landfill (EP6-06, EP6-08, EP6-09, K6-01S, K6-19 and K6-36) is conducted semi-annually for VOCs and tritium and annually for aromatic VOCs (benzene, toluene, ethylbenzene, and xylenes), beryllium, mercury, total uranium, gross alpha/beta, perchlorate, and nitrate. When detection monitor well K6-01S is dry, well K6-01 serves as an alternate detection monitor well and is sampled for the same constituents. Wells EP6-08 and K6-36 have been dry for the past several reporting periods. Beginning in 2013, nearby wells EP6-07 (near EP6-08) and K6-35 (near K6-36) were designated to serve as detection monitor wells and are sampled for the same constituents when EP6-08 and K6-35 are dry.

The sampling and analysis plan for the Pit 6 Landfill ground water Detection Monitoring Program is presented in Table 2.3-1.

During the reporting period, ground water monitoring was conducted in accordance with CMP monitoring requirements. Because wells EP6-08 and K6-36 were dry, wells EP6-07 (for

EP6-08) and K6-35 (for K6-36) were successfully sampled for all the required semi-annual detection monitoring constituents that normally apply to EP6-08 and K6-36. Well K6-01S had available ground water for sampling and thus, well K6-01 was not needed to serve as an alternate detection monitor well.

3.2.2. Contaminant Detection Monitoring Results

A map showing the locations of monitor wells at the Pit 6 Landfill is presented on Figure 2.3-1. The ground water elevation contour map for the Qt-Tnbs$_1$ HSU is presented on Figure 2.3-2. The distribution of total VOCs and tritium in the Qt-Tnbs$_1$ HSU is presented on Figures 2.3-3 and 2.3-4, respectively. Analytical results for 2014 are summarized in Appendix B Table B-3.05 and physical parameters measured during 2014 sampling are included in Appendix B Table B-3.06. There was no evidence of a new contaminant release from the Pit 6 Landfill as indicated by the 2014 ground water detection monitoring data.

Data collected during the third quarter 2014 do not differ significantly from the first semester. Wells EP6-08 and K6-36 were once again dry and not sampled. Nearby wells EP6-07 and K6-35 did have available ground water and were sampled for the required detection monitoring constituents, effectively replacing EP6-08 and K6-36. Also, well K6-01S did contain ground water and was successfully sampled for the required detection monitoring constituents.

Tritium and VOCs that were released to ground water from the landfill prior to its closure in 1998 continue to be detected. During 2014, tritium activities did not exceed statistical limits in ground water samples from any detection monitor wells and were less than the reporting limit of 100 pCi/L in all the wells except K6-19. The 2014 maximum tritium activity was 150 pCi/L in the first quarter, in well K6-19; in the third quarter, the tritium activity dropped to 120 pCi/L in a duplicate sample and <100 pCi/L in the routine sample from this well. The statistical limit for tritium in well K6-19 was revised from 100 pCi/L to 317 pCi/L, following a statistical analysis conducted in September 2013. The maximum tritium activity of 150 pCi/L is less than the statistical limit and lower in 2014 than the maximum 2013 activity of 209 pCi/L detected in well K6-19. This tritium detection is not considered to be indicative of a new release. Tritium activities in well K6-19 have dropped since October 1999 when the historic maximum activity of 2,520 pCi/L was detected. Since then, tritium activities have generally decreased (Campbell, 2007; Blake et al., 2011) and have always been well below the 20,000 pCi/L MCL cleanup level.

In 2014, VOCs were not detected in Pit 6 detection monitor wells above their applicable statistical limits. However, TCE was detected in January at 5.2 µg/L, in one Pit 6 detection monitor well (EP6-09) slightly above its MCL cleanup level (5 µg/L). In July, a routine and duplicate sample collected from this well both yielded 4.8 µg/L TCE, less than its MCL cleanup level. The maximum 2013 TCE detection in this well was 5.8 µg/L. The historic maximum TCE concentration in Pit 6 monitor wells was 250 µg/L, detected in well K6-19 (1988); TCE has declined to 2.5 µg/L in K6-19, in 2014. Further discussion of VOC distribution is presented in Section 2.3.2.1.1 of this CMR report.

Except for a small detection of cis-1,2-DCE (2.7 µg/L, K6-01S, January) far below its MCL cleanup level (6 µg/L) and statistical limit (7 µg/L), the other detection monitoring constituents: (aromatic VOCs, beryllium, mercury, total uranium, gross alpha/beta, perchlorate and nitrate) in samples collected from the detection monitor wells during 2014 were below reporting limits for aromatic VOCs, beryllium, mercury, perchlorate and nitrate; and below statistical limits for gross alpha/beta and total uranium.

There was no evidence of new contaminant releases from the Pit 6 Landfill indicated by the 2014 ground water detection monitoring data.

3.2.3. Landfill Inspection Results

Abri Engineering conducted the Pit 6 Landfill Annual Engineering Inspection during first semester on April 8, 2014. Inspection results were summarized in a May 2014 engineering inspection report. No problems were reported.

3.2.4. Annual Subsidence Monitoring Results

The annual subsidence monitoring inspection was conducted in October during second semester 2014. No subsidence was observed.

3.2.5. Maintenance

A post-closure visual maintenance inspection was performed during this semester by LLNL staff on April 8, 2014. With the exception of only a few minor maintenance procedures such as removing vegetation from the drainage system, this inspection demonstrated the continued functional and structural integrity of the cap, vegetative cover, and drainage system.

3.3. Pit 8 Landfill

Pit 8 Landfill received debris from the Building 801 Firing Table until 1974, when it was covered with compacted soil. There is no evidence of contaminant releases from the landfill.

3.3.1. Sampling and Analysis Plan Modifications

Detection monitoring of detection monitor wells located downgradient of the Pit 8 Landfill, is conducted annually for VOCs, nitrate, tritium, perchlorate, HE compounds, uranium isotopes, Title 26 metals, lithium and fluoride. Detection monitoring wells for the Pit 8 Landfill include downgradient wells K8-02B, K8-04 and K8-05. Data from wells K8-01 and K8-03B that are located upgradient from the Pit 8 Landfill and downgradient of the Building 801 release site are also used for comparative purposes.

The sampling and analysis plan for the Pit 8 Landfill ground water Detection Monitoring Program is presented in Table 2.8-1.

During the reporting period, ground water monitoring was conducted in accordance with the CMP monitoring requirements with the following exceptions; 15 required analyses were not performed due to an inoperable pump in well K8-02B; the pump in this well has been repaired.

3.3.2. Contaminant Detection Monitoring Results

A map of the Building 801 Firing Table and Pit 8 Landfill showing building, firing table, landfill, and monitor well locations is presented as Figure 2.8-1.

Historic and current data indicate that VOCs detected in ground water in the Pit 8 Landfill area are the result of releases from the former Building 801D dry well, which have migrated downgradient from Building 801 to the area beneath the landfill. Well K8-04 was the only detection monitor well located downgradient of the Pit 8 in which VOCs were detected in 2014.

The presence of VOCs (2.2 µg/L, May), comprised of 1.4 µg/L of TCE and 0.8 µg/L of 1,2-DCA, in this well appears to be a continuation of the VOC plume originating at the Building 801 dry well and not indicative of a release from the Pit 8 Landfill. Well K8-01, which has historically contained the highest VOC concentrations, is located upgradient of Pit 8 and downgradient of Building 801. This well was not sampled during 2014 due to an inoperable pump (the pump was repaired in February 2015). The maximum 2013 VOC concentration in ground water from well K8-01 was 5.5 µg/L (May), comprised of 3.6 µg/L of TCE and 1.9 µg/L of 1,2-DCA.

The maximum 2014 nitrate concentration detected in a ground water sample from a well in the Pit 8 Landfill area was 69 mg/L in a sample collected from downgradient detection monitor well K8-04. During 2013, nitrate concentrations in ground water samples collected from monitor well K8-04 also exceeded the 45 mg/L cleanup standard for nitrate. Although monitor well K8-01 was not sampled during first semester 2014 due to an inoperable pump (the pump was repaired in February 2015), nitrate concentrations in ground water samples from this upgradient well also exceeded the 45 mg/L cleanup standard for nitrate in 2013. Nitrate concentrations in other wells are within the range of nitrate background in Site 300 ground water. These nitrate results were generally similar to historical results, and not indicative of a new release from the Pit 8 Landfill.

Tritium activities in ground water samples collected from wells in the Pit 8 Landfill area during 2014 were below the reporting limit (<100 pCi/L). Samples from monitor well K8-01 were not collected in 2014 due to an inoperable pump (the pump was repaired in February 2015). However, tritium activities in samples collected from this well during 2013 were <100 pCi/L and 104 pCi/L for routine and duplicate samples collected in May, respectively, and 121 pCi/L and 176 pCi/L for routine and duplicate samples collected in November, respectively. These tritium activities are all within or very close to the range of background, when considering reported measurement error. As well K8-01 is located upgradient of the Pit 8 Landfill, the tritium detections above the reporting limit are not indicative a release from the landfill. These tritium results are not indicative of a new release from the Pit 8 Landfill.

The other detection monitoring constituents: perchlorate, HE compounds, uranium isotopes, Title 26 metals, lithium, and fluoride concentrations/activities in samples collected during 2014 from wells upgradient/cross-gradient and downgradient of the Pit 8 Landfill were either below reporting limits or within the range of background concentrations.

Of the constituents monitored during 2014 as part of the Detection Monitoring Program in $Tnbs_1/Tnbs_0$ HSU ground water from Pit 8 Landfill area wells, only nitrate and 1,2-DCA exceeded their applicable MCL cleanup standards.

There was no evidence of a new contaminant release from the Pit 8 Landfill indicated by the 2014 ground water detection monitoring data.

3.3.3. Landfill Inspection Results

During 2014, the Pit 8 Landfill was inspected on February 5, June 24, September 23, and December 30. Two large animal burrows were noticed during the February 5 inspection.

3.3.4. Annual Subsidence Monitoring Results

Annual subsidence monitoring was conducted during second semester 2014. No evidence of subsidence was detected.

3.3.5. Maintenance

Two large animal burrows were filled in during the inspection on February 5. No further maintenance was necessary or conducted at Pit 8 during 2014.

3.4. Pit 9 Landfill

Debris generated at the Building 845 Firing Table was buried in the Pit 9 Landfill from 1958 until 1963. There has been no evidence of contaminant releases from the Pit 9 Landfill.

3.4.1. Sampling and Analysis Plan Modifications

Detection monitoring is conducted in wells located downgradient of the Pit 9 Landfill annually for VOCs, nitrate, tritium, perchlorate, HE compounds, uranium isotopes, Title 26 metals, lithium and fluoride. Detection monitoring wells for the Pit 9 Landfill include K9-01, K9-02, K9-03 and K9-04.

The sampling and analysis plan for the Pit 9 Landfill ground water Detection Monitoring Program is presented in Table 2.8-3.

During the reporting period, ground water monitoring was conducted in accordance with CMP monitoring requirements.

3.4.2. Contaminant Detection Monitoring Results

A Building 845 Firing Table and Pit 9 Landfill site map showing building, landfill, and monitor well locations is presented as Figure 2.8-3. The detection monitoring constituents: VOCs, nitrate, tritium, perchlorate, HE compounds, uranium isotopes, Title 26 metals, lithium and fluoride concentrations/activities in samples collected during 2014 were either below reporting limits or within the range of background concentrations. There was no evidence of a new release from the Pit 9 Landfill during 2014.

3.4.3. Landfill Inspection Results

During 2014, the Pit 9 Landfill was inspected on January 29, June 24, September 23, and December 30. Several large animal burrows were noticed during the inspection on December 30.

3.4.4. Annual Subsidence Monitoring Results

Annual subsidence monitoring was conducted during second semester 2014. No evidence of subsidence was detected.

3.4.5. Maintenance

Several large animal burrows were filled in during the December 30 inspection. No other maintenance was conducted or required at Pit 9 during 2014.

3.5. Pit 7 Complex Landfills

The Pit 3, 4, 5, and 7 Landfills are collectively designated the Pit 7 Landfill Complex. Firing table debris containing tritium, depleted uranium, and metals was placed in the pits in the 1950s through the 1980s. The Pit 4 and 7 Landfills, and about 25-30% of Pit 3, were capped in 1992. During years of above-normal rainfall (i.e., 1997-1998 El Niño), ground water rose into the bottom of the landfills and the underlying contaminated bedrock. This resulted in the release of tritium, uranium, VOCs, perchlorate and nitrate to ground water. In addition to these COCs, ground water samples from Pit 7 Complex detection monitor wells are also analyzed for metals, HE compounds, and PCBs as these constituents may have been contained in the firing table gravels placed in the landfills.

3.5.1. Sampling and Analysis Plan Modifications

Detection monitoring is conducted in wells located downgradient of the Pit 7 Landfill Complex annually for VOCs, nitrate, tritium, perchlorate, HE compounds, uranium isotopes, Title 26 metals, lithium, fluoride and PCBs.

The sampling and analysis plan for the Pit 7 Complex Landfill ground water Detection Monitoring Program is presented in Table 2.5-8.

During the reporting period, ground water monitoring was conducted in accordance with CMP monitoring requirements.

3.5.2. Contaminant Detection Monitoring Results

A map showing the locations of detection monitor wells and the Pit 7 Complex Landfill is presented on Figure 2.5-1. Wells K7-01, K7-03, K7-06, K7-09, K7-10, NC7-26, NC7-47 and NC7-48 comprise the current detection monitoring well network for the Pit 7 Complex. Wells K7-01, K7-03 and NC7-26 are located downgradient of Pit 5 and Pit 7; well K7-06 is upgradient of Pit 7, wells K7-09 and K7-10 are cross-gradient of Pits 3, 5 and 7; well NC7-48 is immediately downgradient of Pit 7, and well NC7-47 is far downgradient of Pits 3 and 7.

The detection monitor wells are screened in the following HSUs:

- NC7-48: Qal/WBR HSU.
- K7-01 and K7-06: Qal/WBR and $Tnbs_1/Tnbs_0$ HSUs.
- K7-03, K7-10, NC7-26 and NC7-47: $Tnbs_1/Tnbs_0$ HSU.
- K7-09: $Tnsc_0$ HSU.

Ground water extraction and treatment at the PIT7-SRC facility began in March 2010. Pumping on the extraction wells proximal to Pits 3 and 5 has an impact on the distribution and magnitudes of COC concentrations observed.

Depth to ground water is currently a minimum of 10 to 15 feet below the buried waste in Landfill Pits 3, 4, 5 and 7.

3.5.2.1. Tritium

The Pit 3 and 5 Landfills have been identified as the sources of previous releases of tritium to ground water. The Pit 7 Landfill is not an apparent source of tritium in ground water as most of the tritium-bearing experiments conducted at Site 300 occurred prior to its opening in 1979 (Taffet et al., 2008).

The highest tritium activity detected in a 2014 ground water sample from a Pit 7 Complex detection monitor well was 71,500 pCi/L in $Tnbs_1/Tnbs_0$ HSU well K7-03 (April). Tritium activities in ground water samples from this well have generally been declining since the historic maximum activity 216,000 pCi/L in March 1993. The maximum 2013 ground water tritium activity in a sample from this well was 73,700 pCi/L (October).

Tritium activities in ground water samples from detection monitor well K7-01 have decreased from the historic maximum activity of 72,900 pCi/L in October 1999 to a 2014 maximum activity of 32,700 pCi/L detected in a duplicate sample collected in October. The tritium activity detected in the routine sample was 28,000 pCi/L. The 2013 maximum tritium activity detected in a ground water sample from this well was 33,200 pCi/L.

Tritium activities in samples from detection monitor well NC7-26 have decreased from a historic maximum activity of 30,000 pCi/L (May 1999) to a 2014 maximum activity of 1,790 pCi/L (October).

Tritium activities in all samples collected during 2014 from upgradient well K7-06, cross-gradient wells K7-09 and K7-10, downgradient well NC7-48, and far downgradient well NC7-47 were all below the 100 pCi/L reporting limit/background activity.

In general, the extent of tritium in the $Tnbs_1/Tnbs_0$ and Qal/WBR HSUs in the Pit 7 Complex area are consistent with those observed in 2013, and tritium activities continue to decrease. No new release of tritium from the landfills is indicated by the 2014 ground water tritium data.

A discussion of tritium that was previously released to ground water from the Pit 7 Complex Landfills is presented in Section 2.5.5.2.1.

3.5.2.2. Uranium

Depleted uranium was previously released to ground water from sources in Pits 3, 5 and 7 (Taffet et al., 2008). Uranium activities were below the 20 pCi/L MCL cleanup standard in all detection monitor well samples collected during 2014. The maximum 2014 uranium activity in a sample from a detection monitor well was 15 pCi/L from well K7-01. Uranium activities in ground water samples from this well have generally fluctuated within a few pCi/L of the 20 pCi/L MCL cleanup standard since the 1997-1998 El Niño. The historic maximum uranium activity detected in this well was 27 pCi/L (September 1984).

The uranium activity in well NC7-48, the only detection monitor well containing depleted uranium, was 5.1 pCi/L. Uranium activities in this well have declined from the historic maximum of 105 pCi/L detected after the 1997-98 El Niño (March 1998). Ground water samples from this well have historically contained depleted uranium.

The extent of uranium in Qal/WBR and $Tnbs_1/Tnbs_0$ ground water is similar to recent years and uranium activities in samples from all detection monitor wells have generally decreased from their historic maximum uranium activities. Ground water uranium data from 2014 do not indicate any new releases of uranium from the Pit 7 Complex Landfills. A discussion of uranium that was previously released to ground water from the Pit 7 Complex Landfills is presented in Section 2.5.5.2.2.

3.5.2.3. Nitrate

Ground water samples collected during 2014 from Pit 7 Complex detection monitor wells NC7-47 and K7-01 contained nitrate at concentrations of 66 mg/L and 46 mg/L, respectively, exceeding the 45 mg/L MCL cleanup standard. The nitrate concentration measured in a duplicate sample from well K7-01 was 38 mg/L. Ground water samples from well NC7-47 have never contained any other COCs in excess of background concentrations. Overall, nitrate concentrations in the detection monitoring wells have remained stable, with occasional fluctuations, for the last decade. Current data do not indicate any new releases of nitrate from any of the landfills. A discussion of nitrate that was previously released to ground water from the Pit 7 Complex Landfills is presented in Section 2.5.5.2.3.

3.5.2.4. Perchlorate

Wells K7-01 (screened in the Qal/WBR and $Tnbs_1/Tnbs_0$ HSUs) and K7-03 (screened in the $Tnbs_1/Tnbs_0$ HSU) are the only detection monitor wells from which ground water samples have historically contained perchlorate at concentrations in excess of the 4 µg/L reporting limit. Perchlorate concentrations in samples from these wells have decreased from the historic maximum of 25 µg/L at well K7-01 (July 2006) and 29 µg/L at well K7-03 (April 2005) to 14 µg/L (duplicate sample result, routine sample result was 9.9 µg/L) and 9 µg/L of perchlorate, respectively. The overall extent of perchlorate at concentrations exceeding the 6 µg/L MCL cleanup standard in ground water in the Pit 7 Complex area did not change significantly from 2013 to 2014. The 2014 data do not indicate any new releases of perchlorate from any of the landfills. A discussion of perchlorate that was previously released to ground water from the Pit 7 Complex landfills is presented in Section 2.5.5.2.4.

3.5.2.5. Volatile Organic Compounds

During 2014, VOCs were detected in samples from two detection monitor wells at concentrations above reporting limits. These samples from wells K7-01 and K7-03 contained 0.9 µg/L and 0.68 µg/L of TCE, respectively. The historic maximum VOC concentrations in samples from these wells were 20 µg/L (well K7-01, 1985) and 15.2 µg/L (well K7-03, 1985). VOC concentrations have generally been declining in samples from these wells since these 1985 maxima. The 2014 data do not indicate any new releases of VOCs from any of the landfills. A discussion of VOCs that were previously released to ground water from the Pit 7 Complex Landfills is presented in Section 2.5.5.2.5.

3.5.2.6. Title 26 Metals and Lithium

During 2014, Title 26 metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium and zinc) and lithium were not detected in ground water samples from the Pit 7 Complex area detection monitoring wells at concentrations in excess of background concentrations. These data did not indicate a release of metals from any of the landfills during reporting period.

3.5.2.7. High Explosives (HE) Compounds

During 2014, HE compounds were not detected in ground water samples from the Pit 7 Complex area detection monitoring wells at concentrations in excess of individual compound detection limits of 1 to 2 µg/L. These data did not indicate a release of HE compounds from any of the landfills during 2014.

3.5.2.8. Polychlorinated Biphenyls (PCBs)

During 2014, PCB compounds were not detected in ground water samples from the Pit 7 Complex area detection monitoring wells at concentrations in excess of the individual compound detection limits of approximately 0.5 µg/L. The data indicate no release of PCBs from any of the landfills during the reporting period.

3.5.3. Landfill Inspection Results

Abri Engineering conducted the annual engineering inspection of the Pit 7 Landfill Cap on April 8, 2014. The landfill cap was found to be in good condition and functioning as intended. Several large animal burrows on the were observed on the cap surface.

3.5.4. Annual Subsidence Monitoring Results

Annual subsidence monitoring was conducted during second semester 2014. No evidence of subsidence was detected.

3.5.5. Maintenance

Several large animal burrows were filled at the time of the inspection. No other maintenance was conducted at Pit 7 during 2014.

3.6. Pit 7 Complex Drainage Diversion System

A Drainage Diversion System was constructed in the Pit 7 Complex area of OU 5 in 2007-2008 (Section 2.6). The Pit 7 Drainage Diversion System is inspected and maintained per the requirements of the Inspection and Maintenance Plan (Taffet et al., 2008).

3.6.1. Drainage Diversion System Inspection Results

Monthly rainy season inspections were performed during first semester 2014. The drainage diversion system was inspected on January 14, February 11, March 5 (post storm), March 13, April 15 (post-season), October 15 (pre-season), December 3 (post storm), and December 15.

3.6.2. Drainage Diversion System Maintenance

Sediment and vegetative debris was removed from basins, channels and rip-rap areas during 2014.

3.7. Building 850 CAMU

A CAMU was constructed in the Building 850 area of OU 5 in 2009 as part of the Building 850 Removal Action (Section 2.5). The Building 850 CAMU is inspected and maintained per the requirements of the Inspection and Maintenance Plan (SCS Engineers, 2010).

3.7.1. Building 850 CAMU Inspection Results

The CAMU was inspected four times immediately following major storms (February 10, March 3, April 2, and December 3) during 2014. No evidence of excess vegetation, erosion, or sedimentation was observed and all controls were working as intended. CAMU inspections are typically conducted during second semester in July (post-season), immediately after major storms, and October (pre-season).

3.7.2. Building 850 CAMU Maintenance

Maintenance was not required during 2014.

4. Risk and Hazard Management Program

The goal of the Site 300 Risk and Hazard Management Program is to protect human health and the environment by controlling exposure to contaminants during remediation. Risk and hazard management is conducted in areas of Site 300 where the exposure point risk exceeded 1×10^{-6} or the hazard index exceeded 1 in the baseline risk assessment. Institutional controls have been implemented to manage risks. The CMP/CP requires that the institution controls in place at Site 300 be evaluated annually. The completed Institutional Controls Monitoring Checklist for 2014 is presented in Appendix D.

4.1. Human Health Risk and Hazard Management

The CMP/CP requires that the risk and hazard associated with volatile contaminants in the subsurface migrating upward into indoor and outdoor ambient air and being inhaled by workers be re-evaluated annually using current data, where the risk exceeds 10^{-6} and the hazard indices exceeds 1.

The onsite worker inhalation risk associated with vapor intrusion from the subsurface into indoor and outdoor air is discussed in Section 4.1.1. The onsite worker inhalation risk associated with springs is discussed in Section 4.1.2.

4.1.1. Annual Inhalation Risk Evaluation

The CMP (Ferry et al., 2002) requires that the risk and hazard associated with volatile contaminants in the subsurface migrating upward into indoor and outdoor ambient air and being inhaled by workers be re-evaluated annually using current data. The following risk evaluations were performed during 2014:

- Indoor Ambient Air in Building 834D
- Indoor Ambient Air in Building 830

The risk and hazard management is complete for a building when the estimated risk is below 10^{-6} and the hazard index is below 1 for two consecutive years. The risk and hazard management is complete and will no longer be evaluated for the following:

- Outdoor Ambient Air Near Building 834D (2003 and 2004)
- Outdoor Ambient Air Near Building 815 (2003 and 2004)
- Outdoor Ambient Air in Building 854F (2003 and 2004)
- Outdoor Ambient Air Near Building 830 (2003 and 2004)

- Indoor Ambient Air Near Building 832F (2003 and 2004, building demolished in 2005)
- Indoor Ambient Air in Building 854F (building demolished in 2005)
- Indoor Ambient Air in Building 854A (2005 and 2006)
- Indoor Ambient Air in Building 833 (2010 and 2011)

Institutional controls, such as restricting access to or activities in areas of elevated risk, remained in place during 2014 to prevent unacceptable exposure to contaminants during remediation for those buildings and areas that continue to show an unacceptable risk and/or hazard.

Between 2003 and 2005, inhalation risk and hazard resulting from transport of VOC vapors from ground water to the building foundations and subsequently into indoor ambient air was estimated using the Johnson-Ettinger Model (U.S. EPA, 2002). Between 2005 and 2011, the model results were updated to reflect the chemical-specific toxicity criteria referenced in the "Interim Final Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air" (DTSC, 2005). In 2011, the toxicity values for a number of contaminants, including TCE, were updated by U.S. EPA. Also in 2011, the toxicity values for a number of contaminants were updated by the California Department of Toxic Substances.

The current inhalation risk and hazard resulting from transport of VOC vapors from ground water to the building foundations and subsequently into indoor ambient air was estimated using the Johnson-Ettinger Model (U.S. EPA, 2002, U.S. EPA, 2004 and U.S. EPA, 2011) after the cancer inhalation unit risk (IUR) and the non-cancer reference concentration (RfC) were updated based on the 2011 California Department of Toxic Substances criteria (DTSC, 2011). For TCE, the IUR was 4.1×10^{-6} per $(ug/m^3)^{-1}$ and the RfC was 2.0×10^{-3} mg/m^3. For Vinyl Chloride, the IUR was 7.8×10^{-5} per $(ug/m^3)^{-1}$ and the RfC was 1.0×10^{-1} mg/m^3. For PCE, the IUR was 5.9×10^{-6} per $(ug/m^3)^{-1}$ and the RfC was 3.5×10^{-2} mg/m^3.

The following conservative methodology is used in developing the input values for each model. A representative soil column was developed combining the borehole geology information from wells and boreholes that are within a 100 ft radius of the modeled building or site. The resulting soil column was simplified into three strata as input to the Johnson-Ettinger Model by conservatively selecting the most permeable soil types for each stratum. The highest observed ground water elevation at the site was used as the source depth. The highest observed VOC ground water concentration in a well located in close proximity to the building or site being modeled was selected as the source concentration. If the VOC of interest was not detected in any nearby wells, then the highest detection limit was used as the source concentration. For the Johnson-Ettinger Model, site-specific building dimensions were used.

The individual chemical risk, hazard index, and cumulative risk values estimated for the indoor ambient air are reported in Table 4.1-1 for those buildings that were evaluated in 2014. Generally the concentrations of VOCs in wells show a declining trend, specifically in areas where there are ground water and soil vapor treatment systems in operation.

As shown in Table 4.1-1, the estimated risk in 2014 remained above 10^{-6} and/or the hazard quotient remained above 1 for the indoor ambient air exposure pathway evaluated at Building 834D. At Building 830, the estimated risk in 2014 was also above 10^{-6} and/or the hazard quotient was above 1 for the indoor ambient air exposure pathway evaluated. As a result, the building occupancy restrictions, engineered controls, monitoring, and annual risk evaluations will continue for Buildings 834D and 830, in accordance with the CMP/CP for the Interim Remedies at LLNL Site 300. In addition, during 2014, active remediation using ground water and soil vapor extraction continued at both locations.

4.1.2. Spring Ambient Air Inhalation Risk Evaluation

4.1.2.1. VOC-Contaminated Springs

The CMP requires annual sampling of outdoor air above VOC-contaminated surface water, when surface water is present to determine VOC concentrations.

An unacceptable risk or hazard was identified during the baseline risk assessment (Webster-Scholten, 1994) for the inhalation of VOCs at four locations:

1. Spring 3 (Building 832 Canyon OU) – Cumulative risk 7 x 10^{-5}, hazard index 2.3 due to TCE and PCE.
2. Spring 5 (HEPA OU) – Cumulative risk 1 x 10^{-5}, due to 1,1-DCE and TCE.
3. Spring 7 (Pit 6 Landfill OU) – Cumulative risk 4 x 10^{-5}, hazard index 1.5 due to TCE, PCE 1,2-DCA, and chloroform.
4. The Carnegie State Vehicular Recreation Area pond (offsite, east of the Pit 6 Landfill) – Cumulative risk 3 x 10^{-6} (hypothetical), due to TCE.

The risk and hazard management evaluation for Spring 3 was completed in 2009. The estimated risk has remained below 10^{-6} and the hazard index remained below 1 for two consecutive years. No unacceptable risk or hazard to onsite workers exists. Therefore, the annual ambient air inhalation risk evaluation was continued for the following springs in 2014:

- Ambient Air Near Spring 5 in the HEPA OU
- Ambient Air Near Spring 7 in the Pit 6 Landfill OU

No surface water or green hydrophilic vegetation was present at Springs 5 and 7 during first semester 2014, therefore no ambient air VOC sampling was performed. Springs 5 and 7 have been devoid of surface water or green hydrophilic vegetation since monitoring began in 2003. These springs will be monitored for the presence of surface water or green hydrophilic vegetation in 2015 and air samples will be collected if water is present.

Water-supply well CARNRW-2 is used to fill the Carnegie State Vehicular Recreation Area pond. The baseline risk assessment indicated that if the VOC source in the Pit 6 Landfill OU was not controlled, contaminated ground water could migrate to well CARNRW-2 and result in an unacceptable risk from inhaling VOC vapors volatilizing from the pond. However, an engineered cap was placed over the Pit 6 Landfill preventing infiltration of precipitation and further releases of contaminants from the landfill. The VOC plume originating from the Pit 6 Landfill has not impacted CARNRW-2. No unacceptable risk or hazard exists.

4.1.2.2. Tritium-Contaminated Springs

An unacceptable cumulative risk of 1 x 10^{-3} was identified in the baseline risk assessment for the inhalation of tritium at Well 8 Spring in the Building 850 area. The risk associated with the inhalation of tritium vapors volatilizing from Well 8 Spring is based on the maximum tritium activity detected (770,000 pCi/L) in 1972. The tritium activities in Well 8 Spring have steadily declined over the decades. The 2009 CMP/CP indicated that the inhalation risk associated with tritium in surface water volatilizing into outdoor ambient air would be re-evaluated annually when surface water is present. The surface water will be sampled and analyzed for tritium semi-annually. The maximum activity will be compared to the current tritium vapor PRG for tap water.

The risk re-evaluation of Well 8 Spring could not be performed in 2014 due to lack of water in the spring. No samples were collected from Well 8 Spring in 2014. Sampling and risk re-evaluation will be conducted in 2015 if surface water is present. Workers do not occupy or plan to occupy the site in the near future, therefore site use restrictions will be maintained and the annual sampling continued until the activity remains below the PRG for two years.

4.2. Ecological Risk and Hazard Management

4.2.1. Ecological Risk and Hazard Management Measures and Contingency Plan Actions Required by the 2009 Compliance Monitoring Report/Contingency Plan

The ecological risk and hazard management measures described in the 2009 CMP/CP (Dibley et al., 2009a) were developed to meet the Remedial Action Objectives for environmental protection. These objectives are designed to:

1. Ensure ecological receptors important at the individual level of ecological organization (special-status species, i.e., State of California or federally-listed threatened or endangered species or State of California species of special concern) do not reside in areas where relevant hazard indices exceed 1.
2. Ensure changes in contaminant conditions do not threaten wildlife populations and vegetation communities.

The ecological risk and hazard management measures required by the 2009 CMP/CP include:

- Periodically evaluating available biological survey data from the Buildings 801, 851 and the HEPA to determine potential population-level impacts to ground squirrel and deer exposed to cadmium in surface soil in these areas, as well as re-evaluating the ecological hazard associated with cadmium in surface soil in these areas. Subsequent evaluations reported on in the 2011 and 2012 Annual CMRs showed the presence of cadmium to no longer be a potential ecological hazard to the deer and ground squirrel populations, or to burrowing or ground dwelling special-status species. Therefore, cadmium is no longer considered an ecological contaminant of concern in these areas, and has been dropped from further consideration.
- Ensuring the integrity of the Pit 7 Complex landfill caps to prevent exposure to burrowing animals from uranium.
- Evaluating changes in existing contaminant and ecological conditions in OUs 1 through 8 every five years, including re-evaluating VOCs in burrow air in the event that ground water VOC concentrations increase to levels that previously posed a risk to burrowing animals.

This report, and subsequent compliance monitoring reports prepared during the reporting period in which the 2009 CMP/CP is active, will report on ecological risk and hazard management measures and ecological contingency plan actions required by the 2009 CMP/CP.

As part of the contingency plan presented in the 2009 CMP/CP, periodic review of available biological survey data (e.g., biological data collected when surveying ground-disturbing programmatic activities, biological monitoring data, surveys conducted for environmental impact statement [EIS] or environmental impact report [EIR] preparation, etc.) for the presence of new special-status species is required. Any new special-status species identified is to be evaluated for potential impact from the presence of contamination using the process described in the 2009 CMP/CP. The results of the periodic review are reported on in the annual CMRs.

As described above, the 2009 CMP/CP requires an evaluation of changes in contaminant and ecological conditions in OUs 1 through 8 every five years. Five-year ecological reviews were conducted in 2008 (reported on in Dibley et al., 2009b; referred to as the 2008 Five-Year Ecological Review), and 2013 (reported on in Dibley et al., 2014; referred to as the 2013 Five-Year Ecological review). The 2008 Five-Year Ecological Review evaluated chemical data collected from January 1, 1999 through December 31, 2007, and ecological data collected from January 1, 1999 through December 31, 2008. The 2013 Five-Year Ecological Review evaluated chemical data collected from January 1, 2008 through December 31, 2012, and biological data collected between January 1, 2009 and December 31, 2012 (four years of biological data). By adjusting the biological review period in the 2013 Five-Year Ecological Review, future five-year ecological reviews will have consistent biological and chemical data review periods.

The 2008 Five-Year Ecological Review identified several new constituents in surface soil and surface water for which ecological hazard could not be adequately evaluated due to either a limited data set or the lack of background data. Most of these constituents have been addressed and reported on in CMRs subsequent to the 2008 Five-Year Ecological Review. The remaining constituents (all in surface water) were also noted in the 2013 Five-Year Ecological Review as requiring on-going monitoring. As discussed below, these constituents will be addressed as new monitoring information becomes available, and added to the ecological risk and hazard management program as necessary.

4.2.2. Uranium in Subsurface Soil within the Pit 7 Complex Landfills

The 2009 CMP/CP requires the Pit 7 Complex landfills to be inspected and any burrows or holes in the cover filled to prevent unacceptable exposure of animals to uranium in the pit waste. This is done as part of the inspection and maintenance program for the Pit 7 Complex. Section 3.5.3 describes the quarterly landfill inspection results, Section 3.5.4 describes the annual subsidence monitoring results, and Section 3.5.5 describes any maintenance performed. Abri Environmental Engineering performs annual inspections of the Pit 7 Complex landfills. Several burrowing animal holes ranging approximately 2 to 6 inches in diameter were observed on the Pit 7 cap surface during the annual inspection conducted on April 8, 2014. The larger holes were repaired at the time of inspection.

4.2.3. Identification and Evaluation of New Special-Status Species

Contingency actions that are described in the 2009 CMP/CP include periodically evaluating available biological survey data (e.g., pre-construction survey data, biological monitoring data, surveys conducted for EIR/EIS preparation) for the presence of new special-status species and reporting the results of the evaluation in the annual compliance monitoring reports. As the 2013 Annual CMR contained an evaluation of biological data collected from 2009 through 2012 as part of the 2013 Five-Year Ecological Review, new biological information collected during 2013 and 2014 are evaluated here. The results of biological surveys conducted during this time period, and any changes in the regulatory status of species occurring at Site 300, were provided by biologists from the LLNL Environmental Functional Area (EFA), and are discussed below.

During a biological survey conducted by EFA biologists in preparation for uranium surface soil sampling at the Building 851 area in July of 2014, a coast horned lizard (*Phrynosoma blainvillii*) was observed. The coast horned lizard is a California Species of Special Concern. While this species has been frequently observed at Site 300 (including at the Building 850 and 854 areas), this is the first documented sighting of this species in the Building 851 area. While there are currently no known ecological concerns surrounding the Building 851 area, the potential for uranium contamination in this area is under investigation.

A flock of 75-80 long-billed curlews (*Numenius americanus*) was observed by EFA biologists at the northern perimeter of the site north of the East Observation Post (East OP) during the winter of 2014. The long-billed curlew is a federal Bird of Conservation Concern and is also included on the California Department of Fish and Wildlife's Watch List. While there are no known ecological concerns in this area, the sighting occurred just north of the Building 865 area, which is currently under investigation (see Figure 4.2.1 for the location of the East OP and Building 865).

In December of 2014, the state granted emergency protection to the tri-colored blackbird (*Agelaius tricolor*) under the California Endangered Species Act. This emergency listing is effective from December 29, 2014 through June 30, 2015. After that time, the State will make a decision whether this listing should be made permanent or if extending the emergency protection period is warranted. Previously, the tri-colored blackbird was a California Species of Special Concern. A nesting colony of tri-colored blackbirds has historically been observed in the wetlands within Elk Ravine near Building 812. The Elk Ravine tri-colored blackbird nesting colony was again observed by EFA biologists in 2014. This area is currently under investigation for uranium contamination (see Figure 4.2.1 for the location of Building 812).

Four burrowing owl nest sites were observed during surveys conducted by EFA biologists between December 2013 and November 2014. The burrowing owl (*Athene cunicularia*) is a federal Bird of Conservation Concern, and a California Species of Special Concern. In 2014, EFA biologists reviewed all historical burrowing owl survey data from Site 300, and a GIS database of all verified historical nesting locations was created. The 2014 nest sites, and historic nest sites dating back to 1992, are shown on Figure 4.2.1. The location of burrowing owl nest sites observed in 2014 is consistent with historical observations.

4.2.4. Constituents Identified 2013 Five-Year Ecological Reviews Requiring Additional Monitoring

The 2013 Five-Year Ecological Review identified several constituents in surface water for which data were not sufficient to determine potential ecological hazard. These constituents are chloride in Spring 14 (HEPA OU, Figure 2.4-1), total phosphorus as P and ammonia in Spring 4 (Building 832 Canyon OU, Figure 2.7-1), and total uranium in Springs 10 and 11 (Building 854 OU, Figure 2.6-1).

The historic chloride concentrations detected in Spring 14 in samples collected through May 2001 (ranging from 160 to 420 mg/L) periodically exceeded the maximum concentration observed in Site 300 background springs (210 mg/L). However, the chloride concentration in the most two recent samples (collected in December 2003 and March 2013) contained chloride concentrations at or below this background level (170 and 210 mg/L, respectively). While it appears that chloride in Spring 14 is not of ecological concern, chloride concentrations in this spring will be periodically monitored to ensure concentrations remain within background levels.

The single sample from Spring 4 analyzed for total phosphorus as P (4 mg/L, sampled in June 2000) exceeded the maximum concentration of total phosphorus observed in the Site 300 background springs (0.3 mg/L). The maximum concentration of ammonia nitrogen (8.7 mg/L) in Spring 4 was also detected in the June 2000 sample, which is the most recent sample available that was analyzed for this constituent. Spring 17, a Site 300 background spring, was sampled for ammonia nitrogen in August 2012. Ammonia nitrogen was detected in this spring at a concentration of 0.52 mg/L. Spring 4 will be periodically sampled for ammonia nitrogen and total phosphorus to provide additional data on these constituents.

The maximum total uranium concentration as mg/L (estimated from uranium-238 results) in Spring 10 and Spring 11 exceeded the Site 300 background concentration in the June 2002 (Spring 11) and the June 2003 (Spring 10) samples. Both samples were analyzed for uranium isotopes using mass spectrometry, and results from both springs showed a $^{235}U/^{238}U$ ratio of 0.0072. This is the natural ratio for these uranium isotopes, and indicates no added depleted uranium is present.

Spring 11 was again sampled in August 2012. Spring 10 was dry at this time, and thus a sample could not be obtained. Spring 11 continues to show high concentrations of uranium (0.074 mg/L) compared to the Site 300 maximum background concentration of 0.028 mg/L (detected in Spring 16). The uranium-235/uranium-238 ratio was again 0.0072. Spring 16, a Site 300 background spring located in the same canyon as Springs 10 and 11, was dry, and therefore a sample could not be obtained from this spring. Both Springs 10 and 16 will be sampled for uranium when water is again available from these springs.

Data from the additional spring sampling will be reported on in future compliance monitoring reports as they become available.

5. Data Management Program

The management of data collected during second semester 2014 was subject to Environmental Restoration Department (ERD) data management process and standard operating procedures (Goodrich and Lorega, 2012). This data management process tracks sample and analytical information from initial sampling plan through data storage in a relational database. As part of the standard operating procedures for data quality, this process includes sample planning, chain of custody tracking, sample collection history, electronic and hard copy analytical results receipt, strict data validation and verification, data quality control procedures, and data retrieval and presentation. Data management and data retrieval is facilitated by a web-based system known as The Environmental Information Management System (TEIMS). The use of this system promotes and provides a consistent data set of known quality. Quality assurance and quality control are performed consistently on all data.

5.1. Modifications to Existing Procedures

The relational database used to maintain the data for the CMR continued to be Oracle version 11.2.0.3 on Linux servers. General maintenance and refinements continued in both the database and the web application programming. Improvements and additions to the ERD data management process are continuously implemented in an ongoing effort to automate and upgrade the applications, including verifications, an ad hoc sampling plans template, and water level collection process. The Treatment Facility Real Time (TFRT) application, a high frequency data acquisition system for treatment facilities and associated extraction wells, continued to be improved by extending options available to users and refining tools to improve usability, including the ability to identify which version of the control system software is installed at a treatment facility. The Self-Monitoring Report (SMR) application was made more dynamic by modifying the initial setup for selecting report month, year, and treatment facility. An extensive effort to identify uranium isotopes by the analytical method was implemented in order to provide customers with results in both mass and activity. The application known as Well Track is used to monitor requests for maintenance of wells. Improvements include highlighting the current step and adding error checking to the well tracking process. Standard Operating Procedures are up to date.

5.2. New Procedures

The process of re-architecting existing computer programs that generate web pages continues, with the dual goals of improving maintainability and user efficiency. An improvement in the ability of the TEIMS systems to authenticate for privileged users has been developed and will be implemented soon. New applications, including a mobile application, have been developed to more efficiently record water levels at monitor wells. The Analytical Contract was rebid and applying laboratories were evaluated. Three incumbent laboratories and two new laboratories were awarded contracts. Work was done to review and update requested analyses that will be used in the future and the new laboratories and their pricing were added to TEIMS. Comparison samples for several key analyses were sent to the new laboratories for evaluation. The sampling plan for the first quarter of 2015 was created and includes the new analytical laboratories along with the incumbent laboratories.

6. Quality Assurance/Quality Control Program

LLNL conducted all compliance monitoring in accordance with the approved Quality Assurance Project Plan (QAPP) (Dibley, 1999) requirements for planning, performing, documenting, and verifying the quality of activities and data. The QAPP was prepared for CERCLA compliance and ensures that the precision, accuracy, completeness, and representativeness of project data are known and are of acceptable quality. The QAPP is used in conjunction with the LLNL ERD Standard Operating Procedures (SOPs), Operations and Maintenance Manuals (O&Ms), Work Plans, Sampling Plans, Integration Work Sheets (IWSs), and Site Safety Plans. Modifications to existing LLNL quality assurance/quality control (QA/QC) procedures, new QA/QC procedures that were implemented during this reporting period, self-assessments, quality issues and corrective actions, and analytical and field quality control are discussed in this section.

6.1. Modifications to Existing Procedures

Some ERD SOPs scheduled for release with the previous issue of Revision 14 remain in the review and update process as listed:

- SOP 1.8: Disposal of Investigation-Derived Wastes (Drill Cuttings, Core Samples, and Drilling Mud).
- SOP 1.14: Final Well Development/Specific Capacity Tests at LLNL Livermore Site and Site 300.
- SOP 2.8: Installation of Dedicated Sampling Devices.
- SOP 3.1: Water-Level Measurements.
- SOP 3.2: Pressure Transducer Field Calibration.
- SOP 3.3: Hydraulic Testing (Slug/Bail).
- SOP 3.4: Hydraulic Testing (Pumping).
- SOP 4.7A: Livermore Site Treatment and Disposal of Well Development and Well Purge Fluids.
- SOP 4.14: Mapping with the Trimble Pathfinder Pro XR GPS System.

The preceding list of SOPs, along with all of Chapters 2 and 5 and other various procedures including SOP 1.2 Borehole Sampling of Unconsolidated Sediments and Rock; SOP 1.12: Surface Soil Sampling; SOP 4.3: Sample Containers and Preservation; and SOP 4.10: Records Management; totaling 33 procedures are currently undergoing modifications. Once approved all the updated procedures will be released as Revision 15. Chapter 2 of the SOPs are currently undergoing review as part of the signature chain process.

6.2. New Procedures

New procedures entitled “Site 300 Treatment Media Acceptance Testing and Usage Tracking”, “Creating Ad-hoc Sampling Plans”, and “Invoice Processing for Contract Analytical Laboratory Payment”, are being developed and planned to be included in the release of ERD SOPs, Revision 15. Procedures affiliated with treatment facility processes such as “Carbon Canister Removal and Carbon Conditioning”, “Conditioning Treatment for Ion Exchange” and “Removing Carbonate Deposits from Portable Treatment Unit Air Strippers Using Citric Acid” have formerly been included in the Operations and Maintenance Manual, Volume 1. Two of these procedures have become obsolete and only one procedure entitled “Conditioning Treatment for Ion Exchange” is currently being reformatted, reviewed, and updated to be included in the release of the ERD SOPs binder, (Rev. 15).

6.3. Self-assessments

ERD participates in self-assessments, both formal and informal. Assessments are conducted to evaluate work activities to procedural, QA, management, and Integrated Safety Management System (ISMS) practices. External regulatory agencies and management performs frequent assessments and management work observations, verifications, and inspections (MOVIs) of ERD work activities. There were a total of 21 assessments consisting of MOVIs, and regulatory inspections conducted for the Site 300 CERCLA program during 2014. Issues and deficiencies observed during assessments are tracked from inception to resolution using the institutional Issues Tracking System (ITS). There were no deficiencies associated with the assessments performed during this reporting period. Issues observed during analytical laboratory assessments are managed through the DOE Consolidated Audit Program process.

To date, scheduled reviews for the majority of the ERD Site 300 IWSs have been completed. The Institutional-Wide Work Planning and Control (WP&C) process is being redesigned and will replace the current IWS system. The new WP&C process is planned for release early 2015.

6.4. Quality Issues and Corrective Actions

Quality improvement, nonconformance, and corrective action reporting is documented using the Quality Improvement Form (QIF).

Three QIFs were processed during first semester 2014. QIF-14-001 was created in response to nitrate (as N) being reported instead of nitrate (as NO_3) as contractually required. The problem was corrected and the QIF was successfully closed-out on February 24, 2014.

QIF-14-002 was developed due to samples arriving at a subcontracted laboratory outside the required temperature range and could not be analyzed. The responsible contracted analytical laboratory (CAL) improved their sample log in procedures and retrained personnel. The QIF was successfully closed-out on April 16, 2014.

The final QIF (QIF-14-003) was generated to document a problem with a CAL reporting EPA Method 625 analytical results where three out of five surrogates failed resulting in 28 of the EPA Method 625 analytes being assigned “J” flags. The CAL implemented corrective action to ensure all future sample results with non-compliant surrogate recoveries will be re-analyzed. The QIF was successfully closed-out on March 31, 2014.

There were no additional QIFs generated during second semester 2014.

6.5. Analytical Quality Control

Data review, validation, and verification are conducted on 100% of the incoming analytical data in accordance with ERD SOP 4.6: Validation and Verification of Radiological and Nonradiological Data Generated by Analytical Laboratories. Contract analytical laboratories are contractually required to provide internal quality control (QC) checks in the form of method blanks, laboratory control samples, matrix spikes, and matrix spike or sample duplicate results with every analysis. During the data validation process, the analytical QC data and associated QC acceptance criteria (control limits) are reviewed. Data qualifier flags are assigned to analytical data that fall outside the QC acceptance criteria. Data qualifier flags and their definitions are listed in the Acronyms and Abbreviations in the Tables section of this report. The qualifier flags, when they exist, appear next to the analytical data presented in the treatment facility compliance tables of this report. Because rejected data are not used for decision-making, the rejected analytical data are not displayed in the tables, only the “R” flag is presented. Data are qualified as rejected only when there is a serious deficiency in the ability to analyze the sample and meet QC criteria.

During first semester 2014, sporadic detections of chloroform were reported in field QC samples. The compound was also detected at low concentrations and reported by two of the CALs for some sample locations where it has not been historically detected. In these instances, the detections are more than likely a result of contamination at the laboratory since chloroform is a common lab contaminant. The ERD TEIMS database is being periodically queried to continue evaluating chloroform detections reported by the CALs. During second semester 2014, the detection of chloroform in field QC samples or other samples was no longer an issue. The detections reported during first semester were determined to be from laboratory contamination, which periodically occurs. These types of detections are continuously monitored during the routine data validation process.

The analytical laboratory contract(s) for environmental services due to expire in August 2014 was extended through the end of the year. A selection committee formed from members of the Analytical Contract Management Team (ACMT) participated in the analytical lab rebidding and evaluation process. By April 2014, six laboratories were selected to participate in the competitive solicitation. All six laboratories passed the initial qualification and in May, the Request for Proposal (RFP) was issued to all six laboratories. In July, proposal evaluation(s) resulted in four of the six laboratories being successful bidders. These laboratories continued the evaluation process by comparing their programs to requirements established in the RFP and to favorable attributes developed by the selection committee. The laboratories also participated in pre-award assessments and upon completion of the assessment process the successful laboratories were presented to the contract review board for final approval. The final approval was the last step of the process prior to contract award.

The analytical contracts for environmental services were awarded to an incumbent laboratory, BC Laboratories, Inc. (Bakersfield CA) and two new analytical laboratories. The two new laboratories, Accutest (San Jose CA) and Test America (West Sacramento CA), became available for use on November 1, 2014. In early November, a sampling plan was developed consisting of collecting duplicate samples for analysis at the new laboratories. The samples were submitted for a wide array of analytical tests covering the majority of ERD's constituents of concern. The first quarter 2015 sample plan and usage of the laboratories for routine ground water and treatment facility sampling was developed based on the overall performance of the laboratories during this preliminary sampling event.

BC Laboratories could not be utilized to analyze soils for metals during the later part of second semester 2014 due to a Priority 1 Finding. The finding was issued due to the laboratory's inability to analyze a performance test (PT) sample within acceptable limits for Antimony in soil. Numerous analytical tests were placed in a no-bid status and unavailable for use until the laboratory can successfully pass the PT sample for antimony in soil. The requested analysis placed in a no-bid status included EWTFMET, NPDES metals, TTLC850MET, TTLMETALs and TTLCMETAL individual metals for soils analyses.

6.6. Field Quality Control

During first semester 2014 reporting period, detections of contaminants were periodically showing up in field blank analysis even though the blank water is analyzed and declared free of contaminants prior to the laboratories providing it to ERD for use. The contaminants detected in the field blanks, were not the same contaminants detected in the associated sample; therefore, data qualifier flags were not assigned to the data. The problem with detections in QC field blank samples did not continue to any significant degree during second semester 2014.

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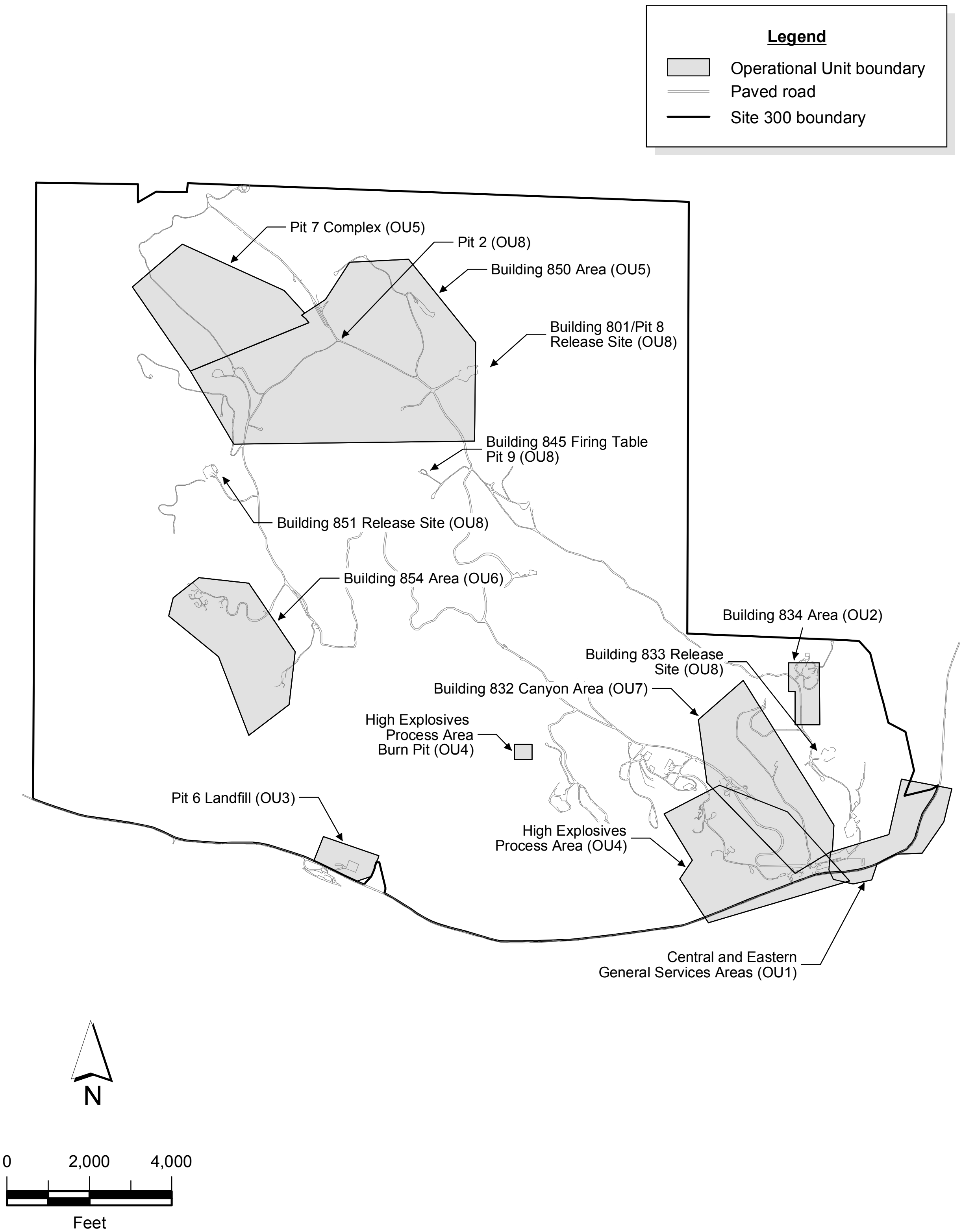

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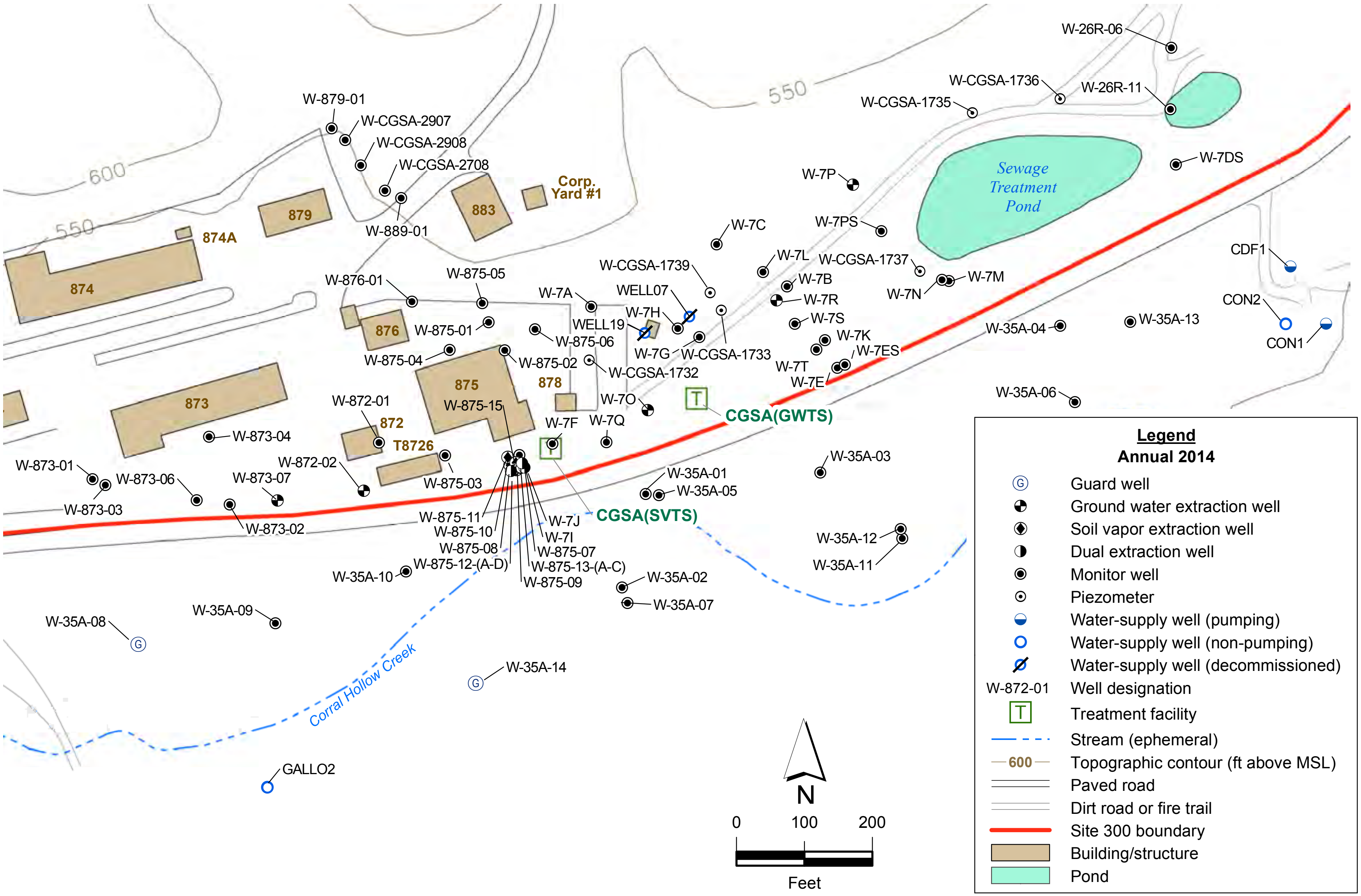

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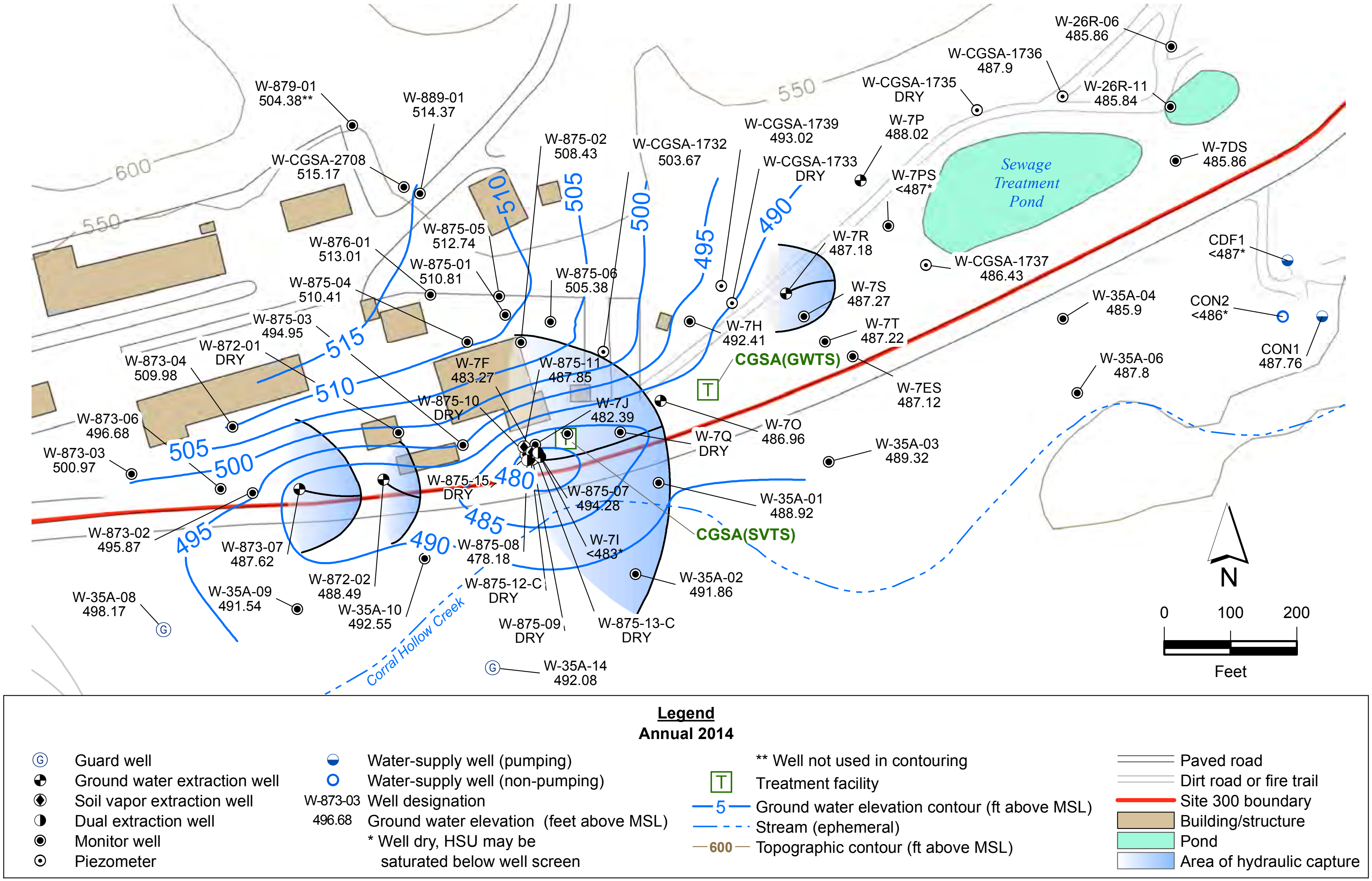

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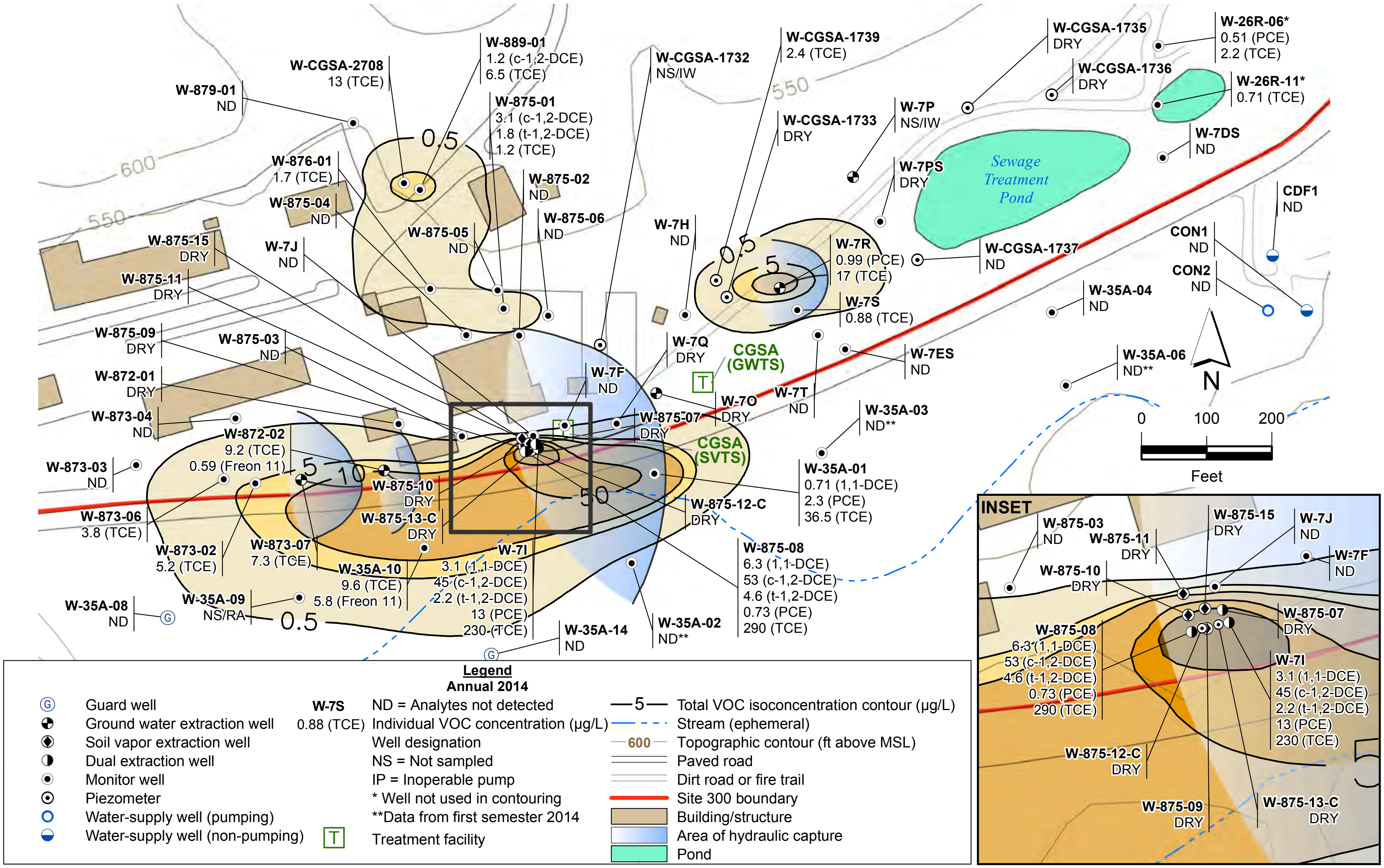

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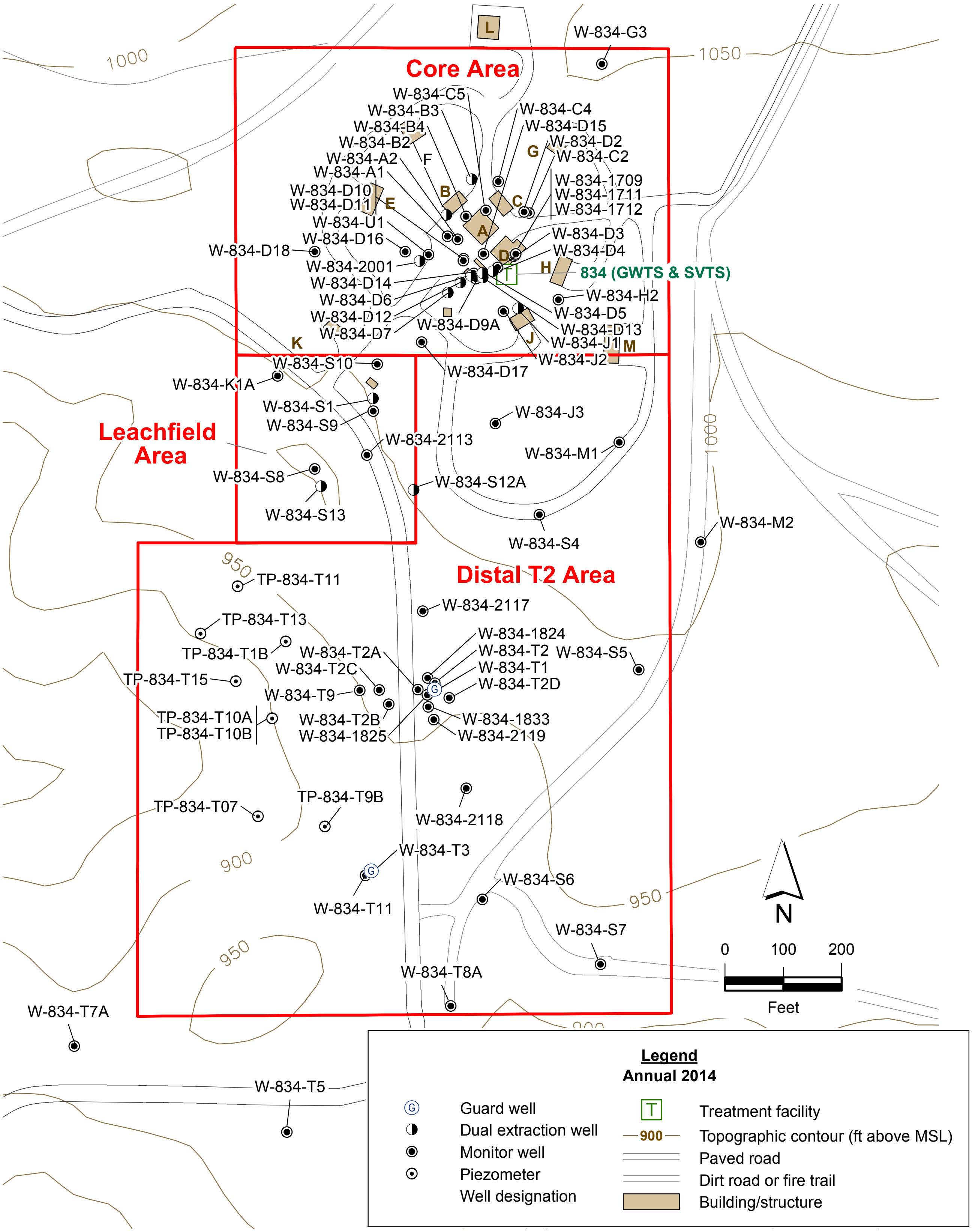

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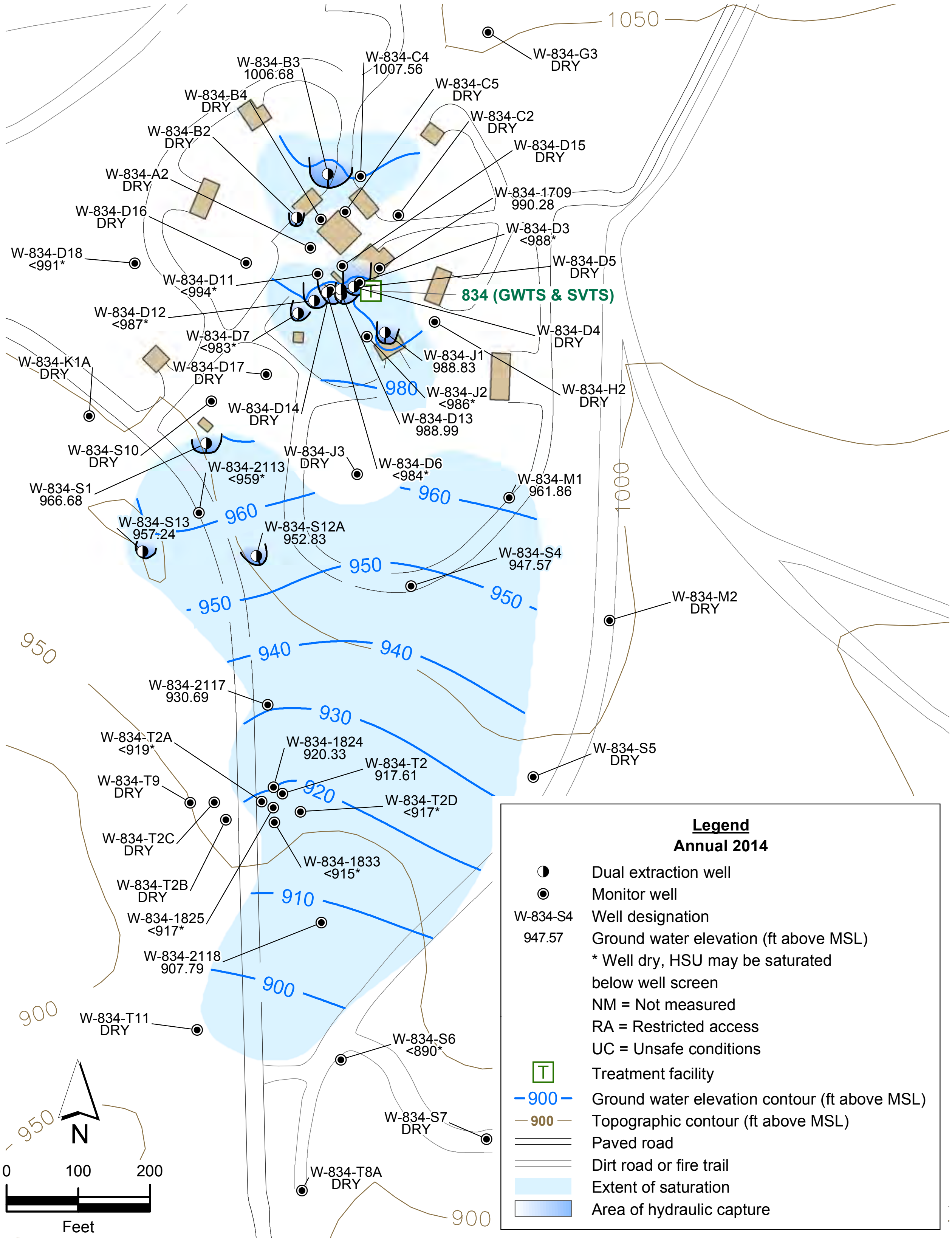

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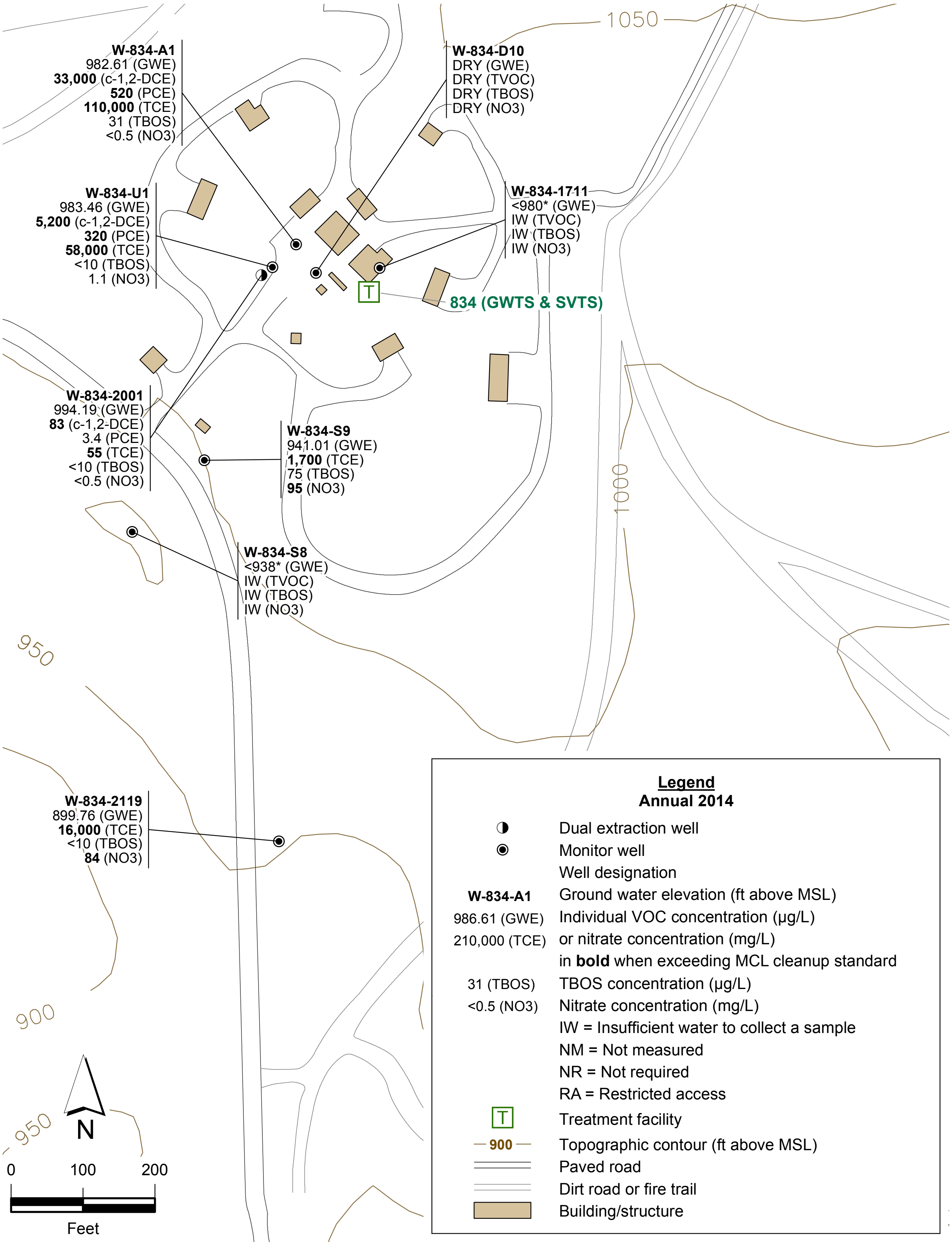

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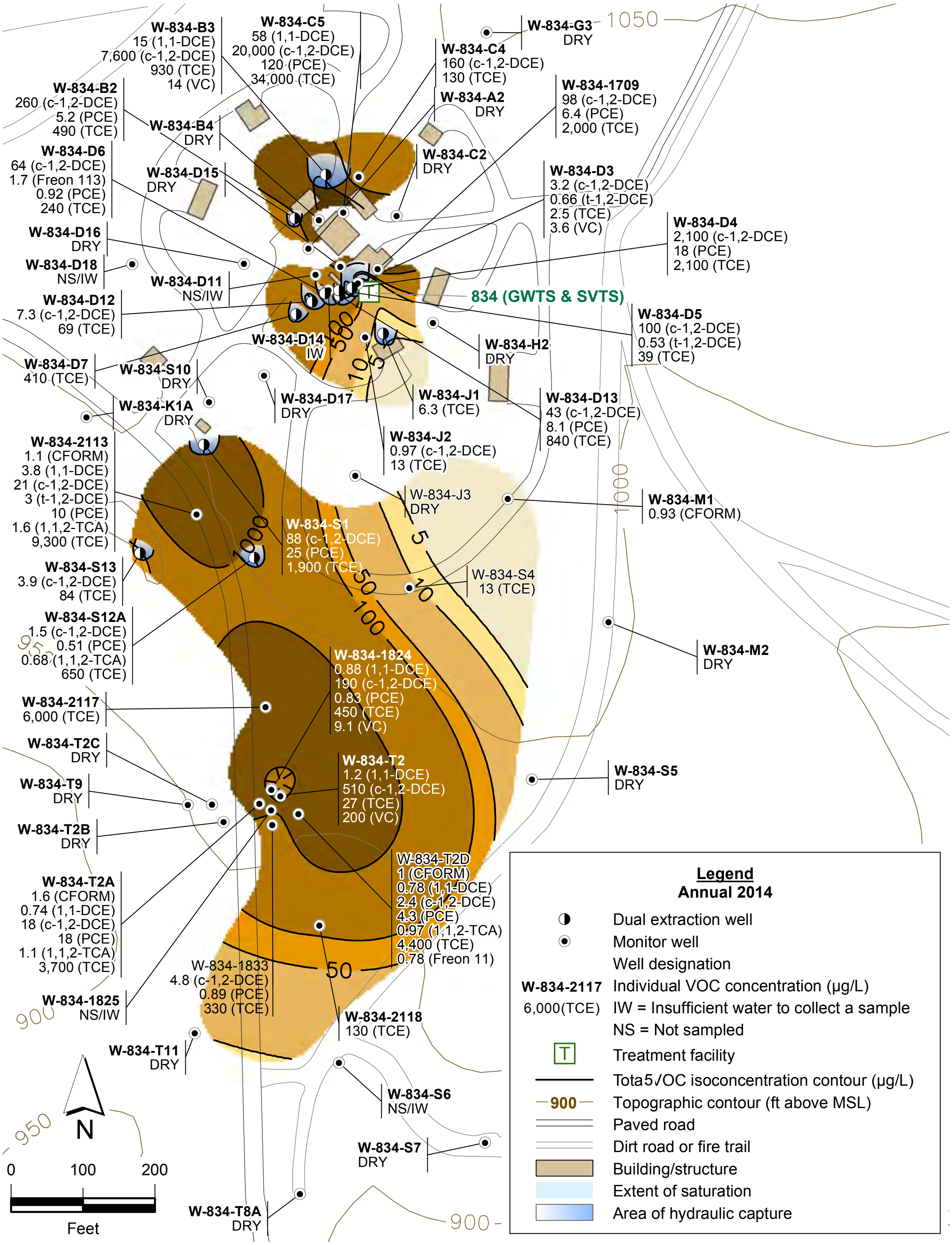

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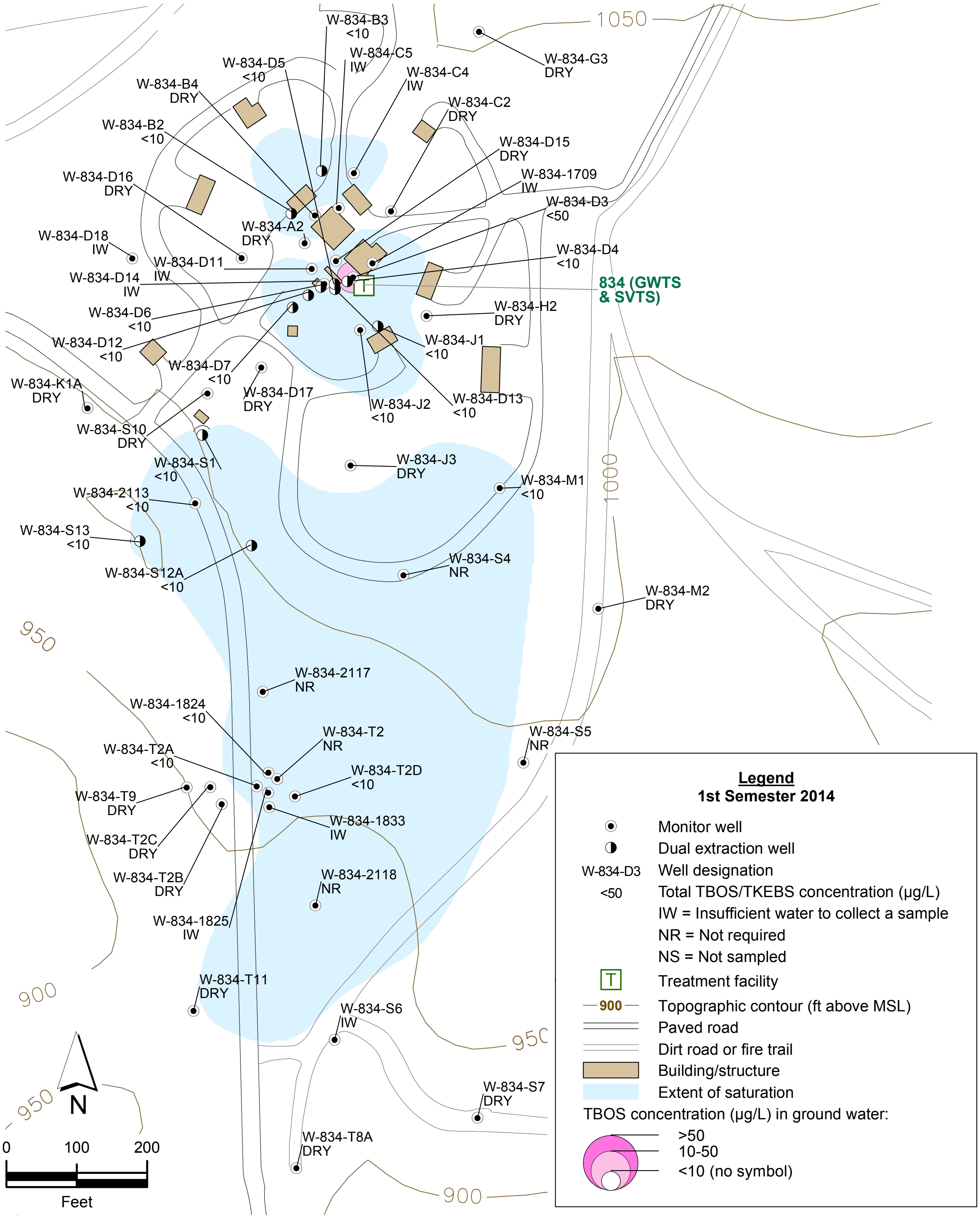

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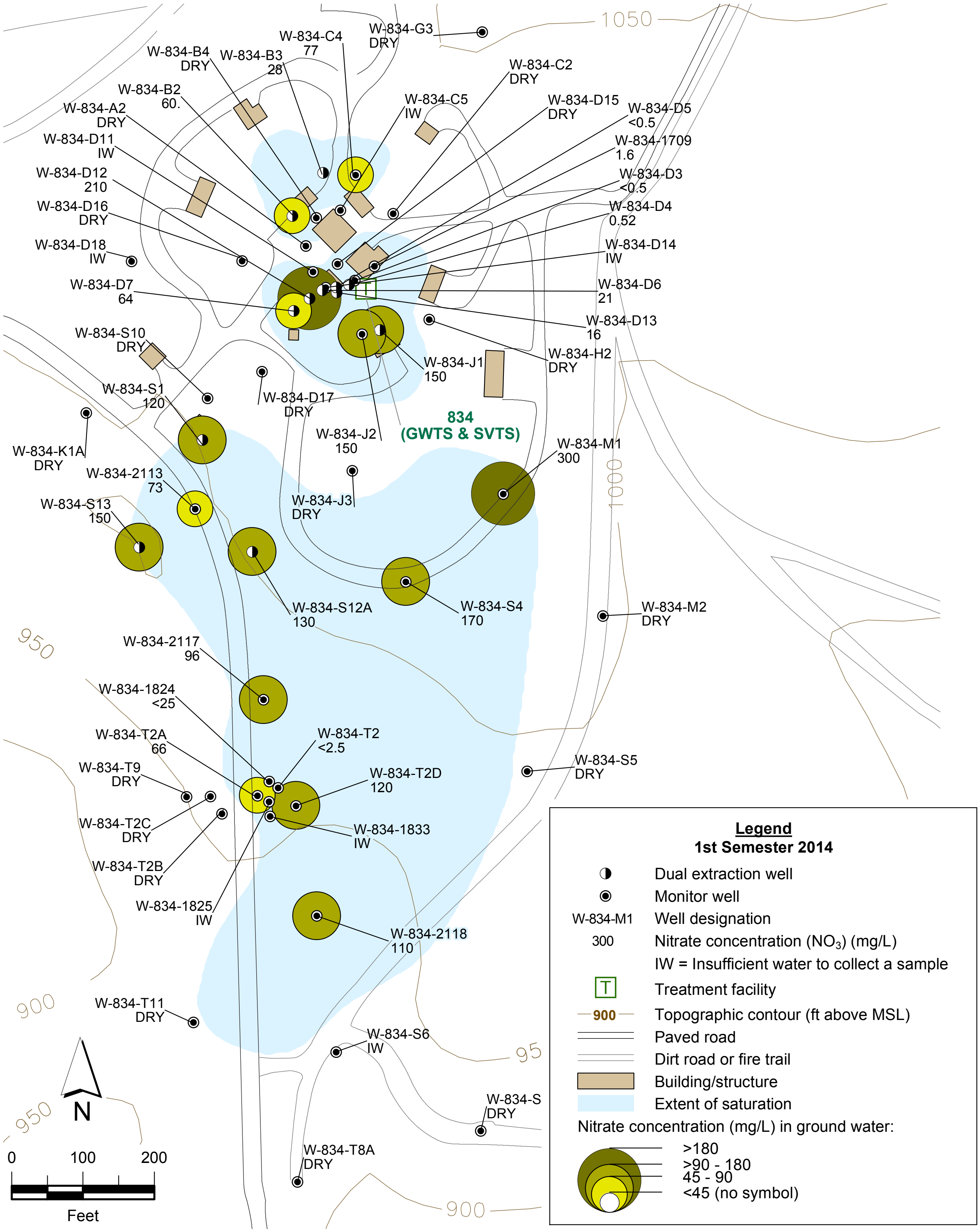

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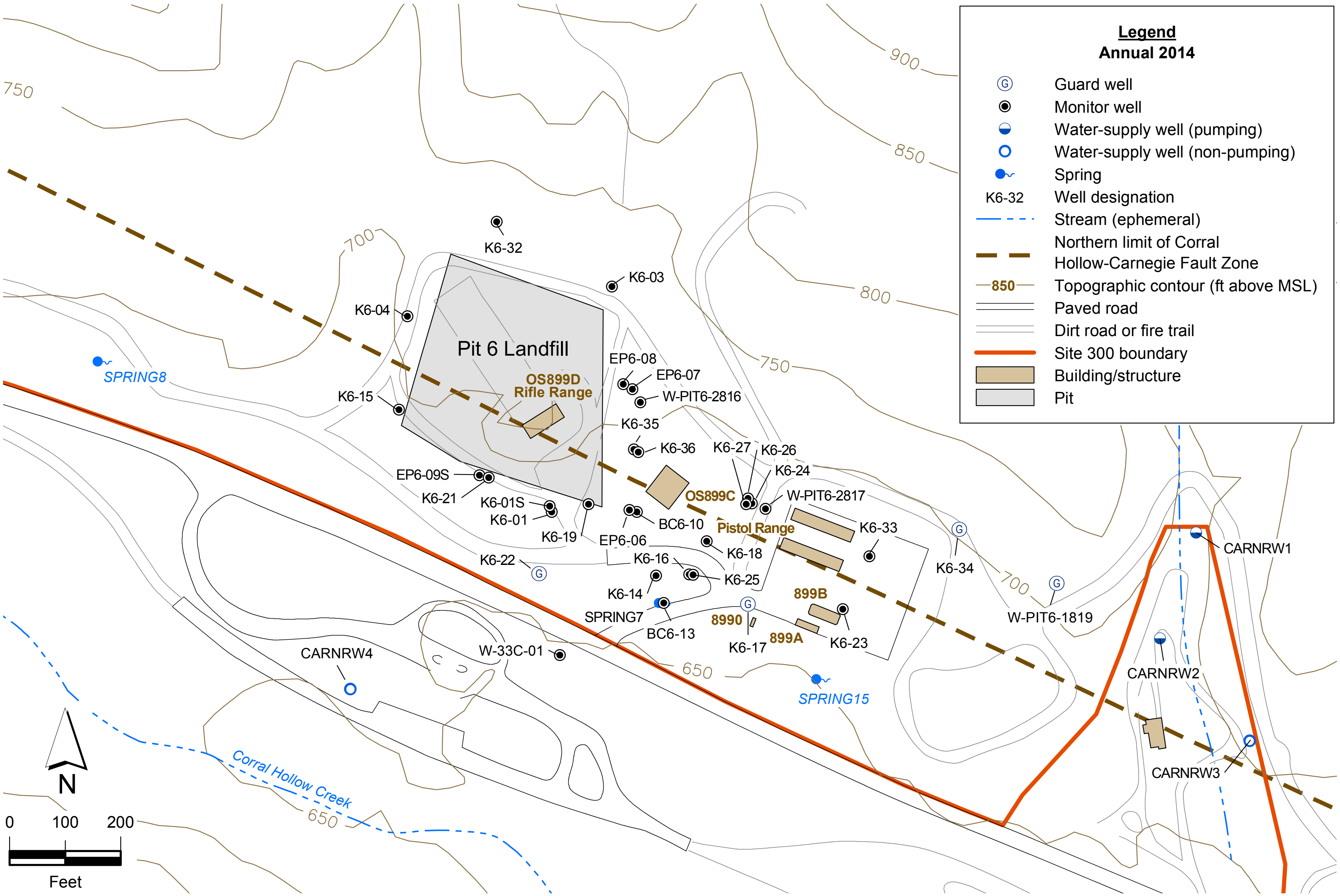

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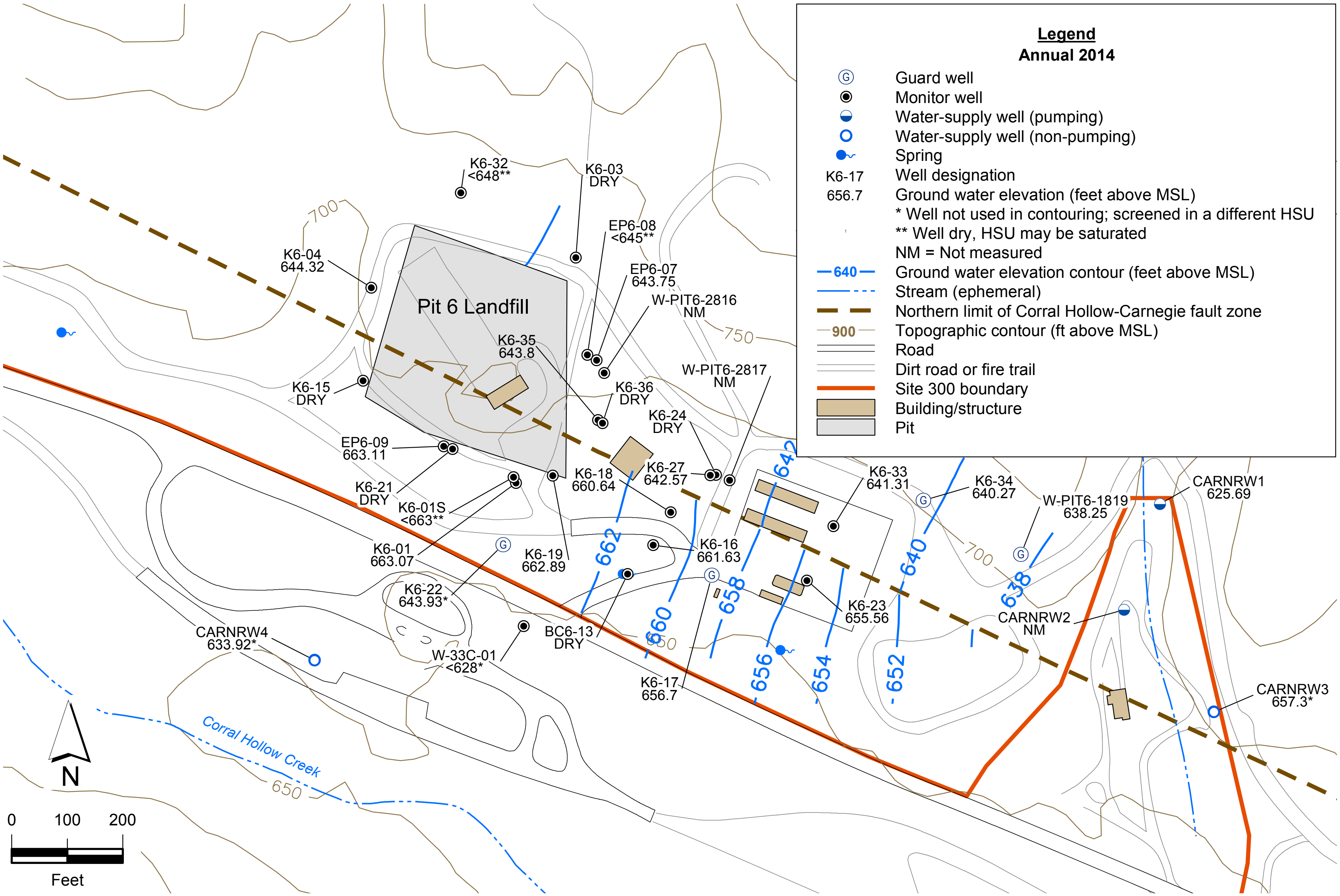

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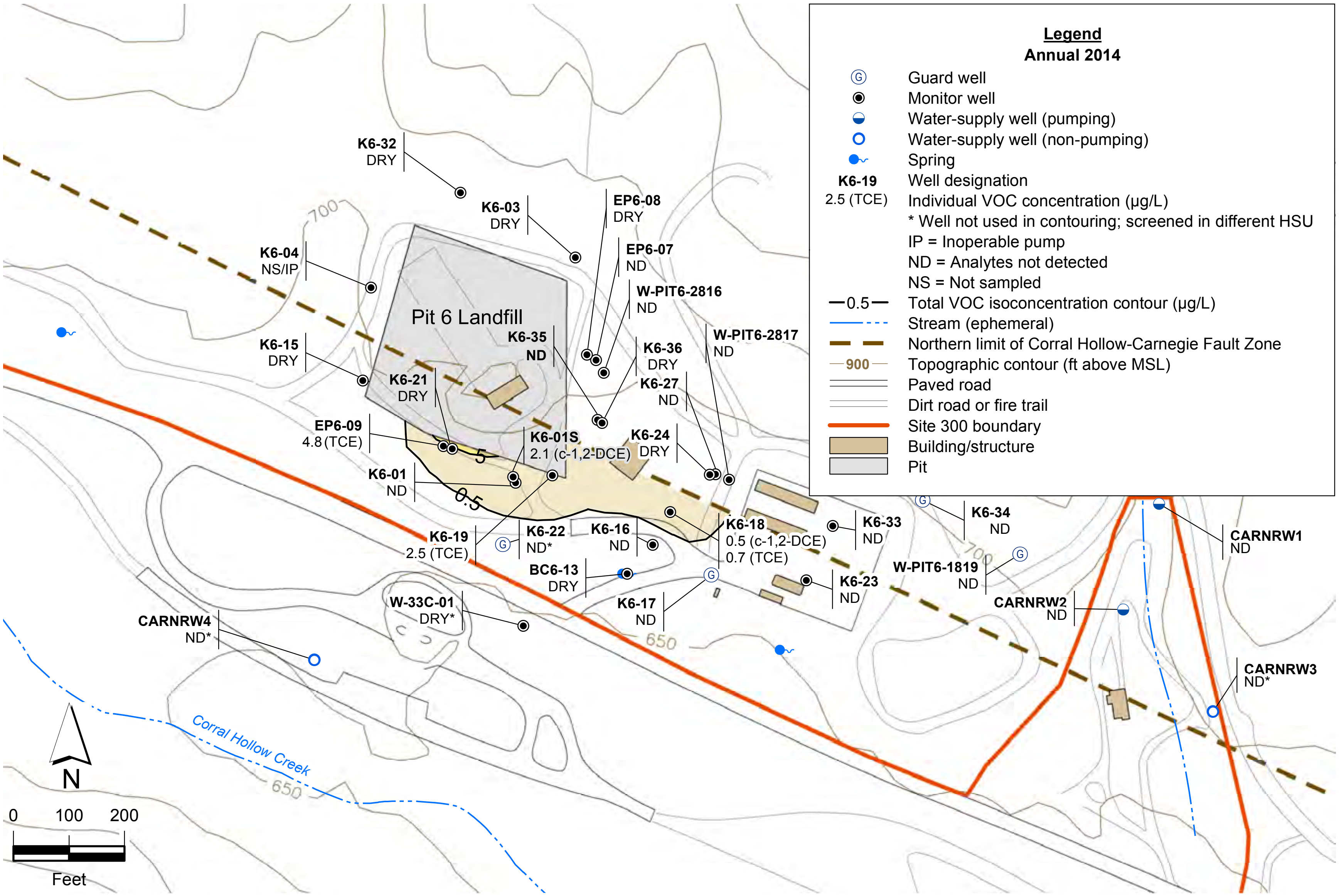

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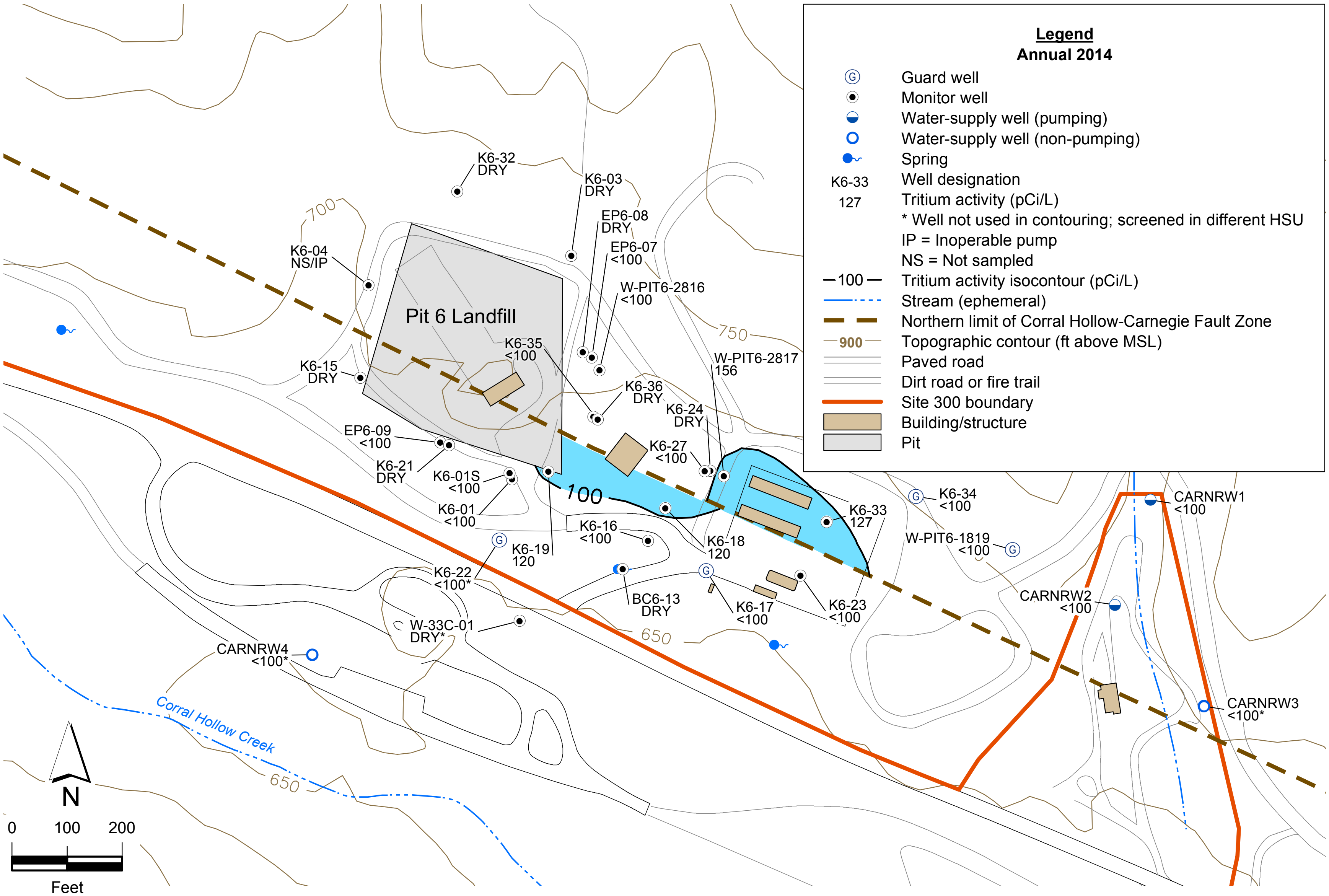

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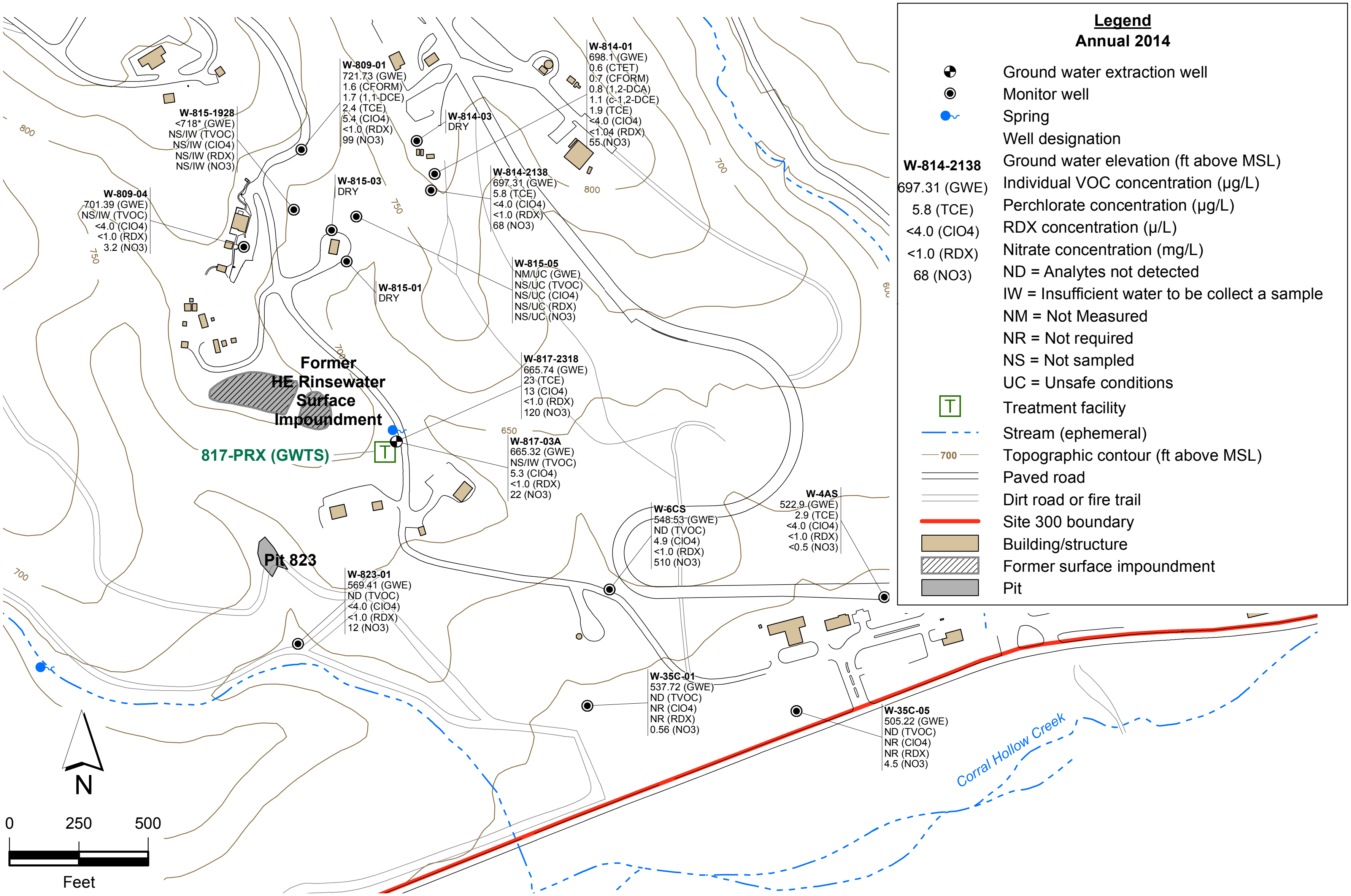

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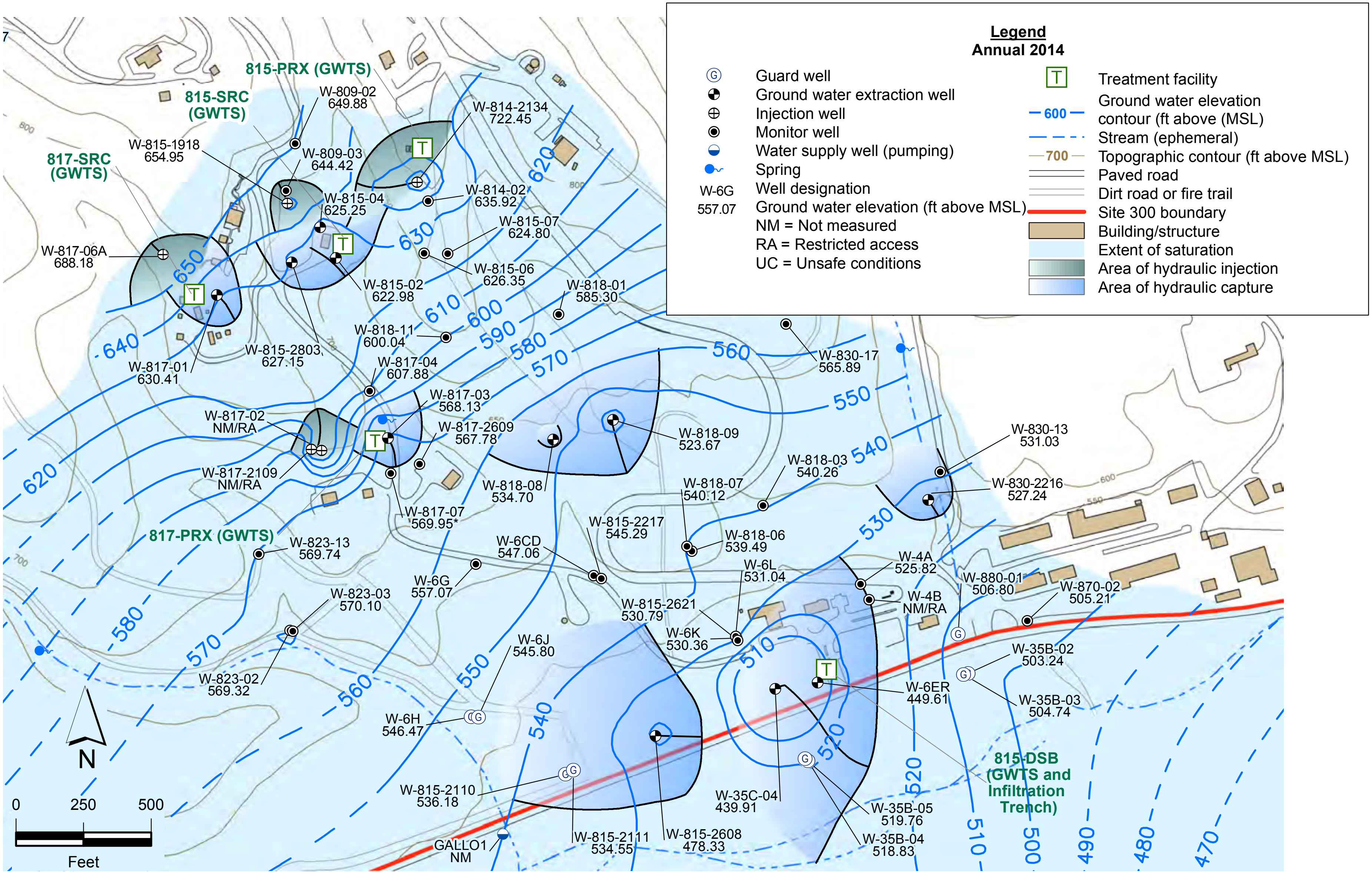

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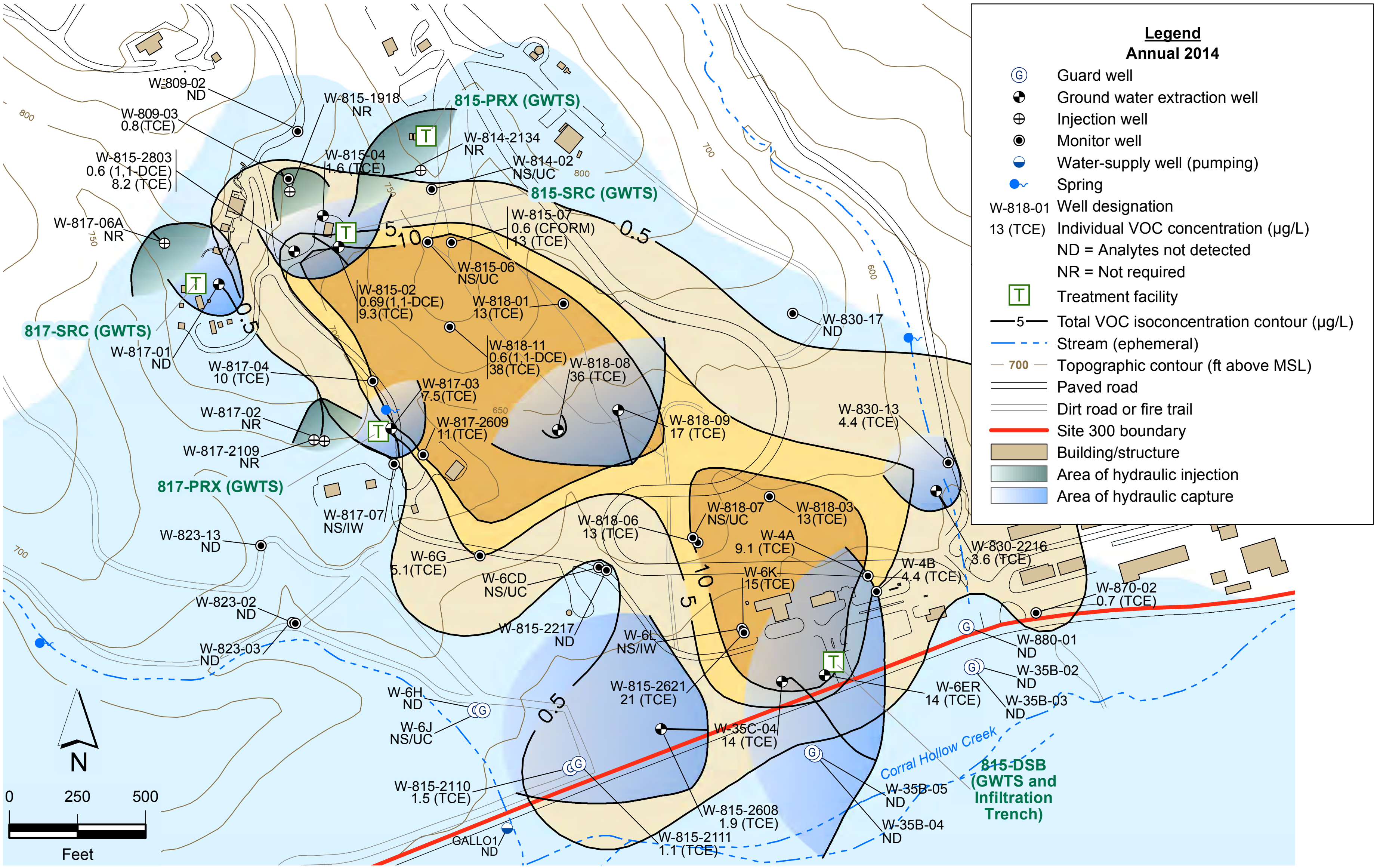

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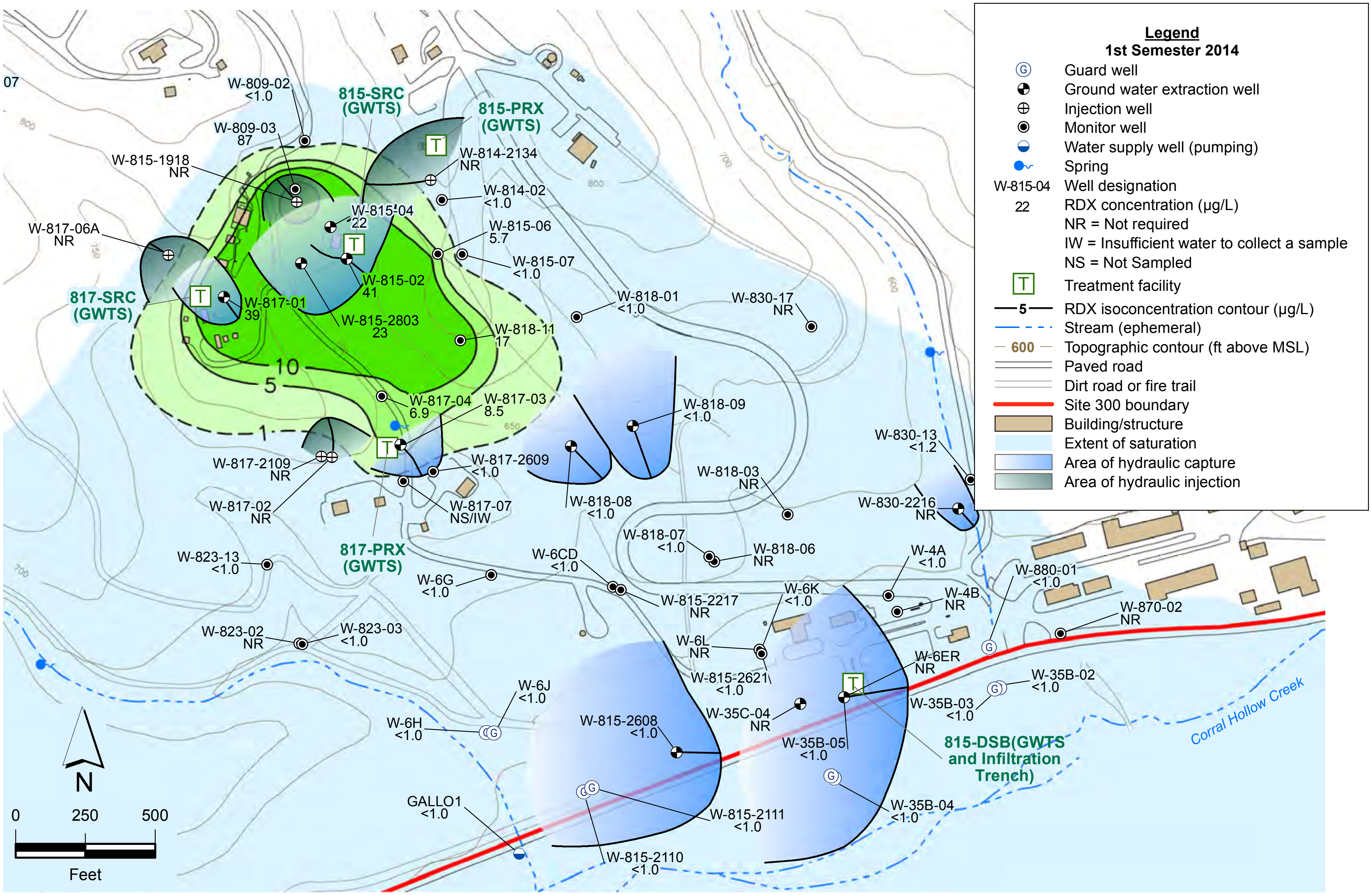

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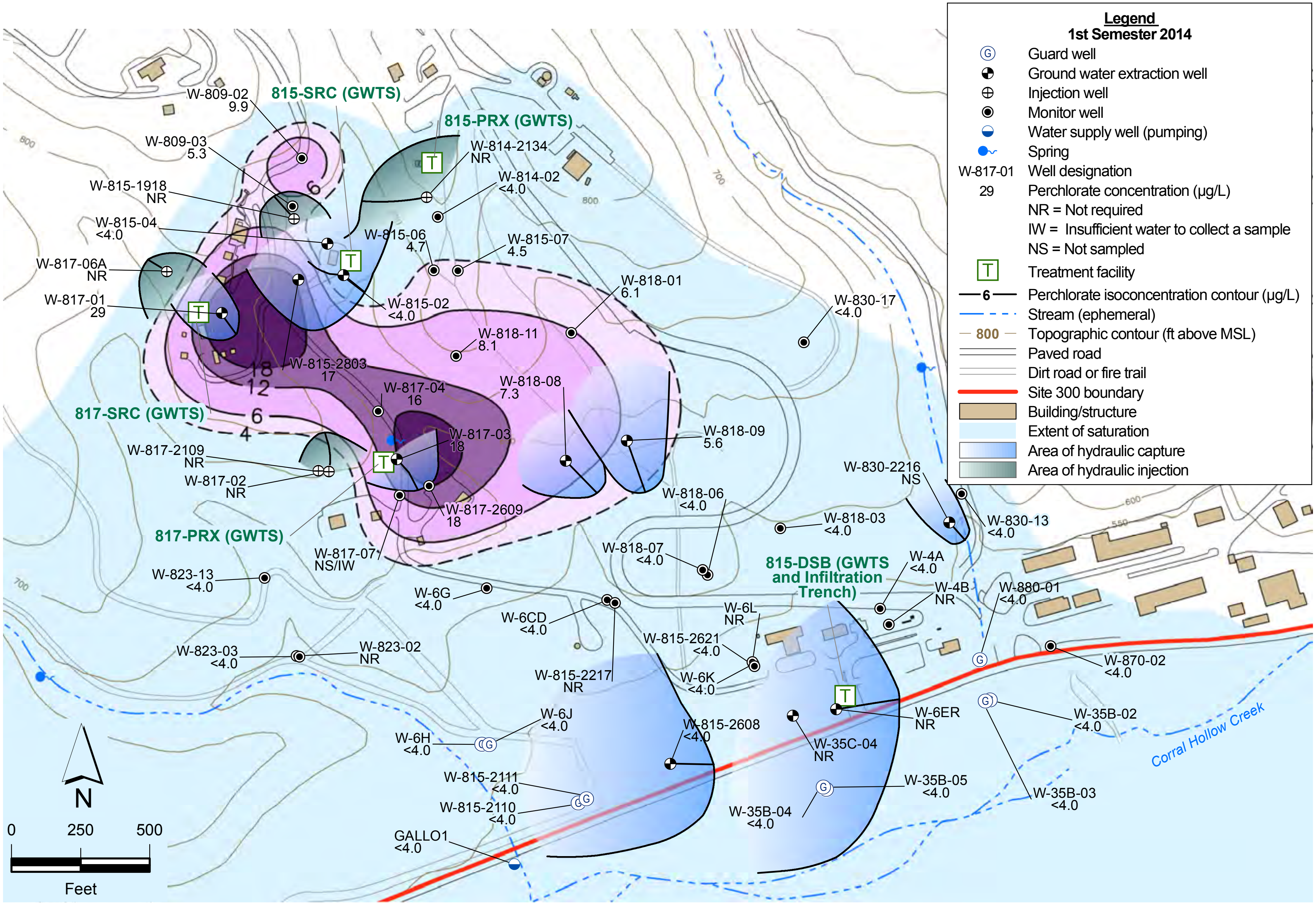

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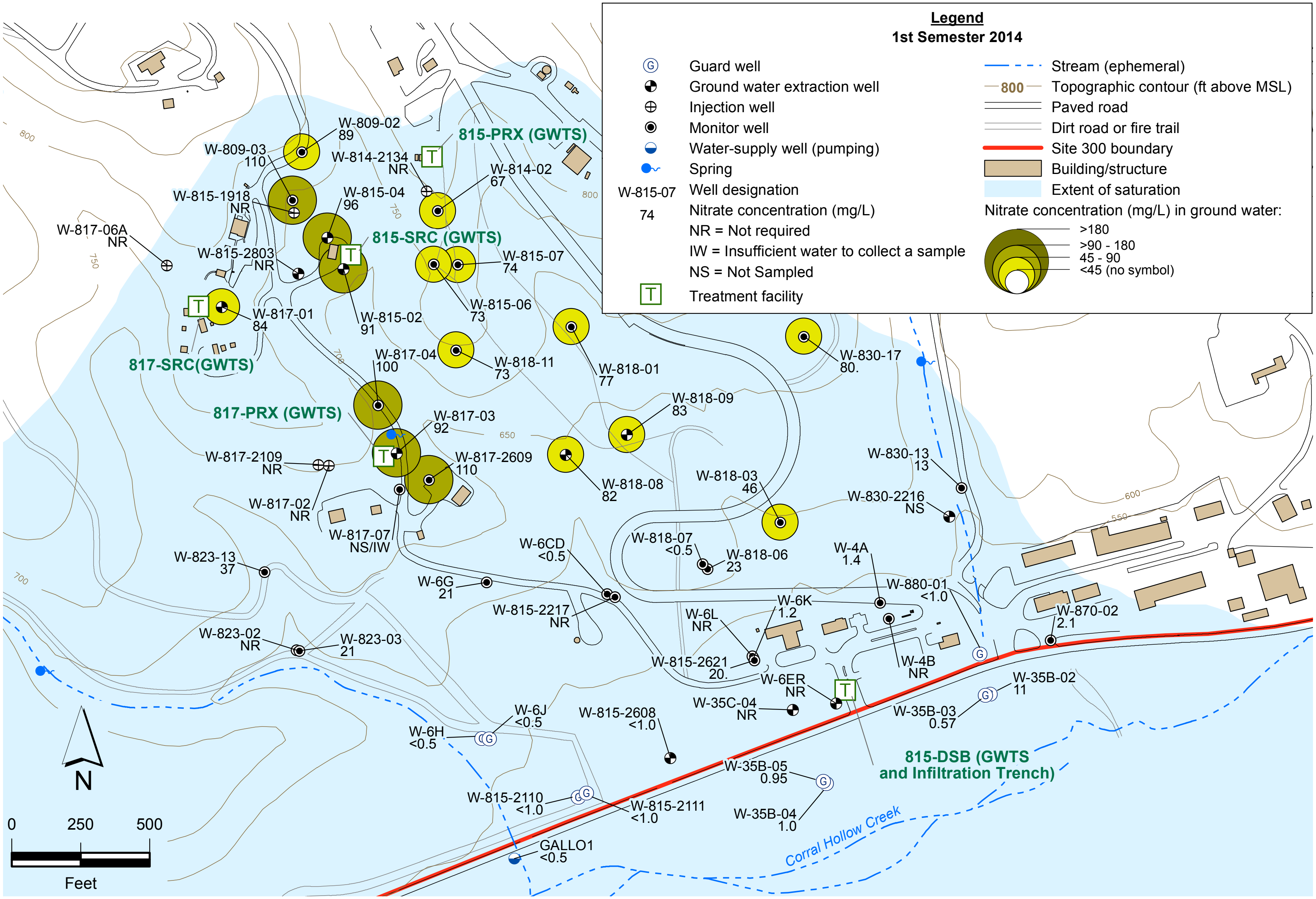

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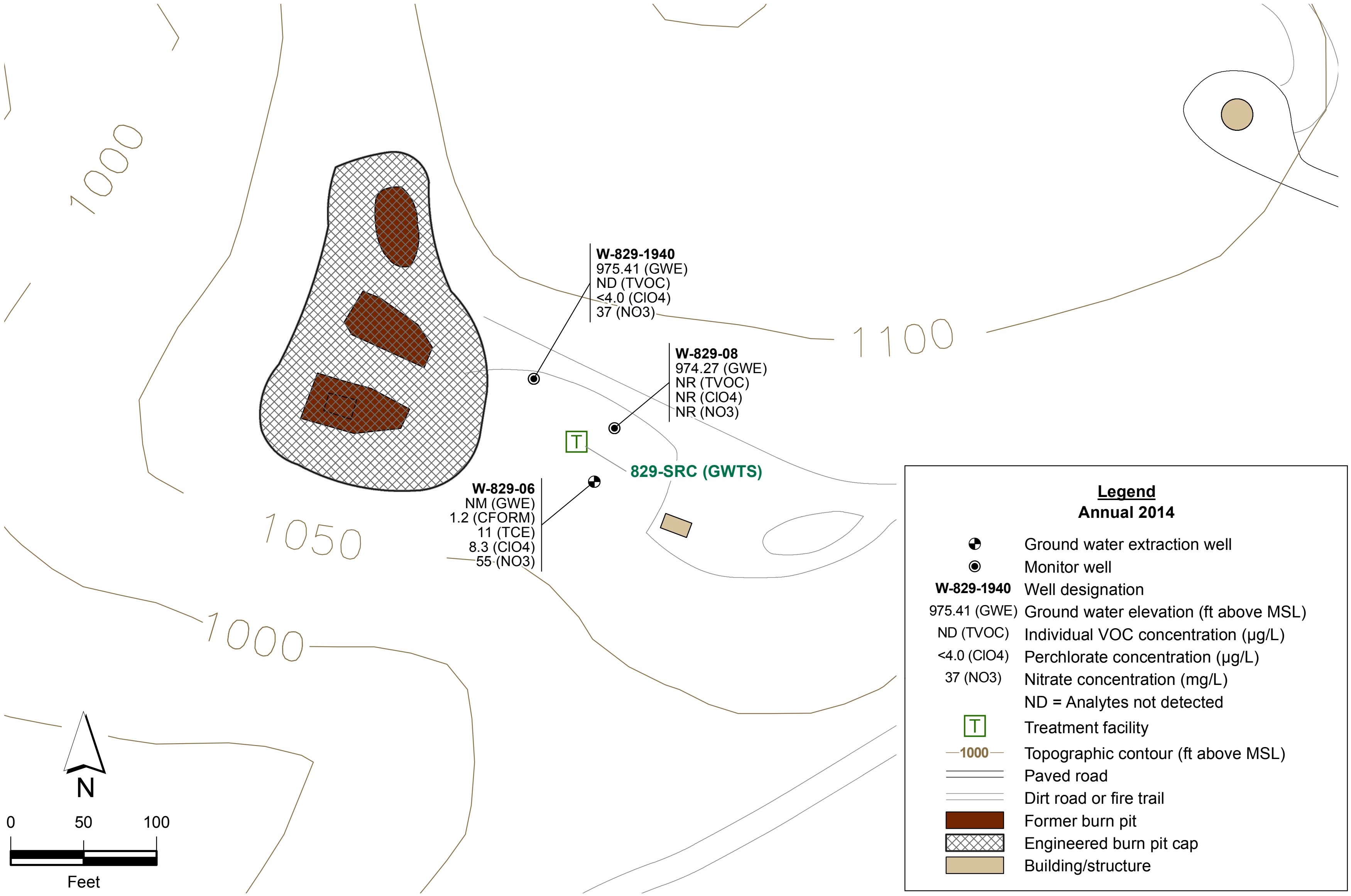

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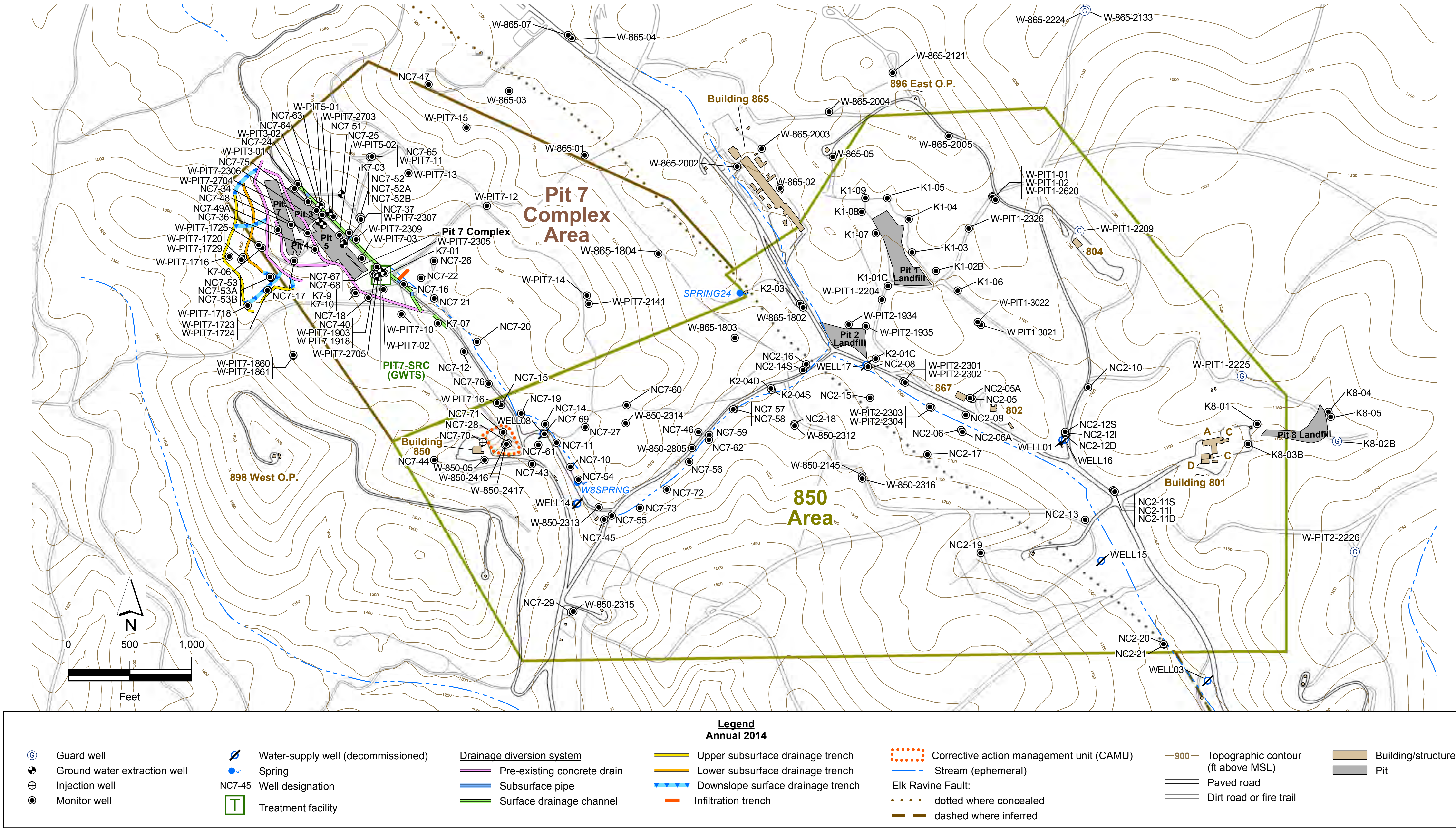

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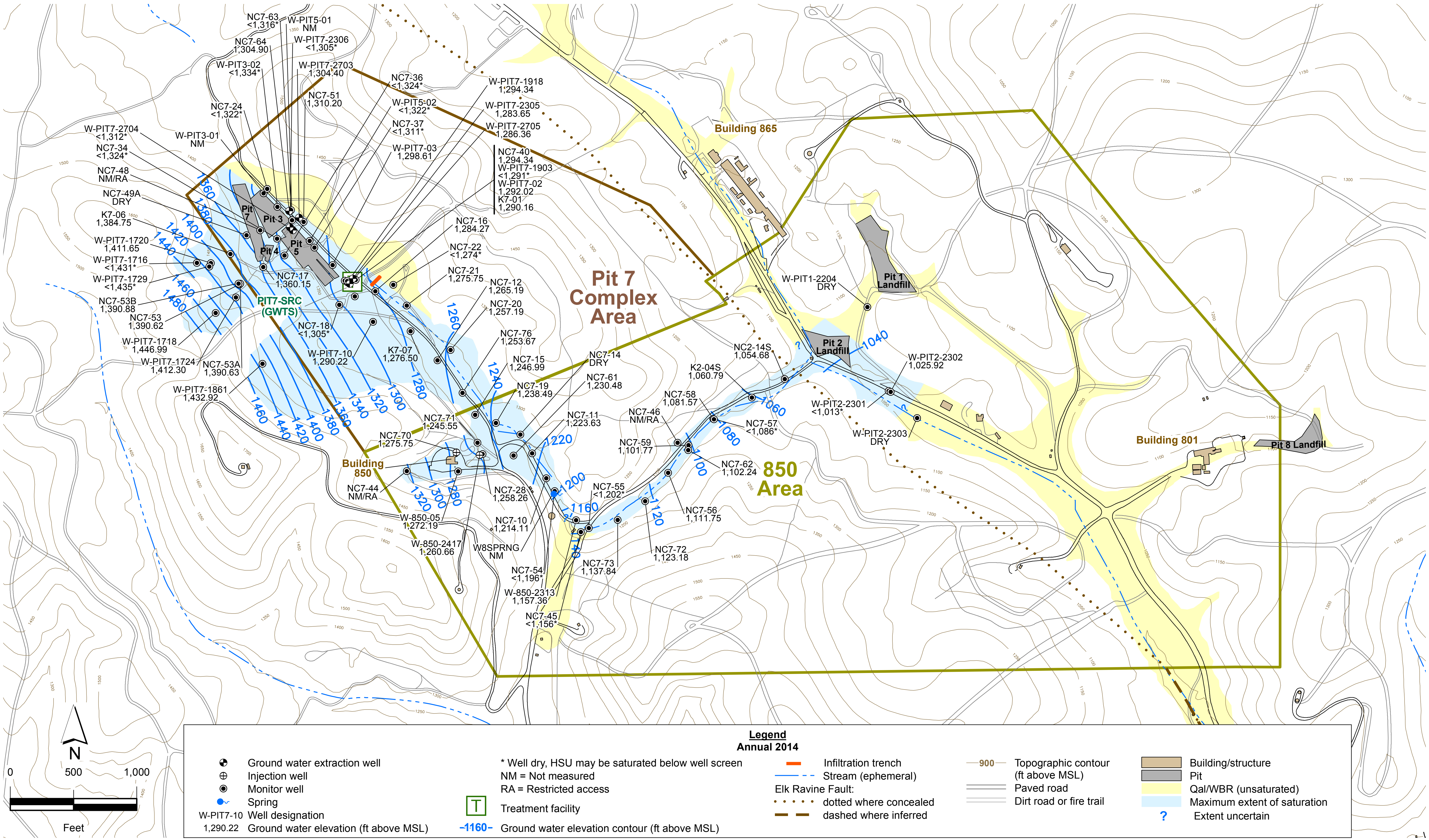

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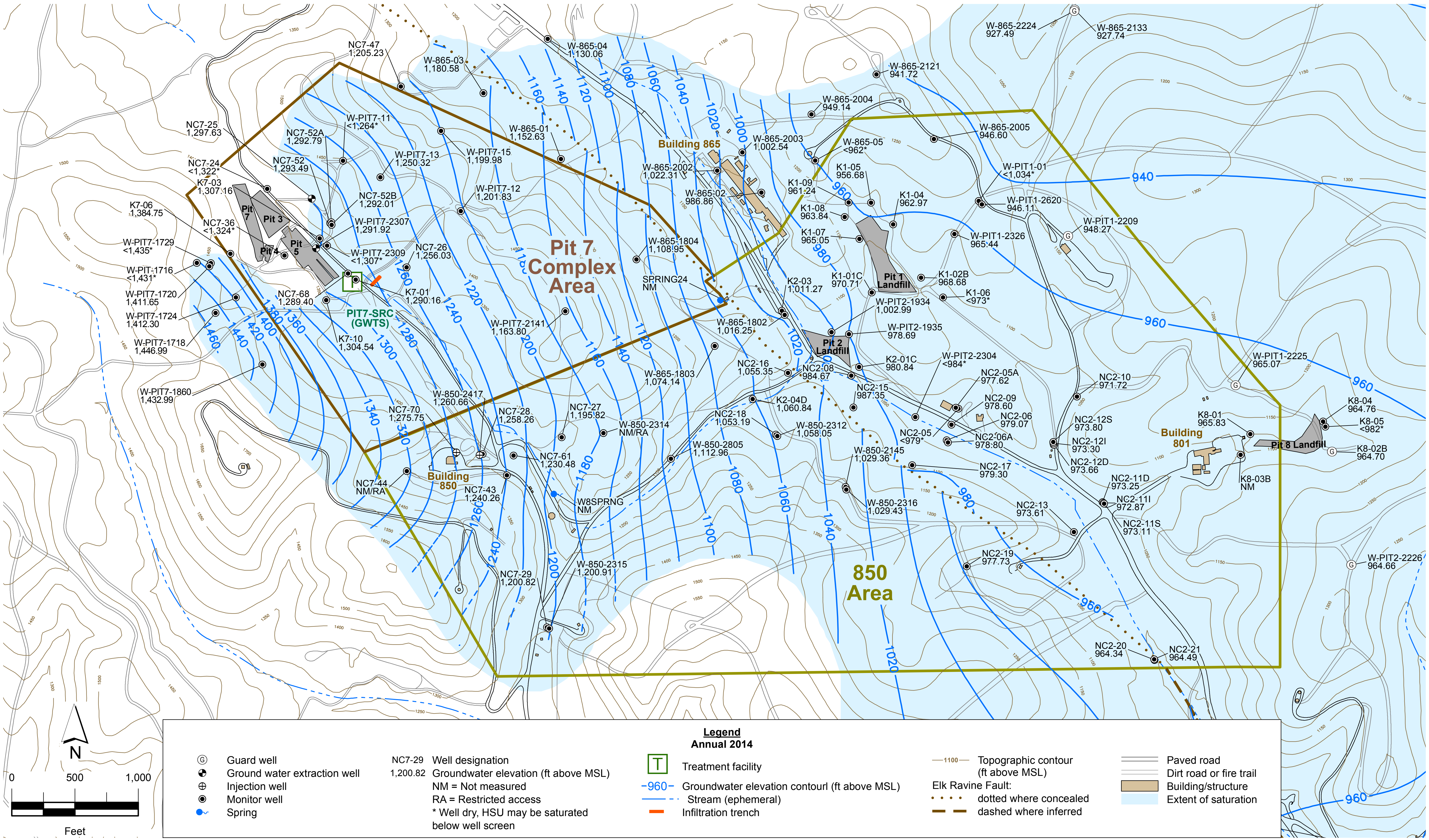

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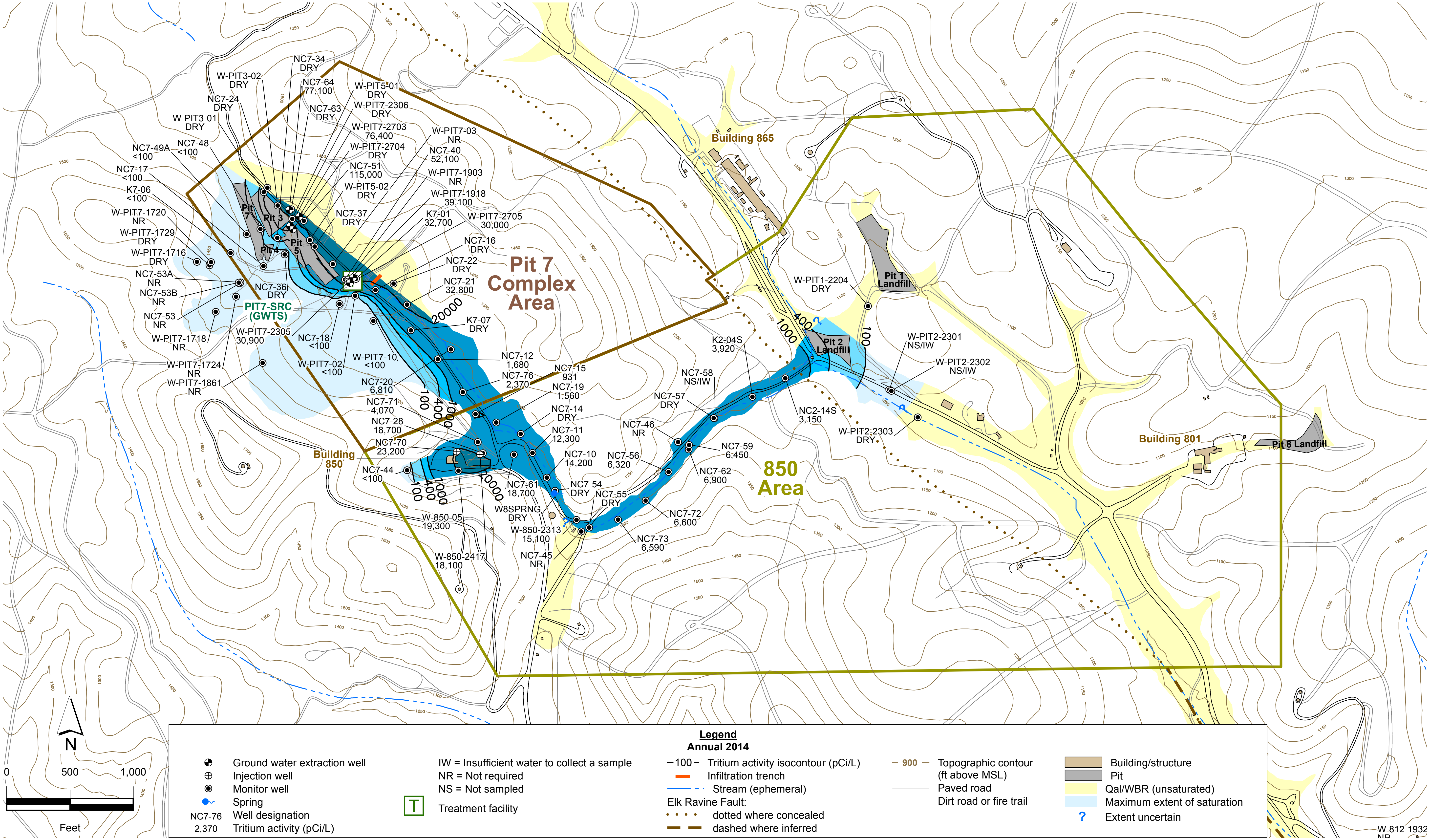

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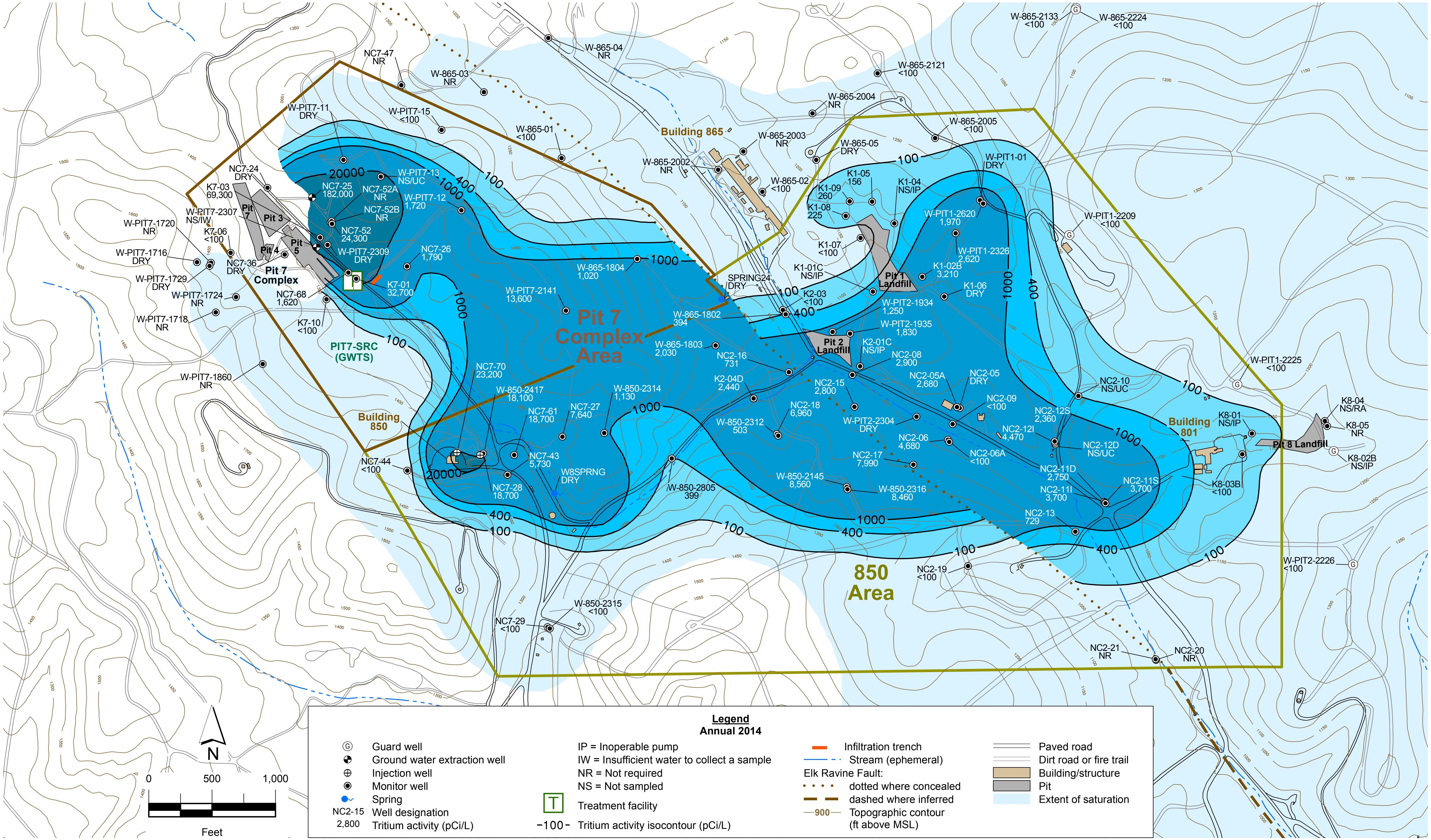


Figure 2.5-5. Building 850 and Pit 7 Complex area tritium activity isocontour map for the $Tnbs_1/Tnbs_0$ hydrostratigraphic unit.

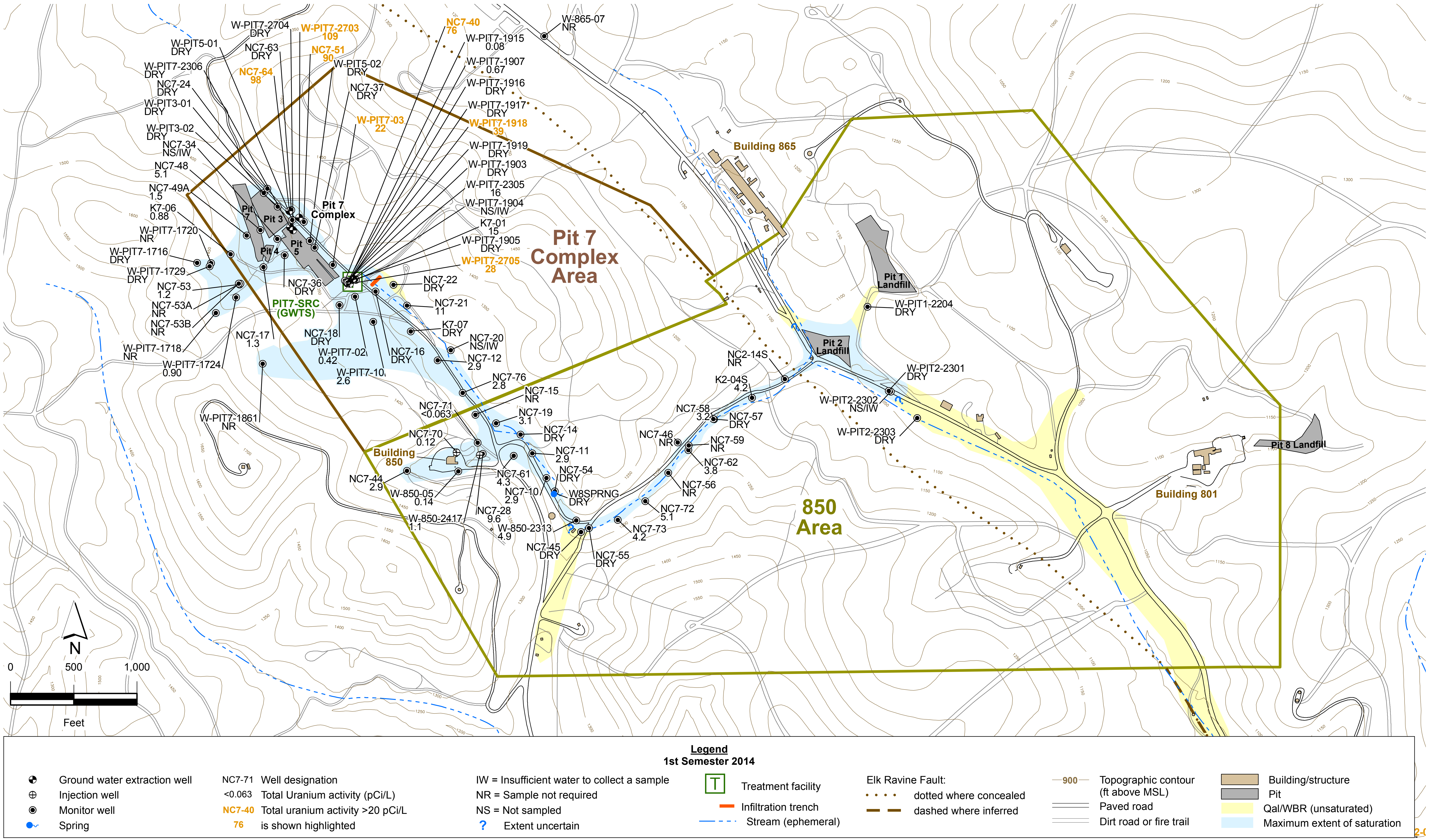


Figure 2.5-6. Building 850 and Pit 7 Complex area map showing ground water uranium activities for the Qal/WBR hydrostratigraphic unit.

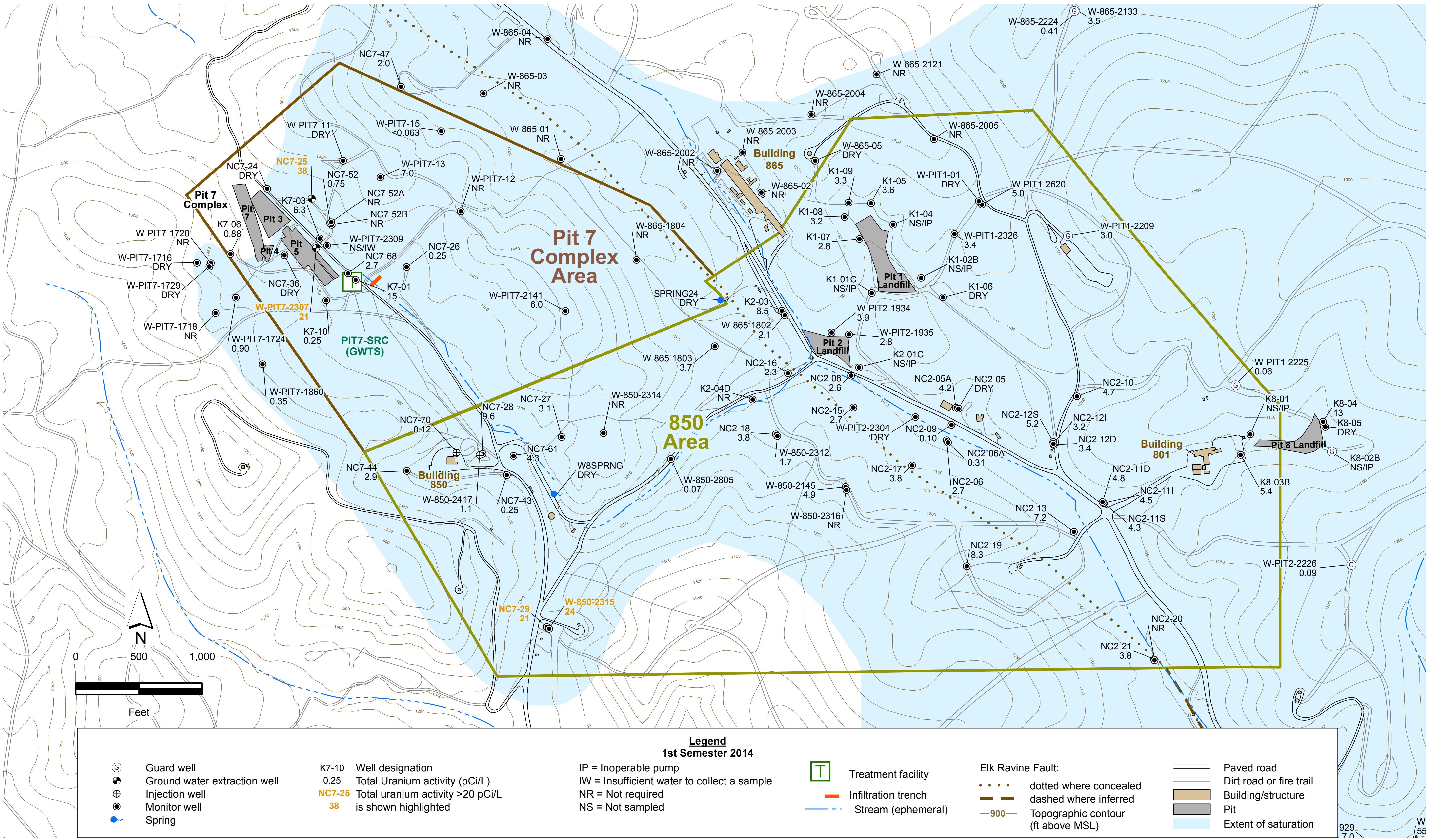


Figure 2.5-7. Building 850 and Pit 7 Complex area map showing ground water uranium activities for the $Tnbs_1/Tnbs_0$ hydrostratigraphic unit.

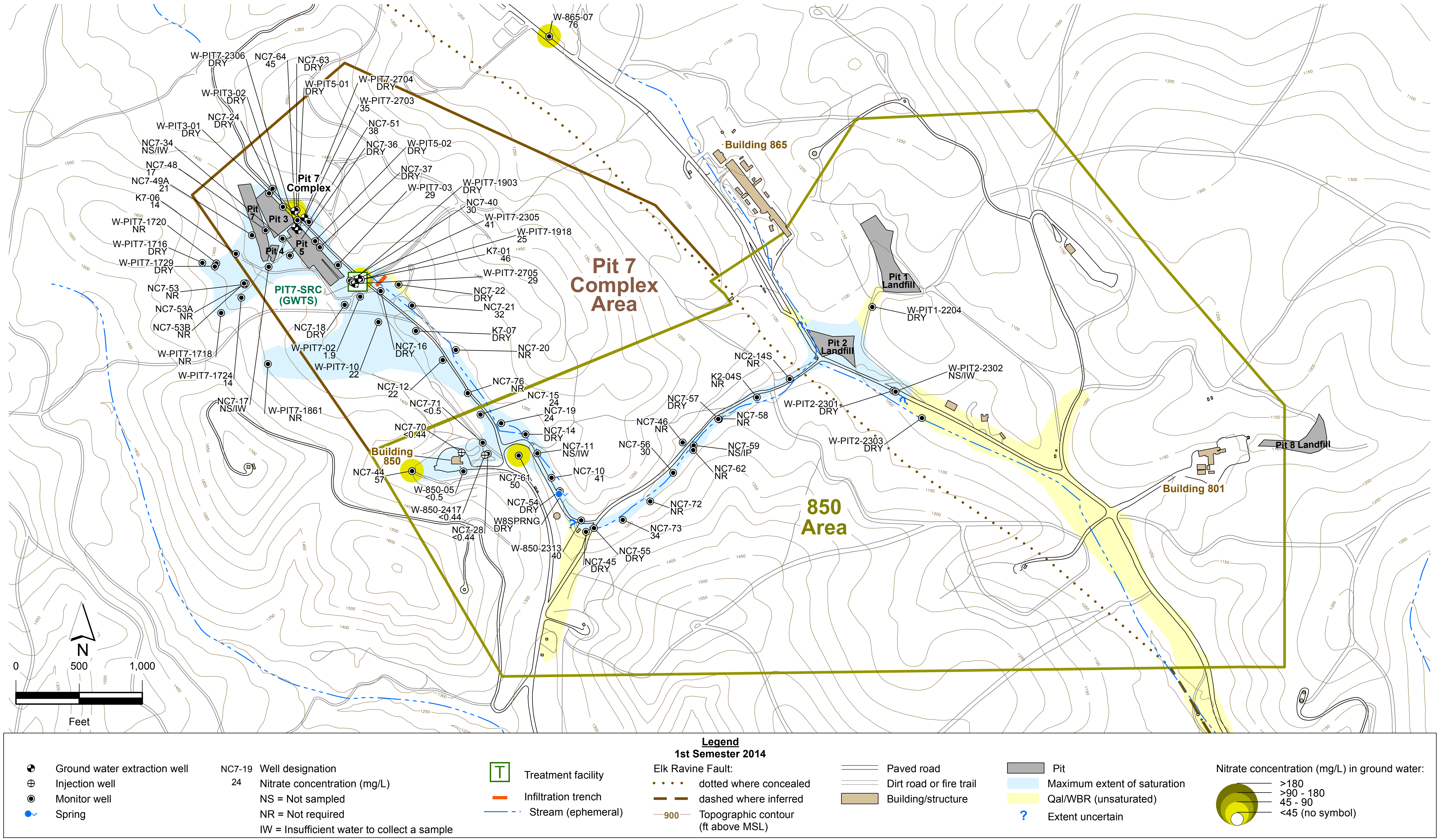


Figure 2.5-8. Building 850 and Pit 7 Complex area map showing nitrate concentrations for the Qal/WBR hydrostratigraphic unit.

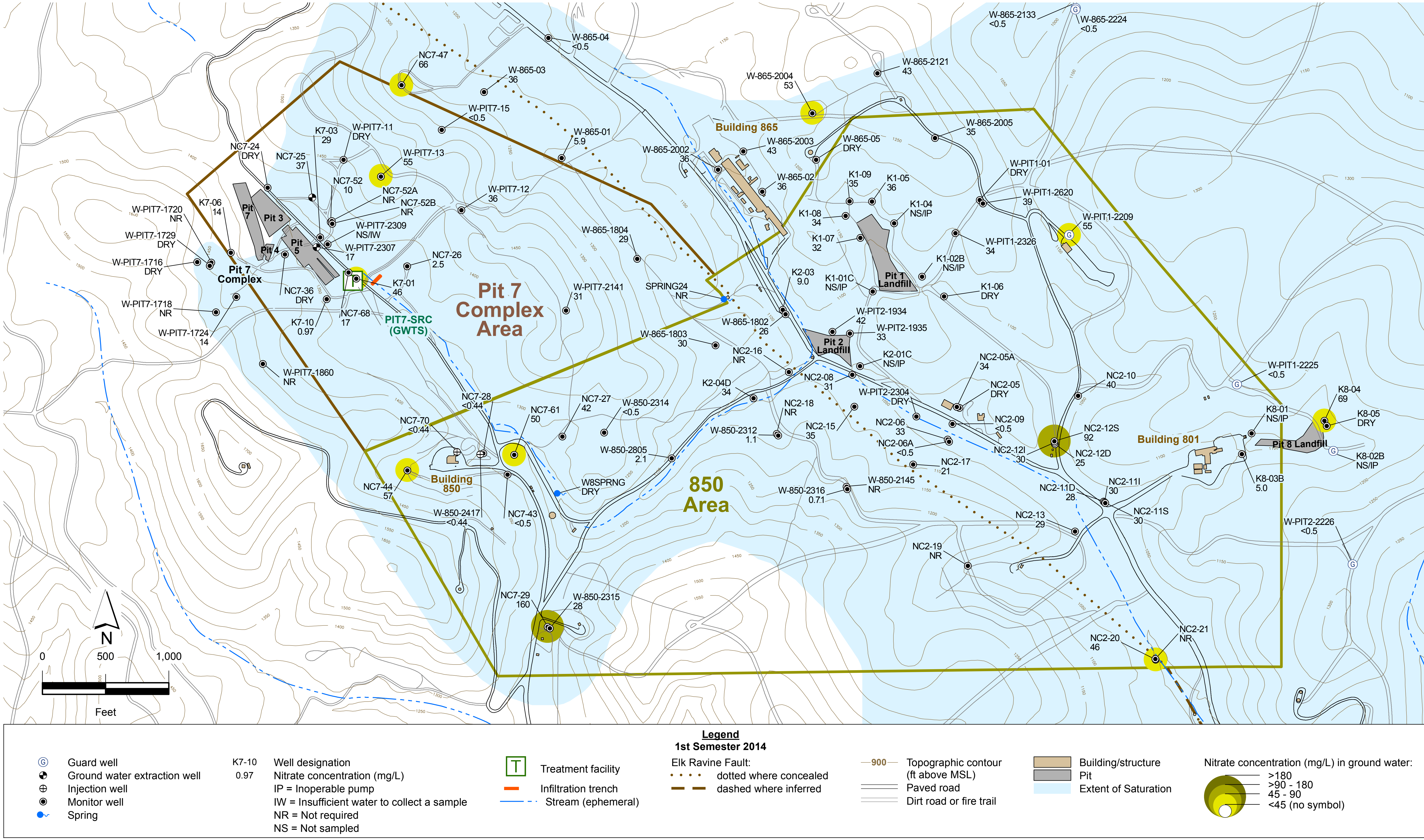


Figure 2.5-9. Building 850 and Pit 7 Complex area map showing nitrate concentrations for the Tnbs$_1$/Tnbs$_0$ hydrostratigraphic unit.

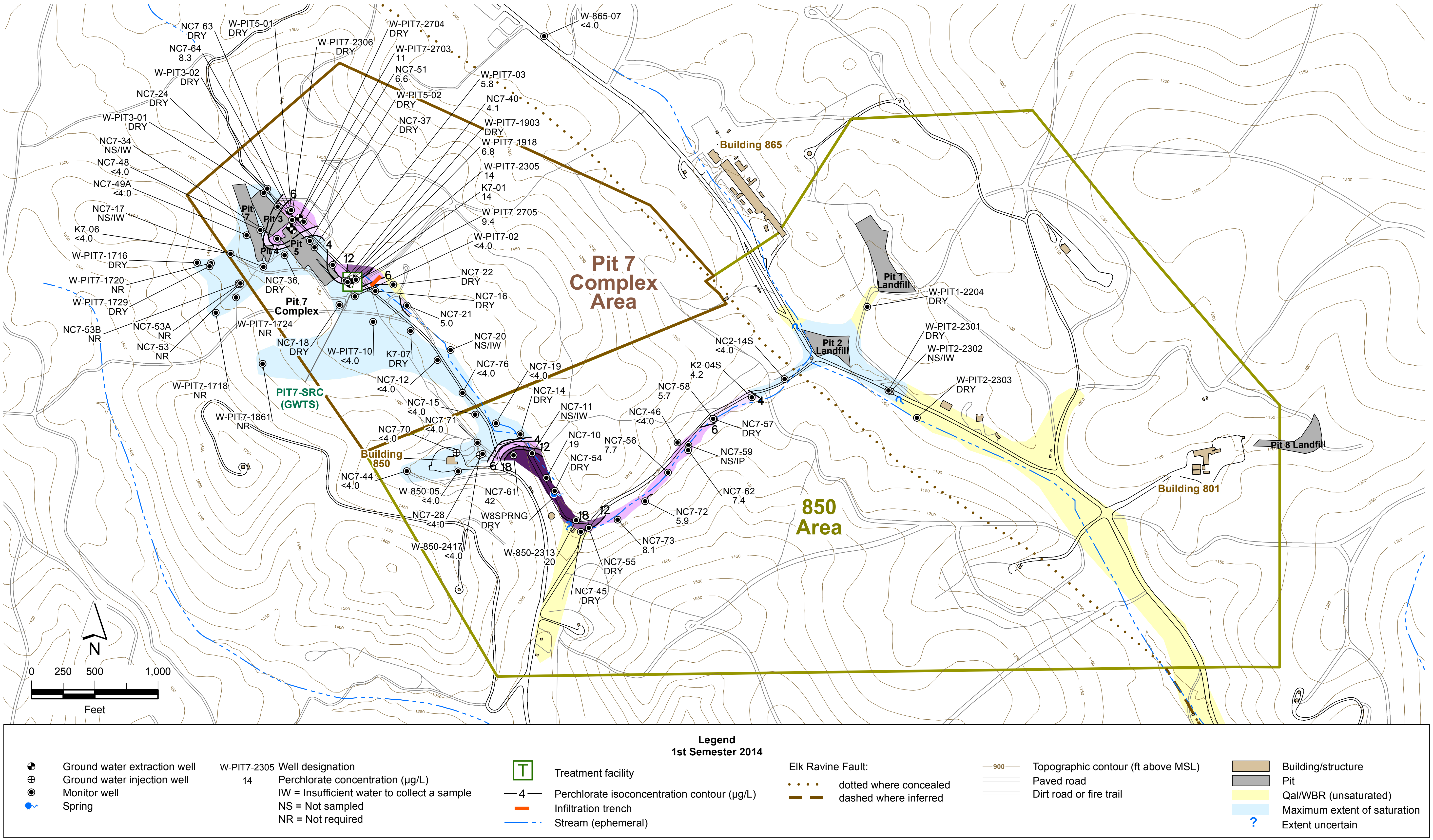


Figure 2.5-10. Building 850 and Pit 7 Complex area perchlorate isoconcentration contour map for the Qal/WBR hydrostratigraphic unit.

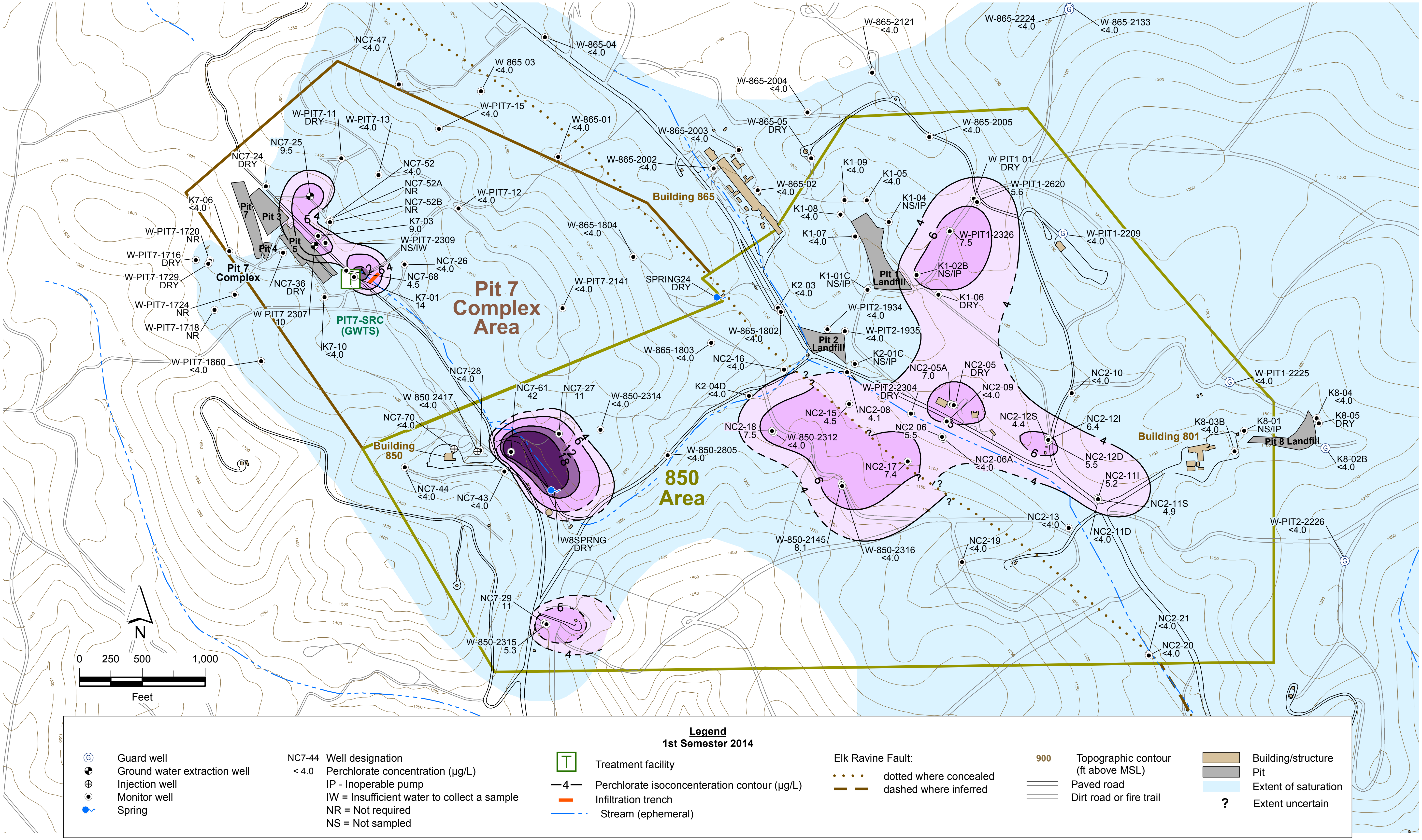


Figure 2.5-11. Building 850 and Pit 7 Complex area perchlorate isoconcentration contour map for the $Tnbs_1/Tnbs_0$ hydrostratigraphic unit.

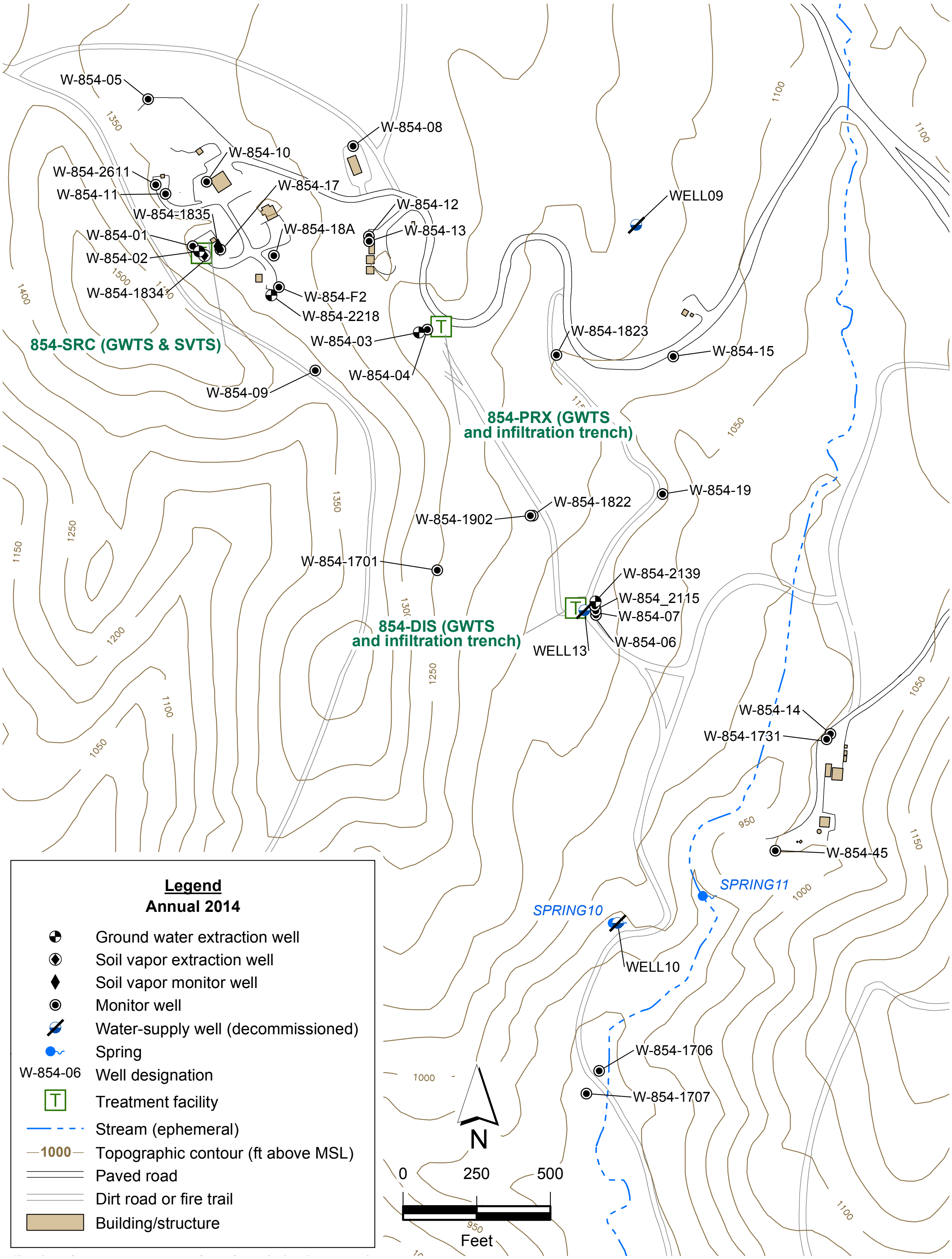


Figure 2.6-1. Building 854 Operable Unit site map showing monitor and extraction wells, and treatment facilities.

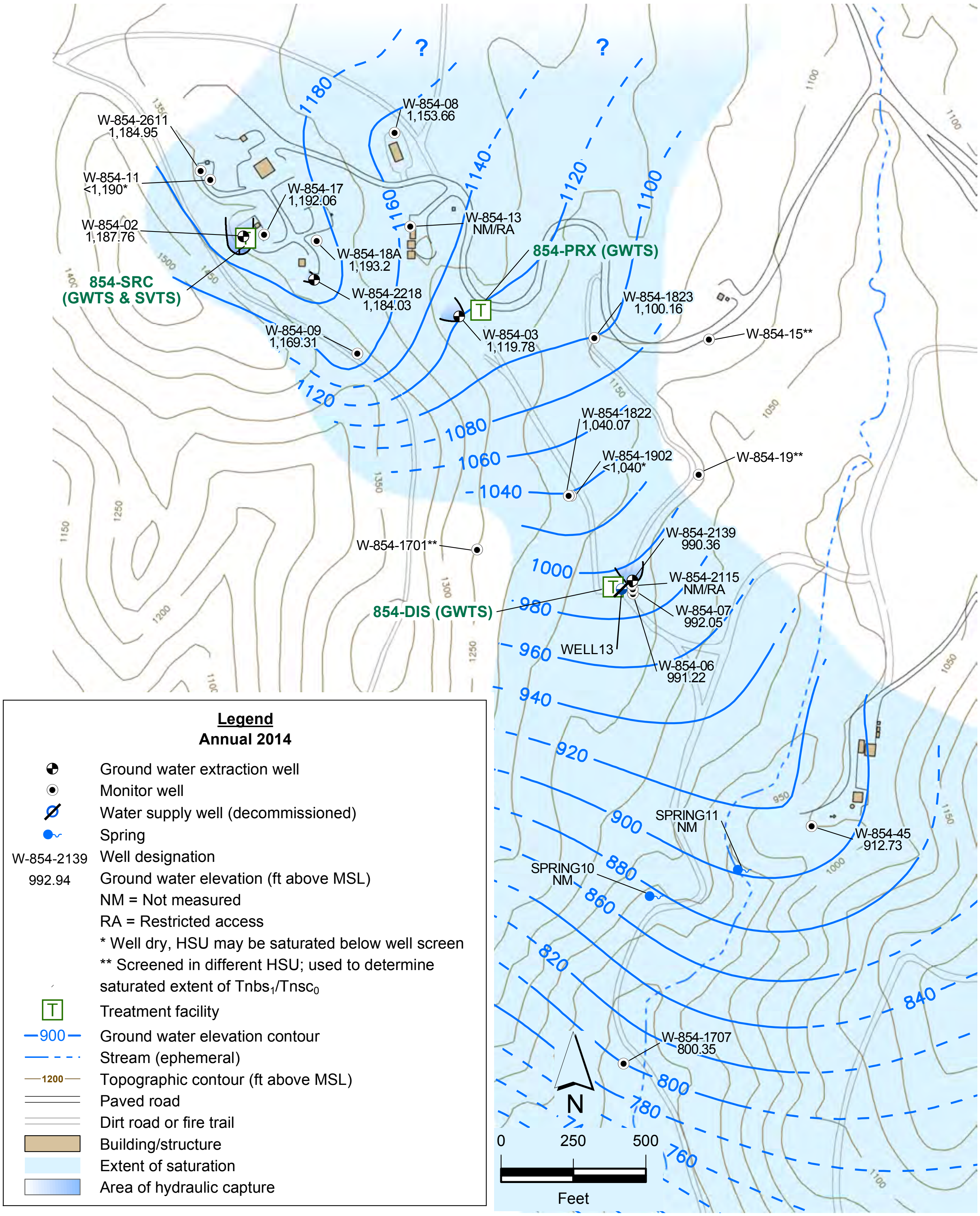


Figure 2.6-2. Building 854 Operable Unit ground water potentiometric surface map for the $Tnbs_1/Tnsc_0$ hydrostratigraphic unit.

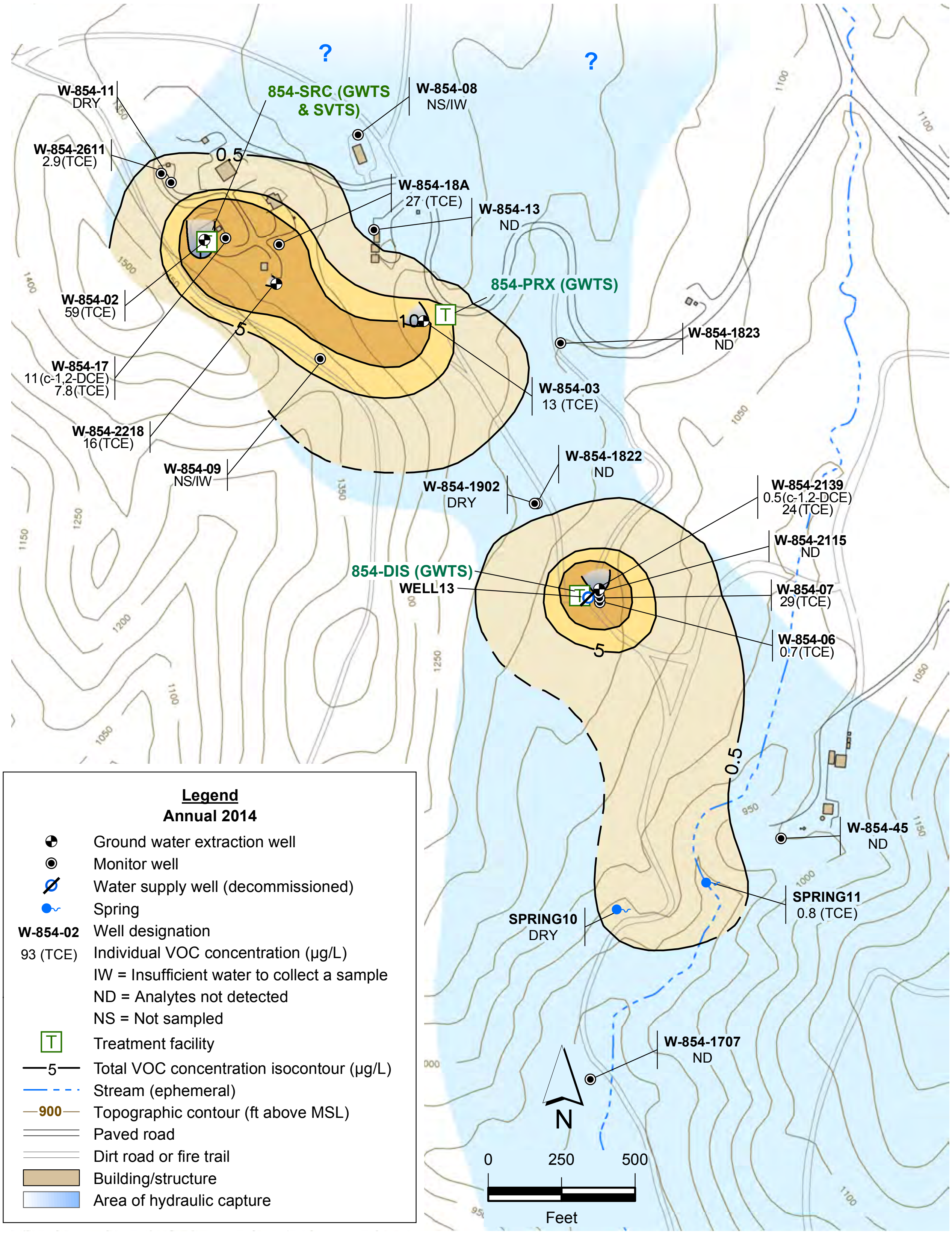


Figure 2.6-3. Building 854 Operable Unit total VOC isoconcentration contour map and individual VOC concentrations for the $Tnbs_1/Tnsc_0$ hydrostratigraphic unit.

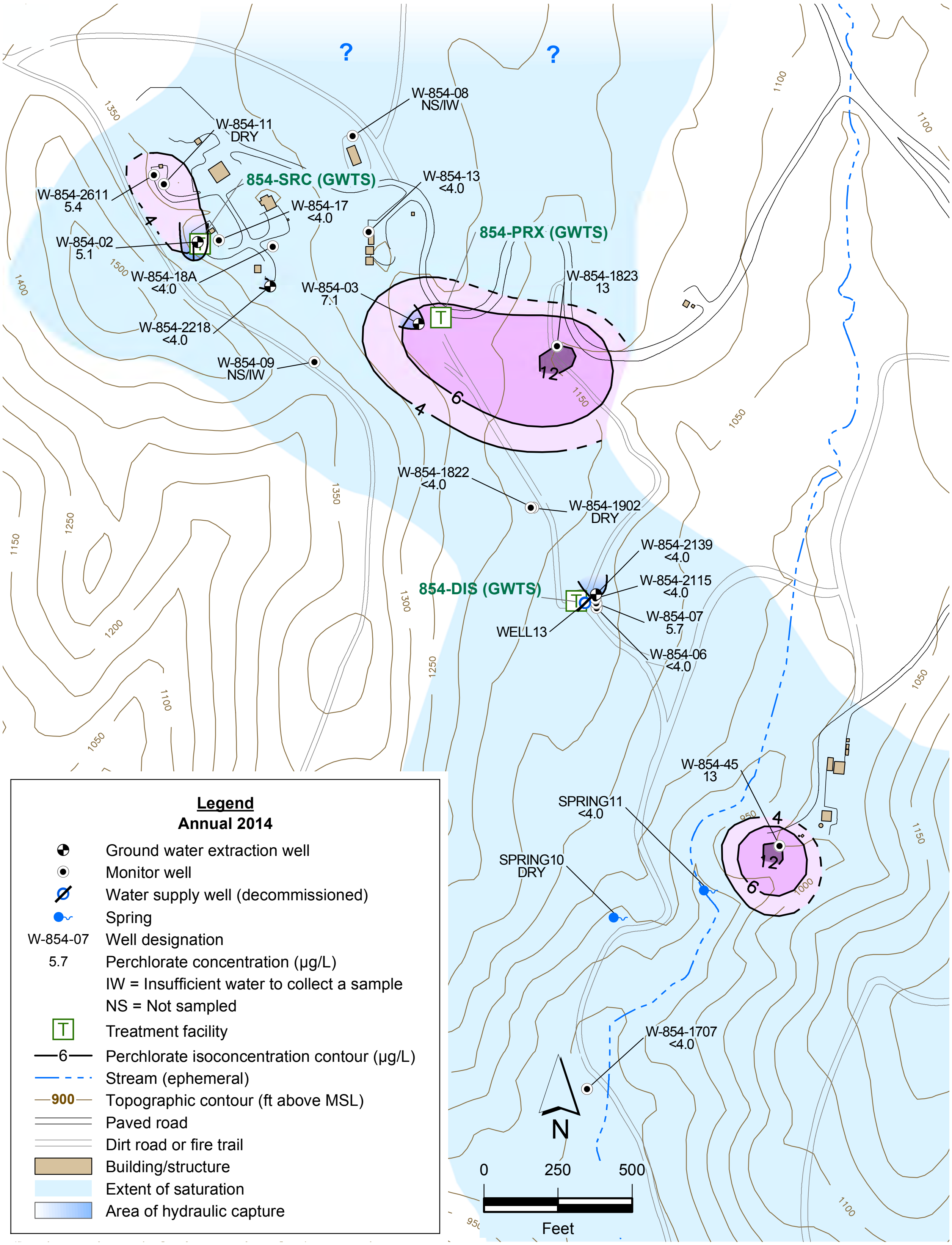


Figure 2.6-4. Building 854 Operable Unit perchlorate isoconcentration contour map for the $Tnbs_1/Tnsc_0$ hydrostratigraphic unit.

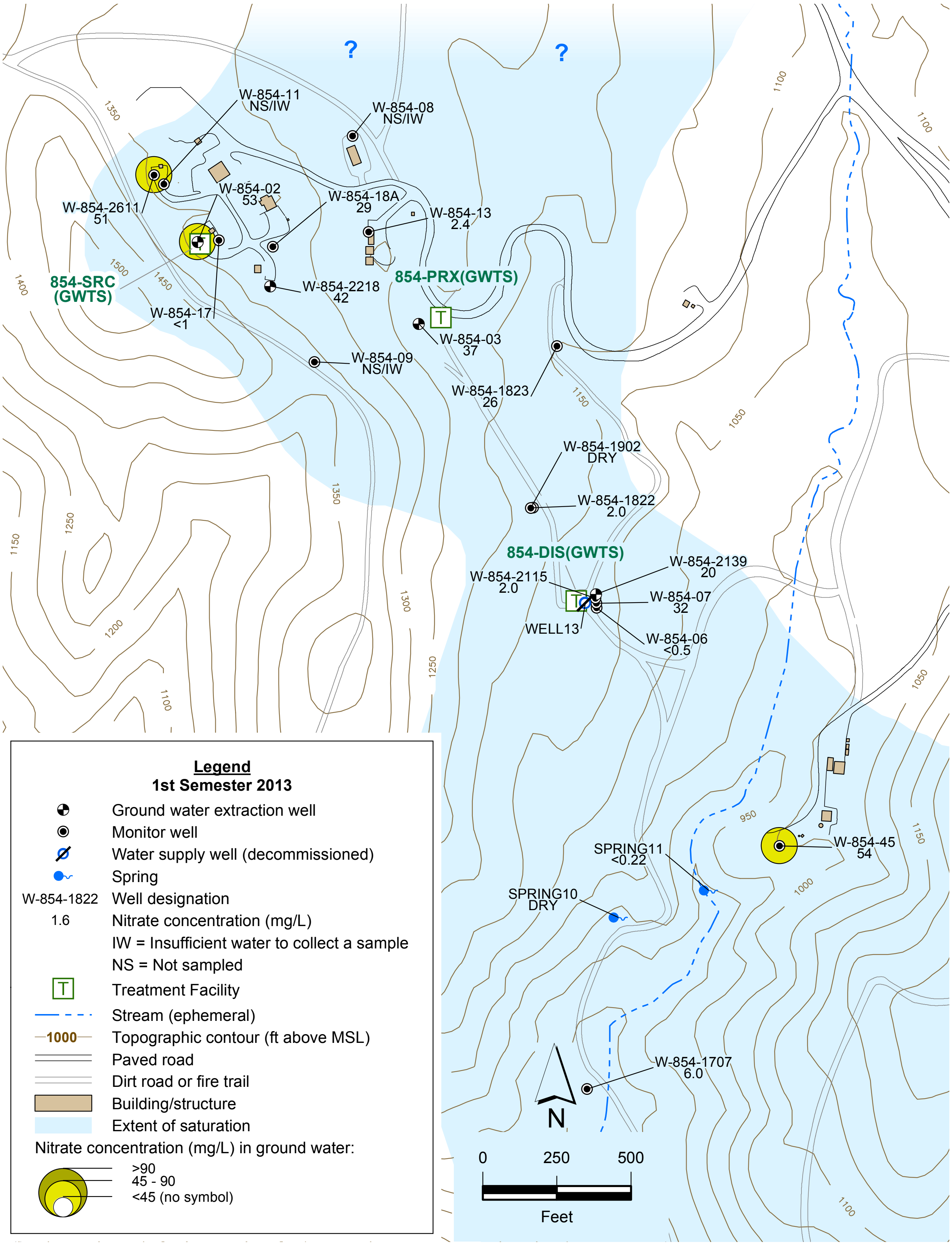


Figure 2.6-5. Building 854 Operable Unit map showing nitrate concentrations for the $Tnbs_1/Tnsc_0$ hydrostratigraphic unit.

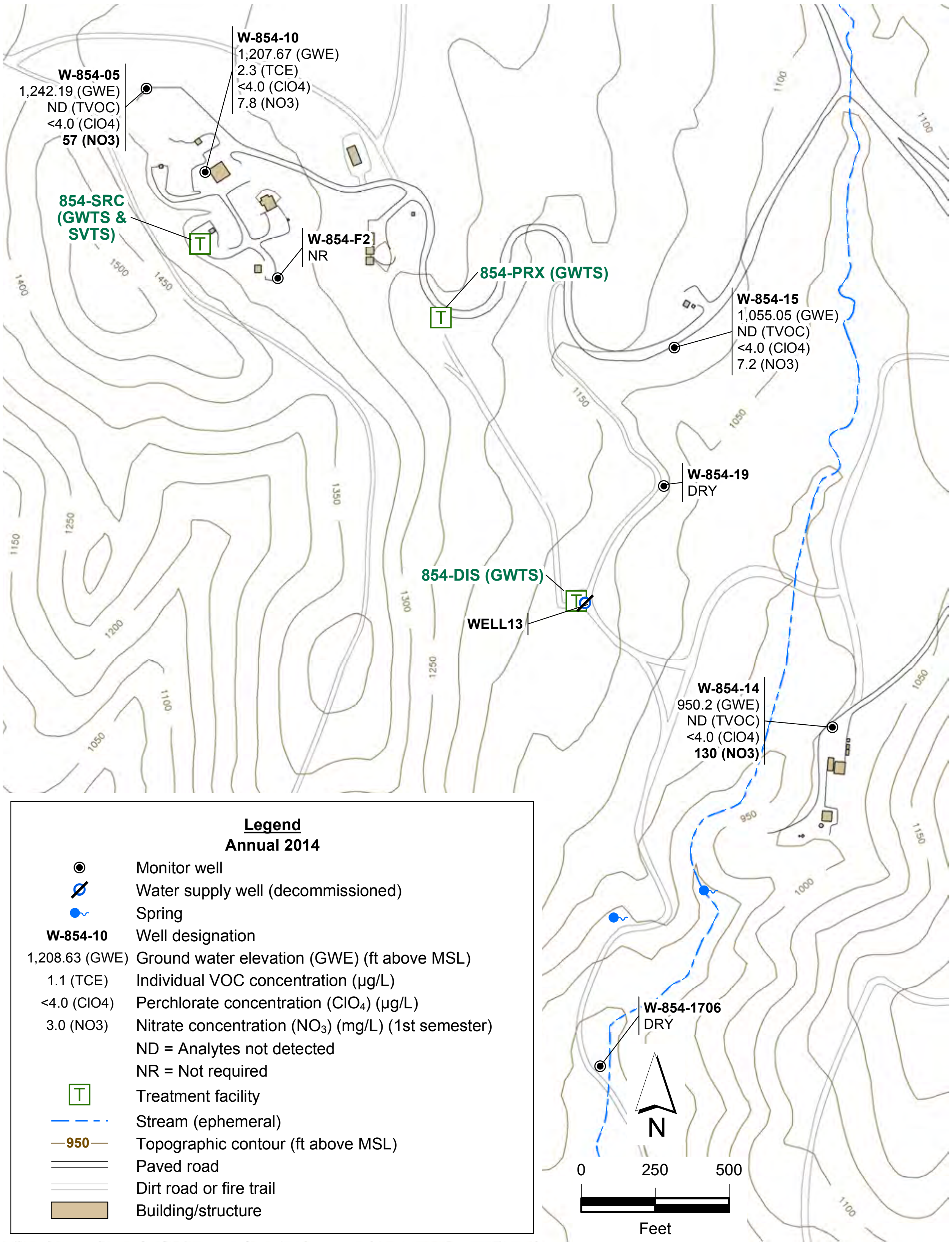


Figure 2.6-6. Building 854 Operable Unit map showing ground water elevations, individual VOC, perchlorate, and nitrate concentrations for the combined Qls and Tnbs$_1$ hydrostratigraphic units.

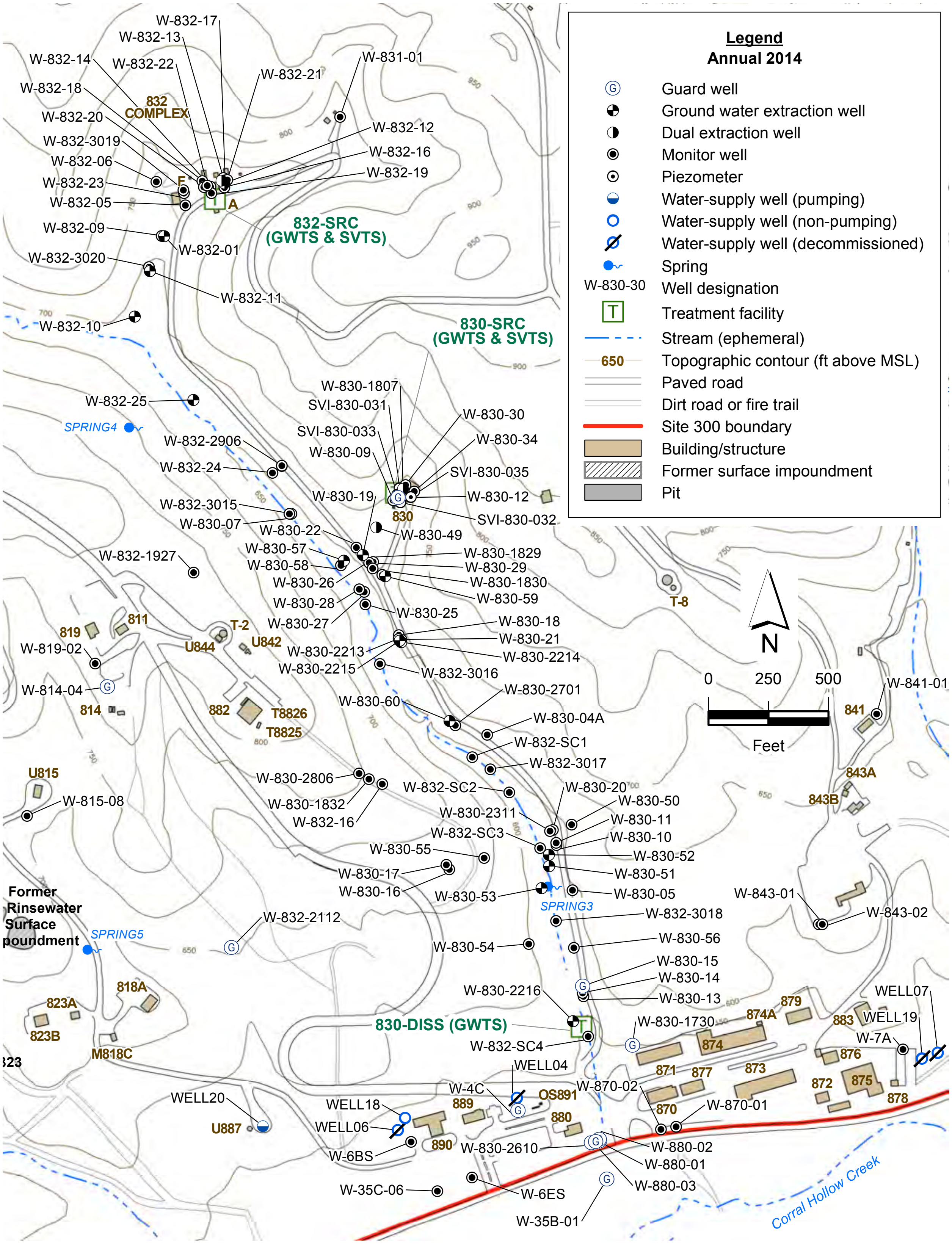


Figure 2.7-1. Building 832 Canyon Operable Unit site map showing monitor, extraction and water-supply wells, and treatment facilities.

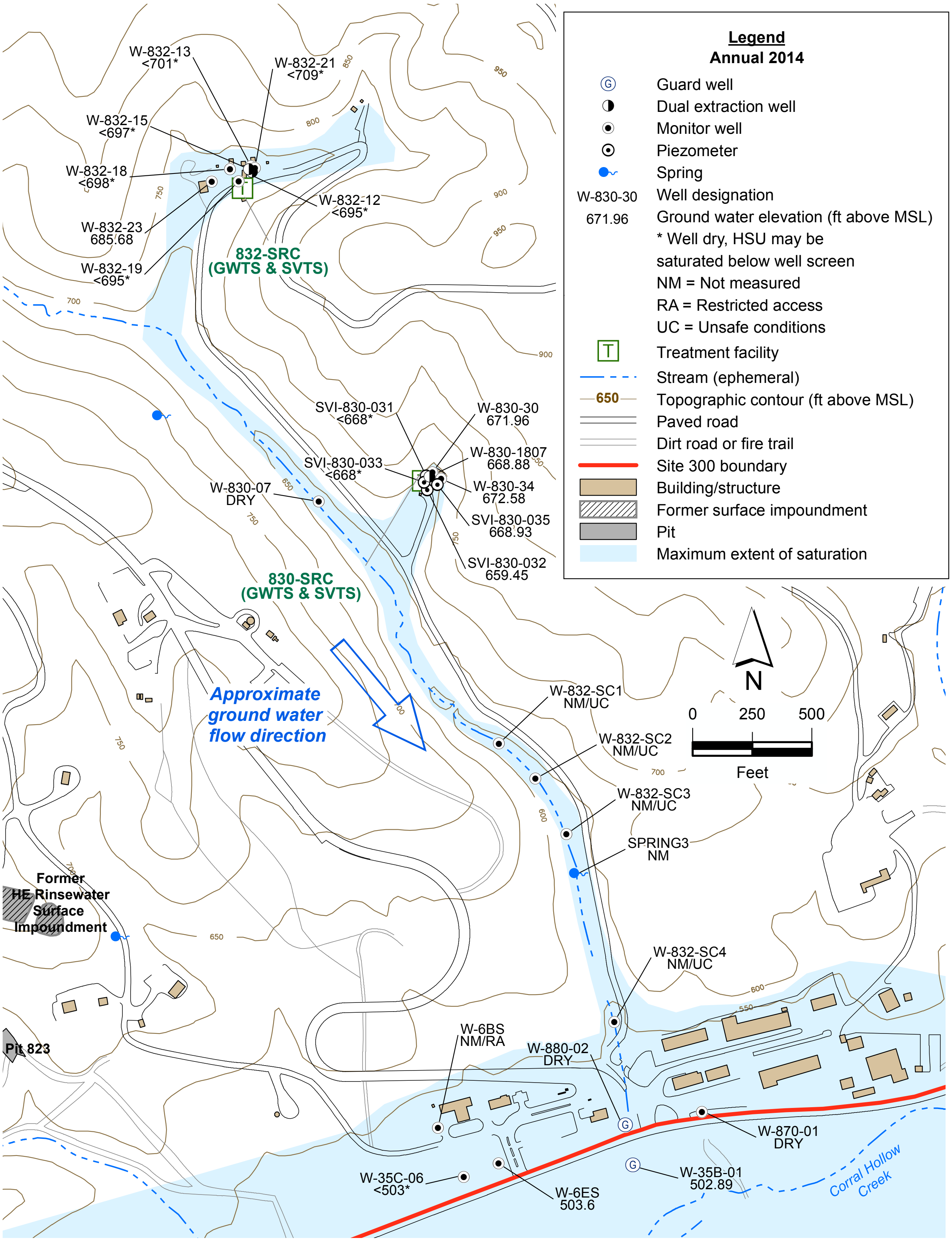


Figure 2.7-2. Building 832 Canyon Operable Unit map showing ground water elevations and ground water flow direction for the Qal/WBR hydrostratigraphic unit.

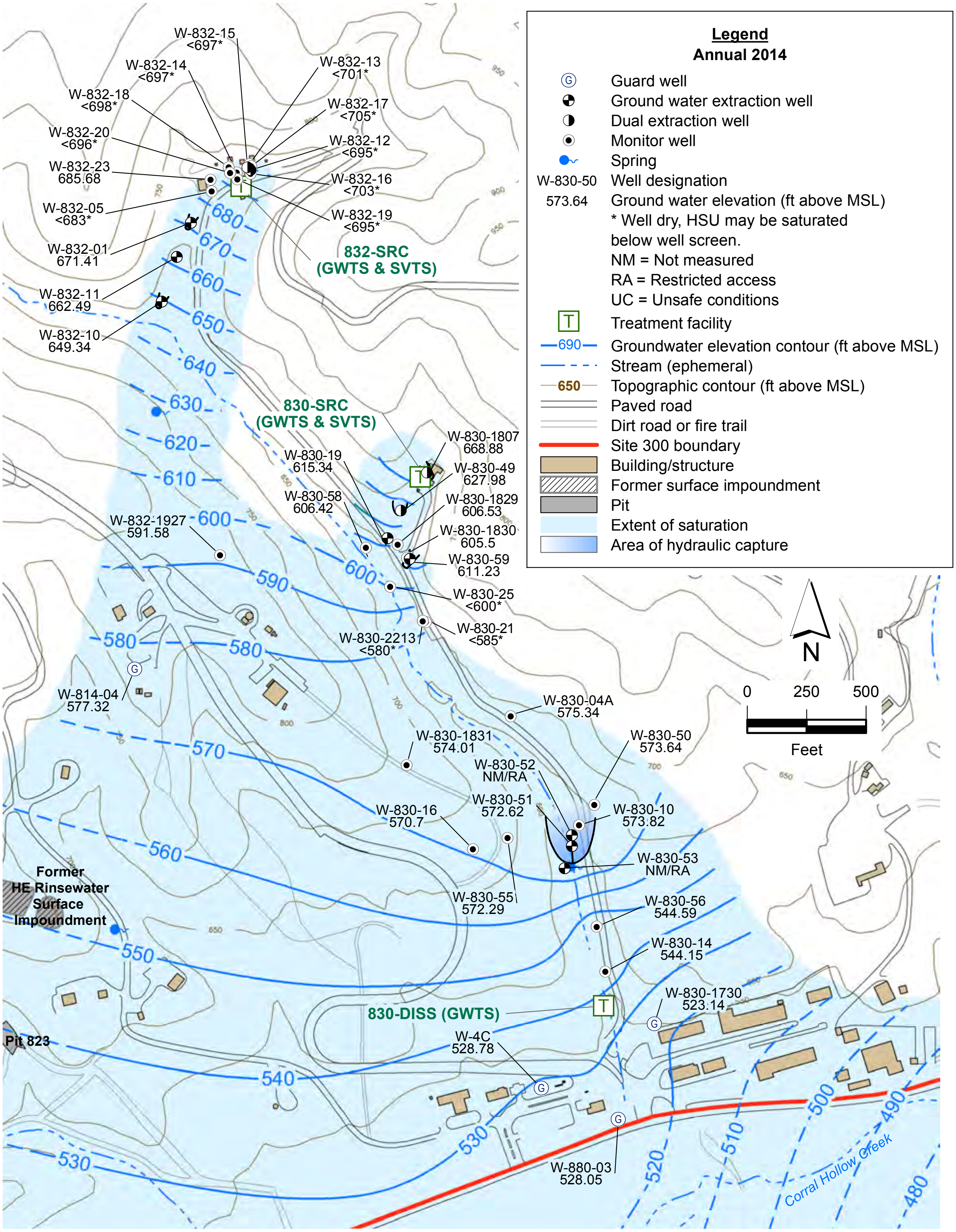


Figure 2.7-3. Building 832 Canyon Operable Unit ground water potentiometric surface map for the Tnsc$_{1b}$ hydrostratigraphic unit.

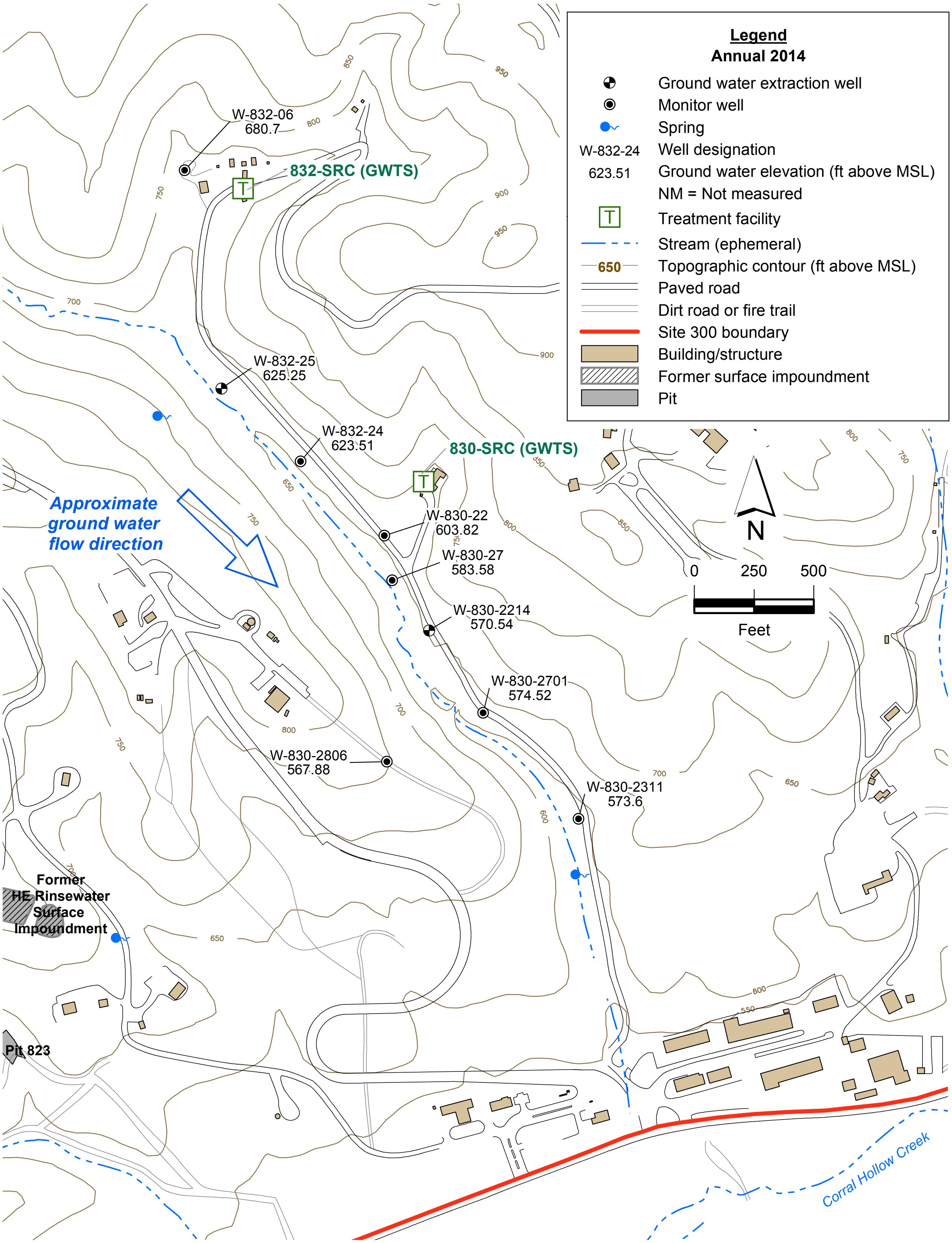


Figure 2.7-4. Building 832 Canyon Operable Unit map showing ground water elevations and ground water flow direction for the Tnsc$_{1a}$ hydrostratigraphic unit.

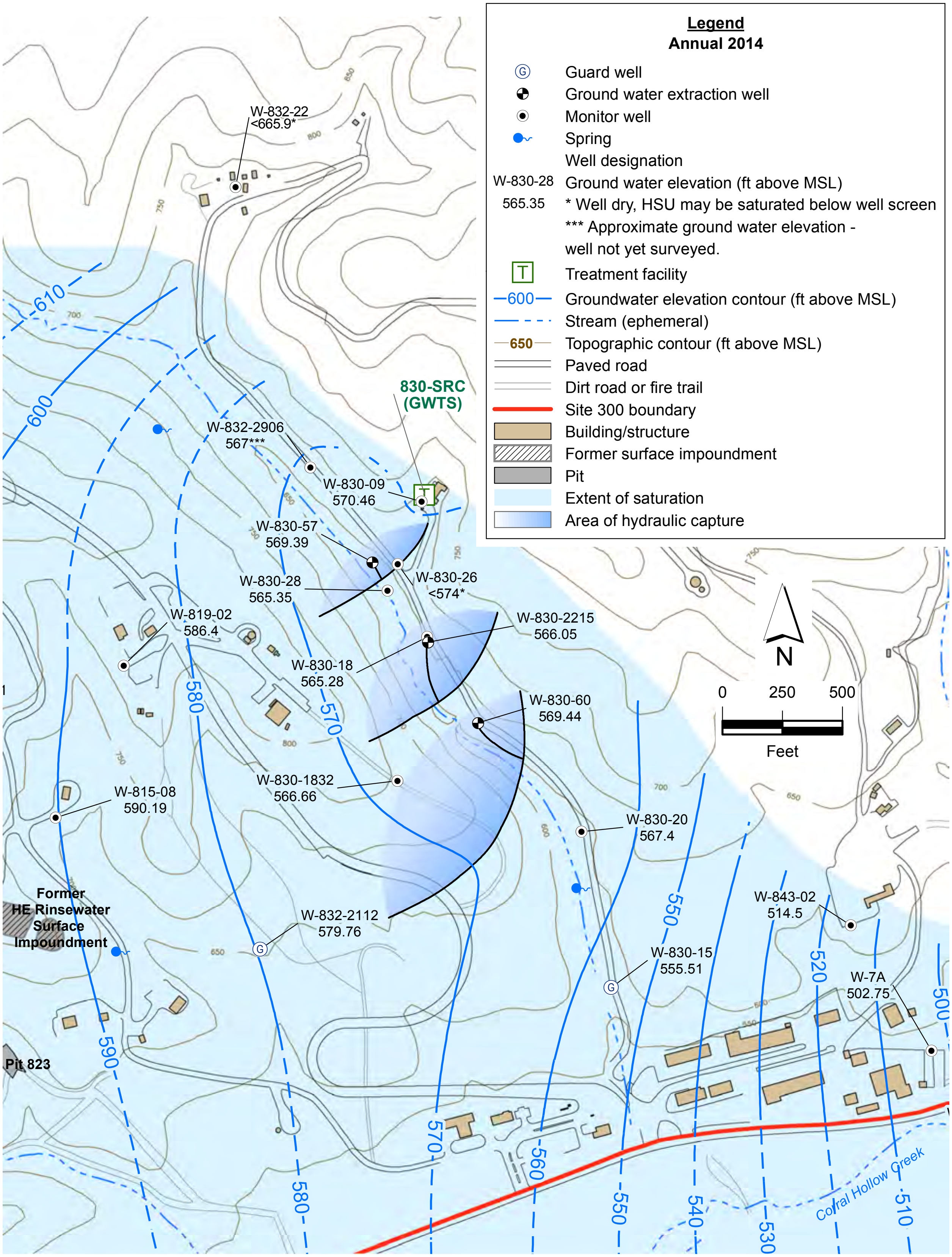


Figure 2.7-5. Building 832 Canyon Operable Unit ground water potentiometric surface map for the Upper $Tnbs_1$ hydrostratigraphic unit.

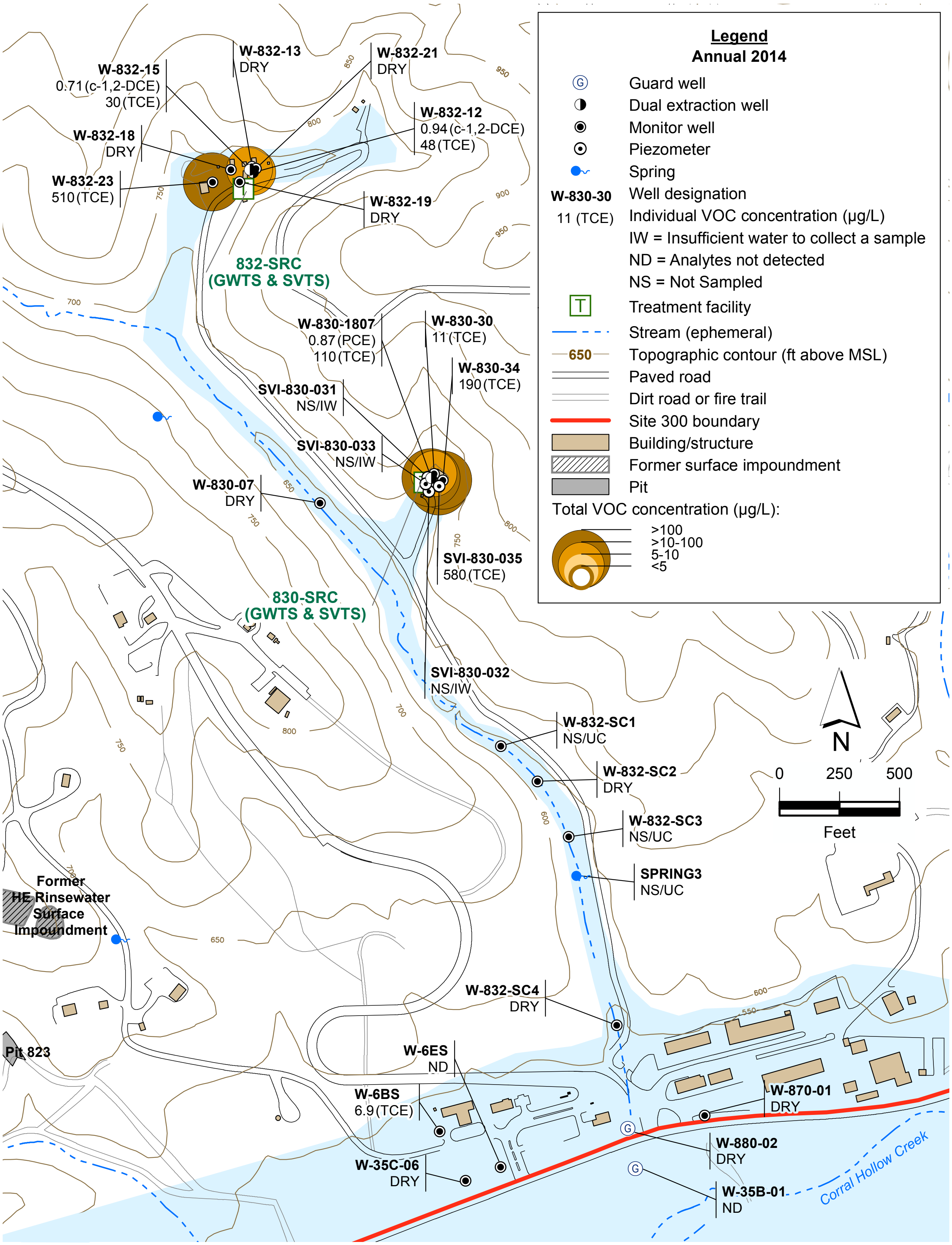


Figure 2.7-6. Building 832 Canyon Operable Unit map showing individual VOC concentrations for the Qal/WBR hydrostratigraphic unit.

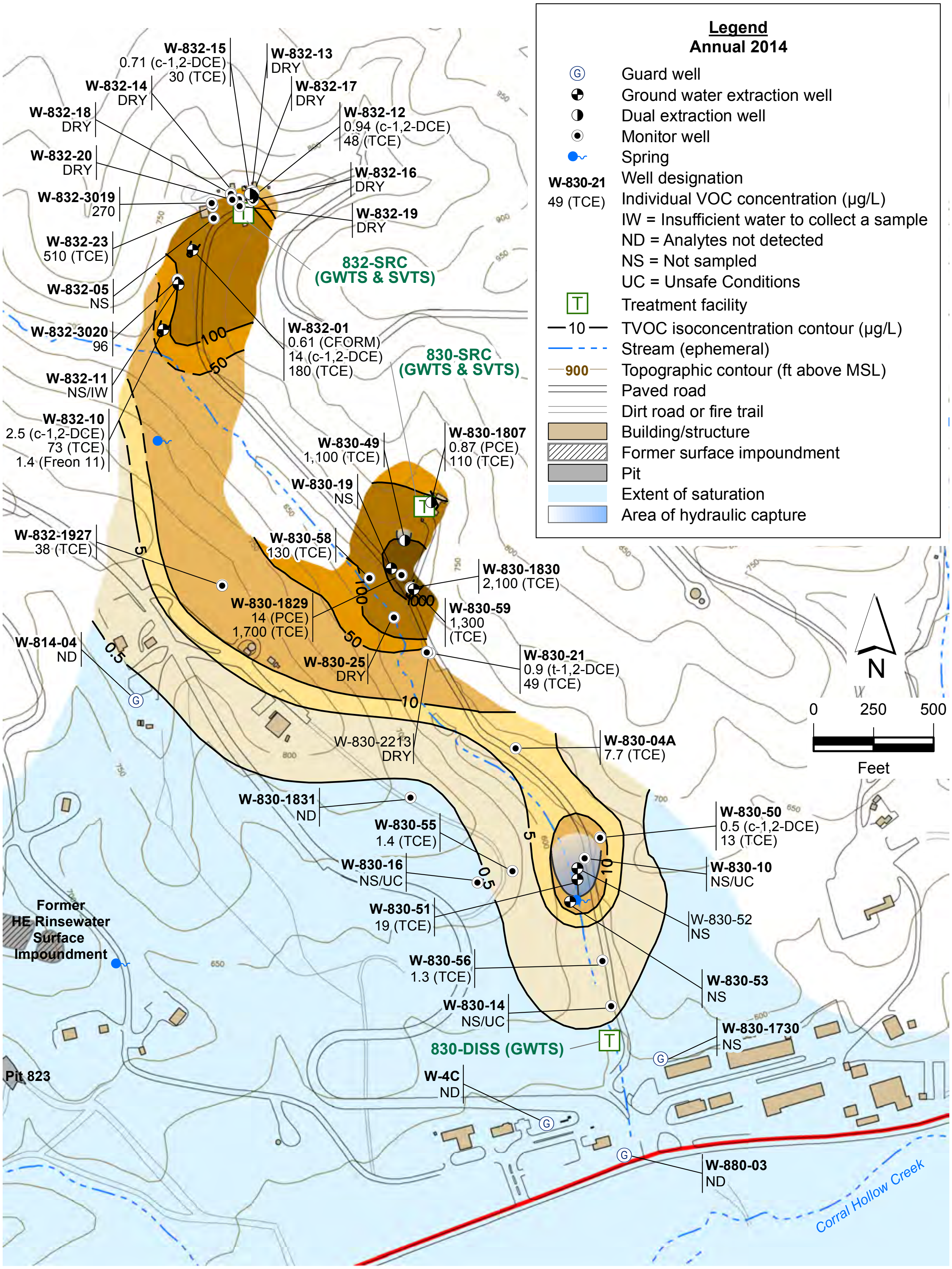


Figure 2.7-7. Building 832 Canyon Operable Unit total VOC isoconcentration contour map and individual VOC concentrations for the Tnsc$_{1b}$ hydrostratigraphic unit.

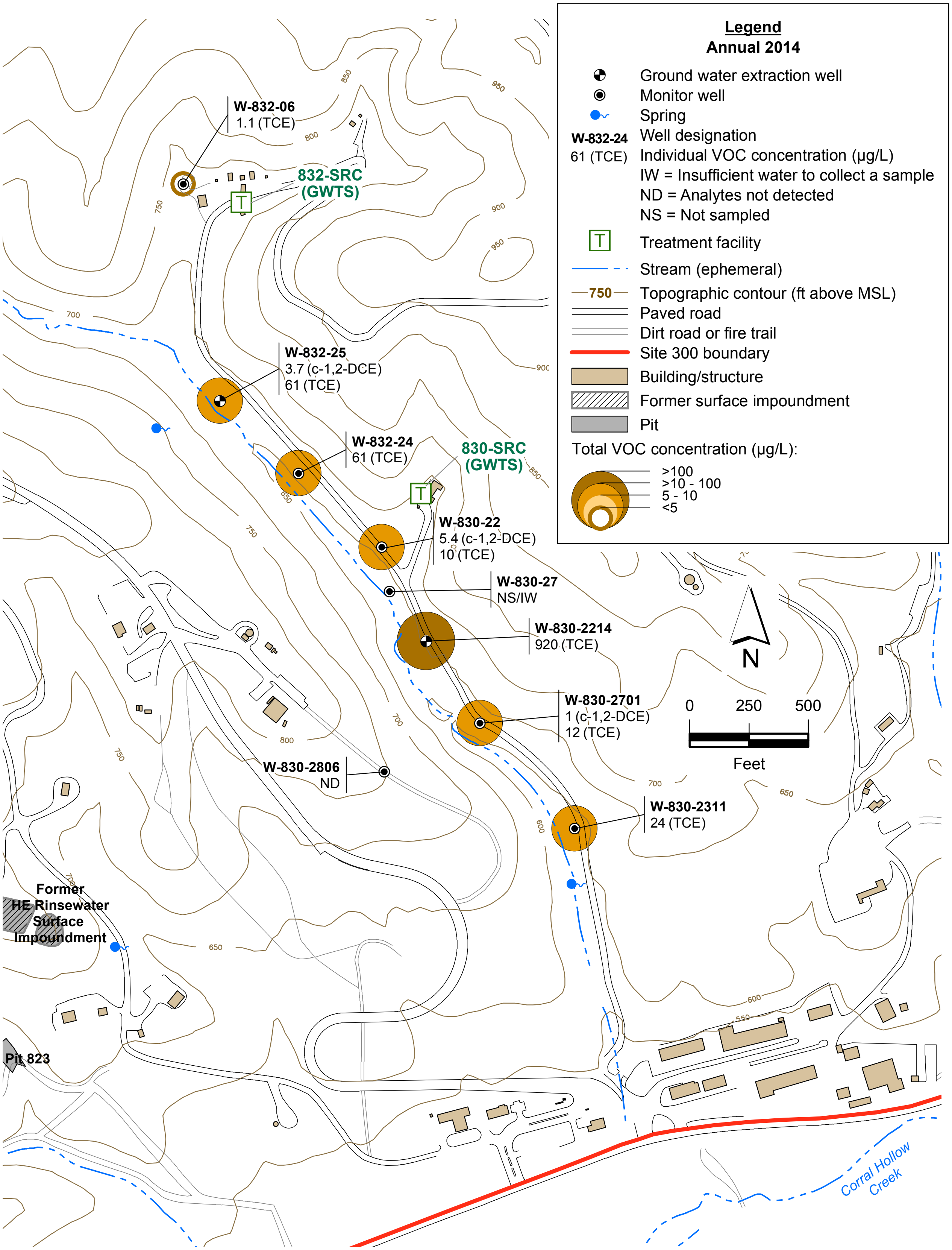


Figure 2.7-8. Building 832 Canyon Operable Unit map showing individual VOC concentrations for the $Tnsc_{1a}$ hydrostratigraphic unit.

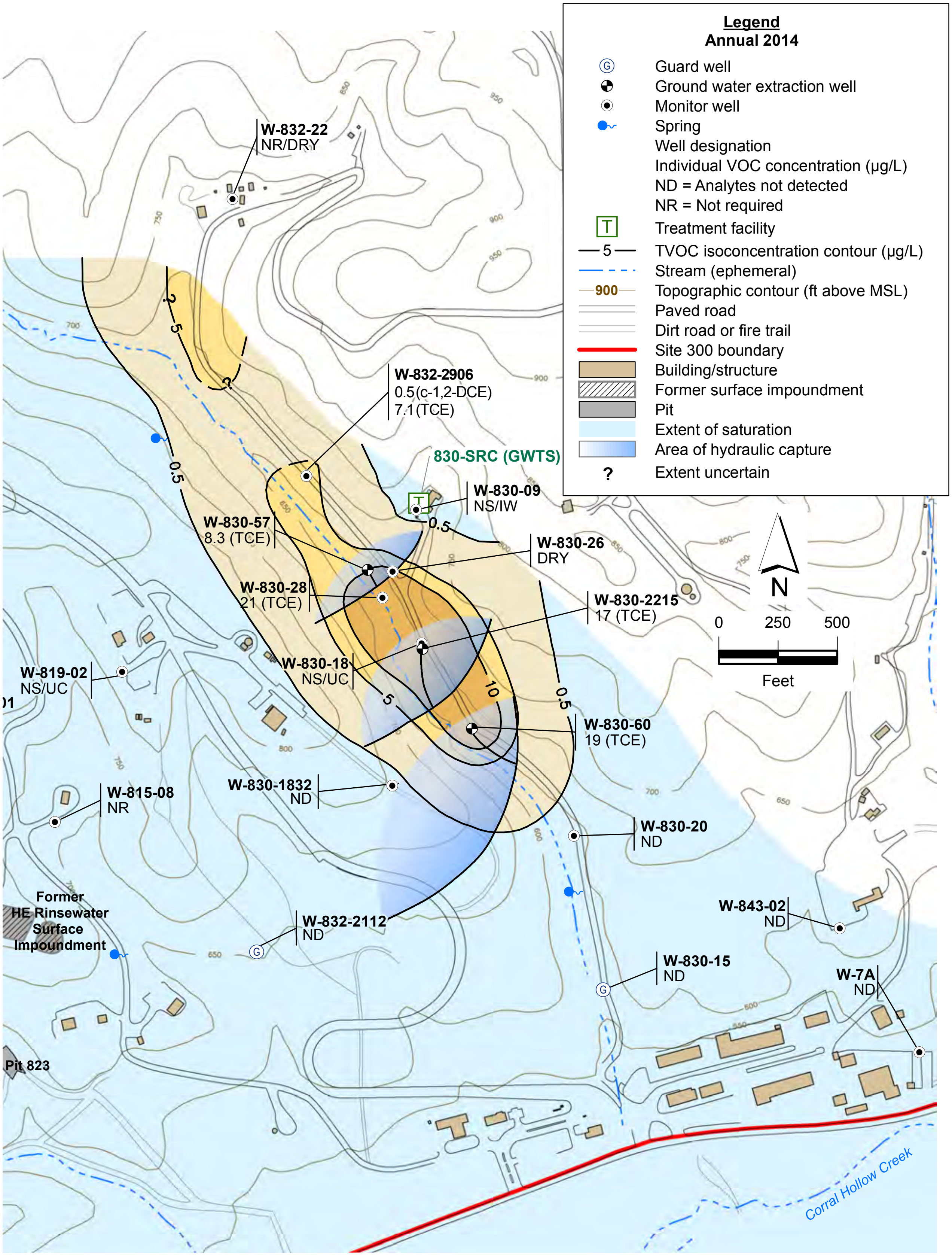


Figure 2.7-9. Building 832 Canyon Operable Unit total VOC isoconcentration contour map and individual VOC concentrations for the Upper Tnbs$_1$ hydrostratigraphic unit.

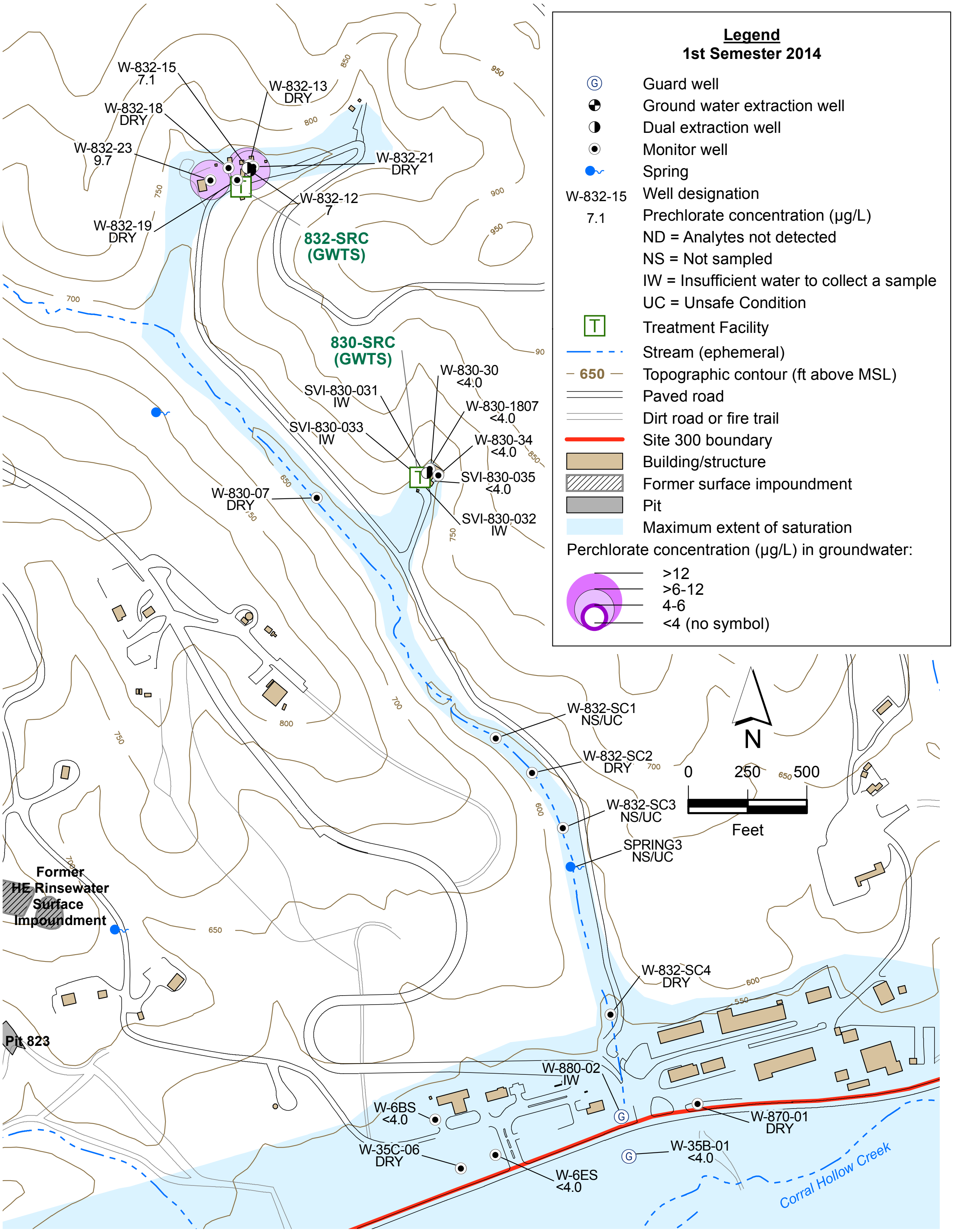


Figure 2.7-10. Building 832 Canyon Operable Unit map showing perchlorate concentrations for the Qal/WBR hydrostratigraphic unit.

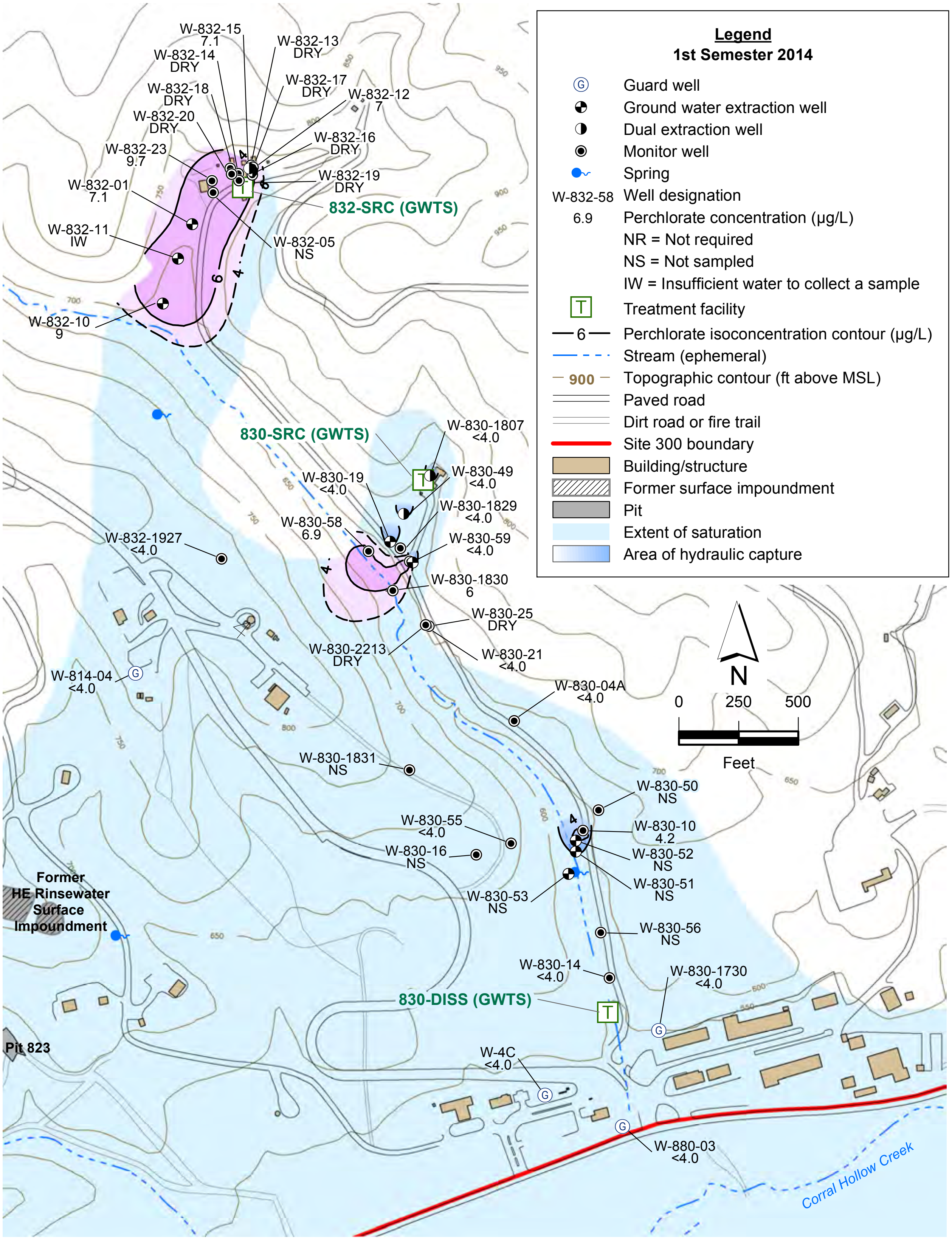


Figure 2.7-11. Building 832 Canyon Operable Unit perchlorate isoconcentration contour map for the Tnsc$_{1b}$ hydrostratigraphic unit.

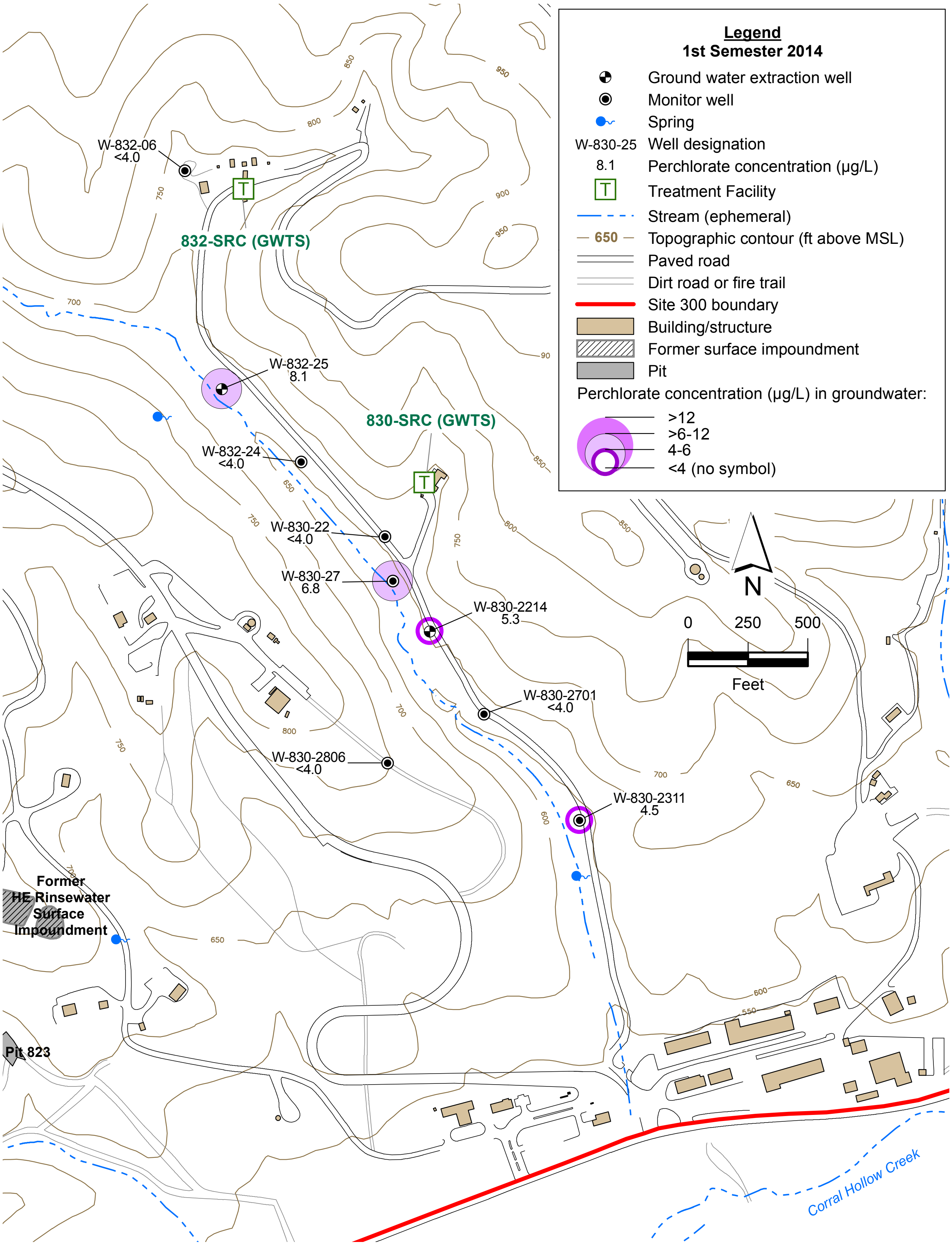


Figure 2.7-12. Building 832 Canyon Operable Unit map showing perchlorate concentrations for the $Tnsc_{1a}$ hydrostratigraphic unit.

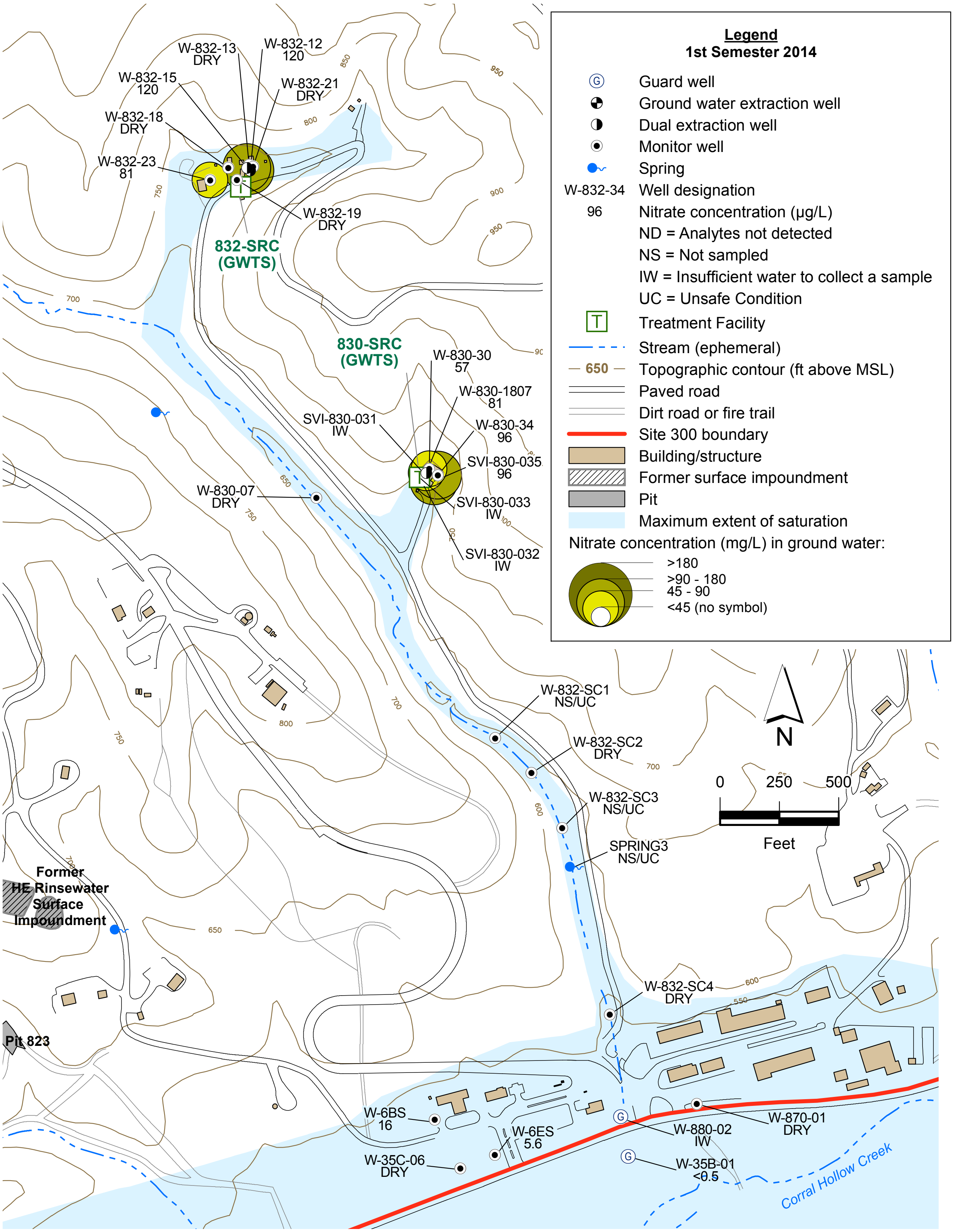


Figure 2.7-13. Building 832 Canyon Operable Unit map showing nitrate concentrations for the Qal/WBR hydrostratigraphic unit.

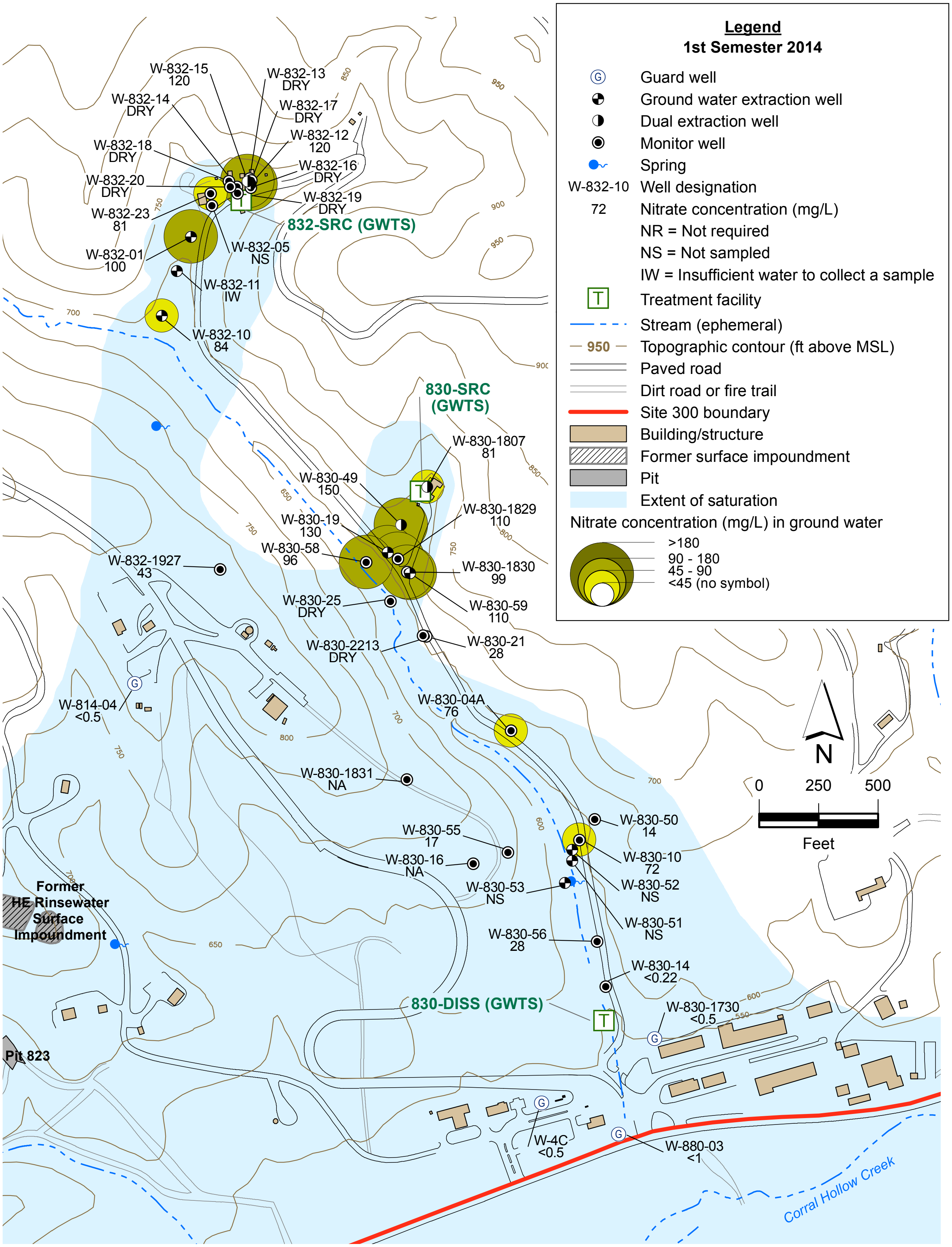


Figure 2.7-14. Building 832 Canyon Operable Unit map showing nitrate concentrations for the Tnsc$_{1b}$ hydrostratigraphic unit.

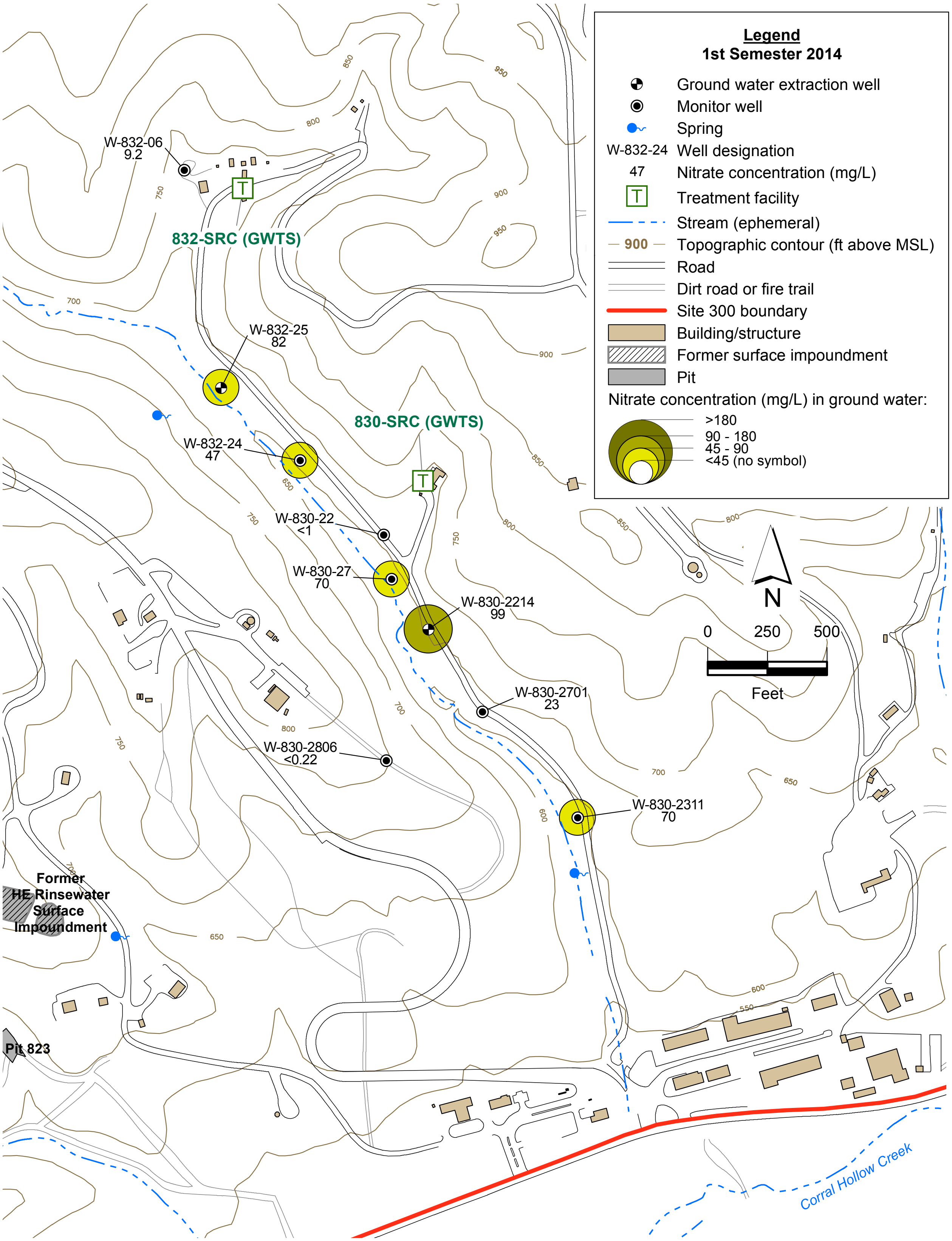
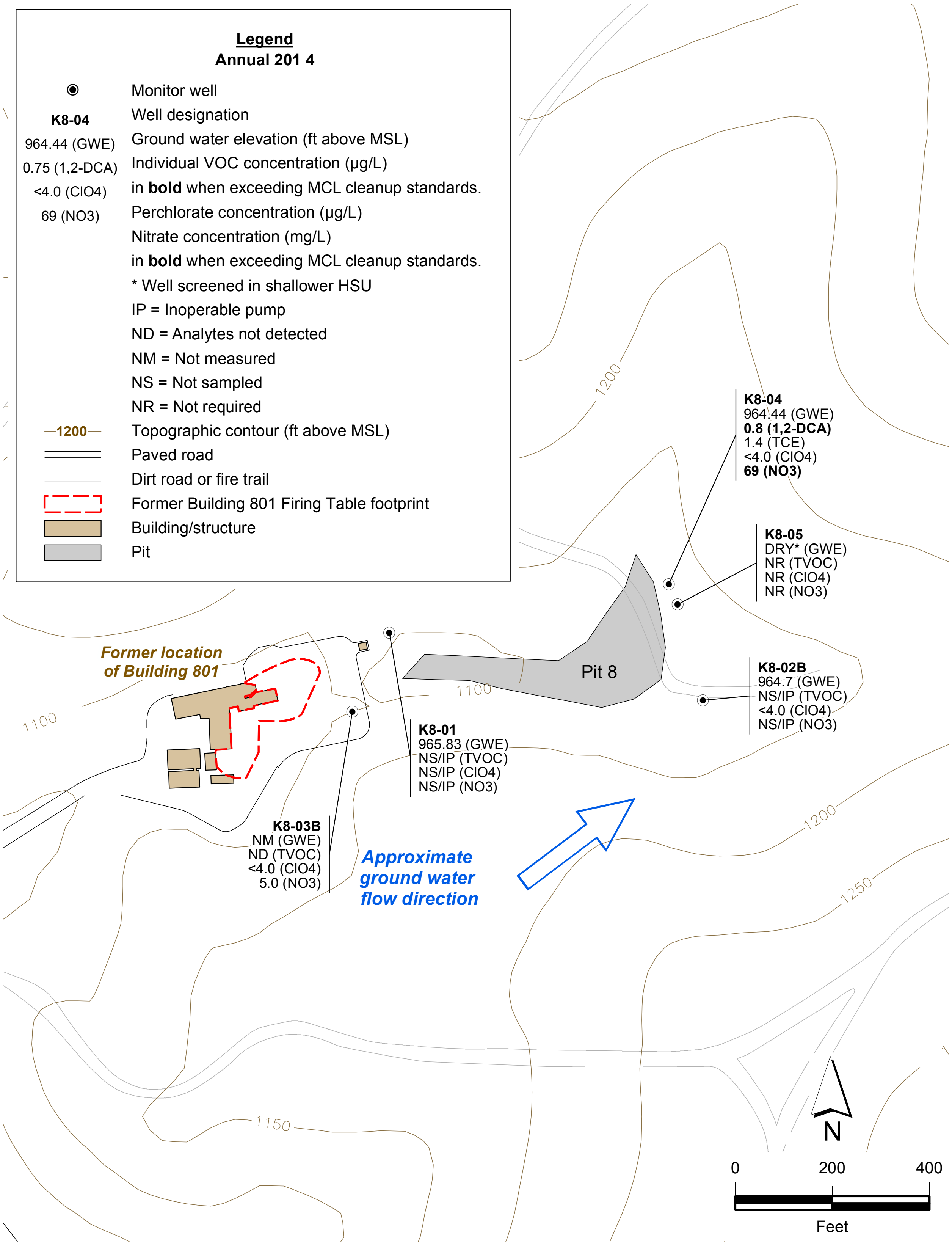


Figure 2.7-15. Building 832 Canyon Operable Unit map showing nitrate concentrations for the Tnsc$_{1a}$ hydrostratigraphic unit.



2.8-1. Building 801 Firing Table and Pit 8 Landfill site map showing monitor well locations, ground water elevations, approximate ground water flow direction, and nitrate, perchlorate and individual VOC concentrations, for the Tnbs$_1$/Tnbs$_0$ hydrostratigraphic unit.

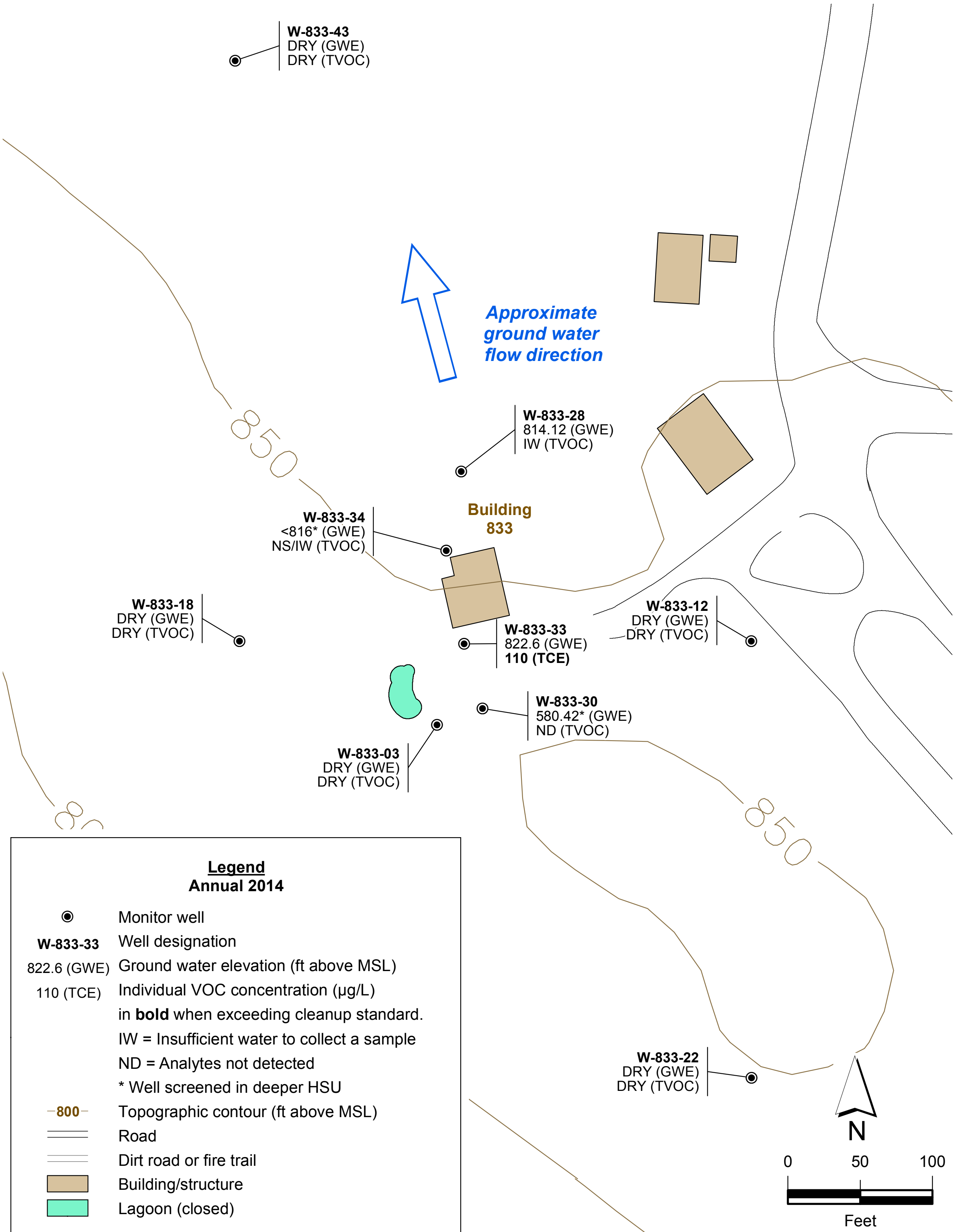


Figure 2.8-2. Building 833 site map showing monitor well locations, ground water elevations, approximate ground water flow direction, and individual VOC concentrations for the Tpsg hydrostratigraphic unit.

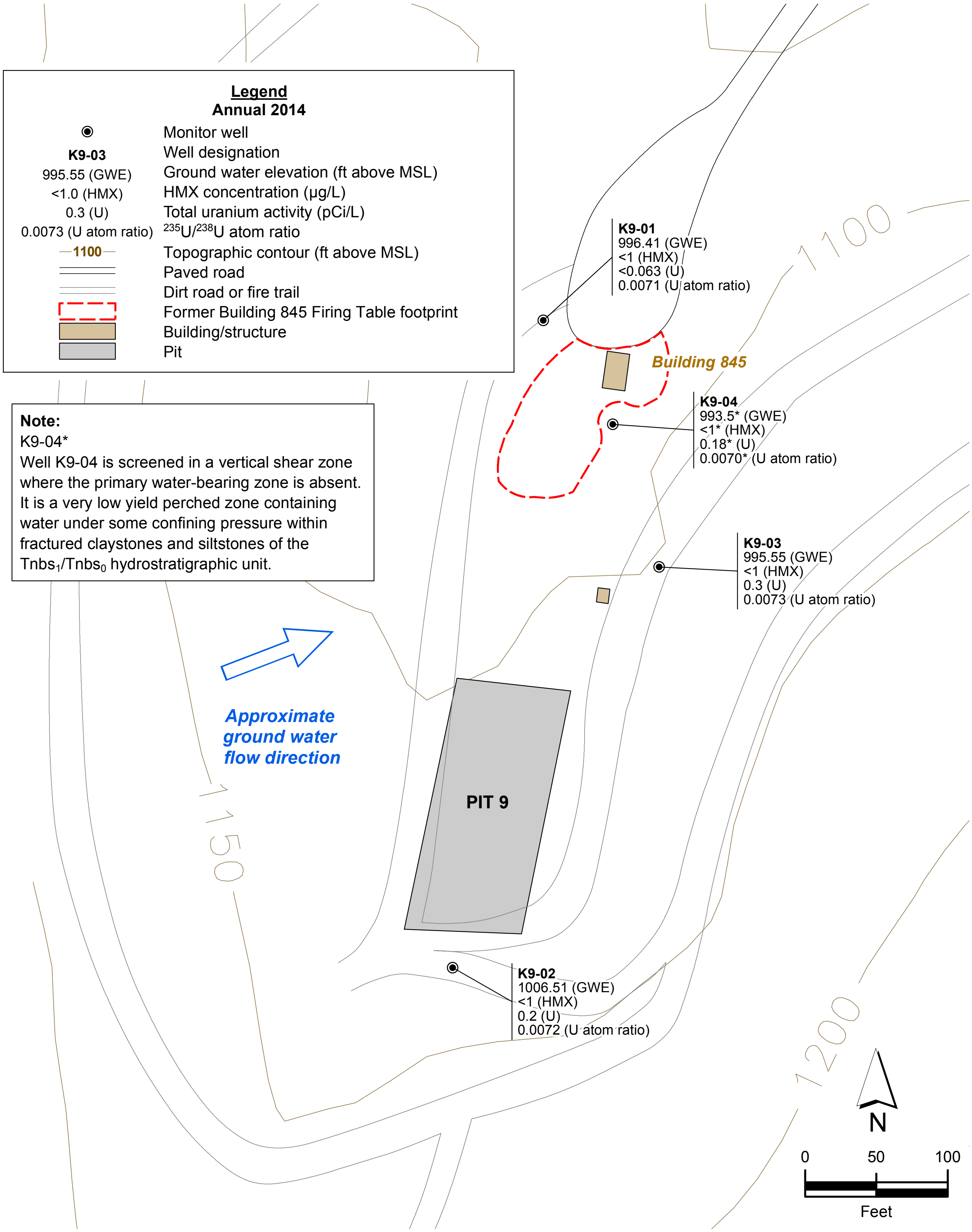


Figure 2.8-3. Building 845 Firing Table and Pit 9 Landfill site map showing monitor well locations, ground water elevations, approximate ground water flow direction, and High Melting Point Explosive concentrations, uranium activities and $^{235}U/^{238}U$ isotope atom ratios for the $Tnbs_1/Tnbs_0$ hydrostratigraphic unit.

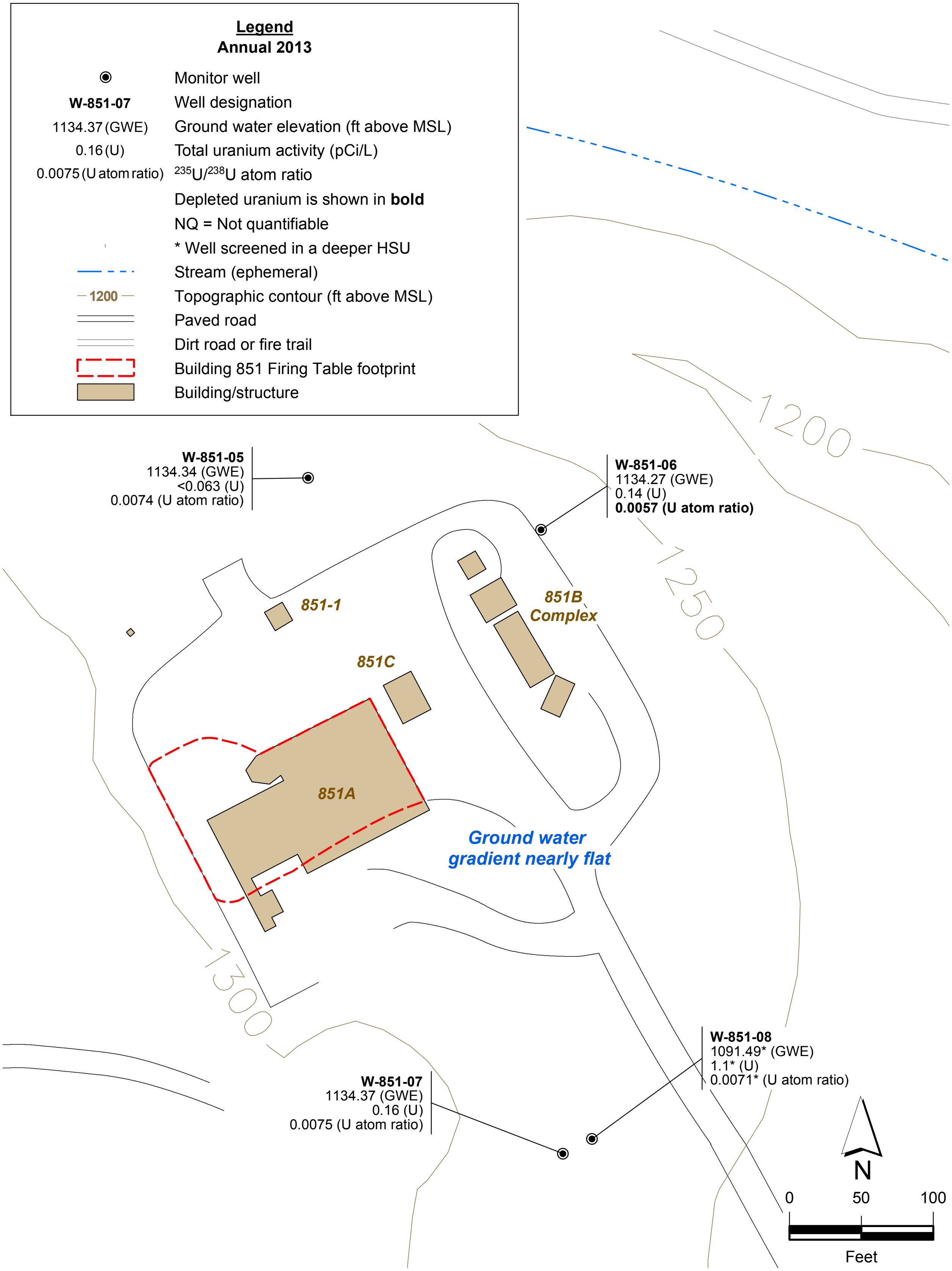


Figure 2.8-4. Building 851 Firing Table site map showing monitor well locations, ground water elevations, approximate ground water flow direction, uranium activities, and $^{235}U/^{238}U$ isotope atom ratios for the Tmss hydrostratigraphic unit.

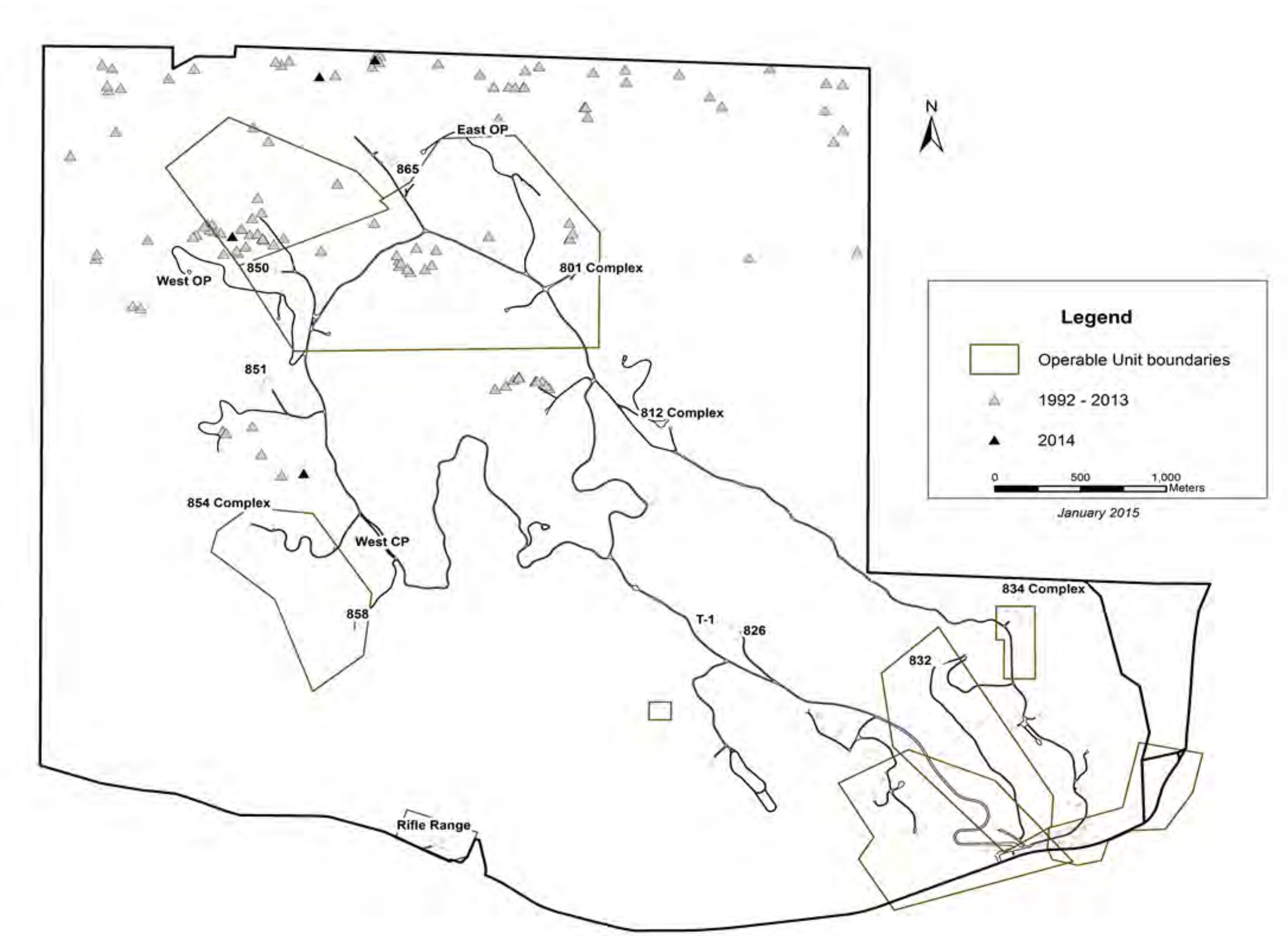


Figure 4.2.1. Distribution of burrowing owls at Site 300, including verified historic observations (1992-2013) and observations made during surveys conducted in 2014 by the LLNL Environmental Functional Area.

Tables

Acronyms and Abbreviations

1,1-DCA	1,1-Dichloroethane
1,2-DCA	1,2-Dichloroethane
1,1-DCE	1,1-Dichloroethene
1,2-DCE	1,2-Dichloroethene (total)
1,1,1-TCA	1,1,1-Trichloroethane
1,1,2-TCA	1,1,2-Trichloroethane
2-ADNT	4-Amino-2,6-dinitrotoluene
4-ADNT	4-Amino-2,6-dinitrotoluene
815	Building 815
817	Building 817
829	Building 829
832	Building 832
834	Building 834
845	Building 845
850	Building 850
851	Building 851
854	Building 854
A	Annual
As N	As nitrogen
As $CaCO_3$	As calcium carbonate
BTEX	Benzene, toluene, ethyl benzene, and xylene
°C	Degrees Celsius
C12-C24	Diesel range organic compounds in the carbon 12 to carbon 24 range
CAL	Contracted analytical laboratories
CAMU	Corrective Action Management Unit
CAP	Corrective and Preventative Action Program
CDFG	California Department of Fish and Game
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFE	Carbon filter effluent
CFI	Carbon filter influent
CF2I	Second aqueous phase granular carbon filter influent
CF3I	Third aqueous phase granular carbon filter influent
cfm	Cubic feet per minute
CFORM	Chloroform
CFV2	Second vapor phase granular activated carbon filter effluent
CGSA	Central General Services Area
CHC	Corral Hollow Creek
c-1,2-DCE	cis-1,2-Dichloroethene
cis-1,2-DCE	cis-1,2-Dichloroethene
CMP/CP	Compliance Monitoring Plan/Contingency Plan
CMR	Compliance Monitoring Report
CO_2	Carbon dioxide
COC	Contaminants of Concern
CTET	Carbon tetrachloride
DEET	n,n-diethyl-meta-toluamide
DIS	Discretionary sampling (not required by the CMP)

DISS	Distal south
DMW	Detection monitor well
DOE	Department of Energy
DSB	Distal Site Boundary
DTSC	Department of Toxic Substances Control
DUP	Duplicate or collocated QC sample
E	Effluent (acronym found in Treatment Facility Sampling Plan Tables)
E	Sample to be collected during even numbered years (i.e., 2012) (acronym found in Sampling Plan Tables)
EcoSSLs	Ecological Soil Screening Levels
EFA	Environmental Functional Area
EGSA	Eastern General Services Area
EIS/EIR	Environmental Impact Statement/Environmental Impact Report
EMS	Environmental Management System
EPA	Environmental Protection Agency
ERD	Environmental Restoration Department
ES&H	Environmental Safety and Health
EV	Effluent vapor
EW	Extraction well
Freon 11	Trichlorofluoromethane
Freon 113	1,1,2-trichloro-1,2,2-trifluoroethane
ft	Feet
ft^3	Cubic feet
g	Gram(s)
GAC	Granular activated carbon
gal	Gallon(s)
GIS	Geographic Information Systems
gpd	Gallons per day
gpm	Gallons per minute
GSA	General Services Area
GTU	Ground Water Treatment Unit.
GW	Guard well
GWTS	Ground Water Treatment System
HE	High Explosives
HEPA	High Explosives Process Area
H-H	Hetch-Hetchy
HMX	High-Melting Explosive
HQ	Hazard quotient
HSU	Hydrostratigraphic unit
I	Influent
ICP-MS	Inductively Coupled Plasma - Mass Spectrometry
ISMA	*In Situ* Microcosm Array
ISMS	Integrated Safety Management System
ISO	International Organization for Standardization
ITS	Issues Tracking System
IV	Influent vapor
IW	Injection well
IWS	Integrated Work Sheet
K-40	Potassium-40
kft^3	Thousands of cubic feet

kg	Kilograms
kgal	Thousands of gallons
km	Kilometers
LCS	Laboratory Control Sample
LHC	Light hydrocarbon
LLNL	Lawrence Livermore National Laboratory
µg/L	Micrograms per liter
$\mu g/m^3$	Micrograms per meters cubed
µmhos/cm	Micro ohms per centimeter
µS	Microsiemens
M	Monthly
MCL	Maximum Contaminant Level
MeCL	Methylene chloride
Mgal	Millions of gallons
Mg/kg/d	Milligram per kilogram per day
mg/L	Milligrams per liter
MNA	Monitored Natural Attenuation
MOVI	Management observations, verifications, and inspections
MSA	Management self-assessment
MSL	Mean Sea Level
MTU	Miniature Treatment Unit
mv	Millivolts
MWB	Monitor well used for background
N	No
NB	Nitrobenzene
N_2	Nitrogen
NO_3	Nitrate
NA	Not applicable
NT	Nitrotoluene
NTU	Nephelometric turbidity units
O	Sample to be collected during odd numbered years (i.e., 2013)
OR	Occurrence Report
ORP	Oxidation/reduction potential
OU	Operable unit
O&M	Operations and Maintenance
P/PO_4	Phosphorous
PCBs	Polychlorinated biphenyls
PCE	Tetrachloroethene
pCi/L	PicoCuries per liter
pH	A measure of the acidity or alkalinity of an aqueous solution
PHG	Public Health Goal
PLC	Programmatic logic control
ppb_v	Parts per billion by volume
ppm_v	Parts per million on a volume-to-volume basis
PBA	Programmatic Biological Assessment
PPCP	Pharmaceutical and Personal Care Product analytes
PRX	Proximal
PRXN	Proximal north
PSDMP	Post-Monitoring Shutdown Plan
PTMW	Plume Tracking Monitor Well

PTU	Portable Treatment Unit
Q	Quarterly
QAPP	Quality Assurance Project Plan
QA/QC	Quality assurance/quality control
QIF	Quality Improvement Form
RAOs	Remedial Action Objectives
R1	Receiving water sampling point located 100 ft upstream
R2	Receiving water sampling point located 100 ft downstream
RDX	Research Department explosive
REA	Reanalysis
Redox	Reduction-oxidation reaction
REX	Resample
ROD	Record of Decision
RPM	Remedial Project Manager
RWQCB	Regional Water Quality Control Board
S	Semi-annual
Scfm	Standard cubic feet per minute
SLs	Statistical Limits
SOP	Standard Operating Procedure
SOW	Statement of work
SPACT	Sample Planning and Chain of Custody Tracking
SPR	Spring
SRC	Source
STU	Solar-powered Treatment Unit
SVE	Soil Vapor Extraction
SVTS	Soil Vapor Treatment System
SVI	Soil Vapor Influent
SWEIS	Site-Wide Environmental Impact Statement
SWFS	Site Wide Feasibility Study
SWRI	Site-Wide Remedial Investigation
TBOS	Tetrabutyl orthosilicate
TCEP	tris (2-chloroethyl) phosphate
TFRT	Treatment Facility Real Time
THMs	Trihalomethanes
TKEBS	Tetrakis (2-ethylbutyl) silane
TCE	Trichloroethene
TDS	Total dissolved solids
TF	Treatment facility
TNB	Trinitrobenzene
TNT	Trinitrotoluene
Total-1,2-DCE	1,2-Dichloroethene (total)
TRV	Toxicity Reference Value
t-1,2-DCE	trans-1,2-Dichloroethene
$^{235}U/^{238}U$	Atom ratio of the isotopes uranium-235 and uranium-238
U.S.	United States
USFWS	U.S. Fish and Wildlife Service
VC	Vinyl chloride
VCF4I	Fourth vapor phase granular activated carbon filter influent
VE	Vapor effluent
VES	Vapor extraction system

VI	Vapor influent
VOC	Volatile organic compound
WAA	waste accumulation area
WGMG	Water Guidance and Monitoring Group
WS	Water supply well
Y	Yes

Hydrogeologic Units

Lower $Tnbs_1$ =	Lower member of the Neroly lower blue sandstone, below claystone marker bed (regional aquifer).
Qal =	Quaternary alluvium.
Qls =	Quaternary landslide.
Qt =	Quaternary terrace.
Tmss =	Miocene Cierbo Formation—lower siltstone/claystone member.
$Tnsc_{1a}$, $Tnsc_{1b}$, $Tnsc_{1c}$ =	Sandstone bodies within the $Tnsc_1$ Neroly middle siltstone/claystone (1a = deepest).
$Tnbs_1$ =	Lower member of the Neroly lower blue sandstone.
$Tnbs_0$ =	Neroly silty sandstone.
$Tnbs_2$ =	Miocene Neroly upper blue sandstone.
$Tnsc_0$ =	Tertiary Neroly Formation—lower siltstone/claystone member.
$Tnsc_2$ =	Miocene Neroly Formation—upper siltstone/claystone member.
Tps =	Pliocene non-marine unit.
Tpsg =	Miocene non-marine unit (gravel facies).
Tts =	Tesla Formation.
$UTnbs_1$ =	Upper member of the Neroly lower blue sandstone, above claystone marker bed.
WBR =	Weathered bedrock.

Data Qualifier Flag Definitions

B = Analyte found in method blank, sample results should be evaluated.

D = Analysis performed at a secondary dilution or concentration (i.e., vapor samples).

E = The analyte was detected below the LLNL reporting limit, but above the analytical laboratory minimum detection limit.

F = Analyte found in field blank, trip blank, or equipment blank.

G = Quantitated using fuel calibration, but does not match typical fuel fingerprint.

H = Sample analyzed outside of holding time, sample results should be evaluated.

I = Surrogate recoveries were outside of QC limits.

J = Analyte was positively identified; the associated numerical value is the proximate concentration of the analyte in the sample.

L = Spike accuracy not within control limits.

O = Duplicate spike or sample precision not within control limits.

R = Sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

S = Analytical results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.

T = Analyte is tentatively identified compound; result is approximate.

Requested Analyses

AS:UISO =	Uranium isotopes performed by alpha spectrometry.
DWMETALS:ALL =	Drinking water metals suite performed by various analytical methods.
E200.7:FE =	Iron performed by EPA Method 200.7.
E200.7:Li =	Lithium performed by EPA Method 200.7.
E200.7:SI =	Silica performed by EPA Method 200.7.
E200.8:AS =	Arsenic performed by EPA Method 200.8.
E200.8:CR =	Chromium performed by EPA Method 200.8.
E200.8:MN =	Manganese performed by EPA Method 200.8.
E200.8:SE =	Selenium performed by EPA Method 200.8.
E300.0:NO3 =	Nitrate performed by EPA Method 300.0.
E300.0:PERC =	Perchlorate performed by EPA Method 300.0.
E300.0:O-PO2 =	Orthophosphate performed by EPA Method 300.0.
E340.2:ALL =	Fluoride performed by EPA method 340.2.
E502.2:ALL =	Volatile organic compounds performed by EPA Method 502.2.
E601:ALL =	Halogenated volatile organic compounds performed by EPA Method 601.
E624:ALL =	Volatile organic compounds performed by EPA Method 624.
E8082A =	Polychlorinated biphenyls performed by EPA Method 8082A.
E8260:ALL =	Volatile organic compounds performed by EPA Method 8260.
E8330LOW:ALL =	High explosive compounds performed by EPA Method 8330.
E8330:R+H =	High explosive compounds RDX and HMX performed by EPA Method 8330.
E8330:TNT =	Trinitrotoluene performed by EPA Method 8330.
E906:ALL =	Tritium performed by EPA Method 906.
EM8015:DIESEL =	Diesel range organic compounds performed by modified EPA Method 8015.
GENMIN:ALL =	General minerals suite performed by various analytical methods.
MS:UISO =	Uranium isotopes performed by mass spectrometry.
T26METALS:ALL =	Title 26 metals.
TBOS:ALL =	Tetrabutylorthosilicate/ Tetrakis (2-ethylbutyl) silane.

Ground Water Elevation Table Notes

ABD = Abandoned.
AD = Drilling of adjacent new wells disturbed water level.
BLOC = Well Blocked.
BS = Water detected below bottom of screened interval.
CB = Installation completed as a Christy box.
DRY = No water detected in well casing at time of measurement.
FA = Flowing artesian well, water elevation converted.
FL = Flowing.
ME = Measuring error suspected.
MSL = Mean Sea Level.
MT = Measured twice.
NA = Information not available.
NM = Not Measured.
NOM = Not on field map.
PD = Predevelopment measurement.
PE = Pump Extraction.
PF = Pump not running at time of measurement.
PS = Measurement taken just before sampling.
PT = Pump test interfered with measurement.
RA = Restricted access.
UC = Unsafe conditions.
VE = Vacuum Extraction.
WE = Well equilibrium suspect.
WR = Well recovery.

List of Tables

Table Summ-1. Mass removed, January 1, 2014 through December 31, 2014.

Treatment facility	Volume of ground water treated (thousands of gal)	Volume of soil vapor treated (thousands of cf)	Estimated total VOC mass removed (g)	Estimated total perchlorate mass removed (g)	Estimated total nitrate mass removed (kg)	Estimated total RDX mass removed (g)	Estimated total TBOS/ TKEBS mass removed (g)	Estimated total Uranium mass removed (g)
CGSA GWTS	354	NA	52	NA	NA	NA	NA	NA
CGSA SVTS	NA	17,742	570	NA	NA	NA	NA	NA
834 GWTS	106	NA	420	NA	33	NA	5.4	NA
834 SVTS	NA	57,069	6,100	NA	NA	NA	NA	NA
815-SRC GWTS	763	NA	20	8.0	260	92	NA	NA
815-PRX GWTS	533	NA	40	13	170	NA	NA	NA
815-DSB GWTS	1,887	NA	47	NA	NA	NA	NA	NA
817-SRC GWTS	7	NA	0	0.78	2.3	0.98	NA	NA
817-PRX GWTS	717	NA	20	53	250	23	NA	NA
829-SRC GWTS	1	NA	0.067	0.045	0.29	NA	NA	NA
PIT7-SRC GWTS	41	NA	0	2.0	6.1	NA	NA	5.5
854-SRC GWTS	1,002	NA	130	5.9	170	NA	NA	NA
854-SRC SVTS	NA	14,864	270	NA	NA	NA	NA	NA
854-PRX GWTS	454	NA	22	12	61	NA	NA	NA
854-DIS GWTS	4	NA	0.39	0.033	0.18	NA	NA	NA
832-SRC GWTS	25	NA	3.7	0.62	7.3	NA	NA	NA
832-SRC SVTS	NA	1,805	52	NA	NA	NA	NA	NA
830-SRC GWTS	1,246	NA	510	1.5	50	NA	NA	NA
830-SRC SVTS	NA	8,314	960	NA	NA	NA	NA	NA
830-DISS GWTS	1,032	NA	48	8.4	240	NA	NA	NA
Total	8,171	99,795	9,300	110	1,300	120	5.4	5.5

Notes:

815 = Building 815.
817 = Building 817.
829 = Building 829.
830 = Building 830.
832 = Building 832.
834 = Building 834.
854 = Building 854.
cf = Cubic feet.
CGSA = Central General Services Area.
DIS = Distal.
DISS = Distal south.
DSB = Distal site boundary.
g = Grams.
gal = Gallons.
GWTS = Ground water treatment system.
kg = Kilograms.
NA = Not applicable.
PRX = Proximal.
RDX = Research Department Explosive.
SRC = Source.
SVTS = Soil vapor treatment system.
TBOS = Tetra 2-ethylbutylorthosilicate.
TKEBS = Tetrakis (2-ethylbutyl) silane.
VOC = Volatile organic compound.

Nitrate re-injected into the $Tnbs_2$ HSU undergoes *in situ* biotransformation to benign N_2 gas by anaerobic denitrifying bacteria. Nitrate mass removal is calculated assuming complete removal of nitrate from treated ground water. At Pit7, re-injected effluent may contain nitrate concentrations below the discharge limit but above the detection limit. Thus, nitrate mass removal calculations at Pit7 are overestimated.

Table Summ-2. Summary of cumulative remediation.

Treatment facility	Volume of ground water treated (thousands of gallons)	Volume of soil vapor treated (thousands of Cubic feet)	Estimated total VOC mass removed (kg)	Estimated total perchlorate mass removed (g)	Estimated total nitrate mass removed (kg)	Estimated total RDX mass removed (kg)	Estimated total TBOS/ TKEBS mass removed (kg)	Estimated total Uranium mass removed (kg)
EGSA GWTS	309,379	NA	7.6	NA	NA	NA	NA	NA
CGSA GWTS	26,354	NA	26	NA	NA	NA	NA	NA
CGSA SVTS	NA	201,072	78	NA	NA	NA	NA	NA
834 GWTS	1,411	NA	46	NA	370	NA	9.5	NA
834 SVTS	NA	473,542	350	NA	NA	NA	NA	NA
815-SRC GWTS*	8,241	NA	0.20	280	2,900	1.9	NA	NA
815-PRX GWTS*	9,169	NA	0.95	220	2,700	NA	NA	NA
815-DSB GWTS	20,286	NA	0.69	NA	NA	NA	NA	NA
817-SRC GWTS*	66	NA	0	6.8	21	0.011	NA	NA
817-PRX GWTS*	5,648	NA	0.22	480	2,000	0.15	NA	NA
829-SRC GWTS	8	NA	0.00052	0.30	2.3	NA	NA	NA
PIT7-SRC GWTS	315	NA	0.0027	15	46	NA	NA	0.047
854-SRC GWTS	12,853	NA	6.0	170	2,400	NA	NA	NA
854-SRC SVTS	NA	135,835	13	NA	NA	NA	NA	NA
854-PRX GWTS	4,557	NA	0.72	180	740	NA	NA	NA
854-DIS GWTS	73	NA	0.0091	1.2	5.7	NA	NA	NA
832-SRC GWTS	958	NA	0.28	24	370	NA	NA	NA
832-SRC SVTS	NA	27,077	2.1	NA	NA	NA	NA	NA
830-SRC GWTS	14,412	NA	8.6	26	1,000	NA	NA	NA
830-SRC SVTS	NA	82,183	54	NA	NA	NA	NA	NA
830-PRXN GWTS	1,949	NA	0.26	NA	22	NA	NA	NA
830-DISS GWTS	10,278	NA	1.7	79	2,500	NA	NA	NA
Total	425,957	919,709	600	1,500	15,000	2.1	9.5	0.047

Notes:

815 = Building 815.
817 = Building 817.
829 = Building 829.
830 = Building 830.
832 = Building 832.
834 = Building 834.
854 = Building 854.
CGSA = Central General Services Area.
DIS = Distal.
DISS = Distal south.
DSB = Distal site boundary.
EGSA = Eastern General Services Area.
GWTS = Ground water treatment system.
kg = Kilograms.
NA = Not applicable.
PRX = Proximal.
PRXN = Proximal North.
RDX = Research Department Explosive.
SRC = Source.
SVTS = Soil vapor treatment system.
TBOS = Tetra 2-ethylbutylorthosilicate.
TKEBS = Tetrakis (2-ethylbutyl) silane.
VOC = Volatile organic compound.

Nitrate re-injected into the $Tnbs_2$ HSU undergoes *in situ* biotransformation to benign N_2 gas by anaerobic denitrifying bacteria. Nitrate mass removal is calculated assuming complete removal of nitrate from treated ground water. At Pit7, re-injected effluent may contain nitrate concentrations below the discharge limit but above the detection limit. Thus, nitrate mass removal calculations at Pit7 are overestimated.

Table 2-1. Wells and boreholes installed during 2014.

Well name	Planned well type	OU	Well/Borehole installation date	HSU	Drill Depth (ft-bgs)	Casing depth (ft-bgs)	Screened interval (ft-bgs)	Primary COCs	Primary COC sampling frequency	Secondary COCs	Secondary COC sampling frequency
W-815-3024	MW	OU4	6/4/14	Tpsg/Tps	50	47.5	37-47	VOCs	Semi-annually	Perchlorate, Nitrate	Annually
W-832-3020	MW	OU7	6/17/14	$Tnsc_{1a}$	70	46.4	36-46	VOCs	Semi-annually	Perchlorate, Nitrate	Annually
W-832-3019	EW	OU7	6/30/14	$Tnsc_{1a}$	60	42.8	32-42	VOCs	Semi-annually	Perchlorate, Nitrate	Annually
W-817-3026	IW	OU4	7/16/14	$Tnbs_2$	150	120.5	80-120	VOCs	Semi-annually	Perchlorate, Nitrate	Annually
W-817-3025	IW	OU4	7/28/14	$Tnbs_2$	150	117	76-116	VOCs	Semi-annually	Perchlorate, Nitrate	Annually
W-817-3023	MW	OU4	8/20/14	$Tnbs_2$	145.5	144.5	134-144	VOCs	Semi-annually	Perchlorate, Nitrate	Annually
W-PIT1-3022	MW	OU5	9/4/14	$Tnbs_1/Tnbs_0$	185	180.5	165-180	Tritium, Perchlorate	Semi-annually	Uranium, Nitrate	Annually
W-PIT1-3021	MW	OU5	9/9/14	$Tnbs_1/Tnbs_0$	135	135	122-132	Tritium, Perchlorate	Semi-annually	Uranium, Nitrate	Annually
W-832-3017	MW	OU7	10/27/14	Qal/WBR	10	10	2.5-10	VOCs	Semi-annually	Perchlorate, Nitrate	Annually
W-832-3018	MW	OU7	10/28/14	Qal/WBR	3.5	3.5	1-3.5	VOCs	Semi-annually	Perchlorate, Nitrate	Annually
W-832-3016	MW	OU7	10/29/14	Qal/WBR	10	10	2.5-10	VOCs	Semi-annually	Perchlorate, Nitrate	Annually
W-832-3015	MW	OU7	11/3/14	Qal/WBR	5.5	5.5	1.5-5	VOCs	Semi-annually	Perchlorate, Nitrate	Annually

Notes:

bgs = Below ground surface.
COC = Contaminant of concern.
ft = Feet.
HSU = Hydrostratigraphic unit.
OU = Operable Unit.
MW = Monitor Well.
EW = Extraction Well.
IW = Injection Well.

Table 2.1-1. Central General Services Area (CGSA) volumes of ground water and soil vapor extracted and discharged, July 1, 2014 through December 31, 2014.

Treatment facility	Month	SVTS Operational hours	GWTS Operational hours	Volume of vapor extracted (thousands of cf)	Volume of ground water discharged (gal)
CGSA	July	744	360	1,587	23,363
	August	672	672	1,487	34,640
	September	792	720	1,723	28,825
	October	720	432	1,570	9,945
	November	648	648	1,407	9,721
	December	792	288	1,673	4,101
Total		4,368	3,120	9,447	110,595

Table 2.1-2. General Services Area Operable Unit volatile organic compounds (VOCs) in ground water extraction and treatment system influent and effluent.

Location	Date	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Carbon tetra-chloride (µg/L)	Chloro-form (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	1,1,2-TCA (µg/L)	Freon 11 (µg/L)	Freon 113 (µg/L)	Vinyl chloride (µg/L)
CGSA-I	7/23/14	22	0.63	1.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CGSA-I	7/23/14 DUP	22	0.58	2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CGSA-I	10/7/14	25	<0.5	1.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CGSA-E	7/23/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CGSA-E	8/5/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CGSA-E	9/3/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CGSA-E	10/7/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CGSA-E	11/5/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CGSA-E	12/1/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Notes:

See Acronyms and Abbreviations in the Tables section of this report for acronym and abbreviation definitions.

Table 2.1-2 (Con't). Analyte detected but not reported in main table.

Location	Date	Detection frequency	1,2-DCE (total) (µg/L)
CGSA-I	7/23/14	1 of 18	2
CGSA-I	7/23/14 DUP	1 of 18	2.2
CGSA-I	10/7/14	1 of 18	1.5
CGSA-E	7/23/14	0 of 18	-
CGSA-E	8/5/14	0 of 18	-
CGSA-E	9/3/14	0 of 18	-
CGSA-E	10/7/14	0 of 18	-
CGSA-E	11/5/14	0 of 18	-
CGSA-E	12/1/14	0 of 18	-

Notes:

See Acronyms and Abbreviations in the Tables section of this report for acronym and abbreviation definitions.

Table 2.1-3. Central General Services Area Operable Unit treatment facility sampling and analysis plan.

Sample location	Sample identification	Parameter	Frequency
CGSA GWTS			
Influent Port	**CGSA-I**	**VOCs**	**Quarterly**
		pH	**Quarterly**
Effluent Port	**CGSA-E**	**VOCs**	**Monthly**
		pH	**Monthly**
CGSA SVTS			
Influent Port	**CGSA-VI**	**No Monitoring Requirements**	
Effluent Port	**CGSA-VE**	**VOCs**	**Weekly**[a]
Intermediate GAC	**CGSA-VCF2I**	**VOCs**	**Weekly**[a]

Notes:

[a] **Weekly monitoring for VOCs will consist of the use of a flame-ionization detector, photo-ionization detector, or other District-approved VOC detection device.**

One duplicate and one blank (given fictitious labels) shall be taken for every 12 samples.

See Acronyms and Abbreviations in the Tables section of this report for acronym and abbreviation definitions.

Table 2.1-4. General Services Area Operable Unit ground water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
CDF1	WS	LTnbs1	A	WGMG	E502.2:ALL	1	Y	
CDF1	WS	LTnbs1	M	CMP	E601:ALL	1	Y	
CDF1	WS	LTnbs1	M	CMP	E601:ALL	1	Y	
CDF1	WS	LTnbs1	M	CMP	E601:ALL	1	Y	
CDF1	WS	LTnbs1	M	CMP	E601:ALL	2	N	Inoperable pump (April only).
CDF1	WS	LTnbs1	M	CMP	E601:ALL	2	Y	
CDF1	WS	LTnbs1	M	CMP	E601:ALL	2	Y	
CDF1	WS	LTnbs1	M	CMP	E601:ALL	3	Y	
CDF1	WS	LTnbs1	M	CMP	E601:ALL	3	Y	
CDF1	WS	LTnbs1	M	CMP	E601:ALL	3	Y	
CDF1	WS	LTnbs1	M	CMP	E601:ALL	4	Y	
CDF1	WS	LTnbs1	M	CMP	E601:ALL	4	Y	
CDF1	WS	LTnbs1	M	CMP	E601:ALL	4	Y	
CON1	WS	LTnbs1	A	WGMG	E502.2:ALL	1	Y	
CON1	WS	LTnbs1	M	CMP	E601:ALL	1	Y	
CON1	WS	LTnbs1	M	CMP	E601:ALL	1	Y	
CON1	WS	LTnbs1	M	CMP	E601:ALL	1	Y	
CON1	WS	LTnbs1	M	CMP	E601:ALL	2	Y	
CON1	WS	LTnbs1	M	CMP	E601:ALL	2	Y	
CON1	WS	LTnbs1	M	CMP	E601:ALL	2	Y	
CON1	WS	LTnbs1	M	CMP	E601:ALL	3	Y	
CON1	WS	LTnbs1	M	CMP	E601:ALL	3	Y	
CON1	WS	LTnbs1	M	CMP	E601:ALL	3	Y	
CON1	WS	LTnbs1	M	CMP	E601:ALL	4	Y	
CON1	WS	LTnbs1	M	CMP	E601:ALL	4	Y	
CON1	WS	LTnbs1	M	CMP	E601:ALL	4	Y	
CON2	WS	LTnbs1	A	WGMG	E601:ALL	1	Y	
CON2	WS	LTnbs1	M	CMP	E601:ALL	1	Y	
CON2	WS	LTnbs1	M	CMP	E601:ALL	1	N	March sample not analyzed - lab error.
CON2	WS	LTnbs1	M	CMP	E601:ALL	2	Y	
CON2	WS	LTnbs1	M	CMP	E601:ALL	2	Y	
CON2	WS	LTnbs1	M	CMP	E601:ALL	2	Y	
CON2	WS	LTnbs1	M	CMP	E601:ALL	3	Y	
CON2	WS	LTnbs1	M	CMP	E601:ALL	3	Y	
CON2	WS	LTnbs1	M	CMP	E601:ALL	3	Y	
CON2	WS	LTnbs1	M	CMP	E601:ALL	4	Y	
CON2	WS	LTnbs1	M	CMP	E601:ALL	4	Y	
CON2	WS	LTnbs1	M	CMP	E601:ALL	4	Y	
W-26R-06	PTMW	Qal-Tnbs1	S	CMP	E601:ALL	2	Y	
W-26R-06	PTMW	Qal-Tnbs1	S	CMP	E601:ALL	4	Y	
W-26R-11	PTMW	Qal-Tnbs1	S	DIS	E601:ALL	2	Y	
W-26R-11	PTMW	Qal-Tnbs1	S	DIS	E601:ALL	4	Y	
W-35A-01	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	2	Y	
W-35A-01	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	4	Y	
W-35A-02	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	2	Y	
W-35A-02	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	4	N	Unsafe conditions.
W-35A-03	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	2	Y	
W-35A-03	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	4	N	Unsafe conditions.
W-35A-04	PTMW	Qt-Tnsc1	A	WGMG	E502.2:ALL	4	Y	
W-35A-04	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	2	Y	
W-35A-04	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	4	Y	
W-35A-05	PTMW	UTnbs1	S	CMP	E601:ALL	2	Y	
W-35A-05	PTMW	UTnbs1	S	CMP	E601:ALL	4	N	Unsafe conditions.
W-35A-06	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	2	Y	
W-35A-06	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	4	N	Unsafe conditions.
W-35A-07	PTMW	LTnbs1	S	CMP	E601:ALL	2	Y	
W-35A-07	PTMW	LTnbs1	S	CMP	E601:ALL	4	N	Unsafe conditions.
W-35A-08	GW	Qt-Tnsc1	Q	CMP	E601:ALL	1	Y	
W-35A-08	GW	Qt-Tnsc1	Q	CMP	E601:ALL	2	N	Unsafe conditions.
W-35A-08	GW	Qt-Tnsc1	Q	CMP	E601:ALL	3	Y	
W-35A-08	GW	Qt-Tnsc1	Q	CMP	E601:ALL	4	N	Unsafe conditions.
W-35A-09	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	2	N	Unsafe conditions.
W-35A-09	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	4	N	Unsafe conditions.
W-35A-10	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	2	N	Unsafe conditions.

Table 2.1-4. General Services Area Operable Unit ground water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-35A-10	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	4	Y	
W-35A-11	PTMW	LTnbs1	S	CMP	E601:ALL	2	Y	
W-35A-11	PTMW	LTnbs1	S	CMP	E601:ALL	4	N	Unsafe conditions.
W-35A-12	PTMW	UTnbs1	S	CMP	E601:ALL	2	Y	
W-35A-12	PTMW	UTnbs1	S	CMP	E601:ALL	4	N	Unsafe conditions.
W-35A-13	PTMW	UTnbs1	S	CMP	E601:ALL	2	Y	
W-35A-13	PTMW	UTnbs1	S	CMP	E601:ALL	4	N	Unsafe conditions.
W-35A-14	GW	Qt-Tnsc1	Q	CMP	E601:ALL	1	Y	
W-35A-14	GW	Qt-Tnsc1	Q	CMP	E601:ALL	2	Y	
W-35A-14	GW	Qt-Tnsc1	Q	CMP	E601:ALL	3	Y	
W-35A-14	GW	Qt-Tnsc1	Q	CMP	E601:ALL	4	N	Unsafe conditions.
W-7A	PTMW	UTnbs1	S	CMP	E601:ALL	2	Y	
W-7A	PTMW	UTnbs1	S	CMP	E601:ALL	4	Y	
W-7B	PTMW	UTnbs1	S	CMP	E601:ALL	2	N	Inoperable pump.
W-7B	PTMW	UTnbs1	S	CMP	E601:ALL	4	N	Inoperable pump.
W-7C	PTMW	UTnbs1	S	CMP	E601:ALL	2	N	Inoperable pump.
W-7C	PTMW	UTnbs1	S	CMP	E601:ALL	4	N	Inoperable pump.
W-7DS	PTMW	Qal-Tnbs1	S	CMP	E601:ALL	2	Y	
W-7DS	PTMW	Qal-Tnbs1	S	CMP	E601:ALL	4	Y	
W-7E	PTMW	UTnbs1	S	CMP	E601:ALL	2	Y	
W-7E	PTMW	UTnbs1	S	CMP	E601:ALL	4	Y	
W-7ES	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	2	Y	
W-7ES	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	4	Y	
W-7F	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	2	Y	
W-7F	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	4	Y	
W-7G	PTMW	LTnbs1	S	CMP	E601:ALL	2	Y	
W-7G	PTMW	LTnbs1	S	CMP	E601:ALL	4	Y	
W-7H	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	2	Y	
W-7H	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	4	Y	
W-7I	EW	Qt-Tnsc1	S	CMP-TF	E601:ALL	2	Y	
W-7I	EW	Qt-Tnsc1	S	DIS-TF	E601:ALL	3	Y	
W-7I	EW	Qt-Tnsc1	S	CMP-TF	E601:ALL	4	N	Dry.
W-7J	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	2	Y	
W-7J	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	4	Y	
W-7K	PTMW	LTnbs1	S	CMP	E601:ALL	2	Y	
W-7K	PTMW	LTnbs1	S	CMP	E601:ALL	4	Y	
W-7L	PTMW	UTnbs1	S	CMP	E601:ALL	2	Y	
W-7L	PTMW	UTnbs1	S	CMP	E601:ALL	4	Y	
W-7M	PTMW	LTnbs1	S	CMP	E601:ALL	2	Y	
W-7M	PTMW	LTnbs1	S	CMP	E601:ALL	4	Y	
W-7N	PTMW	UTnbs1	S	CMP	E601:ALL	2	Y	
W-7N	PTMW	UTnbs1	S	CMP	E601:ALL	4	Y	
W-7O	EW	Qt-Tnsc1	S	CMP-TF	E601:ALL	2	Y	
W-7O	EW	Qt-Tnsc1	S	CMP-TF	E601:ALL	4	N	Dry.
W-7P	EW	Qal-Tnbs1	S	CMP-TF	E601:ALL	2	N	Unit off for freeze protection.
W-7P	EW	Qal-Tnbs1	S	CMP-TF	E601:ALL	4	N	Dry.
W-7PS	PTMW	Qal-Tnbs1	S	CMP	E601:ALL	2	N	Dry.
W-7PS	PTMW	Qal-Tnbs1	S	CMP	E601:ALL	4	N	Dry.
W-7R	EW	Qt-Tnsc1	S	CMP-TF	E601:ALL	2	Y	
W-7R	EW	Qt-Tnsc1	S	DIS-TF	E601:ALL	3	Y	
W-7R	EW	Qt-Tnsc1	S	CMP-TF	E601:ALL	4	Y	
W-7S	PTMW	Qt-Tnsc1	S	DIS	E601:ALL	2	Y	
W-7S	PTMW	Qt-Tnsc1	S	DIS	E601:ALL	4	Y	
W-7T	PTMW	Qt-Tnsc1	S	DIS	E601:ALL	2	Y	
W-7T	PTMW	Qt-Tnsc1	S	DIS	E601:ALL	4	Y	
W-843-01	PTMW	LTnbs1	S	CMP	E601:ALL	2	Y	
W-843-01	PTMW	LTnbs1	S	CMP	E601:ALL	4	Y	
W-843-02	PTMW	UTnbs1	S	CMP	E601:ALL	2	Y	
W-843-02	PTMW	UTnbs1	S	CMP	E601:ALL	4	Y	
W-872-01	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	2	N	Dry.
W-872-01	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	4	N	Dry.
W-872-02	EW	Qt-Tnsc1	S	CMP-TF	E601:ALL	2	Y	
W-872-02	EW	Qt-Tnsc1	S	DIS-TF	E601:ALL	3	Y	
W-872-02	EW	Qt-Tnsc1	S	CMP-TF	E601:ALL	4	Y	

Table 2.1-4. General Services Area Operable Unit ground water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-873-01	PTMW	LTnbs1	S	CMP	E601:ALL	2	Y	
W-873-01	PTMW	LTnbs1	S	CMP	E601:ALL	4	Y	
W-873-02	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	2	Y	
W-873-02	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	4	Y	
W-873-03	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	2	Y	
W-873-03	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	4	Y	
W-873-04	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	2	Y	
W-873-04	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	4	Y	
W-873-06	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	2	Y	
W-873-06	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	4	Y	
W-873-07	EW	Qt-Tnsc1	S	CMP-TF	E601:ALL	2	Y	
W-873-07	EW	Qt-Tnsc1	S	DIS-TF	E601:ALL	3	Y	
W-873-07	EW	Qt-Tnsc1	S	CMP-TF	E601:ALL	4	Y	
W-875-01	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	2	Y	
W-875-01	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	4	Y	
W-875-02	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	2	Y	
W-875-02	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	4	Y	
W-875-03	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	2	Y	
W-875-03	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	4	Y	
W-875-04	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	2	Y	
W-875-04	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	4	Y	
W-875-05	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	2	Y	
W-875-05	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	4	Y	
W-875-06	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	2	Y	
W-875-06	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	4	Y	
W-875-07	EW	Qt-Tnsc1	S	CMP-TF	E601:ALL	2	N	Unit off for freeze protection.
W-875-07	EW	Qt-Tnsc1	S	CMP-TF	E601:ALL	4	N	Dry.
W-875-08	EW	Qt-Tnsc1	S	CMP-TF	E601:ALL	2	Y	
W-875-08	EW	Qt-Tnsc1	S	DIS-TF	E601:ALL	3	Y	
W-875-08	EW	Qt-Tnsc1	S	CMP-TF	E601:ALL	4	Y	
W-875-09	EW	Qt-Tnsc1	S	CMP-TF	E601:ALL	2	N	Unit off for freeze protection.
W-875-09	EW	Qt-Tnsc1	S	CMP-TF	E601:ALL	4	N	Dry.
W-875-10	EW	Qt-Tnsc1	S	CMP-TF	E601:ALL	2	N	Unit off for freeze protection.
W-875-10	EW	Qt-Tnsc1	S	CMP-TF	E601:ALL	4	N	Dry.
W-875-11	EW	Qt-Tnsc1	S	CMP-TF	E601:ALL	2	N	Unit off for freeze protection.
W-875-11	EW	Qt-Tnsc1	S	CMP-TF	E601:ALL	4	N	Dry.
W-875-15	EW	Qt-Tnsc1	S	CMP-TF	E601:ALL	2	N	Unit off for freeze protection.
W-875-15	EW	Qt-Tnsc1	S	CMP-TF	E601:ALL	4	N	Dry.
W-876-01	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	2	Y	
W-876-01	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	4	Y	
W-879-01	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	2	Y	
W-879-01	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	4	Y	
W-889-01	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	2	Y	
W-889-01	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	4	Y	
W-CGSA-1732	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	2	N	Insufficient water.
W-CGSA-1732	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	4	N	Insufficient water.
W-CGSA-1733	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	2	N	Dry.
W-CGSA-1733	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	4	N	Dry.
W-CGSA-1735	PTMW	Qal-Tnbs1	S	CMP	E601:ALL	2	N	Dry.
W-CGSA-1735	PTMW	Qal-Tnbs1	S	CMP	E601:ALL	4	N	Dry.
W-CGSA-1736	PTMW	Qal-Tnbs1	S	CMP	E601:ALL	2	N	Insufficient water.
W-CGSA-1736	PTMW	Qal-Tnbs1	S	CMP	E601:ALL	4	N	Dry.
W-CGSA-1737	PTMW	Qal-Tnbs1	S	CMP	E601:ALL	2	Y	
W-CGSA-1737	PTMW	Qal-Tnbs1	S	CMP	E601:ALL	4	Y	
W-CGSA-1739	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	2	Y	
W-CGSA-1739	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	4	Y	
W-CGSA-2708	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	2	Y	
W-CGSA-2708	PTMW	Qt-Tnsc1	S	CMP	E601:ALL	4	Y	

Table 2.1-5. Central General Services Area (CGSA) mass removed, July 1, 2014 through December 31, 2014.

Treatment facility	Month	SVTS VOC mass removed (g)	GWTS VOC mass removed (g)	Perchlorate mass removed (g)	Nitrate mass removed (kg)	RDX mass removed (g)	TBOS/TKEBS mass removed (g)
CGSA	July	71	4.1	NA	NA	NA	NA
	August	67	6.3	NA	NA	NA	NA
	September	79	6.3	NA	NA	NA	NA
	October	72	5.7	NA	NA	NA	NA
	November	47	6.7	NA	NA	NA	NA
	December	56	3.0	NA	NA	NA	NA
Total		390	32	NA	NA	NA	NA

Table 2.2-1. Building 834 (834) volumes of ground water and soil vapor extracted and discharged, July 1, 2014 through December 31, 2014.

Treatment facility	Month	SVTS Operational hours	GWTS Operational hours	Volume of vapor extracted (thousands of cf)	Volume of ground water discharged (gal)
834	July	642	672	5,130	10,128
	August	673	673	5,393	9,803
	September	840	840	6,796	13,420
	October	672	672	5,538	10,173
	November	672	672	5,601	9,986
	December	336	336	2,792	5,335
Total		3,835	3,865	31,250	58,845

Table 2.2-2. Building 834 Operable Unit volatile organic compounds (VOCs) in ground water extraction and treatment system influent and effluent.

Location	Date	TCE (μg/L)	PCE (μg/L)	cis-1,2-DCE (μg/L)	trans-1,2-DCE (μg/L)	Carbon tetra-chloride (μg/L)	Chloro-form (μg/L)	1,1-DCA (μg/L)	1,2-DCA (μg/L)	1,1-DCE (μg/L)	1,1,1-TCA (μg/L)	1,1,2-TCA (μg/L)	Freon 11 (μg/L)	Freon 113 (μg/L)	Vinyl chloride (μg/L)
834-I	7/7/14	1,700 D	15	160 D	<25 D	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.52	0.52	<0.5	<0.5
834-I	7/7/14 DUP	1,700 D	15	160 D	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	0.6	0.9	<0.5	<0.5
834-I	10/6/14	1,700 D	14	100 D	<25 D	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5
834-E	7/7/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
834-E	8/4/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
834-E	9/2/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
834-E	10/6/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
834-E	11/3/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
834-E	12/1/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Notes:

See Acronyms and Abbreviations in the Tables section of this report for acronym and abbreviation definitions.

Table 2.2-2 (Con't). Analyte detected but not reported in main table.

Location	Date	Detection frequency	1,2-DCE (total) (μg/L)
834-I	7/7/14	1 of 18	160 D
834-I	7/7/14 DUP	1 of 18	160 D
834-I	10/6/14	1 of 18	100 D
834-E	7/7/14	0 of 18	-
834-E	8/4/14	0 of 18	-
834-E	9/2/14	0 of 18	-
834-E	10/6/14	0 of 18	-
834-E	11/3/14	0 of 18	-
834-E	12/1/14	0 of 18	-

Notes:

See Acronyms and Abbreviations in the Tables section of this report for acronym and abbreviation definitions.

Table 2.2-3. Building 834 Operable Unit diesel range organic compounds in ground water extraction and treatment system influent and effluent.

Location	Date	Diesel Fuel (µg/L)	Diesel Range Organics (C12-C24) (µg/L)
834-I	7/7/14	-	<200
834-I	7/7/14 DUP	79	-
834-I	10/6/14	-	<200
834-E	7/7/14	-	<200
834-E	8/4/14	-	<200
834-E	9/2/14	-	<200
834-E	10/6/14	-	<200
834-E	11/3/14	-	<200
834-E	12/1/14	-	<200

Notes:

See Acronyms and Abbreviations in the Tables section of this report for acronym and abbreviation definitions.

Table 2.2-4. Building 834 Operable Unit tetrabutyl orthosilicate/tetrakis (2-ethylbutyl) silane (TBOS/TKEBS) in ground water extraction and treatment system influent and effluent.

Location	Date	TBOS(µg/L)
834-I	7/7/14	27
834-I	7/7/14 DUP	<10
834-I	10/6/14	28
834-E	7/7/14	<10
834-E	8/4/14	<10
834-E	9/2/14	<10
834-E	10/6/14	<10
834-E	11/3/14	<10
834-E	12/1/14	<10

Notes:

See Acronyms and Abbreviations in the Tables section of this report for acronym and abbreviation definitions.

Table 2.2-5. Building 834 Operable Unit treatment facility sampling and analysis plan.

Sample location	Sample identification	Parameter	Frequency
834 GWTS			
Influent Port	834-I	VOCs	Quarterly
		TBOS/TKEBS	Quarterly
		Diesel	Quarterly
		pH	Quarterly
Effluent Port	834-E	VOCs	Monthly
		TBOS/TKEBS	Monthly
		Diesel	Monthly
		pH	Monthly
834 SVTS			
Influent Port	834-VI	No Monitoring Requirements	
Effluent Port	834-VE	VOCs	Weekly[a]
Intermediate GAC	834-VCF4I	VOCs	Weekly[a]

Notes:

[a] Weekly monitoring for VOCs will consist of the use of a flame-ionization detector, photo-ionization detector, or other District-approved VOC detection device.

One duplicate and one blank (given fictitious labels) shall be taken for every 12 samples.

See Acronyms and Abbreviations in the Tables section of this report for acronym and abbreviation definitions.

Table 2.2-6. Building 834 Operable Unit ground water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-834-1709	PTMW	Tpsg	A	CMP	E300.0:NO3	1	Y	
W-834-1709	PTMW	Tpsg	S	CMP	E601:ALL	1	Y	
W-834-1709	PTMW	Tpsg	S	CMP	E601:ALL	3	Y	
W-834-1709	PTMW	Tpsg	A	CMP	TBOS:ALL	1	N	Insufficient water.
W-834-1711	PTMW	Tps-Tnsc2	A	CMP	E300.0:NO3	1	N	Insufficient water.
W-834-1711	PTMW	Tps-Tnsc2	S	CMP	E601:ALL	1	Y	
W-834-1711	PTMW	Tps-Tnsc2	S	CMP	E601:ALL	3	N	Dry.
W-834-1711	PTMW	Tps-Tnsc2	A	CMP	TBOS:ALL	1	N	Insufficient water.
W-834-1824	PTMW	Tpsg	A	DIS	E200.7:FE	1	Y	
W-834-1824	PTMW	Tpsg	A	DIS	E200.8:MN	1	Y	
W-834-1824	PTMW	Tpsg	A	CMP	E300.0:NO3	1	Y	
W-834-1824	PTMW	Tpsg	S	CMP	E601:ALL	1	Y	
W-834-1824	PTMW	Tpsg	S	CMP	E601:ALL	3	Y	
W-834-1824	PTMW	Tpsg	1	UK	GENETRAC:DHC-M1	1	Y	
W-834-1824	PTMW	Tpsg	1	UK	GENETRAC:VCRA-M2	1	Y	
W-834-1824	PTMW	Tpsg	1	UK	LITEHCS:ALL	1	Y	
W-834-1824	PTMW	Tpsg	1	UK	LOWVFAS:ALL	1	Y	
W-834-1824	PTMW	Tpsg	E	CMP	TBOS:ALL	1	Y	
W-834-1825	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Dry.
W-834-1825	PTMW	Tpsg	S	CMP	E601:ALL	1	N	Dry.
W-834-1825	PTMW	Tpsg	S	CMP	E601:ALL	3	N	Insufficient water.
W-834-1825	PTMW	Tpsg	O	CMP	TBOS:ALL	1	N	To be sampled in 2015.
W-834-1833	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Insufficient water.
W-834-1833	PTMW	Tpsg	S	CMP	E601:ALL	1	N	Insufficient water.
W-834-1833	PTMW	Tpsg	S	CMP	E601:ALL	3	Y	
W-834-1833	PTMW	Tpsg	E	CMP	TBOS:ALL	1	N	Insufficient water.
W-834-2001	EW	Tps-Tnsc2	A	CMP-TF	E300.0:NO3	1	Y	
W-834-2001	EW	Tps-Tnsc2	S	CMP-TF	E601:ALL	1	Y	
W-834-2001	EW	Tps-Tnsc2	S	CMP-TF	E601:ALL	3	Y	
W-834-2001	EW	Tps-Tnsc2	S	DIS-TF	E624:ALL	2	Y	
W-834-2001	EW	Tps-Tnsc2	S	DIS-TF	E624:ALL	4	Y	
W-834-2001	EW	Tps-Tnsc2	S	DIS-TF	EM8015:DIESEL	1	Y	
W-834-2001	EW	Tps-Tnsc2	S	DIS-TF	EM8015:DIESEL	3	Y	
W-834-2001	EW	Tps-Tnsc2	A	CMP-TF	TBOS:ALL	1	Y	
W-834-2001	EW	Tps-Tnsc2	A	DIS-TF	TBOS:ALL	3	Y	
W-834-2113	PTMW	Tpsg	A	CMP	E300.0:NO3	1	Y	
W-834-2113	PTMW	Tpsg	S	CMP	E601:ALL	1	Y	
W-834-2113	PTMW	Tpsg	S	CMP	E601:ALL	3	Y	
W-834-2113	PTMW	Tpsg	E	CMP	TBOS:ALL	1	Y	
W-834-2117	PTMW	Tpsg	A	CMP	E300.0:NO3	1	Y	
W-834-2117	PTMW	Tpsg	S	CMP	E601:ALL	1	Y	
W-834-2117	PTMW	Tpsg	S	CMP	E601:ALL	3	Y	
W-834-2117	PTMW	Tpsg	O	CMP	TBOS:ALL	1	N	To be sampled in 2015.
W-834-2118	PTMW	Tpsg	A	CMP	E300.0:NO3	1	Y	
W-834-2118	PTMW	Tpsg	S	DIS	E300.0:PERC	1	Y	
W-834-2118	PTMW	Tpsg	S	DIS	E300.0:PERC	3	Y	
W-834-2118	PTMW	Tpsg	S	CMP	E601:ALL	1	Y	
W-834-2118	PTMW	Tpsg	S	CMP	E601:ALL	3	Y	
W-834-2118	PTMW	Tpsg	O	CMP	TBOS:ALL	1	N	To be sampled in 2015.
W-834-2119	PTMW	Tps-Tnsc2	A	CMP	E300.0:NO3	1	Y	
W-834-2119	PTMW	Tps-Tnsc2	S	CMP	E601:ALL	1	Y	
W-834-2119	PTMW	Tps-Tnsc2	S	CMP	E601:ALL	3	Y	
W-834-2119	PTMW	Tps-Tnsc2	E	CMP	TBOS:ALL	1	Y	
W-834-A1	PTMW	Tps-Tnsc2	A	CMP	E300.0:NO3	1	Y	
W-834-A1	PTMW	Tps-Tnsc2	S	CMP	E601:ALL	1	Y	
W-834-A1	PTMW	Tps-Tnsc2	S	CMP	E601:ALL	3	Y	
W-834-A1	PTMW	Tps-Tnsc2	E	DIS	EM8015:DRANGE	1	Y	
W-834-A1	PTMW	Tps-Tnsc2	A	CMP	TBOS:ALL	1	Y	
W-834-A2	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Dry.
W-834-A2	PTMW	Tpsg	S	CMP	E601:ALL	1	N	Dry.
W-834-A2	PTMW	Tpsg	S	CMP	E601:ALL	3	N	Dry.
W-834-A2	PTMW	Tpsg	A	CMP	TBOS:ALL	1	N	Dry.
W-834-B2	EW	Tpsg	A	CMP-TF	E300.0:NO3	1	Y	
W-834-B2	EW	Tpsg	S	CMP-TF	E601:ALL	1	Y	
W-834-B2	EW	Tpsg	S	DIS-TF	E601:ALL	2	Y	
W-834-B2	EW	Tpsg	S	CMP-TF	E601:ALL	3	Y	
W-834-B2	EW	Tpsg	S	DIS-TF	E601:ALL	4	Y	
W-834-B2	EW	Tpsg	A	CMP-TF	TBOS:ALL	1	Y	

Table 2.2-6. Building 834 Operable Unit ground water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-834-B2	EW	Tpsg	A	DIS-TF	TBOS:ALL	3	Y	
W-834-B3	EW	Tpsg	A	CMP-TF	E300.0:NO3	1	Y	
W-834-B3	EW	Tpsg	S	CMP-TF	E601:ALL	1	Y	
W-834-B3	EW	Tpsg	S	DIS-TF	E601:ALL	2	Y	
W-834-B3	EW	Tpsg	S	CMP-TF	E601:ALL	3	Y	
W-834-B3	EW	Tpsg	S	DIS-TF	E601:ALL	4	Y	
W-834-B3	EW	Tpsg	A	CMP-TF	TBOS:ALL	1	Y	
W-834-B3	EW	Tpsg	A	DIS-TF	TBOS:ALL	3	Y	
W-834-B4	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Dry.
W-834-B4	PTMW	Tpsg	S	CMP	E601:ALL	1	N	Dry.
W-834-B4	PTMW	Tpsg	S	CMP	E601:ALL	3	N	Dry.
W-834-B4	PTMW	Tpsg	A	CMP	TBOS:ALL	1	N	Dry.
W-834-C2	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Dry.
W-834-C2	PTMW	Tpsg	S	CMP	E601:ALL	1	N	Dry.
W-834-C2	PTMW	Tpsg	S	CMP	E601:ALL	3	N	Dry.
W-834-C2	PTMW	Tpsg	A	CMP	TBOS:ALL	1	N	Dry.
W-834-C4	PTMW	Tpsg	A	CMP	E300.0:NO3	1	Y	
W-834-C4	PTMW	Tpsg	S	CMP	E601:ALL	1	Y	
W-834-C4	PTMW	Tpsg	S	CMP	E601:ALL	3	Y	
W-834-C4	PTMW	Tpsg	A	CMP	TBOS:ALL	1	N	Insufficient water.
W-834-C5	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Insufficient water.
W-834-C5	PTMW	Tpsg	S	CMP	E601:ALL	1	N	Insufficient water.
W-834-C5	PTMW	Tpsg	S	CMP	E601:ALL	3	Y	
W-834-C5	PTMW	Tpsg	A	CMP	TBOS:ALL	1	N	Insufficient water.
W-834-D2	PTMW	LTnbs1	A	CMP	E300.0:NO3	1	N	Dry.
W-834-D2	PTMW	LTnbs1	A	CMP	E601:ALL	1	N	Dry.
W-834-D2	PTMW	LTnbs1	A	CMP	TBOS:ALL	1	N	Dry.
W-834-D3	PTMW	Tpsg	A	CMP	E300.0:NO3	1	Y	
W-834-D3	PTMW	Tpsg	S	CMP	E601:ALL	1	Y	
W-834-D3	PTMW	Tpsg	S	CMP	E601:ALL	3	Y	
W-834-D3	PTMW	Tpsg	A	CMP	TBOS:ALL	1	Y	
W-834-D4	EW	Tpsg	A	CMP-TF	E300.0:NO3	1	Y	
W-834-D4	EW	Tpsg	S	CMP-TF	E601:ALL	1	Y	
W-834-D4	EW	Tpsg	S	DIS-TF	E601:ALL	2	Y	
W-834-D4	EW	Tpsg	S	CMP-TF	E601:ALL	3	Y	
W-834-D4	EW	Tpsg	S	DIS-TF	E601:ALL	4	Y	
W-834-D4	EW	Tpsg	A	CMP-TF	TBOS:ALL	1	Y	
W-834-D4	EW	Tpsg	A	DIS-TF	TBOS:ALL	3	Y	
W-834-D5	EW	Tpsg	A	CMP-TF	E300.0:NO3	1	Y	
W-834-D5	EW	Tpsg	S	CMP-TF	E601:ALL	1	Y	
W-834-D5	EW	Tpsg	S	CMP-TF	E601:ALL	3	Y	
W-834-D5	EW	Tpsg	A	CMP-TF	TBOS:ALL	1	Y	
W-834-D6	EW	Tpsg	A	CMP-TF	E300.0:NO3	1	Y	
W-834-D6	EW	Tpsg	S	CMP-TF	E601:ALL	1	Y	
W-834-D6	EW	Tpsg	S	DIS-TF	E601:ALL	2	Y	
W-834-D6	EW	Tpsg	S	CMP-TF	E601:ALL	3	Y	
W-834-D6	EW	Tpsg	S	DIS-TF	E601:ALL	4	Y	
W-834-D6	EW	Tpsg	A	CMP-TF	TBOS:ALL	1	Y	
W-834-D6	EW	Tpsg	A	DIS-TF	TBOS:ALL	3	Y	
W-834-D7	EW	Tpsg	A	CMP-TF	E300.0:NO3	1	Y	
W-834-D7	EW	Tpsg	S	CMP-TF	E601:ALL	1	Y	
W-834-D7	EW	Tpsg	S	DIS-TF	E601:ALL	2	Y	
W-834-D7	EW	Tpsg	S	CMP-TF	E601:ALL	3	Y	
W-834-D7	EW	Tpsg	S	DIS-TF	E601:ALL	4	Y	
W-834-D7	EW	Tpsg	A	CMP-TF	TBOS:ALL	1	Y	
W-834-D7	EW	Tpsg	A	DIS-TF	TBOS:ALL	3	Y	
W-834-D9A	PTMW	Tnbs2	A	CMP	E300.0:NO3	1	N	Dry.
W-834-D9A	PTMW	Tnbs2	A	CMP	E601:ALL	1	N	Dry.
W-834-D9A	PTMW	Tnbs2	A	CMP	TBOS:ALL	1	N	Dry.
W-834-D10	PTMW	Tps-Tnsc2	A	CMP	E300.0:NO3	1	N	Dry.
W-834-D10	PTMW	Tps-Tnsc2	S	CMP	E601:ALL	1	N	Dry.
W-834-D10	PTMW	Tps-Tnsc2	S	CMP	E601:ALL	3	N	Dry.
W-834-D10	PTMW	Tps-Tnsc2	A	CMP	TBOS:ALL	1	N	Dry.
W-834-D11	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Insufficient water.
W-834-D11	PTMW	Tpsg	S	CMP	E601:ALL	1	N	Insufficient water.
W-834-D11	PTMW	Tpsg	S	CMP	E601:ALL	3	N	Insufficient water.
W-834-D11	PTMW	Tpsg	A	CMP	TBOS:ALL	1	N	Insufficient water.
W-834-D12	EW	Tpsg	A	CMP-TF	E300.0:NO3	1	Y	

Table 2.2-6. Building 834 Operable Unit ground water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-834-D12	EW	Tpsg	S	CMP-TF	E601:ALL	1	Y	
W-834-D12	EW	Tpsg	S	DIS-TF	E601:ALL	2	Y	
W-834-D12	EW	Tpsg	S	CMP-TF	E601:ALL	3	Y	
W-834-D12	EW	Tpsg	S	DIS-TF	E601:ALL	4	Y	
W-834-D12	EW	Tpsg	A	CMP-TF	TBOS:ALL	1	Y	
W-834-D12	EW	Tpsg	A	DIS-TF	TBOS:ALL	3	Y	
W-834-D13	EW	Tpsg	A	CMP-TF	E300.0:NO3	1	Y	
W-834-D13	EW	Tpsg	S	CMP-TF	E601:ALL	1	Y	
W-834-D13	EW	Tpsg	S	DIS-TF	E601:ALL	2	Y	
W-834-D13	EW	Tpsg	S	CMP-TF	E601:ALL	3	Y	
W-834-D13	EW	Tpsg	S	DIS-TF	E601:ALL	4	Y	
W-834-D13	EW	Tpsg	A	CMP-TF	TBOS:ALL	1	Y	
W-834-D13	EW	Tpsg	A	DIS-TF	TBOS:ALL	3	Y	
W-834-D14	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Insufficient water.
W-834-D14	PTMW	Tpsg	S	CMP	E601:ALL	1	N	Insufficient water.
W-834-D14	PTMW	Tpsg	S	CMP	E601:ALL	3	N	Insufficient water.
W-834-D14	PTMW	Tpsg	A	CMP	TBOS:ALL	1	N	Insufficient water.
W-834-D15	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Dry.
W-834-D15	PTMW	Tpsg	S	CMP	E601:ALL	1	N	Dry.
W-834-D15	PTMW	Tpsg	S	CMP	E601:ALL	3	N	Dry.
W-834-D15	PTMW	Tpsg	A	CMP	TBOS:ALL	1	N	Dry.
W-834-D16	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Dry.
W-834-D16	PTMW	Tpsg	S	CMP	E601:ALL	1	N	Dry.
W-834-D16	PTMW	Tpsg	S	CMP	E601:ALL	3	N	Dry.
W-834-D16	PTMW	Tpsg	A	CMP	TBOS:ALL	1	N	Dry.
W-834-D17	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Dry.
W-834-D17	PTMW	Tpsg	S	CMP	E601:ALL	1	N	Dry.
W-834-D17	PTMW	Tpsg	S	CMP	E601:ALL	3	N	Dry.
W-834-D17	PTMW	Tpsg	A	CMP	TBOS:ALL	1	N	Dry.
W-834-D18	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Insufficient water.
W-834-D18	PTMW	Tpsg	S	CMP	E601:ALL	1	N	Insufficient water.
W-834-D18	PTMW	Tpsg	S	CMP	E601:ALL	3	N	Insufficient water.
W-834-D18	PTMW	Tpsg	A	CMP	TBOS:ALL	1	N	Insufficient water.
W-834-G3	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Dry.
W-834-G3	PTMW	Tpsg	A	CMP	E601:ALL	1	N	Dry.
W-834-G3	PTMW	Tpsg	A	CMP	TBOS:ALL	1	N	Dry.
W-834-H2	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Dry.
W-834-H2	PTMW	Tpsg	S	CMP	E601:ALL	1	N	Dry.
W-834-H2	PTMW	Tpsg	S	CMP	E601:ALL	3	N	Dry.
W-834-H2	PTMW	Tpsg	A	CMP	TBOS:ALL	1	N	Dry.
W-834-J1	EW	Tpsg	A	CMP-TF	E300.0:NO3	1	Y	
W-834-J1	EW	Tpsg	S	CMP-TF	E601:ALL	1	Y	
W-834-J1	EW	Tpsg	S	DIS-TF	E601:ALL	2	Y	
W-834-J1	EW	Tpsg	S	CMP-TF	E601:ALL	3	Y	
W-834-J1	EW	Tpsg	S	DIS-TF	E601:ALL	4	Y	
W-834-J1	EW	Tpsg	A	CMP-TF	TBOS:ALL	1	Y	
W-834-J1	EW	Tpsg	A	DIS-TF	TBOS:ALL	3	Y	
W-834-J2	PTMW	Tpsg	A	CMP	E300.0:NO3	1	Y	
W-834-J2	PTMW	Tpsg	S	CMP	E601:ALL	1	Y	
W-834-J2	PTMW	Tpsg	S	CMP	E601:ALL	3	Y	
W-834-J2	PTMW	Tpsg	A	CMP	TBOS:ALL	1	Y	
W-834-J3	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Dry.
W-834-J3	PTMW	Tpsg	S	CMP	E601:ALL	1	N	Dry.
W-834-J3	PTMW	Tpsg	S	CMP	E601:ALL	3	N	Dry.
W-834-J3	PTMW	Tpsg	O	CMP	TBOS:ALL	1	N	To be sampled in 2015.
W-834-K1A	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Dry.
W-834-K1A	PTMW	Tpsg	S	CMP	E601:ALL	1	N	Dry.
W-834-K1A	PTMW	Tpsg	S	CMP	E601:ALL	3	N	Dry.
W-834-K1A	PTMW	Tpsg	A	CMP	TBOS:ALL	1	N	Dry.
W-834-M1	PTMW	Tpsg	A	CMP	E300.0:NO3	1	Y	
W-834-M1	PTMW	Tpsg	S	CMP	E601:ALL	1	Y	
W-834-M1	PTMW	Tpsg	S	CMP	E601:ALL	3	Y	
W-834-M1	PTMW	Tpsg	E	CMP	TBOS:ALL	1	Y	
W-834-M2	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Dry.
W-834-M2	PTMW	Tpsg	S	CMP	E601:ALL	1	N	Dry.
W-834-M2	PTMW	Tpsg	S	CMP	E601:ALL	3	N	Dry.
W-834-M2	PTMW	Tpsg	E	CMP	TBOS:ALL	1	N	Dry.
W-834-S1	EW	Tpsg	A	CMP-TF	E300.0:NO3	1	Y	

Table 2.2-6. Building 834 Operable Unit ground water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-834-S1	EW	Tpsg	S	CMP-TF	E601:ALL	1	Y	
W-834-S1	EW	Tpsg	S	DIS-TF	E601:ALL	2	Y	
W-834-S1	EW	Tpsg	S	CMP-TF	E601:ALL	3	Y	
W-834-S1	EW	Tpsg	S	DIS-TF	E601:ALL	4	Y	
W-834-S1	EW	Tpsg	A	CMP-TF	TBOS:ALL	1	Y	
W-834-S1	EW	Tpsg	A	DIS-TF	TBOS:ALL	3	Y	
W-834-S10	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Dry.
W-834-S10	PTMW	Tpsg	S	CMP	E624:ALL	1	N	Dry.
W-834-S10	PTMW	Tpsg	S	CMP	E624:ALL	3	N	Dry.
W-834-S10	PTMW	Tpsg	A	CMP	TBOS:ALL	1	N	Dry.
W-834-S12A	EW	Tpsg	A	CMP-TF	E300.0:NO3	1	Y	
W-834-S12A	EW	Tpsg	S	CMP-TF	E601:ALL	1	Y	
W-834-S12A	EW	Tpsg	S	DIS-TF	E601:ALL	2	Y	
W-834-S12A	EW	Tpsg	S	CMP-TF	E601:ALL	3	Y	
W-834-S12A	EW	Tpsg	S	DIS-TF	E601:ALL	4	Y	
W-834-S12A	EW	Tpsg	A	CMP-TF	TBOS:ALL	1	Y	
W-834-S12A	EW	Tpsg	A	DIS-TF	TBOS:ALL	3	Y	
W-834-S13	EW	Tpsg	A	CMP-TF	E300.0:NO3	1	Y	
W-834-S13	EW	Tpsg	S	CMP-TF	E601:ALL	1	Y	
W-834-S13	EW	Tpsg	S	DIS-TF	E601:ALL	2	Y	
W-834-S13	EW	Tpsg	S	CMP-TF	E601:ALL	3	Y	
W-834-S13	EW	Tpsg	S	DIS-TF	E601:ALL	4	Y	
W-834-S13	EW	Tpsg	A	CMP-TF	TBOS:ALL	1	Y	
W-834-S13	EW	Tpsg	A	DIS-TF	TBOS:ALL	3	Y	
W-834-S4	PTMW	Tpsg	A	CMP	E300.0:NO3	1	Y	
W-834-S4	PTMW	Tpsg	S	CMP	E601:ALL	1	Y	
W-834-S4	PTMW	Tpsg	S	CMP	E601:ALL	3	Y	
W-834-S4	PTMW	Tpsg	O	CMP	TBOS:ALL	1	N	To be sampled in 2015.
W-834-S5	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Dry.
W-834-S5	PTMW	Tpsg	S	CMP	E601:ALL	1	N	Dry.
W-834-S5	PTMW	Tpsg	S	CMP	E601:ALL	3	N	Dry.
W-834-S5	PTMW	Tpsg	O	CMP	TBOS:ALL	1	N	To be sampled in 2015.
W-834-S6	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Insufficient water.
W-834-S6	PTMW	Tpsg	S	CMP	E601:ALL	1	N	Insufficient water.
W-834-S6	PTMW	Tpsg	S	CMP	E601:ALL	3	N	Insufficient water.
W-834-S6	PTMW	Tpsg	E	CMP	TBOS:ALL	1	N	Insufficient water.
W-834-S7	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Dry.
W-834-S7	PTMW	Tpsg	S	CMP	E601:ALL	1	N	Dry.
W-834-S7	PTMW	Tpsg	S	CMP	E601:ALL	3	N	Dry.
W-834-S7	PTMW	Tpsg	E	CMP	TBOS:ALL	1	N	Dry.
W-834-S8	PTMW	Tps-Tnsc2	A	CMP	E300.0:NO3	1	N	Dry.
W-834-S8	PTMW	Tps-Tnsc2	S	CMP	E601:ALL	1	N	Dry.
W-834-S8	PTMW	Tps-Tnsc2	S	CMP	E601:ALL	3	N	Dry.
W-834-S8	PTMW	Tps-Tnsc2	O	CMP	TBOS:ALL	1	N	To be sampled in 2015.
W-834-S9	PTMW	Tps-Tnsc2	A	CMP	E300.0:NO3	1	Y	
W-834-S9	PTMW	Tps-Tnsc2	S	CMP	E601:ALL	1	Y	
W-834-S9	PTMW	Tps-Tnsc2	S	CMP	E601:ALL	3	Y	
W-834-S9	PTMW	Tps-Tnsc2	E	DIS	EM8015:DRANGE	1	Y	
W-834-S9	PTMW	Tps-Tnsc2	E	CMP	TBOS:ALL	1	Y	
W-834-T1	GW	LTnbs1	S	CMP	E300.0:NO3	1	Y	
W-834-T1	GW	LTnbs1	S	CMP	E300.0:NO3	3	N	Inoperable pump.
W-834-T1	GW	LTnbs1	Q	CMP	E601:ALL	1	Y	
W-834-T1	GW	LTnbs1	Q	CMP	E601:ALL	2	Y	
W-834-T1	GW	LTnbs1	Q	CMP	E601:ALL	3	N	Inoperable pump.
W-834-T1	GW	LTnbs1	Q	CMP	E601:ALL	4	Y	
W-834-T1	GW	LTnbs1	S	CMP	TBOS:ALL	1	Y	
W-834-T1	GW	LTnbs1	S	CMP	TBOS:ALL	3	N	Inoperable pump.
W-834-T11	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Dry.
W-834-T11	PTMW	Tpsg	S	CMP	E601:ALL	1	N	Dry.
W-834-T11	PTMW	Tpsg	S	CMP	E601:ALL	3	N	Dry.
W-834-T11	PTMW	Tpsg	E	CMP	TBOS:ALL	1	N	Dry.
W-834-T2	PTMW	Tpsg	A	DIS	E200.7:FE	1	Y	
W-834-T2	PTMW	Tpsg	A	DIS	E200.8:MN	1	Y	
W-834-T2	PTMW	Tpsg	A	CMP	E300.0:NO3	1	Y	
W-834-T2	PTMW	Tpsg	S	CMP	E601:ALL	1	Y	
W-834-T2	PTMW	Tpsg	S	CMP	E601:ALL	3	Y	
W-834-T2	PTMW	Tpsg	1	UK	GENETRAC:DHC-M1	1	Y	
W-834-T2	PTMW	Tpsg	1	UK	GENETRAC:VCRA-M2	1	Y	

Table 2.2-6. Building 834 Operable Unit ground water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-834-T2	PTMW	Tpsg	1	UK	LITEHCS:ALL	1	Y	
W-834-T2	PTMW	Tpsg	1	UK	LOWVFAS:ALL	1	Y	
W-834-T2	PTMW	Tpsg	O	CMP	TBOS:ALL	1	N	To be sampled in 2015.
W-834-T2A	PTMW	Tpsg	A	CMP	E300.0:NO3	1	Y	
W-834-T2A	PTMW	Tpsg	S	CMP	E601:ALL	1	Y	
W-834-T2A	PTMW	Tpsg	S	CMP	E601:ALL	3	Y	
W-834-T2A	PTMW	Tpsg	E	CMP	TBOS:ALL	1	Y	
W-834-T2B	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Dry.
W-834-T2B	PTMW	Tpsg	S	CMP	E601:ALL	1	N	Dry.
W-834-T2B	PTMW	Tpsg	S	CMP	E601:ALL	3	N	Dry.
W-834-T2B	PTMW	Tpsg	O	CMP	TBOS:ALL	1	N	To be sampled in 2015.
W-834-T2C	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Dry.
W-834-T2C	PTMW	Tpsg	S	CMP	E601:ALL	1	N	Dry.
W-834-T2C	PTMW	Tpsg	S	CMP	E601:ALL	3	N	Dry.
W-834-T2C	PTMW	Tpsg	E	CMP	TBOS:ALL	1	N	Dry.
W-834-T2D	PTMW	Tpsg	A	CMP	E300.0:NO3	1	Y	
W-834-T2D	PTMW	Tpsg	S	CMP	E601:ALL	1	Y	
W-834-T2D	PTMW	Tpsg	S	CMP	E601:ALL	3	Y	
W-834-T2D	PTMW	Tpsg	E	CMP	TBOS:ALL	1	Y	
W-834-T3	GW	LTnbs1	Q	DIS	AS:UISO	1	Y	
W-834-T3	GW	LTnbs1	S	CMP	E300.0:NO3	1	Y	
W-834-T3	GW	LTnbs1	S	CMP	E300.0:NO3	3	N	Inoperable pump.
W-834-T3	GW	LTnbs1	Q	CMP	E601:ALL	1	Y	
W-834-T3	GW	LTnbs1	Q	CMP	E601:ALL	2	Y	
W-834-T3	GW	LTnbs1	Q	CMP	E601:ALL	3	N	Inoperable pump.
W-834-T3	GW	LTnbs1	Q	CMP	E601:ALL	4	N	Inoperable pump.
W-834-T3	GW	LTnbs1	Q	DIS	E9060:ALL	1	Y	
W-834-T3	GW	LTnbs1	Q	DIS	GENMIN:ALL	1	Y	
W-834-T3	GW	LTnbs1	S	CMP	TBOS:ALL	1	Y	
W-834-T3	GW	LTnbs1	S	CMP	TBOS:ALL	3	N	Inoperable pump.
W-834-T5	PTMW	Tps-Tnsc2	A	CMP	E300.0:NO3	1	Y	
W-834-T5	PTMW	Tps-Tnsc2	S	CMP	E601:ALL	1	Y	
W-834-T5	PTMW	Tps-Tnsc2	S	CMP	E601:ALL	3	Y	
W-834-T5	PTMW	Tps-Tnsc2	E	CMP	TBOS:ALL	1	Y	
W-834-T7A	PTMW	Tps-Tnsc2	A	CMP	E300.0:NO3	1	N	Dry.
W-834-T7A	PTMW	Tps-Tnsc2	S	CMP	E601:ALL	1	N	Dry.
W-834-T7A	PTMW	Tps-Tnsc2	S	CMP	E601:ALL	3	N	Dry.
W-834-T7A	PTMW	Tps-Tnsc2	O	CMP	TBOS:ALL	1	N	To be sampled in 2015.
W-834-T8A	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Dry.
W-834-T8A	PTMW	Tpsg	S	CMP	E601:ALL	1	N	Dry.
W-834-T8A	PTMW	Tpsg	S	CMP	E601:ALL	3	N	Dry.
W-834-T8A	PTMW	Tpsg	O	CMP	TBOS:ALL	1	N	To be sampled in 2015.
W-834-T9	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Dry.
W-834-T9	PTMW	Tpsg	S	CMP	E601:ALL	1	N	Dry.
W-834-T9	PTMW	Tpsg	S	CMP	E601:ALL	3	N	Dry.
W-834-T9	PTMW	Tpsg	O	CMP	TBOS:ALL	1	N	To be sampled in 2015.
W-834-U1	PTMW	Tps-Tnsc2	A	CMP	E300.0:NO3	1	Y	
W-834-U1	PTMW	Tps-Tnsc2	S	CMP	E624:ALL	1	Y	
W-834-U1	PTMW	Tps-Tnsc2	S	CMP	E624:ALL	3	Y	
W-834-U1	PTMW	Tps-Tnsc2	A	DIS	EM8015:DIESEL	1	Y	
W-834-U1	PTMW	Tps-Tnsc2	A	CMP	TBOS:ALL	1	Y	

Table 2.2-7. Building 834 (834) mass removed, July 1, 2014 through December 31, 2014.

Treatment facility	Month	SVTS VOC mass removed (g)	GWTS VOC mass removed (g)	Perchlorate mass removed (g)	Nitrate mass removed (kg)	RDX mass removed (g)	TBOS/TKEBS mass removed (g)
834	July	340	53	NA	3.1	NA	0
	August	390	14	NA	3.2	NA	1.1
	September	470	19	NA	4.2	NA	1.4
	October	390	16	NA	3.1	NA	1.1
	November	590	53	NA	3.1	NA	1.0
	December	290	25	NA	1.8	NA	0.60
Total		2,500	180	NA	18	NA	5.3

Table 2.3-1. Pit 6 Landfill Operable Unit ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
BC6-10	PTMW	LTnbs1	A	CMP	E300.0:NO3	1	Y	
BC6-10	PTMW	LTnbs1	A	CMP	E300.0:PERC	1	Y	
BC6-10	PTMW	LTnbs1	S	CMP	E601:ALL	1	Y	
BC6-10	PTMW	LTnbs1	S	CMP	E601:ALL	3	Y	
BC6-10	PTMW	LTnbs1	S	CMP	E906:ALL	1	Y	
BC6-10	PTMW	LTnbs1	S	CMP	E906:ALL	3	Y	
BC6-13	PTMW	Qt-Tnbs1	E	CMP	E300.0:NO3	1	N	Dry.
BC6-13	PTMW	Qt-Tnbs1	E	CMP	E300.0:PERC	1	N	Dry.
BC6-13	PTMW	Qt-Tnbs1	E	CMP	E601:ALL	1	N	Dry.
BC6-13	PTMW	Qt-Tnbs1	E	CMP	E906:ALL	1	N	Dry.
CARNRW1	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	1	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	1	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	1	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	2	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	2	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	2	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	3	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	3	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	3	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	4	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	4	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	4	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	1	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	1	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	1	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	2	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	2	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	2	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	3	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	3	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	3	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	4	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	4	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	4	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E601:ALL	1	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E601:ALL	1	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E601:ALL	1	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E601:ALL	2	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E601:ALL	2	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E601:ALL	2	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E601:ALL	3	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E601:ALL	3	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E601:ALL	3	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E601:ALL	4	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E601:ALL	4	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E601:ALL	4	Y	
CARNRW1	WS	Qt-Tnbs1	Q	WGMG	E624:ALL	1	Y	
CARNRW1	WS	Qt-Tnbs1	Q	WGMG	E624:ALL	2	Y	
CARNRW1	WS	Qt-Tnbs1	Q	WGMG	E624:ALL	3	Y	
CARNRW1	WS	Qt-Tnbs1	Q	WGMG	E624:ALL	4	Y	
CARNRW1	WS	Qt-Tnbs1	Q	WGMG	E8330:R+H	1	Y	
CARNRW1	WS	Qt-Tnbs1	Q	WGMG	E8330:R+H	2	Y	
CARNRW1	WS	Qt-Tnbs1	Q	WGMG	E8330:R+H	3	Y	
CARNRW1	WS	Qt-Tnbs1	Q	WGMG	E8330:R+H	4	Y	
CARNRW1	WS	Qt-Tnbs1	Q	WGMG	E900:ALL	1	Y	
CARNRW1	WS	Qt-Tnbs1	Q	WGMG	E900:ALL	2	Y	
CARNRW1	WS	Qt-Tnbs1	Q	WGMG	E900:ALL	3	Y	
CARNRW1	WS	Qt-Tnbs1	Q	WGMG	E900:ALL	4	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E906:ALL	1	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E906:ALL	1	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E906:ALL	1	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E906:ALL	2	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E906:ALL	2	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E906:ALL	2	Y	

Table 2.3-1. Pit 6 Landfill Operable Unit ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
CARNRW1	WS	Qt-Tnbs1	M	CMP	E906:ALL	3	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E906:ALL	3	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E906:ALL	3	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E906:ALL	4	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E906:ALL	4	Y	
CARNRW1	WS	Qt-Tnbs1	M	CMP	E906:ALL	4	Y	
CARNRW1	WS	Qt-Tnbs1	Q	WGMG	WGMGMET3:ALL	1	Y	
CARNRW1	WS	Qt-Tnbs1	Q	WGMG	WGMGMET3:ALL	2	Y	
CARNRW1	WS	Qt-Tnbs1	Q	WGMG	WGMGMET3:ALL	3	Y	
CARNRW1	WS	Qt-Tnbs1	Q	WGMG	WGMGMET3:ALL	4	Y	
CARNRW2	WS	Qt-Tnbs1	Q	WGMG	AS:UISO	1	Y	
CARNRW2	WS	Qt-Tnbs1	Q	WGMG	AS:UISO	2	Y	
CARNRW2	WS	Qt-Tnbs1	Q	WGMG	AS:UISO	3	Y	
CARNRW2	WS	Qt-Tnbs1	Q	WGMG	AS:UISO	4	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	1	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	1	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	1	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	2	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	2	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	2	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	3	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	3	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	3	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	4	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	4	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	4	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	1	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	1	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	1	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	2	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	2	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	2	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	3	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	3	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	3	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	4	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	4	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	4	Y	
CARNRW2	WS	Qt-Tnbs1	Q	WGMG	E502.2:ALL	1	Y	
CARNRW2	WS	Qt-Tnbs1	Q	WGMG	E502.2:ALL	2	Y	
CARNRW2	WS	Qt-Tnbs1	Q	WGMG	E502.2:ALL	3	Y	
CARNRW2	WS	Qt-Tnbs1	Q	WGMG	E502.2:ALL	4	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E601:ALL	1	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E601:ALL	1	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E601:ALL	1	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E601:ALL	2	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E601:ALL	2	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E601:ALL	2	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E601:ALL	3	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E601:ALL	3	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E601:ALL	3	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E601:ALL	4	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E601:ALL	4	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E601:ALL	4	Y	
CARNRW2	WS	Qt-Tnbs1	Q	WGMG	E8330:R+H	1	Y	
CARNRW2	WS	Qt-Tnbs1	Q	WGMG	E8330:R+H	2	Y	
CARNRW2	WS	Qt-Tnbs1	Q	WGMG	E8330:R+H	3	Y	
CARNRW2	WS	Qt-Tnbs1	Q	WGMG	E8330:R+H	4	Y	
CARNRW2	WS	Qt-Tnbs1	Q	WGMG	E900:ALL	1	Y	
CARNRW2	WS	Qt-Tnbs1	Q	WGMG	E900:ALL	2	Y	
CARNRW2	WS	Qt-Tnbs1	Q	WGMG	E900:ALL	3	Y	
CARNRW2	WS	Qt-Tnbs1	Q	WGMG	E900:ALL	4	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E906:ALL	1	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E906:ALL	1	Y	

Table 2.3-1. Pit 6 Landfill Operable Unit ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
CARNRW2	WS	Qt-Tnbs1	M	CMP	E906:ALL	1	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E906:ALL	2	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E906:ALL	2	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E906:ALL	2	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E906:ALL	3	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E906:ALL	3	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E906:ALL	3	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E906:ALL	4	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E906:ALL	4	Y	
CARNRW2	WS	Qt-Tnbs1	M	CMP	E906:ALL	4	Y	
CARNRW2	WS	Qt-Tnbs1	Q	WGMG	WGMGMET3:ALL	1	Y	
CARNRW2	WS	Qt-Tnbs1	Q	WGMG	WGMGMET3:ALL	2	Y	
CARNRW2	WS	Qt-Tnbs1	Q	WGMG	WGMGMET3:ALL	3	Y	
CARNRW2	WS	Qt-Tnbs1	Q	WGMG	WGMGMET3:ALL	4	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	1	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	1	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	1	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	2	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	2	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	2	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	3	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	3	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	3	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	4	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	4	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	4	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	1	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	1	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	1	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	2	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	2	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	2	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	3	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	3	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	3	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	4	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	4	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	4	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E601:ALL	1	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E601:ALL	1	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E601:ALL	1	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E601:ALL	2	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E601:ALL	2	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E601:ALL	2	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E601:ALL	3	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E601:ALL	3	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E601:ALL	3	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E601:ALL	4	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E601:ALL	4	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E601:ALL	4	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E906:ALL	1	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E906:ALL	1	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E906:ALL	1	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E906:ALL	2	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E906:ALL	2	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E906:ALL	2	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E906:ALL	3	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E906:ALL	3	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E906:ALL	3	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E906:ALL	4	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E906:ALL	4	Y	
CARNRW3	WS	Qt-Tnbs1	M	CMP	E906:ALL	4	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	1	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	1	Y	

Table 2.3-1. Pit 6 Landfill Operable Unit ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
CARNRW4	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	1	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	2	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	2	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	2	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	3	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	3	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	3	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	4	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	4	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E300.0:NO3	4	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	1	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	1	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	1	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	2	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	2	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	2	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	3	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	3	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	3	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	4	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	4	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E300.0:PERC	4	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E601:ALL	1	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E601:ALL	1	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E601:ALL	1	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E601:ALL	2	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E601:ALL	2	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E601:ALL	2	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E601:ALL	3	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E601:ALL	3	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E601:ALL	3	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E601:ALL	4	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E601:ALL	4	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E601:ALL	4	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E906:ALL	1	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E906:ALL	1	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E906:ALL	1	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E906:ALL	2	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E906:ALL	2	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E906:ALL	2	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E906:ALL	3	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E906:ALL	3	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E906:ALL	3	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E906:ALL	4	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E906:ALL	4	Y	
CARNRW4	WS	Qt-Tnbs1	M	CMP	E906:ALL	4	Y	
EP6-06	DMW	LTnbs1	A	WGMG	AS:UISO	1	Y	
EP6-06	DMW	LTnbs1	A	WGMG	E160.1:ALL	1	Y	
EP6-06	DMW	LTnbs1	A	WGMG	E210.2:ALL	1	Y	
EP6-06	DMW	LTnbs1	A	WGMG	E245.2:ALL	1	Y	
EP6-06	DMW	LTnbs1	A	WGMG	E300.0:NO3	1	Y	
EP6-06	DMW	LTnbs1	A	WGMG	E300.0:PERC	1	Y	
EP6-06	DMW	LTnbs1	S	WGMG	E601:ALL	1	Y	
EP6-06	DMW	LTnbs1	S	WGMG	E601:ALL	3	Y	
EP6-06	DMW	LTnbs1	A	WGMG	E602:ALL	1	Y	
EP6-06	DMW	LTnbs1	A	WGMG	E900:ALL	1	Y	
EP6-06	DMW	LTnbs1	S	WGMG	E906:ALL	1	Y	
EP6-06	DMW	LTnbs1	S	WGMG	E906:ALL	3	Y	
EP6-07	PTMW	Qt-Tnbs1	A	WGMG	AS:UISO	1	Y	
EP6-07	PTMW	Qt-Tnbs1	A	WGMG	E160.1:ALL	1	Y	
EP6-07	PTMW	Qt-Tnbs1	A	WGMG	E210.2:ALL	1	Y	
EP6-07	PTMW	Qt-Tnbs1	A	WGMG	E245.2:ALL	1	Y	
EP6-07	PTMW	Qt-Tnbs1	A	CMP	E300.0:NO3	1	Y	
EP6-07	PTMW	Qt-Tnbs1	A	CMP	E300.0:PERC	1	Y	

Table 2.3-1. Pit 6 Landfill Operable Unit ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
EP6-07	PTMW	Qt-Tnbs1	S	CMP	E601:ALL	1	Y	
EP6-07	PTMW	Qt-Tnbs1	S	CMP	E601:ALL	3	Y	
EP6-07	PTMW	Qt-Tnbs1	A	WGMG	E602:ALL	1	Y	
EP6-07	PTMW	Qt-Tnbs1	A	WGMG	E900:ALL	1	Y	
EP6-07	PTMW	Qt-Tnbs1	S	CMP	E906:ALL	1	Y	
EP6-07	PTMW	Qt-Tnbs1	S	CMP	E906:ALL	3	Y	
EP6-08	DMW	Qt-Tnbs1	A	WGMG	AS:UISO	1	N	Dry.
EP6-08	DMW	Qt-Tnbs1	A	WGMG	E160.1:ALL	1	N	Dry.
EP6-08	DMW	Qt-Tnbs1	A	WGMG	E210.2:ALL	1	N	Dry.
EP6-08	DMW	Qt-Tnbs1	A	WGMG	E245.2:ALL	1	N	Dry.
EP6-08	DMW	Qt-Tnbs1	A	WGMG	E300.0:NO3	1	N	Dry.
EP6-08	DMW	Qt-Tnbs1	A	WGMG	E300.0:PERC	1	N	Dry.
EP6-08	DMW	Qt-Tnbs1	S	WGMG	E601:ALL	1	N	Dry.
EP6-08	DMW	Qt-Tnbs1	S	WGMG	E601:ALL	3	N	Dry.
EP6-08	DMW	Qt-Tnbs1	A	WGMG	E602:ALL	1	N	Dry.
EP6-08	DMW	Qt-Tnbs1	A	WGMG	E900:ALL	1	N	Dry.
EP6-08	DMW	Qt-Tnbs1	S	WGMG	E906:ALL	1	N	Dry.
EP6-08	DMW	Qt-Tnbs1	S	WGMG	E906:ALL	3	N	Dry.
EP6-09	DMW	Qt-Tnbs1	A	WGMG	AS:UISO	1	Y	
EP6-09	DMW	Qt-Tnbs1	A	WGMG	E160.1:ALL	1	Y	
EP6-09	DMW	Qt-Tnbs1	A	WGMG	E210.2:ALL	1	Y	
EP6-09	DMW	Qt-Tnbs1	A	WGMG	E245.2:ALL	1	Y	
EP6-09	DMW	Qt-Tnbs1	A	WGMG	E300.0:NO3	1	Y	
EP6-09	DMW	Qt-Tnbs1	A	WGMG	E300.0:PERC	1	Y	
EP6-09	DMW	Qt-Tnbs1	S	WGMG	E601:ALL	1	Y	
EP6-09	DMW	Qt-Tnbs1	S	WGMG	E601:ALL	3	Y	
EP6-09	DMW	Qt-Tnbs1	A	WGMG	E602:ALL	1	Y	
EP6-09	DMW	Qt-Tnbs1	A	WGMG	E900:ALL	1	Y	
EP6-09	DMW	Qt-Tnbs1	S	WGMG	E906:ALL	1	Y	
EP6-09	DMW	Qt-Tnbs1	S	WGMG	E906:ALL	3	Y	
K6-01	DMW	Qt-Tnbs1	A	WGMG	AS:UISO	1	Y	
K6-01	DMW	Qt-Tnbs1	A	WGMG	E160.1:ALL	1	Y	
K6-01	DMW	Qt-Tnbs1	A	WGMG	E210.2:ALL	1	Y	
K6-01	DMW	Qt-Tnbs1	A	WGMG	E245.2:ALL	1	Y	
K6-01	DMW	Qt-Tnbs1	A	CMP	E300.0:NO3	1	Y	
K6-01	DMW	Qt-Tnbs1	A	CMP	E300.0:PERC	1	Y	
K6-01	DMW	Qt-Tnbs1	S	CMP	E601:ALL	1	Y	
K6-01	DMW	Qt-Tnbs1	S	CMP	E601:ALL	3	Y	
K6-01	DMW	Qt-Tnbs1	A	WGMG	E602:ALL	1	Y	
K6-01	DMW	Qt-Tnbs1	A	WGMG	E900:ALL	1	Y	
K6-01	DMW	Qt-Tnbs1	S	CMP	E906:ALL	1	Y	
K6-01	DMW	Qt-Tnbs1	S	CMP	E906:ALL	3	Y	
K6-01S	DMW	Qt-Tnbs1	A	WGMG	AS:UISO	1	Y	
K6-01S	DMW	Qt-Tnbs1	A	WGMG	E160.1:ALL	1	Y	
K6-01S	DMW	Qt-Tnbs1	A	WGMG	E210.2:ALL	1	Y	
K6-01S	DMW	Qt-Tnbs1	A	WGMG	E245.2:ALL	1	Y	
K6-01S	DMW	Qt-Tnbs1	A	WGMG	E300.0:NO3	1	Y	
K6-01S	DMW	Qt-Tnbs1	A	WGMG	E300.0:PERC	1	Y	
K6-01S	DMW	Qt-Tnbs1	S	WGMG	E601:ALL	1	Y	
K6-01S	DMW	Qt-Tnbs1	S	WGMG	E601:ALL	3	Y	
K6-01S	DMW	Qt-Tnbs1	A	WGMG	E602:ALL	1	Y	
K6-01S	DMW	Qt-Tnbs1	A	WGMG	E900:ALL	1	Y	
K6-01S	DMW	Qt-Tnbs1	S	WGMG	E906:ALL	1	Y	
K6-01S	DMW	Qt-Tnbs1	S	WGMG	E906:ALL	3	Y	
K6-03	PTMW	Qt-Tnbs1	A	CMP	E300.0:NO3	1	Y	
K6-03	PTMW	Qt-Tnbs1	A	CMP	E300.0:PERC	1	Y	
K6-03	PTMW	Qt-Tnbs1	S	CMP	E601:ALL	1	Y	
K6-03	PTMW	Qt-Tnbs1	S	CMP	E601:ALL	3	N	Inoperable pump.
K6-03	PTMW	Qt-Tnbs1	S	CMP	E906:ALL	1	Y	
K6-03	PTMW	Qt-Tnbs1	S	CMP	E906:ALL	3	N	Inoperable pump.
K6-04	PTMW	Qt-Tnbs1	A	CMP	E300.0:NO3	1	N	Inoperable pump.
K6-04	PTMW	Qt-Tnbs1	A	CMP	E300.0:PERC	1	N	Inoperable pump.
K6-04	PTMW	Qt-Tnbs1	S	CMP	E601:ALL	1	N	Inoperable pump.
K6-04	PTMW	Qt-Tnbs1	S	CMP	E601:ALL	3	N	Inoperable pump.

Table 2.3-1. Pit 6 Landfill Operable Unit ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
K6-04	PTMW	Qt-Tnbs1	S	CMP	E906:ALL	1	N	Inoperable pump.
K6-04	PTMW	Qt-Tnbs1	S	CMP	E906:ALL	3	N	Inoperable pump.
K6-14	PTMW	LTnbs1	A	CMP	E300.0:NO3	1	Y	
K6-14	PTMW	LTnbs1	A	CMP	E300.0:PERC	1	Y	
K6-14	PTMW	LTnbs1	S	CMP	E601:ALL	1	Y	
K6-14	PTMW	LTnbs1	S	CMP	E601:ALL	3	Y	
K6-14	PTMW	LTnbs1	S	CMP	E906:ALL	1	Y	
K6-14	PTMW	LTnbs1	S	CMP	E906:ALL	3	Y	
K6-15	PTMW	Qt-Tnbs1	A	CMP	E300.0:NO3	1	N	Dry.
K6-15	PTMW	Qt-Tnbs1	A	CMP	E300.0:PERC	1	N	Dry.
K6-15	PTMW	Qt-Tnbs1	S	CMP	E601:ALL	1	N	Dry.
K6-15	PTMW	Qt-Tnbs1	S	CMP	E601:ALL	3	N	Dry.
K6-15	PTMW	Qt-Tnbs1	S	CMP	E906:ALL	1	N	Dry.
K6-15	PTMW	Qt-Tnbs1	S	CMP	E906:ALL	3	N	Dry.
K6-16	PTMW	Qt-Tnbs1	A	CMP	E300.0:NO3	1	Y	
K6-16	PTMW	Qt-Tnbs1	A	CMP	E300.0:PERC	1	Y	
K6-16	PTMW	Qt-Tnbs1	S	CMP	E601:ALL	1	Y	
K6-16	PTMW	Qt-Tnbs1	S	CMP	E601:ALL	3	Y	
K6-16	PTMW	Qt-Tnbs1	S	CMP	E906:ALL	1	Y	
K6-16	PTMW	Qt-Tnbs1	S	CMP	E906:ALL	3	Y	
K6-17	GW	Qt-Tnbs1	S	CMP	E300.0:NO3	1	Y	
K6-17	GW	Qt-Tnbs1	S	CMP	E300.0:NO3	3	Y	
K6-17	GW	Qt-Tnbs1	S	CMP	E300.0:PERC	1	Y	
K6-17	GW	Qt-Tnbs1	S	CMP	E300.0:PERC	3	Y	
K6-17	GW	Qt-Tnbs1	Q	CMP	E601:ALL	1	Y	
K6-17	GW	Qt-Tnbs1	Q	CMP	E601:ALL	2	Y	
K6-17	GW	Qt-Tnbs1	Q	CMP	E601:ALL	3	Y	
K6-17	GW	Qt-Tnbs1	Q	CMP	E601:ALL	4	Y	
K6-17	GW	Qt-Tnbs1	Q	CMP	E906:ALL	1	Y	
K6-17	GW	Qt-Tnbs1	Q	CMP	E906:ALL	2	Y	
K6-17	GW	Qt-Tnbs1	Q	CMP	E906:ALL	3	Y	
K6-17	GW	Qt-Tnbs1	Q	CMP	E906:ALL	4	Y	
K6-17	GW	Qt-Tnbs1	S	WGMG	SM9221:ALL	1	Y	
K6-17	GW	Qt-Tnbs1	S	WGMG	SM9221:ALL	3	Y	
K6-18	PTMW	Qt-Tnbs1	A	CMP	E300.0:NO3	1	Y	
K6-18	PTMW	Qt-Tnbs1	A	CMP	E300.0:PERC	1	Y	
K6-18	PTMW	Qt-Tnbs1	S	CMP	E601:ALL	1	Y	
K6-18	PTMW	Qt-Tnbs1	S	CMP	E601:ALL	3	Y	
K6-18	PTMW	Qt-Tnbs1	S	CMP	E906:ALL	1	Y	
K6-18	PTMW	Qt-Tnbs1	S	CMP	E906:ALL	3	Y	
K6-19	DMW	Qt-Tnbs1	A	WGMG	AS:UISO	1	Y	
K6-19	DMW	Qt-Tnbs1	A	WGMG	E160.1:ALL	1	Y	
K6-19	DMW	Qt-Tnbs1	A	WGMG	E210.2:ALL	1	Y	
K6-19	DMW	Qt-Tnbs1	A	WGMG	E245.2:ALL	1	Y	
K6-19	DMW	Qt-Tnbs1	A	WGMG	E300.0:NO3	1	Y	
K6-19	DMW	Qt-Tnbs1	A	WGMG	E300.0:PERC	1	Y	
K6-19	DMW	Qt-Tnbs1	S	WGMG	E601:ALL	1	Y	
K6-19	DMW	Qt-Tnbs1	S	WGMG	E601:ALL	3	Y	
K6-19	DMW	Qt-Tnbs1	A	WGMG	E602:ALL	1	Y	
K6-19	DMW	Qt-Tnbs1	A	WGMG	E900:ALL	1	Y	
K6-19	DMW	Qt-Tnbs1	S	WGMG	E906:ALL	1	Y	
K6-19	DMW	Qt-Tnbs1	S	WGMG	E906:ALL	3	Y	
K6-21	PTMW	LTnbs1	A	CMP	E300.0:NO3	1	N	Dry.
K6-21	PTMW	LTnbs1	A	CMP	E300.0:PERC	1	N	Dry.
K6-21	PTMW	LTnbs1	A	CMP	E601:ALL	1	N	Dry.
K6-21	PTMW	LTnbs1	A	CMP	E906:ALL	1	N	Dry.
K6-22	GW	Qt-Tnbs1	S	CMP	E300.0:NO3	1	Y	
K6-22	GW	Qt-Tnbs1	S	CMP	E300.0:NO3	3	Y	
K6-22	GW	Qt-Tnbs1	S	CMP	E300.0:PERC	1	Y	
K6-22	GW	Qt-Tnbs1	S	CMP	E300.0:PERC	3	Y	
K6-22	GW	Qt-Tnbs1	Q	CMP	E601:ALL	1	Y	
K6-22	GW	Qt-Tnbs1	Q	CMP	E601:ALL	2	Y	
K6-22	GW	Qt-Tnbs1	Q	CMP	E601:ALL	3	Y	
K6-22	GW	Qt-Tnbs1	Q	CMP	E601:ALL	4	Y	

Table 2.3-1. Pit 6 Landfill Operable Unit ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
K6-22	GW	Qt-Tnbs1	Q	CMP	E906:ALL	1	Y	
K6-22	GW	Qt-Tnbs1	Q	CMP	E906:ALL	2	Y	
K6-22	GW	Qt-Tnbs1	Q	CMP	E906:ALL	3	Y	
K6-22	GW	Qt-Tnbs1	Q	CMP	E906:ALL	4	Y	
K6-23	PTMW	Qt-Tnbs1	S	CMP	E300.0:NO3	1	Y	
K6-23	PTMW	Qt-Tnbs1	S	CMP	E300.0:NO3	3	Y	
K6-23	PTMW	Qt-Tnbs1	A	CMP	E300.0:PERC	1	Y	
K6-23	PTMW	Qt-Tnbs1	S	CMP	E601:ALL	1	Y	
K6-23	PTMW	Qt-Tnbs1	S	CMP	E601:ALL	3	Y	
K6-23	PTMW	Qt-Tnbs1	S	CMP	E906:ALL	1	Y	
K6-23	PTMW	Qt-Tnbs1	S	CMP	E906:ALL	3	Y	
K6-23	PTMW	Qt-Tnbs1	S	WGMG	SM9221:ALL	1	Y	
K6-23	PTMW	Qt-Tnbs1	S	WGMG	SM9221:ALL	3	Y	
K6-24	PTMW	Qt-Tnbs1	A	CMP	E300.0:NO3	1	N	Dry.
K6-24	PTMW	Qt-Tnbs1	A	CMP	E300.0:PERC	1	N	Dry.
K6-24	PTMW	Qt-Tnbs1	S	CMP	E601:ALL	1	N	Dry.
K6-24	PTMW	Qt-Tnbs1	S	CMP	E601:ALL	3	N	Dry.
K6-24	PTMW	Qt-Tnbs1	S	CMP	E906:ALL	1	N	Dry.
K6-24	PTMW	Qt-Tnbs1	S	CMP	E906:ALL	3	N	Dry.
K6-25	PTMW	Tmss	A	CMP	E300.0:NO3	1	N	Inoperable pump.
K6-25	PTMW	Tmss	A	CMP	E300.0:PERC	1	N	Inoperable pump.
K6-25	PTMW	Tmss	S	CMP	E601:ALL	1	N	Inoperable pump.
K6-25	PTMW	Tmss	S	CMP	E601:ALL	3	Y	
K6-25	PTMW	Tmss	S	CMP	E906:ALL	1	N	Inoperable pump.
K6-25	PTMW	Tmss	S	CMP	E906:ALL	3	Y	
K6-26	PTMW	LTnbs1	A	CMP	E300.0:NO3	1	Y	
K6-26	PTMW	LTnbs1	A	CMP	E300.0:PERC	1	Y	
K6-26	PTMW	LTnbs1	S	CMP	E601:ALL	1	Y	
K6-26	PTMW	LTnbs1	S	CMP	E601:ALL	3	Y	
K6-26	PTMW	LTnbs1	S	CMP	E906:ALL	1	Y	
K6-26	PTMW	LTnbs1	S	CMP	E906:ALL	3	Y	
K6-27	PTMW	Qt-Tnbs1	A	CMP	E300.0:NO3	1	Y	
K6-27	PTMW	Qt-Tnbs1	A	CMP	E300.0:PERC	1	Y	
K6-27	PTMW	Qt-Tnbs1	S	CMP	E601:ALL	1	Y	
K6-27	PTMW	Qt-Tnbs1	S	CMP	E601:ALL	3	Y	
K6-27	PTMW	Qt-Tnbs1	S	CMP	E906:ALL	1	Y	
K6-27	PTMW	Qt-Tnbs1	S	CMP	E906:ALL	3	Y	
K6-32	PTMW	Qt-Tnbs1	A	CMP	E300.0:NO3	1	N	Dry.
K6-32	PTMW	Qt-Tnbs1	A	CMP	E300.0:PERC	1	N	Dry.
K6-32	PTMW	Qt-Tnbs1	S	CMP	E601:ALL	1	N	Dry.
K6-32	PTMW	Qt-Tnbs1	S	CMP	E601:ALL	3	N	Dry.
K6-32	PTMW	Qt-Tnbs1	S	CMP	E906:ALL	1	N	Dry.
K6-32	PTMW	Qt-Tnbs1	S	CMP	E906:ALL	3	N	Dry.
K6-33	PTMW	Qt-Tnbs1	A	CMP	E300.0:NO3	1	N	Insufficient water.
K6-33	PTMW	Qt-Tnbs1	A	CMP	E300.0:PERC	1	N	Insufficient water.
K6-33	PTMW	Qt-Tnbs1	S	CMP	E601:ALL	1	N	Insufficient water.
K6-33	PTMW	Qt-Tnbs1	S	CMP	E601:ALL	3	Y	
K6-33	PTMW	Qt-Tnbs1	S	CMP	E906:ALL	1	N	Insufficient water.
K6-33	PTMW	Qt-Tnbs1	S	CMP	E906:ALL	3	Y	
K6-34	GW	Qt-Tnbs1	S	CMP	E300.0:NO3	1	Y	
K6-34	GW	Qt-Tnbs1	S	CMP	E300.0:NO3	3	Y	
K6-34	GW	Qt-Tnbs1	S	CMP	E300.0:PERC	1	Y	
K6-34	GW	Qt-Tnbs1	S	CMP	E300.0:PERC	3	Y	
K6-34	GW	Qt-Tnbs1	Q	CMP	E601:ALL	1	Y	
K6-34	GW	Qt-Tnbs1	Q	CMP	E601:ALL	2	Y	
K6-34	GW	Qt-Tnbs1	Q	CMP	E601:ALL	3	Y	
K6-34	GW	Qt-Tnbs1	Q	CMP	E601:ALL	4	N	Inoperable pump.
K6-34	GW	Qt-Tnbs1	Q	CMP	E906:ALL	1	Y	
K6-34	GW	Qt-Tnbs1	Q	CMP	E906:ALL	2	Y	
K6-34	GW	Qt-Tnbs1	Q	CMP	E906:ALL	3	Y	
K6-34	GW	Qt-Tnbs1	Q	CMP	E906:ALL	4	N	Inoperable pump.
K6-35	PTMW	Qt-Tnbs1	A	WGMG	AS:UISO	1	Y	
K6-35	PTMW	Qt-Tnbs1	A	WGMG	E160.1:ALL	1	Y	
K6-35	PTMW	Qt-Tnbs1	A	WGMG	E210.2:ALL	1	Y	

Table 2.3-1. Pit 6 Landfill Operable Unit ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
K6-35	PTMW	Qt-Tnbs1	A	WGMG	E245.2:ALL	1	Y	
K6-35	PTMW	Qt-Tnbs1	A	CMP	E300.0:NO3	1	Y	
K6-35	PTMW	Qt-Tnbs1	A	CMP	E300.0:PERC	1	Y	
K6-35	PTMW	Qt-Tnbs1	S	CMP	E601:ALL	1	Y	
K6-35	PTMW	Qt-Tnbs1	S	CMP	E601:ALL	3	Y	
K6-35	PTMW	Qt-Tnbs1	A	WGMG	E602:ALL	1	Y	
K6-35	PTMW	Qt-Tnbs1	A	WGMG	E900:ALL	1	Y	
K6-35	PTMW	Qt-Tnbs1	S	CMP	E906:ALL	1	Y	
K6-35	PTMW	Qt-Tnbs1	S	CMP	E906:ALL	3	Y	
K6-36	DMW	Qt-Tnbs1	A	WGMG	AS:UISO	1	N	Dry.
K6-36	DMW	Qt-Tnbs1	A	WGMG	E160.1:ALL	1	N	Dry.
K6-36	DMW	Qt-Tnbs1	A	WGMG	E210.2:ALL	1	N	Dry.
K6-36	DMW	Qt-Tnbs1	A	WGMG	E245.2:ALL	1	N	Dry.
K6-36	DMW	Qt-Tnbs1	A	WGMG	E300.0:NO3	1	N	Dry.
K6-36	DMW	Qt-Tnbs1	A	WGMG	E300.0:PERC	1	N	Dry.
K6-36	DMW	Qt-Tnbs1	S	WGMG	E601:ALL	1	N	Dry.
K6-36	DMW	Qt-Tnbs1	S	WGMG	E601:ALL	3	N	Dry.
K6-36	DMW	Qt-Tnbs1	A	WGMG	E602:ALL	1	N	Dry.
K6-36	DMW	Qt-Tnbs1	A	WGMG	E900:ALL	1	N	Dry.
K6-36	DMW	Qt-Tnbs1	S	WGMG	E906:ALL	1	N	Dry.
K6-36	DMW	Qt-Tnbs1	S	WGMG	E906:ALL	3	N	Dry.
W-33C-01	PTMW	Tts	A	CMP	E300.0:NO3	1	Y	
W-33C-01	PTMW	Tts	A	CMP	E300.0:PERC	1	Y	
W-33C-01	PTMW	Tts	S	CMP	E601:ALL	1	Y	
W-33C-01	PTMW	Tts	S	CMP	E601:ALL	3	N	Dry.
W-33C-01	PTMW	Tts	S	CMP	E906:ALL	1	Y	
W-33C-01	PTMW	Tts	S	CMP	E906:ALL	3	N	Dry.
SPRING15	SPR	Qt-Tnbs1	O	CMP	E300.0:NO3	1	N	To be sampled in 2015.
SPRING15	SPR	Qt-Tnbs1	O	CMP	E300.0:PERC	1	N	To be sampled in 2015.
SPRING15	SPR	Qt-Tnbs1	O	CMP	E601:ALL	1	N	To be sampled in 2015.
SPRING15	SPR	Qt-Tnbs1	O	CMP	E906:ALL	1	N	To be sampled in 2015.
SPRING15	SPR	Qt-Tnbs1	Q	WGMG	NUTRIENTS:ALL	1	N	Dry.
SPRING15	SPR	Qt-Tnbs1	Q	WGMG	NUTRIENTS:ALL	2	N	Dry.
SPRING15	SPR	Qt-Tnbs1	Q	WGMG	NUTRIENTS:ALL	3	N	Dry.
SPRING15	SPR	Qt-Tnbs1	Q	WGMG	NUTRIENTS:ALL	4	N	Dry.
W-PIT6-1819	GW	Qt-Tnbs1	S	CMP	E300.0:NO3	1	Y	
W-PIT6-1819	GW	Qt-Tnbs1	S	CMP	E300.0:NO3	3	Y	
W-PIT6-1819	GW	Qt-Tnbs1	S	CMP	E300.0:PERC	1	Y	
W-PIT6-1819	GW	Qt-Tnbs1	S	CMP	E300.0:PERC	3	Y	
W-PIT6-1819	GW	Qt-Tnbs1	Q	CMP	E601:ALL	1	Y	
W-PIT6-1819	GW	Qt-Tnbs1	Q	CMP	E601:ALL	2	Y	
W-PIT6-1819	GW	Qt-Tnbs1	Q	CMP	E601:ALL	3	Y	
W-PIT6-1819	GW	Qt-Tnbs1	Q	CMP	E601:ALL	4	Y	
W-PIT6-1819	GW	Qt-Tnbs1	Q	CMP	E906:ALL	1	Y	
W-PIT6-1819	GW	Qt-Tnbs1	Q	CMP	E906:ALL	2	Y	
W-PIT6-1819	GW	Qt-Tnbs1	Q	CMP	E906:ALL	3	Y	
W-PIT6-1819	GW	Qt-Tnbs1	Q	CMP	E906:ALL	4	Y	
W-PIT6-2816	PTMW	Qt-Tnbs1	A	CMP	E300.0:NO3	1	Y	
W-PIT6-2816	PTMW	Qt-Tnbs1	A	CMP	E300.0:PERC	1	Y	
W-PIT6-2816	PTMW	Qt-Tnbs1	S	CMP	E601:ALL	1	Y	
W-PIT6-2816	PTMW	Qt-Tnbs1	S	CMP	E601:ALL	3	Y	
W-PIT6-2816	PTMW	Qt-Tnbs1	S	CMP	E906:ALL	1	Y	
W-PIT6-2816	PTMW	Qt-Tnbs1	S	CMP	E906:ALL	3	Y	
W-PIT6-2817	PTMW	Qt-Tnbs1	A	CMP	E300.0:NO3	1	Y	
W-PIT6-2817	PTMW	Qt-Tnbs1	A	CMP	E300.0:PERC	1	Y	
W-PIT6-2817	PTMW	Qt-Tnbs1	S	CMP	E601:ALL	1	Y	
W-PIT6-2817	PTMW	Qt-Tnbs1	S	CMP	E601:ALL	3	Y	
W-PIT6-2817	PTMW	Qt-Tnbs1	S	CMP	E906:ALL	1	Y	
W-PIT6-2817	PTMW	Qt-Tnbs1	S	CMP	E906:ALL	3	Y	

Table 2.4-1. Building 815-Source (815-SRC) volumes of ground water and soil vapor extracted and discharged, July 1, 2014 through December 31, 2014.

Treatment facility	Month	SVTS Operational hours	GWTS Operational hours	Volume of vapor extracted (thousands of cf)	Volume of ground water discharged (gal)
815-SRC	July	NA	668	NA	62,971
	August	NA	583	NA	54,963
	September	NA	820	NA	71,657
	October	NA	666	NA	56,661
	November	NA	670	NA	55,674
	December	NA	334	NA	27,691
Total		NA	3,741	NA	329,617

Table 2.4-2. Building 815-Proximal (815-PRX) volumes of ground water and soil vapor extracted and discharged, July 1, 2014 through December 31, 2014.

Treatment facility	Month	SVTS Operational hours	GWTS Operational hours	Volume of vapor extracted (thousands of cf)	Volume of ground water discharged (gal)
815-PRX	July	NA	678	NA	48,264
	August	NA	672	NA	43,418
	September	NA	851	NA	50,006
	October	NA	596	NA	35,219
	November	NA	679	NA	38,547
	December	NA	340	NA	19,091
Total		NA	3,816	NA	234,545

Table 2.4-3. Building 815-Distal Site Boundary (815-DSB) volumes of ground water and soil vapor extracted and discharged, July 1, 2014 through December 31, 2014.

Treatment facility	Month	SVTS Operational hours	GWTS Operational hours	Volume of vapor extracted (thousands of cf)	Volume of ground water discharged (gal)
815-DSB	July	NA	742	NA	169,464
	August	NA	605	NA	142,081
	September	NA	792	NA	175,568
	October	NA	486	NA	113,988
	November	NA	386	NA	106,710
	December	NA	530	NA	185,572
Total		NA	3,541	NA	893,383

Table 2.4-4. Building 817-Source (817-SRC) volumes of ground water and soil vapor extracted and discharged, July 1, 2014 through December 31, 2014.

Treatment facility	Month	SVTS Operational hours	GWTS Operational hours	Volume of vapor extracted (thousands of cf)	Volume of ground water discharged (gal)
817-SRC	July	NA	15	NA	648
	August	NA	14	NA	629
	September	NA	18	NA	678
	October	NA	12	NA	566
	November	NA	7	NA	395
	December	NA	5	NA	246
Total		NA	71	NA	3,162

Table 2.4-5. Building 817-Proximal (817-PRX) volumes of ground water and soil vapor extracted and discharged, July 1, 2014 through December 31, 2014.

Treatment facility	Month	SVTS Operational hours	GWTS Operational hours	Volume of vapor extracted (thousands of cf)	Volume of ground water discharged (gal)
817-PRX	July	NA	679	NA	55,243
	August	NA	632	NA	50,089
	September	NA	851	NA	65,154
	October	NA	676	NA	51,664
	November	NA	680	NA	54,442
	December	NA	340	NA	27,117
Total		NA	3,858	NA	303,709

Table 2.4-6. Building 829-Source (829-SRC) volumes of ground water and soil vapor extracted and discharged, July 1, 2014 through December 31, 2014.

Treatment facility	Month	SVTS Operational hours	GWTS Operational hours	Volume of vapor extracted (thousands of cf)	Volume of ground water discharged (gal)
829-SRC	July	NA	646	NA	87
	August	NA	673	NA	97
	September	NA	839	NA	117
	October	NA	673	NA	82
	November	NA	625	NA	85
	December	NA	315	NA	33
Total		NA	3,771	NA	501

Table 2.4-7. High Explosives Process Area Operable Unit volatile organic compounds (VOCs) in ground water extraction and treatment system influent and effluent.

Location	Date	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Carbon tetra-chloride (µg/L)	Chloro-form (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	1,1,2-TCA (µg/L)	Freon 11 (µg/L)	Freon 113 (µg/L)	Vinyl chloride (µg/L)
Building 815-Distal Site Boundary															
815-DSB-I	7/7/14	6.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
815-DSB-I	7/7/14 DUP	7.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
815-DSB-I	10/6/14	6.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
815-DSB-E	7/7/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
815-DSB-E	8/5/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
815-DSB-E	9/3/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
815-DSB-E	10/6/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
815-DSB-E	11/12/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
815-DSB-E	12/1/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Building 815-Proximal															
815-PRX-I	7/8/14	23	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
815-PRX-I	7/8/14 DUP	24	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
815-PRX-I	10/20/14	25	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
815-PRX-E	7/8/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
815-PRX-E	8/4/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
815-PRX-E	9/2/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
815-PRX-E	10/20/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
815-PRX-E	11/3/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
815-PRX-E	12/1/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table 2.4-7. High Explosives Process Area Operable Unit volatile organic compounds (VOCs) in ground water extraction and treatment system influent and effluent.

Location	Date	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Carbon tetra-chloride (µg/L)	Chloro-form (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	1,1,2-TCA (µg/L)	Freon 11 (µg/L)	Freon 113 (µg/L)	Vinyl chloride (µg/L)
Building 815-Source															
815-SRC-I	7/9/14	9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5
815-SRC-I	7/9/14 DUP	6.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5
815-SRC-I	10/7/14	5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
815-SRC-E	7/9/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
815-SRC-E	8/4/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
815-SRC-E	9/2/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
815-SRC-E	10/7/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
815-SRC-E	11/3/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
815-SRC-E	12/1/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Building 817-Proximal															
817-PRX-I	7/14/14	12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
817-PRX-I	7/14/14 DUP	12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
817-PRX-I	10/7/14	9.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
817-PRX-E	7/14/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
817-PRX-E	8/4/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
817-PRX-E	9/2/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
817-PRX-E	10/7/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
817-PRX-E	11/3/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
817-PRX-E	12/1/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table 2.4-7. High Explosives Process Area Operable Unit volatile organic compounds (VOCs) in ground water extraction and treatment system influent and effluent.

Location	Date	TCE (μg/L)	PCE (μg/L)	cis-1,2-DCE (μg/L)	trans-1,2-DCE (μg/L)	Carbon tetra-chloride (μg/L)	Chloro-form (μg/L)	1,1-DCA (μg/L)	1,2-DCA (μg/L)	1,1-DCE (μg/L)	1,1,1-TCA (μg/L)	1,1,2-TCA (μg/L)	Freon 11 (μg/L)	Freon 113 (μg/L)	Vinyl chloride (μg/L)
Building 817-Source															
817-SRC-I	7/7/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
817-SRC-I	7/7/14 DUP	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
817-SRC-I	10/7/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
817-SRC-E	7/7/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
817-SRC-E	8/4/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
817-SRC-E	9/2/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
817-SRC-E	10/7/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
817-SRC-E	11/3/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
817-SRC-E	12/1/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Building 829-Source[a]															
829-SRC-I	7/8/14	16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
829-SRC-I	7/8/14 DUP	16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
829-SRC-I	11/3/14	20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Notes:

[a] **No effluent samples collected due to ground water treatment being conducted at 815-SRC.**

See Acronyms and Abbreviations in the Tables section of this report for acronym and abbreviation definitions.

Table 2.4-7 (Con't). Analyte detected but not reported in main table.

Location	Date	Detection frequency
Building 815-Distal Site Boundary		
815-DSB-I	**7/7/14**	**0 of 18**
815-DSB-I	**7/7/14 DUP**	**0 of 18**
815-DSB-I	**10/6/14**	**0 of 18**
815-DSB-E	**7/7/14**	**0 of 18**
815-DSB-E	**8/5/14**	**0 of 18**
815-DSB-E	**9/3/14**	**0 of 18**
815-DSB-E	**10/6/14**	**0 of 18**
815-DSB-E	**11/12/14**	**0 of 18**
815-DSB-E	**12/1/14**	**0 of 18**
Building 815-Proximal		
815-PRX-I	**7/8/14**	**0 of 18**
815-PRX-I	**7/8/14 DUP**	**0 of 18**
815-PRX-I	**10/20/14**	**0 of 18**
815-PRX-E	**7/8/14**	**0 of 18**
815-PRX-E	**8/4/14**	**0 of 18**
815-PRX-E	**9/2/14**	**0 of 18**
815-PRX-E	**10/20/14**	**0 of 18**
815-PRX-E	**11/3/14**	**0 of 18**
815-PRX-E	**12/1/14**	**0 of 18**
Building 815-Source		
815-SRC-I	**7/9/14**	**0 of 18**
815-SRC-I	**7/9/14 DUP**	**0 of 18**
815-SRC-I	**10/7/14**	**0 of 18**
815-SRC-E	**7/9/14**	**0 of 18**
815-SRC-E	**8/4/14**	**0 of 18**
815-SRC-E	**9/2/14**	**0 of 18**
815-SRC-E	**10/7/14**	**0 of 18**
815-SRC-E	**11/3/14**	**0 of 18**
815-SRC-E	**12/1/14**	**0 of 18**
Building 817-Proximal		
817-PRX-I	**7/14/14**	**0 of 18**
817-PRX-I	**7/14/14 DUP**	**0 of 18**
817-PRX-I	**10/7/14**	**0 of 18**
817-PRX-E	**7/14/14**	**0 of 18**
817-PRX-E	**8/4/14**	**0 of 18**
817-PRX-E	**9/2/14**	**0 of 18**
817-PRX-E	**10/7/14**	**0 of 18**
817-PRX-E	**11/3/14**	**0 of 18**
817-PRX-E	**12/1/14**	**0 of 18**
Building 817-Source		
817-SRC-I	**7/7/14**	**0 of 18**
817-SRC-I	**7/7/14 DUP**	**0 of 18**

Table 2.4-7 (Con't). Analyte detected but not reported in main table.

Location	Date	Detection frequency
817-SRC-I	10/7/14	0 of 18
817-SRC-E	7/7/14	0 of 18
817-SRC-E	8/4/14	0 of 18
817-SRC-E	9/2/14	0 of 18
817-SRC-E	10/7/14	0 of 18
817-SRC-E	11/3/14	0 of 18
817-SRC-E	12/1/14	0 of 18
Building 829-Source[a]		
829-SRC-I	7/8/14	0 of 18
829-SRC-I	7/8/14 DUP	0 of 18
829-SRC-I	11/3/14	0 of 18

Notes:

[a] **No effluent samples collected due to ground water treatment being conducted at 815-SRC.**

See Acronyms and Abbreviations in the Tables section of this report for acronym and abbreviation definitions.

Table 2.4-8. High Explosives Process Area Operable Unit nitrate and perchlorate in ground water extraction and treatment system influent and effluent.

Location	Date	Nitrate as NO3 (mg/L)	Perchlorate (µg/L)
Building 815-Distal Site Boundry[a]			
815-DSB-I	7/7/14	<1 D	-
815-DSB-I	7/7/14 DUP	<0.5	-
815-DSB-I	10/6/14	<1 D	-
Building 815-Proximal[b]			
815-PRX-I	7/8/14	-	7.8
815-PRX-I	7/8/14 DUP	-	7.2
815-PRX-I	10/20/14	-	6.3
815-PRX-E	7/8/14	-	<4
815-PRX-E	8/4/14	-	<4
815-PRX-E	9/2/14	-	<4
815-PRX-E	10/20/14	-	<4
815-PRX-E	11/3/14	-	<4
815-PRX-E	12/1/14	-	<4
Building 815-Source[b]			
815-SRC-I	7/9/14	-	4.1
815-SRC-I	7/9/14 DUP	-	6.7
815-SRC-I	10/7/14	-	<4
815-SRC-E	7/9/14	-	<4
815-SRC-E	8/4/14	-	<4
815-SRC-E	9/2/14	-	<4
815-SRC-E	10/7/14	-	<4
815-SRC-E	11/3/14	-	<4
815-SRC-E	12/1/14	-	<4
Building 817-Proximal[b]			
817-PRX-I	7/14/14	-	21 D
817-PRX-I	7/14/14 DUP	-	22 D
817-PRX-I	10/7/14	-	20 D
817-PRX-E	7/14/14	-	<4
817-PRX-E	8/4/14	-	<4
817-PRX-E	9/2/14	-	<4
817-PRX-E	10/7/14	-	<4
817-PRX-E	11/3/14	-	<4

Table 2.4-8. High Explosives Process Area Operable Unit nitrate and perchlorate in ground water extraction and treatment system influent and effluent.

Location	Date	Nitrate as NO3 (mg/L)	Perchlorate (µg/L)
817-PRX-E	12/1/14	-	<4
Building 817-Source[b]			
817-SRC-I	7/7/14	-	29 D
817-SRC-I	7/7/14 DUP	-	28 D
817-SRC-I	10/7/14	-	28 D
817-SRC-E	7/7/14	-	<4
817-SRC-E	8/4/14	-	<4
817-SRC-E	9/2/14	-	<4
817-SRC-E	10/7/14	-	<4
817-SRC-E	11/3/14	-	<4
817-SRC-E	12/1/14	-	<4
Building 829-Source[c]			
829-SRC-I	7/8/14	68 D	11
829-SRC-I	7/8/14 DUP	54 D	10
829-SRC-I	11/3/14	71 D	13

Notes:

[a] No nitrate or perchlorate monitoring required; nitrate measured for trend analysis only.

[b] No nitrate monitoring required.

[c] No effluent samples collected due to ground water treatment being conducted at 815-SRC.

See Acronyms and Abbreviations in the Tables section of this report for acronym and abbreviation definitions.

Table 2.4-9. High Explosives Process Area Operable Unit high explosive compounds in ground water extraction and treatment system influent and effluent.

Location	Date	1,3,5-TNB (µg/L)	1,3-DNB (µg/L)	2,4-DNT (µg/L)	2,6-DNT (µg/L)	2-Amino-4,6-DNT (µg/L)	2-NT (µg/L)	3-NT (µg/L)	4-Amino-2,6-DNT (µg/L)	4-NT (µg/L)	HMX (µg/L)	NB (µg/L)	RDX (µg/L)	TNT (µg/L)
***Building 815-Distal Site Boundry*[a]**														
***Building 815-Proximal*[a]**														
Building 815-Source														
815-SRC-I	7/9/14	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	5.8 D	<2 D	40 D	<2 D
815-SRC-I	7/9/14 DUP	<2	<2	<2	<2	<2	<2	<2	5.5	<2	7.3	<2	46	<2
815-SRC-I	10/7/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	3.3	<2	29	<2
815-SRC-E	7/9/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
815-SRC-E	8/4/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
815-SRC-E	9/2/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
815-SRC-E	10/7/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
815-SRC-E	11/3/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
815-SRC-E	12/1/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
Building 817-Proximal														
817-PRX-I	7/14/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	6.3	<2
817-PRX-I	7/14/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	5.8	<2
817-PRX-I	10/7/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	7.4	<2
817-PRX-E	7/14/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
817-PRX-E	8/4/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
817-PRX-E	9/2/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
817-PRX-E	10/7/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
817-PRX-E	11/3/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
817-PRX-E	12/1/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2

Table 2.4-9. High Explosives Process Area Operable Unit high explosive compounds in ground water extraction and treatment system influent and effluent.

Location	Date	1,3,5-TNB (µg/L)	1,3-DNB (µg/L)	2,4-DNT (µg/L)	2,6-DNT (µg/L)	2-Amino-4,6-DNT (µg/L)	2-NT (µg/L)	3-NT (µg/L)	4-Amino-2,6-DNT (µg/L)	4-NT (µg/L)	HMX (µg/L)	NB (µg/L)	RDX (µg/L)	TNT (µg/L)
Building 817-Source														
817-SRC-I	7/7/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	15	<2	41	<2
817-SRC-I	7/7/14 DUP	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	15 D	<2 D	36 D	<2 D
817-SRC-I	10/7/14	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<2 IJ	8.6 IJ	<2 IJ	17 IJ	<2 IJ
817-SRC-E	7/7/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
817-SRC-E	8/4/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
817-SRC-E	9/2/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
817-SRC-E	10/7/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
817-SRC-E	11/3/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
817-SRC-E	12/1/14	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<1 D	<2 D	<1 D	<2 D
Building 829-Source[a]														

Notes:

[a] **No high explosive compound monitoring required.**

See Acronyms and Abbreviations in the Tables section of this report for acronym and abbreviation definitions.

Table 2.4-10. High Explosives Process Area Operable Unit treatment facility sampling and analysis plan.

Sample location	Sample identification	Parameter	Frequency
815-SRC GWTS			
Influent Port	**815-SRC-I**	**VOCs**	**Quarterly**
		HE Compounds	**Quarterly**
		Perchlorate	**Quarterly**
Effluent Port	**815-SRC-E**	**VOCs**	**Monthly**
		HE Compounds	**Monthly**
		Perchlorate	**Monthly**
		pH	**Monthly**
815-PRX GWTS			
Influent Port	**815-PRX-I**	**VOCs**	**Quarterly**
		Perchlorate	**Quarterly**
Effluent Port	**815-PRX-E**	**VOCs**	**Monthly**
		HE Compounds	**Quarterly**
		Perchlorate	**Monthly**
		pH	**Monthly**
815-DSB GWTS			
Influent Port	**815-DSB-I**	**VOCs**	**Quarterly**
Effluent Port	**815-DSB-E**	**VOCs**	**Monthly**
		pH	**Monthly**
817-SRC GWTS			
Influent Port	**W-817-01-817-SRC-I**	**VOCs**	**Quarterly**
		HE Compounds	**Quarterly**
		Perchlorate	**Quarterly**
Effluent Port	**817-SRC-E**	**VOCs**	**Monthly**
		HE Compounds	**Monthly**
		Perchlorate	**Monthly**
		pH	**Monthly**

Table 2.4-10 (Con't.). High Explosives Process Area Operable Unit treatment facility sampling and analysis plans.

Sample location	Sample identification	Parameter	Frequency
817-PRX GWTS			
Influent Port	817-PRX-I	VOCs	Quarterly
		HE Compounds	Quarterly
		Perchlorate	Quarterly
Effluent Port	817-PRX-E	VOCs	Monthly
		HE Compounds	Monthly
		Perchlorate	Monthly
		pH	Monthly
829-SRC GWTS			
Influent Port	W-829-06-829-SRC-I	VOCs	Quarterly
		Perchlorate	Quarterly
		Nitrate	Quarterly
Effluent Port[a]	829-SRC-E	NA	NA

Notes:

[a] Effluent monitoring no longer required due to extracted water being treated at 815-SRC GWTS.

One duplicate and one blank (given fictitious labels) shall be taken for every 12 samples.

See Acronyms and Abbreviations in the Tables section of this report for acronym and abbreviation definitions.

Table 2.4-11. High Explosives Process Area Operable Unit ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
GALLO1	WS	Tnbs2	M	CMP	E300.0:NO3	1	Y	
GALLO1	WS	Tnbs2	M	CMP	E300.0:NO3	1	Y	
GALLO1	WS	Tnbs2	M	CMP	E300.0:NO3	1	Y	
GALLO1	WS	Tnbs2	M	CMP	E300.0:NO3	2	Y	
GALLO1	WS	Tnbs2	M	CMP	E300.0:NO3	2	Y	
GALLO1	WS	Tnbs2	M	CMP	E300.0:NO3	2	Y	
GALLO1	WS	Tnbs2	M	CMP	E300.0:NO3	3	Y	
GALLO1	WS	Tnbs2	M	CMP	E300.0:NO3	3	Y	
GALLO1	WS	Tnbs2	M	CMP	E300.0:NO3	3	Y	
GALLO1	WS	Tnbs2	M	CMP	E300.0:NO3	4	Y	
GALLO1	WS	Tnbs2	M	CMP	E300.0:NO3	4	Y	
GALLO1	WS	Tnbs2	M	CMP	E300.0:NO3	4	Y	
GALLO1	WS	Tnbs2	M	CMP	E300.0:PERC	1	Y	
GALLO1	WS	Tnbs2	M	CMP	E300.0:PERC	1	Y	
GALLO1	WS	Tnbs2	M	CMP	E300.0:PERC	1	Y	
GALLO1	WS	Tnbs2	M	CMP	E300.0:PERC	2	Y	
GALLO1	WS	Tnbs2	M	CMP	E300.0:PERC	2	Y	
GALLO1	WS	Tnbs2	M	CMP	E300.0:PERC	2	Y	
GALLO1	WS	Tnbs2	M	CMP	E300.0:PERC	3	Y	
GALLO1	WS	Tnbs2	M	CMP	E300.0:PERC	3	Y	
GALLO1	WS	Tnbs2	M	CMP	E300.0:PERC	3	Y	
GALLO1	WS	Tnbs2	M	CMP	E300.0:PERC	4	Y	
GALLO1	WS	Tnbs2	M	CMP	E300.0:PERC	4	Y	
GALLO1	WS	Tnbs2	M	CMP	E300.0:PERC	4	Y	
GALLO1	WS	Tnbs2	Q	WGMG	E502.2:ALL	1	Y	
GALLO1	WS	Tnbs2	Q	WGMG	E502.2:ALL	2	Y	
GALLO1	WS	Tnbs2	Q	WGMG	E502.2:ALL	3	Y	
GALLO1	WS	Tnbs2	Q	WGMG	E502.2:ALL	4	Y	
GALLO1	WS	Tnbs2	M	CMP	E601:ALL	1	Y	
GALLO1	WS	Tnbs2	M	CMP	E601:ALL	1	Y	
GALLO1	WS	Tnbs2	M	CMP	E601:ALL	1	Y	
GALLO1	WS	Tnbs2	M	CMP	E601:ALL	2	Y	
GALLO1	WS	Tnbs2	M	CMP	E601:ALL	2	Y	
GALLO1	WS	Tnbs2	M	CMP	E601:ALL	2	Y	
GALLO1	WS	Tnbs2	M	CMP	E601:ALL	3	Y	
GALLO1	WS	Tnbs2	M	CMP	E601:ALL	3	Y	
GALLO1	WS	Tnbs2	M	CMP	E601:ALL	3	Y	
GALLO1	WS	Tnbs2	M	CMP	E601:ALL	4	Y	
GALLO1	WS	Tnbs2	M	CMP	E601:ALL	4	Y	
GALLO1	WS	Tnbs2	M	CMP	E601:ALL	4	Y	
GALLO1	WS	Tnbs2	M	CMP	E8330LOW:ALL	1	Y	
GALLO1	WS	Tnbs2	M	CMP	E8330LOW:ALL	1	Y	
GALLO1	WS	Tnbs2	M	CMP	E8330LOW:ALL	1	Y	
GALLO1	WS	Tnbs2	M	CMP	E8330LOW:ALL	2	Y	
GALLO1	WS	Tnbs2	M	CMP	E8330LOW:ALL	2	Y	
GALLO1	WS	Tnbs2	M	CMP	E8330LOW:ALL	2	Y	
GALLO1	WS	Tnbs2	M	CMP	E8330LOW:ALL	3	Y	
GALLO1	WS	Tnbs2	M	CMP	E8330LOW:ALL	3	Y	
GALLO1	WS	Tnbs2	M	CMP	E8330LOW:ALL	3	Y	
GALLO1	WS	Tnbs2	M	CMP	E8330LOW:ALL	4	Y	
GALLO1	WS	Tnbs2	M	CMP	E8330LOW:ALL	4	Y	
GALLO1	WS	Tnbs2	M	CMP	E8330LOW:ALL	4	Y	
SPRING14	SPR	Tpsg-Tps	O	CMP	E300.0:NO3	1	N	To be sampled in 2015.
SPRING14	SPR	Tpsg-Tps	O	CMP	E300.0:PERC	1	N	To be sampled in 2015.
SPRING14	SPR	Tpsg-Tps	O	CMP	E601:ALL	1	N	To be sampled in 2015.
SPRING14	SPR	Tpsg-Tps	O	CMP	E8330LOW:ALL	1	N	To be sampled in 2015.
SPRING5	SPR	Tpsg-Tps	A	CMP	E300.0:NO3	1	N	Dry.
SPRING5	SPR	Tpsg-Tps	A	CMP	E300.0:PERC	1	N	Dry.
SPRING5	SPR	Tpsg-Tps	S	CMP	E601:ALL	1	N	Dry.
SPRING5	SPR	Tpsg-Tps	S	CMP	E601:ALL	3	N	Dry.
SPRING5	SPR	Tpsg-Tps	A	CMP	E8330LOW:ALL	1	N	Dry.
W-35B-01	GW	Qal/WBR	S	CMP	E300.0:NO3	1	Y	
W-35B-01	GW	Qal/WBR	S	CMP	E300.0:NO3	3	Y	
W-35B-01	GW	Qal/WBR	S	CMP	E300.0:PERC	1	Y	

Table 2.4-11. High Explosives Process Area Operable Unit ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-35B-01	GW	Qal/WBR	S	CMP	E300.0:PERC	3	Y	
W-35B-01	GW	Qal/WBR	Q	CMP	E601:ALL	1	Y	
W-35B-01	GW	Qal/WBR	Q	CMP	E601:ALL	2	N	Unsafe conditions.
W-35B-01	GW	Qal/WBR	Q	CMP	E601:ALL	3	Y	
W-35B-01	GW	Qal/WBR	Q	CMP	E601:ALL	4	N	Unsafe conditions.
W-35B-01	GW	Qal/WBR	S	CMP	E8330LOW:ALL	1	Y	
W-35B-01	GW	Qal/WBR	S	CMP	E8330LOW:ALL	3	Y	
W-35B-02	GW	Tnbs2	S	CMP	E300.0:NO3	1	Y	
W-35B-02	GW	Tnbs2	S	CMP	E300.0:NO3	3	Y	
W-35B-02	GW	Tnbs2	S	CMP	E300.0:PERC	1	Y	
W-35B-02	GW	Tnbs2	S	CMP	E300.0:PERC	3	Y	
W-35B-02	GW	Tnbs2	Q	CMP	E601:ALL	1	Y	
W-35B-02	GW	Tnbs2	Q	CMP	E601:ALL	2	Y	
W-35B-02	GW	Tnbs2	Q	CMP	E601:ALL	3	Y	
W-35B-02	GW	Tnbs2	Q	CMP	E601:ALL	4	N	Unsafe conditions.
W-35B-02	GW	Tnbs2	S	CMP	E8330LOW:ALL	1	Y	
W-35B-02	GW	Tnbs2	S	CMP	E8330LOW:ALL	3	Y	
W-35B-03	GW	Tnbs2	S	CMP	E300.0:NO3	1	Y	
W-35B-03	GW	Tnbs2	S	CMP	E300.0:NO3	3	Y	
W-35B-03	GW	Tnbs2	S	CMP	E300.0:PERC	1	Y	
W-35B-03	GW	Tnbs2	S	CMP	E300.0:PERC	3	Y	
W-35B-03	GW	Tnbs2	Q	CMP	E601:ALL	1	Y	
W-35B-03	GW	Tnbs2	Q	CMP	E601:ALL	2	Y	
W-35B-03	GW	Tnbs2	Q	CMP	E601:ALL	3	Y	
W-35B-03	GW	Tnbs2	Q	CMP	E601:ALL	4	N	Unsafe conditions.
W-35B-03	GW	Tnbs2	S	CMP	E8330LOW:ALL	1	Y	
W-35B-03	GW	Tnbs2	S	CMP	E8330LOW:ALL	3	Y	
W-35B-04	GW	Tnbs2	S	CMP	E300.0:NO3	1	Y	
W-35B-04	GW	Tnbs2	S	CMP	E300.0:NO3	3	Y	
W-35B-04	GW	Tnbs2	S	CMP	E300.0:PERC	1	Y	
W-35B-04	GW	Tnbs2	S	CMP	E300.0:PERC	3	Y	
W-35B-04	GW	Tnbs2	Q	CMP	E601:ALL	1	Y	
W-35B-04	GW	Tnbs2	Q	CMP	E601:ALL	2	Y	
W-35B-04	GW	Tnbs2	Q	CMP	E601:ALL	3	Y	
W-35B-04	GW	Tnbs2	Q	CMP	E601:ALL	4	N	Unsafe conditions.
W-35B-04	GW	Tnbs2	S	CMP	E8330LOW:ALL	1	Y	
W-35B-04	GW	Tnbs2	S	CMP	E8330LOW:ALL	3	Y	
W-35B-05	GW	Tnbs2	S	CMP	E300.0:NO3	1	Y	
W-35B-05	GW	Tnbs2	S	CMP	E300.0:NO3	3	Y	
W-35B-05	GW	Tnbs2	S	CMP	E300.0:PERC	1	Y	
W-35B-05	GW	Tnbs2	S	CMP	E300.0:PERC	3	Y	
W-35B-05	GW	Tnbs2	Q	CMP	E601:ALL	1	Y	
W-35B-05	GW	Tnbs2	Q	CMP	E601:ALL	2	Y	
W-35B-05	GW	Tnbs2	Q	CMP	E601:ALL	3	Y	
W-35B-05	GW	Tnbs2	Q	CMP	E601:ALL	4	N	Unsafe conditions.
W-35B-05	GW	Tnbs2	S	CMP	E8330LOW:ALL	1	Y	
W-35B-05	GW	Tnbs2	S	CMP	E8330LOW:ALL	3	Y	
W-35C-01	PTMW	Tpsg-Tps	A	CMP	E300.0:NO3	1	Y	
W-35C-01	PTMW	Tpsg-Tps	O	CMP	E300.0:PERC	1	N	To be sampled in 2015.
W-35C-01	PTMW	Tpsg-Tps	S	CMP	E601:ALL	1	Y	
W-35C-01	PTMW	Tpsg-Tps	S	CMP	E601:ALL	3	Y	
W-35C-01	PTMW	Tpsg-Tps	O	CMP	E8330LOW:ALL	1	N	To be sampled in 2015.
W-35C-02	PTMW	Tnbs1	O	CMP	E300.0:NO3	1	N	To be sampled in 2015.
W-35C-02	PTMW	Tnbs1	O	CMP	E300.0:PERC	1	N	To be sampled in 2015.
W-35C-02	PTMW	Tnbs1	S	CMP	E601:ALL	1	Y	
W-35C-02	PTMW	Tnbs1	S	CMP	E601:ALL	3	N	Inoperable pump.
W-35C-02	PTMW	Tnbs1	A	CMP	E8330LOW:ALL	1	Y	
W-35C-04	EW	Tnbs2	O	CMP-TF	E300.0:NO3	1	N	To be sampled in 2015.
W-35C-04	EW	Tnbs2	O	CMP-TF	E300.0:PERC	1	N	To be sampled in 2015.
W-35C-04	EW	Tnbs2	S	CMP-TF	E601:ALL	1	Y	
W-35C-04	EW	Tnbs2	S	DIS-TF	E601:ALL	2	Y	
W-35C-04	EW	Tnbs2	S	CMP-TF	E601:ALL	3	Y	
W-35C-04	EW	Tnbs2	S	DIS-TF	E601:ALL	4	Y	
W-35C-04	EW	Tnbs2	O	CMP-TF	E8330LOW:ALL	1	N	To be sampled in 2015.

Table 2.4-11. High Explosives Process Area Operable Unit ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-35C-05	PTMW	Tpsg-Tps	A	CMP	E300.0:NO3	1	Y	
W-35C-05	PTMW	Tpsg-Tps	O	CMP	E300.0:PERC	1	N	To be sampled in 2015.
W-35C-05	PTMW	Tpsg-Tps	S	CMP	E601:ALL	1	Y	
W-35C-05	PTMW	Tpsg-Tps	S	CMP	E601:ALL	3	Y	
W-35C-05	PTMW	Tpsg-Tps	O	CMP	E8330LOW:ALL	1	N	To be sampled in 2015.
W-35C-06	PTMW	Qal/WBR	E	CMP	E300.0:NO3	1	N	Dry.
W-35C-06	PTMW	Qal/WBR	E	CMP	E300.0:PERC	1	N	Dry.
W-35C-06	PTMW	Qal/WBR	S	CMP	E601:ALL	1	N	Dry.
W-35C-06	PTMW	Qal/WBR	S	CMP	E601:ALL	3	N	Dry.
W-35C-06	PTMW	Qal/WBR	E	CMP	E8330LOW:ALL	1	N	Dry.
W-35C-07	PTMW	Tnsc2	E	CMP	E300.0:NO3	1	Y	
W-35C-07	PTMW	Tnsc2	E	CMP	E300.0:PERC	1	Y	
W-35C-07	PTMW	Tnsc2	S	CMP	E601:ALL	1	Y	
W-35C-07	PTMW	Tnsc2	S	CMP	E601:ALL	3	Y	
W-35C-07	PTMW	Tnsc2	E	CMP	E8330LOW:ALL	1	Y	
W-35C-08	PTMW	Tnsc2	A	CMP	E300.0:NO3	1	Y	
W-35C-08	PTMW	Tnsc2	A	CMP	E300.0:PERC	1	Y	
W-35C-08	PTMW	Tnsc2	S	CMP	E601:ALL	1	Y	
W-35C-08	PTMW	Tnsc2	S	CMP	E601:ALL	3	Y	
W-35C-08	PTMW	Tnsc2	O	CMP	E8330LOW:ALL	1	N	To be sampled in 2015.
W-4A	PTMW	Tnbs2	E	CMP	E300.0:NO3	1	Y	
W-4A	PTMW	Tnbs2	E	CMP	E300.0:PERC	1	Y	
W-4A	PTMW	Tnbs2	S	CMP	E601:ALL	1	Y	
W-4A	PTMW	Tnbs2	S	CMP	E601:ALL	3	Y	
W-4A	PTMW	Tnbs2	E	CMP	E8330LOW:ALL	1	Y	
W-4AS	PTMW	Tpsg-Tps	A	CMP	E300.0:NO3	1	Y	
W-4AS	PTMW	Tpsg-Tps	E	CMP	E300.0:PERC	1	Y	
W-4AS	PTMW	Tpsg-Tps	S	CMP	E601:ALL	1	Y	
W-4AS	PTMW	Tpsg-Tps	S	CMP	E601:ALL	3	Y	
W-4AS	PTMW	Tpsg-Tps	E	CMP	E8330LOW:ALL	1	Y	
W-4B	PTMW	Tnbs2	O	CMP	E300.0:NO3	1	N	To be sampled in 2015.
W-4B	PTMW	Tnbs2	O	CMP	E300.0:PERC	1	N	To be sampled in 2015.
W-4B	PTMW	Tnbs2	S	CMP	E601:ALL	1	Y	
W-4B	PTMW	Tnbs2	S	CMP	E601:ALL	3	Y	
W-4B	PTMW	Tnbs2	O	CMP	E8330LOW:ALL	1	N	To be sampled in 2015.
W-4C	GW	Tnsc1b	S	CMP	E300.0:NO3	1	Y	
W-4C	GW	Tnsc1b	S	CMP	E300.0:NO3	3	Y	
W-4C	GW	Tnsc1b	S	CMP	E300.0:PERC	1	Y	
W-4C	GW	Tnsc1b	S	CMP	E300.0:PERC	3	Y	
W-4C	GW	Tnsc1b	Q	CMP	E601:ALL	1	Y	
W-4C	GW	Tnsc1b	Q	CMP	E601:ALL	2	Y	
W-4C	GW	Tnsc1b	Q	CMP	E601:ALL	3	Y	
W-4C	GW	Tnsc1b	Q	CMP	E601:ALL	4	N	Inoperable pump.
W-6BD	PTMW	Tpsg-Tps	A	CMP	E300.0:NO3	1	Y	
W-6BD	PTMW	Tpsg-Tps	E	CMP	E300.0:PERC	1	Y	
W-6BD	PTMW	Tpsg-Tps	S	CMP	E601:ALL	1	Y	
W-6BD	PTMW	Tpsg-Tps	S	CMP	E601:ALL	3	Y	
W-6BD	PTMW	Tpsg-Tps	E	CMP	E8330LOW:ALL	1	Y	
W-6BS	PTMW	Qal/WBR	A	CMP	E300.0:NO3	1	Y	
W-6BS	PTMW	Qal/WBR	E	CMP	E300.0:PERC	1	Y	
W-6BS	PTMW	Qal/WBR	S	CMP	E601:ALL	1	Y	
W-6BS	PTMW	Qal/WBR	S	CMP	E601:ALL	3	Y	
W-6BS	PTMW	Qal/WBR	E	CMP	E8330LOW:ALL	1	Y	
W-6CD	PTMW	Tnbs2	E	CMP	E300.0:NO3	1	Y	
W-6CD	PTMW	Tnbs2	E	CMP	E300.0:PERC	1	Y	
W-6CD	PTMW	Tnbs2	S	CMP	E601:ALL	1	Y	
W-6CD	PTMW	Tnbs2	S	CMP	E601:ALL	3	N	Inoperable pump.
W-6CD	PTMW	Tnbs2	E	CMP	E8330LOW:ALL	1	Y	
W-6CI	PTMW	Tnsc2	A	CMP	E300.0:NO3	1	Y	
W-6CI	PTMW	Tnsc2	A	CMP	E300.0:PERC	1	Y	
W-6CI	PTMW	Tnsc2	S	CMP	E601:ALL	1	Y	
W-6CI	PTMW	Tnsc2	S	CMP	E601:ALL	3	Y	
W-6CI	PTMW	Tnsc2	A	CMP	E8330LOW:ALL	1	Y	
W-6CS	PTMW	Tpsg-Tps	A	CMP	E300.0:NO3	1	Y	

Table 2.4-11. High Explosives Process Area Operable Unit ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-6CS	PTMW	Tpsg-Tps	A	CMP	E300.0:PERC	1	Y	
W-6CS	PTMW	Tpsg-Tps	S	CMP	E601:ALL	1	Y	
W-6CS	PTMW	Tpsg-Tps	S	CMP	E601:ALL	3	Y	
W-6CS	PTMW	Tpsg-Tps	A	CMP	E8330LOW:ALL	1	Y	
W-6EI	PTMW	Tnsc2	A	CMP	E300.0:NO3	1	Y	
W-6EI	PTMW	Tnsc2	A	CMP	E300.0:PERC	1	Y	
W-6EI	PTMW	Tnsc2	S	CMP	E601:ALL	1	Y	
W-6EI	PTMW	Tnsc2	S	CMP	E601:ALL	3	Y	
W-6EI	PTMW	Tnsc2	A	CMP	E8330LOW:ALL	1	Y	
W-6ER	EW	Tnbs2	O	CMP-TF	E300.0:NO3	1	N	To be sampled in 2015.
W-6ER	EW	Tnbs2	O	CMP-TF	E300.0:PERC	1	N	To be sampled in 2015.
W-6ER	EW	Tnbs2	S	CMP-TF	E601:ALL	1	Y	
W-6ER	EW	Tnbs2	S	DIS-TF	E601:ALL	2	Y	
W-6ER	EW	Tnbs2	S	CMP-TF	E601:ALL	3	Y	
W-6ER	EW	Tnbs2	S	DIS-TF	E601:ALL	4	Y	
W-6ER	EW	Tnbs2	O	CMP-TF	E8330LOW:ALL	1	N	To be sampled in 2015.
W-6ES	PTMW	Qal/WBR	E	CMP	E300.0:NO3	1	Y	
W-6ES	PTMW	Qal/WBR	E	CMP	E300.0:PERC	1	Y	
W-6ES	PTMW	Qal/WBR	S	CMP	E601:ALL	1	Y	
W-6ES	PTMW	Qal/WBR	S	CMP	E601:ALL	3	Y	
W-6ES	PTMW	Qal/WBR	E	CMP	E8330LOW:ALL	1	Y	
W-6F	PTMW	Tnsc2	A	CMP	E300.0:NO3	1	Y	
W-6F	PTMW	Tnsc2	A	CMP	E300.0:PERC	1	Y	
W-6F	PTMW	Tnsc2	S	CMP	E601:ALL	1	Y	
W-6F	PTMW	Tnsc2	S	CMP	E601:ALL	3	Y	
W-6F	PTMW	Tnsc2	A	CMP	E8330LOW:ALL	1	Y	
W-6G	PTMW	Tnbs2	A	CMP	E300.0:NO3	1	Y	
W-6G	PTMW	Tnbs2	A	CMP	E300.0:PERC	1	Y	
W-6G	PTMW	Tnbs2	S	CMP	E601:ALL	1	Y	
W-6G	PTMW	Tnbs2	S	CMP	E601:ALL	3	N	Only partial sample event collected.
W-6G	PTMW	Tnbs2	A	CMP	E8330LOW:ALL	1	Y	
W-6H	GW	Tnbs2	S	CMP	E300.0:NO3	1	Y	
W-6H	GW	Tnbs2	S	CMP	E300.0:NO3	3	Y	
W-6H	GW	Tnbs2	S	CMP	E300.0:PERC	1	Y	
W-6H	GW	Tnbs2	S	CMP	E300.0:PERC	3	Y	
W-6H	GW	Tnbs2	Q	CMP	E601:ALL	1	Y	
W-6H	GW	Tnbs2	Q	CMP	E601:ALL	2	Y	
W-6H	GW	Tnbs2	Q	CMP	E601:ALL	3	Y	
W-6H	GW	Tnbs2	Q	CMP	E601:ALL	4	N	Unsafe conditions.
W-6H	GW	Tnbs2	S	CMP	E8330LOW:ALL	1	Y	
W-6H	GW	Tnbs2	S	CMP	E8330LOW:ALL	3	Y	
W-6I	PTMW	Tpsg-Tps	O	CMP	E300.0:NO3	1	N	To be sampled in 2015.
W-6I	PTMW	Tpsg-Tps	O	CMP	E300.0:PERC	1	N	To be sampled in 2015.
W-6I	PTMW	Tpsg-Tps	S	CMP	E601:ALL	1	Y	
W-6I	PTMW	Tpsg-Tps	S	CMP	E601:ALL	3	Y	
W-6I	PTMW	Tpsg-Tps	O	CMP	E8330LOW:ALL	1	N	To be sampled in 2015.
W-6J	GW	Tnbs2	S	CMP	E300.0:NO3	1	Y	
W-6J	GW	Tnbs2	S	CMP	E300.0:NO3	3	N	Inoperable pump.
W-6J	GW	Tnbs2	S	CMP	E300.0:PERC	1	Y	
W-6J	GW	Tnbs2	S	CMP	E300.0:PERC	3	N	Inoperable pump.
W-6J	GW	Tnbs2	Q	CMP	E601:ALL	1	Y	
W-6J	GW	Tnbs2	Q	CMP	E601:ALL	2	Y	
W-6J	GW	Tnbs2	Q	CMP	E601:ALL	3	N	Inoperable pump.
W-6J	GW	Tnbs2	Q	CMP	E601:ALL	4	N	Unsafe conditions.
W-6J	GW	Tnbs2	S	CMP	E8330LOW:ALL	1	Y	
W-6J	GW	Tnbs2	S	CMP	E8330LOW:ALL	3	N	Inoperable pump.
W-6K	PTMW	Tnbs2	E	CMP	E300.0:NO3	1	Y	
W-6K	PTMW	Tnbs2	E	CMP	E300.0:PERC	1	Y	
W-6K	PTMW	Tnbs2	S	CMP	E601:ALL	1	Y	
W-6K	PTMW	Tnbs2	S	CMP	E601:ALL	3	Y	
W-6K	PTMW	Tnbs2	E	CMP	E8330LOW:ALL	1	Y	
W-6L	PTMW	Tnbs2	O	CMP	E300.0:NO3	1	N	To be sampled in 2015.
W-6L	PTMW	Tnbs2	O	CMP	E300.0:PERC	1	N	To be sampled in 2015.
W-6L	PTMW	Tnbs2	S	CMP	E601:ALL	1	Y	

Table 2.4-11. High Explosives Process Area Operable Unit ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-6L	PTMW	Tnbs2	S	CMP	E601:ALL	3	N	No/Low Flow
W-6L	PTMW	Tnbs2	O	CMP	E8330LOW:ALL	1	N	To be sampled in 2015.
W-806-06A	PTMW	Tnsc1b	O	CMP	E300.0:NO3	1	N	To be sampled in 2015.
W-806-06A	PTMW	Tnsc1b	O	CMP	E300.0:PERC	1	N	To be sampled in 2015.
W-806-06A	PTMW	Tnsc1b	O	CMP	E601:ALL	1	N	To be sampled in 2015.
W-806-06A	PTMW	Tnsc1b	O	CMP	E8330LOW:ALL	1	N	To be sampled in 2015.
W-806-07	PTMW	Tnbs2	O	CMP	E300.0:NO3	1	N	To be sampled in 2015.
W-806-07	PTMW	Tnbs2	O	CMP	E300.0:PERC	1	N	To be sampled in 2015.
W-806-07	PTMW	Tnbs2	O	CMP	E601:ALL	1	N	To be sampled in 2015.
W-806-07	PTMW	Tnbs2	O	CMP	E8330LOW:ALL	1	N	To be sampled in 2015.
W-808-01	PTMW	Tpsg-Tps	A	CMP	E300.0:NO3	1	Y	
W-808-01	PTMW	Tpsg-Tps	A	CMP	E300.0:PERC	1	Y	
W-808-01	PTMW	Tpsg-Tps	S	CMP	E601:ALL	1	Y	
W-808-01	PTMW	Tpsg-Tps	S	CMP	E601:ALL	3	Y	
W-808-01	PTMW	Tpsg-Tps	O	CMP	E8330LOW:ALL	1	N	To be sampled in 2015.
W-808-02	PTMW	Tpsg-Tps	A	CMP	E300.0:NO3	1	N	Dry.
W-808-02	PTMW	Tpsg-Tps	A	CMP	E300.0:PERC	1	N	Dry.
W-808-02	PTMW	Tpsg-Tps	S	CMP	E601:ALL	1	N	Dry.
W-808-02	PTMW	Tpsg-Tps	S	CMP	E601:ALL	3	N	Dry.
W-808-02	PTMW	Tpsg-Tps	O	CMP	E8330LOW:ALL	1	N	To be sampled in 2015.
W-808-03	PTMW	UTnbs1	A	CMP	E300.0:NO3	1	Y	
W-808-03	PTMW	UTnbs1	A	CMP	E300.0:PERC	1	Y	
W-808-03	PTMW	UTnbs1	S	CMP	E601:ALL	1	Y	
W-808-03	PTMW	UTnbs1	S	CMP	E601:ALL	3	N	Inoperable pump.
W-808-03	PTMW	UTnbs1	O	CMP	E8330LOW:ALL	1	N	To be sampled in 2015.
W-809-01	PTMW	Tpsg-Tps	A	CMP	E300.0:NO3	1	Y	
W-809-01	PTMW	Tpsg-Tps	A	CMP	E300.0:PERC	1	Y	
W-809-01	PTMW	Tpsg-Tps	S	CMP	E601:ALL	1	Y	
W-809-01	PTMW	Tpsg-Tps	S	CMP	E601:ALL	3	Y	
W-809-01	PTMW	Tpsg-Tps	A	CMP	E8330LOW:ALL	1	Y	
W-809-02	PTMW	Tnbs2	A	CMP	E300.0:NO3	1	Y	
W-809-02	PTMW	Tnbs2	A	CMP	E300.0:PERC	1	Y	
W-809-02	PTMW	Tnbs2	A	DIS	E300.0:PERC	3	Y	
W-809-02	PTMW	Tnbs2	S	CMP	E601:ALL	1	Y	
W-809-02	PTMW	Tnbs2	S	CMP	E601:ALL	3	Y	
W-809-02	PTMW	Tnbs2	A	CMP	E8330LOW:ALL	1	Y	
W-809-03	PTMW	Tnbs2	A	CMP	E300.0:NO3	1	Y	
W-809-03	PTMW	Tnbs2	A	CMP	E300.0:PERC	1	Y	
W-809-03	PTMW	Tnbs2	A	DIS	E300.0:PERC	3	Y	
W-809-03	PTMW	Tnbs2	S	CMP	E601:ALL	1	Y	
W-809-03	PTMW	Tnbs2	S	CMP	E601:ALL	3	Y	
W-809-03	PTMW	Tnbs2	A	CMP	E8330LOW:ALL	1	Y	
W-809-03	PTMW	Tnbs2	A	DIS	E8330LOW:ALL	3	Y	
W-809-04	PTMW	Tpsg-Tps	A	CMP	E300.0:NO3	1	Y	
W-809-04	PTMW	Tpsg-Tps	A	CMP	E300.0:PERC	1	Y	
W-809-04	PTMW	Tpsg-Tps	S	CMP	E601:ALL	1	Y	
W-809-04	PTMW	Tpsg-Tps	S	CMP	E601:ALL	3	N	Insufficient water.
W-809-04	PTMW	Tpsg-Tps	A	CMP	E8330LOW:ALL	1	Y	
W-810-01	PTMW	UTnbs1	A	CMP	E300.0:NO3	1	Y	
W-810-01	PTMW	UTnbs1	A	CMP	E300.0:PERC	1	Y	
W-810-01	PTMW	UTnbs1	S	CMP	E601:ALL	1	Y	
W-810-01	PTMW	UTnbs1	S	CMP	E601:ALL	3	N	Inoperable pump.
W-810-01	PTMW	UTnbs1	A	CMP	E8330LOW:ALL	1	Y	
W-814-01	PTMW	Tpsg-Tps	A	CMP	E300.0:NO3	1	Y	
W-814-01	PTMW	Tpsg-Tps	A	CMP	E300.0:PERC	1	Y	
W-814-01	PTMW	Tpsg-Tps	S	CMP	E601:ALL	1	Y	
W-814-01	PTMW	Tpsg-Tps	S	CMP	E601:ALL	3	Y	
W-814-01	PTMW	Tpsg-Tps	A	CMP	E8330LOW:ALL	1	Y	
W-814-02	PTMW	Tnbs2	A	CMP	E300.0:NO3	1	Y	
W-814-02	PTMW	Tnbs2	A	CMP	E300.0:PERC	1	Y	
W-814-02	PTMW	Tnbs2	S	CMP	E601:ALL	1	Y	
W-814-02	PTMW	Tnbs2	S	CMP	E601:ALL	3	N	Inoperable pump.
W-814-02	PTMW	Tnbs2	A	CMP	E8330LOW:ALL	1	Y	
W-814-03	PTMW	Tpsg-Tps	A	CMP	E300.0:NO3	1	N	Dry.

Table 2.4-11. High Explosives Process Area Operable Unit ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-814-03	PTMW	Tpsg-Tps	A	CMP	E300.0:PERC	1	N	Dry.
W-814-03	PTMW	Tpsg-Tps	S	CMP	E601:ALL	1	N	Dry.
W-814-03	PTMW	Tpsg-Tps	S	CMP	E601:ALL	3	N	Dry.
W-814-03	PTMW	Tpsg-Tps	A	CMP	E8330LOW:ALL	1	N	Dry.
W-814-04	GW	Tnsc1b	S	CMP	E300.0:NO3	1	Y	
W-814-04	GW	Tnsc1b	S	CMP	E300.0:NO3	3	Y	
W-814-04	GW	Tnsc1b	S	CMP	E300.0:PERC	1	Y	
W-814-04	GW	Tnsc1b	S	CMP	E300.0:PERC	3	Y	
W-814-04	GW	Tnsc1b	Q	CMP	E601:ALL	1	Y	
W-814-04	GW	Tnsc1b	Q	CMP	E601:ALL	2	Y	
W-814-04	GW	Tnsc1b	Q	CMP	E601:ALL	3	Y	
W-814-04	GW	Tnsc1b	Q	CMP	E601:ALL	4	Y	
W-814-2138	PTMW	Tpsg-Tps	A	CMP	E300.0:NO3	1	Y	
W-814-2138	PTMW	Tpsg-Tps	A	CMP	E300.0:PERC	1	Y	
W-814-2138	PTMW	Tpsg-Tps	S	CMP	E601:ALL	1	Y	
W-814-2138	PTMW	Tpsg-Tps	S	CMP	E601:ALL	3	Y	
W-814-2138	PTMW	Tpsg-Tps	A	CMP	E8330LOW:ALL	1	Y	
W-815-01	PTMW	Tpsg-Tps	A	CMP	E300.0:NO3	1	N	Dry.
W-815-01	PTMW	Tpsg-Tps	A	CMP	E300.0:PERC	1	N	Dry.
W-815-01	PTMW	Tpsg-Tps	S	CMP	E601:ALL	1	N	Dry.
W-815-01	PTMW	Tpsg-Tps	S	CMP	E601:ALL	3	N	Dry.
W-815-01	PTMW	Tpsg-Tps	A	CMP	E8330LOW:ALL	1	N	Dry.
W-815-02	EW	Tnbs2	A	CMP-TF	E300.0:NO3	1	Y	
W-815-02	EW	Tnbs2	A	CMP-TF	E300.0:PERC	1	Y	
W-815-02	EW	Tnbs2	A	DIS-TF	E300.0:PERC	3	Y	
W-815-02	EW	Tnbs2	S	CMP-TF	E601:ALL	1	Y	
W-815-02	EW	Tnbs2	S	DIS-TF	E601:ALL	2	Y	
W-815-02	EW	Tnbs2	S	CMP-TF	E601:ALL	3	Y	
W-815-02	EW	Tnbs2	S	DIS-TF	E601:ALL	4	Y	
W-815-02	EW	Tnbs2	A	CMP-TF	E8330LOW:ALL	1	Y	
W-815-02	EW	Tnbs2	A	DIS-TF	E8330LOW:ALL	3	Y	
W-815-03	PTMW	Tpsg-Tps	A	CMP	E300.0:NO3	1	N	Dry.
W-815-03	PTMW	Tpsg-Tps	A	CMP	E300.0:PERC	1	N	Dry.
W-815-03	PTMW	Tpsg-Tps	S	CMP	E601:ALL	1	N	Dry.
W-815-03	PTMW	Tpsg-Tps	S	CMP	E601:ALL	3	N	Dry.
W-815-03	PTMW	Tpsg-Tps	A	CMP	E8330LOW:ALL	1	N	Dry.
W-815-04	EW	Tnbs2	A	CMP-TF	E300.0:NO3	1	Y	
W-815-04	EW	Tnbs2	A	CMP-TF	E300.0:PERC	1	Y	
W-815-04	EW	Tnbs2	A	DIS-TF	E300.0:PERC	3	Y	
W-815-04	EW	Tnbs2	S	CMP-TF	E601:ALL	1	Y	
W-815-04	EW	Tnbs2	S	DIS-TF	E601:ALL	2	Y	
W-815-04	EW	Tnbs2	S	CMP-TF	E601:ALL	3	Y	
W-815-04	EW	Tnbs2	S	DIS-TF	E601:ALL	4	Y	
W-815-04	EW	Tnbs2	A	CMP-TF	E8330LOW:ALL	1	Y	
W-815-04	EW	Tnbs2	A	DIS-TF	E8330LOW:ALL	3	Y	
W-815-05	PTMW	Tpsg-Tps	A	CMP	E300.0:NO3	1	N	Unsafe conditions.
W-815-05	PTMW	Tpsg-Tps	A	CMP	E300.0:PERC	1	N	Unsafe conditions.
W-815-05	PTMW	Tpsg-Tps	S	CMP	E601:ALL	1	N	Unsafe conditions.
W-815-05	PTMW	Tpsg-Tps	S	CMP	E601:ALL	3	N	Unsafe conditions.
W-815-05	PTMW	Tpsg-Tps	A	CMP	E8330LOW:ALL	1	N	Unsafe conditions.
W-815-06	PTMW	Tnbs2	A	CMP	E300.0:NO3	1	Y	
W-815-06	PTMW	Tnbs2	A	CMP	E300.0:PERC	1	Y	
W-815-06	PTMW	Tnbs2	S	CMP	E601:ALL	1	Y	
W-815-06	PTMW	Tnbs2	S	CMP	E601:ALL	3	N	Inoperable pump.
W-815-06	PTMW	Tnbs2	A	CMP	E8330LOW:ALL	1	Y	
W-815-07	PTMW	Tnbs2	A	CMP	E300.0:NO3	1	Y	
W-815-07	PTMW	Tnbs2	A	CMP	E300.0:PERC	1	Y	
W-815-07	PTMW	Tnbs2	S	CMP	E601:ALL	1	Y	
W-815-07	PTMW	Tnbs2	S	CMP	E601:ALL	3	Y	
W-815-07	PTMW	Tnbs2	A	CMP	E8330LOW:ALL	1	Y	
W-815-08	PTMW	UTnbs1	E	CMP	E300.0:NO3	1	Y	
W-815-08	PTMW	UTnbs1	E	CMP	E300.0:PERC	1	Y	
W-815-08	PTMW	UTnbs1	A	CMP	E601:ALL	1	Y	
W-815-08	PTMW	UTnbs1	E	CMP	E8330LOW:ALL	1	Y	

Table 2.4-11. High Explosives Process Area Operable Unit ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-815-1928	PTMW	Tpsg-Tps	A	CMP	E300.0:NO3	1	N	Insufficient water.
W-815-1928	PTMW	Tpsg-Tps	A	CMP	E300.0:PERC	1	N	Insufficient water.
W-815-1928	PTMW	Tpsg-Tps	S	CMP	E601:ALL	1	N	Insufficient water.
W-815-1928	PTMW	Tpsg-Tps	S	CMP	E601:ALL	3	N	Insufficient water.
W-815-1928	PTMW	Tpsg-Tps	A	CMP	E8330LOW:ALL	1	N	Insufficient water.
W-815-2110	GW	Tnbs2	Q	DIS	DWMETALS:ALL	1	Y	
W-815-2110	GW	Tnbs2	S	CMP	E300.0:NO3	1	Y	
W-815-2110	GW	Tnbs2	S	CMP	E300.0:NO3	3	Y	
W-815-2110	GW	Tnbs2	S	CMP	E300.0:PERC	1	Y	
W-815-2110	GW	Tnbs2	S	CMP	E300.0:PERC	3	Y	
W-815-2110	GW	Tnbs2	Q	CMP	E601:ALL	1	Y	
W-815-2110	GW	Tnbs2	Q	CMP	E601:ALL	2	Y	
W-815-2110	GW	Tnbs2	Q	CMP	E601:ALL	3	Y	
W-815-2110	GW	Tnbs2	Q	CMP	E601:ALL	4	N	Unsafe conditions.
W-815-2110	GW	Tnbs2	S	CMP	E8330LOW:ALL	1	Y	
W-815-2110	GW	Tnbs2	S	CMP	E8330LOW:ALL	3	Y	
W-815-2111	GW	Tnbs2	S	CMP	E300.0:NO3	1	Y	
W-815-2111	GW	Tnbs2	S	CMP	E300.0:NO3	3	Y	
W-815-2111	GW	Tnbs2	S	CMP	E300.0:PERC	1	Y	
W-815-2111	GW	Tnbs2	S	CMP	E300.0:PERC	3	Y	
W-815-2111	GW	Tnbs2	Q	CMP	E601:ALL	1	Y	
W-815-2111	GW	Tnbs2	Q	CMP	E601:ALL	2	Y	
W-815-2111	GW	Tnbs2	Q	CMP	E601:ALL	3	Y	
W-815-2111	GW	Tnbs2	Q	CMP	E601:ALL	4	Y	
W-815-2111	GW	Tnbs2	S	CMP	E8330LOW:ALL	1	Y	
W-815-2111	GW	Tnbs2	S	CMP	E8330LOW:ALL	3	Y	
W-815-2217	PTMW	Tnbs2	O	CMP	E300.0:NO3	1	N	To be sampled in 2015.
W-815-2217	PTMW	Tnbs2	O	CMP	E300.0:PERC	1	N	To be sampled in 2015.
W-815-2217	PTMW	Tnbs2	S	CMP	E601:ALL	1	Y	
W-815-2217	PTMW	Tnbs2	S	CMP	E601:ALL	3	Y	
W-815-2217	PTMW	Tnbs2	O	CMP	E8330LOW:ALL	1	N	To be sampled in 2015.
W-815-2608	EW	Tnbs2	A	CMP-TF	E300.0:NO3	1	Y	
W-815-2608	EW	Tnbs2	A	CMP-TF	E300.0:PERC	1	Y	
W-815-2608	EW	Tnbs2	S	CMP-TF	E601:ALL	1	Y	
W-815-2608	EW	Tnbs2	S	DIS-TF	E601:ALL	2	Y	
W-815-2608	EW	Tnbs2	S	CMP-TF	E601:ALL	3	Y	
W-815-2608	EW	Tnbs2	S	DIS-TF	E601:ALL	4	Y	
W-815-2608	EW	Tnbs2	A	CMP-TF	E8330LOW:ALL	1	Y	
W-815-2621	PTMW	Tnbs2	A	CMP	E300.0:NO3	1	Y	
W-815-2621	PTMW	Tnbs2	A	CMP	E300.0:PERC	1	Y	
W-815-2621	PTMW	Tnbs2	S	CMP	E601:ALL	1	Y	
W-815-2621	PTMW	Tnbs2	S	CMP	E601:ALL	3	Y	
W-815-2621	PTMW	Tnbs2	A	CMP	E8330LOW:ALL	1	Y	
W-815-2803	EW	Tnbs2	A	CMP-TF	E300.0:NO3	3	Y	
W-815-2803	EW	Tnbs2	A	DIS-TF	E300.0:PERC	1	Y	
W-815-2803	EW	Tnbs2	A	CMP-TF	E300.0:PERC	3	Y	
W-815-2803	EW	Tnbs2	S	CMP-TF	E601:ALL	1	Y	
W-815-2803	EW	Tnbs2	S	DIS-TF	E601:ALL	2	Y	
W-815-2803	EW	Tnbs2	S	CMP-TF	E601:ALL	3	Y	
W-815-2803	EW	Tnbs2	S	DIS-TF	E601:ALL	4	Y	
W-815-2803	EW	Tnbs2	A	DIS-TF	E8330LOW:ALL	1	Y	
W-815-2803	EW	Tnbs2	A	CMP-TF	E8330LOW:ALL	3	Y	
W-817-01	EW	Tnbs2	A	DIS-TF	E300.0:NO3	1	Y	
W-817-01	EW	Tnbs2	Q	DIS-TF	E300.0:PERC	1	Y	
W-817-01	EW	Tnbs2	Q	DIS-TF	E300.0:PERC	2	Y	
W-817-01	EW	Tnbs2	Q	DIS-TF	E300.0:PERC	3	Y	
W-817-01	EW	Tnbs2	Q	DIS-TF	E300.0:PERC	4	Y	
W-817-01	EW	Tnbs2	Q	DIS-TF	E601:ALL	1	Y	
W-817-01	EW	Tnbs2	Q	DIS-TF	E601:ALL	2	Y	
W-817-01	EW	Tnbs2	Q	DIS-TF	E601:ALL	3	Y	
W-817-01	EW	Tnbs2	Q	DIS-TF	E601:ALL	4	Y	
W-817-01	EW	Tnbs2	Q	DIS-TF	E8330LOW:ALL	1	Y	
W-817-01	EW	Tnbs2	Q	DIS-TF	E8330LOW:ALL	2	Y	
W-817-01	EW	Tnbs2	Q	DIS-TF	E8330LOW:ALL	3	Y	

Table 2.4-11. High Explosives Process Area Operable Unit ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-817-01	EW	Tnbs2	Q	DIS-TF	E8330LOW:ALL	4	Y	
W-817-03	EW	Tnbs2	A	CMP-TF	E300.0:NO3	1	Y	
W-817-03	EW	Tnbs2	A	CMP-TF	E300.0:PERC	1	Y	
W-817-03	EW	Tnbs2	A	DIS-TF	E300.0:PERC	3	Y	
W-817-03	EW	Tnbs2	S	CMP-TF	E601:ALL	1	Y	
W-817-03	EW	Tnbs2	S	DIS-TF	E601:ALL	2	Y	
W-817-03	EW	Tnbs2	S	CMP-TF	E601:ALL	3	Y	
W-817-03	EW	Tnbs2	S	DIS-TF	E601:ALL	4	Y	
W-817-03	EW	Tnbs2	A	CMP-TF	E8330LOW:ALL	1	Y	
W-817-03	EW	Tnbs2	A	DIS-TF	E8330LOW:ALL	3	Y	
W-817-03A	PTMW	Tpsg-Tps	A	CMP	E300.0:NO3	1	Y	
W-817-03A	PTMW	Tpsg-Tps	A	CMP	E300.0:PERC	1	Y	
W-817-03A	PTMW	Tpsg-Tps	S	CMP	E601:ALL	1	Y	
W-817-03A	PTMW	Tpsg-Tps	S	CMP	E601:ALL	3	N	Insufficient water.
W-817-03A	PTMW	Tpsg-Tps	A	CMP	E8330LOW:ALL	1	Y	
W-817-04	PTMW	Tnbs2	A	CMP	E300.0:NO3	1	Y	
W-817-04	PTMW	Tnbs2	A	CMP	E300.0:PERC	1	Y	
W-817-04	PTMW	Tnbs2	S	CMP	E601:ALL	1	Y	
W-817-04	PTMW	Tnbs2	S	CMP	E601:ALL	3	Y	
W-817-04	PTMW	Tnbs2	A	CMP	E8330LOW:ALL	1	Y	
W-817-05	PTMW	Tnsc1b	A	CMP	E300.0:NO3	1	Y	
W-817-05	PTMW	Tnsc1b	A	CMP	E300.0:PERC	1	Y	
W-817-05	PTMW	Tnsc1b	S	CMP	E601:ALL	1	Y	
W-817-05	PTMW	Tnsc1b	S	CMP	E601:ALL	3	Y	
W-817-05	PTMW	Tnsc1b	A	CMP	E8330LOW:ALL	1	Y	
W-817-07	PTMW	Tnbs2	A	CMP	E300.0:NO3	1	N	Insufficient water.
W-817-07	PTMW	Tnbs2	A	CMP	E300.0:PERC	1	N	Insufficient water.
W-817-07	PTMW	Tnbs2	S	CMP	E601:ALL	1	N	Insufficient water.
W-817-07	PTMW	Tnbs2	S	CMP	E601:ALL	3	N	Insufficient water.
W-817-07	PTMW	Tnbs2	A	CMP	E8330LOW:ALL	1	N	Insufficient water.
W-817-2318	EW	Tpsg-Tps	A	CMP-TF	E300.0:NO3	1	Y	
W-817-2318	EW	Tpsg-Tps	A	CMP-TF	E300.0:PERC	1	Y	
W-817-2318	EW	Tpsg-Tps	A	DIS-TF	E300.0:PERC	3	Y	
W-817-2318	EW	Tpsg-Tps	S	CMP-TF	E601:ALL	1	Y	
W-817-2318	EW	Tpsg-Tps	S	DIS-TF	E601:ALL	2	Y	
W-817-2318	EW	Tpsg-Tps	S	CMP-TF	E601:ALL	3	Y	
W-817-2318	EW	Tpsg-Tps	S	DIS-TF	E601:ALL	4	Y	
W-817-2318	EW	Tpsg-Tps	A	CMP-TF	E8330LOW:ALL	1	Y	
W-817-2318	EW	Tpsg-Tps	A	DIS-TF	E8330LOW:ALL	3	Y	
W-817-2609	PTMW	Tnbs2	A	CMP	E300.0:NO3	1	Y	
W-817-2609	PTMW	Tnbs2	A	CMP	E300.0:PERC	1	Y	
W-817-2609	PTMW	Tnbs2	S	CMP	E601:ALL	1	Y	
W-817-2609	PTMW	Tnbs2	S	CMP	E601:ALL	3	Y	
W-817-2609	PTMW	Tnbs2	A	CMP	E8330LOW:ALL	1	Y	
W-817-3025	PTMW	Tnbs2	U	DIS	E300.0:PERC	3	Y	New well Baseline sampling.
W-817-3025	PTMW	Tnbs2	U	DIS	E8330LOW:ALL	3	Y	New well Baseline sampling.
W-817-3026	PTMW	Tnbs2	U	DIS	E8330LOW:ALL	3	Y	New well Baseline sampling.
W-818-01	PTMW	Tnbs2	A	CMP	E300.0:NO3	1	Y	
W-818-01	PTMW	Tnbs2	A	CMP	E300.0:PERC	1	Y	
W-818-01	PTMW	Tnbs2	S	CMP	E601:ALL	1	Y	
W-818-01	PTMW	Tnbs2	S	CMP	E601:ALL	3	Y	
W-818-01	PTMW	Tnbs2	A	CMP	E8330LOW:ALL	1	Y	
W-818-03	PTMW	Tnbs2	A	CMP	E300.0:NO3	1	Y	
W-818-03	PTMW	Tnbs2	A	CMP	E300.0:PERC	1	Y	
W-818-03	PTMW	Tnbs2	S	CMP	E601:ALL	1	Y	
W-818-03	PTMW	Tnbs2	S	CMP	E601:ALL	3	Y	
W-818-03	PTMW	Tnbs2	O	CMP	E8330LOW:ALL	1	N	To be sampled in 2015.
W-818-04	PTMW	Tnsc2	A	CMP	E300.0:NO3	1	Y	
W-818-04	PTMW	Tnsc2	A	CMP	E300.0:PERC	1	Y	
W-818-04	PTMW	Tnsc2	S	CMP	E601:ALL	1	Y	
W-818-04	PTMW	Tnsc2	S	CMP	E601:ALL	3	N	Inoperable pump.
W-818-04	PTMW	Tnsc2	A	CMP	E8330LOW:ALL	1	Y	
W-818-06	PTMW	Tnbs2	A	CMP	E300.0:NO3	1	Y	
W-818-06	PTMW	Tnbs2	A	CMP	E300.0:PERC	1	Y	

Table 2.4-11. High Explosives Process Area Operable Unit ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-818-06	PTMW	Tnbs2	S	CMP	E601:ALL	1	Y	
W-818-06	PTMW	Tnbs2	S	CMP	E601:ALL	3	Y	
W-818-06	PTMW	Tnbs2	O	CMP	E8330LOW:ALL	1	N	To be sampled in 2015.
W-818-07	PTMW	Tnbs2	A	CMP	E300.0:NO3	1	Y	
W-818-07	PTMW	Tnbs2	A	CMP	E300.0:PERC	1	Y	
W-818-07	PTMW	Tnbs2	S	CMP	E601:ALL	1	Y	
W-818-07	PTMW	Tnbs2	S	CMP	E601:ALL	3	N	Inoperable pump.
W-818-07	PTMW	Tnbs2	E	CMP	E8330LOW:ALL	1	Y	
W-818-08	EW	Tnbs2	A	CMP-TF	E300.0:NO3	1	Y	
W-818-08	EW	Tnbs2	A	CMP-TF	E300.0:PERC	1	Y	
W-818-08	EW	Tnbs2	A	DIS-TF	E300.0:PERC	3	Y	
W-818-08	EW	Tnbs2	S	CMP-TF	E601:ALL	1	Y	
W-818-08	EW	Tnbs2	S	CMP-TF	E601:ALL	1	Y	
W-818-08	EW	Tnbs2	S	DIS-TF	E601:ALL	2	Y	
W-818-08	EW	Tnbs2	S	CMP-TF	E601:ALL	3	Y	
W-818-08	EW	Tnbs2	S	DIS-TF	E601:ALL	4	Y	
W-818-08	EW	Tnbs2	A	CMP-TF	E8330LOW:ALL	1	Y	
W-818-09	EW	Tnbs2	A	CMP-TF	E300.0:NO3	1	Y	
W-818-09	EW	Tnbs2	A	CMP-TF	E300.0:PERC	1	Y	
W-818-09	EW	Tnbs2	A	DIS-TF	E300.0:PERC	3	Y	
W-818-09	EW	Tnbs2	S	CMP-TF	E601:ALL	1	Y	
W-818-09	EW	Tnbs2	S	DIS-TF	E601:ALL	2	Y	
W-818-09	EW	Tnbs2	S	CMP-TF	E601:ALL	3	Y	
W-818-09	EW	Tnbs2	S	DIS-TF	E601:ALL	4	Y	
W-818-09	EW	Tnbs2	A	CMP-TF	E8330LOW:ALL	1	Y	
W-818-11	PTMW	Tnbs2	A	CMP	E300.0:NO3	1	Y	
W-818-11	PTMW	Tnbs2	A	CMP	E300.0:PERC	1	Y	
W-818-11	PTMW	Tnbs2	S	CMP	E601:ALL	1	Y	
W-818-11	PTMW	Tnbs2	S	CMP	E601:ALL	3	Y	
W-818-11	PTMW	Tnbs2	A	CMP	E8330LOW:ALL	1	Y	
W-819-02	PTMW	UTnbs1	A	CMP	E300.0:NO3	1	Y	
W-819-02	PTMW	UTnbs1	A	CMP	E300.0:PERC	1	Y	
W-819-02	PTMW	UTnbs1	S	CMP	E601:ALL	1	Y	
W-819-02	PTMW	UTnbs1	S	CMP	E601:ALL	3	N	Inoperable pump.
W-819-02	PTMW	UTnbs1	A	CMP	E8330LOW:ALL	1	Y	
W-823-01	PTMW	Tpsg-Tps	A	CMP	E300.0:NO3	1	Y	
W-823-01	PTMW	Tpsg-Tps	A	CMP	E300.0:PERC	1	Y	
W-823-01	PTMW	Tpsg-Tps	S	CMP	E601:ALL	1	Y	
W-823-01	PTMW	Tpsg-Tps	S	CMP	E601:ALL	3	Y	
W-823-01	PTMW	Tpsg-Tps	A	CMP	E8330LOW:ALL	1	Y	
W-823-02	PTMW	Tnbs2	O	CMP	E300.0:NO3	1	N	To be sampled in 2015.
W-823-02	PTMW	Tnbs2	O	CMP	E300.0:PERC	1	N	To be sampled in 2015.
W-823-02	PTMW	Tnbs2	S	CMP	E601:ALL	1	Y	
W-823-02	PTMW	Tnbs2	S	CMP	E601:ALL	3	Y	
W-823-02	PTMW	Tnbs2	O	CMP	E8330LOW:ALL	1	N	To be sampled in 2015.
W-823-03	PTMW	Tnbs2	A	CMP	E300.0:NO3	1	Y	
W-823-03	PTMW	Tnbs2	E	CMP	E300.0:PERC	1	Y	
W-823-03	PTMW	Tnbs2	S	CMP	E601:ALL	1	Y	
W-823-03	PTMW	Tnbs2	S	CMP	E601:ALL	3	Y	
W-823-03	PTMW	Tnbs2	E	CMP	E8330LOW:ALL	1	Y	
W-823-13	PTMW	Tnbs2	A	CMP	E300.0:NO3	1	Y	
W-823-13	PTMW	Tnbs2	A	CMP	E300.0:PERC	1	Y	
W-823-13	PTMW	Tnbs2	S	CMP	E601:ALL	1	Y	
W-823-13	PTMW	Tnbs2	S	CMP	E601:ALL	3	Y	
W-823-13	PTMW	Tnbs2	A	CMP	E8330LOW:ALL	1	Y	
W-827-01	PTMW	Tnbs2	O	CMP	E300.0:NO3	1	N	To be sampled in 2015.
W-827-01	PTMW	Tnbs2	O	CMP	E300.0:PERC	1	N	To be sampled in 2015.
W-827-01	PTMW	Tnbs2	O	CMP	E601:ALL	1	N	To be sampled in 2015.
W-827-01	PTMW	Tnbs2	O	CMP	E8330LOW:ALL	1	N	To be sampled in 2015.
W-827-02	PTMW	Tnsc1	O	CMP	E300.0:NO3	1	N	To be sampled in 2015.
W-827-02	PTMW	Tnsc1	O	CMP	E300.0:PERC	1	N	To be sampled in 2015.
W-827-02	PTMW	Tnsc1	O	CMP	E601:ALL	1	N	To be sampled in 2015.
W-827-02	PTMW	Tnsc1	O	CMP	E8330LOW:ALL	1	N	To be sampled in 2015.
W-827-03	PTMW	UTnbs1	O	CMP	E300.0:NO3	1	N	To be sampled in 2015.

Table 2.4-11. High Explosives Process Area Operable Unit ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-827-03	PTMW	UTnbs1	O	CMP	E300.0:PERC	1	N	To be sampled in 2015.
W-827-03	PTMW	UTnbs1	O	CMP	E601:ALL	1	N	To be sampled in 2015.
W-827-03	PTMW	UTnbs1	O	CMP	E8330LOW:ALL	1	N	To be sampled in 2015.
W-827-04	PTMW	LTnbs1	A	CMP	E300.0:NO3	1	N	Insufficient water.
W-827-04	PTMW	LTnbs1	A	CMP	E300.0:PERC	1	N	Insufficient water.
W-827-04	PTMW	LTnbs1	S	CMP	E601:ALL	1	N	Insufficient water.
W-827-04	PTMW	LTnbs1	S	CMP	E601:ALL	3	N	Dry.
W-827-04	PTMW	LTnbs1	A	CMP	E8330LOW:ALL	1	N	Insufficient water.
W-827-05	PTMW	LTnbs1	A	CMP	E300.0:NO3	1	Y	
W-827-05	PTMW	LTnbs1	A	CMP	E300.0:PERC	1	Y	
W-827-05	PTMW	LTnbs1	S	CMP	E601:ALL	1	Y	
W-827-05	PTMW	LTnbs1	S	CMP	E601:ALL	3	Y	
W-827-05	PTMW	LTnbs1	A	CMP	E8330LOW:ALL	1	Y	
W-829-06	EW	Tnsc1b	Q	DIS-TF	E300.0:NO3	1	Y	
W-829-06	EW	Tnsc1b	Q	DIS-TF	E300.0:NO3	2	Y	
W-829-06	EW	Tnsc1b	Q	DIS-TF	E300.0:NO3	3	Y	
W-829-06	EW	Tnsc1b	Q	DIS-TF	E300.0:NO3	4	Y	
W-829-06	EW	Tnsc1b	Q	DIS-TF	E300.0:PERC	1	Y	
W-829-06	EW	Tnsc1b	Q	DIS-TF	E300.0:PERC	2	Y	
W-829-06	EW	Tnsc1b	Q	DIS-TF	E300.0:PERC	3	Y	
W-829-06	EW	Tnsc1b	Q	DIS-TF	E300.0:PERC	4	Y	
W-829-06	EW	Tnsc1b	Q	DIS-TF	E601:ALL	1	Y	
W-829-06	EW	Tnsc1b	Q	DIS-TF	E601:ALL	2	Y	
W-829-06	EW	Tnsc1b	Q	DIS-TF	E601:ALL	3	Y	
W-829-06	EW	Tnsc1b	Q	DIS-TF	E601:ALL	4	Y	
W-829-06	EW	Tnsc1b	A	DIS-TF	E8330LOW:ALL	1	Y	
W-829-08	PTMW	Tnsc1b	A	CMP	E300.0:NO3	1	Y	
W-829-08	PTMW	Tnsc1b	A	CMP	E300.0:PERC	1	Y	
W-829-08	PTMW	Tnsc1b	S	CMP	E601:ALL	1	Y	
W-829-08	PTMW	Tnsc1b	S	CMP	E601:ALL	3	Y	
W-829-08	PTMW	Tnsc1b	A	CMP	E8330LOW:ALL	1	Y	
W-829-15	DMW	LTnbs1	A	WGMG	E300.0:PERC	2	Y	
W-829-15	DMW	LTnbs1	A	WGMG	E624:ALL	2	Y	
W-829-15	DMW	LTnbs1	A	WGMG	E8330:R+H	2	Y	
W-829-15	DMW	LTnbs1	A	WGMG	E8330:TNT	2	Y	
W-829-1938	DMW	LTnbs1	Q	WGMG	E300.0:PERC	1	Y	
W-829-1938	DMW	LTnbs1	Q	WGMG	E300.0:PERC	2	Y	
W-829-1938	DMW	LTnbs1	Q	WGMG	E300.0:PERC	3	Y	
W-829-1938	DMW	LTnbs1	Q	WGMG	E300.0:PERC	4	Y	
W-829-1938	DMW	LTnbs1	Q	WGMG	E624:ALL	1	Y	
W-829-1938	DMW	LTnbs1	Q	WGMG	E624:ALL	2	Y	
W-829-1938	DMW	LTnbs1	Q	WGMG	E624:ALL	3	Y	
W-829-1938	DMW	LTnbs1	Q	WGMG	E624:ALL	4	Y	
W-829-1938	DMW	LTnbs1	Q	WGMG	E8330:R+H	1	Y	
W-829-1938	DMW	LTnbs1	Q	WGMG	E8330:R+H	2	Y	
W-829-1938	DMW	LTnbs1	Q	WGMG	E8330:R+H	3	Y	
W-829-1938	DMW	LTnbs1	Q	WGMG	E8330:R+H	4	Y	
W-829-1938	DMW	LTnbs1	Q	WGMG	E8330:TNT	1	Y	
W-829-1938	DMW	LTnbs1	Q	WGMG	E8330:TNT	2	Y	
W-829-1938	DMW	LTnbs1	Q	WGMG	E8330:TNT	3	Y	
W-829-1938	DMW	LTnbs1	Q	WGMG	E8330:TNT	4	Y	
W-829-1940	PTMW	Tnsc1b	A	CMP	E300.0:NO3	1	Y	
W-829-1940	PTMW	Tnsc1b	A	CMP	E300.0:PERC	1	Y	
W-829-1940	PTMW	Tnsc1b	S	CMP	E601:ALL	1	Y	
W-829-1940	PTMW	Tnsc1b	S	CMP	E601:ALL	3	Y	
W-829-1940	PTMW	Tnsc1b	A	CMP	E8330LOW:ALL	1	Y	
W-829-22	DMW	LTnbs1	A	WGMG	E300.0:PERC	2	Y	
W-829-22	DMW	LTnbs1	A	WGMG	E624:ALL	2	Y	
W-829-22	DMW	LTnbs1	A	WGMG	E8330:R+H	2	Y	
W-829-22	DMW	LTnbs1	A	WGMG	E8330:TNT	2	Y	
WELL18	WS	Tnbs1	M	CMP	E300.0:NO3	1	Y	
WELL18	WS	Tnbs1	M	CMP	E300.0:NO3	1	Y	
WELL18	WS	Tnbs1	M	CMP	E300.0:NO3	1	Y	
WELL18	WS	Tnbs1	M	CMP	E300.0:NO3	2	N	Inoperable pump.

Table 2.4-11. High Explosives Process Area Operable Unit ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
WELL18	WS	Tnbs1	M	CMP	E300.0:NO3	2	Y	
WELL18	WS	Tnbs1	M	CMP	E300.0:NO3	2	Y	
WELL18	WS	Tnbs1	M	CMP	E300.0:NO3	3	Y	
WELL18	WS	Tnbs1	M	CMP	E300.0:NO3	3	Y	
WELL18	WS	Tnbs1	M	CMP	E300.0:NO3	3	Y	
WELL18	WS	Tnbs1	M	CMP	E300.0:NO3	4	Y	
WELL18	WS	Tnbs1	M	CMP	E300.0:NO3	4	Y	
WELL18	WS	Tnbs1	M	CMP	E300.0:NO3	4	Y	
WELL18	WS	Tnbs1	M	CMP	E300.0:PERC	1	Y	
WELL18	WS	Tnbs1	M	CMP	E300.0:PERC	1	Y	
WELL18	WS	Tnbs1	M	CMP	E300.0:PERC	1	Y	
WELL18	WS	Tnbs1	M	CMP	E300.0:PERC	2	N	Inoperable pump.
WELL18	WS	Tnbs1	M	CMP	E300.0:PERC	2	Y	
WELL18	WS	Tnbs1	M	CMP	E300.0:PERC	2	Y	
WELL18	WS	Tnbs1	M	CMP	E300.0:PERC	3	Y	
WELL18	WS	Tnbs1	M	CMP	E300.0:PERC	3	Y	
WELL18	WS	Tnbs1	M	CMP	E300.0:PERC	3	Y	
WELL18	WS	Tnbs1	M	CMP	E300.0:PERC	4	Y	
WELL18	WS	Tnbs1	M	CMP	E300.0:PERC	4	Y	
WELL18	WS	Tnbs1	M	CMP	E300.0:PERC	4	Y	
WELL18	WS	Tnbs1	M	CMP	E601:ALL	1	Y	
WELL18	WS	Tnbs1	M	CMP	E601:ALL	1	Y	
WELL18	WS	Tnbs1	M	CMP	E601:ALL	1	Y	
WELL18	WS	Tnbs1	M	CMP	E601:ALL	2	N	Inoperable pump.
WELL18	WS	Tnbs1	M	CMP	E601:ALL	2	Y	
WELL18	WS	Tnbs1	M	CMP	E601:ALL	2	Y	
WELL18	WS	Tnbs1	M	CMP	E601:ALL	3	Y	
WELL18	WS	Tnbs1	M	CMP	E601:ALL	3	Y	
WELL18	WS	Tnbs1	M	CMP	E601:ALL	3	Y	
WELL18	WS	Tnbs1	M	CMP	E601:ALL	4	Y	
WELL18	WS	Tnbs1	M	CMP	E601:ALL	4	Y	
WELL18	WS	Tnbs1	M	CMP	E601:ALL	4	Y	
WELL18	WS	Tnbs1	M	CMP	E8330LOW:ALL	1	Y	
WELL18	WS	Tnbs1	M	CMP	E8330LOW:ALL	1	Y	
WELL18	WS	Tnbs1	M	CMP	E8330LOW:ALL	1	Y	
WELL18	WS	Tnbs1	M	CMP	E8330LOW:ALL	2	N	Inoperable pump.
WELL18	WS	Tnbs1	M	CMP	E8330LOW:ALL	2	Y	
WELL18	WS	Tnbs1	M	CMP	E8330LOW:ALL	2	Y	
WELL18	WS	Tnbs1	M	CMP	E8330LOW:ALL	3	Y	
WELL18	WS	Tnbs1	M	CMP	E8330LOW:ALL	3	Y	
WELL18	WS	Tnbs1	M	CMP	E8330LOW:ALL	3	Y	
WELL18	WS	Tnbs1	M	CMP	E8330LOW:ALL	4	Y	
WELL18	WS	Tnbs1	M	CMP	E8330LOW:ALL	4	Y	
WELL18	WS	Tnbs1	M	CMP	E8330LOW:ALL	4	Y	
WELL20	WS	Tnbs1	M	CMP	E300.0:NO3	1	Y	
WELL20	WS	Tnbs1	M	CMP	E300.0:NO3	1	Y	
WELL20	WS	Tnbs1	M	CMP	E300.0:NO3	1	Y	
WELL20	WS	Tnbs1	M	CMP	E300.0:NO3	2	Y	
WELL20	WS	Tnbs1	M	CMP	E300.0:NO3	2	Y	
WELL20	WS	Tnbs1	M	CMP	E300.0:NO3	2	Y	
WELL20	WS	Tnbs1	M	CMP	E300.0:NO3	3	Y	
WELL20	WS	Tnbs1	M	CMP	E300.0:NO3	3	Y	
WELL20	WS	Tnbs1	M	CMP	E300.0:NO3	3	Y	
WELL20	WS	Tnbs1	M	CMP	E300.0:NO3	4	Y	
WELL20	WS	Tnbs1	M	CMP	E300.0:NO3	4	Y	
WELL20	WS	Tnbs1	M	CMP	E300.0:NO3	4	Y	
WELL20	WS	Tnbs1	M	CMP	E300.0:PERC	1	Y	
WELL20	WS	Tnbs1	M	CMP	E300.0:PERC	1	Y	
WELL20	WS	Tnbs1	M	CMP	E300.0:PERC	1	Y	
WELL20	WS	Tnbs1	M	CMP	E300.0:PERC	2	Y	
WELL20	WS	Tnbs1	M	CMP	E300.0:PERC	2	Y	
WELL20	WS	Tnbs1	M	CMP	E300.0:PERC	2	Y	
WELL20	WS	Tnbs1	M	CMP	E300.0:PERC	3	Y	
WELL20	WS	Tnbs1	M	CMP	E300.0:PERC	3	Y	

Table 2.4-11. High Explosives Process Area Operable Unit ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
WELL20	WS	Tnbs1	M	CMP	E300.0:PERC	3	Y	
WELL20	WS	Tnbs1	M	CMP	E300.0:PERC	4	Y	
WELL20	WS	Tnbs1	M	CMP	E300.0:PERC	4	Y	
WELL20	WS	Tnbs1	M	CMP	E300.0:PERC	4	Y	
WELL20	WS	Tnbs1	M	WGMG	E502.2:ALL	1	Y	
WELL20	WS	Tnbs1	M	WGMG	E502.2:ALL	1	Y	
WELL20	WS	Tnbs1	M	WGMG	E502.2:ALL	1	Y	
WELL20	WS	Tnbs1	M	WGMG	E502.2:ALL	2	Y	
WELL20	WS	Tnbs1	M	WGMG	E502.2:ALL	2	Y	
WELL20	WS	Tnbs1	M	WGMG	E502.2:ALL	2	Y	
WELL20	WS	Tnbs1	M	WGMG	E502.2:ALL	3	Y	
WELL20	WS	Tnbs1	M	WGMG	E502.2:ALL	3	Y	
WELL20	WS	Tnbs1	M	WGMG	E502.2:ALL	3	Y	
WELL20	WS	Tnbs1	M	WGMG	E502.2:ALL	4	Y	
WELL20	WS	Tnbs1	M	WGMG	E502.2:ALL	4	Y	
WELL20	WS	Tnbs1	M	WGMG	E502.2:ALL	4	Y	
WELL20	WS	Tnbs1	M	CMP	E8330LOW:ALL	1	Y	
WELL20	WS	Tnbs1	M	CMP	E8330LOW:ALL	1	Y	
WELL20	WS	Tnbs1	M	CMP	E8330LOW:ALL	1	Y	
WELL20	WS	Tnbs1	M	CMP	E8330LOW:ALL	2	Y	
WELL20	WS	Tnbs1	M	CMP	E8330LOW:ALL	2	Y	
WELL20	WS	Tnbs1	M	CMP	E8330LOW:ALL	2	Y	
WELL20	WS	Tnbs1	M	CMP	E8330LOW:ALL	3	Y	
WELL20	WS	Tnbs1	M	CMP	E8330LOW:ALL	3	Y	
WELL20	WS	Tnbs1	M	CMP	E8330LOW:ALL	3	Y	
WELL20	WS	Tnbs1	M	CMP	E8330LOW:ALL	4	Y	
WELL20	WS	Tnbs1	M	CMP	E8330LOW:ALL	4	Y	
WELL20	WS	Tnbs1	M	CMP	E8330LOW:ALL	4	Y	

Table 2.4-12. Building 815-Source (815-SRC) mass removed, July 1, 2014 through December 31, 2014.

Treatment facility	Month	SVTS VOC mass removed (g)	GWTS VOC mass removed (g)	Perchlorate mass removed (g)	Nitrate mass removed (kg)	RDX mass removed (g)	TBOS/TKEBS mass removed (g)
815-SRC	July	NA	1.7	0.86	22	7.3	NA
	August	NA	1.5	0.73	19	6.4	NA
	September	NA	1.9	0.95	25	8.4	NA
	October	NA	1.2	0.75	20	6.6	NA
	November	NA	1.2	0.74	20	6.5	NA
	December	NA	0.58	0.37	9.7	3.2	NA
Total		NA	8.1	4.4	120	38	NA

Notes:

***Nitrate re-injected into the $Tnbs_2$ HSU undergoes in-situ biotransformation to benign N_2 gas by anaerobic denitrifying bacteria.**

Table 2.4-13. Building 815-Proximal (815-PRX) mass removed, July 1, 2014 through December 31, 2014.

Treatment facility	Month	SVTS VOC mass removed (g)	GWTS VOC mass removed (g)	Perchlorate mass removed (g)	Nitrate mass removed (kg)	RDX mass removed (g)	TBOS/TKEBS mass removed (g)
815-PRX	July	NA	3.5	1.3	15	NA	NA
	August	NA	3.0	1.1	14	NA	NA
	September	NA	3.3	1.3	16	NA	NA
	October	NA	2.3	0.91	11	NA	NA
	November	NA	2.5	0.99	12	NA	NA
	December	NA	1.2	0.49	5.9	NA	NA
Total		NA	16	6.1	73	NA	NA

Notes:

***Nitrate re-injected into the $Tnbs_2$ HSU undergoes in-situ biotransformation to benign N_2 gas by anaerobic denitrifying bacteria.**

Table 2.4-14. Building 815-Distal Site Boundary (815-DSB) mass removed, July 1, 2014 through December 31, 2014.

Treatment facility	Month	SVTS VOC mass removed (g)	GWTS VOC mass removed (g)	Perchlorate mass removed (g)	Nitrate mass removed (kg)	RDX mass removed (g)	TBOS/TKEBS mass removed (g)
815-DSB	July	NA	4.2	NA	NA	NA	NA
	August	NA	3.7	NA	NA	NA	NA
	September	NA	4.4	NA	NA	NA	NA
	October	NA	2.5	NA	NA	NA	NA
	November	NA	2.1	NA	NA	NA	NA
	December	NA	4.0	NA	NA	NA	NA
Total		NA	21	NA	NA	NA	NA

Table 2.4-15. Building 817-Source (817-SRC) mass removed, July 1, 2014 through December 31, 2014.

Treatment facility	Month	SVTS VOC mass removed (g)	GWTS VOC mass removed (g)	Perchlorate mass removed (g)	Nitrate mass removed (kg)	RDX mass removed (g)	TBOS/TKEBS mass removed (g)
817-SRC	July	NA	0	0.071	0.21	0.10	NA
	August	NA	0	0.069	0.20	0.098	NA
	September	NA	0	0.074	0.22	0.11	NA
	October	NA	0	0.060	0.18	0.036	NA
	November	NA	0	0.042	0.13	0.025	NA
	December	NA	0	0.026	0.078	0.016	NA
Total		NA	0	0.34	1.0	0.38	NA

Notes:

***Nitrate re-injected into the $Tnbs_2$ HSU undergoes in-situ biotransformation to benign N_2 gas by anaerobic denitrifying bacteria.**

Table 2.4-16. Building 817-Proximal (817-PRX) mass removed, July 1, 2014 through December 31, 2014.

Treatment facility	Month	SVTS VOC mass removed (g)	GWTS VOC mass removed (g)	Perchlorate mass removed (g)	Nitrate mass removed (kg)	RDX mass removed (g)	TBOS/TKEBS mass removed (g)
817-PRX	July	NA	1.6	4.6	19	1.8	NA
	August	NA	1.4	4.2	17	1.6	NA
	September	NA	1.9	5.4	23	2.1	NA
	October	NA	1.6	4.3	18	1.7	NA
	November	NA	1.7	4.5	19	1.8	NA
	December	NA	0.84	2.3	9.4	0.88	NA
Total		NA	9.0	25	110	9.9	NA

Notes:

***Nitrate re-injected into the $Tnbs_2$ HSU undergoes in-situ biotransformation to benign N_2 gas by anaerobic denitrifying bacteria.**

Table 2.4-17. Building 829-Source (829-SRC) mass removed, July 1, 2014 through December 31, 2014.

Treatment facility	Month	SVTS VOC mass removed (g)	GWTS VOC mass removed (g)	Perchlorate mass removed (g)	Nitrate mass removed (kg)	RDX mass removed (g)	TBOS/TKEBS mass removed (g)
829-SRC	July	NA	0.0053	0.0036	0.022	NA	NA
	August	NA	0.0059	0.0040	0.025	NA	NA
	September	NA	0.0071	0.0049	0.030	NA	NA
	October	NA	0.0050	0.0034	0.021	NA	NA
	November	NA	0.0064	0.0042	0.023	NA	NA
	December	NA	0.0025	0.0016	0.0089	NA	NA
Total		NA	0.032	0.022	0.13	NA	NA

Table 2.5-1. Building 850 Area of Operable Unit 5 ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
K1-01C	DMW	Tnbs1-Tnbs0	Q	WGMG	AS:UISO	1	N	Inoperable pump.
K1-01C	DMW	Tnbs1-Tnbs0	Q	WGMG	AS:UISO	2	N	Inoperable pump.
K1-01C	DMW	Tnbs1-Tnbs0	Q	WGMG	AS:UISO	3	N	Inoperable pump.
K1-01C	DMW	Tnbs1-Tnbs0	Q	WGMG	AS:UISO	4	N	Inoperable pump.
K1-01C	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:NO3	1	N	Inoperable pump.
K1-01C	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:NO3	2	N	Inoperable pump.
K1-01C	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:NO3	3	N	Inoperable pump.
K1-01C	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:NO3	4	N	Inoperable pump.
K1-01C	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	1	N	Inoperable pump.
K1-01C	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	2	N	Inoperable pump.
K1-01C	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	3	N	Inoperable pump.
K1-01C	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	4	N	Inoperable pump.
K1-01C	DMW	Tnbs1-Tnbs0	Q	WGMG	E8260:ALL	1	N	Inoperable pump.
K1-01C	DMW	Tnbs1-Tnbs0	Q	WGMG	E8260:ALL	2	N	Inoperable pump.
K1-01C	DMW	Tnbs1-Tnbs0	Q	WGMG	E8260:ALL	3	N	Inoperable pump.
K1-01C	DMW	Tnbs1-Tnbs0	Q	WGMG	E8260:ALL	4	N	Inoperable pump.
K1-01C	DMW	Tnbs1-Tnbs0	Q	WGMG	E8330:R+H	1	N	Inoperable pump.
K1-01C	DMW	Tnbs1-Tnbs0	Q	WGMG	E8330:R+H	2	N	Inoperable pump.
K1-01C	DMW	Tnbs1-Tnbs0	Q	WGMG	E8330:R+H	3	N	Inoperable pump.
K1-01C	DMW	Tnbs1-Tnbs0	Q	WGMG	E8330:R+H	4	N	Inoperable pump.
K1-01C	DMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	1	N	Inoperable pump.
K1-01C	DMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	2	N	Inoperable pump.
K1-01C	DMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	3	N	Inoperable pump.
K1-01C	DMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	4	N	Inoperable pump.
K1-02B	DMW	Tnbs1-Tnbs0	Q	WGMG	AS:UISO	1	N	Inoperable pump.
K1-02B	DMW	Tnbs1-Tnbs0	O	CMP	AS:UISO	1	N	To be sampled in 2015.
K1-02B	DMW	Tnbs1-Tnbs0	Q	WGMG	AS:UISO	2	N	Inoperable pump.
K1-02B	DMW	Tnbs1-Tnbs0	Q	WGMG	AS:UISO	3	Y	
K1-02B	DMW	Tnbs1-Tnbs0	Q	WGMG	AS:UISO	4	Y	
K1-02B	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:NO3	1	N	Inoperable pump.
K1-02B	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:NO3	2	N	Inoperable pump.
K1-02B	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:NO3	3	Y	
K1-02B	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:NO3	4	Y	
K1-02B	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	1	N	Inoperable pump.
K1-02B	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	2	N	Inoperable pump.
K1-02B	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	3	Y	
K1-02B	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	4	Y	
K1-02B	DMW	Tnbs1-Tnbs0	Q	WGMG	E8260:ALL	1	N	Inoperable pump.
K1-02B	DMW	Tnbs1-Tnbs0	Q	WGMG	E8260:ALL	2	N	Inoperable pump.
K1-02B	DMW	Tnbs1-Tnbs0	Q	WGMG	E8260:ALL	3	Y	
K1-02B	DMW	Tnbs1-Tnbs0	Q	WGMG	E8260:ALL	4	Y	
K1-02B	DMW	Tnbs1-Tnbs0	Q	WGMG	E8330:R+H	1	N	Inoperable pump.
K1-02B	DMW	Tnbs1-Tnbs0	Q	WGMG	E8330:R+H	2	N	Inoperable pump.
K1-02B	DMW	Tnbs1-Tnbs0	Q	WGMG	E8330:R+H	3	Y	
K1-02B	DMW	Tnbs1-Tnbs0	Q	WGMG	E8330:R+H	4	Y	
K1-02B	DMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	1	N	Inoperable pump.
K1-02B	DMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	2	N	Inoperable pump.
K1-02B	DMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	3	Y	
K1-02B	DMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	4	Y	
K1-04	DMW	Tnbs1-Tnbs0	Q	WGMG	AS:UISO	1	N	Inoperable pump.
K1-04	DMW	Tnbs1-Tnbs0	Q	WGMG	AS:UISO	2	N	Inoperable pump.
K1-04	DMW	Tnbs1-Tnbs0	Q	WGMG	AS:UISO	3	N	Inoperable pump.
K1-04	DMW	Tnbs1-Tnbs0	Q	WGMG	AS:UISO	4	N	Inoperable pump.
K1-04	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:NO3	1	N	Inoperable pump.
K1-04	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:NO3	2	N	Inoperable pump.
K1-04	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:NO3	3	N	Inoperable pump.
K1-04	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:NO3	4	N	Inoperable pump.
K1-04	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	1	N	Inoperable pump.
K1-04	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	2	N	Inoperable pump.
K1-04	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	3	N	Inoperable pump.
K1-04	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	4	N	Inoperable pump.
K1-04	DMW	Tnbs1-Tnbs0	Q	WGMG	E8260:ALL	1	N	Inoperable pump.
K1-04	DMW	Tnbs1-Tnbs0	Q	WGMG	E8260:ALL	2	N	Inoperable pump.
K1-04	DMW	Tnbs1-Tnbs0	Q	WGMG	E8260:ALL	3	N	Inoperable pump.

Table 2.5-1. Building 850 Area of Operable Unit 5 ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
K1-04	DMW	Tnbs1-Tnbs0	Q	WGMG	E8260:ALL	4	N	Inoperable pump.
K1-04	DMW	Tnbs1-Tnbs0	Q	WGMG	E8330:R+H	1	N	Inoperable pump.
K1-04	DMW	Tnbs1-Tnbs0	Q	WGMG	E8330:R+H	2	N	Inoperable pump.
K1-04	DMW	Tnbs1-Tnbs0	Q	WGMG	E8330:R+H	3	N	Inoperable pump.
K1-04	DMW	Tnbs1-Tnbs0	Q	WGMG	E8330:R+H	4	N	Inoperable pump.
K1-04	DMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	1	N	Inoperable pump.
K1-04	DMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	2	N	Inoperable pump.
K1-04	DMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	3	N	Inoperable pump.
K1-04	DMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	4	N	Inoperable pump.
K1-05	DMW	Tnbs1-Tnbs0	Q	WGMG	AS:UISO	1	Y	
K1-05	DMW	Tnbs1-Tnbs0	O	CMP	AS:UISO	1	N	To be sampled in 2015.
K1-05	DMW	Tnbs1-Tnbs0	Q	WGMG	AS:UISO	2	Y	
K1-05	DMW	Tnbs1-Tnbs0	Q	WGMG	AS:UISO	3	Y	
K1-05	DMW	Tnbs1-Tnbs0	Q	WGMG	AS:UISO	4	Y	
K1-05	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:NO3	1	Y	
K1-05	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:NO3	2	Y	
K1-05	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:NO3	3	Y	
K1-05	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:NO3	4	Y	
K1-05	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	1	Y	
K1-05	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	2	Y	
K1-05	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	3	Y	
K1-05	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	4	Y	
K1-05	DMW	Tnbs1-Tnbs0	Q	WGMG	E8260:ALL	1	Y	
K1-05	DMW	Tnbs1-Tnbs0	Q	WGMG	E8260:ALL	2	Y	
K1-05	DMW	Tnbs1-Tnbs0	Q	WGMG	E8260:ALL	3	Y	
K1-05	DMW	Tnbs1-Tnbs0	Q	WGMG	E8260:ALL	4	Y	
K1-05	DMW	Tnbs1-Tnbs0	Q	WGMG	E8330:R+H	1	Y	
K1-05	DMW	Tnbs1-Tnbs0	Q	WGMG	E8330:R+H	2	Y	
K1-05	DMW	Tnbs1-Tnbs0	Q	WGMG	E8330:R+H	3	Y	
K1-05	DMW	Tnbs1-Tnbs0	Q	WGMG	E8330:R+H	4	Y	
K1-05	DMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	1	Y	
K1-05	DMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	2	Y	
K1-05	DMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	3	Y	
K1-05	DMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	4	Y	
K1-06	PTMW	Tnbs1-Tnbs0	A	CMP	AS:UISO	2	N	Dry.
K1-06	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	N	Dry.
K1-06	PTMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	1	N	Dry.
K1-06	PTMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	2	N	Dry.
K1-06	PTMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	3	N	Dry.
K1-06	PTMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	4	N	Dry.
K1-06	PTMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	1	N	Dry.
K1-06	PTMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	2	N	Dry.
K1-06	PTMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	3	N	Dry.
K1-06	PTMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	4	N	Dry.
K1-07	DMW	Tnbs1-Tnbs0	Q	WGMG	AS:UISO	1	Y	
K1-07	DMW	Tnbs1-Tnbs0	Q	WGMG	AS:UISO	2	Y	
K1-07	DMW	Tnbs1-Tnbs0	Q	WGMG	AS:UISO	3	Y	
K1-07	DMW	Tnbs1-Tnbs0	Q	WGMG	AS:UISO	4	Y	
K1-07	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:NO3	1	Y	
K1-07	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:NO3	2	Y	
K1-07	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:NO3	3	Y	
K1-07	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:NO3	4	Y	
K1-07	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	1	Y	
K1-07	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	2	Y	
K1-07	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	3	Y	
K1-07	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	4	Y	
K1-07	DMW	Tnbs1-Tnbs0	Q	WGMG	E8260:ALL	1	Y	
K1-07	DMW	Tnbs1-Tnbs0	Q	WGMG	E8260:ALL	2	Y	
K1-07	DMW	Tnbs1-Tnbs0	Q	WGMG	E8260:ALL	3	Y	
K1-07	DMW	Tnbs1-Tnbs0	Q	WGMG	E8260:ALL	4	Y	
K1-07	DMW	Tnbs1-Tnbs0	Q	WGMG	E8330:R+H	1	Y	
K1-07	DMW	Tnbs1-Tnbs0	Q	WGMG	E8330:R+H	2	Y	
K1-07	DMW	Tnbs1-Tnbs0	Q	WGMG	E8330:R+H	3	Y	
K1-07	DMW	Tnbs1-Tnbs0	Q	WGMG	E8330:R+H	4	Y	

Table 2.5-1. Building 850 Area of Operable Unit 5 ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
K1-07	DMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	1	Y	
K1-07	DMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	2	Y	
K1-07	DMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	3	Y	
K1-07	DMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	4	Y	
K1-07	DMW	Tnbs1-Tnbs0	A	DIS	MS:UISO	2	Y	
K1-08	DMW	Tnbs1-Tnbs0	Q	WGMG	AS:UISO	1	Y	
K1-08	DMW	Tnbs1-Tnbs0	O	CMP	AS:UISO	1	N	To be sampled in 2015.
K1-08	DMW	Tnbs1-Tnbs0	Q	WGMG	AS:UISO	2	Y	
K1-08	DMW	Tnbs1-Tnbs0	Q	WGMG	AS:UISO	3	Y	
K1-08	DMW	Tnbs1-Tnbs0	Q	WGMG	AS:UISO	4	Y	
K1-08	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:NO3	1	Y	
K1-08	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:NO3	2	Y	
K1-08	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:NO3	3	Y	
K1-08	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:NO3	4	Y	
K1-08	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	1	Y	
K1-08	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	2	Y	
K1-08	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	3	Y	
K1-08	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	4	Y	
K1-08	DMW	Tnbs1-Tnbs0	Q	WGMG	E8260:ALL	1	Y	
K1-08	DMW	Tnbs1-Tnbs0	Q	WGMG	E8260:ALL	2	Y	
K1-08	DMW	Tnbs1-Tnbs0	Q	WGMG	E8260:ALL	3	Y	
K1-08	DMW	Tnbs1-Tnbs0	Q	WGMG	E8260:ALL	4	Y	
K1-08	DMW	Tnbs1-Tnbs0	Q	WGMG	E8330:R+H	1	Y	
K1-08	DMW	Tnbs1-Tnbs0	Q	WGMG	E8330:R+H	2	Y	
K1-08	DMW	Tnbs1-Tnbs0	Q	WGMG	E8330:R+H	3	Y	
K1-08	DMW	Tnbs1-Tnbs0	Q	WGMG	E8330:R+H	4	Y	
K1-08	DMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	1	Y	
K1-08	DMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	2	Y	
K1-08	DMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	3	Y	
K1-08	DMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	4	Y	
K1-09	DMW	Tnbs1-Tnbs0	Q	WGMG	AS:UISO	1	Y	
K1-09	DMW	Tnbs1-Tnbs0	Q	WGMG	AS:UISO	2	Y	
K1-09	DMW	Tnbs1-Tnbs0	Q	WGMG	AS:UISO	3	Y	
K1-09	DMW	Tnbs1-Tnbs0	Q	WGMG	AS:UISO	4	Y	
K1-09	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:NO3	1	Y	
K1-09	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:NO3	2	Y	
K1-09	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:NO3	3	Y	
K1-09	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:NO3	4	Y	
K1-09	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	1	Y	
K1-09	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	2	Y	
K1-09	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	3	Y	
K1-09	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	4	Y	
K1-09	DMW	Tnbs1-Tnbs0	Q	WGMG	E8260:ALL	1	Y	
K1-09	DMW	Tnbs1-Tnbs0	Q	WGMG	E8260:ALL	2	Y	
K1-09	DMW	Tnbs1-Tnbs0	Q	WGMG	E8260:ALL	3	Y	
K1-09	DMW	Tnbs1-Tnbs0	Q	WGMG	E8260:ALL	4	Y	
K1-09	DMW	Tnbs1-Tnbs0	Q	WGMG	E8330:R+H	1	Y	
K1-09	DMW	Tnbs1-Tnbs0	Q	WGMG	E8330:R+H	2	Y	
K1-09	DMW	Tnbs1-Tnbs0	Q	WGMG	E8330:R+H	3	Y	
K1-09	DMW	Tnbs1-Tnbs0	Q	WGMG	E8330:R+H	4	Y	
K1-09	DMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	1	Y	
K1-09	DMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	2	Y	
K1-09	DMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	3	Y	
K1-09	DMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	4	Y	
K2-03	PTMW	Tnbs1-Tnbs0	A	CMP	AS:UISO	2	Y	
K2-03	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
K2-03	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	Y	
K2-03	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	Y	
K2-03	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
K2-03	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
K2-04D	PTMW	Tnbs1-Tnbs0	O	CMP	AS:UISO	2	N	To be sampled in 2015.
K2-04D	PTMW	Tnbs1-Tnbs0	E	CMP	E300.0:NO3	2	Y	
K2-04D	PTMW	Tnbs1-Tnbs0	A	WGMG	E300.0:PERC	2	Y	
K2-04D	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	Y	

Table 2.5-1. Building 850 Area of Operable Unit 5 ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
K2-04D	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
K2-04D	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
K2-04S	PTMW	Qal/WBR	E	CMP	AS:UISO	2	Y	
K2-04S	PTMW	Qal/WBR	O	CMP	E300.0:NO3	2	N	To be sampled in 2015.
K2-04S	PTMW	Qal/WBR	A	WGMG	E300.0:PERC	2	Y	
K2-04S	PTMW	Qal/WBR	S	CMP	E300.0:PERC	4	Y	
K2-04S	PTMW	Qal/WBR	S	CMP	E906:ALL	2	Y	
K2-04S	PTMW	Qal/WBR	S	CMP	E906:ALL	4	Y	
NC2-05	PTMW	Tnbs1-Tnbs0	A	CMP	AS:UISO	2	N	Dry.
NC2-05	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	N	Dry.
NC2-05	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	N	Dry.
NC2-05	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	N	Dry.
NC2-05	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	N	Dry.
NC2-05	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	N	Dry.
NC2-05A	PTMW	Tnbs1-Tnbs0	A	CMP	AS:UISO	2	Y	
NC2-05A	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
NC2-05A	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	Y	
NC2-05A	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	Y	
NC2-05A	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
NC2-05A	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
NC2-06	PTMW	Tnbs1-Tnbs0	A	CMP	AS:UISO	2	Y	
NC2-06	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
NC2-06	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	Y	
NC2-06	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	Y	
NC2-06	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
NC2-06	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
NC2-06A	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
NC2-06A	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	Y	
NC2-06A	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	Y	
NC2-06A	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
NC2-06A	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
NC2-06A	PTMW	Tnbs1-Tnbs0	A	CMP	MS:UISO	2	Y	
NC2-09	PTMW	Tnbs1-Tnbs0	A	CMP	AS:UISO	2	Y	
NC2-09	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
NC2-09	PTMW	Tnbs1-Tnbs0	A	DIS	E300.0:PERC	2	Y	
NC2-09	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
NC2-09	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
NC2-10	PTMW	Tnbs1-Tnbs0	A	CMP	AS:UISO	2	Y	
NC2-10	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
NC2-10	PTMW	Tnbs1-Tnbs0	A	DIS	E300.0:PERC	2	Y	
NC2-10	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
NC2-10	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	N	Inoperable pump.
NC2-11D	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
NC2-11D	PTMW	Tnbs1-Tnbs0	S	WGMG	E300.0:PERC	2	Y	
NC2-11D	PTMW	Tnbs1-Tnbs0	S	WGMG	E300.0:PERC	4	Y	
NC2-11D	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
NC2-11D	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
NC2-11D	PTMW	Tnbs1-Tnbs0	A	CMP	MS:UISO	2	Y	
NC2-11I	PTMW	Tnbs1-Tnbs0	A	CMP	AS:UISO	2	Y	
NC2-11I	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
NC2-11I	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	Y	
NC2-11I	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	Y	
NC2-11I	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
NC2-11I	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
NC2-11S	PTMW	Tnbs1-Tnbs0	A	CMP	AS:UISO	2	Y	
NC2-11S	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
NC2-11S	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	Y	
NC2-11S	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	Y	
NC2-11S	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
NC2-11S	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
NC2-12D	PTMW	Tnbs1-Tnbs0	A	CMP	AS:UISO	2	Y	
NC2-12D	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
NC2-12D	PTMW	Tnbs1-Tnbs0	A	WGMG	E300.0:PERC	2	Y	
NC2-12D	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	N	Inoperable pump.

Table 2.5-1. Building 850 Area of Operable Unit 5 ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
NC2-12D	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
NC2-12D	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	N	Inoperable pump.
NC2-12I	PTMW	Tnbs1-Tnbs0	A	CMP	AS:UISO	2	Y	
NC2-12I	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
NC2-12I	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	Y	
NC2-12I	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	Y	
NC2-12I	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
NC2-12I	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
NC2-12S	PTMW	Tnbs1-Tnbs0	A	CMP	AS:UISO	2	Y	
NC2-12S	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
NC2-12S	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	Y	
NC2-12S	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	Y	
NC2-12S	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
NC2-12S	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
NC2-13	PTMW	Tnbs1-Tnbs0	A	CMP	AS:UISO	2	Y	
NC2-13	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
NC2-13	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	Y	
NC2-13	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	Y	
NC2-13	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
NC2-13	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
NC2-14S	PTMW	Qal/WBR	O	CMP	AS:UISO	2	N	To be sampled in 2015.
NC2-14S	PTMW	Qal/WBR	O	CMP	E300.0:NO3	2	N	To be sampled in 2015.
NC2-14S	PTMW	Qal/WBR	S	CMP	E300.0:PERC	1	Y	
NC2-14S	PTMW	Qal/WBR	S	CMP	E300.0:PERC	3	Y	
NC2-14S	PTMW	Qal/WBR	S	CMP	E906:ALL	2	Y	
NC2-14S	PTMW	Qal/WBR	S	CMP	E906:ALL	4	Y	
NC2-15	PTMW	Tnbs1-Tnbs0	A	CMP	AS:UISO	2	Y	
NC2-15	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
NC2-15	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	Y	
NC2-15	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	Y	
NC2-15	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
NC2-15	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
NC2-16	PTMW	Tnbs1-Tnbs0	E	CMP	AS:UISO	2	Y	
NC2-16	PTMW	Tnbs1-Tnbs0	O	CMP	E300.0:NO3	2	N	To be sampled in 2015.
NC2-16	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	1	Y	
NC2-16	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	3	Y	
NC2-16	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
NC2-16	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
NC2-17	PTMW	Tnbs1-Tnbs0	A	CMP	AS:UISO	2	Y	
NC2-17	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
NC2-17	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	Y	
NC2-17	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	Y	
NC2-17	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
NC2-17	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
NC2-18	PTMW	Tnbs1-Tnbs0	S	CMP	AS:UISO	2	Y	
NC2-18	PTMW	Tnbs1-Tnbs0	S	CMP	AS:UISO	4	Y	
NC2-18	PTMW	Tnbs1-Tnbs0	O	CMP	E300.0:NO3	2	N	To be sampled in 2015.
NC2-18	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	Y	
NC2-18	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	Y	
NC2-18	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
NC2-18	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
NC2-19	PTMW	Tnbs1-Tnbs0	E	CMP	AS:UISO	2	Y	
NC2-19	PTMW	Tnbs1-Tnbs0	O	CMP	E300.0:NO3	2	N	To be sampled in 2015.
NC2-19	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	Y	
NC2-19	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	Y	
NC2-19	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
NC2-19	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
NC2-20	PTMW	Tnbs1-Tnbs0	O	CMP	AS:UISO	2	N	To be sampled in 2015.
NC2-20	PTMW	Tnbs1-Tnbs0	E	CMP	E300.0:NO3	2	Y	
NC2-20	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:PERC	2	Y	
NC2-20	PTMW	Tnbs1-Tnbs0	A	CMP	E906:ALL	2	Y	
NC2-21	PTMW	Tnbs1-Tnbs0	E	CMP	AS:UISO	2	Y	
NC2-21	PTMW	Tnbs1-Tnbs0	O	CMP	E300.0:NO3	2	N	To be sampled in 2015.
NC2-21	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:PERC	2	Y	

Table 2.5-1. Building 850 Area of Operable Unit 5 ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
NC2-21	PTMW	Tnbs1-Tnbs0	A	CMP	E906:ALL	2	Y	
NC7-10	PTMW	Qal/WBR	A	CMP	E300.0:NO3	2	Y	
NC7-10	PTMW	Qal/WBR	S	DIS	E300.0:PERC	1	Y	
NC7-10	PTMW	Qal/WBR	S	DIS	E300.0:PERC	3	Y	
NC7-10	PTMW	Qal/WBR	S	DIS	E8330LOW:ALL	2	Y	
NC7-10	PTMW	Qal/WBR	S	DIS	E8330LOW:ALL	4	Y	
NC7-10	PTMW	Qal/WBR	S	CMP	E906:ALL	2	Y	
NC7-10	PTMW	Qal/WBR	S	CMP	E906:ALL	4	Y	
NC7-10	PTMW	Qal/WBR	A	CMP	MS:UISO	2	Y	
NC7-11	PTMW	Qal/WBR	A	CMP	AS:UISO	2	N	Insufficient water.
NC7-11	PTMW	Qal/WBR	A	CMP	E300.0:NO3	2	N	Insufficient water.
NC7-11	PTMW	Qal/WBR	S	CMP	E300.0:PERC	2	N	Insufficient water.
NC7-11	PTMW	Qal/WBR	S	CMP	E300.0:PERC	4	N	Only partial sample event collected.
NC7-11	PTMW	Qal/WBR	S	CMP	E906:ALL	2	N	Insufficient water.
NC7-11	PTMW	Qal/WBR	S	CMP	E906:ALL	4	N	Only partial sample event collected.
NC7-14	PTMW	Qal/WBR	A	CMP	AS:UISO	2	N	Dry.
NC7-14	PTMW	Qal/WBR	A	CMP	E300.0:NO3	2	N	Dry.
NC7-14	PTMW	Qal/WBR	S	CMP	E300.0:PERC	2	N	Dry.
NC7-14	PTMW	Qal/WBR	S	CMP	E300.0:PERC	4	N	Dry.
NC7-14	PTMW	Qal/WBR	S	CMP	E906:ALL	2	N	Dry.
NC7-14	PTMW	Qal/WBR	S	CMP	E906:ALL	4	N	Dry.
NC7-15	PTMW	Qal/WBR	O	CMP	AS:UISO	2	N	To be sampled in 2015.
NC7-15	PTMW	Qal/WBR	E	CMP	E300.0:NO3	2	Y	
NC7-15	PTMW	Qal/WBR	A	CMP	E300.0:PERC	2	Y	
NC7-15	PTMW	Qal/WBR	S	DIS	E8330LOW:ALL	2	Y	
NC7-15	PTMW	Qal/WBR	S	DIS	E8330LOW:ALL	4	Y	
NC7-15	PTMW	Qal/WBR	S	CMP	E906:ALL	2	Y	
NC7-15	PTMW	Qal/WBR	S	CMP	E906:ALL	4	Y	
NC7-19	PTMW	Qal/WBR	E	CMP	AS:UISO	2	Y	
NC7-19	PTMW	Qal/WBR	A	CMP	E300.0:NO3	2	Y	
NC7-19	PTMW	Qal/WBR	S	CMP	E300.0:PERC	2	Y	
NC7-19	PTMW	Qal/WBR	S	CMP	E300.0:PERC	4	Y	
NC7-19	PTMW	Qal/WBR	S	DIS	E8330LOW:ALL	2	Y	
NC7-19	PTMW	Qal/WBR	S	DIS	E8330LOW:ALL	4	Y	
NC7-19	PTMW	Qal/WBR	S	CMP	E906:ALL	2	Y	
NC7-19	PTMW	Qal/WBR	S	CMP	E906:ALL	4	Y	
NC7-27	PTMW	Tnbs1-Tnbs0	A	CMP	AS:UISO	2	Y	
NC7-27	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
NC7-27	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	Y	
NC7-27	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	Y	
NC7-27	PTMW	Tnbs1-Tnbs0	S	DIS	E8330LOW:ALL	2	Y	
NC7-27	PTMW	Tnbs1-Tnbs0	S	DIS	E8330LOW:ALL	4	Y	
NC7-27	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
NC7-27	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	Q	DIS	DWMETALS:ALL	1	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	Q	DIS	DWMETALS:ALL	2	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	Q	DIS	DWMETALS:ALL	3	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	Q	DIS	DWMETALS:ALL	4	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	Q	DIS	E300.0:NO3	1	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	Q	DIS	E300.0:NO3	2	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	Q	DIS	E300.0:NO3	3	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	Q	DIS	E300.0:NO3	4	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	M	DIS	E300.0:PERC	1	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	M	DIS	E300.0:PERC	1	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	M	DIS	E300.0:PERC	1	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	M	DIS	E300.0:PERC	2	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	M	DIS	E300.0:PERC	2	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	M	DIS	E300.0:PERC	2	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	M	DIS	E300.0:PERC	3	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	M	DIS	E300.0:PERC	3	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	M	DIS	E300.0:PERC	4	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	Y	

Table 2.5-1. Building 850 Area of Operable Unit 5 ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
NC7-28	PTMW	Tnbs1-Tnbs0	M	DIS	E300.0:PERC	4	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	M	DIS	E300.0:PERC	4	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	E	DIS	E8082A:ALL	2	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	Q	DIS	E8330LOW:ALL	1	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	Q	DIS	E8330LOW:ALL	2	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	Q	DIS	E8330LOW:ALL	3	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	Q	DIS	E8330LOW:ALL	4	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	Q	DIS	E9060:ALL	1	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	Q	DIS	E9060:ALL	2	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	Q	DIS	E9060:ALL	3	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	Q	DIS	E9060:ALL	4	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	Q	DIS	GENMIN:ALL	1	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	Q	DIS	GENMIN:ALL	2	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	Q	DIS	GENMIN:ALL	3	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	Q	DIS	GENMIN:ALL	4	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	1	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	1	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	1	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	2	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	2	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	2	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	3	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	3	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	4	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	4	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	4	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	Q	DIS	LITEHCS:ALL	1	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	Q	DIS	LITEHCS:ALL	2	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	Q	DIS	LITEHCS:ALL	3	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	Q	DIS	LITEHCS:ALL	4	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	Q	DIS	LOWVFAS:ALL	1	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	Q	DIS	LOWVFAS:ALL	2	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	Q	DIS	LOWVFAS:ALL	3	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	Q	DIS	LOWVFAS:ALL	4	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	Q	DIS	MS:UISO	1	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	Q	DIS	MS:UISO	2	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	Q	DIS	MS:UISO	3	Y	
NC7-28	PTMW	Tnbs1-Tnbs0	Q	DIS	MS:UISO	4	Y	
NC7-29	PTMW	Tnbs1-Tnbs0	A	CMP	AS:UISO	2	Y	
NC7-29	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
NC7-29	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	Y	
NC7-29	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	Y	
NC7-29	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
NC7-29	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
NC7-29	PTMW	Tnbs1-Tnbs0	A	DIS	MS:UISO	4	Y	
NC7-43	PTMW	Tnbs1-Tnbs0	A	CMP	AS:UISO	2	Y	
NC7-43	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
NC7-43	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	Y	
NC7-43	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	Y	
NC7-43	PTMW	Tnbs1-Tnbs0	S	DIS	E8330LOW:ALL	2	Y	
NC7-43	PTMW	Tnbs1-Tnbs0	S	DIS	E8330LOW:ALL	4	Y	
NC7-43	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
NC7-43	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
NC7-44	PTMW	Tnbs1-Tnbs0	A	CMP	AS:UISO	2	Y	
NC7-44	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
NC7-44	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	Y	
NC7-44	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	Y	
NC7-44	PTMW	Tnbs1-Tnbs0	E	DIS	E8082A:ALL	2	Y	
NC7-44	PTMW	Tnbs1-Tnbs0	S	DIS	E8330LOW:ALL	2	Y	
NC7-44	PTMW	Tnbs1-Tnbs0	S	DIS	E8330LOW:ALL	4	Y	
NC7-44	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
NC7-44	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	

Table 2.5-1. Building 850 Area of Operable Unit 5 ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
NC7-46	PTMW	Qal/WBR	O	CMP	AS:UISO	2	N	To be sampled in 2015.
NC7-46	PTMW	Qal/WBR	O	CMP	E300.0:NO3	2	N	To be sampled in 2015.
NC7-46	PTMW	Qal/WBR	A	CMP	E300.0:PERC	2	Y	
NC7-46	PTMW	Qal/WBR	A	CMP	E906:ALL	2	Y	
NC7-54	PTMW	Qal/WBR	A	CMP	E300.0:NO3	2	N	Dry.
NC7-54	PTMW	Qal/WBR	S	CMP	E300.0:PERC	2	N	Dry.
NC7-54	PTMW	Qal/WBR	S	CMP	E300.0:PERC	4	N	Dry.
NC7-54	PTMW	Qal/WBR	S	CMP	E906:ALL	2	N	Dry.
NC7-54	PTMW	Qal/WBR	S	CMP	E906:ALL	4	N	Dry.
NC7-55	PTMW	Qal/WBR	A	CMP	AS:UISO	2	N	Dry.
NC7-55	PTMW	Qal/WBR	O	CMP	E300.0:NO3	2	N	To be sampled in 2015.
NC7-55	PTMW	Qal/WBR	S	CMP	E300.0:PERC	2	N	Dry.
NC7-55	PTMW	Qal/WBR	S	CMP	E300.0:PERC	4	N	Dry.
NC7-55	PTMW	Qal/WBR	S	CMP	E906:ALL	2	N	Dry.
NC7-55	PTMW	Qal/WBR	S	CMP	E906:ALL	4	N	Dry.
NC7-56	PTMW	Qal/WBR	O	CMP	AS:UISO	2	N	To be sampled in 2015.
NC7-56	PTMW	Qal/WBR	E	CMP	E300.0:NO3	2	Y	
NC7-56	PTMW	Qal/WBR	S	CMP	E300.0:PERC	2	Y	
NC7-56	PTMW	Qal/WBR	S	CMP	E300.0:PERC	4	Y	
NC7-56	PTMW	Qal/WBR	S	DIS	E8330LOW:ALL	2	Y	
NC7-56	PTMW	Qal/WBR	S	DIS	E8330LOW:ALL	4	Y	
NC7-56	PTMW	Qal/WBR	S	CMP	E906:ALL	2	Y	
NC7-56	PTMW	Qal/WBR	S	CMP	E906:ALL	4	Y	
NC7-57	PTMW	Qal/WBR	O	CMP	AS:UISO	2	N	To be sampled in 2015.
NC7-57	PTMW	Qal/WBR	E	CMP	E300.0:NO3	2	N	Dry.
NC7-57	PTMW	Qal/WBR	S	CMP	E300.0:PERC	2	N	Dry.
NC7-57	PTMW	Qal/WBR	S	CMP	E300.0:PERC	4	N	Dry.
NC7-57	PTMW	Qal/WBR	S	CMP	E906:ALL	2	N	Dry.
NC7-57	PTMW	Qal/WBR	S	CMP	E906:ALL	4	N	Dry.
NC7-58	PTMW	Qal/WBR	E	CMP	AS:UISO	2	Y	
NC7-58	PTMW	Qal/WBR	O	CMP	E300.0:NO3	2	N	To be sampled in 2015.
NC7-58	PTMW	Qal/WBR	S	CMP	E300.0:PERC	2	Y	
NC7-58	PTMW	Qal/WBR	S	CMP	E300.0:PERC	4	N	Insufficient water.
NC7-58	PTMW	Qal/WBR	S	CMP	E906:ALL	2	Y	
NC7-58	PTMW	Qal/WBR	S	CMP	E906:ALL	4	N	Insufficient water.
NC7-59	PTMW	Qal/WBR	O	CMP	AS:UISO	2	N	To be sampled in 2015.
NC7-59	PTMW	Qal/WBR	E	CMP	E300.0:NO3	2	N	Inoperable pump.
NC7-59	PTMW	Qal/WBR	S	CMP	E300.0:PERC	2	N	Inoperable pump.
NC7-59	PTMW	Qal/WBR	S	CMP	E300.0:PERC	4	Y	
NC7-59	PTMW	Qal/WBR	S	CMP	E906:ALL	2	N	Inoperable pump.
NC7-59	PTMW	Qal/WBR	S	CMP	E906:ALL	4	Y	
NC7-60	PTMW	Tnsc0	E	CMP	AS:UISO	2	Y	
NC7-60	PTMW	Tnsc0	A	CMP	E300.0:NO3	2	Y	
NC7-60	PTMW	Tnsc0	S	CMP	E300.0:PERC	1	Y	
NC7-60	PTMW	Tnsc0	S	CMP	E300.0:PERC	3	Y	
NC7-60	PTMW	Tnsc0	S	DIS	E8330LOW:ALL	2	Y	
NC7-60	PTMW	Tnsc0	S	DIS	E8330LOW:ALL	4	Y	
NC7-60	PTMW	Tnsc0	S	CMP	E906:ALL	2	Y	
NC7-60	PTMW	Tnsc0	S	CMP	E906:ALL	4	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	Q	DIS	DWMETALS:ALL	1	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	Q	DIS	DWMETALS:ALL	2	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	Q	DIS	DWMETALS:ALL	3	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	Q	DIS	DWMETALS:ALL	4	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	1	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	M	CMP	E300.0:PERC	1	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	M	CMP	E300.0:PERC	1	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	2	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	M	CMP	E300.0:PERC	2	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	M	CMP	E300.0:PERC	2	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	3	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	M	CMP	E300.0:PERC	3	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	M	CMP	E300.0:PERC	3	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	4	Y	

Table 2.5-1. Building 850 Area of Operable Unit 5 ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
NC7-61	PTMW	Tnbs1-Tnbs0	M	CMP	E300.0:PERC	4	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	M	CMP	E300.0:PERC	4	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	Q	DIS	E8330LOW:ALL	1	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	Q	DIS	E8330LOW:ALL	2	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	Q	DIS	E8330LOW:ALL	3	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	Q	DIS	E8330LOW:ALL	4	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	Q	DIS	E9060:ALL	1	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	Q	DIS	E9060:ALL	2	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	Q	DIS	E9060:ALL	3	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	Q	DIS	E9060:ALL	4	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	S	WGMG	E906:ALL	2	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	S	WGMG	E906:ALL	4	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	Q	DIS	GENMIN:ALL	1	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	Q	DIS	GENMIN:ALL	2	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	Q	DIS	GENMIN:ALL	3	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	Q	DIS	GENMIN:ALL	4	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	1	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	1	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	1	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	2	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	2	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	2	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	3	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	3	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	4	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	4	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	4	Y	
NC7-61	PTMW	Tnbs1-Tnbs0	A	CMP	MS:UISO	2	Y	
NC7-62	PTMW	Qal/WBR	E	CMP	AS:UISO	2	Y	
NC7-62	PTMW	Qal/WBR	O	CMP	E300.0:NO3	2	N	To be sampled in 2015.
NC7-62	PTMW	Qal/WBR	S	CMP	E300.0:PERC	2	Y	
NC7-62	PTMW	Qal/WBR	S	CMP	E300.0:PERC	4	Y	
NC7-62	PTMW	Qal/WBR	S	CMP	E906:ALL	2	Y	
NC7-62	PTMW	Qal/WBR	S	CMP	E906:ALL	4	Y	
NC7-69	PTMW	Tmss	A	CMP	AS:UISO	2	Y	
NC7-69	PTMW	Tmss	A	CMP	E300.0:NO3	2	Y	
NC7-69	PTMW	Tmss	S	CMP	E300.0:PERC	2	Y	
NC7-69	PTMW	Tmss	S	CMP	E300.0:PERC	4	Y	
NC7-69	PTMW	Tmss	S	DIS	E8330LOW:ALL	2	Y	
NC7-69	PTMW	Tmss	S	DIS	E8330LOW:ALL	4	Y	
NC7-69	PTMW	Tmss	S	CMP	E906:ALL	2	Y	
NC7-69	PTMW	Tmss	S	CMP	E906:ALL	4	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	Q	DIS	DWMETALS:ALL	1	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	Q	DIS	DWMETALS:ALL	2	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	Q	DIS	DWMETALS:ALL	3	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	Q	DIS	DWMETALS:ALL	4	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	Q	DIS	E300.0:NO3	1	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	Q	DIS	E300.0:NO3	3	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	Q	DIS	E300.0:NO3	4	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	M	DIS	E300.0:PERC	1	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	M	DIS	E300.0:PERC	1	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	M	DIS	E300.0:PERC	1	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	M	DIS	E300.0:PERC	2	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	M	DIS	E300.0:PERC	2	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	M	DIS	E300.0:PERC	2	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	M	DIS	E300.0:PERC	3	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	M	DIS	E300.0:PERC	3	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	M	DIS	E300.0:PERC	3	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	M	DIS	E300.0:PERC	4	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	M	DIS	E300.0:PERC	4	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	M	DIS	E300.0:PERC	4	Y	

Table 2.5-1. Building 850 Area of Operable Unit 5 ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
NC7-70	PTMW	Tnbs1-Tnbs0	Q	DIS	E8330LOW:ALL	1	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	Q	DIS	E8330LOW:ALL	2	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	Q	DIS	E8330LOW:ALL	3	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	Q	DIS	E8330LOW:ALL	4	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	Q	DIS	E9060:ALL	1	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	Q	DIS	E9060:ALL	2	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	Q	DIS	E9060:ALL	3	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	Q	DIS	E9060:ALL	4	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	Q	DIS	GENMIN:ALL	1	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	Q	DIS	GENMIN:ALL	2	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	Q	DIS	GENMIN:ALL	3	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	Q	DIS	GENMIN:ALL	4	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	1	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	1	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	1	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	2	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	2	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	2	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	3	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	3	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	3	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	4	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	4	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	4	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	Q	DIS	LITEHCS:ALL	1	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	Q	DIS	LITEHCS:ALL	2	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	Q	DIS	LITEHCS:ALL	3	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	Q	DIS	LITEHCS:ALL	4	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	Q	DIS	LOWVFAS:ALL	1	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	Q	DIS	LOWVFAS:ALL	2	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	Q	DIS	LOWVFAS:ALL	3	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	Q	DIS	LOWVFAS:ALL	4	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	Q	DIS	MS:UISO	1	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	A	CMP	MS:UISO	2	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	Q	DIS	MS:UISO	3	Y	
NC7-70	PTMW	Tnbs1-Tnbs0	Q	DIS	MS:UISO	4	Y	
NC7-71	PTMW	Qal/WBR	Q	DIS	DWMETALS:ALL	1	Y	
NC7-71	PTMW	Qal/WBR	Q	DIS	DWMETALS:ALL	2	Y	
NC7-71	PTMW	Qal/WBR	Q	DIS	DWMETALS:ALL	3	Y	
NC7-71	PTMW	Qal/WBR	Q	DIS	DWMETALS:ALL	4	Y	
NC7-71	PTMW	Qal/WBR	Q	DIS	E300.0:NO3	1	Y	
NC7-71	PTMW	Qal/WBR	A	CMP	E300.0:NO3	2	Y	
NC7-71	PTMW	Qal/WBR	Q	DIS	E300.0:NO3	3	Y	
NC7-71	PTMW	Qal/WBR	Q	DIS	E300.0:NO3	4	Y	
NC7-71	PTMW	Qal/WBR	M	DIS	E300.0:PERC	1	Y	
NC7-71	PTMW	Qal/WBR	M	DIS	E300.0:PERC	1	Y	
NC7-71	PTMW	Qal/WBR	M	DIS	E300.0:PERC	1	Y	
NC7-71	PTMW	Qal/WBR	S	CMP	E300.0:PERC	2	Y	
NC7-71	PTMW	Qal/WBR	M	DIS	E300.0:PERC	2	Y	
NC7-71	PTMW	Qal/WBR	M	DIS	E300.0:PERC	2	Y	
NC7-71	PTMW	Qal/WBR	M	DIS	E300.0:PERC	3	Y	
NC7-71	PTMW	Qal/WBR	M	DIS	E300.0:PERC	3	Y	
NC7-71	PTMW	Qal/WBR	M	DIS	E300.0:PERC	3	Y	
NC7-71	PTMW	Qal/WBR	S	CMP	E300.0:PERC	4	Y	
NC7-71	PTMW	Qal/WBR	M	DIS	E300.0:PERC	4	Y	
NC7-71	PTMW	Qal/WBR	M	DIS	E300.0:PERC	4	Y	
NC7-71	PTMW	Qal/WBR	Q	DIS	E8330LOW:ALL	1	Y	
NC7-71	PTMW	Qal/WBR	Q	DIS	E8330LOW:ALL	2	Y	
NC7-71	PTMW	Qal/WBR	Q	DIS	E8330LOW:ALL	3	Y	
NC7-71	PTMW	Qal/WBR	Q	DIS	E8330LOW:ALL	4	Y	
NC7-71	PTMW	Qal/WBR	Q	DIS	E9060:ALL	1	Y	
NC7-71	PTMW	Qal/WBR	Q	DIS	E9060:ALL	2	Y	

Table 2.5-1. Building 850 Area of Operable Unit 5 ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
NC7-71	PTMW	Qal/WBR	Q	DIS	E9060:ALL	3	Y	
NC7-71	PTMW	Qal/WBR	Q	DIS	E9060:ALL	4	Y	
NC7-71	PTMW	Qal/WBR	S	CMP	E906:ALL	2	Y	
NC7-71	PTMW	Qal/WBR	S	CMP	E906:ALL	4	Y	
NC7-71	PTMW	Qal/WBR	Q	DIS	GENMIN:ALL	1	Y	
NC7-71	PTMW	Qal/WBR	Q	DIS	GENMIN:ALL	2	Y	
NC7-71	PTMW	Qal/WBR	Q	DIS	GENMIN:ALL	3	Y	
NC7-71	PTMW	Qal/WBR	Q	DIS	GENMIN:ALL	4	Y	
NC7-71	PTMW	Qal/WBR	M	DIS	KPA:UTOT	1	Y	
NC7-71	PTMW	Qal/WBR	M	DIS	KPA:UTOT	1	Y	
NC7-71	PTMW	Qal/WBR	M	DIS	KPA:UTOT	1	Y	
NC7-71	PTMW	Qal/WBR	M	DIS	KPA:UTOT	2	Y	
NC7-71	PTMW	Qal/WBR	M	DIS	KPA:UTOT	2	Y	
NC7-71	PTMW	Qal/WBR	M	DIS	KPA:UTOT	2	Y	
NC7-71	PTMW	Qal/WBR	M	DIS	KPA:UTOT	3	Y	
NC7-71	PTMW	Qal/WBR	M	DIS	KPA:UTOT	3	Y	
NC7-71	PTMW	Qal/WBR	M	DIS	KPA:UTOT	3	Y	
NC7-71	PTMW	Qal/WBR	M	DIS	KPA:UTOT	4	Y	
NC7-71	PTMW	Qal/WBR	M	DIS	KPA:UTOT	4	Y	
NC7-71	PTMW	Qal/WBR	M	DIS	KPA:UTOT	4	Y	
NC7-71	PTMW	Qal/WBR	Q	DIS	MS:UISO	1	Y	
NC7-71	PTMW	Qal/WBR	A	CMP	MS:UISO	2	Y	
NC7-71	PTMW	Qal/WBR	Q	DIS	MS:UISO	3	Y	
NC7-71	PTMW	Qal/WBR	Q	DIS	MS:UISO	4	Y	
NC7-72	PTMW	Qal/WBR	E	CMP	AS:UISO	2	Y	
NC7-72	PTMW	Qal/WBR	O	CMP	E300.0:NO3	2	N	To be sampled in 2015.
NC7-72	PTMW	Qal/WBR	S	CMP	E300.0:PERC	2	Y	
NC7-72	PTMW	Qal/WBR	S	CMP	E300.0:PERC	4	Y	
NC7-72	PTMW	Qal/WBR	S	DIS	E8330LOW:ALL	2	Y	
NC7-72	PTMW	Qal/WBR	S	DIS	E8330LOW:ALL	4	Y	
NC7-72	PTMW	Qal/WBR	S	CMP	E906:ALL	2	Y	
NC7-72	PTMW	Qal/WBR	S	CMP	E906:ALL	4	Y	
NC7-73	PTMW	Qal/WBR	A	CMP	AS:UISO	2	Y	
NC7-73	PTMW	Qal/WBR	E	CMP	E300.0:NO3	2	Y	
NC7-73	PTMW	Qal/WBR	S	CMP	E300.0:PERC	2	Y	
NC7-73	PTMW	Qal/WBR	S	CMP	E300.0:PERC	4	Y	
NC7-73	PTMW	Qal/WBR	S	DIS	E8330LOW:ALL	2	Y	
NC7-73	PTMW	Qal/WBR	S	DIS	E8330LOW:ALL	4	Y	
NC7-73	PTMW	Qal/WBR	S	CMP	E906:ALL	2	Y	
NC7-73	PTMW	Qal/WBR	S	CMP	E906:ALL	4	Y	
SPRING24	SPR	Tnbs1-Tnbs0	E	CMP	AS:UISO	2	N	Dry.
SPRING24	SPR	Tnbs1-Tnbs0	O	CMP	E300.0:NO3	2	N	To be sampled in 2015.
SPRING24	SPR	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	N	Dry.
SPRING24	SPR	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	N	Dry.
SPRING24	SPR	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	N	Dry.
SPRING24	SPR	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	N	Dry.
W-850-05	PTMW	Qal/WBR	A	CMP	AS:UISO	2	Y	
W-850-05	PTMW	Qal/WBR	A	CMP	E300.0:NO3	2	Y	
W-850-05	PTMW	Qal/WBR	S	CMP	E300.0:PERC	2	Y	
W-850-05	PTMW	Qal/WBR	S	CMP	E300.0:PERC	4	Y	
W-850-05	PTMW	Qal/WBR	S	DIS	E8330LOW:ALL	2	Y	
W-850-05	PTMW	Qal/WBR	S	DIS	E8330LOW:ALL	4	Y	
W-850-05	PTMW	Qal/WBR	S	CMP	E906:ALL	2	Y	
W-850-05	PTMW	Qal/WBR	S	CMP	E906:ALL	4	Y	
W-850-05	PTMW	Qal/WBR	A	DIS	MS:UISO	4	Y	
W-850-2145	PTMW	Tnbs1-Tnbs0	E	CMP	AS:UISO	2	Y	
W-850-2145	PTMW	Tnbs1-Tnbs0	O	CMP	E300.0:NO3	2	N	To be sampled in 2015.
W-850-2145	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	Y	
W-850-2145	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	Y	
W-850-2145	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
W-850-2145	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
W-850-2312	PTMW	Tnbs1-Tnbs0	E	CMP	AS:UISO	2	Y	
W-850-2312	PTMW	Tnbs1-Tnbs0	E	CMP	E300.0:NO3	2	Y	
W-850-2312	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	Y	

Table 2.5-1. Building 850 Area of Operable Unit 5 ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-850-2312	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	Y	
W-850-2312	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
W-850-2312	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
W-850-2313	PTMW	Qal/WBR	A	CMP	AS:UISO	2	Y	
W-850-2313	PTMW	Qal/WBR	E	CMP	E300.0:NO3	2	Y	
W-850-2313	PTMW	Qal/WBR	S	CMP	E300.0:PERC	2	Y	
W-850-2313	PTMW	Qal/WBR	S	CMP	E300.0:PERC	4	Y	
W-850-2313	PTMW	Qal/WBR	S	DIS	E8330LOW:ALL	2	Y	
W-850-2313	PTMW	Qal/WBR	S	DIS	E8330LOW:ALL	4	Y	
W-850-2313	PTMW	Qal/WBR	S	CMP	E906:ALL	2	Y	
W-850-2313	PTMW	Qal/WBR	S	CMP	E906:ALL	4	Y	
W-850-2313	PTMW	Qal/WBR	A	DIS	MS:UISO	2	Y	
W-850-2314	PTMW	Tnbs1-Tnbs0	O	CMP	AS:UISO	2	N	To be sampled in 2015.
W-850-2314	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
W-850-2314	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	Y	
W-850-2314	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	Y	
W-850-2314	PTMW	Tnbs1-Tnbs0	S	DIS	E8330LOW:ALL	2	Y	
W-850-2314	PTMW	Tnbs1-Tnbs0	S	DIS	E8330LOW:ALL	4	Y	
W-850-2314	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
W-850-2314	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
W-850-2315	PTMW	Tnbs1-Tnbs0	A	CMP	AS:UISO	2	Y	
W-850-2315	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
W-850-2315	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	Y	
W-850-2315	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	Y	
W-850-2315	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
W-850-2315	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
W-850-2315	PTMW	Tnbs1-Tnbs0	A	DIS	MS:UISO	4	Y	
W-850-2316	PTMW	Tnbs1-Tnbs0	O	CMP	AS:UISO	2	N	To be sampled in 2015.
W-850-2316	PTMW	Tnbs1-Tnbs0	E	CMP	E300.0:NO3	2	Y	
W-850-2316	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	Y	
W-850-2316	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	Y	
W-850-2316	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
W-850-2316	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
W-850-2416	PTMW	Tnsc0	Q	DIS	DWMETALS:ALL	1	Y	
W-850-2416	PTMW	Tnsc0	Q	DIS	DWMETALS:ALL	2	Y	
W-850-2416	PTMW	Tnsc0	Q	DIS	DWMETALS:ALL	3	Y	
W-850-2416	PTMW	Tnsc0	Q	DIS	DWMETALS:ALL	4	Y	
W-850-2416	PTMW	Tnsc0	Q	DIS	E300.0:NO3	1	Y	
W-850-2416	PTMW	Tnsc0	A	CMP	E300.0:NO3	2	Y	
W-850-2416	PTMW	Tnsc0	Q	DIS	E300.0:NO3	3	Y	
W-850-2416	PTMW	Tnsc0	Q	DIS	E300.0:NO3	4	Y	
W-850-2416	PTMW	Tnsc0	M	DIS	E300.0:PERC	1	Y	
W-850-2416	PTMW	Tnsc0	M	DIS	E300.0:PERC	1	Y	
W-850-2416	PTMW	Tnsc0	M	DIS	E300.0:PERC	1	Y	
W-850-2416	PTMW	Tnsc0	S	CMP	E300.0:PERC	2	Y	
W-850-2416	PTMW	Tnsc0	M	DIS	E300.0:PERC	2	Y	
W-850-2416	PTMW	Tnsc0	M	DIS	E300.0:PERC	2	Y	
W-850-2416	PTMW	Tnsc0	M	DIS	E300.0:PERC	3	Y	
W-850-2416	PTMW	Tnsc0	M	DIS	E300.0:PERC	3	Y	
W-850-2416	PTMW	Tnsc0	M	DIS	E300.0:PERC	3	Y	
W-850-2416	PTMW	Tnsc0	S	CMP	E300.0:PERC	4	Y	
W-850-2416	PTMW	Tnsc0	M	DIS	E300.0:PERC	4	Y	
W-850-2416	PTMW	Tnsc0	M	DIS	E300.0:PERC	4	Y	
W-850-2416	PTMW	Tnsc0	Q	DIS	E8330LOW:ALL	1	Y	
W-850-2416	PTMW	Tnsc0	Q	DIS	E8330LOW:ALL	2	Y	
W-850-2416	PTMW	Tnsc0	Q	DIS	E8330LOW:ALL	3	Y	
W-850-2416	PTMW	Tnsc0	Q	DIS	E8330LOW:ALL	4	Y	
W-850-2416	PTMW	Tnsc0	Q	DIS	E9060:ALL	1	Y	
W-850-2416	PTMW	Tnsc0	Q	DIS	E9060:ALL	2	Y	
W-850-2416	PTMW	Tnsc0	Q	DIS	E9060:ALL	3	Y	
W-850-2416	PTMW	Tnsc0	Q	DIS	E9060:ALL	4	Y	
W-850-2416	PTMW	Tnsc0	S	CMP	E906:ALL	2	Y	
W-850-2416	PTMW	Tnsc0	S	CMP	E906:ALL	4	Y	
W-850-2416	PTMW	Tnsc0	Q	DIS	GENMIN:ALL	1	Y	

Table 2.5-1. Building 850 Area of Operable Unit 5 ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-850-2416	PTMW	Tnsc0	Q	DIS	GENMIN:ALL	2	Y	
W-850-2416	PTMW	Tnsc0	Q	DIS	GENMIN:ALL	3	Y	
W-850-2416	PTMW	Tnsc0	Q	DIS	GENMIN:ALL	4	Y	
W-850-2416	PTMW	Tnsc0	M	DIS	KPA:UTOT	1	Y	
W-850-2416	PTMW	Tnsc0	M	DIS	KPA:UTOT	1	Y	
W-850-2416	PTMW	Tnsc0	M	DIS	KPA:UTOT	1	Y	
W-850-2416	PTMW	Tnsc0	M	DIS	KPA:UTOT	2	Y	
W-850-2416	PTMW	Tnsc0	M	DIS	KPA:UTOT	2	Y	
W-850-2416	PTMW	Tnsc0	M	DIS	KPA:UTOT	2	Y	
W-850-2416	PTMW	Tnsc0	M	DIS	KPA:UTOT	3	Y	
W-850-2416	PTMW	Tnsc0	M	DIS	KPA:UTOT	3	Y	
W-850-2416	PTMW	Tnsc0	M	DIS	KPA:UTOT	3	Y	
W-850-2416	PTMW	Tnsc0	M	DIS	KPA:UTOT	4	Y	
W-850-2416	PTMW	Tnsc0	M	DIS	KPA:UTOT	4	Y	
W-850-2416	PTMW	Tnsc0	M	DIS	KPA:UTOT	4	Y	
W-850-2416	PTMW	Tnsc0	Q	DIS	MS:UISO	1	Y	
W-850-2416	PTMW	Tnsc0	A	CMP	MS:UISO	2	Y	
W-850-2416	PTMW	Tnsc0	Q	DIS	MS:UISO	3	Y	
W-850-2416	PTMW	Tnsc0	Q	DIS	MS:UISO	4	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	Q	DIS	DWMETALS:ALL	1	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	Q	DIS	DWMETALS:ALL	2	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	Q	DIS	DWMETALS:ALL	3	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	Q	DIS	DWMETALS:ALL	4	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	Q	DIS	E300.0:NO3	1	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	Q	DIS	E300.0:NO3	3	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	Q	DIS	E300.0:NO3	4	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	M	DIS	E300.0:PERC	1	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	M	DIS	E300.0:PERC	1	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	M	DIS	E300.0:PERC	1	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	M	DIS	E300.0:PERC	2	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	M	DIS	E300.0:PERC	2	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	M	DIS	E300.0:PERC	3	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	M	DIS	E300.0:PERC	3	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	M	DIS	E300.0:PERC	3	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	M	DIS	E300.0:PERC	4	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	M	DIS	E300.0:PERC	4	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	Q	DIS	E8330LOW:ALL	1	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	Q	DIS	E8330LOW:ALL	2	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	Q	DIS	E8330LOW:ALL	3	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	Q	DIS	E8330LOW:ALL	4	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	Q	DIS	E9060:ALL	1	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	Q	DIS	E9060:ALL	2	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	Q	DIS	E9060:ALL	3	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	Q	DIS	E9060:ALL	4	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	Q	DIS	GENMIN:ALL	1	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	Q	DIS	GENMIN:ALL	2	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	Q	DIS	GENMIN:ALL	3	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	Q	DIS	GENMIN:ALL	4	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	1	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	1	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	1	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	2	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	2	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	2	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	3	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	3	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	3	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	4	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	4	Y	

Table 2.5-1. Building 850 Area of Operable Unit 5 ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-850-2417	PTMW	Tnbs1-Tnbs0	M	DIS	KPA:UTOT	4	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	Q	DIS	LITEHCS:ALL	1	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	Q	DIS	LITEHCS:ALL	2	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	Q	DIS	LITEHCS:ALL	3	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	Q	DIS	LITEHCS:ALL	4	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	Q	DIS	LOWVFAS:ALL	1	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	Q	DIS	LOWVFAS:ALL	2	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	Q	DIS	LOWVFAS:ALL	3	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	Q	DIS	LOWVFAS:ALL	4	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	Q	DIS	MS:UISO	1	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	Q	DIS	MS:UISO	2	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	Q	DIS	MS:UISO	3	Y	
W-850-2417	PTMW	Tnbs1-Tnbs0	Q	DIS	MS:UISO	4	Y	
W-850-2805	PTMW	Tnbs1/Tnbs0	A	CMP	AS:UISO	2	Y	
W-850-2805	PTMW	Tnbs1/Tnbs0	A	CMP	E300.0:NO3	2	Y	
W-850-2805	PTMW	Tnbs1/Tnbs0	S	CMP	E300.0:PERC	2	Y	
W-850-2805	PTMW	Tnbs1/Tnbs0	S	CMP	E300.0:PERC	4	Y	
W-850-2805	PTMW	Tnbs1/Tnbs0	S	CMP	E906:ALL	2	Y	
W-850-2805	PTMW	Tnbs1/Tnbs0	S	CMP	E906:ALL	4	Y	
W-865-02	PTMW	Tnbs1-Tnbs0	A	DIS	DWMETALS:ALL	1	Y	
W-865-02	PTMW	Tnbs1-Tnbs0	S	DIS	E300.0:NO3	1	Y	
W-865-02	PTMW	Tnbs1-Tnbs0	S	DIS	E300.0:NO3	3	Y	
W-865-02	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:PERC	1	Y	
W-865-02	PTMW	Tnbs1-Tnbs0	S	DIS	E601:ALL	1	Y	
W-865-02	PTMW	Tnbs1-Tnbs0	S	DIS	E601:ALL	3	Y	
W-865-02	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	1	Y	
W-865-02	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	3	Y	
W-865-05	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:PERC	1	N	Dry.
W-865-05	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	1	N	Dry.
W-865-05	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	3	N	Dry.
W-865-1802	PTMW	Tnbs1-Tnbs0	A	CMP	AS:UISO	2	Y	
W-865-1802	PTMW	Tnbs1-Tnbs0	A	DIS	E300.0:NO3	2	Y	
W-865-1802	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:PERC	2	Y	
W-865-1802	PTMW	Tnbs1-Tnbs0	S	DIS	E601:ALL	1	Y	
W-865-1802	PTMW	Tnbs1-Tnbs0	S	DIS	E601:ALL	3	Y	
W-865-1802	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
W-865-1802	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
W-865-1803	PTMW	Tnbs1-Tnbs0	E	CMP	AS:UISO	2	Y	
W-865-1803	PTMW	Tnbs1-Tnbs0	E	CMP	E300.0:NO3	2	Y	
W-865-1803	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	Y	
W-865-1803	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	Y	
W-865-1803	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
W-865-1803	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
W-865-2005	PTMW	Tnbs1-Tnbs0	A	DIS	DWMETALS:ALL	1	Y	
W-865-2005	PTMW	Tnbs1-Tnbs0	S	DIS	E300.0:NO3	1	Y	
W-865-2005	PTMW	Tnbs1-Tnbs0	S	DIS	E300.0:NO3	3	Y	
W-865-2005	PTMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	1	Y	
W-865-2005	PTMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	2	Y	
W-865-2005	PTMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	3	Y	
W-865-2005	PTMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	4	Y	
W-865-2005	PTMW	Tnbs1-Tnbs0	S	DIS	E601:ALL	1	Y	
W-865-2005	PTMW	Tnbs1-Tnbs0	S	DIS	E601:ALL	3	Y	
W-865-2005	PTMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	1	Y	
W-865-2005	PTMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	2	Y	
W-865-2005	PTMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	3	Y	
W-865-2005	PTMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	4	Y	
W-865-2121	PTMW	Tnbs1-Tnbs0	A	DIS	DWMETALS:ALL	1	Y	
W-865-2121	PTMW	Tnbs1-Tnbs0	S	DIS	E300.0:NO3	1	Y	
W-865-2121	PTMW	Tnbs1-Tnbs0	S	DIS	E300.0:NO3	3	Y	
W-865-2121	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:PERC	1	Y	
W-865-2121	PTMW	Tnbs1-Tnbs0	S	DIS	E601:ALL	1	Y	
W-865-2121	PTMW	Tnbs1-Tnbs0	S	DIS	E601:ALL	3	Y	
W-865-2121	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
W-865-2121	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	

Table 2.5-1. Building 850 Area of Operable Unit 5 ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-865-2133	GW	Tnbs1-Tnbs0	S	CMP	AS:UISO	1	Y	
W-865-2133	GW	Tnbs1-Tnbs0	S	CMP	AS:UISO	3	Y	
W-865-2133	GW	Tnbs1-Tnbs0	A	DIS	DWMETALS:ALL	1	Y	
W-865-2133	GW	Tnbs1-Tnbs0	S	DIS	E300.0:NO3	1	Y	
W-865-2133	GW	Tnbs1-Tnbs0	S	DIS	E300.0:NO3	3	Y	
W-865-2133	GW	Tnbs1-Tnbs0	Q	CMP	E300.0:PERC	1	Y	
W-865-2133	GW	Tnbs1-Tnbs0	Q	CMP	E300.0:PERC	2	Y	
W-865-2133	GW	Tnbs1-Tnbs0	Q	CMP	E300.0:PERC	3	Y	
W-865-2133	GW	Tnbs1-Tnbs0	Q	CMP	E300.0:PERC	4	Y	
W-865-2133	GW	Tnbs1-Tnbs0	S	DIS	E601:ALL	1	Y	
W-865-2133	GW	Tnbs1-Tnbs0	S	DIS	E601:ALL	3	Y	
W-865-2133	GW	Tnbs1-Tnbs0	Q	CMP	E906:ALL	1	Y	
W-865-2133	GW	Tnbs1-Tnbs0	Q	CMP	E906:ALL	2	Y	
W-865-2133	GW	Tnbs1-Tnbs0	Q	CMP	E906:ALL	3	Y	
W-865-2133	GW	Tnbs1-Tnbs0	Q	CMP	E906:ALL	4	Y	
W-865-2224	GW	Tnbs1-Tnbs0	S	CMP	AS:UISO	2	Y	
W-865-2224	GW	Tnbs1-Tnbs0	S	CMP	AS:UISO	4	Y	
W-865-2224	GW	Tnbs1-Tnbs0	S	CMP	E300.0:NO3	2	Y	
W-865-2224	GW	Tnbs1-Tnbs0	S	CMP	E300.0:NO3	4	Y	
W-865-2224	GW	Tnbs1-Tnbs0	Q	CMP	E300.0:PERC	1	Y	
W-865-2224	GW	Tnbs1-Tnbs0	Q	CMP	E300.0:PERC	2	Y	
W-865-2224	GW	Tnbs1-Tnbs0	Q	CMP	E300.0:PERC	3	Y	
W-865-2224	GW	Tnbs1-Tnbs0	Q	CMP	E300.0:PERC	4	Y	
W-865-2224	GW	Tnbs1-Tnbs0	S	DIS	E601:ALL	2	Y	
W-865-2224	GW	Tnbs1-Tnbs0	S	DIS	E601:ALL	4	Y	
W-865-2224	GW	Tnbs1-Tnbs0	Q	CMP	E906:ALL	1	Y	
W-865-2224	GW	Tnbs1-Tnbs0	Q	CMP	E906:ALL	2	Y	
W-865-2224	GW	Tnbs1-Tnbs0	Q	CMP	E906:ALL	3	Y	
W-865-2224	GW	Tnbs1-Tnbs0	Q	CMP	E906:ALL	4	Y	
W-PIT1-01	PTMW	Tnbs1-Tnbs0	O	CMP	AS:UISO	1	N	To be sampled in 2015.
W-PIT1-01	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	1	N	Dry.
W-PIT1-01	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	3	N	Dry.
W-PIT1-01	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	1	N	Dry.
W-PIT1-01	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	3	N	Dry.
W-PIT1-2204	PTMW	Qal/WBR	A	CMP	AS:UISO	2	N	Insufficient water.
W-PIT1-2204	PTMW	Qal/WBR	A	CMP	E300.0:NO3	2	N	Insufficient water.
W-PIT1-2204	PTMW	Qal/WBR	S	CMP	E300.0:PERC	2	N	Insufficient water.
W-PIT1-2204	PTMW	Qal/WBR	S	CMP	E300.0:PERC	4	N	Insufficient water.
W-PIT1-2204	PTMW	Qal/WBR	S	CMP	E906:ALL	2	N	Insufficient water.
W-PIT1-2204	PTMW	Qal/WBR	S	CMP	E906:ALL	4	N	Insufficient water.
W-PIT1-2209	GW	Tnbs1-Tnbs0	S	CMP	AS:UISO	2	Y	
W-PIT1-2209	GW	Tnbs1-Tnbs0	S	CMP	AS:UISO	4	Y	
W-PIT1-2209	GW	Tnbs1-Tnbs0	S	CMP	E300.0:NO3	2	Y	
W-PIT1-2209	GW	Tnbs1-Tnbs0	S	CMP	E300.0:NO3	4	Y	
W-PIT1-2209	GW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	1	Y	
W-PIT1-2209	GW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	2	Y	
W-PIT1-2209	GW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	3	Y	
W-PIT1-2209	GW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	4	Y	
W-PIT1-2209	GW	Tnbs1-Tnbs0	S	DIS	E601:ALL	2	Y	
W-PIT1-2209	GW	Tnbs1-Tnbs0	S	DIS	E601:ALL	4	Y	
W-PIT1-2209	GW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	1	Y	
W-PIT1-2209	GW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	2	Y	
W-PIT1-2209	GW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	3	Y	
W-PIT1-2209	GW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	4	Y	
W-PIT1-2225	GW	Tnbs1-Tnbs0	S	CMP	AS:UISO	2	Y	
W-PIT1-2225	GW	Tnbs1-Tnbs0	S	CMP	AS:UISO	4	N	Unsafe conditions.
W-PIT1-2225	GW	Tnbs1-Tnbs0	S	CMP	E300.0:NO3	2	Y	
W-PIT1-2225	GW	Tnbs1-Tnbs0	S	CMP	E300.0:NO3	4	N	Unsafe conditions.
W-PIT1-2225	GW	Tnbs1-Tnbs0	Q	CMP	E300.0:PERC	1	Y	
W-PIT1-2225	GW	Tnbs1-Tnbs0	Q	CMP	E300.0:PERC	2	Y	
W-PIT1-2225	GW	Tnbs1-Tnbs0	Q	CMP	E300.0:PERC	3	Y	
W-PIT1-2225	GW	Tnbs1-Tnbs0	Q	CMP	E300.0:PERC	4	N	Unsafe conditions.
W-PIT1-2225	GW	Tnbs1-Tnbs0	Q	CMP	E906:ALL	1	Y	
W-PIT1-2225	GW	Tnbs1-Tnbs0	Q	CMP	E906:ALL	2	Y	

Table 2.5-1. Building 850 Area of Operable Unit 5 ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-PIT1-2225	GW	Tnbs1-Tnbs0	Q	CMP	E906:ALL	3	Y	
W-PIT1-2225	GW	Tnbs1-Tnbs0	Q	CMP	E906:ALL	4	N	Unsafe conditions.
W-PIT1-2326	DMW	Tnbs1-Tnbs0	Q	WGMG	AS:UISO	1	Y	
W-PIT1-2326	DMW	Tnbs1-Tnbs0	Q	WGMG	AS:UISO	2	Y	
W-PIT1-2326	DMW	Tnbs1-Tnbs0	Q	WGMG	AS:UISO	3	Y	
W-PIT1-2326	DMW	Tnbs1-Tnbs0	Q	WGMG	AS:UISO	4	Y	
W-PIT1-2326	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:NO3	1	Y	
W-PIT1-2326	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:NO3	2	Y	
W-PIT1-2326	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:NO3	3	Y	
W-PIT1-2326	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:NO3	4	Y	
W-PIT1-2326	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	1	Y	
W-PIT1-2326	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	2	Y	
W-PIT1-2326	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	3	Y	
W-PIT1-2326	DMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	4	Y	
W-PIT1-2326	DMW	Tnbs1-Tnbs0	Q	WGMG	E8260:ALL	1	Y	
W-PIT1-2326	DMW	Tnbs1-Tnbs0	Q	WGMG	E8260:ALL	2	Y	
W-PIT1-2326	DMW	Tnbs1-Tnbs0	Q	WGMG	E8260:ALL	3	Y	
W-PIT1-2326	DMW	Tnbs1-Tnbs0	Q	WGMG	E8260:ALL	4	Y	
W-PIT1-2326	DMW	Tnbs1-Tnbs0	Q	WGMG	E8330:R+H	1	Y	
W-PIT1-2326	DMW	Tnbs1-Tnbs0	Q	WGMG	E8330:R+H	2	Y	
W-PIT1-2326	DMW	Tnbs1-Tnbs0	Q	WGMG	E8330:R+H	3	Y	
W-PIT1-2326	DMW	Tnbs1-Tnbs0	Q	WGMG	E8330:R+H	4	Y	
W-PIT1-2326	DMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	1	Y	
W-PIT1-2326	DMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	2	Y	
W-PIT1-2326	DMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	3	Y	
W-PIT1-2326	DMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	4	Y	
W-PIT1-2620	PTMW	Tnbs1-Tnbs0	E	CMP	AS:UISO	2	Y	
W-PIT1-2620	PTMW	Tnbs1-Tnbs0	A	DIS	DWMETALS:ALL	2	Y	
W-PIT1-2620	PTMW	Tnbs1-Tnbs0	A	DIS	E300.0:NO3	2	Y	
W-PIT1-2620	PTMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	1	Y	
W-PIT1-2620	PTMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	2	Y	
W-PIT1-2620	PTMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	3	Y	
W-PIT1-2620	PTMW	Tnbs1-Tnbs0	Q	WGMG	E300.0:PERC	4	Y	
W-PIT1-2620	PTMW	Tnbs1-Tnbs0	S	DIS	E601:ALL	2	Y	
W-PIT1-2620	PTMW	Tnbs1-Tnbs0	S	DIS	E601:ALL	4	Y	
W-PIT1-2620	PTMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	1	Y	
W-PIT1-2620	PTMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	2	Y	
W-PIT1-2620	PTMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	3	Y	
W-PIT1-2620	PTMW	Tnbs1-Tnbs0	Q	WGMG	E906:ALL	4	Y	
W-PIT7-16	PTMW	Tnsc0	A	CMP	AS:UISO	2	Y	
W-PIT7-16	PTMW	Tnsc0	A	CMP	E300.0:NO3	2	Y	
W-PIT7-16	PTMW	Tnsc0	S	CMP	E300.0:PERC	2	Y	
W-PIT7-16	PTMW	Tnsc0	S	CMP	E300.0:PERC	4	N	Inoperable pump.
W-PIT7-16	PTMW	Tnsc0	S	DIS	E8330LOW:ALL	2	Y	
W-PIT7-16	PTMW	Tnsc0	S	CMP	E906:ALL	2	Y	
W-PIT7-16	PTMW	Tnsc0	S	CMP	E906:ALL	4	N	Inoperable pump.
W8SPRNG	SPR	Tnbs1-Tnbs0	A	CMP	AS:UISO	2	N	Dry.
W8SPRNG	SPR	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	N	Dry.
W8SPRNG	SPR	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	N	Dry.
W8SPRNG	SPR	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	N	Dry.
W8SPRNG	SPR	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	N	Dry.
W8SPRNG	SPR	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	N	Dry.

Table 2.5-2. PIT 7-Source (PIT7-SRC) volumes of ground water and soil vapor extracted and discharged, July 1, 2014 through December 31, 2014.

Treatment facility	Month	SVTS Operational hours	GWTS Operational hours	Volume of vapor extracted (thousands of cf)	Volume of ground water discharged (gal)
PIT7-SRC	July	NA	906	NA	698
	August	NA	504	NA	1,044
	September	NA	793	NA	1,153
	October	NA	552	NA	803
	November	NA	626	NA	586
	December	NA	811	NA	1,667
Total		NA	4,192	NA	5,951

Table 2.5-3. Pit 7-Source (PIT7-SRC) volatile organic compounds (VOCs) in ground water extraction and treatment system influent and effluent.

Location	Date	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Carbon tetra-chloride (µg/L)	Chloro-form (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	1,1,2-TCA (µg/L)	Freon 11 (µg/L)	Freon 113 (µg/L)	Vinyl chloride (µg/L)
PIT7-SRC-I	7/8/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PIT7-SRC-I	7/8/14 DUP	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PIT7-SRC-I	10/6/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PIT7-SRC-E	7/8/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PIT7-SRC-E	8/4/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PIT7-SRC-E	9/3/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PIT7-SRC-E	10/6/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PIT7-SRC-E	11/5/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PIT7-SRC-E	12/1/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Notes:

See Acronyms and Abbreviations in the Tables section of this report for acronym and abbreviation definitions.

Table 2.5-3 (Con't). Analyte detected but not reported in main table.

Location	Date	Detection frequency
PIT7-SRC-I	7/8/14	0 of 18
PIT7-SRC-I	7/8/14 DUP	0 of 18
PIT7-SRC-I	10/6/14	0 of 18
PIT7-SRC-E	7/8/14	0 of 18
PIT7-SRC-E	8/4/14	0 of 18
PIT7-SRC-E	9/3/14	0 of 18
PIT7-SRC-E	10/6/14	0 of 18
PIT7-SRC-E	11/5/14	0 of 18
PIT7-SRC-E	12/1/14	0 of 18

Notes:

See Acronyms and Abbreviations in the Tables section of this report for acronym and abbreviation definitions.

Table 2.5-4. Pit 7-Source (PIT7-SRC) nitrate and perchlorate in ground water extraction and treatment system influent and effluent.

Location	Date	Nitrate as NO3 (mg/L)	Perchlorate (µg/L)
PIT7-SRC-I	7/8/14	39	14
PIT7-SRC-I	7/8/14 DUP	38	15
PIT7-SRC-I	10/6/14	35	12
PIT7-SRC-E	7/8/14	<0.5	<4
PIT7-SRC-E	8/4/14	<0.5	<4
PIT7-SRC-E	9/3/14	<0.5	<4
PIT7-SRC-E	10/6/14	<0.5	<4
PIT7-SRC-E	11/5/14	<0.5	<4
PIT7-SRC-E	12/1/14	<0.5	<4

Notes:

See Acronyms and Abbreviations in the Tables section of this report for acronym and abbreviation definitions.

Table 2.5-5. Pit 7-Source (PIT7-SRC) total uranium in ground water extraction and treatment system influent and effluent.

Location	Date	Total Uranium (calculated) (pCi/L)
PIT7-SRC-I	7/8/14	21.5 ± 2.22
PIT7-SRC-I	7/8/14 DUP	22.8 ± 2.42
PIT7-SRC-I	10/6/14	23.6 ± 2.38
PIT7-SRC-E	7/8/14	<0.3
PIT7-SRC-E	8/4/14	<0.3
PIT7-SRC-E	9/3/14	<0.3
PIT7-SRC-E	10/6/14	<0.3
PIT7-SRC-E	11/5/14	<0.3
PIT7-SRC-E	12/1/14	<0.3

Notes:

See Acronyms and Abbreviations in the Tables section of this report for acronym and abbreviation definitions.

Table 2.5-6. Pit 7-Source (PIT7-SRC) tritium in ground water extraction and treatment system influent and effluent.

Location	Date	Tritium (pCi/L)
PIT7-SRC-I	7/8/14	46400 ± 9010
PIT7-SRC-I	7/8/14 DUP	47900 ± 9310
PIT7-SRC-I	10/6/14	37000 ± 7190
PIT7-SRC-E	7/8/14	42700 ± 8300
PIT7-SRC-E	8/4/14	53900 ± 10500
PIT7-SRC-E	9/3/14	40900 ± 7960
PIT7-SRC-E	10/6/14	35800 ± 6950
PIT7-SRC-E	11/5/14	40800 ± 7920
PIT7-SRC-E	12/1/14	38900 ± 7560

Notes:

See Acronyms and Abbreviations in the Tables section of this report for acronym and abbreviation definitions.

Table 2.5-7. Pit 7-Source (PIT7-SRC) treatment facility sampling and analysis plan.

Sample location	Sample identification	Parameter	Frequency
PIT7-SRC GWTS			
Influent Port	**PIT7-SRC-I**	**VOCs**	**Quarterly**
		Uranium	**Quarterly**
		Perchlorate	**Quarterly**
		Nitrate	**Quarterly**
		Tritium[a]	**Quarterly**
		pH	**Quarterly**
Effluent Port	**PIT7-SRC-E**	**VOCs**	**Monthly**
		Uranium	**Monthly**
		Perchlorate	**Monthly**
		Nitrate	**Monthly**
		Tritium[a]	**Monthly**
		pH	**Monthly**

Notes:

[a] Although tritium is not treated/removed by the PIT7-SRC GWTS, tritium activities will be monitoring to determine levels that are being discharged to the infiltration trench.

One duplicate and one blank (given fictitious labels) shall be taken for every 12 samples.

See Acronyms and Abbreviations in the Tables section of this report for acronym and abbreviation definitions.

Table 2.5-8. Pit 7 Complex Area of Operable Unit 5 ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
K7-01	DMW	Tnbs1-Tnbs0	A	CMP	E200.7:LI	2	Y	
K7-01	DMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
K7-01	DMW	Tnbs1-Tnbs0	A	CMP	E300.0:PERC	2	Y	
K7-01	DMW	Tnbs1-Tnbs0	A	CMP	E340.2:ALL	2	Y	
K7-01	DMW	Tnbs1-Tnbs0	A	CMP	E601:ALL	2	Y	
K7-01	DMW	Tnbs1-Tnbs0	A	CMP	E8082A:ALL	2	Y	
K7-01	DMW	Tnbs1-Tnbs0	A	CMP	E8330LOW:ALL	2	Y	
K7-01	DMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
K7-01	DMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
K7-01	DMW	Tnbs1-Tnbs0	A	CMP	MS:UISO	2	Y	
K7-01	DMW	Tnbs1-Tnbs0	A	CMP	T26METALS:ALL	2	Y	
K7-03	DMW	Tnbs1-Tnbs0	A	CMP	E200.7:LI	2	Y	
K7-03	DMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
K7-03	DMW	Tnbs1-Tnbs0	A	CMP	E300.0:PERC	2	Y	
K7-03	DMW	Tnbs1-Tnbs0	A	CMP	E340.2:ALL	2	Y	
K7-03	DMW	Tnbs1-Tnbs0	A	CMP	E601:ALL	2	Y	
K7-03	DMW	Tnbs1-Tnbs0	A	CMP	E8082A:ALL	2	Y	
K7-03	DMW	Tnbs1-Tnbs0	A	CMP	E8330LOW:ALL	2	Y	
K7-03	DMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
K7-03	DMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
K7-03	DMW	Tnbs1-Tnbs0	A	CMP	MS:UISO	2	Y	
K7-03	DMW	Tnbs1-Tnbs0	A	CMP	T26METALS:ALL	2	Y	
K7-06	DMW	Tnbs1-Tnbs0	A	CMP	AS:UISO	2	Y	
K7-06	DMW	Tnbs1-Tnbs0	A	CMP	E200.7:LI	2	Y	
K7-06	DMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
K7-06	DMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	Y	
K7-06	DMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	Y	
K7-06	DMW	Tnbs1-Tnbs0	A	CMP	E340.2:ALL	2	Y	
K7-06	DMW	Tnbs1-Tnbs0	A	CMP	E601:ALL	2	Y	
K7-06	DMW	Tnbs1-Tnbs0	A	CMP	E8082A:ALL	2	Y	
K7-06	DMW	Tnbs1-Tnbs0	A	CMP	E8330LOW:ALL	2	Y	
K7-06	DMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
K7-06	DMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
K7-06	DMW	Tnbs1-Tnbs0	A	CMP	T26METALS:ALL	2	Y	
K7-07	PTMW	Qal/WBR	A	CMP	AS:UISO	2	N	Dry.
K7-07	PTMW	Qal/WBR	E	CMP	E300.0:NO3	2	N	Dry.
K7-07	PTMW	Qal/WBR	A	CMP	E300.0:PERC	2	N	Dry.
K7-07	PTMW	Qal/WBR	A	CMP	E601:ALL	2	N	Dry.
K7-07	PTMW	Qal/WBR	S	CMP	E906:ALL	2	N	Dry.
K7-07	PTMW	Qal/WBR	S	CMP	E906:ALL	4	N	Dry.
K7-09	DMW	Tnsc0	A	CMP	AS:UISO	2	Y	
K7-09	DMW	Tnsc0	A	CMP	E200.7:LI	2	Y	
K7-09	DMW	Tnsc0	A	CMP	E300.0:NO3	2	Y	
K7-09	DMW	Tnsc0	S	CMP	E300.0:PERC	2	Y	
K7-09	DMW	Tnsc0	S	CMP	E300.0:PERC	4	Y	
K7-09	DMW	Tnsc0	A	CMP	E340.2:ALL	2	Y	
K7-09	DMW	Tnsc0	A	CMP	E601:ALL	2	Y	
K7-09	DMW	Tnsc0	A	CMP	E8082A:ALL	2	Y	
K7-09	DMW	Tnsc0	A	CMP	E8330LOW:ALL	2	Y	
K7-09	DMW	Tnsc0	S	CMP	E906:ALL	2	Y	
K7-09	DMW	Tnsc0	S	CMP	E906:ALL	4	Y	
K7-09	DMW	Tnsc0	A	CMP	T26METALS:ALL	2	Y	
K7-10	DMW	Tnbs1-Tnbs0	A	CMP	AS:UISO	2	Y	
K7-10	DMW	Tnbs1-Tnbs0	A	CMP	E200.7:LI	2	Y	

Table 2.5-8. Pit 7 Complex Area of Operable Unit 5 ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
K7-10	DMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
K7-10	DMW	Tnbs1-Tnbs0	A	CMP	E300.0:PERC	2	Y	
K7-10	DMW	Tnbs1-Tnbs0	A	CMP	E340.2:ALL	2	Y	
K7-10	DMW	Tnbs1-Tnbs0	A	CMP	E601:ALL	2	Y	
K7-10	DMW	Tnbs1-Tnbs0	A	CMP	E8082A:ALL	2	Y	
K7-10	DMW	Tnbs1-Tnbs0	A	CMP	E8330LOW:ALL	2	Y	
K7-10	DMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
K7-10	DMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
K7-10	DMW	Tnbs1-Tnbs0	A	CMP	T26METALS:ALL	2	Y	
NC7-12	PTMW	Qal/WBR	A	CMP	AS:UISO	2	Y	
NC7-12	PTMW	Qal/WBR	E	CMP	E300.0:NO3	2	Y	
NC7-12	PTMW	Qal/WBR	A	CMP	E300.0:PERC	2	Y	
NC7-12	PTMW	Qal/WBR	A	CMP	E601:ALL	2	Y	
NC7-12	PTMW	Qal/WBR	S	CMP	E906:ALL	2	Y	
NC7-12	PTMW	Qal/WBR	S	CMP	E906:ALL	4	Y	
NC7-12	PTMW	Qal/WBR	A	DIS	MS:UISO	2	Y	
NC7-16	PTMW	Qal/WBR	A	CMP	E300.0:NO3	2	N	Insufficient water.
NC7-16	PTMW	Qal/WBR	A	CMP	E300.0:PERC	2	N	Insufficient water.
NC7-16	PTMW	Qal/WBR	A	CMP	E601:ALL	2	N	Insufficient water.
NC7-16	PTMW	Qal/WBR	S	CMP	E906:ALL	2	N	Insufficient water.
NC7-16	PTMW	Qal/WBR	S	CMP	E906:ALL	4	N	Dry.
NC7-17	PTMW	Qal/WBR	A	CMP	AS:UISO	2	N	Insufficient water.
NC7-17	PTMW	Qal/WBR	A	CMP	E300.0:NO3	2	N	Insufficient water.
NC7-17	PTMW	Qal/WBR	E	CMP	E300.0:PERC	2	N	Insufficient water.
NC7-17	PTMW	Qal/WBR	A	CMP	E601:ALL	2	N	Insufficient water.
NC7-17	PTMW	Qal/WBR	S	CMP	E906:ALL	2	N	Insufficient water.
NC7-17	PTMW	Qal/WBR	S	CMP	E906:ALL	4	Y	
NC7-18	PTMW	Qal/WBR	A	CMP	AS:UISO	2	N	Insufficient water.
NC7-18	PTMW	Qal/WBR	A	CMP	E300.0:NO3	2	N	Insufficient water.
NC7-18	PTMW	Qal/WBR	A	CMP	E300.0:PERC	2	N	Insufficient water.
NC7-18	PTMW	Qal/WBR	A	CMP	E601:ALL	2	N	Insufficient water.
NC7-18	PTMW	Qal/WBR	S	CMP	E906:ALL	2	N	Insufficient water.
NC7-18	PTMW	Qal/WBR	S	CMP	E906:ALL	4	Y	
NC7-20	PTMW	Qal/WBR	A	CMP	AS:UISO	2	N	Insufficient water.
NC7-20	PTMW	Qal/WBR	O	CMP	E300.0:NO3	2	N	To be sampled in 2015.
NC7-20	PTMW	Qal/WBR	A	CMP	E300.0:PERC	2	N	Insufficient water.
NC7-20	PTMW	Qal/WBR	A	CMP	E601:ALL	2	N	Insufficient water.
NC7-20	PTMW	Qal/WBR	S	CMP	E906:ALL	2	N	Insufficient water.
NC7-20	PTMW	Qal/WBR	S	CMP	E906:ALL	4	Y	
NC7-21	PTMW	Qal/WBR	A	CMP	AS:UISO	2	Y	
NC7-21	PTMW	Qal/WBR	A	CMP	E300.0:NO3	2	Y	
NC7-21	PTMW	Qal/WBR	A	CMP	E300.0:PERC	2	Y	
NC7-21	PTMW	Qal/WBR	A	CMP	E601:ALL	2	Y	
NC7-21	PTMW	Qal/WBR	S	CMP	E906:ALL	2	Y	
NC7-21	PTMW	Qal/WBR	S	CMP	E906:ALL	4	Y	
NC7-22	PTMW	Qal/WBR	A	CMP	AS:UISO	2	N	Dry.
NC7-22	PTMW	Qal/WBR	A	CMP	E300.0:NO3	2	N	Dry.
NC7-22	PTMW	Qal/WBR	A	CMP	E300.0:PERC	2	N	Dry.
NC7-22	PTMW	Qal/WBR	A	CMP	E601:ALL	2	N	Dry.
NC7-22	PTMW	Qal/WBR	S	CMP	E906:ALL	2	N	Dry.
NC7-22	PTMW	Qal/WBR	S	CMP	E906:ALL	4	N	Dry.
NC7-24	PTMW	Qal/WBR	A	CMP	AS:UISO	2	N	Dry.
NC7-24	PTMW	Qal/WBR	A	CMP	E300.0:NO3	2	N	Dry.
NC7-24	PTMW	Qal/WBR	A	CMP	E300.0:PERC	2	N	Dry.

Table 2.5-8. Pit 7 Complex Area of Operable Unit 5 ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
NC7-24	PTMW	Qal/WBR	S	CMP	E906:ALL	2	N	Dry.
NC7-24	PTMW	Qal/WBR	S	CMP	E906:ALL	4	N	Dry.
NC7-25	EW	Tnbs1-Tnbs0	A	CMP-TF	AS:UISO	2	Y	
NC7-25	EW	Tnbs1-Tnbs0	A	CMP-TF	E300.0:NO3	2	Y	
NC7-25	EW	Tnbs1-Tnbs0	A	CMP-TF	E300.0:PERC	2	Y	
NC7-25	EW	Tnbs1-Tnbs0	A	DIS-TF	E300.0:PERC	4	Y	
NC7-25	EW	Tnbs1-Tnbs0	A	CMP-TF	E601:ALL	2	Y	
NC7-25	EW	Tnbs1-Tnbs0	A	DIS-TF	E601:ALL	4	Y	
NC7-25	EW	Tnbs1-Tnbs0	S	CMP-TF	E906:ALL	2	Y	
NC7-25	EW	Tnbs1-Tnbs0	S	CMP-TF	E906:ALL	4	Y	
NC7-25	EW	Tnbs1-Tnbs0	S	DIS-TF	KPA:UTOT	2	Y	
NC7-25	EW	Tnbs1-Tnbs0	S	DIS-TF	KPA:UTOT	4	Y	
NC7-25	EW	Tnbs1-Tnbs0	A	DIS-TF	MS:UISO	4	Y	
NC7-26	DMW	Tnbs1-Tnbs0	A	CMP	E200.7:LI	2	Y	
NC7-26	DMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
NC7-26	DMW	Tnbs1-Tnbs0	A	CMP	E300.0:PERC	2	Y	
NC7-26	DMW	Tnbs1-Tnbs0	A	DIS	E300.0:PERC	4	Y	
NC7-26	DMW	Tnbs1-Tnbs0	A	CMP	E340.2:ALL	2	Y	
NC7-26	DMW	Tnbs1-Tnbs0	A	CMP	E601:ALL	2	Y	
NC7-26	DMW	Tnbs1-Tnbs0	A	CMP	E8082A:ALL	2	Y	
NC7-26	DMW	Tnbs1-Tnbs0	A	CMP	E8330LOW:ALL	2	Y	
NC7-26	DMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
NC7-26	DMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
NC7-26	DMW	Tnbs1-Tnbs0	A	CMP	MS:UISO	2	Y	
NC7-26	DMW	Tnbs1-Tnbs0	A	CMP	T26METALS:ALL	2	Y	
NC7-34	PTMW	Qal/WBR	A	CMP	AS:UISO	2	N	Insufficient water.
NC7-34	PTMW	Qal/WBR	A	CMP	E300.0:NO3	2	N	Insufficient water.
NC7-34	PTMW	Qal/WBR	A	CMP	E300.0:PERC	2	N	Insufficient water.
NC7-34	PTMW	Qal/WBR	A	CMP	E601:ALL	2	N	Insufficient water.
NC7-34	PTMW	Qal/WBR	S	CMP	E906:ALL	2	N	Insufficient water.
NC7-34	PTMW	Qal/WBR	S	CMP	E906:ALL	4	N	Dry.
NC7-36	PTMW	Tnbs1-Tnbs0	A	CMP	AS:UISO	2	N	Dry.
NC7-36	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	N	Dry.
NC7-36	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:PERC	2	N	Dry.
NC7-36	PTMW	Tnbs1-Tnbs0	A	CMP	E601:ALL	2	N	Dry.
NC7-36	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	N	Dry.
NC7-36	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	N	Dry.
NC7-37	PTMW	Qal/WBR	A	CMP	AS:UISO	2	N	Dry.
NC7-37	PTMW	Qal/WBR	A	CMP	E300.0:NO3	2	N	Dry.
NC7-37	PTMW	Qal/WBR	A	CMP	E300.0:PERC	2	N	Dry.
NC7-37	PTMW	Qal/WBR	A	CMP	E601:ALL	2	N	Dry.
NC7-37	PTMW	Qal/WBR	S	CMP	E906:ALL	2	N	Dry.
NC7-37	PTMW	Qal/WBR	S	CMP	E906:ALL	4	N	Dry.
NC7-40	PTMW	Qal/WBR	A	CMP	E300.0:NO3	2	Y	
NC7-40	PTMW	Qal/WBR	A	CMP	E300.0:PERC	2	Y	
NC7-40	PTMW	Qal/WBR	A	CMP	E601:ALL	2	Y	
NC7-40	PTMW	Qal/WBR	S	DIS	E906:ALL	1	Y	
NC7-40	PTMW	Qal/WBR	S	CMP	E906:ALL	2	Y	
NC7-40	PTMW	Qal/WBR	S	DIS	E906:ALL	3	Y	
NC7-40	PTMW	Qal/WBR	S	CMP	E906:ALL	4	Y	
NC7-40	PTMW	Qal/WBR	Q	DIS	MS:UISO	1	Y	
NC7-40	PTMW	Qal/WBR	Q	DIS	MS:UISO	2	Y	
NC7-40	PTMW	Qal/WBR	Q	DIS	MS:UISO	3	Y	
NC7-40	PTMW	Qal/WBR	Q	DIS	MS:UISO	4	Y	

Table 2.5-8. Pit 7 Complex Area of Operable Unit 5 ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
NC7-47	DMW	Tnbs1-Tnbs0	A	CMP	AS:UISO	2	Y	
NC7-47	DMW	Tnbs1-Tnbs0	A	CMP	E200.7:LI	2	Y	
NC7-47	DMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
NC7-47	DMW	Tnbs1-Tnbs0	A	CMP	E300.0:PERC	2	Y	
NC7-47	DMW	Tnbs1-Tnbs0	A	CMP	E340.2:ALL	2	Y	
NC7-47	DMW	Tnbs1-Tnbs0	A	CMP	E601:ALL	2	Y	
NC7-47	DMW	Tnbs1-Tnbs0	A	CMP	E8082A:ALL	2	Y	
NC7-47	DMW	Tnbs1-Tnbs0	A	CMP	E8330LOW:ALL	2	Y	
NC7-47	DMW	Tnbs1-Tnbs0	A	CMP	E906:ALL	2	Y	
NC7-47	DMW	Tnbs1-Tnbs0	A	CMP	T26METALS:ALL	2	Y	
NC7-48	DMW	Qal/WBR	A	CMP	E200.7:LI	2	Y	
NC7-48	DMW	Qal/WBR	A	CMP	E300.0:NO3	2	Y	
NC7-48	DMW	Qal/WBR	A	CMP	E300.0:PERC	2	Y	
NC7-48	DMW	Qal/WBR	A	CMP	E340.2:ALL	2	Y	
NC7-48	DMW	Qal/WBR	A	CMP	E601:ALL	2	Y	
NC7-48	DMW	Qal/WBR	A	CMP	E8082A:ALL	2	Y	
NC7-48	DMW	Qal/WBR	A	CMP	E8330LOW:ALL	2	Y	
NC7-48	DMW	Qal/WBR	S	CMP	E906:ALL	2	Y	
NC7-48	DMW	Qal/WBR	S	CMP	E906:ALL	4	Y	
NC7-48	DMW	Qal/WBR	A	CMP	MS:UISO	2	Y	
NC7-48	DMW	Qal/WBR	A	CMP	T26METALS:ALL	2	Y	
NC7-49A	PTMW	Qal/WBR	A	CMP	AS:UISO	2	Y	
NC7-49A	PTMW	Qal/WBR	E	CMP	E300.0:NO3	2	Y	
NC7-49A	PTMW	Qal/WBR	E	CMP	E300.0:PERC	2	Y	
NC7-49A	PTMW	Qal/WBR	S	CMP	E906:ALL	2	Y	
NC7-49A	PTMW	Qal/WBR	S	CMP	E906:ALL	4	Y	
NC7-50	CW	Tmss	E	DIS	AS:UISO	2	Y	
NC7-51	PTMW	Qal/WBR	A	CMP	E300.0:NO3	2	Y	
NC7-51	PTMW	Qal/WBR	A	CMP	E300.0:PERC	2	Y	
NC7-51	PTMW	Qal/WBR	A	CMP	E601:ALL	2	Y	
NC7-51	PTMW	Qal/WBR	S	DIS	E906:ALL	1	Y	
NC7-51	PTMW	Qal/WBR	S	CMP	E906:ALL	2	Y	
NC7-51	PTMW	Qal/WBR	S	DIS	E906:ALL	3	Y	
NC7-51	PTMW	Qal/WBR	S	CMP	E906:ALL	4	Y	
NC7-51	PTMW	Qal/WBR	Q	DIS	MS:UISO	1	Y	
NC7-51	PTMW	Qal/WBR	A	CMP	MS:UISO	2	Y	
NC7-51	PTMW	Qal/WBR	Q	DIS	MS:UISO	3	Y	
NC7-51	PTMW	Qal/WBR	Q	DIS	MS:UISO	4	Y	
NC7-52	PTMW	Tnbs1-Tnbs0	A	CMP	AS:UISO	2	Y	
NC7-52	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
NC7-52	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:PERC	2	Y	
NC7-52	PTMW	Tnbs1-Tnbs0	A	CMP	E601:ALL	2	Y	
NC7-52	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	1	Y	
NC7-52	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	3	Y	
NC7-53	PTMW	Qal/WBR	A	DIS	AS:UISO	2	Y	
NC7-53	PTMW	Qal/WBR	O	CMP	E300.0:NO3	2	N	To be sampled in 2015.
NC7-53	PTMW	Qal/WBR	O	CMP	E300.0:PERC	2	N	To be sampled in 2015.
NC7-63	PTMW	Qal/WBR	A	CMP	E300.0:NO3	2	N	Dry.
NC7-63	PTMW	Qal/WBR	A	CMP	E300.0:PERC	2	N	Dry.
NC7-63	PTMW	Qal/WBR	A	CMP	E601:ALL	2	N	Dry.
NC7-63	PTMW	Qal/WBR	S	CMP	E906:ALL	2	N	Dry.
NC7-63	PTMW	Qal/WBR	S	CMP	E906:ALL	4	N	Dry.
NC7-63	PTMW	Qal/WBR	A	CMP	MS:UISO	2	N	Dry.
NC7-64	EW	Qal/WBR	A	CMP-TF	AS:UISO	2	Y	

Table 2.5-8. Pit 7 Complex Area of Operable Unit 5 ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
NC7-64	EW	Qal/WBR	A	CMP-TF	E300.0:NO3	2	Y	
NC7-64	EW	Qal/WBR	A	CMP-TF	E300.0:PERC	2	Y	
NC7-64	EW	Qal/WBR	A	DIS-TF	E300.0:PERC	4	Y	
NC7-64	EW	Qal/WBR	A	CMP-TF	E601:ALL	2	Y	
NC7-64	EW	Qal/WBR	A	DIS-TF	E601:ALL	4	Y	
NC7-64	EW	Qal/WBR	S	CMP-TF	E906:ALL	2	Y	
NC7-64	EW	Qal/WBR	S	CMP-TF	E906:ALL	4	Y	
NC7-64	EW	Qal/WBR	S	DIS-TF	KPA:UTOT	2	Y	
NC7-64	EW	Qal/WBR	S	DIS-TF	KPA:UTOT	4	Y	
NC7-64	EW	Qal/WBR	A	DIS-TF	MS:UISO	4	Y	
NC7-65	PTMW	Tnsc0	A	CMP	AS:UISO	2	Y	
NC7-65	PTMW	Tnsc0	A	CMP	E300.0:NO3	2	Y	
NC7-65	PTMW	Tnsc0	A	CMP	E300.0:PERC	2	Y	
NC7-65	PTMW	Tnsc0	A	CMP	E601:ALL	2	Y	
NC7-65	PTMW	Tnsc0	S	CMP	E906:ALL	2	Y	
NC7-65	PTMW	Tnsc0	S	CMP	E906:ALL	4	Y	
NC7-65	PTMW	Tnsc0	A	DIS	MS:UISO	2	Y	
NC7-67	PTMW	Tnsc0	A	CMP	AS:UISO	2	Y	
NC7-67	PTMW	Tnsc0	A	CMP	E300.0:NO3	2	Y	
NC7-67	PTMW	Tnsc0	A	CMP	E300.0:PERC	2	Y	
NC7-67	PTMW	Tnsc0	A	CMP	E601:ALL	2	Y	
NC7-67	PTMW	Tnsc0	S	CMP	E906:ALL	2	Y	
NC7-67	PTMW	Tnsc0	S	CMP	E906:ALL	4	Y	
NC7-68	PTMW	Tnbs1-Tnbs0	A	DIS	AS:UISO	2	Y	
NC7-68	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
NC7-68	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:PERC	2	Y	
NC7-68	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
NC7-68	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
NC7-75	PTMW	Tnsc0	A	CMP	AS:UISO	2	Y	
NC7-75	PTMW	Tnsc0	A	CMP	E300.0:NO3	2	Y	
NC7-75	PTMW	Tnsc0	S	CMP	E300.0:PERC	2	Y	
NC7-75	PTMW	Tnsc0	S	CMP	E300.0:PERC	4	Y	
NC7-75	PTMW	Tnsc0	A	CMP	E601:ALL	2	Y	
NC7-75	PTMW	Tnsc0	S	CMP	E906:ALL	2	Y	
NC7-75	PTMW	Tnsc0	S	CMP	E906:ALL	4	Y	
NC7-76	PTMW	Qal/WBR	A	CMP	AS:UISO	2	Y	
NC7-76	PTMW	Qal/WBR	O	CMP	E300.0:NO3	2	N	To be sampled in 2015.
NC7-76	PTMW	Qal/WBR	A	CMP	E300.0:PERC	2	Y	
NC7-76	PTMW	Qal/WBR	S	CMP	E906:ALL	2	Y	
NC7-76	PTMW	Qal/WBR	S	CMP	E906:ALL	4	Y	
W-865-01	PTMW	Tnbs1-Tnbs0	A	DIS	DWMETALS:ALL	1	Y	
W-865-01	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	1	Y	
W-865-01	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:PERC	1	Y	
W-865-01	PTMW	Tnbs1-Tnbs0	S	DIS	E601:ALL	1	Y	
W-865-01	PTMW	Tnbs1-Tnbs0	S	DIS	E601:ALL	3	Y	
W-865-01	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	1	Y	
W-865-01	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	3	Y	
W-865-03	PTMW	Tnbs1-Tnbs0	A	DIS	E300.0:NO3	1	Y	
W-865-03	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:PERC	1	Y	
W-865-03	PTMW	Tnbs1-Tnbs0	A	DIS	E906:ALL	1	Y	
W-865-1804	PTMW	Tnbs1-Tnbs0	E	CMP	E300.0:NO3	1	Y	
W-865-1804	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:PERC	1	Y	
W-865-1804	PTMW	Tnbs1-Tnbs0	A	DIS	E300.0:PERC	3	Y	
W-865-1804	PTMW	Tnbs1-Tnbs0	S	DIS	E601:ALL	1	Y	

Table 2.5-8. Pit 7 Complex Area of Operable Unit 5 ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-865-1804	PTMW	Tnbs1-Tnbs0	S	DIS	E601:ALL	3	Y	
W-865-1804	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	1	Y	
W-865-1804	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	3	Y	
W-PIT3-01	PTMW	Qal/WBR	A	CMP	E300.0:NO3	2	N	Dry.
W-PIT3-01	PTMW	Qal/WBR	A	CMP	E300.0:PERC	2	N	Dry.
W-PIT3-01	PTMW	Qal/WBR	S	CMP	E906:ALL	2	N	Dry.
W-PIT3-01	PTMW	Qal/WBR	S	CMP	E906:ALL	4	N	Dry.
W-PIT3-01	PTMW	Qal/WBR	A	CMP	MS:UISO	2	N	Dry.
W-PIT3-02	PTMW	Qal/WBR	A	CMP	AS:UISO	2	N	Dry.
W-PIT3-02	PTMW	Qal/WBR	A	CMP	E300.0:NO3	2	N	Dry.
W-PIT3-02	PTMW	Qal/WBR	A	CMP	E300.0:PERC	2	N	Dry.
W-PIT3-02	PTMW	Qal/WBR	S	CMP	E906:ALL	2	N	Dry.
W-PIT3-02	PTMW	Qal/WBR	S	CMP	E906:ALL	4	N	Dry.
W-PIT5-01	PTMW	Qal/WBR	A	CMP	AS:UISO	2	N	Dry.
W-PIT5-01	PTMW	Qal/WBR	A	CMP	E300.0:NO3	2	N	Dry.
W-PIT5-01	PTMW	Qal/WBR	A	CMP	E300.0:PERC	2	N	Dry.
W-PIT5-01	PTMW	Qal/WBR	S	CMP	E906:ALL	2	N	Dry.
W-PIT5-01	PTMW	Qal/WBR	S	CMP	E906:ALL	4	N	Dry.
W-PIT5-02	PTMW	Qal/WBR	A	CMP	AS:UISO	2	N	Dry.
W-PIT5-02	PTMW	Qal/WBR	A	CMP	E300.0:NO3	2	N	Dry.
W-PIT5-02	PTMW	Qal/WBR	A	CMP	E300.0:PERC	2	N	Dry.
W-PIT5-02	PTMW	Qal/WBR	S	CMP	E906:ALL	2	N	Dry.
W-PIT5-02	PTMW	Qal/WBR	S	CMP	E906:ALL	4	N	Dry.
W-PIT7-02	PTMW	Qal/WBR	A	CMP	AS:UISO	2	Y	
W-PIT7-02	PTMW	Qal/WBR	A	CMP	E300.0:NO3	2	Y	
W-PIT7-02	PTMW	Qal/WBR	A	CMP	E300.0:PERC	2	Y	
W-PIT7-02	PTMW	Qal/WBR	S	CMP	E906:ALL	1	Y	
W-PIT7-02	PTMW	Qal/WBR	S	CMP	E906:ALL	3	Y	
W-PIT7-03	PTMW	Qal/WBR	A	CMP	AS:UISO	2	Y	
W-PIT7-03	PTMW	Qal/WBR	A	CMP	E300.0:NO3	2	Y	
W-PIT7-03	PTMW	Qal/WBR	A	CMP	E300.0:PERC	2	Y	
W-PIT7-03	PTMW	Qal/WBR	S	CMP	E601:ALL	2	Y	
W-PIT7-03	PTMW	Qal/WBR	S	CMP	E601:ALL	4	Y	
W-PIT7-03	PTMW	Qal/WBR	A	CMP	E906:ALL	1	Y	
W-PIT7-10	PTMW	Qal/WBR	A	CMP	AS:UISO	2	Y	
W-PIT7-10	PTMW	Qal/WBR	A	CMP	E300.0:NO3	2	Y	
W-PIT7-10	PTMW	Qal/WBR	A	CMP	E300.0:PERC	2	Y	
W-PIT7-10	PTMW	Qal/WBR	A	CMP	E601:ALL	2	Y	
W-PIT7-10	PTMW	Qal/WBR	S	CMP	E906:ALL	2	Y	
W-PIT7-10	PTMW	Qal/WBR	S	CMP	E906:ALL	4	Y	
W-PIT7-11	PTMW	Tnbs1-Tnbs0	A	CMP	AS:UISO	2	N	Dry.
W-PIT7-11	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	N	Dry.
W-PIT7-11	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:PERC	2	N	Dry.
W-PIT7-11	PTMW	Tnbs1-Tnbs0	A	CMP	E601:ALL	2	N	Dry.
W-PIT7-11	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	N	Dry.
W-PIT7-11	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	N	Dry.
W-PIT7-12	PTMW	Tnbs1-Tnbs0	O	CMP	AS:UISO	2	N	To be sampled in 2015.
W-PIT7-12	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
W-PIT7-12	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:PERC	2	Y	
W-PIT7-12	PTMW	Tnbs1-Tnbs0	A	DIS	E300.0:PERC	4	Y	
W-PIT7-12	PTMW	Tnbs1-Tnbs0	A	CMP	E601:ALL	2	Y	
W-PIT7-12	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
W-PIT7-12	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
W-PIT7-13	PTMW	Tnbs1-Tnbs0	A	CMP	AS:UISO	2	Y	

Table 2.5-8. Pit 7 Complex Area of Operable Unit 5 ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-PIT7-13	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
W-PIT7-13	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:PERC	2	Y	
W-PIT7-13	PTMW	Tnbs1-Tnbs0	A	CMP	E601:ALL	2	Y	
W-PIT7-13	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
W-PIT7-13	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	N	Inoperable pump.
W-PIT7-14	PTMW	Tnsc0	A	CMP	E300.0:PERC	2	Y	
W-PIT7-14	PTMW	Tnsc0	A	CMP	E906:ALL	2	Y	
W-PIT7-14	PTMW	Tnsc0	A	DIS	MS:UISO	2	Y	
W-PIT7-15	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
W-PIT7-15	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:PERC	2	Y	
W-PIT7-15	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
W-PIT7-15	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
W-PIT7-15	PTMW	Tnbs1-Tnbs0	A	CMP	MS:UISO	2	Y	
W-PIT7-1860	PTMW	Tnbs1-Tnbs0	E	DIS	AS:UISO	2	Y	
W-PIT7-1860	PTMW	Tnbs1-Tnbs0	E	CMP	E300.0:PERC	2	Y	
W-PIT7-1860	PTMW	Tnbs1-Tnbs0	E	CMP	E906:ALL	2	Y	
W-PIT7-1861	PTMW	Qal/WBR	O	CMP	AS:UISO	2	N	To be sampled in 2015.
W-PIT7-1861	PTMW	Qal/WBR	O	CMP	E300.0:NO3	2	N	To be sampled in 2015.
W-PIT7-1861	PTMW	Qal/WBR	O	CMP	E300.0:PERC	2	N	To be sampled in 2015.
W-PIT7-1861	PTMW	Qal/WBR	O	CMP	E906:ALL	2	N	To be sampled in 2015.
W-PIT7-1907	PTMW	Qal/WBR	A	DIS	AS:UISO	2	Y	
W-PIT7-1907	PTMW	Qal/WBR	A	DIS	E300.0:O-PO2	2	Y	
W-PIT7-1915	PTMW	Qal/WBR	A	DIS	AS:UISO	2	Y	
W-PIT7-1915	PTMW	Qal/WBR	A	DIS	E300.0:O-PO2	2	Y	
W-PIT7-1918	PTMW	Qal/WBR	A	CMP	E300.0:NO3	2	Y	
W-PIT7-1918	PTMW	Qal/WBR	A	DIS	E300.0:O-PO2	2	Y	
W-PIT7-1918	PTMW	Qal/WBR	A	CMP	E300.0:PERC	2	Y	
W-PIT7-1918	PTMW	Qal/WBR	A	DIS	E300.0:PERC	4	Y	
W-PIT7-1918	PTMW	Qal/WBR	A	CMP	E601:ALL	2	Y	
W-PIT7-1918	PTMW	Qal/WBR	A	DIS	E601:ALL	4	Y	
W-PIT7-1918	PTMW	Qal/WBR	S	CMP	E906:ALL	2	Y	
W-PIT7-1918	PTMW	Qal/WBR	S	CMP	E906:ALL	4	Y	
W-PIT7-1918	PTMW	Qal/WBR	A	CMP	MS:UISO	2	Y	
W-PIT7-2141	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
W-PIT7-2141	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	Y	
W-PIT7-2141	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	Y	
W-PIT7-2141	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
W-PIT7-2141	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
W-PIT7-2141	PTMW	Tnbs1-Tnbs0	A	CMP	MS:UISO	2	Y	
W-PIT7-2305	EW	Qal/WBR	A	CMP-TF	AS:UISO	2	Y	
W-PIT7-2305	EW	Qal/WBR	A	CMP-TF	E300.0:NO3	2	Y	
W-PIT7-2305	EW	Qal/WBR	A	CMP-TF	E300.0:PERC	2	Y	
W-PIT7-2305	EW	Qal/WBR	A	DIS-TF	E300.0:PERC	4	Y	
W-PIT7-2305	EW	Qal/WBR	A	CMP-TF	E601:ALL	2	Y	
W-PIT7-2305	EW	Qal/WBR	A	DIS-TF	E601:ALL	4	Y	
W-PIT7-2305	EW	Qal/WBR	S	CMP-TF	E906:ALL	2	Y	
W-PIT7-2305	EW	Qal/WBR	S	CMP-TF	E906:ALL	4	Y	
W-PIT7-2305	EW	Qal/WBR	S	DIS-TF	KPA:UTOT	2	Y	
W-PIT7-2305	EW	Qal/WBR	S	DIS-TF	KPA:UTOT	4	Y	
W-PIT7-2305	EW	Qal/WBR	A	DIS-TF	MS:UISO	4	Y	
W-PIT7-2306	EW	Qal/WBR	A	CMP-TF	AS:UISO	2	N	Insufficient water.
W-PIT7-2306	EW	Qal/WBR	A	CMP-TF	E300.0:NO3	2	N	Insufficient water.
W-PIT7-2306	EW	Qal/WBR	A	CMP-TF	E300.0:PERC	2	N	Insufficient water.
W-PIT7-2306	EW	Qal/WBR	A	DIS-TF	E300.0:PERC	4	N	Insufficient water.

Table 2.5-8. Pit 7 Complex Area of Operable Unit 5 ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-PIT7-2306	EW	Qal/WBR	A	CMP-TF	E601:ALL	2	N	Insufficient water.
W-PIT7-2306	EW	Qal/WBR	A	DIS-TF	E601:ALL	4	N	Insufficient water.
W-PIT7-2306	EW	Qal/WBR	S	CMP-TF	E906:ALL	2	N	Insufficient water.
W-PIT7-2306	EW	Qal/WBR	S	CMP-TF	E906:ALL	4	N	Insufficient water.
W-PIT7-2306	EW	Qal/WBR	A	DIS-TF	KPA:UTOT	3	N	Insufficient water.
W-PIT7-2306	EW	Qal/WBR	A	DIS-TF	MS:UISO	4	N	Insufficient water.
W-PIT7-2307	EW	Qal/WBR	A	CMP-TF	AS:UISO	2	Y	
W-PIT7-2307	EW	Qal/WBR	A	CMP-TF	E300.0:NO3	2	Y	
W-PIT7-2307	EW	Qal/WBR	A	CMP-TF	E300.0:PERC	2	Y	
W-PIT7-2307	EW	Qal/WBR	A	DIS-TF	E300.0:PERC	4	N	Insufficient water.
W-PIT7-2307	EW	Qal/WBR	A	CMP-TF	E601:ALL	2	Y	
W-PIT7-2307	EW	Qal/WBR	A	DIS-TF	E601:ALL	4	N	Insufficient water.
W-PIT7-2307	EW	Qal/WBR	S	CMP-TF	E906:ALL	2	Y	
W-PIT7-2307	EW	Qal/WBR	S	CMP-TF	E906:ALL	4	N	Insufficient water.
W-PIT7-2307	EW	Qal/WBR	A	DIS-TF	KPA:UTOT	3	N	Insufficient water.
W-PIT7-2307	EW	Qal/WBR	A	DIS-TF	MS:UISO	4	N	Insufficient water.
W-PIT7-2309	PTMW	Qal/WBR	A	CMP	E300.0:NO3	2	N	Insufficient water.
W-PIT7-2309	PTMW	Qal/WBR	A	CMP	E300.0:PERC	2	N	Insufficient water.
W-PIT7-2309	PTMW	Qal/WBR	A	CMP	E601:ALL	2	N	Insufficient water.
W-PIT7-2309	PTMW	Qal/WBR	S	CMP	E906:ALL	2	N	Insufficient water.
W-PIT7-2309	PTMW	Qal/WBR	S	CMP	E906:ALL	4	N	Dry.
W-PIT7-2309	PTMW	Qal/WBR	A	CMP	MS:UISO	2	N	Insufficient water.
W-PIT7-2703	PTMW	Qal/WBR	A	CMP-TF	AS:UISO	2	Y	
W-PIT7-2703	PTMW	Qal/WBR	A	CMP-TF	E300.0:NO3	2	Y	
W-PIT7-2703	PTMW	Qal/WBR	A	CMP-TF	E300.0:PERC	2	Y	
W-PIT7-2703	PTMW	Qal/WBR	A	DIS-TF	E300.0:PERC	4	Y	
W-PIT7-2703	PTMW	Qal/WBR	A	CMP-TF	E601:ALL	2	Y	
W-PIT7-2703	PTMW	Qal/WBR	A	DIS-TF	E601:ALL	4	Y	
W-PIT7-2703	PTMW	Qal/WBR	S	CMP-TF	E906:ALL	2	Y	
W-PIT7-2703	PTMW	Qal/WBR	S	CMP-TF	E906:ALL	4	Y	
W-PIT7-2703	PTMW	Qal/WBR	S	CMP-TF	KPA:UTOT	2	Y	
W-PIT7-2703	PTMW	Qal/WBR	S	CMP-TF	KPA:UTOT	4	Y	
W-PIT7-2703	PTMW	Qal/WBR	A	DIS-TF	MS:UISO	4	Y	
W-PIT7-2704	PTMW	Qal/WBR	A	CMP-TF	AS:UISO	2	N	Insufficient water.
W-PIT7-2704	PTMW	Qal/WBR	A	CMP-TF	E300.0:NO3	2	N	Insufficient water.
W-PIT7-2704	PTMW	Qal/WBR	A	CMP-TF	E300.0:PERC	2	N	Insufficient water.
W-PIT7-2704	PTMW	Qal/WBR	A	DIS-TF	E300.0:PERC	4	N	Insufficient water.
W-PIT7-2704	PTMW	Qal/WBR	A	CMP-TF	E601:ALL	2	N	Insufficient water.
W-PIT7-2704	PTMW	Qal/WBR	A	DIS-TF	E601:ALL	4	N	Insufficient water.
W-PIT7-2704	PTMW	Qal/WBR	S	CMP-TF	E906:ALL	2	N	Insufficient water.
W-PIT7-2704	PTMW	Qal/WBR	S	CMP-TF	E906:ALL	4	N	Insufficient water.
W-PIT7-2704	PTMW	Qal/WBR	A	CMP-TF	KPA:UTOT	3	N	Insufficient water.
W-PIT7-2704	PTMW	Qal/WBR	A	DIS-TF	MS:UISO	4	N	Insufficient water.
W-PIT7-2705	PTMW	Qal/WBR	A	CMP-TF	AS:UISO	2	Y	
W-PIT7-2705	PTMW	Qal/WBR	A	CMP-TF	E300.0:NO3	2	Y	
W-PIT7-2705	PTMW	Qal/WBR	A	CMP-TF	E300.0:PERC	2	Y	
W-PIT7-2705	PTMW	Qal/WBR	A	DIS-TF	E300.0:PERC	4	Y	
W-PIT7-2705	PTMW	Qal/WBR	A	CMP-TF	E601:ALL	2	Y	
W-PIT7-2705	PTMW	Qal/WBR	A	DIS-TF	E601:ALL	4	Y	
W-PIT7-2705	PTMW	Qal/WBR	S	CMP-TF	E906:ALL	2	Y	
W-PIT7-2705	PTMW	Qal/WBR	S	CMP-TF	E906:ALL	4	Y	
W-PIT7-2705	PTMW	Qal/WBR	S	CMP-TF	KPA:UTOT	2	Y	
W-PIT7-2705	PTMW	Qal/WBR	S	CMP-TF	KPA:UTOT	4	Y	
W-PIT7-2705	PTMW	Qal/WBR	A	DIS-TF	MS:UISO	4	Y	

Table 2.5-9. PIT 7-Source (PIT7-SRC) mass removed, July 1, 2014 through December 31, 2014.

Treatment facility	Month	SVTS VOC mass removed (g)	GWTS VOC mass removed (g)	Perchlorate mass removed (g)	Nitrate mass removed (kg)	Total Uranium mass removed (g)
PIT7-SRC	July	NA	0	0.034	0.10	0.10
	August	NA	0	0.047	0.15	0.20
	September	NA	0	0.050	0.15	0.20
	October	NA	0	0.034	0.11	0.12
	November	NA	0	0.023	0.076	0.11
	December	NA	0	0.072	0.23	0.23
Total		NA	0	0.26	0.82	0.96

Table 2.6-1. Building 854-Source (854-SRC) volumes of ground water and soil vapor extracted and discharged, July 1, 2014 through December 31, 2014.

Treatment facility	Month	SVTS Operational hours	GWTS Operational hours	Volume of vapor extracted (thousands of cf)	Volume of ground water discharged (gal)
854-SRC	July	743	712	2,039	152,299
	August	522	264	1,437	62,197
	September	797	769	2,200	199,729
	October	689	178	1,911	48,103
	November	625	77	1,752	16,273
	December	689	37	1,924	8,026
Total		4,065	2,037	11,263	486,627

Table 2.6-2. Building 854-Proximal (854-PRX) volumes of ground water and soil vapor extracted and discharged, July 1, 2014 through December 31, 2014.

Treatment facility	Month	SVTS Operational hours	GWTS Operational hours	Volume of vapor extracted (thousands of cf)	Volume of ground water discharged (gal)
854-PRX	October	NA	166	NA	54,725
	November	NA	619	NA	197,934
	December	NA	527	NA	168,772
Total		NA	1,312	NA	421,431

Table 2.6-3. Building 854-Distal (854-DIS) volumes of ground water and soil vapor extracted and discharged, July 1, 2014 through December 31, 2014.

Treatment facility	Month	SVTS Operational hours	GWTS Operational hours	Volume of vapor extracted (thousands of cf)	Volume of ground water discharged (gal)
854-DIS	July	NA	5	NA	131
	August	NA	12	NA	196
	September	NA	38	NA	839
	October	NA	12	NA	404
	November	NA	12	NA	516
	December	NA	5	NA	280
Total		NA	84	NA	2,366

Table 2.6-4. Building 854 Operable Unit volatile organic compounds (VOCs) in ground water extraction and treatment system influent and effluent.

Location	Date	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Carbon tetra-chloride (µg/L)	Chloro-form (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	1,1,2-TCA (µg/L)	Freon 11 (µg/L)	Freon 113 (µg/L)	Vinyl chloride (µg/L)
Building 854-Distal[a]															
854-DIS-I	8/12/14	35	<0.5	0.71	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
854-DIS-I	8/12/14 DUP	35	<0.5	0.72	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
854-DIS-I	10/6/14	24	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
854-DIS-E	8/12/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
854-DIS-E	9/3/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
854-DIS-E	10/6/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
854-DIS-E	11/4/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
854-DIS-E	12/1/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Building 854-Proximal[b]															
854-PRX-I	10/8/14	10	<0.5	<0.5	<0.5	<0.5	0.51	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
854-PRX-I	10/20/14	13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
854-PRX-E	10/8/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
854-PRX-E	10/20/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
854-PRX-E	11/4/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
854-PRX-E	12/1/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Building 854-Source															
854-SRC-I	7/7/14	17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
854-SRC-I	7/7/14 DUP	19	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
854-SRC-I	10/6/14	35	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
854-SRC-E	7/7/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table 2.6-4. Building 854 Operable Unit volatile organic compounds (VOCs) in ground water extraction and treatment system influent and effluent.

Location	Date	TCE (μg/L)	PCE (μg/L)	cis-1,2-DCE (μg/L)	trans-1,2-DCE (μg/L)	Carbon tetra-chloride (μg/L)	Chloro-form (μg/L)	1,1-DCA (μg/L)	1,2-DCA (μg/L)	1,1-DCE (μg/L)	1,1,1-TCA (μg/L)	1,1,2-TCA (μg/L)	Freon 11 (μg/L)	Freon 113 (μg/L)	Vinyl chloride (μg/L)
Building 854-Source (continued)															
854-SRC-E	8/12/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
854-SRC-E	9/3/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
854-SRC-E	10/6/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
854-SRC-E	11/4/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
854-SRC-E	12/1/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Notes:

[a] **GWTS not operating in July due to extraction well pump problems.**

[b] **No compliance monitoring conducted until October upon GWTS restart following shut down for upgrades.**

See Acronyms and Abbreviations in the Tables section of this report for acronym and abbreviation definitions.

Table 2.6-4 (Con't). Analyte detected but not reported in main table.

Location	Date	Detection frequency
Building 854-Distal[a]		
854-DIS-I	**8/12/14**	**0 of 18**
854-DIS-I	**8/12/14 DUP**	**0 of 18**
854-DIS-I	**10/6/14**	**0 of 18**
854-DIS-E	**8/12/14**	**0 of 18**
854-DIS-E	**9/3/14**	**0 of 18**
854-DIS-E	**10/6/14**	**0 of 18**
854-DIS-E	**11/4/14**	**0 of 18**
854-DIS-E	**12/1/14**	**0 of 18**
Building 854-Proximal[b]		
854-PRX-I	**10/8/14**	**0 of 18**
854-PRX-I	**10/20/14**	**0 of 18**
854-PRX-E	**10/8/14**	**0 of 18**
854-PRX-E	**10/20/14**	**0 of 18**
854-PRX-E	**11/4/14**	**0 of 18**
854-PRX-E	**12/1/14**	**0 of 18**
Building 854-Source		
854-SRC-I	**7/7/14**	**0 of 18**
854-SRC-I	**7/7/14 DUP**	**0 of 18**
854-SRC-I	**10/6/14**	**0 of 18**
854-SRC-E	**7/7/14**	**0 of 18**
854-SRC-E	**8/12/14**	**0 of 18**
854-SRC-E	**9/3/14**	**0 of 18**
854-SRC-E	**10/6/14**	**0 of 18**
854-SRC-E	**11/4/14**	**0 of 18**
854-SRC-E	**12/1/14**	**0 of 18**

Notes:

[a] **GWTS not operating in July due to extraction well pump problems.**

[b] **No compliance monitoring conducted until October upon GWTS restart following shut down for upgrades.**

See Acronyms and Abbreviations in the Tables section of this report for acronym and abbreviation definitions.

Table 2.6-5. Building 854 Operable Unit nitrate and perchlorate in ground water extraction and treatment system influent and effluent.

Location	Date	Nitrate as NO3 (mg/L)	Perchlorate (µg/L)
Building 854-Distal[a]			
854-DIS-I	8/12/14	16	4.2
854-DIS-I	8/12/14 DUP	1.9	<4
854-DIS-I	10/6/14	3.6	<4
854-DIS-E	8/12/14	1.1	<4
854-DIS-E	9/3/14	3.6	<4
854-DIS-E	10/6/14	6.5	<4
854-DIS-E	11/4/14	4.7	<4
854-DIS-E	12/1/14	6.1	<4
Building 854-Proximal[b]			
854-PRX-I	10/8/14	35	7.1
854-PRX-I	10/20/14	35 D	6.6
854-PRX-I	10/30/14	37 D	-
854-PRX-I	11/4/14	37	-
854-PRX-I	11/17/14	33	-
854-PRX-I	12/1/14	33	-
854-PRX-E	10/8/14	<0.5	<4
854-PRX-E	10/20/14	<0.5	<4
854-PRX-E	11/4/14	38	<4
854-PRX-E	12/1/14	33 D	<4
Building 854-Source			
854-SRC-I	7/7/14	-	<4
854-SRC-I	7/7/14 DUP	-	<4
854-SRC-I	8/12/14	50	-
854-SRC-I	10/6/14	-	<4
854-SRC-E	7/7/14	-	<4
854-SRC-E	8/12/14	-	<4
854-SRC-E	8/14/14	41	-
854-SRC-E	9/3/14	-	<4
854-SRC-E	10/6/14	-	<4
854-SRC-E	11/4/14	-	<4
854-SRC-E	12/1/14	-	<4

Notes:

[a] GWTS not operating in July due to extraction well pump problems.

[b] No compliance monitoring conducted until October upon GWTS restart following shut down for upgrades.

See Acronyms and Abbreviations in the Tables section of this report for acronym and abbreviation definitions.

Table 2.6-6. Building 854 Operable Unit treatment facility sampling and analysis plan.

Sample location	Sample identification	Parameter	Frequency
854-SRC GWTS			
Influent Port	854-SRC-I	VOCs	Quarterly
		Perchlorate	Quarterly
		pH	Quarterly
Effluent Port	854-SRC-E	VOCs	Monthly
		Perchlorate	Monthly
		pH	Monthly
854-SRC SVTS			
Influent Port	W-854-1834-854-SRC-VI	No Monitoring Requirements	
Effluent Port	854-SRC-VE	VOCs	Weekly[a]
Intermediate GAC	854-SRC-VCF3I	VOCs	Weekly[a]
854-PRX GWTS			
Influent Port	W-854-03-854-PRX-I	VOCs	Quarterly
		Perchlorate	Quarterly
		Nitrate	Quarterly
		pH	Quarterly
Effluent Port	854-PRX-E	VOCs	Monthly
		Perchlorate	Monthly
		Nitrate	Monthly
		pH	Monthly
854-DIS GWTS			
Influent Port	W-854-2139-854-DIS-I	VOCs	Quarterly
		Perchlorate	Quarterly
		Nitrate	Quarterly
		pH	Quarterly
Effluent Port	854-DIS-E	VOCs	Monthly
		Perchlorate	Monthly
		Nitrate	Monthly
		pH	Monthly

Notes:

[a] Weekly monitoring for VOCs will consist of the use of a flame-ionization detector, photo-ionization detector, or other District-approved VOC detection device.

One duplicate and one blank (given fictitious labels) shall be taken for every 12 samples.

See Acronyms and Abbreviations in the Tables section of this report for acronym and abbreviation definitions.

Table 2.6-7. Building 854 Operable Unit ground and surface water sampling and analysis plan.

Sample Location	Location Type	Hydro Unit	Sampling Frequency	Sample Driver	Requested Analysis	Sampling Quarter	Sampled Y/N	Comment
W-854-01	PTWM	Tnsc0	A	CMP	E300.0:NO3	2	Y	
W-854-01	PTWM	Tnsc0	S	CMP	E300.0:PERC	2	Y	
W-854-01	PTWM	Tnsc0	S	CMP	E300.0:PERC	4	Y	
W-854-01	PTWM	Tnsc0	S	CMP	E601:ALL	2	Y	
W-854-01	PTWM	Tnsc0	S	CMP	E601:ALL	4	Y	
W-854-02	EW	Tnbs1-Tnsc0	A	CMP-TF	E300.0:NO3	2	Y	
W-854-02	EW	Tnbs1-Tnsc0	S	DIS-TF	E300.0:PERC	1	Y	
W-854-02	EW	Tnbs1-Tnsc0	S	CMP-TF	E300.0:PERC	2	Y	
W-854-02	EW	Tnbs1-Tnsc0	S	DIS-TF	E300.0:PERC	3	Y	
W-854-02	EW	Tnbs1-Tnsc0	S	CMP-TF	E300.0:PERC	4	Y	
W-854-02	EW	Tnbs1-Tnsc0	S	DIS-TF	E601:ALL	1	Y	
W-854-02	EW	Tnbs1-Tnsc0	S	CMP-TF	E601:ALL	2	Y	
W-854-02	EW	Tnbs1-Tnsc0	S	DIS-TF	E601:ALL	3	Y	
W-854-02	EW	Tnbs1-Tnsc0	S	CMP-TF	E601:ALL	4	Y	
W-854-03	EW	Tnbs1-Tnsc0	M	DIS-TF	E300.0:NO3	1	Y	
W-854-03	EW	Tnbs1-Tnsc0	M	DIS-TF	E300.0:NO3	1	Y	
W-854-03	EW	Tnbs1-Tnsc0	M	DIS-TF	E300.0:NO3	4	Y	
W-854-03	EW	Tnbs1-Tnsc0	M	DIS-TF	E300.0:NO3	4	Y	
W-854-03	EW	Tnbs1-Tnsc0	M	DIS-TF	E300.0:NO3	4	Y	
W-854-03	EW	Tnbs1-Tnsc0	Q	DIS-TF	E300.0:PERC	1	Y	
W-854-03	EW	Tnbs1-Tnsc0	Q	DIS-TF	E300.0:PERC	4	Y	
W-854-03	EW	Tnbs1-Tnsc0	Q	DIS-TF	E601:ALL	1	Y	
W-854-03	EW	Tnbs1-Tnsc0	Q	DIS-TF	E601:ALL	4	Y	
W-854-04	PTWM	Tmss	A	CMP	E300.0:NO3	2	Y	
W-854-04	PTWM	Tmss	S	CMP	E300.0:PERC	2	Y	
W-854-04	PTWM	Tmss	S	CMP	E300.0:PERC	4	N	Inoperable pump.
W-854-04	PTWM	Tmss	S	CMP	E601:ALL	2	Y	
W-854-04	PTWM	Tmss	S	CMP	E601:ALL	4	N	Inoperable pump.
W-854-05	PTWM	Qls-Tnbs1	A	CMP	E300.0:NO3	2	Y	
W-854-05	PTWM	Qls-Tnbs1	S	CMP	E300.0:PERC	2	Y	
W-854-05	PTWM	Qls-Tnbs1	S	CMP	E300.0:PERC	4	Y	
W-854-05	PTWM	Qls-Tnbs1	S	CMP	E601:ALL	2	Y	
W-854-05	PTWM	Qls-Tnbs1	S	CMP	E601:ALL	4	Y	
W-854-06	PTWM	Tnbs1-Tnsc0	A	CMP	E300.0:NO3	2	Y	
W-854-06	PTWM	Tnbs1-Tnsc0	S	CMP	E300.0:PERC	2	Y	
W-854-06	PTWM	Tnbs1-Tnsc0	S	CMP	E300.0:PERC	4	Y	
W-854-06	PTWM	Tnbs1-Tnsc0	S	CMP	E601:ALL	2	Y	
W-854-06	PTWM	Tnbs1-Tnsc0	S	CMP	E601:ALL	4	Y	
W-854-07	PTWM	Tnbs1-Tnsc0	A	CMP	E300.0:NO3	2	Y	
W-854-07	PTWM	Tnbs1-Tnsc0	S	CMP	E300.0:PERC	2	Y	
W-854-07	PTWM	Tnbs1-Tnsc0	S	CMP	E300.0:PERC	4	Y	
W-854-07	PTWM	Tnbs1-Tnsc0	S	CMP	E601:ALL	2	Y	
W-854-07	PTWM	Tnbs1-Tnsc0	S	CMP	E601:ALL	4	Y	
W-854-08	PTWM	Tnbs1-Tnsc0	A	CMP	E300.0:NO3	2	N	Insufficient water.
W-854-08	PTWM	Tnbs1-Tnsc0	S	CMP	E300.0:PERC	2	N	Insufficient water.
W-854-08	PTWM	Tnbs1-Tnsc0	S	CMP	E300.0:PERC	4	N	Insufficient water.
W-854-08	PTWM	Tnbs1-Tnsc0	S	CMP	E601:ALL	2	N	Insufficient water.
W-854-08	PTWM	Tnbs1-Tnsc0	S	CMP	E601:ALL	4	N	Insufficient water.
W-854-09	PTWM	Tnbs1-Tnsc0	A	CMP	E300.0:NO3	2	N	Insufficient water.
W-854-09	PTWM	Tnbs1-Tnsc0	S	CMP	E300.0:PERC	2	N	Insufficient water.
W-854-09	PTWM	Tnbs1-Tnsc0	S	CMP	E300.0:PERC	4	N	Insufficient water.
W-854-09	PTWM	Tnbs1-Tnsc0	S	CMP	E601:ALL	2	N	Insufficient water.
W-854-09	PTWM	Tnbs1-Tnsc0	S	CMP	E601:ALL	4	N	Insufficient water.
W-854-10	PTWM	Qls-Tnbs1	A	CMP	E300.0:NO3	2	Y	
W-854-10	PTWM	Qls-Tnbs1	S	CMP	E300.0:PERC	2	Y	
W-854-10	PTWM	Qls-Tnbs1	S	CMP	E300.0:PERC	4	Y	
W-854-10	PTWM	Qls-Tnbs1	S	CMP	E601:ALL	2	Y	
W-854-10	PTWM	Qls-Tnbs1	S	CMP	E601:ALL	4	Y	
W-854-11	PTWM	Tnbs1-Tnsc0	A	CMP	E300.0:NO3	2	N	Dry.
W-854-11	PTWM	Tnbs1-Tnsc0	S	CMP	E300.0:PERC	2	N	Dry.
W-854-11	PTWM	Tnbs1-Tnsc0	S	CMP	E300.0:PERC	4	N	Dry.
W-854-11	PTWM	Tnbs1-Tnsc0	S	CMP	E601:ALL	2	N	Dry.
W-854-11	PTWM	Tnbs1-Tnsc0	S	CMP	E601:ALL	4	N	Dry.
W-854-12	PTWM	Tmss	A	CMP	E300.0:NO3	2	N	Insufficient water.

Table 2.6-7. Building 854 Operable Unit ground and surface water sampling and analysis plan.

Sample Location	Location Type	Hydro Unit	Sampling Frequency	Sample Driver	Requested Analysis	Sampling Quarter	Sampled Y/N	Comment
W-854-12	PTWM	Tmss	S	CMP	E300.0:PERC	2	N	Insufficient water.
W-854-12	PTWM	Tmss	S	CMP	E300.0:PERC	4	N	Insufficient water.
W-854-12	PTWM	Tmss	S	CMP	E601:ALL	2	N	Insufficient water.
W-854-12	PTWM	Tmss	S	CMP	E601:ALL	4	N	Insufficient water.
W-854-13	PTWM	Tnbs1-Tnsc0	A	CMP	E300.0:NO3	2	Y	
W-854-13	PTWM	Tnbs1-Tnsc0	S	CMP	E300.0:PERC	2	Y	
W-854-13	PTWM	Tnbs1-Tnsc0	S	CMP	E300.0:PERC	4	Y	
W-854-13	PTWM	Tnbs1-Tnsc0	S	CMP	E601:ALL	2	Y	
W-854-13	PTWM	Tnbs1-Tnsc0	S	CMP	E601:ALL	4	Y	
W-854-14	PTWM	Qls-Tnbs1	A	CMP	E300.0:NO3	2	Y	
W-854-14	PTWM	Qls-Tnbs1	S	CMP	E300.0:PERC	2	Y	
W-854-14	PTWM	Qls-Tnbs1	S	CMP	E300.0:PERC	4	Y	
W-854-14	PTWM	Qls-Tnbs1	S	CMP	E601:ALL	2	Y	
W-854-14	PTWM	Qls-Tnbs1	S	CMP	E601:ALL	4	Y	
W-854-15	PTWM	Qls-Tnbs1	A	CMP	E300.0:NO3	2	Y	
W-854-15	PTWM	Qls-Tnbs1	S	CMP	E300.0:PERC	2	Y	
W-854-15	PTWM	Qls-Tnbs1	S	CMP	E300.0:PERC	4	Y	
W-854-15	PTWM	Qls-Tnbs1	S	CMP	E601:ALL	2	Y	
W-854-15	PTWM	Qls-Tnbs1	S	CMP	E601:ALL	4	Y	
W-854-17	PTWM	Tnbs1-Tnsc0	A	CMP	E300.0:NO3	2	Y	
W-854-17	PTWM	Tnbs1-Tnsc0	S	CMP	E300.0:PERC	2	Y	
W-854-17	PTWM	Tnbs1-Tnsc0	S	CMP	E300.0:PERC	4	Y	
W-854-17	PTWM	Tnbs1-Tnsc0	S	CMP	E601:ALL	2	Y	
W-854-17	PTWM	Tnbs1-Tnsc0	S	CMP	E601:ALL	4	Y	
W-854-18A	PTMW	Tnbs1-Tnsc0	A	CMP	E300.0:NO3	2	Y	
W-854-18A	PTMW	Tnbs1-Tnsc0	S	CMP	E300.0:PERC	2	Y	
W-854-18A	PTMW	Tnbs1-Tnsc0	S	CMP	E300.0:PERC	4	Y	
W-854-18A	PTMW	Tnbs1-Tnsc0	S	CMP	E601:ALL	2	Y	
W-854-18A	PTMW	Tnbs1-Tnsc0	S	CMP	E601:ALL	4	Y	
W-854-19	PTWM	Qls-Tnbs1	O	CMP	E300.0:NO3	2	N	To be sampled in 2015.
W-854-19	PTWM	Qls-Tnbs1	O	CMP	E300.0:PERC	2	N	To be sampled in 2015.
W-854-19	PTWM	Qls-Tnbs1	O	CMP	E601:ALL	2	N	To be sampled in 2015.
W-854-45	PTWM	Tnbs1-Tnsc0	A	CMP	E300.0:NO3	2	Y	
W-854-45	PTWM	Tnbs1-Tnsc0	S	CMP	E300.0:PERC	2	Y	
W-854-45	PTWM	Tnbs1-Tnsc0	S	CMP	E300.0:PERC	4	Y	
W-854-45	PTWM	Tnbs1-Tnsc0	S	CMP	E601:ALL	2	Y	
W-854-45	PTWM	Tnbs1-Tnsc0	S	CMP	E601:ALL	4	Y	
W-854-1701	PTWM	Tnsc0	A	CMP	E300.0:NO3	2	Y	
W-854-1701	PTWM	Tnsc0	S	CMP	E300.0:PERC	2	Y	
W-854-1701	PTWM	Tnsc0	S	CMP	E300.0:PERC	4	Y	
W-854-1701	PTWM	Tnsc0	S	CMP	E601:ALL	2	Y	
W-854-1701	PTWM	Tnsc0	S	CMP	E601:ALL	4	Y	
W-854-1706	PTWM	Qls-Tnbs1	A	CMP	E300.0:NO3	2	N	Insufficient water.
W-854-1706	PTWM	Qls-Tnbs1	S	CMP	E300.0:PERC	2	N	Insufficient water.
W-854-1706	PTWM	Qls-Tnbs1	S	CMP	E300.0:PERC	4	N	Dry.
W-854-1706	PTWM	Qls-Tnbs1	S	CMP	E601:ALL	2	N	Insufficient water.
W-854-1706	PTWM	Qls-Tnbs1	S	CMP	E601:ALL	4	N	Dry.
W-854-1707	PTWM	Tnbs1-Tnsc0	A	CMP	E300.0:NO3	2	Y	
W-854-1707	PTWM	Tnbs1-Tnsc0	S	CMP	E300.0:PERC	2	Y	
W-854-1707	PTWM	Tnbs1-Tnsc0	S	CMP	E300.0:PERC	4	Y	
W-854-1707	PTWM	Tnbs1-Tnsc0	S	CMP	E601:ALL	2	Y	
W-854-1707	PTWM	Tnbs1-Tnsc0	S	CMP	E601:ALL	4	Y	
W-854-1731	PTWM	Tnsc0	A	CMP	E300.0:NO3	2	Y	
W-854-1731	PTWM	Tnsc0	S	CMP	E300.0:PERC	2	Y	
W-854-1731	PTWM	Tnsc0	S	CMP	E300.0:PERC	4	Y	
W-854-1731	PTWM	Tnsc0	S	CMP	E601:ALL	2	Y	
W-854-1731	PTWM	Tnsc0	S	CMP	E601:ALL	4	Y	
W-854-1822	PTWM	Tnbs1-Tnsc0	A	CMP	E300.0:NO3	2	Y	
W-854-1822	PTWM	Tnbs1-Tnsc0	S	CMP	E300.0:PERC	2	Y	
W-854-1822	PTWM	Tnbs1-Tnsc0	S	CMP	E300.0:PERC	4	Y	
W-854-1822	PTWM	Tnbs1-Tnsc0	S	CMP	E601:ALL	2	Y	
W-854-1822	PTWM	Tnbs1-Tnsc0	S	CMP	E601:ALL	4	Y	
W-854-1823	PTWM	Tnbs1-Tnsc0	A	CMP	E300.0:NO3	2	Y	
W-854-1823	PTWM	Tnbs1-Tnsc0	S	CMP	E300.0:PERC	2	Y	

Table 2.6-7. Building 854 Operable Unit ground and surface water sampling and analysis plan.

Sample Location	Location Type	Hydro Unit	Sampling Frequency	Sample Driver	Requested Analysis	Sampling Quarter	Sampled Y/N	Comment
W-854-1823	PTWM	Tnbs1-Tnsc0	S	CMP	E300.0:PERC	4	Y	
W-854-1823	PTWM	Tnbs1-Tnsc0	S	CMP	E601:ALL	2	Y	
W-854-1823	PTWM	Tnbs1-Tnsc0	S	CMP	E601:ALL	4	Y	
W-854-1902	PTWM	Tnbs1-Tnsc0	A	CMP	E300.0:NO3	2	N	Dry.
W-854-1902	PTWM	Tnbs1-Tnsc0	S	CMP	E300.0:PERC	2	N	Dry.
W-854-1902	PTWM	Tnbs1-Tnsc0	S	CMP	E300.0:PERC	4	N	Dry.
W-854-1902	PTWM	Tnbs1-Tnsc0	S	CMP	E601:ALL	2	N	Dry.
W-854-1902	PTWM	Tnbs1-Tnsc0	S	CMP	E601:ALL	4	N	Dry.
W-854-2115	PTWM	Tnbs1-Tnsc0	A	CMP	E300.0:NO3	2	Y	
W-854-2115	PTWM	Tnbs1-Tnsc0	S	CMP	E300.0:PERC	2	Y	
W-854-2115	PTWM	Tnbs1-Tnsc0	S	CMP	E300.0:PERC	4	Y	
W-854-2115	PTWM	Tnbs1-Tnsc0	S	CMP	E601:ALL	2	Y	
W-854-2115	PTWM	Tnbs1-Tnsc0	S	CMP	E601:ALL	4	Y	
W-854-2139	EW	Tnbs1-Tnsc0	Q	DIS-TF	E300.0:NO3	1	Y	
W-854-2139	EW	Tnbs1-Tnsc0	Q	DIS-TF	E300.0:NO3	2	Y	
W-854-2139	EW	Tnbs1-Tnsc0	Q	DIS-TF	E300.0:NO3	3	Y	
W-854-2139	EW	Tnbs1-Tnsc0	Q	DIS-TF	E300.0:NO3	4	Y	
W-854-2139	EW	Tnbs1-Tnsc0	Q	DIS-TF	E300.0:PERC	1	Y	
W-854-2139	EW	Tnbs1-Tnsc0	Q	DIS-TF	E300.0:PERC	2	Y	
W-854-2139	EW	Tnbs1-Tnsc0	Q	DIS-TF	E300.0:PERC	3	Y	
W-854-2139	EW	Tnbs1-Tnsc0	Q	DIS-TF	E300.0:PERC	4	Y	
W-854-2139	EW	Tnbs1-Tnsc0	Q	DIS-TF	E601:ALL	1	Y	
W-854-2139	EW	Tnbs1-Tnsc0	Q	DIS-TF	E601:ALL	2	Y	
W-854-2139	EW	Tnbs1-Tnsc0	Q	DIS-TF	E601:ALL	3	Y	
W-854-2139	EW	Tnbs1-Tnsc0	Q	DIS-TF	E601:ALL	4	Y	
W-854-2218	EW	Tnbs1-Tnsc0	A	CMP-TF	E300.0:NO3	2	Y	
W-854-2218	EW	Tnbs1-Tnsc0	S	CMP-TF	E300.0:PERC	2	Y	
W-854-2218	EW	Tnbs1-Tnsc0	S	DIS-TF	E300.0:PERC	3	Y	
W-854-2218	EW	Tnbs1-Tnsc0	S	CMP-TF	E300.0:PERC	4	Y	
W-854-2218	EW	Tnbs1-Tnsc0	S	CMP-TF	E601:ALL	2	Y	
W-854-2218	EW	Tnbs1-Tnsc0	S	DIS-TF	E601:ALL	3	Y	
W-854-2218	EW	Tnbs1-Tnsc0	S	CMP-TF	E601:ALL	4	Y	
W-854-2611	PTMW	Tnbs1/Tnsc0	A	CMP	E300.0:NO3	2	Y	
W-854-2611	PTMW	Tnbs1/Tnsc0	S	CMP	E300.0:PERC	2	Y	
W-854-2611	PTMW	Tnbs1/Tnsc0	S	CMP	E300.0:PERC	4	Y	
W-854-2611	PTMW	Tnbs1/Tnsc0	S	CMP	E601:ALL	2	Y	
W-854-2611	PTMW	Tnbs1/Tnsc0	S	CMP	E601:ALL	4	Y	
W-854-F2	PTWM	Qls-Tnbs1	O	CMP	E300.0:NO3	2	N	To be sampled in 2015.
W-854-F2	PTWM	Qls-Tnbs1	O	CMP	E300.0:PERC	2	N	To be sampled in 2015.
W-854-F2	PTWM	Qls-Tnbs1	O	CMP	E601:ALL	2	N	To be sampled in 2015.
SPRING10	SPR	Tnbs1-Tnsc0	A	CMP	E300.0:NO3	2	N	Dry.
SPRING10	SPR	Tnbs1-Tnsc0	S	CMP	E300.0:PERC	2	N	Dry.
SPRING10	SPR	Tnbs1-Tnsc0	S	CMP	E300.0:PERC	4	N	Dry.
SPRING10	SPR	Tnbs1-Tnsc0	S	CMP	E601:ALL	2	N	Dry.
SPRING10	SPR	Tnbs1-Tnsc0	S	CMP	E601:ALL	4	N	Dry.
SPRING11	SPR	Tnbs1-Tnsc0	A	CMP	E300.0:NO3	2	Y	
SPRING11	SPR	Tnbs1-Tnsc0	S	CMP	E300.0:PERC	2	Y	
SPRING11	SPR	Tnbs1-Tnsc0	S	CMP	E300.0:PERC	4	Y	
SPRING11	SPR	Tnbs1-Tnsc0	S	CMP	E601:ALL	2	Y	
SPRING11	SPR	Tnbs1-Tnsc0	S	CMP	E601:ALL	4	Y	

Table 2.6-8. Building 854-Source (854-SRC) mass removed, July 1, 2014 through December 31, 2014.

Treatment facility	Month	SVTS VOC mass removed (g)	GWTS VOC mass removed (g)	Perchlorate mass removed (g)	Nitrate mass removed (kg)	RDX mass removed (g)	TBOS/TKEBS mass removed (g)
854-SRC	July	56	14	0.51	25	NA	NA
	August	39	8.6	0.50	11	NA	NA
	September	60	15	0.32	32	NA	NA
	October	0	6.9	0.47	8.7	NA	NA
	November	0	3.6	0.31	3.3	NA	NA
	December	0	1.8	0.16	1.6	NA	NA
Total		160	49	2.3	81	NA	NA

Table 2.6-9. Building 854-Proximal (854-PRX) mass removed, July 1, 2014 through December 31, 2014.

Treatment facility	Month	SVTS VOC mass removed (g)	GWTS VOC mass removed (g)	Perchlorate mass removed (g)	Nitrate mass removed (kg)	RDX mass removed (g)	TBOS/TKEBS mass removed (g)
854-PRX	October	NA	2.7	1.5	7.3	NA	NA
	November	NA	9.7	5.3	28	NA	NA
	December	NA	8.3	4.5	21	NA	NA
Total		NA	21	11	56	NA	NA

Table 2.6-10. Building 854-Distal (854-DIS) mass removed, July 1, 2014 through December 31, 2014.

Treatment facility	Month	SVTS VOC mass removed (g)	GWTS VOC mass removed (g)	Perchlorate mass removed (g)	Nitrate mass removed (kg)	RDX mass removed (g)	TBOS/TKEBS mass removed (g)
854-DIS	July	NA	0.015	0.0023	0.0099	NA	NA
	August	NA	0.027	0.0031	0.012	NA	NA
	September	NA	0.11	0.013	0.051	NA	NA
	October	NA	0.038	0	0.0055	NA	NA
	November	NA	0.048	0	0.0070	NA	NA
	December	NA	0.026	0	0.0038	NA	NA
Total		NA	0.27	0.019	0.089	NA	NA

Table 2.7-1. Building 832-Source (832-SRC) volumes of ground water and soil vapor extracted and discharged, July 1, 2014 through December 31, 2014.

Treatment facility	Month	SVTS Operational hours	GWTS Operational hours	Volume of vapor extracted (thousands of cf)	Volume of ground water discharged (gal)
832-SRC	July	672	672	181	1,638
	August	648	648	157	859
	September	840	840	264	1,781
	October	600	600	177	1,289
	November	0	0	0	0
	December	0	0	0	0
Total		2,760	2,760	779	5,567

Table 2.7-2. Building 830-Source (830-SRC) volumes of ground water and soil vapor extracted and discharged, July 1, 2014 through December 31, 2014.

Treatment facility	Month	SVTS Operational hours	GWTS Operational hours	Volume of vapor extracted (thousands of cf)	Volume of ground water discharged (gal)
830-SRC	July	642	323	1,219	155,214
	August	334	273	661	120,028
	September	0	0	0	0
	October	0	0	0	0
	November	0	0	0	0
	December	0	0	0	0
Total		976	596	1,880	275,242

Table 2.7-3. Building 830-Distal South (830-DISS) volumes of ground water and soil vapor extracted and discharged, July 1, 2014 through December 31, 2014.

Treatment facility	Month	SVTS Operational hours	GWTS Operational hours	Volume of vapor extracted (thousands of cf)	Volume of ground water discharged (gal)
830-DISS	July	NA	384	NA	40,656
	August	NA	672	NA	150,501
	September	NA	696	NA	167,961
	October	NA	432	NA	86,733
	November	NA	648	NA	144,006
	December	NA	288	NA	71,372
Total		NA	3,120	NA	661,229

Table 2.7-4. Building 832 Canyon Operable Unit volatile organic compounds (VOCs) in ground water extraction and treatment system influent and effluent.

Location	Date	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Carbon tetra-chloride (µg/L)	Chloro-form (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	1,1,2-TCA (µg/L)	Freon 11 (µg/L)	Freon 113 (µg/L)	Vinyl chloride (µg/L)
Building 830-Distal South [a]															
Building 830-Source [b, c]															
830-SRC-I	7/7/14	990 D	1.2	0.77	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
830-SRC-I	7/7/14 DUP	1,100 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D
830-SRC-I2	7/7/14	13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
830-SRC-I2	7/7/14 DUP	15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
830-SRC-E	7/7/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
830-SRC-E	8/4/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Building 832-Source [d]															
832-SRC-I	7/7/14	58	<0.5	2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
832-SRC-I	7/7/14 DUP	50	<0.5	1.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
832-SRC-I	10/6/14	82 D	<0.5	9.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
832-SRC-E	7/7/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
832-SRC-E	8/4/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
832-SRC-E	9/2/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
832-SRC-E	10/6/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Notes:

[a] No influent or effluent monitoring conducted due to VOC treatment at CGSA GWTS.

[b] GWTS has a split influent stream requiring two separate influent sample locations (-I & -I2). Low flow wells that also contain perchlorate are plumbed to 830-SRC-I, while the high flow wells free of perchlorate are plumbed to 830-SRC-I2.

[c] No compliance monitoring cinducted after August due to system shut down upgrades.

[d] No compliance monitoring in November or December due to system shut down for maintenance and freeze protection.

See Acronyms and Abbreviations in the Tables section of this report for acronym and abbreviation definitions.

Table 2.7-4 (Con't). Analyte detected but not reported in main table.

Location	Date	Detection frequency	1,2-Dichloroethene (total) (µg/L)
Building 830-Distal South [a]			
Building 830-Source [b]			
830-SRC-I	7/7/14	0 of 18	-
830-SRC-I	7/7/14 DUP	0 of 18	-
830-SRC-I2	7/7/14	0 of 18	-
830-SRC-I2	7/7/14 DUP	0 of 18	-
830-SRC-E	7/7/14	0 of 18	-
830-SRC-E	8/4/14	0 of 18	-
Building 832-Source [c]			
832-SRC-I	7/7/14	1 of 18	2
832-SRC-I	7/7/14 DUP	1 of 18	1.4
832-SRC-I	10/6/14	1 of 18	9.1
832-SRC-E	7/7/14	0 of 18	-
832-SRC-E	8/4/14	0 of 18	-
832-SRC-E	9/2/14	0 of 18	-
832-SRC-E	10/6/14	0 of 18	-

Notes:

[a] **No influent or effluent monitoring conducted due to VOC treatment at CGSA GWTS.**

[b] **GWTS has a split influent stream requiring two separate influent sample locations (-I & -I2). Low flow wells that also contain perchlorate are plumbed to 830-SRC-I, while the high flow wells free of perchlorate are plumbed to 830-SRC-I2.**

[c] **No compliance monitoring in November or December due to system shut down for maintenance and freeze protection.**

See Acronyms and Abbreviations in the Tables section of this report for acronym and abbreviation definitions.

Table 2.7-5. Building 832 Canyon Operable Unit perchlorate in ground water extraction and treatment system influent and effluent.

Location	Date	Perchlorate (µg/L)
Building 830-Distal South		
830-DISS-I	7/23/14	<4
830-DISS-I	7/23/14 DUP	<4
830-DISS-I	10/6/14	<4
830-DISS-E	7/23/14	<4
830-DISS-E	8/5/14	<4
830-DISS-E	9/3/14	<4
830-DISS-E	10/6/14	<4
830-DISS-E	11/5/14	<4
830-DISS-E	12/1/14	<4
Building 830-Source[a]		
830-SRC-I	7/7/14	6.7
830-SRC-I	7/7/14 DUP	5.9
830-SRC-E	7/7/14	<4
830-SRC-E	8/4/14	<4
Building 832-Source[b]		
832-SRC-I	7/7/14	7.3
832-SRC-I	7/7/14 DUP	7.5
832-SRC-I	10/6/14	7
832-SRC-E	7/7/14	<4
832-SRC-E	8/4/14	<4
832-SRC-E	9/2/14	<4
832-SRC-E	10/6/14	<4

Notes:

[a] No compliance monitoring cinducted after August due to system shut down upgrades.

[b] No compliance monitoring in November or December due to system shut down for maintenance and freeze protection.

See Acronyms and Abbreviations in the Tables section of this report for acronym and abbreviation definitions.

Table 2.7-6. Building 832 Canyon Operable Unit treatment facility sampling and analysis plan.

Sample location	Sample identification	Parameter	Frequency
832-SRC GWTS			
Influent Port	832-SRC-I	VOCs	Quarterly
		Perchlorate	Quarterly
		pH	Quarterly
Effluent Port	832-SRC-E	VOCs	Monthly
		Perchlorate	Monthly
		PH	Monthly
832-SRC SVTS			
Influent Port	832-SRC-VI	No Monitoring Requirements	
Effluent Port	832-SRC-VE	VOCs	Weekly[a]
Intermediate GAC	832-SRC-VCF3I	VOCs	Weekly[a]
830-SRC GWTS			
Influent Port	830-SRC-I	VOCs	Quarterly
		Perchlorate	Quarterly
		PH	Quarterly
Effluent Port	830-SRC-E	VOCs	Monthly
		Perchlorate	Monthly
		PH	Monthly
830-SRC SVTS			
Influent Port	830-SRC-VI	No Monitoring Requirements	
Effluent Port	830-SRC-VE	VOCs	Weekly[a]
Intermediate GAC	830-SRC-VCF3I	VOCs	Weekly[a]
830-DISS GWTS			
Influent Port	830-DISS-I	Perchlorate	Quarterly
		pH	Quarterly
Effluent Port	830-DISS-E	Perchlorate	Monthly
		pH	Monthly

Notes:

[a] Weekly monitoring for VOCs will consist of the use of a flame-ionization detector, photo-ionization detector, or other District-approved VOC detection device.

One duplicate and one blank (given fictitious labels) shall be taken for every 12 samples.

See Acronyms and Abbreviations in the Tables section of this report for acronym and abbreviation definitions.

Table 2.7-7. Building 832 Canyon Operable Unit ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
SPRING3	SPR	Qal/WBR	A	CMP	E300.0:NO3	1	N	Unsafe conditions.
SPRING3	SPR	Qal/WBR	A	CMP	E300.0:PERC	1	N	Unsafe conditions.
SPRING3	SPR	Qal/WBR	S	CMP	E601:ALL	1	N	Unsafe conditions.
SPRING3	SPR	Qal/WBR	S	CMP	E601:ALL	3	N	Unsafe conditions.
SPRING4	SPR	Tpsg-Tps	O	CMP	E300.0:NO3	1	N	To be sampled in 2015.
SPRING4	SPR	Tpsg-Tps	O	CMP	E300.0:PERC	1	N	To be sampled in 2015.
SPRING4	SPR	Tpsg-Tps	O	CMP	E601:ALL	1	N	To be sampled in 2015.
SVI-830-031	PTMW	Qal/WBR	A	CMP	E300.0:NO3	1	N	Insufficient water.
SVI-830-031	PTMW	Qal/WBR	A	CMP	E300.0:PERC	1	N	Insufficient water.
SVI-830-031	PTMW	Qal/WBR	S	CMP	E601:ALL	1	N	Insufficient water.
SVI-830-031	PTMW	Qal/WBR	S	CMP	E601:ALL	3	N	Insufficient water.
SVI-830-032	PTMW	Qal/WBR	A	CMP	E300.0:NO3	1	N	Insufficient water.
SVI-830-032	PTMW	Qal/WBR	A	CMP	E300.0:PERC	1	N	Insufficient water.
SVI-830-032	PTMW	Qal/WBR	S	CMP	E601:ALL	1	N	Insufficient water.
SVI-830-032	PTMW	Qal/WBR	S	CMP	E601:ALL	3	N	Insufficient water.
SVI-830-033	PTMW	Qal/WBR	A	CMP	E300.0:NO3	1	N	Insufficient water.
SVI-830-033	PTMW	Qal/WBR	A	CMP	E300.0:PERC	1	N	Insufficient water.
SVI-830-033	PTMW	Qal/WBR	S	CMP	E601:ALL	1	N	Insufficient water.
SVI-830-033	PTMW	Qal/WBR	S	CMP	E601:ALL	3	N	Insufficient water.
SVI-830-035	PTMW	Qal/WBR	A	CMP	E300.0:NO3	1	Y	
SVI-830-035	PTMW	Qal/WBR	A	CMP	E300.0:PERC	1	Y	
SVI-830-035	PTMW	Qal/WBR	S	CMP	E601:ALL	1	Y	
SVI-830-035	PTMW	Qal/WBR	S	CMP	E601:ALL	3	Y	
W-830-04A	PTMW	Tnsc1b	A	CMP	E300.0:NO3	1	Y	
W-830-04A	PTMW	Tnsc1b	A	CMP	E300.0:PERC	1	Y	
W-830-04A	PTMW	Tnsc1b	S	CMP	E601:ALL	1	Y	
W-830-04A	PTMW	Tnsc1b	S	CMP	E601:ALL	3	Y	
W-830-05	PTMW	Tnsc1c	A	CMP	E300.0:NO3	1	Y	
W-830-05	PTMW	Tnsc1c	A	CMP	E300.0:PERC	1	Y	
W-830-05	PTMW	Tnsc1c	S	CMP	E601:ALL	1	Y	
W-830-05	PTMW	Tnsc1c	S	CMP	E601:ALL	3	Y	
W-830-07	PTMW	Qal/WBR	A	CMP	E300.0:NO3	1	N	Dry.
W-830-07	PTMW	Qal/WBR	A	CMP	E300.0:PERC	1	N	Dry.
W-830-07	PTMW	Qal/WBR	S	CMP	E601:ALL	1	N	Dry.
W-830-07	PTMW	Qal/WBR	S	CMP	E601:ALL	3	N	Dry.
W-830-09	PTMW	UTnbs1	O	CMP	E300.0:NO3	1	N	To be sampled in 2015.
W-830-09	PTMW	UTnbs1	O	CMP	E300.0:PERC	1	N	To be sampled in 2015.
W-830-09	PTMW	UTnbs1	S	CMP	E601:ALL	1	Y	
W-830-09	PTMW	UTnbs1	S	CMP	E601:ALL	3	N	Insufficient water.
W-830-10	PTMW	Tnsc1b	A	CMP	E300.0:NO3	1	Y	
W-830-10	PTMW	Tnsc1b	A	CMP	E300.0:PERC	1	Y	
W-830-10	PTMW	Tnsc1b	S	CMP	E601:ALL	1	Y	
W-830-10	PTMW	Tnsc1b	S	CMP	E601:ALL	3	N	Inoperable pump.
W-830-11	PTMW	Tnsc1c	A	CMP	E300.0:NO3	1	Y	
W-830-11	PTMW	Tnsc1c	A	CMP	E300.0:PERC	1	Y	
W-830-11	PTMW	Tnsc1c	S	CMP	E601:ALL	1	Y	
W-830-11	PTMW	Tnsc1c	S	CMP	E601:ALL	3	Y	
W-830-12	GW	LTnbs1	S	CMP	E300.0:NO3	1	Y	
W-830-12	GW	LTnbs1	S	CMP	E300.0:NO3	3	N	Inoperable pump.
W-830-12	GW	LTnbs1	S	CMP	E300.0:PERC	1	Y	
W-830-12	GW	LTnbs1	S	CMP	E300.0:PERC	3	N	Inoperable pump.
W-830-12	GW	LTnbs1	Q	CMP	E601:ALL	1	Y	
W-830-12	GW	LTnbs1	Q	CMP	E601:ALL	2	Y	
W-830-12	GW	LTnbs1	Q	CMP	E601:ALL	3	N	Inoperable pump.
W-830-12	GW	LTnbs1	Q	CMP	E601:ALL	4	Y	
W-830-13	PTMW	Tnbs2	A	CMP	E300.0:NO3	1	Y	
W-830-13	PTMW	Tnbs2	A	CMP	E300.0:PERC	1	Y	
W-830-13	PTMW	Tnbs2	S	CMP	E601:ALL	1	Y	

Table 2.7-7. Building 832 Canyon Operable Unit ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-830-13	PTMW	Tnbs2	S	CMP	E601:ALL	3	Y	
W-830-13	PTMW	Tnbs2	E	CMP	E8330LOW:ALL	1	Y	
W-830-14	PTMW	Tnsc1b	E	CMP	E300.0:NO3	1	Y	
W-830-14	PTMW	Tnsc1b	E	CMP	E300.0:PERC	1	Y	
W-830-14	PTMW	Tnsc1b	S	CMP	E601:ALL	1	Y	
W-830-14	PTMW	Tnsc1b	S	CMP	E601:ALL	3	N	Inoperable pump.
W-830-15	GW	UTnbs1	S	CMP	E300.0:NO3	1	Y	
W-830-15	GW	UTnbs1	S	CMP	E300.0:NO3	3	Y	
W-830-15	GW	UTnbs1	S	CMP	E300.0:PERC	1	Y	
W-830-15	GW	UTnbs1	S	CMP	E300.0:PERC	3	Y	
W-830-15	GW	UTnbs1	Q	CMP	E601:ALL	1	Y	
W-830-15	GW	UTnbs1	Q	CMP	E601:ALL	2	Y	
W-830-15	GW	UTnbs1	Q	CMP	E601:ALL	3	Y	
W-830-15	GW	UTnbs1	Q	CMP	E601:ALL	4	Y	
W-830-16	PTMW	Tnsc1b	O	CMP	E300.0:NO3	1	N	To be sampled in 2015.
W-830-16	PTMW	Tnsc1b	O	CMP	E300.0:PERC	1	N	To be sampled in 2015.
W-830-16	PTMW	Tnsc1b	S	CMP	E601:ALL	1	Y	
W-830-16	PTMW	Tnsc1b	S	CMP	E601:ALL	3	N	Inoperable pump.
W-830-17	PTMW	Tnbs2	A	CMP	E300.0:NO3	1	Y	
W-830-17	PTMW	Tnbs2	A	CMP	E300.0:PERC	1	Y	
W-830-17	PTMW	Tnbs2	S	CMP	E601:ALL	1	Y	
W-830-17	PTMW	Tnbs2	S	CMP	E601:ALL	3	Y	
W-830-18	PTMW	UTnbs1	E	CMP	E300.0:NO3	1	Y	
W-830-18	PTMW	UTnbs1	E	CMP	E300.0:PERC	1	Y	
W-830-18	PTMW	UTnbs1	S	CMP	E601:ALL	1	Y	
W-830-18	PTMW	UTnbs1	S	CMP	E601:ALL	3	N	Inoperable pump.
W-830-19	EW	Tnsc1b	A	CMP-TF	E300.0:NO3	1	Y	
W-830-19	EW	Tnsc1b	A	CMP-TF	E300.0:PERC	1	Y	
W-830-19	EW	Tnsc1b	S	CMP-TF	E601:ALL	1	Y	
W-830-19	EW	Tnsc1b	S	DIS-TF	E601:ALL	2	Y	
W-830-19	EW	Tnsc1b	S	CMP-TF	E601:ALL	3	N	Inoperable pump.
W-830-20	PTMW	UTnbs1	E	CMP	E300.0:NO3	1	Y	
W-830-20	PTMW	UTnbs1	E	CMP	E300.0:PERC	1	Y	
W-830-20	PTMW	UTnbs1	S	CMP	E601:ALL	1	Y	
W-830-20	PTMW	UTnbs1	S	CMP	E601:ALL	3	Y	
W-830-21	PTMW	Tnsc1b	A	CMP	E300.0:NO3	1	Y	
W-830-21	PTMW	Tnsc1b	A	CMP	E300.0:PERC	1	Y	
W-830-21	PTMW	Tnsc1b	S	CMP	E601:ALL	1	Y	
W-830-21	PTMW	Tnsc1b	S	CMP	E601:ALL	3	Y	
W-830-22	PTMW	Tnsc1a	A	CMP	E300.0:NO3	1	Y	
W-830-22	PTMW	Tnsc1a	A	CMP	E300.0:PERC	1	Y	
W-830-22	PTMW	Tnsc1a	S	CMP	E601:ALL	1	Y	
W-830-22	PTMW	Tnsc1a	S	CMP	E601:ALL	3	Y	
W-830-25	PTMW	Tnsc1b	A	CMP	E300.0:NO3	1	N	Dry.
W-830-25	PTMW	Tnsc1b	A	CMP	E300.0:PERC	1	N	Dry.
W-830-25	PTMW	Tnsc1b	S	CMP	E601:ALL	1	N	Dry.
W-830-25	PTMW	Tnsc1b	S	CMP	E601:ALL	3	N	Dry.
W-830-26	PTMW	UTnbs1	E	CMP	E300.0:NO3	1	N	Dry.
W-830-26	PTMW	UTnbs1	E	CMP	E300.0:PERC	1	N	Dry.
W-830-26	PTMW	UTnbs1	S	CMP	E601:ALL	1	N	Dry.
W-830-26	PTMW	UTnbs1	S	CMP	E601:ALL	3	N	Dry.
W-830-27	PTMW	Tnsc1a	A	CMP	E300.0:NO3	1	Y	
W-830-27	PTMW	Tnsc1a	A	CMP	E300.0:PERC	1	Y	
W-830-27	PTMW	Tnsc1a	S	CMP	E601:ALL	1	Y	
W-830-27	PTMW	Tnsc1a	S	CMP	E601:ALL	3	N	Insufficient water.
W-830-28	PTMW	UTnbs1	O	CMP	E300.0:NO3	1	N	To be sampled in 2015.
W-830-28	PTMW	UTnbs1	O	CMP	E300.0:PERC	1	N	To be sampled in 2015.
W-830-28	PTMW	UTnbs1	S	CMP	E601:ALL	1	Y	

Table 2.7-7. Building 832 Canyon Operable Unit ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-830-28	PTMW	UTnbs1	S	CMP	E601:ALL	3	Y	
W-830-29	PTMW	LTnbs1	A	CMP	E300.0:NO3	1	Y	
W-830-29	PTMW	LTnbs1	A	CMP	E300.0:PERC	1	Y	
W-830-29	PTMW	LTnbs1	S	CMP	E601:ALL	1	Y	
W-830-29	PTMW	LTnbs1	S	CMP	E601:ALL	3	Y	
W-830-30	PTMW	Qal/WBR	A	CMP	E300.0:NO3	1	Y	
W-830-30	PTMW	Qal/WBR	A	CMP	E300.0:PERC	1	Y	
W-830-30	PTMW	Qal/WBR	S	CMP	E601:ALL	1	Y	
W-830-30	PTMW	Qal/WBR	S	CMP	E601:ALL	3	Y	
W-830-34	PTMW	Qal/WBR	A	CMP	E300.0:NO3	1	Y	
W-830-34	PTMW	Qal/WBR	A	CMP	E300.0:PERC	1	Y	
W-830-34	PTMW	Qal/WBR	S	CMP	E601:ALL	1	Y	
W-830-34	PTMW	Qal/WBR	S	CMP	E601:ALL	3	Y	
W-830-34	PTMW	Qal/WBR	E	CMP	E8330LOW:ALL	1	Y	
W-830-49	EW	Tnsc1b	A	CMP-TF	E300.0:NO3	1	Y	
W-830-49	EW	Tnsc1b	A	CMP-TF	E300.0:PERC	1	Y	
W-830-49	EW	Tnsc1b	A	DIS-TF	E300.0:PERC	3	Y	
W-830-49	EW	Tnsc1b	S	CMP-TF	E601:ALL	1	Y	
W-830-49	EW	Tnsc1b	S	DIS-TF	E601:ALL	2	Y	
W-830-49	EW	Tnsc1b	S	CMP-TF	E601:ALL	3	Y	
W-830-50	PTMW	Tnsc1b	A	CMP	E300.0:NO3	1	Y	
W-830-50	PTMW	Tnsc1b	O	CMP	E300.0:PERC	1	N	To be sampled in 2015.
W-830-50	PTMW	Tnsc1b	S	CMP	E601:ALL	1	Y	
W-830-50	PTMW	Tnsc1b	S	CMP	E601:ALL	3	Y	
W-830-51	EW	Tnsc1b	A	CMP-TF	E300.0:NO3	1	N	Unit off for freeze protection.
W-830-51	EW	Tnsc1b	A	CMP-TF	E300.0:PERC	1	N	Unit off for freeze protection.
W-830-51	EW	Tnsc1b	A	DIS-TF	E300.0:PERC	3	Y	
W-830-51	EW	Tnsc1b	S	CMP-TF	E601:ALL	1	N	Unit off for freeze protection.
W-830-51	EW	Tnsc1b	S	DIS-TF	E601:ALL	2	Y	
W-830-51	EW	Tnsc1b	S	CMP-TF	E601:ALL	3	Y	
W-830-51	EW	Tnsc1b	S	DIS-TF	E601:ALL	4	Y	
W-830-52	EW	Tnsc1b	A	CMP-TF	E300.0:NO3	1	N	Unit Off for FREEZe protection
W-830-52	EW	Tnsc1b	A	CMP-TF	E300.0:PERC	1	N	Unit Off for FREEZe protection
W-830-52	EW	Tnsc1b	S	CMP-TF	E601:ALL	1	N	Unit off for freeze protection.
W-830-52	EW	Tnsc1b	S	DIS-TF	E601:ALL	2	Y	
W-830-52	EW	Tnsc1b	S	CMP-TF	E601:ALL	3	N	No/low flow.
W-830-53	EW	Tnsc1b	A	CMP-TF	E300.0:NO3	1	N	Unit off for freeze protection.
W-830-53	EW	Tnsc1b	A	CMP-TF	E300.0:PERC	1	N	Unit off for freeze protection.
W-830-53	EW	Tnsc1b	S	CMP-TF	E601:ALL	1	N	Unit off for freeze protection.
W-830-53	EW	Tnsc1b	S	DIS-TF	E601:ALL	2	Y	
W-830-53	EW	Tnsc1b	S	CMP-TF	E601:ALL	3	N	No/low flow.
W-830-54	PTMW	Tnsc1c	O	CMP	E300.0:NO3	1	N	To be sampled in 2015.
W-830-54	PTMW	Tnsc1c	O	CMP	E300.0:PERC	1	N	To be sampled in 2015.
W-830-54	PTMW	Tnsc1c	S	CMP	E601:ALL	1	Y	
W-830-54	PTMW	Tnsc1c	S	CMP	E601:ALL	3	Y	
W-830-55	PTMW	Tnsc1b	A	CMP	E300.0:NO3	1	Y	
W-830-55	PTMW	Tnsc1b	E	CMP	E300.0:PERC	1	Y	
W-830-55	PTMW	Tnsc1b	S	CMP	E601:ALL	1	Y	
W-830-55	PTMW	Tnsc1b	S	CMP	E601:ALL	3	Y	
W-830-56	PTMW	Tnsc1b	A	CMP	E300.0:NO3	1	Y	
W-830-56	PTMW	Tnsc1b	O	CMP	E300.0:PERC	1	N	To be sampled in 2015.
W-830-56	PTMW	Tnsc1b	S	CMP	E601:ALL	1	Y	
W-830-56	PTMW	Tnsc1b	S	CMP	E601:ALL	3	Y	
W-830-57	EW	UTnbs1	A	CMP-TF	E300.0:NO3	1	Y	
W-830-57	EW	UTnbs1	A	CMP-TF	E300.0:PERC	1	Y	
W-830-57	EW	UTnbs1	S	CMP-TF	E601:ALL	1	Y	
W-830-57	EW	UTnbs1	S	DIS-TF	E601:ALL	2	Y	
W-830-57	EW	UTnbs1	S	CMP-TF	E601:ALL	3	Y	

Table 2.7-7. Building 832 Canyon Operable Unit ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-830-58	PTMW	Tnsc1b	A	CMP	E300.0:NO3	1	Y	
W-830-58	PTMW	Tnsc1b	A	CMP	E300.0:PERC	1	Y	
W-830-58	PTMW	Tnsc1b	S	CMP	E601:ALL	1	Y	
W-830-58	PTMW	Tnsc1b	S	CMP	E601:ALL	3	Y	
W-830-59	EW	Tnsc1b	A	CMP-TF	E300.0:NO3	1	Y	
W-830-59	EW	Tnsc1b	A	CMP-TF	E300.0:PERC	1	Y	
W-830-59	EW	Tnsc1b	A	DIS-TF	E300.0:PERC	3	Y	
W-830-59	EW	Tnsc1b	S	CMP-TF	E601:ALL	1	Y	
W-830-59	EW	Tnsc1b	S	DIS-TF	E601:ALL	2	Y	
W-830-59	EW	Tnsc1b	S	CMP-TF	E601:ALL	3	Y	
W-830-60	EW	UTnbs1	A	CMP-TF	E300.0:NO3	1	Y	
W-830-60	EW	UTnbs1	A	CMP-TF	E300.0:PERC	1	Y	
W-830-60	EW	UTnbs1	S	CMP-TF	E601:ALL	1	Y	
W-830-60	EW	UTnbs1	S	DIS-TF	E601:ALL	2	Y	
W-830-60	EW	UTnbs1	S	CMP-TF	E601:ALL	3	Y	
W-830-1730	GW	Tnsc1b	S	CMP	E300.0:NO3	1	Y	
W-830-1730	GW	Tnsc1b	S	CMP	E300.0:NO3	3	N	Inoperable pump.
W-830-1730	GW	Tnsc1b	S	CMP	E300.0:PERC	1	Y	
W-830-1730	GW	Tnsc1b	S	CMP	E300.0:PERC	3	N	Inoperable pump.
W-830-1730	GW	Tnsc1b	Q	CMP	E601:ALL	1	Y	
W-830-1730	GW	Tnsc1b	Q	CMP	E601:ALL	2	Y	
W-830-1730	GW	Tnsc1b	Q	CMP	E601:ALL	3	N	Inoperable pump.
W-830-1730	GW	Tnsc1b	Q	CMP	E601:ALL	4	Y	
W-830-1807	EW	Qal/WBR-Tnsc1b	A	CMP-TF	E300.0:NO3	1	Y	
W-830-1807	EW	Qal/WBR-Tnsc1b	A	CMP-TF	E300.0:PERC	1	Y	
W-830-1807	EW	Qal/WBR-Tnsc1b	A	DIS-TF	E300.0:PERC	3	Y	
W-830-1807	EW	Qal/WBR-Tnsc1b	S	CMP-TF	E601:ALL	1	Y	
W-830-1807	EW	Qal/WBR-Tnsc1b	S	DIS-TF	E601:ALL	2	Y	
W-830-1807	EW	Qal/WBR-Tnsc1b	S	CMP-TF	E601:ALL	3	Y	
W-830-1829	PTMW	Tnsc1b	A	CMP	E300.0:NO3	1	Y	
W-830-1829	PTMW	Tnsc1b	A	CMP	E300.0:PERC	1	Y	
W-830-1829	PTMW	Tnsc1b	S	CMP	E601:ALL	1	Y	
W-830-1829	PTMW	Tnsc1b	S	CMP	E601:ALL	3	Y	
W-830-1830	PTMW	Tnsc1b	A	CMP	E300.0:NO3	1	Y	
W-830-1830	PTMW	Tnsc1b	A	CMP	E300.0:PERC	1	Y	
W-830-1830	PTMW	Tnsc1b	S	CMP	E601:ALL	1	Y	
W-830-1830	PTMW	Tnsc1b	S	CMP	E601:ALL	3	Y	
W-830-1831	PTMW	Tnsc1b	O	CMP	E300.0:NO3	1	N	To be sampled in 2015.
W-830-1831	PTMW	Tnsc1b	O	CMP	E300.0:PERC	1	N	To be sampled in 2015.
W-830-1831	PTMW	Tnsc1b	S	CMP	E601:ALL	1	Y	
W-830-1831	PTMW	Tnsc1b	S	CMP	E601:ALL	3	Y	
W-830-1832	PTMW	UTnbs1	A	CMP	E300.0:NO3	1	Y	
W-830-1832	PTMW	UTnbs1	A	CMP	E300.0:PERC	1	Y	
W-830-1832	PTMW	UTnbs1	S	CMP	E601:ALL	1	Y	
W-830-1832	PTMW	UTnbs1	S	CMP	E601:ALL	3	Y	
W-830-2213	PTMW	Tnsc1b	A	CMP	E300.0:NO3	1	N	Dry.
W-830-2213	PTMW	Tnsc1b	A	CMP	E300.0:PERC	1	N	Dry.
W-830-2213	PTMW	Tnsc1b	S	CMP	E601:ALL	1	N	Dry.
W-830-2213	PTMW	Tnsc1b	S	CMP	E601:ALL	3	N	Dry.
W-830-2214	EW	Tnsc1a	A	CMP-TF	E300.0:NO3	1	Y	
W-830-2214	EW	Tnsc1a	A	CMP-TF	E300.0:PERC	1	Y	
W-830-2214	EW	Tnsc1a	A	DIS-TF	E300.0:PERC	3	Y	
W-830-2214	EW	Tnsc1a	S	CMP-TF	E601:ALL	1	Y	
W-830-2214	EW	Tnsc1a	S	DIS-TF	E601:ALL	2	Y	
W-830-2214	EW	Tnsc1a	S	CMP-TF	E601:ALL	3	Y	
W-830-2215	EW	UTnbs1	A	CMP-TF	E300.0:NO3	1	Y	
W-830-2215	EW	UTnbs1	A	CMP-TF	E300.0:PERC	1	Y	
W-830-2215	EW	UTnbs1	S	CMP-TF	E601:ALL	1	Y	

Table 2.7-7. Building 832 Canyon Operable Unit ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-830-2215	EW	UTnbs1	S	DIS-TF	E601:ALL	2	Y	
W-830-2215	EW	UTnbs1	S	CMP-TF	E601:ALL	3	Y	
W-830-2216	EW	Tnbs2	A	CMP-TF	E300.0:NO3	1	N	Dry.
W-830-2216	EW	Tnbs2	A	CMP-TF	E300.0:PERC	1	N	Dry.
W-830-2216	EW	Tnbs2	A	DIS-TF	E300.0:PERC	3	Y	
W-830-2216	EW	Tnbs2	S	CMP-TF	E601:ALL	1	N	Dry.
W-830-2216	EW	Tnbs2	S	DIS-TF	E601:ALL	2	Y	
W-830-2216	EW	Tnbs2	S	CMP-TF	E601:ALL	3	Y	
W-830-2216	EW	Tnbs2	S	DIS-TF	E601:ALL	4	Y	
W-830-2216	EW	Tnbs2	O	CMP-TF	E8330LOW:ALL	1	N	To be sampled in 2015.
W-830-2311	PTMW	Tnsc1a	A	CMP	E300.0:NO3	1	Y	
W-830-2311	PTMW	Tnsc1a	A	CMP	E300.0:PERC	1	Y	
W-830-2311	PTMW	Tnsc1a	S	CMP	E601:ALL	1	Y	
W-830-2311	PTMW	Tnsc1a	S	CMP	E601:ALL	3	Y	
W-830-2701	PTMW	Tnsc1a	A	CMP	E300.0:NO3	1	Y	
W-830-2701	PTMW	Tnsc1a	A	CMP	E300.0:PERC	1	Y	
W-830-2701	PTMW	Tnsc1a	S	CMP	E601:ALL	1	Y	
W-830-2701	PTMW	Tnsc1a	S	CMP	E601:ALL	3	Y	
W-830-2806	PTMW	Tnsc1a	S	CMP	E300.0:NO3	1	Y	
W-830-2806	PTMW	Tnsc1a	S	CMP	E300.0:NO3	3	Y	
W-830-2806	PTMW	Tnsc1a	S	CMP	E300.0:PERC	1	Y	
W-830-2806	PTMW	Tnsc1a	S	CMP	E300.0:PERC	3	Y	
W-830-2806	PTMW	Tnsc1a	Q	CMP	E601:ALL	1	Y	
W-830-2806	PTMW	Tnsc1a	Q	CMP	E601:ALL	2	Y	
W-830-2806	PTMW	Tnsc1a	Q	CMP	E601:ALL	3	Y	
W-830-2806	PTMW	Tnsc1a	Q	CMP	E601:ALL	4	N	Unsafe conditions.
W-831-01	PTMW	LTnbs1	O	CMP	E300.0:NO3	1	N	To be sampled in 2015.
W-831-01	PTMW	LTnbs1	O	CMP	E300.0:PERC	1	N	To be sampled in 2015.
W-831-01	PTMW	LTnbs1	O	CMP	E601:ALL	1	N	To be sampled in 2015.
W-832-01	EW	Tnsc1b	A	CMP-TF	E300.0:NO3	1	Y	
W-832-01	EW	Tnsc1b	A	CMP-TF	E300.0:PERC	1	Y	
W-832-01	EW	Tnsc1b	A	DIS-TF	E300.0:PERC	3	Y	
W-832-01	EW	Tnsc1b	S	CMP-TF	E601:ALL	1	Y	
W-832-01	EW	Tnsc1b	S	DIS-TF	E601:ALL	2	Y	
W-832-01	EW	Tnsc1b	S	CMP-TF	E601:ALL	3	Y	
W-832-06	PTMW	Tnsc1a	A	CMP	E300.0:NO3	1	Y	
W-832-06	PTMW	Tnsc1a	A	CMP	E300.0:PERC	1	Y	
W-832-06	PTMW	Tnsc1a	S	CMP	E601:ALL	1	Y	
W-832-06	PTMW	Tnsc1a	S	CMP	E601:ALL	3	Y	
W-832-09	PTMW	LTnbs1	A	CMP	E300.0:NO3	1	N	Inoperable pump.
W-832-09	PTMW	LTnbs1	A	CMP	E300.0:PERC	1	N	Inoperable pump.
W-832-09	PTMW	LTnbs1	S	CMP	E601:ALL	1	N	Inoperable pump.
W-832-09	PTMW	LTnbs1	S	CMP	E601:ALL	3	N	Inoperable pump.
W-832-10	EW	Tnsc1b	A	CMP-TF	E300.0:NO3	1	Y	
W-832-10	EW	Tnsc1b	A	CMP-TF	E300.0:PERC	1	Y	
W-832-10	EW	Tnsc1b	A	DIS-TF	E300.0:PERC	3	Y	
W-832-10	EW	Tnsc1b	S	CMP-TF	E601:ALL	1	Y	
W-832-10	EW	Tnsc1b	S	DIS-TF	E601:ALL	2	Y	
W-832-10	EW	Tnsc1b	S	CMP-TF	E601:ALL	3	Y	
W-832-11	EW	Tnsc1b	A	CMP-TF	E300.0:NO3	1	N	Insufficient water.
W-832-11	EW	Tnsc1b	A	CMP-TF	E300.0:PERC	1	N	Insufficient water.
W-832-11	EW	Tnsc1b	S	CMP-TF	E601:ALL	1	N	Insufficient water.
W-832-11	EW	Tnsc1b	S	DIS-TF	E601:ALL	2	N	Only partial sample event collected.
W-832-11	EW	Tnsc1b	S	CMP-TF	E601:ALL	3	N	Insufficient water.
W-832-12	EW	Qal/WBR-Tnsc1b	A	CMP-TF	E300.0:NO3	1	Y	
W-832-12	EW	Qal/WBR-Tnsc1b	A	CMP-TF	E300.0:PERC	1	Y	
W-832-12	EW	Qal/WBR-Tnsc1b	A	DIS-TF	E300.0:PERC	3	Y	
W-832-12	EW	Qal/WBR-Tnsc1b	S	CMP-TF	E601:ALL	1	Y	

Table 2.7-7. Building 832 Canyon Operable Unit ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-832-12	EW	Qal/WBR-Tnsc1b	S	DIS-TF	E601:ALL	2	Y	
W-832-12	EW	Qal/WBR-Tnsc1b	S	CMP-TF	E601:ALL	3	Y	
W-832-13	PTMW	Qal/WBR-Tnsc1b	A	CMP	E300.0:NO3	1	N	Dry.
W-832-13	PTMW	Qal/WBR-Tnsc1b	A	CMP	E300.0:PERC	1	N	Dry.
W-832-13	PTMW	Qal/WBR-Tnsc1b	S	CMP	E601:ALL	1	N	Dry.
W-832-13	PTMW	Qal/WBR-Tnsc1b	S	CMP	E601:ALL	3	N	Dry.
W-832-14	PTMW	Tnsc1b	A	CMP	E300.0:NO3	1	N	Dry.
W-832-14	PTMW	Tnsc1b	A	CMP	E300.0:PERC	1	N	Dry.
W-832-14	PTMW	Tnsc1b	S	CMP	E601:ALL	1	N	Dry.
W-832-14	PTMW	Tnsc1b	S	CMP	E601:ALL	3	N	Dry.
W-832-15	EW	Qal/WBR-Tnsc1b	A	CMP-TF	E300.0:NO3	1	Y	
W-832-15	EW	Qal/WBR-Tnsc1b	A	DIS-TF	E300.0:NO3	3	Y	
W-832-15	EW	Qal/WBR-Tnsc1b	A	CMP-TF	E300.0:PERC	1	Y	
W-832-15	EW	Qal/WBR-Tnsc1b	A	DIS-TF	E300.0:PERC	3	Y	
W-832-15	EW	Qal/WBR-Tnsc1b	S	CMP-TF	E601:ALL	1	Y	
W-832-15	EW	Qal/WBR-Tnsc1b	S	DIS-TF	E601:ALL	2	Y	
W-832-15	EW	Qal/WBR-Tnsc1b	S	CMP-TF	E601:ALL	3	Y	
W-832-15	EW	Qal/WBR-Tnsc1b	E	CMP-TF	E8330LOW:ALL	2	Y	
W-832-16	PTMW	Tnsc1b	A	CMP	E300.0:NO3	1	N	Dry.
W-832-16	PTMW	Tnsc1b	A	CMP	E300.0:PERC	1	N	Dry.
W-832-16	PTMW	Tnsc1b	S	CMP	E601:ALL	1	N	Dry.
W-832-16	PTMW	Tnsc1b	S	CMP	E601:ALL	3	N	Dry.
W-832-17	PTMW	Tnsc1b	A	CMP	E300.0:NO3	1	N	Dry.
W-832-17	PTMW	Tnsc1b	A	CMP	E300.0:PERC	1	N	Dry.
W-832-17	PTMW	Tnsc1b	S	CMP	E601:ALL	1	N	Dry.
W-832-17	PTMW	Tnsc1b	S	CMP	E601:ALL	3	N	Dry.
W-832-18	PTMW	Qal/WBR-Tnsc1b	A	CMP	E300.0:NO3	1	N	Dry.
W-832-18	PTMW	Qal/WBR-Tnsc1b	A	CMP	E300.0:PERC	1	N	Dry.
W-832-18	PTMW	Qal/WBR-Tnsc1b	S	CMP	E601:ALL	1	N	Dry.
W-832-18	PTMW	Qal/WBR-Tnsc1b	S	CMP	E601:ALL	3	N	Dry.
W-832-19	PTMW	Qal/WBR-Tnsc1b	A	CMP	E300.0:NO3	1	N	Dry.
W-832-19	PTMW	Qal/WBR-Tnsc1b	A	CMP	E300.0:PERC	1	N	Dry.
W-832-19	PTMW	Qal/WBR-Tnsc1b	S	CMP	E601:ALL	1	N	Dry.
W-832-19	PTMW	Qal/WBR-Tnsc1b	S	CMP	E601:ALL	3	N	Dry.
W-832-20	PTMW	Tnsc1b	A	CMP	E300.0:NO3	1	N	Dry.
W-832-20	PTMW	Tnsc1b	A	CMP	E300.0:PERC	1	N	Dry.
W-832-20	PTMW	Tnsc1b	S	CMP	E601:ALL	1	N	Dry.
W-832-20	PTMW	Tnsc1b	S	CMP	E601:ALL	3	N	Dry.
W-832-21	PTMW	Qal/WBR	A	CMP	E300.0:NO3	1	N	Dry.
W-832-21	PTMW	Qal/WBR	A	CMP	E300.0:PERC	1	N	Dry.
W-832-21	PTMW	Qal/WBR	S	CMP	E601:ALL	1	N	Dry.
W-832-21	PTMW	Qal/WBR	S	CMP	E601:ALL	3	N	Dry.
W-832-22	PTMW	UTnbs1	A	CMP	E300.0:NO3	1	N	Dry.
W-832-22	PTMW	UTnbs1	A	CMP	E300.0:PERC	1	N	Dry.
W-832-22	PTMW	UTnbs1	A	CMP	E601:ALL	1	N	Dry.
W-832-23	PTMW	Tnsc1b	A	CMP	E300.0:NO3	1	Y	
W-832-23	PTMW	Tnsc1b	A	CMP	E300.0:PERC	1	Y	
W-832-23	PTMW	Tnsc1b	S	CMP	E601:ALL	1	Y	
W-832-23	PTMW	Tnsc1b	S	CMP	E601:ALL	3	Y	
W-832-24	PTMW	Tnsc1a	A	CMP	E300.0:NO3	1	Y	
W-832-24	PTMW	Tnsc1a	A	CMP	E300.0:PERC	1	Y	
W-832-24	PTMW	Tnsc1a	S	CMP	E601:ALL	1	Y	
W-832-24	PTMW	Tnsc1a	S	CMP	E601:ALL	3	Y	
W-832-25	EW	Tnsc1a	A	CMP-TF	E300.0:NO3	1	Y	
W-832-25	EW	Tnsc1a	A	CMP-TF	E300.0:PERC	1	Y	
W-832-25	EW	Tnsc1a	A	DIS-TF	E300.0:PERC	3	Y	
W-832-25	EW	Tnsc1a	S	CMP-TF	E601:ALL	1	Y	
W-832-25	EW	Tnsc1a	S	DIS-TF	E601:ALL	2	Y	

Table 2.7-7. Building 832 Canyon Operable Unit ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-832-25	EW	Tnsc1a	S	CMP-TF	E601:ALL	3	Y	
W-832-1927	PTMW	Tnsc1b	A	CMP	E300.0:NO3	1	Y	
W-832-1927	PTMW	Tnsc1b	A	CMP	E300.0:PERC	1	Y	
W-832-1927	PTMW	Tnsc1b	S	CMP	E601:ALL	1	Y	
W-832-1927	PTMW	Tnsc1b	S	CMP	E601:ALL	3	Y	
W-832-2112	GW	UTnbs1	S	CMP	E300.0:NO3	1	Y	
W-832-2112	GW	UTnbs1	S	CMP	E300.0:NO3	3	Y	
W-832-2112	GW	UTnbs1	S	CMP	E300.0:PERC	1	Y	
W-832-2112	GW	UTnbs1	S	CMP	E300.0:PERC	3	Y	
W-832-2112	GW	UTnbs1	Q	CMP	E601:ALL	1	Y	
W-832-2112	GW	UTnbs1	Q	CMP	E601:ALL	2	Y	
W-832-2112	GW	UTnbs1	Q	CMP	E601:ALL	3	Y	
W-832-2112	GW	UTnbs1	Q	CMP	E601:ALL	4	N	Unsafe conditions.
W-832-2906	PTMW	UTnbs1	S	CMP	E300.0:NO3	1	Y	
W-832-2906	PTMW	UTnbs1	S	CMP	E300.0:NO3	3	Y	
W-832-2906	PTMW	UTnbs1	S	CMP	E300.0:PERC	1	Y	
W-832-2906	PTMW	UTnbs1	S	CMP	E300.0:PERC	3	Y	
W-832-2906	PTMW	UTnbs1	Q	CMP	E601:ALL	1	Y	
W-832-2906	PTMW	UTnbs1	Q	CMP	E601:ALL	2	Y	
W-832-2906	PTMW	UTnbs1	Q	CMP	E601:ALL	3	Y	
W-832-2906	PTMW	UTnbs1	Q	CMP	E601:ALL	4	Y	
W-832-SC1	PTMW	Qal/WBR	A	CMP	E300.0:NO3	1	N	Unsafe conditions.
W-832-SC1	PTMW	Qal/WBR	A	CMP	E300.0:PERC	1	N	Unsafe conditions.
W-832-SC1	PTMW	Qal/WBR	S	CMP	E601:ALL	1	N	Unsafe conditions.
W-832-SC1	PTMW	Qal/WBR	S	CMP	E601:ALL	3	N	Unsafe conditions.
W-832-SC2	PTMW	Qal/WBR	A	CMP	E300.0:NO3	1	N	Dry.
W-832-SC2	PTMW	Qal/WBR	E	CMP	E300.0:PERC	1	N	Dry.
W-832-SC2	PTMW	Qal/WBR	S	CMP	E601:ALL	1	N	Dry.
W-832-SC2	PTMW	Qal/WBR	S	CMP	E601:ALL	3	N	Dry.
W-832-SC3	PTMW	Qal/WBR	A	CMP	E300.0:NO3	1	N	Unsafe conditions.
W-832-SC3	PTMW	Qal/WBR	O	CMP	E300.0:PERC	1	N	To be sampled in 2015.
W-832-SC3	PTMW	Qal/WBR	S	CMP	E601:ALL	1	N	Unsafe conditions.
W-832-SC3	PTMW	Qal/WBR	S	CMP	E601:ALL	3	N	Unsafe conditions.
W-832-SC4	PTMW	Qal/WBR	A	CMP	E300.0:NO3	1	N	Dry.
W-832-SC4	PTMW	Qal/WBR	E	CMP	E300.0:PERC	1	N	Dry.
W-832-SC4	PTMW	Qal/WBR	S	CMP	E601:ALL	1	N	Dry.
W-832-SC4	PTMW	Qal/WBR	S	CMP	E601:ALL	3	N	Dry.
W-870-01	PTMW	Qal/WBR	A	CMP	E300.0:NO3	1	N	Dry.
W-870-01	PTMW	Qal/WBR	O	CMP	E300.0:PERC	1	N	To be sampled in 2015.
W-870-01	PTMW	Qal/WBR	S	CMP	E601:ALL	1	N	Dry.
W-870-01	PTMW	Qal/WBR	S	CMP	E601:ALL	3	N	Dry.
W-870-02	PTMW	Tnbs2	A	CMP	E300.0:NO3	1	Y	
W-870-02	PTMW	Tnbs2	E	CMP	E300.0:PERC	1	Y	
W-870-02	PTMW	Tnbs2	S	CMP	E601:ALL	1	Y	
W-870-02	PTMW	Tnbs2	S	CMP	E601:ALL	3	Y	
W-880-01	GW	Tnbs2	S	CMP	E300.0:NO3	1	Y	
W-880-01	GW	Tnbs2	S	CMP	E300.0:NO3	3	Y	
W-880-01	GW	Tnbs2	S	CMP	E300.0:PERC	1	Y	
W-880-01	GW	Tnbs2	S	CMP	E300.0:PERC	3	Y	
W-880-01	GW	Tnbs2	Q	CMP	E601:ALL	1	Y	
W-880-01	GW	Tnbs2	Q	CMP	E601:ALL	2	Y	
W-880-01	GW	Tnbs2	Q	CMP	E601:ALL	3	Y	
W-880-01	GW	Tnbs2	Q	CMP	E601:ALL	4	Y	
W-880-01	GW	Tnbs2	S	CMP	E8330LOW:ALL	1	Y	
W-880-01	GW	Tnbs2	S	CMP	E8330LOW:ALL	3	Y	
W-880-02	GW	Qal/WBR	S	CMP	E300.0:NO3	1	N	Insufficient water.
W-880-02	GW	Qal/WBR	S	CMP	E300.0:NO3	3	N	Dry.
W-880-02	GW	Qal/WBR	S	CMP	E300.0:PERC	1	N	Insufficient water.

Table 2.7-7. Building 832 Canyon Operable Unit ground and surface water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-880-02	GW	Qal/WBR	S	CMP	E300.0:PERC	3	N	Dry.
W-880-02	GW	Qal/WBR	Q	CMP	E601:ALL	1	N	Insufficient water.
W-880-02	GW	Qal/WBR	Q	CMP	E601:ALL	2	Y	
W-880-02	GW	Qal/WBR	Q	CMP	E601:ALL	3	N	Dry.
W-880-02	GW	Qal/WBR	Q	CMP	E601:ALL	4	N	Insufficient water.
W-880-02	GW	Qal/WBR	S	CMP	E8330LOW:ALL	1	N	Insufficient water.
W-880-02	GW	Qal/WBR	S	CMP	E8330LOW:ALL	3	N	Dry.
W-880-03	GW	Tnsc1b	S	CMP	E300.0:NO3	1	Y	
W-880-03	GW	Tnsc1b	S	CMP	E300.0:NO3	3	Y	
W-880-03	GW	Tnsc1b	S	CMP	E300.0:PERC	1	Y	
W-880-03	GW	Tnsc1b	S	CMP	E300.0:PERC	3	Y	
W-880-03	GW	Tnsc1b	Q	CMP	E601:ALL	1	Y	
W-880-03	GW	Tnsc1b	Q	CMP	E601:ALL	2	Y	
W-880-03	GW	Tnsc1b	Q	CMP	E601:ALL	3	Y	
W-880-03	GW	Tnsc1b	Q	CMP	E601:ALL	4	Y	
W-880-03	GW	Tnsc1b	S	CMP	E8330LOW:ALL	1	Y	
W-880-03	GW	Tnsc1b	S	CMP	E8330LOW:ALL	3	Y	

Table 2.7-8. Building 832-Source (832-SRC) mass removed, July 1, 2014 through December 31, 2014.

Treatment facility	Month	SVTS VOC mass removed (g)	GWTS VOC mass removed (g)	Perchlorate mass removed (g)	Nitrate mass removed (kg)	RDX mass removed (g)	TBOS/TKEBS mass removed (g)
832-SRC	July	5.0	0.35	0.044	0.71	NA	NA
	August	1.6	0.37	0.017	0.35	NA	NA
	September	2.7	0.48	0.025	0.77	NA	NA
	October	1.8	0.33	0.023	0.56	NA	NA
	November	0	0	0	0	NA	NA
	December	0	0	0	0	NA	NA
Total		11	1.5	0.11	2.4	NA	NA

Table 2.7-9. Building 830-Source (830-SRC) mass removed, July 1, 2014 through December 31, 2014.

Treatment facility	Month	SVTS VOC mass removed (g)	GWTS VOC mass removed (g)	Perchlorate mass removed (g)	Nitrate mass removed (kg)	RDX mass removed (g)	TBOS/TKEBS mass removed (g)
830-SRC	July	150	43	0.16	5.7	NA	NA
	August	29	36	0.14	4.6	NA	NA
	September	0	0	0	0	NA	NA
	October	0	0	0	0	NA	NA
	November	0	0	0	0	NA	NA
	December	0	0	0	0	NA	NA
Total		170	79	0.31	10	NA	NA

Table 2.7-10. Building 830-Distal South (830-DISS) mass removed, July 1, 2014 through December 31, 2014.

Treatment facility	Month	SVTS VOC mass removed (g)	GWTS VOC mass removed (g)	Perchlorate mass removed (g)	Nitrate mass removed (kg)	RDX mass removed (g)	TBOS/TKEBS mass removed (g)
830-DISS	July	NA	1.5	0.27	9.2	NA	NA
	August	NA	5.9	1.1	35	NA	NA
	September	NA	6.8	1.3	39	NA	NA
	October	NA	3.8	0.65	20	NA	NA
	November	NA	7.4	1.4	34	NA	NA
	December	NA	3.9	0.72	17	NA	NA
Total		NA	29	5.3	150	NA	NA

Table 2.8-1. Building 801 and Pit 8 Landfill area ground water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
K8-01	PTMW	Tnbs1-Tnbs0	A	CMP	AS:UISO	2	N	Inoperable pump.
K8-01	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	N	Inoperable pump.
K8-01	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	N	Inoperable pump.
K8-01	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	N	Inoperable pump.
K8-01	PTMW	Tnbs1-Tnbs0	S	CMP	E601:ALL	2	N	Inoperable pump.
K8-01	PTMW	Tnbs1-Tnbs0	S	CMP	E601:ALL	4	N	Inoperable pump.
K8-01	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	N	Inoperable pump.
K8-01	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	N	Inoperable pump.
K8-02B	DMW	Tnbs1-Tnbs0	A	CMP	AS:UISO	4	N	Inoperable pump.
K8-02B	DMW	Tnbs1-Tnbs0	A	CMP	E200.7:LI	2	N	Inoperable pump.
K8-02B	DMW	Tnbs1-Tnbs0	S	CMP	E300.0:NO3	2	N	Inoperable pump.
K8-02B	DMW	Tnbs1-Tnbs0	S	CMP	E300.0:NO3	4	N	Inoperable pump.
K8-02B	DMW	Tnbs1-Tnbs0	Q	CMP	E300.0:PERC	1	Y	
K8-02B	DMW	Tnbs1-Tnbs0	Q	CMP	E300.0:PERC	2	N	Inoperable pump.
K8-02B	DMW	Tnbs1-Tnbs0	Q	CMP	E300.0:PERC	3	N	Inoperable pump.
K8-02B	DMW	Tnbs1-Tnbs0	Q	CMP	E300.0:PERC	4	N	Inoperable pump.
K8-02B	DMW	Tnbs1-Tnbs0	A	CMP	E340.2:ALL	2	N	Inoperable pump.
K8-02B	DMW	Tnbs1-Tnbs0	A	CMP	E601:ALL	2	N	Inoperable pump.
K8-02B	DMW	Tnbs1-Tnbs0	A	CMP	E8330LOW:ALL	2	N	Inoperable pump.
K8-02B	DMW	Tnbs1-Tnbs0	Q	CMP	E906:ALL	1	Y	
K8-02B	DMW	Tnbs1-Tnbs0	Q	CMP	E906:ALL	2	N	Inoperable pump.
K8-02B	DMW	Tnbs1-Tnbs0	Q	CMP	E906:ALL	3	N	Inoperable pump.
K8-02B	DMW	Tnbs1-Tnbs0	Q	CMP	E906:ALL	4	N	Inoperable pump.
K8-02B	DMW	Tnbs1-Tnbs0	A	CMP	MS:UISO	2	N	Inoperable pump.
K8-02B	DMW	Tnbs1-Tnbs0	A	CMP	T26METALS:ALL	2	N	Inoperable pump.
K8-03B	PTMW	Tnbs1-Tnbs0	A	CMP	AS:UISO	2	Y	
K8-03B	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
K8-03B	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	Y	
K8-03B	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	Y	
K8-03B	PTMW	Tnbs1-Tnbs0	S	CMP	E601:ALL	2	Y	
K8-03B	PTMW	Tnbs1-Tnbs0	S	CMP	E601:ALL	4	Y	
K8-03B	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
K8-03B	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
K8-04	DMW	Tnbs1-Tnbs0	A	CMP	E200.7:LI	2	Y	
K8-04	DMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
K8-04	DMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	Y	
K8-04	DMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	N	Unsafe conditions.
K8-04	DMW	Tnbs1-Tnbs0	A	CMP	E340.2:ALL	2	Y	
K8-04	DMW	Tnbs1-Tnbs0	A	CMP	E601:ALL	2	Y	
K8-04	DMW	Tnbs1-Tnbs0	A	CMP	E8330LOW:ALL	2	Y	
K8-04	DMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
K8-04	DMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	N	Unsafe conditions.
K8-04	DMW	Tnbs1-Tnbs0	A	CMP	MS:UISO	2	Y	
K8-04	DMW	Tnbs1-Tnbs0	A	CMP	T26METALS:ALL	2	Y	
K8-05	DMW	Tnbs1-Tnbs0	O	CMP	AS:UISO	2	N	To be sampled in 2015.
K8-05	DMW	Tnbs1-Tnbs0	O	CMP	E200.7:LI	2	N	To be sampled in 2015.
K8-05	DMW	Tnbs1-Tnbs0	O	CMP	E300.0:NO3	2	N	To be sampled in 2015.
K8-05	DMW	Tnbs1-Tnbs0	O	CMP	E300.0:PERC	2	N	To be sampled in 2015.
K8-05	DMW	Tnbs1-Tnbs0	O	CMP	E340.2:ALL	2	N	To be sampled in 2015.
K8-05	DMW	Tnbs1-Tnbs0	O	CMP	E601:ALL	2	N	To be sampled in 2015.
K8-05	DMW	Tnbs1-Tnbs0	O	CMP	E8330LOW:ALL	2	N	To be sampled in 2015.
K8-05	DMW	Tnbs1-Tnbs0	O	CMP	E906:ALL	2	N	To be sampled in 2015.
K8-05	DMW	Tnbs1-Tnbs0	O	CMP	T26METALS:ALL	2	N	To be sampled in 2015.

Table 2.8-2. Building 833 area ground water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-833-03	PTMW	Tpsg	A	CMP	E601:ALL	1	N	Dry.
W-833-12	PTMW	Tpsg	A	CMP	E601:ALL	1	N	Dry.
W-833-18	PTMW	Tpsg	A	CMP	E601:ALL	1	N	Dry.
W-833-22	PTMW	Tpsg	A	CMP	E601:ALL	1	N	Dry.
W-833-28	PTMW	Tpsg	A	CMP	E601:ALL	1	N	Insufficient water.
W-833-30	PTMW	LTnbs1	S	CMP	E601:ALL	1	Y	
W-833-30	PTMW	LTnbs1	S	CMP	E601:ALL	3	Y	
W-833-33	PTMW	Tpsg	A	CMP	E601:ALL	1	Y	
W-833-34	PTMW	Tpsg	A	CMP	E601:ALL	1	N	Insufficient water.
W-833-43	PTMW	Tpsg	A	CMP	E601:ALL	1	N	Dry.
W-840-01	PTMW	LTnbs1	A	CMP	E300.0:NO3	1	Y	
W-840-01	PTMW	LTnbs1	A	CMP	E300.0:PERC	1	Y	
W-840-01	PTMW	LTnbs1	A	CMP	E601:ALL	1	Y	
W-841-01	PTMW	UTnbs1	O	CMP	E300.0:NO3	1	N	To be sampled in 2015.
W-841-01	PTMW	UTnbs1	O	CMP	E300.0:PERC	1	N	To be sampled in 2015.
W-841-01	PTMW	UTnbs1	A	CMP	E601:ALL	1	N	Inoperable pump.

Table 2.8-3. Building 845 Firing Table and Pit 9 Landfill area ground water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
K9-01	DMW	Tnbs1/Tnbs0	A	CMP	E200.7:LI	2	Y	
K9-01	DMW	Tnbs1/Tnbs0	A	CMP	E300.0:NO3	2	Y	
K9-01	DMW	Tnbs1/Tnbs0	A	CMP	E300.0:PERC	2	Y	
K9-01	DMW	Tnbs1/Tnbs0	A	CMP	E340.2:ALL	2	Y	
K9-01	DMW	Tnbs1/Tnbs0	A	CMP	E601:ALL	2	Y	
K9-01	DMW	Tnbs1/Tnbs0	A	CMP	E8330LOW:ALL	2	Y	
K9-01	DMW	Tnbs1/Tnbs0	A	CMP	E906:ALL	2	Y	
K9-01	DMW	Tnbs1/Tnbs0	A	CMP	MS:UISO	2	Y	
K9-01	DMW	Tnbs1/Tnbs0	A	CMP	T26METALS:ALL	2	Y	
K9-02	DMW	Tnbs1/Tnbs0	A	CMP	E200.7:LI	2	Y	
K9-02	DMW	Tnbs1/Tnbs0	A	CMP	E300.0:NO3	2	Y	
K9-02	DMW	Tnbs1/Tnbs0	A	CMP	E300.0:PERC	2	Y	
K9-02	DMW	Tnbs1/Tnbs0	A	CMP	E340.2:ALL	2	Y	
K9-02	DMW	Tnbs1/Tnbs0	A	CMP	E601:ALL	2	Y	
K9-02	DMW	Tnbs1/Tnbs0	A	CMP	E8330LOW:ALL	2	Y	
K9-02	DMW	Tnbs1/Tnbs0	A	CMP	E906:ALL	2	Y	
K9-02	DMW	Tnbs1/Tnbs0	A	DIS	MS:UISO	2	Y	
K9-02	DMW	Tnbs1/Tnbs0	A	CMP	T26METALS:ALL	2	Y	
K9-03	DMW	Tnbs1/Tnbs0	A	CMP	E200.7:LI	2	Y	
K9-03	DMW	Tnbs1/Tnbs0	A	CMP	E300.0:NO3	2	Y	
K9-03	DMW	Tnbs1/Tnbs0	A	CMP	E300.0:PERC	2	Y	
K9-03	DMW	Tnbs1/Tnbs0	A	CMP	E340.2:ALL	2	Y	
K9-03	DMW	Tnbs1/Tnbs0	A	CMP	E601:ALL	2	Y	
K9-03	DMW	Tnbs1/Tnbs0	A	CMP	E8330LOW:ALL	2	Y	
K9-03	DMW	Tnbs1/Tnbs0	A	CMP	E906:ALL	2	Y	
K9-03	DMW	Tnbs1/Tnbs0	A	CMP	MS:UISO	2	Y	
K9-03	DMW	Tnbs1/Tnbs0	A	CMP	T26METALS:ALL	2	Y	
K9-04	DMW	Tnbs1/Tnbs0	A	CMP	E200.7:LI	2	Y	
K9-04	DMW	Tnbs1/Tnbs0	A	CMP	E300.0:NO3	2	Y	
K9-04	DMW	Tnbs1/Tnbs0	A	CMP	E300.0:PERC	2	Y	
K9-04	DMW	Tnbs1/Tnbs0	A	CMP	E340.2:ALL	2	Y	
K9-04	DMW	Tnbs1/Tnbs0	A	CMP	E601:ALL	2	Y	
K9-04	DMW	Tnbs1/Tnbs0	A	CMP	E8330LOW:ALL	2	Y	
K9-04	DMW	Tnbs1/Tnbs0	A	CMP	E906:ALL	2	Y	
K9-04	DMW	Tnbs1/Tnbs0	A	CMP	MS:UISO	2	Y	
K9-04	DMW	Tnbs1/Tnbs0	A	CMP	T26METALS:ALL	2	Y	

Table 2.8-4. Building 851 area ground water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-851-05	PTMW	Tmss	A	CMP	AS:UISO	4	Y	
W-851-05	PTMW	Tmss	O	CMP	E601:ALL	2	N	To be sampled in 2015.
W-851-05	PTMW	Tmss	A	CMP	MS:UISO	2	Y	
W-851-06	PTMW	Tmss	A	CMP	AS:UISO	4	N	Inoperable pump.
W-851-06	PTMW	Tmss	A	CMP	MS:UISO	2	Y	
W-851-07	PTMW	Tmss	A	CMP	AS:UISO	4	N	Inoperable pump.
W-851-07	PTMW	Tmss	A	CMP	MS:UISO	2	Y	
W-851-08	PTMW	Tmss	A	CMP	AS:UISO	4	Y	
W-851-08	PTMW	Tmss	A	CMP	MS:UISO	2	Y	

Table 3.1-1. Pit 2 Landfill area ground water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
K2-01C	DMW	Tnbs1-Tnbs0	A	CMP	E200.7:LI	2	N	Inoperable pump.
K2-01C	DMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	N	Inoperable pump.
K2-01C	DMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	N	Inoperable pump.
K2-01C	DMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	N	Inoperable pump.
K2-01C	DMW	Tnbs1-Tnbs0	A	CMP	E340.2:ALL	2	N	Inoperable pump.
K2-01C	DMW	Tnbs1-Tnbs0	A	CMP	E601:ALL	2	N	Inoperable pump.
K2-01C	DMW	Tnbs1-Tnbs0	A	CMP	E8330LOW:ALL	2	N	Inoperable pump.
K2-01C	DMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	N	Inoperable pump.
K2-01C	DMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	N	Inoperable pump.
K2-01C	DMW	Tnbs1-Tnbs0	A	CMP	MS:UISO	2	N	Inoperable pump.
K2-01C	DMW	Tnbs1-Tnbs0	A	CMP	T26METALS:ALL	2	N	Inoperable pump.
NC2-08	DMW	Tnbs1-Tnbs0	A	CMP	AS:UISO	2	Y	
NC2-08	DMW	Tnbs1-Tnbs0	A	CMP	E200.7:LI	2	Y	
NC2-08	DMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
NC2-08	DMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	Y	
NC2-08	DMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	Y	
NC2-08	DMW	Tnbs1-Tnbs0	A	CMP	E340.2:ALL	2	Y	
NC2-08	DMW	Tnbs1-Tnbs0	A	CMP	E601:ALL	2	Y	
NC2-08	DMW	Tnbs1-Tnbs0	A	CMP	E8330LOW:ALL	2	Y	
NC2-08	DMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
NC2-08	DMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
NC2-08	DMW	Tnbs1-Tnbs0	A	DIS	MS:UISO	2	Y	
NC2-08	DMW	Tnbs1-Tnbs0	A	CMP	T26METALS:ALL	2	Y	
W-PIT2-1934	DMW	Tnbs1-Tnbs0	A	CMP	E200.7:LI	2	Y	
W-PIT2-1934	DMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
W-PIT2-1934	DMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	Y	
W-PIT2-1934	DMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	Y	
W-PIT2-1934	DMW	Tnbs1-Tnbs0	A	CMP	E340.2:ALL	2	Y	
W-PIT2-1934	DMW	Tnbs1-Tnbs0	A	CMP	E601:ALL	2	Y	
W-PIT2-1934	DMW	Tnbs1-Tnbs0	A	CMP	E8330LOW:ALL	2	Y	
W-PIT2-1934	DMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
W-PIT2-1934	DMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
W-PIT2-1934	DMW	Tnbs1-Tnbs0	A	CMP	MS:UISO	2	Y	
W-PIT2-1934	DMW	Tnbs1-Tnbs0	A	CMP	T26METALS:ALL	2	Y	
W-PIT2-1935	DMW	Tnbs1-Tnbs0	A	CMP	E200.7:LI	2	Y	
W-PIT2-1935	DMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	Y	
W-PIT2-1935	DMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	Y	
W-PIT2-1935	DMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	Y	
W-PIT2-1935	DMW	Tnbs1-Tnbs0	A	CMP	E340.2:ALL	2	Y	
W-PIT2-1935	DMW	Tnbs1-Tnbs0	A	CMP	E601:ALL	2	Y	
W-PIT2-1935	DMW	Tnbs1-Tnbs0	A	CMP	E8330LOW:ALL	2	Y	
W-PIT2-1935	DMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	Y	
W-PIT2-1935	DMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	Y	
W-PIT2-1935	DMW	Tnbs1-Tnbs0	A	CMP	MS:UISO	2	Y	
W-PIT2-1935	DMW	Tnbs1-Tnbs0	A	CMP	T26METALS:ALL	2	Y	
W-PIT2-2226	GW	Tnbs1-Tnbs0	S	CMP	AS:UISO	2	Y	
W-PIT2-2226	GW	Tnbs1-Tnbs0	S	CMP	AS:UISO	4	N	Unsafe conditions.
W-PIT2-2226	GW	Tnbs1-Tnbs0	S	CMP	E300.0:NO3	2	Y	
W-PIT2-2226	GW	Tnbs1-Tnbs0	S	CMP	E300.0:NO3	4	N	Unsafe conditions.
W-PIT2-2226	GW	Tnbs1-Tnbs0	Q	CMP	E300.0:PERC	1	Y	
W-PIT2-2226	GW	Tnbs1-Tnbs0	Q	CMP	E300.0:PERC	2	Y	
W-PIT2-2226	GW	Tnbs1-Tnbs0	Q	CMP	E300.0:PERC	3	Y	
W-PIT2-2226	GW	Tnbs1-Tnbs0	Q	CMP	E300.0:PERC	4	N	Unsafe conditions.
W-PIT2-2226	GW	Tnbs1-Tnbs0	Q	CMP	E906:ALL	1	Y	
W-PIT2-2226	GW	Tnbs1-Tnbs0	Q	CMP	E906:ALL	2	Y	
W-PIT2-2226	GW	Tnbs1-Tnbs0	Q	CMP	E906:ALL	3	Y	
W-PIT2-2226	GW	Tnbs1-Tnbs0	Q	CMP	E906:ALL	4	N	Unsafe conditions.
W-PIT2-2301	PTMW	Qal/WBR	A	CMP	E300.0:NO3	2	N	Insufficient water.
W-PIT2-2301	PTMW	Qal/WBR	S	CMP	E300.0:PERC	2	N	Insufficient water.
W-PIT2-2301	PTMW	Qal/WBR	S	CMP	E300.0:PERC	4	N	Insufficient water.
W-PIT2-2301	PTMW	Qal/WBR	S	CMP	E906:ALL	2	N	Insufficient water.
W-PIT2-2301	PTMW	Qal/WBR	S	CMP	E906:ALL	4	N	Insufficient water.
W-PIT2-2301	PTMW	Qal/WBR	A	CMP	MS:UISO	2	N	Insufficient water.
W-PIT2-2302	PTMW	Qal/WBR	A	CMP	E300.0:NO3	2	N	Insufficient water.

Table 3.1-1. Pit 2 Landfill area ground water sampling and analysis plan.

Sample location	Location type	Hydro unit	Sampling frequency	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-PIT2-2302	PTMW	Qal/WBR	S	CMP	E300.0:PERC	2	N	Insufficient water.
W-PIT2-2302	PTMW	Qal/WBR	S	CMP	E300.0:PERC	4	N	Insufficient water.
W-PIT2-2302	PTMW	Qal/WBR	S	CMP	E906:ALL	2	N	Insufficient water.
W-PIT2-2302	PTMW	Qal/WBR	S	CMP	E906:ALL	4	N	Insufficient water.
W-PIT2-2302	PTMW	Qal/WBR	A	CMP	MS:UISO	2	N	Insufficient water.
W-PIT2-2303	PTMW	Qal/WBR	A	CMP	E300.0:NO3	2	N	Dry.
W-PIT2-2303	PTMW	Qal/WBR	S	CMP	E300.0:PERC	2	N	Dry.
W-PIT2-2303	PTMW	Qal/WBR	S	CMP	E300.0:PERC	4	N	Dry.
W-PIT2-2303	PTMW	Qal/WBR	S	CMP	E906:ALL	2	N	Dry.
W-PIT2-2303	PTMW	Qal/WBR	S	CMP	E906:ALL	4	N	Dry.
W-PIT2-2303	PTMW	Qal/WBR	A	CMP	MS:UISO	2	N	Dry.
W-PIT2-2304	PTMW	Tnbs1-Tnbs0	A	CMP	AS:UISO	2	N	Dry.
W-PIT2-2304	PTMW	Tnbs1-Tnbs0	A	CMP	E300.0:NO3	2	N	Dry.
W-PIT2-2304	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	2	N	Dry.
W-PIT2-2304	PTMW	Tnbs1-Tnbs0	S	CMP	E300.0:PERC	4	N	Dry.
W-PIT2-2304	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	2	N	Dry.
W-PIT2-2304	PTMW	Tnbs1-Tnbs0	S	CMP	E906:ALL	4	N	Dry.

Table 4.1-1. Summary of inhalation risks and hazards resulting from transport of contaminant vapors to indoor and outdoor ambient air.

Area	Pathway and Model	Contaminant	Incremental Risk	Hazard Quotient	Comment
Building 834D	Indoor – JEM	TCE	9.3×10^{-4}	2.7×10^{2}	Based on a TCE concentration of 180,000 ug/L (3-Feb-2014) in well W-834-A1.
	Indoor – JEM	PCE	9.9×10^{-6}	1.1×10^{-1}	Based on a PCE concentration of 940 ug/L (3-Feb-2014) in well W-834-A1.
Cumulative risk and hazard index			**9.4×10^{-4}**	**2.7×10^{2}**	**Institutional controls in place, building only used for storage.**
Building 830	Indoor – JEM	Vinyl Chloride	1.2×10^{-5}	3.5×10^{-3}	Based on the Vinyl Chloride detection limit of 25 ug/L (13-Aug-2014) in well SVI-830-035.
	Indoor – JEM	TCE	5.2×10^{-6}	1.5×10^{0}	Based on a TCE concentration of 640 ug/L (27-Feb-2014) in well SVI-830-035.
Cumulative risk and hazard index			**1.7×10^{-5}**	**1.5×10^{-0}**	**Institutional controls in place.**

Note:

JEM – Johnson-Ettinger Model for indoor air pathway (U.S. EPA, 2002) incorporates the updated risk values in DTSC (2011) Final Vapor Intrusion Guidance.

Appendix A

Results of Influent and Effluent pH Monitoring

Appendix A

Results of Influent and Effluent pH Monitoring

Table A-1. Results of influent and effluent pH, July through December 2014.

A-1. Results of infuent and effluent pH, July through December 2014.

Sample Location	Sample Date	Effluent pH Result
GSA OU		
CGSA GWTS	**07/01/2014**	**7.2**
CGSA GWTS	**08/05/2014**	**7.2**
CGSA GWTS	**09/03/2014**	**7.0**
CGSA GWTS	**10/07/2014**	**7.2**
CGSA GWTS	**11/05/2014**	**7.2**
CGSA GWTS	**12/01/2014**	**7.0**
Building 834 OU		
834 GWTS	**07/07/2014**	**8.3**
834 GWTS	**08/04/2014**	**8.2**
834 GWTS	**09/02/2014**	**8.0**
834 GWTS	**10/06/2014**	**7.5**
834 GWTS	**11/03/2014**	**7.8**
834 GWTS	**12/01/2014**	**7.5**
HEPA OU		
815-SRC GWTS	**07/09/2014**	**7.1**
815-SRC GWTS	**08/04/2014**	**7.7**
815-SRC GWTS	**09/02/2014**	**7.5**
815-SRC GWTS	**10/07/2014**	**7.0**
815-SRC GWTS	**11/03/2014**	**7.0**
815-SRC GWTS	**12/01/2014**	**7.0**
815-PRX GWTS	**07/08/2014**	**7.0**
815-PRX GWTS	**08/04/2014**	**7.5**
815-PRX GWTS	**09/02/2014**	**7.0**
815-PRX GWTS	**10/20/2014**	**7.0**
815-PRX GWTS	**11/03/2014**	**7.0**
815-PRX GWTS	**12/01/2014**	**7.0**
815-DSB GWTS	**07/07/2014**	**7.0**
815-DSB GWTS	**08/05/2014**	**7.0**

A-1. Results of infuent and effluent pH, July through December 2014.

Sample Location	Sample Date	Effluent pH Result
815-DSB GWTS	09/03/2014	7.0
815-DSB GWTS	10/06/2014	7.0
815-DSB GWTS	11/12/2014	7.0
815-DSB GWTS	12/01/2014	7.0
817-SRC GWTS	07/07/2014	7.5
817-SRC GWTS	08/04/2014	8.3
817-SRC GWTS	09/02/2014	7.0
817-SRC GWTS	10/07/2014	7.0
817-SRC GWTS	11/03/2014	7.0
817-SRC GWTS	12/01/2014	7.0
817-PRX GWTS	07/14/2014	7.1
817-PRX GWTS	08/04/2014	8.3
817-PRX GWTS	09/02/2014	7.5
817-PRX GWTS	10/07/2014	7.0
817-PRX GWTS	11/03/2014	7.0
817-PRX GWTS	12/01/2014	7.0
829-SRC GWTS	07/31/2014	NM
829-SRC GWTS	08/31/2014	NM
829-SRC GWTS	09/30/2014	NM
829-SRC GWTS	10/31/2014	NM
829-SRC GWTS	11/30/2014	NM
829-SRC GWTS	12/31/2014	NM
Building 850/Pit 7 Complex OU		
PIT7-SRC GWTS	07/08/2014	7.0
PIT7-SRC GWTS	08/04/2014	7.0
PIT7-SRC GWTS	09/03/2014	7.0
PIT7-SRC GWTS	10/06/2014	7.0
PIT7-SRC GWTS	11/05/2014	7.0
PIT7-SRC GWTS	12/01/2014	7.0

A-1. Results of infuent and effluent pH, July through December 2014.

Sample Location	Sample Date	Effluent pH Result
Building 854 OU		
854-SRC GWTS	**07/07/2014**	**7.0**
854-SRC GWTS	**08/12/2014**	**7.0**
854-SRC GWTS	**09/03/2014**	**7.0**
854-SRC GWTS	**10/06/2014**	**7.0**
854-SRC GWTS	**11/04/2014**	**7.0**
854-SRC GWTS	**12/01/2014**	**7.0**
854-PRX GWTS	**07/31/2014**	**NM**
854-PRX GWTS	**08/31/2014**	**NM**
854-PRX GWTS	**09/30/2014**	**NM**
854-PRX GWTS	**10/08/2014**	**7.0**
854-PRX GWTS	**11/07/2014**	**7.0**
854-PRX GWTS	**12/01/2014**	**7.0**
854-DIS GWTS	**07/31/2014**	**NM**
854-DIS GWTS	**08/12/2014**	**7.0**
854-DIS GWTS	**09/03/2014**	**7.0**
854-DIS GWTS	**10/06/2014**	**7.0**
854-DIS GWTS	**11/04/2014**	**7.0**
854-DIS GWTS	**12/01/2014**	**7.0**
832 Canyon OU		
832-SRC GWTS	**07/07/2014**	**7.8**
832-SRC GWTS	**08/04/2014**	**7.4**
832-SRC GWTS	**09/02/2014**	**7.7**
832-SRC GWTS	**10/06/2014**	**7.3**
832-SRC GWTS	**11/30/2014**	**NM**
832-SRC GWTS	**12/31/2014**	**NM**
830-SRC GWTS	**07/07/2014**	**7.4**
830-SRC GWTS	**08/04/2014**	**7.9**
830-SRC GWTS	**09/30/2014**	**NM**

A-1. Results of infuent and effluent pH, July through December 2014.

Sample Location	Sample Date	Effluent pH Result
830-SRC GWTS	10/31/2014	NM
830-SRC GWTS	11/30/2014	NM
830-SRC GWTS	12/31/2014	NM
830-DISS GWTS	07/23/2014	7.0
830-DISS GWTS	08/05/2014	7.0
830-DISS GWTS	09/03/2014	7.0
830-DISS GWTS	10/01/2014	7.0
830-DISS GWTS	11/05/2014	7.0
830-DISS GWTS	12/01/2014	7.0

Notes:

834 = Building 834.
815 = Building 815.
817 = Building 817.
829 = Building 829.
854 = Building 854.
832 = Building 832.
830 = Building 830.
CGSA = Central General Services Area.
EGSA = Eastern General Services Area.
DISS = Distal south.
DSB = Distal site boundary.
GWTS = Ground water treatment system.
PRX = Proximal.
PRXN = Proximal North.
SRC = Source.
NA = Not applicable.
NM = Not measured due to facility not operating during this period.
NR = Not required.
OU = Operable unit.
pH = A measure of the acidity or alkalinity of an aqueous solution.
mg/L = Milligrams per liter.

Appendix B

Analytical Results for Routine Monitoring During 2014

Appendix B

Analytical Results for Routine Monitoring During 2014

Table B-1.01. General Services Area Operable Unit volatile organic compounds (VOCs) in ground water.

Location	Date	Method	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Carbon tetra-chloride (µg/L)	Chloro-form (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	1,1,2-TCA (µg/L)	Freon 11 (µg/L)	Freon 113 (µg/L)	Vinyl chloride (µg/L)
CDF1	1/21/14	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	0.81	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CDF1	1/21/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CDF1	1/21/14 DUP	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
CDF1	1/21/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CDF1	2/24/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CDF1	2/24/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CDF1	3/12/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CDF1	3/12/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CDF1	5/20/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CDF1	5/20/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CDF1	6/10/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CDF1	6/10/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CDF1	7/28/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CDF1	7/28/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CDF1	8/27/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CDF1	8/27/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CDF1	9/23/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 O
CDF1	9/23/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CDF1	10/30/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CDF1	10/30/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CDF1	11/25/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CDF1	11/25/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CDF1	12/17/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CDF1	12/17/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CON1	1/21/14	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CON1	1/21/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CON1	1/21/14 DUP	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
CON1	1/21/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CON1	2/24/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CON1	2/24/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CON1	3/12/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CON1	3/12/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CON1	4/9/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CON1	4/9/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CON1	5/20/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CON1	5/20/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CON1	6/9/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table B-1.01. General Services Area Operable Unit volatile organic compounds (VOCs) in ground water.

Location	Date	Method	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Carbon tetra-chloride (µg/L)	Chloro-form (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	1,1,2-TCA (µg/L)	Freon 11 (µg/L)	Freon 113 (µg/L)	Vinyl chloride (µg/L)
CON1	6/9/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CON1	7/28/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CON1	7/28/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CON1	8/27/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CON1	8/27/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CON1	9/23/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 O
CON1	9/23/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CON1	10/30/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CON1	10/30/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CON1	11/25/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CON1	11/25/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CON1	12/17/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CON1	12/17/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CON2	1/21/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CON2	2/24/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CON2	4/9/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CON2	5/20/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CON2	6/9/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CON2	7/28/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CON2	8/27/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CON2	9/23/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 O
CON2	10/30/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CON2	10/30/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CON2	11/25/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CON2	11/25/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CON2	12/17/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CON2	12/17/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-26R-06	6/18/14	E601	0.88	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-26R-06	12/22/14	E601	2.2	0.51	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-26R-11	5/5/14	E601	0.69	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-26R-11	11/17/14	E601	0.71	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35A-01	6/18/14	E601	13	0.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35A-01	6/18/14 DUP	E601	27	1.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<1	<2	<0.5
W-35A-01	11/11/14	E601	36	2.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.58	<0.5	<0.5	<0.5	<0.5	<0.5
W-35A-01	11/11/14 DUP	E601	36.5	2.3	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5 O	0.71	<0.5	<0.5	<0.5	<0.5	<0.5
W-35A-02	6/16/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35A-03	6/12/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table B-1.01. General Services Area Operable Unit volatile organic compounds (VOCs) in ground water.

Location	Date	Method	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Carbon tetra-chloride (µg/L)	Chloro-form (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	1,1,2-TCA (µg/L)	Freon 11 (µg/L)	Freon 113 (µg/L)	Vinyl chloride (µg/L)
W-35A-04	5/7/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-35A-04	11/18/14	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35A-04	11/18/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-35A-05	6/12/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35A-06	6/17/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-35A-07	6/16/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35A-08	3/10/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35A-08	9/16/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35A-10	11/11/14	E601	9.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	5.8	<0.5	<0.5
W-35A-10	11/11/14 DUP	E601	9.3	<0.5	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5	4.8	<0.5	<0.5
W-35A-11	6/17/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35A-12	6/17/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35A-13	6/17/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-35A-14	3/10/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35A-14	6/16/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35A-14	9/16/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7A	6/16/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7A	12/11/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7DS	5/5/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7DS	11/17/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7E	5/7/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7E	11/18/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7E	11/18/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7ES	5/7/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7ES	5/7/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7ES	11/18/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7F	6/17/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7F	12/11/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7G	6/17/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7G	12/11/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7H	6/3/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7H	12/8/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7I	4/21/14	E601	290 D	37	32	0.94	<0.5	<0.5	0.59	0.68	3	<0.5	<0.5	<0.5	<0.5	<0.5
W-7I	7/23/14	E601	220 D	13	45	2.3	<0.5	<0.5	<0.5	<0.5	3.1	<0.5 O	<0.5	<0.5	<0.5	<0.5
W-7I	7/23/14 DUP	E601	230 D	13	45	2.2	<0.5	<0.5	<0.5	<0.5	3.1	<0.5 O	<0.5	<0.5	<0.5	<0.5
W-7J	6/17/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7J	12/8/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table B-1.01. General Services Area Operable Unit volatile organic compounds (VOCs) in ground water.

Location	Date	Method	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Carbon tetra-chloride (µg/L)	Chloro-form (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	1,1,2-TCA (µg/L)	Freon 11 (µg/L)	Freon 113 (µg/L)	Vinyl chloride (µg/L)
W-7K	6/3/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7K	12/8/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7L	6/4/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-7L	12/22/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-7M	6/4/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-7M	12/22/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-7N	6/4/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-7N	12/22/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-7O	4/21/14	E601	83	6.2	0.68	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5	<0.5	<0.5	<0.5
W-7R	4/21/14	E601	<0.5	0.91	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7R	7/23/14	E601	10	0.99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5	<0.5
W-7R	10/7/14	E601	17	0.99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7S	6/3/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7S	12/8/14	E601	0.88	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7T	6/3/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7T	12/8/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-843-01	6/10/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-843-01	12/3/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-843-02	6/10/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-843-02	12/3/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-872-02	4/21/14	E601	8.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.5	<0.5	<0.5
W-872-02	7/23/14	E601	13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 O	<0.5	2.9	<0.5	<0.5
W-872-02	7/23/14 DUP	E601	13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 O	<0.5	3	<0.5	<0.5
W-872-02	10/7/14	E601	9.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.59	<0.5	<0.5
W-873-01	6/11/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-873-01	12/8/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-873-02	6/11/14	E601	5.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-873-02	12/8/14	E601	5.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-873-02	12/8/14 DUP	E601	4.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-873-03	6/11/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-873-03	12/4/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-873-04	6/11/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-873-04	12/4/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-873-06	6/11/14	E601	3.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-873-06	12/8/14	E601	3.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-873-06	12/8/14 DUP	E601	3.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-873-07	4/21/14	E601	3.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	6.3	<0.5	<0.5

Table B-1.01. General Services Area Operable Unit volatile organic compounds (VOCs) in ground water.

Location	Date	Method	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Carbon tetra-chloride (µg/L)	Chloro-form (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	1,1,2-TCA (µg/L)	Freon 11 (µg/L)	Freon 113 (µg/L)	Vinyl chloride (µg/L)
W-873-07	7/23/14	E601	12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.4	<0.5	<0.5
W-873-07	10/7/14	E601	7.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-875-01	6/12/14	E601	0.76	<0.5	3.2	1.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-875-01	6/12/14 DUP	E601	0.81	<0.5	3.3	1.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-875-01	12/10/14	E601	0.97	<0.5	3.1	1.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-875-01	12/10/14 DUP	E601	1.2	<0.5	3.1	1.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-875-02	6/12/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-875-02	12/10/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-875-03	6/12/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-875-03	12/10/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-875-04	6/12/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-875-04	12/10/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-875-05	6/12/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-875-05	12/10/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-875-06	6/12/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-875-06	12/10/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-875-08	4/21/14	E601	99	4.1	18	1.3	<0.5	<0.5	<0.5	<0.5	1.6	<0.5	<0.5	<0.5	<0.5	<0.5
W-875-08	7/23/14	E601	190 D	2.2	38	3.4	<0.5	<0.5	<0.5	<0.5	3.7	<0.5 O	<0.5	<0.5	<0.5	<0.5
W-875-08	10/7/14	E601	290 D	0.73	53	4.6	<0.5	<0.5	<0.5	<0.5	6.3	<0.5	<0.5	<0.5	<0.5	<0.5
W-876-01	6/12/14	E601	2.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-876-01	12/8/14	E601	1.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-879-01	6/10/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-879-01	12/3/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-889-01	6/10/14	E601	6.7	<0.5	1.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-889-01	12/8/14	E601	6.5	<0.5	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-CGSA-1737	6/4/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-CGSA-1737	12/15/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-CGSA-1739	6/16/14	E601	2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-CGSA-1739	12/15/14	E601	2.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-CGSA-2708	6/16/14	E601	12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-CGSA-2708	6/16/14 DUP	E601	12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-CGSA-2708	12/10/14	E601	13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table B-1.01 (Con't). Analyte detected but not reported in main table.

Location	Date	Method	Detectio	1,2-Dich	Bromodichloromethane (µg/L)
CDF1	1/21/14	E502.2	1 of 46	-	0.54
CDF1	1/21/14	E601	0 of 18	-	-
CDF1	1/21/14 DUP	E502.2	0 of 45	-	-
CDF1	1/21/14 DUP	E601	0 of 18	-	-
CDF1	2/24/14	E601	0 of 18	-	-
CDF1	2/24/14 DUP	E601	0 of 18	-	-
CDF1	3/12/14	E601	0 of 18	-	-
CDF1	3/12/14 DUP	E601	0 of 18	-	-
CDF1	5/20/14	E601	0 of 18	-	-
CDF1	5/20/14 DUP	E601	0 of 18	-	-
CDF1	6/10/14	E601	0 of 18	-	-
CDF1	6/10/14 DUP	E601	0 of 18	-	-
CDF1	7/28/14	E601	0 of 18	-	-
CDF1	7/28/14 DUP	E601	0 of 18	-	-
CDF1	8/27/14	E601	0 of 18	-	-
CDF1	8/27/14 DUP	E601	0 of 18	-	-
CDF1	9/23/14	E601	0 of 18	-	-
CDF1	9/23/14 DUP	E601	0 of 18	-	-
CDF1	10/30/14	E601	0 of 18	-	-
CDF1	10/30/14 DUP	E601	0 of 18	-	-
CDF1	11/25/14	E601	0 of 18	-	-
CDF1	11/25/14 DUP	E601	0 of 18	-	-
CDF1	12/17/14	E601	0 of 18	-	-
CDF1	12/17/14 DUP	E601	0 of 18	-	-
CON1	1/21/14	E502.2	0 of 46	-	-
CON1	1/21/14	E601	0 of 18	-	-
CON1	1/21/14 DUP	E502.2	0 of 45	-	-
CON1	1/21/14 DUP	E601	0 of 18	-	-
CON1	2/24/14	E601	0 of 18	-	-
CON1	2/24/14 DUP	E601	0 of 18	-	-
CON1	3/12/14	E601	0 of 18	-	-
CON1	3/12/14 DUP	E601	0 of 18	-	-
CON1	4/9/14	E601	0 of 18	-	-
CON1	4/9/14 DUP	E601	0 of 18	-	-
CON1	5/20/14	E601	0 of 18	-	-
CON1	5/20/14 DUP	E601	0 of 18	-	-
CON1	6/9/14	E601	0 of 18	-	-
CON1	6/9/14 DUP	E601	0 of 18	-	-
CON1	7/28/14	E601	0 of 18	-	-
CON1	7/28/14 DUP	E601	0 of 18	-	-

Table B-1.01 (Con't). Analyte detected but not reported in main table.

Location	Date	Method	Detectioı	1,2-Dich	Bromodichloromethane (µg/L)
CON1	8/27/14	E601	0 of 18	-	-
CON1	8/27/14 DUP	E601	0 of 18	-	-
CON1	9/23/14	E601	0 of 18	-	-
CON1	9/23/14 DUP	E601	0 of 18	-	-
CON1	10/30/14	E601	0 of 18	-	-
CON1	10/30/14 DUP	E601	0 of 18	-	-
CON1	11/25/14	E601	0 of 18	-	-
CON1	11/25/14 DUP	E601	0 of 18	-	-
CON1	12/17/14	E601	0 of 18	-	-
CON1	12/17/14 DUP	E601	0 of 18	-	-
CON2	1/21/14	E601	0 of 18	-	-
CON2	2/24/14	E601	0 of 18	-	-
CON2	4/9/14	E601	0 of 18	-	-
CON2	5/20/14	E601	0 of 18	-	-
CON2	6/9/14	E601	0 of 18	-	-
CON2	7/28/14	E601	0 of 18	-	-
CON2	8/27/14	E601	0 of 18	-	-
CON2	9/23/14	E601	0 of 18	-	-
CON2	10/30/14	E601	0 of 18	-	-
CON2	10/30/14 DUP	E601	0 of 18	-	-
CON2	11/25/14	E601	0 of 18	-	-
CON2	11/25/14 DUP	E601	0 of 18	-	-
CON2	12/17/14	E601	0 of 18	-	-
CON2	12/17/14 DUP	E601	0 of 18	-	-
W-26R-06	6/18/14	E601	0 of 18	-	-
W-26R-06	12/22/14	E601	0 of 18	-	-
W-26R-11	5/5/14	E601	0 of 18	-	-
W-26R-11	11/17/14	E601	0 of 18	-	-
W-35A-01	6/18/14	E601	0 of 18	-	-
W-35A-01	6/18/14 DUP	E601	0 of 18	-	-
W-35A-01	11/11/14	E601	0 of 18	-	-
W-35A-01	11/11/14 DUP	E601	0 of 18	-	-
W-35A-02	6/16/14	E601	0 of 18	-	-
W-35A-03	6/12/14	E601	0 of 18	-	-
W-35A-04	5/7/14	E601	0 of 18	-	-
W-35A-04	11/18/14	E502.2	0 of 46	-	-
W-35A-04	11/18/14	E601	0 of 18	-	-
W-35A-05	6/12/14	E601	0 of 18	-	-
W-35A-06	6/17/14	E601	0 of 18	-	-
W-35A-07	6/16/14	E601	0 of 18	-	-

Table B-1.01 (Con't). Analyte detected but not reported in main table.

Location	Date	Method	Detectioı	1,2-Dich	Bromodichloromethane (µg/L)
W-35A-08	3/10/14	E601	0 of 18	-	-
W-35A-08	9/16/14	E601	0 of 18	-	-
W-35A-10	11/11/14	E601	0 of 18	-	-
W-35A-10	11/11/14 DUP	E601	0 of 18	-	-
W-35A-11	6/17/14	E601	0 of 18	-	-
W-35A-12	6/17/14	E601	0 of 18	-	-
W-35A-13	6/17/14	E601	0 of 18	-	-
W-35A-14	3/10/14	E601	0 of 18	-	-
W-35A-14	6/16/14	E601	0 of 18	-	-
W-35A-14	9/16/14	E601	0 of 18	-	-
W-7A	6/16/14	E601	0 of 18	-	-
W-7A	12/11/14	E601	0 of 18	-	-
W-7DS	5/5/14	E601	0 of 18	-	-
W-7DS	11/17/14	E601	0 of 18	-	-
W-7E	5/7/14	E601	0 of 18	-	-
W-7E	11/18/14	E601	0 of 18	-	-
W-7E	11/18/14 DUP	E601	0 of 18	-	-
W-7ES	5/7/14	E601	0 of 18	-	-
W-7ES	5/7/14 DUP	E601	0 of 18	-	-
W-7ES	11/18/14	E601	0 of 18	-	-
W-7F	6/17/14	E601	0 of 18	-	-
W-7F	12/11/14	E601	0 of 18	-	-
W-7G	6/17/14	E601	0 of 18	-	-
W-7G	12/11/14	E601	0 of 18	-	-
W-7H	6/3/14	E601	0 of 18	-	-
W-7H	12/8/14	E601	0 of 18	-	-
W-7I	4/21/14	E601	1 of 18	33	-
W-7I	7/23/14	E601	1 of 18	48	-
W-7I	7/23/14 DUP	E601	1 of 18	47	-
W-7J	6/17/14	E601	0 of 18	-	-
W-7J	12/8/14	E601	0 of 18	-	-
W-7K	6/3/14	E601	0 of 18	-	-
W-7K	12/8/14	E601	0 of 18	-	-
W-7L	6/4/14	E601	0 of 18	-	-
W-7L	12/22/14	E601	0 of 18	-	-
W-7M	6/4/14	E601	0 of 18	-	-
W-7M	12/22/14	E601	0 of 18	-	-
W-7N	6/4/14	E601	0 of 18	-	-
W-7N	12/22/14	E601	0 of 18	-	-
W-7O	4/21/14	E601	0 of 18	-	-

Table B-1.01 (Con't). Analyte detected but not reported in main table.

Location	Date	Method	Detectio	1,2-Dich	Bromodichloromethane (µg/L)
W-7R	4/21/14	E601	0 of 18	-	-
W-7R	7/23/14	E601	0 of 18	-	-
W-7R	10/7/14	E601	0 of 18	-	-
W-7S	6/3/14	E601	0 of 18	-	-
W-7S	12/8/14	E601	0 of 18	-	-
W-7T	6/3/14	E601	0 of 18	-	-
W-7T	12/8/14	E601	0 of 18	-	-
W-843-01	6/10/14	E601	0 of 18	-	-
W-843-01	12/3/14	E601	0 of 18	-	-
W-843-02	6/10/14	E601	0 of 18	-	-
W-843-02	12/3/14	E601	0 of 18	-	-
W-872-02	4/21/14	E601	0 of 18	-	-
W-872-02	7/23/14	E601	0 of 18	-	-
W-872-02	7/23/14 DUP	E601	0 of 18	-	-
W-872-02	10/7/14	E601	0 of 18	-	-
W-873-01	6/11/14	E601	0 of 18	-	-
W-873-01	12/8/14	E601	0 of 18	-	-
W-873-02	6/11/14	E601	0 of 18	-	-
W-873-02	12/8/14	E601	0 of 18	-	-
W-873-02	12/8/14 DUP	E601	0 of 18	-	-
W-873-03	6/11/14	E601	0 of 18	-	-
W-873-03	12/4/14	E601	0 of 18	-	-
W-873-04	6/11/14	E601	0 of 18	-	-
W-873-04	12/4/14	E601	0 of 18	-	-
W-873-06	6/11/14	E601	0 of 18	-	-
W-873-06	12/8/14	E601	0 of 18	-	-
W-873-06	12/8/14 DUP	E601	0 of 18	-	-
W-873-07	4/21/14	E601	0 of 18	-	-
W-873-07	7/23/14	E601	0 of 18	-	-
W-873-07	10/7/14	E601	0 of 18	-	-
W-875-01	6/12/14	E601	1 of 18	4.8	-
W-875-01	6/12/14 DUP	E601	1 of 18	4.9	-
W-875-01	12/10/14	E601	1 of 18	4.8	-
W-875-01	12/10/14 DUP	E601	1 of 18	4.9	-
W-875-02	6/12/14	E601	0 of 18	-	-
W-875-02	12/10/14	E601	0 of 18	-	-
W-875-03	6/12/14	E601	0 of 18	-	-
W-875-03	12/10/14	E601	0 of 18	-	-
W-875-04	6/12/14	E601	0 of 18	-	-
W-875-04	12/10/14	E601	0 of 18	-	-

Table B-1.01 (Con't). Analyte detected but not reported in main table.

Location	Date	Method	Detectio	1,2-Dich	Bromodichloromethane (µg/L)
W-875-05	6/12/14	E601	0 of 18	-	-
W-875-05	12/10/14	E601	0 of 18	-	-
W-875-06	6/12/14	E601	0 of 18	-	-
W-875-06	12/10/14	E601	0 of 18	-	-
W-875-08	4/21/14	E601	1 of 18	19	-
W-875-08	7/23/14	E601	1 of 18	42	-
W-875-08	10/7/14	E601	1 of 18	58	-
W-876-01	6/12/14	E601	0 of 18	-	-
W-876-01	12/8/14	E601	0 of 18	-	-
W-879-01	6/10/14	E601	0 of 18	-	-
W-879-01	12/3/14	E601	0 of 18	-	-
W-889-01	6/10/14	E601	1 of 18	1.4	-
W-889-01	12/8/14	E601	1 of 18	1.2	-
W-CGSA-1737	6/4/14	E601	0 of 18	-	-
W-CGSA-1737	12/15/14	E601	0 of 18	-	-
W-CGSA-1739	6/16/14	E601	0 of 18	-	-
W-CGSA-1739	12/15/14	E601	0 of 18	-	-
W-CGSA-2708	6/16/14	E601	0 of 18	-	-
W-CGSA-2708	6/16/14 DUP	E601	0 of 18	-	-
W-CGSA-2708	12/10/14	E601	0 of 18	-	-

Table B-2.01. Building 834 Operable Unit volatile organic compounds (VOCs) in ground water.

Location	Date	Method	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Carbon tetra-chloride (µg/L)	Chloro-form (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	1,1,2-TCA (µg/L)	Freon 11 (µg/L)	Freon 113 (µg/L)	Vinyl chloride (µg/L)
W-834-1709	2/3/14	E601	2,600 D	5.7 D	260 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D
W-834-1709	7/29/14	E601	2,000 D	6.4 D	98 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D
W-834-1711	2/3/14	E601	1,300 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D
W-834-1824	2/19/14	E601	420 D	0.71	140 D	<5 D	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	8.1
W-834-1824	8/5/14	E601	450 DIJ	0.83	190 DIJ	<5 D	<0.5	<0.5	<0.5	<0.5	0.88 IJ	<0.5	<0.5	<0.5	<0.5	9.1 IJ
W-834-1824	8/5/14 DUP	E601	380 DIJ	0.78	180 DIJ	<12 D	<0.5	<0.5	<0.5	<0.5	0.92 IJ	<0.5	<0.5	<0.5	<0.5	9.9 IJ
W-834-1833	8/5/14	E601	330 DIJ	0.89	4.8 IJ	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 IJ	<0.5	<0.5	<0.5	<0.5	<0.5 IJ
W-834-2001	3/4/14	E601	420 D	9.6	280 D	<5 D	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-2001	4/29/14	E624	170 D	10	770 D	<50 D	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
W-834-2001	8/4/14	E601	55	3.4	83	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-2001	8/4/14 DUP	E601	50 D	3.4 D	83 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D
W-834-2001	11/3/14	E624	240 D	18	670 D	<10 D	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
W-834-2113	2/10/14	E601	8,400 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D	<100 D	<200 D	<50 D
W-834-2113	8/4/14	E601	7,700 DLO	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D	<100 D	<200 D	<50 D
W-834-2113	8/4/14 DUP	E601	9,300 DLO	10 D	21 D	3 D	<1 D	1.1 D	<1 D	<1 D	3.8 D	<1 D	1.6 D	<2 D	<4 D	<1 D
W-834-2117	2/10/14	E601	7,600 D	<250 D	<250 D	<250 D	<250 D	<250 D	<250 D	<250 D	<250 D	<250 D	<250 D	<250 D	<250 D	<250 D
W-834-2117	8/4/14	E601	6,000 D	<250 D	<250 D	<250 D	<250 D	<250 D	<250 D	<250 D	<250 D	<250 D	<250 D	<250 D	<250 D	<250 D
W-834-2118	2/13/14	E601	110 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D
W-834-2118	2/13/14 DUP	E601	110 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D
W-834-2118	8/7/14	E601	130 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D
W-834-2119	2/11/14	E601	13,000 D	<500 D	<500 D	<500 D	<500 D	<500 D	<500 D	<500 D	<500 D	<500 D	<500 D	<500 D	<500 D	<500 D
W-834-2119	2/11/14 DUP	E601	13,000 D	<500 D	<500 D	<500 D	<500 D	<500 D	<500 D	<500 D	<500 D	<500 D	<500 D	<500 D	<500 D	<500 D
W-834-2119	8/6/14	E601	16,000 D	<500 D	<500 D	<500 D	<500 D	<500 D	<500 D	<500 D	<500 D	<500 D	<500 D	<500 D	<500 D	<500 D
W-834-2119	8/6/14 DUP	E601	12,000 DLO	22 D	41 D	<1 D	1.6 D	3 D	<1 D	<1 D	2.4 D	<1 D	1.8 D	<2 D	<4 D	<1 D
W-834-A1	2/3/14	E601	180,000 D	940 D	2,200 D	<500 D	<500 D	<500 D	<500 D	<500 D	<500 D	<500 D	<500 D	<500 D	<500 D	<500 D
W-834-A1	2/3/14 DUP	E601	160,000 D	<5,000 D	<5,000 D	<5,000 D	<5,000 D	<5,000 D	<5,000 D	<5,000 D	<5,000 D	<5,000 D	<5,000 D	<5,000 D	<5,000 D	<5,000 D
W-834-A1	7/29/14	E601	110,000 D	520 D	33,000 D	<250 D	<250 D	<250 D	<250 D	<250 D	<250 D	<250 D	<250 D	<250 D	<250 D	<250 D
W-834-B2	3/4/14	E601	1,700 D	17 D	840 D	<25 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D
W-834-B2	4/29/14	E601	690 D	9.8 D	360 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D
W-834-B2	8/4/14	E601	490 D	5.2	260 D	<25 D	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-B2	11/3/14	E601	1,400 D	16 D	840 D	<25 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D
W-834-B3	3/4/14	E601	61 D	<1 D	790 D	<5 D	<1 D	<1 D	<1 D	<1 D	1.9 D	<1 D	<1 D	<1 D	<1 D	<1 D
W-834-B3	4/29/14	E601	360 D	0.82	1,600 D	<25 D	<0.5	<0.5	<0.5	<0.5	4.6	<0.5	<0.5	<0.5	<0.5	0.67
W-834-B3	8/4/14	E601	930 D	<2.5 D	7,600 D	<100 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	15 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	14 D
W-834-B3	11/3/14	E601	140 D	<1 D	920 D	<25 D	<1 D	<1 D	<1 D	<1 D	2.9 D	<1 D	<1 D	<1 D	<1 D	<1 D
W-834-C4	2/3/14	E601	14	<0.5	11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-C4	7/29/14	E601	130 D	<0.5	160 D	<5 D	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-C4	7/29/14 DUP	E601	110 D	<0.5	120 D	<1 D	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-834-C5	7/29/14	E601	34,000 D	120 D	20,000 D	<1,000 D	<50 D	<50 D	<50 D	<50 D	58 D	<50 D	<50 D	<50 D	<50 D	<50 D

Table B-2.01. Building 834 Operable Unit volatile organic compounds (VOCs) in ground water.

Location	Date	Method	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Carbon tetra-chloride (µg/L)	Chloro-form (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	1,1,2-TCA (µg/L)	Freon 11 (µg/L)	Freon 113 (µg/L)	Vinyl chloride (µg/L)
W-834-D3	2/6/14	E601	0.66	<0.5	9.6	2.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	7.1 O
W-834-D3	7/30/14	E601	2.5	<0.5	3.2	0.66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	3.6
W-834-D4	3/4/14	E601	870 D	11 D	600 D	<25 D	<1 D	<1 D	<1 D	<1 D	<1 D	<1 D	1.4 D	<1 D	<1 D	<1 D
W-834-D4	4/29/14	E601	1,900 D	11	930 D	<25 D	<0.5	<0.5	<0.5	0.71	1.1	<0.5	2.3	<0.5	<0.5	<0.5
W-834-D4	8/4/14	E601	2,100 D	18 D	2,100 D	<25 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D
W-834-D4	11/3/14	E601	570 D	13	250 D	<25 D	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.1	<0.5	<0.5	<0.5
W-834-D5	3/4/14	E601	610 D	1.1	830 D	<25 D	<0.5	<0.5	<0.5	<0.5	1.6	<0.5	<0.5	<0.5	<0.5	2.7
W-834-D5	8/4/14	E601	39	<0.5	100	0.53	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-D6	3/4/14	E601	940 D	3.5	270 D	<25 D	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	<0.5
W-834-D6	4/29/14	E601	220 D	0.93	78	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	3.7	<0.5
W-834-D6	8/4/14	E601	240 D	0.92	64	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.7	<0.5
W-834-D6	11/3/14	E601	230 D	1.1	56	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	15	<0.5
W-834-D7	3/4/14	E601	4,200 D	24 D	160 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D
W-834-D7	4/29/14	E601	7,600 D	45 D	170 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D
W-834-D7	8/4/14	E601	350 D	3.7	6.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-D7	8/4/14 DUP	E601	410 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D
W-834-D7	11/3/14	E601	10,000 D	56 D	82 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D
W-834-D12	3/4/14	E601	57	0.57	33	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-D12	4/29/14	E601	100 D	0.68	20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-D12	8/4/14	E601	69	<0.5	7.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-D12	11/3/14	E601	110 D	0.83	10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-D13	3/4/14	E601	8,300 D	83 D	470 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D
W-834-D13	4/29/14	E601	6,200 D	71 D	410 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D
W-834-D13	8/4/14	E601	840 D	8.1 D	43 D	<1 D	<1 D	<1 D	<1 D	<1 D	<1 D	<1 D	<1 D	<1 D	<1 D	<1 D
W-834-D13	11/3/14	E601	6,200 D	42 D	220 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D
W-834-J1	3/4/14	E601	9.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-J1	4/29/14	E601	26	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-J1	8/4/14	E601	6.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-J1	11/3/14	E601	17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-J2	2/5/14	E601	64	<0.5	2.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-J2	7/31/14	E601	13	<0.5	0.97	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-M1	2/5/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	0.78	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-M1	7/31/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	0.93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-S1	3/4/14	E601	3,000 D	48 D	140 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D
W-834-S1	4/29/14	E601	3,200 D	47 D	140 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D
W-834-S1	8/4/14	E601	1,900 D	25 D	88 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D
W-834-S1	11/3/14	E601	1,600 D	19 D	33 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D
W-834-S12A	3/4/14	E601	890 D	<1 D	2.4 D	<1 D	<1 D	<1 D	<1 D	<1 D	<1 D	<1 D	<1 D	<1 D	<1 D	<1 D
W-834-S12A	4/29/14	E601	830 D	0.7	1.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.85	<0.5	<0.5	<0.5

Table B-2.01. Building 834 Operable Unit volatile organic compounds (VOCs) in ground water.

Location	Date	Method	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Carbon tetra-chloride (µg/L)	Chloro-form (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	1,1,2-TCA (µg/L)	Freon 11 (µg/L)	Freon 113 (µg/L)	Vinyl chloride (µg/L)
W-834-S12A	8/4/14	E601	510 D	<0.5	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.62	<0.5	<0.5	<0.5
W-834-S12A	11/3/14	E601	650 D	0.51	1.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.68	<0.5	<0.5	<0.5
W-834-S13	3/4/14	E601	130 D	0.75	6.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-S13	4/29/14	E601	78	0.56	4.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-S13	8/4/14	E601	86	0.5	4.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-S13	11/3/14	E601	84	<0.5	3.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-S4	2/5/14	E601	14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-S4	7/31/14	E601	13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-S9	2/10/14	E601	1,600 D	3.6 D	2.8 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D
W-834-S9	2/10/14 DUP	E601	1,800 D	<100 D	<100 D	<100 D	<100 D	<100 D	<100 D	<100 D	<100 D	<100 D	<100 D	<100 D	<100 D	<100 D
W-834-S9	8/4/14	E601	1,500 DLO	3.9 D	2.4 D	<1 D	<1 D	<1 D	<1 D	<1 D	<1 D	<1 D	<1 D	<2 D	<4 D	<1 D
W-834-S9	8/4/14 DUP	E601	1,700 D	<100 D	<100 D	<100 D	<100 D	<100 D	<100 D	<100 D	<100 D	<100 D	<100 D	<100 D	<100 D	<100 D
W-834-T1	2/11/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-T1	6/4/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-T1	6/4/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-834-T1	12/1/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-T1	12/1/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-834-T2	2/19/14	E601	60	<0.5	1,000 D	<25 D	<0.5	<0.5	<0.5	<0.5	1.7	<0.5	<0.5	<0.5	<0.5	330 D
W-834-T2	8/5/14	E601	27 IJ	<0.5	510 DIJ	<12 D	<0.5	<0.5	<0.5	<0.5	1.2 IJ	<0.5	<0.5	<0.5	<0.5	200 DIJ
W-834-T2A	2/11/14	E601	5,000 D	17 D	20 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D
W-834-T2A	8/5/14	E601	3,700 DIJ	18	18 IJ	<0.5	<0.5	1.6	<0.5	<0.5	0.74 IJ	<0.5	1.1	<0.5	<0.5	<0.5 IJ
W-834-T2A	9/23/14	E601	2,400 D	7.4 D	10 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D
W-834-T2D	2/12/14	E601	4,100 D	6.5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D
W-834-T2D	2/12/14 DUP	E601	5,700 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D
W-834-T2D	8/5/14	E601	4,400 DIJ	4.3	2.4 IJ	<0.5	<0.5	1	<0.5	<0.5	0.78 IJ	<0.5	0.97	0.78	<0.5	<0.5 IJ
W-834-T2D	9/23/14	E601	1,900 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D
W-834-T3	2/12/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-T3	6/4/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-T5	2/12/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-T5	8/7/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-U1	2/10/14	E624	16,000 D	91 D	1,500 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D
W-834-U1	8/4/14	E624	58,000 D	320 D	5,200 D	<100 D	<100 D	<100 D	<100 D	<100 D	<100 D	<100 D	<100 D	<100 D	<100 D	<100 D

Table B-2.01 (Con't). Analyte detected but not reported in main table.

Location	Date	Method	Detection fre	1,2-Dichlo	Chloroethane (µg/L)
W-834-1709	2/3/14	E601	1 of 18	260 D	-
W-834-1709	7/29/14	E601	1 of 18	98 D	-
W-834-1711	2/3/14	E601	0 of 18	-	-
W-834-1824	2/19/14	E601	1 of 18	140 D	-
W-834-1824	8/5/14	E601	1 of 18	190 DIJ	-
W-834-1824	8/5/14 DUP	E601	1 of 18	180 DIJ	-
W-834-1833	8/5/14	E601	1 of 18	4.8 IJ	-
W-834-2001	3/4/14	E601	1 of 18	280 D	-
W-834-2001	4/29/14	E624	1 of 30	770 D	-
W-834-2001	8/4/14	E601	1 of 18	83	-
W-834-2001	8/4/14 DUP	E601	1 of 18	83 D	-
W-834-2001	11/3/14	E624	1 of 30	670 D	-
W-834-2113	2/10/14	E601	0 of 18	-	-
W-834-2113	8/4/14	E601	0 of 18	-	-
W-834-2113	8/4/14 DUP	E601	1 of 18	24 D	-
W-834-2117	2/10/14	E601	0 of 18	-	-
W-834-2117	8/4/14	E601	0 of 18	-	-
W-834-2118	2/13/14	E601	0 of 18	-	-
W-834-2118	2/13/14 DUP	E601	0 of 18	-	-
W-834-2118	8/7/14	E601	0 of 18	-	-
W-834-2119	2/11/14	E601	0 of 18	-	-
W-834-2119	2/11/14 DUP	E601	0 of 18	-	-
W-834-2119	8/6/14	E601	0 of 18	-	-
W-834-2119	8/6/14 DUP	E601	1 of 18	41 D	-
W-834-A1	2/3/14	E601	1 of 18	2,200 D	-
W-834-A1	2/3/14 DUP	E601	0 of 18	-	-
W-834-A1	7/29/14	E601	1 of 18	33,000 D	-
W-834-B2	3/4/14	E601	1 of 18	840 D	-
W-834-B2	4/29/14	E601	1 of 18	360 D	-
W-834-B2	8/4/14	E601	1 of 18	260 D	-
W-834-B2	11/3/14	E601	1 of 18	840 D	-
W-834-B3	3/4/14	E601	1 of 18	790 D	-
W-834-B3	4/29/14	E601	1 of 18	1,600 D	-
W-834-B3	8/4/14	E601	1 of 18	7,600 D	-
W-834-B3	11/3/14	E601	1 of 18	920 D	-
W-834-C4	2/3/14	E601	1 of 18	11	-
W-834-C4	7/29/14	E601	1 of 18	160 D	-
W-834-C4	7/29/14 DUP	E601	1 of 18	120 D	-
W-834-C5	7/29/14	E601	1 of 18	20,000 D	-
W-834-D3	2/6/14	E601	1 of 18	12	-
W-834-D3	7/30/14	E601	1 of 18	3.8	-
W-834-D4	3/4/14	E601	1 of 18	600 D	-

Table B-2.01 (Con't). Analyte detected but not reported in main table.

Location	Date	Method	Detection fre	1,2-Dichlo	Chloroethane (µg/L)
W-834-D4	4/29/14	E601	1 of 18	930 D	-
W-834-D4	8/4/14	E601	1 of 18	2,100 D	-
W-834-D4	11/3/14	E601	1 of 18	250 D	-
W-834-D5	3/4/14	E601	1 of 18	840 D	-
W-834-D5	8/4/14	E601	1 of 18	100	-
W-834-D6	3/4/14	E601	1 of 18	270 D	-
W-834-D6	4/29/14	E601	1 of 18	78	-
W-834-D6	8/4/14	E601	1 of 18	64	-
W-834-D6	11/3/14	E601	1 of 18	56	-
W-834-D7	3/4/14	E601	1 of 18	160 D	-
W-834-D7	4/29/14	E601	1 of 18	170 D	-
W-834-D7	8/4/14	E601	1 of 18	6.7	-
W-834-D7	8/4/14 DUP	E601	0 of 18	-	-
W-834-D7	11/3/14	E601	1 of 18	82 D	-
W-834-D12	3/4/14	E601	1 of 18	33	-
W-834-D12	4/29/14	E601	1 of 18	20	-
W-834-D12	8/4/14	E601	1 of 18	7.3	-
W-834-D12	11/3/14	E601	1 of 18	10	-
W-834-D13	3/4/14	E601	1 of 18	470 D	-
W-834-D13	4/29/14	E601	1 of 18	410 D	-
W-834-D13	8/4/14	E601	1 of 18	43 D	-
W-834-D13	11/3/14	E601	1 of 18	220 D	-
W-834-J1	3/4/14	E601	0 of 18	-	-
W-834-J1	4/29/14	E601	0 of 18	-	-
W-834-J1	8/4/14	E601	0 of 18	-	-
W-834-J1	11/3/14	E601	0 of 18	-	-
W-834-J2	2/5/14	E601	1 of 18	2.8	-
W-834-J2	7/31/14	E601	0 of 18	-	-
W-834-M1	2/5/14	E601	0 of 18	-	-
W-834-M1	7/31/14	E601	0 of 18	-	-
W-834-S1	3/4/14	E601	1 of 18	140 D	-
W-834-S1	4/29/14	E601	1 of 18	140 D	-
W-834-S1	8/4/14	E601	1 of 18	88 D	-
W-834-S1	11/3/14	E601	1 of 18	33 D	-
W-834-S12A	3/4/14	E601	1 of 18	2.4 D	-
W-834-S12A	4/29/14	E601	1 of 18	1.7	-
W-834-S12A	8/4/14	E601	1 of 18	1.1	-
W-834-S12A	11/3/14	E601	1 of 18	1.5	-
W-834-S13	3/4/14	E601	1 of 18	6.2	-
W-834-S13	4/29/14	E601	1 of 18	4.1	-
W-834-S13	8/4/14	E601	1 of 18	4.1	-
W-834-S13	11/3/14	E601	1 of 18	3.9	-

Table B-2.01 (Con't). Analyte detected but not reported in main table.

Location	Date	Method	Detection fre	1,2-Dichlo	Chloroethane (µg/L)
W-834-S4	2/5/14	E601	0 of 18	-	-
W-834-S4	7/31/14	E601	0 of 18	-	-
W-834-S9	2/10/14	E601	0 of 18	-	-
W-834-S9	2/10/14 DUP	E601	0 of 18	-	-
W-834-S9	8/4/14	E601	1 of 18	2.4 D	-
W-834-S9	8/4/14 DUP	E601	0 of 18	-	-
W-834-T1	2/11/14	E601	0 of 18	-	-
W-834-T1	6/4/14	E601	0 of 18	-	-
W-834-T1	6/4/14 DUP	E601	0 of 18	-	-
W-834-T1	12/1/14	E601	0 of 18	-	-
W-834-T1	12/1/14 DUP	E601	0 of 18	-	-
W-834-T2	2/19/14	E601	2 of 18	1,000 D	29
W-834-T2	8/5/14	E601	2 of 18	510 DIJ	71
W-834-T2A	2/11/14	E601	1 of 18	20 D	-
W-834-T2A	8/5/14	E601	1 of 18	19 IJ	-
W-834-T2A	9/23/14	E601	1 of 18	10 D	-
W-834-T2D	2/12/14	E601	0 of 18	-	-
W-834-T2D	2/12/14 DUP	E601	0 of 18	-	-
W-834-T2D	8/5/14	E601	1 of 18	2.5 IJ	-
W-834-T2D	9/23/14	E601	0 of 18	-	-
W-834-T3	2/12/14	E601	0 of 18	-	-
W-834-T3	6/4/14	E601	0 of 18	-	-
W-834-T5	2/12/14	E601	0 of 18	-	-
W-834-T5	8/7/14	E601	0 of 18	-	-
W-834-U1	2/10/14	E624	1 of 30	1,500 D	-
W-834-U1	8/4/14	E624	1 of 30	5,200 D	-

Table B-2.02. Building 834 Operable Unit nitrate and perchlorate in ground water.

Location	Date	Nitrate (as NO3) (mg/L)	Perchlorate (µg/L)
W-834-1709	2/3/14	1.6	-
W-834-1824	2/19/14	<25 D	-
W-834-2001	3/4/14	<0.5	-
W-834-2113	2/10/14	73 D	-
W-834-2117	2/10/14	96 D	-
W-834-2118	2/13/14	99 D	<4
W-834-2118	2/13/14 DUP	110 D	<4
W-834-2118	8/7/14	-	<4
W-834-2119	2/11/14	84 D	-
W-834-2119	2/11/14 DUP	84 D	-
W-834-A1	2/3/14	<0.5	-
W-834-A1	2/3/14 DUP	<0.5	-
W-834-B2	3/4/14	60	-
W-834-B3	3/4/14	28	-
W-834-C4	2/3/14	77	-
W-834-D3	2/6/14	<0.5	-
W-834-D4	3/4/14	0.52	-
W-834-D5	3/4/14	<0.5	-
W-834-D6	3/4/14	21	-
W-834-D7	3/4/14	64	-
W-834-D12	3/4/14	210 D	-
W-834-D13	3/4/14	16	-
W-834-J1	3/4/14	150 D	-
W-834-J2	2/5/14	150 D	-
W-834-M1	2/5/14	300 D	-
W-834-S1	3/4/14	120 D	-
W-834-S12A	3/4/14	130 D	-
W-834-S13	3/4/14	150 D	-
W-834-S4	2/5/14	170 D	-
W-834-S9	2/10/14	95 D	-
W-834-S9	2/10/14 DUP	78 D	-
W-834-T1	2/11/14	<0.5	-
W-834-T2	2/19/14	<2.5 D	-
W-834-T2A	2/11/14	66 D	-
W-834-T2D	2/12/14	120 D	-
W-834-T2D	2/12/14 DUP	99 D	-
W-834-T3	2/12/14	<0.5	-
W-834-T5	2/12/14	93 D	-
W-834-U1	2/10/14	1.1	-

Table B-2.03. Building 834 Operable Unit tetrabutyl orthosilicate/tetrakis (2-ethylbutyl) silane (TBOS/TKEBS) in ground water.

Location	Date	C24H52O4Si (µg/L)
W-834-1824	2/19/14	<10
W-834-2001	3/4/14	<10
W-834-2001	8/4/14	<10
W-834-2001	9/10/14	R
W-834-2113	2/10/14	<10
W-834-2119	2/11/14	<10
W-834-2119	2/11/14 DUP	<10
W-834-A1	2/3/14	26
W-834-A1	2/3/14 DUP	31 O
W-834-B2	3/4/14	<10
W-834-B2	8/4/14	91
W-834-B3	3/4/14	<10
W-834-B3	8/4/14	20
W-834-D3	2/27/14	<50 DIJ
W-834-D4	3/4/14	<10
W-834-D4	8/4/14	72
W-834-D5	3/4/14	<10
W-834-D6	3/4/14	<10
W-834-D6	8/4/14	30
W-834-D7	3/4/14	<10
W-834-D7	8/4/14	55
W-834-D7	8/4/14 DUP	<10 O
W-834-D12	3/4/14	<10
W-834-D12	8/4/14	56
W-834-D13	3/4/14	<10
W-834-D13	8/4/14	21
W-834-J1	3/4/14	<10
W-834-J1	8/4/14	17
W-834-J2	2/5/14	<10
W-834-M1	2/5/14	<10
W-834-S1	3/4/14	<10
W-834-S1	8/4/14	33
W-834-S12A	3/4/14	<10
W-834-S12A	8/4/14	<10
W-834-S13	3/4/14	<10
W-834-S13	8/4/14	52
W-834-S9	2/10/14	59 IJ
W-834-S9	2/10/14 DUP	75
W-834-T1	2/11/14	<10
W-834-T2A	2/11/14	<10
W-834-T2D	2/12/14	<10
W-834-T2D	2/12/14 DUP	<10
W-834-T3	2/12/14	<10
W-834-T5	2/12/14	<10
W-834-U1	2/10/14	<10

Table B-2.04. Building 834 Operable Unit diesel range organic compounds in ground water.

Location	Date	Diesel Fuel (µg/L)	Diesel Range Organics (C12-C24) (µg/L)
W-834-2001	3/4/14	2,300	-
W-834-2001	8/4/14	1,600	-
W-834-2001	9/10/14	<50	-
W-834-A1	2/3/14	-	<200
W-834-S9	2/10/14	-	<240 D
W-834-S9	2/10/14 DUP	97	-
W-834-U1	2/10/14	<240 D	-

Table B-2.05. Building 834 Operable Unit metals in ground water.

Location	Date	Iron (mg/L)	Manganese (mg/L)
W-834-1824	2/19/14	130 D	11 D
W-834-T2	2/19/14	0.12	0.49

Table B-3.01. Pit 6 Landfill Operable Unit volatile organic compounds (VOCs) in ground water.

Location	Date	Method	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	1,1,2-TCA (µg/L)	Freon 11 (µg/L)	Freon 113 (µg/L)	Vinyl chloride (µg/L)
BC6-10	1/9/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
BC6-10	7/7/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
CARNRW1	1/7/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW1	1/7/14	E624	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
CARNRW1	1/7/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW1	1/7/14 DUP	E624	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
CARNRW1	2/11/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW1	2/11/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW1	3/4/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW1	3/4/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW1	4/7/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW1	4/7/14	E624	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
CARNRW1	4/7/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW1	4/7/14 DUP	E624	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
CARNRW1	5/21/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW1	5/21/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW1	6/11/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW1	6/11/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW1	7/10/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW1	7/10/14	E624	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
CARNRW1	7/10/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW1	7/10/14 DUP	E624	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
CARNRW1	8/25/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW1	8/25/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW1	9/9/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW1	9/9/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW1	10/8/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW1	10/8/14	E624	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
CARNRW1	10/8/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW1	10/8/14 DUP	E624	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
CARNRW1	11/24/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW1	11/24/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW1	12/10/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW1	12/10/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW2	1/7/14	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW2	1/7/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 J
CARNRW2	1/7/14 DUP	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
CARNRW2	1/7/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW2	2/5/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW2	2/5/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW2	3/5/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW2	3/5/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW2	4/8/14	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW2	4/8/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table B-3.01. Pit 6 Landfill Operable Unit volatile organic compounds (VOCs) in ground water.

Location	Date	Method	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	1,1,2-TCA (µg/L)	Freon 11 (µg/L)	Freon 113 (µg/L)	Vinyl chloride (µg/L)
CARNRW2	4/8/14 DUP	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
CARNRW2	4/8/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW2	5/21/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW2	5/21/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW2	6/11/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW2	6/11/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW2	7/16/14	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW2	7/16/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW2	7/16/14 DUP	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
CARNRW2	7/16/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW2	8/25/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW2	8/25/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW2	9/9/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW2	9/9/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW2	10/8/14	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW2	10/8/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW2	10/8/14 DUP	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
CARNRW2	10/8/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW2	11/24/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW2	11/24/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW2	12/15/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW2	12/15/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW3	1/7/14	E601	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 J
CARNRW3	1/7/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW3	2/5/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW3	2/5/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW3	3/4/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW3	3/4/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW3	4/7/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW3	4/7/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW3	5/21/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW3	5/21/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW3	6/11/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW3	6/11/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW3	7/16/14	E601	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW3	7/16/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW3	8/25/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW3	8/25/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW3	9/9/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW3	9/9/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW3	10/14/14	E601	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW3	10/14/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW3	11/24/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW3	11/24/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table B-3.01. Pit 6 Landfill Operable Unit volatile organic compounds (VOCs) in ground water.

Location	Date	Method	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	1,1,2-TCA (µg/L)	Freon 11 (µg/L)	Freon 113 (µg/L)	Vinyl chloride (µg/L)
CARNRW3	12/10/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW3	12/10/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW4	1/7/14	E601	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 J
CARNRW4	1/7/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW4	2/5/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW4	2/5/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW4	3/4/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW4	3/4/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW4	4/7/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW4	4/7/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW4	5/21/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW4	5/21/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW4	6/11/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW4	6/11/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW4	7/16/14	E601	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW4	7/16/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW4	8/25/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW4	8/25/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW4	9/9/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW4	9/9/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW4	10/14/14	E601	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW4	10/14/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW4	11/24/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW4	11/24/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW4	12/15/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW4	12/15/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
EP6-06	1/13/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
EP6-06	7/9/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
EP6-07	1/13/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
EP6-07	1/13/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
EP6-07	7/2/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
EP6-09	1/13/14	E601	5.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
EP6-09	7/9/14	E601	4.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
EP6-09	7/9/14 DUP	E601	4.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K6-01	1/8/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K6-01	7/8/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K6-01S	1/8/14	E601	<0.5	<0.5	2.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K6-01S	7/9/14	E601	<0.5	<0.5	2.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K6-03	1/7/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K6-14	1/8/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
K6-14	7/9/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
K6-16	1/8/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
K6-16	1/8/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K6-16	7/9/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5

Table B-3.01. Pit 6 Landfill Operable Unit volatile organic compounds (VOCs) in ground water.

Location	Date	Method	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	1,1,2-TCA (µg/L)	Freon 11 (µg/L)	Freon 113 (µg/L)	Vinyl chloride (µg/L)
K6-17	1/7/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
K6-17	4/1/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
K6-17	7/7/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
K6-17	10/1/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
K6-17	10/1/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
K6-18	1/8/14	E601	<0.5	<0.5	0.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
K6-18	1/8/14 DUP	E601	<0.5	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K6-18	7/9/14	E601	0.7	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
K6-19	1/8/14	E601	1.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K6-19	1/8/14 DUP	E601	1.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K6-19	7/9/14	E601	1.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K6-19	7/9/14 DUP	E601	2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
K6-22	1/9/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
K6-22	4/1/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
K6-22	7/7/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
K6-22	10/1/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
K6-23	1/7/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
K6-23	7/7/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
K6-25	7/9/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
K6-26	1/8/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
K6-26	7/9/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
K6-27	1/8/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K6-27	7/8/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K6-33	7/2/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K6-34	1/7/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
K6-34	4/1/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
K6-34	7/7/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
K6-35	1/8/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K6-35	7/2/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-33C-01	1/9/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-PIT6-1819	1/7/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT6-1819	4/1/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT6-1819	7/2/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT6-1819	10/1/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT6-2816	1/9/14	E601	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT6-2816	7/9/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT6-2816	7/9/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-PIT6-2817	1/8/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT6-2817	7/2/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table B-3.01 (Con't). Analyte detected but not reported in main table.

Location	Date	Method	Detection frequency	Dichloroethene (total) (µg/L)
BC6-10	1/9/14	E601	0 of 18	-
BC6-10	7/7/14	E601	0 of 18	-
CARNRW1	1/7/14	E601	0 of 18	-
CARNRW1	1/7/14	E624	0 of 30	-
CARNRW1	1/7/14 DUP	E601	0 of 18	-
CARNRW1	1/7/14 DUP	E624	0 of 30	-
CARNRW1	2/11/14	E601	0 of 18	-
CARNRW1	2/11/14 DUP	E601	0 of 18	-
CARNRW1	3/4/14	E601	0 of 18	-
CARNRW1	3/4/14 DUP	E601	0 of 18	-
CARNRW1	4/7/14	E601	0 of 18	-
CARNRW1	4/7/14	E624	0 of 30	-
CARNRW1	4/7/14 DUP	E601	0 of 18	-
CARNRW1	4/7/14 DUP	E624	0 of 30	-
CARNRW1	5/21/14	E601	0 of 18	-
CARNRW1	5/21/14 DUP	E601	0 of 18	-
CARNRW1	6/11/14	E601	0 of 18	-
CARNRW1	6/11/14 DUP	E601	0 of 18	-
CARNRW1	7/10/14	E601	0 of 18	-
CARNRW1	7/10/14	E624	0 of 30	-
CARNRW1	7/10/14 DUP	E601	0 of 18	-
CARNRW1	7/10/14 DUP	E624	0 of 30	-
CARNRW1	8/25/14	E601	0 of 18	-
CARNRW1	8/25/14 DUP	E601	0 of 18	-
CARNRW1	9/9/14	E601	0 of 18	-
CARNRW1	9/9/14 DUP	E601	0 of 18	-
CARNRW1	10/8/14	E601	0 of 18	-
CARNRW1	10/8/14	E624	0 of 30	-
CARNRW1	10/8/14 DUP	E601	0 of 18	-
CARNRW1	10/8/14 DUP	E624	0 of 30	-
CARNRW1	11/24/14	E601	0 of 18	-
CARNRW1	11/24/14 DUP	E601	0 of 18	-
CARNRW1	12/10/14	E601	0 of 18	-
CARNRW1	12/10/14 DUP	E601	0 of 18	-
CARNRW2	1/7/14	E502.2	0 of 46	-
CARNRW2	1/7/14	E601	0 of 18	-
CARNRW2	1/7/14 DUP	E502.2	0 of 45	-
CARNRW2	1/7/14 DUP	E601	0 of 18	-
CARNRW2	2/5/14	E601	0 of 18	-
CARNRW2	2/5/14 DUP	E601	0 of 18	-
CARNRW2	3/5/14	E601	0 of 18	-
CARNRW2	3/5/14 DUP	E601	0 of 18	-
CARNRW2	4/8/14	E502.2	0 of 46	-
CARNRW2	4/8/14	E601	0 of 18	-
CARNRW2	4/8/14 DUP	E502.2	0 of 45	-

Table B-3.01 (Con't). Analyte detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloroethene (total) (µg/L)
CARNRW2	4/8/14 DUP	E601	0 of 18	-
CARNRW2	5/21/14	E601	0 of 18	-
CARNRW2	5/21/14 DUP	E601	0 of 18	-
CARNRW2	6/11/14	E601	0 of 18	-
CARNRW2	6/11/14 DUP	E601	0 of 18	-
CARNRW2	7/16/14	E502.2	0 of 46	-
CARNRW2	7/16/14	E601	0 of 18	-
CARNRW2	7/16/14 DUP	E502.2	0 of 45	-
CARNRW2	7/16/14 DUP	E601	0 of 18	-
CARNRW2	8/25/14	E601	0 of 18	-
CARNRW2	8/25/14 DUP	E601	0 of 18	-
CARNRW2	9/9/14	E601	0 of 18	-
CARNRW2	9/9/14 DUP	E601	0 of 18	-
CARNRW2	10/8/14	E502.2	0 of 46	-
CARNRW2	10/8/14	E601	0 of 18	-
CARNRW2	10/8/14 DUP	E502.2	0 of 45	-
CARNRW2	10/8/14 DUP	E601	0 of 18	-
CARNRW2	11/24/14	E601	0 of 18	-
CARNRW2	11/24/14 DUP	E601	0 of 18	-
CARNRW2	12/15/14	E601	0 of 18	-
CARNRW2	12/15/14 DUP	E601	0 of 18	-
CARNRW3	1/7/14	E601	0 of 18	-
CARNRW3	1/7/14 DUP	E601	0 of 18	-
CARNRW3	2/5/14	E601	0 of 18	-
CARNRW3	2/5/14 DUP	E601	0 of 18	-
CARNRW3	3/4/14	E601	0 of 18	-
CARNRW3	3/4/14 DUP	E601	0 of 18	-
CARNRW3	4/7/14	E601	0 of 18	-
CARNRW3	4/7/14 DUP	E601	0 of 18	-
CARNRW3	5/21/14	E601	0 of 18	-
CARNRW3	5/21/14 DUP	E601	0 of 18	-
CARNRW3	6/11/14	E601	0 of 18	-
CARNRW3	6/11/14 DUP	E601	0 of 18	-
CARNRW3	7/16/14	E601	0 of 18	-
CARNRW3	7/16/14 DUP	E601	0 of 18	-
CARNRW3	8/25/14	E601	0 of 18	-
CARNRW3	8/25/14 DUP	E601	0 of 18	-
CARNRW3	9/9/14	E601	0 of 18	-
CARNRW3	9/9/14 DUP	E601	0 of 18	-
CARNRW3	10/14/14	E601	0 of 18	-
CARNRW3	10/14/14 DUP	E601	0 of 18	-
CARNRW3	11/24/14	E601	0 of 18	-
CARNRW3	11/24/14 DUP	E601	0 of 18	-
CARNRW3	12/10/14	E601	0 of 18	-

Table B-3.01 (Con't). Analyte detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloroethene (total) (µg/L)
CARNRW3	12/10/14 DUP	E601	0 of 18	-
CARNRW4	1/7/14	E601	0 of 18	-
CARNRW4	1/7/14 DUP	E601	0 of 18	-
CARNRW4	2/5/14	E601	0 of 18	-
CARNRW4	2/5/14 DUP	E601	0 of 18	-
CARNRW4	3/4/14	E601	0 of 18	-
CARNRW4	3/4/14 DUP	E601	0 of 18	-
CARNRW4	4/7/14	E601	0 of 18	-
CARNRW4	4/7/14 DUP	E601	0 of 18	-
CARNRW4	5/21/14	E601	0 of 18	-
CARNRW4	5/21/14 DUP	E601	0 of 18	-
CARNRW4	6/11/14	E601	0 of 18	-
CARNRW4	6/11/14 DUP	E601	0 of 18	-
CARNRW4	7/16/14	E601	0 of 18	-
CARNRW4	7/16/14 DUP	E601	0 of 18	-
CARNRW4	8/25/14	E601	0 of 18	-
CARNRW4	8/25/14 DUP	E601	0 of 18	-
CARNRW4	9/9/14	E601	0 of 18	-
CARNRW4	9/9/14 DUP	E601	0 of 18	-
CARNRW4	10/14/14	E601	0 of 18	-
CARNRW4	10/14/14 DUP	E601	0 of 18	-
CARNRW4	11/24/14	E601	0 of 18	-
CARNRW4	11/24/14 DUP	E601	0 of 18	-
CARNRW4	12/15/14	E601	0 of 18	-
CARNRW4	12/15/14 DUP	E601	0 of 18	-
EP6-06	1/13/14	E601	0 of 18	-
EP6-06	1/13/14	E602	0 of 10	-
EP6-06	7/9/14	E601	0 of 18	-
EP6-07	1/13/14	E601	0 of 18	-
EP6-07	1/13/14	E602	0 of 10	-
EP6-07	1/13/14 DUP	E601	0 of 18	-
EP6-07	1/13/14 DUP	E602	0 of 10	-
EP6-07	7/2/14	E601	0 of 18	-
EP6-09	1/13/14	E601	0 of 18	-
EP6-09	1/13/14	E602	0 of 10	-
EP6-09	7/9/14	E601	0 of 18	-
EP6-09	7/9/14 DUP	E601	0 of 18	-
K6-01	1/8/14	E601	0 of 18	-
K6-01	1/8/14	E602	0 of 10	-
K6-01	7/8/14	E601	0 of 18	-
K6-01S	1/8/14	E601	1 of 18	2.7
K6-01S	1/8/14	E602	0 of 10	-
K6-01S	7/9/14	E601	1 of 18	2.1
K6-03	1/7/14	E601	0 of 18	-

Table B-3.01 (Con't). Analyte detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloroethene (total) (µg/L)
K6-14	1/8/14	E601	0 of 18	-
K6-14	7/9/14	E601	0 of 18	-
K6-16	1/8/14	E601	0 of 18	-
K6-16	1/8/14 DUP	E601	0 of 18	-
K6-16	7/9/14	E601	0 of 18	-
K6-17	1/7/14	E601	0 of 18	-
K6-17	4/1/14	E601	0 of 18	-
K6-17	7/7/14	E601	0 of 18	-
K6-17	10/1/14	E601	0 of 18	-
K6-17	10/1/14 DUP	E601	0 of 18	-
K6-18	1/8/14	E601	1 of 18	0.9
K6-18	1/8/14 DUP	E601	0 of 18	-
K6-18	7/9/14	E601	1 of 18	0.5
K6-19	1/8/14	E601	0 of 18	-
K6-19	1/8/14	E602	0 of 10	-
K6-19	1/8/14 DUP	E601	0 of 18	-
K6-19	1/8/14 DUP	E602	0 of 10	-
K6-19	7/9/14	E601	0 of 18	-
K6-19	7/9/14 DUP	E601	0 of 18	-
K6-22	1/9/14	E601	0 of 18	-
K6-22	4/1/14	E601	0 of 18	-
K6-22	7/7/14	E601	0 of 18	-
K6-22	10/1/14	E601	0 of 18	-
K6-23	1/7/14	E601	0 of 18	-
K6-23	7/7/14	E601	0 of 18	-
K6-25	7/9/14	E601	0 of 18	-
K6-26	1/8/14	E601	0 of 18	-
K6-26	7/9/14	E601	0 of 18	-
K6-27	1/8/14	E601	0 of 18	-
K6-27	7/8/14	E601	0 of 18	-
K6-33	7/2/14	E601	0 of 18	-
K6-34	1/7/14	E601	0 of 18	-
K6-34	4/1/14	E601	0 of 18	-
K6-34	7/7/14	E601	0 of 18	-
K6-35	1/8/14	E601	0 of 18	-
K6-35	1/8/14	E602	0 of 10	-
K6-35	7/2/14	E601	0 of 18	-
W-33C-01	1/9/14	E601	0 of 18	-
W-PIT6-1819	1/7/14	E601	0 of 18	-
W-PIT6-1819	4/1/14	E601	0 of 18	-
W-PIT6-1819	7/2/14	E601	0 of 18	-
W-PIT6-1819	10/1/14	E601	0 of 18	-
W-PIT6-2816	1/9/14	E601	0 of 18	-
W-PIT6-2816	7/9/14	E601	0 of 18	-

Table B-3.01 (Con't). Analyte detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloroethene (total) (µg/L)
W-PIT6-2816	7/9/14 DUP	E601	0 of 18	-
W-PIT6-2817	1/8/14	E601	0 of 18	-
W-PIT6-2817	7/2/14	E601	0 of 18	-

Table B-3.02. Pit 6 Landfill Operable Unit nitrate and perchlorate in ground water.

Location	Date	Nitrate (as NO3) (mg/L)	Perchlorate (µg/L)
BC6-10	1/9/14	1.5	<4
CARNRW1	1/7/14	<0.5	<4 L
CARNRW1	1/7/14 DUP	<0.5	<4
CARNRW1	2/11/14	<0.5	<4
CARNRW1	2/11/14 DUP	<0.5	<4
CARNRW1	3/4/14	<0.5	<4
CARNRW1	3/4/14 DUP	<0.5	<4
CARNRW1	4/7/14	<0.5	<4
CARNRW1	4/7/14 DUP	<0.5	<4
CARNRW1	5/21/14	<0.5	<4
CARNRW1	5/21/14 DUP	<0.5	<4
CARNRW1	6/11/14	<0.5	<4
CARNRW1	6/11/14 DUP	<0.5	<4
CARNRW1	7/10/14	<0.5	<4
CARNRW1	7/10/14 DUP	<0.5	<4
CARNRW1	8/25/14	<0.5	<4
CARNRW1	8/25/14 DUP	<0.5	<4
CARNRW1	9/9/14	<1 D	<4
CARNRW1	9/9/14 DUP	<0.5	<4
CARNRW1	10/8/14	<0.5	<4
CARNRW1	10/8/14 DUP	<0.5	<4
CARNRW1	11/24/14	<0.5	<4
CARNRW1	11/24/14 DUP	<0.5	<4
CARNRW1	12/10/14	<0.5	<4
CARNRW1	12/10/14 DUP	<0.5	<4
CARNRW2	1/7/14	<1 D	<4 L
CARNRW2	1/7/14 DUP	<0.5	<4
CARNRW2	2/5/14	<0.5	<4
CARNRW2	2/5/14 DUP	<0.5	<4
CARNRW2	3/5/14	<0.5	<4
CARNRW2	3/5/14 DUP	<0.5	<4
CARNRW2	4/8/14	<0.5	<4
CARNRW2	4/8/14 DUP	<0.5	<4
CARNRW2	5/21/14	1.6	<4
CARNRW2	5/21/14 DUP	1.4	<4
CARNRW2	6/11/14	<0.5	<4
CARNRW2	6/11/14 DUP	<0.5	<4
CARNRW2	7/16/14	<0.5	<4
CARNRW2	7/16/14 DUP	<0.5	<4
CARNRW2	8/25/14	<0.5	<4
CARNRW2	8/25/14 DUP	<0.5	<4
CARNRW2	9/9/14	<1 D	<4
CARNRW2	9/9/14 DUP	<0.5	<4
CARNRW2	10/8/14	1.1	<4
CARNRW2	10/8/14 DUP	0.65	<4
CARNRW2	11/24/14	0.5	<4

Table B-3.02. Pit 6 Landfill Operable Unit nitrate and perchlorate in ground water.

Location	Date	Nitrate (as NO3) (mg/L)	Perchlorate (µg/L)
CARNRW2	11/24/14 DUP	<0.5	<4
CARNRW2	12/15/14	<0.5	<4
CARNRW2	12/15/14 DUP	<0.5	<4
CARNRW3	1/7/14	<1 D	<4 L
CARNRW3	1/7/14 DUP	<0.5	<4
CARNRW3	2/5/14	<1 D	<4
CARNRW3	2/5/14 DUP	<0.5	<4
CARNRW3	3/4/14	<1 D	<4
CARNRW3	3/4/14 DUP	<0.5	<4
CARNRW3	4/7/14	<1 D	<4
CARNRW3	4/7/14 DUP	<0.5	<4
CARNRW3	5/21/14	<1 D	<4
CARNRW3	5/21/14 DUP	<0.5	<4
CARNRW3	6/11/14	<0.5	<4
CARNRW3	6/11/14 DUP	<0.5	<4
CARNRW3	7/16/14	<1 D	<4
CARNRW3	7/16/14 DUP	<0.5	<4
CARNRW3	8/25/14	<1 D	<4
CARNRW3	8/25/14 DUP	<0.5	<4
CARNRW3	9/9/14	<1 D	<4
CARNRW3	9/9/14 DUP	<0.5	<4
CARNRW3	10/14/14	<0.5	<4
CARNRW3	10/14/14 DUP	<0.5	<4
CARNRW3	11/24/14	<1 D	<4
CARNRW3	11/24/14 DUP	<0.5	<4
CARNRW3	12/10/14	<0.5	<4
CARNRW3	12/10/14 DUP	<0.5	<4
CARNRW4	1/7/14	<1 D	<4 L
CARNRW4	1/7/14 DUP	<0.5	<4
CARNRW4	2/5/14	<0.5	<4
CARNRW4	2/5/14 DUP	<0.5	<4
CARNRW4	3/4/14	1.2 D	<4
CARNRW4	3/4/14 DUP	<0.5	<4
CARNRW4	4/7/14	<1 D	<4
CARNRW4	4/7/14 DUP	<0.5	<4
CARNRW4	5/21/14	<1 D	<4
CARNRW4	5/21/14 DUP	<0.5	<4
CARNRW4	6/11/14	<1 D	<4
CARNRW4	6/11/14 DUP	<0.5	<4
CARNRW4	7/16/14	<1 D	<4
CARNRW4	7/16/14 DUP	<0.5	<4
CARNRW4	8/25/14	<0.5	<4
CARNRW4	8/25/14 DUP	<0.5	<4
CARNRW4	9/9/14	<1 D	<4
CARNRW4	9/9/14 DUP	<0.5	<4
CARNRW4	10/14/14	<0.5	<4

Table B-3.02. Pit 6 Landfill Operable Unit nitrate and perchlorate in ground water.

Location	Date	Nitrate (as NO3) (mg/L)	Perchlorate (µg/L)
CARNRW4	10/14/14 DUP	<0.5	<4
CARNRW4	11/24/14	<0.5	<4
CARNRW4	11/24/14 DUP	<0.5	<4
CARNRW4	12/15/14	1.8	<4
CARNRW4	12/15/14 DUP	1.7	<4
EP6-06	1/13/14	<1 D	<4
EP6-07	1/13/14	<0.5	<4
EP6-07	1/13/14 DUP	<0.5	<4
EP6-09	1/13/14	8.7 D	<4
K6-01	1/8/14	<0.5	<4
K6-01S	1/8/14	<2.5 D	<4
K6-03	1/7/14	3.8	<4
K6-14	1/8/14	0.55	<4
K6-16	1/8/14	11 D	<20 D
K6-16	1/8/14 DUP	9	<4
K6-17	1/7/14	<0.22	<4
K6-17	7/7/14	0.24	<4
K6-18	1/8/14	16	<4
K6-18	1/8/14 DUP	6.2	8.7 D
K6-19	1/8/14	<1 D	<4
K6-19	1/8/14 DUP	<1 D	<4
K6-22	1/9/14	<1.1 D	<4
K6-22	7/7/14	<1.1 D	<8 D
K6-23	1/7/14	130 D	<8 D
K6-23	7/7/14	84 D	-
K6-26	1/8/14	<0.22	<4
K6-27	1/8/14	<0.5	<4
K6-34	1/7/14	<0.22	<4
K6-34	7/7/14	<0.22	<8 D
K6-35	1/8/14	<0.5	<4
W-33C-01	1/9/14	0.92	<4
W-PIT6-1819	1/7/14	1.4	<4
W-PIT6-1819	7/2/14	<0.5	<4
W-PIT6-2816	1/9/14	<0.5	<4
W-PIT6-2817	1/8/14	0.7	<4

Table B-3.03. Pit 6 Landfill Operable Unit tritium in ground water.

Location	Date	Tritium (pCi/L)
BC6-10	1/9/14	<100
BC6-10	7/7/14	<100
CARNRW1	1/7/14	<100
CARNRW1	1/7/14 DUP	<100
CARNRW1	2/11/14	<100 L
CARNRW1	2/11/14 DUP	<100
CARNRW1	3/4/14	<100
CARNRW1	3/4/14 DUP	<100
CARNRW1	4/7/14	<100
CARNRW1	4/7/14 DUP	<100
CARNRW1	5/21/14	<100
CARNRW1	5/21/14 DUP	<100
CARNRW1	6/11/14	<100
CARNRW1	6/11/14 DUP	<100
CARNRW1	7/10/14	<100
CARNRW1	7/10/14 DUP	<100
CARNRW1	8/25/14	<100
CARNRW1	8/25/14 DUP	<100
CARNRW1	9/9/14	<100
CARNRW1	9/9/14 DUP	<100 L
CARNRW1	10/8/14	<100
CARNRW1	10/8/14 DUP	<100
CARNRW1	11/24/14	<100
CARNRW1	11/24/14 DUP	<100
CARNRW1	12/10/14	<100
CARNRW1	12/10/14 DUP	<100
CARNRW2	1/7/14	<100
CARNRW2	1/7/14 DUP	<100
CARNRW2	2/5/14	<100
CARNRW2	2/5/14 DUP	<100
CARNRW2	3/5/14	<100
CARNRW2	3/5/14 DUP	<100
CARNRW2	4/8/14	<100
CARNRW2	4/8/14 DUP	<100
CARNRW2	5/21/14	104 ± 68.7
CARNRW2	5/21/14 DUP	<100
CARNRW2	6/11/14	<100
CARNRW2	6/11/14 DUP	<100
CARNRW2	7/16/14	<100
CARNRW2	7/16/14 DUP	<100
CARNRW2	8/25/14	<100
CARNRW2	8/25/14 DUP	<100
CARNRW2	9/9/14	<100
CARNRW2	9/9/14 DUP	<100 L
CARNRW2	10/8/14	<100
CARNRW2	10/8/14 DUP	<100

Table B-3.03. Pit 6 Landfill Operable Unit tritium in ground water.

Location	Date	Tritium (pCi/L)
CARNRW2	11/24/14	<100
CARNRW2	11/24/14 DUP	<100
CARNRW2	12/15/14	<100
CARNRW2	12/15/14 DUP	<100
CARNRW3	1/7/14	<100
CARNRW3	1/7/14 DUP	<100
CARNRW3	2/5/14	<100
CARNRW3	2/5/14 DUP	<100
CARNRW3	3/4/14	<100
CARNRW3	3/4/14 DUP	<100
CARNRW3	4/7/14	<100
CARNRW3	4/7/14 DUP	<100
CARNRW3	5/21/14	<100
CARNRW3	5/21/14 DUP	<100
CARNRW3	6/11/14	<100
CARNRW3	6/11/14 DUP	<100
CARNRW3	7/16/14	<100
CARNRW3	7/16/14 DUP	<100
CARNRW3	8/25/14	<100
CARNRW3	8/25/14 DUP	<100
CARNRW3	9/9/14	<100
CARNRW3	9/9/14 DUP	<100 L
CARNRW3	10/14/14	<100
CARNRW3	10/14/14 DUP	183 ± 75.0
CARNRW3	11/24/14	<100
CARNRW3	11/24/14 DUP	<100
CARNRW3	12/10/14	<100
CARNRW3	12/10/14 DUP	<100
CARNRW4	1/7/14	<100
CARNRW4	1/7/14 DUP	<100
CARNRW4	2/5/14	<100
CARNRW4	2/5/14 DUP	<100
CARNRW4	3/4/14	<100
CARNRW4	3/4/14 DUP	<100
CARNRW4	4/7/14	<100
CARNRW4	4/7/14 DUP	<100
CARNRW4	5/21/14	<100
CARNRW4	5/21/14 DUP	<100
CARNRW4	6/11/14	<100
CARNRW4	6/11/14 DUP	<100
CARNRW4	7/16/14	<100
CARNRW4	7/16/14 DUP	<100
CARNRW4	8/25/14	<100
CARNRW4	8/25/14 DUP	<100
CARNRW4	9/9/14	<100
CARNRW4	9/9/14 DUP	<100 L

Table B-3.03. Pit 6 Landfill Operable Unit tritium in ground water.

Location	Date	Tritium (pCi/L)
CARNRW4	10/14/14	<100
CARNRW4	10/14/14 DUP	<100
CARNRW4	11/24/14	<100
CARNRW4	11/24/14 DUP	<100
CARNRW4	12/15/14	<100
CARNRW4	12/15/14 DUP	<100
EP6-06	1/13/14	<100
EP6-06	7/9/14	<100
EP6-07	1/13/14	<100
EP6-07	1/13/14 DUP	<100
EP6-07	7/2/14	<100
EP6-09	1/13/14	<100
EP6-09	7/9/14	<100
EP6-09	7/9/14 DUP	<100
K6-01	1/8/14	<100
K6-01	7/8/14	<100
K6-01S	1/8/14	<100
K6-01S	7/9/14	<100
K6-03	1/7/14	<100
K6-14	1/8/14	<100
K6-14	7/9/14	<100
K6-16	1/8/14	<100
K6-16	7/9/14	<100
K6-17	1/7/14	<100
K6-17	4/1/14	<100
K6-17	7/7/14	<100
K6-17	10/1/14	<100
K6-17	10/1/14 DUP	<100
K6-18	1/8/14	124 ± 86.8
K6-18	1/8/14	<100
K6-18	7/9/14	120 ± 83.4
K6-19	1/8/14	150 ± 89.1
K6-19	1/8/14 DUP	135 ± 88.0
K6-19	7/9/14	<100
K6-19	7/9/14 DUP	120 ± 66.0
K6-22	1/9/14	<100
K6-22	4/1/14	<100
K6-22	7/7/14	<100
K6-22	10/1/14	<100
K6-23	1/7/14	<100
K6-23	7/7/14	<100
K6-25	7/9/14	<100
K6-26	1/8/14	<100
K6-26	7/9/14	<100
K6-27	1/8/14	<100
K6-27	7/8/14	<100

Table B-3.03. Pit 6 Landfill Operable Unit tritium in ground water.

Location	Date	Tritium (pCi/L)
K6-33	7/2/14	127 ± 85.0
K6-34	1/7/14	<100
K6-34	4/1/14	<100
K6-34	7/7/14	<100
K6-35	1/8/14	<100
K6-35	7/2/14	<100
W-33C-01	1/9/14	<100
W-PIT6-1819	1/7/14	<100
W-PIT6-1819	4/1/14	<100
W-PIT6-1819	7/2/14	<100
W-PIT6-1819	10/1/14	<100
W-PIT6-2816	1/9/14	<100
W-PIT6-2816	7/9/14	<100
W-PIT6-2816	7/9/14 DUP	<100
W-PIT6-2817	1/8/14	104 ± 84.0
W-PIT6-2817	7/2/14	156 ± 88.8

Table B-3.04. Pit 6 Landfill Operable Unit total uranium and uranium isotopes in ground water.

Location	Date	AS	AS	AS
		Uranium 234 and 233 (in activity) (pCi/L)	Uranium 235 and 236 (in activity) (pCi/L)	Uranium 238 (in activity) (pCi/L)
CARNRW2	1/7/14	0.103 ± 0.0612 O	<0.1	<0.1
CARNRW2	1/7/14 DUP	0.148 ± 0.0710	<0.1	<0.1
CARNRW2	4/8/14	<0.1	<0.1	<0.1 O
CARNRW2	4/8/14 DUP	<0.1	<0.1	<0.1
CARNRW2	7/16/14	<0.1	<0.1	<0.1
CARNRW2	7/16/14 DUP	2.89 ± 0.520 O	0.181 ± 0.0640 O	<0.1
CARNRW2	10/8/14	<0.1	<0.1	<0.1
CARNRW2	10/8/14 DUP	<0.1	<0.1	<0.1
EP6-06	1/13/14	0.493 ± 0.127	<0.1	0.320 ± 0.0960
EP6-07	1/13/14	0.225 ± 0.0746	<0.1	0.183 ± 0.0637
EP6-07	1/13/14 DUP	0.189 ± 0.0809	<0.1	0.175 ± 0.0649
EP6-09	1/13/14	1.44 ± 0.248	<0.1	1.30 ± 0.229
K6-01	1/8/14	0.301 ± 0.103 O	<0.1	0.233 ± 0.0877
K6-01S	1/8/14	2.43 ± 0.419 O	0.106 ± 0.0629	1.72 ± 0.319
K6-19	1/8/14	1.76 ± 0.354 O	<0.1	1.08 ± 0.249
K6-19	1/8/14 DUP	1.70 ± 0.326 O	<0.1	1.18 ± 0.248
K6-35	1/8/14	<0.1 O	<0.1	<0.1

Table B-3.05. Pit 6 Landfill Post-closure Monitoring Plan constituents of concern, detection monitoring wells, SLs, MCLs, and analytical results for 2014.

COC	Well	SL	MCL	Q1	Q1 DUP	Q3	Q3 DUP
Beryllium (mg/L)	EP6-06	0.0002	0.004	<0.0005	-	-	-
	EP6-07	-	0.004	<0.0005	<0.0005	-	-
	EP6-09	0.0002	0.004	<0.0005	-	-	-
	K6-01S	0.0002	0.004	<0.0005	-	-	-
	K6-19	0.0002	0.004	<0.0005	<0.0005	-	-
	K6-35	-	0.004	<0.0005	-	-	-
Mercury (mg/L)	EP6-06	0.0002	0.002	<0.0002	-	-	-
	EP6-07	-	0.002	<0.0002	<0.0002	-	-
	EP6-09	0.0002	0.002	<0.0002	-	-	-
	K6-01S	0.0002	0.002	<0.0002	-	-	-
	K6-19	0.0002	0.002	<0.0002	<0.0002	-	-
	K6-35	-	0.002	<0.0002	-	-	-
Tritium (pCi/L)	EP6-06	100	20000	<100	-	<100	-
	EP6-07	141	20000	<100	<100	<100	-
	EP6-09	138	20000	<100	-	<100	<100
	K6-01S	167	20000	<100	-	<100	-
	K6-19	317	20000	150 ± 89.1	135 ± 88	<100	120 ± 66
	K6-35	157	20000	<100	-	<100	-
Total Uranium (calculated) (pCi/L)	EP6-06	-	-	0.822 ± 0.162	-	-	-
	EP6-07	-	-	0.429 ± 0.103	0.398 ± 0.109	-	-
	EP6-09	-	-	2.8 ± 0.34	-	-	-
	K6-01S	-	-	4.26 ± 0.53 O	-	-	-
	K6-19	-	-	2.87 ± 0.435 O	2.97 ± 0.414 O	-	-
	K6-35	-	-	<0.3 O	-	-	-
Gross alpha (pCi/L)	EP6-06	7.7	15	<2	-	-	-
	EP6-07	-	15	<2	<2	-	-
	EP6-09	4.9	15	<2	-	-	-
	K6-01S	26	15	2.73 ± 6.81	-	-	-
	K6-19	9.2	15	<2	<2	-	-
	K6-35	-	15	<2	-	-	-
Gross beta (pCi/L)	EP6-06	21.3	50	9.19 ± 2.2	-	-	-
	EP6-07	-	50	7.22 ± 1.96	7.35 ± 1.82	-	-
	EP6-09	21.3	50	7.88 ± 2.08	-	-	-
	K6-01S	57.7	50	14.6 ± 4.19	-	-	-
	K6-19	21.3	50	8.07 ± 1.88	8.5 ± 2.02	-	-
	K6-35	-	50	5.14 ± 1.46	-	-	-
Benzene (µg/L)	EP6-06	0.5	1	<0.5	-	-	-
	EP6-07	-	1	<0.5	<0.5	-	-
	EP6-09	0.5	1	<0.5	-	-	-
	K6-01S	0.5	1	<0.5	-	-	-
	K6-19	0.5	1	<0.5	<0.5	-	-
	K6-35	-	1	<0.5	-	-	-
Chloroform (µg/L)	EP6-06	0.5	80	<0.5	-	<0.5	-
	EP6-07	-	80	<0.5	<0.5	<0.5	-
	EP6-09	0.5	80	<0.5	-	<0.5	<0.5
	K6-01S	0.5	80	<0.5	-	<0.5	-
	K6-19	1.5	80	<0.5	<0.5	<0.5	<0.5
	K6-35	-	80	<0.5	-	<0.5	-

Table B-3.05. Pit 6 Landfill Post-closure Monitoring Plan constituents of concern, detection monitoring wells, SLs, MCLs, and analytical results for 2014.

COC	Well	SL	MCL	Q1	Q1 DUP	Q3	Q3 DUP
1,2-Dichloroethane (µg/L)	EP6-06	0.5	0.5	<0.5	-	<0.5	-
	EP6-07	-	0.5	<0.5	<0.5	<0.5	-
	EP6-09	0.5	0.5	<0.5	-	<0.5	<0.5
	K6-01S	0.5	0.5	<0.5	-	<0.5	-
	K6-19	0.5	0.5	<0.5	<0.5	<0.5	<0.5
	K6-35	-	0.5	<0.5	-	<0.5	-
cis-1,2-Dichloroethene (µg/L)	EP6-06	0.5	6	<0.5	-	<0.5	-
	EP6-07	-	6	<0.5	<0.5	<0.5	-
	EP6-09	0.5	6	<0.5	-	<0.5	<0.5
	K6-01S	7	6	2.7	-	2.1	-
	K6-19	0.5	6	<0.5	<0.5	<0.5	<0.5
	K6-35	-	6	<0.5	-	<0.5	-
Ethylbenzene (µg/L)	EP6-06	0.5	700	<0.5	-	-	-
	EP6-07	-	700	<0.5	<0.5	-	-
	EP6-09	0.5	700	<0.5	-	-	-
	K6-01S	0.5	700	<0.5	-	-	-
	K6-19	0.5	700	<0.5	<0.5	-	-
	K6-35	-	700	<0.5	-	-	-
Methylene chloride (µg/L)	EP6-06	1	5	<1	-	<1	-
	EP6-07	-	5	<1	<1	<1	-
	EP6-09	1	5	<1	-	<1	<1
	K6-01S	1	5	<1	-	<1	-
	K6-19	1	5	<1	<1	<1	<10
	K6-35	-	5	<1	-	<1	-
Tetrachloroethene (µg/L)	EP6-06	0.5	5	<0.5	-	<0.5	-
	EP6-07	-	5	<0.5	<0.5	<0.5	-
	EP6-09	0.5	5	<0.5	-	<0.5	<0.5
	K6-01S	0.5	5	<0.5	-	<0.5	-
	K6-19	0.5	5	<0.5	<0.5	<0.5	<0.5
	K6-35	-	5	<0.5	-	<0.5	-
Toluene (µg/L)	EP6-06	0.5	150	<0.5	-	-	-
	EP6-07	-	150	<0.5	<0.5	-	-
	EP6-09	0.5	150	<0.5	-	-	-
	K6-01S	0.5	150	<0.5	-	-	-
	K6-19	0.5	150	<0.5	<0.5	-	-
	K6-35	-	150	<0.5	-	-	-
1,1,1-Trichloroethane (µg/L)	EP6-06	0.5	200	<0.5	-	<0.5	-
	EP6-07	-	200	<0.5	<0.5	<0.5	-
	EP6-09	0.5	200	<0.5	-	<0.5	<0.5
	K6-01S	0.5	200	<0.5	-	<0.5	-
	K6-19	0.5	200	<0.5	<0.5	<0.5	<0.5
	K6-35	-	200	<0.5	-	<0.5	-
Trichloroethene (TCE) (µg/L)	EP6-06	0.5	5	<0.5	-	<0.5	-
	EP6-07	-	5	<0.5	<0.5	<0.5	-
	EP6-09	17	5	5.2	-	4.8	4.8
	K6-01S	1.5	5	<0.5	-	<0.5	-
	K6-19	13	5	1.6	1.4	1.7	2.5
	K6-35	-	5	<0.5	-	<0.5	-

Table B-3.05. Pit 6 Landfill Post-closure Monitoring Plan constituents of concern, detection monitoring wells, SLs, MCLs, and

COC	Well	SL	MCL	Q1	Q1 DUP	Q3	Q3 DUP
Total xylene isomers (µg/L)	EP6-06	1	1750	<1	-	-	-
	EP6-07	-	1750	<1	<1	-	-
	EP6-09	1	1750	<1	-	-	-
	K6-01S	1	1750	<1	-	-	-
	K6-19	1	1750	<1	<1	-	-
	K6-35	-	1750	<1	-	-	-

Table B-3.06. Pit 6 Landfill detection monitoring physical parameters for 2014.

Location	Date	Field Temperature (Degrees C)	Field pH (Units)	Field Specific Conductance (µmhos/cm)	Total dissolved solids (TDS) (mg/L)
EP6-06	1/13/14	19	7.75	1,261	700 D
EP6-06	7/9/14	21.8	7.61	1,942	-
EP6-07	1/13/14	20.6	7.82	1,058	720 D
EP6-07	1/13/14 DUP	-	-	-	720 D
EP6-07	7/2/14	24.1	7.79	1,047	-
EP6-09	1/13/14	21.6	7.47	1,655	1,100 D
EP6-09	7/9/14	22.3	7.54	1,449	-
K6-01S	1/8/14	21.7	7.02	3,518	2,700 D
K6-01S	7/9/14	22.4	7.21	3,314	-
K6-19	1/8/14	21.1	7.69	1,221	760 D
K6-19	1/8/14 DUP	-	-	-	750 D
K6-19	7/9/14	22.8	7.71	1,212	-
K6-35	1/8/14	21.2	7.83	1,042	710 D
K6-35	7/2/14	23.4	7.88	1,039	-

Table B-4.01. High Explosives Process Area Operable Unit volatile organic compounds (VOCs) in ground and surface water.

Location	Date	Method	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	1,1,2-TCA (µg/L)	Freon 11 (µg/L)	Freon 113 (µg/L)	Vinyl chloride (µg/L)
GALLO1	1/29/14	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
GALLO1	1/29/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
GALLO1	1/29/14 DUP	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
GALLO1	1/29/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
GALLO1	2/25/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
GALLO1	2/25/14 DUP	E601	<0.5 LO	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
GALLO1	3/10/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
GALLO1	3/10/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
GALLO1	4/8/14	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
GALLO1	4/8/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
GALLO1	4/8/14 DUP	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
GALLO1	4/8/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
GALLO1	5/27/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
GALLO1	5/27/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
GALLO1	6/10/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
GALLO1	6/10/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
GALLO1	7/28/14	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
GALLO1	7/28/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
GALLO1	7/28/14 DUP	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
GALLO1	7/28/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
GALLO1	8/25/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
GALLO1	8/25/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
GALLO1	9/16/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
GALLO1	9/16/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
GALLO1	10/13/14	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
GALLO1	10/13/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
GALLO1	10/13/14 DUP	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
GALLO1	10/13/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
GALLO1	11/25/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
GALLO1	11/25/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
GALLO1	12/15/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
GALLO1	12/15/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35B-01	3/3/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35B-01	9/10/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35B-02	3/3/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35B-02	6/25/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35B-02	9/10/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35B-03	3/3/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35B-03	6/25/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35B-03	9/10/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35B-04	3/3/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35B-04	6/25/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35B-04	9/10/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35B-05	3/3/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table B-4.01. High Explosives Process Area Operable Unit volatile organic compounds (VOCs) in ground and surface water.

Location	Date	Method	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	1,1,2-TCA (µg/L)	Freon 11 (µg/L)	Freon 113 (µg/L)	Vinyl chloride (µg/L)
W-35B-05	6/25/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35B-05	9/10/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35C-01	3/17/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35C-01	9/11/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35C-02	3/18/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35C-04	1/7/14	E601	14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35C-04	4/1/14	E601	12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35C-04	7/7/14	E601	12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35C-04	7/7/14 DUP	E601	14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35C-04	10/6/14	E601	12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35C-05	3/4/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35C-05	9/9/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35C-07	3/4/14	E601	1.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35C-07	9/16/14	E601	2.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35C-07	9/16/14 DUP	E601	2.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-35C-08	3/4/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35C-08	9/9/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-4A	3/19/14	E601	8.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-4A	3/19/14 DUP	E601	8.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-4A	9/17/14	E601	9.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-4AS	3/19/14	E601	3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-4AS	9/17/14	E601	2.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-4B	3/19/14	E601	4.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-4B	3/19/14 DUP	E601	4.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-4B	9/8/14	E601	4.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-4C	3/19/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-4C	6/10/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-4C	9/8/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6BD	3/19/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6BD	9/18/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6BS	3/19/14	E601	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6BS	3/19/14 DUP	E601	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6BS	9/18/14	E601	6.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6CD	3/11/14	E601	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6CI	3/18/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6CI	9/15/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6CS	3/11/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6CS	9/15/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6EI	3/18/14	E601	3.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6EI	9/8/14	E601	3.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6ER	1/7/14	E601	15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6ER	4/1/14	E601	13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6ER	7/7/14	E601	14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6ER	10/6/14	E601	12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table B-4.01. High Explosives Process Area Operable Unit volatile organic compounds (VOCs) in ground and surface water.

Location	Date	Method	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	1,1,2-TCA (µg/L)	Freon 11 (µg/L)	Freon 113 (µg/L)	Vinyl chloride (µg/L)
W-6ES	3/19/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6ES	9/8/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6F	3/11/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6F	9/15/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6G	3/11/14	E601	5.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6G	9/15/14	E601	4.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6G	9/15/14 DUP	E601	5.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-6H	3/17/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6H	6/9/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6H	9/10/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6I	3/17/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6I	9/10/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6J	3/17/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6J	6/9/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6K	3/6/14	E601	9.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6K	9/16/14	E601	13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6K	9/16/14 DUP	E601	15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-6L	3/6/14	E601	14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-808-01	3/10/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-808-01	8/26/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-808-03	3/10/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-809-01	3/10/14	E601	2.1	<0.5	<0.5	<0.5	<0.5	1.4	<0.5	<0.5	1.6	<0.5	<0.5	<0.5	<0.5	<0.5
W-809-01	3/10/14 DUP	E601	2	<0.5	<0.5	<0.5	<0.5	1.1 F	<0.5	<0.5	1.1	<0.5	<0.5	<0.5	<0.5	<0.5
W-809-01	8/26/14	E601	2.4	<0.5	<0.5	<0.5	<0.5	1.6	<0.5	<0.5	1.7	<0.5	<0.5	<0.5	<0.5	<0.5
W-809-02	3/10/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-809-02	8/26/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-809-03	3/10/14	E601	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-809-03	8/27/14	E601	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-809-04	3/12/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-810-01	3/11/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-814-01	3/13/14	E601	2	<0.5	1	<0.5	0.6	0.6	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-814-01	9/3/14	E601	1.9	<0.5	1.1	<0.5	0.6	0.7	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-814-02	3/13/14	E601	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-814-04	3/13/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-814-04	6/9/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-814-04	9/3/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-814-04	12/2/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-814-2138	3/13/14	E601	6.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-814-2138	9/3/14	E601	5.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-814-2138	9/3/14 DUP	E601	5.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-02	1/7/14	E601	11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-02	4/1/14	E601	11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.78	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-02	7/9/14	E601	9.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.69	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-02	10/7/14	E601	7.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.61	<0.5	<0.5	<0.5	<0.5	<0.5

Table B-4.01. High Explosives Process Area Operable Unit volatile organic compounds (VOCs) in ground and surface water.

Location	Date	Method	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	1,1,2-TCA (µg/L)	Freon 11 (µg/L)	Freon 113 (µg/L)	Vinyl chloride (µg/L)
W-815-04	1/7/14	E601	1.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-04	4/1/14	E601	1.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-04	7/9/14	E601	1.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-04	7/9/14 DUP	E601	1.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-04	10/7/14	E601	1.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-06	3/13/14	E601	11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-07	3/13/14	E601	13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-07	3/13/14 DUP	E601	13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-07	9/4/14	E601	13	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-08	3/11/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-2110	3/17/14	E601	1.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-2110	6/9/14	E601	1.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-2110	9/11/14	E601	1.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-2111	3/17/14	E601	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-2111	6/9/14	E601	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-2111	6/9/14 DUP	E601	0.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-815-2111	9/11/14	E601	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-2111	11/10/14	E601	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-2111	11/10/14 DUP	E601	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-815-2111	11/10/14 DUP	E601	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-2217	3/11/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-2217	9/15/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-2608	1/7/14	E601	1.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-2608	4/1/14	E601	1.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-2608	7/7/14	E601	1.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-2608	10/6/14	E601	1.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-2621	3/11/14	E601	22	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-2621	9/2/14	E601	21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-2621	9/2/14 DUP	E601	16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-2803	1/7/14	E601	1.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-2803	4/1/14	E601	2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-2803	7/9/14	E601	8.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-2803	7/9/14 DUP	E601	1.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-2803	10/7/14	E601	3.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-817-01	2/5/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-817-01	4/1/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-817-01	7/7/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-817-01	7/7/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-817-01	10/7/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-817-03	1/8/14	E601	6.2 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-817-03	4/1/14	E601	6.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-817-03	7/14/14	E601	7.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-817-03	10/7/14	E601	8.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-817-03A	3/12/14	E601	4.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table B-4.01. High Explosives Process Area Operable Unit volatile organic compounds (VOCs) in ground and surface water.

Location	Date	Method	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	1,1,2-TCA (µg/L)	Freon 11 (µg/L)	Freon 113 (µg/L)	Vinyl chloride (µg/L)
W-817-04	3/12/14	E601	10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-817-04	3/12/14 DUP	E601	10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-817-04	9/2/14	E601	10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-817-05	3/12/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-817-05	9/2/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-817-2318	2/3/14	E601	25	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-817-2318	4/1/14	E601	23	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-817-2318	7/14/14	E601	23	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-817-2318	7/14/14 DUP	E601	23	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-817-2318	10/7/14	E601	19	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-817-2609	3/12/14	E601	9.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-817-2609	9/2/14	E601	10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-817-2609	9/2/14 DUP	E601	11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-818-01	3/17/14	E601	12	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-818-01	9/4/14	E601	13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-818-03	3/18/14	E601	12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-818-03	9/4/14	E601	13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-818-04	3/18/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-818-06	3/18/14	E601	12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-818-06	9/8/14	E601	13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-818-07	3/18/14	E601	8.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-818-07	3/18/14 DUP	E601	9.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-818-08	2/5/14	E601	31	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-818-08	2/5/14	E601	35	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-818-08	4/1/14	E601	37	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-818-08	4/1/14	E601	37	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-818-08	5/12/14	E601	33	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-818-08	5/12/14	E601	32	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-818-08	7/8/14	E601	36	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-818-08	7/8/14	E601	35	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-818-08	10/20/14	E601	36	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-818-09	2/12/14	E601	15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-818-09	2/12/14	E601	16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-818-09	4/1/14	E601	17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-818-09	4/1/14	E601	16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-818-09	5/12/14	E601	16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-818-09	5/12/14	E601	16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-818-09	7/8/14	E601	17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-818-09	7/8/14	E601	17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-818-09	7/8/14 DUP	E601	36 S	<0.5 S	<0.5 S	<0.5 S	<0.5 S	<0.5 S	<0.5 S	<0.5 S	<0.5 S	<0.5 S	<0.5 S	<0.5 S	<0.5 S	<0.5 S
W-818-09	10/20/14	E601	17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-818-11	3/17/14	E601	39	<0.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-818-11	9/16/14	E601	37	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5
W-818-11	9/16/14 DUP	E601	38	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<1	<2	<0.5

Table B-4.01. High Explosives Process Area Operable Unit volatile organic compounds (VOCs) in ground and surface water.

Location	Date	Method	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	1,1,2-TCA (µg/L)	Freon 11 (µg/L)	Freon 113 (µg/L)	Vinyl chloride (µg/L)
W-819-02	3/17/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-823-01	3/17/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-823-01	9/10/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-823-02	3/17/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-823-02	9/10/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-823-03	3/17/14	E601	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-823-03	9/10/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-823-13	3/17/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-823-13	9/10/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-827-05	3/19/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-827-05	9/16/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-829-06	3/5/14	E601	15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-829-06	4/1/14	E601	17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-829-06	7/8/14	E601	16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-829-06	7/8/14 DUP	E601	16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-829-06	11/3/14	E601	20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-829-08	3/5/14	E601	8.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-829-08	9/11/14	E601	5.7	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-829-15	4/14/14	E624	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
W-829-15	4/14/14 DUP	E624	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
W-829-1938	1/23/14	E624	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
W-829-1938	1/23/14 DUP	E624	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
W-829-1938	4/23/14	E624	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
W-829-1938	7/30/14	E624	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
W-829-1938	7/30/14 DUP	E624	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
W-829-1938	10/29/14	E624	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
W-829-1938	10/29/14 DUP	E624	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
W-829-1940	3/5/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-829-1940	9/11/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-829-22	4/15/14	E624	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
WELL18	1/28/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WELL18	1/28/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WELL18	2/25/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WELL18	2/25/14 DUP	E601	<0.5 LO	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WELL18	3/11/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WELL18	3/11/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WELL18	5/6/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WELL18	5/6/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WELL18	6/3/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WELL18	6/3/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WELL18	7/8/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WELL18	7/8/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WELL18	8/18/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WELL18	8/18/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table B-4.01. High Explosives Process Area Operable Unit volatile organic compounds (VOCs) in ground and surface water.

Location	Date	Method	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	1,1,2-TCA (µg/L)	Freon 11 (µg/L)	Freon 113 (µg/L)	Vinyl chloride (µg/L)
WELL18	9/2/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WELL18	9/2/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WELL18	10/7/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WELL18	10/7/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WELL18	11/25/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WELL18	11/25/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WELL18	12/9/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WELL18	12/9/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WELL20	1/28/14	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	0.91	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WELL20	1/28/14 DUP	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
WELL20	2/25/14	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WELL20	2/25/14 DUP	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
WELL20	3/11/14	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WELL20	3/11/14 DUP	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
WELL20	4/22/14	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WELL20	4/22/14 DUP	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	4.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
WELL20	5/6/14	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WELL20	5/6/14 DUP	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
WELL20	6/3/14	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WELL20	6/3/14 DUP	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<1	<0.5
WELL20	7/30/14	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WELL20	7/30/14 DUP	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
WELL20	8/18/14	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WELL20	8/18/14 DUP	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
WELL20	9/2/14	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WELL20	9/2/14 DUP	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
WELL20	10/7/14	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WELL20	10/7/14 DUP	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
WELL20	11/25/14	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WELL20	11/25/14 DUP	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
WELL20	12/9/14	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
WELL20	12/9/14 DUP	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5

Table B-4.01 (Con't). Analyte detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloro-ethene (total) (µg/L)	Methylene chloride (µg/L)
GALLO1	1/29/14	E502.2	0 of 46	-	-
GALLO1	1/29/14	E601	0 of 18	-	-
GALLO1	1/29/14 DUP	E502.2	0 of 45	-	-
GALLO1	1/29/14 DUP	E601	0 of 18	-	-
GALLO1	2/25/14	E601	0 of 18	-	-
GALLO1	2/25/14 DUP	E601	0 of 18	-	-
GALLO1	3/10/14	E601	0 of 18	-	-
GALLO1	3/10/14 DUP	E601	0 of 18	-	-
GALLO1	4/8/14	E502.2	0 of 46	-	-
GALLO1	4/8/14	E601	0 of 18	-	-
GALLO1	4/8/14 DUP	E502.2	0 of 45	-	-
GALLO1	4/8/14 DUP	E601	0 of 18	-	-
GALLO1	5/27/14	E601	0 of 18	-	-
GALLO1	5/27/14 DUP	E601	0 of 18	-	-
GALLO1	6/10/14	E601	0 of 18	-	-
GALLO1	6/10/14 DUP	E601	0 of 18	-	-
GALLO1	7/28/14	E502.2	0 of 46	-	-
GALLO1	7/28/14	E601	0 of 18	-	-
GALLO1	7/28/14 DUP	E502.2	0 of 45	-	-
GALLO1	7/28/14 DUP	E601	0 of 18	-	-
GALLO1	8/25/14	E601	0 of 18	-	-
GALLO1	8/25/14 DUP	E601	0 of 18	-	-
GALLO1	9/16/14	E601	0 of 18	-	-
GALLO1	9/16/14 DUP	E601	0 of 18	-	-
GALLO1	10/13/14	E502.2	0 of 46	-	-
GALLO1	10/13/14	E601	0 of 18	-	-
GALLO1	10/13/14 DUP	E502.2	0 of 45	-	-
GALLO1	10/13/14 DUP	E601	0 of 18	-	-
GALLO1	11/25/14	E601	0 of 18	-	-
GALLO1	11/25/14 DUP	E601	0 of 18	-	-
GALLO1	12/15/14	E601	0 of 18	-	-
GALLO1	12/15/14 DUP	E601	0 of 18	-	-
W-35B-01	3/3/14	E601	0 of 18	-	-
W-35B-01	9/10/14	E601	0 of 18	-	-
W-35B-02	3/3/14	E601	0 of 18	-	-
W-35B-02	6/25/14	E601	0 of 18	-	-
W-35B-02	9/10/14	E601	0 of 18	-	-
W-35B-03	3/3/14	E601	0 of 18	-	-
W-35B-03	6/25/14	E601	0 of 18	-	-
W-35B-03	9/10/14	E601	0 of 18	-	-
W-35B-04	3/3/14	E601	0 of 18	-	-
W-35B-04	6/25/14	E601	0 of 18	-	-

Table B-4.01 (Con't). Analyte detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloro-ethene (total) (µg/L)	Methylene chloride (µg/L)
W-35B-04	9/10/14	E601	0 of 18	-	-
W-35B-05	3/3/14	E601	0 of 18	-	-
W-35B-05	6/25/14	E601	0 of 18	-	-
W-35B-05	9/10/14	E601	0 of 18	-	-
W-35C-01	3/17/14	E601	0 of 18	-	-
W-35C-01	9/11/14	E601	0 of 18	-	-
W-35C-02	3/18/14	E601	0 of 18	-	-
W-35C-04	1/7/14	E601	0 of 18	-	-
W-35C-04	4/1/14	E601	0 of 18	-	-
W-35C-04	7/7/14	E601	0 of 18	-	-
W-35C-04	7/7/14 DUP	E601	0 of 18	-	-
W-35C-04	10/6/14	E601	0 of 18	-	-
W-35C-05	3/4/14	E601	0 of 18	-	-
W-35C-05	9/9/14	E601	0 of 18	-	-
W-35C-07	3/4/14	E601	1 of 18	-	1.4
W-35C-07	9/16/14	E601	1 of 18	-	0.7
W-35C-07	9/16/14 DUP	E601	0 of 18	-	-
W-35C-08	3/4/14	E601	0 of 18	-	-
W-35C-08	9/9/14	E601	0 of 18	-	-
W-4A	3/19/14	E601	0 of 18	-	-
W-4A	3/19/14 DUP	E601	0 of 18	-	-
W-4A	9/17/14	E601	0 of 18	-	-
W-4AS	3/19/14	E601	0 of 18	-	-
W-4AS	9/17/14	E601	0 of 18	-	-
W-4B	3/19/14	E601	0 of 18	-	-
W-4B	3/19/14 DUP	E601	0 of 18	-	-
W-4B	9/8/14	E601	0 of 18	-	-
W-4C	3/19/14	E601	0 of 18	-	-
W-4C	6/10/14	E601	0 of 18	-	-
W-4C	9/8/14	E601	0 of 18	-	-
W-6BD	3/19/14	E601	0 of 18	-	-
W-6BD	9/18/14	E601	0 of 18	-	-
W-6BS	3/19/14	E601	0 of 18	-	-
W-6BS	3/19/14 DUP	E601	0 of 18	-	-
W-6BS	9/18/14	E601	0 of 18	-	-
W-6CD	3/11/14	E601	0 of 18	-	-
W-6CI	3/18/14	E601	0 of 18	-	-
W-6CI	9/15/14	E601	0 of 18	-	-
W-6CS	3/11/14	E601	0 of 18	-	-
W-6CS	9/15/14	E601	0 of 18	-	-
W-6EI	3/18/14	E601	0 of 18	-	-
W-6EI	9/8/14	E601	0 of 18	-	-

Table B-4.01 (Con't). Analyte detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloro-ethene (total) (µg/L)	Methylene chloride (µg/L)
W-6ER	1/7/14	E601	0 of 18	-	-
W-6ER	4/1/14	E601	0 of 18	-	-
W-6ER	7/7/14	E601	0 of 18	-	-
W-6ER	10/6/14	E601	0 of 18	-	-
W-6ES	3/19/14	E601	0 of 18	-	-
W-6ES	9/8/14	E601	0 of 18	-	-
W-6F	3/11/14	E601	0 of 18	-	-
W-6F	9/15/14	E601	0 of 18	-	-
W-6G	3/11/14	E601	0 of 18	-	-
W-6G	9/15/14	E601	0 of 18	-	-
W-6G	9/15/14 DUP	E601	0 of 18	-	-
W-6H	3/17/14	E601	0 of 18	-	-
W-6H	6/9/14	E601	0 of 18	-	-
W-6H	9/10/14	E601	0 of 18	-	-
W-6I	3/17/14	E601	0 of 18	-	-
W-6I	9/10/14	E601	0 of 18	-	-
W-6J	3/17/14	E601	0 of 18	-	-
W-6J	6/9/14	E601	0 of 18	-	-
W-6K	3/6/14	E601	0 of 18	-	-
W-6K	9/16/14	E601	0 of 18	-	-
W-6K	9/16/14 DUP	E601	0 of 18	-	-
W-6L	3/6/14	E601	0 of 18	-	-
W-808-01	3/10/14	E601	0 of 18	-	-
W-808-01	8/26/14	E601	0 of 18	-	-
W-808-03	3/10/14	E601	0 of 18	-	-
W-809-01	3/10/14	E601	0 of 18	-	-
W-809-01	3/10/14 DUP	E601	0 of 18	-	-
W-809-01	8/26/14	E601	0 of 18	-	-
W-809-02	3/10/14	E601	0 of 18	-	-
W-809-02	8/26/14	E601	0 of 18	-	-
W-809-03	3/10/14	E601	0 of 18	-	-
W-809-03	8/27/14	E601	0 of 18	-	-
W-809-04	3/12/14	E601	0 of 18	-	-
W-810-01	3/11/14	E601	0 of 18	-	-
W-814-01	3/13/14	E601	1 of 18	1	-
W-814-01	9/3/14	E601	1 of 18	1.1	-
W-814-02	3/13/14	E601	0 of 18	-	-
W-814-04	3/13/14	E601	0 of 18	-	-
W-814-04	6/9/14	E601	0 of 18	-	-
W-814-04	9/3/14	E601	0 of 18	-	-
W-814-04	12/2/14	E601	0 of 18	-	-
W-814-2138	3/13/14	E601	0 of 18	-	-

Table B-4.01 (Con't). Analyte detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloro-ethene (total) (µg/L)	Methylene chloride (µg/L)
W-814-2138	9/3/14	E601	0 of 18	-	-
W-814-2138	9/3/14 DUP	E601	0 of 18	-	-
W-815-02	1/7/14	E601	0 of 18	-	-
W-815-02	4/1/14	E601	0 of 18	-	-
W-815-02	7/9/14	E601	0 of 18	-	-
W-815-02	10/7/14	E601	0 of 18	-	-
W-815-04	1/7/14	E601	0 of 18	-	-
W-815-04	4/1/14	E601	0 of 18	-	-
W-815-04	7/9/14	E601	0 of 18	-	-
W-815-04	7/9/14 DUP	E601	0 of 18	-	-
W-815-04	10/7/14	E601	0 of 18	-	-
W-815-06	3/13/14	E601	0 of 18	-	-
W-815-07	3/13/14	E601	0 of 18	-	-
W-815-07	3/13/14 DUP	E601	0 of 18	-	-
W-815-07	9/4/14	E601	0 of 18	-	-
W-815-08	3/11/14	E601	0 of 18	-	-
W-815-2110	3/17/14	E601	0 of 18	-	-
W-815-2110	6/9/14	E601	0 of 18	-	-
W-815-2110	9/11/14	E601	0 of 18	-	-
W-815-2111	3/17/14	E601	0 of 18	-	-
W-815-2111	6/9/14	E601	0 of 18	-	-
W-815-2111	6/9/14 DUP	E601	0 of 18	-	-
W-815-2111	9/11/14	E601	0 of 18	-	-
W-815-2111	11/10/14	E601	0 of 18	-	-
W-815-2111	11/10/14 DUP	E601	0 of 18	-	-
W-815-2111	11/10/14 DUP	E601	0 of 18	-	-
W-815-2217	3/11/14	E601	0 of 18	-	-
W-815-2217	9/15/14	E601	0 of 18	-	-
W-815-2608	1/7/14	E601	0 of 18	-	-
W-815-2608	4/1/14	E601	0 of 18	-	-
W-815-2608	7/7/14	E601	0 of 18	-	-
W-815-2608	10/6/14	E601	0 of 18	-	-
W-815-2621	3/11/14	E601	0 of 18	-	-
W-815-2621	9/2/14	E601	0 of 18	-	-
W-815-2621	9/2/14 DUP	E601	0 of 18	-	-
W-815-2803	1/7/14	E601	0 of 18	-	-
W-815-2803	4/1/14	E601	0 of 18	-	-
W-815-2803	7/9/14	E601	0 of 18	-	-
W-815-2803	7/9/14 DUP	E601	0 of 18	-	-
W-815-2803	10/7/14	E601	0 of 18	-	-
W-817-01	2/5/14	E601	0 of 18	-	-
W-817-01	4/1/14	E601	0 of 18	-	-

Table B-4.01 (Con't). Analyte detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloro-ethene (total) (µg/L)	Methylene chloride (µg/L)
W-817-01	7/7/14	E601	0 of 18	-	-
W-817-01	7/7/14 DUP	E601	0 of 18	-	-
W-817-01	10/7/14	E601	0 of 18	-	-
W-817-03	1/8/14	E601	0 of 18	-	-
W-817-03	4/1/14	E601	0 of 18	-	-
W-817-03	7/14/14	E601	0 of 18	-	-
W-817-03	10/7/14	E601	0 of 18	-	-
W-817-03A	3/12/14	E601	0 of 18	-	-
W-817-04	3/12/14	E601	0 of 18	-	-
W-817-04	3/12/14 DUP	E601	0 of 18	-	-
W-817-04	9/2/14	E601	0 of 18	-	-
W-817-05	3/12/14	E601	0 of 18	-	-
W-817-05	9/2/14	E601	0 of 18	-	-
W-817-2318	2/3/14	E601	0 of 18	-	-
W-817-2318	4/1/14	E601	0 of 18	-	-
W-817-2318	7/14/14	E601	0 of 18	-	-
W-817-2318	7/14/14 DUP	E601	0 of 18	-	-
W-817-2318	10/7/14	E601	0 of 18	-	-
W-817-2609	3/12/14	E601	0 of 18	-	-
W-817-2609	9/2/14	E601	0 of 18	-	-
W-817-2609	9/2/14 DUP	E601	0 of 18	-	-
W-818-01	3/17/14	E601	0 of 18	-	-
W-818-01	9/4/14	E601	0 of 18	-	-
W-818-03	3/18/14	E601	0 of 18	-	-
W-818-03	9/4/14	E601	0 of 18	-	-
W-818-04	3/18/14	E601	0 of 18	-	-
W-818-06	3/18/14	E601	0 of 18	-	-
W-818-06	9/8/14	E601	0 of 18	-	-
W-818-07	3/18/14	E601	0 of 18	-	-
W-818-07	3/18/14 DUP	E601	0 of 18	-	-
W-818-08	2/5/14	E601	0 of 18	-	-
W-818-08	2/5/14	E601	0 of 18	-	-
W-818-08	4/1/14	E601	0 of 18	-	-
W-818-08	4/1/14	E601	0 of 18	-	-
W-818-08	5/12/14	E601	0 of 18	-	-
W-818-08	5/12/14	E601	0 of 18	-	-
W-818-08	7/8/14	E601	0 of 18	-	-
W-818-08	7/8/14	E601	0 of 18	-	-
W-818-08	10/20/14	E601	0 of 18	-	-
W-818-09	2/12/14	E601	0 of 18	-	-
W-818-09	2/12/14	E601	0 of 18	-	-
W-818-09	4/1/14	E601	0 of 18	-	-

Table B-4.01 (Con't). Analyte detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloro-ethene (total) (µg/L)	Methylene chloride (µg/L)
W-818-09	4/1/14	E601	0 of 18	-	-
W-818-09	5/12/14	E601	0 of 18	-	-
W-818-09	5/12/14	E601	0 of 18	-	-
W-818-09	7/8/14	E601	0 of 18	-	-
W-818-09	7/8/14	E601	0 of 18	-	-
W-818-09	7/8/14 DUP	E601	0 of 18	-	-
W-818-09	10/20/14	E601	0 of 18	-	-
W-818-11	3/17/14	E601	0 of 18	-	-
W-818-11	9/16/14	E601	0 of 18	-	-
W-818-11	9/16/14 DUP	E601	0 of 18	-	-
W-819-02	3/17/14	E601	0 of 18	-	-
W-823-01	3/17/14	E601	0 of 18	-	-
W-823-01	9/10/14	E601	0 of 18	-	-
W-823-02	3/17/14	E601	0 of 18	-	-
W-823-02	9/10/14	E601	0 of 18	-	-
W-823-03	3/17/14	E601	0 of 18	-	-
W-823-03	9/10/14	E601	0 of 18	-	-
W-823-13	3/17/14	E601	0 of 18	-	-
W-823-13	9/10/14	E601	0 of 18	-	-
W-827-05	3/19/14	E601	0 of 18	-	-
W-827-05	9/16/14	E601	0 of 18	-	-
W-829-06	3/5/14	E601	0 of 18	-	-
W-829-06	4/1/14	E601	0 of 18	-	-
W-829-06	7/8/14	E601	0 of 18	-	-
W-829-06	7/8/14 DUP	E601	0 of 18	-	-
W-829-06	11/3/14	E601	0 of 18	-	-
W-829-08	3/5/14	E601	0 of 18	-	-
W-829-08	9/11/14	E601	0 of 18	-	-
W-829-15	4/14/14	E624	0 of 30	-	-
W-829-15	4/14/14 DUP	E624	0 of 30	-	-
W-829-1938	1/23/14	E624	0 of 30	-	-
W-829-1938	1/23/14 DUP	E624	0 of 30	-	-
W-829-1938	4/23/14	E624	0 of 30	-	-
W-829-1938	7/30/14	E624	0 of 30	-	-
W-829-1938	7/30/14 DUP	E624	0 of 30	-	-
W-829-1938	10/29/14	E624	0 of 30	-	-
W-829-1938	10/29/14 DUP	E624	0 of 30	-	-
W-829-1940	3/5/14	E601	0 of 18	-	-
W-829-1940	9/11/14	E601	0 of 18	-	-
W-829-22	4/15/14	E624	0 of 30	-	-
WELL18	1/28/14	E601	0 of 18	-	-
WELL18	1/28/14 DUP	E601	0 of 18	-	-

Table B-4.01 (Con't). Analyte detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloro-ethene (total) (µg/L)	Methylene chloride (µg/L)
WELL18	2/25/14	E601	0 of 18	-	-
WELL18	2/25/14 DUP	E601	0 of 18	-	-
WELL18	3/11/14	E601	0 of 18	-	-
WELL18	3/11/14 DUP	E601	0 of 18	-	-
WELL18	5/6/14	E601	0 of 18	-	-
WELL18	5/6/14 DUP	E601	0 of 18	-	-
WELL18	6/3/14	E601	0 of 18	-	-
WELL18	6/3/14 DUP	E601	0 of 18	-	-
WELL18	7/8/14	E601	0 of 18	-	-
WELL18	7/8/14 DUP	E601	0 of 18	-	-
WELL18	8/18/14	E601	0 of 18	-	-
WELL18	8/18/14 DUP	E601	0 of 18	-	-
WELL18	9/2/14	E601	0 of 18	-	-
WELL18	9/2/14 DUP	E601	0 of 18	-	-
WELL18	10/7/14	E601	0 of 18	-	-
WELL18	10/7/14 DUP	E601	0 of 18	-	-
WELL18	11/25/14	E601	0 of 18	-	-
WELL18	11/25/14 DUP	E601	0 of 18	-	-
WELL18	12/9/14	E601	0 of 18	-	-
WELL18	12/9/14 DUP	E601	0 of 18	-	-
WELL20	1/28/14	E502.2	0 of 46	-	-
WELL20	1/28/14 DUP	E502.2	0 of 45	-	-
WELL20	2/25/14	E502.2	0 of 46	-	-
WELL20	2/25/14 DUP	E502.2	0 of 45	-	-
WELL20	3/11/14	E502.2	0 of 46	-	-
WELL20	3/11/14 DUP	E502.2	0 of 45	-	-
WELL20	4/22/14	E502.2	0 of 46	-	-
WELL20	4/22/14 DUP	E502.2	0 of 45	-	-
WELL20	5/6/14	E502.2	0 of 46	-	-
WELL20	5/6/14 DUP	E502.2	0 of 45	-	-
WELL20	6/3/14	E502.2	0 of 46	-	-
WELL20	6/3/14 DUP	E502.2	0 of 45	-	-
WELL20	7/30/14	E502.2	0 of 46	-	-
WELL20	7/30/14 DUP	E502.2	0 of 45	-	-
WELL20	8/18/14	E502.2	0 of 46	-	-
WELL20	8/18/14 DUP	E502.2	0 of 45	-	-
WELL20	9/2/14	E502.2	0 of 46	-	-
WELL20	9/2/14 DUP	E502.2	0 of 45	-	-
WELL20	10/7/14	E502.2	0 of 46	-	-
WELL20	10/7/14 DUP	E502.2	0 of 45	-	-
WELL20	11/25/14	E502.2	0 of 46	-	-
WELL20	11/25/14 DUP	E502.2	0 of 45	-	-
WELL20	12/9/14	E502.2	0 of 46	-	-
WELL20	12/9/14 DUP	E502.2	0 of 45	-	-

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Table B-4.02. High Explosives Process Area Operable Unit nitrate and perchlorate in ground and surface water.

Location	Date	Nitrate (as NO3) (mg/L)	Perchlorate (µg/L)
GALLO1	1/29/14	<0.5 O	<4
GALLO1	1/29/14 DUP	<0.5	<4
GALLO1	2/25/14	<0.5	<4
GALLO1	2/25/14 DUP	<0.5	<4
GALLO1	3/10/14	<0.5	<4
GALLO1	3/10/14 DUP	<0.5	<4
GALLO1	4/8/14	<0.5	<4
GALLO1	4/8/14 DUP	<0.5	<4
GALLO1	5/27/14	<0.5	<4
GALLO1	5/27/14 DUP	<0.5 L	<4
GALLO1	6/10/14	<0.5	<4
GALLO1	6/10/14 DUP	<0.5	<4
GALLO1	7/28/14	<0.5	<4
GALLO1	7/28/14 DUP	<0.5	<4 L
GALLO1	8/25/14	<1 D	<4
GALLO1	8/25/14 DUP	<0.5	<4
GALLO1	9/16/14	<1 D	<4
GALLO1	9/16/14 DUP	<0.5	<4
GALLO1	10/13/14	<1 D	<4
GALLO1	10/13/14 DUP	<0.5	<4
GALLO1	11/25/14	<0.5	<4
GALLO1	11/25/14 DUP	<0.5	<4
GALLO1	12/15/14	<0.5	<4
GALLO1	12/15/14 DUP	<0.5	<4
W-35B-01	3/3/14	<0.5	<4
W-35B-01	9/10/14	<0.5	<4
W-35B-02	3/3/14	11	<4
W-35B-02	9/10/14	9.1	<4
W-35B-03	3/3/14	0.57	<4
W-35B-03	9/10/14	<0.5	<4
W-35B-04	3/3/14	1	<4
W-35B-04	9/10/14	0.88	<4
W-35B-05	3/3/14	0.95	<4
W-35B-05	9/10/14	1.1	<4
W-35C-01	3/17/14	0.56	-
W-35C-05	3/4/14	4.5	-
W-35C-07	3/4/14	<0.5	<4
W-35C-08	3/4/14	0.92	<4
W-4A	3/19/14	1.1	<4
W-4A	3/19/14 DUP	1.4 D	<4
W-4AS	3/19/14	<0.5	<4
W-4C	3/19/14	<0.5	<4
W-4C	9/8/14	<0.5	<4
W-6BD	3/19/14	<0.5	<4
W-6BS	3/19/14	5.3 D	<4
W-6BS	3/19/14 DUP	16	<4

Table B-4.02. High Explosives Process Area Operable Unit nitrate and perchlorate in ground and surface water.

Location	Date	Nitrate (as NO3) (mg/L)	Perchlorate (µg/L)
W-6CD	3/11/14	<0.5	<4
W-6CI	3/18/14	<0.5	<4
W-6CS	3/11/14	510 D	4.9
W-6EI	3/18/14	<0.5	<4
W-6ES	3/19/14	5.6	<4
W-6F	3/11/14	0.61	<4
W-6G	3/11/14	21	<4
W-6H	3/17/14	<0.5	<4
W-6H	9/10/14	<0.5	<4
W-6J	3/17/14	<0.5	<4
W-6K	3/6/14	1.2	<4
W-808-01	3/10/14	79 D	<4
W-808-03	3/10/14	<0.5	<4
W-809-01	3/10/14	92 D	4.3
W-809-01	3/10/14 DUP	99 D	5.4
W-809-02	3/10/14	89 D	9.9
W-809-02	8/26/14	-	9.9
W-809-03	3/10/14	110 D	5.3
W-809-03	8/27/14	-	11
W-809-04	3/12/14	3.2	<4
W-810-01	3/11/14	<0.5	<4
W-814-01	3/13/14	55 D	<4
W-814-02	3/13/14	67 D	<4
W-814-04	3/13/14	<0.5	<4
W-814-04	9/3/14	<0.5	<4
W-814-2138	3/13/14	68 D	<4
W-815-02	1/7/14	91 D	<4
W-815-02	7/9/14	-	4.7
W-815-04	1/7/14	96 D	<4
W-815-04	7/9/14	-	<4
W-815-04	7/9/14 DUP	-	<4
W-815-06	3/13/14	73 D	4.7
W-815-07	3/13/14	74 D	<4
W-815-07	3/13/14 DUP	73 D	4.5
W-815-08	3/11/14	<0.5	<4
W-815-2110	3/17/14	<1 D	<4
W-815-2110	9/11/14	<1 D	<4
W-815-2111	3/17/14	<1 D	<4
W-815-2111	9/11/14	<1 D	<4
W-815-2608	1/7/14	<1 D	<4
W-815-2621	3/11/14	20 D	<4
W-815-2803	1/7/14	-	17 L
W-815-2803	7/9/14	93 D	7.3
W-815-2803	7/9/14 DUP	86 DL	4.3
W-817-01	2/5/14	84 D	29 D
W-817-01	4/1/14	-	28 D

Table B-4.02. High Explosives Process Area Operable Unit nitrate and perchlorate in ground and surface water.

Location	Date	Nitrate (as NO3) (mg/L)	Perchlorate (µg/L)
W-817-01	7/7/14	-	29 D
W-817-01	7/7/14 DUP	-	28 D
W-817-01	10/7/14	-	28 D
W-817-03	1/8/14	92 D	18
W-817-03	7/14/14	-	22 D
W-817-03A	3/12/14	22 D	5.3
W-817-04	3/12/14	100 D	16
W-817-04	3/12/14 DUP	97 D	16
W-817-05	3/12/14	1.3	<4
W-817-2318	2/3/14	120 D	13
W-817-2318	7/14/14	-	15
W-817-2318	7/14/14 DUP	-	14
W-817-2609	3/12/14	110 D	18
W-818-01	3/17/14	77 D	6.1
W-818-03	3/18/14	46 D	<4
W-818-04	3/18/14	<0.5	<4
W-818-06	3/18/14	23 D	<4
W-818-07	3/18/14	<0.5	<4
W-818-07	3/18/14 DUP	<0.5	<4
W-818-08	2/5/14	82 D	7.3
W-818-08	5/12/14	-	7.5
W-818-08	5/12/14	-	6.9
W-818-08	7/8/14	-	7.6
W-818-09	2/12/14	83 D	5.6
W-818-09	5/12/14	-	6.2
W-818-09	5/12/14	-	5.9
W-818-09	7/8/14	-	6.8
W-818-09	7/8/14 DUP	-	8.2 S
W-818-11	3/17/14	73 D	8.1
W-819-02	3/17/14	<0.5	<4
W-823-01	3/17/14	12 D	<4
W-823-03	3/17/14	21 D	<4
W-823-13	3/17/14	37 D	<4
W-827-05	3/19/14	<0.5	<4
W-829-06	3/5/14	71 D	11
W-829-06	4/1/14	73 D	10
W-829-06	7/8/14	68 D	11
W-829-06	7/8/14 DUP	54 D	10
W-829-06	11/3/14	71 D	13
W-829-08	3/5/14	<2.5 D	<4
W-829-15	4/14/14	-	<4
W-829-15	4/14/14 DUP	-	<4
W-829-1938	1/23/14	-	<4
W-829-1938	1/23/14 DUP	-	<4
W-829-1938	4/23/14	-	<4
W-829-1938	7/30/14	-	<4

Table B-4.02. High Explosives Process Area Operable Unit nitrate and perchlorate in ground and surface water.

Location	Date	Nitrate (as NO3) (mg/L)	Perchlorate (µg/L)
W-829-1938	7/30/14 DUP	-	<4
W-829-1938	10/29/14	-	<4
W-829-1938	10/29/14 DUP	-	<4
W-829-1940	3/5/14	43 D	<4
W-829-22	4/15/14	-	<4
WELL18	1/28/14	<0.5	<4
WELL18	1/28/14 DUP	<0.5	<4
WELL18	2/25/14	<0.5	<4
WELL18	2/25/14 DUP	<0.5	<4
WELL18	3/11/14	<0.5	<4
WELL18	3/11/14 DUP	<0.5	<4
WELL18	5/6/14	<0.5	<4
WELL18	5/6/14 DUP	<0.5	<4
WELL18	6/3/14	<0.5	<4
WELL18	6/3/14 DUP	<0.5	<4
WELL18	7/8/14	<0.5	<4
WELL18	7/8/14 DUP	<0.5	<4
WELL18	8/18/14	<0.5	<4
WELL18	8/18/14 DUP	<0.5	<4
WELL18	9/2/14	<1 D	<4
WELL18	9/2/14 DUP	<0.5	<4
WELL18	10/7/14	<1 D	<4
WELL18	10/7/14 DUP	<0.5	<4
WELL18	11/25/14	<0.5	<4
WELL18	11/25/14 DUP	<0.5	<4
WELL18	12/9/14	<0.5	<4
WELL18	12/9/14 DUP	<0.5 H	<4
WELL20	1/28/14	<0.5	<4
WELL20	1/28/14 DUP	<0.5	<4
WELL20	2/25/14	<0.5	<4
WELL20	2/25/14 DUP	<0.5	<4
WELL20	3/11/14	<0.5	<4
WELL20	3/11/14 DUP	<0.5	<4
WELL20	4/22/14	<0.5	<4
WELL20	4/22/14 DUP	<0.5	<4
WELL20	5/6/14	<0.5	<4
WELL20	5/6/14 DUP	<0.5	<4
WELL20	6/3/14	<0.5	<4
WELL20	6/3/14 DUP	<0.5	<4
WELL20	7/30/14	<0.5	<4
WELL20	7/30/14 DUP	<0.5	<4 L
WELL20	8/18/14	<0.5	<4
WELL20	8/18/14 DUP	<0.5	<4
WELL20	9/2/14	<0.5	<4
WELL20	9/2/14 DUP	<0.5	<4
WELL20	10/7/14	<1 D	<4

Table B-4.02. High Explosives Process Area Operable Unit nitrate and perchlorate in ground and surface water.

Location	Date	Nitrate (as NO3) (mg/L)	Perchlorate (µg/L)
WELL20	11/25/14	<0.5	<4
WELL20	11/25/14 DUP	<0.5	<4
WELL20	12/9/14	<0.5	<4
WELL20	12/9/14 DUP	<0.5 H	<4

Table B-4.03. High Explosives Process Area Operable Unit high explosive compounds in ground and surface water.

Location	Date	1,3,5-Trinitrobenzene (µg/L)	1,3-Dinitrobenzene (µg/L)	2,4-Dinitrotoluene (µg/L)	2,6-Dinitrotoluene (µg/L)	2-Amino-4,6-Dinitrotoluene (µg/L)	2-Nitrotoluene (µg/L)	3-Nitrotoluene (µg/L)	4-Amino-2,6-Dinitrotoluene (µg/L)	4-Nitrotoluene (µg/L)	HMX (µg/L)	Nitrobenzene (µg/L)	RDX (µg/L)	TNT (µg/L)
GALLO1	1/29/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
GALLO1	1/29/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
GALLO1	2/25/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
GALLO1	2/25/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
GALLO1	3/10/14	<2	<2 O	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
GALLO1	3/10/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
GALLO1	4/8/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
GALLO1	4/8/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
GALLO1	5/27/14	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<1 D	<2 D	<1 D	<2 D
GALLO1	5/27/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
GALLO1	6/10/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
GALLO1	6/10/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
GALLO1	7/28/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
GALLO1	7/28/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
GALLO1	8/25/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
GALLO1	8/25/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
GALLO1	9/16/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
GALLO1	9/16/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
GALLO1	10/13/14	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<1 D	<2 D	<1 D	<2 D
GALLO1	10/13/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
GALLO1	11/25/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
GALLO1	11/25/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
GALLO1	12/15/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
GALLO1	12/15/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-35B-01	3/3/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-35B-01	9/10/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-35B-02	3/3/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-35B-02	9/10/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-35B-03	3/3/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-35B-03	9/10/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-35B-04	3/3/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-35B-04	9/10/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-35B-05	3/3/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-35B-05	9/10/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-35C-02	3/18/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-35C-07	3/4/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-4A	3/19/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-4A	3/19/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-4AS	3/19/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-6BD	3/19/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-6BS	3/19/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-6BS	3/19/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-6CD	3/11/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-6CI	3/18/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2

Table B-4.03. High Explosives Process Area Operable Unit high explosive compounds in ground and surface water.

Location	Date	1,3,5-Trinitrobenzene (µg/L)	1,3-Dinitrobenzene (µg/L)	2,4-Dinitrotoluene (µg/L)	2,6-Dinitrotoluene (µg/L)	2-Amino-4,6-Dinitrotoluene (µg/L)	2-Nitrotoluene (µg/L)	3-Nitrotoluene (µg/L)	4-Amino-2,6-Dinitrotoluene (µg/L)	4-Nitrotoluene (µg/L)	HMX (µg/L)	Nitrobenzene (µg/L)	RDX (µg/L)	TNT (µg/L)
W-6CS	3/11/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-6EI	3/18/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-6ES	3/19/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-6F	3/11/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-6G	3/11/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-6H	3/17/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-6H	9/10/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-6J	3/17/14	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<1 IJ	<2 IJ	<1 IJ	<2 IJ
W-6K	3/6/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-809-01	3/10/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-809-01	3/10/14 DUP	<2	<2 O	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-809-02	3/10/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-809-03	3/10/14	<2	<2	<2	<2	<2	<2	<2	9.4	<2	20	<2	87 D	<2
W-809-03	8/27/14	<2	<2	<2	<2	<2	<2	<2	9.8	<2	21	<2	69 D	<2
W-809-04	3/12/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-810-01	3/11/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-814-01	3/13/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-814-02	3/13/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-814-2138	3/13/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-815-02	1/7/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	3.9	<2	41	<2
W-815-02	7/9/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	1.9	<2	31	<2
W-815-04	1/7/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	2.9	<2	22	<2
W-815-04	7/9/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	3.7	<2	25	<2
W-815-04	7/9/14 DUP	<2	<2	<2	<2	<2	<2	<2	2.7	<2	5.1	<2	30	<2
W-815-06	3/13/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	5.7	<2
W-815-07	3/13/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-815-07	3/13/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-815-08	3/11/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-815-2110	3/17/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-815-2110	9/11/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-815-2111	3/17/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-815-2111	9/11/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-815-2608	1/7/14	<2	<2 O	<2 O	<2 O	<2 O	<2 O	<2 O	<2 O	<2 O	<1 O	<2 O	<1 O	<2 O
W-815-2621	3/11/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-815-2803	1/7/14	<2	<2 O	<2 O	<2	<2 O	<2	<2	<2	<2	2.8 O	<2 O	23 O	<2 O
W-815-2803	7/9/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	1.9	<2	26	<2
W-815-2803	7/9/14 DUP	<2	<2	<2	<2	<2	<2	<2	5.6	<2	3.1	<2	32	<2
W-817-01	2/5/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	13	<2	39	<2
W-817-01	4/1/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	14	<2	39	<2
W-817-01	7/7/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	15	<2	41	<2
W-817-01	7/7/14 DUP	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	15 D	<2 D	36 D	<2 D
W-817-01	10/7/14	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<2 IJ	8.6 IJ	<2 IJ	17 IJ	<2 IJ
W-817-03	1/8/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	8.5	<2
W-817-03	7/14/14	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<0.9	<1.8	8.6	<1.8

Table B-4.03. High Explosives Process Area Operable Unit high explosive compounds in ground and surface water.

Location	Date	1,3,5-Trinitrobenzene (µg/L)	1,3-Dinitrobenzene (µg/L)	2,4-Dinitrotoluene (µg/L)	2,6-Dinitrotoluene (µg/L)	2-Amino-4,6-Dinitrotoluene (µg/L)	2-Nitrotoluene (µg/L)	3-Nitrotoluene (µg/L)	4-Amino-2,6-Dinitrotoluene (µg/L)	4-Nitrotoluene (µg/L)	HMX (µg/L)	Nitrobenzene (µg/L)	RDX (µg/L)	TNT (µg/L)
W-817-03A	3/12/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-817-04	3/12/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	6.3	<2
W-817-04	3/12/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	6.9	<2
W-817-05	3/12/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-817-2318	2/3/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-817-2318	7/14/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-817-2318	7/14/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-817-2609	3/12/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-818-01	3/17/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-818-04	3/18/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-818-07	3/18/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-818-07	3/18/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-818-08	2/5/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-818-09	2/12/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-818-11	3/17/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	17	<2
W-819-02	3/17/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-823-01	3/17/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-823-03	3/17/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-823-13	3/17/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-827-05	3/19/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-829-06	3/5/14	<2	<2 O	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-829-08	3/5/14	<2	<2 O	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-829-15	4/14/14	-	-	<5	<5	-	-	-	-	-	<1	<5	<1	<5
W-829-15	4/14/14 DUP	-	-	<5	<5	-	-	-	-	-	<1	<5	<1	<5
W-829-1938	1/23/14	-	-	<5 IJ	<5 IJ	-	-	-	-	-	<0.89	<5	<0.89	<4.5
W-829-1938	1/23/14 DUP	-	-	<5	<5	-	-	-	-	-	<0.89	<5	<0.89	<4.4
W-829-1938	4/23/14	-	-	<5	<5	-	-	-	-	-	<1	<5	<1	<5
W-829-1938	7/30/14	-	-	<5	<5	-	-	-	-	-	<1	<5	<1	<5
W-829-1938	7/30/14 DUP	-	-	<5	<5	-	-	-	-	-	<0.89	<5	<0.89	<4.4
W-829-1938	10/29/14	-	-	<5	<5	-	-	-	-	-	<1	<5	<1	<5
W-829-1938	10/29/14 DUP	-	-	<5	<5	-	-	-	-	-	<1	<5	<1	<5
W-829-1940	3/5/14	<2	<2 O	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-829-22	4/15/14	-	-	<5	<5	-	-	-	-	-	<0.81	<5	<0.81	<4
WELL18	1/28/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL18	1/28/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL18	2/25/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL18	2/25/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL18	3/11/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL18	3/11/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL18	5/6/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL18	5/6/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL18	6/3/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL18	6/3/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL18	7/8/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2

Table B-4.03. High Explosives Process Area Operable Unit high explosive compounds in ground and surface water.

Location	Date	1,3,5-Trinitrobenzene (µg/L)	1,3-Dinitrobenzene (µg/L)	2,4-Dinitrotoluene (µg/L)	2,6-Dinitrotoluene (µg/L)	2-Amino-4,6-Dinitrotoluene (µg/L)	2-Nitrotoluene (µg/L)	3-Nitrotoluene (µg/L)	4-Amino-2,6-Dinitrotoluene (µg/L)	4-Nitrotoluene (µg/L)	HMX (µg/L)	Nitrobenzene (µg/L)	RDX (µg/L)	TNT (µg/L)
WELL18	7/8/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL18	8/18/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL18	8/18/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL18	9/2/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL18	9/2/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL18	10/7/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL18	10/7/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL18	11/25/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL18	11/25/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL18	12/9/14	<2	<2	<2 JL	<2	<2 JL	<2	<2	<2	<2	<1	<2	<1	<2
WELL18	12/9/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL20	1/28/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL20	1/28/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL20	2/25/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL20	2/25/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL20	3/11/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL20	3/11/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL20	4/22/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL20	4/22/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL20	5/6/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL20	5/6/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL20	6/3/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL20	6/3/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL20	7/30/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL20	7/30/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL20	8/18/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL20	8/18/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL20	9/2/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL20	9/2/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL20	10/7/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL20	10/7/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL20	11/25/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL20	11/25/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
WELL20	12/9/14	<2	<2	<2 JL	<2	<2 JL	<2	<2	<2	<2	<1	<2	<1	<2
WELL20	12/9/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2

Table B-4.04. High Explosives Process Area Operable Unit metals and silica in ground water.

saerloc	m.d.y	Antimony (mg/L)	Arsenic (mg/L)	Barium (mg/L)	Beryllium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Mercury (mg/L)	num (mg/L)	Nickel (mg/L)	Potassium (mg/L)	Selenium (mg/L)	Silver (mg/L)	Sodium (mg/L)	Thallium (mg/L)	Vanadium (mg/L)	Zinc (mg/L)
GALLO1	1/29/14	-	0.0026	<0.025	<0.0005	<0.0005	-	<0.025	<0.01	-	<0.002	-	-	-	<0.005	-	-	-	-	-	<0.025	<0.02
GALLO1	1/29/14 DUP	-	0.002	<0.02	<0.0005	<0.0005	-	<0.02	<0.01	-	<0.002	-	-	-	<0.005	-	-	-	-	-	<0.02	<0.02
GALLO1	4/8/14	-	0.0029	<0.025	<0.0005	<0.0005	-	<0.025	<0.01	-	<0.002	-	-	-	<0.005	-	-	-	-	-	<0.025	<0.02
GALLO1	4/8/14 DUP	-	0.0032	<0.02	<0.0005	<0.0005	-	<0.02	<0.01	-	<0.002	-	-	-	<0.005	-	-	-	-	-	<0.02	<0.02
GALLO1	7/28/14	-	0.004 D	<0.05 D	<0.001 D	<0.001 D	-	<0.05 DO	<0.02 D	-	<0.004 D	-	-	-	<0.01 D	-	-	-	-	-	<0.05 D	<0.04 D
GALLO1	7/28/14 DUP	-	0.003	<0.02	<0.0005	<0.0005	-	<0.02	<0.01	-	<0.002	-	-	-	<0.005	-	-	-	-	-	<0.02	<0.02
GALLO1	10/13/14	-	0.004 J	<0.025	<0.0005	<0.0005	-	<0.025	<0.01	-	<0.002	-	-	-	<0.005	-	-	-	-	-	<0.025	<0.02
GALLO1	10/13/14 DUP	-	0.003	<0.02	<0.0005	<0.0005	-	<0.02	<0.01	-	<0.002	-	-	-	<0.005	-	-	-	-	-	<0.02	<0.02
W-815-2110	3/17/14	-	0.0082	<0.025	-	<0.001	<0.001	-	-	-	<0.005	-	<0.0002	-	-	-	<0.002	<0.001	-	-	-	-
W-829-15	4/14/14	<0.005	0.018 J	0.049	<0.0005	<0.0005	<0.001	<0.025	<0.01	<0.05	<0.002	<0.01	<0.0002 L	<0.025	<0.005	21 J	<0.002	<0.0005	160 J	<0.001	<0.025	<0.02
W-829-15	4/14/14 DUP	<0.005	0.018 J	0.055	<0.0005	<0.0005	<0.001	<0.025	<0.01	<0.05	<0.002	<0.01	<0.0002 L	<0.025	<0.005	20 J	<0.002	<0.0005	160 J	<0.001	<0.025	<0.02
W-829-1938	1/23/14	<0.005	0.026	0.031	<0.0005	<0.0005	<0.001	<0.025	<0.01	0.063	<0.002	0.038	<0.0002	0.025	<0.005	13 J	<0.002	<0.0005	160 J	<0.001	<0.025	<0.02
W-829-1938	1/23/14 DUP	<0.005	0.025	0.03	<0.0005	<0.0005	<0.001	<0.025	<0.01	0.075	<0.002	0.035	<0.0002	0.026	<0.005	13 J	<0.002	<0.0005	170 J	<0.001	<0.025	<0.02
W-829-1938	3/5/14 REX	-	-	0.025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W-829-1938	3/13/14 REX	-	-	0.029	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W-829-1938	4/23/14	<0.005	0.023	0.027	<0.0005	<0.0005	<0.001	<0.025	<0.01 O	<0.05	<0.002 O	0.019	<0.0002	<0.025	<0.005	12	<0.002	<0.0005	150	<0.001	<0.025	<0.02
W-829-1938	7/30/14	<0.005	0.023	0.031	<0.0005	<0.0005	<0.001	<0.025	<0.01	<0.05	<0.002	0.03	<0.0002	<0.025	<0.005	14	<0.002	<0.0005	180	<0.001	<0.025	<0.02
W-829-1938	7/30/14 DUP	<0.005	0.023	0.031	<0.0005	<0.0005	<0.001	<0.025	<0.01	<0.05	<0.002	0.029	<0.0002	0.026	<0.005	14	<0.002	<0.0005	180	<0.001	<0.025	<0.02
W-829-1938	8/28/14 REX	-	-	<0.025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W-829-1938	9/4/14 REX	-	-	0.023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W-829-1938	10/29/14	<0.005	0.023	<0.024	<0.0005	<0.0005	<0.001	<0.025	<0.01	<0.05	<0.002	0.061	<0.0002	<0.025	<0.005	13	<0.002	<0.0005	160	<0.001	<0.025	<0.02
W-829-1938	10/29/14 DUP	<0.005	0.024	<0.021	<0.0005	<0.0005	<0.001	<0.025	<0.01	<0.05	<0.002	0.052	<0.0002	<0.025	<0.005	13	<0.002	<0.0005	160	<0.001	<0.025	<0.02
W-829-22	4/15/14	<0.005	<0.002	<0.025	<0.0005	<0.0005	<0.001	<0.025	<0.01	<0.05	<0.002	<0.01	<0.0002	<0.025	<0.005	8.7	<0.002	<0.0005	210 FJ	<0.001	<0.025	<0.02
WELL20	1/28/14	<0.005	<0.002	<0.025	<0.0005	<0.0005	<0.001	<0.025	<0.01	-	<0.002	-	<0.0002	<0.025	<0.005	-	<0.002	<0.0005	-	<0.001	<0.025	<0.02
WELL20	1/28/14 DUP	<5	<0.002	<0.025	<0.0005	<0.0005	<0.001	<0.02	<0.01	-	<0.002	-	<0.0002	<0.025	<0.005	-	<0.002	<0.0005	-	<0.001	<0.02	<0.02
WELL20	4/22/14	<0.005	<0.002	<0.025	<0.0005	<0.0005	<0.001	<0.025	<0.01	-	<0.002 O	-	<0.0002	<0.025	<0.005	-	<0.002 O	<0.0005	-	<0.001	<0.025	<0.02
WELL20	4/22/14 DUP	<5	<0.002	<0.025	<0.0005	<0.0005	<0.001	<0.02	<0.01	-	<0.002	-	<0.0002	<0.025	<0.005	-	<0.002	<0.0005	-	<0.001	<0.02	<0.02
WELL20	7/30/14	<0.005	<0.002	<0.025	<0.0005	<0.0005	<0.001	<0.025	<0.01	-	<0.002	-	<0.0002	<0.025	<0.005	-	<0.002	<0.0005	-	<0.001	<0.025	<0.02
WELL20	7/30/14 DUP	<5	<0.002	<0.025	<0.0005	<0.0005	<0.001	<0.02	<0.01	-	<0.002	-	<0.0002	<0.025	<0.005	-	<0.002	<0.0005	-	<0.001	<0.02	<0.02
WELL20	10/7/14	<0.005	<0.002	0.012	<0.0005	<0.0005	<0.001	<0.025	<0.01	-	<0.002	-	<0.0002	<0.025 J	<0.005	-	<0.002	<0.0005	-	<0.001	<0.025	<0.02
WELL20	10/7/14 DUP	<5	<0.002	<0.025	<0.0005	<0.0005	<0.001	<0.02	<0.01	-	<0.002	-	<0.0002 L	<0.025	<0.005	-	<0.002	<0.0005	-	<0.001	<0.02	<0.02

Table B-5.01. Building 850 area in Operable Unit 5 volatile organic compounds (VOCs) in ground water.

Location	Date	Method	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	1,1,2-TCA (µg/L)	Freon 11 (µg/L)	Freon 113 (µg/L)	Vinyl chloride (µg/L)
K1-02B	8/27/14	E8260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-02B	10/21/14	E8260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-05	2/3/14	E8260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	18	<0.5
K1-05	4/29/14	E8260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	15	<0.5
K1-05	4/29/14 DUP	E8260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	13	<0.5
K1-05	7/29/14	E8260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	13	<0.5
K1-05	10/21/14	E8260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	20	<0.5
K1-07	1/14/14	E8260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-07	4/30/14	E8260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-07	7/29/14	E8260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-07	11/12/14	E8260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-08	1/29/14	E8260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	23	<0.5
K1-08	4/29/14	E8260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	20	<0.5
K1-08	7/29/14	E8260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	9.4	<0.5
K1-08	7/29/14 DUP	E8260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	11	<0.5
K1-08	11/11/14	E8260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	15	<0.5
K1-09	1/14/14	E8260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	39	<0.5
K1-09	4/30/14	E8260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	54	<0.5
K1-09	8/12/14	E8260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	52	<0.5
K1-09	11/11/14	E8260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	48	<0.5
W-865-02	1/21/14	E601	<0.5	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	55	<0.5
W-865-02	7/15/14	E601	<0.5	1.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.9	67 D	<0.5
W-865-1802	1/15/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-1802	7/14/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-2005	1/30/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	5	<0.5
W-865-2005	1/30/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	4.9	<0.5
W-865-2005	8/13/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	6.1	<0.5
W-865-2005	8/13/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	6.1	<0.5
W-865-2121	1/16/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	14	<0.5
W-865-2121	7/16/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	17	<0.5
W-865-2133	1/16/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-2133	7/15/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-2224	5/14/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-2224	11/12/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT1-2209	4/21/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT1-2209	10/15/14	E601	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT1-2326	2/3/14	E8260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT1-2326	5/14/14	E8260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT1-2326	8/11/14	E8260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT1-2326	12/10/14	E8260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT1-2326	12/10/14 DUP	E8260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT1-2620	5/15/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT1-2620	10/16/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table B-5.01 (Con't). Analyte detected but not reported in main table.

Location	Date	Method	Detection frequency
K1-02B	8/27/14	E8260	0 of 36
K1-02B	10/21/14	E8260	0 of 36
K1-05	2/3/14	E8260	0 of 36
K1-05	4/29/14	E8260	0 of 36
K1-05	4/29/14 DUP	E8260	0 of 36
K1-05	7/29/14	E8260	0 of 36
K1-05	10/21/14	E8260	0 of 36
K1-07	1/14/14	E8260	0 of 36
K1-07	4/30/14	E8260	0 of 36
K1-07	7/29/14	E8260	0 of 36
K1-07	11/12/14	E8260	0 of 36
K1-08	1/29/14	E8260	0 of 36
K1-08	4/29/14	E8260	0 of 36
K1-08	7/29/14	E8260	0 of 36
K1-08	7/29/14 DUP	E8260	0 of 36
K1-08	11/11/14	E8260	0 of 36
K1-09	1/14/14	E8260	0 of 36
K1-09	4/30/14	E8260	0 of 36
K1-09	8/12/14	E8260	0 of 36
K1-09	11/11/14	E8260	0 of 36
W-865-02	1/21/14	E601	0 of 18
W-865-02	7/15/14	E601	0 of 18
W-865-1802	1/15/14	E601	0 of 18
W-865-1802	7/14/14	E601	0 of 18
W-865-2005	1/30/14	E601	0 of 18
W-865-2005	1/30/14 DUP	E601	0 of 18
W-865-2005	8/13/14	E601	0 of 18
W-865-2005	8/13/14 DUP	E601	0 of 18
W-865-2121	1/16/14	E601	0 of 18
W-865-2121	7/16/14	E601	0 of 18
W-865-2133	1/16/14	E601	0 of 18
W-865-2133	7/15/14	E601	0 of 18
W-865-2224	5/14/14	E601	0 of 18
W-865-2224	11/12/14	E601	0 of 18
W-PIT1-2209	4/21/14	E601	0 of 18
W-PIT1-2209	10/15/14	E601	0 of 18
W-PIT1-2326	2/3/14	E8260	0 of 36
W-PIT1-2326	5/14/14	E8260	0 of 36
W-PIT1-2326	8/11/14	E8260	0 of 36
W-PIT1-2326	12/10/14	E8260	0 of 36
W-PIT1-2326	12/10/14 DUP	E8260	0 of 36
W-PIT1-2620	5/15/14	E601	0 of 18
W-PIT1-2620	10/16/14	E601	0 of 18

Table B-5.02. Building 850 area in Operable Unit 5 nitrate and perchlorate in ground water.

Location	Date	Nitrate as NO3 (mg/L)	Perchlorate (µg/L)
K1-02B	8/27/14	31	6
K1-02B	10/21/14	32	5.4
K1-05	2/3/14	36	<4
K1-05	4/29/14	36	<4
K1-05	4/29/14 DUP	36	<4
K1-05	7/29/14	36	<4
K1-05	10/21/14	36	<4
K1-07	1/14/14	31	<4
K1-07	4/30/14	32 J	<4 O
K1-07	7/29/14	32	<4
K1-07	11/12/14	31 O	<4
K1-08	1/29/14	34 O	<4
K1-08	4/29/14	34	<4
K1-08	7/29/14	33	<4
K1-08	7/29/14 DUP	33	<4
K1-08	11/11/14	33	<4
K1-08	11/11/14 DUP	32.3	-
K1-09	1/14/14	34	<4
K1-09	4/30/14	35	<4 O
K1-09	8/12/14	35	<4
K1-09	11/11/14	34	<4
K1-09	11/11/14 DUP	33.2	-
K2-03	5/12/14	9 D	<4
K2-03	10/27/14	-	<4
K2-04D	4/16/14	34	<4
K2-04D	10/27/14	-	<4
K2-04S	6/2/14	-	4.1
K2-04S	6/2/14 DUP	-	4.2
K2-04S	10/23/14	-	<4
NC2-05A	5/21/14	34 D	7
NC2-05A	5/21/14 DUP	33 D	6.5
NC2-05A	11/17/14	-	5.4
NC2-06	5/22/14	33 D	5.5
NC2-06	11/13/14	-	5.5
NC2-06A	5/22/14	<0.5	<4
NC2-06A	11/13/14	-	<4
NC2-09	5/22/14	<0.5	<4
NC2-10	5/28/14	40 D	<4
NC2-11D	4/14/14	28 D	<4
NC2-11D	10/20/14	-	<4
NC2-11I	5/28/14	30 D	5.2
NC2-11I	11/18/14	-	4.6
NC2-11S	5/28/14	30 D	4.9
NC2-11S	11/18/14	-	4.3
NC2-12D	4/16/14	24 D	5.5
NC2-12D	4/16/14 DUP	25 D	4.8

Table B-5.02. Building 850 area in Operable Unit 5 nitrate and perchlorate in ground water.

Location	Date	Nitrate as NO3 (mg/L)	Perchlorate (µg/L)
NC2-12S	5/28/14	92 D	4.4
NC2-12S	11/18/14	-	4.5
NC2-13	5/13/14	29 D	<4
NC2-13	11/17/14	-	<4
NC2-14S	1/14/14	-	<4
NC2-14S	7/14/14	-	<4
NC2-15	5/21/14	35	4.5
NC2-15	5/21/14	30 D	4.1
NC2-15	11/17/14	-	<4
NC2-16	1/14/14	-	<4
NC2-16	1/14/14 DUP	-	<4
NC2-16	7/14/14	-	<4
NC2-17	5/22/14	21 D	7.4
NC2-17	11/13/14	-	7
NC2-18	5/20/14	-	7.5
NC2-18	11/4/14	-	7.2
NC2-18	11/4/14 DUP	-	7.4
NC2-19	5/13/14	-	<4
NC2-19	11/17/14	-	<4
NC2-20	5/28/14	46 D	<4
NC2-21	5/28/14	-	<4
NC7-10	1/14/14	-	19
NC7-10	4/24/14	41 D	-
NC7-10	7/10/14	-	18
NC7-11	10/16/14	-	21
NC7-15	4/23/14	24 D	<4
NC7-19	4/23/14	24 D	<4
NC7-19	10/15/14	-	<4
NC7-27	4/24/14	42 D	11
NC7-27	10/16/14	-	11
NC7-28	1/22/14	<0.5	<4
NC7-28	2/26/14	-	<4
NC7-28	3/13/14	-	<4
NC7-28	4/24/14	<0.5	<4
NC7-28	4/24/14 DUP	<0.5	<4
NC7-28	5/22/14	-	4.3
NC7-28	6/19/14	-	<4
NC7-28	8/26/14	<0.5	<4
NC7-28	9/17/14	-	<4
NC7-28	10/23/14	<0.5	<4
NC7-28	10/23/14	-	<4
NC7-28	11/24/14	-	<4 L
NC7-28	12/22/14	-	<4
NC7-29	4/30/14	160 D	11
NC7-29	11/10/14	-	8.1
NC7-29	11/10/14 DUP	-	11

Table B-5.02. Building 850 area in Operable Unit 5 nitrate and perchlorate in ground water.

Location	Date	Nitrate as NO3 (mg/L)	Perchlorate (µg/L)
NC7-43	10/20/14	-	<4
NC7-44	5/19/14	53 D	<4
NC7-44	5/19/14 DUP	57 D	<4
NC7-44	10/20/14	-	<4
NC7-46	5/8/14	-	<4
NC7-56	5/7/14	30 D	7.7
NC7-56	10/22/14	-	7.1
NC7-58	5/7/14	-	5.7
NC7-59	10/22/14	-	7
NC7-60	1/14/14	-	<4
NC7-60	4/24/14	0.53	-
NC7-60	9/24/14	-	<4
NC7-61	1/27/14	-	41 D
NC7-61	1/27/14 DUP	-	43 D
NC7-61	2/26/14	-	38 D
NC7-61	2/26/14 DUP	-	37 D
NC7-61	3/13/14	-	44 D
NC7-61	3/13/14 DUP	-	44 D
NC7-61	4/23/14	49	39 D
NC7-61	4/23/14 DUP	49	40 D
NC7-61	5/22/14	-	39 D
NC7-61	5/22/14 DUP	-	42 D
NC7-61	6/19/14	-	39 D
NC7-61	6/19/14 DUP	-	39 D
NC7-61	8/26/14	-	44 D
NC7-61	8/26/14 DUP	-	39 D
NC7-61	9/17/14	-	40 D
NC7-61	9/17/14 DUP	-	41 D
NC7-61	10/23/14	-	37 D
NC7-61	10/23/14 DUP	-	37 D
NC7-61	11/10/14	-	36 D
NC7-61	11/10/14 DUP	-	37 D
NC7-61	12/22/14	-	37 D
NC7-61	12/22/14 DUP	-	39 D
NC7-62	5/7/14	-	7.4
NC7-62	10/22/14	-	7.4
NC7-62	10/22/14 DUP	-	7.4
NC7-69	4/23/14	<0.5	<4
NC7-69	10/23/14	-	<4
NC7-70	1/22/14	<0.5	<4
NC7-70	2/26/14	-	<4
NC7-70	3/13/14	-	<4
NC7-70	4/28/14	-	<4
NC7-70	4/28/14 DUP	<0.5	<4
NC7-70	5/27/14	-	<4
NC7-70	6/19/14	-	<4

Table B-5.02. Building 850 area in Operable Unit 5 nitrate and perchlorate in ground water.

Location	Date	Nitrate as NO3 (mg/L)	Perchlorate (µg/L)
NC7-70	9/17/14	-	<80 D
NC7-70	10/23/14	<0.5	<4
NC7-70	10/23/14	-	<4
NC7-70	10/23/14 DUP	-	<4
NC7-70	11/24/14	-	<4 L
NC7-70	12/22/14	-	<4
NC7-71	1/22/14	<0.5	<4
NC7-71	2/26/14	-	<4
NC7-71	3/13/14	-	<4
NC7-71	4/28/14	<0.5	<4
NC7-71	5/22/14	-	<4
NC7-71	6/19/14	-	<4
NC7-71	8/26/14	<0.5	<4
NC7-71	9/17/14	-	<4
NC7-71	10/28/14	<0.5	<4
NC7-71	11/24/14	-	<4
NC7-71	12/22/14	-	<4
NC7-72	5/7/14	-	5.9
NC7-72	10/22/14	-	<4
NC7-73	5/7/14	34 D	8.1
NC7-73	10/22/14	-	7.1
W-850-05	4/29/14	<0.5	<4
W-850-05	10/20/14	-	<4
W-850-05	10/20/14 DUP	-	<4
W-850-2145	5/20/14	-	8.1
W-850-2145	11/4/14	-	7.6
W-850-2312	5/20/14	1.1	<4
W-850-2312	11/4/14	-	<4
W-850-2313	4/24/14	40	20
W-850-2313	10/20/14	-	17
W-850-2313	10/20/14 DUP	-	12
W-850-2314	4/24/14	<0.5	<4
W-850-2314	10/16/14	-	<4
W-850-2315	4/30/14	28	5.3
W-850-2315	10/20/14	-	<4
W-850-2316	5/20/14	0.71	<4
W-850-2316	11/4/14	-	<4
W-850-2416	1/22/14	0.89	<4
W-850-2416	2/26/14	-	<4
W-850-2416	3/13/14	-	<4
W-850-2416	4/28/14	1	<4
W-850-2416	5/22/14	-	<4
W-850-2416	6/19/14	-	<4
W-850-2416	8/26/14	0.8	<4
W-850-2416	9/17/14	-	<4
W-850-2416	10/28/14	1	<4

Table B-5.02. Building 850 area in Operable Unit 5 nitrate and perchlorate in ground water.

Location	Date	Nitrate as NO3 (mg/L)	Perchlorate (µg/L)
W-850-2417	1/22/14	<0.5	<4
W-850-2417	2/26/14	-	<4
W-850-2417	3/13/14	-	<4
W-850-2417	4/24/14	<0.5	<4
W-850-2417	5/22/14	-	<4
W-850-2417	6/19/14	-	<4
W-850-2417	8/26/14	<0.5	<4
W-850-2417	9/17/14	-	<4
W-850-2417	10/23/14	<0.5	<4
W-850-2417	11/24/14	-	<4 L
W-850-2417	12/22/14	-	<4
W-850-2805	6/2/14	2.1	<4
W-850-2805	10/23/14	-	<4
W-865-02	1/21/14	36 D	<4
W-865-02	7/15/14	37 D	-
W-865-1802	5/12/14	26 D	<4
W-865-1803	5/12/14	30 D	<4
W-865-1803	10/27/14	-	<4
W-865-2005	1/30/14	35	<4
W-865-2005	1/30/14 DUP	31 D	<4
W-865-2005	4/21/14	-	<4
W-865-2005	4/21/14 DUP	-	<4
W-865-2005	8/13/14	34 D	<4
W-865-2005	8/13/14 DUP	35 D	<4
W-865-2005	10/22/14	-	<4
W-865-2005	10/22/14 DUP	-	<4
W-865-2121	1/16/14	43 D	<4
W-865-2121	7/16/14	42 D	-
W-865-2133	1/16/14	<0.5	<4
W-865-2133	5/14/14	-	<4
W-865-2133	7/15/14	<0.5	<4
W-865-2133	11/12/14	-	<4
W-865-2224	1/16/14	-	<4
W-865-2224	5/14/14	<0.5	<4
W-865-2224	7/15/14	-	<4
W-865-2224	11/12/14	<0.5	<4
W-PIT1-2209	1/27/14	-	<4
W-PIT1-2209	4/21/14	55	<4
W-PIT1-2209	7/23/14	-	<4
W-PIT1-2209	10/15/14	56	<4
W-PIT1-2225	2/4/14	-	<4
W-PIT1-2225	5/27/14	<0.5	<4
W-PIT1-2225	7/17/14	-	<4
W-PIT1-2326	2/3/14	33	6.6
W-PIT1-2326	5/14/14	34	7.5
W-PIT1-2326	8/11/14	33	4.9

Table B-5.02. Building 850 area in Operable Unit 5 nitrate and perchlorate in ground water.

Location	Date	Nitrate as NO3 (mg/L)	Perchlorate (µg/L)
W-PIT1-2620	2/4/14	-	5.8
W-PIT1-2620	5/15/14	39 D	5.6
W-PIT1-2620	7/23/14	-	5.3 L
W-PIT1-2620	10/16/14	-	6
W-PIT7-16	4/23/14	<0.5	<4

Table B-5.03. Building 850 area in Operable Unit 5 metals in ground water.

Location	Date	Arsenic (mg/L)	Barium (mg/L)	Beryllium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Mercury (mg/L)	Nickel (mg/L)	Selenium (mg/L)	Silver (mg/L)	Sodium (mg/L)	Vanadium (mg/L)	Zinc (mg/L)
K1-02B	8/27/14	0.011	0.026	<0.0005	<0.0005	<0.003	<0.025	<0.01	<0.05	<0.002	<0.01	<0.0002	<0.005	0.002	<0.0005	46 L	0.046	<0.02
K1-02B	10/21/14	0.011	0.027	<0.0005	<0.0005 O	-	<0.025 O	<0.01	-	<0.002	-	-	<0.005	-	-	-	0.049	<0.02
K1-05	2/3/14	0.014	0.042	<0.0005	<0.0005	<0.003	<0.025	<0.01	<0.05	<0.002	<0.01	<0.0002	<0.005	<0.002	<0.0005	47 F	0.063	<0.02
K1-05	4/29/14	0.014	0.036	<0.0005	<0.0005	-	<0.025	<0.01	-	<0.002	-	-	<0.005	-	-	-	0.061	<0.02
K1-05	4/29/14 DUP	0.013	0.035	<0.0005	<0.0005	-	<0.025	<0.01	-	<0.002	-	-	<0.005	-	-	-	0.058	<0.02
K1-05	7/29/14	0.014	0.038	<0.0005	<0.0005	<0.003	<0.025	<0.01	<0.05	<0.002	<0.01	<0.0002 O	<0.005	<0.002	<0.0005	50	0.062 J	<0.02
K1-05	10/21/14	0.014	0.039	<0.0005	<0.0005 O	-	<0.025 O	<0.01	-	<0.002	-	-	<0.005	-	-	-	0.067	<0.02
K1-07	1/14/14	0.013	0.028	<0.0005	<0.0005	<0.003	<0.025	<0.01	<0.05	<0.002	<0.01	<0.0002	<0.005	<0.002	<0.0005	41	0.066	<0.02
K1-07	4/30/14	0.014	0.03 J	<0.0005	<0.0005	-	<0.025	<0.01	-	<0.002	-	-	<0.005	-	-	-	0.065	<0.02
K1-07	7/29/14	0.012	0.029	<0.0005	<0.0005	<0.003	<0.025	<0.01	<0.05	<0.002	<0.01	<0.0002 O	<0.005	<0.002	<0.0005	48	0.065 J	<0.02
K1-07	11/12/14	0.013	0.031	<0.0005	<0.0005	-	<0.025	<0.01	-	<0.002	-	-	<0.005	-	-	-	0.07	<0.02
K1-08	1/29/14	0.014	0.044	<0.0005	<0.0005	<0.003	<0.025	<0.01	<0.05	<0.002	<0.01	<0.0002	<0.005	<0.002	<0.0005	42 J	0.062	<0.02
K1-08	4/29/14	0.014	0.042	<0.0005	<0.0005	-	<0.025	<0.01	-	<0.002	-	-	<0.005	-	-	-	0.06	<0.02
K1-08	7/29/14	0.013	0.042	<0.0005	<0.0005	<0.003	<0.025	<0.01	<0.05	<0.002	<0.01	<0.0002 O	<0.005	<0.002	<0.0005	50	0.059 J	<0.02
K1-08	7/29/14 DUP	0.013	0.043	<0.0005	<0.0005	<0.003	<0.025	<0.01	<0.05	<0.002	<0.01	<0.0002 O	<0.005	<0.002	<0.0005	49	0.058 J	<0.02
K1-08	11/11/14	0.015	0.044	<0.0005	<0.0005	-	<0.025	<0.01	-	<0.002	-	-	<0.005	-	-	-	0.065	<0.02
K1-09	1/14/14	0.013	0.044	<0.0005	<0.0005	<0.003	<0.025	<0.01	<0.05	<0.002	<0.01	<0.0002	<0.005	<0.002	<0.0005	43	0.057	<0.02
K1-09	4/30/14	0.014	0.046	<0.0005	<0.0005	-	<0.025	<0.01	-	<0.002	-	-	<0.005	-	-	-	0.059	<0.02
K1-09	8/12/14	0.013	0.05 J	<0.0005	<0.0005	<0.003	<0.025	<0.01	<0.05	<0.002	<0.01	<0.0002	<0.005	<0.002	<0.0005	50 FJ	0.058	<0.02
K1-09	11/11/14	0.014	0.048	<0.0005	<0.0005	-	<0.025	<0.01	-	<0.002	-	-	<0.005	-	-	-	0.063	<0.02
NC7-28	1/22/14	0.022	0.21	-	<0.001	<0.001	-	-	-	<0.005	-	<0.0002	-	<0.002	<0.001	-	-	-
NC7-28	4/24/14	0.023	0.19	-	<0.001	<0.003	-	-	-	<0.001	-	<0.0002	-	<0.002	<0.001	-	-	-
NC7-28	8/26/14	0.02	0.17	-	<0.001	<0.003	-	-	-	<0.001	-	<0.0002	-	<0.002	<0.001	-	-	-
NC7-28	10/23/14	0.019	0.17	-	<0.001	<0.003	-	-	-	<0.001	-	<0.0002	-	<0.002	<0.001	-	-	-
NC7-61	1/27/14	0.019	0.091	-	<0.001	<0.003	-	-	-	<0.001	-	<0.0002	-	<0.002	<0.001	-	-	-
NC7-61	1/27/14 DUP	0.019	0.091	-	<0.001	<0.003	-	-	-	<0.001	-	<0.0002	-	<0.002	<0.001	-	-	-
NC7-61	4/23/14	0.018	0.089	-	<0.001	<0.003	-	-	-	<0.001	-	<0.0002	-	0.002	<0.001	-	-	-
NC7-61	4/23/14 DUP	0.019	0.092	-	<0.001	<0.003	-	-	-	<0.001	-	<0.0002	-	<0.002	<0.001	-	-	-
NC7-61	8/26/14	0.019	0.092	-	<0.001	<0.003	-	-	-	<0.001	-	<0.0002	-	<0.002	<0.001	-	-	-
NC7-61	8/26/14 DUP	0.018	0.091	-	<0.001	<0.003	-	-	-	<0.001	-	<0.0002	-	<0.002	<0.001	-	-	-
NC7-61	10/23/14	0.019	0.092	-	<0.001	<0.003	-	-	-	<0.001	-	<0.0002	-	<0.002	<0.001	-	-	-
NC7-61	10/23/14 DUP	0.019	0.091	-	<0.001	<0.003	-	-	-	<0.001	-	<0.0002	-	<0.002	<0.001	-	-	-
NC7-70	1/22/14	0.0069 D	0.065 D	-	<0.002 D	<0.002 D	-	-	-	<0.01 D	-	<0.0002	-	<0.004 D	<0.002 D	-	-	-
NC7-70	4/28/14	0.0088	0.2	-	<0.001	0.015 J	-	-	-	<0.001	-	<0.0002	-	<0.002	<0.001	-	-	-
NC7-70	8/26/14	0.01 D	0.3 D	-	<0.005 D	0.034 D	-	-	-	<0.005 D	-	<0.0002	-	<0.01 D	<0.005 D	-	-	-
NC7-70	10/23/14	<0.02 D	<0.25 D	-	<0.01 D	<0.03 D	-	-	-	<0.01 D	-	<0.0002	-	<0.02 D	<0.01 D	-	-	-
NC7-71	1/22/14	0.0061	0.04	-	0.0001	0.0007	-	-	-	<0.0002	-	<0.0002	-	<0.002	<0.0001	-	-	-
NC7-71	4/28/14	0.0059	0.04	-	<0.0005	<0.001	-	-	-	<0.005	-	<0.0002	-	<0.002	<0.001	-	-	-
NC7-71	8/26/14	0.0062	0.03	-	<0.0001	<0.0005	-	-	-	<0.0002	-	<0.0002	-	<0.002	<0.0001	-	-	-
NC7-71	10/28/14	0.0062	0.03	-	0.0002	0.0006	-	-	-	<0.0002	-	<0.0002 L	-	<0.002	<0.0001	-	-	-
W-850-2416	1/22/14	<0.002	0.036	-	<0.001	<0.001	-	-	-	<0.005	-	<0.0002	-	<0.002	<0.001	-	-	-
W-850-2416	4/28/14	<0.002	0.034	-	<0.001	<0.003 J	-	-	-	<0.001	-	<0.0002	-	<0.002	<0.001	-	-	-
W-850-2416	8/26/14	<0.002	0.036	-	<0.001	<0.003	-	-	-	<0.001	-	<0.0002	-	<0.002	<0.001	-	-	-
W-850-2416	10/28/14	0.0021	0.036	-	<0.001	<0.003	-	-	-	<0.001	-	<0.0002	-	<0.002	<0.001	-	-	-

Table B-5.03. Building 850 area in Operable Unit 5 metals in ground water.

Location	Date	Arsenic (mg/L)	Barium (mg/L)	Beryllium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Cobalt (mg/L)	Copper (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Mercury (mg/L)	Nickel (mg/L)	Selenium (mg/L)	Silver (mg/L)	Sodium (mg/L)	Vanadium (mg/L)	Zinc (mg/L)
W-850-2417	1/22/14	0.0054	0.13	-	<0.001	<0.001	-	-	-	<0.005	-	<0.0002	-	<0.002	<0.001	-	-	-
W-850-2417	4/24/14	0.03	0.15	-	<0.001	<0.003	-	-	-	<0.001	-	<0.0002	-	<0.002	<0.001	-	-	-
W-850-2417	8/26/14	0.0055	0.17	-	<0.001	<0.003	-	-	-	<0.001	-	<0.0002	-	<0.002	<0.001	-	-	-
W-850-2417	10/23/14	0.014	0.14	-	<0.001	<0.003	-	-	-	<0.001	-	<0.0002	-	<0.002	<0.001	-	-	-
W-865-02	1/21/14	0.0086	<0.02	-	<0.0005	<0.001	-	-	-	<0.005	-	<0.0002	-	<0.002	<0.001	-	-	-
W-865-2005	1/30/14	0.013	0.03	-	0.001	<0.001	-	-	-	<0.005	-	<0.0002	-	0.0021	<0.001	-	-	-
W-865-2005	1/30/14 DUP	0.013	0.03	-	0.0009	<0.001	-	-	-	<0.005	-	<0.0002	-	0.0023	<0.001	-	-	-
W-865-2121	1/16/14	0.008	<0.02	-	<0.0005	<0.001	-	-	-	<0.005	-	<0.0002	-	0.0024	<0.001	-	-	-
W-865-2133	1/16/14	0.018	<0.02	-	<0.0005	<0.001	-	-	-	<0.005	-	<0.0002	-	<0.002	<0.001	-	-	-
W-PIT1-2326	2/3/14	0.011	0.039	<0.0005	<0.0005	-	<0.025	<0.01	-	<0.002	-	-	<0.005	-	-	-	0.048	<0.02
W-PIT1-2326	5/14/14	0.012	0.034	<0.0005	<0.0005	-	<0.025	<0.01	-	<0.002	-	-	<0.005	-	-	-	0.048	<0.02 O
W-PIT1-2326	8/11/14	0.011	0.039	<0.0005	<0.0005	-	<0.025	<0.01	-	<0.002	-	-	<0.005	-	-	-	0.046	<0.02
W-PIT1-2326	12/10/14	0.011	0.037	<0.0005	<0.0005	-	<0.025	<0.01 O	-	<0.002	-	-	<0.005	-	-	-	0.048	<0.02
W-PIT1-2326	12/10/14 DUP	0.01	0.037	<0.0005	<0.0005	-	<0.025	<0.01 O	-	<0.002	-	-	<0.005	-	-	-	0.049	<0.02
W-PIT1-2620	5/15/14	0.015	0.04	-	<0.0005	<0.001	-	-	-	<0.005	-	<0.0002	-	0.0039	<0.001	-	-	-

Table B-5.04. Building 850 area in Operable Unit 5 polychlorinated biphenyl (PCB) compounds in ground water.

Location	Date	PCB 1016 (µg/L)	PCB 1221 (µg/L)	PCB 1232 (µg/L)	PCB 1242 (µg/L)	PCB 1248 (µg/L)	PCB 1254 (µg/L)	PCB 1260 (µg/L)
K1-05	2/3/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-07	1/14/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-08	1/29/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-09	1/14/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
NC7-28	4/24/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
NC7-44	5/19/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
NC7-44	5/19/14 DUP	<0.5	<1	<0.5	<0.5	<0.51	<0.5	<0.5

Table B-5.05. Building 850 area in Operable Unit 5 total uranium and uranium isotopes in ground water.

Location	Date	AS	AS	AS	KPA	MS	MS	MS	MS	MS	MS	MS	MS
		Uranium 234 and 233 (in activity) (pCi/L)	Uranium 235 and 236 (in activity) (pCi/L)	Uranium 238 (in activity) (pCi/L)	Total Uranium (in mass) (µg/L)	Total Uranium (in activity) (pCi/L)	Total Uranium (in mass) (µg/L)	Uranium 234 (in activity) (pCi/L)	Uranium 235 (in activity) (pCi/L)	Uranium 236 (in activity) (pCi/L)	Uranium 238 (in activity) (pCi/L)	Uranium 238 (in mass) (µg/L)	Uranium 235/238 (atom/atom)
K1-02B	8/27/14	2.57 ± 0.402	<0.1	1.53 ± 0.263	-	-	-	-	-	-	-	-	-
K1-02B	10/21/14	2.59 ± 0.404	<0.1	1.43 ± 0.252	-	-	-	-	-	-	-	-	-
K1-05	2/3/14	1.84 ± 0.328 O	<0.1	0.971 ± 0.202 O	-	-	-	-	-	-	-	-	-
K1-05	4/29/14	2.38 ± 0.599 O	<0.1	1.19 ± 0.367 O	-	-	-	-	-	-	-	-	-
K1-05	4/29/14 DUP	1.92 ± 0.467 O	<0.1	1.01 ± 0.298 O	-	-	-	-	-	-	-	-	-
K1-05	7/29/14	1.78 ± 0.386	<0.1 O	0.897 ± 0.237	-	-	-	-	-	-	-	-	-
K1-05	10/21/14	1.92 ± 0.315	0.100 ± 0.0590	0.943 ± 0.183	-	-	-	-	-	-	-	-	-
K1-07	1/14/14	2.04 ± 0.320	<0.1 O	0.965 ± 0.177	-	-	-	-	-	-	-	-	-
K1-07	4/30/14	1.77 ± 0.421 O	<0.1	0.926 ± 0.268 O	-	2.90 ± 0.0360	2.70 ± 0.00660	2.00 ± 0.0360	0.0420 ± 0.000170	<0.00017	0.900 ± 0.00220	2.70 ± 0.00660	0.00723 ± 0.0000230
K1-07	7/29/14	1.94 ± 0.423	<0.1 O	0.831 ± 0.233	-	-	-	-	-	-	-	-	-
K1-07	11/12/14	2.01 ± 0.322	<0.1	1.08 ± 0.197 O	-	-	-	-	-	-	-	-	-
K1-08	1/29/14	2.22 ± 0.410	<0.1	1.02 ± 0.229	-	-	-	-	-	-	-	-	-
K1-08	4/29/14	2.02 ± 0.501 O	<0.1	1.11 ± 0.327 O	-	-	-	-	-	-	-	-	-
K1-08	7/29/14	1.76 ± 0.391	<0.1 O	0.977 ± 0.258	-	-	-	-	-	-	-	-	-
K1-08	7/29/14 DUP	2.28 ± 0.511	<0.1 O	0.914 ± 0.268	-	-	-	-	-	-	-	-	-
K1-08	11/11/14	1.75 ± 0.309	<0.1	0.993 ± 0.199	-	-	-	-	-	-	-	-	-
K1-09	1/14/14	2.23 ± 0.362	<0.1 O	0.987 ± 0.191	-	-	-	-	-	-	-	-	-
K1-09	4/30/14	2.23 ± 0.518 O	<0.1	0.992 ± 0.291 O	-	-	-	-	-	-	-	-	-
K1-09	8/12/14	1.88 ± 0.441 O	0.118 ± 0.0953	0.825 ± 0.249 O	-	-	-	-	-	-	-	-	-
K1-09	11/11/14	2.25 ± 0.376	<0.1	1.09 ± 0.214	-	-	-	-	-	-	-	-	-
K2-03	5/12/14	5.12 ± 0.727	0.183 ± 0.0709	3.23 ± 0.479	-	-	-	-	-	-	-	-	-
K2-04S	6/2/14	2.59 ± 0.607	<0.1	1.56 ± 0.416 O	-	-	-	-	-	-	-	-	-
K2-04S	6/2/14 DUP	2.20 ± 0.514	<0.1	1.27 ± 0.345 O	-	-	-	-	-	-	-	-	-
NC2-05A	5/21/14	2.58 ± 0.600 O	<0.1	1.58 ± 0.416 O	-	-	-	-	-	-	-	-	-
NC2-05A	5/21/14 DUP	2.22 ± 0.530 O	0.133 ± 0.112	1.41 ± 0.381 O	-	-	-	-	-	-	-	-	-
NC2-06	5/22/14	1.62 ± 0.286	<0.1	1.06 ± 0.208	-	-	-	-	-	-	-	-	-
NC2-06A	5/22/14	-	-	-	-	0.310 ± 0.00610	0.370 ± 0.00100	0.180 ± 0.00610	0.00520 ± 0.0000250	<0.007	0.120 ± 0.000350	0.370 ± 0.00100	0.00647 ± 0.0000250
NC2-09	5/22/14	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-	-
NC2-10	5/28/14	3.10 ± 0.478	<0.1	1.50 ± 0.261	-	-	-	-	-	-	-	-	-
NC2-11D	4/14/14	-	-	-	-	4.80 ± 0.0810	5.30 ± 0.0270	2.90 ± 0.0810	0.0820 ± 0.000500	<0.00034	1.80 ± 0.00890	5.30 ± 0.0270	0.00719 ± 0.0000250
NC2-11I	5/28/14	2.79 ± 0.422	0.118 ± 0.0533	1.55 ± 0.258	-	-	-	-	-	-	-	-	-
NC2-11S	5/28/14	2.65 ± 0.395	<0.1	1.52 ± 0.249	-	-	-	-	-	-	-	-	-
NC2-12D	4/16/14	1.97 ± 0.340	<0.1	1.24 ± 0.237	-	-	-	-	-	-	-	-	-
NC2-12D	4/16/14 DUP	2.10 ± 0.361	<0.1	1.30 ± 0.248	-	-	-	-	-	-	-	-	-
NC2-12I	5/28/14	2.07 ± 0.318	<0.1	1.12 ± 0.193	-	-	-	-	-	-	-	-	-
NC2-12S	5/28/14	3.21 ± 0.474	<0.1	1.92 ± 0.305	-	-	-	-	-	-	-	-	-
NC2-13	5/13/14	4.40 ± 0.818	0.124 ± 0.0906 O	2.70 ± 0.546	-	-	-	-	-	-	-	-	-
NC2-15	5/21/14	1.70 ± 0.433 O	<0.1	0.892 ± 0.281 O	-	-	-	-	-	-	-	-	-
NC2-16	5/12/14	1.44 ± 0.229	<0.1	0.773 ± 0.141	-	-	-	-	-	-	-	-	-
NC2-17	5/22/14	2.24 ± 0.377	<0.1	1.52 ± 0.276	-	-	-	-	-	-	-	-	-
NC2-18	5/20/14	2.13 ± 0.529 O	0.106 ± 0.104	1.52 ± 0.416 O	-	-	-	-	-	-	-	-	-
NC2-18	11/4/14	1.87 ± 0.313	0.115 ± 0.0571	1.44 ± 0.253	-	-	-	-	-	-	-	-	-
NC2-18	11/4/14 DUP	1.90 ± 0.361	0.103 ± 0.0688	1.60 ± 0.315	-	-	-	-	-	-	-	-	-
NC2-19	5/13/14	4.82 ± 0.923	0.207 ± 0.124 O	3.30 ± 0.672	-	-	-	-	-	-	-	-	-
NC2-21	5/28/14	2.16 ± 0.346	0.115 ± 0.0604	1.49 ± 0.255	-	-	-	-	-	-	-	-	-
NC7-10	4/24/14	-	-	-	-	2.90 ± 0.0740	3.30 ± 0.0140	1.70 ± 0.0740	0.0480 ± 0.000540	<0.00097	1.10 ± 0.00460	3.30 ± 0.0140	0.00675 ± 0.0000720
NC7-11	4/24/14	1.52 ± 0.402 O	<0.1	1.35 ± 0.369 O	-	-	-	-	-	-	-	-	-
NC7-19	4/23/14	1.58 ± 0.269	0.101 ± 0.0529	1.42 ± 0.246	-	-	-	-	-	-	-	-	-
NC7-27	4/24/14	1.81 ± 0.443 O	<0.1	1.24 ± 0.340 O	-	-	-	-	-	-	-	-	-
NC7-28	1/22/14	-	-	-	23.8 ± 2.07	9.60 ± 0.180	-	2.70 ± 0.170	0.120 ± 0.00160	0.0380 ± 0.0000210	6.80 ± 0.0310	-	0.00273 ± 0.0000350
NC7-28	2/26/14	-	-	-	47.8 ± 4.99 D	-	-	-	-	-	-	-	-
NC7-28	3/13/14	-	-	-	20.1 ± 2.09 D	-	-	-	-	-	-	-	-

Table B-5.05. Building 850 area in Operable Unit 5 total uranium and uranium isotopes in ground water.

Location	Date	AS	AS	AS	KPA	MS	MS	MS	MS	MS	MS	MS	MS
NC7-28	4/24/14	-	-	-	12.8 ± 1.33 D	5.40 ± 0.0700	11.0 ± 0.0620	1.50 ± 0.0670	0.0650 ± 0.000630	0.0200 ± 0.0000330	3.80 ± 0.0210	11.0 ± 0.0620	0.00269 ± 0.0000210
NC7-28	5/22/14	-	-	-	22.4 ± 2.33 D	-	-	-	-	-	-	-	-
NC7-28	6/19/14	-	-	-	16.9 ± 1.77 D	-	-	-	-	-	-	-	-
NC7-28	8/26/14	-	-	-	11.2 ± 1.18 D	4.90 ± 0.0680	10.0 ± 0.0450	1.40 ± 0.0660	0.0600 ± 0.000340	0.0190 ± 0.0000110	3.50 ± 0.0150	10.0 ± 0.0450	0.00271 ± 0.0000100
NC7-28	9/17/14	-	-	-	19.5 ± 2.10 D	-	-	-	-	-	-	-	-
NC7-28	10/23/14	-	-	-	11.8 ± 1.24 D	6.30 ± 0.230	14.0 ± 0.610	1.70 ± 0.110	0.0780 ± 0.00490	0.0240 ± 0.0000690	4.50 ± 0.200	14.0 ± 0.610	0.00266 ± 0.000117
NC7-28	11/24/14	-	-	-	13.7 ± 1.45 D	-	-	-	-	-	-	-	-
NC7-28	12/22/14	-	-	-	8.38 ± 0.894 D	-	-	-	-	-	-	-	-
NC7-29	4/30/14	10.9 ± 2.01 O	0.507 ± 0.217	9.46 ± 1.77 O	-	-	-	-	-	-	-	-	-
NC7-29	11/10/14	-	-	-	-	18.0 ± 0.300	25.0 ± 0.130	9.80 ± 0.290	0.380 ± 0.00230	<0.0016	8.20 ± 0.0450	24.0 ± 0.130	0.00728 ± 0.0000170
NC7-43	4/29/14	<0.1	<0.1	0.164 ± 0.114	-	-	-	-	-	-	-	-	-
NC7-44	5/19/14	1.62 ± 0.476 O	<0.1	0.828 ± 0.307 O	-	-	-	-	-	-	-	-	-
NC7-44	5/19/14 DUP	2.01 ± 0.360	0.132 ± 0.0470	0.710 ± 0.150	-	-	-	-	-	-	-	-	-
NC7-58	5/7/14	1.78 ± 0.273	<0.1	1.38 ± 0.222	-	-	-	-	-	-	-	-	-
NC7-60	4/24/14	0.541 ± 0.207 O	<0.1	0.295 ± 0.145 O	-	-	-	-	-	-	-	-	-
NC7-61	1/27/14	-	-	-	6.81 ± 0.587 J	-	-	-	-	-	-	-	-
NC7-61	1/27/14 DUP	-	-	-	6.70 ± 0.577 J	-	-	-	-	-	-	-	-
NC7-61	2/26/14	-	-	-	6.78 ± 0.708 D	-	-	-	-	-	-	-	-
NC7-61	2/26/14 DUP	-	-	-	7.23 ± 0.754 D	-	-	-	-	-	-	-	-
NC7-61	3/13/14	-	-	-	6.87 ± 0.715 D	-	-	-	-	-	-	-	-
NC7-61	3/13/14 DUP	-	-	-	6.83 ± 0.711 D	-	-	-	-	-	-	-	-
NC7-61	4/23/14	-	-	-	6.36 ± 0.678 D	4.30 ± 0.0410	6.50 ± 0.0280	2.00 ± 0.0400	0.0590 ± 0.000900	0.00760 ± 0.0000100	2.20 ± 0.00930	6.50 ± 0.0280	0.00424 ± 0.0000620
NC7-61	4/23/14 DUP	-	-	-	6.38 ± 0.680 D	4.30 ± 0.0470	6.50 ± 0.0260	2.00 ± 0.0470	0.0590 ± 0.000310	0.00790 ± 0.0000540	2.20 ± 0.00880	6.40 ± 0.0260	0.00426 ± 0.0000150
NC7-61	5/22/14	-	-	-	7.04 ± 0.734 D	-	-	-	-	-	-	-	-
NC7-61	5/22/14 DUP	-	-	-	6.94 ± 0.723 D	-	-	-	-	-	-	-	-
NC7-61	6/19/14	-	-	-	6.89 ± 0.722 D	-	-	-	-	-	-	-	-
NC7-61	8/26/14	-	-	-	6.75 ± 0.713 D	-	-	-	-	-	-	-	-
NC7-61	8/26/14 DUP	-	-	-	5.92 ± 0.625 D	-	-	-	-	-	-	-	-
NC7-61	9/17/14	-	-	-	6.75 ± 0.727 D	-	-	-	-	-	-	-	-
NC7-61	9/17/14 DUP	-	-	-	6.88 ± 0.741 D	-	-	-	-	-	-	-	-
NC7-61	10/23/14	-	-	-	6.17 ± 0.650 D	-	-	-	-	-	-	-	-
NC7-61	10/23/14 DUP	-	-	-	5.85 ± 0.618 D	-	-	-	-	-	-	-	-
NC7-61	11/10/14	-	-	-	6.83 ± 0.746 FD	-	-	-	-	-	-	-	-
NC7-61	11/10/14 DUP	-	-	-	6.84 ± 0.748 FD	-	-	-	-	-	-	-	-
NC7-61	12/22/14	-	-	-	6.81 ± 0.728 D	-	-	-	-	-	-	-	-
NC7-61	12/22/14 DUP	-	-	-	6.31 ± 0.674 D	-	-	-	-	-	-	-	-
NC7-62	5/7/14	1.90 ± 0.290	0.131 ± 0.0524	1.80 ± 0.276	-	-	-	-	-	-	-	-	-
NC7-69	4/23/14	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-	-
NC7-70	1/22/14	-	-	-	0.124 ± 0.0109	0.120 ± 0.00790	-	0.0810 ± 0.00790	0.00170 ± 0.0000140	<0.000049	0.0400 ± 0.000260	-	0.00649 ± 0.0000350
NC7-70	2/26/14	-	-	-	0.266 ± 0.0236	-	-	-	-	-	-	-	-
NC7-70	3/13/14	-	-	-	0.183 ± 0.0164	-	-	-	-	-	-	-	-
NC7-70	4/28/14	-	-	-	0.107 ± 0.00925	<0.0627	0.0760 ± 0.000560	<0.061	0.00110 ± 0.0000130	<0.000048	0.0250 ± 0.000190	0.0750 ± 0.000560	0.00654 ± 0.0000610
NC7-70	5/27/14	-	-	-	0.281 ± 0.0247	-	-	-	-	-	-	-	-
NC7-70	6/19/14	-	-	-	22.5 ± 2.35 D	-	-	-	-	-	-	-	-
NC7-70	8/26/14	-	-	-	3.27 ± 0.286	1.90 ± 0.0250	3.80 ± 0.00920	0.590 ± 0.0240	0.0240 ± 0.000180	<0.007	1.30 ± 0.00310	3.80 ± 0.00920	0.00296 ± 0.0000210
NC7-70	9/17/14	-	-	-	3.34 ± 0.301	-	-	-	-	-	-	-	-
NC7-70	10/23/14	-	-	-	4.07 ± 0.355	1.90 ± 0.0130	3.70 ± 0.0160	0.590 ± 0.0120	0.0240 ± 0.000160	<0.007	1.30 ± 0.00530	3.70 ± 0.0160	0.00297 ± 0.0000150
NC7-70	11/24/14	-	-	-	4.33 ± 0.459 D	-	-	-	-	-	-	-	-
NC7-70	12/22/14	-	-	-	41.0 ± 4.39 D	-	-	-	-	-	-	-	-
NC7-71	1/22/14	-	-	-	<0.1	<0.0627	-	<0.027	0.000580 ± 0.0000150	<0.000028	0.0140 ± 0.000220	-	0.00649 ± 0.000135
NC7-71	2/26/14	-	-	-	<0.1	-	-	-	-	-	-	-	-
NC7-71	3/13/14	-	-	-	<0.1	-	-	-	-	-	-	-	-
NC7-71	4/28/14	-	-	-	<0.1	<0.0627	0.0410 ± 0.000210	<0.062	0.000580 ± 0.00000860	<0.0000095	0.0140 ± 0.0000650	0.0400 ± 0.000190	0.00667 ± 0.0000930
NC7-71	5/22/14	-	-	-	<0.1	-	-	-	-	-	-	-	-
NC7-71	6/19/14	-	-	-	<0.1	-	-	-	-	-	-	-	-

Table B-5.05. Building 850 area in Operable Unit 5 total uranium and uranium isotopes in ground water.

Location	Date	AS	AS	AS	KPA	MS	MS	MS	MS	MS	MS	MS	MS
NC7-71	8/26/14	-	-	-	<0.1	<0.0627	0.0450 ± 0.000440	<0.034	0.000650 ± 0.00000900	<0.000013	0.0150 ± 0.000150	0.0450 ± 0.000430	0.00677 ± 0.0000660
NC7-71	9/17/14	-	-	-	<0.1	-	-	-	-	-	-	-	-
NC7-71	10/28/14	-	-	-	<0.1	<0.0627	0.0470 ± 0.000920	<0.062	0.000670 ± 0.0000160	<0.00004	0.0160 ± 0.000310	0.0470 ± 0.000910	0.00667 ± 0.0000920
NC7-71	11/24/14	-	-	-	<0.1	-	-	-	-	-	-	-	-
NC7-71	12/22/14	-	-	-	<0.1	-	-	-	-	-	-	-	-
NC7-72	5/7/14	2.81 ± 0.406	0.148 ± 0.0546	2.17 ± 0.323	-	-	-	-	-	-	-	-	-
NC7-73	5/7/14	2.16 ± 0.328	0.130 ± 0.0540	1.91 ± 0.295	-	-	-	-	-	-	-	-	-
W-850-05	4/29/14	0.124 ± 0.108	<0.1	<0.1	-	-	-	-	-	-	-	-	-
W-850-05	10/20/14	-	-	-	-	0.0980 ± 0.00290	0.0940 ± 0.00100	0.0650 ± 0.00290	0.00140 ± 0.0000260	<0.000029	0.0310 ± 0.000340	0.0930 ± 0.00100	0.00698 ± 0.000106
W-850-2145	5/20/14	2.87 ± 0.662 O	0.111 ± 0.112	1.91 ± 0.487 O	-	-	-	-	-	-	-	-	-
W-850-2312	5/20/14	1.26 ± 0.367 O	<0.1	0.425 ± 0.189 O	-	-	-	-	-	-	-	-	-
W-850-2313	4/24/14	2.52 ± 0.592 O	<0.1	2.39 ± 0.567 O	-	4.90 ± 0.0490	6.40 ± 0.0430	2.70 ± 0.0470	0.0990 ± 0.000780	<0.00041	2.20 ± 0.0140	6.40 ± 0.0430	0.00718 ± 0.0000290
W-850-2315	4/30/14	13.3 ± 2.44 O	0.616 ± 0.246	9.93 ± 1.87 O	-	-	-	-	-	-	-	-	-
W-850-2315	10/20/14	-	-	-	-	20.0 ± 0.120	26.0 ± 0.160	11.0 ± 0.100	0.400 ± 0.00280	<0.0017	8.60 ± 0.0550	26.0 ± 0.160	0.00726 ± 0.0000220
W-850-2416	1/22/14	-	-	-	<0.1	<0.0627	-	<0.062	0.000900 ± 0.0000250	<0.000016	0.0230 ± 0.000280	-	0.00616 ± 0.000153
W-850-2416	2/26/14	-	-	-	<0.1	-	-	-	-	-	-	-	-
W-850-2416	3/13/14	-	-	-	<0.1	-	-	-	-	-	-	-	-
W-850-2416	4/28/14	-	-	-	0.103 ± 0.00912	<0.0627	0.0650 ± 0.000420	<0.062	0.000880 ± 0.0000120	<0.000038	0.0220 ± 0.000140	0.0650 ± 0.000420	0.00631 ± 0.0000770
W-850-2416	5/22/14	-	-	-	<0.1	-	-	-	-	-	-	-	-
W-850-2416	6/19/14	-	-	-	<0.1	-	-	-	-	-	-	-	-
W-850-2416	8/26/14	-	-	-	<0.1	<0.0627	0.0660 ± 0.000660	<0.062	0.000900 ± 0.0000170	<0.000045	0.0220 ± 0.000220	0.0650 ± 0.000650	0.00641 ± 0.000102
W-850-2416	9/17/14	-	-	-	<0.1	-	-	-	-	-	-	-	-
W-850-2416	10/28/14	-	-	-	<0.1	<0.0627	0.0670 ± 0.000600	<0.062	0.000930 ± 0.0000140	<0.007	0.0220 ± 0.000200	0.0670 ± 0.000600	0.00647 ± 0.0000740
W-850-2416	11/24/14	-	-	-	<0.1	-	-	-	-	-	-	-	-
W-850-2416	12/22/14	-	-	-	<0.1	-	-	-	-	-	-	-	-
W-850-2417	1/22/14	-	-	-	2.47 ± 0.216	1.10 ± 0.0140	-	0.290 ± 0.0130	0.0130 ± 0.000110	<0.007	0.800 ± 0.00360	-	0.00263 ± 0.0000170
W-850-2417	2/26/14	-	-	-	1.94 ± 0.168	-	-	-	-	-	-	-	-
W-850-2417	3/13/14	-	-	-	1.25 ± 0.109	-	-	-	-	-	-	-	-
W-850-2417	4/24/14	-	-	-	3.31 ± 0.284	0.750 ± 0.0100	1.60 ± 0.00590	0.210 ± 0.00990	0.00900 ± 0.000110	<0.007	0.530 ± 0.00200	1.60 ± 0.00590	0.00264 ± 0.0000300
W-850-2417	5/22/14	-	-	-	4.86 ± 0.506 D	-	-	-	-	-	-	-	-
W-850-2417	6/19/14	-	-	-	1.69 ± 0.146	-	-	-	-	-	-	-	-
W-850-2417	8/26/14	-	-	-	1.46 ± 0.128	0.610 ± 0.00510	1.30 ± 0.00300	0.170 ± 0.00500	0.00760 ± 0.0000280	<0.007	0.430 ± 0.00100	1.30 ± 0.00300	0.00272 ± 0.00000800
W-850-2417	9/17/14	-	-	-	0.530 ± 0.0486	-	-	-	-	-	-	-	-
W-850-2417	10/23/14	-	-	-	1.47 ± 0.129	0.680 ± 0.00740	1.50 ± 0.00320	0.180 ± 0.00730	0.00840 ± 0.0000490	<0.007	0.490 ± 0.00110	1.50 ± 0.00320	0.00268 ± 0.0000140
W-850-2417	11/24/14	-	-	-	1.72 ± 0.151	-	-	-	-	-	-	-	-
W-850-2417	12/22/14	-	-	-	1.27 ± 0.113	-	-	-	-	-	-	-	-
W-850-2805	6/2/14	<0.1	<0.1	<0.1 O	-	-	-	-	-	-	-	-	-
W-865-1802	5/12/14	1.29 ± 0.209	<0.1	0.716 ± 0.132	-	-	-	-	-	-	-	-	-
W-865-1803	5/12/14	2.39 ± 0.358	<0.1	1.19 ± 0.202	-	-	-	-	-	-	-	-	-
W-865-2133	1/16/14	2.01 ± 0.339	0.116 ± 0.0621 O	1.35 ± 0.247	-	-	-	-	-	-	-	-	-
W-865-2133	7/15/14	2.01 ± 0.552	<0.1	1.30 ± 0.407	-	-	-	-	-	-	-	-	-
W-865-2224	5/14/14	0.264 ± 0.123	<0.1 O	0.145 ± 0.0925	-	-	-	-	-	-	-	-	-
W-865-2224	11/12/14	0.317 ± 0.0862	<0.1	0.174 ± 0.0620 O	-	-	-	-	-	-	-	-	-
W-PIT1-2209	4/21/14	1.79 ± 0.298	0.114 ± 0.0566	1.06 ± 0.198	-	-	-	-	-	-	-	-	-
W-PIT1-2209	10/15/14	2.17 ± 0.371	<0.1	1.22 ± 0.236	-	-	-	-	-	-	-	-	-
W-PIT1-2225	5/27/14	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-	-
W-PIT1-2326	2/3/14	2.83 ± 0.488 O	<0.1	1.37 ± 0.275 O	-	-	-	-	-	-	-	-	-
W-PIT1-2326	5/14/14	2.21 ± 0.451	<0.1 O	1.17 ± 0.281	-	-	-	-	-	-	-	-	-
W-PIT1-2326	8/11/14	2.57 ± 0.622 O	<0.1	1.27 ± 0.373 O	-	-	-	-	-	-	-	-	-
W-PIT1-2326	12/10/14	2.41 ± 0.389	<0.1	1.19 ± 0.222	-	-	-	-	-	-	-	-	-
W-PIT1-2326	12/10/14 DUP	2.53 ± 0.397	0.114 ± 0.0569	1.41 ± 0.246	-	-	-	-	-	-	-	-	-
W-PIT1-2620	5/15/14	3.33 ± 0.678	<0.1 O	1.54 ± 0.376	-	-	-	-	-	-	-	-	-
W-PIT7-16	4/23/14	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-	-

Table B-5.06. Building 850 area in Operable Unit 5 tritium in ground and surface water.

Location	Date	Tritium (pCi/L)
K1-02B	8/27/14	3470 ± 692
K1-02B	10/21/14	3210 ± 654
K1-04	1/9/14 REX	302 ± 98.7
K1-04	1/16/14 REX	223 ± 94.2
K1-05	2/3/14	272 ± 98.8
K1-05	4/29/14	179 ± 75.2
K1-05	4/29/14 DUP	155 ± 75.7
K1-05	7/29/14	269 ± 89.4
K1-05	10/21/14	156 ± 77.7
K1-07	1/14/14	<100
K1-07	4/30/14	<100
K1-07	7/29/14	<100
K1-07	11/12/14	<100
K1-08	1/29/14	199 ± 79.9
K1-08	4/29/14	194 ± 79.7
K1-08	7/29/14	127 ± 66.2
K1-08	7/29/14 DUP	174 ± 84.3
K1-08	11/11/14	225 ± 78.6
K1-09	1/14/14	206 ± 89.5
K1-09	4/30/14	183 ± 76.6
K1-09	8/12/14	251 ± 96.7
K1-09	9/22/14 REX	142 ± 88.7
K1-09	9/29/14 REX	196 ± 94.8
K1-09	11/11/14	260 ± 84.5
K2-03	5/12/14	<100
K2-03	10/27/14	<100
K2-04D	4/16/14	2660 ± 549
K2-04D	10/27/14	2440 ± 504
K2-04S	6/2/14	3590 ± 724
K2-04S	6/2/14 DUP	3630 ± 731
K2-04S	10/23/14	3920 ± 792
NC2-05A	5/21/14	2980 ± 608
NC2-05A	5/21/14 DUP	2760 ± 563
NC2-05A	11/17/14	2680 ± 549
NC2-06	5/22/14	4400 ± 884
NC2-06	11/13/14	4680 ± 938
NC2-06A	5/22/14	<100
NC2-06A	11/13/14	<100
NC2-09	5/22/14	<100
NC2-09	11/13/14	<100
NC2-10	5/28/14	389 ± 120
NC2-11D	4/14/14	2820 ± 580
NC2-11D	10/20/14	2750 ± 566
NC2-11I	5/28/14	3560 ± 724
NC2-11I	11/18/14	3700 ± 747
NC2-11S	5/28/14	3740 ± 758

Table B-5.06. Building 850 area in Operable Unit 5 tritium in ground and surface water.

Location	Date	Tritium (pCi/L)
NC2-11S	11/18/14	3700 ± 748
NC2-12D	4/16/14	5030 ± 1010
NC2-12D	4/16/14 DUP	4580 ± 918
NC2-12I	5/28/14	4780 ± 958
NC2-12I	11/18/14	4470 ± 895
NC2-12S	5/28/14	2510 ± 521
NC2-12S	11/18/14	2360 ± 487
NC2-13	5/13/14	779 ± 183
NC2-13	11/17/14	729 ± 178
NC2-14S	5/12/14	2700 ± 554
NC2-14S	10/27/14	3150 ± 642
NC2-15	5/21/14	3280 ± 665
NC2-15	5/21/14 DUP	3340 ± 510
NC2-15	11/17/14	2800 ± 574
NC2-16	5/12/14	658 ± 163
NC2-16	10/27/14	731 ± 180
NC2-17	5/22/14	7710 ± 1520
NC2-17	11/13/14	7990 ± 1570
NC2-18	5/20/14	7130 ± 1410
NC2-18	11/4/14	6850 ± 1360
NC2-18	11/4/14 DUP	6960 ± 1380
NC2-19	5/13/14	<100
NC2-19	11/17/14	<100
NC2-20	5/28/14	<100
NC2-21	5/28/14	<100
NC7-10	4/24/14	12200 ± 2380
NC7-10	10/16/14	14200 ± 2780
NC7-11	4/24/14	10100 ± 1980
NC7-11	10/16/14	12300 ± 2410
NC7-15	4/23/14	701 ± 178 O
NC7-15	11/17/14	931 ± 217
NC7-19	4/23/14	1700 ± 367 O
NC7-19	10/15/14	1560 ± 333
NC7-27	4/24/14	7590 ± 1500
NC7-27	10/16/14	7640 ± 1510
NC7-28	4/24/14	19100 ± 3720
NC7-28	10/23/14	18700 ± 3650
NC7-29	4/30/14	<100
NC7-29	11/10/14	<100
NC7-29	11/10/14 DUP	<100
NC7-43	4/29/14	5340 ± 1060
NC7-43	10/20/14	5730 ± 1140
NC7-44	5/19/14	<100
NC7-44	5/19/14 DUP	<100
NC7-44	10/20/14	<100
NC7-46	5/8/14	<100

Table B-5.06. Building 850 area in Operable Unit 5 tritium in ground and surface water.

Location	Date	Tritium (pCi/L)
NC7-56	5/7/14	6620 ± 1310
NC7-56	10/22/14	6320 ± 1250
NC7-58	5/7/14	4960 ± 988
NC7-59	10/22/14	6450 ± 1280
NC7-60	4/24/14	1090 ± 245
NC7-60	10/16/14	989 ± 227
NC7-61	4/23/14	18000 ± 3510 L
NC7-61	4/23/14 DUP	18600 ± 3620 L
NC7-61	10/23/14	18700 ± 3650
NC7-61	10/23/14 DUP	18400 ± 3580
NC7-62	5/7/14	7010 ± 1380
NC7-62	10/22/14	6200 ± 1230
NC7-62	10/22/14 DUP	6900 ± 1000
NC7-69	4/23/14	<100 O
NC7-69	10/23/14	<100
NC7-70	4/28/14	25100 ± 4900
NC7-70	10/23/14	23200 ± 4510
NC7-71	4/28/14	3580 ± 726
NC7-71	10/28/14	4070 ± 820
NC7-72	5/7/14	5690 ± 1130
NC7-72	10/22/14	6600 ± 1310
NC7-73	5/7/14	7590 ± 1500
NC7-73	10/22/14	6590 ± 1310
W-850-05	4/29/14	15700 ± 3070
W-850-05	10/20/14	18100 ± 3540
W-850-05	10/20/14 DUP	19300 ± 2900
W-850-2145	5/20/14	7430 ± 1470
W-850-2145	11/4/14	8560 ± 1690
W-850-2312	5/20/14	480 ± 128
W-850-2312	11/4/14	503 ± 141
W-850-2313	4/24/14	13200 ± 2590
W-850-2313	10/20/14	15100 ± 2960
W-850-2313	10/20/14 DUP	15000 ± 2300
W-850-2314	4/24/14	1190 ± 263
W-850-2314	10/16/14	1130 ± 254
W-850-2315	4/30/14	<100
W-850-2315	10/20/14	<100
W-850-2316	5/20/14	7990 ± 1570
W-850-2316	11/4/14	8460 ± 1670
W-850-2416	4/28/14	<100
W-850-2416	10/28/14	<100
W-850-2417	4/24/14	19600 ± 3830
W-850-2417	10/23/14	18100 ± 3530
W-850-2805	6/2/14	435 ± 120
W-850-2805	10/23/14	399 ± 118
W-865-02	1/21/14	<100

Table B-5.06. Building 850 area in Operable Unit 5 tritium in ground and surface water.

Location	Date	Tritium (pCi/L)
W-865-02	7/15/14	<100
W-865-1802	5/12/14	431 ± 121
W-865-1802	10/27/14	394 ± 119
W-865-1803	5/12/14	2140 ± 446
W-865-1803	10/27/14	2030 ± 426
W-865-2005	1/30/14	<100
W-865-2005	1/30/14 DUP	<100
W-865-2005	4/21/14	<100 O
W-865-2005	4/21/14 DUP	<100 O
W-865-2005	8/13/14	<100
W-865-2005	8/13/14 DUP	<100
W-865-2005	10/22/14	<100
W-865-2005	10/22/14 DUP	<100
W-865-2121	6/2/14	<100
W-865-2121	11/19/14	<100
W-865-2133	1/16/14	<100
W-865-2133	5/14/14	<100
W-865-2133	7/15/14	<100
W-865-2133	11/12/14	<100
W-865-2224	1/16/14	<100
W-865-2224	5/14/14	<100
W-865-2224	7/15/14	<100
W-865-2224	11/12/14	<100
W-PIT1-2209	1/27/14	<100
W-PIT1-2209	4/21/14	<100 O
W-PIT1-2209	7/23/14	<100
W-PIT1-2209	10/15/14	<100
W-PIT1-2225	2/4/14	<100
W-PIT1-2225	5/27/14	<100
W-PIT1-2225	7/17/14	<100
W-PIT1-2326	2/3/14	2360 ± 492
W-PIT1-2326	5/14/14	2530 ± 519
W-PIT1-2326	8/11/14	2620 ± 541
W-PIT1-2326	12/10/14	2460 ± 513
W-PIT1-2326	12/10/14 DUP	2600 ± 541
W-PIT1-2620	2/4/14	1970 ± 417
W-PIT1-2620	5/15/14	1950 ± 406
W-PIT1-2620	7/23/14	1890 ± 399
W-PIT1-2620	10/16/14	1970 ± 414
W-PIT7-16	4/23/14	<100 O

Table B-5.07. Building 850 area in Operable Unit 5 high explosive compounds in ground water water.

Location	Date	1,3,5-Trinitrobenzene (µg/L)	1,3-Dinitrobenzene (µg/L)	2,4-Dinitrotoluene (µg/L)	2,6-Dinitrotoluene (µg/L)	2-Amino-4,6-Dinitrotoluene (µg/L)	2-Nitrotoluene (µg/L)	3-Nitrotoluene (µg/L)	4-Amino-2,6-Dinitrotoluene (µg/L)	4-Nitrotoluene (µg/L)	HMX (µg/L)	Nitrobenzene (µg/L)	RDX (µg/L)	TNT (µg/L)
K1-02B	8/27/14	-	-	-	-	-	-	-	-	-	<1	-	<1	-
K1-02B	10/21/14	-	-	-	-	-	-	-	-	-	<1	-	<1	-
K1-05	2/3/14	-	-	<5	<5	-	-	-	-	-	<0.87	<5	<0.87	-
K1-05	4/29/14	-	-	-	-	-	-	-	-	-	<1	-	<1	-
K1-05	4/29/14 DUP	-	-	-	-	-	-	-	-	-	<1	-	<1	-
K1-05	7/29/14	-	-	-	-	-	-	-	-	-	<0.87	-	<0.87	-
K1-05	10/21/14	-	-	-	-	-	-	-	-	-	<1	-	<1	-
K1-07	1/14/14	-	-	<5	<5	-	-	-	-	-	<0.9	<5	<0.9	-
K1-07	4/30/14	-	-	-	-	-	-	-	-	-	<1	-	<1	-
K1-07	7/29/14	-	-	-	-	-	-	-	-	-	<0.83	-	<0.83	-
K1-07	11/12/14	-	-	-	-	-	-	-	-	-	<1	-	<1	-
K1-08	1/29/14	-	-	<5	<5	-	-	-	-	-	<1	<5	<1	-
K1-08	4/29/14	-	-	-	-	-	-	-	-	-	<1	-	<1	-
K1-08	7/29/14	-	-	-	-	-	-	-	-	-	<0.8	-	<0.8	-
K1-08	7/29/14 DUP	-	-	-	-	-	-	-	-	-	<0.85	-	<0.85	-
K1-08	11/11/14	-	-	-	-	-	-	-	-	-	<1	-	<1	-
K1-09	1/14/14	-	-	<5	<5	-	-	-	-	-	<0.89	<5	<0.89	-
K1-09	4/30/14	-	-	-	-	-	-	-	-	-	<1	-	<1	-
K1-09	8/12/14	-	-	-	-	-	-	-	-	-	<1	-	<1	-
K1-09	11/11/14	-	-	-	-	-	-	-	-	-	<1	-	<1	-
NC7-10	4/24/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
NC7-10	10/16/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
NC7-15	4/23/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
NC7-15	11/17/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
NC7-19	4/23/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
NC7-19	10/15/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
NC7-27	4/24/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
NC7-27	10/16/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
NC7-28	1/22/14	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	2.2	<1.4	<0.68	<1.4
NC7-28	4/24/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	3.1	<2	<1	<2
NC7-28	8/26/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
NC7-28	10/23/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	4.6 O	<2	2.6	<2
NC7-43	4/29/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
NC7-43	10/20/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
NC7-44	5/19/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
NC7-44	5/19/14 DUP	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2
NC7-44	10/20/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
NC7-56	5/7/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
NC7-56	10/22/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
NC7-60	4/24/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
NC7-60	10/16/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
NC7-61	1/27/14	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	2.8	<1.7	3.7	<1.7
NC7-61	1/27/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	4.3	<2	3.8	<2
NC7-61	4/23/14	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	5 D	<2 D	2.6 D	<2 D

Table B-5.07. Building 850 area in Operable Unit 5 high explosive compounds in ground water water.

Location	Date	1,3,5-Trinitrobenzene (µg/L)	1,3-Dinitrobenzene (µg/L)	2,4-Dinitrotoluene (µg/L)	2,6-Dinitrotoluene (µg/L)	2-Amino-4,6-Dinitrotoluene (µg/L)	2-Nitrotoluene (µg/L)	3-Nitrotoluene (µg/L)	4-Amino-2,6-Dinitrotoluene (µg/L)	4-Nitrotoluene (µg/L)	HMX (µg/L)	Nitrobenzene (µg/L)	RDX (µg/L)	TNT (µg/L)
NC7-61	4/23/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	4.6	<2	2.1	<2
NC7-61	8/26/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	7.1	<2	5	<2
NC7-61	8/26/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	1.6	<2	3.9	<2
NC7-61	10/23/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	5.9 O	<2	5.2	<2
NC7-61	10/23/14 DUP	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	3.6 O	<1.7	3.5	<1.7
NC7-61	11/10/14	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	<2.1	6.8	<2.1	5.7	<2.1
NC7-69	4/23/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
NC7-69	10/23/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
NC7-70	1/22/14	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<0.88	<1.8	<0.88	<1.8
NC7-70	4/28/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
NC7-70	8/26/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
NC7-70	10/23/14	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<0.85 O	<1.7	<0.85	<1.7
NC7-71	1/22/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
NC7-71	4/28/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
NC7-71	8/26/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
NC7-71	10/28/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1.1	<2	<1.1	<2
NC7-72	5/7/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
NC7-72	10/22/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
NC7-73	5/7/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
NC7-73	10/22/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-850-05	4/29/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-850-05	10/20/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-850-05	10/20/14 DUP	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<0.9	<1.8	<0.9	<1.8
W-850-2313	4/24/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-850-2313	10/20/14	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<0.89	<1.8	<0.89	<1.8
W-850-2313	10/20/14 DUP	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
W-850-2314	4/24/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-850-2314	10/16/14	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<0.83	<1.7	<0.83	<1.7
W-850-2416	1/22/14	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<0.88	<1.8	<0.88	<1.8
W-850-2416	4/28/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-850-2416	8/26/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-850-2416	10/28/14	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<0.84	<1.7	<0.84	<1.7
W-850-2417	1/22/14	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	2.4	<1.7	<0.87	<1.7
W-850-2417	4/24/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-850-2417	8/26/14	<3	<3	<3	<3	<3	<3	<3	<3	<3	<1	<3	<1	<3
W-850-2417	10/23/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	4.7 O	<2	<1	<2
W-PIT1-2326	2/3/14	-	-	-	-	-	-	-	-	-	<1	-	<1	-
W-PIT1-2326	5/14/14	-	-	-	-	-	-	-	-	-	<1 D	-	<1 D	-
W-PIT1-2326	8/11/14	-	-	-	-	-	-	-	-	-	<1	-	<1	-
W-PIT1-2326	12/10/14	-	-	-	-	-	-	-	-	-	<1	-	<1	-
W-PIT1-2326	12/10/14 DUP	-	-	-	-	-	-	-	-	-	<0.9	-	<0.9	-
W-PIT7-16	4/23/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2

Table B-5.08. Building 850 area in Operable Unit 5 general minerals in ground water.

Constituents of concern	NC7-28	NC7-28	NC7-28	NC7-28	NC7-61	NC7-61	NC7-61	NC7-61	NC7-61	NC7-61	NC7-61	NC7-61	NC7-70	NC7-70	NC7-70	NC7-70
	1/22/14	4/24/14	8/26/14	10/23/14	1/27/14	1/27/14 DUP	4/23/14	4/23/14 DUP	8/26/14	8/26/14 DUP	10/23/14	10/23/14 DUP	1/22/14	4/28/14	8/26/14	10/23/14
Total Alkalinity (as CaCO3) (mg/L)	250	230	220	210	200	200	200	200	200	200	200	200	150	340	630	570
Aluminum (mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bicarbonate Alk (as CaCO3) (mg/L)	250	230	220	210	200	200	200	200	200	200	200	200	150	340 D	630 D	570 D
Calcium (mg/L)	52	49 L	47 L	48	50	50	49	50	49 L	49 L	52	52	39	130	200 L	120
Carbonate Alk (as CaCO3) (mg/L)	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<8.2 D	<8.2 D	<8.2 D
Chloride (mg/L)	51	52	52	55	52	52	50	50	52	51	55	55	60	81 D	65 D	53
Copper (mg/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoride (mg/L)	0.73	0.73	0.75	0.75 H	0.42	0.4	0.45	0.46	0.48	0.5	0.45 H	0.44 H	0.15	<0.1 D	<0.1 D	0.54 D
Hydroxide Alk (as CaCO3) (mg/L)	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<8.2 D	<8.2 D	<8.2 D
Iron (mg/L)	0.17	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	6.3	30	8	<0.1
Magnesium (mg/L)	28	25 L	24	26	25	25	23	24	24	24	26	26	26	66	92	63
Manganese (mg/L)	1.9	2	1.6	1.5	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.11	1	2.1	1
Nickel (mg/L)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nitrate (as N) (mg/L)	<0.5	<0.5	<0.5	<0.5	12	12	11	11	11	11	11	11	<0.5	<1 D	<1 D	<0.5
Nitrate (as NO3) (mg/L)	<0.5	<0.44	<0.5	<0.44 H	53	52	50	50	50	50	49 H	49 H	<0.5	<0.44 H	<1	<0.44 H
Nitrite (as N) (mg/L)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5 D	<0.5	<0.5
pH (Units)	7.35	7.36	7.7	7.34 H	7.79	7.75	7.58	7.67	7.96	7.99	7.7 H	7.7 H	5.93	5.08	6.36	7.34 H
Ortho-Phosphate (mg/L)	<1	0.19	0.18	0.22	0.17	0.18	0.25	0.25	0.21	0.2	0.23	0.22	<1	0.14	<0.05	<0.05
Total Phosphorus (as PO4) (mg/L)	0.23 HJ	1.5 H	0.32 H	0.32 H	0.22 H	0.19 H	0.17 H	0.22 H	0.23 H	0.23 H	0.23 H	0.25 H	<0.15 HJ	0.53 J	1.3 H	0.53 H
Potassium (mg/L)	3.4	3.4	3.2	3.4	3.6	3.6	3.4	3.6	3.6	3.6	3.7	3.7	4.6	6.8	8.3	6.3
Sodium (mg/L)	57	55 L	57 L	58	64	64	61	62	65 L	64 L	67	66	52	74	120 L	76
Total dissolved solids (TDS) (mg/L)	510 D	450 DH	420 DHF	380 DH	480 D	480 D	480	470	480 DHF	470 DHF	450 DH	450 DH	460 D	1,400 DH	710 DHF	710 DH
Specific Conductance (µmhos/cm)	659	688	622	634 H	699	702	719	731	676	676	697 H	700 H	584	1,270	1,660	1,180 H
Sulfate (mg/L)	35	35	34	36 H	41	41	38	37	38	38	41 H	41 H	2.3	<2 D	22 D	1.3
Surfactants (mg/L)	<1 D	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5 D
Total Hardness (as CaCO3) (mg/L)	240	230	220	230	230	230	220	230	220	220	240	240	200	600	870	560
Total Organic Carbon (TOC) (mg/L)	1.3	1.5	1.4	1.1	1.4 F	1.5 F	1.3	1.2	1.5	1.3	<1	<1	240 D	970 D	14 D	15 D
Zinc (mg/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.34	<0.05

Table B-5.08. Building 850 area in Operable Unit 5 general minerals in ground water.

Constituents of concern	NC7-71	NC7-71	NC7-71	NC7-71	W-850-2416	W-850-2416	W-850-2416	W-850-2416	W-850-2417	W-850-2417	W-850-2417	W-850-2417
	1/22/14	4/28/14	8/26/14	10/28/14	1/22/14	4/28/14	8/26/14	10/28/14	1/22/14	4/24/14	8/26/14	10/23/14
Total Alkalinity (as CaCO3) (mg/L)	161	164	151	158	160	160	160	160	240	260	300	240
Aluminum (mg/L)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bicarbonate Alk (as CaCO3) (mg/L)	161	164	151	158	160	160	160	160	240	260	300	240
Calcium (mg/L)	49	49	48	48	47	46	48 L	50	49	55 L	57 L	51
Carbonate Alk (as CaCO3) (mg/L)	<10	<10	<10	<10	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1
Chloride (mg/L)	48 D	45 DL	44 D	54 D	65	66	65	63	52	51	53	55
Copper (mg/L)	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoride (mg/L)	0.49	0.35	0.19	0.5	0.3	0.28 D	0.27	0.25	0.87	0.82	0.8	0.73 H
Hydroxide Alk (as CaCO3) (mg/L)	<10	<10	<10	<10	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1	<4.1
Iron (mg/L)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.5	5.9	0.19	1.4
Magnesium (mg/L)	20	20	19	20	21	20	21	23	25	27 L	28	27
Manganese (mg/L)	<0.03	<0.03	<0.03	<0.03	<0.01	<0.03	<0.03	<0.03	1.8	2	1.9	1.4
Nickel (mg/L)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nitrate (as N) (mg/L)	<0.1	<0.1	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Nitrate (as NO3) (mg/L)	<0.5	<0.5	<0.5	-	0.89	0.97 H	0.8	1 H	<0.5	<0.44	<0.5	<0.44 H
Nitrite (as N) (mg/L)	<0.1	<0.1	<0.03	<0.03	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
pH (Units)	7.7	7.8	7.8	7.7	8.07	8.18	8.14	7.86 H	6.96	6.79	7.15	6.83 H
Ortho-Phosphate (mg/L)	<0.1	<0.1	<0.1	<0.1	<1	0.14	0.077	0.11	<1	0.95	0.11	0.3
Total Phosphorus (as PO4) (mg/L)	<0.1 H	<0.1 H	<0.1 H	<0.1 H	0.16 HJ	<0.15 J	<0.15 H	<0.15 H	1.2 HJ	1.3 H	1.1 H	0.86 H
Potassium (mg/L)	6.8	6.6	7	6.3	5.6	5.5	5.6	5.8	3.6	4	4	4.1
Sodium (mg/L)	46	43 L	44	46	63	60	64 L	65	55	55 L	59 L	59
Total dissolved solids (TDS) (mg/L)	410 H	400 H	420	420 H	420 D	410 DH	440 DHF	420 DH	420 D	520 DH	480 DHF	410 DH
Specific Conductance (µmhos/cm)	650 H	660 H	600 H	620 H	644	659	656	668 H	617	706	710	653 H
Sulfate (mg/L)	78 DH	74 D	70 D	82 D	87	87	86	83	19	11	8.2	21 H
Surfactants (mg/L)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total Hardness (as CaCO3) (mg/L)	210	210	200	200	200	200	200	220	230	250	260	240
Total Organic Carbon (TOC) (mg/L)	<1	<1	<1	<1	0.96	<1	1.1	<1	2.5	4.8	3.3	24 D
Zinc (mg/L)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Table B-5.09. Pit 2 Landfill volatile organic compounds (VOCs) in ground water.

Location	Date	Method	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	1,1,2-TCA (µg/L)	Freon 11 (µg/L)	Freon 113 (µg/L)	Vinyl chloride (µg/L)
NC2-08	5/21/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT2-1934	5/20/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT2-1935	5/20/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table B-5.09 (Con't). Analyte detected but not reported in main table.

Location	Date	Method	Detection frequency
NC2-08	5/21/14	E601	0 of 18
W-PIT2-1934	5/20/14	E601	0 of 18
W-PIT2-1935	5/20/14	E601	0 of 18

Table B-5.10. Pit 2 Landfill total uranium and uranium isotopes in ground water.

Location	Date	AS	AS	AS	MS	MS	MS	MS	MS	MS	MS	MS
		Uranium 234 and 233 (in activity) (pCi/L)	Uranium 235 and 236 (in activity) (pCi/L)	Uranium 238 (in activity) (pCi/L)	Total Uranium (in activity) (pCi/L)	Total Uranium (in mass) (µg/L)	Uranium 234 (in activity) (pCi/L)	Uranium 235 (in activity) (pCi/L)	Uranium 236 (in activity) (pCi/L)	Uranium 238 (in activity) (pCi/L)	Uranium 238 (in mass) (µg/L)	Uranium 235/238 (atom/atom)
NC2-08	5/21/14	1.33 ± 0.371 O	<0.1	1.15 ± 0.336 O	2.60 ± 0.0410	2.90 ± 0.0130	1.60 ± 0.0400	0.0440 ± 0.000390	<0.00019	0.970 ± 0.00440	2.90 ± 0.0130	0.00714 ± 0.0000540
W-PIT2-1934	5/20/14	-	-	-	3.90 ± 0.0390	4.40 ± 0.0160	2.40 ± 0.0390	0.0610 ± 0.000360	<0.007	1.50 ± 0.00530	4.40 ± 0.0160	0.00645 ± 0.0000300
W-PIT2-1935	5/20/14	-	-	-	2.80 ± 0.0360	2.90 ± 0.0110	1.80 ± 0.0360	0.0450 ± 0.000400	<0.00019	0.970 ± 0.00390	2.90 ± 0.0110	0.00713 ± 0.0000570
W-PIT2-2226	5/27/14	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-

Table B-5.11. Pit 2 Landfill nitrate and perchlorate in ground water.

Location	Date	Nitrate (as NO3) (mg/L)	Perchlorate (µg/L)
NC2-08	5/21/14	31 D	4.1
NC2-08	11/17/14	-	<4
W-PIT2-1934	5/20/14	42 D	<4
W-PIT2-1934	11/12/14	-	<4
W-PIT2-1935	5/20/14	33 D	<4
W-PIT2-1935	11/12/14	-	<4
W-PIT2-2226	1/21/14	-	<4
W-PIT2-2226	5/27/14	<0.5 L	<4
W-PIT2-2226	7/17/14	-	<4

Table B-5.12. Pit 2 Landfill high explosive compounds in ground water.

Location	Date	1,3,5-Trinitrobenzene (µg/L)	1,3-Dinitrobenzene (µg/L)	2,4-Dinitrotoluene (µg/L)	2,6-Dinitrotoluene (µg/L)	2-Amino-4,6-Dinitrotoluene (µg/L)	2-Nitrotoluene (µg/L)	3-Nitrotoluene (µg/L)	4-Amino-2,6-Dinitrotoluene (µg/L)	4-Nitrotoluene (µg/L)	HMX (µg/L)	Nitrobenzene (µg/L)	RDX (µg/L)	TNT (µg/L)
NC2-08	5/21/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-PIT2-1934	5/20/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1.2	<2	<1.2	<2
W-PIT2-1935	5/20/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1.2	<2	<1.2	<2

Table B-5.13. Pit 2 Landfill tritium in ground water.

Location	Date	Tritium (pCi/L)
NC2-08	5/21/14	2950 ± 600
NC2-08	11/17/14	2900 ± 592
W-PIT2-1934	5/20/14	1170 ± 259
W-PIT2-1934	11/12/14	1250 ± 276
W-PIT2-1935	5/20/14	1790 ± 379
W-PIT2-1935	11/12/14	1830 ± 386
W-PIT2-2226	1/21/14	<100
W-PIT2-2226	5/27/14	<100
W-PIT2-2226	7/17/14	<100

Table B-5.14. Pit 2 Landfill fluoride in ground water.

Location	Date	Fluoride (mg/L)
NC2-08	5/21/14	0.18
W-PIT2-1934	5/20/14	0.38
W-PIT2-1935	5/20/14	0.29

Table B-5.15. Pit 2 Landfill metals in ground water.

Constituents of concern	NC2-08	W-PIT2-1934	W-PIT2-1935
	5/21/14	5/20/14	5/20/14
Antimony (mg/L)	<0.0005	<0.0005	<0.0005
Arsenic (mg/L)	0.01	0.01	0.01
Barium (mg/L)	0.03	0.02	0.02
Beryllium (mg/L)	<0.0001 L	<0.0001	<0.0001
Cadmium (mg/L)	<0.0001	<0.0001	<0.0001
Chromium (mg/L)	<0.0005	<0.0005	<0.0005
Cobalt (mg/L)	<0.0005	<0.0005	<0.0005
Copper (mg/L)	<0.0005	0.0006	0.0006
Lead (mg/L)	<0.0002	<0.0002	<0.0002
Lithium (mg/L)	0.023	0.016	0.019
Mercury (mg/L)	<0.0002	<0.0005	<0.0005
Molybdenum (mg/L)	0.004	0.003	0.002
Nickel (mg/L)	<0.0005	<0.0005	<0.0005
Selenium (mg/L)	0.002	0.002	0.002
Silver (mg/L)	<0.0001	<0.0001	<0.0001
Thallium (mg/L)	<0.0001	<0.0001	<0.0001
Vanadium (mg/L)	0.06	0.06	0.06
Zinc (mg/L)	<0.01	<0.01	<0.01

Table B-5.16. Pit 7 Complex area in Operable Unit 5 volatile organic compounds (VOCs) in ground water.

Location	Date	Method	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	1,1,2-TCA (µg/L)	Freon 11 (µg/L)	Freon 113 (µg/L)	Vinyl chloride (µg/L)
K7-01	4/29/14	E601	0.82	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K7-01	4/29/14 DUP	E601	0.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K7-03	4/3/14	E601	0.68	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K7-06	4/14/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K7-09	4/15/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K7-10	4/15/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
NC7-12	4/22/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
NC7-21	4/22/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
NC7-25	4/2/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
NC7-25	10/13/14	E601	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
NC7-26	4/23/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
NC7-40	4/16/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
NC7-47	5/12/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
NC7-48	4/14/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
NC7-51	4/2/14	E601	0.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
NC7-52	4/8/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
NC7-52	4/8/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
NC7-64	4/7/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
NC7-64	10/13/14	E601	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
NC7-65	4/9/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
NC7-67	4/3/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
NC7-75	4/2/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-01	1/14/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-01	7/14/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-1804	1/14/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-1804	7/14/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT7-03	4/8/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT7-03	4/8/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-PIT7-03	10/13/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT7-10	4/15/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT7-12	4/9/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT7-13	4/8/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT7-13	4/8/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-PIT7-1918	4/17/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT7-1918	10/13/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT7-1918	10/13/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-PIT7-2305	4/2/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT7-2305	10/13/14	E601	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT7-2307	4/7/14	E601	4.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.4	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT7-2703	4/2/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT7-2703	10/13/14	E601	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT7-2705	4/2/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT7-2705	10/13/14	E601	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table B-5.16 (Con't). Analyte detected but not reported in main table.

Location	Date	Method	Detection frequency
K7-01	4/29/14	E601	0 of 18
K7-01	4/29/14 DUP	E601	0 of 18
K7-03	4/3/14	E601	0 of 18
K7-06	4/14/14	E601	0 of 18
K7-09	4/15/14	E601	0 of 18
K7-10	4/15/14	E601	0 of 18
NC7-12	4/22/14	E601	0 of 18
NC7-21	4/22/14	E601	0 of 18
NC7-25	4/2/14	E601	0 of 18
NC7-25	10/13/14	E601	0 of 18
NC7-26	4/23/14	E601	0 of 18
NC7-40	4/16/14	E601	0 of 18
NC7-47	5/12/14	E601	0 of 18
NC7-48	4/14/14	E601	0 of 18
NC7-51	4/2/14	E601	0 of 18
NC7-52	4/8/14	E601	0 of 18
NC7-52	4/8/14 DUP	E601	0 of 18
NC7-64	4/7/14	E601	0 of 18
NC7-64	10/13/14	E601	0 of 18
NC7-65	4/9/14	E601	0 of 18
NC7-67	4/3/14	E601	0 of 18
NC7-75	4/2/14	E601	0 of 18
W-865-01	1/14/14	E601	0 of 18
W-865-01	7/14/14	E601	0 of 18
W-865-1804	1/14/14	E601	0 of 18
W-865-1804	7/14/14	E601	0 of 18
W-PIT7-03	4/8/14	E601	0 of 18
W-PIT7-03	4/8/14 DUP	E601	0 of 18
W-PIT7-03	10/13/14	E601	0 of 18
W-PIT7-10	4/15/14	E601	0 of 18
W-PIT7-12	4/9/14	E601	0 of 18
W-PIT7-13	4/8/14	E601	0 of 18
W-PIT7-13	4/8/14 DUP	E601	0 of 18
W-PIT7-1918	4/17/14	E601	0 of 18
W-PIT7-1918	10/13/14	E601	0 of 18
W-PIT7-1918	10/13/14 DUP	E601	0 of 18
W-PIT7-2305	4/2/14	E601	0 of 18
W-PIT7-2305	10/13/14	E601	0 of 18
W-PIT7-2307	4/7/14	E601	0 of 18
W-PIT7-2703	4/2/14	E601	0 of 18
W-PIT7-2703	10/13/14	E601	0 of 18
W-PIT7-2705	4/2/14	E601	0 of 18
W-PIT7-2705	10/13/14	E601	0 of 18

Table B-5.17. Pit 7 Complex area in Operable Unit 5 nitrate, perchlorate, and orthophosphate in ground water.

Location	Date	Nitrate as NO3 (mg/L)	Perchlorate (µg/L)	Orthophosphate (mg/L)
K7-01	4/29/14	46	9.9	-
K7-01	4/29/14 DUP	38 D	14	-
K7-03	4/3/14	29	9 O	-
K7-06	4/14/14	14	<4	-
K7-06	10/7/14	-	<4	-
K7-09	4/15/14	<0.5	<4	-
K7-09	10/14/14	-	<4	-
K7-10	4/15/14	0.97	<4	-
NC7-12	4/22/14	22 D	<4	-
NC7-21	4/22/14	32 D	5	-
NC7-25	4/2/14	37	9.5	-
NC7-25	10/13/14	-	9.8	-
NC7-26	4/23/14	2.5	<4	-
NC7-26	10/14/14	-	<4	-
NC7-40	4/16/14	30 D	4.1	-
NC7-47	5/12/14	66	<4	-
NC7-48	4/14/14	17	<4	-
NC7-49A	4/14/14	21 D	<4	-
NC7-51	4/2/14	38 D	6.6	-
NC7-52	4/8/14	10	<4	-
NC7-52	4/8/14 DUP	8	<4	-
NC7-64	4/7/14	45	8.3	-
NC7-64	10/13/14	-	7	-
NC7-65	4/9/14	<0.5	<4	-
NC7-67	4/3/14	1.1	<4	-
NC7-68	4/3/14	17 D	4.5	-
NC7-75	4/2/14	<0.5	<4	-
NC7-75	10/8/14	-	<4	-
NC7-76	4/23/14	-	<4	-
W-865-01	1/14/14	5.9	<4	-
W-865-03	1/15/14	36 D	<4	-
W-865-1804	1/14/14	29 D	<4	-
W-865-1804	7/14/14	-	<4	-
W-PIT7-02	4/3/14	1.9	<4	-
W-PIT7-03	4/8/14	27 D	<4	-
W-PIT7-03	4/8/14 DUP	29 D	5.8	-
W-PIT7-10	4/15/14	22 D	<4	-
W-PIT7-12	4/9/14	36 D	<4	-
W-PIT7-12	10/6/14	-	<4	-
W-PIT7-13	4/8/14	51 D	<4	-
W-PIT7-13	4/8/14 DUP	55 D	<4	-
W-PIT7-14	4/9/14	-	<4	-
W-PIT7-15	5/12/14	<0.5	<4	-
W-PIT7-1860	4/16/14	-	<4	-
W-PIT7-1907	4/17/14	-	-	140 DLO
W-PIT7-1915	4/17/14	-	-	200 DLO

Table B-5.17. Pit 7 Complex area in Operable Unit 5 nitrate, perchlorate, and orthophosphate in ground water.

Location	Date	Nitrate as NO3 (mg/L)	Perchlorate (µg/L)	Orthophosphate (mg/L)
W-PIT7-1918	4/17/14	25	6.8	<1 O
W-PIT7-1918	10/13/14	-	8.5	-
W-PIT7-1918	10/13/14 DUP	-	4.2	-
W-PIT7-2141	4/9/14	31 D	<4	-
W-PIT7-2141	10/6/14	-	5	-
W-PIT7-2305	4/2/14	41	14	-
W-PIT7-2305	10/13/14	-	13	-
W-PIT7-2307	4/7/14	17	10	-
W-PIT7-2703	4/2/14	35	11	-
W-PIT7-2703	10/13/14	-	11	-
W-PIT7-2705	4/2/14	29	9.4	-
W-PIT7-2705	10/13/14	-	9	-

OU5B-METALS [mg/L] 2014 data (prepared 2015-03-18 04:43:23, Oracle teims08/epprd02.llnl.gov)

Table B-5.18. Pit 7 Complex area in Operable Unit 5 metals and silica in ground water.

Constituents of concern	K7-01	K7-01	K7-03	K7-06	K7-09	K7-10	NC7-26	NC7-47	NC7-48	W-865-01
	4/29/14	4/29/14 DUP	4/3/14	4/14/14	4/15/14	4/15/14	4/23/14	5/12/14	4/14/14	1/14/14
Antimony (mg/L)	-	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0006	<0.06	<0.06	-
Arsenic (mg/L)	-	0.008	0.002	0.02	0.0007	0.003	0.001	0.012	0.006	0.0037
Barium (mg/L)	-	0.19	0.08	0.09	0.02	0.14	0.03 B	0.057	0.13	0.05
Beryllium (mg/L)	-	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.002	<0.002	-
Cadmium (mg/L)	-	0.001	<0.0001	0.002	<0.0001	<0.0001	<0.0001	<0.005	<0.005	<0.0005
Chromium (mg/L)	-	<0.0005	0.002	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.001
Cobalt (mg/L)	-	<0.0005	0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.02	<0.02	-
Copper (mg/L)	-	0.004	0.01	<0.0005	<0.0005	0.0006	<0.0005	<0.01	<0.01	-
Lead (mg/L)	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.003	<0.003	<0.005
Lithium (mg/L)	0.037	0.034	0.029	0.029	0.058	0.046	0.03	0.023	0.064	-
Mercury (mg/L)	-	<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0003	<0.0002	<0.0002	<0.0002
Molybdenum (mg/L)	-	0.003	0.004	0.003	0.002	0.003	0.007	<0.02	<0.02	-
Nickel (mg/L)	-	0.004	0.08	<0.0005	<0.0005	0.001	0.0006	<0.02	<0.02	-
Selenium (mg/L)	-	0.001	0.001	0.002	<0.001	<0.001	<0.001	<0.005	<0.005	<0.002
Silver (mg/L)	-	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.005	<0.005	<0.001
Thallium (mg/L)	-	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.005	<0.005	-
Vanadium (mg/L)	-	0.01	<0.002	0.04	<0.002	0.003	<0.002	0.059	0.018	-
Zinc (mg/L)	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.05	-

Table B-5.19. Pit 7 Complex area in Operable Unit 5 polychlorinated biphenyl (PCBs) compounds in ground water.

Location	Date	PCB 1016 (µg/L)	PCB 1221 (µg/L)	PCB 1232 (µg/L)	PCB 1242 (µg/L)	PCB 1248 (µg/L)	PCB 1254 (µg/L)	PCB 1260 (µg/L)
K7-01	4/29/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K7-01	4/29/14 DUP	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
K7-03	4/3/14	<0.57 D	<0.57 D	<0.57 D	<0.57 D	<0.57 D	<0.57 D	<0.57 D
K7-06	4/14/14	<0.57 D	<0.57 D	<0.57 D	<0.57 D	<0.57 D	<0.57 D	<0.57 D
K7-09	4/15/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K7-10	4/15/14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
NC7-26	4/23/14	<0.5 D	<0.5 D	<0.5 D	<0.5 D	<0.5 D	<0.5 D	<0.5 D
NC7-47	5/12/14	<0.5 D	<0.5 D	<0.5 D	<0.5 D	<0.5 D	<0.5 D	<0.5 D
NC7-48	4/14/14	<0.61 D	<0.61 D	<0.61 D	<0.61 D	<0.61 D	<0.61 D	<0.61 D

Table B-5.20. Pit 7 Complex area in Operable Unit 5 fluoride in ground water.

Location	Date	Fluoride (mg/L)
K7-01	4/29/14	0.44
K7-01	4/29/14 DUP	0.19
K7-03	4/3/14	0.32
K7-06	4/14/14	0.14
K7-09	4/15/14	0.2
K7-10	4/15/14	<0.05
NC7-26	4/23/14	<0.05
NC7-47	5/12/14	0.5
NC7-48	4/14/14	0.15
W-PIT7-2141	1/14/14	0.26 H

Table B-5.21. Pit 7 Complex area in Operable Unit 5 total uranium and uranium isotopes in ground water.

Location	Date	AS	AS	AS	KPA	MS	MS	MS	MS	MS	MS	MS	MS
		Uranium 234 and 233 (in activity) (pCi/L)	Uranium 235 and 236 (in activity) (pCi/L)	Uranium 238 (in activity) (pCi/L)	Total Uranium (in mass) (µg/L)	Total Uranium (in activity) (pCi/L)	Total Uranium (in mass) (µg/L)	Uranium 234 (in activity) (pCi/L)	Uranium 235 (in activity) (pCi/L)	Uranium 236 (in activity) (pCi/L)	Uranium 238 (in activity) (pCi/L)	Uranium 238 (in mass) (µg/L)	Uranium 235/238 (atom/atom)
K7-01	4/29/14	-	-	-	-	15.0 ± 0.260	21.0 ± 0.0960	7.70 ± 0.250	0.320 ± 0.00170	<0.0013	7.00 ± 0.0320	21.0 ± 0.0960	0.00721 ± 0.0000170
K7-03	4/3/14	-	-	-	-	6.30 ± 0.0470	8.80 ± 0.0290	3.30 ± 0.0460	0.140 ± 0.000820	<0.00056	2.90 ± 0.00960	8.70 ± 0.0290	0.00722 ± 0.0000370
K7-06	4/14/14	0.476 ± 0.104	<0.1	0.376 ± 0.0893	-	-	-	-	-	-	-	-	-
K7-09	4/15/14	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-	-
K7-10	4/15/14	0.129 ± 0.0645	<0.1	<0.1	-	-	-	-	-	-	-	-	-
NC7-12	4/22/14	1.65 ± 0.288	<0.1	1.30 ± 0.239	-	2.90 ± 0.0390	3.90 ± 0.00990	1.50 ± 0.0390	0.0590 ± 0.000420	<0.00052	1.30 ± 0.00330	3.90 ± 0.00990	0.00707 ± 0.0000470
NC7-17	4/15/14	0.676 ± 0.149	<0.1	0.519 ± 0.126	-	-	-	-	-	-	-	-	-
NC7-21	4/22/14	5.27 ± 0.791	0.299 ± 0.101	5.13 ± 0.771	-	-	-	-	-	-	-	-	-
NC7-25	4/2/14	-	-	-	46.4 ± 4.85 D	-	-	-	-	-	-	-	-
NC7-25	4/7/14	19.8 ± 2.93	0.891 ± 0.230	17.1 ± 2.55 O	-	-	-	-	-	-	-	-	-
NC7-25	10/13/14	-	-	-	139 ± 14.8 D	100 ± 4.20	140 ± 6.50	50.0 ± 3.50	2.00 ± 0.130	0.0330 ± 0.00120	47.0 ± 2.20	140 ± 6.50	0.00656 ± 0.000316
NC7-26	4/23/14	-	-	-	-	0.250 ± 0.00440	0.300 ± 0.00110	0.150 ± 0.00440	0.00460 ± 0.0000360	<0.00002	0.0990 ± 0.000370	0.290 ± 0.00110	0.00723 ± 0.0000500
NC7-40	1/13/14	-	-	-	-	78.0 ± 1.20	-	22.0 ± 1.20	1.10 ± 0.00570	0.270 ± 0.000310	55.0 ± 0.110	-	0.00315 ± 0.0000150
NC7-40	4/16/14	-	-	-	-	76.0 ± 1.10	160 ± 0.850	19.0 ± 1.10	1.10 ± 0.00980	0.270 ± 0.000190	55.0 ± 0.290	160 ± 0.850	0.00303 ± 0.0000230
NC7-40	7/10/14	-	-	-	-	69.0 ± 1.10	140 ± 0.550	20.0 ± 1.10	1.00 ± 0.00830	0.230 ± 0.000300	48.0 ± 0.190	140 ± 0.550	0.00323 ± 0.0000240
NC7-40	10/13/14	-	-	-	-	70.0 ± 1.40	150 ± 0.750	20.0 ± 1.40	1.00 ± 0.0130	0.220 ± 0.000180	49.0 ± 0.250	150 ± 0.750	0.00332 ± 0.0000380
NC7-47	5/12/14	1.29 ± 0.220	<0.1	0.716 ± 0.144	-	-	-	-	-	-	-	-	-
NC7-48	4/14/14	-	-	-	-	5.10 ± 0.110	11.0 ± 0.0330	1.40 ± 0.110	0.0710 ± 0.000580	0.0150 ± 0.0000140	3.60 ± 0.0110	11.0 ± 0.0330	0.00306 ± 0.0000230
NC7-49A	4/14/14	0.895 ± 0.192	<0.1	0.569 ± 0.140	-	-	-	-	-	-	-	-	-
NC7-50	5/8/14	1.54 ± 0.248	<0.1	1.16 ± 0.197	-	-	-	-	-	-	-	-	-
NC7-51	1/13/14	-	-	-	-	90.0 ± 0.960	-	40.0 ± 0.950	1.60 ± 0.0120	0.120 ± 0.000850	48.0 ± 0.130	-	0.00526 ± 0.0000380
NC7-51	4/2/14	-	-	-	-	84.0 ± 0.600	130 ± 0.300	38.0 ± 0.590	1.50 ± 0.00950	0.110 ± 0.000310	45.0 ± 0.100	130 ± 0.300	0.00534 ± 0.0000310
NC7-51	7/10/14	-	-	-	-	79.0 ± 0.320	130 ± 0.200	35.0 ± 0.310	1.50 ± 0.00850	0.110 ± 0.000290	43.0 ± 0.0690	130 ± 0.200	0.00534 ± 0.0000290
NC7-51	10/8/14	-	-	-	-	82.0 ± 0.500	130 ± 0.490	36.0 ± 0.480	1.50 ± 0.00840	0.0960 ± 0.000340	44.0 ± 0.170	130 ± 0.490	0.00543 ± 0.0000210
NC7-51	10/8/14 DUP	-	-	-	-	85.0 ± 0.790	140 ± 0.400	38.0 ± 0.780	1.60 ± 0.0120	0.0990 ± 0.000340	45.0 ± 0.130	130 ± 0.400	0.00543 ± 0.0000370
NC7-52	4/8/14	0.317 ± 0.0787	<0.1	0.241 ± 0.0663 O	-	-	-	-	-	-	-	-	-
NC7-52	4/8/14 DUP	0.380 ± 0.110	<0.1	0.320 ± 0.0970	-	-	-	-	-	-	-	-	-
NC7-53	4/14/14	0.654 ± 0.147	<0.1	0.548 ± 0.129	-	-	-	-	-	-	-	-	-
NC7-64	4/7/14	46.8 ± 6.78	2.26 ± 0.428	48.7 ± 7.06 O	132 ± 13.8 D	-	-	-	-	-	-	-	-
NC7-64	10/13/14	-	-	-	144 ± 15.2 D	98.0 ± 1.40	140 ± 0.650	49.0 ± 1.40	2.00 ± 0.0120	0.0380 ± 0.000950	47.0 ± 0.220	140 ± 0.650	0.00665 ± 0.0000240
NC7-65	4/9/14	0.622 ± 0.132	<0.1	0.432 ± 0.105 O	-	1.10 ± 0.0160	1.30 ± 0.00440	0.600 ± 0.0160	0.0210 ± 0.0000890	<0.000085	0.440 ± 0.00150	1.30 ± 0.00440	0.00734 ± 0.0000190
NC7-67	4/3/14	<0.1	<0.1	<0.1 O	-	-	-	-	-	-	-	-	-
NC7-68	4/3/14	1.44 ± 0.236	<0.1	1.20 ± 0.202 O	-	-	-	-	-	-	-	-	-
NC7-75	4/2/14	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-	-
NC7-76	4/23/14	1.45 ± 0.285	<0.1	1.29 ± 0.261	-	-	-	-	-	-	-	-	-
W-PIT7-02	4/3/14	0.256 ± 0.0686	<0.1	0.145 ± 0.0488 O	-	-	-	-	-	-	-	-	-
W-PIT7-03	4/8/14	11.0 ± 1.54	0.577 ± 0.141	10.2 ± 1.43 O	-	-	-	-	-	-	-	-	-
W-PIT7-03	4/8/14 DUP	10.8 ± 1.80	0.440 ± 0.110	9.20 ± 1.50	-	-	-	-	-	-	-	-	-
W-PIT7-10	4/15/14	1.27 ± 0.233	0.112 ± 0.0590	1.25 ± 0.224	-	-	-	-	-	-	-	-	-
W-PIT7-13	4/8/14	4.13 ± 0.593	0.207 ± 0.0731	2.69 ± 0.405 O	-	-	-	-	-	-	-	-	-
W-PIT7-13	4/8/14 DUP	4.11 ± 0.720	0.141 ± 0.0560	2.28 ± 0.420	-	-	-	-	-	-	-	-	-
W-PIT7-14	4/9/14	-	-	-	-	<0.06273	0.00170 ± 0.0000210	<0.0012	<0.00003	<0.0000098	0.000570 ± 0.00000690	0.00170 ± 0.0000210	<0.008346
W-PIT7-15	5/12/14	-	-	-	-	<0.06273	0.0650 ± 0.000330	<0.062	0.00100 ± 0.0000160	<0.000014	0.0220 ± 0.000110	0.0650 ± 0.000310	0.00714 ± 0.000111
W-PIT7-1860	4/16/14	0.227 ± 0.0797	<0.1	0.105 ± 0.0561	-	-	-	-	-	-	-	-	-
W-PIT7-1907	4/17/14	0.169 ± 0.116	<0.1	0.475 ± 0.171	-	-	-	-	-	-	-	-	-
W-PIT7-1915	4/17/14	<0.1	<0.1	<0.1	-	-	-	-	-	-	-	-	-
W-PIT7-1918	4/17/14	-	-	-	-	39.0 ± 0.410	76.0 ± 0.440	13.0 ± 0.390	0.620 ± 0.00650	0.100 ± 0.000150	25.0 ± 0.150	75.0 ± 0.440	0.00381 ± 0.0000330
W-PIT7-2141	4/9/14	-	-	-	-	6.00 ± 0.0970	6.90 ± 0.0120	3.60 ± 0.0970	0.110 ± 0.000300	<0.00044	2.30 ± 0.00390	6.80 ± 0.0120	0.00726 ± 0.0000160
W-PIT7-2305	4/2/14	7.98 ± 1.22	0.424 ± 0.138	7.68 ± 1.18	20.6 ± 2.16 D	-	-	-	-	-	-	-	-
W-PIT7-2305	10/13/14	-	-	-	19.6 ± 2.07 D	13.0 ± 0.200	19.0 ± 0.0730	6.70 ± 0.200	0.290 ± 0.00180	<0.0012	6.40 ± 0.0240	19.0 ± 0.0730	0.00715 ± 0.0000330
W-PIT7-2307	4/7/14	10.6 ± 1.59	0.449 ± 0.142	9.66 ± 1.46 O	-	-	-	-	-	-	-	-	-
W-PIT7-2703	4/2/14	54.1 ± 8.35	2.20 ± 0.464	52.5 ± 8.10	134 ± 14.0 D	-	-	-	-	-	-	-	-

Table B-5.21. Pit 7 Complex area in Operable Unit 5 total uranium and uranium isotopes in ground water.

Location	Date	AS	AS	AS	KPA	MS	MS	MS	MS	MS	MS	MS	MS
		Uranium 234 and 233 (in activity) (pCi/L)	Uranium 235 and 236 (in activity) (pCi/L)	Uranium 238 (in activity) (pCi/L)	Total Uranium (in mass) (µg/L)	Total Uranium (in activity) (pCi/L)	Total Uranium (in mass) (µg/L)	Uranium 234 (in activity) (pCi/L)	Uranium 235 (in activity) (pCi/L)	Uranium 236 (in activity) (pCi/L)	Uranium 238 (in activity) (pCi/L)	Uranium 238 (in mass) (µg/L)	Uranium 235/238 (atom/atom)
W-PIT7-2703	10/13/14	-	-	-	140 ± 14.9 D	98.0 ± 0.820	140 ± 0.950	50.0 ± 0.750	2.00 ± 0.0210	0.0330 ± 0.00110	46.0 ± 0.320	140 ± 0.950	0.00669 ± 0.0000530
W-PIT7-2705	4/2/14	9.99 ± 1.46	0.642 ± 0.166	17.6 ± 2.51	52.3 ± 5.47 D	-	-	-	-	-	-	-	-
W-PIT7-2705	10/13/14	-	-	-	47.9 ± 5.08 D	28.0 ± 0.440	51.0 ± 0.130	10.0 ± 0.440	0.480 ± 0.00340	0.0580 ± 0.000240	17.0 ± 0.0450	51.0 ± 0.130	0.00437 ± 0.0000290

Table B-5.22. Pit 7 Complex area in Operable Unit 5 tritium in ground water.

Location	Date	Tritium (pCi/L)
K7-01	4/29/14	29600 ± 5750
K7-01	4/29/14 DUP	32300 ± 4900
K7-01	10/13/14	28000 ± 5440
K7-01	10/13/14 DUP	32700 ± 5000
K7-03	4/3/14	71500 ± 13900
K7-03	10/8/14	69300 ± 13500
K7-06	4/14/14	<100
K7-06	10/7/14	<100
K7-09	4/15/14	<100
K7-09	10/14/14	<100
K7-10	4/15/14	<100
K7-10	10/14/14	<100
NC7-12	4/22/14	1900 ± 405 O
NC7-12	10/15/14	1680 ± 357
NC7-17	4/15/14	<100
NC7-17	10/7/14	<100
NC7-18	10/14/14	<100
NC7-20	10/15/14	6810 ± 1350
NC7-21	4/22/14	34000 ± 6600 O
NC7-21	10/14/14	32800 ± 6380
NC7-25	4/2/14	171000 ± 33200
NC7-25	10/13/14	182000 ± 35300
NC7-26	4/23/14	1700 ± 367 O
NC7-26	10/14/14	1790 ± 378
NC7-40	1/13/14	49500 ± 9610
NC7-40	1/13/14 DUP	54000 ± 8200
NC7-40	4/16/14	54400 ± 10600
NC7-40	7/10/14	47200 ± 9170
NC7-40	10/13/14	52100 ± 10100
NC7-47	5/12/14	<100
NC7-48	4/14/14	<100
NC7-48	10/7/14	<100
NC7-49A	4/14/14	<100
NC7-49A	10/7/14	<100
NC7-51	1/13/14	126000 ± 24500
NC7-51	1/13/14 DUP	134000 ± 20000
NC7-51	4/2/14	120000 ± 23300
NC7-51	7/10/14	119000 ± 23200
NC7-51	7/10/14 DUP	129000 ± 20000
NC7-51	10/8/14	115000 ± 22300
NC7-51	10/8/14 DUP	115000 ± 22300
NC7-52	1/13/14	21700 ± 4220
NC7-52	7/10/14	24300 ± 4720
NC7-64	4/7/14	81000 ± 15700
NC7-64	10/13/14	77100 ± 15000
NC7-65	4/9/14	354 ± 108

Table B-5.22. Pit 7 Complex area in Operable Unit 5 tritium in ground water.

Location	Date	Tritium (pCi/L)
NC7-65	10/6/14	354 ± 114
NC7-67	4/3/14	1460 ± 316
NC7-67	10/13/14	1880 ± 397
NC7-68	4/3/14	1550 ± 332
NC7-68	10/13/14	1620 ± 349
NC7-75	4/2/14	350 ± 117
NC7-75	10/8/14	485 ± 136
NC7-76	4/23/14	2210 ± 465 O
NC7-76	10/15/14	2370 ± 490
W-865-01	1/14/14	<100
W-865-01	7/14/14	<100
W-865-03	1/15/14	<100
W-865-1804	1/14/14	1230 ± 272
W-865-1804	7/14/14	1020 ± 230
W-PIT7-02	1/13/14	<100
W-PIT7-02	7/10/14	<100
W-PIT7-03	1/13/14	82400 ± 16000
W-PIT7-03	1/13/14 DUP	74100 ± 14400
W-PIT7-10	4/15/14	<100
W-PIT7-10	10/14/14	<100
W-PIT7-12	4/9/14	1910 ± 400
W-PIT7-12	10/6/14	1720 ± 366
W-PIT7-13	4/8/14	26000 ± 5050
W-PIT7-13	4/8/14 DUP	29600 ± 4500
W-PIT7-14	4/9/14	<100
W-PIT7-15	5/12/14	<100
W-PIT7-15	10/15/14	<100
W-PIT7-1860	4/16/14	<100
W-PIT7-1918	4/17/14	38200 ± 7430 O
W-PIT7-1918	10/13/14	36900 ± 7180
W-PIT7-1918	10/13/14 DUP	39100 ± 5900
W-PIT7-2141	4/9/14	12100 ± 2360
W-PIT7-2141	10/6/14	13600 ± 2660
W-PIT7-2305	4/2/14	32100 ± 6240
W-PIT7-2305	10/13/14	30900 ± 6000
W-PIT7-2307	4/7/14	36100 ± 7000
W-PIT7-2703	4/2/14	75000 ± 14600
W-PIT7-2703	10/13/14	76400 ± 14800
W-PIT7-2705	4/2/14	30600 ± 5940
W-PIT7-2705	10/13/14	30000 ± 5830

Table B-5.23. Pit 7 Complex area in Operable Unit 5 high explosive compounds in ground water.

Location	Date	1,3,5-Trinitrobenzene (µg/L)	1,3-Dinitrobenzene (µg/L)	2,4-Dinitrotoluene (µg/L)	2,6-Dinitrotoluene (µg/L)	2-Amino-4,6-Dinitrotoluene (µg/L)	2-Nitrotoluene (µg/L)	3-Nitrotoluene (µg/L)	4-Amino-2,6-Dinitrotoluene (µg/L)	4-Nitrotoluene (µg/L)	HMX (µg/L)	Nitrobenzene (µg/L)	RDX (µg/L)	TNT (µg/L)
K7-01	4/29/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
K7-01	4/29/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
K7-03	4/3/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
K7-06	4/14/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
K7-09	4/15/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
K7-10	4/15/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
NC7-26	4/23/14	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<1 D	<2 D	<1 D	<2 D
NC7-47	5/12/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
NC7-48	4/14/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2

Table B-6.01. Building 854 Operable Unit volatile organic compounds (VOCs) in ground and surface water.

Location	Date	Method	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	1,1,2-TCA (µg/L)	Freon 11 (µg/L)	Freon 113 (µg/L)	Vinyl chloride (µg/L)
W-854-01	5/6/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-01	10/28/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-02	2/10/14	E601	92	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-02	4/28/14	E601	91	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-02	7/7/14	E601	88	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-02	7/7/14 DUP	E601	83 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D
W-854-02	10/6/14	E601	59	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-03	1/15/14	E601	14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-03	10/8/14	E601	10	<0.5	<0.5	<0.5	<0.5	0.51	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-03	10/20/14	E601	13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-04	5/8/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-05	5/1/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-05	10/28/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-06	5/5/14	E601	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-06	10/29/14	E601	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-07	5/5/14	E601	39	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-07	5/5/14 DUP	E601	36	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-07	10/29/14	E601	29	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-10	5/6/14	E601	10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-10	5/6/14 DUP	E601	6.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-854-10	10/30/14	E601	1.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-10	10/30/14 DUP	E601	2.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-13	5/8/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-13	10/30/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-14	5/6/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-854-14	11/3/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-854-15	5/6/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-15	10/30/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-17	5/6/14	E601	5.5	<0.5	7.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-17	10/28/14	E601	7.8	<0.5	11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-17	10/28/14 DUP	E601	7.3	<0.5	11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-18A	5/1/14	E601	19	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-18A	10/28/14	E601	27	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-45	5/6/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-854-45	11/11/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-854-45	11/11/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-1701	5/5/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-1701	10/29/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-1707	5/19/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-854-1707	11/3/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-854-1731	5/6/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-854-1731	11/3/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-854-1822	5/5/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-1822	10/29/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table B-6.01. Building 854 Operable Unit volatile organic compounds (VOCs) in ground and surface water.

Location	Date	Method	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	1,1,2-TCA (µg/L)	Freon 11 (µg/L)	Freon 113 (µg/L)	Vinyl chloride (µg/L)
W-854-1823	5/5/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-1823	11/10/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-2115	5/5/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-2115	10/29/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-2139	2/5/14	E601	18	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-2139	4/2/14	E601	30	<0.5	0.74	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-2139	8/12/14	E601	35	<0.5	0.71	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-2139	8/12/14 DUP	E601	35	<0.5	0.72	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-2139	10/6/14	E601	24	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-2218	4/21/14	E601	23	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-2218	7/7/14	E601	15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-2218	10/6/14	E601	16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-2611	5/1/14	E601	2.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-2611	11/11/14	E601	2.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SPRING11	5/19/14	E601	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
SPRING11	11/3/14	E601	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5

Table B-6.01 (Con't). Analyte detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichlor-oethene (total) (µg/L)
W-854-01	5/6/14	E601	0 of 18	-
W-854-01	10/28/14	E601	0 of 18	-
W-854-02	2/10/14	E601	0 of 18	-
W-854-02	4/28/14	E601	0 of 18	-
W-854-02	7/7/14	E601	0 of 18	-
W-854-02	7/7/14 DUP	E601	0 of 18	-
W-854-02	10/6/14	E601	0 of 18	-
W-854-03	1/15/14	E601	0 of 18	-
W-854-03	10/8/14	E601	0 of 18	-
W-854-03	10/20/14	E601	0 of 18	-
W-854-04	5/8/14	E601	0 of 18	-
W-854-05	5/1/14	E601	0 of 18	-
W-854-05	10/28/14	E601	0 of 18	-
W-854-06	5/5/14	E601	0 of 18	-
W-854-06	10/29/14	E601	0 of 18	-
W-854-07	5/5/14	E601	0 of 18	-
W-854-07	5/5/14 DUP	E601	0 of 18	-
W-854-07	10/29/14	E601	0 of 18	-
W-854-10	5/6/14	E601	0 of 18	-
W-854-10	5/6/14 DUP	E601	0 of 18	-

Table B-6.01 (Con't). Analyte detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloro-ethene (total) (µg/L)
W-854-10	10/30/14	E601	0 of 18	-
W-854-10	10/30/14 DUP	E601	0 of 18	-
W-854-13	5/8/14	E601	0 of 18	-
W-854-13	10/30/14	E601	0 of 18	-
W-854-14	5/6/14	E601	0 of 18	-
W-854-14	11/3/14	E601	0 of 18	-
W-854-15	5/6/14	E601	0 of 18	-
W-854-15	10/30/14	E601	0 of 18	-
W-854-17	5/6/14	E601	1 of 18	7.4
W-854-17	10/28/14	E601	1 of 18	11
W-854-17	10/28/14 DUP	E601	1 of 18	11
W-854-18A	5/1/14	E601	0 of 18	-
W-854-18A	10/28/14	E601	0 of 18	-
W-854-45	5/6/14	E601	0 of 18	-
W-854-45	11/11/14	E601	0 of 18	-
W-854-45	11/11/14 DUP	E601	0 of 18	-
W-854-1701	5/5/14	E601	0 of 18	-
W-854-1701	10/29/14	E601	0 of 18	-
W-854-1707	5/19/14	E601	0 of 18	-
W-854-1707	11/3/14	E601	0 of 18	-
W-854-1731	5/6/14	E601	0 of 18	-
W-854-1731	11/3/14	E601	0 of 18	-
W-854-1822	5/5/14	E601	0 of 18	-
W-854-1822	10/29/14	E601	0 of 18	-
W-854-1823	5/5/14	E601	0 of 18	-
W-854-1823	11/10/14	E601	0 of 18	-
W-854-2115	5/5/14	E601	0 of 18	-
W-854-2115	10/29/14	E601	0 of 18	-
W-854-2139	2/5/14	E601	0 of 18	-
W-854-2139	4/2/14	E601	0 of 18	-
W-854-2139	8/12/14	E601	0 of 18	-
W-854-2139	8/12/14 DUP	E601	0 of 18	-
W-854-2139	10/6/14	E601	0 of 18	-
W-854-2218	4/21/14	E601	0 of 18	-
W-854-2218	7/7/14	E601	0 of 18	-
W-854-2218	10/6/14	E601	0 of 18	-
W-854-2611	5/1/14	E601	0 of 18	-
W-854-2611	11/11/14	E601	0 of 18	-
SPRING11	5/19/14	E601	0 of 18	-
SPRING11	11/3/14	E601	0 of 18	-

Table B-6.02. Building 854 Operable Unit nitrate and perchlorate in ground and surface water.

Location	Date	Nitrate (as NO3) (mg/L)	Perchlorate (µg/L)
W-854-01	5/6/14	<0.5	<4
W-854-01	10/28/14	-	<4
W-854-02	2/10/14	-	6.9
W-854-02	4/28/14	53	6.6
W-854-02	7/7/14	-	7.2
W-854-02	7/7/14 DUP	-	5.9
W-854-02	10/6/14	-	5.1
W-854-03	1/15/14	36	6.7
W-854-03	2/3/14	37	-
W-854-03	10/8/14	35	7.1
W-854-03	10/20/14	35 D	6.6
W-854-03	11/4/14	37	-
W-854-03	11/17/14	33	-
W-854-03	12/1/14	33	-
W-854-04	5/8/14	<0.5	<4
W-854-05	5/1/14	57 D	4.4
W-854-05	10/28/14	-	<4
W-854-06	5/5/14	<0.5	<4
W-854-06	10/29/14	-	<4
W-854-07	5/5/14	32	6
W-854-07	5/5/14 DUP	27 D	6
W-854-07	10/29/14	-	5.7
W-854-10	5/6/14	7.8	<4
W-854-10	5/6/14 DUP	7.1	<4
W-854-10	10/30/14	-	<4
W-854-10	10/30/14 DUP	-	<4
W-854-13	5/8/14	2.4	<4
W-854-13	10/30/14	-	<4
W-854-14	5/6/14	130 D	<4
W-854-14	11/3/14	-	<4
W-854-15	5/6/14	7.2	<4
W-854-15	10/30/14	-	<4
W-854-17	5/6/14	<1 D	<4
W-854-17	10/28/14	-	<4
W-854-17	10/28/14 DUP	-	<4
W-854-18A	5/1/14	29	<4
W-854-18A	10/28/14	-	<4
W-854-45	5/6/14	54 D	8.1
W-854-45	11/11/14	-	8.4 D
W-854-45	11/11/14 DUP	-	9.8
W-854-45	11/11/14 DUP	-	13
W-854-1701	5/5/14	<0.5	<4
W-854-1701	10/29/14	-	<4
W-854-1707	5/19/14	6	<4
W-854-1707	11/3/14	-	<4
W-854-1731	5/6/14	6.2	<4

Table B-6.02. Building 854 Operable Unit nitrate and perchlorate in ground and surface water.

Location	Date	Nitrate (as NO3) (mg/L)	Perchlorate (µg/L)
W-854-1731	11/3/14	-	<4
W-854-1822	5/5/14	2	<4
W-854-1822	10/29/14	-	<4
W-854-1823	5/5/14	26 D	15
W-854-1823	11/10/14	-	13
W-854-1823	11/10/14 DUP	-	13
W-854-2115	5/5/14	2	<4
W-854-2115	10/29/14	-	<4
W-854-2139	2/5/14	17	<4
W-854-2139	4/2/14	20	4.7
W-854-2139	8/12/14	16	4.2
W-854-2139	8/12/14 DUP	1.9	<4
W-854-2139	10/6/14	3.6	<4
W-854-2218	4/21/14	42	<4
W-854-2218	7/7/14	-	<4
W-854-2218	10/6/14	-	<4
W-854-2611	5/1/14	51 D	5.4
W-854-2611	11/11/14	-	4.8
W-854-2611	11/11/14 DUP	-	5.4
SPRING11	5/19/14	<0.22	<4
SPRING11	11/3/14	-	<4

Table B-7.01. Building 832 Canyon Operable Unit volatile organic compounds (VOCs) in ground and surface water.

Location	Date	Method	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	1,1,2-TCA (µg/L)	Freon 11 (µg/L)	Freon 113 (µg/L)	Vinyl chloride (µg/L)
SVI-830-035	2/27/14	E601	640 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D
SVI-830-035	8/13/14	E601	580 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D
W-830-04A	3/3/14	E601	7.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-04A	3/3/14 DUP	E601	7.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-04A	8/14/14	E601	7.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-04A	8/14/14 DUP	E601	7.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-05	3/6/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-05	8/14/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-09	2/26/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-830-10	3/4/14	E601	25	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-830-10	3/4/14 DUP	E601	26	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-11	3/4/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-11	8/14/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-12	2/26/14	E601	<0.5 LO	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-12	6/4/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-12	12/1/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-13	3/4/14	E601	4.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-830-13	8/18/14	E601	4.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-830-14	3/4/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-830-15	3/4/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-830-15	6/4/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-830-15	8/18/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-830-15	12/1/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-830-16	2/24/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-830-17	2/24/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-17	8/19/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-18	2/27/14	E601	23	<0.5	1.6	2.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-19	1/22/14	E601	2,300 D	<5 D	130 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D
W-830-19	4/29/14	E601	2,100 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D
W-830-20	3/3/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-20	8/14/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-21	2/27/14	E601	57	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-21	8/14/14	E601	49	<0.5	<0.5	0.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-22	2/20/14	E601	10	<0.5	1.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-22	8/12/14	E601	10	<0.5	5.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-27	3/5/14	E601	620 D	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-28	3/5/14	E601	13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-28	8/20/14	E601	21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-29	2/20/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-29	8/12/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-30	2/26/14	E601	13 LO	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-30	8/13/14	E601	11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-34	2/26/14	E601	130 DLO	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D
W-830-34	8/13/14	E601	190 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D

Table B-7.01. Building 832 Canyon Operable Unit volatile organic compounds (VOCs) in ground and surface water.

Location	Date	Method	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	1,1,2-TCA (µg/L)	Freon 11 (µg/L)	Freon 113 (µg/L)	Vinyl chloride (µg/L)
W-830-49	1/22/14	E601	1,200 D	1.5 D	<1.2 D	<1.2 D	<1.2 D	<1.2 D	<1.2 D	<1.2 D	<1.2 D	<1.2 D	<1.2 D	<1.2 D	<1.2 D	<1.2 D
W-830-49	4/29/14	E601	1,000 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D
W-830-49	7/14/14	E601	1,000 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D
W-830-49	7/14/14 DUP	E601	1,100 D	<250 D	<250 D	<250 D	<250 D	<250 D	<250 D	<250 D	<250 D	<250 D	<250 D	<250 D	<250 D	<250 D
W-830-50	3/3/14	E601	11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-50	8/14/14	E601	13	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-51	5/7/14	E601	20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-51	7/23/14	E601	19	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-51	10/6/14	E601	21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-52	5/7/14	E601	20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-53	5/7/14	E601	20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-54	2/24/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-54	8/19/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-55	2/25/14	E601	1.6 LO	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-55	8/19/14	E601	1.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-56	3/6/14	E601	1.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-56	8/19/14	E601	1.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-57	1/22/14	E601	11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-57	4/29/14	E601	8.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-57	7/14/14	E601	7.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-57	7/14/14 DUP	E601	8.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-58	3/5/14	E601	530 D	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-58	8/20/14	E601	130 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D
W-830-59	1/22/14	E601	1,400 D	<2.5 D	19 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D
W-830-59	4/29/14	E601	1,200 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D
W-830-59	7/14/14	E601	1,300 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D
W-830-60	1/22/14	E601	21	<0.5	0.61	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-60	4/29/14	E601	20	<0.5	0.59	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-60	7/14/14	E601	19	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-1730	2/25/14	E601	<0.5 LO	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-1730	6/4/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-1730	12/1/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-1807	1/22/14	E601	180 D	1.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-1807	4/29/14	E601	380 D	1.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-1807	7/14/14	E601	110 D	0.87	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-1829	2/25/14	E601	1,800 D	<13 D	<13 D	<13 D	<13 D	<13 D	<13 D	<13 D	<13 D	<13 D	<13 D	<25 D	<50 D	<13 D
W-830-1829	8/12/14	E601	1,700 D	14 D	<13 D	<13 D	<13 D	<13 D	<13 D	<13 D	<13 D	<13 D	<13 D	<25 D	<50 D	<13 D
W-830-1830	2/20/14	E601	1,700 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D
W-830-1830	8/12/14	E601	2,100 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D	<50 D
W-830-1831	2/25/14	E601	<0.5 LO	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-1831	8/21/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-1832	2/25/14	E601	<0.5 LO	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-1832	8/21/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-2214	1/22/14	E601	1,100 D	<1.2 D	<1.2 D	<1.2 D	<1.2 D	<1.2 D	<1.2 D	<1.2 D	<1.2 D	<1.2 D	<1.2 D	<1.2 D	<1.2 D	<1.2 D

Table B-7.01. Building 832 Canyon Operable Unit volatile organic compounds (VOCs) in ground and surface water.

Location	Date	Method	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	1,1,2-TCA (µg/L)	Freon 11 (µg/L)	Freon 113 (µg/L)	Vinyl chloride (µg/L)
W-830-2214	4/29/14	E601	1,100 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D
W-830-2214	7/14/14	E601	920 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D
W-830-2215	1/22/14	E601	18	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-2215	4/29/14	E601	17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-2215	7/14/14	E601	16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-2215	7/14/14 DUP	E601	17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-2216	5/7/14	E601	4.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-2216	7/23/14	E601	3.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-2216	10/6/14	E601	3.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-2311	3/3/14	E601	23	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-2311	3/3/14 DUP	E601	24	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-2311	8/18/14	E601	22	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-2311	8/18/14 DUP	E601	24	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-830-2701	3/4/14	E601	13	<0.5	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-2701	8/14/14	E601	12	<0.5	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-2806	2/25/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-830-2806	6/5/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-830-2806	8/25/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-832-01	3/5/14	E601	160 D	<0.5	7	<0.5	<0.5	0.58 F	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-832-01	4/2/14	E601	92 D	<0.5	4.5	<0.5	<0.5	0.57	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-832-01	8/4/14	E601	180 D	<0.5	14	<0.5	<0.5	0.61	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-832-01	8/4/14 DUP	E601	170 D	<0.5	14	<0.5	<0.5	0.57	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-832-06	2/18/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-832-06	8/11/14	E601	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-832-10	3/5/14	E601	78	<0.5	1.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.6	<0.5	<0.5
W-832-10	3/5/14	E601	71	<0.5	2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.3	<0.5	<0.5
W-832-10	4/2/14	E601	42	<0.5	1.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.8	<0.5	<0.5
W-832-10	4/2/14	E601	74	<0.5	1.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5
W-832-10	8/4/14	E601	41	<0.5	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.9	<0.5	<0.5
W-832-10	8/4/14	E601	73	<0.5	2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.4	<0.5	<0.5
W-832-11	5/20/14	E601	110 D	<0.5	2.9	<0.5	<0.5	0.68	<0.5	<0.5	<0.5	<0.5	<0.5	0.78	<0.5	<0.5
W-832-12	1/21/14	E601	20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-832-12	4/2/14	E601	54	<0.5	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-832-12	8/4/14	E601	48	<0.5	0.94	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-832-15	1/21/14	E601	14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-832-15	4/2/14	E601	48	<0.5	0.86	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-832-15	8/4/14	E601	30	<0.5	0.66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-832-15	8/4/14 DUP	E601	30	<0.5	0.71	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-832-23	2/18/14	E601	430 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D
W-832-23	2/18/14 DUP	E601	330 DLO	<1.7 D	<1.7 D	<1.7 D	<1.7 D	<1.7 D	<1.7 D	<1.7 D	<1.7 D	<1.7 D	<1.7 D	<3.3 D	<6.7 D	<1.7 D
W-832-23	8/11/14	E601	510 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D
W-832-23	8/11/14 DUP	E601	430 D	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-832-24	2/24/14	E601	51	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-832-24	2/24/14 DUP	E601	48	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5

Table B-7.01. Building 832 Canyon Operable Unit volatile organic compounds (VOCs) in ground and surface water.

Location	Date	Method	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	1,1,2-TCA (µg/L)	Freon 11 (µg/L)	Freon 113 (µg/L)	Vinyl chloride (µg/L)
W-832-24	8/12/14	E601	61	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-832-25	3/5/14	E601	24	<0.5	0.63	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-832-25	3/5/14	E601	53	<0.5	2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-832-25	4/2/14	E601	23	<0.5	0.64	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-832-25	4/2/14	E601	42	<0.5	1.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-832-25	8/4/14	E601	24	<0.5	0.57	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-832-25	8/4/14	E601	61	<0.5	3.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-832-1927	2/24/14	E601	41	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-832-1927	2/24/14 DUP	E601	39	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-832-1927	8/18/14	E601	35	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.9	<0.5	<0.5
W-832-1927	8/18/14 DUP	E601	38	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-832-2112	2/24/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-832-2112	6/5/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-832-2112	8/21/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-832-2906	2/24/14	E601	8.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-832-2906	6/4/14	E601	6.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-832-2906	8/12/14	E601	7.1	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-832-2906	12/1/14	E601	8.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-832-2906	12/1/14 DUP	E601	10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<2	<0.5
W-870-02	3/6/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-870-02	8/21/14	E601	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-880-01	3/6/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-880-01	6/5/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-880-01	6/5/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-880-01	8/25/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-880-01	12/2/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-880-02	6/5/14	E601	<0.5	0.52	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-880-03	3/6/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-880-03	6/5/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-880-03	8/25/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-880-03	12/2/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table B-7.01 (Con't). Analyte detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloroethene (total) (µg/L)	Methylene chloride (µg/L)
SVI-830-035	2/27/14	E601	0 of 18	-	-
SVI-830-035	8/13/14	E601	0 of 18	-	-
W-830-04A	3/3/14	E601	0 of 18	-	-
W-830-04A	3/3/14 DUP	E601	0 of 18	-	-
W-830-04A	8/14/14	E601	0 of 18	-	-
W-830-04A	8/14/14 DUP	E601	0 of 18	-	-
W-830-05	3/6/14	E601	0 of 18	-	-
W-830-05	8/14/14	E601	0 of 18	-	-
W-830-09	2/26/14	E601	0 of 18	-	-
W-830-10	3/4/14	E601	0 of 18	-	-
W-830-10	3/4/14 DUP	E601	0 of 18	-	-
W-830-11	3/4/14	E601	0 of 18	-	-
W-830-11	8/14/14	E601	0 of 18	-	-
W-830-12	2/26/14	E601	0 of 18	-	-
W-830-12	6/4/14	E601	0 of 18	-	-
W-830-12	12/1/14	E601	0 of 18	-	-
W-830-13	3/4/14	E601	0 of 18	-	-
W-830-13	8/18/14	E601	0 of 18	-	-
W-830-14	3/4/14	E601	0 of 18	-	-
W-830-15	3/4/14	E601	0 of 18	-	-
W-830-15	6/4/14	E601	0 of 18	-	-
W-830-15	8/18/14	E601	0 of 18	-	-
W-830-15	12/1/14	E601	0 of 18	-	-
W-830-16	2/24/14	E601	0 of 18	-	-
W-830-17	2/24/14	E601	0 of 18	-	-
W-830-17	8/19/14	E601	0 of 18	-	-
W-830-18	2/27/14	E601	1 of 18	4.2	-
W-830-19	1/22/14	E601	1 of 18	130 D	-
W-830-19	4/29/14	E601	0 of 18	-	-
W-830-20	3/3/14	E601	0 of 18	-	-
W-830-20	8/14/14	E601	0 of 18	-	-
W-830-21	2/27/14	E601	1 of 18	1.8	-
W-830-21	8/14/14	E601	0 of 18	-	-
W-830-22	2/20/14	E601	1 of 18	1.6	-
W-830-22	8/12/14	E601	1 of 18	5.5	-
W-830-27	3/5/14	E601	0 of 18	-	-
W-830-28	3/5/14	E601	0 of 18	-	-
W-830-28	8/20/14	E601	0 of 18	-	-
W-830-29	2/20/14	E601	0 of 18	-	-
W-830-29	8/12/14	E601	0 of 18	-	-
W-830-30	2/26/14	E601	0 of 18	-	-
W-830-30	8/13/14	E601	0 of 18	-	-
W-830-34	2/26/14	E601	0 of 18	-	-
W-830-34	8/13/14	E601	0 of 18	-	-

Table B-7.01 (Con't). Analyte detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloroethene (total) (µg/L)	Methylene chloride (µg/L)
W-830-49	1/22/14	E601	0 of 18		
W-830-49	4/29/14	E601	0 of 18		
W-830-49	7/14/14	E601	0 of 18	-	-
W-830-49	7/14/14 DUP	E601	0 of 18	-	-
W-830-50	3/3/14	E601	0 of 18	-	-
W-830-50	8/14/14	E601	0 of 18	-	-
W-830-51	5/7/14	E601	0 of 18	-	-
W-830-51	7/23/14	E601	0 of 18	-	-
W-830-51	10/6/14	E601	0 of 18	-	-
W-830-52	5/7/14	E601	0 of 18	-	-
W-830-53	5/7/14	E601	0 of 18	-	-
W-830-54	2/24/14	E601	0 of 18	-	-
W-830-54	8/19/14	E601	0 of 18	-	-
W-830-55	2/25/14	E601	0 of 18	-	-
W-830-55	8/19/14	E601	0 of 18	-	-
W-830-56	3/6/14	E601	0 of 18	-	-
W-830-56	8/19/14	E601	0 of 18	-	-
W-830-57	1/22/14	E601	0 of 18	-	-
W-830-57	4/29/14	E601	0 of 18	-	-
W-830-57	7/14/14	E601	0 of 18	-	-
W-830-57	7/14/14 DUP	E601	0 of 18	-	-
W-830-58	3/5/14	E601	0 of 18	-	-
W-830-58	8/20/14	E601	0 of 18	-	-
W-830-59	1/22/14	E601	1 of 18	19 D	-
W-830-59	4/29/14	E601	0 of 18	-	-
W-830-59	7/14/14	E601	0 of 18	-	-
W-830-60	1/22/14	E601	0 of 18	-	-
W-830-60	4/29/14	E601	0 of 18	-	-
W-830-60	7/14/14	E601	0 of 18	-	-
W-830-1730	2/25/14	E601	0 of 18	-	-
W-830-1730	6/4/14	E601	0 of 18	-	-
W-830-1730	12/1/14	E601	0 of 18	-	-
W-830-1807	1/22/14	E601	0 of 18	-	-
W-830-1807	4/29/14	E601	0 of 18	-	-
W-830-1807	7/14/14	E601	0 of 18	-	-
W-830-1829	2/25/14	E601	0 of 18	-	-
W-830-1829	8/12/14	E601	0 of 18	-	-
W-830-1830	2/20/14	E601	0 of 18	-	-
W-830-1830	8/12/14	E601	0 of 18	-	-
W-830-1831	2/25/14	E601	0 of 18	-	-
W-830-1831	8/21/14	E601	0 of 18	-	-
W-830-1832	2/25/14	E601	0 of 18	-	-
W-830-1832	8/21/14	E601	0 of 18	-	-
W-830-2214	1/22/14	E601	1 of 18	-	2.9 D

Table B-7.01 (Con't). Analyte detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloroethene (total) (µg/L)	Methylene chloride (µg/L)
W-830-2214	4/29/14	E601	0 of 18	-	-
W-830-2214	7/14/14	E601	0 of 18	-	-
W-830-2215	1/22/14	E601	0 of 18	-	-
W-830-2215	4/29/14	E601	0 of 18	-	-
W-830-2215	7/14/14	E601	0 of 18	-	-
W-830-2215	7/14/14 DUP	E601	0 of 18	-	-
W-830-2216	5/7/14	E601	0 of 18	-	-
W-830-2216	7/23/14	E601	0 of 18	-	-
W-830-2216	10/6/14	E601	0 of 18	-	-
W-830-2311	3/3/14	E601	0 of 18	-	-
W-830-2311	3/3/14 DUP	E601	0 of 18	-	-
W-830-2311	8/18/14	E601	0 of 18	-	-
W-830-2311	8/18/14 DUP	E601	0 of 18	-	-
W-830-2701	3/4/14	E601	1 of 18	1	-
W-830-2701	8/14/14	E601	1 of 18	1	-
W-830-2806	2/25/14	E601	0 of 18	-	-
W-830-2806	6/5/14	E601	0 of 18	-	-
W-830-2806	8/25/14	E601	0 of 18	-	-
W-832-01	3/5/14	E601	1 of 18	7	-
W-832-01	4/2/14	E601	1 of 18	4.5	-
W-832-01	8/4/14	E601	1 of 18	14	-
W-832-01	8/4/14 DUP	E601	1 of 18	14	-
W-832-06	2/18/14	E601	0 of 18	-	-
W-832-06	8/11/14	E601	0 of 18	-	-
W-832-10	3/5/14	E601	1 of 18	1.8	-
W-832-10	3/5/14	E601	1 of 18	2	-
W-832-10	4/2/14	E601	1 of 18	1.4	-
W-832-10	4/2/14	E601	1 of 18	1.9	-
W-832-10	8/4/14	E601	1 of 18	1.2	-
W-832-10	8/4/14	E601	1 of 18	2.5	-
W-832-11	5/20/14	E601	1 of 18	2.9	-
W-832-12	1/21/14	E601	0 of 18	-	-
W-832-12	4/2/14	E601	1 of 18	1.1	-
W-832-12	8/4/14	E601	0 of 18	-	-
W-832-15	1/21/14	E601	0 of 18	-	-
W-832-15	4/2/14	E601	0 of 18	-	-
W-832-15	8/4/14	E601	0 of 18	-	-
W-832-15	8/4/14 DUP	E601	0 of 18	-	-
W-832-23	2/18/14	E601	0 of 18	-	-
W-832-23	2/18/14 DUP	E601	0 of 18	-	-
W-832-23	8/11/14	E601	0 of 18	-	-
W-832-23	8/11/14 DUP	E601	0 of 18	-	-
W-832-24	2/24/14	E601	0 of 18	-	-
W-832-24	2/24/14 DUP	E601	0 of 18	-	-

Table B-7.01 (Con't). Analyte detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloroethene (total) (µg/L)	Methylene chloride (µg/L)
W-832-24	8/12/14	E601	0 of 18	-	-
W-832-25	3/5/14	E601	0 of 18	-	-
W-832-25	3/5/14	E601	1 of 18	2	-
W-832-25	4/2/14	E601	0 of 18	-	-
W-832-25	4/2/14	E601	1 of 18	1.5	-
W-832-25	8/4/14	E601	0 of 18	-	-
W-832-25	8/4/14	E601	1 of 18	3.7	-
W-832-1927	2/24/14	E601	0 of 18	-	-
W-832-1927	2/24/14 DUP	E601	0 of 18	-	-
W-832-1927	8/18/14	E601	0 of 18	-	-
W-832-1927	8/18/14 DUP	E601	0 of 18	-	-
W-832-2112	2/24/14	E601	0 of 18	-	-
W-832-2112	6/5/14	E601	0 of 18	-	-
W-832-2112	8/21/14	E601	0 of 18	-	-
W-832-2906	2/24/14	E601	0 of 18	-	-
W-832-2906	6/4/14	E601	0 of 18	-	-
W-832-2906	8/12/14	E601	1 of 18	0.5	-
W-832-2906	12/1/14	E601	0 of 18	-	-
W-832-2906	12/1/14 DUP	E601	0 of 18	-	-
W-870-02	3/6/14	E601	0 of 18	-	-
W-870-02	8/21/14	E601	0 of 18	-	-
W-880-01	3/6/14	E601	0 of 18	-	-
W-880-01	6/5/14	E601	0 of 18	-	-
W-880-01	6/5/14 DUP	E601	0 of 18	-	-
W-880-01	8/25/14	E601	0 of 18	-	-
W-880-01	12/2/14	E601	0 of 18	-	-
W-880-02	6/5/14	E601	0 of 18	-	-
W-880-03	3/6/14	E601	0 of 18	-	-
W-880-03	6/5/14	E601	0 of 18	-	-
W-880-03	8/25/14	E601	0 of 18	-	-
W-880-03	12/2/14	E601	0 of 18	-	-

Table B-7.02. Building 832 Canyon Operable Unit nitrate and perchlorate in ground and surface water.

Location	Date	Nitrate (as NO3) (mg/L)	Perchlorate (µg/L)
SVI-830-035	2/27/14	96 D	<4
W-830-04A	3/3/14	75 D	<4
W-830-04A	3/3/14 DUP	76 D	<4
W-830-05	3/6/14	67 D	4.5
W-830-10	3/4/14	72 D	<4
W-830-10	3/4/14 DUP	61 D	4.2
W-830-11	3/4/14	11 D	<4
W-830-12	2/26/14	<0.5	<4
W-830-13	3/4/14	13	<4
W-830-14	3/4/14	<0.22	<4
W-830-15	3/4/14	<0.22	<40 D
W-830-15	8/18/14	<0.22	86 D
W-830-17	2/24/14	80 D	<4
W-830-18	2/27/14	0.66	<4
W-830-19	1/22/14	130 D	<4
W-830-20	3/3/14	<1 D	<4
W-830-21	2/27/14	28	<4
W-830-22	2/20/14	<1 D	<4
W-830-27	3/5/14	70 D	6.8
W-830-29	2/20/14	<0.5	<4
W-830-30	2/26/14	57 D	<4
W-830-34	2/26/14	96 D	<4
W-830-49	1/22/14	150 D	<4
W-830-49	7/14/14	-	<4
W-830-49	7/14/14 DUP	-	4.5
W-830-50	3/3/14	14 D	-
W-830-51	7/23/14	-	4.3
W-830-55	2/25/14	17 D	<4
W-830-56	3/6/14	28 D	-
W-830-57	1/22/14	2.7 D	<4
W-830-58	3/5/14	96 D	6.9
W-830-59	1/22/14	110 D	<4
W-830-59	7/14/14	-	4.1
W-830-60	1/22/14	1.5 D	<4
W-830-1730	2/25/14	<0.5	<4
W-830-1807	1/22/14	81 D	<4
W-830-1807	7/14/14	-	<4
W-830-1829	2/25/14	110 D	<4
W-830-1830	2/20/14	99 D	6
W-830-1832	2/25/14	1.7	<4
W-830-2214	1/22/14	99 D	5.3
W-830-2214	7/14/14	-	5.2
W-830-2215	1/22/14	3 D	<4
W-830-2216	7/23/14	-	<4
W-830-2311	3/3/14	69 D	4.5
W-830-2311	3/3/14 DUP	70 D	4.3

Table B-7.02. Building 832 Canyon Operable Unit nitrate and perchlorate in ground and surface water.

Location	Date	Nitrate (as NO3) (mg/L)	Perchlorate (µg/L)
W-830-2701	3/4/14	23 D	<4
W-830-2806	2/25/14	<0.22	<4
W-830-2806	8/25/14	<0.22	<4
W-832-01	3/5/14	100 D	7.1
W-832-01	8/4/14	-	5.6
W-832-01	8/4/14 DUP	-	6
W-832-06	2/18/14	9.2	<4
W-832-10	3/5/14	84 D	9
W-832-10	8/4/14	-	5.9
W-832-12	1/21/14	120 D	7
W-832-12	8/4/14	-	<4
W-832-15	1/21/14	120 D	7.1
W-832-15	8/4/14	120 D	7.6
W-832-15	8/4/14 DUP	120 D	7
W-832-23	2/18/14	66 D	9.7
W-832-23	2/18/14 DUP	81 D	7.9
W-832-24	2/24/14	39 D	<4
W-832-24	2/24/14 DUP	47 D	<4
W-832-25	3/5/14	82 D	8.1
W-832-25	8/4/14	-	6.4
W-832-1927	2/24/14	37 D	<4
W-832-1927	2/24/14 DUP	43 D	<4
W-832-2112	2/24/14	<0.5	<4
W-832-2112	8/21/14	<0.5	<4
W-832-2906	2/24/14	<0.22	<4
W-832-2906	8/12/14	<0.22	<4
W-870-02	3/6/14	2.1	<4
W-880-01	3/6/14	<1 D	<4
W-880-01	8/25/14	<1 D	<4
W-880-03	3/6/14	<1 D	<4
W-880-03	8/25/14	<1 D	7.3

Table B-7.03. Building 832 Canyon Operable Unit high explosive compounds in ground water.

Location	Date	1,3,5-Trinitrobenzene (µg/L)	1,3-Dinitrobenzene (µg/L)	2,4-Dinitrotoluene (µg/L)	2,6-Dinitrotoluene (µg/L)	2-Amino-4,6-Dinitrotoluene (µg/L)	2-Nitrotoluene (µg/L)	3-Nitrotoluene (µg/L)	4-Amino-2,6-Dinitrotoluene (µg/L)	4-Nitrotoluene (µg/L)	HMX (µg/L)	Nitrobenzene (µg/L)	RDX (µg/L)	TNT (µg/L)
W-830-13	3/4/14	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2
W-830-34	2/26/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-832-15	4/2/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-880-01	3/6/14	<2	<2 O	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-880-01	8/25/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-880-03	3/6/14	<2	<2 O	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
W-880-03	8/25/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2

Table B-8.01. Building 851 Firing Table total uranium and uranium isotopes in ground water.

Location	Date	Total Uranium (in activity) (pCi/L)	Total Uranium (in mass) (µg/L)	Uranium 234 (in activity) (pCi/L)	Uranium 235 (in activity) (pCi/L)	Uranium 236 (in activity) (pCi/L)	Uranium 238 (in activity) (pCi/L)	Uranium 238 (in mass) (µg/L)	Uranium 235/238 (atom/atom)
W-851-05	4/30/14	<0.0627	0.0220 ± 0.000470	<0.061	0.000360 ± 0.0000150	<0.00012	0.00750 ± 0.000120	0.0220 ± 0.000360	0.00742 ± 0.000293
W-851-06	4/30/14	0.140 ± 0.00730	0.120 ± 0.00180	0.100 ± 0.00720	0.00150 ± 0.0000460	<0.00015	0.0410 ± 0.000610	0.120 ± 0.00180	0.00570 ± 0.000155
W-851-07	4/30/14	0.160 ± 0.00580	0.0930 ± 0.000660	0.130 ± 0.00580	0.00150 ± 0.0000280	<0.00011	0.0310 ± 0.000220	0.0930 ± 0.000650	0.00749 ± 0.000130
W-851-08	4/30/14	1.10 ± 0.0200	1.30 ± 0.00640	0.610 ± 0.0190	0.0200 ± 0.000170	<0.00027	0.430 ± 0.00220	1.30 ± 0.00640	0.00710 ± 0.0000490

Table B-8.02. Building 845 Firing Table and Pit 9 Landfill tritium in ground water.

Location	Date	Tritium (pCi/L)
K9-01	5/29/14	<100
K9-02	5/29/14	<100
K9-03	5/29/14	<100
K9-04	5/29/14	<100

Table B-8.03. Building 845 Firing Table and Pit 9 Landfill metals in ground water.

Constituents of concern	K9-01	K9-02	K9-03	K9-04
	5/29/14	5/29/14	5/29/14	5/29/14
Antimony (mg/L)	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic (mg/L)	0.002	0.02	0.003	0.0008
Barium (mg/L)	0.01	0.02	0.01	0.04
Beryllium (mg/L)	<0.0001	<0.0001	<0.0001	<0.0001
Cadmium (mg/L)	<0.0001	<0.0001	<0.0001	<0.0001
Chromium (mg/L)	<0.0005	<0.0005	<0.0005	<0.0005
Cobalt (mg/L)	<0.0005	<0.0005	<0.0005	<0.0005
Copper (mg/L)	<0.0005	<0.0005	<0.0005	<0.0005
Lead (mg/L)	<0.0002	<0.0002	<0.0002	<0.0002
Lithium (mg/L)	0.068	0.075	0.086	0.094
Mercury (mg/L)	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (mg/L)	0.03	0.05	0.03	0.009
Nickel (mg/L)	<0.0005	<0.0005	<0.0005	<0.0005
Selenium (mg/L)	<0.001	<0.001	<0.001	<0.001
Silver (mg/L)	<0.0001	<0.0001	<0.0001	<0.0001
Thallium (mg/L)	<0.0001	<0.0001	<0.0001	<0.0001
Vanadium (mg/L)	<0.002	<0.002	<0.002	<0.002
Zinc (mg/L)	<0.01	<0.01	<0.01	<0.01

Table B-8.04. Building 845 Firing Table and Pit 9 Landfill volatile organic compounds (VOCs) in ground water.

Location	Date	Method	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	1,1,2-TCA (µg/L)	Freon 11 (µg/L)	Freon 113 (µg/L)	Vinyl chloride (µg/L)
K9-01	5/29/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K9-02	5/29/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K9-03	5/29/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K9-04	5/29/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table B-8.04 (Con't). Analyte detected but not reported in main table.

Location	Date	Method	Detection frequency
K9-01	5/29/14	E601	0 of 18
K9-02	5/29/14	E601	0 of 18
K9-03	5/29/14	E601	0 of 18
K9-04	5/29/14	E601	0 of 18

Table B-8.05. Building 845 Firing Table and Pit 9 Landfill high explosive compounds in ground water.

Location	Date	1,3,5-Trinitrobenzene (µg/L)	1,3-Dinitrobenzene (µg/L)	2,4-Dinitrotoluene (µg/L)	2,6-Dinitrotoluene (µg/L)	2-Amino-4,6-Dinitrotoluene (µg/L)	2-Nitrotoluene (µg/L)	3-Nitrotoluene (µg/L)	4-Amino-2,6-Dinitrotoluene (µg/L)	4-Nitrotoluene (µg/L)	HMX (µg/L)	Nitrobenzene (µg/L)	RDX (µg/L)	TNT (µg/L)
K9-01	5/29/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
K9-02	5/29/14	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<1 IJ	<2 IJ	<1 IJ	<2 IJ
K9-03	5/29/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2
K9-04	5/29/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2

Table B-8.06. Building 845 Firing Table and Pit 9 Landfill nitrate and perchlorate in ground water.

Location	Date	Nitrate (as NO3) (mg/L)	Perchlorate (µg/L)
K9-01	5/29/14	<0.5	<4
K9-02	5/29/14	<0.5	<4
K9-03	5/29/14	<0.5	<4
K9-04	5/29/14	<0.5	<4

Table B-8.07. Building 845 Firing Table and Pit 9 Landfill fluoride in ground water.

Location	Date	Fluoride (mg/L)
K9-01	5/29/14	0.27
K9-02	5/29/14	0.34
K9-03	5/29/14	0.27
K9-04	5/29/14	0.29

Table B-8.08. Building 845 Firing Table and Pit 9 Landfill total uranium and uranium isotopes in ground water.

Location	Date	MS	MS	MS	MS	MS	MS	MS	MS
		Total Uranium (in activity) (pCi/L)	Total Uranium (in mass) (µg/L)	Uranium 234 (in activity) (pCi/L)	Uranium 235 (in activity) (pCi/L)	Uranium 236 (in activity) (pCi/L)	Uranium 238 (in activity) (pCi/L)	Uranium 238 (in mass) (µg/L)	Uranium 235/238 (atom/atom)
K9-01	5/29/14	<0.06273	0.0540 ± 0.00130	<0.062	0.000820 ± 0.0000230	<0.000033	0.0180 ± 0.000430	0.0530 ± 0.00130	0.00708 ± 0.000107
K9-02	5/29/14	0.200 ± 0.00680	0.130 ± 0.00110	0.150 ± 0.00680	0.00200 ± 0.0000230	<0.000017	0.0420 ± 0.000360	0.130 ± 0.00110	0.00721 ± 0.0000590
K9-03	5/29/14	0.300 ± 0.00810	0.230 ± 0.00240	0.220 ± 0.00810	0.00350 ± 0.0000610	<0.00014	0.0750 ± 0.000800	0.220 ± 0.00240	0.00734 ± 0.000101
K9-04	5/29/14	0.180 ± 0.00680	0.130 ± 0.000680	0.140 ± 0.00680	0.00200 ± 0.0000310	<0.00006	0.0450 ± 0.000230	0.130 ± 0.000680	0.00695 ± 0.000100

Table B-8.09. Building 833 volatile organic compounds (VOCs) in ground water.

Location	Date	Method	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	1,1,2-TCA (µg/L)	Freon 11 (µg/L)	Freon 113 (µg/L)	Vinyl chloride (µg/L)
W-833-30	3/20/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-833-30	3/20/14 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-833-30	9/17/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-833-33	3/20/14	E601	110 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D
W-840-01	3/20/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table B-8.09 (Con't). Analyte detected but not reported in main table.

Location	Date	Method	Detection frequency
W-833-30	3/20/14	E601	0 of 18
W-833-30	3/20/14 DUP	E601	0 of 18
W-833-30	9/17/14	E601	0 of 18
W-833-33	3/20/14	E601	0 of 18
W-840-01	3/20/14	E601	0 of 18

Table B-8.10. Building 833 nitrate and perchlorate in ground water.

Location	Date	Nitrate (as NO3) (mg/L)	Perchlorate (µg/L)
W-840-01	3/20/14	<0.5 L	<4

Table B-8.11. Building 801 Firing Table and Pit 8 Landfill tritium in ground water.

Location	Date	Tritium (pCi/L)
K8-02B	1/21/14	<100
K8-03B	5/13/14	<100
K8-03B	11/20/14	<100
K8-04	5/13/14	<100
K8-04	5/13/14 DUP	<100

Table B-8.12. Building 801 Firing Table and Pit 8 Landfill metals in ground water.

Constituents of concern	K8-04	K8-04
	5/13/14	5/13/14 DUP
Antimony (mg/L)	<0.0005	<0.06
Arsenic (mg/L)	0.03	0.026
Barium (mg/L)	0.007	<0.01
Beryllium (mg/L)	<0.0001	<0.002
Cadmium (mg/L)	0.0006	<0.005
Chromium (mg/L)	0.008	<0.01
Cobalt (mg/L)	<0.0005	<0.02
Copper (mg/L)	<0.0005	<0.01
Lead (mg/L)	<0.0001	<0.003
Lithium (mg/L)	0.037	0.045
Mercury (mg/L)	<0.0002	<0.0002
Molybdenum (mg/L)	0.006	<0.02
Nickel (mg/L)	0.008	<0.02
Selenium (mg/L)	0.01	0.012
Silver (mg/L)	<0.0001	<0.005
Thallium (mg/L)	<0.0001	<0.005
Vanadium (mg/L)	0.1	0.086
Zinc (mg/L)	<0.01	<0.05

Table B-8.13. Building 801 Firing Table and Pit 8 Landfill volatile organic compounds (VOCs) in ground water.

Location	Date	Method	TCE (µg/L)	PCE (µg/L)	cis-1,2-DCE (µg/L)	trans-1,2-DCE (µg/L)	Carbon tetrachloride (µg/L)	Chloroform (µg/L)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	1,1-DCE (µg/L)	1,1,1-TCA (µg/L)	1,1,2-TCA (µg/L)	Freon 11 (µg/L)	Freon 113 (µg/L)	Vinyl chloride (µg/L)
K8-03B	5/13/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K8-03B	11/20/14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K8-04	5/13/14	E601	1.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K8-04	5/13/14 DUP	E601	1.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.75	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Table B-8.13 (Con't). Analyte detected but not reported in main table.

Location	Date	Method	Detection frequency
K8-03B	5/13/14	E601	0 of 18
K8-03B	11/20/14	E601	0 of 18
K8-04	5/13/14	E601	0 of 18
K8-04	5/13/14 DUP	E601	0 of 18

Table B-8.14. Building 801 Firing Table and Pit 8 Landfill high explosive compounds in ground water.

Location	Date	1,3,5-Trinitrobenzene (µg/L)	1,3-Dinitrobenzene (µg/L)	2,4-Dinitrotoluene (µg/L)	2,6-Dinitrotoluene (µg/L)	2-Amino-4,6-Dinitrotoluene (µg/L)	2-Nitrotoluene (µg/L)	3-Nitrotoluene (µg/L)	4-Amino-2,6-Dinitrotoluene (µg/L)	4-Nitrotoluene (µg/L)	HMX (µg/L)	Nitrobenzene (µg/L)	RDX (µg/L)	TNT (µg/L)
K8-04	5/13/14	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1.2	<2	<1.2	<2
K8-04	5/13/14 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1	<2

Table B-8.15. Building 801 Firing Table and Pit 8 Landfill nitrate and perchlorate in ground water.

Location	Date	Nitrate (as NO3) (mg/L)	Perchlorate (µg/L)
K8-02B	1/21/14	-	<4
K8-03B	5/13/14	5	<4
K8-03B	11/20/14	-	<4
K8-04	5/13/14	61 D	<4
K8-04	5/13/14 DUP	69	<4

Table B-8.16. Building 801 Firing Table and Pit 8 Landfill fluoride in ground water.

Location	Date	Fluoride (mg/L)
K8-04	5/13/14	0.16
K8-04	5/13/14 DUP	0.45

Table B-8.17. Building 801 Firing Table and Pit 8 Landfill total uranium and uranium isotopes in ground water.

Location	Date	AS	AS	AS	MS	MS	MS	MS	MS	MS	MS	MS
		Uranium 234 and 233 (in activity) (pCi/L)	Uranium 235 and 236 (in activity) (pCi/L)	Uranium 238 (in activity) (pCi/L)	Total Uranium (in activity) (pCi/L)	Total Uranium (in mass) (µg/L)	Uranium 234 (in activity) (pCi/L)	Uranium 235 (in activity) (pCi/L)	Uranium 236 (in activity) (pCi/L)	Uranium 238 (in activity) (pCi/L)	Uranium 238 (in mass) (µg/L)	Uranium 235/238 (atom/atom)
K8-03B	5/13/14	3.40 ± 0.671	0.165 ± 0.105 O	1.88 ± 0.422	-	-	-	-	-	-	-	-
K8-04	5/13/14	-	-	-	13.0 ± 0.140	15.0 ± 0.120	7.80 ± 0.130	0.230 ± 0.00200	<0.00096	5.00 ± 0.0390	15.0 ± 0.120	0.00722 ± 0.0000270

Appendix C

Ground Water Elevations Measured During 2014

Appendix C

Ground Water Elevations Measured During 2014

Table C-1. General Services Area Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
CDF1	02/18/14	18.56	484.06	
CDF1	06/10/14	27.81	474.81	PUMP RUNNING
CDF1	08/27/14	16.91	485.71	PUMP OFF
CDF1	11/25/14	15.89	486.73	
CON1	02/18/14	11.49	489.59	
CON1	06/10/14	12.74	488.34	
CON1	08/27/14	13.29	487.79	
CON1	11/25/14	13.32	487.76	
CON2	02/18/14	17.24	487.75	
CON2	06/10/14	18.20	486.79	
CON2	08/27/14	19.30	485.69	
CON2	11/25/14	19.71	485.28	
W-24P-03	02/14/14	2.23	425.51	
W-24P-03	06/10/14	2.36	425.38	
W-24P-03	08/27/14	2.59	425.15	
W-24P-03	11/12/14	2.61	425.13	
W-25D-01	02/18/14	19.79	445.70	
W-25D-01	06/10/14	19.92	445.57	
W-25D-01	08/27/14	20.57	444.92	
W-25D-01	11/12/14	20.57	444.92	
W-25D-02	02/18/14	12.39	445.80	
W-25D-02	06/10/14	14.57	443.62	
W-25D-02	08/27/14	16.14	442.05	
W-25D-02	11/12/14	15.67	442.52	
W-25M-01	02/18/14	25.42	454.14	
W-25M-01	06/10/14	25.40	454.16	
W-25M-01	08/26/14	26.37	453.19	
W-25M-01	11/12/14	26.61	452.95	
W-25M-02	02/18/14	12.13	473.11	
W-25M-02	06/10/14	14.61	470.63	
W-25M-02	08/26/14	14.67	470.57	
W-25M-02	11/25/14	15.13	470.11	
W-25M-03	02/18/14	11.76	475.67	
W-25M-03	06/10/14	12.86	474.57	
W-25M-03	08/26/14	15.40	472.03	
W-25M-03	11/25/14	16.10	471.33	
W-25N-01	02/10/14	19.35	487.77	
W-25N-01	05/20/14	20.42	486.70	
W-25N-01	08/26/14	21.76	485.36	
W-25N-01	11/10/14	22.02	485.10	
W-25N-04	02/10/14	41.51	486.38	
W-25N-04	05/20/14	41.80	486.09	
W-25N-04	08/26/14	42.22	485.67	
W-25N-04	11/10/14	42.23	485.66	

Table C-1. General Services Area Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-25N-05	02/18/14	13.81	483.36	
W-25N-05	06/10/14	15.51	481.66	
W-25N-05	08/26/14	16.06	481.11	
W-25N-05	11/25/14	16.63	480.54	
W-25N-06	02/18/14	17.31	479.51	
W-25N-06	06/10/14	18.42	478.40	
W-25N-06	08/26/14	19.35	477.47	
W-25N-06	11/25/14	19.82	477.00	
W-25N-07	02/18/14	16.93	488.47	
W-25N-07	06/10/14	18.83	486.57	
W-25N-07	08/26/14	19.60	485.80	
W-25N-07	11/25/14	-	-	
W-25N-08	02/10/14	24.56	486.26	
W-25N-08	05/20/14	25.63	485.19	
W-25N-08	08/26/14	26.12	484.70	
W-25N-08	11/10/14	27.09	483.73	
W-25N-09	02/10/14	19.77	490.69	
W-25N-09	05/20/14	20.78	489.68	
W-25N-09	08/26/14	21.32	489.14	
W-25N-09	11/10/14	21.03	489.43	
W-25N-10	02/18/14	16.22	489.34	
W-25N-10	06/10/14	17.28	488.28	
W-25N-10	08/26/14	19.49	486.07	
W-25N-10	11/25/14	18.58	486.98	
W-25N-11	02/18/14	15.72	489.42	
W-25N-11	06/10/14	17.93	487.21	
W-25N-11	08/26/14	21.37	483.77	
W-25N-11	11/25/14	20.61	484.53	
W-25N-12	02/18/14	15.90	489.62	
W-25N-12	06/10/14	17.81	487.71	
W-25N-12	08/26/14	19.05	486.47	
W-25N-12	11/25/14	18.66	486.86	
W-25N-13	02/18/14	17.37	488.01	
W-25N-13	06/10/14	19.96	485.42	
W-25N-13	08/26/14	20.44	484.94	
W-25N-13	11/25/14	21.02	484.36	
W-25N-15	02/18/14	16.20	484.88	
W-25N-15	06/10/14	16.53	484.55	
W-25N-15	08/26/14	17.30	483.78	
W-25N-15	11/25/14	17.87	483.21	
W-25N-18	02/18/14	16.45	485.37	
W-25N-18	06/10/14	17.57	484.25	
W-25N-18	08/26/14	18.41	483.41	
W-25N-18	11/25/14	18.86	482.96	

Table C-1. General Services Area Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-25N-20	02/10/14	17.02	485.09	
W-25N-20	05/20/14	18.12	483.99	
W-25N-20	08/26/14	19.23	482.88	
W-25N-20	11/10/14	19.71	482.40	
W-25N-21	02/10/14	22.50	490.68	
W-25N-21	05/20/14	23.48	489.70	
W-25N-21	08/26/14	24.47	488.71	
W-25N-21	11/10/14	24.92	488.26	
W-25N-22	02/10/14	25.55	487.20	
W-25N-22	05/20/14	26.40	486.35	
W-25N-22	08/26/14	27.86	484.89	
W-25N-22	11/10/14	28.00	484.75	
W-25N-23	02/10/14	23.50	486.58	
W-25N-23	05/20/14	24.56	485.52	
W-25N-23	08/26/14	25.70	484.38	
W-25N-23	11/10/14	26.25	483.83	
W-25N-24	02/10/14	19.08	487.54	
W-25N-24	05/20/14	20.12	486.50	
W-25N-24	08/26/14	21.15	485.47	
W-25N-24	11/10/14	21.70	484.92	
W-25N-25	02/18/14	13.25	487.82	
W-25N-25	06/10/14	16.06	485.01	
W-25N-25	08/26/14	16.66	484.41	
W-25N-25	11/25/14	17.15	483.92	
W-25N-26	02/18/14	13.61	485.76	
W-25N-26	06/10/14	15.60	483.77	
W-25N-26	08/26/14	15.59	483.78	
W-25N-26	11/25/14	16.05	483.32	
W-25N-28	02/18/14	13.49	483.66	
W-25N-28	06/10/14	15.32	481.83	
W-25N-28	08/26/14	16.31	480.84	
W-25N-28	11/25/14	16.76	480.39	
W-26R-01	02/10/14	21.65	488.06	
W-26R-01	05/20/14	22.71	487.00	
W-26R-01	08/26/14	23.25	486.46	
W-26R-01	11/10/14	23.43	486.28	
W-26R-02	02/10/14	37.14	491.06	
W-26R-02	05/20/14	38.20	490.00	
W-26R-02	08/26/14	39.46	488.74	
W-26R-02	11/10/14	39.52	488.68	
W-26R-03	02/10/14	18.10	488.12	
W-26R-03	05/20/14	24.00	482.22	
W-26R-03	08/26/14	24.86	481.36	
W-26R-03	11/10/14	20.81	485.41	

Table C-1. General Services Area Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-26R-04	02/10/14	20.76	487.91	
W-26R-04	05/20/14	21.89	486.78	
W-26R-04	08/26/14	22.94	485.73	
W-26R-04	11/10/14	23.07	485.60	
W-26R-05	02/10/14	25.49	487.62	
W-26R-05	05/20/14	25.82	487.29	
W-26R-05	08/26/14	26.50	486.61	
W-26R-05	11/10/14	26.81	486.30	
W-26R-06	02/10/14	26.98	487.86	
W-26R-06	05/20/14	28.09	486.75	
W-26R-06	08/26/14	28.93	485.91	
W-26R-06	11/10/14	28.98	485.86	
W-26R-07	02/10/14	29.74	490.85	
W-26R-07	05/20/14	30.79	489.80	
W-26R-07	08/26/14	31.47	489.12	
W-26R-07	11/10/14	31.73	488.86	
W-26R-08	02/10/14	31.80	491.31	
W-26R-08	05/20/14	32.92	490.19	
W-26R-08	08/26/14	33.22	489.89	
W-26R-08	11/10/14	33.43	489.68	
W-26R-11	02/10/14	18.95	488.26	
W-26R-11	05/20/14	20.04	487.17	
W-26R-11	08/26/14	21.12	486.09	
W-26R-11	11/10/14	21.37	485.84	
W-35A-01	02/19/14	16.72	491.49	
W-35A-01	06/04/14	17.26	490.95	
W-35A-01	08/27/14	19.27	488.94	
W-35A-01	12/02/14	19.29	488.92	
W-35A-02	02/19/14	15.23	494.47	
W-35A-02	06/04/14	16.31	493.39	
W-35A-02	08/27/14	17.83	491.87	
W-35A-02	12/02/14	17.84	491.86	
W-35A-03	02/19/14	16.19	490.65	
W-35A-03	06/04/14	16.87	489.97	
W-35A-03	08/27/14	17.47	489.37	
W-35A-03	12/02/14	17.52	489.32	
W-35A-04	02/19/14	15.77	488.30	
W-35A-04	06/04/14	16.38	487.69	
W-35A-04	08/27/14	18.05	486.02	
W-35A-04	12/02/14	18.17	485.90	
W-35A-05	02/19/14	17.56	490.75	
W-35A-05	06/04/14	18.27	490.04	
W-35A-05	08/27/14	19.85	488.46	
W-35A-05	12/02/14	19.43	488.88	

Table C-1. General Services Area Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-35A-06	02/19/14	14.83	489.19	
W-35A-06	06/04/14	15.45	488.57	
W-35A-06	08/27/14	16.33	487.69	
W-35A-06	12/02/14	16.22	487.80	
W-35A-07	02/19/14	10.25	503.07	
W-35A-07	06/04/14	11.16	502.16	
W-35A-07	08/27/14	12.17	501.15	
W-35A-07	12/02/14	12.38	500.94	
W-35A-08	02/19/14	17.87	500.09	
W-35A-08	06/04/14	18.31	499.65	
W-35A-08	08/27/14	19.56	498.40	
W-35A-08	12/02/14	19.79	498.17	
W-35A-09	02/19/14	21.07	494.60	
W-35A-09	06/04/14	22.77	492.90	
W-35A-09	08/27/14	23.64	492.03	
W-35A-09	12/02/14	24.13	491.54	
W-35A-10	02/19/14	17.98	494.18	
W-35A-10	06/04/14	18.63	493.53	
W-35A-10	08/27/14	19.37	492.79	
W-35A-10	12/02/14	19.61	492.55	
W-35A-11	02/19/14	6.35	501.11	
W-35A-11	06/04/14	7.17	500.29	
W-35A-11	08/27/14	9.10	498.36	
W-35A-11	12/02/14	8.95	498.51	
W-35A-12	02/19/14	14.65	493.03	
W-35A-12	06/04/14	15.10	492.58	
W-35A-12	08/27/14	15.86	491.82	
W-35A-12	12/02/14	15.75	491.93	
W-35A-13	02/19/14	13.73	489.61	
W-35A-13	06/04/14	14.28	489.06	
W-35A-13	08/27/14	15.25	488.09	
W-35A-13	12/02/14	20.76	482.58	
W-35A-14	02/19/14	17.20	495.33	
W-35A-14	06/04/14	18.95	493.58	
W-35A-14	08/27/14	20.21	492.32	
W-35A-14	12/02/14	20.45	492.08	
W-7A	02/10/14	-	-	
W-7A	05/28/14	21.98	502.91	
W-7A	09/10/14	22.14	502.75	
W-7A	11/10/14	22.70	502.19	
W-7B	02/10/14	21.75	489.39	PUMP REMOVED 12/16/13
W-7B	05/20/14	22.85	488.29	
W-7B	08/26/14	23.86	487.28	
W-7B	11/10/14	24.30	486.84	

Table C-1. General Services Area Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-7C	02/10/14	19.06	498.51	
W-7C	05/20/14	19.84	497.73	
W-7C	08/26/14	21.26	496.31	
W-7C	11/10/14	20.67	496.90	
W-7D	02/10/14	15.91	491.21	
W-7D	05/20/14	17.05	490.07	
W-7D	08/26/14	17.76	489.36	
W-7D	11/10/14	17.92	489.20	
W-7DS	02/10/14	18.28	488.32	
W-7DS	05/20/14	19.35	487.25	
W-7DS	08/26/14	20.43	486.17	
W-7DS	11/10/14	20.74	485.86	
W-7E	02/10/14	19.86	489.42	
W-7E	05/20/14	20.61	488.67	
W-7E	08/26/14	21.48	487.80	
W-7E	11/10/14	21.51	487.77	
W-7ES	02/10/14	20.01	489.70	
W-7ES	05/20/14	21.21	488.50	
W-7ES	08/26/14	22.35	487.36	
W-7ES	11/10/14	22.59	487.12	
W-7F	02/11/14	31.98	495.10	
W-7F	05/28/14	43.78	483.30	
W-7F	09/10/14	43.75	483.33	
W-7F	11/10/14	43.81	483.27	
W-7F	12/30/14	-	-	
W-7G	02/10/14	12.97	499.95	
W-7G	05/28/14	13.71	499.21	
W-7G	08/26/14	14.21	498.71	
W-7G	11/10/14	14.37	498.55	
W-7H	02/10/14	17.57	493.87	
W-7H	05/28/14	18.15	493.29	
W-7H	08/26/14	18.91	492.53	
W-7H	11/10/14	19.03	492.41	
W-7I	02/11/14	34.11	495.19	
W-7I	05/28/14	49.53	479.77	
W-7I	09/10/14	47.14	482.16	
W-7I	11/11/14	47.39	481.91	
W-7J	02/11/14	32.47	495.42	
W-7J	05/28/14	46.09	481.80	
W-7J	09/10/14	45.50	482.39	
W-7J	11/11/14	45.50	482.39	
W-7K	02/10/14	9.77	500.16	
W-7K	05/20/14	10.39	499.54	
W-7K	08/26/14	11.47	498.46	

Table C-1. General Services Area Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-7K	11/10/14	11.58	498.35	
W-7L	02/10/14	12.55	500.21	
W-7L	05/20/14	13.16	499.60	
W-7L	08/26/14	14.26	498.50	
W-7L	11/10/14	14.58	498.18	
W-7M	02/10/14	13.35	494.40	
W-7M	05/20/14	14.38	493.37	
W-7M	08/26/14	15.32	492.43	
W-7M	11/10/14	15.50	492.25	
W-7N	02/10/14	18.45	489.73	
W-7N	05/20/14	19.59	488.59	
W-7N	08/26/14	20.63	487.55	
W-7N	11/10/14	21.03	487.15	
W-7O	02/11/14	26.23	489.56	FC=26.1 Q=0.01
W-7O	05/28/14	27.57	488.22	FC=27.40 Q=0.01
W-7O	08/26/14	28.36	487.43	FC=28.30 Q=0.01
W-7O	11/11/14	28.83	486.96	FC=28.90 Q=0.01gpm
W-7P	02/10/14	20.56	489.36	NOT RUNNING
W-7P	05/20/14	21.58	488.34	
W-7P	09/10/14	21.67	488.25	
W-7P	11/10/14	21.90	488.02	
W-7PS	02/10/14	-	-	DT=18.30
W-7PS	05/20/14	-	-	TD=18.30 PUMP REMOVED
W-7PS	08/26/14	-	-	TD=18.30
W-7PS	11/10/14	-	-	
W-7Q	02/11/14	26.61	491.01	
W-7Q	05/28/14	-	-	TD=27.35
W-7Q	08/26/14	-	-	TD=27.35
W-7Q	11/10/14	-	-	
W-7R	02/10/14	20.71	489.69	
W-7R	05/20/14	21.80	488.60	NOT RUNNING
W-7R	08/26/14	23.08	487.32	
W-7R	11/10/14	23.22	487.18	
W-7S	02/10/14	20.14	489.74	
W-7S	05/20/14	20.73	489.15	
W-7S	08/26/14	22.47	487.41	
W-7S	11/10/14	22.61	487.27	
W-7T	02/10/14	20.03	489.74	
W-7T	05/20/14	21.28	488.49	
W-7T	08/26/14	22.36	487.41	
W-7T	11/10/14	22.55	487.22	
W-843-01	02/24/14	111.76	512.00	
W-843-01	05/28/14	112.58	511.18	
W-843-01	09/09/14	114.01	509.75	

Table C-1. General Services Area Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-843-01	11/17/14	114.37	509.39	
W-843-02	02/24/14	107.35	515.05	
W-843-02	05/28/14	107.34	515.06	
W-843-02	09/09/14	107.90	514.50	
W-843-02	11/17/14	108.25	514.15	
W-872-01	02/11/14	32.76	497.88	FC=OFF
W-872-01	06/03/14	-	-	TD=34.10
W-872-01	09/10/14	-	-	TD=34.10
W-872-01	11/12/14	-	-	
W-872-02	02/11/14	37.09	495.90	
W-872-02	06/03/14	44.38	488.61	
W-872-02	09/10/14	-	-	
W-872-02	11/12/14	44.50	488.49	
W-873-01	02/11/14	17.86	516.07	
W-873-01	06/03/14	18.93	515.00	
W-873-01	09/10/14	20.59	513.34	
W-873-01	11/12/14	20.57	513.36	
W-873-02	02/11/14	35.93	496.92	
W-873-02	06/03/14	36.51	496.34	
W-873-02	09/10/14	37.07	495.78	
W-873-02	11/12/14	36.98	495.87	
W-873-03	02/11/14	31.82	501.67	
W-873-03	06/03/14	31.72	501.77	
W-873-03	09/10/14	32.47	501.02	
W-873-03	11/12/14	32.52	500.97	
W-873-04	02/11/14	20.67	510.74	
W-873-04	06/03/14	20.85	510.56	
W-873-04	09/10/14	21.36	510.05	
W-873-04	11/12/14	21.43	509.98	
W-873-06	02/11/14	35.41	497.65	
W-873-06	06/03/14	35.71	497.35	
W-873-06	09/10/14	36.33	496.73	
W-873-06	11/12/14	36.38	496.68	
W-873-07	02/11/14	36.45	496.45	
W-873-07	06/03/14	44.66	488.24	
W-873-07	09/10/14	45.28	487.62	
W-873-07	11/12/14	-	-	
W-875-01	02/11/14	21.22	511.18	
W-875-01	06/03/14	21.48	510.92	
W-875-01	09/10/14	21.54	510.86	
W-875-01	11/12/14	21.59	510.81	
W-875-02	02/11/14	22.90	508.46	
W-875-02	06/03/14	22.85	508.51	
W-875-02	09/10/14	22.82	508.54	

Table C-1. General Services Area Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-875-02	11/12/14	22.93	508.43	
W-875-03	02/11/14	33.53	495.11	
W-875-03	06/03/14	33.57	495.07	
W-875-03	09/10/14	33.62	495.02	
W-875-03	11/12/14	33.69	494.95	
W-875-04	02/11/14	21.95	510.28	
W-875-04	06/03/14	21.70	510.53	
W-875-04	09/10/14	21.73	510.50	
W-875-04	11/12/14	21.82	510.41	
W-875-05	02/11/14	23.46	512.94	
W-875-05	06/03/14	23.58	512.82	
W-875-05	09/10/14	23.65	512.75	
W-875-05	11/12/14	23.66	512.74	
W-875-06	02/11/14	26.13	503.29	
W-875-06	06/03/14	30.31	499.11	
W-875-06	09/10/14	30.34	499.08	
W-875-06	11/12/14	30.41	499.01	
W-875-07	02/11/14	34.10	495.44	FC=OFF
W-875-07	05/28/14	-	-	TD=35.60 FC=ON
W-875-07	09/10/14	35.06	494.48	FC=RUNNING
W-875-07	11/11/14	35.26	494.28	FC= RUNNING
W-875-08	02/11/14	33.91	495.85	FC=OFF
W-875-08	05/28/14	51.62	478.14	FC=ON
W-875-08	09/10/14	51.52	478.24	FC=RUNNING 4IN HG
W-875-08	11/11/14	51.58	478.18	4.5IN HG FC=RUNNING
W-875-09	02/11/14	33.88	495.83	FC=OFF
W-875-09	05/28/14	-	-	TD=42.40 FC=ON
W-875-09	09/10/14	-	-	TD=42.50 FC=RUNNING 7IN HG
W-875-09	11/11/14	-	-	TD=42.50 DRY
W-875-10	02/11/14	34.30	495.89	FC=OFF
W-875-10	05/28/14	-	-	TD=41.80 FC=ON
W-875-10	09/10/14	-	-	TD=41.80
W-875-10	11/11/14	-	-	TD=41.78 DRY
W-875-11	02/11/14	34.34	495.39	
W-875-11	05/28/14	41.90	487.83	
W-875-11	09/10/14	41.85	487.88	FC=RUNNING 4IN HG
W-875-11	11/11/14	41.88	487.85	4.1IN HG RUNNING
W-875-15	02/11/14	33.84	496.07	FC=OFF
W-875-15	05/28/14	-	-	TD=40.50 FC=ON
W-875-15	09/10/14	-	-	TD=41.50 FC=RUNNING 2.5IN HG
W-875-15	11/11/14	-	-	
W-876-01	02/11/14	24.77	513.21	
W-876-01	06/03/14	24.34	513.64	
W-876-01	09/10/14	24.82	513.16	

Table C-1. General Services Area Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-876-01	11/24/14	24.97	513.01	
W-879-01	02/24/14	46.25	505.61	
W-879-01	05/28/14	46.70	505.16	
W-879-01	09/10/14	47.31	504.55	
W-879-01	11/24/14	47.48	504.38	
W-889-01	02/24/14	39.20	514.43	
W-889-01	05/28/14	39.23	514.40	
W-889-01	09/10/14	39.24	514.39	
W-889-01	11/24/14	39.26	514.37	
W-CGSA-1732	02/11/14	19.14	503.71	
W-CGSA-1732	05/20/14	19.73	503.12	
W-CGSA-1732	09/10/14	19.19	503.66	
W-CGSA-1732	11/11/14	19.18	503.67	
W-CGSA-1733	02/10/14	-	-	TD=20.70
W-CGSA-1733	05/20/14	-	-	TD=20.70
W-CGSA-1733	08/26/14	-	-	TD=21.40
W-CGSA-1733	11/10/14	-	-	TD=20.50 DRY
W-CGSA-1735	02/10/14	-	-	TD=14.90
W-CGSA-1735	05/20/14	-	-	TD=14.90
W-CGSA-1735	08/26/14	-	-	TD=14.90
W-CGSA-1735	11/10/14	-	-	
W-CGSA-1736	02/10/14	20.88	488.49	
W-CGSA-1736	05/20/14	21.39	487.98	
W-CGSA-1736	08/26/14	21.42	487.95	
W-CGSA-1736	11/10/14	21.47	487.90	
W-CGSA-1737	02/10/14	18.20	489.41	
W-CGSA-1737	05/20/14	19.38	488.23	
W-CGSA-1737	08/26/14	20.56	487.05	
W-CGSA-1737	11/10/14	21.18	486.43	
W-CGSA-1739	02/10/14	19.77	492.70	
W-CGSA-1739	05/20/14	19.52	492.95	
W-CGSA-1739	08/26/14	19.61	492.86	
W-CGSA-1739	11/10/14	19.45	493.02	
W-CGSA-2708	02/24/14	39.06	515.68	
W-CGSA-2708	05/28/14	27.56	527.18	
W-CGSA-2708	09/10/14	29.14	525.60	
W-CGSA-2708	11/24/14	29.47	525.27	
W-CGSA-2907	05/28/14	28.31	-	
W-CGSA-2908	05/28/14	27.56	-	

Table C-2. Building 834 Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-834-1709	02/26/14	-	-	PADLOCKED ROOM
W-834-1709	05/07/14	-	-	
W-834-1709	09/02/14	26.30	990.28	
W-834-1709	12/10/14	25.97	990.61	
W-834-1711	02/26/14	-	-	PADLOCKED ROOM
W-834-1711	05/07/14	-	-	
W-834-1711	09/02/14	37.90	979.04	
W-834-1711	12/10/14	37.88	979.06	
W-834-1712	02/26/14	-	-	PADLOCKED ROOM
W-834-1712	05/07/14	-	-	AREA OFF LIMITS PADLOCKED DOOR
W-834-1712	09/02/14	-	-	TD=16.65
W-834-1712	12/10/14	-	-	
W-834-1824	02/26/14	40.12	920.66	
W-834-1824	05/07/14	40.60	920.18	
W-834-1824	09/02/14	40.45	920.33	
W-834-1824	12/10/14	40.50	920.28	
W-834-1825	02/26/14	-	-	TD=40.80
W-834-1825	05/07/14	40.81	916.86	
W-834-1825	09/02/14	40.89	916.78	
W-834-1825	12/10/14	40.80	916.87	
W-834-1833	02/26/14	40.60	915.51	
W-834-1833	05/07/14	41.00	915.11	
W-834-1833	09/02/14	41.15	914.96	
W-834-1833	12/10/14	41.10	915.01	
W-834-2001	02/26/14	-	-	DIESEL WELL
W-834-2001	05/07/14	-	-	8.1 IN HG 71 PSI DIESEL WELL
W-834-2001	09/02/14	24.60	989.69	100 PSI 7.9IN HG
W-834-2001	12/10/14	20.10	994.19	
W-834-2113	05/07/14	40.00	959.01	
W-834-2113	09/02/14	40.27	958.74	
W-834-2113	12/10/14	40.30	958.71	
W-834-2117	02/26/14	42.53	931.36	
W-834-2117	05/07/14	42.68	931.21	
W-834-2117	09/02/14	43.20	930.69	
W-834-2117	12/10/14	43.36	930.53	
W-834-2118	02/25/14	31.16	908.13	
W-834-2118	05/08/14	31.24	908.05	
W-834-2118	09/02/14	31.50	907.79	
W-834-2118	12/10/14	31.68	907.61	
W-834-2119	02/26/14	55.62	899.59	
W-834-2119	05/07/14	55.40	899.81	
W-834-2119	09/02/14	55.60	899.61	
W-834-2119	12/10/14	55.45	899.76	
W-834-A1	02/26/14	33.86	981.23	

Table C-2. Building 834 Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-834-A1	05/07/14	34.12	980.97	
W-834-A1	09/02/14	32.52	982.57	
W-834-A1	12/10/14	32.48	982.61	
W-834-A2	02/26/14	-	-	TD=18.50
W-834-A2	05/07/14	-	-	TD=18.50
W-834-A2	09/02/14	-	-	TD=18.50
W-834-A2	12/10/14	-	-	TD=18.50 DRY
W-834-B2	02/26/14	-	-	TD=16.60
W-834-B2	05/07/14	-	-	T=16.60 FC=ON 8.3 IN HG
W-834-B2	09/02/14	-	-	TD=16.75 8.1IN HG
W-834-B2	12/10/14	17.05	1001.34	FC=OFF
W-834-B3	02/26/14	11.20	1006.68	FC=ON 8IN Hg
W-834-B3	05/07/14	11.10	1006.78	0 PSI 8 IN HG
W-834-B3	09/02/14	11.20	1006.68	8IN HG
W-834-B3	12/10/14	8.80	1009.08	FC=OFF
W-834-B4	02/26/14	-	-	TD=18.50
W-834-B4	05/07/14	-	-	TD=18.50
W-834-B4	09/02/14	-	-	TD=18.50
W-834-B4	12/10/14	-	-	TD=18.50 DRY
W-834-C2	02/26/14	-	-	FC=OFF TD=19.20
W-834-C2	05/07/14	-	-	TD=19.20 FC=OFF
W-834-C2	09/02/14	-	-	TD=19.00
W-834-C2	12/10/14	-	-	
W-834-C4	02/26/14	10.95	1008.31	
W-834-C4	05/07/14	10.11	1009.15	
W-834-C4	09/02/14	11.70	1007.56	
W-834-C4	12/10/14	9.03	1010.23	
W-834-C5	02/26/14	-	-	TD=13.50
W-834-C5	05/07/14	-	-	TD=13.50
W-834-C5	09/02/14	-	-	TD=13.50
W-834-C5	12/10/14	13.70	1001.97	VERY LITTLE WATER
W-834-D2	02/26/14	-	-	TD=325.10
W-834-D2	05/07/14	-	-	TD=325.10
W-834-D2	09/02/14	-	-	TD=325.10
W-834-D2	12/10/14	-	-	TD=325.10 DRY
W-834-D3	02/26/14	31.21	987.34	NOT HOOKED TO FC
W-834-D3	05/07/14	29.20	989.35	FC=OFF
W-834-D3	09/02/14	30.69	987.86	
W-834-D3	12/10/14	31.90	986.65	
W-834-D4	02/26/14	-	-	55 PSI 7IN Hg
W-834-D4	05/07/14	-	-	TD=36.50 7 IN HG 0 PSI
W-834-D4	09/02/14	-	-	TD=31.55 9IN HG
W-834-D4	12/10/14	-	-	TD=31.55 FC=OFF DRY
W-834-D5	02/26/14	-	-	TD=31.55 FC=OFF

Table C-2. Building 834 Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-834-D5	05/07/14	-	-	TD=31.55 FC=OFF
W-834-D5	09/02/14	-	-	TD=31.60
W-834-D5	12/10/14	-	-	TD=31.60 FC=OFF DRY
W-834-D6	02/26/14	34.30	983.98	69 PSI 7IN Hg
W-834-D6	05/07/14	34.40	983.88	
W-834-D6	09/02/14	34.50	983.78	
W-834-D6	12/10/14	33.60	984.68	FC=OFF
W-834-D7	02/26/14	32.49	981.43	70 PSI 7.5 IN Hg
W-834-D7	05/07/14	-	-	
W-834-D7	09/02/14	32.40	981.52	
W-834-D7	12/10/14	30.90	983.02	FC=OFF
W-834-D10	02/26/14	-	-	TD=34.15 NOT HOOKED TO FC
W-834-D10	05/07/14	-	-	TD=34.15 NOT HOOKED UP
W-834-D10	09/02/14	-	-	TD=34.15
W-834-D10	12/10/14	-	-	TD=34.15 DRY
W-834-D11	02/26/14	24.34	993.20	
W-834-D11	05/07/14	24.30	993.24	
W-834-D11	09/02/14	24.47	993.07	
W-834-D11	12/10/14	24.35	993.19	FC=OFF
W-834-D12	02/26/14	29.45	986.84	7 PSI 8IN Hg
W-834-D12	05/07/14	29.60	986.69	
W-834-D12	09/02/14	29.58	986.71	
W-834-D12	12/10/14	29.95	986.34	FC=OFF
W-834-D13	02/26/14	30.00	987.99	8IN Hg 58PSI
W-834-D13	05/07/14	30.27	987.72	
W-834-D13	09/02/14	29.00	988.99	
W-834-D13	12/10/14	30.10	987.89	FC=OFF
W-834-D14	02/26/14	30.30	988.07	NOT HOOKED TO FC
W-834-D14	05/07/14	30.90	987.47	FC=OFF
W-834-D14	09/02/14	-	-	TD=31.10
W-834-D14	12/10/14	31.15	987.22	FC=OFF
W-834-D15	02/26/14	-	-	TD=25.37
W-834-D15	05/07/14	-	-	TD=25.37
W-834-D15	09/02/14	-	-	TD=25.35
W-834-D15	12/10/14	-	-	TD=25.35 DRY
W-834-D16	02/26/14	-	-	TD=10.95
W-834-D16	05/07/14	-	-	TD=10.90
W-834-D16	09/02/14	-	-	TD=10.90
W-834-D16	12/10/14	-	-	TD=10.06 DRY
W-834-D17	02/26/14	-	-	TD=33.60
W-834-D17	05/07/14	-	-	TD=33.6
W-834-D17	09/02/14	-	-	TD=33.62
W-834-D17	12/10/14	-	-	
W-834-D18	02/26/14	27.55	990.91	

Table C-2. Building 834 Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-834-D18	05/07/14	27.68	990.78	
W-834-D18	09/02/14	27.84	990.62	
W-834-D18	12/10/14	27.90	990.56	
W-834-G3	02/26/14	-	-	TD=12.35
W-834-G3	05/07/14	-	-	TD=12.35
W-834-G3	09/02/14	-	-	TD=12.35
W-834-G3	12/10/14	-	-	TD=12.30 DRY
W-834-H2	02/26/14	-	-	TD=32.30 FC=OFF
W-834-H2	05/07/14	-	-	TD=32.30 FC=OFF
W-834-H2	09/02/14	-	-	TD=32.30
W-834-H2	12/10/14	-	-	TD=32.31 DRY
W-834-J1	02/26/14	31.87	987.96	7.1 IN Hg
W-834-J1	05/07/14	31.92	987.91	FC=ON 6.3IN HG 0 PSI
W-834-J1	09/02/14	31.00	988.83	
W-834-J1	12/10/14	32.04	987.79	
W-834-J2	02/26/14	33.30	986.65	FC=OFF
W-834-J2	05/07/14	33.42	986.53	FC=OFF
W-834-J2	09/02/14	34.90	985.05	
W-834-J2	12/10/14	34.98	984.97	
W-834-J3	02/26/14	-	-	TD=75.40
W-834-J3	05/07/14	-	-	TD=75.40
W-834-J3	09/02/14	-	-	TD=75.40
W-834-J3	12/10/14	-	-	
W-834-M1	02/26/14	62.00	962.21	
W-834-M1	05/07/14	62.18	962.03	
W-834-M1	09/02/14	62.35	961.86	
W-834-M1	12/10/14	62.30	961.91	
W-834-M2	02/25/14	-	-	TD=51.30
W-834-M2	05/07/14	-	-	TD=51.30
W-834-M2	09/02/14	-	-	TD=51.30
W-834-M2	12/10/14	-	-	TD=51.30 DRY
W-834-S1	02/26/14	35.44	966.64	FC= ON 8IN Hg
W-834-S1	05/07/14	35.56	966.52	NEEDS BOOK
W-834-S1	09/02/14	35.40	966.68	
W-834-S1	12/10/14	25.90	976.18	
W-834-S10	02/26/14	-	-	TD=24.70
W-834-S10	05/07/14	-	-	TD=24.70
W-834-S10	09/02/14	-	-	TD=24.70
W-834-S10	12/10/14	-	-	TD=24.68 DRY
W-834-S12A	02/26/14	51.60	953.13	
W-834-S12A	05/07/14	51.71	953.02	
W-834-S12A	09/02/14	51.90	952.83	
W-834-S12A	12/10/14	51.97	952.76	
W-834-S13	02/26/14	47.27	956.47	7.3IN Hg

Table C-2. Building 834 Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-834-S13	05/07/14	45.90	957.84	FC=ON 7.3 IN HG UNABLE TO READ PSI GAUGE
W-834-S13	09/02/14	46.50	957.24	7.8IN HG
W-834-S13	12/10/14	46.85	956.89	
W-834-S4	02/26/14	78.88	947.79	
W-834-S4	05/07/14	78.93	947.74	
W-834-S4	09/02/14	79.10	947.57	
W-834-S4	12/10/14	79.05	947.62	
W-834-S5	02/25/14	-	-	TD=51.30
W-834-S5	05/08/14	-	-	TD=51.30
W-834-S5	09/02/14	-	-	TD=51.30
W-834-S5	12/10/14	-	-	ROAD SATURATED NM/UC
W-834-S6	02/25/14	38.62	890.80	
W-834-S6	05/08/14	38.70	890.72	
W-834-S6	09/02/14	39.89	889.53	
W-834-S6	12/10/14	-	-	TOO WET TO DRIVE NM/UC
W-834-S7	02/25/14	-	-	TD=51.95
W-834-S7	05/08/14	-	-	TD=51.95
W-834-S7	09/02/14	-	-	TD=24.70
W-834-S7	12/10/14	-	-	ROAD SATURATED NM/UC
W-834-S8	02/26/14	-	-	TD=65.10
W-834-S8	05/07/14	-	-	TD=15.10 FC=OFF
W-834-S8	09/02/14	-	-	
W-834-S8	12/10/14	65.70	937.02	
W-834-S9	02/26/14	59.12	940.89	
W-834-S9	05/07/14	58.70	941.31	
W-834-S9	09/02/14	58.87	941.14	
W-834-S9	12/10/14	59.00	941.01	
W-834-T1	02/26/14	317.18	641.74	
W-834-T1	05/07/14	316.68	642.24	
W-834-T1	09/02/14	316.00	642.92	
W-834-T1	12/10/14	317.22	641.70	
W-834-T11	02/26/14	-	-	TD=36.70
W-834-T11	05/08/14	-	-	TD=36.70
W-834-T11	09/02/14	-	-	TD=36.70
W-834-T11	12/10/14	-	-	
W-834-T2	02/26/14	41.74	918.02	
W-834-T2	05/07/14	41.92	917.84	
W-834-T2	09/02/14	42.15	917.61	
W-834-T2	12/10/14	42.10	917.66	
W-834-T2A	02/26/14	40.20	918.74	
W-834-T2A	05/07/14	40.40	918.54	
W-834-T2A	09/02/14	40.59	918.35	
W-834-T2A	12/10/14	42.27	916.67	
W-834-T2B	02/26/14	-	-	TD=38.55

Table C-2. Building 834 Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-834-T2B	05/07/14	-	-	TD=38.55
W-834-T2B	09/02/14	-	-	TD=38.50
W-834-T2B	12/10/14	-	-	TD=38.50 DRY
W-834-T2C	02/26/14	-	-	TD=29.30
W-834-T2C	05/07/14	-	-	TD=39.05
W-834-T2C	09/02/14	-	-	TD=39.05
W-834-T2C	12/10/14	-	-	
W-834-T2D	02/25/14	37.87	916.52	
W-834-T2D	05/08/14	37.93	916.46	
W-834-T2D	09/02/14	38.16	916.23	
W-834-T2D	12/10/14	-	-	
W-834-T3	02/25/14	323.42	609.12	
W-834-T3	05/08/14	323.48	609.06	
W-834-T3	09/02/14	323.57	608.97	
W-834-T3	12/10/14	323.55	608.99	
W-834-T5	02/25/14	77.63	853.34	
W-834-T5	05/08/14	77.70	853.27	
W-834-T5	09/02/14	77.89	853.08	
W-834-T5	12/10/14	77.74	853.23	
W-834-T7A	02/25/14	-	-	TD=77.80
W-834-T7A	05/08/14	-	-	TD=77.80
W-834-T7A	09/02/14	-	-	TD=77.80
W-834-T7A	12/10/14	-	-	ROAD UNSAFE MUDDY NM/UC
W-834-T8A	02/25/14	-	-	TD=32.35
W-834-T8A	05/08/14	-	-	TD=32.35
W-834-T8A	09/02/14	-	-	TD=32.35
W-834-T8A	12/10/14	-	-	ROAD UNSAFE MUDDY NM/UC
W-834-T9	02/26/14	-	-	TD=21.29
W-834-T9	05/07/14	-	-	TD=21.30
W-834-T9	09/02/14	-	-	TD=21.30
W-834-T9	12/10/14	-	-	TD=21.30 DRY
W-834-U1	02/26/14	-	-	DIESEL WELL
W-834-U1	05/07/14	-	-	
W-834-U1	09/02/14	27.25	985.01	
W-834-U1	12/10/14	28.80	983.46	

Table C-3. Pit 6 Landfill Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
BC6-10	03/05/14	32.54	655.01	
BC6-10	06/09/14	32.42	655.13	
BC6-10	09/15/14	31.26	656.29	
BC6-10	12/15/14	32.68	654.87	
BC6-13	03/05/14	-	-	TD=8.90
BC6-13	06/09/14	-	-	TD=8.90
BC6-13	09/15/14	-	-	TD=8.90
BC6-13	12/15/14	-	-	TD=8.90 DRY
CARNRW1	03/05/14	51.70	626.73	PUMP NOT RUNNING
CARNRW1	06/09/14	52.35	626.08	PUMP RUNNING
CARNRW1	09/15/14	43.68	634.75	PUMP NOT RUNNING
CARNRW1	12/15/14	52.74	625.69	
CARNRW3	03/05/14	49.51	653.49	
CARNRW3	06/09/14	51.12	651.88	
CARNRW3	09/15/14	45.36	657.64	
CARNRW3	12/15/14	45.70	657.30	
CARNRW4	03/05/14	14.89	636.86	
CARNRW4	06/09/14	15.24	636.51	
CARNRW4	09/11/14	17.66	634.09	
CARNRW4	12/15/14	17.83	633.92	
EP6-06	03/05/14	27.87	660.24	
EP6-06	06/09/14	27.93	660.18	
EP6-06	09/15/14	26.28	661.83	
EP6-06	12/15/14	27.87	660.24	
EP6-07	03/05/14	69.86	637.39	
EP6-07	06/09/14	70.45	636.80	
EP6-07	09/15/14	66.82	640.43	
EP6-07	12/15/14	63.50	643.75	NEW PUMP INSTALLED 11/11/2014
EP6-08	03/05/14	-	-	TD=61.55
EP6-08	06/09/14	-	-	DT=61.50
EP6-08	09/15/14	-	-	DT=61.50
EP6-08	12/15/14	-	-	
EP6-09	03/05/14	31.05	663.23	
EP6-09	06/09/14	31.10	663.18	
EP6-09	07/09/14	31.18	-	
EP6-09	09/15/14	31.27	663.01	
EP6-09	12/15/14	31.17	663.11	
K6-01	03/05/14	28.31	663.15	
K6-01	06/09/14	29.07	662.39	
K6-01	09/15/14	28.42	663.04	
K6-01	12/15/14	28.39	663.07	
K6-01S	03/05/14	29.37	663.15	
K6-01S	06/09/14	29.84	662.68	
K6-01S	07/09/14	-999.25	-	

Table C-3. Pit 6 Landfill Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
K6-01S	09/15/14	29.52	663.00	
K6-01S	12/15/14	29.46	663.06	
K6-03	03/05/14	89.01	637.44	
K6-03	06/09/14	89.71	636.74	
K6-03	09/15/14	87.63	638.82	
K6-03	12/15/14	-	-	
K6-04	03/05/14	69.46	638.71	
K6-04	06/09/14	69.51	638.66	
K6-04	09/15/14	69.47	638.70	
K6-04	12/15/14	63.85	644.32	
K6-14	03/05/14	22.48	658.39	
K6-14	06/09/14	21.42	659.45	
K6-14	09/15/14	20.12	660.75	
K6-14	12/15/14	21.44	659.43	
K6-15	03/05/14	-	-	TD=35.50
K6-15	06/09/14	-	-	TD=36.50
K6-15	09/15/14	-	-	TD=36.50
K6-15	12/15/14	-	-	
K6-16	03/05/14	18.27	661.18	
K6-16	06/09/14	18.36	661.09	
K6-16	09/15/14	17.98	661.47	
K6-16	12/15/14	17.82	661.63	
K6-17	03/05/14	23.12	655.59	
K6-17	06/09/14	21.77	656.94	
K6-17	07/07/14	22.33	-	
K6-17	09/15/14	24.29	654.42	
K6-17	12/15/14	22.01	656.70	
K6-18	03/05/14	26.18	659.11	
K6-18	06/09/14	25.94	659.35	
K6-18	09/15/14	24.33	660.96	
K6-18	12/15/14	24.65	660.64	
K6-19	03/05/14	30.24	662.83	
K6-19	06/09/14	30.29	662.78	
K6-19	07/09/14	30.35	-	
K6-19	09/15/14	30.42	662.65	
K6-19	12/15/14	30.18	662.89	
K6-21	03/05/14	-	-	TD=30.05
K6-21	06/09/14	-	-	TD=30.05
K6-21	09/15/14	-	-	TD=31.00
K6-21	12/15/14	-	-	
K6-22	03/05/14	32.30	649.23	
K6-22	06/09/14	37.48	644.05	
K6-22	09/15/14	37.61	643.92	
K6-22	12/15/14	37.60	643.93	

Table C-3. Pit 6 Landfill Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
K6-23	03/05/14	25.13	655.85	
K6-23	06/09/14	25.28	655.70	
K6-23	07/07/14	25.02	-	
K6-23	09/15/14	24.18	656.80	
K6-23	12/15/14	25.42	655.56	
K6-24	03/05/14	-	-	TD=42.65
K6-24	06/09/14	-	-	TD=42.60
K6-24	09/15/14	-	-	TD=42.60
K6-24	12/15/14	-	-	TD=42.65 DRY
K6-25	03/05/14	18.88	660.57	
K6-25	06/09/14	18.92	660.53	
K6-25	09/15/14	19.15	660.30	
K6-25	12/15/14	18.74	660.71	
K6-26	03/05/14	49.55	637.78	
K6-26	06/09/14	50.13	637.20	
K6-26	09/15/14	45.61	641.72	
K6-26	12/15/14	43.28	644.05	
K6-27	03/05/14	51.38	635.81	
K6-27	06/09/14	52.03	635.16	
K6-27	09/15/14	42.00	645.19	
K6-27	12/15/14	44.62	642.57	
K6-32	03/05/14	-	-	DT=75.80
K6-32	06/09/14	-	-	DT=75.80
K6-32	09/15/14	-	-	DT=75.80
K6-32	12/15/14	-	-	
K6-33	03/05/14	52.15	630.09	
K6-33	06/09/14	52.27	629.97	
K6-33	09/15/14	52.48	629.76	
K6-33	12/15/14	42.93	639.31	
K6-34	03/05/14	75.61	627.67	
K6-34	06/09/14	71.62	631.66	
K6-34	09/15/14	66.20	637.08	
K6-34	12/15/14	63.01	640.27	
K6-35	03/05/14	55.48	637.48	
K6-35	06/09/14	55.84	637.12	
K6-35	09/15/14	53.37	639.59	
K6-35	12/15/14	49.16	643.80	
K6-36	03/05/14	-	-	TD=38.70
K6-36	06/09/14	-	-	TD=38.70
K6-36	09/15/14	-	-	TD=38.70
K6-36	12/15/14	-	-	
W-33C-01	03/05/14	22.86	629.65	
W-33C-01	06/09/14	-	-	DT=25.30
W-33C-01	09/11/14	-	-	DT=25.30

Table C-3. Pit 6 Landfill Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-33C-01	12/15/14	-	-	DT=25.30 DRYTAG
W-34-01	03/05/14	-	-	
W-34-01	06/12/14	14.33	669.83	
W-34-01	09/15/14	15.27	668.89	
W-34-01	12/15/14	-	-	ROAD UNDER WATER NM/UC
W-34-02	03/05/14	-	-	
W-34-02	06/12/14	47.15	637.41	
W-34-02	09/15/14	47.64	636.92	
W-34-02	12/15/14	-	-	
W-PIT6-1819	03/05/14	88.78	627.09	
W-PIT6-1819	06/09/14	85.67	630.20	
W-PIT6-1819	09/15/14	80.20	635.67	
W-PIT6-1819	12/15/14	77.62	638.25	
W-PIT6-2816	03/05/14	68.86	-	
W-PIT6-2816	06/09/14	69.51	-	
W-PIT6-2816	09/15/14	64.77	-	
W-PIT6-2816	12/15/14	62.50	-	
W-PIT6-2817	03/05/14	51.45	-	
W-PIT6-2817	06/09/14	52.02	-	
W-PIT6-2817	09/15/14	47.10	-	
W-PIT6-2817	12/15/14	44.84	-	

Table C-4. High Explosives Process Area Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-35B-01	02/18/14	19.10	503.92	
W-35B-01	06/04/14	19.67	503.35	
W-35B-01	08/27/14	20.13	502.89	
W-35B-01	12/02/14	20.31	502.71	
W-35B-02	02/18/14	18.87	504.16	
W-35B-02	06/04/14	19.38	503.65	
W-35B-02	08/27/14	19.79	503.24	
W-35B-02	12/02/14	20.17	502.86	
W-35B-03	02/18/14	17.50	505.60	
W-35B-03	06/04/14	18.56	504.54	
W-35B-03	08/27/14	18.36	504.74	
W-35B-03	12/02/14	18.27	504.83	
W-35B-04	02/18/14	7.87	521.09	
W-35B-04	06/04/14	9.10	519.86	
W-35B-04	08/27/14	10.13	518.83	
W-35B-04	12/02/14	11.23	517.73	
W-35B-05	02/18/14	7.63	521.10	
W-35B-05	06/04/14	8.38	520.35	
W-35B-05	08/27/14	8.97	519.76	
W-35B-05	12/02/14	4.76	523.97	
W-35C-01	03/11/14	2.31	539.41	
W-35C-01	06/05/14	2.20	539.52	
W-35C-01	09/11/14	4.00	537.72	
W-35C-01	12/22/14	3.71	538.01	
W-35C-02	03/10/14	38.20	534.60	
W-35C-02	06/05/14	22.96	549.84	
W-35C-02	12/22/14	48.63	524.17	
W-35C-04	02/18/14	92.12	440.06	FC=92.3 Q=.95
W-35C-04	06/03/14	-	-	13PSI .90GPM SITE TUBE BLOCKED UNABLE TO MEASURE
W-35C-04	08/26/14	92.27	439.91	Q=0.82 15PSI
W-35C-04	11/13/14	92.25	439.93	
W-35C-05	02/18/14	24.82	506.31	
W-35C-05	06/03/14	25.62	505.51	
W-35C-05	08/26/14	25.91	505.22	
W-35C-05	11/13/14	26.47	504.66	
W-35C-06	02/18/14	26.62	505.01	
W-35C-06	06/03/14	-	-	DT=26.75
W-35C-06	08/26/14	-	-	DT=26.75
W-35C-06	11/13/14	-	-	DT=26.70 DRYTAG
W-35C-07	02/18/14	-	-	NON ARTESIAN
W-35C-07	06/03/14	-	-	NON ARTESIAN
W-35C-07	08/26/14	-	-	NO FLOW ARTESIAN WELL
W-35C-07	11/13/14	-	-	
W-35C-08	02/18/14	26.04	506.25	
W-35C-08	06/03/14	26.71	505.58	
W-35C-08	08/26/14	27.35	504.94	
W-35C-08	11/13/14	27.74	504.55	
W-4A	02/18/14	6.12	525.15	
W-4A	06/03/14	6.67	524.60	

Table C-4. High Explosives Process Area Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-4A	08/25/14	5.45	525.82	
W-4A	11/13/14	5.73	525.54	
W-4AS	02/18/14	10.27	521.38	
W-4AS	06/03/14	10.59	521.06	
W-4AS	08/25/14	8.75	522.90	
W-4AS	11/13/14	8.92	522.73	
W-4B	02/18/14	-	-	NON ARTESIAN
W-4B	06/03/14	-	-	NON ARTESIAN NO PORT
W-4B	08/26/14	-	-	NON ARTESIAN
W-4B	11/13/14	-	-	
W-4C	02/18/14	1.15	528.63	
W-4C	06/03/14	-	-	
W-4C	08/26/14	1.00	528.78	
W-4C	11/13/14	1.09	528.69	
W-6BD	02/18/14	-	-	CARS PARKED IN LOT
W-6BD	06/03/14	-	-	
W-6BD	08/26/14	26.75	506.52	
W-6BD	12/30/14	-	-	vehicle blocking access NM/RA
W-6BS	02/18/14	-	-	CARS PARKED IN LOT
W-6BS	06/03/14	-	-	CARS ON MANHOLE COVER
W-6BS	08/26/14	-	-	CAR ON MANHOLE
W-6BS	12/30/14	-	-	
W-6CD	03/10/14	32.80	547.24	
W-6CD	06/05/14	33.45	546.59	
W-6CD	09/11/14	32.98	547.06	
W-6CD	12/22/14	33.60	546.44	
W-6CI	03/10/14	35.27	545.24	
W-6CI	06/05/14	37.60	542.91	
W-6CI	09/11/14	37.69	542.82	
W-6CI	12/22/14	36.30	544.21	
W-6CS	03/10/14	31.20	548.48	
W-6CS	06/05/14	30.96	548.72	
W-6CS	09/11/14	31.15	548.53	
W-6CS	12/22/14	23.71	555.97	
W-6EI	02/18/14	-	-	NON ARTESIAN
W-6EI	06/03/14	-	-	NON ARTESIAN NO PORT
W-6EI	08/26/14	-	-	NON ARTESIAN
W-6EI	11/13/14	-	-	NON ARTESIAN NO FLOW NM/RA
W-6ER	02/18/14	82.28	449.63	FC=82.0 Q=0.77GPM
W-6ER	06/03/14	82.35	449.56	Q=0.67 15PSI
W-6ER	08/26/14	82.30	449.61	
W-6ER	11/13/14	70.26	462.16	
W-6ES	02/18/14	26.57	504.62	
W-6ES	06/03/14	27.11	504.08	
W-6ES	08/26/14	27.59	503.60	
W-6ES	11/13/14	28.02	503.17	
W-6F	03/10/14	62.75	556.11	
W-6F	06/05/14	62.88	555.98	
W-6F	09/11/14	62.96	555.90	

Table C-4. High Explosives Process Area Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-6F	12/22/14	64.25	554.61	
W-6G	03/10/14	62.91	557.01	
W-6G	06/05/14	62.73	557.19	
W-6G	09/11/14	62.85	557.07	
W-6G	12/22/14	64.17	555.75	
W-6H	03/11/14	12.61	548.73	
W-6H	06/05/14	17.10	544.24	
W-6H	09/11/14	14.87	546.47	
W-6H	12/22/14	13.74	547.60	
W-6I	03/11/14	26.78	534.51	
W-6I	06/05/14	28.27	533.02	
W-6I	09/11/14	30.28	531.01	
W-6I	12/22/14	29.21	532.08	
W-6J	03/11/14	13.60	547.76	
W-6J	06/05/14	17.70	543.66	
W-6J	09/11/14	15.56	545.80	
W-6J	12/22/14	14.72	546.64	
W-6K	02/18/14	-	-	NON ARTESIAN
W-6K	06/03/14	-	-	
W-6K	08/26/14	3.48	530.36	
W-6K	11/13/14	3.26	530.58	
W-6L	02/18/14	-	-	NON ARTESIAN
W-6L	06/03/14	-	-	
W-6L	08/26/14	2.87	531.04	
W-6L	11/13/14	-	-	
W-806-06A	02/24/14	126.35	694.96	
W-806-06A	05/12/14	-	-	ROAD UNDERCUT OFF LIMITS
W-806-06A	09/08/14	-	-	ROAD FIRE HAZARD
W-806-06A	12/15/14	-	-	ROAD UNDRIVABLE NM/UC
W-806-07	02/24/14	-	-	TD=59.00
W-806-07	05/12/14	-	-	ROAD UNDERCUT OFF LIMITS
W-806-07	09/08/14	-	-	ROAD FIRE HAZARD
W-806-07	12/15/14	-	-	
W-808-01	02/24/14	68.28	833.73	
W-808-01	05/12/14	50.85	851.16	
W-808-01	09/08/14	51.30	850.71	
W-808-01	12/15/14	51.26	850.75	
W-808-02	02/24/14	-	-	TD=85.80
W-808-02	05/12/14	-	-	TD=85.80
W-808-02	09/08/14	-	-	TD=85.80
W-808-02	12/15/14	-	-	
W-808-03	02/24/14	298.67	604.22	
W-808-03	05/12/14	298.69	604.20	
W-808-03	09/08/14	298.93	603.96	
W-808-03	12/15/14	298.85	604.04	
W-809-01	02/24/14	68.41	721.82	
W-809-01	05/12/14	68.90	721.33	
W-809-01	09/08/14	68.50	721.73	
W-809-01	12/15/14	68.71	721.52	

Table C-4. High Explosives Process Area Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-809-02	02/24/14	141.31	650.22	
W-809-02	05/12/14	141.73	649.80	
W-809-02	09/08/14	141.65	649.88	
W-809-02	12/15/14	141.73	649.80	
W-809-03	02/24/14	100.89	645.18	
W-809-03	05/12/14	100.97	645.10	
W-809-03	09/08/14	101.65	644.42	
W-809-03	12/15/14	101.74	644.33	
W-809-04	02/24/14	74.83	701.92	
W-809-04	05/12/14	74.97	701.78	
W-809-04	09/08/14	75.36	701.39	
W-809-04	12/15/14	79.63	697.12	
W-810-01	03/11/14	244.03	596.70	
W-810-01	05/12/14	244.26	596.47	
W-810-01	09/08/14	244.32	596.41	
W-810-01	12/15/14	244.39	596.34	
W-814-01	03/12/14	110.40	698.43	
W-814-01	06/02/14	110.47	698.36	
W-814-01	08/25/14	110.73	698.10	
W-814-01	11/25/14	110.67	698.16	
W-814-02	03/12/14	158.26	635.12	
W-814-02	06/02/14	157.31	636.07	
W-814-02	08/25/14	157.46	635.92	
W-814-02	11/25/14	158.30	635.08	
W-814-03	03/11/14	-	-	TD=92.50
W-814-03	06/02/14	-	-	TD=92.50
W-814-03	08/25/14	-	-	TD=47.50
W-814-03	11/25/14	-	-	
W-814-04	03/11/14	237.43	576.99	
W-814-04	06/02/14	235.84	578.58	
W-814-04	08/25/14	237.10	577.32	
W-814-04	11/25/14	237.32	577.10	
W-814-2134	03/12/14	74.00	720.89	FC=ON
W-814-2134	06/02/14	52.03	742.86	XX DBL CHECK
W-814-2134	08/25/14	72.44	722.45	
W-814-2134	11/25/14	63.78	731.11	
W-814-2138	03/12/14	97.40	697.51	
W-814-2138	06/02/14	97.48	697.43	
W-814-2138	08/25/14	97.60	697.31	
W-814-2138	11/25/14	97.83	697.08	
W-815-01	02/24/14	-	-	TD=48.80
W-815-01	05/12/14	-	-	TD=48.80
W-815-01	09/08/14	-	-	TD=48.75
W-815-01	12/15/14	-	-	TD=48.60 DRY
W-815-02	02/24/14	100.37	621.21	FC=100.3 Q=0.09
W-815-02	05/12/14	100.20	621.38	FC=100.50 Q=0.9
W-815-02	09/08/14	98.60	622.98	FC=98.6 Q=0.8
W-815-02	12/15/14	89.90	631.68	FC=89.8 Q=0.00
W-815-03	02/24/14	-	-	TD=47.50

Table C-4. High Explosives Process Area Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-815-03	05/12/14	-	-	TD=47.30
W-815-03	09/08/14	-	-	TD=47.30
W-815-03	12/15/14	-	-	TD=47.30 DRY
W-815-04	02/24/14	96.17	626.18	FC=96.2 Q=0.00
W-815-04	05/12/14	96.45	625.90	FC=96.40 Q=0.0
W-815-04	09/08/14	97.10	625.25	FC=97.7 Q=0.7
W-815-04	12/15/14	83.60	638.75	FC=83.30 Q=0.00
W-815-05	02/24/14	-	-	WELL UNDERCUT
W-815-05	05/12/14	-	-	WELL UNDERCUT
W-815-05	09/08/14	-	-	WELL UNDERCUT
W-815-05	12/15/14	-	-	
W-815-06	03/12/14	129.57	626.21	
W-815-06	06/02/14	129.21	626.57	
W-815-06	08/25/14	129.43	626.35	
W-815-06	11/25/14	129.94	625.84	
W-815-07	03/12/14	137.76	624.73	
W-815-07	05/12/14	137.65	624.84	
W-815-07	08/25/14	137.69	624.80	
W-815-07	11/25/14	138.08	624.41	
W-815-08	02/24/14	132.87	590.92	
W-815-08	05/12/14	133.10	590.69	
W-815-08	09/08/14	133.60	590.19	
W-815-08	12/15/14	131.90	591.89	
W-815-1918	02/24/14	90.15	655.46	
W-815-1918	05/12/14	90.29	655.32	
W-815-1918	09/08/14	90.66	654.95	HARD TO GET WATER LEVEL
W-815-1918	12/30/14	-	-	
W-815-1928	02/24/14	28.19	717.86	
W-815-1928	05/12/14	28.27	717.78	
W-815-1928	09/08/14	28.20	717.85	
W-815-1928	12/30/14	-	-	restricted access NM/RA
W-815-2110	03/11/14	8.84	537.65	FC=OFF
W-815-2110	06/05/14	15.28	531.21	FC=OFF 0 PSI
W-815-2110	09/11/14	10.31	536.18	FC=10.70
W-815-2110	12/22/14	9.89	536.60	
W-815-2111	03/11/14	9.88	536.11	
W-815-2111	06/05/14	16.67	529.32	FC=OFF 0 PSI
W-815-2111	09/11/14	11.44	534.55	FC=10.82
W-815-2111	12/22/14	10.82	535.17	
W-815-2217	03/10/14	32.85	547.07	
W-815-2217	06/05/14	33.43	546.49	
W-815-2217	12/30/14	-	-	restricted access NM/RA
W-815-2608	03/11/14	59.62	478.61	
W-815-2608	06/05/14	60.23	478.00	
W-815-2608	09/11/14	59.90	478.33	FC=59.94
W-815-2608	12/22/14	59.74	478.49	
W-815-2621	02/18/14	2.65	531.70	
W-815-2621	06/03/14	2.19	532.16	
W-815-2621	08/26/14	3.56	530.79	

Table C-4. High Explosives Process Area Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-815-2621	12/30/14	-	-	restricted access NM/RA
W-815-2803	02/24/14	106.55	-	FC=106.50 Q=0.00
W-815-2803	05/12/14	103.75	-	FC=103.8 Q=0.0
W-815-2803	09/08/14	106.35	-	FC=104.7 Q=4.5 XD INCORRECT
W-815-2803	12/15/14	99.40	-	FC=98.4 Q=0.00
W-817-01	02/24/14	139.38	634.43	FC=139.7 Q=0.00
W-817-01	05/12/14	138.87	634.94	FC=138.90 Q=0.0
W-817-01	09/08/14	143.40	630.41	
W-817-01	12/15/14	138.10	635.71	
W-817-02	02/24/14	-	-	BEHIND LOCKED GATE FC=36.4 Q=0.00
W-817-02	05/12/14	-	-	FC=26.0 Q=0.0
W-817-02	09/08/14	-	-	FC=27.4 Q=0.00 TFRT=10.12
W-817-02	12/15/14	-	-	FENCE LOCKED NM/RA
W-817-03	02/24/14	105.50	569.10	FC=105.1 Q=1.49
W-817-03	05/12/14	105.20	569.40	FC=105.0 Q=1.4
W-817-03	09/08/14	106.47	568.13	
W-817-03	12/15/14	104.90	569.70	
W-817-03A	02/24/14	11.82	666.18	
W-817-03A	05/12/14	10.11	667.89	
W-817-03A	09/08/14	12.68	665.32	
W-817-03A	12/15/14	10.75	667.25	
W-817-04	02/24/14	74.32	608.72	FC=121.7 Q=0.00 NO XD IN WELL
W-817-04	05/12/14	74.12	608.92	FC=121.70 NO TRANSDUCER IN WELL READINGS WRONG
W-817-04	09/08/14	75.16	607.88	
W-817-04	12/15/14	75.40	607.64	
W-817-05	02/24/14	130.04	634.29	
W-817-05	05/12/14	130.27	634.06	
W-817-05	09/08/14	129.80	634.53	
W-817-05	12/15/14	-	-	GROUND UNSAFE FOR TRAVEL NM/UC
W-817-06A	02/24/14	68.26	699.90	FC=142.0 Q=0.00 XD OFF
W-817-06A	05/12/14	68.53	699.63	FC=81.30 Q=0.0
W-817-06A	09/08/14	79.98	688.18	FC=80.8 Q=0.06 HARD TO READ LEVEL
W-817-06A	12/15/14	-	-	
W-817-07	02/24/14	98.01	569.94	
W-817-07	05/12/14	97.90	570.05	
W-817-07	09/08/14	98.00	569.95	
W-817-07	12/15/14	97.90	570.05	
W-817-2109	02/24/14	-	-	BEHIND LOCKED GATE FC=28.1 Q=0.00
W-817-2109	05/12/14	-	-	FC=17.7 Q=0.0
W-817-2109	09/08/14	-	-	FC=18.4 BEHIND LOCKED GATE
W-817-2109	12/15/14	-	-	FENCE LOCKED NM/RA
W-817-2318	02/24/14	10.59	665.43	FC=9.4 Q=0.01
W-817-2318	05/12/14	8.10	667.91	FC=8.10 Q=0.01
W-817-2318	09/08/14	10.27	665.74	FC=10.2 Q=0.01
W-817-2318	12/15/14	8.45	667.56	
W-817-2609	02/24/14	93.83	568.67	
W-817-2609	05/12/14	93.30	569.20	
W-817-2609	09/08/14	94.72	567.78	
W-817-2609	12/15/14	95.00	567.50	

Table C-4. High Explosives Process Area Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-818-01	03/12/14	94.84	585.73	
W-818-01	06/02/14	95.02	585.55	
W-818-01	08/25/14	95.27	585.30	
W-818-01	11/25/14	95.43	585.14	
W-818-03	03/12/14	59.47	539.40	
W-818-03	06/02/14	58.32	540.55	
W-818-03	08/25/14	58.61	540.26	
W-818-03	11/25/14	58.77	540.10	
W-818-04	03/12/14	68.10	545.96	
W-818-04	06/02/14	67.49	546.57	
W-818-04	08/25/14	69.11	544.95	
W-818-04	11/25/14	68.61	545.45	
W-818-06	03/12/14	72.77	540.75	
W-818-06	06/02/14	73.02	540.50	
W-818-06	08/25/14	74.03	539.49	
W-818-06	11/25/14	73.45	540.07	
W-818-07	03/12/14	72.93	541.28	
W-818-07	06/02/14	72.98	541.23	
W-818-07	08/25/14	74.09	540.12	
W-818-07	11/25/14	73.69	540.52	
W-818-08	03/12/14	114.37	534.69	FC=114.3 Q=0.78
W-818-08	06/02/14	114.38	534.68	FC=114.40 Q=0.77
W-818-08	08/25/14	114.36	534.70	FC=114.30 Q=0.00
W-818-08	11/25/14	114.57	534.49	FC=114.30 Q=0.00
W-818-09	03/12/14	118.10	523.80	FC=118.0 Q=1.18
W-818-09	06/02/14	118.08	523.82	FC=118.10 Q=1.20
W-818-09	08/25/14	118.23	523.67	FC=118.10 Q=1.04
W-818-09	11/25/14	118.50	523.40	
W-818-11	03/12/14	148.97	600.70	
W-818-11	06/02/14	149.15	600.52	
W-818-11	08/25/14	149.63	600.04	
W-818-11	11/25/14	150.04	599.63	
W-819-02	03/11/14	237.36	584.46	
W-819-02	06/02/14	236.58	585.24	
W-819-02	08/25/14	235.42	586.40	
W-819-02	11/25/14	226.73	595.09	
W-823-01	03/11/14	17.82	573.43	
W-823-01	06/05/14	19.70	571.55	
W-823-01	09/11/14	21.84	569.41	
W-823-01	12/22/14	21.65	569.60	
W-823-02	03/11/14	17.10	573.28	
W-823-02	06/05/14	18.81	571.57	
W-823-02	09/11/14	21.06	569.32	
W-823-02	12/22/14	20.87	569.51	
W-823-03	03/11/14	17.16	572.86	
W-823-03	06/05/14	17.93	572.09	
W-823-03	09/11/14	19.92	570.10	
W-823-03	12/22/14	19.26	570.76	
W-823-13	03/11/14	50.41	571.83	

Table C-4. High Explosives Process Area Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-823-13	06/05/14	50.89	571.35	
W-823-13	09/11/14	52.50	569.74	
W-823-13	12/22/14	52.38	569.86	
W-827-01	03/05/14	-	-	TD=50.90
W-827-01	05/27/14	-	-	TD=50.90
W-827-01	08/20/14	-	-	TD=50.90
W-827-01	11/20/14	-	-	
W-827-02	03/05/14	56.23	866.62	
W-827-02	05/27/14	56.38	866.47	
W-827-02	08/20/14	56.42	866.43	
W-827-02	11/20/14	56.49	866.36	
W-827-03	03/05/14	198.27	725.83	
W-827-03	05/27/14	198.42	725.68	
W-827-03	08/20/14	198.56	725.54	
W-827-03	11/20/14	198.55	725.55	
W-827-04	03/05/14	308.75	724.88	MUDDY/VERY LITTLE WATER
W-827-04	05/27/14	-	-	TD=308.90
W-827-04	08/20/14	-	-	TD=308.90
W-827-04	11/20/14	-	-	
W-827-05	03/05/14	382.47	651.11	
W-827-05	05/27/14	382.55	651.03	
W-827-05	08/20/14	382.61	650.97	
W-827-05	11/20/14	382.74	650.84	
W-829-06	03/05/14	98.97	973.02	
W-829-06	05/27/14	99.58	972.41	
W-829-06	08/20/14	99.38	972.61	
W-829-06	11/20/14	99.45	972.54	
W-829-08	03/05/14	100.35	974.10	
W-829-08	05/27/14	100.41	974.04	
W-829-08	08/20/14	102.52	971.93	
W-829-08	11/20/14	101.12	973.33	
W-829-15	03/05/14	337.85	696.15	
W-829-15	05/27/14	337.88	696.12	
W-829-15	08/20/14	337.82	696.18	
W-829-15	11/20/14	337.96	696.04	
W-829-1938	03/05/14	373.52	706.48	
W-829-1938	05/27/14	373.55	706.45	
W-829-1938	08/20/14	373.85	706.15	
W-829-1938	11/20/14	373.80	706.20	
W-829-1940	03/05/14	108.57	975.60	
W-829-1940	05/27/14	108.76	975.41	
W-829-1940	08/20/14	108.83	975.34	
W-829-1940	11/20/14	108.87	975.30	
W-829-22	03/05/14	399.23	653.84	
W-829-22	05/27/14	399.16	653.91	
W-829-22	08/20/14	399.37	653.70	
W-829-22	11/20/14	399.44	653.63	
WELL20	03/13/14	-	-	NO PORT
WELL20	06/02/14	-	-	NO PORT TO MEASURE

Table C-4. High Explosives Process Area Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
WELL20	09/11/14	-	-	NO WATER LEVEL ACCESS
WELL20	12/15/14	-	-	NO MEASURING PORT NM/RA

Table C-5. Building 850 area in Operable Unit 5 ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
K1-01C	01/13/14	110.33	971.61	
K1-01C	04/08/14	110.43	971.51	
K1-01C	07/22/14	110.97	970.97	
K1-01C	10/21/14	111.23	970.71	
K1-02B	01/13/14	138.32	968.91	
K1-02B	04/08/14	138.45	968.78	
K1-02B	07/22/14	138.86	968.37	
K1-02B	10/21/14	138.55	968.68	
K1-04	01/13/14	159.10	963.57	
K1-04	04/08/14	159.17	963.50	
K1-04	07/22/14	159.56	963.11	
K1-04	10/21/14	159.70	962.97	
K1-05	01/13/14	173.66	957.20	
K1-05	04/08/14	173.72	957.14	
K1-05	07/22/14	173.91	956.95	
K1-05	10/21/14	174.18	956.68	
K1-06	01/13/14	-	-	TD=117.35
K1-06	04/08/14	-	-	TD=117.35
K1-06	07/22/14	-	-	TD=117.35
K1-06	10/21/14	-	-	
K1-07	01/13/14	144.09	965.54	
K1-07	04/08/14	144.07	965.56	
K1-07	07/22/14	144.29	965.34	
K1-07	10/21/14	144.58	965.05	
K1-08	01/13/14	158.38	964.36	
K1-08	04/08/14	158.49	964.25	
K1-08	07/22/14	158.67	964.07	
K1-08	10/21/14	158.90	963.84	
K1-09	01/13/14	164.62	962.06	
K1-09	04/08/14	164.77	961.91	
K1-09	07/22/14	165.12	961.56	
K1-09	10/21/14	165.44	961.24	
K2-03	01/07/14	54.88	1011.76	
K2-03	04/07/14	55.46	1011.18	
K2-03	07/21/14	55.36	1011.28	
K2-03	10/16/14	55.37	1011.27	
K2-04D	01/14/14	31.25	1061.27	
K2-04D	04/09/14	31.46	1061.06	
K2-04D	07/17/14	31.64	1060.88	
K2-04D	10/28/14	31.68	1060.84	
K2-04S	01/14/14	30.40	1061.55	
K2-04S	04/09/14	30.58	1061.37	
K2-04S	07/17/14	30.81	1060.84	
K2-04S	10/28/14	30.86	1060.79	

Table C-5. Building 850 area in Operable Unit 5 ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
NC2-05	01/29/14	-	-	TD=56.30 DBL CHECKED
NC2-05	05/01/14	-	-	TD=56.30
NC2-05	08/18/14	-	-	TD=56.31
NC2-05	11/03/14	-	-	
NC2-05A	01/29/14	56.83	978.60	
NC2-05A	05/01/14	56.88	978.55	
NC2-05A	08/18/14	56.92	978.51	
NC2-05A	11/03/14	57.81	977.62	
NC2-06	01/29/14	54.11	979.43	
NC2-06	05/01/14	54.16	979.38	
NC2-06	08/18/14	54.36	979.18	
NC2-06	10/28/14	54.47	979.07	
NC2-06A	01/29/14	55.03	979.20	
NC2-06A	05/01/14	55.17	979.06	
NC2-06A	08/18/14	55.34	978.89	
NC2-06A	10/28/14	55.43	978.80	
NC2-09	01/29/14	56.34	979.13	
NC2-09	05/01/14	56.49	978.98	
NC2-09	08/18/14	56.81	978.66	
NC2-09	11/03/14	56.87	978.60	
NC2-10	01/23/14	67.73	972.36	
NC2-10	05/01/14	67.84	972.25	
NC2-10	08/18/14	68.07	972.02	
NC2-10	11/03/14	68.37	971.72	
NC2-11D	01/29/14	55.16	973.46	
NC2-11D	04/16/14	55.18	973.44	
NC2-11D	08/18/14	55.42	973.20	
NC2-11D	11/03/14	55.37	973.25	
NC2-11I	01/29/14	55.32	973.18	
NC2-11I	04/16/14	55.37	973.13	
NC2-11I	08/18/14	55.56	972.94	
NC2-11I	11/03/14	55.63	972.87	
NC2-11S	01/29/14	55.06	973.46	
NC2-11S	04/16/14	55.15	973.37	
NC2-11S	08/18/14	55.48	973.04	
NC2-11S	11/03/14	55.41	973.11	
NC2-12D	01/29/14	54.02	974.42	
NC2-12D	04/16/14	54.10	974.34	
NC2-12D	08/18/14	54.41	974.03	
NC2-12D	11/03/14	54.78	973.66	
NC2-12I	01/29/14	54.42	973.98	
NC2-12I	04/16/14	54.56	973.84	
NC2-12I	08/18/14	54.80	973.60	
NC2-12I	11/03/14	55.10	973.30	

Table C-5. Building 850 area in Operable Unit 5 ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
NC2-12S	01/29/14	54.08	974.44	
NC2-12S	04/16/14	54.21	974.31	
NC2-12S	08/18/14	54.40	974.12	
NC2-12S	11/03/14	54.72	973.80	
NC2-13	01/29/14	47.39	974.11	
NC2-13	05/01/14	47.52	973.98	
NC2-13	08/18/14	47.83	973.67	
NC2-13	10/28/14	47.89	973.61	
NC2-14S	01/07/14	18.61	1055.29	
NC2-14S	04/09/14	18.81	1055.09	
NC2-14S	07/17/14	19.13	1054.77	
NC2-14S	10/28/14	19.22	1054.68	
NC2-15	01/29/14	85.01	988.45	
NC2-15	05/01/14	85.15	988.31	
NC2-15	08/18/14	85.57	987.89	
NC2-15	11/03/14	86.11	987.35	
NC2-16	01/07/14	26.67	1055.79	
NC2-16	04/09/14	26.87	1055.59	
NC2-16	07/17/14	26.93	1055.53	
NC2-16	10/28/14	27.11	1055.35	
NC2-17	01/29/14	109.48	979.71	
NC2-17	05/01/14	109.73	979.46	
NC2-17	08/18/14	109.85	979.34	
NC2-17	11/03/14	109.89	979.30	
NC2-18	01/14/14	77.34	1053.83	
NC2-18	04/09/14	77.74	1053.43	
NC2-18	07/17/14	77.90	1053.27	
NC2-18	10/28/14	77.98	1053.19	
NC2-19	01/29/14	113.85	978.24	
NC2-19	05/01/14	113.97	978.12	
NC2-19	08/18/14	114.23	977.86	
NC2-19	10/28/14	114.36	977.73	
NC2-20	01/29/14	37.42	964.85	
NC2-20	05/01/14	37.64	964.63	
NC2-20	08/18/14	37.86	964.41	
NC2-20	10/28/14	37.93	964.34	
NC2-21	01/29/14	37.22	964.92	
NC2-21	05/01/14	37.46	964.68	
NC2-21	08/18/14	37.63	964.51	
NC2-21	10/28/14	37.65	964.49	
NC7-10	01/14/14	12.12	1214.18	
NC7-10	04/24/14	11.93	1214.37	
NC7-10	07/28/14	12.34	1213.96	
NC7-10	10/27/14	12.19	1214.11	

Table C-5. Building 850 area in Operable Unit 5 ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
NC7-11	01/14/14	20.68	1223.71	
NC7-11	04/24/14	20.67	1223.72	
NC7-11	07/28/14	20.76	1223.63	
NC7-11	10/27/14	20.76	1223.63	
NC7-14	01/14/14	-	-	TD=29.25
NC7-14	04/30/14	-	-	TD=29.25
NC7-14	07/28/14	-	-	TD=29.30
NC7-14	10/27/14	-	-	
NC7-15	01/23/14	22.28	1247.13	
NC7-15	04/30/14	22.36	1247.05	
NC7-15	07/28/14	22.41	1247.00	
NC7-15	10/27/14	22.42	1246.99	
NC7-19	01/23/14	22.07	1238.61	
NC7-19	04/28/14	22.21	1238.47	
NC7-19	07/28/14	22.29	1238.39	
NC7-19	10/27/14	22.19	1238.49	
NC7-27	01/14/14	86.72	1195.68	
NC7-27	04/24/14	86.42	1195.98	
NC7-27	07/28/14	86.54	1195.86	
NC7-27	12/30/14	86.58	1195.82	
NC7-28	01/28/14	-	-	TRACER TEST
NC7-28	04/28/14	-	-	BIO850/CAMU TEST
NC7-28	07/28/14	-	-	850/CAMO STUDY
NC7-28	12/30/14	-	-	
NC7-29	01/14/14	53.55	1201.19	
NC7-29	04/10/14	53.72	1201.02	
NC7-29	07/28/14	53.77	1200.97	
NC7-29	12/22/14	53.92	1200.82	
NC7-43	01/28/14	47.12	1240.09	
NC7-43	04/30/14	46.89	1240.32	
NC7-43	07/28/14	46.95	1240.26	
NC7-43	10/28/14	-	-	850 CAMU BIO TEST NM/RA
NC7-44	01/06/14	-	-	TRACER TEST
NC7-44	04/28/14	-	-	BIO850/CAMU TEST
NC7-44	07/28/14	-	-	850/CAMO STUDY
NC7-44	12/30/14	-	-	
NC7-45	01/14/14	36.32	1152.37	
NC7-45	04/24/14	36.30	1152.39	
NC7-45	07/17/14	36.51	1152.18	
NC7-45	10/27/14	36.45	1152.24	
NC7-46	01/14/14	24.46	1106.97	
NC7-46	04/09/14	24.38	1107.05	
NC7-46	07/17/14	24.40	1107.03	
NC7-46	12/30/14	-	-	

Table C-5. Building 850 area in Operable Unit 5 ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
NC7-54	01/14/14	9.92	1197.33	
NC7-54	04/24/14	-	-	OVERGROWN IN RAVINE
NC7-54	07/28/14	-	-	TD=10.15
NC7-54	10/27/14	-	-	TD=10.20 DRY
NC7-55	01/14/14	-	-	TD=57.2
NC7-55	04/09/14	-	-	TD=57.20
NC7-55	07/17/14	-	-	TD=57.20
NC7-55	10/28/14	-	-	
NC7-56	01/14/14	20.50	1111.67	
NC7-56	04/09/14	20.43	1111.74	
NC7-56	07/17/14	20.55	1111.62	
NC7-56	10/28/14	20.42	1111.75	
NC7-57	01/14/14	-	-	TD=18.00
NC7-57	04/09/14	-	-	TD=18.00
NC7-57	07/17/14	-	-	TD=18.00
NC7-57	10/28/14	-	-	
NC7-58	01/14/14	25.39	1081.34	
NC7-58	04/09/14	24.66	1082.07	
NC7-58	07/17/14	24.72	1082.01	
NC7-58	10/28/14	25.16	1081.57	
NC7-59	01/14/14	13.84	1101.65	
NC7-59	04/09/14	13.66	1101.83	
NC7-59	07/17/14	13.75	1101.74	
NC7-59	10/28/14	13.72	1101.77	
NC7-60	01/28/14	159.32	1168.00	
NC7-60	04/24/14	158.93	1168.39	
NC7-60	07/28/14	158.97	1168.35	
NC7-60	12/30/14	-	-	road undriveable NM/RA
NC7-61	01/28/14	-	-	TRACER TEST
NC7-61	04/28/14	-	-	BIO850/CAMU TEST
NC7-61	07/28/14	-	-	850/CAMO STUDY
NC7-61	10/28/14	-	-	
NC7-62	01/14/14	23.00	1102.11	
NC7-62	04/09/14	22.82	1102.29	
NC7-62	07/17/14	22.85	1102.26	
NC7-62	10/28/14	22.87	1102.24	
NC7-69	01/14/14	3.90	1248.56	
NC7-69	04/24/14	4.19	1248.27	
NC7-69	07/28/14	3.70	1248.76	
NC7-69	10/27/14	4.60	1247.86	
NC7-70	01/28/14	-	-	TRACER TEST
NC7-70	04/28/14	-	-	BIO850/CAMU TEST
NC7-70	07/28/14	-	-	850/CAMO STUDY
NC7-70	10/28/14	-	-	850 CAMU BIO TEST NM/RA

Table C-5. Building 850 area in Operable Unit 5 ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
NC7-71	01/28/14	-	-	TRACER TEST
NC7-71	04/28/14	-	-	BIO850/CAMU TEST
NC7-71	07/28/14	-	-	850/CAMO STUDY
NC7-71	12/30/14	-	-	
NC7-72	01/14/14	33.24	1123.11	
NC7-72	04/09/14	33.06	1123.29	
NC7-72	07/17/14	33.21	1123.14	
NC7-72	10/28/14	33.17	1123.18	
NC7-73	01/14/14	28.54	1137.73	
NC7-73	04/09/14	28.39	1137.88	
NC7-73	07/17/14	28.47	1137.80	
NC7-73	10/28/14	28.43	1137.84	
W-850-05	01/28/14	-	-	TRACER TEST
W-850-05	04/28/14	-	-	BIO850/CAMU TEST
W-850-05	07/28/14	-	-	850/CAMO STUDY
W-850-05	10/28/14	-	-	
W-850-2145	01/14/14	177.02	1029.95	
W-850-2145	04/09/14	177.49	1029.48	
W-850-2145	07/17/14	177.58	1029.39	
W-850-2145	11/03/14	177.61	1029.36	
W-850-2312	01/14/14	73.44	1058.52	
W-850-2312	04/09/14	73.77	1058.19	
W-850-2312	07/17/14	73.89	1058.07	
W-850-2312	10/28/14	73.91	1058.05	
W-850-2313	01/14/14	25.33	1157.40	
W-850-2313	04/24/14	25.28	1157.45	
W-850-2313	07/17/14	25.53	1157.20	
W-850-2313	10/27/14	25.37	1157.36	
W-850-2314	01/28/14	157.08	1178.69	
W-850-2314	04/24/14	157.88	1177.89	
W-850-2314	12/30/14	-	-	
W-850-2315	01/14/14	53.96	1201.37	
W-850-2315	04/10/14	54.04	1201.29	
W-850-2315	07/28/14	54.28	1201.05	
W-850-2315	12/22/14	54.42	1200.91	
W-850-2316	01/14/14	177.20	1029.92	
W-850-2316	04/28/14	177.29	1029.83	
W-850-2316	07/17/14	177.64	1029.48	
W-850-2316	11/03/14	177.69	1029.43	
W-850-2416	01/28/14	-	-	TRACER TEST
W-850-2416	04/28/14	-	-	BIO850/CAMU TEST
W-850-2416	07/28/14	-	-	850/CAMO STUDY
W-850-2416	12/30/14	-	-	850/Camu study NM
W-850-2417	01/28/14	-	-	TRACER TEST

Table C-5. Building 850 area in Operable Unit 5 ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-850-2417	04/28/14	-	-	BIO850/CAMU TEST
W-850-2417	07/28/14	-	-	850/CAMO STUDY
W-850-2417	12/30/14	-	-	
W-850-2805	01/14/14	14.67	-	
W-850-2805	04/09/14	15.21	-	
W-850-2805	07/17/14	15.38	-	
W-850-2805	12/22/14	14.24	-	
W-865-02	01/07/14	125.23	987.15	
W-865-02	04/07/14	125.23	987.15	
W-865-02	07/21/14	125.42	986.96	
W-865-02	10/16/14	125.52	986.86	
W-865-05	01/07/14	-	-	DT=270.89
W-865-05	04/07/14	-	-	DT=270.05
W-865-05	07/21/14	-	-	DT=270.05
W-865-05	10/16/14	-	-	
W-865-1802	01/07/14	52.12	1016.93	
W-865-1802	04/07/14	52.30	1016.75	
W-865-1802	07/21/14	52.61	1016.44	
W-865-1802	10/16/14	52.80	1016.25	
W-865-1803	01/07/14	105.56	1074.43	
W-865-1803	04/09/14	105.62	1074.37	
W-865-1803	07/21/14	105.68	1074.31	
W-865-1803	10/16/14	105.85	1074.14	
W-865-2005	01/08/14	327.68	947.19	
W-865-2005	04/07/14	328.16	946.71	
W-865-2005	07/21/14	328.33	946.54	
W-865-2005	10/20/14	328.27	946.60	
W-865-2121	01/08/14	346.36	942.25	
W-865-2121	04/07/14	346.82	941.79	
W-865-2121	07/21/14	346.96	941.65	
W-865-2121	10/20/14	346.89	941.72	
W-865-2133	01/08/14	80.57	927.93	
W-865-2133	04/07/14	80.59	927.91	
W-865-2133	07/21/14	80.68	927.82	
W-865-2133	10/20/14	80.76	927.74	
W-865-2224	01/08/14	80.80	927.75	
W-865-2224	04/07/14	80.90	927.65	
W-865-2224	07/21/14	81.07	927.48	
W-865-2224	10/20/14	81.06	927.49	
W-PIT1-01	01/08/14	-	-	TD=148.92
W-PIT1-01	04/07/14	-	-	TD=148.90
W-PIT1-01	07/21/14	-	-	TD=148.90
W-PIT1-01	10/21/14	-	-	
W-PIT1-02	01/08/14	234.51	946.79	

Table C-5. Building 850 area in Operable Unit 5 ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-PIT1-02	04/07/14	234.68	946.62	
W-PIT1-02	07/21/14	234.77	946.53	
W-PIT1-02	10/21/14	235.21	946.09	
W-PIT1-2204	01/09/14	41.30	1031.86	
W-PIT1-2204	04/08/14	-	-	TD=41.70
W-PIT1-2204	07/21/14	-	-	TD=41.75
W-PIT1-2204	10/21/14	-	-	
W-PIT1-2209	01/13/14	217.41	948.64	
W-PIT1-2209	04/07/14	217.68	948.37	
W-PIT1-2209	07/21/14	217.74	948.31	
W-PIT1-2209	10/21/14	217.78	948.27	
W-PIT1-2225	01/13/14	227.90	965.24	
W-PIT1-2225	04/10/14	228.15	964.99	
W-PIT1-2225	09/11/14	228.03	965.11	
W-PIT1-2225	12/17/14	228.07	965.07	
W-PIT1-2326	01/13/14	181.92	965.87	
W-PIT1-2326	04/07/14	181.98	965.81	
W-PIT1-2326	07/21/14	182.15	965.64	
W-PIT1-2326	12/17/14	182.35	965.44	
W-PIT1-2620	01/08/14	232.97	946.90	
W-PIT1-2620	04/07/14	233.22	946.65	
W-PIT1-2620	07/21/14	233.38	946.49	
W-PIT1-2620	10/21/14	233.76	946.11	
W-PIT7-16	01/23/14	22.30	1248.70	
W-PIT7-16	04/24/14	22.56	1248.44	
W-PIT7-16	07/28/14	22.62	1248.38	
W-PIT7-16	12/17/14	22.27	1248.73	

Table C-6. Pit 2 Landfill ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
K2-01C	01/07/14	68.72	982.18	
K2-01C	04/24/14	69.27	981.63	
K2-01C	07/21/14	69.57	981.33	
K2-01C	11/03/14	70.06	980.84	
NC2-08	01/29/14	63.65	985.72	
NC2-08	05/01/14	63.82	985.55	
NC2-08	07/17/14	64.50	984.87	
NC2-08	11/03/14	64.70	984.67	
W-PIT2-1934	01/07/14	57.51	1003.60	
W-PIT2-1934	05/01/14	57.93	1003.18	
W-PIT2-1934	07/21/14	58.16	1002.95	
W-PIT2-1934	10/16/14	58.12	1002.99	
W-PIT2-1935	01/07/14	76.48	979.38	
W-PIT2-1935	05/01/14	77.04	978.82	
W-PIT2-1935	07/21/14	77.18	978.68	
W-PIT2-1935	10/16/14	77.17	978.69	
W-PIT2-2226	01/06/14	328.61	965.51	
W-PIT2-2226	04/30/14	329.31	964.81	
W-PIT2-2226	08/04/14	329.47	964.65	
W-PIT2-2226	12/17/14	329.46	964.66	
W-PIT2-2301	01/29/14	-	-	TD=31.10
W-PIT2-2301	06/02/14	-	-	TD=31.10
W-PIT2-2301	08/18/14	-	-	TD=31.05
W-PIT2-2301	11/03/14	-	-	
W-PIT2-2302	01/29/14	16.53	1025.97	
W-PIT2-2302	06/02/14	16.62	1025.88	
W-PIT2-2302	08/18/14	16.67	1025.83	
W-PIT2-2302	11/03/14	16.58	1025.92	
W-PIT2-2303	01/29/14	-	-	TD=20.50
W-PIT2-2303	06/02/14	-	-	TD=20.50
W-PIT2-2303	08/18/14	-	-	TD=20.50
W-PIT2-2303	11/03/14	-	-	TD=20.50 DRY
W-PIT2-2304	01/29/14	-	-	TD=56.80
W-PIT2-2304	06/02/14	-	-	TD=56.80
W-PIT2-2304	08/18/14	-	-	TD=56.80
W-PIT2-2304	11/03/14	-	-	TD=56.80 DRY

Table C-7. Pit 7 Complex area in Operable Unit 5 ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
K7-01	01/28/14	29.00	1289.73	XD=29.11
K7-01	04/22/14	29.20	1289.53	FC=29.18
K7-01	08/05/14	29.40	1289.33	FC=29.42
K7-01	12/18/14	28.57	1290.16	
K7-03	01/28/14	30.75	1308.34	
K7-03	04/22/14	31.21	1307.88	
K7-03	08/05/14	31.87	1307.22	
K7-03	12/18/14	31.63	1307.16	
K7-06	01/22/14	28.37	1385.28	XD=27.81
K7-06	04/23/14	28.00	1385.65	
K7-06	07/29/14	28.92	1384.73	
K7-06	12/17/14	28.90	1384.75	FC=22.88
K7-07	01/22/14	-	-	TD=23.00
K7-07	04/28/14	-	-	TD=23.00
K7-07	08/06/14	-	-	
K7-07	12/17/14	21.52	1276.50	
K7-09	01/22/14	51.46	1293.84	
K7-09	04/23/14	51.94	1293.36	
K7-09	08/06/14	52.09	1293.21	
K7-09	12/17/14	52.17	1293.13	
K7-10	01/22/14	37.68	1305.63	
K7-10	04/23/14	38.40	1304.91	
K7-10	08/06/14	38.79	1304.52	
K7-10	12/17/14	38.77	1304.54	
NC7-12	01/28/14	23.23	1262.46	
NC7-12	04/23/14	23.37	1262.32	
NC7-12	07/28/14	23.52	1262.17	
NC7-12	12/17/14	20.50	1265.19	
NC7-16	01/28/14	29.36	1281.38	
NC7-16	04/22/14	29.43	1281.31	
NC7-16	08/06/14	28.52	1282.22	FC=28.46 Q=0.00
NC7-16	12/17/14	26.47	1284.27	FC=28.46
NC7-17	01/22/14	31.00	1358.20	XD=30.9
NC7-17	04/22/14	31.01	1358.19	FC=31.04
NC7-17	08/06/14	31.37	1357.83	FC=31.44
NC7-17	11/03/14	29.05	1360.15	
NC7-18	01/22/14	25.63	1306.33	
NC7-18	04/23/14	26.65	1305.31	
NC7-18	08/06/14	27.45	1304.51	
NC7-18	12/17/14	27.50	1304.46	
NC7-20	01/28/14	38.53	1256.86	
NC7-20	04/23/14	38.65	1256.74	
NC7-20	07/28/14	38.69	1256.70	
NC7-20	12/17/14	38.20	1257.19	

Table C-7. Pit 7 Complex area in Operable Unit 5 ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
NC7-21	01/28/14	30.46	1273.71	
NC7-21	04/24/14	29.97	1274.20	
NC7-21	08/06/14	30.42	1273.75	FC=30.65
NC7-21	12/17/14	28.42	1275.75	FC=28.50
NC7-22	01/28/14	-	-	TD=37.75 XD=37.15
NC7-22	04/24/14	-	-	TD=37.00
NC7-22	08/05/14	-	-	TD=37.00 FC=37.11
NC7-22	12/17/14	-	-	TD=37.80 DRY
NC7-24	01/23/14	-	-	TD=37.60 XD=36.98
NC7-24	04/22/14	-	-	TD=37.60
NC7-24	08/05/14	-	-	TD=37.60 FC=36.94
NC7-24	10/27/14	-	-	TD=37.60 DRY
NC7-25	01/23/14	69.91	1296.60	
NC7-25	04/22/14	70.22	1296.29	
NC7-25	08/05/14	68.95	1297.56	
NC7-25	12/30/14	68.88	1297.63	
NC7-26	01/28/14	72.27	1256.40	
NC7-26	04/24/14	72.44	1256.23	
NC7-26	07/28/14	72.62	1256.05	
NC7-26	12/30/14	72.64	1256.03	
NC7-34	01/22/14	38.88	1325.15	
NC7-34	04/22/14	38.98	1325.05	
NC7-34	08/06/14	-	-	TD=40.55
NC7-34	12/30/14	-	-	
NC7-36	01/28/14	24.36	1337.58	
NC7-36	04/22/14	24.61	1337.33	
NC7-36	08/06/14	-	-	TD=34.70
NC7-36	12/30/14	-	-	TD=34.70 DRY
NC7-37	01/28/14	-	-	TD=27.60
NC7-37	04/24/14	-	-	TD=27.60
NC7-37	08/05/14	-	-	TD=27.60
NC7-37	12/30/14	-	-	
NC7-40	01/28/14	24.81	1294.97	
NC7-40	04/22/14	25.01	1294.77	
NC7-40	08/06/14	25.42	1294.36	
NC7-40	12/18/14	25.44	1294.34	
NC7-47	01/07/14	63.24	1205.27	
NC7-47	04/07/14	-	-	
NC7-47	07/21/14	63.26	1205.25	
NC7-47	10/16/14	63.28	1205.23	
NC7-48	01/22/14	49.85	1342.97	XD=49.83
NC7-48	04/23/14	49.86	1342.96	FC=49.79
NC7-48	08/06/14	49.87	1342.95	FC=49.89 Q=0.00
NC7-48	12/30/14	-	-	

Table C-7. Pit 7 Complex area in Operable Unit 5 ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
NC7-49A	01/22/14	36.77	1356.96	
NC7-49A	04/22/14	36.45	1357.28	
NC7-49A	07/17/14	36.52	1357.21	
NC7-49A	12/30/14	36.60	1357.13	
NC7-50	01/07/14	77.22	1122.50	
NC7-50	04/07/14	77.31	1122.41	
NC7-50	07/21/14	77.42	1122.30	
NC7-50	10/16/14	77.68	1122.04	
NC7-51	01/28/14	37.14	1310.69	XD=37.41
NC7-51	04/22/14	37.27	1310.56	FC=37.55
NC7-51	08/05/14	37.54	1310.29	
NC7-51	12/30/14	37.63	1310.20	
NC7-52	01/23/14	74.77	1293.58	
NC7-52	04/22/14	75.02	1293.33	
NC7-52	08/05/14	74.87	1293.48	
NC7-52	12/30/14	74.86	1293.49	
NC7-53	01/22/14	33.69	1389.35	XD=33.63
NC7-53	04/23/14	33.84	1389.20	FC=33.80
NC7-53	07/29/14	34.10	1388.94	
NC7-53	12/30/14	32.42	1390.62	
NC7-63	01/23/14	-	-	TD=34.00 XD=33.58
NC7-63	04/22/14	-	-	TD=34.0 FC=33.57
NC7-63	08/05/14	-	-	
NC7-63	12/17/14	34.01	1315.06	
NC7-64	01/23/14	44.13	1304.45	XD=43.99 Q=0.00
NC7-64	04/22/14	44.15	1304.43	FC=43.92 Q=0.00
NC7-64	08/05/14	44.11	1304.47	
NC7-64	12/17/14	43.42	1305.16	
NC7-65	01/23/14	190.10	1261.18	
NC7-65	04/22/14	190.25	1261.03	
NC7-65	07/30/14	190.20	1261.08	
NC7-65	12/30/14	-	-	
NC7-67	01/28/14	33.78	1289.14	
NC7-67	04/22/14	33.92	1289.00	
NC7-67	08/06/14	34.18	1288.74	
NC7-67	12/17/14	34.01	1288.91	
NC7-68	01/28/14	33.30	1289.60	
NC7-68	04/22/14	33.46	1289.44	
NC7-68	08/06/14	33.75	1289.15	
NC7-68	12/17/14	33.50	1289.40	
NC7-75	01/23/14	51.42	1300.50	
NC7-75	04/22/14	51.62	1300.30	
NC7-75	08/05/14	51.82	1300.10	
NC7-75	12/17/14	52.12	1299.80	

Table C-7. Pit 7 Complex area in Operable Unit 5 ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
NC7-76	01/28/14	23.90	1252.98	
NC7-76	04/24/14	24.04	1252.84	
NC7-76	07/28/14	24.18	1252.70	
NC7-76	12/17/14	23.21	1253.67	
W-865-01	01/07/14	35.10	1152.56	
W-865-01	04/07/14	35.00	1152.66	
W-865-01	07/21/14	35.22	1152.44	
W-865-01	10/16/14	35.03	1152.63	
W-865-03	01/07/14	55.13	1180.85	
W-865-03	04/07/14	55.28	1180.70	
W-865-03	07/21/14	55.29	1180.69	
W-865-03	10/16/14	55.40	1180.58	
W-865-1804	01/07/14	102.92	1109.19	
W-865-1804	04/09/14	103.02	1109.09	
W-865-1804	07/21/14	103.27	1108.84	
W-865-1804	10/16/14	103.16	1108.95	
W-PIT3-02	01/23/14	-	-	TD=20.25
W-PIT3-02	04/22/14	-	-	TD=20.25
W-PIT3-02	08/05/14	-	-	TD=20.25
W-PIT3-02	10/27/14	-	-	TD=20.25 DRY
W-PIT5-02	01/23/14	-	-	TD=19.70
W-PIT5-02	04/22/14	-	-	TD=19.70
W-PIT5-02	08/05/14	-	-	TD=41.70
W-PIT5-02	12/17/14	-	-	
W-PIT7-02	01/28/14	23.37	1294.60	
W-PIT7-02	04/22/14	23.58	1294.39	
W-PIT7-02	08/06/14	23.64	1294.33	
W-PIT7-02	12/17/14	25.95	1292.02	
W-PIT7-03	01/28/14	30.64	1298.88	
W-PIT7-03	04/22/14	30.72	1298.80	
W-PIT7-03	08/05/14	30.79	1298.73	
W-PIT7-03	12/17/14	30.91	1298.61	
W-PIT7-10	01/22/14	27.87	1290.56	
W-PIT7-10	04/22/14	27.91	1290.52	
W-PIT7-10	08/06/14	28.06	1290.37	
W-PIT7-10	12/17/14	28.21	1290.22	
W-PIT7-11	01/23/14	-	-	TD=189.90
W-PIT7-11	04/22/14	-	-	TD=189.90
W-PIT7-11	07/30/14	-	-	TD=189.90
W-PIT7-11	10/16/14	-	-	
W-PIT7-12	01/23/14	214.39	1202.16	
W-PIT7-12	04/22/14	214.46	1202.09	
W-PIT7-12	07/30/14	214.73	1201.82	
W-PIT7-12	12/17/14	214.72	1201.83	

Table C-7. Pit 7 Complex area in Operable Unit 5 ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-PIT7-13	01/23/14	231.92	1250.62	
W-PIT7-13	04/22/14	232.05	1250.49	
W-PIT7-13	07/30/14	232.16	1250.38	
W-PIT7-13	12/17/14	232.22	1250.32	
W-PIT7-14	01/23/14	304.62	1158.62	
W-PIT7-14	04/22/14	304.73	1158.51	
W-PIT7-14	07/30/14	304.77	1158.47	
W-PIT7-14	12/17/14	304.80	1158.44	
W-PIT7-15	01/07/14	105.56	1200.24	
W-PIT7-15	04/07/14	-	-	
W-PIT7-15	07/21/14	105.61	1200.19	
W-PIT7-15	10/16/14	105.82	1199.98	
W-PIT7-1715	01/22/14	49.03	1422.95	
W-PIT7-1715	04/23/14	49.11	1422.87	
W-PIT7-1715	07/29/14	49.10	1422.88	
W-PIT7-1715	12/30/14	49.14	1422.84	
W-PIT7-1716	01/22/14	-	-	TD=41.81
W-PIT7-1716	04/23/14	-	-	TD=41.80
W-PIT7-1716	07/29/14	-	-	TD=41.80
W-PIT7-1716	12/30/14	-	-	
W-PIT7-1719	01/22/14	22.30	1450.22	
W-PIT7-1719	04/23/14	22.49	1450.03	
W-PIT7-1719	07/29/14	22.53	1449.99	
W-PIT7-1719	12/30/14	22.50	1450.02	
W-PIT7-1721	01/22/14	-	-	TD=26.00
W-PIT7-1721	04/23/14	-	-	TD=26.00
W-PIT7-1721	07/29/14	-	-	TD=26.05
W-PIT7-1721	12/30/14	-	-	TD=26.00 DRY
W-PIT7-1722	01/22/14	-	-	TD=17.40
W-PIT7-1722	04/23/14	-	-	TD=17.40
W-PIT7-1722	07/29/14	-	-	TD=17.40
W-PIT7-1722	12/30/14	-	-	
W-PIT7-1725	01/22/14	120.44	1299.61	
W-PIT7-1725	04/23/14	120.52	1299.53	
W-PIT7-1725	07/29/14	120.43	1299.62	
W-PIT7-1725	12/30/14	120.39	1299.66	
W-PIT7-1726	01/22/14	-	-	TD=8.75
W-PIT7-1726	04/23/14	-	-	TD=8.75
W-PIT7-1726	07/28/14	-	-	TD=8.75
W-PIT7-1726	12/30/14	-	-	TD=8.75 DRY
W-PIT7-1727	01/22/14	-	-	TD=7.5
W-PIT7-1727	04/23/14	-	-	TD=7.50
W-PIT7-1727	07/28/14	-	-	TD=7.50
W-PIT7-1727	12/30/14	-	-	TD=7.50 DRY

Table C-7. Pit 7 Complex area in Operable Unit 5 ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-PIT7-1728	01/22/14	-	-	TD=13.35
W-PIT7-1728	04/23/14	-	-	TD=13.50
W-PIT7-1728	07/28/14	-	-	TD=13.52
W-PIT7-1728	12/30/14	-	-	TD=13.50 DRY
W-PIT7-1729	01/22/14	-	-	TD=13.05
W-PIT7-1729	04/23/14	-	-	TD=13.00
W-PIT7-1729	07/29/14	-	-	TD=13.00
W-PIT7-1729	12/30/14	-	-	
W-PIT7-1860	01/28/14	13.73	1433.05	
W-PIT7-1860	04/23/14	13.77	1433.01	
W-PIT7-1860	07/29/14	13.79	1432.99	
W-PIT7-1860	12/30/14	-	-	
W-PIT7-1861	01/28/14	13.87	1432.96	
W-PIT7-1861	04/23/14	13.86	1432.97	
W-PIT7-1861	07/29/14	13.91	1432.92	
W-PIT7-1861	12/30/14	-	-	road undriveable NM/RA
W-PIT7-1903	01/28/14	-	-	TD=21.81
W-PIT7-1903	04/22/14	-	-	TD=21.80
W-PIT7-1903	08/05/14	-	-	TD=21.80
W-PIT7-1903	12/18/14	-	-	
W-PIT7-1904	01/28/14	24.69	1293.06	
W-PIT7-1904	04/22/14	24.73	1293.02	
W-PIT7-1904	08/06/14	25.07	1292.68	
W-PIT7-1904	12/18/14	25.14	1292.61	
W-PIT7-1905	01/28/14	-	-	TD=24.10
W-PIT7-1905	04/22/14	-	-	TD=24.10
W-PIT7-1905	08/06/14	-	-	TD=24.10
W-PIT7-1905	12/18/14	-	-	
W-PIT7-1907	01/28/14	23.60	1294.63	
W-PIT7-1907	04/22/14	23.84	1294.39	
W-PIT7-1907	08/06/14	24.10	1294.13	
W-PIT7-1907	12/18/14	24.17	1294.06	
W-PIT7-1915	01/28/14	23.58	1294.32	
W-PIT7-1915	04/22/14	23.80	1294.10	
W-PIT7-1915	08/06/14	24.00	1293.90	
W-PIT7-1915	12/18/14	24.22	1293.68	
W-PIT7-1916	01/28/14	-	-	TD=23.70
W-PIT7-1916	04/22/14	-	-	TD=23.70
W-PIT7-1916	08/06/14	-	-	TD=23.70 PAD FLOATING
W-PIT7-1916	12/18/14	-	-	TD=23.70 DRY
W-PIT7-1917	01/28/14	-	-	TD=23.40
W-PIT7-1917	04/22/14	-	-	TD=23.40
W-PIT7-1917	08/06/14	-	-	TD=23.40
W-PIT7-1917	12/18/14	-	-	TD=23.40 DRY

Table C-7. Pit 7 Complex area in Operable Unit 5 ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-PIT7-1918	01/28/14	24.02	1294.02	FC=24.04 Q=0.00
W-PIT7-1918	04/22/14	24.18	1293.86	FC=24.21 Q=0.00
W-PIT7-1918	08/06/14	24.47	1293.57	FC=24.53 PAD FLOATING
W-PIT7-1918	12/18/14	23.70	1294.34	FC=23.89
W-PIT7-1919	01/28/14	-	-	TD=21.80
W-PIT7-1919	04/22/14	-	-	TD=22.80
W-PIT7-1919	08/06/14	-	-	TD=22.80
W-PIT7-1919	12/18/14	-	-	
W-PIT7-2141	01/28/14	300.54	1163.85	
W-PIT7-2141	04/24/14	300.57	1163.82	
W-PIT7-2141	07/30/14	300.61	1163.78	
W-PIT7-2141	12/18/14	300.59	1163.80	
W-PIT7-2305	01/28/14	35.99	1283.76	FC=35.90 Q=0.18
W-PIT7-2305	04/22/14	35.93	1283.82	FC=35.82 Q=0.18
W-PIT7-2305	08/06/14	35.99	1283.76	
W-PIT7-2305	12/17/14	36.10	1283.65	
W-PIT7-2306	01/28/14	46.91	1305.11	FC=46.95 Q=0.00
W-PIT7-2306	04/22/14	-	-	TD=47.45 FC=46.94 Q=0.00
W-PIT7-2306	08/05/14	47.44	1304.58	FC=46.91 Q=0.00
W-PIT7-2306	12/17/14	47.48	1304.54	XD=46.87 FC=OFF
W-PIT7-2307	01/28/14	32.54	1305.01	FC=32.47 Q=0.00
W-PIT7-2307	04/23/14	32.92	1304.63	FC=32.96 Q=0.00
W-PIT7-2307	08/05/14	33.43	1304.12	FC=33.45 Q=0.00
W-PIT7-2307	12/17/14	45.63	1291.92	
W-PIT7-2309	01/28/14	32.27	1306.71	
W-PIT7-2309	04/22/14	36.24	1302.74	
W-PIT7-2309	08/05/14	32.68	1306.30	DBLE CHECKED DTW
W-PIT7-2309	12/30/14	-	-	restricted access NM/RA
W-PIT7-2703	01/28/14	46.00	1304.12	FC=46.03 Q=0.03
W-PIT7-2703	04/22/14	45.99	1304.13	FC=46.02 Q=0.05
W-PIT7-2703	08/05/14	45.87	1304.25	FC=45.81 Q=0.00 40PSI
W-PIT7-2703	12/18/14	45.72	1304.40	FC=45.85
W-PIT7-2704	01/28/14	39.50	1311.42	FC=39.53 Q=0.00
W-PIT7-2704	04/22/14	39.55	1311.37	FC=39.53 Q=0.00
W-PIT7-2704	08/05/14	39.52	1311.40	FC=39.56 Q=0.00
W-PIT7-2704	12/17/14	39.56	1311.36	FC=45.78
W-PIT7-2705	01/28/14	31.65	1286.37	FC=31.52 Q=0.05
W-PIT7-2705	04/22/14	31.67	1286.35	FC=31.51 Q=0.00
W-PIT7-2705	08/05/14	31.70	1286.32	FC=31.55 Q=0.00
W-PIT7-2705	12/17/14	31.66	1286.36	FC=39.63

Table C-8. Building 854 Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-854-01	02/06/14	217.89	1118.26	
W-854-01	04/14/14	217.75	1118.40	
W-854-01	08/28/14	217.76	1118.39	
W-854-01	11/05/14	217.81	1118.34	
W-854-02	02/06/14	147.68	1186.29	
W-854-02	08/28/14	146.21	1187.76	
W-854-02	11/05/14	146.35	1187.62	
W-854-03	02/06/14	120.83	1119.70	
W-854-03	04/14/14	120.32	1120.21	
W-854-03	08/28/14	122.25	1119.78	
W-854-03	11/05/14	126.47	1115.56	
W-854-04	02/06/14	291.63	948.46	
W-854-04	04/14/14	291.46	948.63	
W-854-04	08/28/14	290.01	950.08	
W-854-04	11/05/14	291.16	948.93	
W-854-05	02/06/14	89.75	1242.29	
W-854-05	04/14/14	89.90	1242.14	
W-854-05	08/28/14	89.85	1242.19	
W-854-05	11/05/14	89.89	1242.15	
W-854-06	02/06/14	119.77	990.68	
W-854-06	04/14/14	119.03	991.42	
W-854-06	08/28/14	119.23	991.22	
W-854-06	11/05/14	119.43	991.02	
W-854-07	02/06/14	118.42	992.44	
W-854-07	04/14/14	118.63	992.23	
W-854-07	08/28/14	118.81	992.05	
W-854-07	11/05/14	119.07	991.79	
W-854-08	02/06/14	121.79	1154.41	
W-854-08	04/14/14	121.87	1154.33	
W-854-08	08/28/14	122.54	1153.66	
W-854-08	11/05/14	122.70	1153.50	
W-854-09	02/06/14	190.66	1170.55	
W-854-09	08/28/14	191.90	1169.31	
W-854-09	11/05/14	190.92	1170.29	
W-854-10	02/06/14	118.05	1208.33	
W-854-10	08/28/14	118.71	1207.67	
W-854-10	11/05/14	118.97	1207.41	
W-854-11	02/06/14	-	-	TD=152.80
W-854-11	08/28/14	-	-	TD=152.80
W-854-11	11/05/14	-	-	TD=152.80 DRY
W-854-12	02/06/14	-	-	GREEN AREA
W-854-12	05/08/14	226.92	1029.87	
W-854-12	09/30/14	-	-	INACCESSABLE
W-854-12	10/30/14	226.84	1029.95	

Table C-8. Building 854 Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-854-13	02/06/14	-	-	GREEN AREA
W-854-13	05/08/14	106.55	1150.62	
W-854-13	09/30/14	-	-	INACCESSABLE
W-854-13	10/30/14	107.00	1150.17	
W-854-14	02/06/14	47.65	956.05	
W-854-14	04/14/14	52.06	951.64	
W-854-14	08/28/14	53.50	950.20	
W-854-14	11/05/14	53.57	950.13	
W-854-15	02/06/14	76.83	1055.17	
W-854-15	04/14/14	77.03	1054.97	
W-854-15	08/28/14	76.95	1055.05	
W-854-15	11/15/14	77.09	1054.91	
W-854-17	02/06/14	147.67	1188.49	
W-854-17	08/28/14	144.10	1192.06	
W-854-17	11/05/14	144.07	1192.09	
W-854-18A	02/06/14	141.40	1194.50	
W-854-18A	08/28/14	142.70	1193.20	
W-854-18A	11/05/14	142.88	1193.02	
W-854-19	02/06/14	-	-	TD=78.35
W-854-19	04/14/14	-	-	TD=78.40
W-854-19	08/28/14	-	-	TD=78.35
W-854-19	11/05/14	-	-	
W-854-45	02/06/14	85.13	912.76	
W-854-45	04/14/14	85.05	912.84	
W-854-45	08/28/14	85.16	912.73	
W-854-45	11/05/14	85.20	912.69	
W-854-1701	02/06/14	238.83	1011.49	
W-854-1701	04/14/14	239.00	1011.32	
W-854-1701	08/28/14	239.67	1010.65	
W-854-1701	11/05/14	239.70	1010.62	
W-854-1706	02/06/14	-	-	
W-854-1706	04/24/14	16.29	816.52	
W-854-1706	08/28/14	17.21	815.60	
W-854-1706	11/05/14	17.33	815.48	
W-854-1707	02/06/14	-	-	
W-854-1707	04/24/14	31.00	801.21	
W-854-1707	08/28/14	31.86	800.35	
W-854-1707	11/05/14	31.85	800.36	
W-854-1731	02/06/14	55.67	947.82	
W-854-1731	04/14/14	56.65	946.84	
W-854-1731	08/28/14	56.83	946.66	
W-854-1731	11/05/14	56.87	946.62	
W-854-1822	02/06/14	147.05	1040.41	
W-854-1822	04/14/14	147.07	1040.39	

Table C-8. Building 854 Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-854-1822	08/28/14	147.39	1040.07	
W-854-1822	11/05/14	147.44	1040.02	
W-854-1823	02/06/14	53.51	1100.75	
W-854-1823	04/14/14	53.73	1100.53	
W-854-1823	08/28/14	54.10	1100.16	
W-854-1823	11/05/14	54.12	1100.14	
W-854-1834	02/06/14	121.64	1211.75	
W-854-1834	04/14/14	121.82	1211.57	
W-854-1834	08/28/14	121.90	1211.49	
W-854-1834	11/05/14	121.33	1212.06	
W-854-1835	02/06/14	122.68	1210.07	
W-854-1835	04/14/14	-	-	TD=122.70
W-854-1835	08/28/14	-	-	DT=127.70
W-854-1835	11/05/14	-	-	DT=122.70 DRYTAG
W-854-1902	02/06/14	148.90	1039.38	VERY LITTLE WATER
W-854-1902	04/14/14	-	-	TD=148.90
W-854-1902	08/28/14	-	-	TD=148.90
W-854-1902	11/05/14	-	-	
W-854-2115	02/06/14	118.70	993.00	
W-854-2115	04/14/14	118.96	992.74	
W-854-2115	09/30/14	-	-	
W-854-2115	11/05/14	119.49	992.21	
W-854-2139	02/06/14	118.57	993.11	FC=OFF
W-854-2139	04/14/14	-	-	DT=120.17
W-854-2139	08/28/14	-	-	
W-854-2139	11/05/14	121.32	990.36	
W-854-2218	02/06/14	146.20	1188.50	
W-854-2218	04/14/14	146.14	1188.56	
W-854-2218	08/28/14	150.67	1184.03	
W-854-2218	11/05/14	149.15	1185.55	
W-854-2611	02/06/14	160.19	-	
W-854-2611	08/28/14	160.68	-	
W-854-2611	11/05/14	160.60	-	

Table C-9. Building 832 Canyon Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
SVI-830-031	02/25/14	24.33	668.00	
SVI-830-031	05/08/14	24.40	667.93	
SVI-830-031	09/03/14	24.58	667.75	
SVI-830-031	12/10/14	24.59	667.74	
SVI-830-032	02/25/14	32.70	659.70	
SVI-830-032	05/08/14	32.60	659.80	
SVI-830-032	09/03/14	32.95	659.45	
SVI-830-032	12/10/14	32.85	659.55	
SVI-830-033	02/25/14	24.02	668.33	
SVI-830-033	05/08/14	24.85	667.50	
SVI-830-033	09/03/14	25.13	667.22	
SVI-830-033	12/10/14	24.90	667.45	
SVI-830-035	02/25/14	23.21	669.15	
SVI-830-035	05/08/14	23.35	669.01	
SVI-830-035	09/03/14	23.43	668.93	
SVI-830-035	12/10/14	23.52	668.84	
W-830-04A	02/19/14	47.90	576.20	
W-830-04A	05/27/14	48.64	575.46	
W-830-04A	09/03/14	48.76	575.34	
W-830-04A	11/19/14	50.68	573.42	
W-830-05	02/24/14	24.32	560.05	
W-830-05	05/27/14	26.73	557.64	
W-830-05	09/03/14	26.82	557.55	
W-830-05	11/19/14	26.87	557.50	
W-830-07	02/24/14	-	-	TD=11.80
W-830-07	05/27/14	-	-	TD=11.80
W-830-07	09/03/14	-	-	TD=11.80
W-830-07	11/19/14	-	-	
W-830-09	02/25/14	124.86	570.90	
W-830-09	05/08/14	125.35	570.41	
W-830-09	09/03/14	125.30	570.46	
W-830-09	12/18/14	122.00	573.76	
W-830-10	02/24/14	20.19	576.51	
W-830-10	05/27/14	21.45	575.25	
W-830-10	09/09/14	22.88	573.82	
W-830-10	11/19/14	23.47	573.23	
W-830-11	02/24/14	36.45	559.74	
W-830-11	05/27/14	36.49	559.70	
W-830-11	09/09/14	37.26	558.93	
W-830-11	11/19/14	36.65	559.54	
W-830-12	02/25/14	90.42	601.90	
W-830-12	05/08/14	90.55	601.77	
W-830-12	09/03/14	90.73	601.59	
W-830-12	12/10/14	90.68	601.64	
W-830-13	02/24/14	31.15	533.06	
W-830-13	05/27/14	31.17	533.04	
W-830-13	09/09/14	-	-	

Table C-9. Building 832 Canyon Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-830-13	11/19/14	33.48	530.73	
W-830-14	02/24/14	20.05	545.45	
W-830-14	05/27/14	21.03	544.47	
W-830-14	09/09/14	21.35	544.15	
W-830-14	11/19/14	21.24	544.26	
W-830-15	02/20/14	9.87	554.92	
W-830-15	05/27/14	8.34	556.45	
W-830-15	09/09/14	9.28	555.51	
W-830-15	11/19/14	7.44	557.35	
W-830-16	03/03/14	97.47	573.41	
W-830-16	06/02/14	98.61	572.27	
W-830-16	09/11/14	100.18	570.70	
W-830-16	11/24/14	100.85	570.03	
W-830-17	03/03/14	107.56	567.13	
W-830-17	06/02/14	108.88	565.81	
W-830-17	09/11/14	108.80	565.89	
W-830-17	11/24/14	109.00	565.69	
W-830-18	02/19/14	89.80	564.69	
W-830-18	05/14/14	89.00	565.49	
W-830-18	09/11/14	89.21	565.28	
W-830-18	11/19/14	84.21	570.28	
W-830-19	02/25/14	44.05	611.49	
W-830-19	05/08/14	44.26	611.28	
W-830-19	09/23/14	40.20	615.34	
W-830-19	12/10/14	-	-	
W-830-20	02/24/14	29.80	567.16	
W-830-20	05/27/14	29.13	567.83	
W-830-20	09/09/14	29.56	567.40	
W-830-20	11/19/14	28.03	568.93	
W-830-21	02/19/14	68.70	585.24	
W-830-21	05/14/14	68.47	585.47	
W-830-21	09/09/14	68.73	585.21	
W-830-21	11/19/14	68.17	585.77	
W-830-22	02/25/14	51.11	603.91	
W-830-22	05/08/14	51.60	603.42	
W-830-22	09/03/14	51.20	603.82	
W-830-22	12/10/14	51.76	603.26	
W-830-25	02/24/14	-	-	TD=26.70
W-830-25	05/27/14	-	-	TD=26.70
W-830-25	09/03/14	-	-	TD=26.70
W-830-25	11/19/14	-	-	TD=26.70 DRY
W-830-26	02/25/14	-	-	TD=77.8
W-830-26	05/08/14	-	-	TD=77.80 IN CHRISTY BOX WRONG CASING HT
W-830-26	09/03/14	-	-	DT=78.30
W-830-26	11/19/14	-	-	
W-830-27	02/19/14	37.96	586.56	
W-830-27	05/27/14	39.98	584.54	

Table C-9. Building 832 Canyon Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-830-27	09/03/14	40.94	583.58	
W-830-27	11/19/14	39.66	584.86	
W-830-28	02/19/14	58.43	566.43	
W-830-28	05/27/14	57.74	567.12	
W-830-28	09/03/14	59.51	565.35	
W-830-28	11/19/14	52.88	571.98	
W-830-29	02/25/14	79.74	580.99	
W-830-29	05/08/14	79.95	580.78	
W-830-29	09/03/14	81.90	578.83	
W-830-29	12/16/14	82.15	578.58	
W-830-30	02/25/14	20.34	672.17	
W-830-30	05/08/14	20.47	672.04	
W-830-30	09/03/14	20.55	671.96	
W-830-30	12/16/14	20.72	671.79	
W-830-34	02/25/14	19.47	672.88	
W-830-34	05/08/14	19.55	672.80	
W-830-34	09/03/14	19.77	672.58	
W-830-34	12/10/14	19.82	672.53	FC=OFF
W-830-49	02/25/14	-	-	PROBE STICKS, NO MEASURE
W-830-49	05/08/14	-	-	COULD NOT OPEN PORT BOLT
W-830-49	09/03/14	40.01	627.98	DISCONNECTED FROM SYSTEM
W-830-49	12/10/14	39.50	628.44	
W-830-50	02/24/14	32.74	576.40	
W-830-50	05/27/14	33.97	575.17	
W-830-50	09/09/14	35.50	573.64	
W-830-50	11/19/14	36.00	573.14	
W-830-51	02/24/14	-3.10	573.88	
W-830-51	05/27/14	-3.49	574.27	
W-830-51	09/09/14	-1.84	572.62	
W-830-51	11/19/14	-1.46	572.24	
W-830-52	02/24/14	0.45	572.93	
W-830-52	05/27/14	-	-	NON ARTESIAN NO PORT
W-830-52	09/09/14	-	-	NON ARTESIAN
W-830-52	11/19/14	-	-	
W-830-53	02/24/14	-0.38	576.45	
W-830-53	06/02/14	-	-	NON ARTESIAN NO PORT
W-830-53	09/09/14	-	-	NON ARTESIAN
W-830-53	11/24/14	-	-	NON ARTESIAN NM/RA
W-830-54	02/24/14	58.10	544.92	
W-830-54	06/02/14	58.46	544.56	
W-830-54	09/11/14	58.56	544.46	
W-830-54	11/24/14	58.85	544.17	
W-830-55	02/24/14	91.26	572.78	
W-830-55	06/02/14	91.53	572.51	
W-830-55	09/09/14	91.75	572.29	
W-830-55	11/19/14	91.54	572.50	
W-830-56	02/24/14	32.17	544.65	

Table C-9. Building 832 Canyon Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-830-56	05/27/14	32.03	544.79	
W-830-56	09/09/14	32.23	544.59	
W-830-56	11/19/14	32.18	544.64	
W-830-57	02/25/14	75.82	563.36	
W-830-57	05/27/14	75.54	563.64	
W-830-57	09/03/14	69.79	569.39	
W-830-57	11/19/14	66.78	573.47	
W-830-58	02/25/14	25.31	607.56	
W-830-58	05/27/14	26.14	606.73	
W-830-58	09/03/14	26.45	606.42	
W-830-58	12/10/14	26.51	606.36	
W-830-59	02/25/14	57.03	609.08	
W-830-59	05/08/14	57.10	609.01	
W-830-59	09/03/14	54.88	611.23	
W-830-59	12/19/14	55.17	610.94	
W-830-60	02/19/14	71.15	566.26	
W-830-60	05/14/14	70.50	566.91	
W-830-60	09/09/14	67.97	569.44	
W-830-60	11/19/14	66.75	572.16	
W-830-1730	02/20/14	25.12	522.98	
W-830-1730	06/02/14	25.22	522.88	
W-830-1730	09/09/14	24.96	523.14	
W-830-1730	11/19/14	24.90	523.20	
W-830-1807	02/25/14	30.55	666.23	
W-830-1807	05/08/14	33.12	663.66	
W-830-1807	09/03/14	27.90	668.88	UNHOOKED FROM SYSTEM
W-830-1807	12/10/14	27.80	668.67	FC=OFF
W-830-1829	02/25/14	54.33	606.18	
W-830-1829	05/08/14	54.72	605.79	
W-830-1829	09/03/14	53.98	606.53	
W-830-1829	12/10/14	53.85	606.66	
W-830-1830	02/25/14	55.45	605.55	
W-830-1830	05/08/14	55.60	605.40	
W-830-1830	09/03/14	55.50	605.50	
W-830-1830	11/19/14	54.09	606.91	
W-830-1831	02/20/14	169.79	574.92	
W-830-1831	06/02/14	169.26	575.45	
W-830-1831	09/11/14	170.70	574.01	
W-830-1831	11/24/14	171.44	573.27	
W-830-1832	02/20/14	181.76	568.11	
W-830-1832	06/02/14	181.51	568.36	
W-830-1832	09/11/14	183.21	566.66	
W-830-1832	11/24/14	176.89	572.98	
W-830-2213	02/19/14	76.81	579.08	
W-830-2213	05/14/14	76.87	579.02	
W-830-2213	09/09/14	77.15	578.74	
W-830-2213	11/19/14	74.09	581.80	NOT HOOKED TO FACILITY

W-830-2214	02/19/14	84.55	571.10	FC=RUNNING
W-830-2214	05/14/14	84.66	570.99	
W-830-2214	09/09/14	85.11	570.54	
W-830-2214	11/19/14	75.51	581.64	NOT HOOKED TO FACILITY
W-830-2215	02/19/14	91.56	564.25	RUNNING
W-830-2215	05/14/14	89.26	566.55	
W-830-2215	09/09/14	89.76	566.05	
W-830-2215	11/19/14	84.85	572.46	
W-830-2216	02/24/14	21.46	531.20	
W-830-2216	05/27/14	21.73	530.93	
W-830-2216	09/11/14	25.42	527.24	
W-830-2216	11/24/14	25.01	527.65	
W-830-2311	02/24/14	21.98	576.31	
W-830-2311	05/27/14	22.28	576.01	
W-830-2311	09/09/14	24.69	573.60	
W-830-2311	11/19/14	25.26	573.03	
W-830-2610	02/18/14	6.88	-	
W-830-2610	06/03/14	5.73	-	
W-830-2610	08/25/14	6.02	-	
W-830-2610	11/13/14	6.50	-	
W-830-2701	02/19/14	60.18	576.04	
W-830-2701	05/14/14	60.74	575.48	
W-830-2701	09/09/14	61.70	574.52	CASING REMOVED NEW POM
W-830-2701	11/19/14	63.36	573.36	
W-830-2806	02/20/14	179.83	-	
W-830-2806	06/02/14	178.74	-	
W-830-2806	09/11/14	180.12	-	
W-830-2806	11/24/14	180.75	-	
W-831-01	02/25/14	133.36	640.13	
W-831-01	05/08/14	130.95	642.54	
W-831-01	09/03/14	131.15	642.34	
W-831-01	12/10/14	131.35	642.14	
W-832-01	02/25/14	34.46	671.60	
W-832-01	05/08/14	34.57	671.49	
W-832-01	09/03/14	34.65	671.41	
W-832-01	12/10/14	34.90	671.16	
W-832-05	02/25/14	-	-	TD=34.50
W-832-05	05/08/14	-	-	TD=34.50
W-832-05	09/03/14	-	-	TD=39.50
W-832-05	12/10/14	-	-	
W-832-06	02/25/14	39.31	681.54	
W-832-06	05/08/14	39.53	681.32	
W-832-06	09/03/14	40.15	680.70	
W-832-06	12/10/14	39.40	681.45	
W-832-09	02/25/14	73.70	633.22	
W-832-09	05/08/14	73.87	633.05	
W-832-09	09/03/14	73.95	632.97	
W-832-09	12/10/14	74.40	632.52	

Table C-9. Building 832 Canyon Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-832-10	02/25/14	36.42	649.73	
W-832-10	05/08/14	36.52	649.63	
W-832-10	09/03/14	36.81	649.34	
W-832-10	12/10/14	36.79	649.36	
W-832-11	02/25/14	35.26	663.39	
W-832-11	05/08/14	35.33	663.32	
W-832-11	09/03/14	36.16	662.49	
W-832-11	12/10/14	36.28	662.37	
W-832-12	02/25/14	-	-	TD=25.50
W-832-12	05/08/14	-	-	TD=25.30
W-832-12	09/03/14	-	-	TD=25.30
W-832-12	12/10/14	-	-	TD=25.30 FC=OFF DRY
W-832-13	02/25/14	-	-	TD=23.00
W-832-13	05/08/14	-	-	TD=23.00
W-832-13	09/03/14	-	-	TD=23.00
W-832-13	12/10/14	-	-	TD=23.00 FC=OFF DRY
W-832-14	02/25/14	-	-	TD=25.50
W-832-14	05/08/14	-	-	TD=25.50
W-832-14	09/03/14	-	-	TD=25.50
W-832-14	12/10/14	-	-	TD=25.50 FC=OFF DRY
W-832-15	02/25/14	-	-	TD=23.50
W-832-15	05/08/14	-	-	TD=23.50
W-832-15	09/03/14	-	-	TD=23.50
W-832-15	12/10/14	-	-	TD=23.50 FC=OFF DRY
W-832-16	02/25/14	-	-	TD=17.90
W-832-16	05/08/14	-	-	TD=17.85
W-832-16	09/03/14	-	-	TD=17.96
W-832-16	12/10/14	-	-	TD=17.90 FC=OFF DRY
W-832-17	02/25/14	-	-	TD=18.50
W-832-17	05/08/14	-	-	TD=18.50
W-832-17	09/03/14	-	-	TD=18.50
W-832-17	12/10/14	-	-	TD=18.50 FC=OFF DRY
W-832-18	02/25/14	-	-	TD=25.50
W-832-18	05/08/14	-	-	TD=25.50
W-832-18	09/03/14	-	-	TD=25.50
W-832-18	12/10/14	-	-	TD=25.50 DRY
W-832-19	02/25/14	-	-	TD=24.90
W-832-19	05/08/14	-	-	TD=25.00
W-832-19	09/03/14	-	-	TD=25.00
W-832-19	12/10/14	-	-	TD=25.00 DRY
W-832-20	02/25/14	-	-	TD=25.60
W-832-20	05/08/14	-	-	TD=25.60
W-832-20	09/03/14	-	-	TD=25.60
W-832-20	12/10/14	-	-	TD=25.50 DRY
W-832-21	02/25/14	-	-	TD=13.40
W-832-21	05/08/14	-	-	TD=13.45
W-832-21	09/03/14	-	-	TD=13.50

Table C-9. Building 832 Canyon Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-832-21	12/10/14	-	-	TD=13.50 DRY
W-832-22	02/25/14	-	-	TD=56.40
W-832-22	05/08/14	-	-	TD=56.40
W-832-22	09/03/14	-	-	TD=56.40
W-832-22	12/10/14	-	-	
W-832-23	02/25/14	34.09	686.05	
W-832-23	05/08/14	34.12	686.02	
W-832-23	09/03/14	34.46	685.68	
W-832-23	12/10/14	34.64	685.50	
W-832-24	02/25/14	38.41	624.08	
W-832-24	05/08/14	38.73	623.76	
W-832-24	09/03/14	38.98	623.51	
W-832-24	12/10/14	38.87	623.62	
W-832-25	02/19/14	41.27	625.54	
W-832-25	05/08/14	41.45	625.36	
W-832-25	09/03/14	41.56	625.25	
W-832-25	12/10/14	41.61	625.20	
W-832-1927	02/19/14	234.40	591.60	
W-832-1927	05/08/14	234.38	591.62	
W-832-1927	09/03/14	234.42	591.58	
W-832-1927	12/10/14	234.51	591.49	
W-832-2112	02/25/14	75.36	578.73	
W-832-2112	06/02/14	74.05	580.04	
W-832-2112	08/25/14	74.33	579.76	
W-832-2112	11/25/14	73.20	580.89	
W-832-SC1	02/19/14	-	-	HIGH BRUSH 832 CANYON
W-832-SC1	05/27/14	-	-	WELLS OVERGROWN BOTTOM CANYON
W-832-SC1	09/09/14	-	-	OVERGROWN BRUSH
W-832-SC1	11/19/14	-	-	BRUSH OVERGROWN NM/UC
W-832-SC2	02/19/14	-	-	HIGH BRUSH 832 CANYON
W-832-SC2	05/27/14	-	-	WELLS OVERGROWN BOTTOM CANYON
W-832-SC2	09/09/14	-	-	IN CANYON
W-832-SC2	11/19/14	-	-	BRUSH OVERGROWN NM/UC
W-832-SC3	02/19/14	-	-	HIGH BRUSH 832 CANYON
W-832-SC3	05/27/14	-	-	WELLS OVERGROWN BOTTOM CANYON
W-832-SC3	09/09/14	-	-	UNSTABLE FOOTING
W-832-SC3	11/19/14	-	-	BRUSH OVERGROWN NM/UC
W-832-SC4	02/19/14	-	-	HIGH BRUSH 832 CANYON
W-832-SC4	05/27/14	-	-	WELLS OVERGROWN BOTTOM CANYON
W-832-SC4	09/09/14	-	-	NOT SAFE TO NAVIGATE
W-832-SC4	11/19/14	-	-	BRUSH OVERGROWN NM/UC
W-870-01	02/18/14	-	-	TD=15.80
W-870-01	06/03/14	-	-	TD=15.80
W-870-01	09/10/14	-	-	TD=15.80
W-870-01	11/17/14	-	-	
W-870-02	02/18/14	18.16	505.66	
W-870-02	06/03/14	18.36	505.46	

Table C-9. Building 832 Canyon Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-870-02	09/10/14	18.61	505.21	
W-870-02	11/17/14	18.76	505.06	
W-880-01	02/18/14	21.28	507.52	
W-880-01	06/03/14	21.48	507.32	
W-880-01	08/25/14	22.00	506.80	
W-880-01	11/13/14	21.48	507.32	
W-880-02	02/18/14	22.29	506.46	
W-880-02	06/03/14	22.27	506.48	
W-880-02	08/25/14	-	-	
W-880-02	11/13/14	22.85	505.90	
W-880-03	02/18/14	-	-	FLOWING ARTESIAN
W-880-03	06/03/14	-	-	FLOWING WELL SMELLS OF EGG
W-880-03	08/25/14	1.00	528.05	
W-880-03	11/13/14	-	-	FLOWING ARTESIAN NO PORT NM/RA

Table C-10. Building 851 Firing Table ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-851-05	03/10/14	-	-	GREEN AREA
W-851-05	04/30/14	137.71	1134.08	
W-851-05	09/30/14	-	-	INACCESSABLE
W-851-05	10/21/14	137.45	1134.34	
W-851-06	03/10/14	-	-	GREEN AREA
W-851-06	04/30/14	131.66	1133.84	
W-851-06	09/30/14	-	-	INACCESSABLE
W-851-06	10/21/14	131.23	1134.27	
W-851-07	03/10/14	-	-	GREEN AREA
W-851-07	04/30/14	137.33	1134.26	
W-851-07	09/30/14	-	-	INACCESSABLE
W-851-07	10/21/14	137.22	1134.37	
W-851-08	03/10/14	-	-	GREEN AREA
W-851-08	04/30/14	180.52	1091.50	
W-851-08	09/30/14	-	-	INACCESSABLE
W-851-08	10/21/14	180.53	1091.49	

Table C-11. Building 845 Firing Table and Pit 9 Landfill ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)
K9-01	01/29/14	79.32	996.19
K9-01	04/10/14	80.15	995.36
K9-01	09/03/14	78.89	996.62
K9-01	11/17/14	79.10	996.41
K9-02	01/29/14	129.39	1006.00
K9-02	04/10/14	129.72	1005.67
K9-02	09/03/14	128.67	1006.72
K9-02	11/17/14	128.88	1006.51
K9-03	01/29/14	120.62	996.46
K9-03	04/10/14	121.87	995.21
K9-03	09/03/14	121.48	995.60
K9-03	11/17/14	121.53	995.55
K9-04	01/29/14	91.27	993.05
K9-04	04/10/14	92.32	992.00
K9-04	09/03/14	90.58	993.74
K9-04	11/17/14	90.82	993.50

Table C-12. Building 833 ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-833-03	03/03/14	-	-	TD=38.50
W-833-03	05/07/14	-	-	TD=38.50
W-833-03	09/04/14	-	-	TD=38.50
W-833-03	11/17/14	-	-	
W-833-12	03/03/14	20.44	826.78	
W-833-12	05/07/14	20.47	826.75	
W-833-12	09/04/14	20.76	826.46	
W-833-12	11/17/14	-	-	TD=20.35 MUDDY DRY
W-833-18	03/03/14	-	-	TD=33.80
W-833-18	05/07/14	-	-	TD=33.80
W-833-18	09/03/14	-	-	TD=33.82
W-833-18	12/10/14	-	-	TD=33.80 DRY
W-833-22	03/03/14	-	-	TD=25.30
W-833-22	05/07/14	-	-	TD=25.30
W-833-22	09/04/14	-	-	TD=25.55
W-833-22	12/10/14	-	-	
W-833-28	03/03/14	41.65	814.27	
W-833-28	05/07/14	41.73	814.19	
W-833-28	09/04/14	41.80	814.12	
W-833-28	11/17/14	41.80	814.12	
W-833-30	03/03/14	273.42	578.24	
W-833-30	05/07/14	270.30	581.36	
W-833-30	09/04/14	270.37	581.29	
W-833-30	11/17/14	271.24	580.42	
W-833-33	03/03/14	25.22	823.58	
W-833-33	05/07/14	26.00	822.80	
W-833-33	09/04/14	26.13	822.67	
W-833-33	11/17/14	26.20	822.60	
W-833-34	03/03/14	-	-	TD=33.70
W-833-34	05/07/14	-	-	TD=33.70
W-833-34	09/04/14	-	-	
W-833-34	11/17/14	33.67	815.25	
W-833-43	03/03/14	-	-	TD=47.82
W-833-43	05/07/14	-	-	TD=47.80
W-833-43	09/03/14	-	-	TD=17.80
W-833-43	12/10/14	-	-	
W-840-01	02/26/14	117.49	579.59	
W-840-01	05/28/14	117.67	579.41	
W-840-01	09/09/14	118.86	578.22	
W-840-01	11/17/14	118.79	578.29	
W-841-01	02/26/14	-	-	
W-841-01	05/28/14	104.46	561.15	
W-841-01	09/09/14	104.05	561.56	
W-841-01	11/17/14	103.93	561.68	

Table C-13. Building 801 Firing Table and Pit 8 Landfill ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
K8-01	01/29/14	134.06	966.38	
K8-01	04/10/14	134.27	966.17	
K8-01	09/11/14	134.52	965.92	
K8-01	12/30/14	134.61	965.83	
K8-02B	01/29/14	163.54	964.58	
K8-02B	04/10/14	163.64	964.48	
K8-02B	09/11/14	163.38	964.74	
K8-02B	12/30/14	163.42	964.70	
K8-04	01/29/14	168.32	964.53	
K8-04	04/10/14	168.09	964.76	
K8-04	09/11/14	168.43	964.42	
K8-04	12/30/14	168.41	964.44	
K8-05	01/29/14	-	-	TD=146.20
K8-05	04/10/14	-	-	TD=146.20
K8-05	09/11/14	-	-	TD=146.30
K8-05	12/30/14	-	-	TD=146.30 DRY

Appendix D

Institutional Controls Monitoring Checklist

Appendix D

Institutional Controls Monitoring Checklist

Table B-2. Completed 2014 Institutional Controls Monitoring Checklist.

Table B-2. Institutional Controls Monitoring Checklist

This checklist will be used to conduct monitoring of institutional and engineered controls that are used to prevent exposure to contamination. The checklist will be completed at least annually and the results will be reported in the annual Compliance Monitoring Reports. Corrective action implementation is discussed in Section 6.1.6.

Institutional Control	Status[a]	Explanation/Observation of Corrective Action
Verify that the occupancy warning signs are visible at Building 834D.	YES	SIGNS VERIFIED 11/3/14
Verify that the Pit 6 Landfill was inspected within the last year and deficiencies were corrected.[b]	YES	DEBRIS REMOVED FROM CHANNEL 4/18/14
Verify that signage is in place at the Pit 6 Landfill prohibiting unauthorized access and excavation.	YES	VERIFIED 4/18/14
Verify that the fences and warning signs at the site boundary and control entry are in proper condition.[c]	YES	VERIFIED PER G. MEYERS 9/10/14
Verify that the Building 850 Soil Solidification Corrective Action Management Unit was inspected within the last year and deficiencies were corrected.[d]	YES	NOTED IN 2014 CMR
Verify that the Pit 7 Complex Drainage Diversion System was inspected within the last year and deficiencies were corrected.[c]	YES	NOTED IN 2014 CMR.
Verify that the Pit 7 Complex landfills were inspected within the last year and deficiencies were corrected.[b]	YES	BENT SURVEYORS MARKER NOTICED. OK TO LEAVE FROM SURVEYOR. 4/8/14
Verify that signage is in place at the Pit 7 Complex Landfills prohibiting unauthorized access and excavation.	YES	SIGNS IN PLACE. SIGNS ARE SHOWING WEAR FROM WEATHER & SUN DAMAGE 11/3/14
Verify that the occupancy warning signs are visible at Building 854A.	YES	IN PLACE ON DOOR TO ROOM 102
Verify that the occupancy warning signs are visible at Building 830.	YES	ON WEST ACCESS DOOR
Verify that the occupancy warning signs are visible at Building 833.	YES	ON MECHANICAL ROOM
Check that the engineered controls (heating, ventilating, and air-conditioning system for Building 833) are functioning properly.	YES	PM's HAVE BEEN COMPLETED FOR AC / HEAT SYSTEMS
Verify that the Pit 2 Landfill was inspected within the last year and deficiencies were corrected.[b]	YES	NO DEFICIENCIES REPORTED 9/23/14

Table B-2. Institutional Controls Monitoring Checklist (continued).

Institutional Control	Status[a]	Explanation/Observation of Corrective Action
Verify that the Pit 8 Landfill was inspected within the last year and deficiencies were corrected.[b]	YES	NO DEFICENCIES REPORTED 9/23/14
Verify that the Pit 9 Landfill was inspected within the last year and deficiencies were corrected.[b]	YES	NO DEFICENCIES REPORTED 9/23/14

Notes:

[a] Satisfactory status indicated by "Yes". Unsatisfactory status indicated by "No". Unsatisfactory status requires explanation. The Inspector shall immediately notify the Environmental Restoration Project Leader of any unsatisfactory status.

[b] The landfills are inspected and maintained by LLNL Maintenance and Utility Services. Inspections are documented and the results are provided to the Environmental Restoration Project and reported in the annual Compliance Monitoring Reports.

[c] Perimeter fences are inspected by LLNL Security annually.

[d] The Building 850 Soil Solidification mound is inspected and maintained by LLNL Maintenance and Utility Services. Inspections are documented and the results are provided to the Environmental Restoration Project and reported in the annual Compliance Monitoring Reports.

[e] The Pit 7 Drainage Diversion System is inspected and maintained by LLNL Maintenance and Utility Services. Inspections are documented and the results are provided to the Environmental Restoration Project and reported in the annual Compliance Monitoring Reports.

Inspected by:

STEPHEN ORLOFF [signature] Date: 11/24/14

(Print Name) (Signature)

PIT INSPECTION RECORDS PER. S. BRIGDON

PERIMETER FENCING INSPECTION PER SPO - G. MEYERS

Appendix E

Site 300 Soil Samples Collected During 2014

Appendix E

Site 300 Soil Samples Collected During 2014

Table E-1. Volatile Organic Compounds (VOCs) in soil sampled during drilling of wells W-832-3015, W-832-3016, W-832-3017 and W-832-3018 at Building 832.

Table E-1. Volatile Organic Compounds (VOCs) in soil sampled durirng drilling of wells W-832-3015, W-832-3016, W-832-3017 and W-832-3018 at Building 832.

Location	Date	Depth (ft)	TCE (mg/kg)	PCE (mg/kg)	cis-1,2-DCE (mg/kg)	trans-1,2-DCE (mg/kg)	Carbon tetrachloride (mg/kg)	Chloroform (mg/kg)	1,1-DCA (mg/kg)	1,2-DCA (mg/kg)	1,1-DCE (mg/kg)	1,1,1-TCA (mg/kg)	1,1,2-TCA (mg/kg)	Freon 11 (mg/kg)	Freon 113 (mg/kg)	Vinyl chloride (mg/kg)
B-832-3015	11/3/14	3	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01
B-832-3016	10/29/14	3	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01
B-832-3017	10/27/14	3	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01
B-832-3018	10/28/14	3	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01

Table E-1 (Con't). Analyte detected but not reported in main table.

Location	Date	Depth (ft)	Detection frequency
B-832-3015	11/3/14	3	0 of 27
B-832-3016	10/29/14	3	0 of 27
B-832-3017	10/27/14	3	0 of 27
B-832-3018	10/28/14	3	0 of 27