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2009 Annual
Compliance Monitoring Report
Lawrence Livermore National Laboratory
Site 300

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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 2009. The report is submitted in compliance with the Compliance Monitoring Plan (CMP)/Contingency Plan for Interim Remedies at Lawrence Livermore National Laboratory Site 300 (Ferry et al., 2002). As agreed to with the Regional Water Quality Control Board (RWQCB), the Central and Eastern General Services Area (GSA) monitoring data, which were collected in compliance with the GSA CMP (Rueth, 1998) and Eastern GSA post-shutdown monitoring requirements (Holtzapple, 2007) are also included in this report.

During the reporting period of January through December 2009, 8.8 million gallons of ground water and 92.9 million cubic feet of soil vapor were treated at Site 300, removing approximately 16 kilograms (kg) of volatile organic compounds (VOCs), 120 grams (g) of perchlorate, 1,500 kg of nitrate, 140 g of Research Department Explosive (RDX), and 3.1 g of a mixture of tetrabutyl orthosilicate (TBOS) and tetrakis (2-ethylbutyl) silane (TKEBS) (Table Summ-1).

Since remediation began in 1991, approximately 376 million gallons of ground water and over 493 million cubic feet of soil vapor have been treated, removing approximately 540 kg of VOCs, 910 g of perchlorate 8,100 kg of nitrate, 1.3 kg of RDX, and 9.5 kg of TBOS/TKEBs (Table Summ-2).

Unless stated otherwise, all monthly calendar dates cited in this report refer to the subject reporting period year 2009.

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 Explosive Process Area (HEPA) OU 4

2.5. Building 850 Area of 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, Building 845, Building 851)

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

Total VOC isoconcentration contour maps were constructed by summing 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 resultant sums were rounded to two significant figures before plotting on the maps.

Second semester 2009 data were used for primary contaminants of concern (COC) isoconcentration contour maps. The primary COC data were over-laid onto second semester extent of saturation so that the concentration data would agree temporally with the ground water level data. Secondary COC data were obtained from first semester 2009 sampling events, so these contours were over-laid onto first semester extent of saturation. As a result, in some cases the maximum concentration reported in the text for a particular COC might not agree with the posted value on the contour map because the maximum concentration sample was collected during the other semester.

Hydraulic capture zones for all HSUs, and post-only maps and isoconcentration contour maps for the secondary COCs are presented in this report. The capture zones are defined only for extraction and injection wells that were active at the time that the ground water elevations were measured. The capture zones presented in this report differ from those presented in the Site-Wide Remediation Evaluation Summary Report (Ferry et al., 2006), because the Site-Wide Remediation Evaluation Summary Report capture zones were estimated using computer models such as Winflow or FEFLOW, whereas the CMR capture zones are based primarily on the equipotentials of the ground water elevation contour maps. As a general rule the capture zones were extended to two upgradient ground water elevation contours. For cases where control is sparse, 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 and primary and secondary COC maps for all OUs where active ground water remediation is occurring (i.e., OU 1, OU 2, OU 4, OU 6, and OU 7).

To present a contemporaneous view of ground water elevations and COC plumes, the maps were constructed using the quarterly sampling data set available with the most complete geographic coverage for the 6-month reporting period. In some cases where multiple samples were collected during the selected quarter, the maximum concentration detected is presented on the COC plume map. In some rare cases, where additional samples were collected during the reporting period but not the selected quarter depicted on the COC plume map, the maximum detection for a particular well may not be shown on the COC plume map. Specific ground water monitoring data are discussed within each OU section of this report and all ground water analytical data are included in the data tables presented in this report.

Treatment facility operations and maintenance issues that occurred during the second semester 2009 and influent and effluent analytical data collected during second semester 2009 are included in this report. Treatment facility pH data collected during the second semester 2009 are presented in Appendix A. Ground and surface water monitoring analytical data and ground water elevation measurements for the entire calendar year 2009 are presented in Appendices B and C, respectively. The Building 834 T2 Area *in situ* bioremediation data is included in Appendix D.

There were no borehole soil samples collected and analyzed during 2009. Soil sample analytical data collected as part of the Building 850 Removal Action are presented in the Building 850 Removal Action Polychlorinated Biphenyl and Dioxin/Furan Compound Verification Sampling and Analysis Status Reports.

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 is an abandoned debris burial trench that received craft shop debris. Leaching of solvents in the debris resulted in the release of contaminants to ground water.

A ground water extraction and treatment system (GWTS) 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 from 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 units that removed VOCs through adsorption. The treated effluent water was discharged to nearby Corral Hollow Creek.

Remediation efforts in the Eastern GSA have successfully reduced concentrations of TCE and other VOCs in ground water to below their respective 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), RWQCB, and California Department of Toxic Substances Control (DTSC) approval. As required by the GSA ROD, ground water monitoring will be conducted for 5 years after shutdown to determine if VOC concentrations rise or "rebound" above cleanup standards. With one exception described in subsection 2.1.3.3 below, VOC (TCE) concentrations remain below their cleanup standards after 2 years and 8 months following shutdown of the treatment facility.

A map of the Eastern GSA, showing the locations of monitoring and extraction wells and the treatment facility is presented on Figure 2.1-1.

At the Central GSA, chlorinated solvents, mainly TCE, were used as degreasing agents in craft shops, such as Building 875. Rinse water from these degreasing operations was disposed of in dry wells. Typically, dry wells were gravel-filled holes about 3 to 4 feet (ft) deep and two ft 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. Contaminated ground water is extracted from eight wells (W-7I, W-875-07, W-875-08, W-873-07, W-872-02, W-7O, W-7P, and W-7R) at an approximate combined flow rate of approximately 2.0 to 3.0 gpm. The Central GSA GWTS began receiving partially treated water from the Building 830-Distal South (830-DISS) facility at the end of the first semester 2007, increasing the flow rate to approximately 5.0 to 6.0 gpm. The current GWTS configuration includes particulate filtration, air stripping to remove VOCs from extracted water, and granular activated carbon (GAC) to treat vapor effluent from the air stripper. Treated ground water is discharged to the surrounding natural vegetation using misting towers. Treated vapors are discharged to the atmosphere under permit from the San Joaquin Valley Unified Air Pollution Control District.

The Central GSA soil vapor extraction and treatment system (SVTS) began operation in the GSA adjacent to the Building 875 dry well contaminant source area in 1994 removing VOCs from soil vapor. Soil vapor is extracted from wells W-875-07, W-875-08, W-7I, and at a total flow rate of approximately 35 scfm. 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 monitoring and extraction wells and treatment facilities is presented on Figure 2.1-2.

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; receiving water monitoring; compliance summary; and sampling plan evaluation and modifications.

2.1.1.1. GSA Facility Performance Assessment

As discussed above, the Eastern GSA GWTS has been shut down since February 15, 2007. Subsequently, only the Central GSA treatment system data are presented in this report. The monthly ground water and soil vapor discharge volumes and rates and operational hours 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 are shown in Tables 2.1-2 and 2.1-3. The pH measurement results are presented in Appendix A.

2.1.1.2. GSA Operations and Maintenance Issues

There were no operations and maintenance issues at the Eastern GSA GWTS since it was shut down on February 15, 2007 because ground water cleanup standards have been achieved (see Section 2.1).

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

- Both the GWTS and SVTS were operated intermittently in the second half of July while various maintenance issues were addressed. Both systems were shut down on August 6 due to a discharge pump failure resulting from scale buildup. The pump was repaired and a 30-gallon Belsperse tank was installed to reduce scale buildup. The system was restarted on September 1.
- On November 17, the GWTS shutdown for no apparent reason. The facility was inspected and restarted on November 18. Operations returned to normal, no problems were identified.

- Extraction wells W-7P and W-R were shut down on December 7 to protect against damage caused by freezing temperatures. Extraction well W-7O was already offline because it is dewatered. An airline and valve were damaged on December 8 due to freezing temperatures. The remaining GWTS and SVTS extraction wells were shut down on December 9 for the rest of the reporting period to protect against damage caused by freezing temperatures. In colder weather, condensation tends to increase in both the GAC units and the water knockout drum; reducing the contaminant removal efficiency of the GAC and increasing the potential for freeze damage to the knock-out drum.

2.1.1.3. GSA Compliance Summary

The Central GSA GWTS operated in compliance with the Substantive Requirements for Wastewater Discharge during the second semester 2009. The Central GSA SVTS system operated in compliance with San Joaquin Valley Unified 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 Substantive Requirements and the GSA CMP (Rueth, 1998) monitoring requirements. The treatment facility sampling and analysis plan is presented in Table 2.1-4. The only modification made to the plan during this reporting period was that no compliance monitoring was conducted in August due to system shutdown as discussed above.

2.1.1.5. GSA Treatment Facility and Extraction Wellfield Modifications

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

2.1.2. GSA Surface Water and Ground Water Monitoring

The sampling and analysis plans for ground water monitoring at the Central and Eastern GSA are presented in Tables 2.1-5 and 2.1-6, respectively. These tables also delineate and explain deviations from the sampling plan and indicate any additions made to the CMP.

During the reporting period, ground water monitoring was conducted in accordance with the Central GSA CMP and Eastern GSA post-shutdown monitoring requirements with the following exceptions; thirteen required analyses were not performed due to a pump failure and twenty required analyses were not performed because there was insufficient water in the wells to collect the samples. Pumps that failed are in the process of being replaced or repaired. Some wells with insufficient water in the dry well pad area are most likely due to water levels dropping below well screens after the SVE system is shut down for sampling; revised sampling methods are being developed for future sampling of these wells.

Ground water elevation contours and hydraulic capture zones for the extraction wells that were active during first semester for the Eastern and Central GSA are presented in Figures 2.1-3 and 2.1-4, respectively.

Analytical results and ground water elevation measurements obtained during 2009 are presented in Appendix B and C, respectively.

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 are summarized in Table 2.1-7. The total mass removed during this 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 GSA OU, VOCs are the primary COCs detected in ground water. VOCs are present at very low concentrations in ground water within Quaternary alluvial deposits (Qal) that directly overlie the $Tnbs_1$ bedrock in the Eastern GSA. A total VOC isoconcentration contour map based on data collected during the second semester 2009 for this shallow Qal-$Tnbs_1$ hydrostratigraphic unit (HSU) is presented on Figure 2.1.5.

Since extraction and treatment began at the Eastern GSA in 1991, TCE concentrations in ground water have decreased from a historic maximum of 74 micrograms per liter (µg/L) (W-26R-03, January 1992) to below analytical reporting limits (0.5 µg/L) in the majority of wells and to below the 5 µg/L cleanup standard for TCE in all wells. Within the Qal-$Tnbs_1$ HSU, total VOC concentrations detected in samples during the second semester 2009 ranged from 4.7 µg/L (W-26R-01, November 2009) to <0.5 µg/L. VOCs were not detected in ground water samples from wells in the deeper $Tnbs_1$ HSU during second semester 2009. Second semester 2009 data indicate that TCE and other VOCs have not rebounded significantly and, with one exception described in subsection 2.1.3.3 below, continue to remain below their cleanup standards in all wells since the Eastern GSA GWTS was shutdown in February 2007.

VOCs are the only COCs in ground water and soil vapor at the Central GSA. There are three primary HSUs in the Central GSA:

- Qt-$Tnsc_1$ HSU, a shallow water bearing zone in the western portion of the Central GSA. This HSU includes saturated Qt deposits, and the $Tnbs_2$ sandstone and $Tnsc_1$ siltstone/claystone bedrock units that subcrop beneath the Qt.
- $Tnbs_1$ HSU, a deeper regional aquifer within the western portion of the Central GSA which consists of $Tnbs_1$ sandstone bedrock.
- Qal-$Tnbs_1$ HSU, a shallow water bearing zone within the eastern portion of the Central GSA. In the eastern portion of the Central GSA (near the sewage treatment pond), Qt deposits and the $Tnbs_2$ and $Tnsc_1$ bedrock units are not present. Qal deposits directly overlie the shallow $Tnbs_1$ bedrock that comprises the Qal-$Tnbs_1$ HSU in this area.

A VOC plume exists within the Qt-$Tnsc_1$ and Qal-$Tnbs_1$ HSUs in the Central GSA. A total VOC isoconcentration contour map based on data collected during the second semester (fourth quarter) of 2009 for these HSUs is presented on Figure 2.1.6.

Within the Qt-$Tnsc_1$ and Qal-$Tnbs_1$ HSUs, total VOC concentrations during the second semester 2009 ranged from a maximum of 390 µg/L (W-875-08, July 2009) to <0.5 µg/L. The maximum total VOC ground water concentration continues to occur in the dry well pad area.

During the second semester 2009, total VOCs were detected in offsite monitoring wells W-35A-01, W-35A-09, and W-35A-10 at concentrations of 60, 2.6, and 18 µg/L, respectively. Freon 11 comprises 8.5 µg/L of the total VOC concentration (18 µg/L) in well W-35A-10. Prior to remediation, the maximum total VOC concentration detected in Central GSA ground water was 329,000 µg/L prior to GWTS startup, compared to 2009 maximum concentration of 320 µg/L. VOCs were not detected in ground water samples from wells in the deeper $Tnbs_1$ HSU. The decline in VOCs within the Qt-$Tnsc_1$ and Qal-$Tnbs_1$ HSUs and the absence of VOCs in the deeper $Tnbs_1$ HSU, demonstrates the efficacy of ongoing cleanup operations. The overall extent of ground water impacted by VOCs in Central GSA has not changed significantly over the last few years. However, due to remedial efforts, there are no longer any wells in the area, with measured VOC concentrations exceeding 1,000 µg/L.

A TCE soil vapor concentration contour map is presented on Figure 2.1-7 and depicts the extent of TCE vapor during the fourth quarter (November) 2009, which is contemporaneous with the quarter represented by the VOC plume in ground water. The extent of the vapor plume is similar to the one depicted during the first semester 2009. The maximum TCE soil vapor concentration detected during the second semester 2009 was 5.7 $ppm_{v/v}$ (W-875-10, September 2009). The maximum TCE soil vapor concentration detected during the first semester 2009 was 6.3 $ppm_{v/v}$ (W-7I, February 2009). The maximum historical TCE vapor concentration was 600 $ppm_{v/v}$ at SVTS startup.

2.1.3.3. GSA Remediation Optimization Evaluation

By 2007, ground water extraction and treatment had reduced VOC concentrations in all Eastern GSA wells to below the GSA ROD ground water cleanup standards and TCE concentrations to below analytical reporting limits (0.5 µg/L) in the majority of wells. In January of 2007, DOE/LLNL proposed to initiate the "Requirements for Closeout" described in the Remedial Design document for the GSA OU (Rueth et al., 1998). These requirements specify: *when VOC concentrations in ground water have been reduced to cleanup standards, the ground water extraction and treatment system will be shut off and placed on standby*. The U.S. EPA, RWQCB, and DTSC approved this proposal and the Eastern GSA ground water extraction and treatment system was turned off and effluent discharge to Corral Hollow Creek was discontinued on February 15, 2007, thereby meeting the Substantive Requirements. As required by the GSA ROD, ground water monitoring is being conducted to determine if VOC concentrations rebound above cleanup standards. As of the end of the second semester 2009, VOCs (TCE) have been detected only once above cleanup standards (6.9 µg/L in well W-26R-01 in May 2009). As described in the first semester 2009 CMR, this well and nearby well W-26R-04 were re-sampled in June 2009 with no TCE detections above the cleanup standard. These results were discussed with the U.S. EPA, DTSC, and RWQCB at the July 8, 2009 Remedial Project Managers (RPM) Meeting. The regulatory agencies concurred with continued monitoring and evaluation of TCE concentrations in Eastern GSA wells to determine if TCE concentrations are rebounding. As mentioned in the previous subsection, TCE concentrations were below the 5 µg/L cleanup standard for all Eastern GSA ground water samples collected during second semester 2009.

At the Central GSA, ground water extraction continues to adequately capture the highest concentrations in ground water, as shown by capture zones depicted on Figure 2.1-6. One extraction well (W-7P) did not produce ground water during second semester 2009, and two other extraction wells (W-7O and W-872-02) were not extracting during October, the month represented by the capture zones; therefore, capture zones were not depicted for these three wells. Water production from wells W-7P and W-7O has declined due to a lowering of the water table resulting from a combination of long-term pumping and low rainfall. Well W-872-02 has not pumped since July 2009; a pump evaluation and possible pump replacement is planned for the near future. Extraction well W-873-07 is also being considered for a pump evaluation in order to increase its pumping rate and drawdown. During the second semester 2009, extraction well W-7R removed most of the ground water while well W-875-08 removed most of the dissolved VOC mass. Total VOC concentrations within the northern plume area (in the vicinity of W-889-01) remain stable. As discussed in the 2006 GSA Five-Year Review, VOC concentrations in well W-889-01 increase in the future, ground water extraction in this area will be considered.

Significantly more VOC mass is being removed by soil vapor extraction than by ground water extraction. During the second semester 2009, 0.06 kg of VOCs was removed from ground water, whereas 0.94 kg of VOCs was removed from vapor. Based on individual well vapor flow monitoring for the second semester 2009, SVE wells W-875-09, W-875-10, W-875-11, and W-875-15 removed most of the vapor mass. The SVE wellfield configuration will continue to be monitored and evaluated. Pneumatic communication tests for each SVE well are planned for the near future, in addition to periodic rebound testing. Changes to the SVE well configuration will be made as part of these ongoing optimization activities.

2.1.3.4. GSA OU Remedy Performance Issues

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 cleanup standards 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. A map of Building 834 OU showing the locations of monitoring 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 main part of the Building 834 Complex, referred to as the Building 834 core area. The GWTS removes VOCs and TBOS/TKEBs from ground water within the Tpsg HSU and the SVTS removes VOCs from soil vapor. The area immediately to the southwest of the core area is the leachfield area and further to the south is the distal (T2) area. 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 extraction wells for both ground water and soil vapor extraction. Ten extraction wells (W-834-B2, -B3, -D4, -D5, -D6, -D7, -D12, -D13, -J1, and -2001) are located within the core area and three (W-834-S1, -S12A, and -S13) in the leachfield area. Extraction well W-834-D5 is connected to the facility but has not been used for extraction since the facility was restarted in October 2004 because the capture area is similar to the capture area of extraction well W-834-D13. Ground water and soil vapor extraction well W-834-2001 was added to the system in March 2007. Extracted ground water from this well contains dissolved-phase diesel related to the former underground diesel storage tank. The GWTS extracts ground water at an approximate combined flow rate of 0.23 gpm and the SVTS extracts soil vapor at a combined flow rate of approximately 103 scfm. The current GWTS configuration includes floating hydrocarbon adsorption devices to remove the floating silicon oil, TBOS/TKEBs, and any floating diesel, 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 from the San Joaquin Valley Unified Air Pollution Control District.

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 are summarized in Table 2.2-1. 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 are shown in Tables 2.2-2 through 2.2-5. 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:

- The GWTS and SVTS were shut down on December 7 and remained off for the rest of the reporting period to prevent freeze damage due to freezing temperatures. The SVTS was turned off due to the potential for increased condensation and freeze damage, and because the SVTS cannot be operated without the GWTS in operation.

2.2.1.3. Building 834 OU Compliance Summary

The Building 834 GWTS operated in compliance with the Substantive Requirements for Wastewater Discharge. The Building 834 SVTS operated in compliance with the San Joaquin Valley Unified Air Pollution Control District permit limitations.

2.2.1.4. Building 834 OU Facility Sampling Plan Evaluation and Modifications

The Building 834 treatment facility sampling and analysis plan complies with CMP monitoring requirements. The sampling and analysis plan is presented in Table 2.2-6. There were no modifications made to the plan during the reporting period.

2.2.1.5. Building 834 OU Treatment Facility and Extraction Wellfield Modifications

No modifications to the treatment facility or to the extraction wellfield occurred 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 2.2-7. 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; one hundred and eight required analyses were not performed because there was insufficient water in the wells to collect the samples.

Ground water elevation contours for the Tpsg HSU are presented on Figure 2.2-2. Ground water elevations for the Tps-$Tnsc_2$ HSU are posted on Figure 2.2-3.

Analytical results and ground water elevation measurements obtained during 2009 are presented in Appendix B and C, respectively.

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 are summarized in Table 2.2-8. The total mass removed during this 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 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.

Total VOC concentration data are contoured for the Tpsg HSU and posted for the Tps-$Tnsc_2$ HSU based on data collected during the second semester 2009 and are presented on Figures 2.2-4 and 2.2-5, respectively. Secondary ground water COC concentrations for the first semester 2009 are posted and presented on Figures 2.2-6 and 2.2-8 for the perched Tpsg HSU and on Figures 2.2-7 and 2.2-9 for the Tps-$Tnsc_2$ HSU.

2.2.3.2.1. Total VOCs Concentrations and Distribution

The overall extent of total VOCs in the Building 834 OU ground water and soil vapor have not changed significantly, and the maximum concentrations have decreased by more than an order-of-magnitude since remediation began in the mid 1990s.

The highest VOC concentrations in both soil vapor and ground water continue to be detected in the 834 core area. Active remediation has reduced total VOC ground water concentrations in the more permeable Tpsg HSU from a pre-remediation maximum of 1,060,000 µg/L (W-834-D3, 1993) to a second semester 2009 maximum concentration of 61,000 µg/L (W-834-C5, August 2009). The underlying Tps-$Tnsc_2$ HSU currently exhibited the highest total VOC ground water concentrations within Building 834 OU, and throughout Site 300, at 170,000 µg/L (W-834-A1, August 2009). Total VOCs in ground water in well W-834-A1 have remained stable since this well began monitoring the Tps-$Tnsc_2$ HSU in 2000. Another Tps-$Tnsc_2$ HSU monitoring well, W-834-U1, exhibited 62,000 µg/L total VOCs in the second semester 2009 and has generally shown decreasing VOC concentrations since 2000. TCE soil vapor concentrations from the core area SVE wells ranged from 0.12 to 4.3 $ppm_{v/v}$ during second semester 2009. These TCE concentrations have decreased significantly from the maximum pre-remediation core area concentration of 3,200 $ppm_{v/v}$ (W-834-D4, 1989). Well W-834-D4 is located approximately 10 ft from well W-834-D3, which yielded the maximum ground water total VOC concentration in the Tpsg HSU, as mentioned above.

In the leachfield area, total VOCs in the Tpsg HSU have decreased by an order-of-magnitude, from a pre-remediation maximum of 179,200 µg/L (W-834-S1, 1988) to a second semester 2009 maximum concentration of 14,000 µg/L (W-834-2113, August 2009). Total VOCs in the underlying Tps-$Tnsc_2$ HSU in the leachfield area are significantly lower than in the core area. The second semester 2009 maximum total VOC concentration in Tps-$Tnsc_2$ HSU ground water was 5,800 µg/L (W-834-S8, August 2009) in the leachfield area. This HSU has exhibited decreasing or stable VOC trends since monitoring began in 1989. Second semester 2009 TCE soil vapor concentrations from the Tpsg HSU in the leachfield area ranged from 0.66 to 11 $ppm_{v/v}$, significantly lower than the 710 $ppm_{v/v}$ maximum pre-remediation leachfield area TCE soil vapor concentration measured in 2004.

In the distal area, total VOC concentrations in the Tpsg HSU have decreased from an historic maximum of 86,000 µg/L (W-834-T2A, 1988) to a second semester 2009 maximum of 11,000 µg/L (W-834-T2A, August 2009). The underlying Tps-$Tnsc_2$ HSU is monitored by one well, W-834-2119, which contained 11,000 µg/L total VOCs during the second semester 2009. Historic total VOC concentrations in this well have not changed significantly. This well continues to be closely monitored because it is located near an ongoing *in situ* bioremediation experiment. *In situ* bioremediation is being evaluated for this area as part of a long-term treatability test described in Section 2.2.3.4. The total VOC concentrations in the area impacted by the bioremediation experiment have decreased significantly due to a combination of *in situ* biodegradation and dilution.

TCE biodegradation continues within the core area where significant amounts of TBOS/TKEBS are present and serve as an electron donor for intrinsic *in situ* biodegradation. Historically, the primary byproduct of this biodegradation has been cis-1,2-DCE, although limited vinyl chloride has also been detected. Both cis-1,2-DCE and vinyl chloride were detected in core area ground water in second semester 2009, at maximum concentrations of 23,000 µg/L and 98 µg/L, respectively.

Total VOCs and their extent in ground water are expected to continue to decrease over time as remediation progresses. The deep regional $Tnbs_1$ aquifer continues to be free of contaminants as demonstrated by quarterly analyses of ground water from $Tnbs_1$ guard wells W-834-T1 and W-834-T3.

2.2.3.2.2. TBOS/TKEBS Concentrations and Distribution

The maximum TBOS/TKEBS ground water concentration has decreased from an historic maximum of 7,300,000 µg/L (W-834-D3, 1995) to 270,000 µg/L (W-834-D3, February 2009). This compound is found exclusively in the core area. TBOS/TKEBS concentrations vary from one sampling event to the next, likely due to varying amounts of free-phase TBOS/TKEBS in the sample. TBOS/TKEBS in Tpsg HSU wells in the leachfield and distal areas continue to be below reporting limits during 2009.

Both the concentration and extent of TBOS/TKEBS in ground water are greater in the Tpsg HSU than in the underlying Tps-$Tnsc_2$ HSU perched horizon. During 2009, TBOS/TKEBS was detected in one Tps-$Tnsc_2$ HSU well at 110 µg/L (W-834-U1, February 2009). TBOS/TKEBS continues to remain below reporting limits in guard wells W-834-T1 and W-834-T3.

2.2.3.2.3. Nitrate Concentrations and Distribution

During 2009, nitrate concentrations in ground water exceeded the 45 mg/L cleanup standard in the Building 834 core, leachfield, and distal areas in the Tpsg and Tps-$Tnsc_2$ HSUs. Nitrate in Tpsg HSU ground water ranged from a maximum of 310 mg/L (W-834-S7, February 2009) to below the 0.5 mg/L reporting limit. In the core area, nitrate in the Tpsg HSU varies spatially and temporally due to denitrification associated with ongoing intrinsic *in situ* biodegradation. In the underlying Tps-$Tnsc_2$ HSU, nitrate ranged from a maximum of 93 mg/L (W-834-1711, January 2009) to 2.4 mg/L (W-834-A1, February 2009).

Both natural and anthropogenic (e.g., septic) sources contribute to the nitrate in Building 834 OU ground water. While nitrate has decreased from an historic maximum of 749 mg/L (W-834-K1A, 2000), the continued presence of nitrate above the MCL indicates an ongoing source of nitrate to ground water that is likely a combination of natural sources and septic system leachate. The primary source of nitrate is most likely the septic system leachfield. Additional natural sources in the Tpsg and underlying Tps-$Tnsc_2$ may also contribute nitrate to the ground water.

Nitrate was measured in $Tnbs_1$ HSU guard well W-834-T1 during the first semester 2009 at 0.89 mg/L (February 2009), well below its MCL. Historically, nitrate has been detected in this well on two previous occasions (0.45 mg/L in January 2004 and 3.8 mg/L in November 1997). During the second semester 2009, nitrate was not detected in guard well W-834-T1. Nitrate was not detected in $Tnbs_1$ HSU guard well W-834-T3 during 2009.

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. During 2009, diesel was detected in well W-834-2001 at 1,200 µg/L (January 2009) and 110,000 µg/L (July 2009). Diesel varies from one sampling event to the next likely due to varying amounts of free-phase product in the sample.

Benzene, toluene, ethylbenzene, and xylenes (BTEX) were monitored in ten Building 834 OU wells during 2009. No BTEX was detected in 2009 in these wells, and none was detected in 2008. In 2007, BTEX was detected at low levels in a single well, W-834-S12A. No BTEX was detected in 2006. Due to the fact that BTEX has not been detected, or only sporadically, in recent years, sampling for BTEX will be discontinued under the new CMP in 2010.

During 2009, two wells (W-834-S7 and W-834-2118) were monitored for perchlorate. Perchlorate was detected in ground water from well W-834-S7 at 11 µg/L (February and August 2009) and from well W-834-2118 at 4.1 µg/L (August 2009). Ground water monitoring for perchlorate will continue semi-annually for these two wells during 2010.

2.2.3.3. Building 834 OU Remediation Optimization Evaluation

Dual-phase extraction and treatment continued in the Building 834 area throughout the second semester 2009 with the exceptions discussed in Section 2.2.1.2. During the second semester 2009, no modifications were made to the core or leachfield area extraction wellfields. Substantially more VOC mass is being removed by soil vapor extraction than by ground water extraction. Of the 4.96 kg of VOCs removed during the second semester 2009, 4.34 kg were removed in the vapor phase. About half of the vapor mass was removed from the core area and half from the leachfield area. However, most of the 0.63 kg of dissolved phase VOC mass that was removed came from the core area (0.52 kg).

The extraction wellfield for the Tpsg HSU within the core area continues to adequately capture the highest VOC concentrations in ground water. In the leachfield area, the extraction wellfield continues to capture portions of the VOCs in ground water. However, the highest concentrations (in the vicinity of monitoring well W-834-2113) are not fully captured. Accordingly, the leachfield area is under consideration for extraction wellfield optimization.

Total VOC concentration trends in the underlying Tps-$Tnsc_2$ HSU will continue to be monitored closely to evaluate beneficial impacts from active remediation of the overlying Tpsg HSU. Additionally, Tps-$Tnsc_2$ HSU monitoring well W-834-A1 is being considered for conversion to an extraction well due to the persistence of high VOC concentrations in this well. The effectiveness of extracting from this low permeability, limited recharge HSU will be evaluated over time. The use and feasibility of enhanced *in situ* remediation techniques, such as reagent injection coupled with bio-augmentation, will be considered if conventional ground water extraction shows limited effectiveness.

2.2.3.4 T2 Treatability Study

The T2 treatability study, which began in 2005, continued during the second semester 2009. One of the primary objectives of this study is to assess the performance of passive *in situ* bioremediation of TCE at concentrations greater than 10 mg/L in a low yield water-bearing zone (Tpsg HSU) that is typical of VOC source areas at Site 300. The technology is considered passive because it relies solely on injection of nutrients and bacteria without the aid of any active extraction wells. In this treatability study, an isotopically distinct conservative tracer, Hetch-Hetchy (H-H) water, and light hydrocarbon (LHC) analysis of TCE breakdown products, such as ethene, are being used to distinguish bacterial dechlorination of TCE from dilution of the plume resulting from reagent and H-H tracer injection. In 2008, Tpsg ground water was bioaugmented with a consortium of dechlorinating bacteria (KB-1) that contain a strain of Dehalococoides capable of complete dechlorination of TCE to ethene.

As reported in the 2008 Annual CMR, the injection of H-H water into Tpsg well W-834-1824 along with additions of electron donor, sodium lactate (Na lactate), was discontinued in late December 2008 (Dibley et al., 2009). A total of approximately 2,800 gallons of H-H water and 200 gallons of Na lactate were injected between June 2007 and December 2008. Well W-834-1825 was bioaugmented on August 5, 2008 by injecting a 10-liter slurry containing KB-1 after suitable reducing conditions had been achieved. In August 2009, all *in situ* monitoring equipment was removed from the T2 area wells.

During this reporting period, ground water levels declined in all wells in the T2 study area. Reduction-oxidation reaction (Redox) conditions remained highly reducing in wells W-834-T2 and W-834-1825 and although they had reached highly reducing conditions in a third well (W-834-1833) by the end of the first semester 2009 (Table D-2), the conditions became much less reducing by the end of August. As reported in the 2008 Annual CMR, the total VOC concentration in two of the five performance monitoring wells, W-834-T2 and W-834-1825, had already declined significantly by the end of the first semester 2009 (60.9 µg/L and 51.7 µg/L, respectively) (Dibley et al., 2009). The other three performance monitoring wells (W-834-1833, W-834-T2A and W-834-T2D) continued to exhibit little to no change. By the end of second semester 2009, bioaugmentation well (W-834-1825) remained at low total VOC concentrations (55.4 µg/L), whereas well W-834-T2 showed a slight rebound of TCE to 100 µg/L, and biotransformation by-products cis-1,2-DCE to 430 µg/L, and vinyl chloride to 190 µg/L. Additionally, the total amount of electron donor available for bacterial dechlorination in well W-834-1825 was considerably higher than in well W-834-T2.

The overall decline in total VOC concentrations within the T2 treatment area is due to both biotransformation of TCE to ethene and dilution by H-H water and Na lactate injection. During this reporting period, isotopic analyses of samples collected in December 2009 indicate very little change in isotopic composition compared to late 2008. This is most likely due to the low levels of rainfall recharge and lack of ground water movement in the perched Tpsg HSU during this time period. Evidence of complete dechlorination of TCE to ethene continues in bioaugmentation well W-834-1825 and nearby well W-834-T2. As reported during the first semester 2009, ethene continues to be higher in well W-834-T2 (970 µg/L) than well W-834-1825 (37 µg/L). There are at least two possible explanations for the detection and persistence of ethene in well W-834-T2: (1) a hydraulic connection exists between bioaugmentation well W-834-1825 and W-834-T2 via a preferential pathway and KB-1 bacteria injected into well W-834-1825 in August migrated to well W-834-T2 by November 2008; or (2) a complete dechlorination of TCE was achieved at well W-834-T2 by indigenous bacteria and electron donor addition. The second scenario was not supported by the microcosm study that indicated electron donor alone could not lead to complete dechlorination. The fact that ethene and other biotransformation by-products continue to be significantly lower in well W-834-1825 than well W-834-T2, could be attributed to a faster rate of biotransformation, including the conversion of ethene to carbon dioxide (CO_2) and water, in the bioaugmentation well.

One of the potential water quality impacts of this *in situ* technology is methane production and metals dissolution in the treatment zone. For example, by December 2009, methane in groundwater increased to 15,000 µg/L in well W-834-T2 and 19,000 µg/L in well W-834-1825 (Appendix D). However, the methane production appears to be localized to the treatment zone in the immediate vicinity of these two wells, as methane levels in nearby well W-834-1833 were measured at a maximum of 50 µg/L in August and dropped to 1.2 µg/L by the end of the second semester 2009. Only one metal, manganese, has shown increases within the treatment zone in the T2 Area (Table B-2.5). The MCL for manganese is 0.05 mg/L. Manganese increased from less than 0.10 mg/L to a maximum of 0.92 mg/L in ground water from well W-834-T2 and to 10.0 mg/L in ground water from well W-834-1825 during the second semester 2008. However, the downgradient well W-834-1833, which is still within the treatment zone, increased to a maximum of 0.48 mg/L in August 2009 and then decreased to 0.013 mg/L in December 2009. This indicates that any increase in metals dissolution is limited to the treatment zone in the vicinity of wells W-834-T2 and W-834-1825.

Another water quality concern related to Na lactate injection is salinity impact. Salinity was closely tracked as part of this study by monitoring specific conductance using *in situ* YSI probes in performance wells W-834-T2, W-834-1825 and W-834-1833, although these probes were removed at the end of August 2009. Based on these *in situ* probes, specific conductance increased by an order-of-magnitude in the two wells (W-834-1824 and W-834-1825) where Na lactate was injected directly. Note that during the tracer test phase of this study, when only low salinity H-H water was being injected into well W-834-1824, salinity increases were also observed but these increases were apparently related to dissolution of salts in the vadose zone between the H-H injection well and the performance wells. A continued increase in specific conductance was observed in ground water from well W-834-T2 (1,700 microsiemens [µS] in December 2008 to 2,095 µS in August 2009), whereas the specific conductance in ground water from well W-834-1833 remained essentially constant throughout 2009, and dropped slightly in well W-834-1825 from ~23,000 µS in December 2008 to ~ 17,000 µS in August 2009. The increase in specific conductance in ground water from well W-834-T2 is probably due to a combination of Na lactate injection and natural salts in the vadose zone. One of the water quality benefits of sustaining reducing conditions is denitrification. Nitrate concentrations have declined by up to an order-of-magnitude in the treatment zone due to denitrification by natural bacteria that convert NO_3 to N_2 gas.

To date, no adverse water quality impacts have been observed outside the treatment zone. The deep $Tnbs_1$ HSU beneath the T2 treatment zone remains devoid of VOCs based on ground water analytical results from $Tnbs_1$ guard well W-834-T1. Nearby Tpsg wells, W-834-T2B and W-834-T2C, located southwest of the treatment zone, remain "dry." Total VOC concentrations in Tpsg wells located upgradient (W-834-2117) and downgradient (W-834-2118) of the treatment zone, and in Tps-clay well (W-834-2119) located within the footprint of the treatment zone, did not significantly change during 2009. None of the wells located outside the treatment zone exhibited any significant changes in total VOC concentrations or any evidence of intrinsic biotransformation.

Performance monitoring will continue during 2010 to further evaluate this passive, *in situ* technology. In addition to VOCs and metals, performance wells will be monitored for: (1) volatile fatty acids to ensure that adequate nutrients are available for bacterial dechlorination; (2) LHCs to confirm complete dechlorination of TCE to ethene; and (3) delta deuterium (H_2O) and delta oxygen-18 (H_2O) to estimate the proportion of injected H-H water to natural ground water in the treatment zone. Water quality impacts within the treatment zone and both laterally and vertically beyond the treatment zone will be monitored for significant increases in VOCs, salinity, metals (chromium, arsenic, manganese, selenium, and iron), and methane. After adequate post-bioaugmentation monitoring has been performed to adequately assess the performance of this technology, different options will be evaluated for future remediation of the Building 834 distal area will be evaluated.

2.2.3.5. Building 834 OU Remedy Performance Issues

There were no new issues that affect the performance of the cleanup remedy for the Building 834 OU during this reporting period. Although the remedy continues to be effective and protective of human health and the environment, and to make progress toward cleanup in the Tpsg HSU, it has not had significant impact decreasing VOC concentrations in the underlying Tps clay HSU beneath the core area.

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 laboratory equipment, craft shop debris, 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 ft 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 monitoring and water-supply wells is 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; four required analyses were not performed due to a pump failure and thirty-eight required analyses were not performed because there was insufficient water in the wells to collect the samples.

A ground water elevation contour map is presented on Figure 2.3-2.

Analytical results and ground water elevation measurements obtained during 2009 are presented in Appendix B and C, respectively.

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 Analysis of 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 been identified within the Qt-Tnbs$_1$ HSU.

The distribution of total VOCs and tritium in the Qt-Tnbs$_1$ HSU based on data collected during the second semester (third quarter) 2009 are contoured on Figures 2.3-3 and 2.3-4, respectively. Isoconcentration contour maps for the secondary COCs, based on data collected during the first semester 2009, are presented on Figures 2.3-5 and 2.3-6.

2.3.2.1.1. Total VOC Concentrations and Distribution

TCE and cis-1,2-DCE were detected within the Qt-Tnbs$_1$ HSU during the second semester 2009. Total VOC concentrations during the second semester ranged from 9 μg/L (EP6-09 DUP, October 2009) to below the reporting limit (<0.5 μg/L).

TCE concentrations have decreased from the historic maximum of 250 μg/L (K6-19, 1988) to a maximum concentration of 9 μg/L during the second semester 2009 (EP6-09 DUP, October 2009). The maximum historic TCE concentration detected in EP6-09 is 28 μg/L from a ground water sample collected in January 1995. For two months in late 1998, ground water was extracted from EP6-09 to determine the effect on TCE trends. In late 1998, TCE was detected as low as 1.4 μg/L. Since 1998, TCE concentrations in EP6-09 have slowly increased to a high of 10 μg/L in October 2008 and have been relatively stable since late 2008.

During the second semester 2009, cis-1,2-DCE was detected in samples from a single Pit 6 Landfill OU well at a maximum concentration of 2.2 μg/L (K6-01S, October 2009). The presence of cis-1,2-DCE, a degradation product of TCE, suggests that some natural dechlorination may be occurring. PCE was not detected during the second semester 2009.

VOCs were not detected in samples collected during the first semester 2009 from guard wells W-PIT6-1819, K6-17, K6-22, and K6-34.

2.3.2.1.2. Tritium Concentrations and Distribution

Tritium was detected above the 100 pCi/L background activity in samples from several wells completed in the Qt-Tnbs$_1$ HSU both north of the fault and within the fault zone. The maximum second semester 2009 tritium activity in ground water was 276 pCi/L (K6-19, October 2009). No tritium activities exceeded the State Public Health Goal (PHG) (400 pCi/L) or the cleanup standard (20,000 pCi/L).

Historically, the highest tritium activities in ground water in the Pit 6 Landfill OU were measured in K6-36 (3,420 pCi/L in 2003). K6-36 has been dry since ground water levels declined below the screen in this well in October 2006. Because the Qt-Tnbs$_1$ HSU is likely saturated below the well screen, the August 2006 tritium activity of 1,200 pCi/L was used to conservatively create the isoconcentration contours presented on Figure 2.3-4, and thus the 1,000 pCi/L contour is shown. Similarly, during third quarter 2009, well K6-24 was dry and K6-33 had insufficient water to collect a sample; the most recent tritium activities (407 pCi/L for K6-24 and 221 pCi/L for K6-33, both January 2008) were used for contouring and thus the 400 pCi/L contour is shown.

During the second semester 2009, tritium activities were detected in ground water samples from guard well W-PIT6-1819 at 126 pCi/L (July 2009) and 156 pCi/L (October 2009). Prior to the second semester 2009, tritium activities in well W-PIT6-1819 ranged from <100 pCi/L to 295 pCi/L. This well is used to define the downgradient extent of the tritium plume. It is located approximately 100 ft west of the Site 300 boundary with the Carnegie State Vehicle Recreation Area residence area and about approximately 200 ft west of the CARNRW1 and CARNRW2 water supply wells (Figure 2.3-4). Additionally, during the second semester 2009, tritium was detected in a ground water sample from $Tnbs_1$ guard well K6-34 at 117 pCi/L (October 2009). It should be noted that the error range for this sample result is 73.8 pCi/L, which yields an error bar extending into the range of background (<100 pCi/L).

Tritium activities in ground water sampled from four offsite CARNRW wells during 2009 were below 100 pCi/L in all the monthly ground water samples. Tritium was detected in duplicate samples from CARNRW2 and CARNRW3 collected in December 2009 at activities of 108 pCi/L and 100 pCi/L, respectively. However, the routine December 2009 samples collected from these wells contained tritium below the detection limit and thus, the detections reported in the December samples are likely spurious. Based on these analyses and the results from other wells, the tritium plume appears to be relatively stable to declining in extent.

2.3.2.1.3. Perchlorate Concentrations and Distribution

During 2009, perchlorate was detected at or above the 4 µg/L reporting limit in three Pit 6 Landfill OU samples (Figure 2.3-5). A March 2009 sample from well K6-18 (completed in the Qt-$Tnbs_1$ HSU within the fault zone) contained 6.2 µg/L of perchlorate, and a duplicate sample revealed 6.9 µg/L perchlorate. These concentrations are slightly above the 6 µg/L cleanup standard. Perchlorate concentrations in K6-18 have generally been declining from the 1999 maximum of 57 µg/L. Perchlorate was detected in a January 2009 duplicate sample from EP6-09 at the reporting limit of 4.0 µg/L; the routine January 2009 perchlorate result for this well was <4 µg/L. The historic maximum perchlorate concentration in a sample from this well (EP6-09) is 6.9 µg/L (July 2005), and recent concentrations have been either below or slightly above the reporting limit. Perchlorate was not detected in the samples collected from any of the other monitor wells or CARNRW water supply wells during 2009. Perchlorate concentrations in ground water have been steadily decreasing from the historic maximum concentration of 65.2 µg/L in a sample collected from well K6-19 in 1998.

2.3.2.1.4. Nitrate Concentrations and Distribution

During 2009, nitrate was detected in samples collected from wells completed within the Qt-$Tnbs_1$ HSU, within and north of the fault zone (Figure 2.3-6). Nitrate was detected in ground water above the 45 mg/L cleanup standard in five Pit 6 Landfill OU samples. Well K6-23 contained nitrate at concentrations of 170 mg/L (February 2009) and 180 mg/L (August 2009). Well K6-23 consistently yields ground water nitrate concentrations in excess of the nitrate cleanup standard and is located in close proximity to the Building 899 septic system, which may be a potential source of the nitrate at this location. In March 2009, two samples collected from well K6-18 (both the routine and duplicate) yielded 52 mg/L of nitrate which marks the first time that nitrate has been detected in excess of the cleanup standard in a sample from this well since 78 mg/L was detected in 1998. The previous sample (January 2008) from this well contained 10 mg/L of nitrate. This well was re-sampled for nitrate in May 2009 and yielded 54 mg/L. The source of recent elevated nitrate concentrations in well K6-18 is currently unknown. The only known potential release site for elevated nitrate in the area is the septic system at Building 899, which is located over 200 ft downgradient (southeast) of well K6-18.

Nitrate was detected above the 0.5 mg/L reporting limit in three of the monthly samples collected during 2009 from water-supply well CARNRW1. The January and May 2009 samples both yielded 0.7 mg/L of nitrate and the December 2009 sample yielded 0.8 mg/L. Historically, nitrate concentrations in samples from this well have typically been <0.5 mg/L with occasional low concentrations above the reporting limit. However, the nitrate concentrations detected in CARNRW1 are well within the range of natural background levels.

2.3.2.1.5. Status of Uranium Statistical Limit Exceedence at Well EP6-08

When sufficient ground water is available, samples from the six detection monitoring wells at Pit 6 (EP6-06, EP6-08, EP6-06, K6-01S, K6-19, and K6-36) are collected and analyzed quarterly for total uranium by alpha spectrometry. The resulting data are compared to Statistical Limits for each respective well. The Statistical Limits are calculated based on a statistical analysis of the historic uranium data for each well and are meant to define evidence of a potential release of the chemical from the landfill. These data and the corresponding comparison to the Statistical Limits are documented in the quarterly Pit 6 Post-Closure Monitoring Reports.

During January 2008, total uranium in a ground water sample from well EP6-08 exceeded its 1.5 pCi/L Statistical Limits with an initial activity of 2.8 pCi/L. As required by regulation, a 7-day letter indicating Statistically Significant Evidence of Release from the landfill was submitted to the RWQCB (Jackson, 2008) and as is standard, the responsibility for determining if an actual release of uranium from Pit 6 had occurred was transferred to CERCLA investigations (Blake and Taffet, 2008a). Well EP6-08 was re-sampled twice later in January 2008 revealing activities of 2.1 and 2.6 pCi/L. In April 2008, samples collected from EP6-08 were analyzed by mass and alpha spectrometry. The mass spectrometry sample yielded a $^{235}U/^{238}U$ atom ratio indicative of natural uranium (0.0072) and a total activity of 3 pCi/L (Blake and Taffet, 2008b). The alpha spectrometry sample yielded 2.2 pCi/L. Although continued analysis of uranium samples was planned for well EP6-08, the well went dry after the April 2008 sampling episode and subsequent sampling has not been possible. LLNL will continue to attempt to collect samples from well EP6-08 every quarter. When sufficient water becomes available due to rising ground water levels, additional ground water samples will be collected for uranium analysis.

At present, the water table north of the fault zone has declined so that several monitoring wells are dry or cannot yield sufficient water for sampling. When sufficient water has been available, samples from the other five monitoring wells at Pit 6 have continued to yield total uranium activities below their respective Statistical Limits for total uranium. Although total uranium activities were increasing slightly in the months leading up to the well going dry, all historic uranium data collected in the Pit 6 area are well below the 20 pCi/L cleanup standard, have a $^{235}U/^{238}U$ atom ratio indicative of natural uranium, and are well within the range of natural background levels for uranium. Therefore, these uranium activities do not indicate a release of uranium from the landfill. Once water levels rise, a suite of samples for uranium analysis will be collected from all of the performance monitoring wells at Pit 6 to supplement the April 2008 monitoring data.

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 Monitored Natural Attenuation (MNA). Ground water elevations and contaminants are monitored on a regular basis to: (1) evaluate the efficacy of the natural attenuation remedy in reducing contaminant concentrations, and (2) detect any new chemical releases from the landfill. In general, all primary and secondary ground water COCs at the Pit 6 Landfill OU exhibit stable to decreasing trends and ground water elevations beneath the landfill remain well below the buried waste. In fact, ground water levels in the Qt-$Tnbs_1$ HSU north of the fault dropped below the screened portion of many of the monitor wells in this area. Consequently, many of the samples that were scheduled for 2009 could not be collected. This decline in water levels is due to a combination of lower than average rainfall during 2009 and continued pumping from CARNRW1 and CARNRW2.

There has been a decline in perchlorate concentrations in Pit 6 area ground water from a maximum of 65.2 µg/L measured in 1998. Perchlorate was detected in ground water above the reporting limit (4 µg/L) in samples from two Pit 6 wells during 2009 at a maximum of 6.9 µg/L. Tritium activities in ground water continue to decrease toward background levels and remain far below the 20,000 pCi/L cleanup standard; tritium activities did not exceed the 400 pCi/L PHG. TCE concentrations in ground water remain above the 5 µg/L cleanup standard in samples from only one well (EP6-09) and the concentrations and extent of total VOCs in ground water are generally declining from the current maximum of 9 µg/L.

2.3.2.3. Pit 6 Landfill OU Performance Issues

Declining water levels north of the fault have impacted the monitoring component of the cleanup remedy for the Pit 6 Landfill OU during this reporting period. Despite these conditions, all scheduled samples were collected from guard well W-PIT6-1819 and water supply wells CARNRW1 and CARNRW2. 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.

Six 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), Building 817-Proximal (817-PRX), and Building 829-Source (829-SRC). A map of the HEPA OU showing the locations of monitoring 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. Initially, the system extracted from one extraction well, W-815-02 and consisted of aqueous-phase GAC, an ion-exchange system, and an anaerobic bioreactor for nitrate destruction. The treated effluent was discharged to a misting system. The anaerobic bioreactor was decommissioned in 2003. In 2005, the wellfield was expanded to include extraction well, W-815-04 with a current combined flow rate of approximately 1.2 gpm. The current GWTS configuration includes a Cuno filter to remove particulates, two ion-exchange columns containing SR-7 resin connected in series for perchlorate removal, and three aqueous-phase GAC canisters (also connected in series) for VOC and HE compound removal. In 2005, the discharge method of misting was replaced by injection of the treated effluent 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 1.7 gpm. The current GWTS configuration includes a Cuno filter to remove particulates, two ion-exchange columns with SR-7 resin that are connected in series for perchlorate removal, and three aqueous-phase GAC canisters (also connected in series) for TCE removal. In 2005, the discharge method of misting was replaced by injection of the treated effluent 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 currently extracted from wells W-35C-04 and W-6ER at a combined flow rate of approximately 3 to 4 gpm. The GWTS originally operated intermittently on solar-power until site power was installed in 2005 when 24-hour operations began. 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 40 to 160 gallons per month. The current GWTS configuration includes a Cuno filter to remove particulates, two ion-exchange columns with SR-7 resin that are 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. Initially, ground water was extracted from wells W-817-03 and W-817-04 at a combined flow rate of approximately 1.0 gpm, although the vast majority of ground water was extracted from well W-817-03. In 2007, the extraction wellfield was expanded to include extraction well, W-817-2318. Due to the low yield from ground water extraction well W-817-04, extraction from this well was discontinued in December 2007. Ground water is currently extracted at a combined flow rate of approximately 1.5 to 2.0 gpm. The current GWTS configuration includes a Cuno filter to remove particulates, two aqueous-phase GAC canisters connected in series for TCE and RDX removal, and three ion-exchange columns (also connected in series) for perchlorate removal. The first of the ion exchange columns contains a new ion exchange resin produced by Purolite that is being tested to replace the SR-7. Two columns containing SR-7 resin follow the Purolite column. A third aqueous-phase GAC canister completes the treatment chain, and is placed in this position to remove any residual organic compounds from new SR-7 resin. However, this configuration may be changed upon the next GAC change out so that the order of treatment media mirrors that of other GWTSs. Treated ground water containing nitrate is injected into upgradient injection wells W-817-2109 and W-817-02 that was added in 2007. The treated effluent is split between the two injection wells 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 is used to extract ground water from well W-829-06 at a flow rate of approximately 1 to 4 gallons a day (gpd). The current GWTS configuration includes two ion-exchange columns containing SR-7 resin connected in series for perchlorate removal, three aqueous phase GAC canisters (also connected in series) for VOC removal, and a biotreatment unit to treat nitrate. However, the biotreatment unit has not been utilized because all the nitrate has to date been adsorbed by the SR-7 resin. Treated effluent is injected into upgradient well W-829-08.

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 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 this reporting period is 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 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 and operational issues interrupted continuous operations of the 815-SRC, 815-PRX, 815-DSB, 817-SRC, 817-PRX, and 829-SRC GWTSs during second semester:

<u>815-SRC GWTS</u>

- The GWTS operated continuously during the reporting period, with brief periods of shut down to replace a leaking GAC canister in August and for ion exchange resin change out in December.

<u>815-PRX GWTS</u>

- A leaking GAC canister was replaced on July 6.
- The first column of ion exchange resin was changed out on August 12.
- The GWTS was shut down on December 7 for the rest of the reporting period to prevent damage caused by freezing temperatures.

<u>815-DSB GWTS</u>

- The pump in extraction well W-35C-04 failed on June 15. The pump was replaced on August 14 and restarted on August 17. The system continued to operate extracting and treating ground water from well W-6ER.

817-SRC GWTS

- The GWTS was shut down on September 14 to allow water table recharge for transducer calibration. Transducer calibration was performed on well W-817-01 on September 17.
- The GWTS was operated manually once to twice a day from September 17 through the rest of the semester. A problem in the Programmatic Logic Control (PLC) strategy was not turning the pump off when the well was dewatered.
- An engineering evaluation was performed on the GWTS on November 3. It was determined that the facility influent samples were being collected after the ion-exchange resin for several months. A new sample port and check valve were installed at the wellhead on November 10. Sampling ports were labeled on November 16.
- The 12-volt deep-cycle batteries were replaced on November 18.
- The GWTS was shut down on December 7 for the rest of the reporting period to prevent damage caused by freezing temperatures.

817-PRX GWTS

- Extraction well W-817-03 went offline on August 25 due to an electronic programming problem. The facility continued to operate, extracting from well W-817-2318. The GWTS was shut down on October 22 for electronic maintenance. The system was restarted on November 3, extracting from wells W-817-03 and W-817-2318.
- Extraction well W-817-2318 was turned off and drained on December 7 to protect against damage caused by freezing temperatures. The treatment system operated on extraction well W-817-03 for the remainder of the reporting period.

829-SRC GWTS

- The GWTS was shut down for the entire reporting period while power supply problems and bioreactor nitrate treatment efficiency issues are resolved. The system is operated by solar power and needed major improvements to efficiently run the compressor. In addition, problems with nitrate treatment utilizing a bioreactor continue due to the low volume of ground water to be treated (limited to several gpd). The power supply issues were resolved at the end of October. The compressor was repaired and verified for operation. A restart plan is in process, however, restart will be delayed until there is no threat of potential freeze damage.

2.4.1.3. HEPA OU Compliance Summary

The 815-SRC, 815-PRX, 815-DSB, 817-SRC, and 817-PRX GWTSs operated in compliance with the Substantive Requirements for Wastewater Discharge. However, as mentioned above, it was discovered on November 3 that facility influent samples collected from the 817-SRC GWTS in April, July, and October were actually collected from a sample port after the ion exchange columns. This sampling error was due to lack of permanent sample port labels and personnel changes. This problem was corrected in November by installing a new sample port at the extraction well and adding permanent labels to all sample ports. The 829-SRC GWTS did not operate during this reporting period.

2.4.1.4. HEPA OU Facility Sampling Plan Evaluation and Modifications

The HEPA OU facility sampling and analysis plan complies with CMP monitoring requirements. The sampling and analysis plan is presented in Table 2.4-10. The only modifications made to the plan included: only fourth quarter influent monitoring for HE compounds and perchlorate at 817-SRC GWTS due to sampling error, and no compliance monitoring at 829-SRC GWTS because the system was shut down.

2.4.1.5. HEPA OU Treatment Facility and Extraction Wellfield Modifications

No modifications were made to any of the HEPA Treatment Facilities during this reporting period. It was reported in the First Semester 2009 CMR that the only wellfield modification occurred at 817-PRX where re-injection of treated water into well W-817-02 was discontinued upon restart in March (Dibley et al., 2009). All treated water is now injected solely into well W-817-2109. However, as a correction, injection solely into well W-817-2109 was only a short-term test and re-injection into both wells occurred throughout 2009.

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; forty-two required analyses were not performed because there was insufficient water in the wells to collect the samples, one required analyses was not performed due to a sampling error, and eleven required analysis was not performed due to an inoperable pump.

Ground water elevation data are contoured for the $Tnbs_2$ HSU (Figure 2.4-7) and are posted for the Tpsg and $Tnsc_{1b}$ (Building 829 area) HSUs on Figures 2.4-2 and 2.4-12, respectively.

Analytical results and ground water elevation measurements obtained during 2009 are presented in Appendix B and C, respectively.

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 are summarized in Tables 2.4-12 through 2.4-17. The total mass removed during this 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-amino-2,6-dinitrotoluene (4-ADNT), perchlorate, and nitrate are secondary COCs. Most ground water contamination at the HEPA is present in the $Tnbs_2$ HSU. Minor amounts of VOCs, perchlorate, and nitrate contamination are present in perched ground water beneath the former Building 829 WAA in the $Tnsc_{1b}$ HSU. The WAA is located in the northwest portion of the HEPA. Some TCE, RDX, and perchlorate have also been detected in the vicinity of Building 815 in perched ground water in the Tpsg sands and gravels of the Tpsg-Tps HSU. No contamination has been detected in the upper and lower $Tnbs_1$ HSUs in the HEPA OU.

Total VOC concentration data are contoured for the $Tnbs_2$ HSU (Figure 2.4-8) and posted for Tpsg-Tps and $Tnsc_{1b}$ HSUs based on data collected during the second semester 2009 on Figures 2.4-3 and 2.4-12, respectively. Isoconcentration contour maps for the secondary COCs based on data collected during the first semester 2009 are presented in: (1) Figures 2.4-4 through 2.4-6 for the Tpsg-Tps HSU, (2) Figures 2.4-9 through 2.4-11 for the $Tnbs_2$ HSU, and (3) Figure 2.4-12 for the $Tnsc_{1b}$ HSU in the Building 829 former burn pit area. For collocated wells, the highest concentration was used in contouring.

2.4.3.2.1. Total VOC Concentrations and Distribution

During 2009, the maximum total VOC concentration measured in samples from $Tnbs_2$ wells was 52 µg/L in extraction well W-818-11 (March 2009). This value represents a slight increase from the concentration (45 µg/L) measured in groundwater from the same well last year. The $Tnbs_2$ total VOC plume is detached from its source at Building 815 and the 815-PRX extraction wellfield captures the plume's highest concentrations. Total VOC concentrations in ground water in the $Tnbs_2$ HSU in the HEPA have decreased from a historic maximum concentration of 110 µg/L (W-818-08, May 1992), yet the plume has much the same shape and extent as in previous years. VOCs continue to be detected in ground water from well W-830-2216 located at the southern end of Building 832 Canyon. Contamination detected in this well likely originates from sources in Building 832 Canyon OU. Well W-830-2216 was connected as an extraction well to the 830-DISS treatment facility in June 2007.

During 2009, low VOC concentrations (<3 µg/L) were detected in samples from $Tnbs_2$ guard wells W-815-2110 and W-815-2111, located near the southern site boundary. VOCs were also detected in ground water at very low (<1 µg/L) concentrations in offsite $Tnbs_2$ guard well W-35B-04. VOCs were not detected in samples taken from any of the other onsite or offsite HEPA $Tnbs_2$ guard wells. VOC concentrations were below the 0.5 µg/L reporting limit in routine monthly samples collected from offsite water-supply well GALLO1 during 2009. Duplicate samples were collected in addition to the routine samples for quality assurance/quality control purposes. The routine and duplicate samples were collected on the same date and were sent to different laboratories for analysis. Duplicate samples collected in January, March, April, May, and August contained TCE at concentrations at or slightly above the 0.5 µg/L reporting limit. The 817-PRX and 815-DSB facilities were installed to minimize migration of VOCs near the site boundary. Due to a failed pump, the 815-DSB was not operational during part of the first semester 2009. Continuous operation of the 815-DSB facility is expected to mitigate extended migration of VOCs downgradient of this facility and offsite. A new extraction well is scheduled for installation in this area in 2010.

At the 829-SRC system, total VOCs samples were not collected from $Tnsc_{1b}$ HSU extraction well W-829-06 during 2009 due to an inoperable pump. In July 2008, 17 µg/L of total VOCs were detected in groundwater in this well. Total VOC concentrations in ground water from well W-829-06 have decreased significantly from a historic maximum of 1,013 µg/L (August 1993). VOCs have never been detected in ground water from nearby monitoring well W-829-1940.

In the vicinity of Building 815, VOCs (mainly TCE) have been detected in the Tpsg sands and gravels of the Tpsg-Tps HSU. Total VOC concentrations in this HSU have generally been decreasing over time. Limited recharge has led to declining water levels resulting in insufficient water for sampling. The maximum 2009 VOC concentration detected in samples from Tpsg-Tps wells was 48 µg/L in 817-PRX extraction well W-817-2318 (March 2009). VOCs in the Tpsg-Tps well W-35C-05, located near the site boundary, remain below the 0.5 µg/L reporting limit.

During 2009, low total VOC concentrations were detected in several samples collected from Qal/WBR guard well W-880-02 (0.6 µg/L, November, 2009). Historically, ground water from well W-880-02 has intermittently had trace concentrations of total VOCs. Trace total VOC contamination in these wells likely originates from Building 832 Canyon sources. Total VOC concentrations in ground water from Qal/WBR wells W-35C-06 and W-6ES, located near the site boundary, remain below the 0.5 µg/L reporting limit.

2.4.3.2.2. HE Compound Concentrations and Distribution

During 2009, RDX concentrations detected in ground water samples from $Tnbs_2$ HSU wells ranged from <1 ug/L to 50 µg/L. RDX concentrations in the $Tnbs_2$ HSU have decreased from a historical maximum of 450 µg/L in 1992 to a maximum concentration of 50 µg/L in 2009. This decrease in maximum RDX concentrations has been observed in $Tnbs_2$ HSU ground water in both the Building 815 and 817 source areas. The extent of most RDX contamination in the $Tnbs_2$ HSU ground water remains relatively stable. Small increases in the extent of the southwestern portion of the RDX plume are observed, but are likely mitigated by the 817-PRX injection-extraction loop. A new extraction well is scheduled to be installed near 817-PRX in 2010 to help stabilize the RDX plume in this area. RDX concentration trends in $Tnbs_2$ HSU in the vicinity (north) of the 815-SRC injection well W-815-1918 have stabilized. In the past, some RDX concentration increases had been observed in this area, possibly due to the mobilization of RDX as a result of the injection of treated ground water into well W-815-1918. RDX was not detected at concentrations above the 1 µg/L in any samples collected from $Tnbs_2$ HSU guard wells.

RDX was not detected at concentrations above the 1 µg/L in any ground water samples collected from $Tnsc_{1b}$ HSU in 2009. However, samples could not be collected from extraction well W-829-06 in 2009 due to an inoperable pump.

In 2008, RDX was detected for the first time in the Tpsg-Tps HSU in a ground water sample collected from well W-815-1928, located north of 815-SRC, at a concentration of 19 µg/L. Because the shallow Tpsg-Tps HSU in the vicinity of well W-815-1928 is only periodically saturated, ground water from this well has only been sampled and analyzed twice for RDX. The first sample collected in March 2003 did not contain RDX above the 1 µg/L detection limit; the second sample collected in March 2008 contained RDX at a concentration of 19 µg/L. Well W-815-1928 has been dry during all other sampling events. No samples could be collected from this well in 2009 as the well was again dry.

HMX detections in the $Tnbs_2$ HSU are rare, but have occurred near the 815-SRC and 817-SRC treatment facilities. The highest historic HMX concentration detected in ground water in the $Tnbs_2$ HSU was 57 µg/L in 817-SRC extraction well W-817-01 (October 1995). During 2009, HMX was detected in ground water from well W-817-01 at a concentration of 14 µg/L (December 2009). Due to a sampling error, no samples were collected from well W-817-01 during the first semester. During 2009, HMX was also detected in several ground water samples collected from 815-SRC extraction wells W-815-02 and W-815-04 at lower concentrations.

During 2009, nitrobenzene was not detected above the reporting limit of 2 µg/L in any HEPA ground water samples. Previously, nitrobenzene was detected in the 817-SRC extraction well W-817-01 at a concentration of 6.2 µg/L (April 2008), and in one sample from the influent to the 815-SRC GWTS at 4.1 µg/L. These samples were the first time nitrobenzene had been detected in ground water in the HEPA and additional samples have all been below the reporting limit.

During 2009, 4-ADNT was detected at a concentration of 2.2 µg/L in monitor well W-818-11; 4-ADNT was not detected above the reporting limit of 2 µg/L in any other well. In July 2008, 4-ADNT was detected at a concentration of 7.5 µg/L in a sample collected from the influent to the 815-SRC GWTS; however, no 4-ADNT was detected in any HEPA treatment facility samples during 2009. The highest historic concentration of 4-ADNT (24 µg/L) was measured in September 1997. Detections of HE compounds other than HMX and RDX reflect a recent change in the Site 300 sampling plan requested analyses to EPA Method 8330. Previously, only RDX and HMX were analyzed and reported, however, now the entire EPA Method 8330 suite is being analyzed and reported.

2.4.3.2.3. Perchlorate Concentrations and Distribution

Perchlorate concentrations in the $Tnbs_2$ HSU have decreased from a historic maximum of 50 µg/L (February 1998) in well W-817-01 to a 2009 maximum of 30 µg/L (March 2009) in the same well. Perchlorate was not detected in any of the $Tnbs_2$ HSU guard wells during 2009. Overall, perchlorate concentrations continue to decline and the southwestern plume front is receding due to 817-PRX and 817-SRC operations. To the north, the perchlorate plume in the $Tnbs_2$ HSU is stable based on concentration trends observed in monitor well W-809-03. In the past, an increasing trend has been observed in this area as a result of the mobilization of perchlorate by injection of treated ground water into nearby 815-SRC injection well W-815-1918.

During 2009, no perchlorate samples were taken from $Tnsc_{1b}$ HSU extraction well W-829-06 due to an inoperable pump. Perchlorate concentrations in well W-829-06 have decreased from a historic maximum of 29 µg/L (December 2000) to a concentration of 9.5 µg/L detected in June 2008. Perchlorate was also detected in well W-829-1940 at a concentration of 4.0 µg/L (March 2009).

The maximum perchlorate concentration detected during 2009 in samples from Tpsg-Tps wells was 16 µg/L in 817-PRX extraction well W-817-2318 (March 2009). Perchlorate was not detected in any HEPA Qal/WBR wells during the reporting period.

2.4.3.2.4. Nitrate Concentrations and Distribution

During 2009, nitrate concentrations in samples from the $Tnbs_2$ HSU ranged from <0.1 mg/L in the vicinity of the Site 300 boundary to a maximum of 96 mg/L (March 2009, W-817-03). Nitrate was not detected above the 45 mg/L cleanup standard in ground water from any of the $Tnbs_2$ guard wells sampled during this reporting period.

The maximum nitrate concentration detected in a sample during 2009 from the $Tnsc_{1b}$ HSU was 56 mg/L (March 2009) in monitor well W-829-1940. Due to an inoperable pump, extraction well W-829-06 was not sampled during 2009.

In 2009, the maximum nitrate concentration detected in ground water from Tpsg-Tps HSU well W-6CS was 660 mg/L (March 2009). Because there are no known septic systems or other Site 300 operations-related nitrate sources near this well, the elevated nitrate could be related to a pre-Site 300 sheep ranch that was discovered in a historic photo of the area. Ground water sampled from all other wells screened in this HSU had significantly lower nitrate concentrations. The highest nitrate concentrations found in other wells screened in this HSU were 160 mg/L in 817-PRX wells W-817-03A and W-817-2318. All ground water sampled from Qal/WBR wells had nitrate concentrations below the 45 mg/L cleanup standard.

Nitrate concentrations detected in ground water during 2009 continue to support the interpretation that nitrate is being treated *in situ* by natural processes. Due to microbial denitrification, nitrate concentrations have decreased significantly near the Site 300 boundary where the $Tnbs_2$ HSU ground water is under confined conditions and anoxic. Nitrate concentrations continue to be below the 45 mg/L cleanup standard in all wells near the southern site boundary.

2.4.3.3. HEPA OU Remediation Optimization Evaluation

Remediation optimization at the HEPA OU is managed by balancing extraction wellfield flow rates at the site boundary with upgradient source area pumping. Based on the $Tnbs_2$ HSU ground water elevation map and the total VOC isoconcentration map shown on Figures 2.4-7 and 2.4-8, the existing extraction wellfield captures both the highest concentrations in the VOC plume in the vicinity of wells W-818-08 and W-818-09 (815-PRX) and the leading edge of the plume near the southern site boundary (815-DSB). During 2008, flow rates from 815-PRX extraction wells W-818-08 and W-818-09 were increased to expand capture of the high concentration portions of the VOC plume. The installation of additional extraction wells near 815-DSB and 817-PRX are scheduled for 2010. Although the overall extent of the primary and secondary COC plumes in the HEPA has not changed significantly during 2009, total VOC and RDX concentrations within the plumes continue to decline from their historic maximums. These trends are due to a combination of natural attenuation mechanisms and remediation efforts in the source and proximal areas of this OU. Since RDX monitoring began in 1985, concentrations for this COC have continued to decline. The 815-SRC extraction wells, W-815-02 and W-815-04, have the highest RDX concentrations, and increased pumping from these wells should improve RDX remediation in this area.

Perchlorate concentrations in the $Tnbs_2$ HSU have steadily decreased since 1998 when monitoring for this COC began. The 817-SRC (W-817-01) and 817-PRX (W-817-03 and W-817-04) extraction wells have had the highest perchlorate concentrations in this OU. In early 2008, extraction from well W-817-04 was terminated due to low yield. Pumping from extraction well W-817-03 continues; the treated water is injected into wells W-817-02 and W-817-2109. Upgradient injection at 815-SRC, 817-SRC, 815-PRX, and 817-PRX enhances remediation by flushing contaminants toward the extraction wells. RDX and perchlorate concentrations measured in groundwater upgradient of the 815-SRC extraction wellfield and near monitor well W-809-03 remain stable; these areas are within hydraulic capture zones.

The 829-SRC ground water extraction and treatment system was shut down in 2009 while power supply problems and nitrate treatment issues were resolved. These issues are being addressed and a restart plan is in process.

Continuous pumping from all HEPA extraction wells, coupled with the increase in 817-PRX effluent injection, should improve long-term ground water yield, increase HEPA mass removal, and prevent contaminated ground water from reaching the Site 300 southern boundary. Close monitoring of VOC concentrations in the southern site boundary area will continue, especially in the vicinity of water-supply well GALLO1.

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, and to make progress toward cleanup. Continuous operation of the 815-DSB is crucial to the continued success of remediation efforts in the HEPA OU.

2.5. Building 850 Area of 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 shot blast. 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 northern part of the site. A map of the Building 850 area within OU 5 showing the locations of monitoring wells is presented on Figure 2.5-1.

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; twenty-three required analyses were not performed because there was insufficient water in the wells to collect the samples, two required analyses were not performed due to an inoperable pump, twelve required analyses were not performed because of access issues associated with the Building 850 Soil Removal Project, and four required analyses were not performed because a bent casing prevented sample collection.

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.

Analytical results and ground water elevation measurements obtained during 2009 are presented in Appendix B and C, respectively.

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 is the primary COC detected in ground water; depleted uranium, perchlorate, 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 the second semester 2009 is contoured on Figures 2.5-4 and 2.5-5, respectively. Concentrations of the secondary COCs uranium, nitrate, and perchlorate in Qal/WBR and $Tnbs_1/Tnbs_0$ ground water, based on data collected during the first semester 2009, are presented on Figures 2.5-6 through 2-5.11.

2.5.2.1.1. Tritium Concentrations and Distribution

The maximum 2009 tritium activity in ground water within the Building 850 area was 57,400 ± 5,800 pCi/L (April 2009) from well NC7-70, screened in the Qal/WBR and upper part of the $Tnbs_1/Tnbs_0$ bedrock HSU and located about 50 ft downgradient (east) of the Building 850 Firing Table. The highest tritium activities in ground water continue to occur immediately downgradient of the Building 850 Firing Table. The historic maximum of 566,000 pCi/L measured in 1985 in a sample from well NC7-28, has declined to 25,400 ± 2,600 pCi/L in 2009. The extent of the 20,000 pCi/L cleanup standard ground water tritium activity contour in both the Qal/WBR and $Tnbs_1/Tnbs_0$ bedrock HSUs in Doall Ravine is similar to those of 2008.

Ground water tritium activities in most portions of the Building 850 plume continue to decline. However, tritium activities in $Tnbs_1/Tnbs_0$ HSU wells located north of Landfill Pit 1 continue to exhibit a slowly increasing trend. Ground water samples were collected for the first time in March 2009 from Qal/WBR wells W-PIT2-2301 and W-PIT2-2302, located in Elk Ravine downgradient from Landfill Pit 2. Tritium within range of the 100 pCi/L background (116 ± 53 pCi/L) was detected in the ground water sample from well W-PIT2-2301. Tritium was not detected above the 100 pCi/L reporting limit in the sample from well W-PIT2-2302. Given the low activities of the Qal/WBR samples, it does not appear that tritium from Building 850 is present in this HSU in Elk Ravine. Overall, the extent of tritium in ground water with activities above the 400 pCi/L California State PHG remains stable, 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

Total uranium activities in ground water were below the 20 pCi/L cleanup standard in samples from all wells in the Building 850 area during 2009. The maximum 2009 uranium activity was 17 pCi/L in the April 2009 sample from well NC7-29. Well NC7-29, screened in the $Tnbs_1/Tnbs_0$ HSU, is located south and cross-gradient of Building 850. Historic isotope ratio data indicate that the uranium in ground water samples from well NC7-29 is natural and that the uranium activities are within the range of natural background levels at Site 300. The maximum 2009 uranium activity in wells located downgradient of the Building 850 source area that indicated the presence of depleted uranium was 16 pCi/L in $Tnbs_1/Tnbs_0$ HSU well NC7-28.

Uranium analyses for 2009 were performed primarily by alpha spectroscopy with selected samples analyzed by Inductively Coupled Plasma - Mass Spectrometry (ICP-MS). Data generated by these two methods are shown on Figures 2.5-6 and 2.5-7. 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 the distribution of ground water within the Qal/WBR and $Tnbs_1/Tnbs_0$ HSUs containing some added depleted uranium extends downgradient about 1,200 ft and 700 ft, respectively, from the Building 850 Firing Table and have remained relatively stable. Depleted uranium has also been detected in Qal/WBR and $Tnbs_1/Tnbs_0$ HSU ground water from wells downgradient of the Pit 2

Landfill and from wells in the $Tnbs_1/Tnbs_0$ HSU south of the Pit 2 Landfill. The available uranium isotope data for 2009 suggest that this has not changed. In addition, ground water samples collected during March 2009 from Qal/WBR wells W-PIT2-2301 and W-PIT2-2302, located downgradient from the Pit 2 Landfill, contain some depleted uranium, but at activities well below the 20 pCi/L cleanup standard. The maximum uranium activity in a ground water sample containing some depleted uranium, as indicated by mass spectrometry, was 16 pCi/L from well NC7-28 (April 2009); this well is screened across the Qal/WBR and $Tnbs_1/Tnbs_0$ HSUs, and is located immediately downgradient of the Building 850 Firing Table.

2.5.2.1.3. Nitrate Concentrations and Distribution

Nitrate was detected at concentrations at or above the 45 mg/L cleanup standard in samples from eleven Building 850 area wells during 2009. These wells are located upgradient and west of Building 850, downgradient and east of Building 850, south-southeast of Building 850, and southeast of Pits 1 and 2. The maximum 2009 nitrate concentration detected in the Building 850 area was 180 mg/L in the April sample from well NC7-29, which equals the historic local maximum also detected in a ground water sample from the same well in June 2007. Well NC7-29, screened in the $Tnbs_1/Tnbs_0$ HSU, is located south and cross-gradient of Building 850. The maximum 2009 uranium activity in wells located downgradient of the Building 850 source area was 79 mg/L in $Tnbs_1/Tnbs_0$ HSU well NC7-28.

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, the distribution and concentrations of nitrate in ground water are generally similar to those observed in previous years.

2.5.2.1.4. Perchlorate Concentrations and Distribution

During 2009, perchlorate at concentrations exceeding the 6 µg/L cleanup standard was detected in ground water samples from wells east and south of Building 850 and east of Pit 1. The maximum perchlorate concentration of 69 µg/L was detected in the January sample from well NC7-28, located downgradient of the Building 850 Firing Table. Wells downgradient of the Building 850 Firing Table continue to exhibit the highest perchlorate concentrations in the Building 850 area. Perchlorate concentrations in excess of the cleanup standard extend continuously from Building 850 over 2,000 and 1,200 ft, respectively, in Qal/WBR and $Tnbs_1/Tnbs_0$ HSU ground water.

In 2009, perchlorate concentrations exceeded the 6 µg/L State Maximum Contaminant Level (MCL) in samples from wells K1-02B (April and July 2009 at 7.3 and 7.1 µg/L, respectively) and W-PIT1-2326 (6.2 µg/L, April and June 2009), both located downgradient of Pit 1. Perchlorate at a concentration above the 4 µg/L reporting limit, but below the 6 µg/L MCL, was detected in the January and October samples from well K1-02B (5.8 and 5.9 mg/L, respectively), October sample from well W-PIT-2326, and the January and May samples from well K1-06 (both 4.6 µg/L). Well W-PIT1-02 (4.4 µg/L, July 2008) was not sampled during 2009 due to an inoperable pump. Because the extent of perchlorate and tritium in the $Tnbs_1/Tnbs_0$ HSU ground water with concentrations exceeding background levels extends to the vicinity of and beyond Pit 1, ground water downgradient of Pit 1 is monitored to these contaminant plumes emanating from Building 850 as part of the CERCLA cleanup program. Detection monitoring for potential releases from the Pit 1 Landfill is conducted under Waste Discharge Requirements issued by the RWQCB, as this landfill is not part of the CERCLA program at Site 300. Detection monitoring results for the Pit 1 Landfill are currently reported in the quarterly post-closure monitoring reports for the RCRA-closed Pit 1 and 7 Landfills. Starting in 2010, monitoring results for the Pit 7 Complex, including Pits 3, 4, 5, and 7 will be reported in the CMP reports.

The overall extent of perchlorate in ground water in the Building 850 and Pit 1 and 2 areas did not change significantly during 2009 and will continue to be closely monitored.

2.5.2.1.5. HE Compound Concentrations and Distribution

During 2009, ground water samples from twenty wells located in or downgradient of the Building 850 Firing Table were collected and analyzed for the HE compounds, HMX and RDX at a 1 µg/L reporting limit. Although maps depicting HE compound distribution are not included in this report, these data are compiled in Table B-5.6 (Appendix B). The RDX cleanup standard (1 µg/L) was exceeded in samples from five of the twenty wells. The maximum RDX concentration of 6.7 µg/L was detected in an April 2009 sample from well NC7-28, which is located immediately east of the Building 850 Firing Table. Well W-850-2417, which had the maximum RDX concentration of 5.9 µg/L in 2008, was not sampled during 2009 because it was inaccessible during the Building 850 Removal Action project. The data indicate that RDX exceeding the cleanup standard extends about 800 ft east of Building 850 in the Qal/WBR HSU. HMX was detected above the reporting limit in samples from five wells. The maximum HMX concentration of 10 µg/L, detected in a sample from well NC7-28, is significantly below the Regional Tapwater Screening Level for HMX (1,800 µg/L). HE compounds were not detected above the reporting limit in ground water samples from wells screened in the $Tnbs_1/Tnbs_0$ HSU downgradient of Building 850 or from wells screened in the underlying $Tnsc_0$ HSU. The data indicate that the extent of HE compounds in the ground water is limited to the Building 850 Firing Table and the Qal/WBR HSU immediately downgradient. Future sampling for HE compounds will be used to evaluate trends and determine whether an active HE source exists in the vadose zone beneath the firing table.

2.5.2.2. Building 850 Area OU Remediation Optimization Evaluation

MNA is the selected remedy for remediation of tritium in ground water emanating from the Building 850 area. Recent data indicate MNA continues to be effective in reducing tritium activities in ground water. The highest tritium activities in ground water continue to be located immediately downgradient of the tritium sources at the Building 850 Firing Table and continue to decline. The extent of the 20,000 pCi/L cleanup standard tritium activity contours in both HSUs continues to diminish. The significant decreases in activities and extent of the Building 850 tritium plume with activities exceeding the cleanup standard indicate that natural attenuation (dispersion, radioactive decay and a decreasing source term) continues to be effective in reducing tritium activities in ground water. In general, ground water tritium activities continue to decline and are significantly below historic highs throughout the Building 850 plume.

Total uranium activities in ground water are below the 20 pCi/L cleanup standard in samples from all wells in the Building 850 area. The overall extent of total uranium activities at Building 850 has not changed significantly. The remediation strategy for uranium at Building 850 continues to be protective given that: (1) total uranium activities in Building 850 ground water generally remain below the 20 pCi/L cleanup standard; (2) the areal extent of depleted uranium has not changed during the period of monitoring; and (3) the temporal trends in $^{235}U/^{238}U$ isotope ratios from past samples have remained stable.

The overall extent and maximum concentrations of nitrate and perchlorate in ground water are also similar to those observed in previous years. An *in situ* perchlorate bioremediation treatability test is scheduled to commence at Building 850 in 2010. The objective of this test is to evaluate the efficacy of *in situ* enhanced remediation methods to reduce perchlorate ground water concentrations immediately downgradient of the Building 850 firing table. Recently installed well W-850-2417 will serve as a reagent injection well and nearby downgradient wells NC7-28 and W-850-2416 will serve as performance monitor wells for this test.

2.5.2.3. Building 850 Area OU Remedy Performance Issues

There were no new issues that affect the performance of the cleanup remedy (MNA) 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 in ground water downgradient of the Building 850 Firing Table will continue to be closely monitored and reported. An *in situ* bioremediation treatability test is planned to remediate perchlorate in ground water in the Building 850 source area. Although this treatability test will specifically target perchlorate, the performance of this technology with respect to uranium and RDX remediation or stabilization will also be evaluated. This test has been delayed pending finalization by the RWQCB of the WDR-R5-2008-0149 permit for *in situ* remediation and also by the Building 850 Removal Action, which was completed in January 2010.

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 monitoring 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 854-SRC.

The 854-SRC GWTS began operation in December 1999 removing VOCs and perchlorate from ground water. Ground water extraction was expanded in September 2006 from one well, W-854-02 extracting at a flow rate of approximately 1 gpm to include wells W-854-18A, W-854-17, and W-854-2218 currently extracting at an approximate combined flow rate of 1.7 gpm. The GWTS configuration includes a particulate filtration system, two ion-exchange columns containing SR-7 resin 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 permit from the San Joaquin Valley Unified Air Pollution Control District.

The 854-PRX GWTS began operation in November 2000 removing VOCs, nitrate, and perchlorate from ground water. Ground water is currently extracted at an approximate flow rate of 1.5 gpm from well W-854-03, located southeast of the Building 854 complex. The GWTS configuration includes two ion-exchange columns containing SR-7 resin connected in series for perchlorate removal, three aqueous-phase GAC units connected in series for VOC removal, and aboveground containerized wetland biotreatment for nitrate removal prior to being discharged into an infiltration trench. In 2007, the treatment system was modified to replace the solar power with site power to increase the volume of extracted ground water by operating the GWTS 24-hours a day.

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. The current operational flow rate averaged over time is approximately 700 to 800 gallons per month. The GWTS configuration includes two SR-7 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.

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 and rates and operational hours 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 are shown 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 and operational issues interrupted continuous operations of the 854-SRC GWTS and SVTS, and 854-PRX and 854-DIS GWTSs during second semester 2009:

<u>854-SRC GWTS</u>

- The GWTS went offline on October 14 due to software problems and a flow meter failure.
- The pump in extraction well W-854-2218 was removed for repair on October 29. The pump was repaired and reinstalled on November 11.
- The GAC was replaced on October 28.
- The flow meter was replaced on November 4. The operating system was repaired on December 1, however, the attempted start-up on December 9th was delayed due to valves damaged from freezing temperatures. The valves were repaired and the system was restarted on December 14. However, the pump in extraction well W-854-2218 would not operate and leaks were encountered in the second and third GAC canisters, prompting shut down of the system. The system was re-started on December 15 just to collect

compliance samples and then shut down and freeze protected for the remainder of the reporting period.

854-PRX GWTS

- Extraction well W-854-03 failed on June 24 and was replaced on August 14. The biotreatment tanks were filled with water and reconditioned prior to restart testing of the treatment system.
- On August 24, the third GAC canister was changed due to a leak in the tank. The system was restarted on September 1. The second GAC canister split and was replaced on September 2.
- The GWTS was found offline on November 30 due to a failed pump in extraction well W-854-03. The system remained off for the remainder of the reporting period to protect against damage caused by freezing temperatures.

854-DIS GWTS

- The GWTS was shut down on July 22 due to failure of a meter that records the number of hours that the facility operates. The system was restarted on August 10 after the meter was replaced.
- The GWTS was shut down from August 17-18 to change out a GAC canister that had a leaking seam.
- 854-DIS was shut down on December 9 for the rest of the reporting period to protect the facility from damage caused by freezing temperatures.

2.6.1.3. Building 854 OU Compliance Summary

The 854-SRC, 854-PRX, and 854-DIS GWTSs all operated in compliance with the Substantive Requirements for Wastewater Discharge. The 854-SRC SVTS operated in compliance with San Joaquin Valley Unified 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 CMP monitoring requirements. The sampling and analysis plan is presented in Table 2.6-6. The only modification to the plan included no compliance monitoring in July, August, and December, and additional start-up monitoring in September at 854-PRX GWTS. In addition, no effluent compliance monitoring was conducted in November at 854-SRC GWTS as the system was not operating due to problems with the electronics system.

2.6.1.5. Building 854 OU Treatment Facility and Extraction Wellfield Modifications

There were no treatment facility or extraction wellfield modifications made in the Building 854 OU during the reporting period.

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 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: seventeen required analyses were not performed because there was insufficient water in the wells to collect the samples and one required analysis was not performed due to an inoperable pump.

A ground water elevation contour map for the $Tnbs_1/Tnsc_0$ HSU is presented on Figure 2.6-2. Ground water elevations are posted for the Qls and $Tnbs_1$ HSUs on Figure 2.6-4.

Analytical results and ground water elevation measurements obtained during 2009 are presented in Appendix B and C, respectively.

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 are summarized in Tables 2.6-8 through 2.6-10. The total mass removed during this 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, VOCs are the primary COCs detected in ground water; perchlorate and nitrate are the secondary COCs. These COCs have been identified primarily in the $Tnbs_1/Tnsc_0$ HSU.

Total VOC concentration data and isoconcentration contours for the $Tnbs_1/Tnsc_0$ HSU, based on data from samples collected during the second semester 2009, are contoured and presented on Figure 2.6-3. A map showing total VOC concentrations for the Qls and $Tnbs_1$ HSUs is presented on Figure 2.6-6. First semester 2009 perchlorate concentration data and isoconcentration contours and nitrate concentration data for the $Tnbs_1/Tnsc_0$ HSU are presented on Figures 2.6-4 and 2.6-5, respectively. A map showing ground water elevations and total VOC, perchlorate, and nitrate concentrations for the combined Qls and $Tnbs_1$ HSU is presented on Figure 2.6-6. 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 Total VOC data and capture zones shown on Figure 2.6-3 apply to the second semester 2009. Because, the 854-SRC facility was not operating from October 4 to December 12, capture for this treatment facility is not shown on the figure. The perchlorate data and capture zones depicted on Figure 2.6-4 are derived from the first semester 2009.

2.6.3.2.1. Total VOC Concentrations and Distribution

The maximum 2009 concentration of total VOCs in $Tnbs_1/Tnsc_0$ HSU ground water was 120 µg/L (W-854-02, April and July 2009). TCE comprises all of the total VOCs observed in ground water at Building 854, except for low cis-1,2-DCE concentrations detected in samples from wells W-854-17 and W-854-2139. The maximum cis-1,2-DCE ground water concentration detected during 2009 was 2.4 µg/L (W-854-17, July 2009). Overall, total VOC concentrations in the $Tnbs_1/Tnsc_0$ HSU have decreased from a historic pre-remediation maximum of 2,900 µg/L (W-854-02, 1997). Two VOC plumes exist in the $Tnbs_1/Tnsc_0$ HSU; a northern plume and a less extensive southern plume. The northern plume encompasses the 854-SRC and 854-PRX areas and is separated from the southern plume by a region where total VOC concentrations are below the 0.5 µg/L reporting limit (wells W-854-1902 and W-854-1822), as shown on Figure 2.6-3. The southern plume is in the vicinity of former water supply Well 13 (Figure 2.6-3). While the extent of VOCs impacting Building 854 ground water with concentrations above the 0.5 µg/L reporting limit has remained relatively stable over time, 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 source area; (2) the extent of the northern total VOC plume with concentrations greater than 10 µg/L has decreased; and (3) the extent of the southern total VOC plume with concentrations greater than 5 µg/L has decreased significantly. Total VOCs were detected in shallow perched ground water in $Tnbs_1$ well W-854-10 located in the 854 source area during the first and second semesters 2009 at maximum concentrations of 17 and 11 µg/L, respectively. These concentrations are similar to the second semester 2008 concentration of 16 µg/L, and are a decrease from the first semester 2008 concentration of 34 µg/L. The long-term total VOC concentrations in ground water at this well exhibit a slightly increasing trend with recent decreases.

2.6.3.2.2. Perchlorate Concentrations and Distribution

The maximum 2009 perchlorate concentration in $Tnbs_1$/$Tnsc_0$ HSU ground water was 22 µg/L (W-854-1823, August 2009). The previous historic maximum concentration (27 µg/L, W-854-1823) was detected in 2003. Well W-854-1823 is located downgradient of the 854-PRX.

Overall, the distribution and concentrations of perchlorate in ground water are nearly identical to those observed last year. Perchlorate was not detected in 2009 samples from any well screened in the Qls or $Tnbs_1$ HSU.

2.6.3.2.3. Nitrate Concentrations and Distribution

The maximum 2009 nitrate concentration in $Tnbs_1$/$Tnsc_0$ HSU ground water was 53 mg/L (W-854-02, April 2009). During 2009, nitrate was detected above the 45 mg/L cleanup standard in samples from two additional $Tnbs_1$/$Tnsc_0$ HSU extraction wells, W-854-03 (854-PRX) and W-854-2218 (854-SRC), and one $Tnbs_1$/$Tnsc_0$ monitoring well, W-854-09. Additionally, during 2009, nitrate was detected above the cleanup standard in samples from a well screened in the Qls, W-854-05 (60 mg/L, May 2009) upgradient of the 854 TCE source area and a well screened in the $Tnbs_1$,W-854-14 (270 mg/L, May 2009) located near Building 858. This 270 mg/L of nitrate in the sample from well W-854-14 is the maximum historic nitrate concentration detected in the Building 854 OU. The continued presence of elevated nitrate in samples from well W-854-14 could be due to impact from the Building 858 septic system. Geochemical data (nitrogen and oxygen isotopes) collected in the Building 854 OU as part of the Site 300 nitrate MNA study indicated some evidence of *in situ* denitrification in the Neroly Formation ground water. The distribution of $Tnbs_1$/$Tnsc_0$ nitrate in the distal area remains low and essentially unchanged since this study was conducted.

2.6.3.3. Building 854 OU Remediation Optimization Evaluation

Since the 2006 expansion of the 854-SRC GWTS wellfield, the total volume of extracted ground water and contaminant mass removed has increased significantly. Ground water extraction continues to adequately capture the highest VOC concentrations. Well W-854-2218 can be pumped at a higher sustainable yield and future optimization efforts at 854-SRC will include increased pumping of this extraction well. Increased pumping would add to the total volume of 854-SRC effluent discharged. The effluent is currently discharged via misting towers, which are at or near capacity. Therefore, to increase the pumping of extraction well W-854-2218, additional misting towers would need to be constructed to accommodate the additional effluent volume. Discharge of additional effluent volume could also be accommodated by injection of treated effluent into a yet-to-be constructed upgradient injection well. However, if the additional effluent were reinjected, a carbon source would need to be added to the injected effluent to facilitate *in situ* bioremediation of nitrate. The slight increase in total VOC concentrations in monitoring well W-854-10 (screened in the $Tnbs_1$) will continue to be monitored closely. 854-SRC SVTS operated throughout 2009, except for intermittent periods offline resulting from high-temperature interlock alarms. The maximum historic TCE vapor concentration measured from well W-854-1834 was 4.4 $ppm_{v/v}$ (November 2005). The maximum 2009 TCE vapor concentration measured from well W-854-1834 was 0.49 $ppm_{v/v}$ (October 2009). During the first and second semesters of 2009, 0.48 and 0.62 kg of VOC vapor mass were removed, respectively, as compared to 0.61 kg during the second semester 2008. Significant VOC mass continues to be removed from the source area due to relatively high vapor flow rates. This VOC mass is likely volatilizing from vadose zone sources beneath the 854 source area and VOC vapors from the underlying dissolved VOC plume in $Tnbs_1$/$Tnsc_0$ ground water. Operation of the 854-SRC SVTS will continue until vapor concentrations decline below reporting limits, even after extended shutdown periods. At that time, the 854-SVTS will enter a period of testing specified by SVE system shutdown criteria.

Construction activities supporting full-time operation of 854-PRX were completed in September 2007, increasing overall extraction capacity and the extraction flow rate from well W-854-03 to 1.4 gpm. Although full-time operations have resulted in larger volumes of extracted water from well W-854-03, the stabilized pumping water level in this well remains more than 10 ft above the top of the well screen. This indicates well W-854-03 can sustain even higher long-term flow rates without excessive drawdown. However, increasing the flow at this facility may exceed the capacity of the nitrate biotreatment unit and injection trench. Different options are being evaluated to allow for increased pumping from well W-854-03, including increasing the capacity of the biotreatment unit, misting any excess ground water that exceeds the capacity of the nitrate biotreatment unit, and/or misting the total volume of the effluent .

Downgradient of 854-PRX, perchlorate has been detected at concentrations as high as 26 µg/L in ground water samples from monitor well W-854-1823. Perchlorate-contaminated ground water in the vicinity of well W-854-1823 is outside the footprint of the TVOC plume and is not currently being captured by the W-854-03 extraction well. An *in situ* microcosm test was initiated during the second semester 2009 to evaluate treatment options for the *in situ* bioremediation of perchlorate. It was also conducted to address a recommendation in the 2008 Five-Year Review report for the Building 854 Operable Unit to evaluate options for *in situ* bioremediation of perchlorate concentrations exceeding the 6 µg/L ground water cleanup standard in the vicinity of well W-854-1823. Unfortunately, the *In Situ* Microcosm Array (ISMA), an innovative apparatus composed of a number of flow-through columns that was undergoing its first field deployment, experienced a mechanical failure and did not produce any usable data. Laboratory microcosm studies that contain ground water and Neroly sediment from Site 300 are being used to evaluate the efficacy of *in situ* biotreatment at Building 854 and 850 and to design a field-scale treatability test at these sites. Preliminary results indicate that three of the four carbon amendments tested (corn syrup, sodium lactate, and ethyl lactate) reduced perchlorate from about 24 µg/L concentrations to below the 4 µg/L reporting limit. Significant nitrate reduction was also observed. The microcosm containing vegetable oil was inconclusive for both perchlorate and nitrate treatment. Additional analysis of water quality parameters including various metals is being conducted and will be reported in the next CMR.

The single extraction well at the 854-DIS GWTS (W-854-2139) pumps at a low average rate of approximately 750 gallons per month because the well becomes rapidly dewatered and cannot sustain prolonged pumping.

2.6.3.4. Building 854 OU Remedy Performance Issues

Although there were no new issues that affect the performance of the cleanup remedy for the Building 854 OU during this reporting period, the facility and discharge capacity limitations at 854-SRC and 854-PRX continue to limit the performance of the extraction wellfields. 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 monitoring 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. Initially, ground water was extracted from nine wells at a combined total flow rate that initially ranged from 30 to 300 gpd. The total flow eventually dropped to 5 to 50 gpd due to lowering of the water table by pumping. In early 2005, the source area extraction wellfield was reduced to two wells (W-832-12 and W-832-15) operating with vacuum enhancement and a combined flow rate ranging from 60 to 220 gpd. In late 2005, the extraction wellfield was expanded to include three additional downgradient wells (W-832-01, W-832-10, and W-832-11). As a result, the combined flow rate increased to about 1,300 gpd, and VOC concentrations in 832-SRC facility influent increased four-fold. Well W-832-25 was connected to 832-SRC in July 2006. Currently, ground water is extracted from wells W-832-01, W-832-10, W-832-11, W-832-12, W-832-15 and W-832-25 at an approximate combined flow rate of 0.16 gpm. Soil vapor is extracted from wells W-832-12 and W-832-15 at an approximate combined flow rate of approximately 3.0 to 4.4 scfm. The current GWTS configuration includes a Cuno filter for particulate filtration, two ion-exchange columns with SR-7 resin 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 manifolded piping. 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 from the San Joaquin Valley Unified 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. Ground water was extracted from four wells at a total flow rate ranging from 5 to 100 gpd. The 830-SRC extraction wellfield was expanded in 2006; seven GWTS extraction wells (W-830-49, W-830-1829, W-830-2213, W-830-2214, W-830-57, W-830-60, and W-830-2215) were added to the original three (W-830-1807, W-830-19, and W-830-59). The expansion well testing began in 2006. The tests were completed and the expanded wellfield was in full operation during the first semester 2007. During the second semester 2009, both wells W-830-1829 and W-830-2213 were converted back to monitor wells due to lack of water for extraction. The 830-SRC GWTS is currently extracting ground water at a combined flow rate of approximately 5 to 7 gpm. The GWTS configuration includes a Cuno filter for particulate filtration, two ion-exchange columns with SR-7 resin connected in series to remove perchlorate, and three in series aqueous-phase GAC units 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. The 830-SRC soil vapor extraction wellfield was also expanded to include well W-830-49 in 2006. 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 30 to 33 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 from the San Joaquin Valley Unified Air Pollution Control District.

The 830-DISS GWTS began operation in July 2000 removing VOCs, perchlorate, and nitrate from ground water. Approximately 1 gpm of ground water was extracted from three wells (W-830-51, W-830-52, and W-830-53) using natural artesian pressure. The GWTS configuration consisted of a Cuno filter for particulate filtration, two aqueous-phase GAC units in series to remove VOCs, two in-series ion-exchange columns with SR-7 resin to remove perchlorate, and three bioreactor units for nitrate reduction. These units were open-container wetland bioreactors containing microorganisms that use nitrate during cellular respiration. Acetic acid was added to the process stream as a carbon source. Treatment system effluent was discharged via a storm drain that discharges to the Corral Hollow alluvium. At the request of the RWQCB, the facility was modified during the first semester 2007 to cease discharge of treated water to a surface water drainage way. The modification included the addition of a fourth well, W-830-2216, to the extraction wellfield. The GWTS is now extracting ground water at a combined flow rate of approximately 2 to 3 gpm. Currently, extracted ground water flows through ion-exchange canisters to remove perchlorate at the 830-DISS location. The water is 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

The 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 are shown 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 and operational issues interrupted continuous operations of the 832-SRC GWTS and SVTS, 830-SRC GWTS and SVTS, and 830-DISS GWTS during second semester 2009:

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

- The GWTS and SVTS shut down on April 23, 2009 due to a site-wide power outage, and the system's Programmatic Logic Control (PLC) was lost. In July, the PLC was reloaded, and the systems were restarted for testing. However, the alarms system continued to shut the systems down. The systems remained off for the entire reporting period while testing and repairs were conducted. Extraction wells W-832-01, W-832-10, W-832-11, and W-832-25 were secured on November 16 to protect against damage caused by freezing temperatures. Restart of the facilities is planned in 2010.

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

- The pumps in wells W-830-1829 and W-830-2213 were pulled on August 6 and September 8, respectively. The wells were converted to monitoring wells due to lack of sufficient water for extraction.
- The GAC in the first and second canisters for the GWTS was changed on August 11. In addition, new rotometers were installed on August 13.
- Several pumps in extraction wells failed and were replaced during the reporting period:
    - Well W-830-59 was restarted on September 2.
    - Well W-830-57 was restarted on October 6.
    - Well W-830-2215 was restarted on October 22.
    - Well W-830-2214 was restarted on October 28.
- The extraction well pump in W-830-49 failed and is currently in re-design for dual extraction upgrades. This well will remain offline to protect against damage caused by

freezing temperatures. The low flow wells, W-830-19 and W-830-59 were drained to protect against damage caused by freezing temperatures on November 18.

830-DISS GWTS

- The GWTS was shut down on July 15 due to the shutdown of the Central GSA systems as a result of the air stripper blower failure. The GWTS was restarted on July 28. However, the facility was again shut down a few hours later due to a discharge pump failure at the Central GSA. The problem was resolved and the system was restarted July 30. On August 6, the GWTS shut down due to a discharge pump failure at the Central GSA. The facility was restarted September 3, sampled and shut down for the long weekend. The GWTS was restarted September 8.
- Extraction wells, W-830-51, -52, and -53 went offline on October 5 due to a small leak detected in the pipeline. The facility continued extracting from well W-830-2216. The leak was repaired and the extraction wells were restarted on October 12.
- The GWTS was shut down on December 9 because the Central GSA system was shut down to protect against damage caused by freezing temperatures.

2.7.1.3. Building 832 Canyon OU Compliance Summary

The 830-SRC, 832-SRC, and 830-DISS GWTSs operated in compliance with Substantive Requirements during the reporting period. The 830-SRC and 832-SRC SVTSs operated in compliance with the San Joaquin Valley Unified 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 CMP monitoring requirements. The sampling and analysis plan is presented in Table 2.7-6. The only modifications made to the plan during this reporting period included no effluent compliance monitoring in August at 830-DISS GWTS and no compliance monitoring for the entire semester at 832-SRC GWTS as the systems were shut down during these time periods.

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

There were no treatment facility modifications in OU 7 during the reporting period. However, as mentioned previously, two extraction wells at the 830-SRC GWTS, W-830-1829 and -2213, were converted back to monitor wells due to lack of available water for extraction.

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; sixty required analyses were not performed because there was insufficient water in the wells to collect the samples, two required analyses were not performed because the artesian well was flowing, and eight required analyses were not performed due to an inoperable pump.

Ground water elevation data are posted for the Qal/WBR and $Tnsc_{1a}$ HSUs and contoured for $Tnsc_{1b}$ and Upper $Tnbs_1$ HSUs as presented on Figures 2.7-2, 2.7-4, 2.7-3, and 2.7-5, respectively. The ground water elevation maps also show hydraulic capture zones for the extraction wells that were active during second semester.

Analytical results and ground water elevation measurements obtained during 2009 are presented in Appendix B and C, 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 are summarized in Tables 2.7-8 through 2.7-10. The total masses removed during this 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 (mainly TCE) are the primary COCs detected in ground water; perchlorate and nitrate are the secondary COCs. These constituents have been identified primarily in the $Tnsc_{1a}$, $Tnsc_{1b}$ and Qal/WBR HSUs. Total VOCs have also been detected in low concentrations in Building 832 Canyon in the $Tnbs_2$ and Upper $Tnbs_1$ HSUs.

Total VOC isoconcentration data are posted for the Qal/WBR and $Tnsc_{1a}$ HSUs and contoured for the $Tnsc_{1b}$ and Upper $Tnbs_1$ HSUs, as presented on Figures 2.7-6, 2.7-8, 2.7-7, and 2.7-9, respectively. Hydraulic capture zones are presented on the $Tnsc_{1b}$ and Upper $Tnbs_1$ HSU ground water elevation and total VOC maps. Concentration maps for the secondary COCs, including hydraulic capture zones, are presented on Figures 2.7-10 through 2.7-17. Concentration data are posted for perchlorate in the Qal/WBR, $Tnsc_{1a}$ and Upper $Tnbs_1$ HSUs; and for nitrate in the Qal/WBR, $Tnsc_{1a}$, $Tnsc_{1b}$, and Upper $Tnbs_1$ HSUs. Concentration data and isoconcentration contours are presented for perchlorate in the $Tnsc_{1b}$ HSU. All secondary COC maps are based on data collected during the first semester 2009. For collocated wells, the highest concentration was used for contouring.

2.7.3.2.1. Total VOC Concentrations and Distribution

Total VOC concentrations in Qal/WBR HSU ground water in the Building 832 Canyon OU have decreased from a historic maximum of 10,000 µg/L (SVI-830-035) in 2003 to a 2009 maximum concentration of 1,400 µg/L (SVI-830-031, August 2009). Historically, ground water samples from wells located in the Building 830 source area have contained the highest total VOC concentrations in the Qal/WBR HSU. Total VOC concentrations in ground water samples taken from Qal/WBR HSU guard wells located south of Building 832 Canyon near the Site 300 southern boundary continue to be low (<1 µg/L) to below reporting limits (<0.5 µg/L) and have decreased from a historic maximum of 2.0 µg/L (W-6BS) in 2001 to 0.8 µg/L (W-35B-01) in 2009.

Since remediation began in 1999 in the Building 832 source area, significant reductions in total VOC concentrations in both ground water and vapor have also been achieved. Total VOC concentrations in wells screened in the Qal/WBR have decreased from a historic maximum of

1,800 µg/L (W-832-18) in 1998 to a 2009 maximum concentration of 460 µg/L (W-832-23). Monitor well W-832-23 is used to monitor plume concentrations in both the Qal/WBR and $Tnsc_{1b}$ HSUs, since it is screened across both units.

Overall, ground water yield continues to be low in the Building 832 source area. The area has been almost completely de-saturated due to ongoing ground water extraction and limited rainfall. As a result, ground water samples (for VOC analyses) were not collected from several wells completed in the Qal and $Tnsc_{1b}$ HSUs because the water table had dropped below the screen bottoms. Nevertheless, due to the effectiveness of the expansion extraction wells W-832-01, W-832-10, W-832-11 and W-832-25, the extent of the total VOC concentrations in the vicinity of 832-SRC continues to decrease.

Total VOC concentrations in soil vapor at 832-SRC have also declined from a historic maximum of 1.8 $ppm_{v/v}$ in September 2001 to a maximum of 0.573 $ppm_{v/v}$ (extraction well W-832-15, September 2009). This soil vapor sample was collected after a period of extended shutdown. The 832-SRC GWTS and SVTS were taken offline in April due to an unscheduled power outage that resulted in the loss of the PLC system that operates the facility. The treatment facilities remained offline for the rest of 2009 for PLC repairs and both facilities are expected to be operational in 2010. Due to the aforementioned operational problems, the total VOC mass removed from the 832-SRC GWTS and SVTS declined by approximately one-third during 2009.

Since remediation began in the Building 830 source area in 2000, a significant reduction in total VOC concentrations in ground water has been achieved. In the $Tnsc_{1b}$ HSU, total VOC concentrations in ground water have decreased by an order-of-magnitude from a historic maximum of 13,000 µg/L (W-830-49) in 2003 to a 2009 maximum of 4,700 µg/L (W-830-19, July 2009). Nevertheless, the overall extent of VOCs in the $Tnsc_{1b}$ HSU has not changed significantly over the past several years because hydraulic capture is constrained by limited recharge and low ground water yields. Total VOC concentrations in soil vapor in the Building 830 source area have declined from a historic maximum of 259 $ppm_{v/v}$ in well W-830-49 (April 2007) to a 2009 maximum of 46 $ppm_{v/v}$ (May 2009). This soil vapor sample was collected in May 2009 after the treatment system had been shut down for about two weeks. The extraction well was taken offline in April for pump repair and remains offline while the dual-extraction wellhead is upgraded. A soil vapor sample collected from well W-830-49 during a period of continuous operation was 0.006 $ppm_{v/v}$ in March 2009.

Due to operational issues such as freezing temperatures and extraction well pump failures, the 830-SRC groundwater and soil vapor treatment facilities did not operate at full capacity during 2009. This downtime had minor impacts on the overall extent of the total VOC plume in the $Tnsc_{1b}$ HSU near the Building 830 source area. The total VOC mass removed in 2009 via the 830-SRC SVTS decreased by one kilogram. The total VOC mass removed via the 830-SRC GWTS remained stable. During 2009, pumps were replaced in four extraction wells as part of routine maintenance. Efforts continue to minimize extraction well downtime and short-term shutdowns are not expected to impact long-term cleanup goals.

At the 830-DISS, total VOC mass removed increased slightly during 2009 due to increased ground water flow from the three passive artesian wells associated with this facility. 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 in 2002 to a 2009 maximum concentration of 38 µg/L (W-830-51, July 2009). Farther south along Building 832 Canyon, the leading edge of the $Tnsc_{1b}$ VOC plume continues to be contained within Site 300 boundaries based on total VOC concentrations below the 0.5 µg/L reporting limit in $Tnsc_{1b}$ HSU guard wells W-830-1730 and W-4C. Due to an inoperable pump, guard well W-880-03 was not sampled during 2009. The pump is scheduled for repair in early 2010.

Remediation of the $Tnsc_{1a}$ HSU began with the 830-SRC wellfield expansion in early 2007. As a result, total VOC concentrations in $Tnsc_{1a}$ HSU ground water have decreased from a historic maximum of 1,700 µg/L (W-830-27, 1998) to a 2009 maximum concentration of 600 µg/L (W-830-27, March 2009 and W-830-2214, November 2009). Monitor well W-830-2311 located near Spring 3, was installed in 2007 as a $Tnsc_{1a}$ HSU to evaluate the downgradient extent of VOCs. The highest total VOC concentration sampled in this well during 2009 was 31 µg/L (December 2009). A new $Tnsc_{1a}$ guard well, located downgradient of well W-830-2311 near the southern site boundary, is planned for installation during 2010. 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 (W-830-28, June 1998) in 1998 to a 2009 maximum concentration of 38 µg/L (extraction well W-830-60, July 2009). Total VOCs were not detected above the 0.5 µg/L reporting limit in Upper $Tnbs_1$ guard wells W-830-20 and W-832-2112 during 2009. Total VOC concentrations in well W-830-15, located even farther downgradient of the guard wells (near the southern end of the Building 832 Canyon), also remains below the reporting limit. The continued absence of total VOCs in these downgradient monitor wells suggests that the Upper $Tnbs_1$ extraction wellfield is adequately capturing the VOC plume in this HSU.

2.7.3.2.2. HE Compound Concentrations and Distribution

During 2009, HE compounds (RDX, HMX, 2-amino-4,6-dinitrotoluene, and nitrobenzene) were not detected in ground water in any Building 832 Canyon OU wells.

2.7.3.2.3. Perchlorate Concentrations and Distribution

Perchlorate concentrations detected in Qal/WBR HSU ground water have decreased from a historic maximum of 51 µg/L (W-830-34, December 1998) to a 2009 maximum concentration of 18 µg/L (W-832-13, February 2009). The maximum perchlorate concentration measured in ground water from W-832-23 during 2009 was 16 µg/L (March 2009). Monitor well W-832-23 is used to monitor contaminant concentrations in both the Qal/WBR and $Tnsc_{1b}$ HSUs, since it is screened across both units. The well is located slightly downgradient of the Building 832 source area. Perchlorate was not detected above the 4 µg/L reporting limit in Qal/WBR guard wells W-35B-01 and W-880-02 during 2009.

The extent of perchlorate above 6 µg/L in the $Tnsc_{1b}$ HSU (Figure 2.7-11) remained stable. The maximum perchlorate ground water concentration sampled in the $Tnsc_{1b}$ HSU during 2009 was 18 µg/L (W-832-13, February 2009). Historically, well W-830-58 has contained the highest perchlorate ground water concentration in this HSU (26 µg/L, May 2001). Perchlorate was not detected above the reporting limit in any $Tnsc_{1b}$ guard wells during 2009. However, due to an inoperable pump, guard well W-880-03 was not sampled during 2009; the pump will be replaced in 2010.

The maximum perchlorate ground water concentration sampled in the $Tnsc_{1a}$ HSU during 2009 remained at a low concentration of 8.3 µg/L (W-832-25, February 2009). The highest historic perchlorate concentration in the $Tnsc_{1a}$ HSU was 13 µg/L (W-832-25, February 1999).

Perchlorate was not detected above the reporting limit of 4 µg/L in any ground water samples taken from the Upper $Tnbs_1$ HSU during 2009.

2.7.3.2.4. Nitrate Concentrations and Distribution

Nitrate ground water concentrations continue to be high in the vicinity of the Building 832 and 830 source areas and remain low to below the reporting limit (<0.5 mg/L) in the downgradient, deeper parts of all Building 832 Canyon HSUs.

During 2009, nitrate ground water concentrations detected in samples from the Qal/WBR HSU ranged from below the <2.5 mg/L reporting limit (guard wells) near the site boundary to 200 mg/L (SVI-830-033, March 2009) in the Building 830 source area.

Nitrate ground water concentrations detected in samples from the $Tnsc_{1b}$ HSU ranged from <0.5 mg/L to 220 mg/L (W-830-49, January 2009). Historically, well W-830-49 has contained the highest nitrate concentrations in the $Tnsc_{1b}$ HSU (501 mg/L, June 1998). Nitrate concentrations in the $Tnsc_{1b}$ guard wells ranged from <0.5 mg/L to 2 mg/L (W-830-1730, March 2009 and W-830-1831, September 2009), significantly below the 45 mg/L cleanup standard. Due to an inoperable pump, guard well W-880-03 was not sampled during 2009; the pump is scheduled for replacement in early 2010.

During 2009, the maximum nitrate ground water concentration detected in samples from the $Tnsc_{1a}$ HSU was 110 mg/L (W-832-25, February 2009). Nitrate ground water concentrations detected in samples from the Upper $Tnbs_1$ ranged from <0.5 mg/L to 13 mg/L (W-830-57, January 2009). Nitrate ground water concentrations in guard wells in Upper $Tnbs_1$ HSU were not detected above the reporting limit. 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

Ground water and soil vapor extraction wellfield optimization continued during 2009 to prevent offsite plume migration, reduce source area concentrations, and increase mass removal. The expanded 832-SRC and 830-SRC extraction wellfields have increased hydraulic capture, while preventing the downward migration of contaminants into deeper HSUs or laterally toward the site boundary and Site 300 water supply wells 18 and 20.

Ground water yield continues to be low from many 830-SRC and 832-SRC extraction wells and hydraulic capture is difficult to assess because these wells cannot maintain continuous operation. The low yield is due to a combination of low hydraulic conductivity geologic materials, dewatering, and limited recharge.

COC concentrations in the Building 830 and Building 832 source areas generally exhibit stable or decreasing trends. Since remediation began, the maximum total VOC concentrations have decreased significantly in both the $Tnsc_{1b}$ and Qal/WBR HSUs. COC concentrations have also decreased in the Upper $Tnbs_1$ HSU, but remain stable in the $Tnsc_{1a}$ HSU. Active remediation of the $Tnsc_{1a}$ HSU began in 2007.

During 2009, remediation in the Building 832 Canyon OU was hampered by operational problems at both the Building 830 and Building 832 source areas (described in Section 2.7.1.2). Both the 832-SRC GWTS and SVTS remained shut down for the entire second semester while the system's PLC was restored. The 832-SRC facility is expected to be operational in early

2010. Operational problems also occurred at the 830-SRC and 830-DISS treatment facilities including several extraction well pump failures and a leak in the 830-DISS pipeline. These facilities are currently operational, and long-term cleanup goals will not be impacted.

The $Tnsc_{1b}$ HSU extraction wells target the highest total VOC plume concentrations emanating from the two source areas. Nevertheless, steep terrain and unstable canyon bottom soil conditions limit the availability of sites for extraction wells. Ground water extraction is further constrained by limited recharge and declining water levels in both source areas. Due to limited water, extraction wells W-830-1829 and W-830-2213 were converted to monitor wells during 2009. Dual-phase 830-SRC extraction well, W-830-49, was also offline for part of the year due to a failed pump. This well remains offline for wellhead redesign.

The $Tnsc_{1a}$ extraction wellfield currently consists of two wells: W-830-2214 is located near the 830-SRC and W-832-25 is located downgradient of 832-SRC in the distal area of this plume. During the short time the $Tnsc_{1a}$ HSU has been under remediation, total VOC concentrations have remained relatively stable. Water levels continue to decline in both the 830-SRC and 832-SRC areas, limiting continuous extraction from the $Tnsc_{1a}$ HSU.

Extraction wells in the Upper $Tnbs_1$ target areas with the highest total VOC concentrations. Monitor well W-830-1832, located on the leading edge of the VOC plume, displayed increasing total VOC concentrations prior to activation of the 830-SRC GWTS. Following activation of the GWTS, total VOC concentrations in this well have generally declined. The overall extent of total VOCs has also decreased in this HSU. Ground water in Upper $Tnbs_1$ guard wells, located downgradient of W-830-1832 and upgradient of water supply Well 20, continue to show analytical results below reporting limits for all COCs. Decreasing COC concentrations downgradient of the 832-SRC and 830-SRC extraction wellfields and the continued absence of COCs in guard wells demonstrate the efficacy of the extraction wellfield in removing mass and reducing the migration of contaminants.

As extraction proceeds from the 832-SRC, 830-SRC and 830-DISS extraction wells, it is expected that concentrations in all identified OU 7 HSUs will continue to decline. Over the past year, the extent of the VOC plume in the Upper $Tnbs_1$ HSU has decreased slightly and this trend is expected to persist with continued pumping. Total VOC concentration trends in the Upper $Tnbs_1$ HSU continue to be carefully monitored due to the potential influence of pumping at water supply Well 20 and backup water supply Well 18.

2.7.3.4. Building 832 Canyon OU Remedy Performance Issues

No 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 be protective of human health and the environment, and to make progress toward cleanup.

2.8. Site 300 Site-Wide OU 8

The Site 300 Site-Wide OU is comprised of release sites at which no significant ground water contamination and no unacceptable risk to human health or the environment are present. For this reason, a monitoring-only 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.

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 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, landfill, monitor wells, ground water elevations, and approximate ground water flow direction is presented on Figure 2.8-1.

2.8.1.1. Building 801 and Pit 8 Landfill Ground Water Monitoring

Wells K8-01 and K8-03B monitor Building 801 ground water contaminants while wells K8-02B, K8-04, and K8-05 are detection monitoring wells for 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; ten required analyses were not performed because there was insufficient water in the wells to collect the samples.

Analytical results and ground water elevation measurements obtained during 2009 are presented in Appendix B and C, respectively.

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

At Building 801, VOCs 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. Nitrate, perchlorate, and total VOC data for the $Tnbs_1/Tnbs_0$ HSU are posted on Figure 2.8-1.

During 2009, the maximum total VOC concentration detected in ground water samples from wells in the Building 801/Pit 8 Landfill area was 7.0 µg/L (K8-01, May 2009). This total VOC concentration was comprised of 4.7 µg/L of TCE and 2.3 µg/L of 1,2-DCA. A duplicate sample collected the same day from well K8-01 contained total VOCs at a concentration of 5.3 µg/L comprised of 3.8 µg/L of TCE and 1.5 µg/L of 1,2-DCA. 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 (K8-01, 1990).

During 2009, perchlorate was detected only in a duplicate sample from well K8-01 at 4.3 µg/L (May 2009). The other sample from well K8-01 and all the other 2009 ground water samples from Building 801/Pit 8 monitor wells did not contain perchlorate above the 4 µg/L reporting limit.

Nitrate concentrations in ground water in the vicinity of Building 801/Pit 8 Landfill have been relatively stable over time. The maximum 2009 nitrate concentration detected in a ground water sample from a well in the Building 801/Pit 8 Landfill area was 61 mg/L (K8-04, May 2009). The sample from well K8-04 was the only one that exceeded the 45 mg/L cleanup standard for nitrate. The historic maximum nitrate concentration of 64 mg/L was detected in samples collected from well K8-01 in 2002. Overall, nitrate concentrations in ground water at the Building 801/Pit 8 Landfill generally are similar to previous years.

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, monitoring wells, and ground water elevations 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; six required analyses were not performed because there was insufficient water in the wells to collect the samples.

Analytical results and ground water elevation measurements obtained during 2008 are presented in Appendix B and C, respectively.

2.8.2.2. Building 833 Contaminant Concentrations and Distribution

At Building 833, VOCs are the primary COC in ground water; there are no secondary COCs. Total VOC concentrations in the Tpsg HSU are presented on Figure 2.8-2.

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 little evidence of saturation. When saturated, monitoring conducted from 1993 to 2009 has shown a decline in total VOC concentrations in Tpsg HSU ground water from a historic maximum concentration of 2,100 μg/L in 1992 (W-833-03). During 2009, none of the Tpsg wells contained sufficient water for sampling. VOCs were not detected in the first or second semester 2009 samples from deep $Tnbs_1$ HSU monitoring well W-833-30, indicating that VOC contamination continues to be confined to the shallow Tpsg perched water-bearing zone.

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, monitoring wells, ground water elevations, and approximate hydraulic gradient direction in the $Tnsc_0$ HSU are presented on Figure 2.8-3.

2.8.3.1. Building 845 and Pit 9 Landfill Ground Water Monitoring

Wells K9-01 through K9-04 are detection monitoring wells for the Building 845 and Pit 9 Landfill. Detection monitoring of this landfill, which is discussed in Section 3.3, is conducted to determine if releases have occurred.

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.

Analytical results and ground water elevation measurements obtained during 2009 are presented in Appendix B and C, respectively.

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

There are no COCs in ground water at Building 845 and the Pit 9 Landfill. The monitoring wells near the Pit 9 Landfill are screened in the lower Neroly Formation $Tnsc_0$ HSU. Detection monitoring of the Pit 9 landfill, which is discussed in Section 3.3, is conducted to determine any releases to ground water.

No COC concentrations maps are provided for the Building 845 and Pit 9 Landfill area as there continues to be no contamination detected in the ground water.

2.8.4. Building 851 Firing Table

The Building 851 Firing Table has been used since 1962 to conduct explosives experiments. A map showing the locations of the firing table, monitoring wells, and ground water elevations 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.

Analytical results and ground water elevation measurements obtained during 2009 are presented in Appendix B and C, respectively.

2.8.4.2. Building 851 Contaminant Concentrations and Distribution

At the Building 851 Firing Table, uranium is the primary and only COC detected in ground water; VOCs are a vadose zone COC. Total uranium activities and $^{235}U/^{238}U$ isotope atom ratios and tritium activities are presented on Figure 2.8-4. Wells W-851-05, W-851-06, and W-851-07 are completed in the Tmss HSU. Well W-851-08 is completed in the overlying $Tnsc_0$ HSU.

The 2009 maximum total uranium activity detected in ground water samples from wells in the Building 851 area was 1.4 pCi/L (W-851-08, November 2009). The historic maximum uranium activity was 3.2 pCi/L (W-851-07, October 1991). The atom ratio of $^{235}U/^{238}U$ in samples from wells W-851-05, W-851-06, and W-851-08 indicated the addition of some depleted uranium. The sample from well W-851-07 contained only natural uranium. Overall, uranium activities in ground water are similar to previous years and remain well below the 20 pCi/L cleanup standard and within the range of natural background levels. During 2009, tritium activities were not detected above the 100 pCi/L reporting limit in ground water samples from any Building 851 monitoring wells. The maximum historic tritium activity detected in Building 851 ground water was 3,790 pCi/L (W-851-08, late 1998).

3. Detection Monitoring, Inspection, and Maintenance Program for the Pits 2, 8, and 9 Landfills

The Pit 2, 8, and 9 Landfills received firing table debris from the 1950s to the 1970s. At present, there is no evidence of contaminant releases to ground water from any of these three landfills, except for low activities of depleted uranium at the Pit 2 Landfill, and no unacceptable risk or hazard to human or ecological receptors has been identified. The Detection Monitoring Program is designed to detect any future releases of contaminants from these landfills. This section presents the results for the Pit 2, 8, and 9 Landfills ground water detection monitoring network, and any landfill inspections or maintenance conducted during the reporting period.

3.1. Pit 2 Landfill

3.1.1. Sampling and Analysis Plan Modifications

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 the CMP monitoring requirements, except that twenty required analyses were not performed because there was insufficient water in the wells to collect the samples. There were no modifications made to the plan.

Analytical results and ground water elevation measurements obtained during 2009 are presented in Appendix B and C, respectively.

3.1.2. Contaminant Detection Monitoring Results

A map showing the locations of monitoring wells and the Pit 2 Landfill is presented on Figure 2.5-1.

The ground water elevation contour maps that include the Pit 2 Landfill are presented on Figures 2.5-2 and 2.5-3. Wells W-PIT2-2301 and W-PIT2-2302, completed in the Qal/WBR HSU immediately southeast of Pit 2, contained ground water within their screened intervals during 2009 and were sampled for tritium, uranium, and perchlorate. Depth to ground water within the $Tnbs_1/Tnbs_0$ HSU was measured at over 50 ft to over 70 ft beneath the Pit 2 Landfill.

A map of the second semester 2009 distribution of ground water tritium activity within the $Tnbs_1/Tnbs_0$ HSU and including the Pit 2 Landfill is presented on Figure 2.5-5. The maximum 2009 tritium activity within the $Tnbs_1/Tnbs_0$ HSU in the area immediately south of the Pit 2 Landfill was 5,430 ± 1060 pCi/L (NC2-08, October 2009). The historic maximum tritium activity of 49,100 pCi/L was detected in 1986 (January and August) from well K2-01C. The 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. Ground water samples were collected for the first time from Qal/WBR HSU wells W-PIT2-2301 and W-PIT2-2302, located in Elk Ravine downgradient from Pit 2 Landfill. A map of the second semester 2009 distribution of ground water tritium activity within the Qal/WBR HSU and including the Pit 2 Landfill is presented on Figure 2.5-4. Tritium above the reporting limit/background activity (100 pCi/L) was not detected in the March 2009 sample from well W-PIT2-2302 and the tritium activity of the March 2009 sample from well W-PIT2-2301 was within the range of background (116 ± 53 pCi/L).

The maximum 2009 uranium activity detected in a ground water sample from the Pit 2 area was 9.3 pCi/L (K2-01C, May 2009). Uranium isotope data for samples collected from Pit 2 wells screened in the $Tnbs_1/Tnbs_0$ HSU (K2-01C, W-PIT2-1934, and W-PIT2-1935) in 2009 and previous years indicate that low activities of depleted uranium, in addition to the naturally-occurring uranium, are present in $Tnbs_1/Tnbs_0$ ground water. Although the uranium isotope ratio from the January 2009 sample from well W-PIT2-1935 indicate some added depleted uranium ($^{235}U/^{238}U$ atom ratio = 0.0064), subsequent samples collected in May and July 2009 indicate only natural uranium (atom ratios = 0.00732 and 0.00718, respectively). Total uranium activities in samples collected from well W-PIT2-1935 ranged from 2.0 to 2.8 pCi/L. Uranium isotope data from ground water samples collected from Qal/WBR wells W-PIT2-2301 and W-PIT2-2302 in March 2009 indicate the presence of low activities of depleted uranium in Qal/WBR HSU ground water, however total uranium activities were well within the range of background (0.46 and 0.21 pCi/L, respectively.

The release of depleted uranium from Pit 2 may have been the result of the discharge of potable water that was used to maintain a wetland habitat for red-legged frogs (a Federally-listed endangered species) within a drainage channel that extends along the northern and eastern margin of the Pit 2 Landfill. This discharge was discontinued in 2005. Since the discharge was discontinued, total uranium activities in ground water from wells W-PIT2-1934 and W-PIT2-1935, both located along the northern margin of the Pit 2 Landfill, have decreased and the last two of three uranium samples collected from well W-PIT2-1935 in 2009 contained only natural uranium.

During 2009, perchlorate was detected above the 4 µg/L reporting limit, but below the 6 µg/L cleanup standard, in ground water samples collected in January from wells K2-01C (4.1 µg/L) and NC2-08 (4.3 µg/L). The 4.1 µg/L result for well K2-01C was from a duplicate sample; perchlorate was not detected above the 4 µg/L reporting limit in the routine sample. Perchlorate was not detected above the 4 µg/L reporting limit in subsequent samples from these wells. Perchlorate was not detected above the 4 µg/L reporting limit in all other samples from wells in the Pit 2 Landfill area, including Qal/WBR HSU wells W-PIT2-2301 and W-PIT2-2302.

No other constituents, including VOCs, nitrate, HE compounds, metals and fluoride that were monitored during the 2009 at the Pit 2 landfill as part of the Detection Monitoring Program were detected in $Tnbs_1/Tnbs_0$ HSU ground water above regulatory limits.

3.1.3. Landfill Inspection Results

The Pit 2 Landfill was inspected quarterly during 2009. Two large burrows, possibly badger dens were observed in the pit cap during the second quarter 2009 inspection. No burrows were identified during the third or fourth quarters.

3.1.4. Annual Subsidence Monitoring Results

Annual subsidence monitoring was conducted during the second semester 2009; none was found.

3.1.5. Maintenance

No maintenance was conducted on Pit 2 during the first semester 2009. The burrows identified during the second quarter were repaired before the third quarter inspection.

3.2. Pit 8 Landfill

3.2.1. Sampling and Analysis Plan Modifications

The sampling and analysis plan for the Pit 8 Landfill ground water Detection Monitoring Program are 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; ten required analyses were not performed because there was insufficient water in the wells to collect the samples. There were no modifications made to the plan.

Analytical results and ground water elevation measurements obtained during 2009 are presented in Appendix B and C, respectively.

3.2.2. Contaminant Detection Monitoring Results

Ground water elevations, nitrate, perchlorate, and total VOC concentrations in $Tnbs_1/Tnbs_0$ HSU ground water are presented on Figure 2.8-1.

Historic and current data indicate that total VOCs detected in ground water in the Pit 8 Landfill area are the result of releases from the former Building 801 dry well, which have migrated downgradient from Building 801 to beneath the landfill. The highest concentration of total VOCs (comprised of 1,2-DCA and TCE) continues to be observed at well K8-01, located upgradient of Pit 8 where samples collected during 2009 contained 7.0 µg/L (May 2009) and 5.4 µg/L (October 2009). The presence of total VOCs in ground water samples from well K8-04, immediately downgradient of the Pit 8 Landfill, with concentrations of 2.4 and 2.5 µg/L (May and October 2009, respectively) appears to be a continuation of the VOC plume originating at the Building 801 dry well and not due to a release from the Pit 8 Landfill. During 2009, 1,2-DCA was the only VOC detected above its 0.5 µg/L cleanup standard. However, the maximum concentration of 2.3 µg/L 1,2-DCA detected in 2009 in well K8-01 represents a decrease from the historical maximum 1,2-DCA concentration of 5 µg/L detected in the same well in 1990. This well is located upgradient from the Pit 8 Landfill, and therefore appears to be the result of releases from the former Building 801 dry well. The presence of 1,2-DCA at concentrations of 0.6 µg/L and 0.9 in downgradient wells K8-01 and K8-04, respectively appears to be a continuation of the VOC plume originating at the Building 801 dry well and not due to a release from the Pit 8 Landfill.

The 2009 maximum nitrate concentration detected in a ground water sample from a well in the Pit 8 Landfill area was 61 mg/L (K8-04, May 2009) and was the only one that exceeded the 45 mg/L cleanup standard for nitrate.

Tritium activities in all samples collected from wells in the Pit 8 Landfill area during 2009 were below the reporting limit (<100 pCi/L), except for the duplicate May 2009 sample from well K8-01 (117 ± 56 pCi/L) and the November sample (118 ± 48.5 pCi/L). The latter activities are within the range of background.

Fluoride, metals, uranium isotopes, and thorium-232 concentrations/activities in samples collected during 2009 from wells upgradient and downgradient of the Pit 8 Landfill were within the range of background concentrations and below regulatory limits.

Of the constituents monitored during 2009 as part of the Detection Monitoring Program in $Tnbs_1/Tnbs_0$ HSU ground water from Pit 8 Landfill area wells, only 1,2-DCA and nitrate exceeded applicable cleanup standards.

3.2.3. Landfill Inspection Results

The Pit 8 Landfill was inspected quarterly during 2009. No problems were reported in 2009, except for several small holes that were filled in during the fourth quarter inspection.

3.2.4. Annual Subsidence Monitoring Results

Annual subsidence monitoring was conducted during the second semester 2009; no subsidence was noted.

3.2.5. Maintenance

No maintenance was conducted at Pit 8 during 2009, except for the filling of several small holes as noted above.

3.3. Pit 9 Landfill

3.3.1. Sampling and Analysis Plan Modifications

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 the CMP monitoring requirements. There were no modifications made to the plan.

Analytical results and ground water elevation measurements obtained during 2009 are presented in Appendix B and C, respectively.

3.3.2. Contaminant Detection Monitoring Results

All detection monitoring constituents including tritium, HE compounds, VOCs, fluoride, metals, uranium isotopes, and thorium-232 concentrations/activities in samples collected in the 2009 from wells upgradient and downgradient of Pit 9 were at or below background concentrations and below regulatory limits.

During 2009, depth to ground water was approximately 110 ft beneath the Pit 9 Landfill. There were no significant changes in ground water elevations from previous years. Pit 9 Landfill ground water elevations and HMX and total uranium data are presented on Figure 2.8-3.

3.3.3. Landfill Inspection Results

The Pit 9 Landfill was inspected quarterly during 2009. Several deep animal burrows and some minor cracks were noted in the inspection reports for the first and second quarters. Twelve small holes and several cracks were observed during the third and fourth quarter inspections and will be repaired during the first semester 2010.

3.3.4. Annual Subsidence Monitoring Results

Annual subsidence monitoring was conducted during the second semester 2009; no subsidence was noted.

3.3.5. Maintenance

Some maintenance of the pit cover, including filling of animal burrows, was conducted during the second quarter of 2009.

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.

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.

The on-site 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 3, 5, and 7 is discussed in Section 4.1.2.

4.1.1. Vapor Intrusion Inhalation Risk Evaluation

According to the CMP/CP, risk and hazard management will continue for buildings/areas where an unacceptable risk and/or hazard were previously identified until the estimated risk is below 10^{-6} and the hazard index is below 1 for two consecutive years. Risk and hazard management was ongoing during the reporting period for the following buildings:

- Building 834D
- Building 830
- Building 833

The risk and hazard calculated for volatile contaminants in the subsurface migrating upward into indoor ambient air of these buildings and being inhaled by onsite workers was re-evaluated in 2009 as described below. Institutional controls, such as restricting access to or activities in areas of elevated risk, remained in place during 2009 to prevent unacceptable exposure to contaminants during remediation for those buildings and areas that continue to show an unacceptable risk and/or hazard.

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). 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).

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 2008.

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 2009 remained above 10^{-6} and/or hazard quotient above 1 for the indoor ambient air exposure pathway evaluated at Building 834D. At Building 830, the estimated risk in 2009 was below 10^{-6} and/or the hazard quotient was below 1 for the indoor ambient air exposure pathway. According to the procedures outlined in Section 6.1.1 and 6.1.2 of the CMP/CP for the Interim Remedies at LLNL Site 300, (Ferry et al., 2002), the risk and hazard management for Building 830 will be considered complete when the estimated risk has remained below 10^{-6} and the hazard quotient has remained below 1 for two consecutive years. To comply with these requirements, 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. During 2009, active remediation using ground water and soil vapor extraction continued at both locations.

In 2009, dry conditions limited ground water sampling at Building 833. In 2008, the risk evaluation for Building 833 for indoor ambient air showed no human health risk for this exposure pathway. “No Risk” is defined as an individual and cumulative excess cancer risk below 10^{-6} and a hazard quotient below 1. The 2006 evaluation for Building 833 also resulted in no human health risk.

According to the procedures outlined in Section 6.1.1 and 6.1.2 of the CMP/CP for the Interim Remedies at LLNL Site 300, the risk and hazard management for Building 833 would be considered complete as the estimated risk has remained below 10^{-6} and the hazard quotient has remained below 1 for two consecutive years (Ferry et al., 2002). However, because dry conditions limited ground water sampling in 2007 and 2009, this condition has not been met. Consequently, the risk and hazard evaluation for Building 833 will continue until all representative ground water samples have been collected and no human health risk for this pathway remains.

4.1.2. Spring Ambient Air Inhalation Risk Evaluation

The CMP requires annual sampling of outdoor air above contaminated surface water, when surface water is present to determine VOC concentrations. The following springs were evaluated during the first semester 2009:

- Ambient Air Near Spring 3 in the Building 832 Canyon OU
- 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 2009, 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 2010 and air samples will be collected if water is present.

Ambient air samples were collected at Spring 3 during the first semester 2009. The results were presented in the first semester 2009 CMR (Dibley et al., 2009). No contaminants were detected above their respective Industrial Air Regional Screening Levels for Chemical Contaminants at Superfund Sites in 2008 and 2009. The estimated risk has remained below 10^{-6} and the hazard index has remained below 1 for two consecutive years indicating that there is no longer a risk or hazard to onsite workers. Therefore, risk and hazard management is complete for Spring 3.

4.2. Ecological Risk and Hazard Management

Surveys for important burrowing species are required in survey areas specified in the CMP as long as a potential ecological hazard is present. The CMP initially required surveys at Building 834, Pit 6 Landfill, and Building 850. As discussed in the 2005 Annual CMR, only Building 850 continues to present a potential ecological hazard.

4.2.1. Polychlorinated biphenyl (PCBs), Dioxins, and Furans in Surface Soil at Buiding 850

Due to the presence of PCBs, dioxins, and furans in the surface soil at Building 850, ecological field surveys have been conducted to determine the presence of important burrowing species. Figure 4.2.1 shows the ecological survey area for the Building 850 Firing Table. As reported in the 2004, 2005, 2006 and 2007 Annual and 2008 First Semester CMRs, wildlife surveys have revealed the presence of the western burrowing owl in the area adjacent to the Building 850 Firing Table within the ecological survey area. As also previously reported, California tiger salamanders have been observed in breeding pools approximately 700 meters (the Mitigation Pond) and 1200 meters (Ambrosino Pool) to the north west of the survey area. No California tiger salamanders have been observed directly in the Building 850 ecological survey area.

Both western burrowing owls and California tiger salamanders fit the description of important burrowing species as defined in the CMP. Western burrowing owls are a State species of concern (California Department of Fish and Game, 2004). A preliminary exposure analysis for the western burrowing owl to estimate hazard to cadmium and PCBs was completed and reported on in the First Semester 2004 CMR. Results suggest cadmium is unlikely to pose a hazard to western burrowing owls nesting in the vicinity of Building 850. However, concentrations of Arochlor 1254 in the soil at Building 850 may pose a hazard to western burrowing owls nesting in the area, as the hazard quotient (HQ) exceeds 1.

The California tiger salamander is a state and federally listed threatened species. Although California tiger salamanders are known to move up to 2 km from breeding ponds (U.S. Fish and Wildlife Service, 2004), research conducted by Trenham (2001) suggests that most (95%) California tiger salamanders use breeding habitat within 173 meters of breeding ponds. Survey results at Site 300 support this research. Although California tiger salamanders can utilize the Building 850 area as upland habitat, the largest concentration of California tiger salamanders is likely to be closer to breeding ponds. An exposure analysis on California tiger salamanders has not been conducted.

Remediation activities at Building 850 began on May 1, 2009 and will be completed in early 2010. Contaminated soil is being excavated from the hillsides adjacent to the firing table, solidified, and placed in the Corrective Action Management Unit located in the former Building 850 corporation yard. A biological opinion prepared by the United States Fish and Wildlife Service which analyzed the impacts to listed species from routine maintenance and operations projects at Site 300 was amended to include potential impacts from the Building 850 remediation activities. This amendment required several avoidance and minimization measures designed to reduce potential impacts to the California tiger salamander, which are being implemented during the Building 850 remediation. These measures include: providing an environmental education program to all project personnel, conducting the work in the dry season, installing temporary exclusion fencing around the project site to keep California tiger salamanders from potentially entering the construction area, including escape ramps for wildlife for steep-walled excavations or trenches more than 1-foot deep or covering the trenches at the end of each work day, and not using any plastic mono-filament netting (erosion control netting) at the project site. In addition, DOE/LLNL will compensate for the loss of California tiger salamander habitat by setting aside 48.5 acres containing two existing seasonal pools at Site 300, and enhancing one of these pools so that it will hold water for a longer period of time.

Surveys for western burrowing owls were conducted in the entire Building 850 remediation project site prior to construction (March and April of 2009). One western burrowing owl was observed at a burrow west the disturbance area prior to construction. An exclusion zone was established around this burrow, but the owl left the area prior to the commencement of construction. This was an individual owl, and no evidence of nesting was observed at this location. Although impacts from the remediation activities to western burrowing owls (which are not a federally-listed species) were not specifically analyzed in the biological opinion, the avoidance and minimization measures put into place provide some protection to this species. Upon completion of remediation activities, the risk to western burrowing owls and California tiger salamanders from contaminated soil will no longer exist. At this point, ecological surveys will be discontinued.

5. Data Management Program

The management of data collected during second semester 2009 was subject to the Environmental Restoration Department (ERD) data management process and standard operating procedures (Goodrich, 2009). This data management process tracks sample and analytical information from the 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, electronic and hard copy analytical results receipt, strict data validation and verification, data quality control procedures, and data retrieval and presentation. 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

During the second semester of 2009, there were no major changes to the relational database that is used to maintain the data for the CMR or the applications used to access the data. General maintenance and refinements were implemented to improve chain of custodies, data entry verification, and querying abilities. Sample Planning and Chain of Custody Tracking (SPACT) was augmented by further automating data entry and creating new verifications using newly added data as part of the data entry process. Minor improvements and additions continue to be implemented to the ERD data management process in an ongoing effort to automate and improve the applications. A query tool was added to assist users in finding the appropriate requested analysis for a specific analyte. Standard operating procedures were updated in the previous semester to reflect the changes necessitated by the normalization to the Oracle database.

5.2. New Procedures

A new web-enabled database tool is being developed to facilitate tracking of well drilling and maintenance. Due to the complexity of the problem and to support on-going work, tool development and implementation is being conducted in four phases. Phases 1 and 2 encompass the tracking of down-hole well equipment and well abandonment, respectively, and include tracking of change requests, designs, approvals, and as-built data. The process is currently in Phase 3, which tracks requests for well surveying.

Another application that has been developed is the Treatment Facility Real Time (TFRT) system. It is a high frequency data acquisition system for Treatment Facilities and their associated extraction wells. It is being implemented treatment facility by facility.

The incorporation of analytical contract pricing, requested analysis, and analyte suites was also implemented in the database. The ability to create a one-time only, unplanned Chain of Custody was also added. No other major new development was done for the database or applications used to manage the CMR data.

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, 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

There were no modifications to existing procedures during this reporting period. The review and updating process has begun for the SOPs. Upon completion, these SOPs will be released as Revision 14 and will include SOP 1.1: Field Borehole Logging, SOP 1.2: Borehole Sampling of Unconsolidated Sediments and Rock, SOP 1.3: Drilling, SOP 1.4: Well Installation, SOP 1.5: Initial Well Development, SOP 1.6: Borehole Geophysical Logging, SOP 1.7: Well Closure, SOP 1.8: Disposal of Investigation-Derived Wastes (Drill Cuttings, Core Samples, and Drilling

Mud), SOP 1.10: Soil Vapor Surveys, SOP 1.11: Soil Surface Flux Monitoring of Gaseous Emission, SOP 1.13: Operation of the AMS TR7000 Well Management System, SOP 1.14: Final Well Development/Specific Capacity Tests at LLNL Livermore Site and Site 300, SOP 1.15: Well Site Core Handling, SOP 1.16: Four Wheel All Terrain Vehicle (ATV) Operation, SOP 1.17: Treatment Facility Vapor Sampling, SOP 1.18: Deployment, Retrieval, Sampling and Maintenance of Instrumented Membrane Technology (IMT) Borehole-Liner Systems, SOP 2.8: Installation of Dedicated Sampling Devices, SOP 2.12: Ground Water Monitor Well and Equipment Maintenance, 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 4.1: General instructions for Field Personnel, SOP 4.2: Sample Control and Documentation, SOP 4.4: Guide to Packaging and Shipping of Samples, SOP 4.5: General Equipment Decontamination, SOP 4.6: Validation and Verification of Radiological and Nonradiological Data Generated by Analytical Laboratories, SOP 4.7A: Livermore Site Treatment and Disposal of Well Development and Well Purge Fluids, SOP 4.7B: Site 300 Treatment and Disposal of Well Development and Well Purge Fluids, SOP 4.8: Calibration/Verification and Maintenance of Field Instruments Used in Measuring Parameters of Surface Water, Ground Water, and Soils, SOP 4.9: Collection of Field QC Samples, SOP 4.14: Mapping with the Trimble Pathfinder Pro XR GPS System, SOP 4.15: ERD Self-assessments and Walkabouts, SOP 4.16: ERD Lockout/Tagout Program, SOP 4.17: Change of Aqueous and Vapor Phase Granular Activated Carbon, SOP 4.18: ERD Document Control, SOP 5.5: Data Management Receipt and Processing, and SOP 5.20: Cost Effective Sampling (CES) Algorithm Preparation.

6.2. New Procedures

There were no new procedures developed during this reporting period. ERD's Integration Worksheets (IWSs) were converted to comply with the LLNL institution-wide work planning and control process, ahead of the December 31, 2009 deadline.

6.3. Self-assessments

ERD participates in formal and informal self-assessments. These assessments are used to evaluate work activities to QA and management procedures, and Integrated Safety Management System (ISMS) practices. External regulatory agencies also perform frequent walkabouts during ERD work activities. There were approximately fifteen assessments and walkabouts performed for the ERD Site 300 work activities. Issues and deficiencies observed during the assessments are tracked from inception to resolution using the institutional Issues Tracking System (ITS). To date, all ERD Site 300 work related issues and deficiencies have been successfully corrected and closed-out in the ITS.

6.4. Quality Issues and Corrective Actions

Quality improvement, nonconformance, and corrective action reporting is documented using the Quality Improvement Form (QIF). There were four QIFs processed during this reporting period. Corrective action(s) recommended in one of the QIFs has been successfully implemented and closed-out. Suggested corrective actions for the remaining QIFs are in progress.

6.5. Analytical Quality Control

Data review, validation, and verification are conducted on 100% of the incoming analytical data. 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 is qualified as rejected only when there is a serious deficiency in the ability to analyze the sample and meet QC criteria. There were no significant data anomalies to report during this semester; however, there was an issue with the QC provided by one of the contracted analytical laboratories (CALs). Periodically, the percent recovery of 1,1,2,2-Tetrachloroethane (an EPA Method 601 analyte) failed the acceptance criteria established by the CAL for the Laboratory Control Sample (LCS). The recovery of this analyte did not meet the lower control limit. An LCS is used to demonstrate that the laboratory measurement system is performing acceptably. It was requested that the CAL provide an explanation as to why the failing LCS compound was reported, versus repeating the process until the recovery of the compound met the control limits. The lab stated that their SOP allows two analytes to be outside the control limits before having to repeat the process. Per the Statement of work (SOW), for the CALs, all LCS analytes must meet the established control limits. Resolution of this issue is still pending.

6.6. Field Quality Control

Quality control is implemented during the sample collection process in the field. Ten percent of samples are collocated (5% intralaboratory and 5% interlaboratory). Field blanks and trip blanks are used to identify contamination that may occur during sample collection, transportation, or handling of samples at the analytical laboratory. Equipment blanks are used to determine the effectiveness of decontamination processes of portable equipment used for purging and/or sample collection. There were no cross-contamination issues indicated by trip blank, field blank, or equipment blank analyses during this reporting period, but there were trihalomethanes (THMs) detected in the blank water samples. The THMs are not project contaminants of concern, but are indicative of chlorination byproducts. After investigating the potential source of contamination, it was learned that the Milli-Q water system, where the blank water is obtained, was overdue for a filter change. The laboratory analyst agreed to track the filter change-outs more closely, but also reminded ERD sampling personnel that the water is sufficient for their purposes. ERD does not utilize this particular onsite laboratory to perform sample analyses, but ERD is allowed to use their Milli-Q water system. The lab analyst reiterated the proper operating parameters and the amount of time necessary to sufficiently purge the system prior to obtaining water. ERD personnel have not deviated from following these operating procedures.

7. References

Blake R., and M. Taffet (2008a) *Compliance Monitoring Program for the CERCLA-Closed Pit 6 Landfill, First Quarter 2008 Report*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-132057-08-1).

Blake R., and M. Taffet (2008b) *Compliance Monitoring Program for the CERCLA-Closed Pit 6 Landfill, Second Quarter 2008 Report*, Lawrence Livermore National Laboratory, Livermore, CA (UCRL-AR-132057-08-2).

California Department of Fish and Game (2004), State and Federally Listed Endangered and Threatened Animals of California. Available online at: http://www.dfg.ca.gov/hcpb/species/t_e_spp/tespp.shtml.

Dibley, V.R. (1999), *Livermore Site and Site 300 Environmental Restoration Projects Quality Assurance Project Plan*, Lawrence Livermore National Laboratory, Livermore, Calif. (UCRL-AR-103160 Rev. 2).

Dibley, V., L. Ferry, and M. Buscheck Ed. (2009), *2008 Annual Compliance Monitoring Report, Lawrence Livermore National Laboratory Site 300*, Lawrence Livermore National Laboratory, Livermore, Calif. (UCRL-AR-206319-08).

DTSC (2005) Interim Final Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air, California EPA – DTSC.

Ferry, R., L. Ferry, M. Dresen, and T. Carlsen (2002), *Compliance Monitoring Plan/Contingency Plan for Interim Remedies at Lawrence Livermore National Laboratory Site 300*, Lawrence Livermore National Laboratory, Livermore, Calif. (UCRL-AR-147570).

Ferry, L., M. Dresen, Z. Demir, V. Dibley, V. Madrid, M. Taffet, S. Gregory, J. Valett, M. Denton (2006), *Final Site-Wide Remediation Evaluation Summary Report for Lawrence Livermore National Laboratory Site 300,* Lawrence Livermore National Laboratory, Livermore, Calif. (UCRL-AR-220391).

Goodrich, R., and J. Wimborough (Eds.) (2009), *LLNL Livermore Site and Site 300 Environmental Restoration Project Standard Operating Procedures (SOPs)*, Lawrence Livermore National Laboratory Livermore, Calif. (UCRL-AM-109115 Rev. 13).

Holtzapple, C. (2007), *Shutdown of the Eastern General Services Area Ground Water Extraction and Treatment System at Lawrence Livermore National Laboratory Site 300*, Lawrence Livermore National Laboratory, Livermore, Calif. (letter).

Jackson, S (2008) *Statistically Significant Evidence for a Release of Total Uranium from Lawrence Livermore National Laboratory Experimental Test Site (Site 300) Pit 6*, Letter to S. Timm, RWQCB (WGMG08-022).

Trenham, P.C. (2001), *Terrestrial habitat use by adult California tiger salamanders,* Journal of Herpetology Vol. 25, No. 2, pp. 343-346.

U.S. DOE (2008), *Final Site-Wide Record of Decision for Lawrence Livermore National Laboratory Site 300,* Lawrence Livermore National Laboratory, Livermore, Calif. (UCRL-AR-236665).

U.S. EPA (2002), OSWER Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils (Subsurface Vapor Intrusion Guidance), EPA530-D-02-004.

U.S. Fish and Wildlife Service (2004), "Endangered and Threatened Wildlife and Plants; Determination of Threatened Status for the California Tiger Salamander; and Special Exemption for Existing Routine Ranching Activities; Final Rule," Federal Register **69**(149) 47212–47248.

Figures

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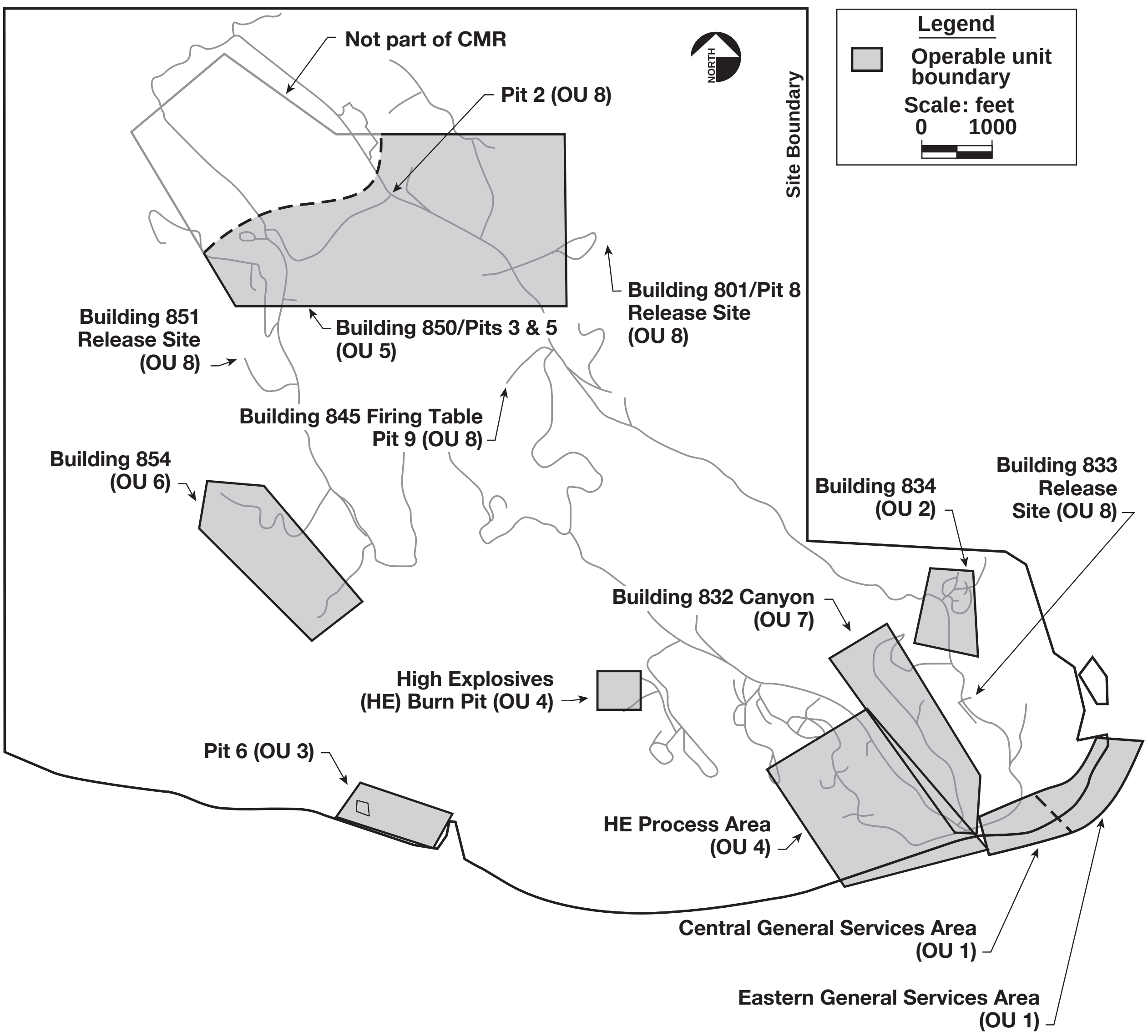

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Figure 2-1. Site 300 map showing OU locations.

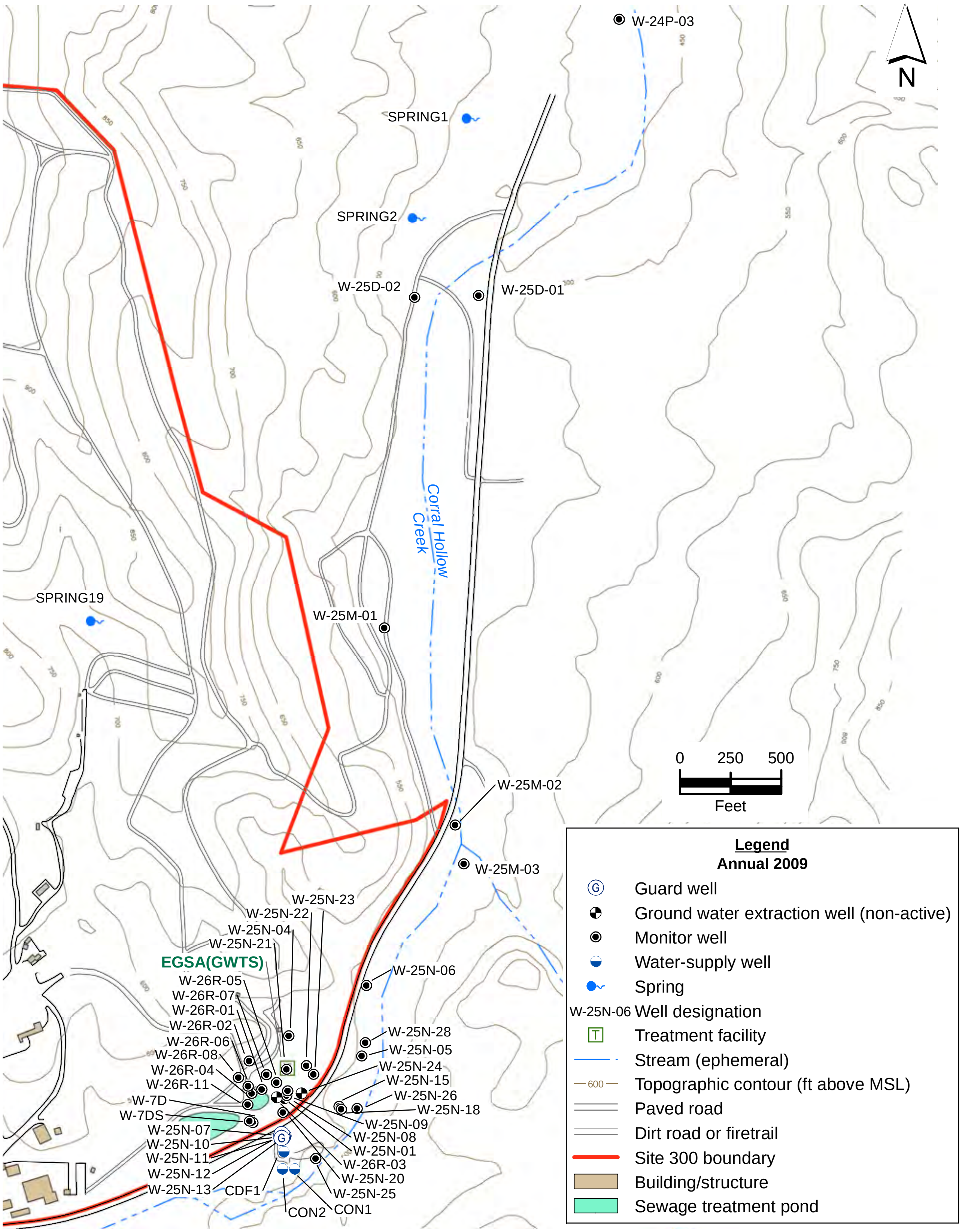
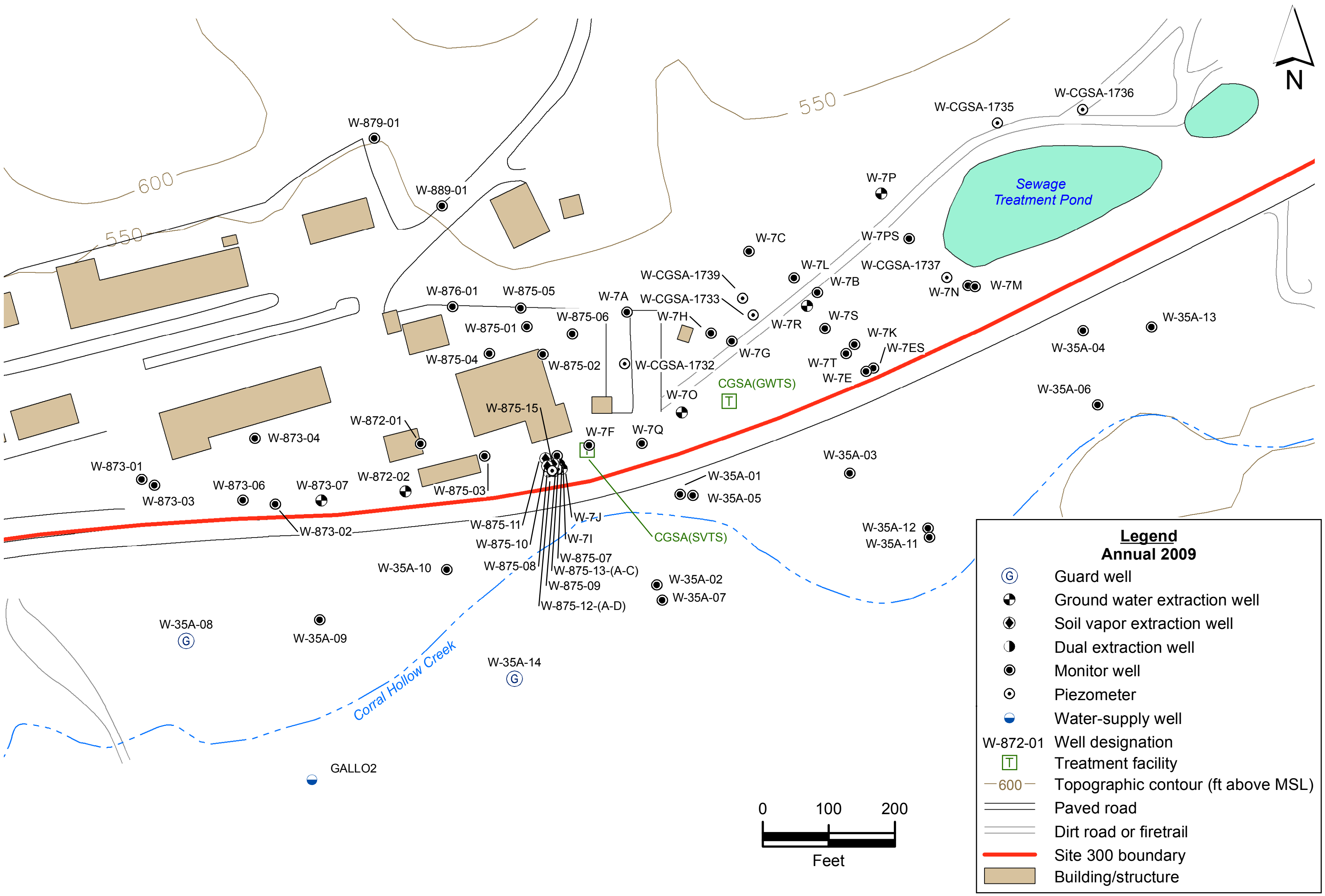


Figure 2.1-1. Eastern General Services Area OU site map showing monitor, extraction and water-supply wells, and treatment facilities.



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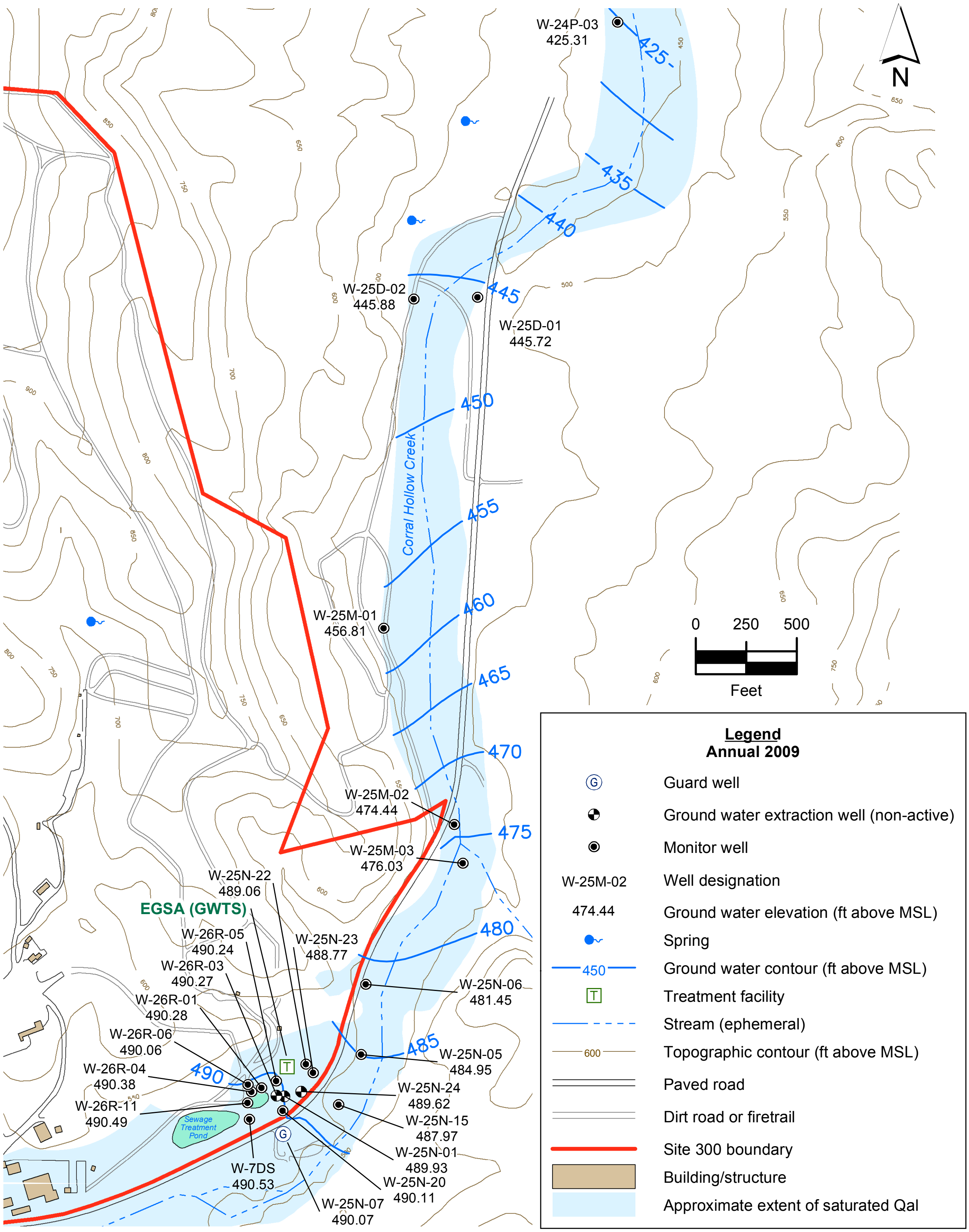

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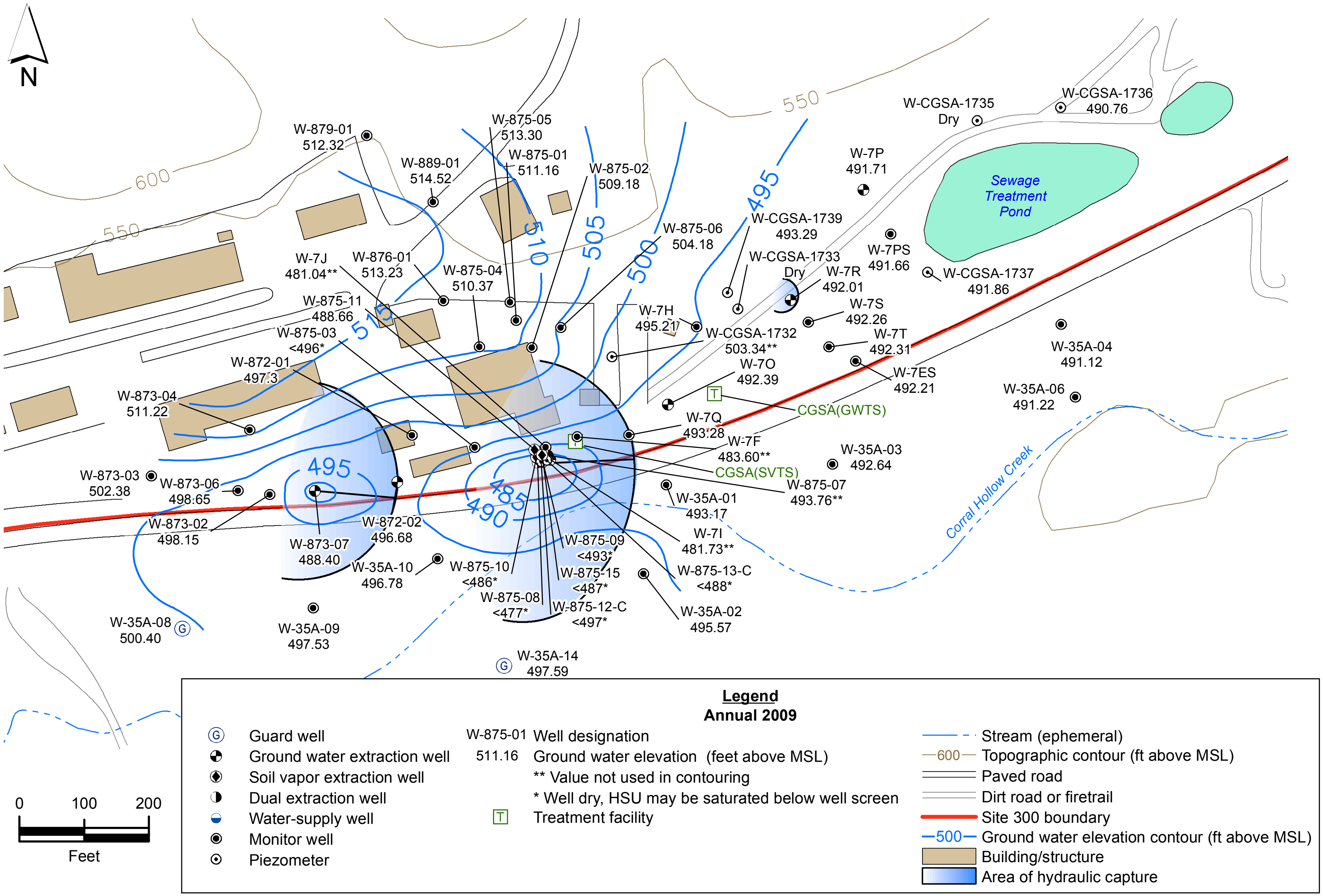

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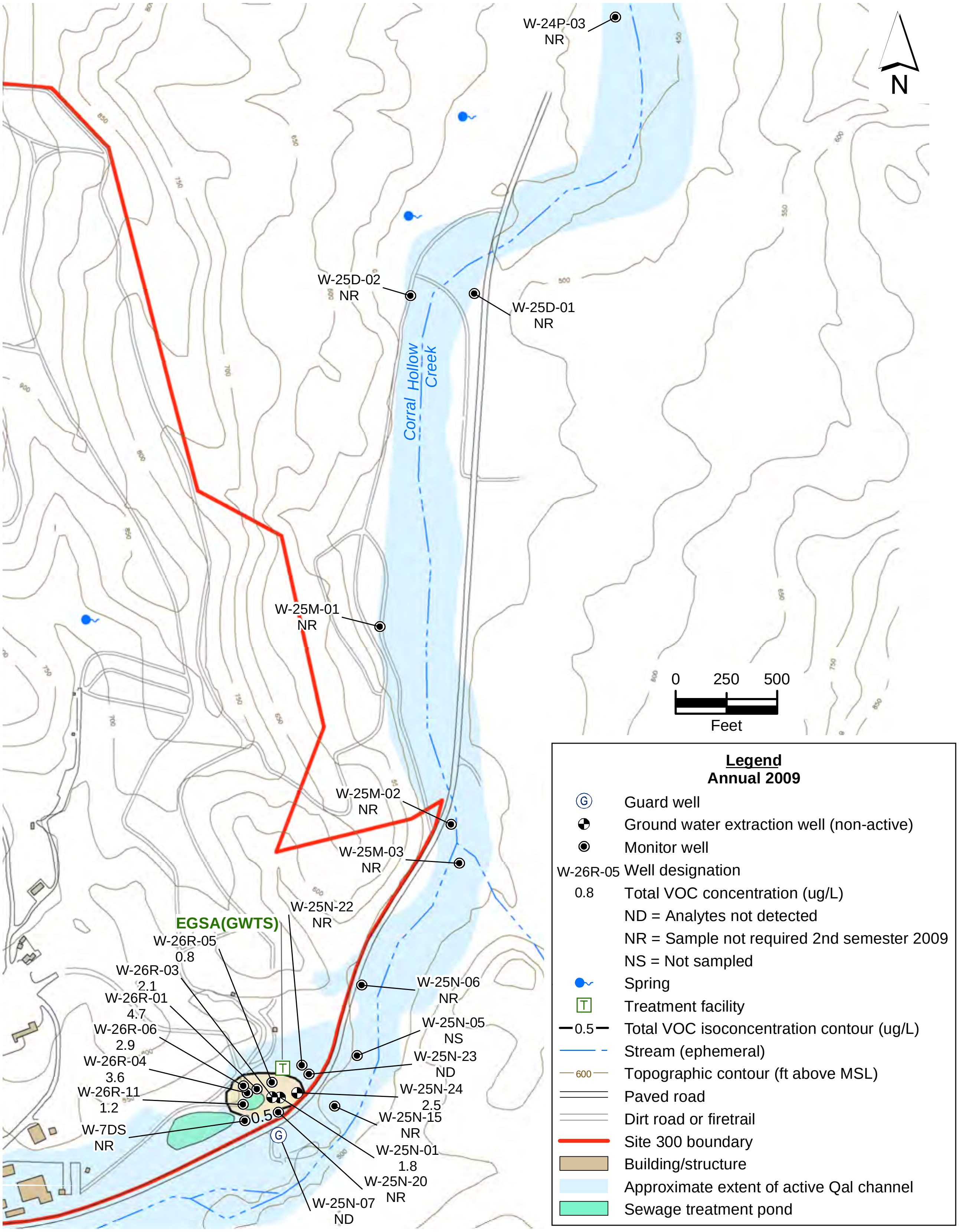

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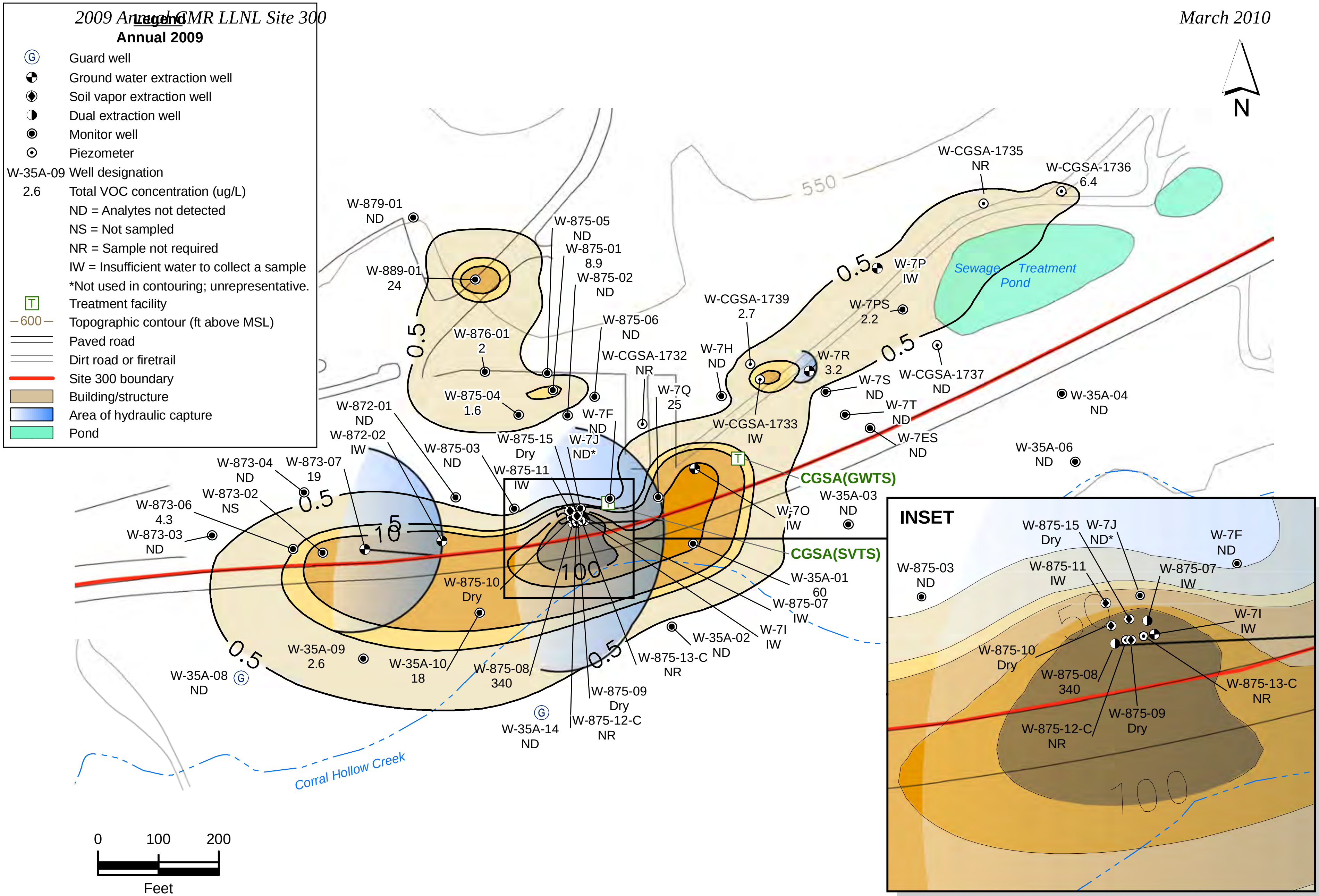
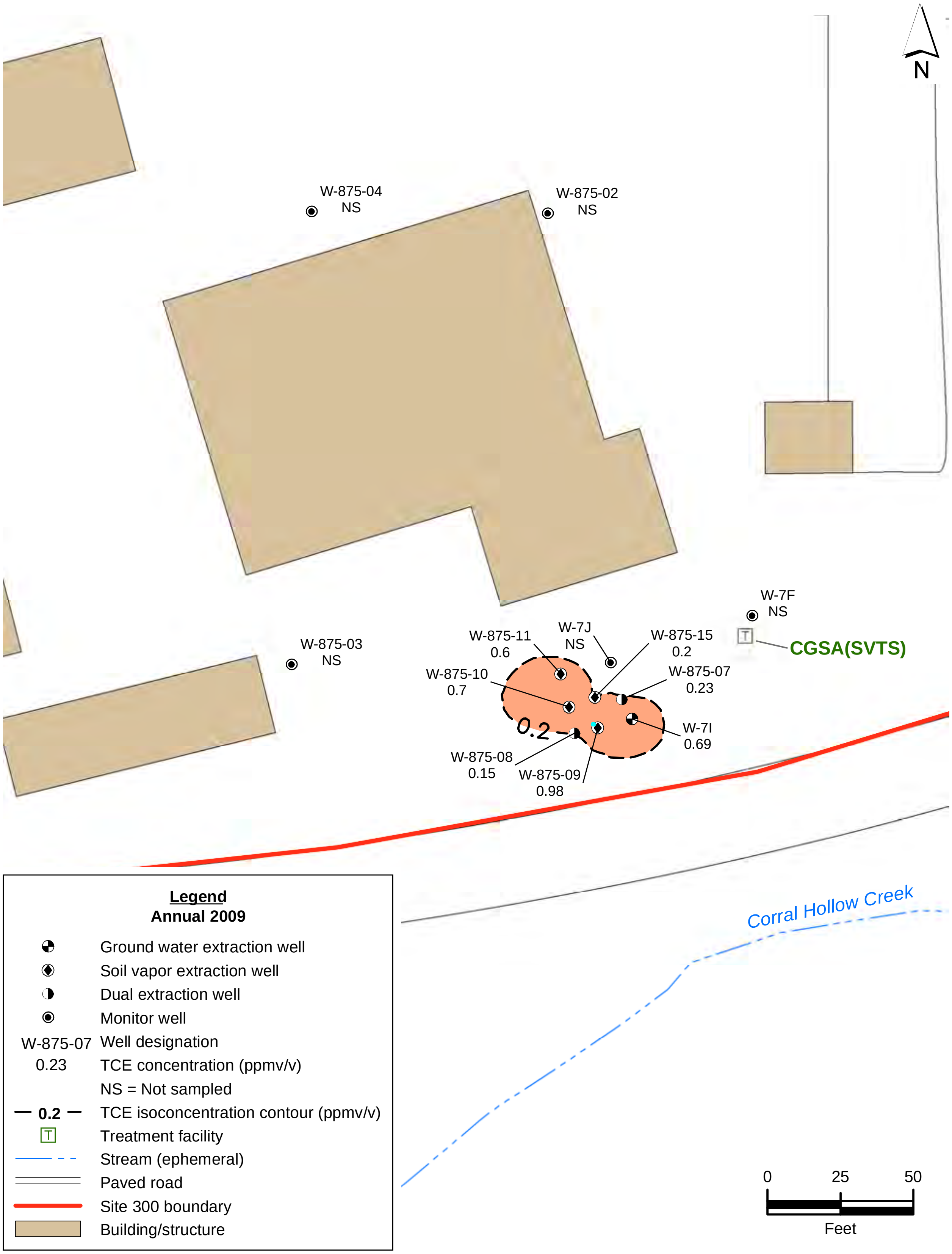


Figure 2.1-6. Central General Services Area OU total VOC isoconcentration contour map for the Qt-Tnsc$_1$ and Qal-Tnbs$_1$ HSUs.



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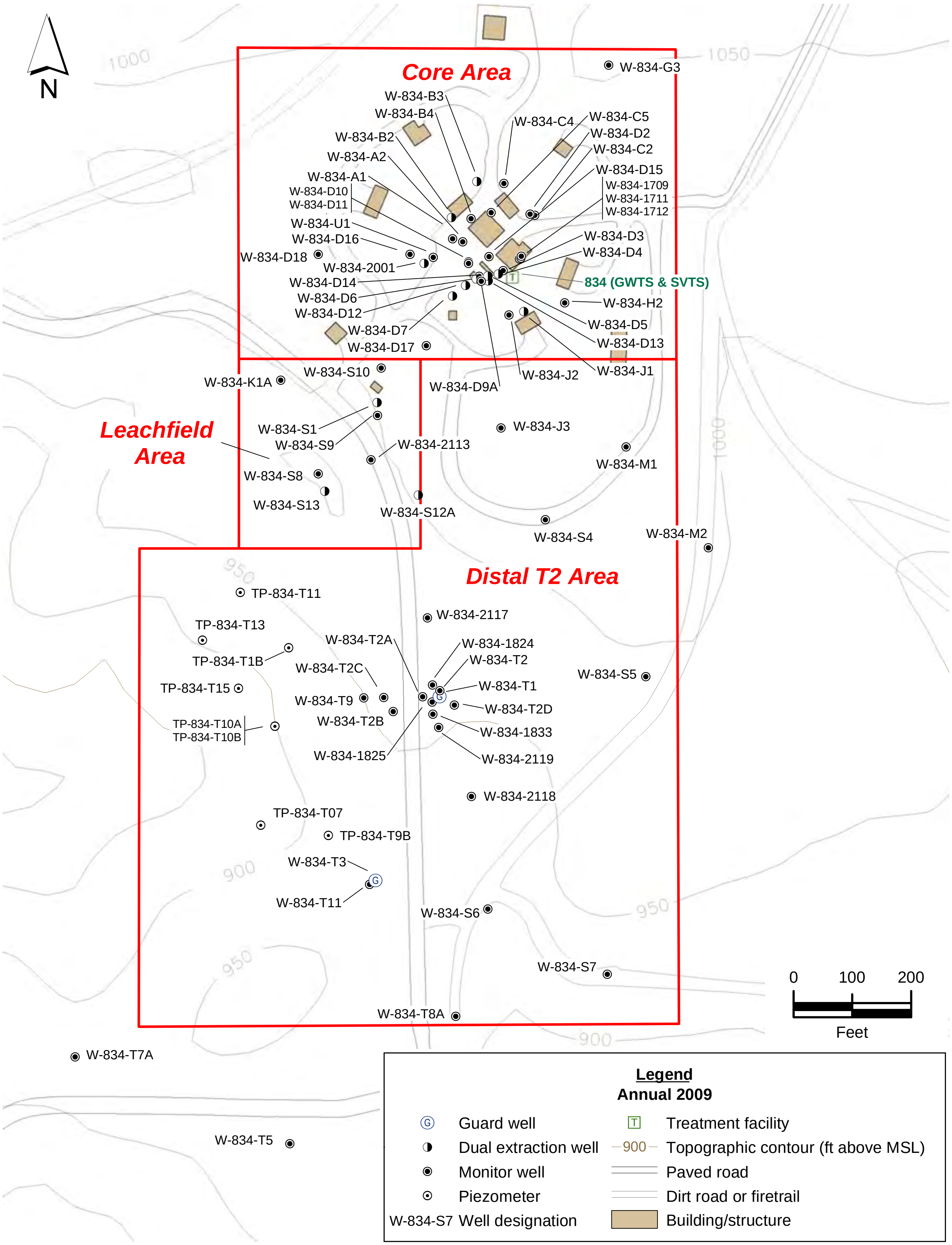

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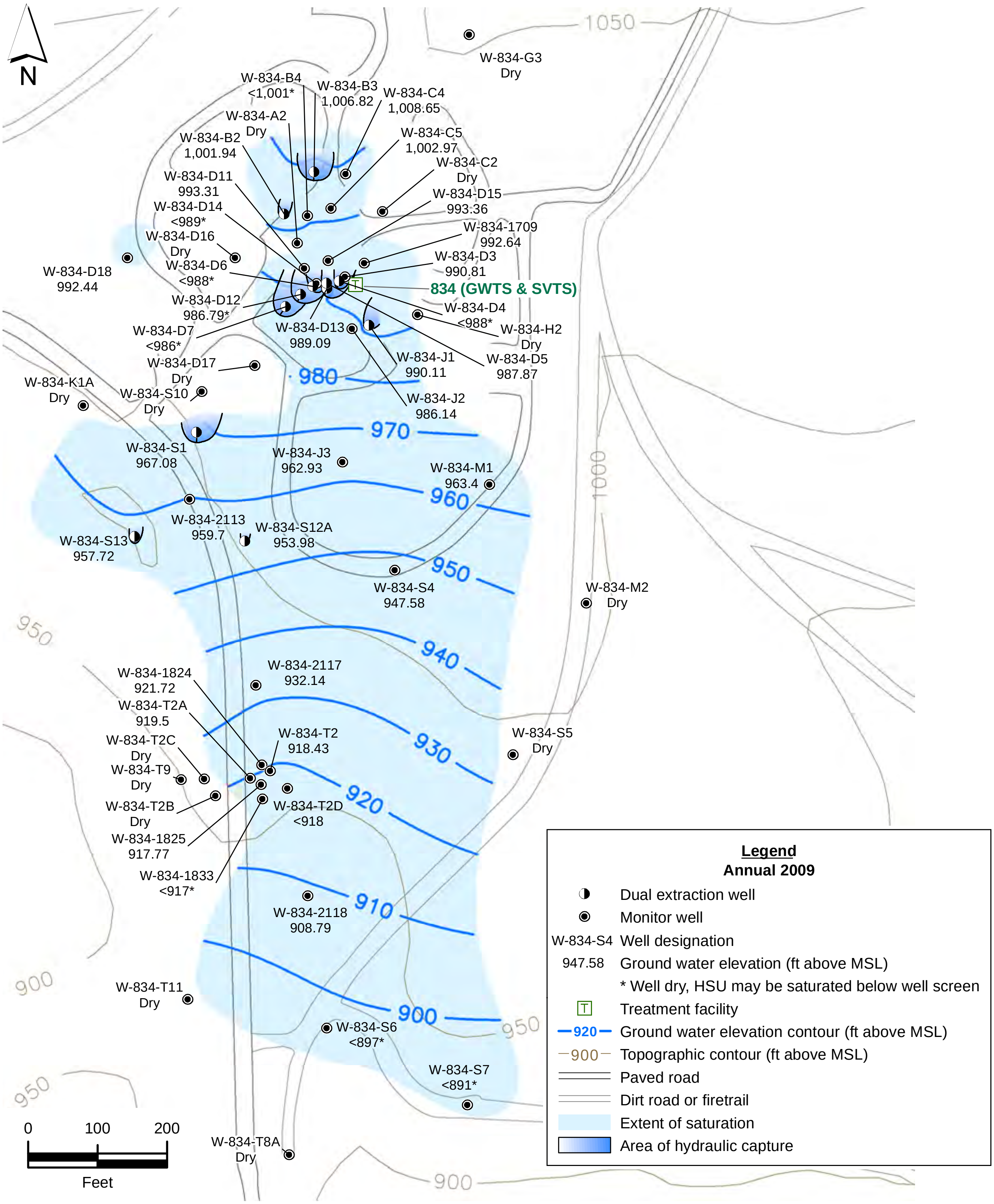

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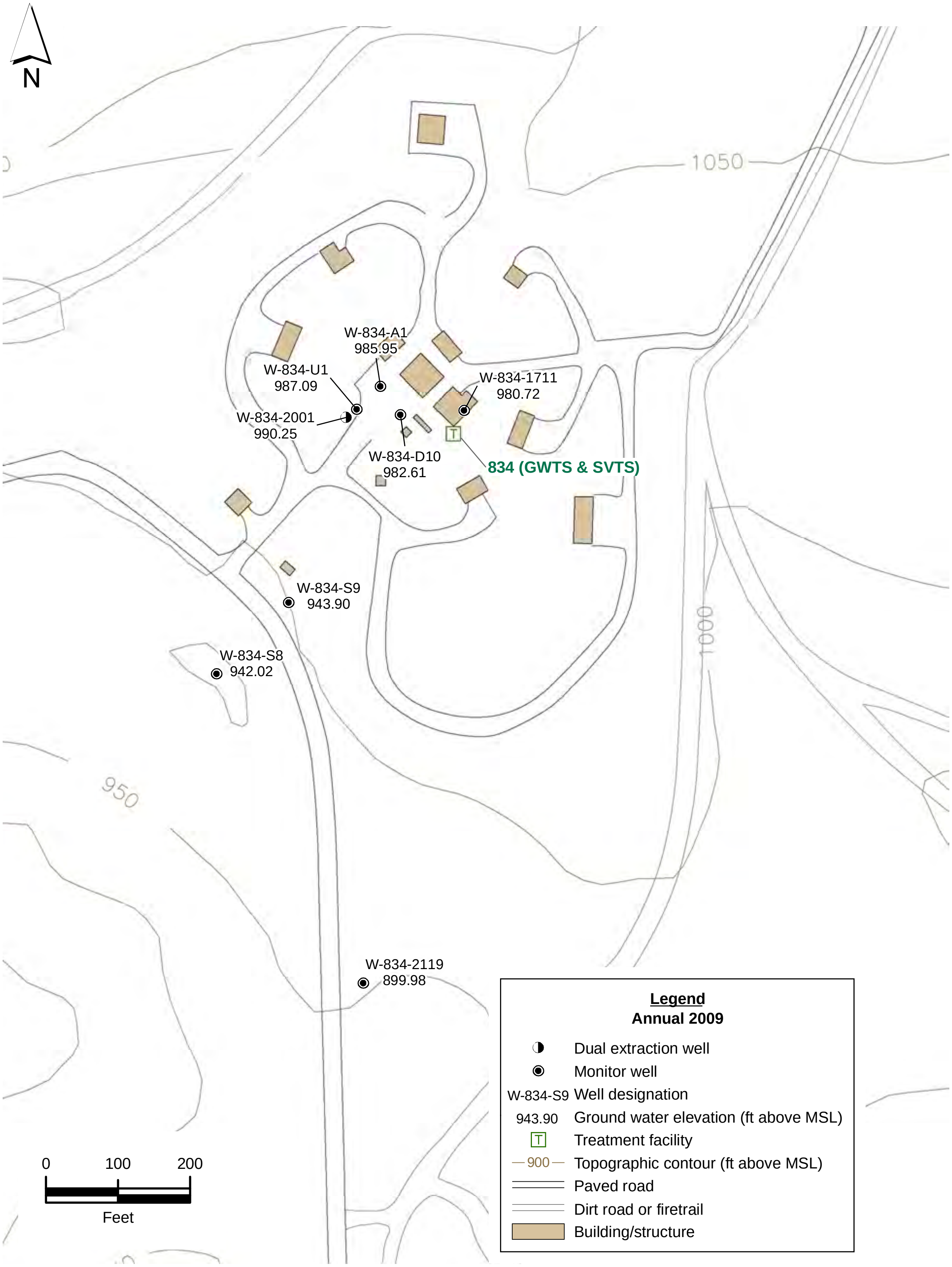

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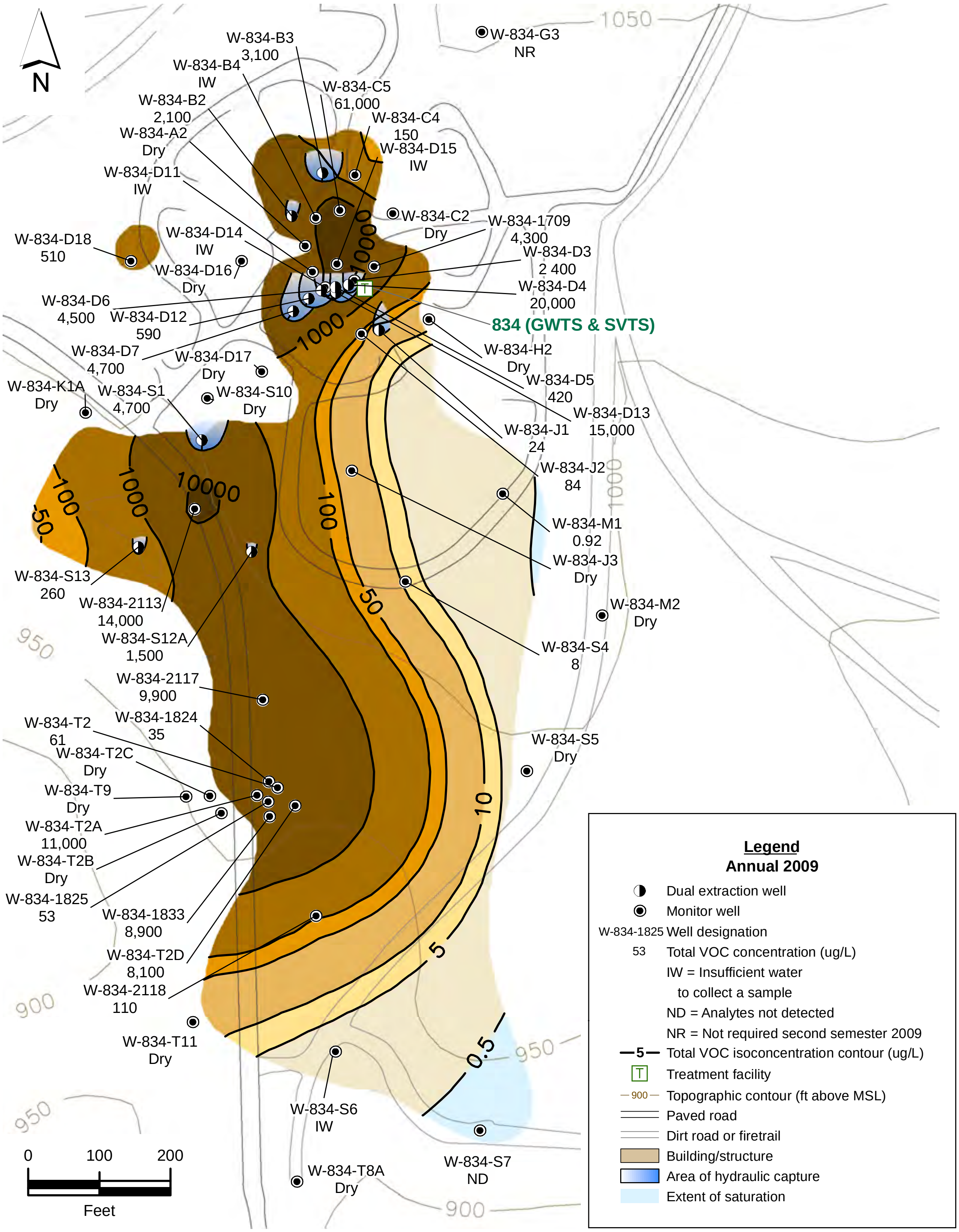

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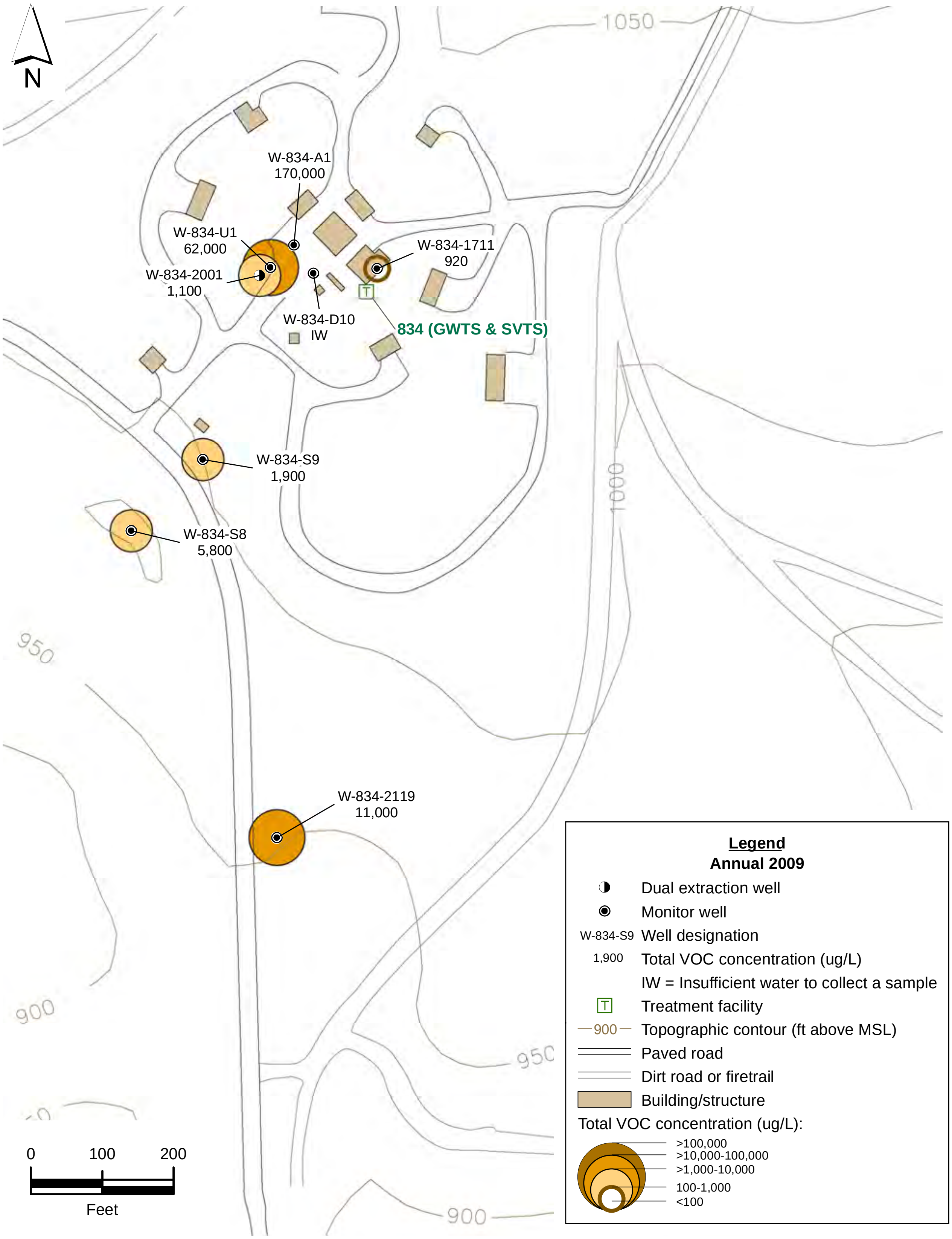

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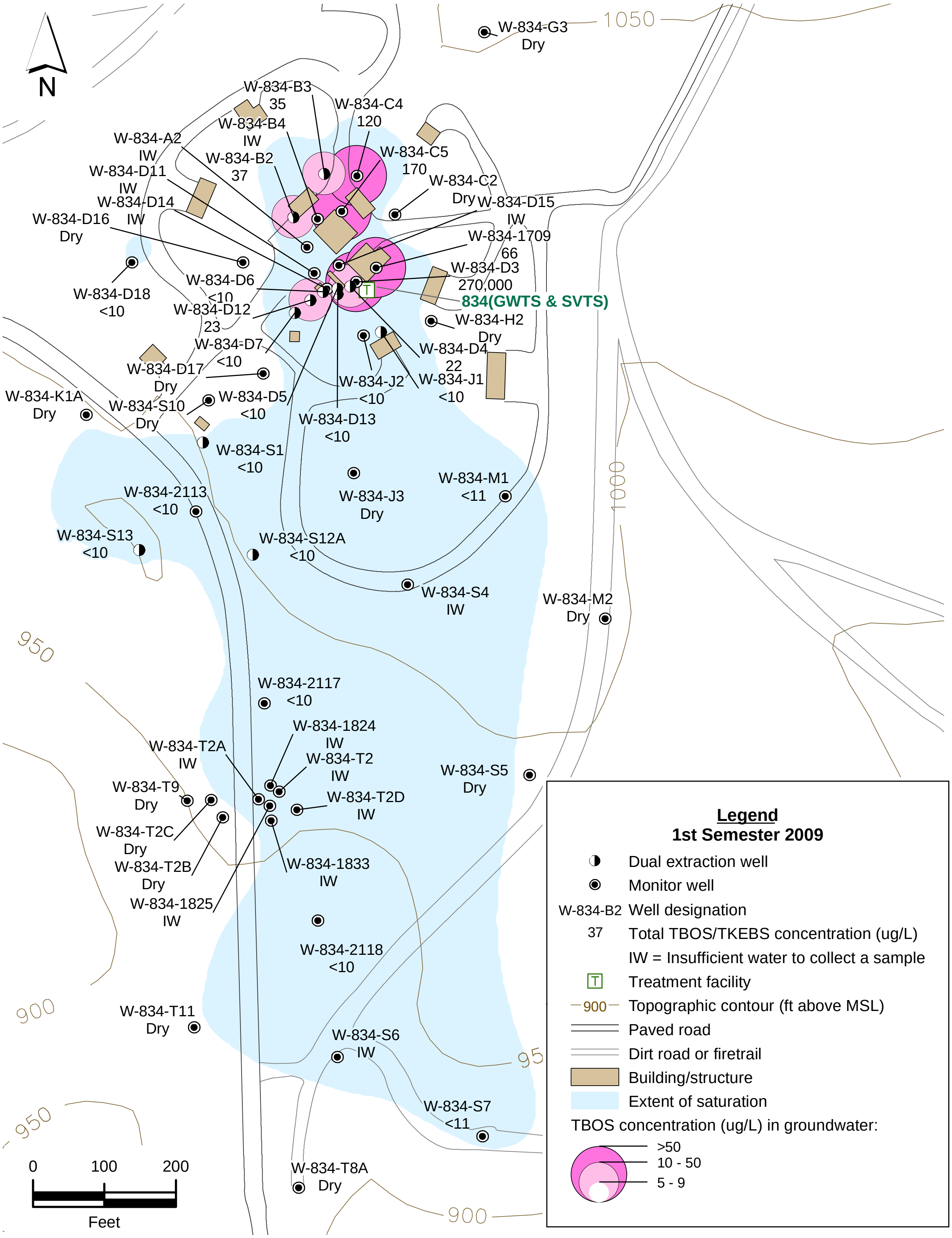

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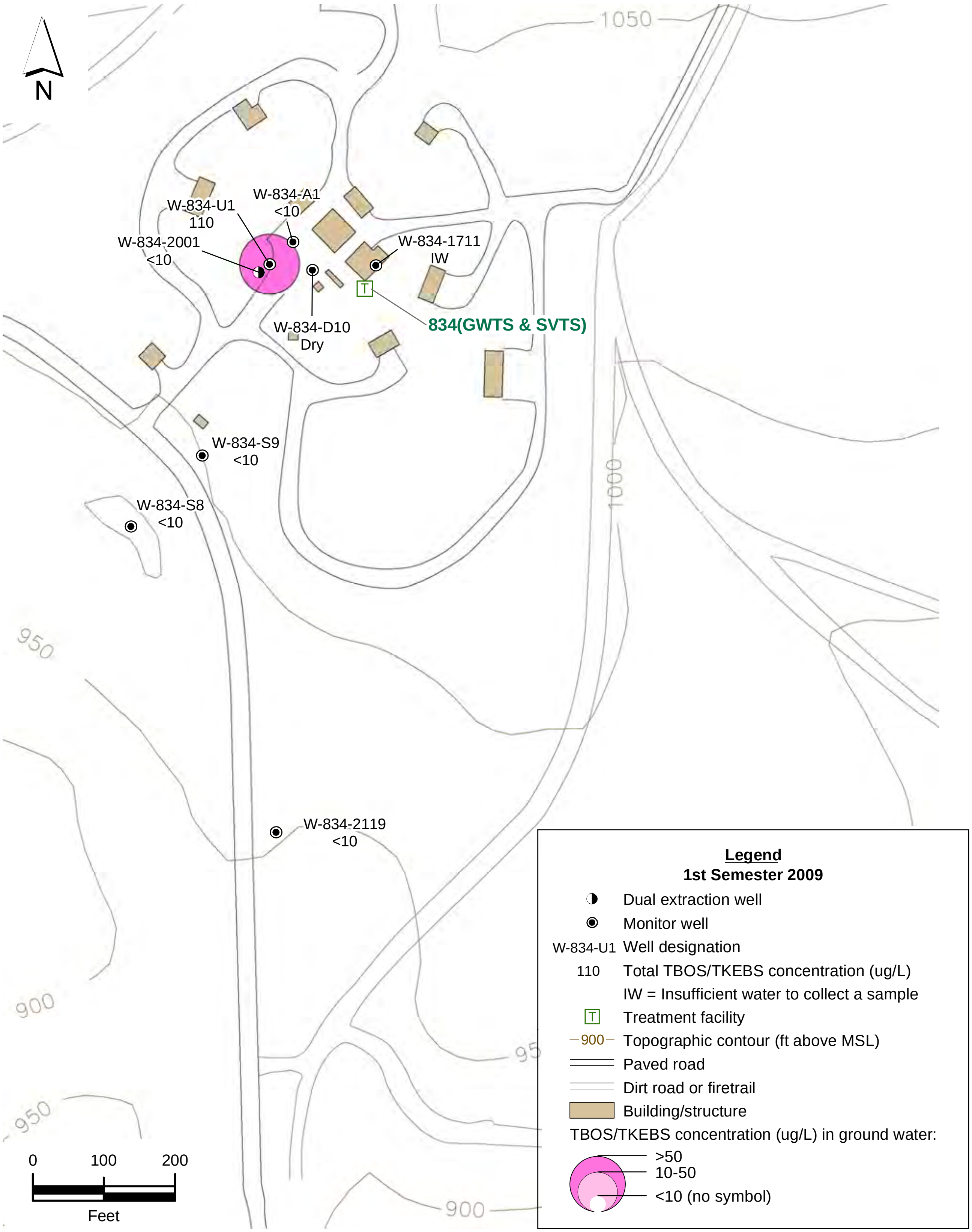

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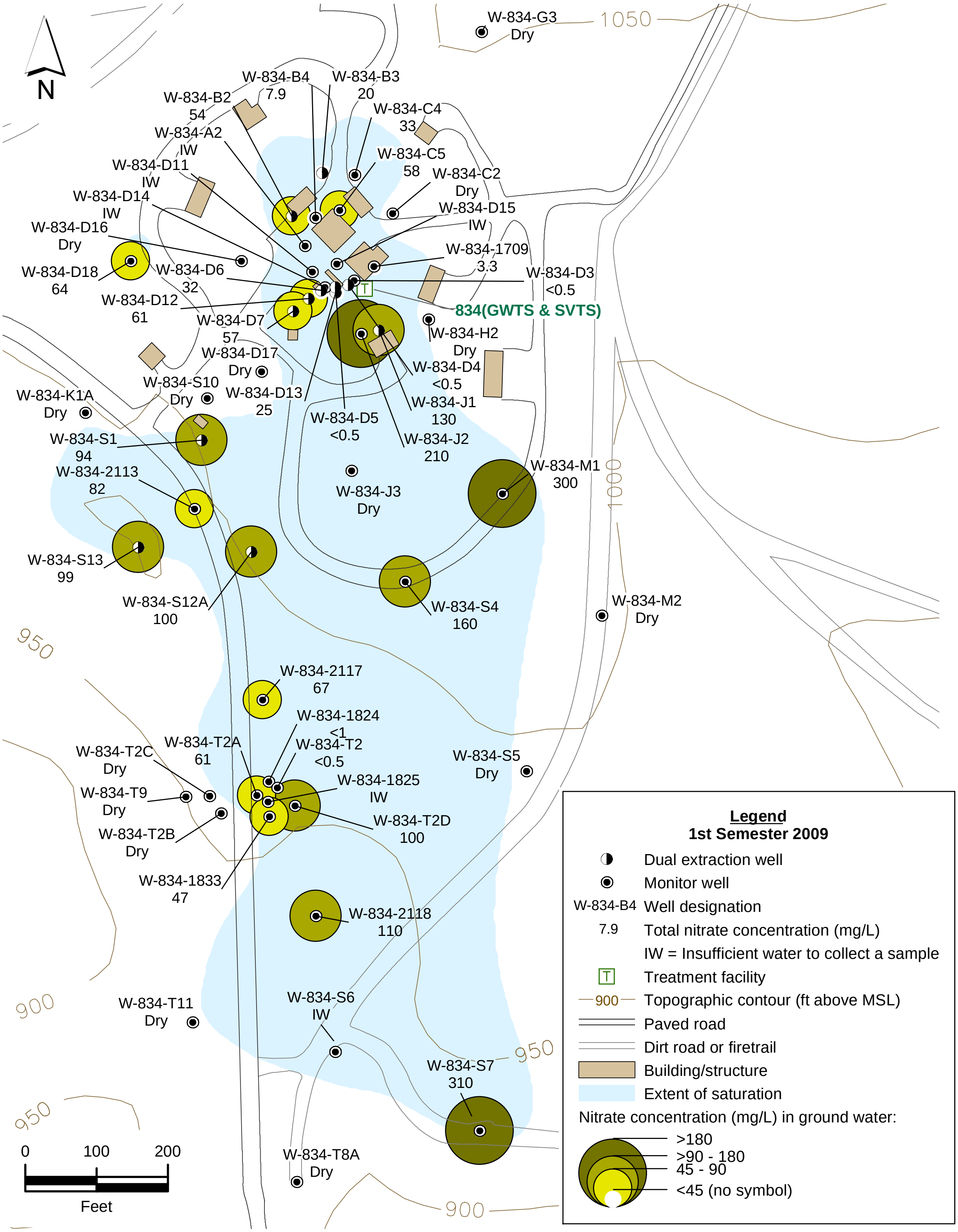

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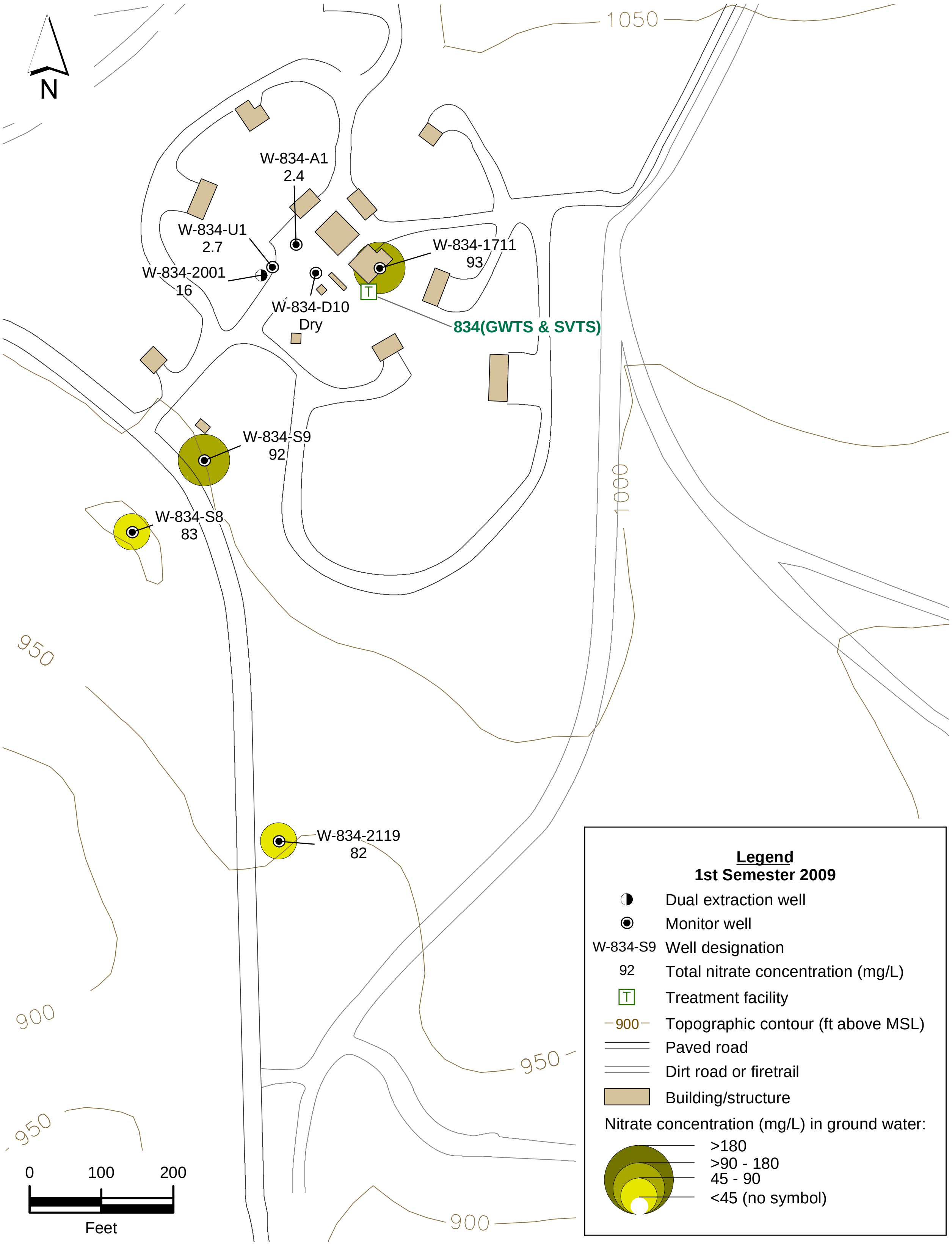

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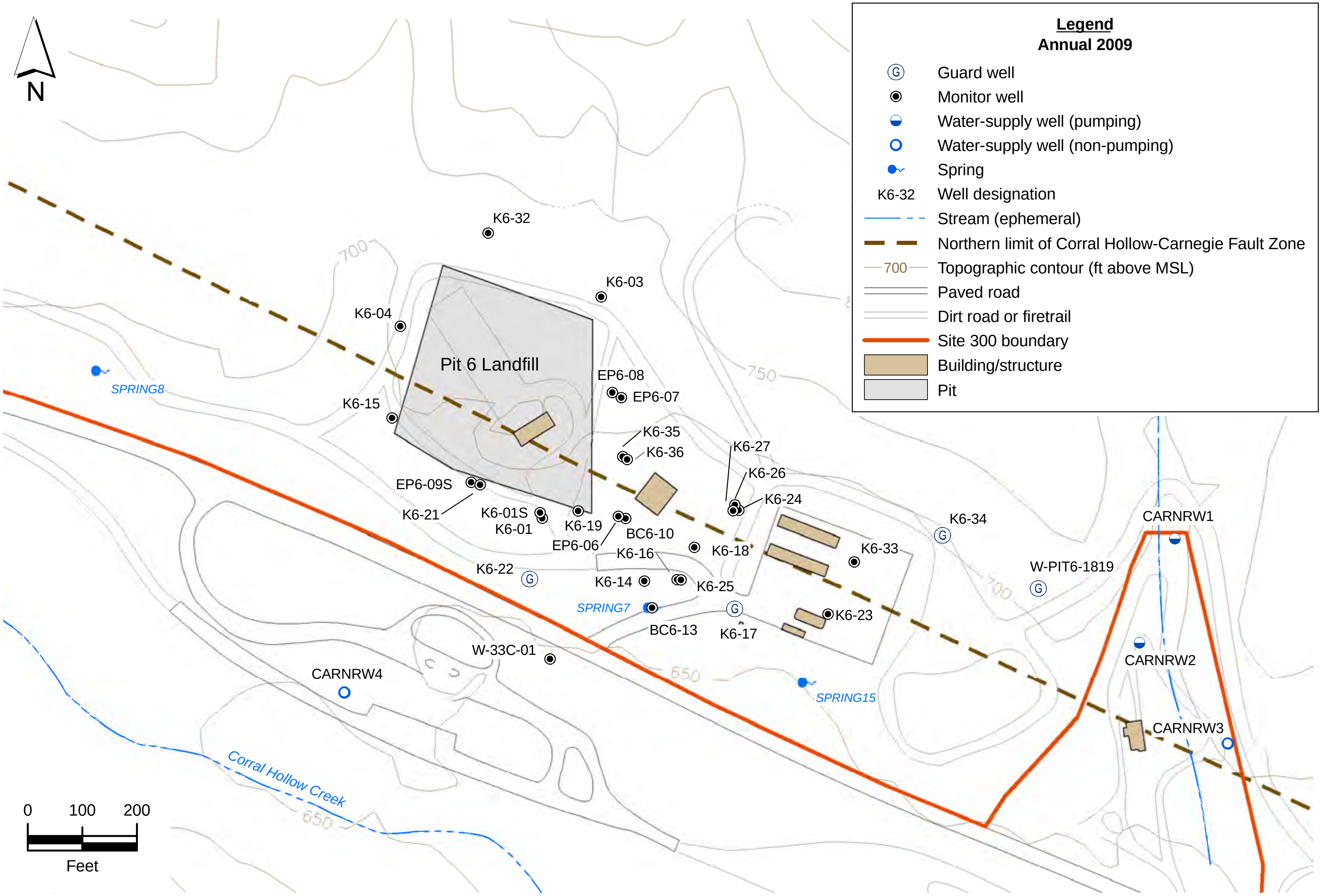

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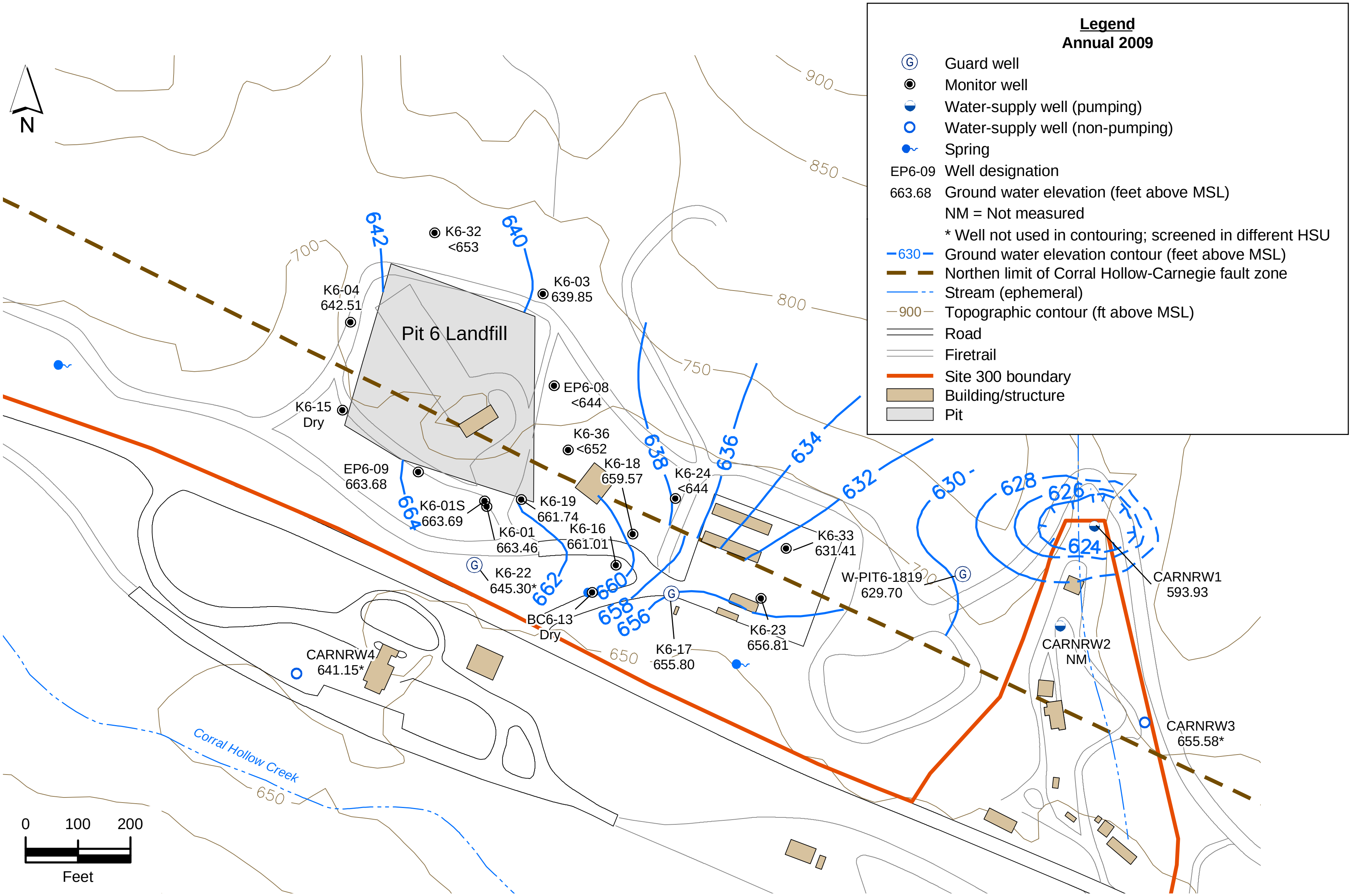

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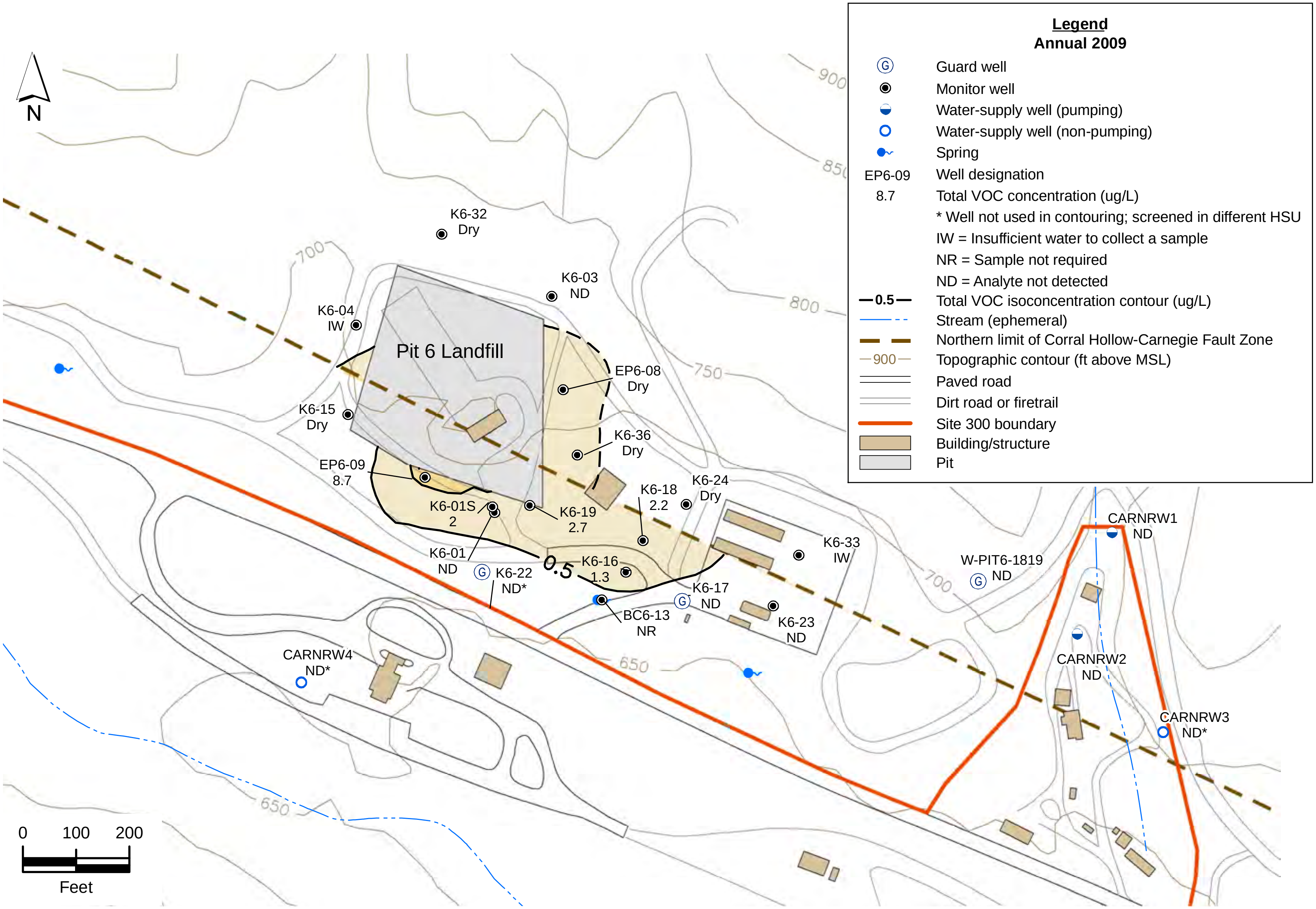

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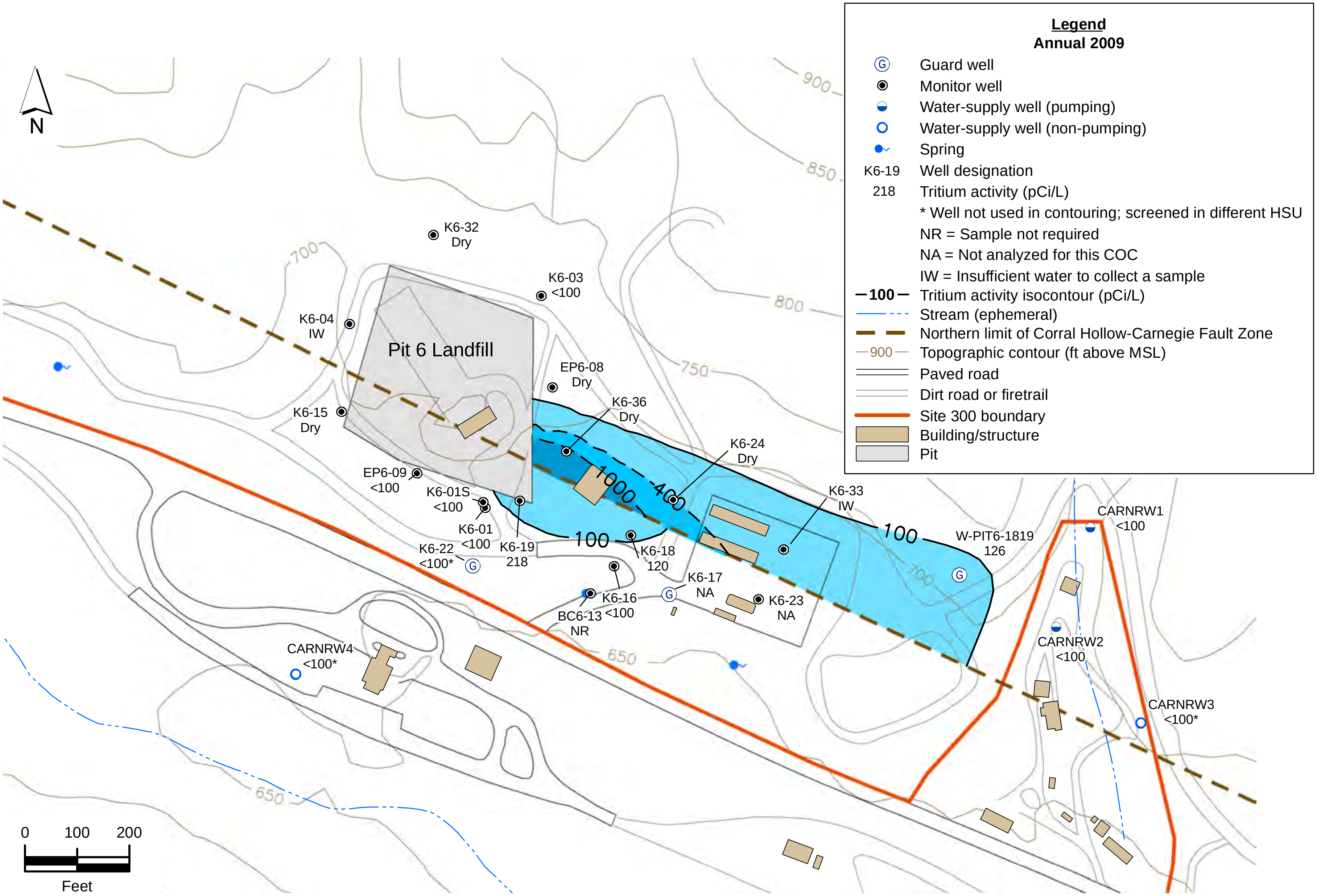

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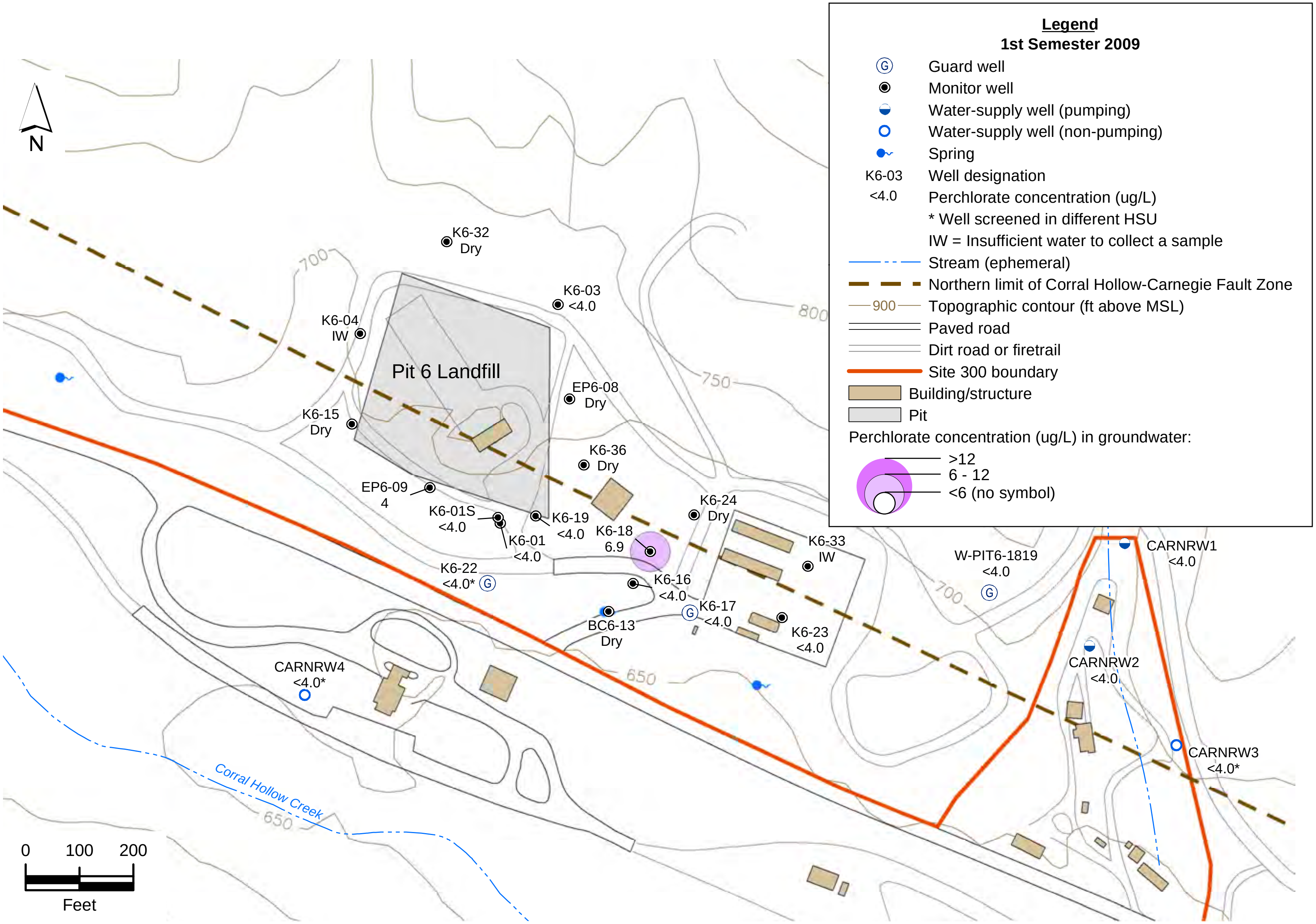

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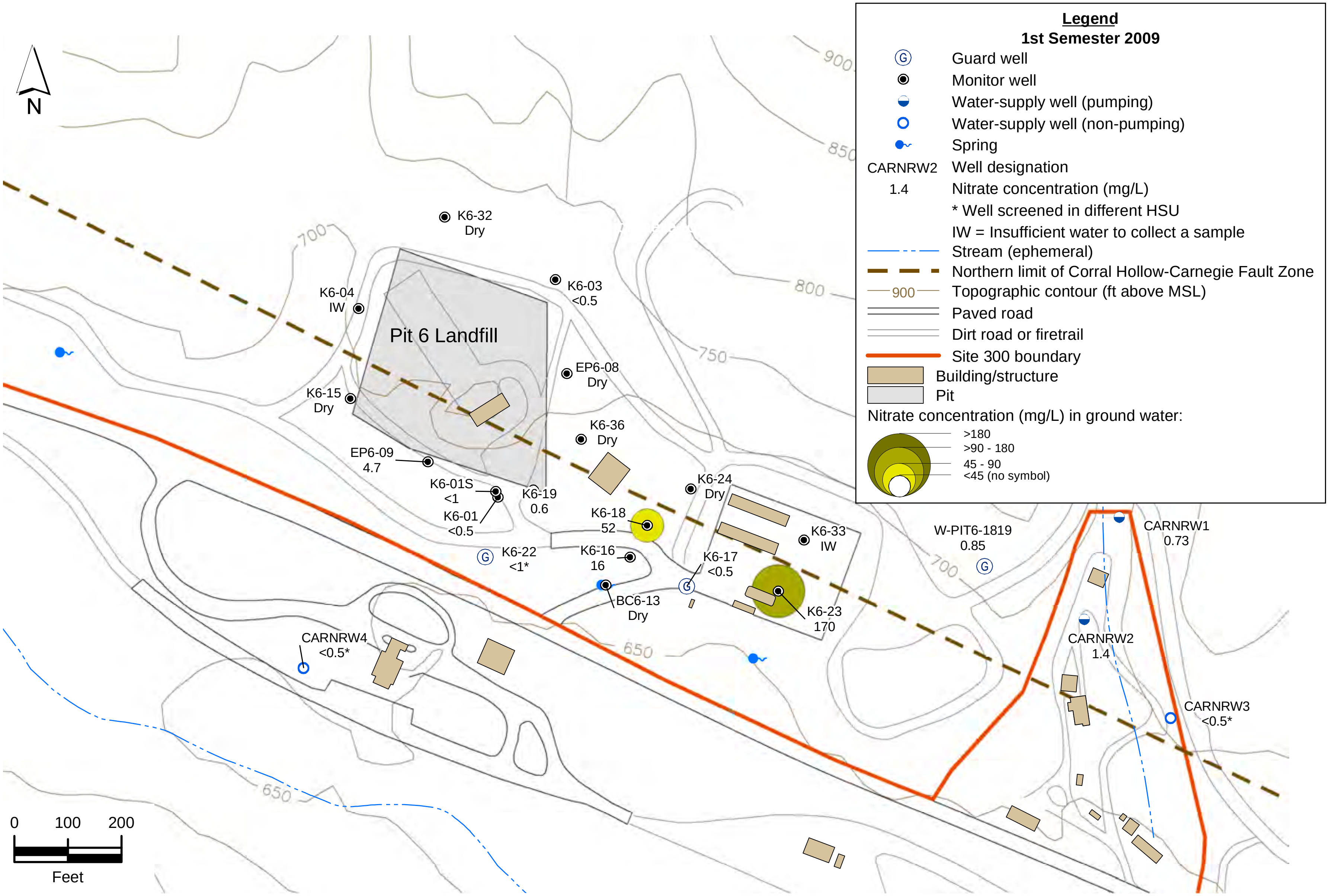

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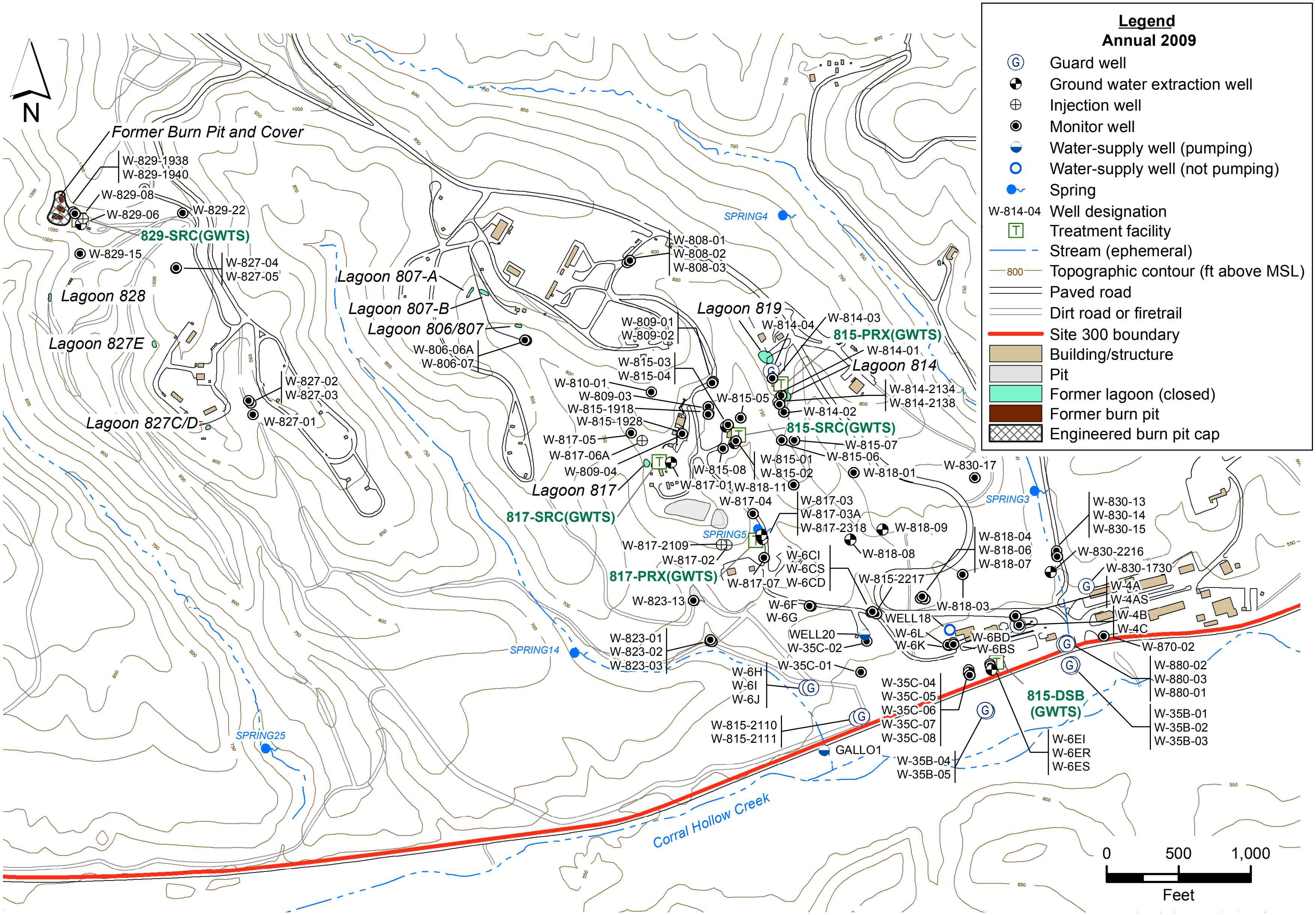
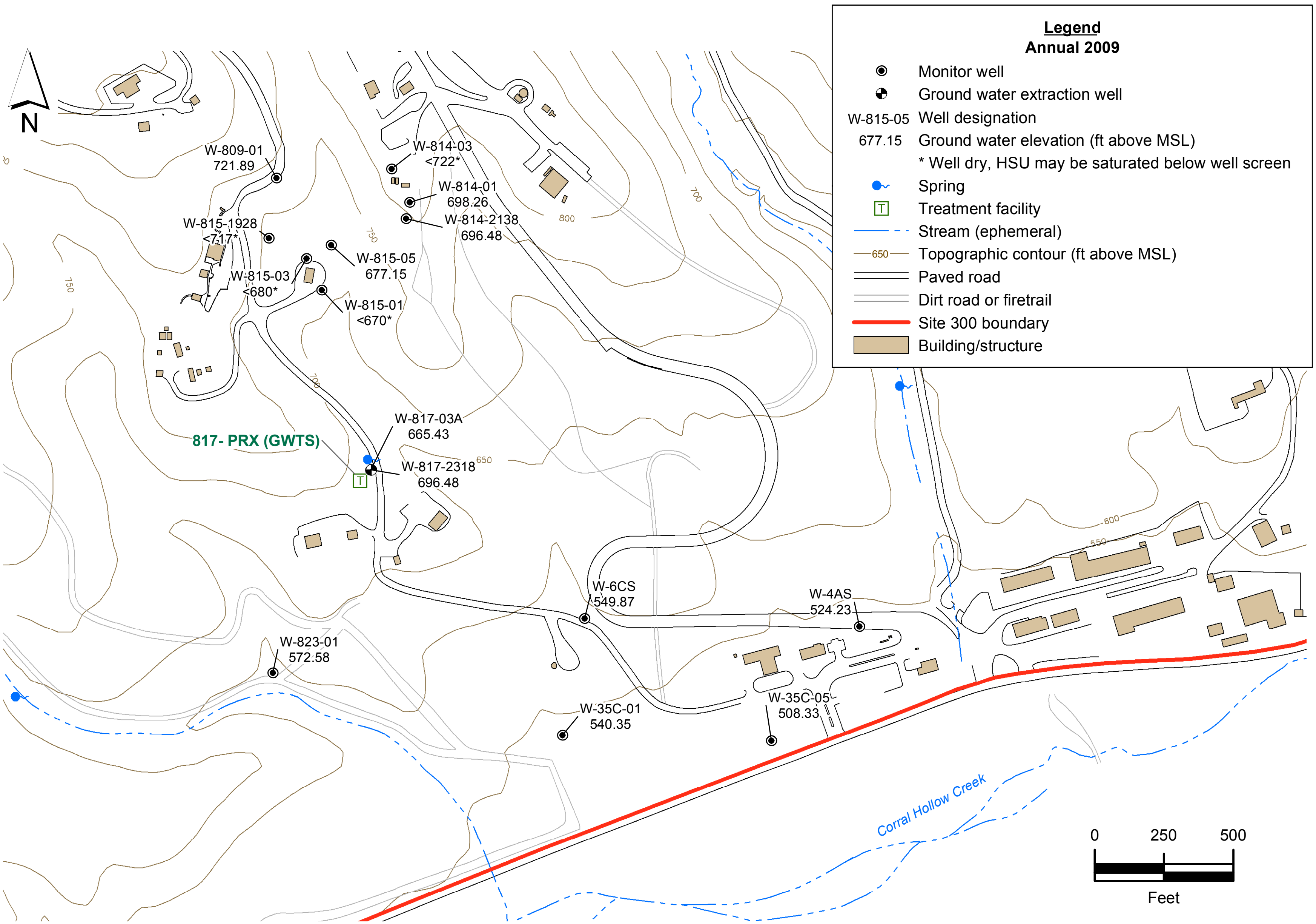


Figure 2.4-1. High Explosives Process Area OU site map showing monitor, extraction, injection and water-supply wells, and treatment facilities.



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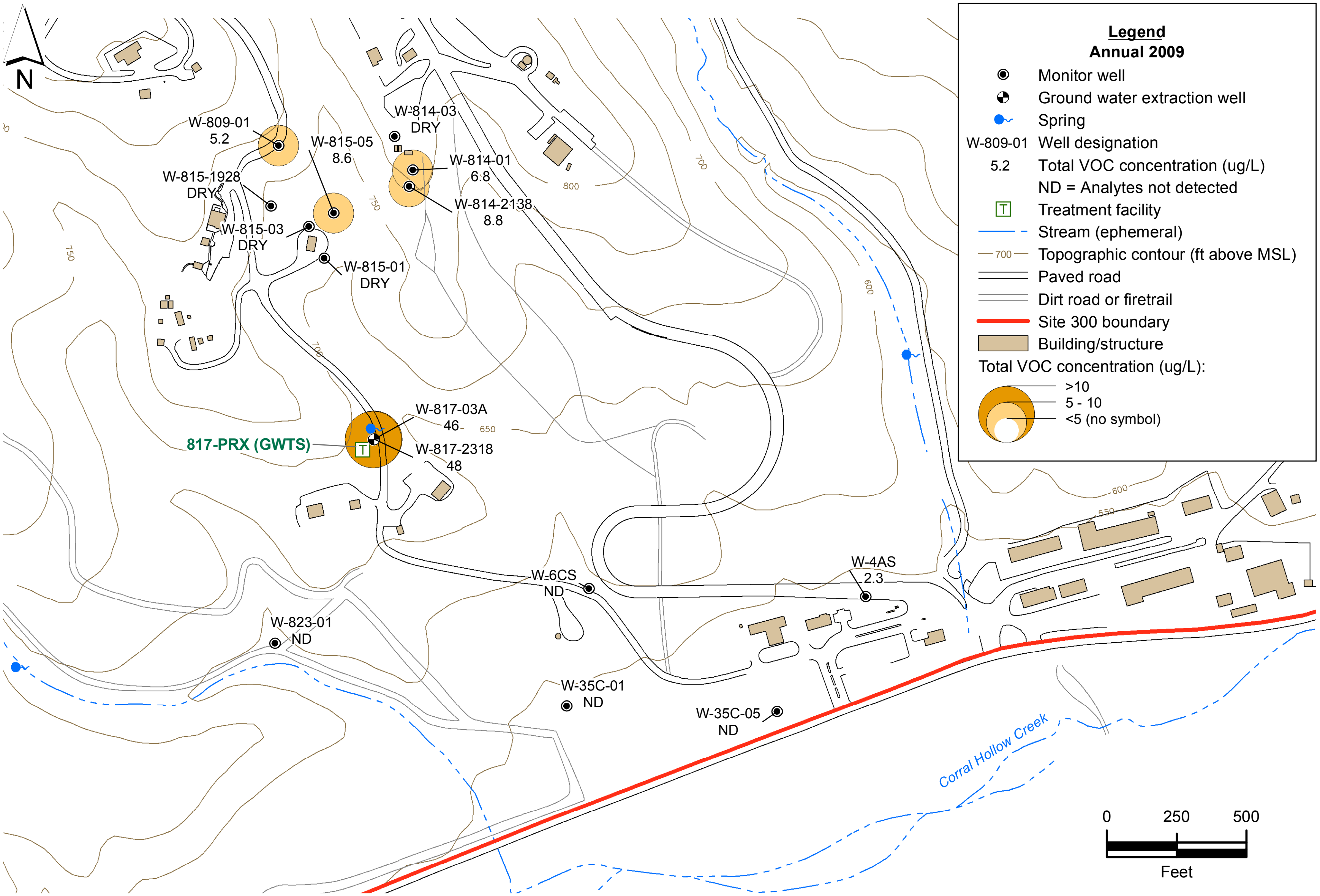

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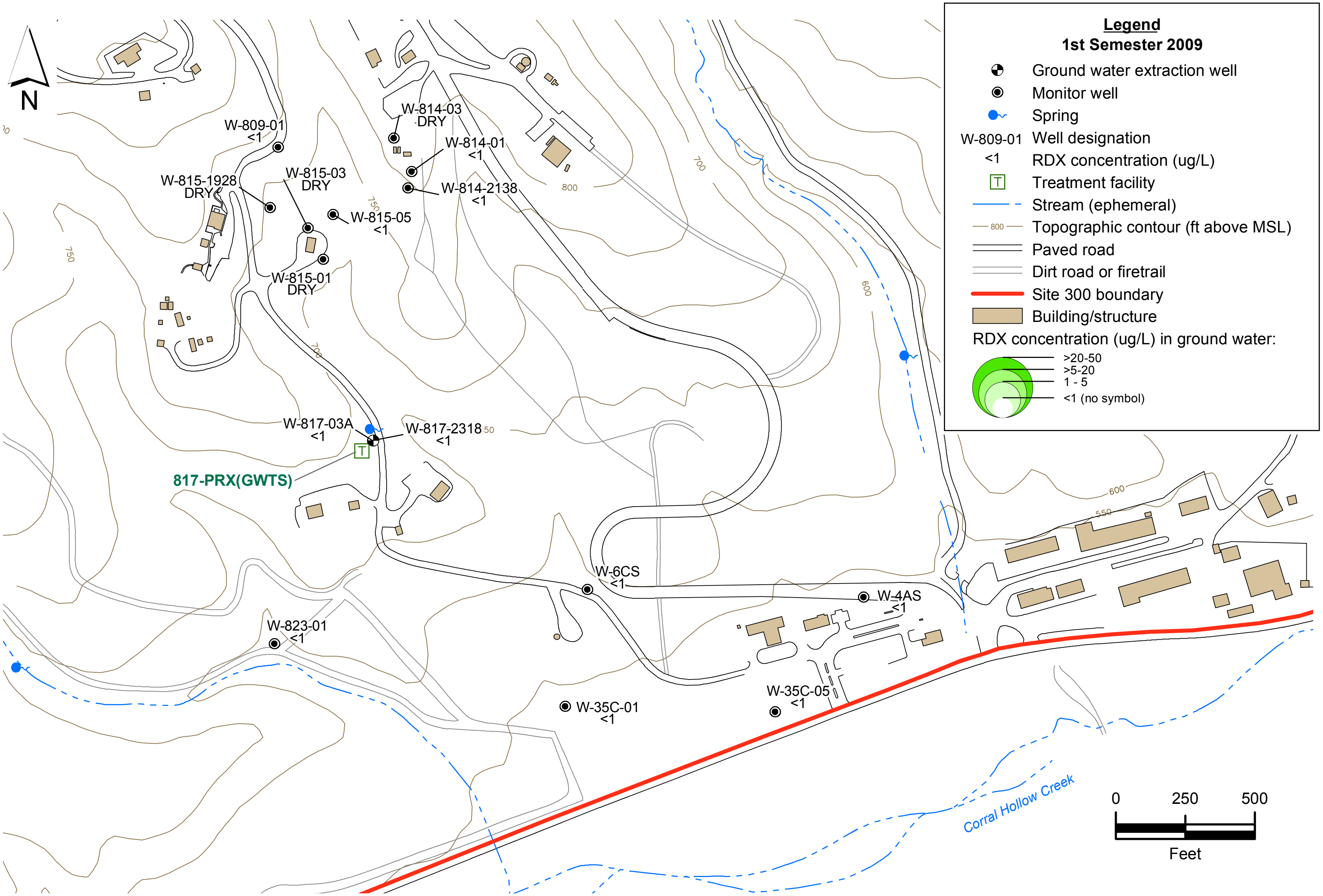

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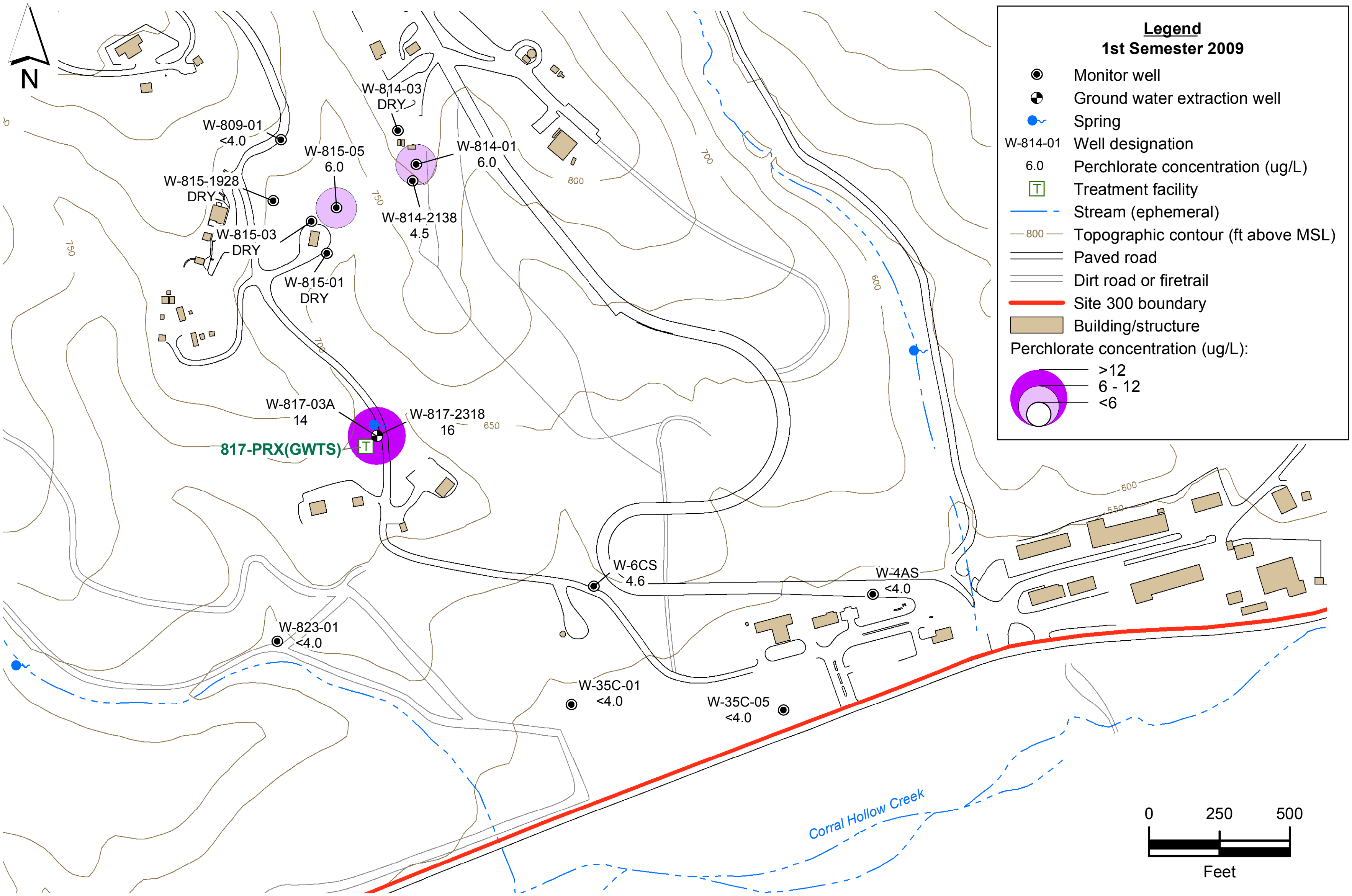

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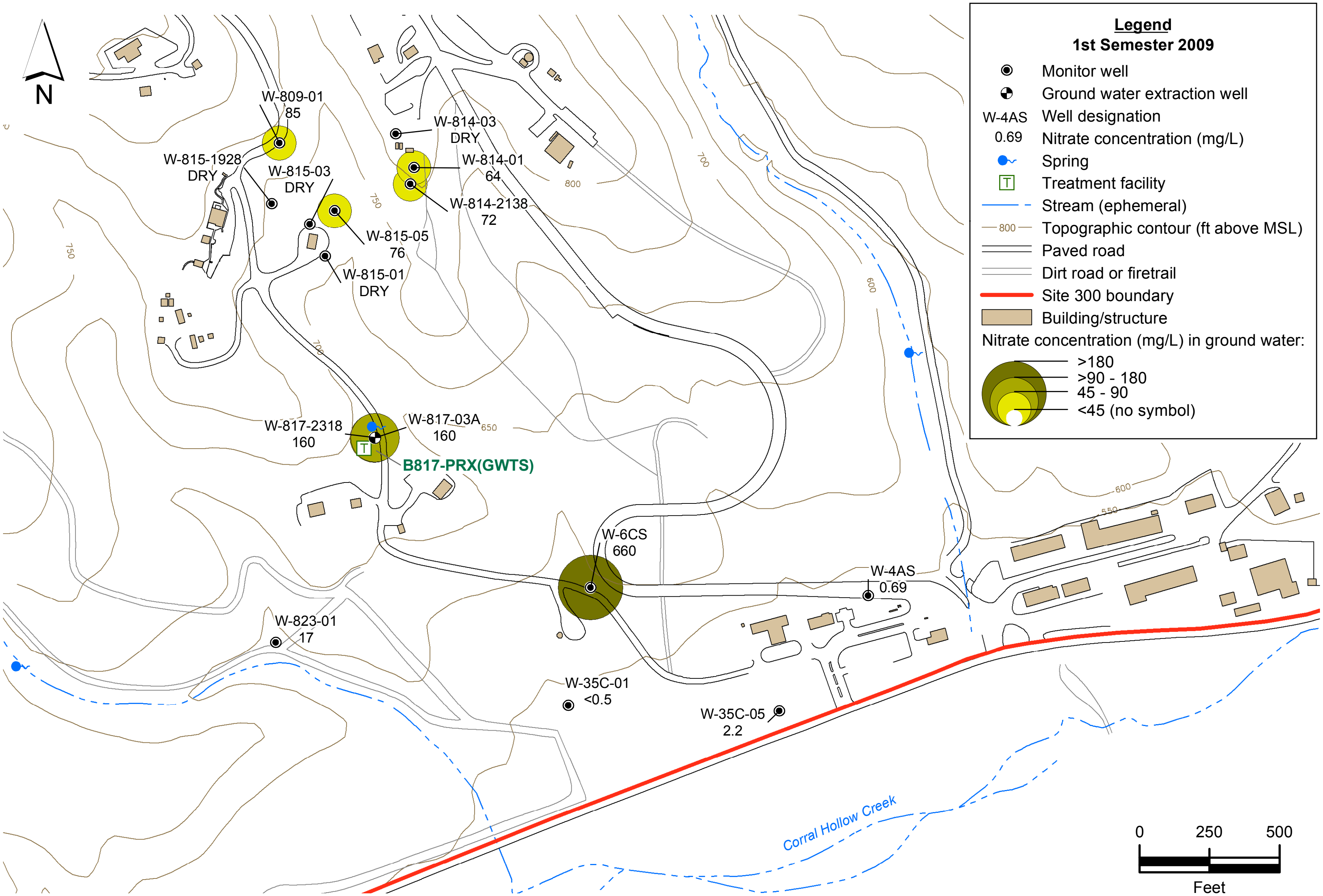

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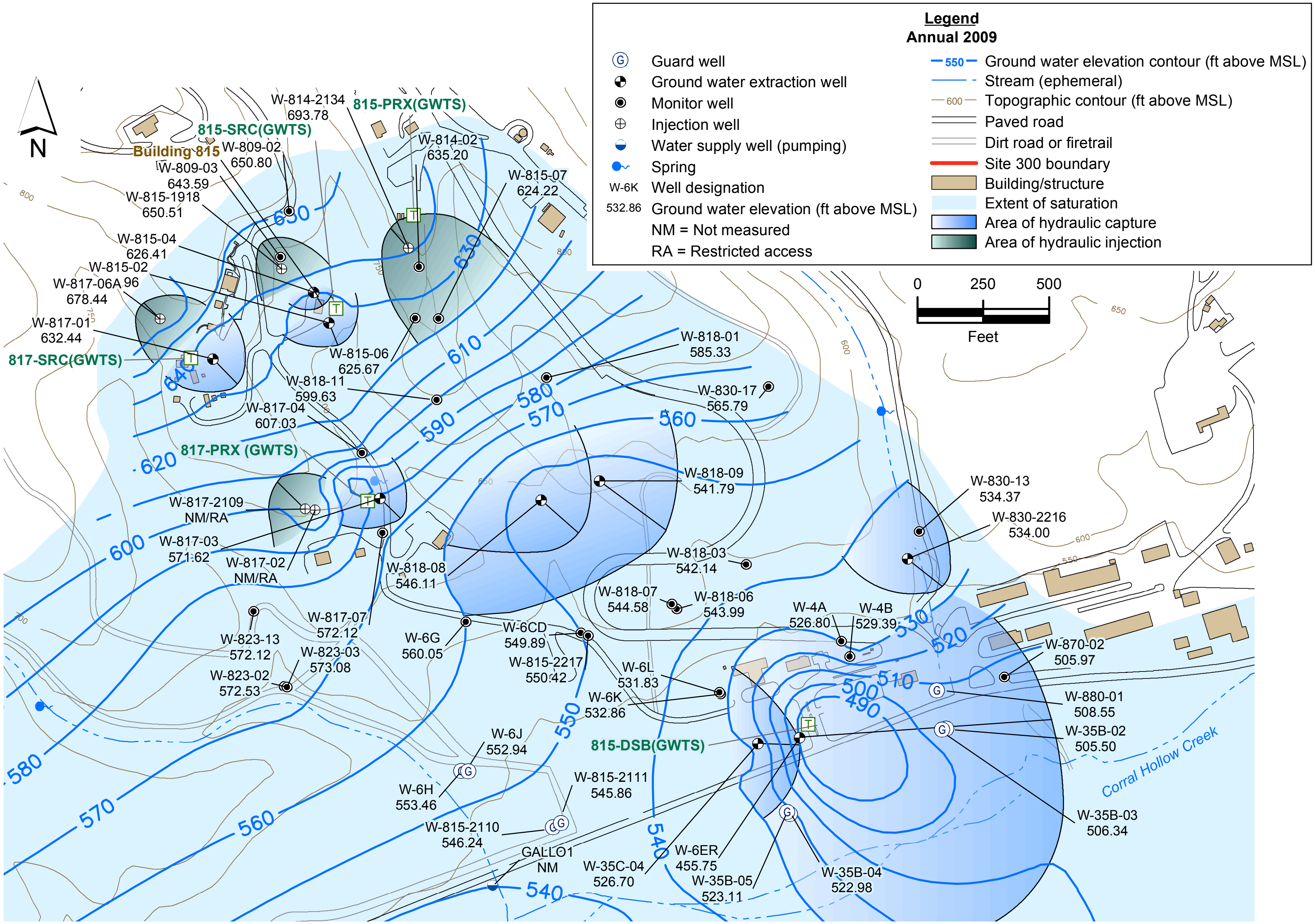

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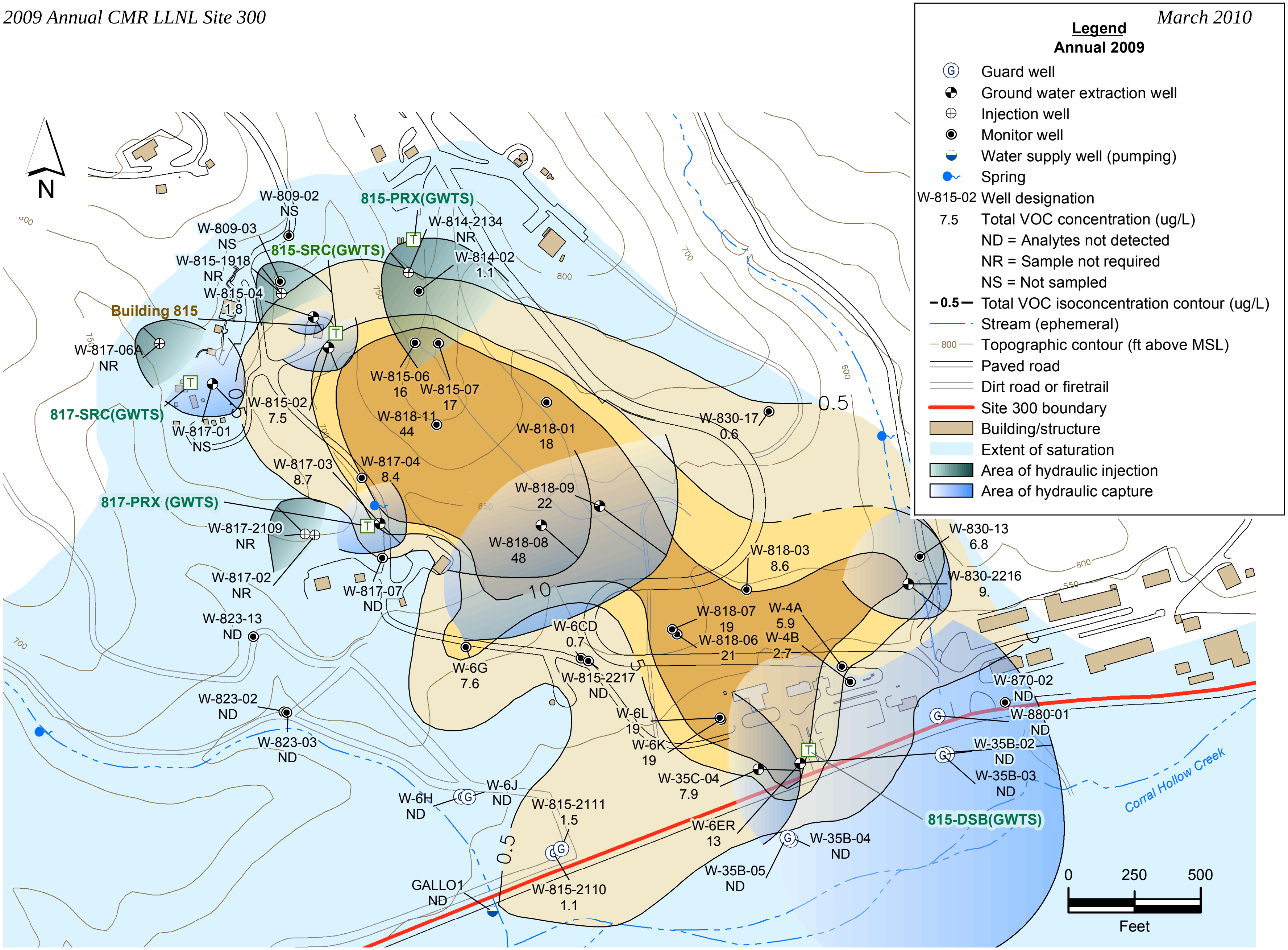

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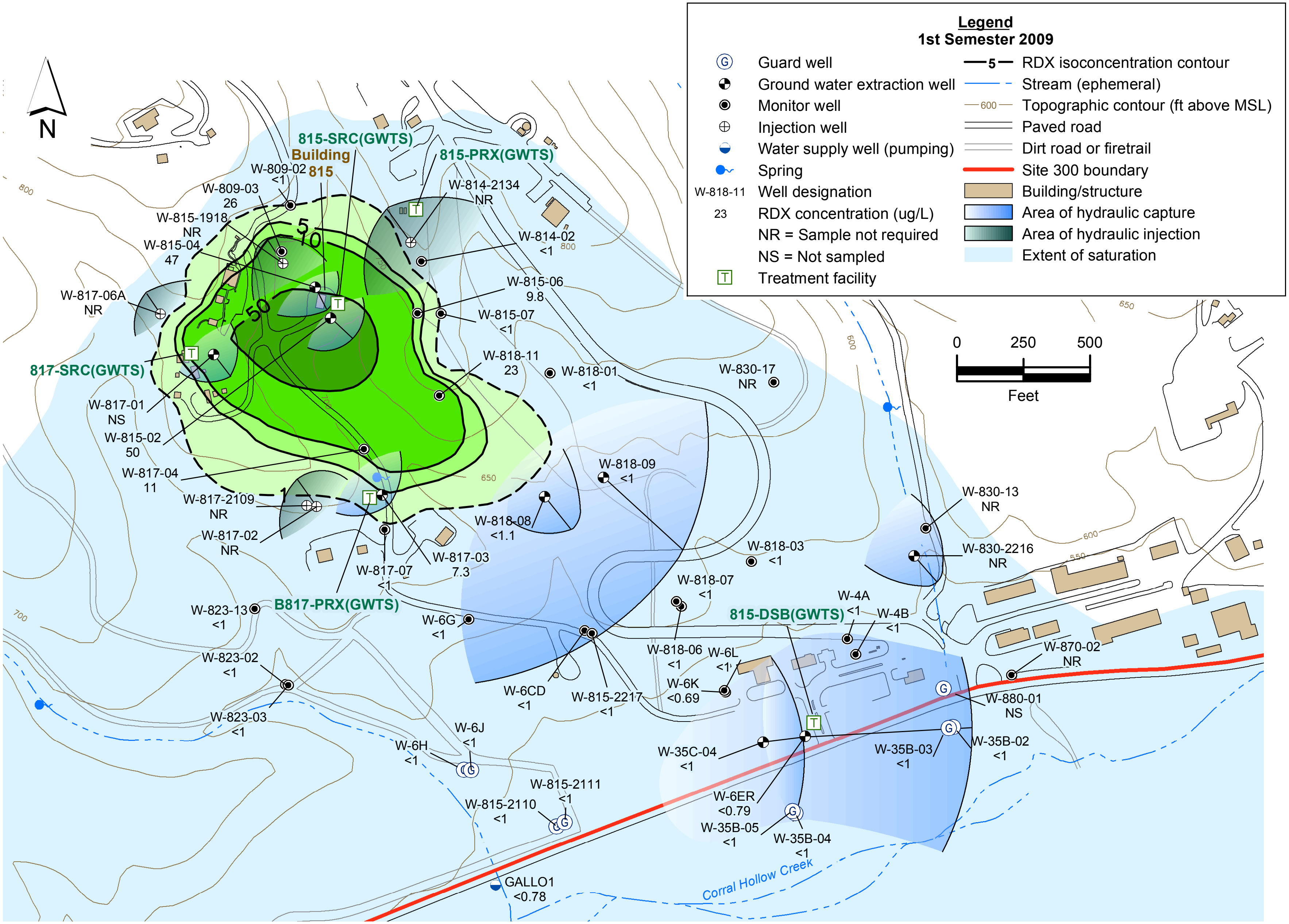

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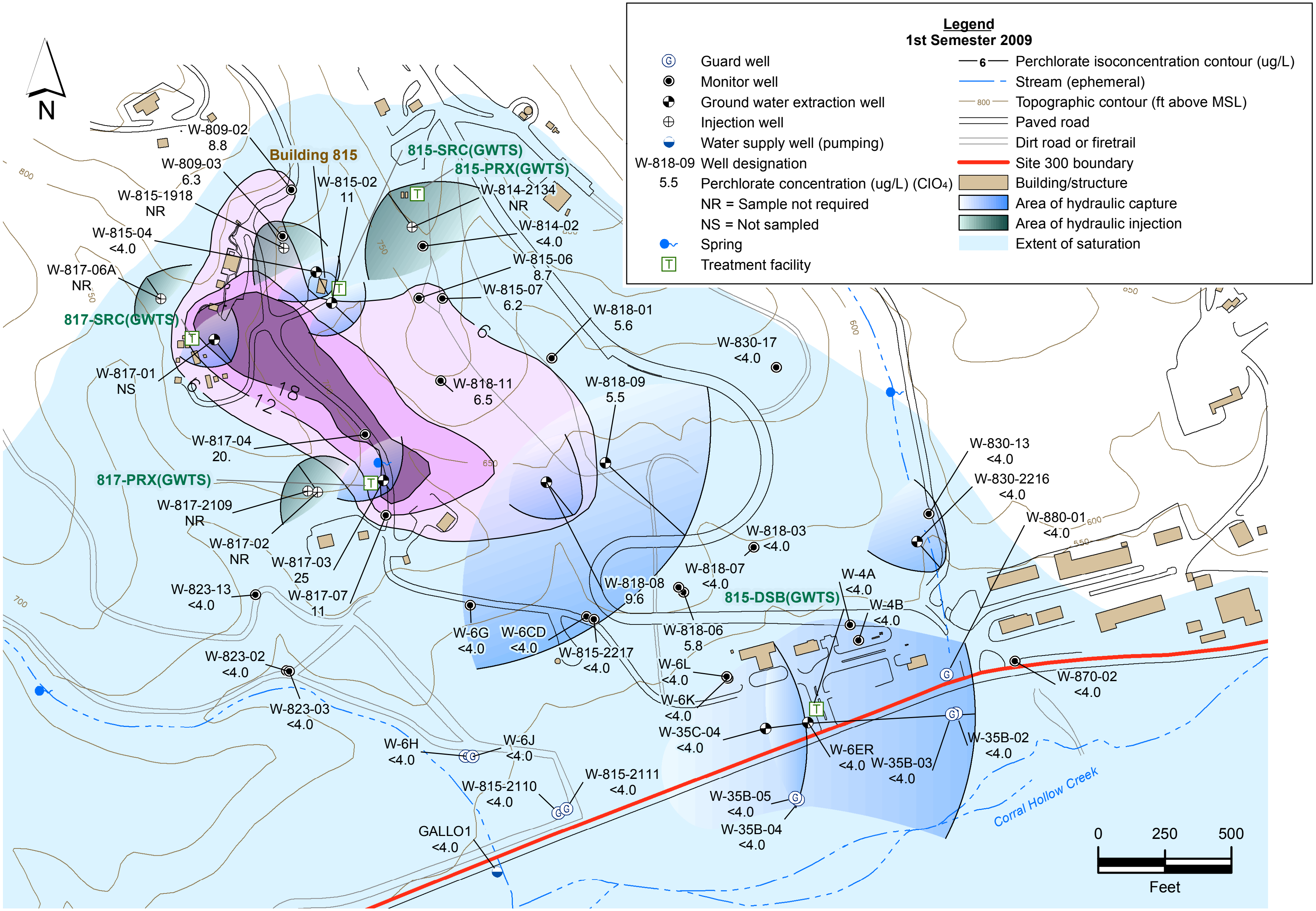

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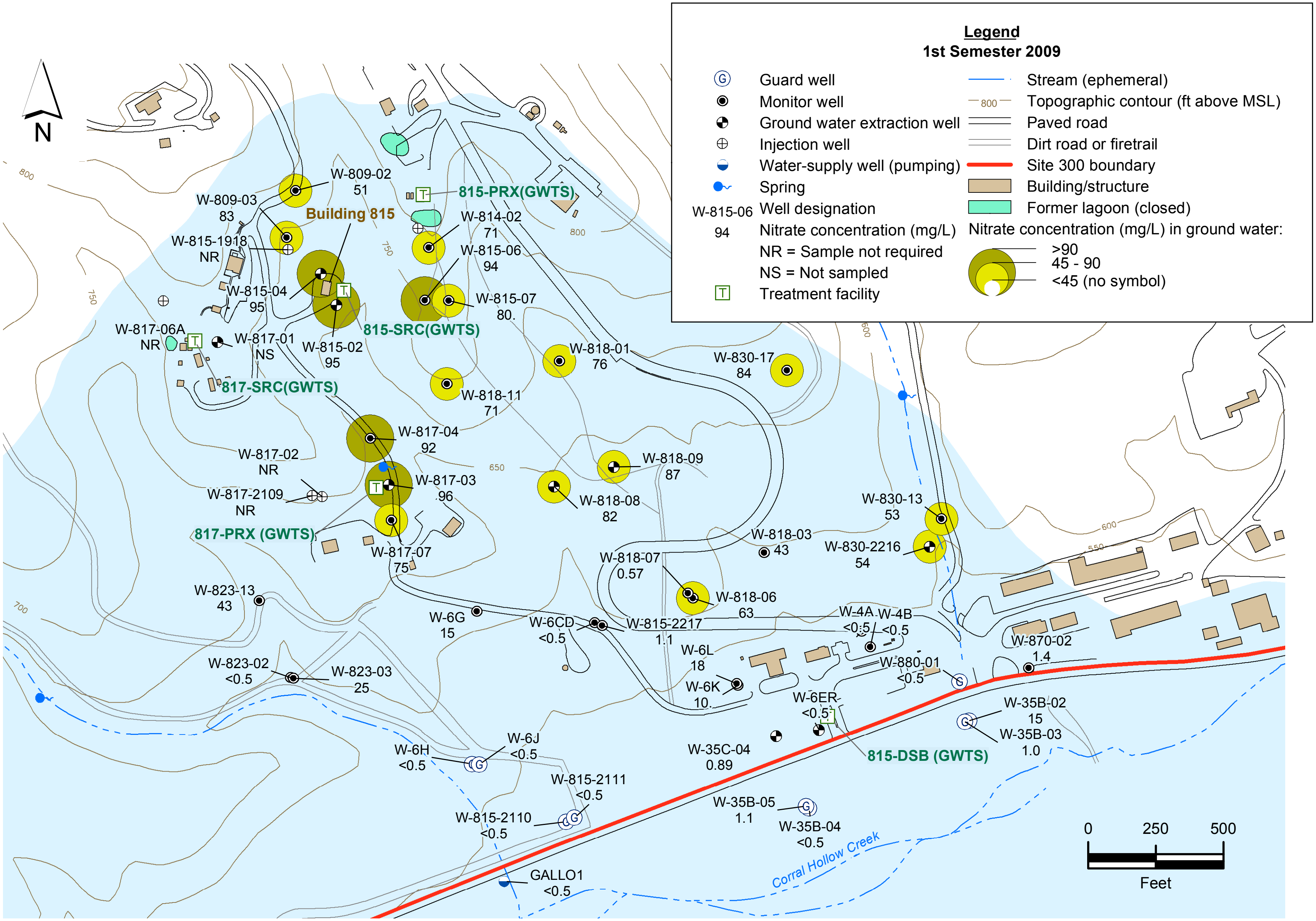

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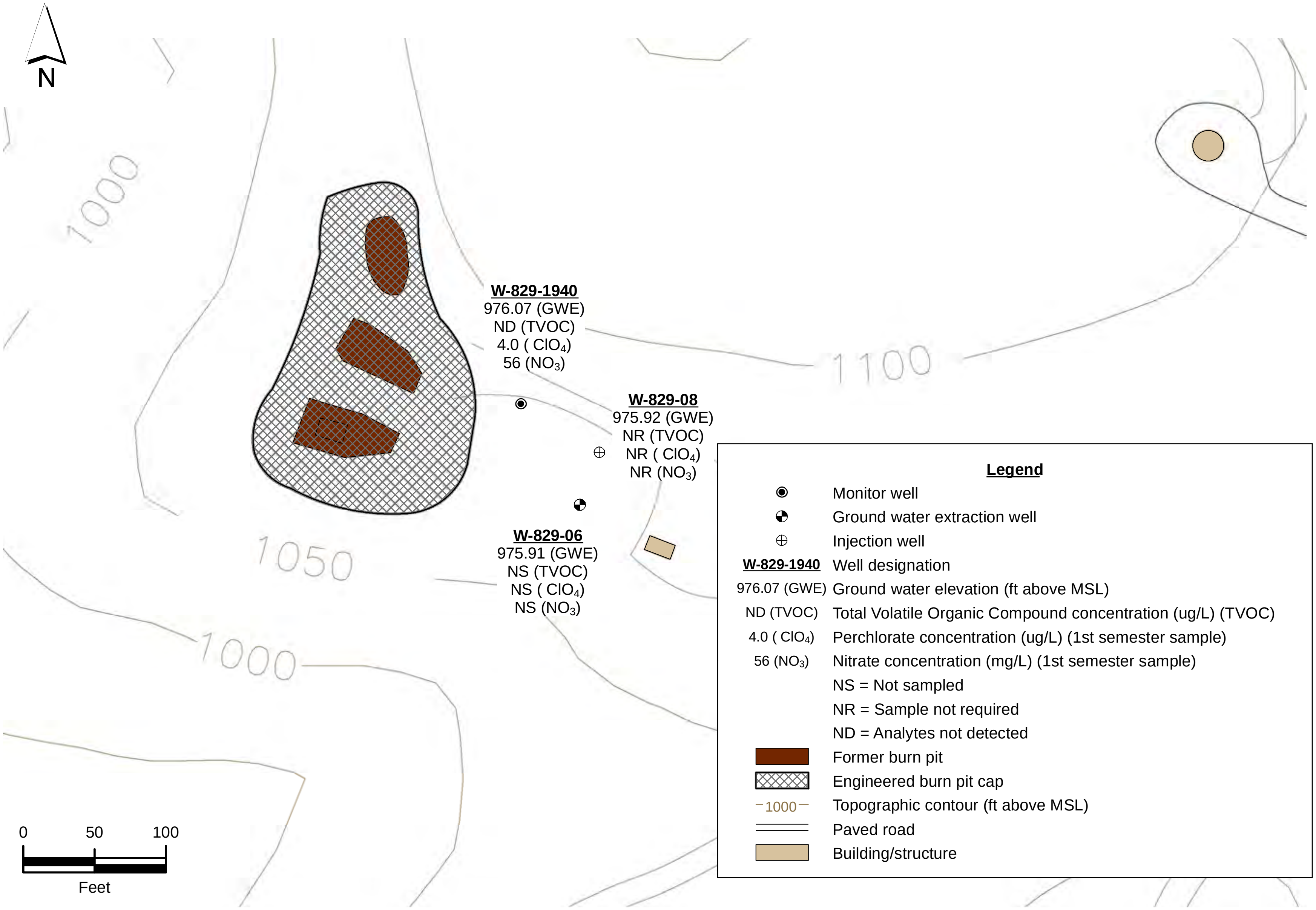

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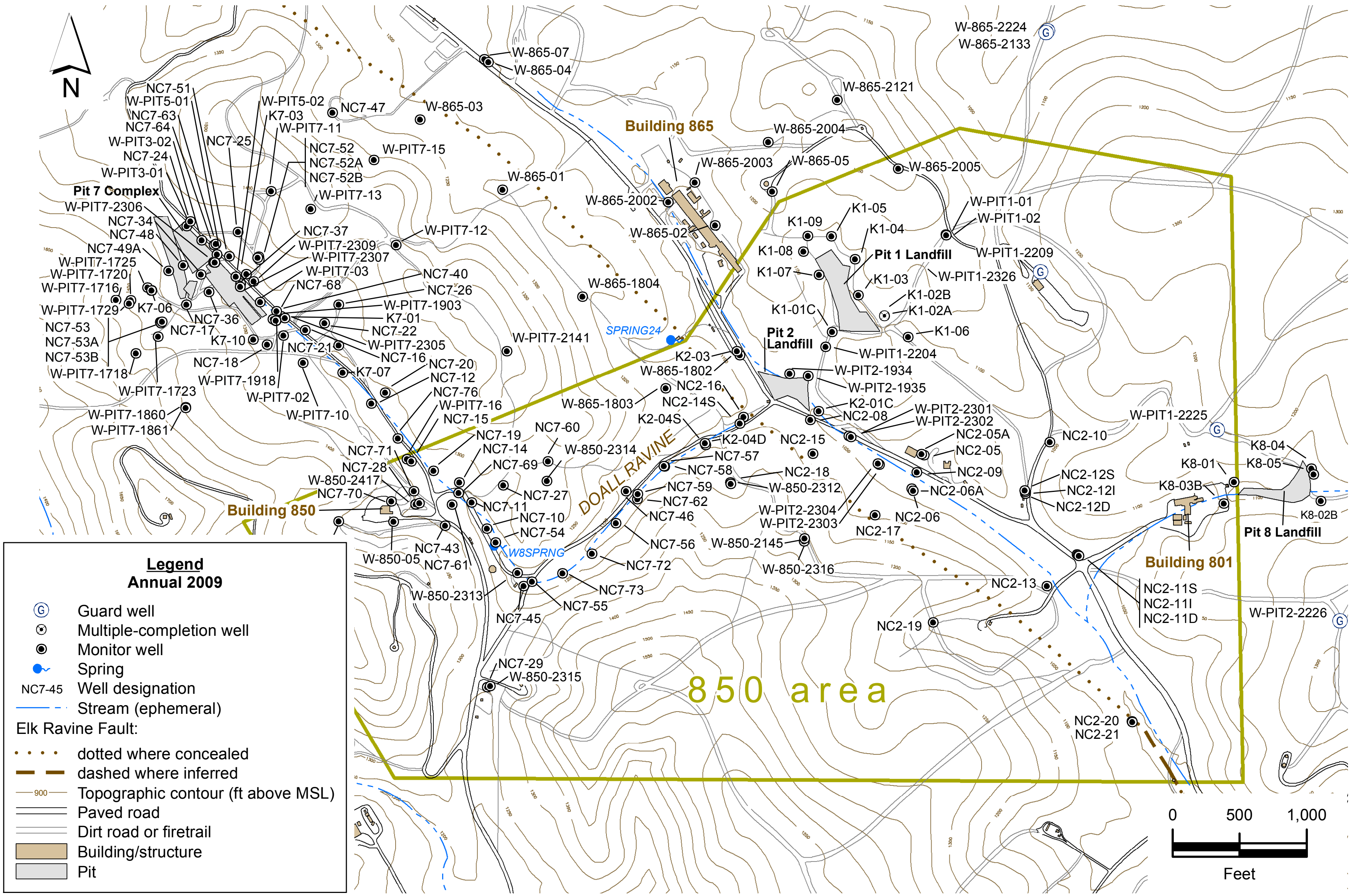

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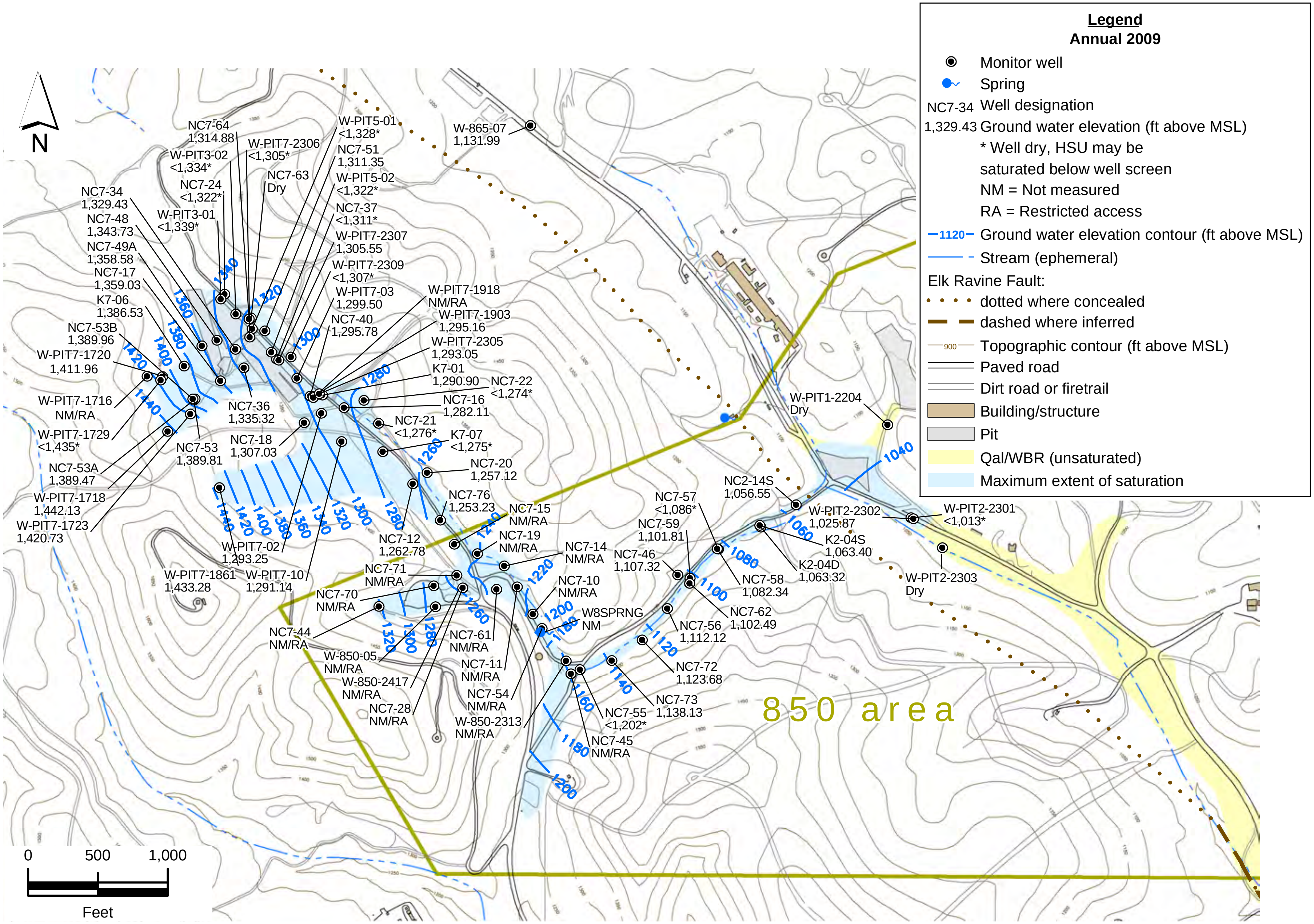

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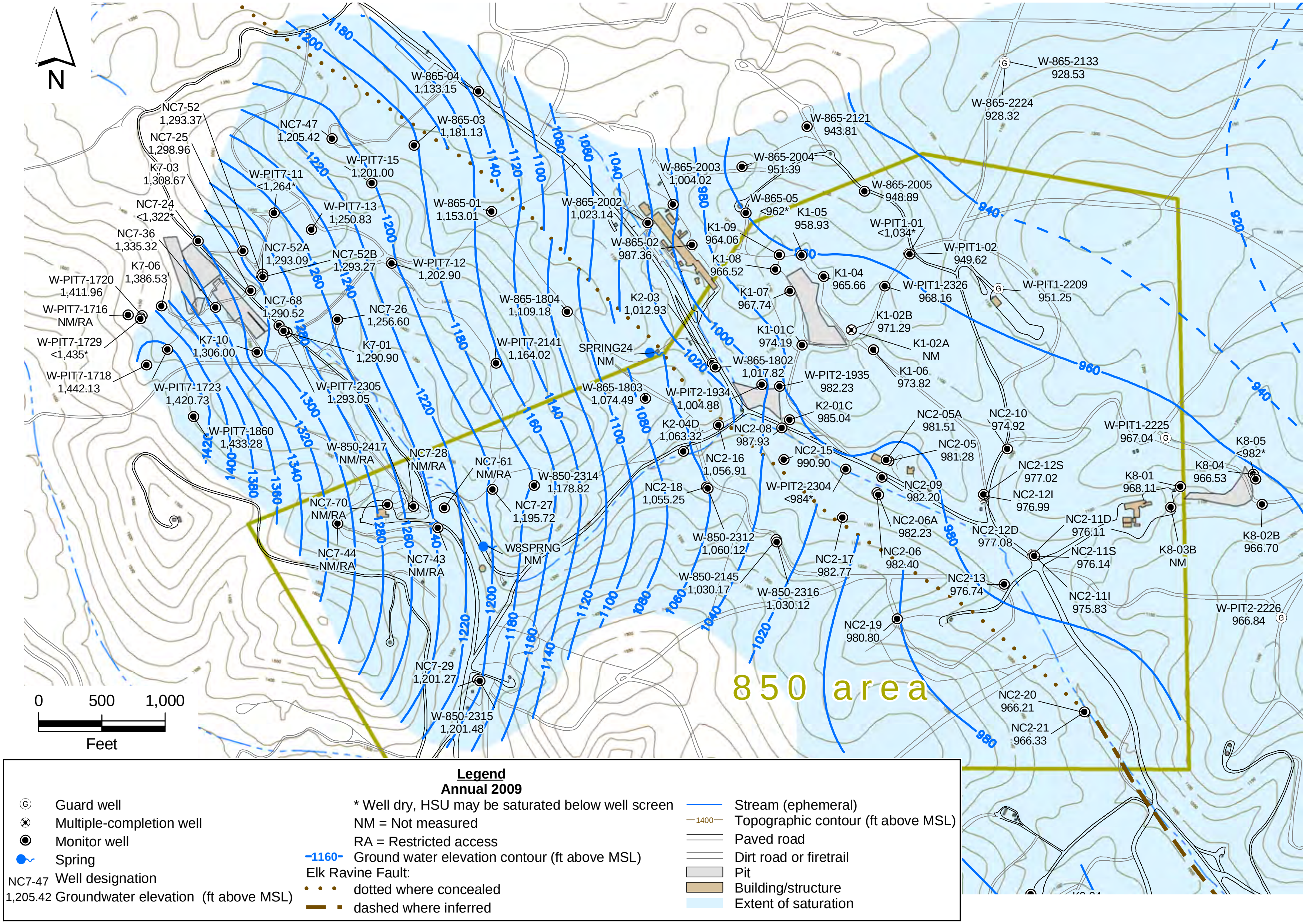

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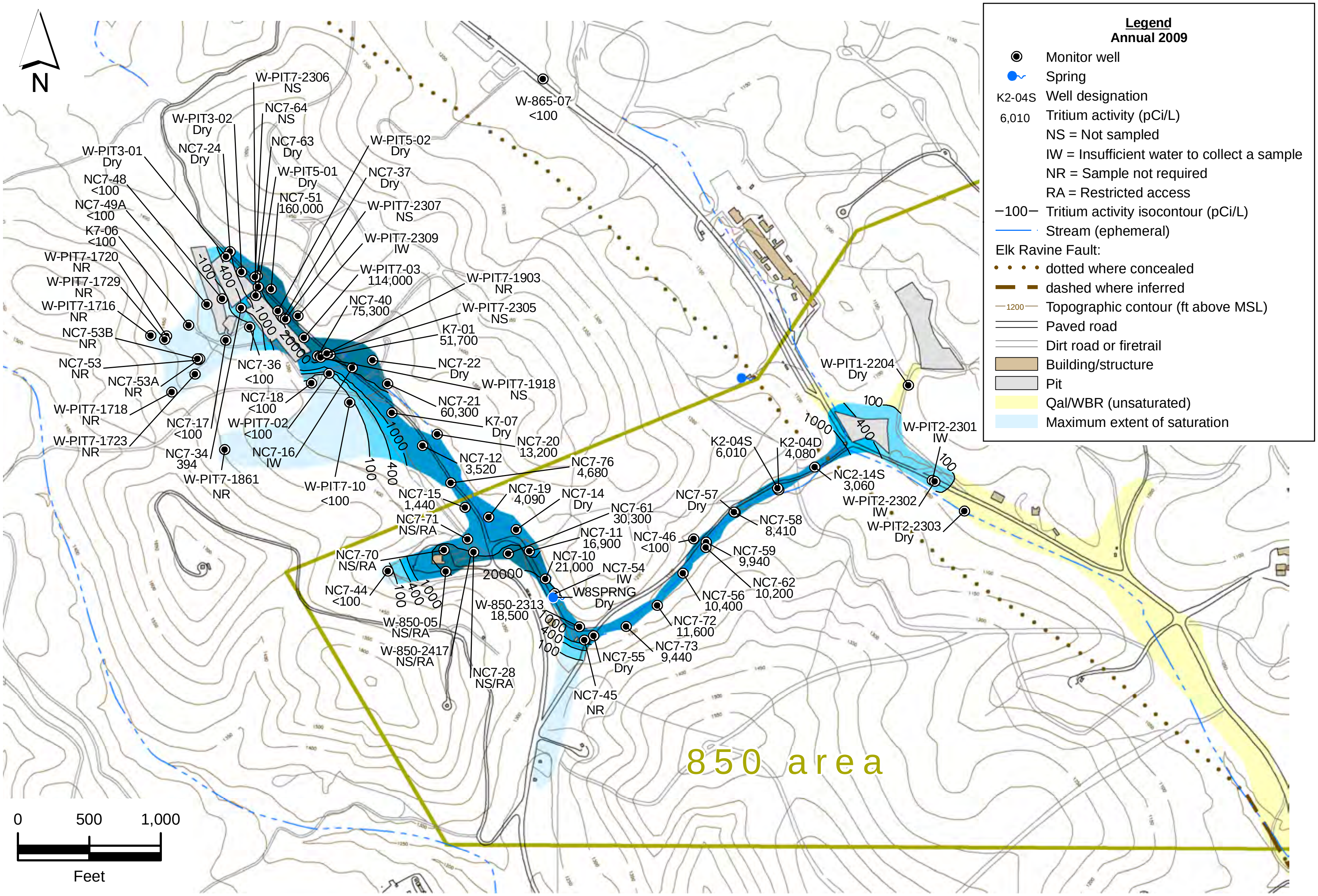

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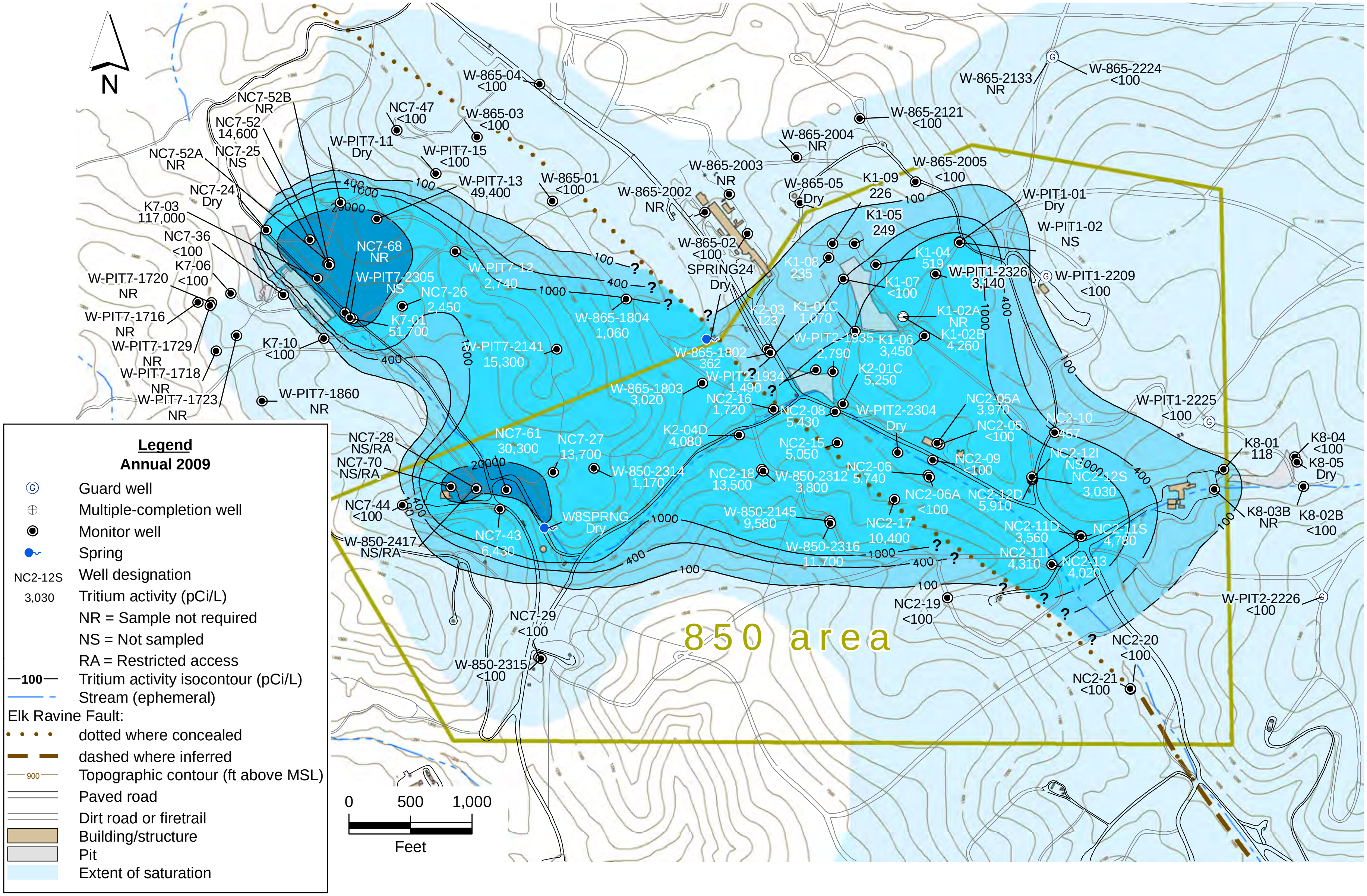

Figure 2.5-5. Building 850 area tritium activity isocontour map for the $Tnbs_1/Tnbs_0$ HSU.

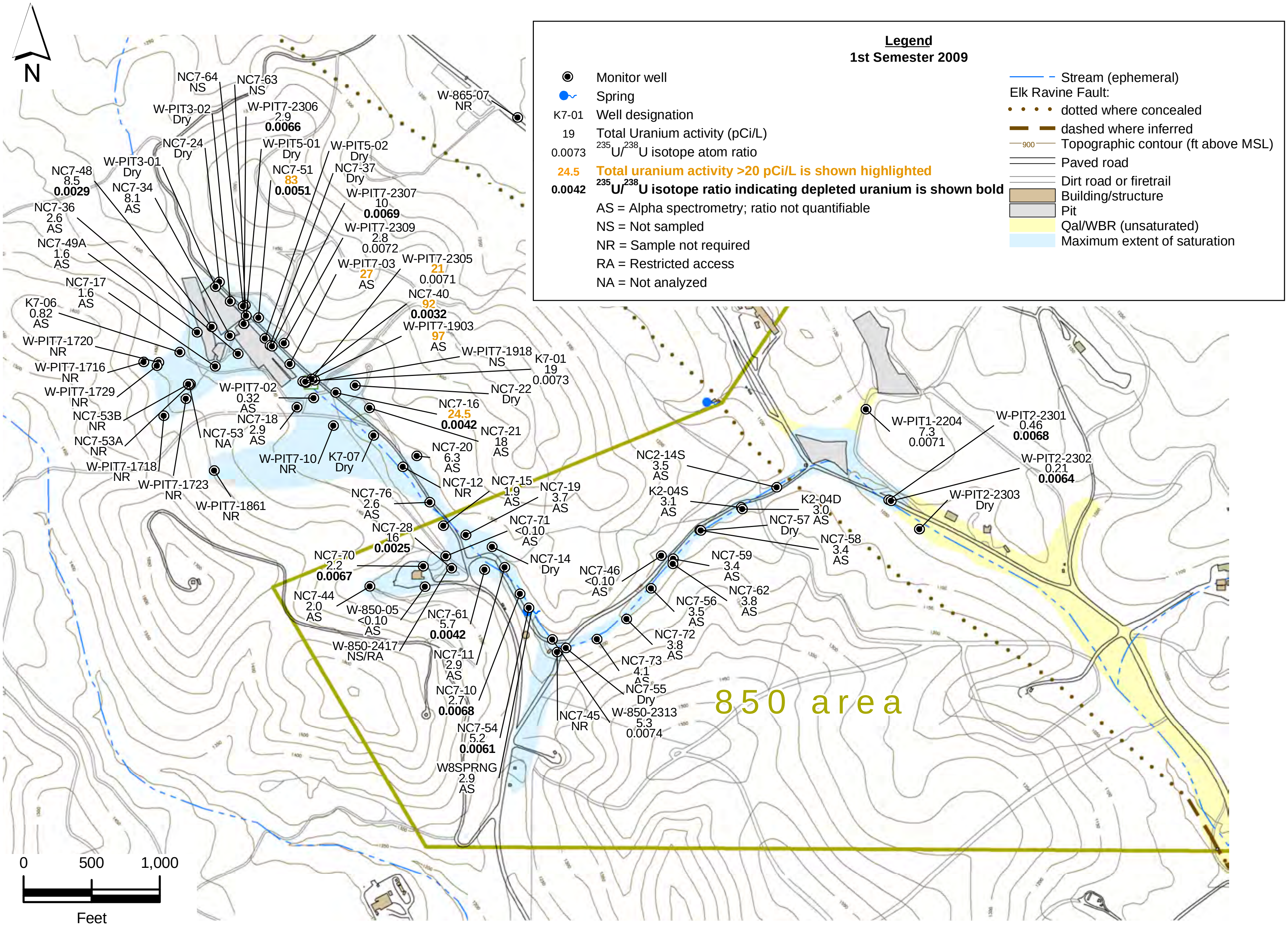

Figure 2.5-6. Building 850 area map showing ground water uranium activities and $^{235}U/^{238}U$ isotope atom ratios for the Qal/WBR HSU.

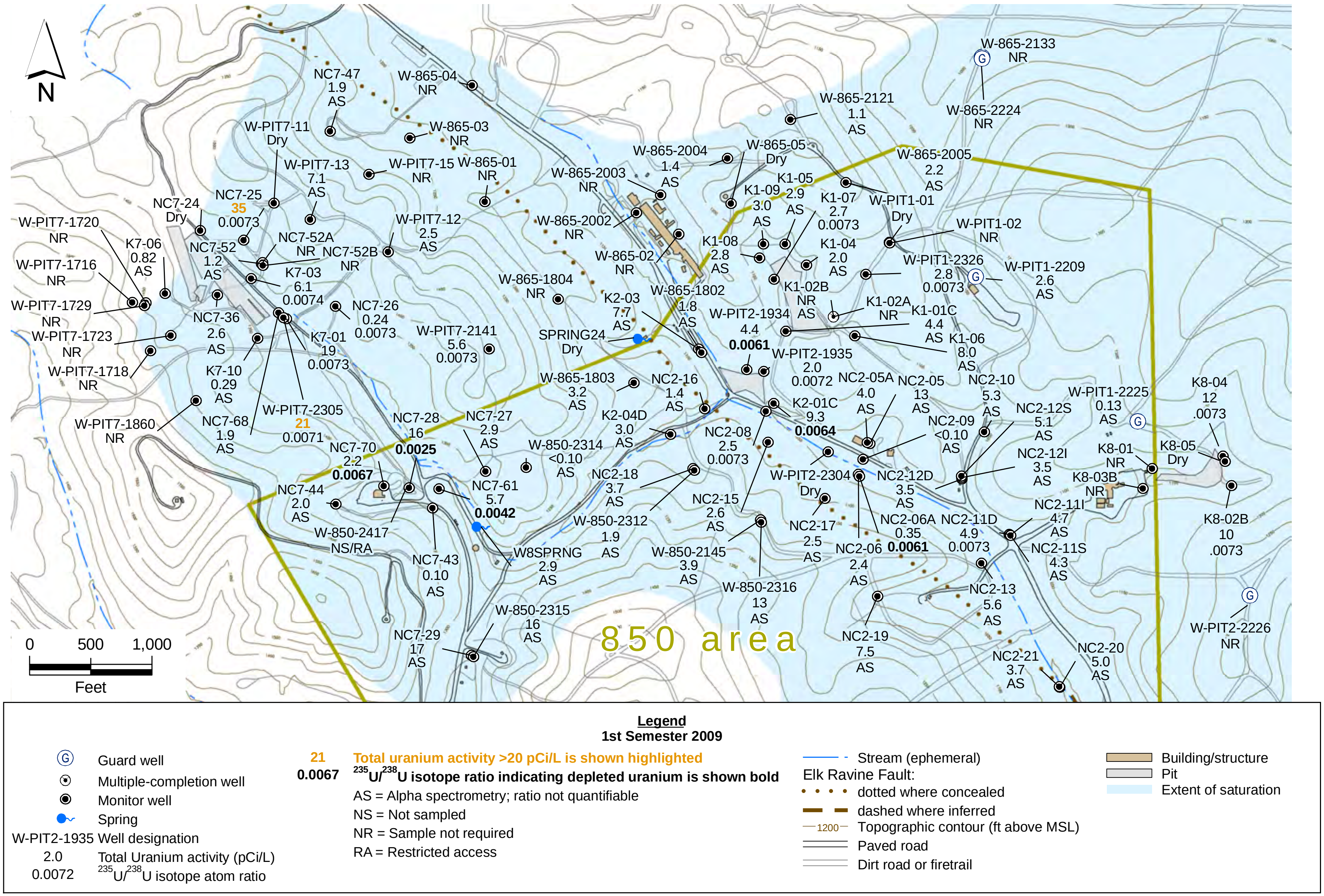

Figure 2.5-7. Building 850 area map showing ground water uranium activities and $^{235}U/^{238}U$ isotope atom ratios for the $Tnbs_1/Tnbs_0$ HSU.

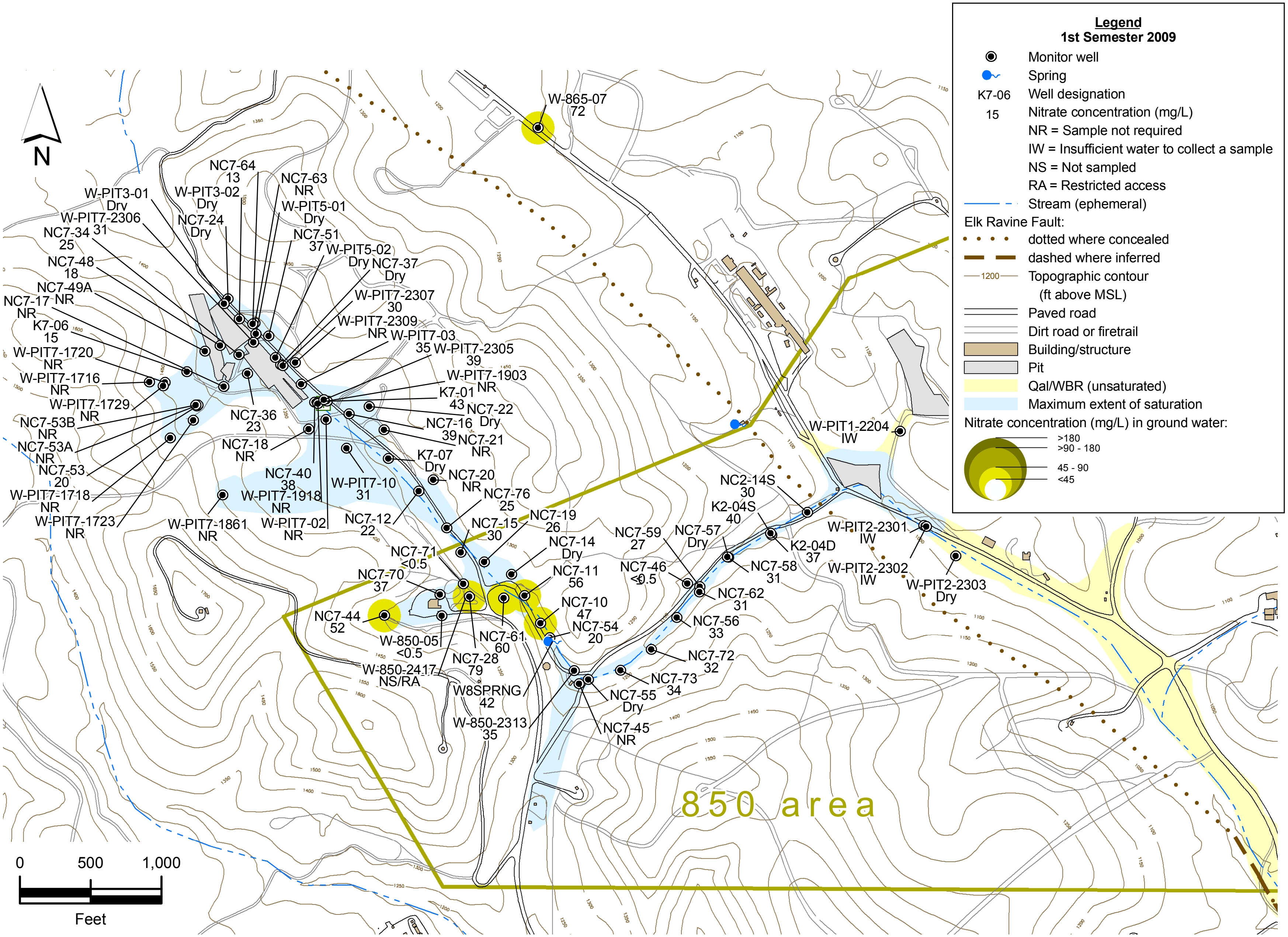

Figure 2.5-8. Building 850 area map showing nitrate concentrations for the Qal/WBR HSU.

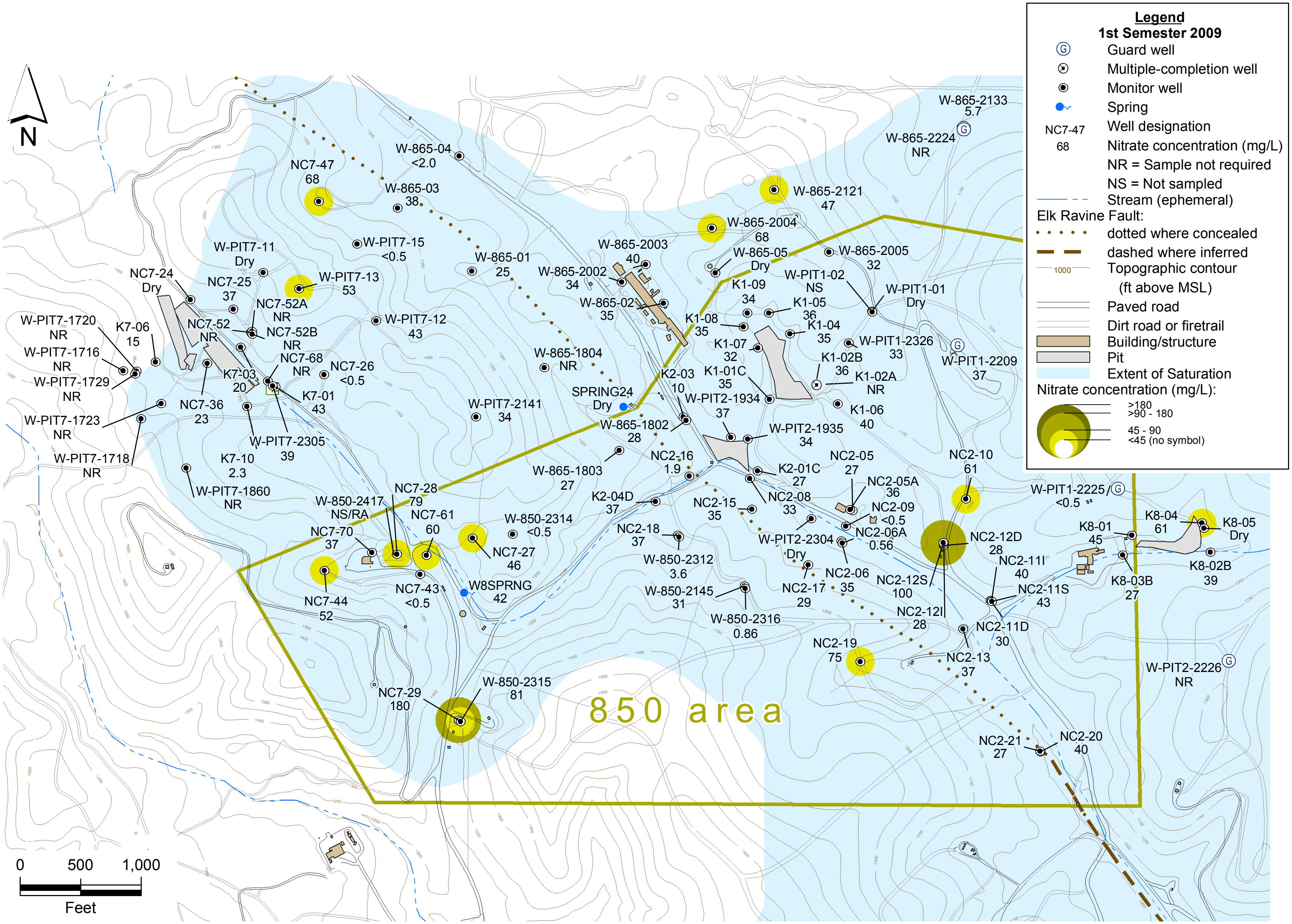

Figure 2.5-9. Building 850 area map showing nitrate concentrations for the $Tnbs_1/Tnbs_0$ HSU.

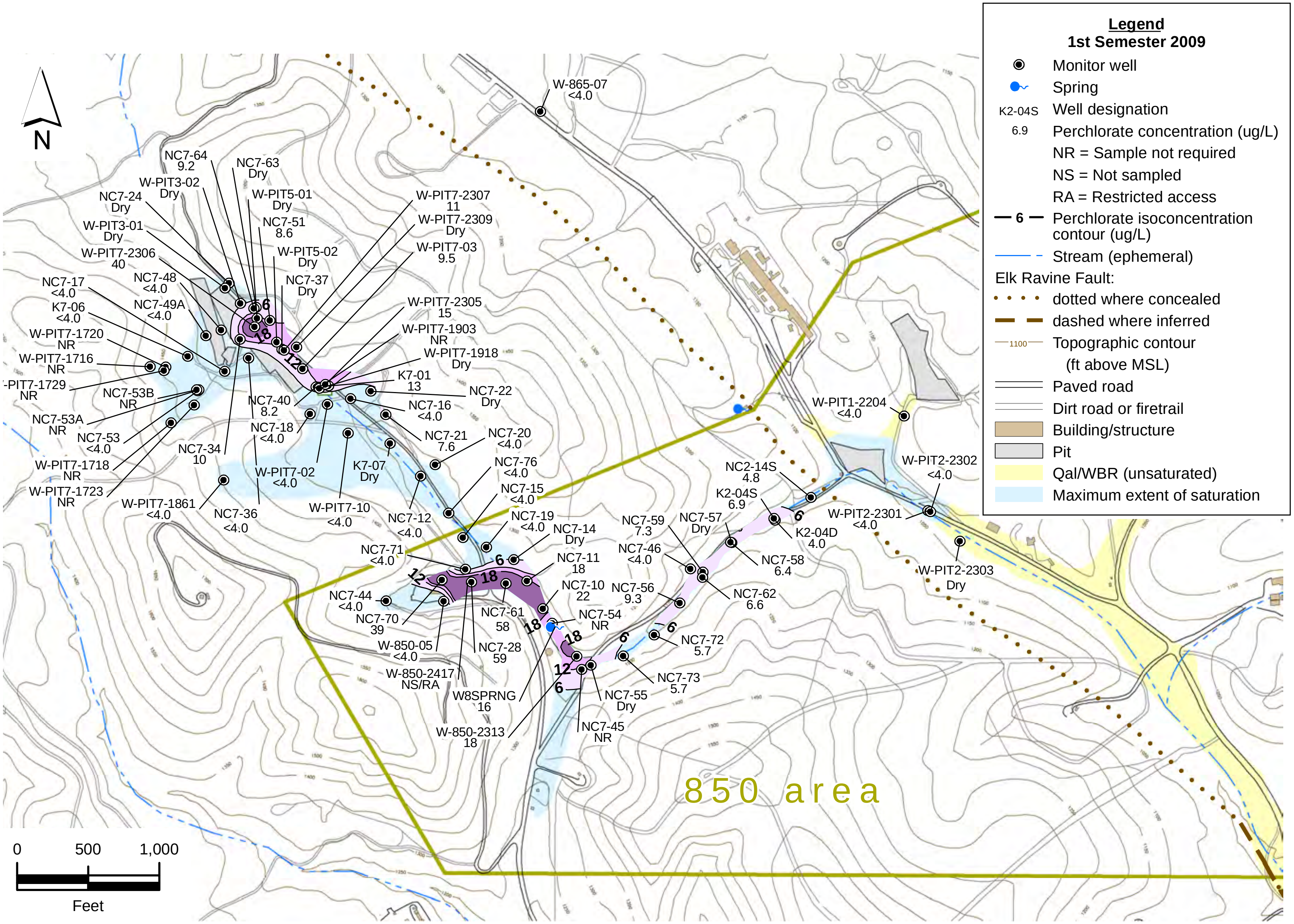

Figure 2.5-10. Building 850 area perchlorate isoconcentration contour map for the Qal/WBR HSU.

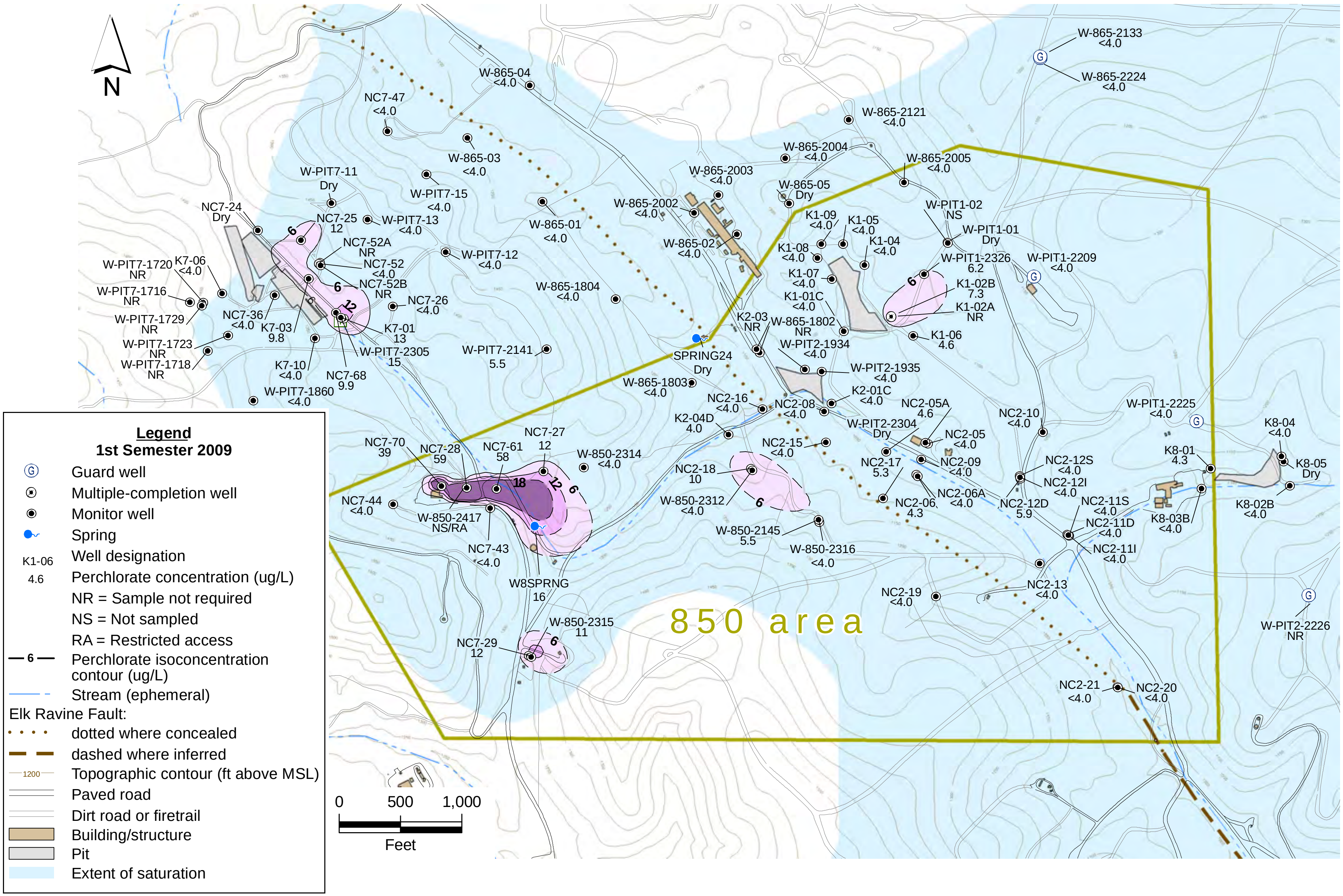

Figure 2.5-11. Building 850 area perchlorate isoconcentration contour map for the $Tnbs_1/Tnbs_0$ HSU.

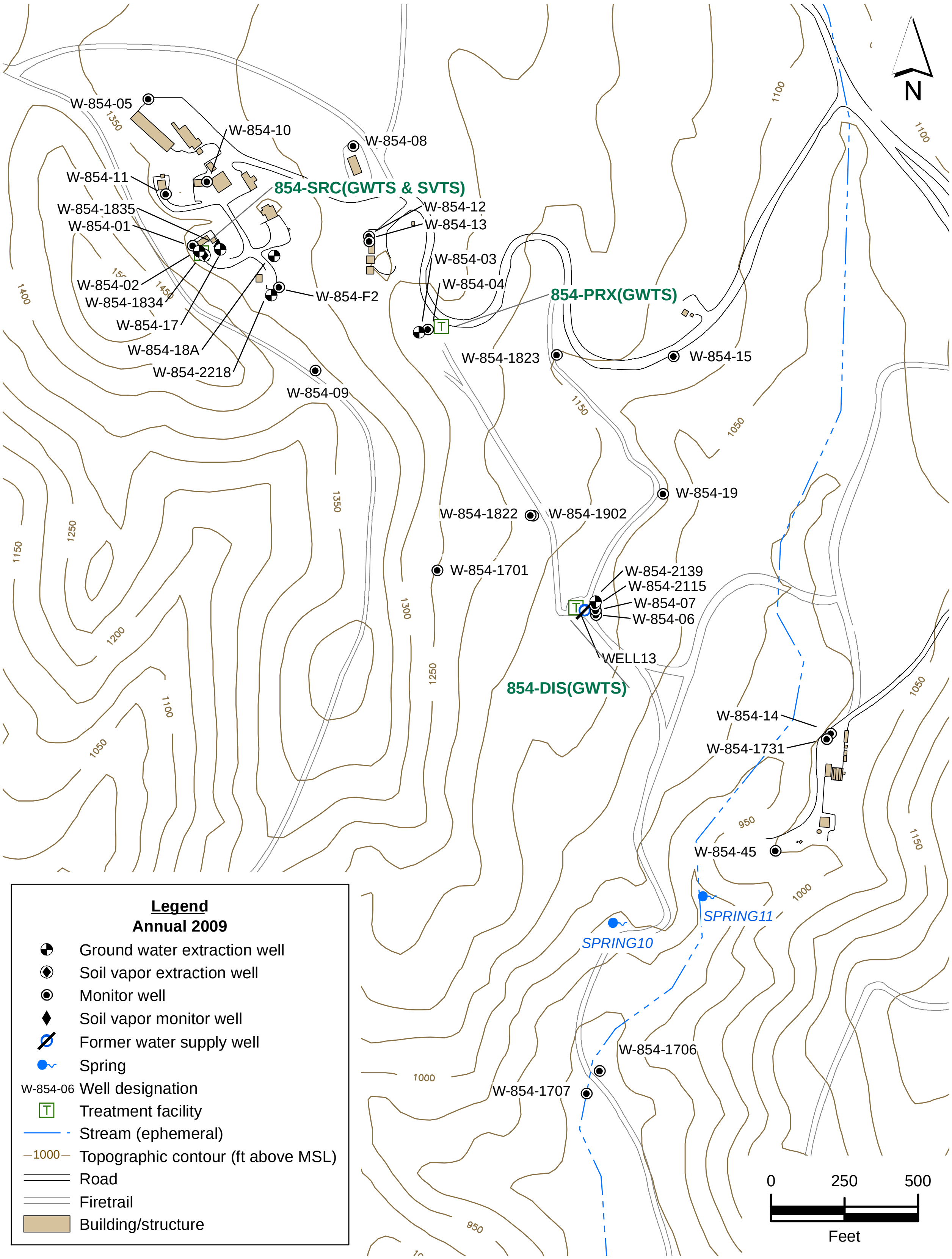

Figure 2.6-1. Building 854 OU site map showing monitor and extraction wells, and treatment facilities.

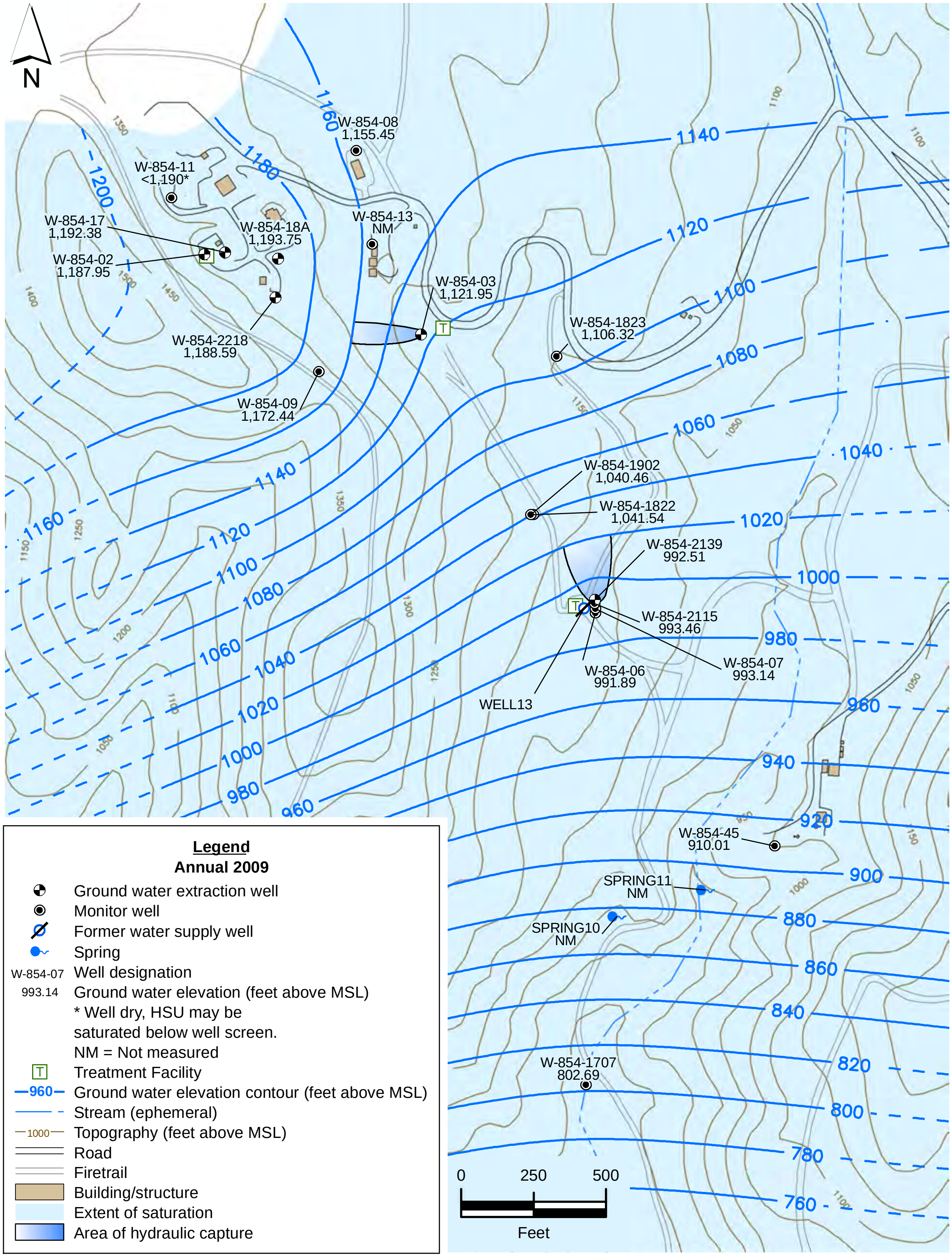

Figure 2.6-2. Building 854 OU ground water potentiometric surface map for the $Tnbs_1/Tnsc_0$ HSU.

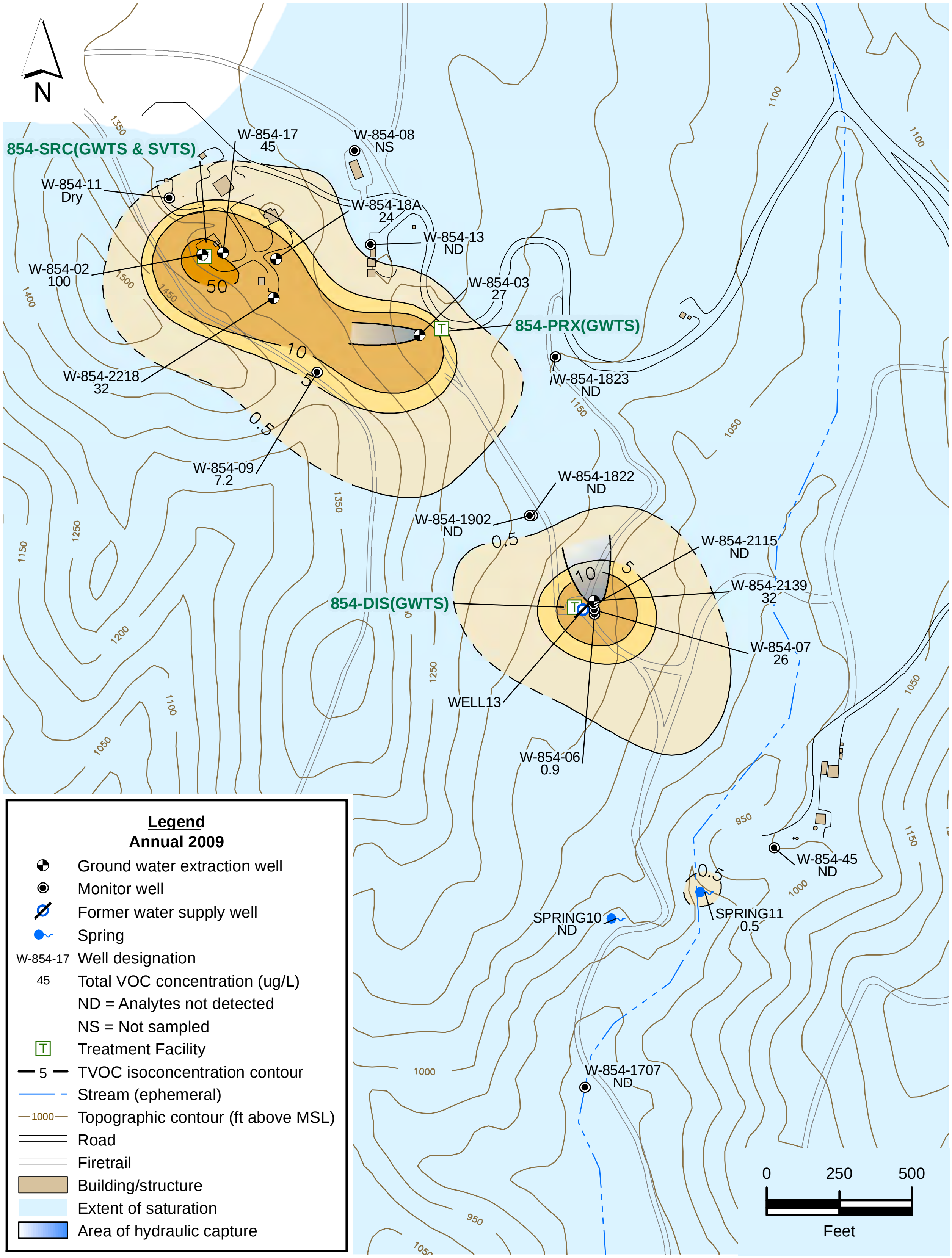

Figure 2.6-3. Building 854 OU total VOC isoconcentration contour map for the $Tnbs_1/Tnsc_0$ HSU.

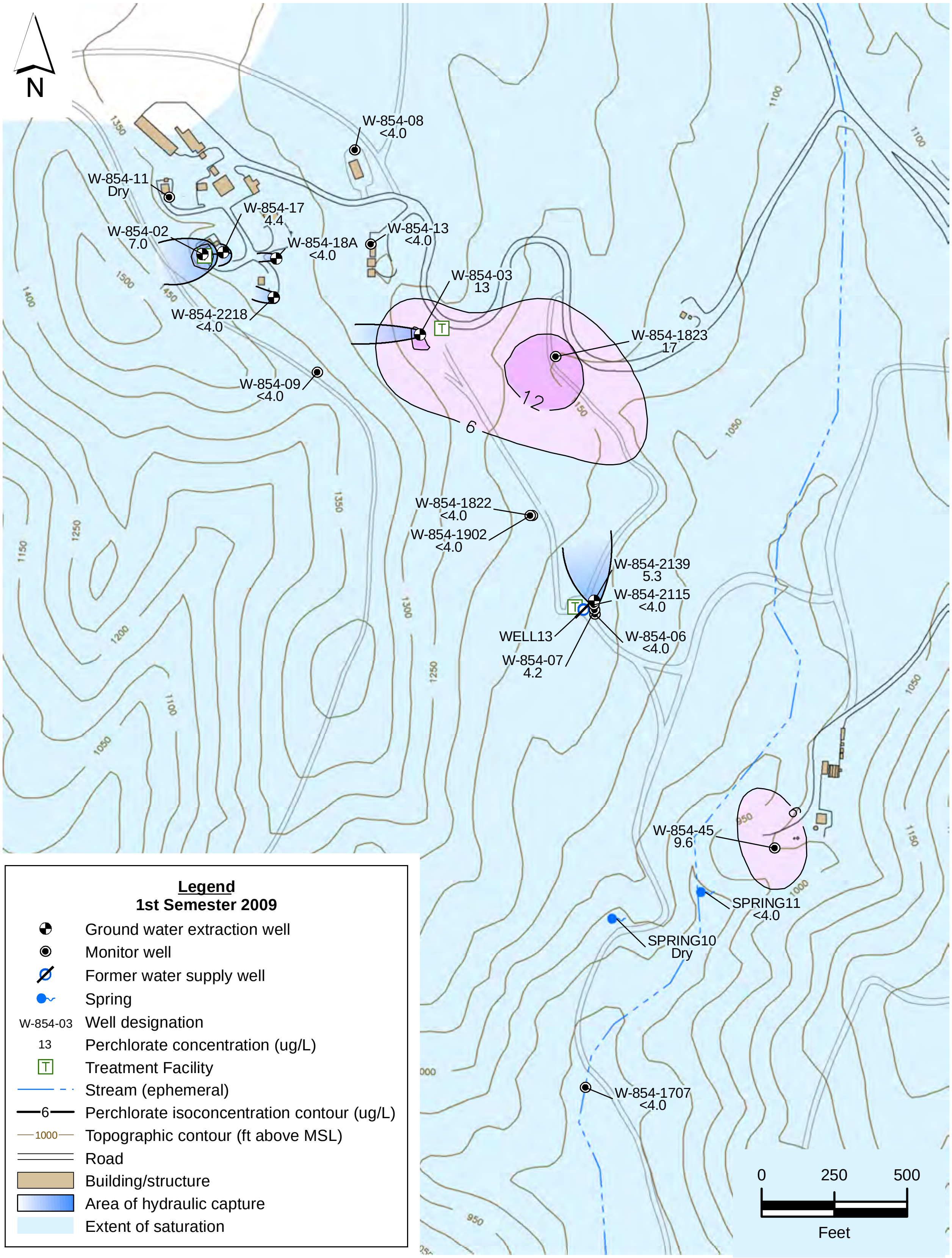

Figure 2.6-4. Building 854 OU perchlorate isoconcentration contour map for the $Tnbs_1/Tnsc_0$ HSU.

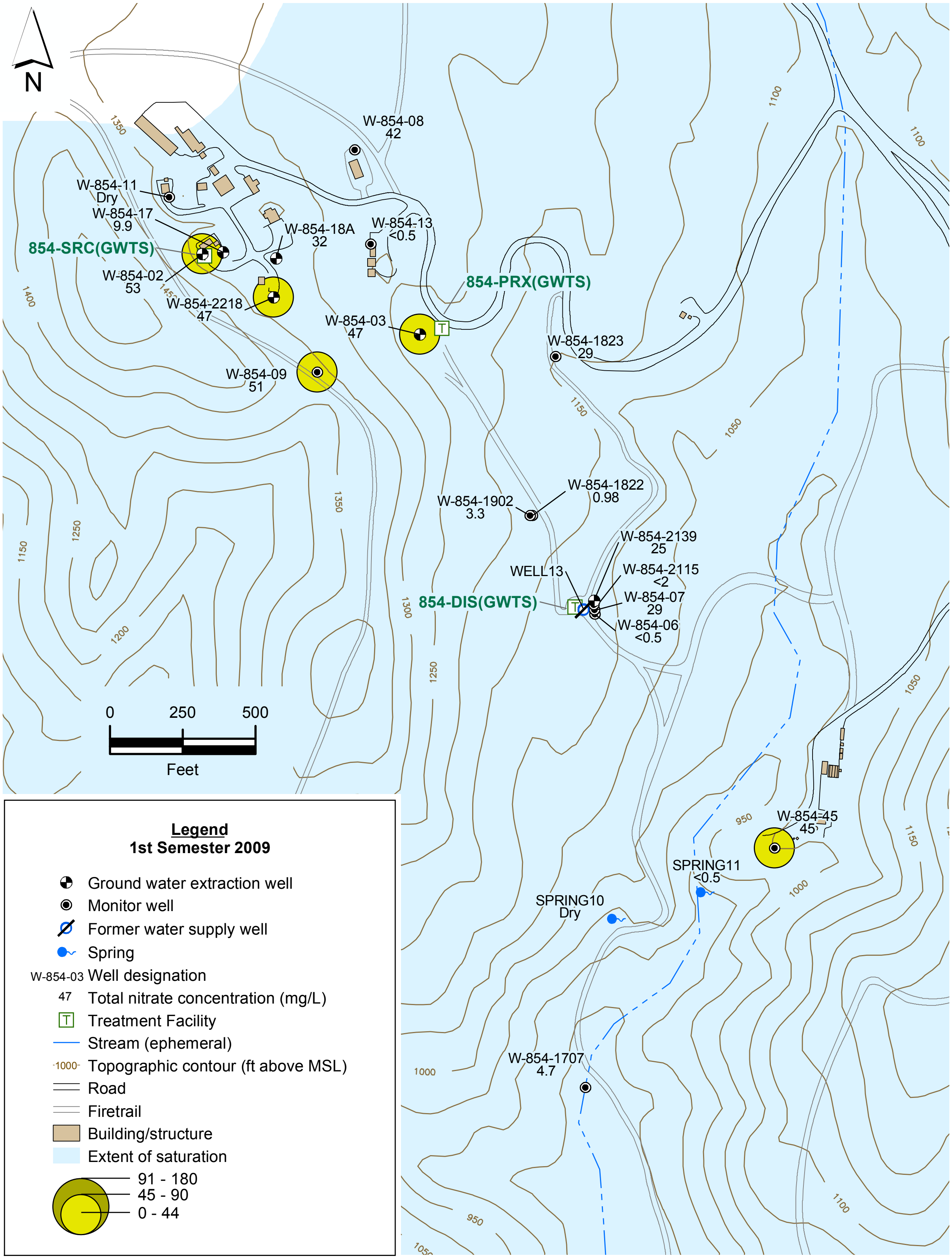

Figure 2.6-5. Building 854 OU map showing nitrate concentrations for the $Tnbs_1/Tnsc_0$ HSU.

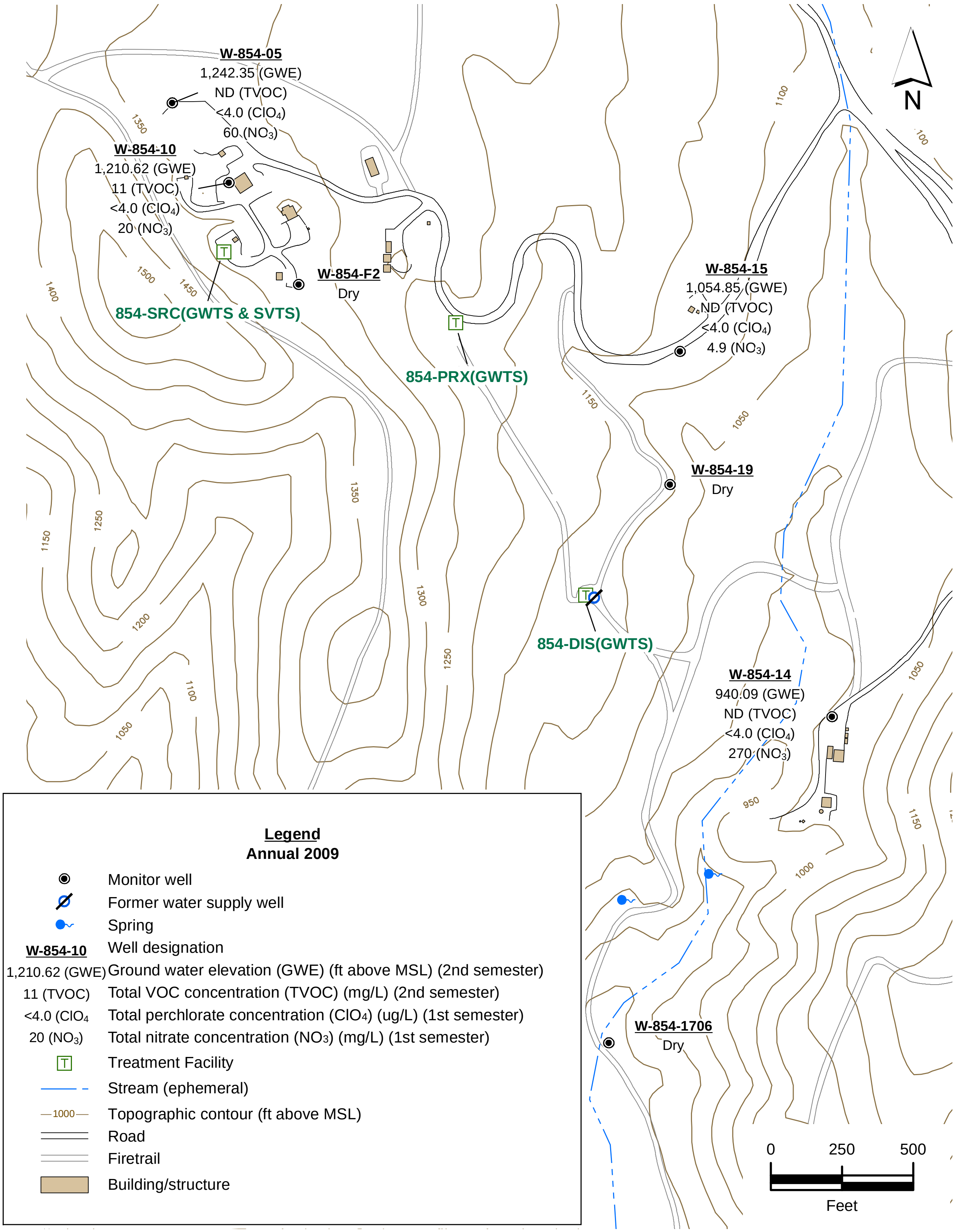

Figure 2.6-6. Building 854 OU map showing ground water elevations, total VOCs, perchlorate and nitrate concentrations for the combined Qls/Tnbs$_1$ HSUs.

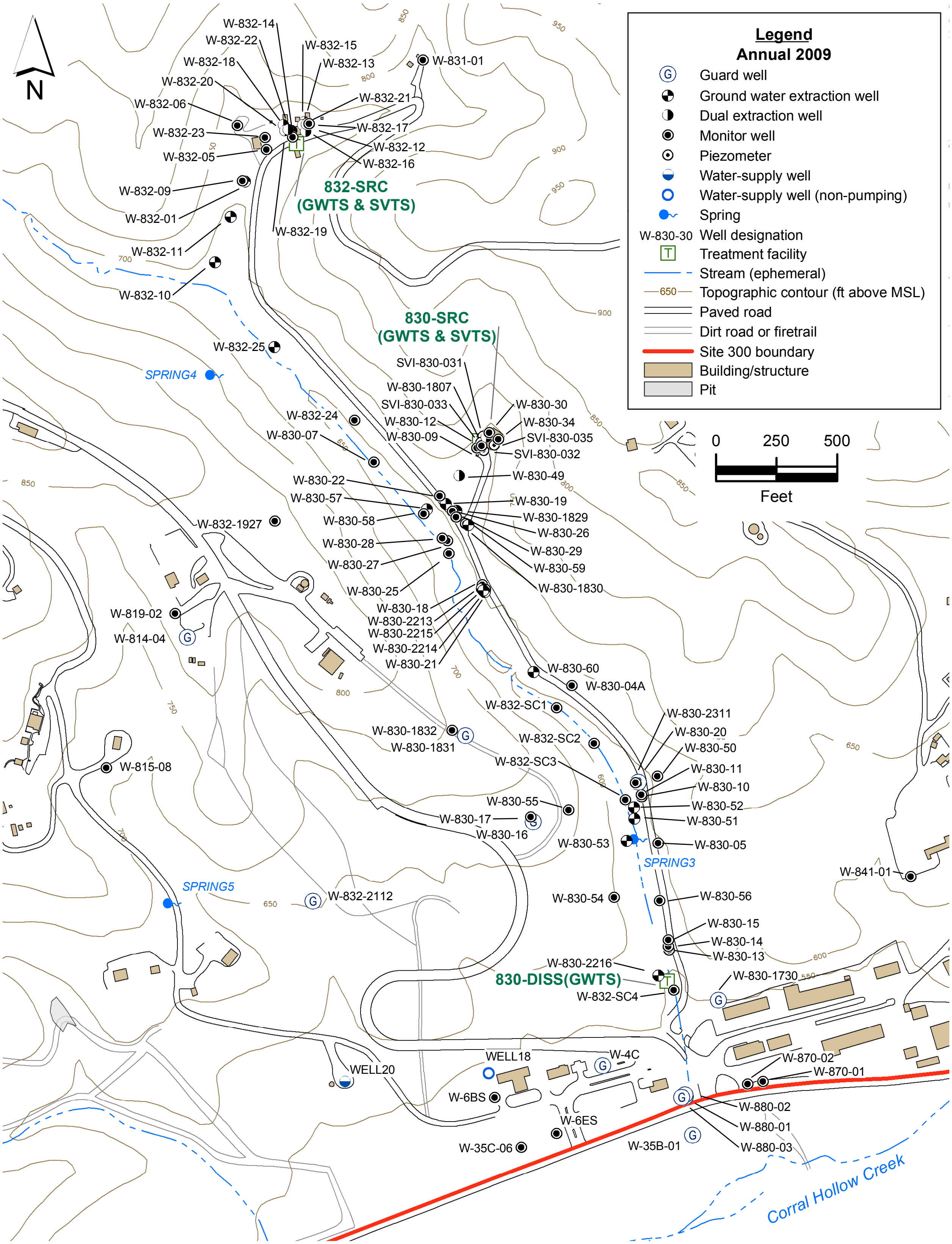

Figure 2.7-1. Building 832 Canyon OU site map showing monitor, extraction and water-supply wells, and treatment facilities.

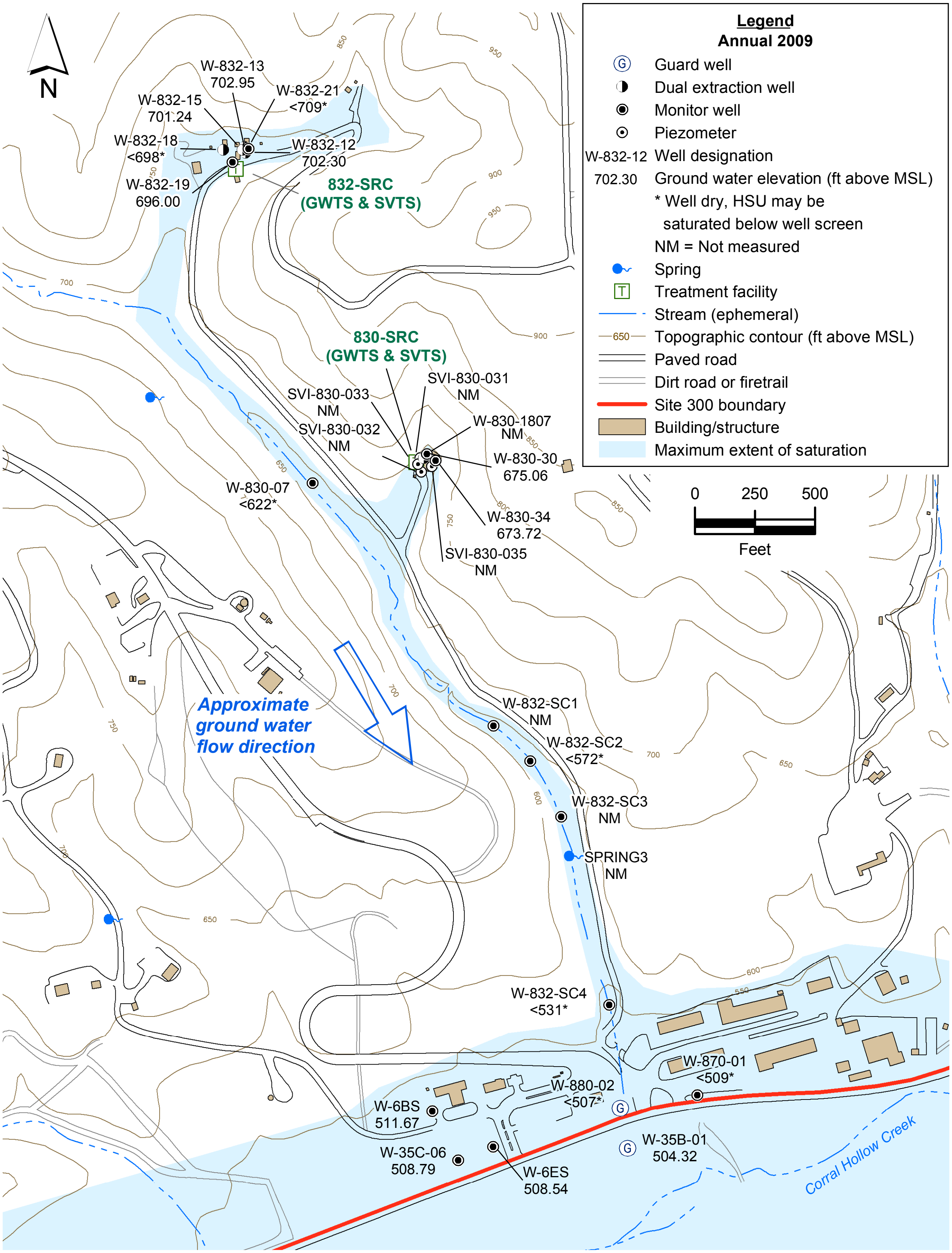

Figure 2.7-2. Building 832 Canyon OU map showing ground water elevations and ground water flow direction for the Qal/WBR HSU.

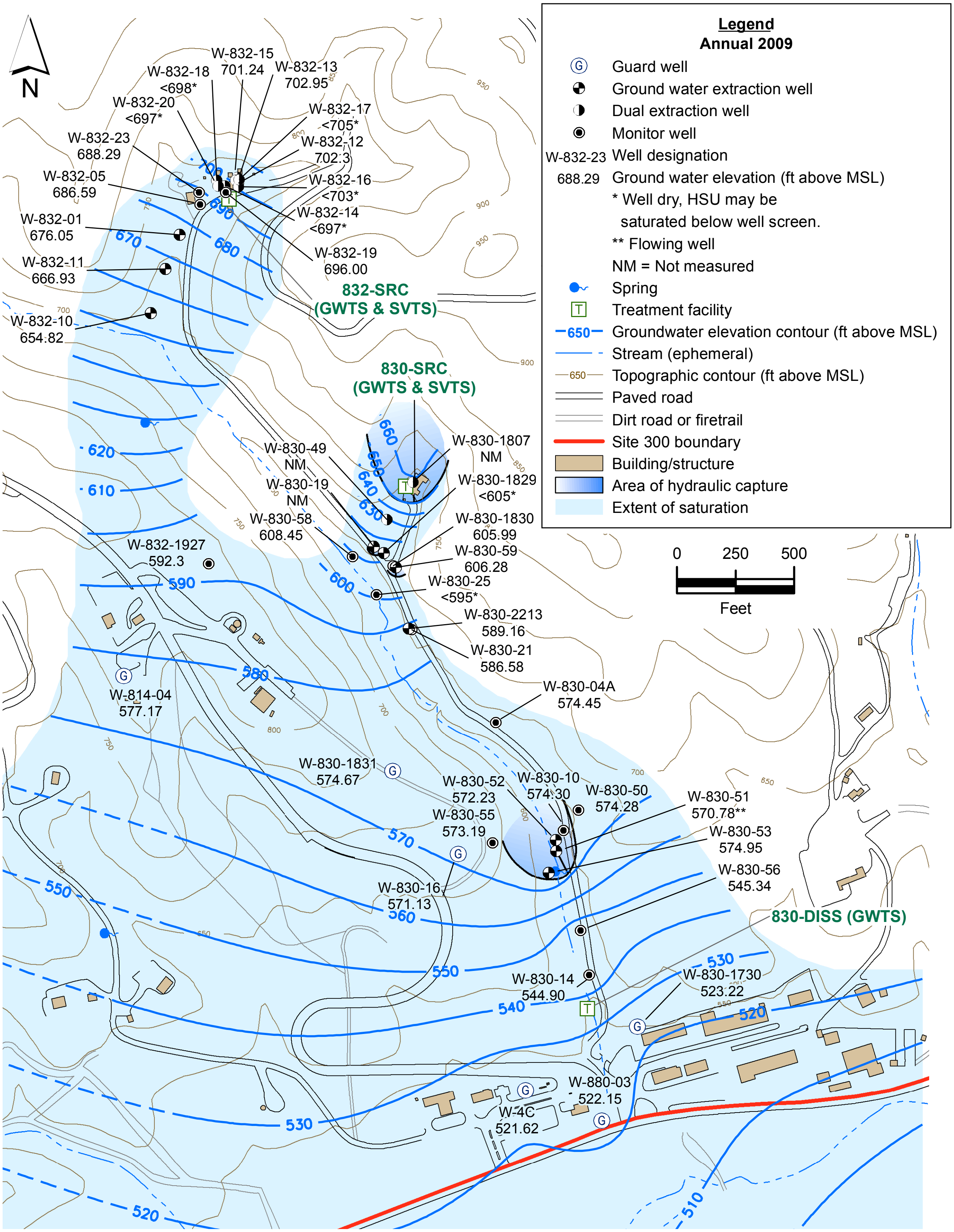

Figure 2.7-3. Building 832 Canyon OU ground water potentiometric surface map for the Tnsc$_{1b}$ HSU.

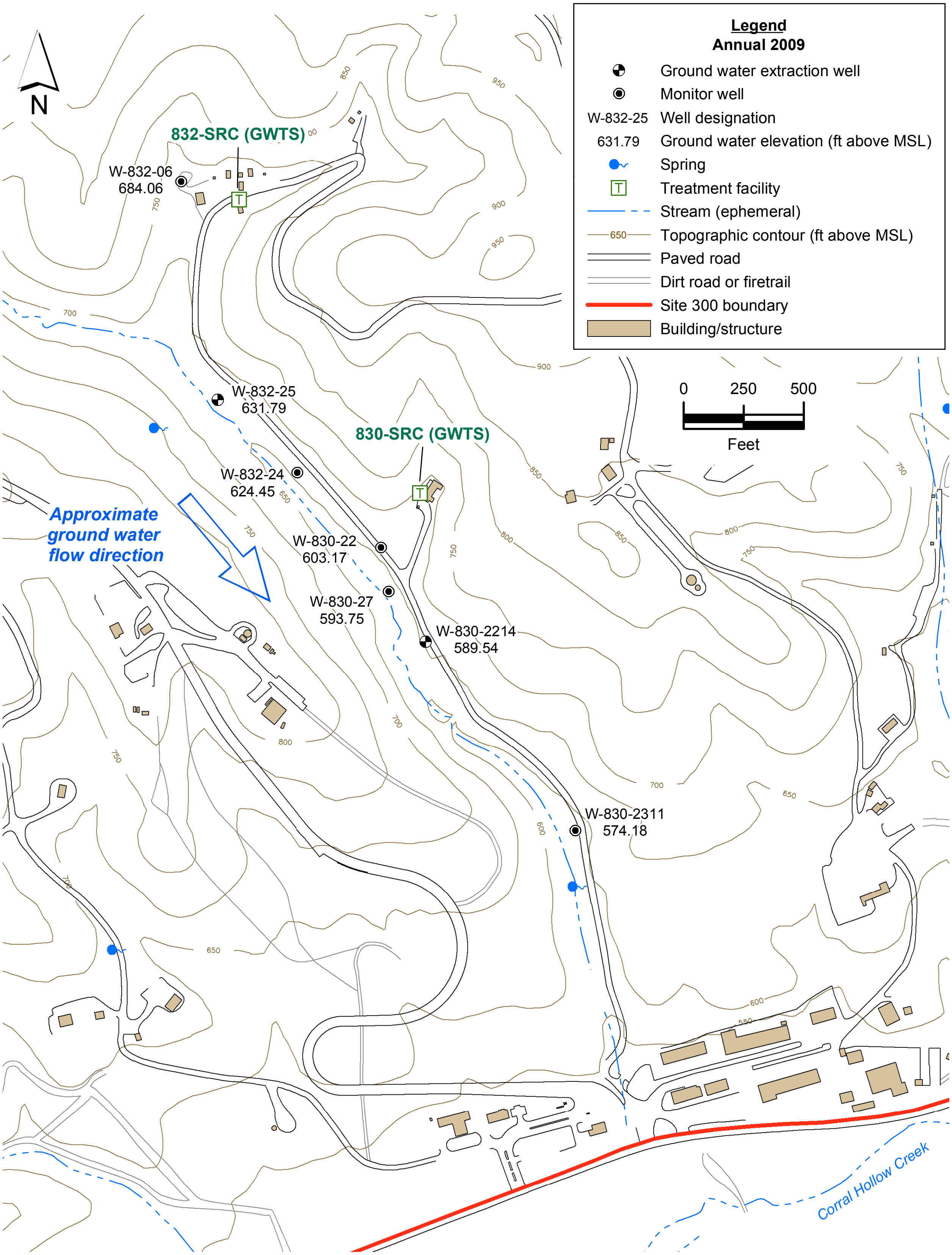

Figure 2.7-4. Building 832 Canyon OU map showing ground water elevations and ground water flow direction for the $Tnsc_{1a}$ HSU.

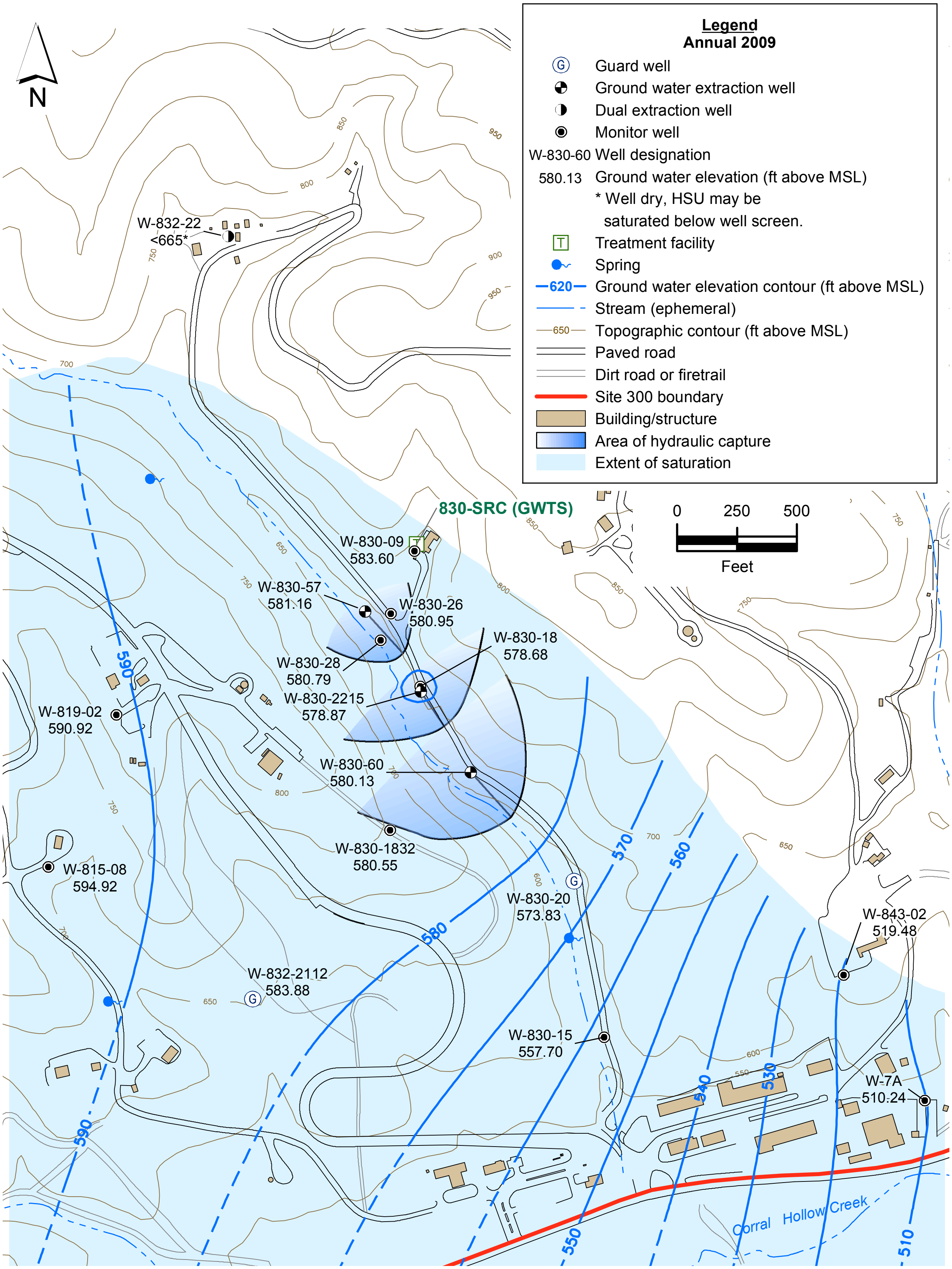

Figure 2.7-5. Building 832 Canyon OU ground water potentiometric surface map for the Upper $Tnbs_1$ HSU.

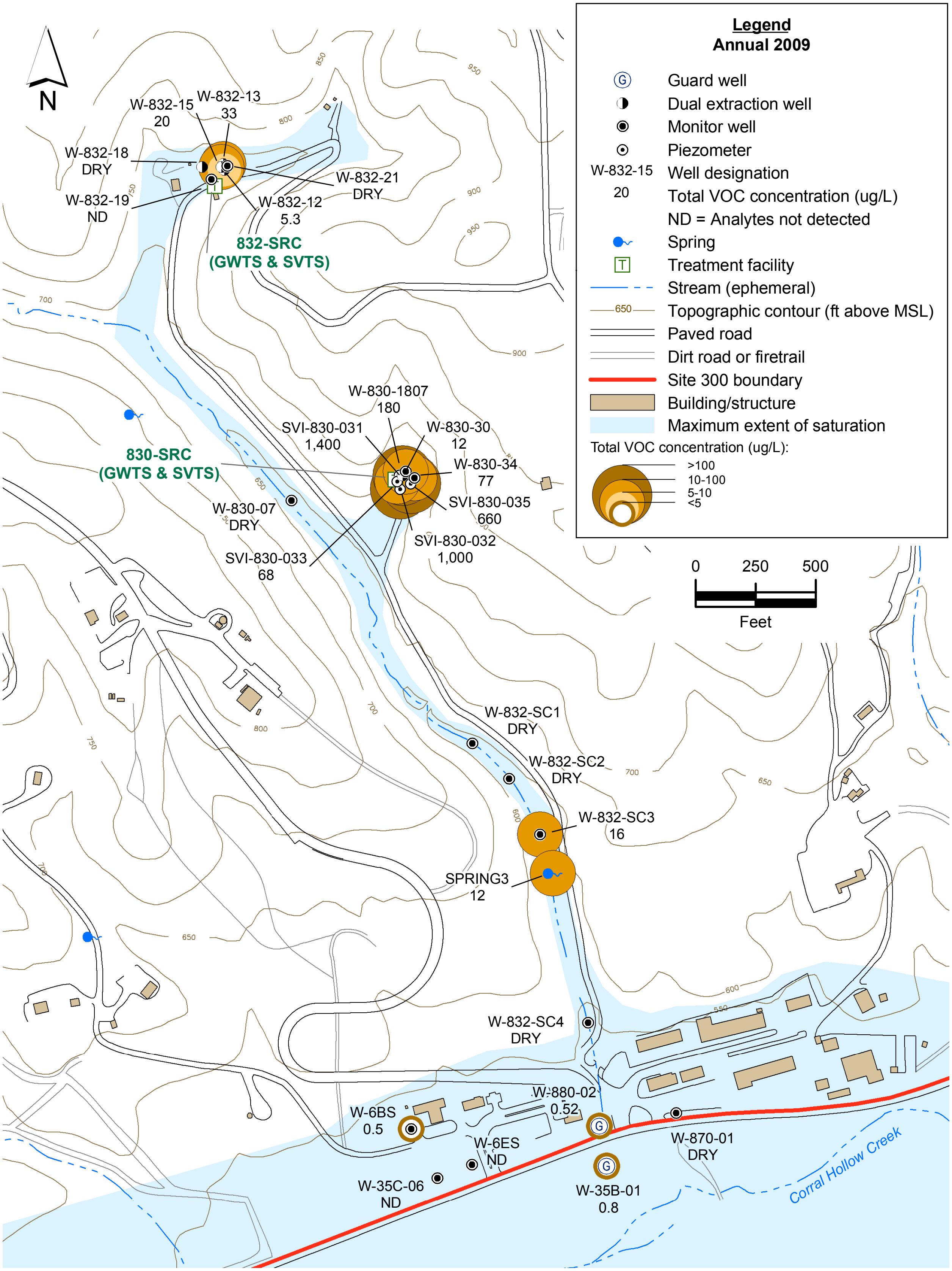

Figure 2.7-6. Building 832 Canyon OU map showing total VOC concentrations for the Qal/WBR HSU.

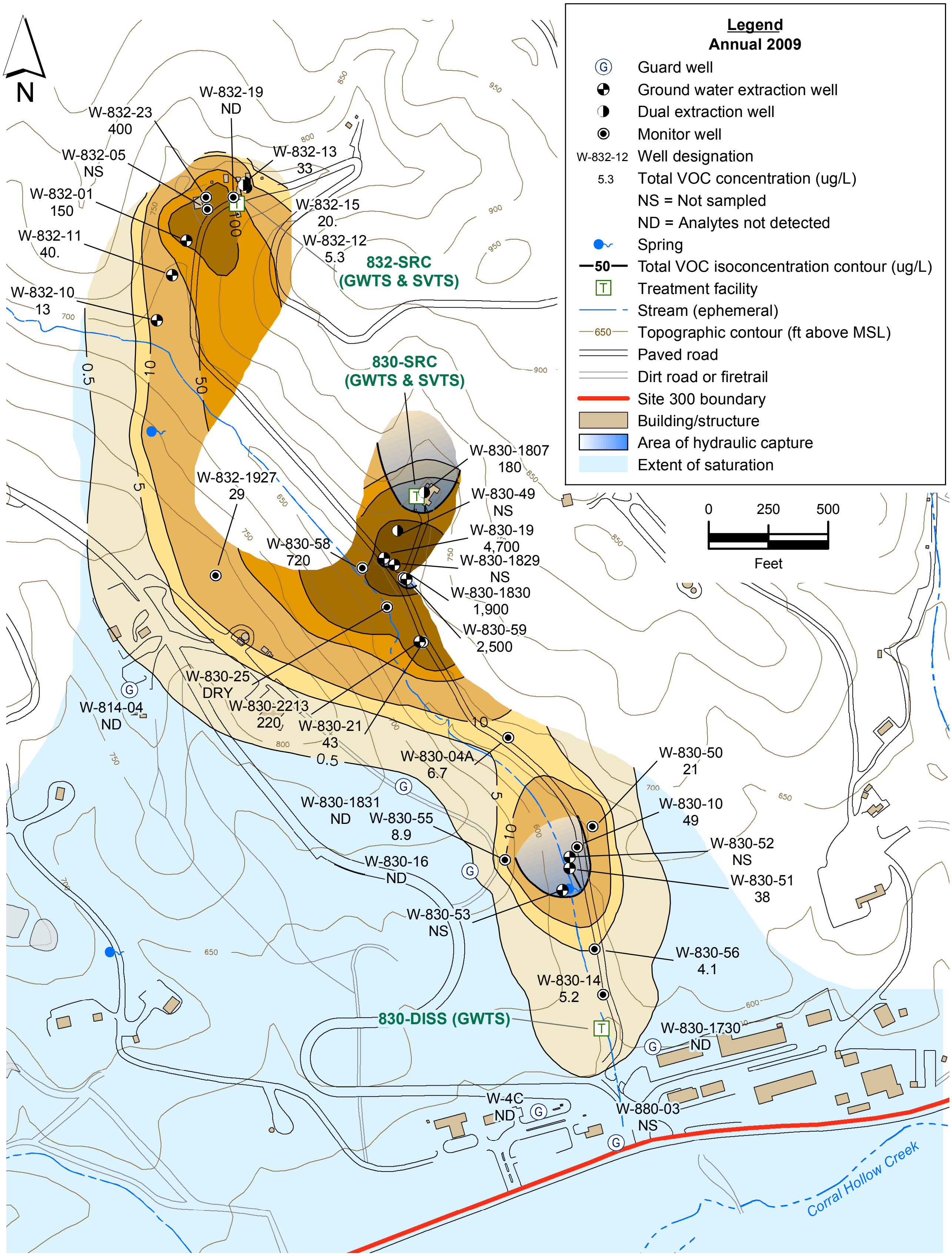

Figure 2.7-7. Building 832 Canyon OU total VOC isoconcentration contour map for the Tnsc$_{1b}$ HSU.

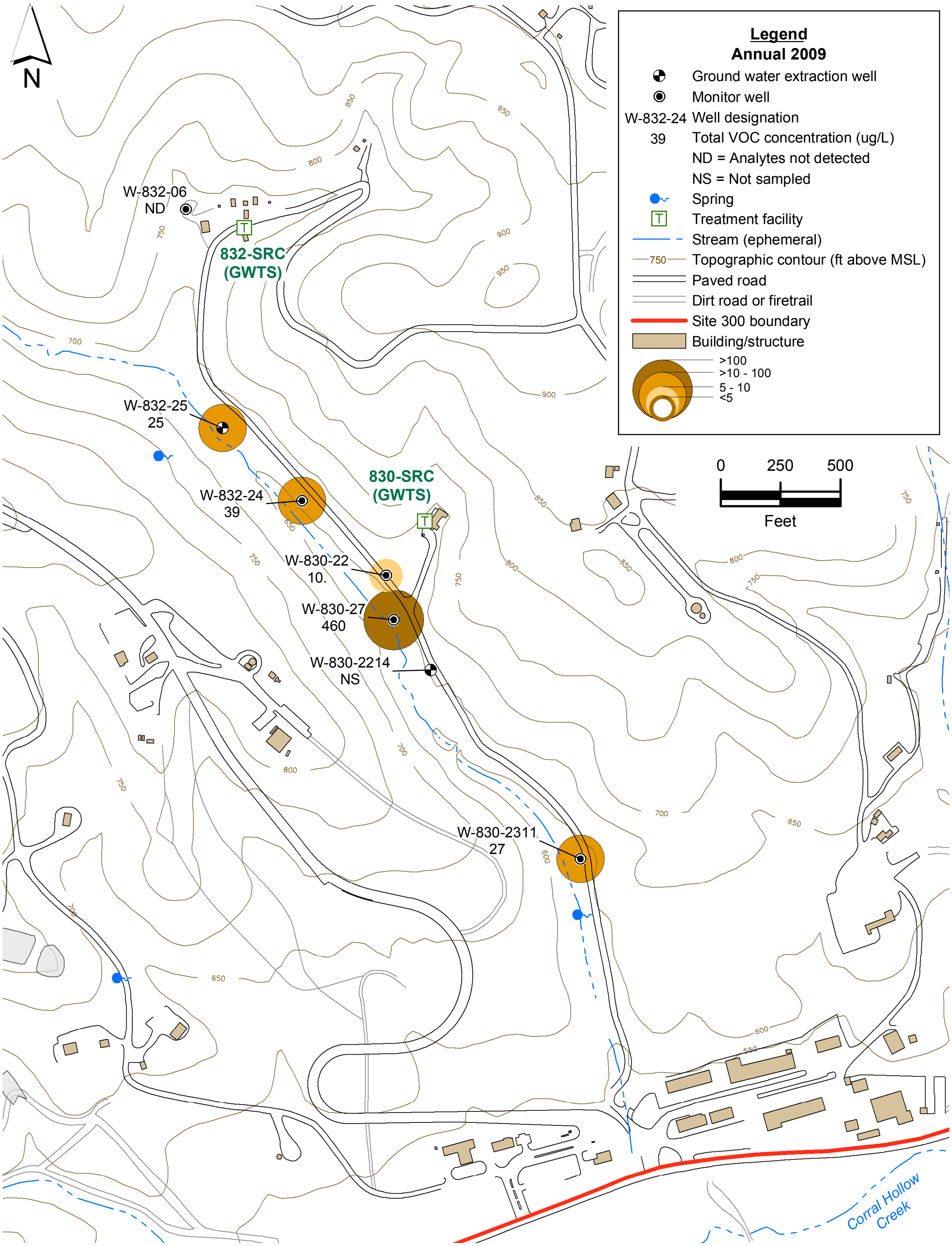

Figure 2.7-8. Building 832 Canyon OU map showing total VOC concentrations for the Tnsc$_{1a}$ HSU.

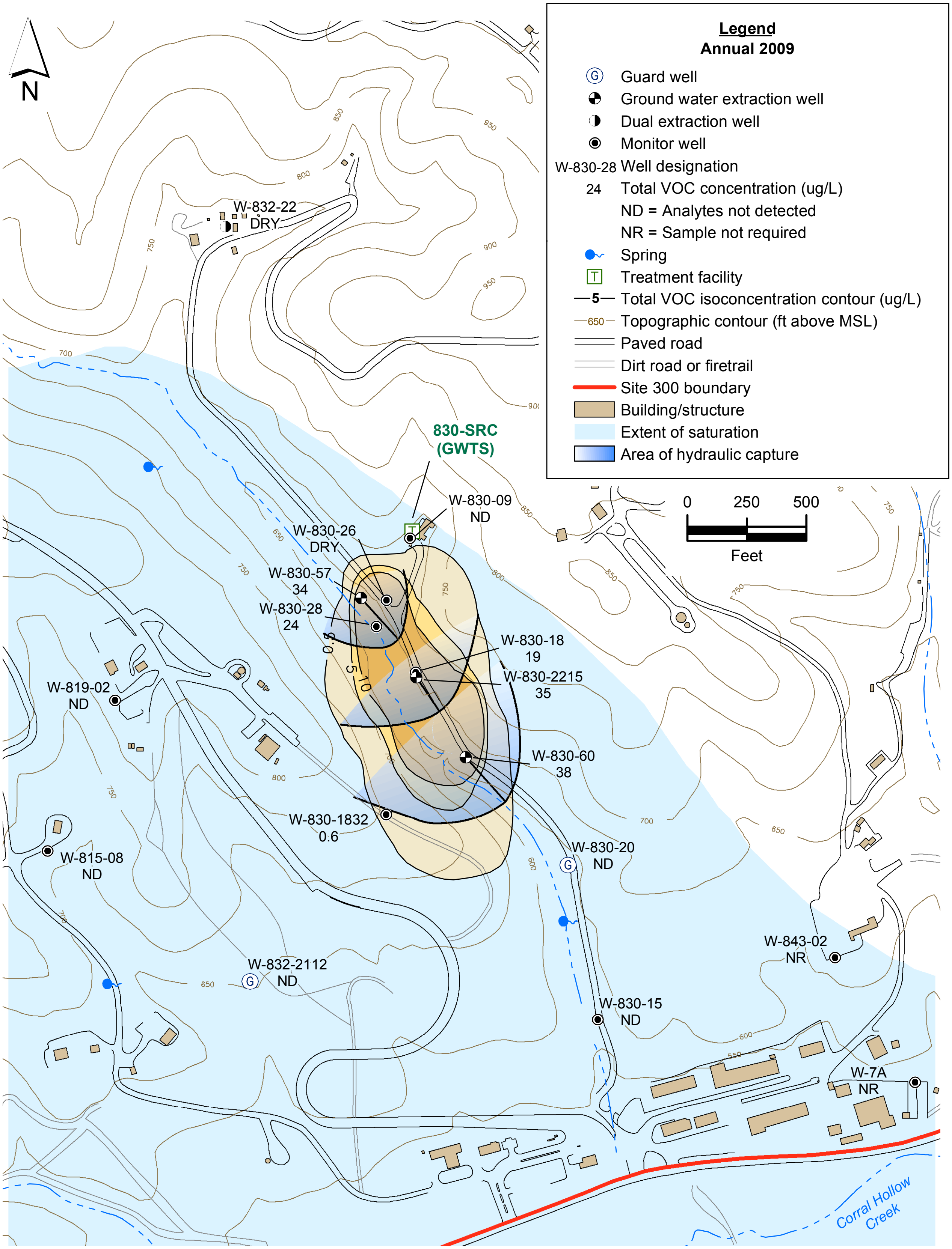

Figure 2.7-9. Building 832 Canyon OU total VOC isoconcentration contour map for the Upper Tnbs$_1$ HSU.

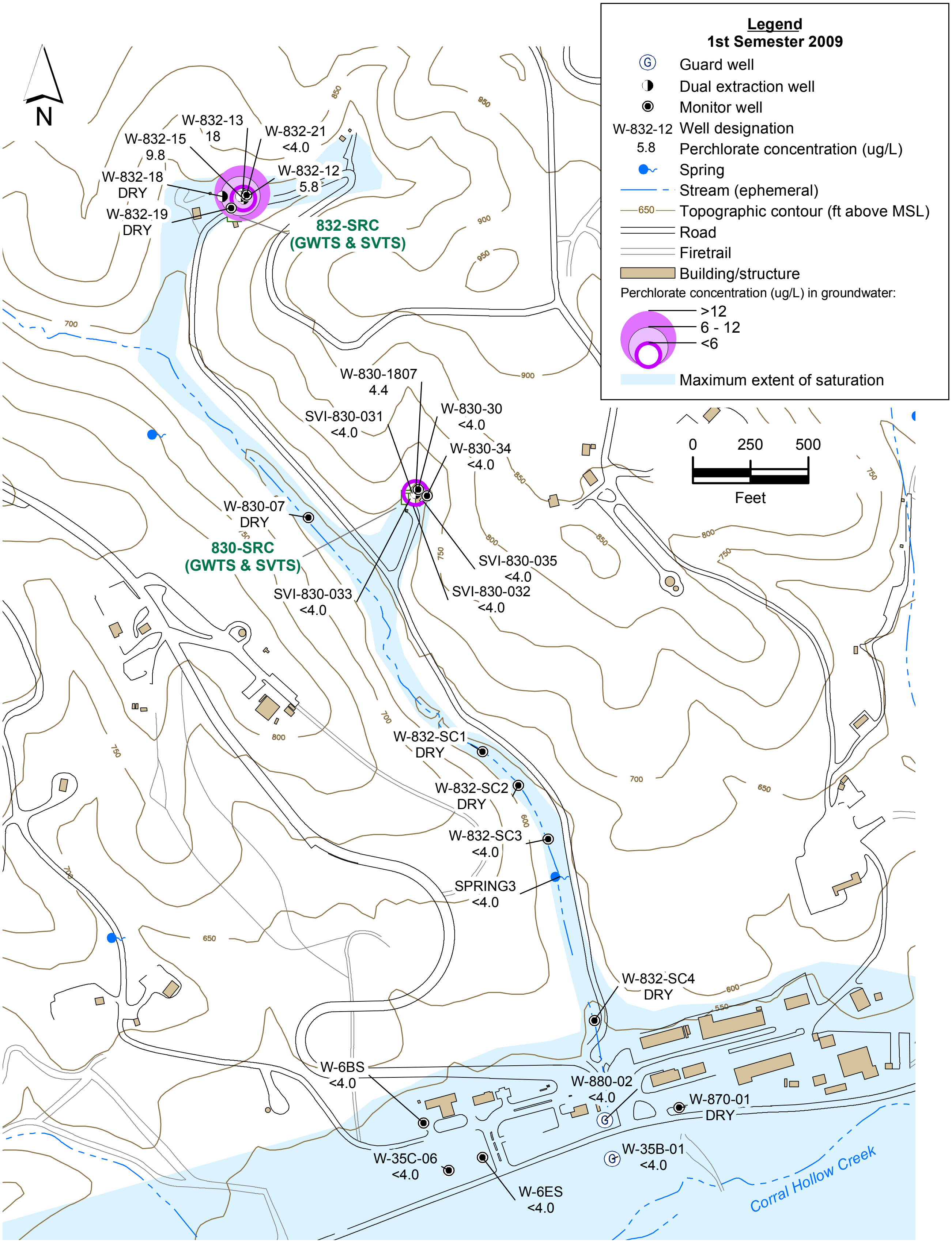

Figure 2.7-10. Building 832 Canyon OU map showing perchlorate concentrations for the Qal/WBR HSU.

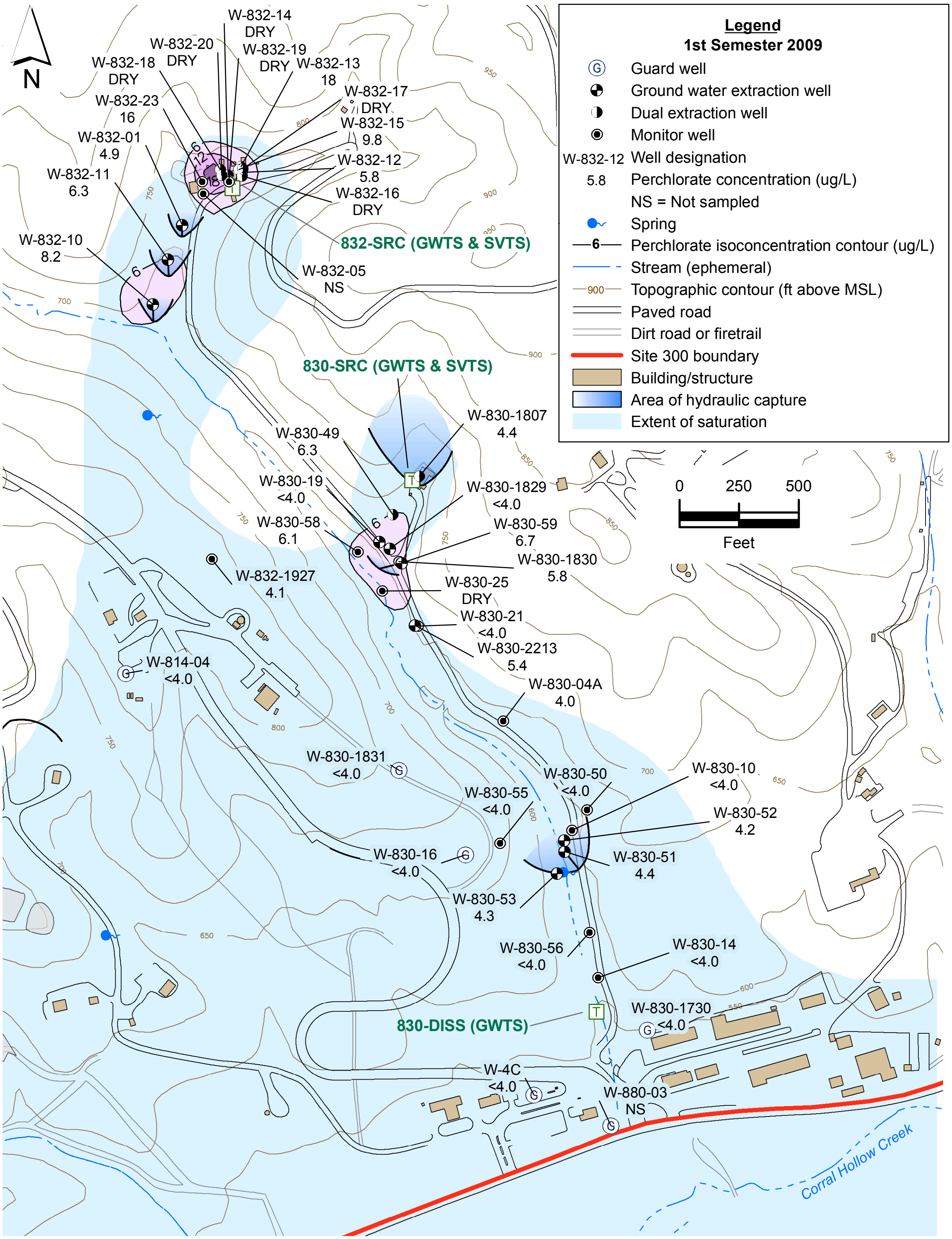

Figure 2.7-11. Building 832 Canyon OU perchlorate isoconcentration contour map for the Tnsc$_{1b}$ HSU.

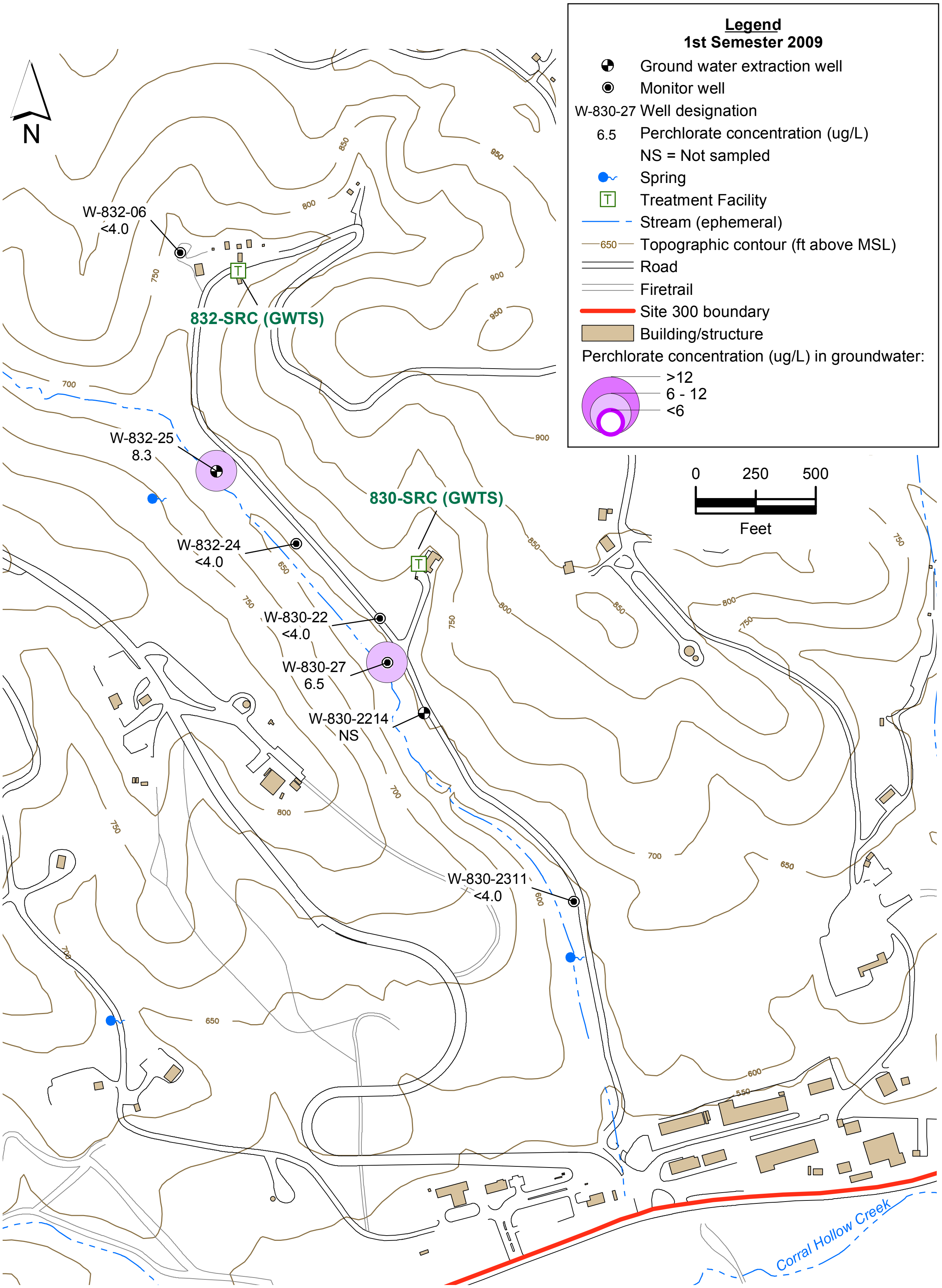

Figure 2.7-12. Building 832 Canyon OU map showing perchlorate concentrations for the $Tnsc_{1a}$ HSU.

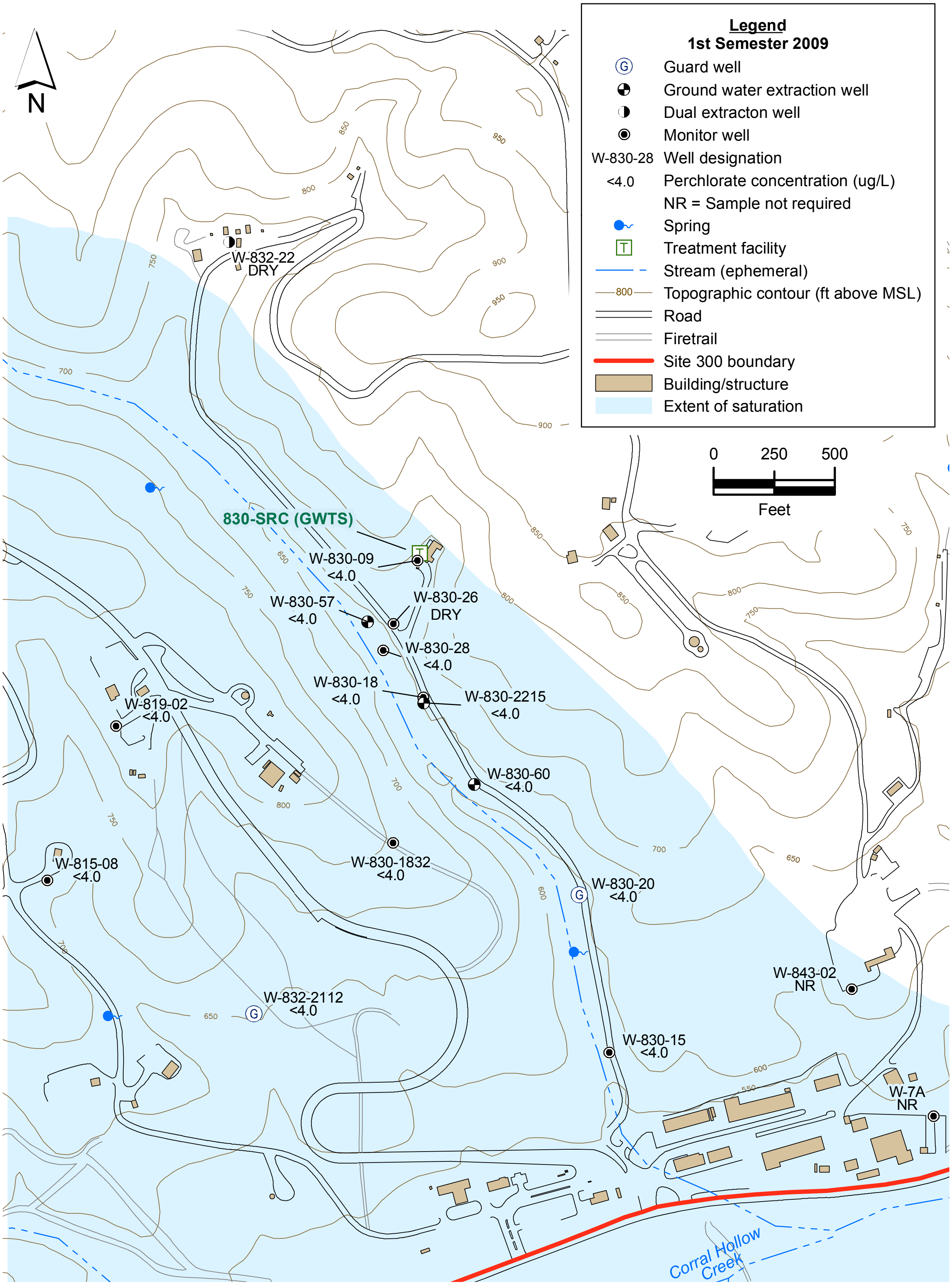

Figure 2.7-13. Building 832 Canyon OU map showing perchlorate concentrations for the Upper Tnbs$_1$ HSU.

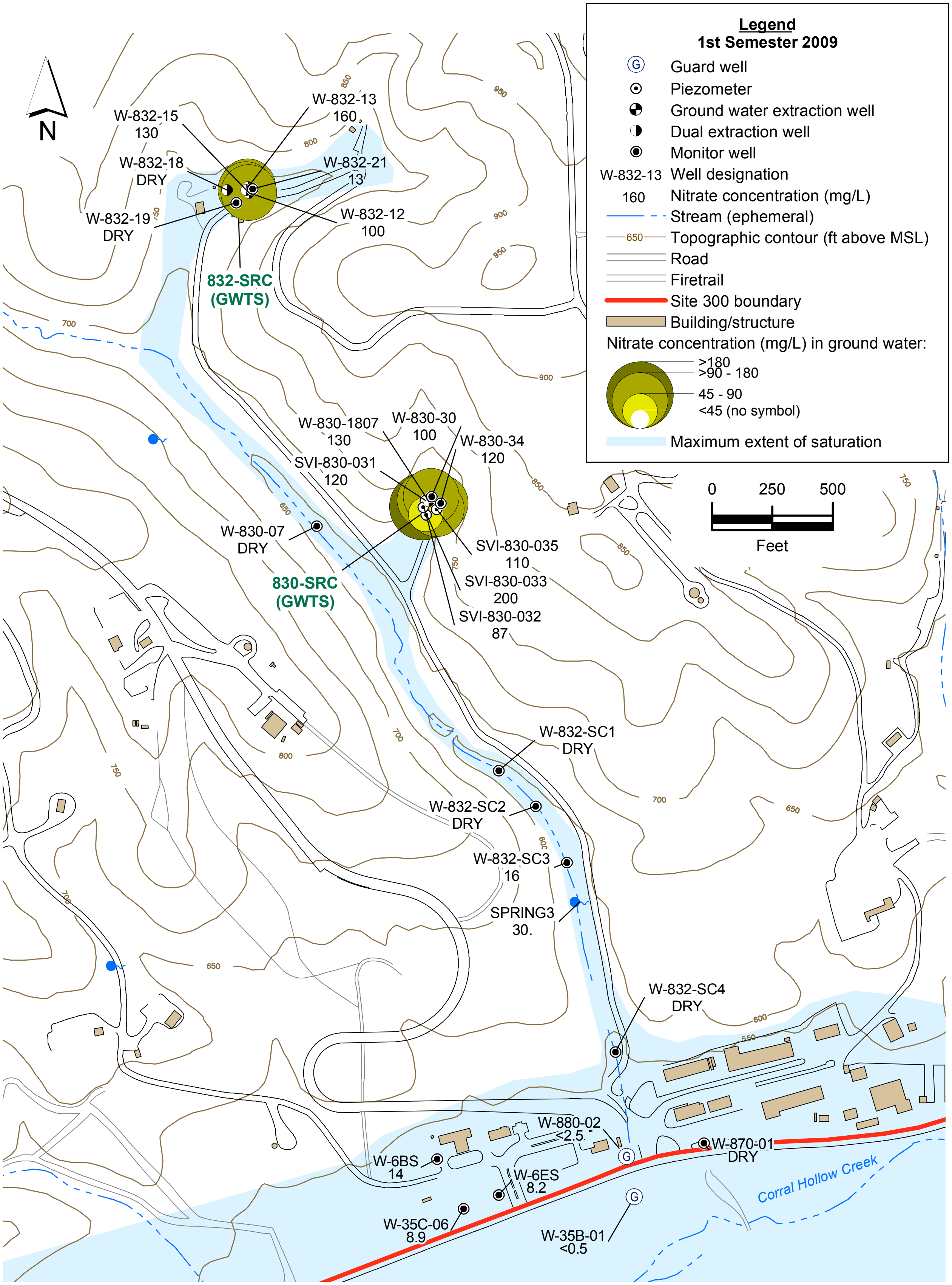

Figure 2.7-14. Building 832 Canyon OU map showing nitrate concentrations for the Qal/WBR HSU.

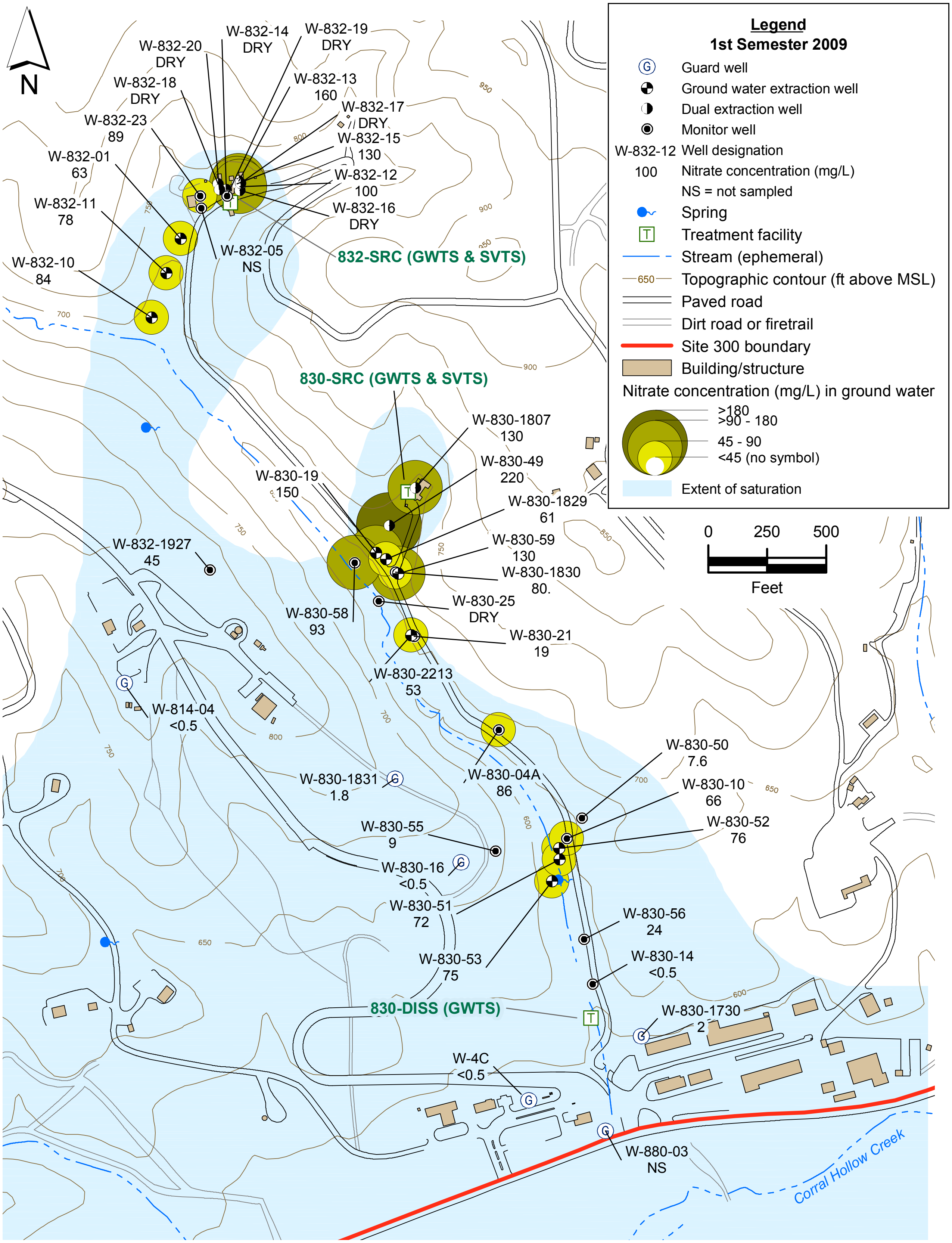

Figure 2.7-15. Building 832 Canyon OU map showing nitrate concentrations for the $Tnsc_{1b}$ HSU.

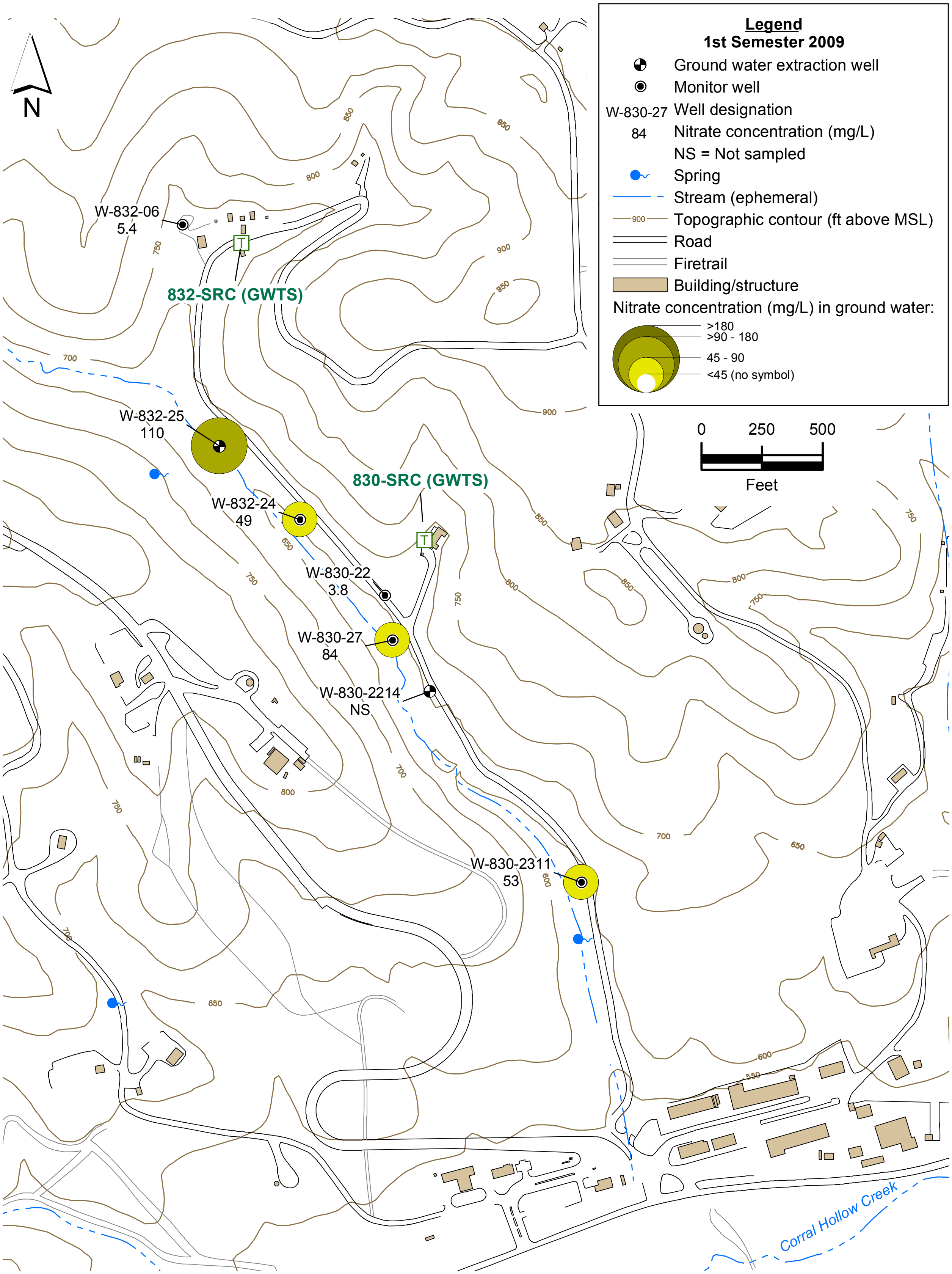

Figure 2.7-16. Building 832 Canyon OU map showing nitrate concentrations for the $Tnsc_{1a}$ HSU.

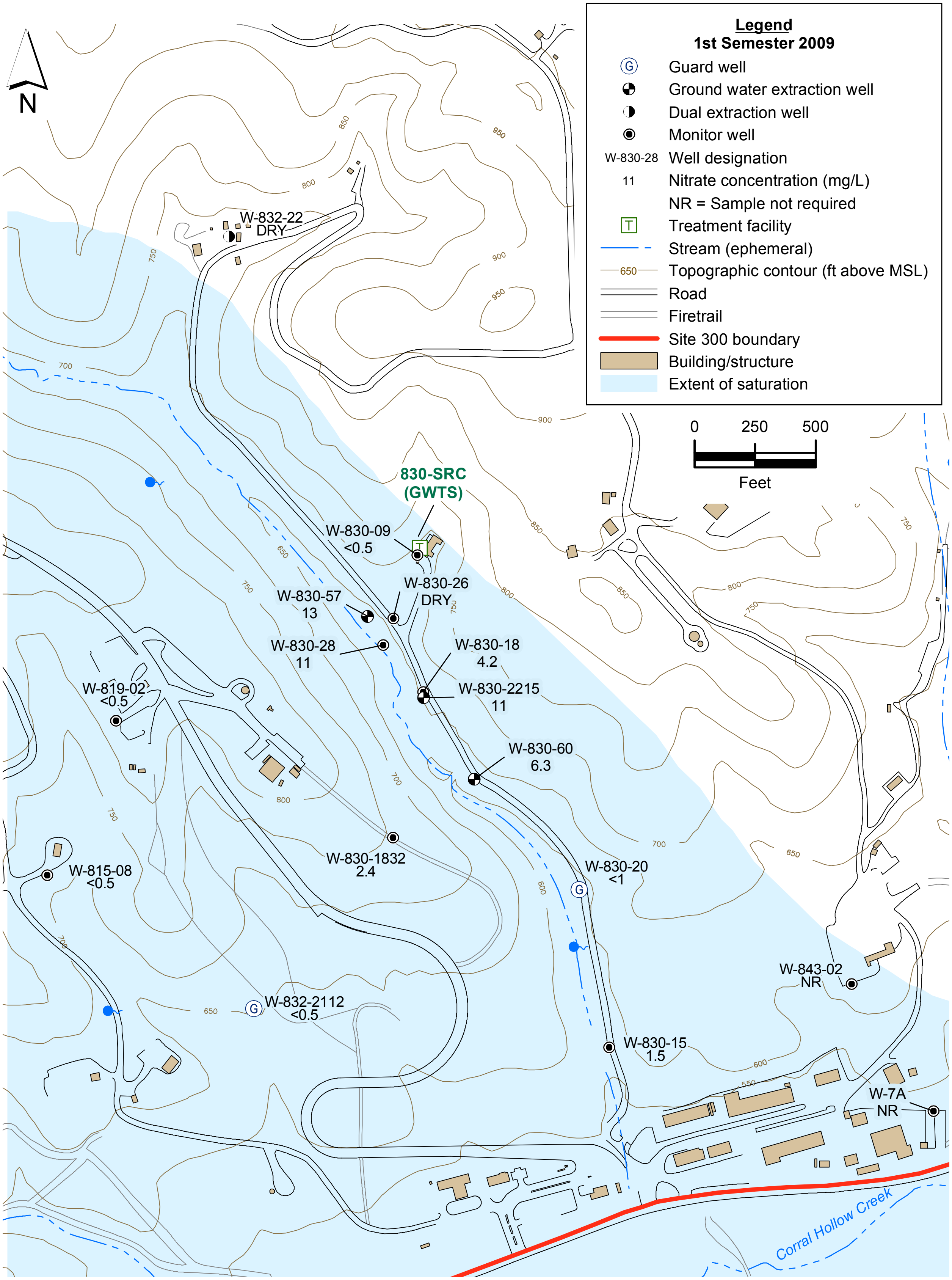

Figure 2.7-17. Building 832 Canyon OU map showing nitrate concentrations for the Upper $Tnbs_1$ HSU.

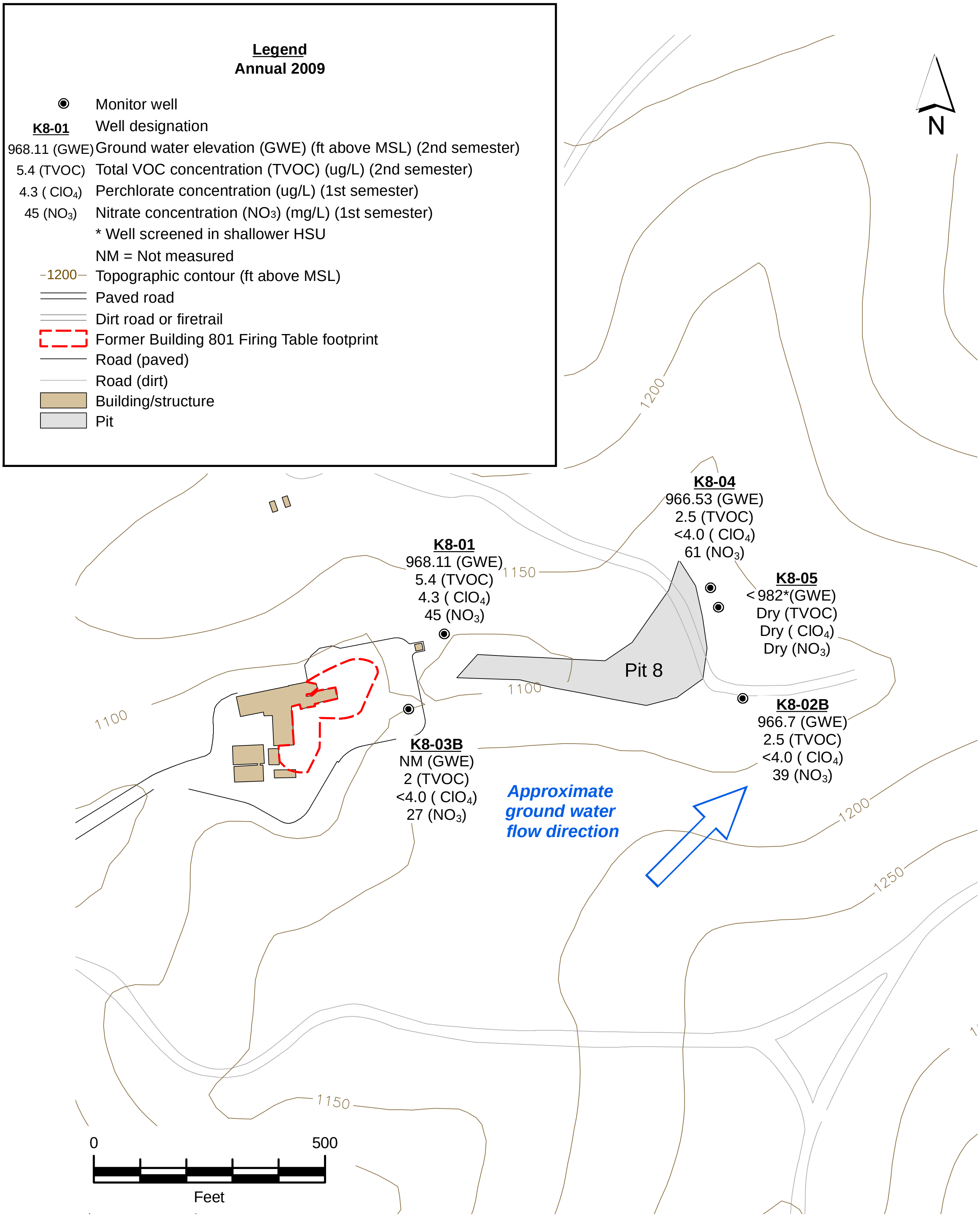

Figure 2.8-1. Building 801 Firing Table and Pit 8 Landfill site map showing monitor well locations, ground water elevations, and nitrate, perchlorate and total VOC concentrations, and ground water flow direction in the $Tnbs_1/Tnbs_0$ HSU.

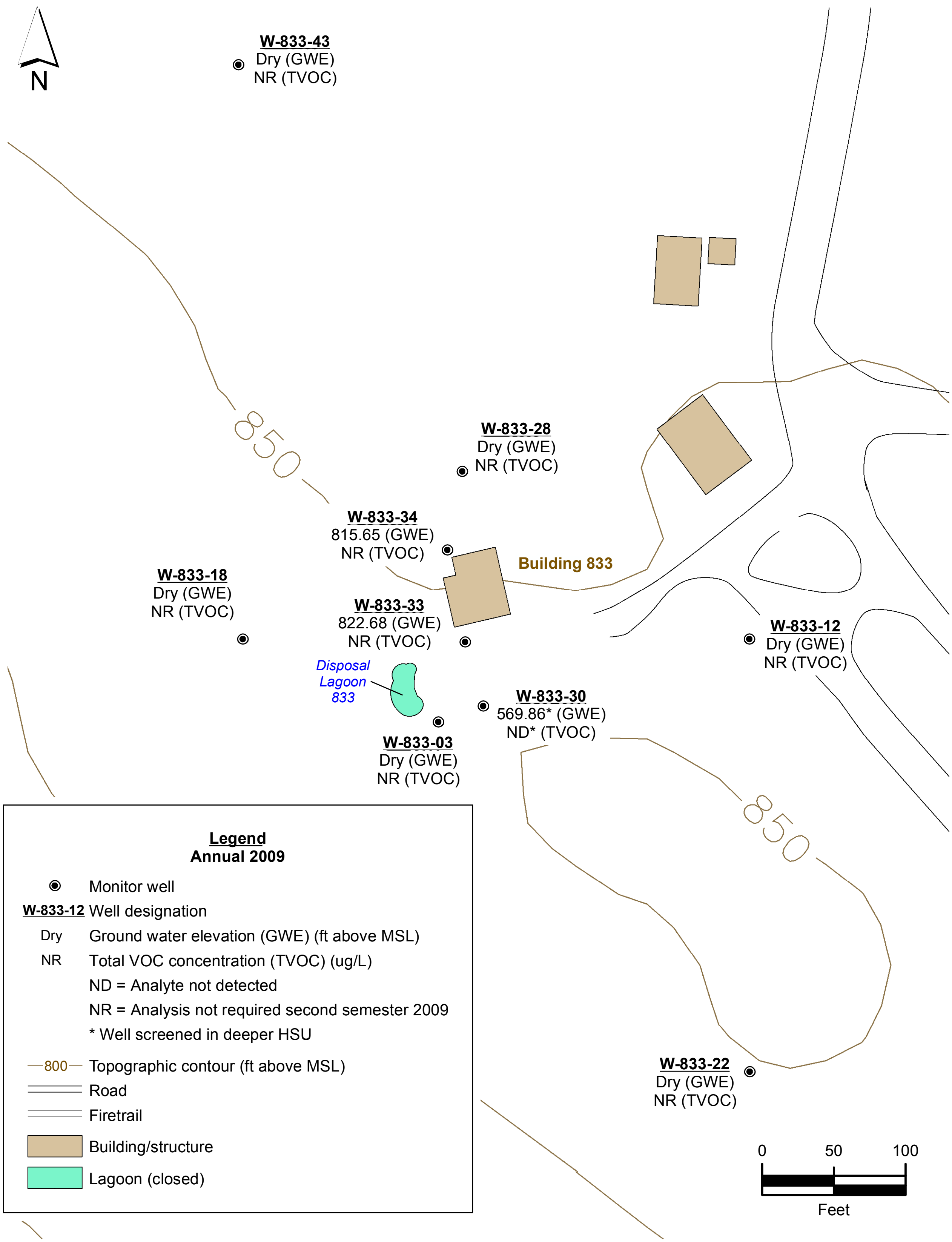

Figure 2.8-2. Building 833 site map showing monitor well locations, ground water elevations, and total VOC concentrations in the Tpsg HSU.

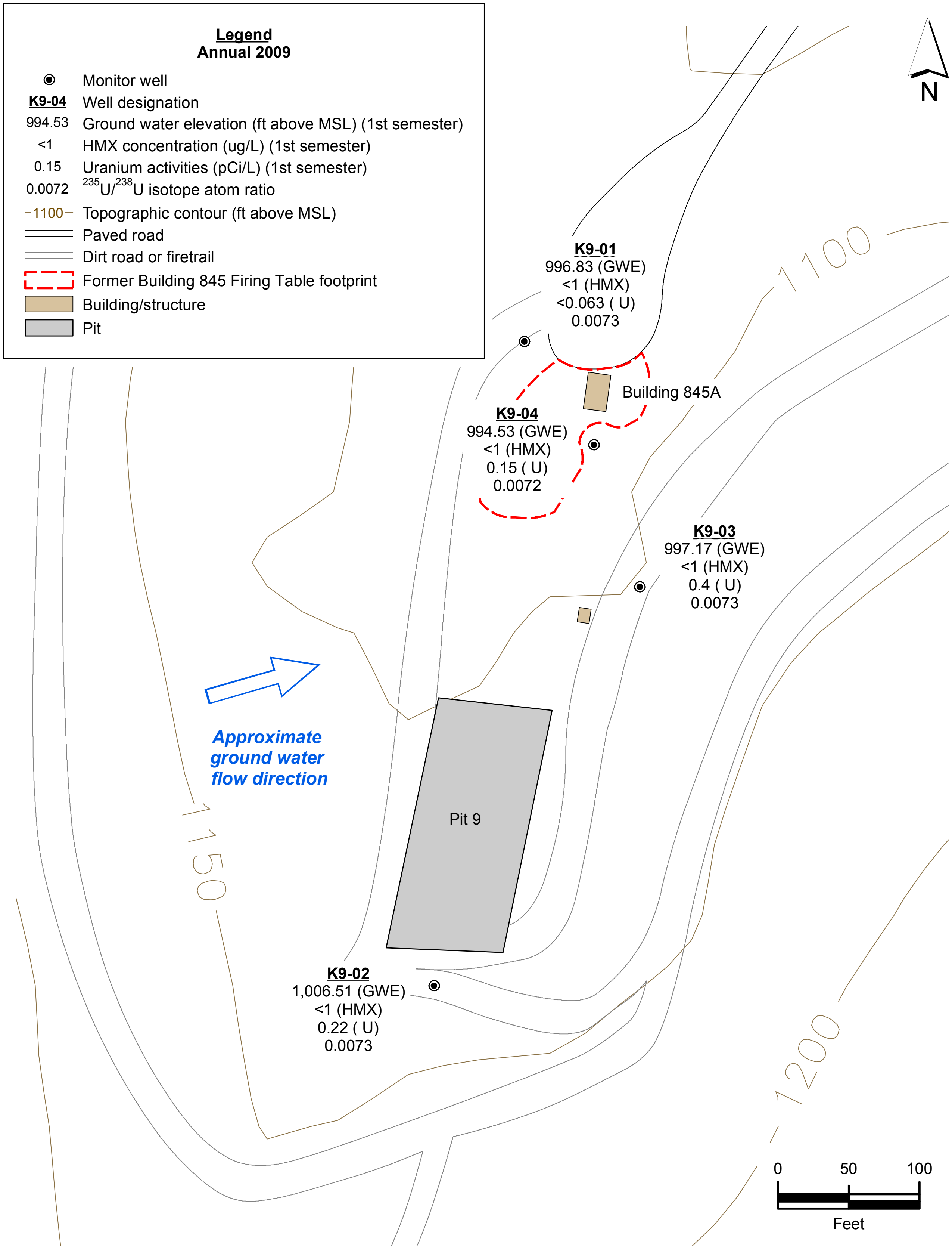

Figure 2.8-3. Building 845 Firing Table and Pit 9 Landfill site map showing monitor well locations, ground water elevations, ground water flow direction, and HMX concentrations, uranium activities and $^{235}U/^{238}U$ isotope atom ratios in the $Tnsc_0$ HSU.

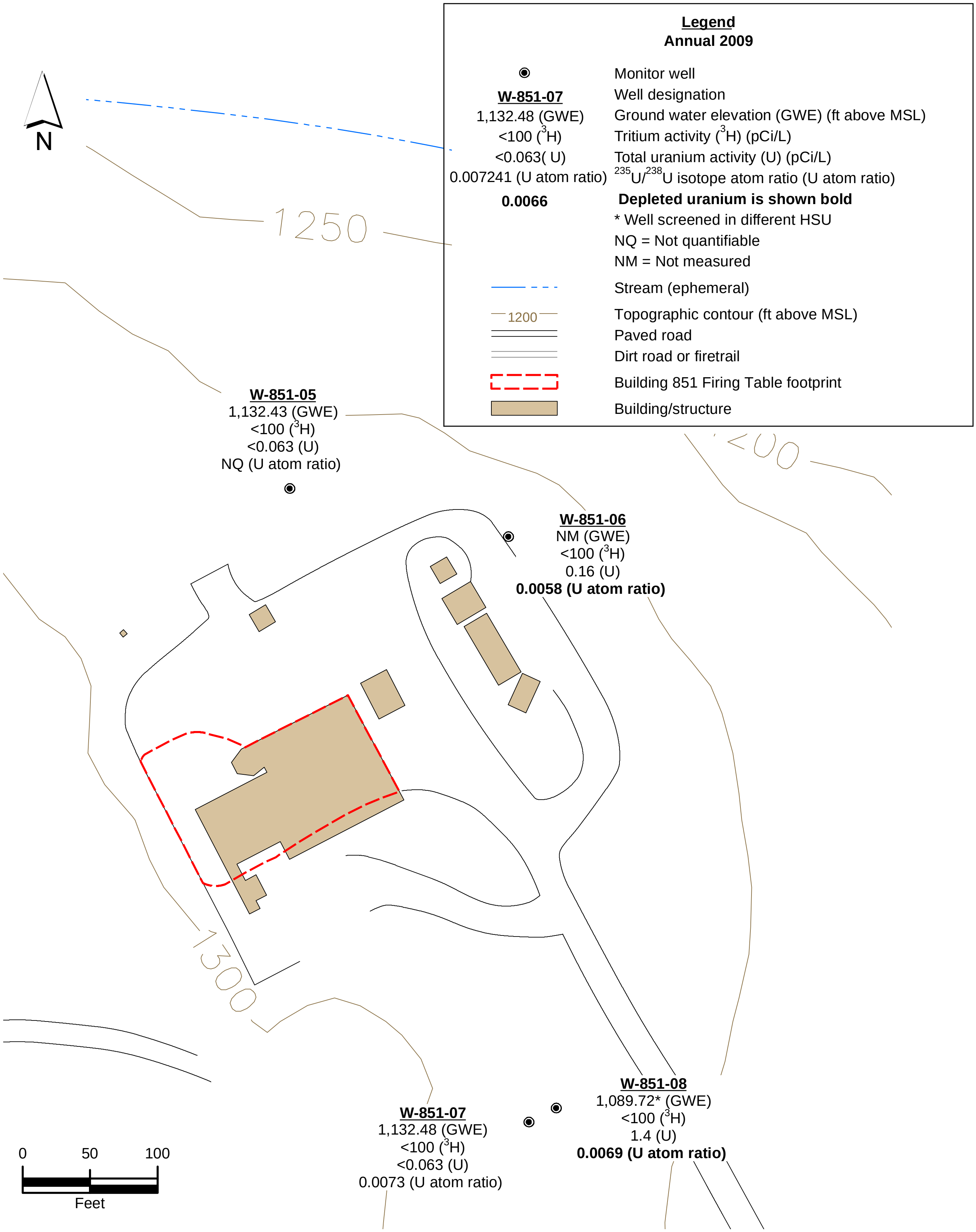

Figure 2.8-4. Building 851 Firing Table site map showing monitor well locations, ground water elevations, and tritium and uranium activities and ^{235}U/^{238}U isotope atom ratios in the Tmss HSU.

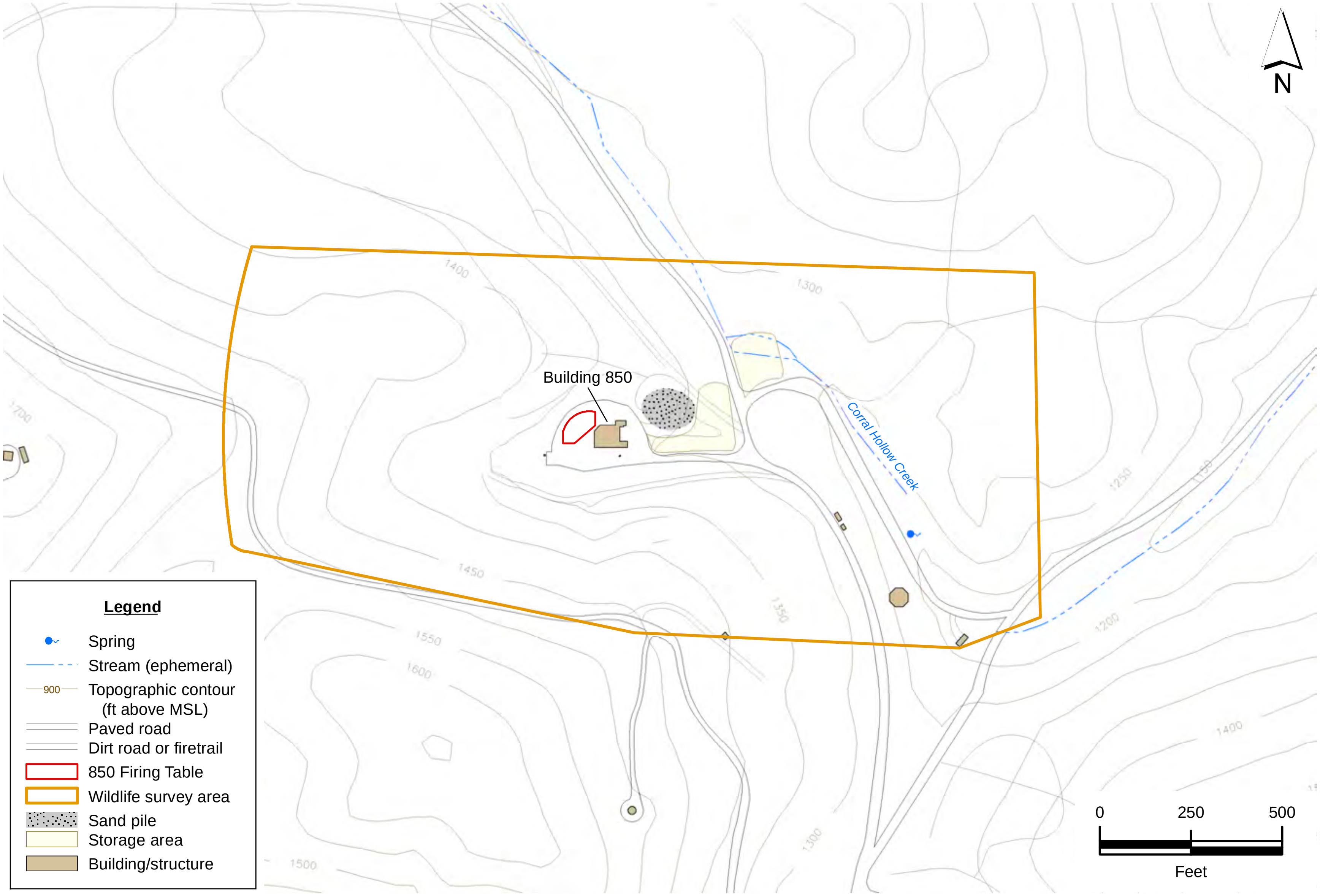

Figure 4.2-1. Area surveyed for important burrowing species at Building 850.

Tables

Acronyms and Abbreviations

4-ADNT	4-Amino-2,6-dinitrotoluene
815	Building 815
817	Building 817
829	Building 829
832	Building 832
834	Building 834
850	Building 850
854	Building 854
A	Annual
As N	As nitrogen
As $CaCO_3$	As calcium carbonate
B	Biennial
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
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
CFV2	Second vapor phase granular activated carbon filter effluent
CGSA	Central General Services Area
CHC	Corral hollow creek
CMP/CP	Compliance Monitoring Plan/Contingency Plan
CMR	Compliance Monitoring Report
CO_2	Carbon dioxide
COC	Contaminants of Concern
DCA	Dichloroethane
DCE	Dichloroethylene or dichloroethene
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
EGSA	Eastern General Services Area
EPA	Environmental Protection Agency
ERD	Environmental Restoration Department
ES&H	Environmental Safety and Health
EV	Effluent vapor
EW	Extraction well
ft	Feet
ft^3	Cubic feet
g	Gram(s)
GAC	Granular activated carbon
gal	Gallon(s)
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
ITS	Issues Tracking System
IV	Influent vapor
IW	Injection well
IWS	Integrated Work Sheet
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
Mgal	Millions of gallons
mg/L	Milligrams per liter
MNA	Monitored Natural Attenuation
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
ORP	Oxidation/reduction potential
OU	Operable unit
O&M	Operations and Maintenance
PCBs	Polychlorinated biphenyls
PCE	Tetrachloroethylene
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
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
SOP	Standard Operating Procedure
SOW	Statement of work
SRC	Source
SPR	Spring
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
TCA	Trichloroethane
THMs	trihalomethanes
TKEBS	Tetrakis (2-ethylbutyl) silane
TCE	Trichloroethylene
TDS	Total dissolved solids
TF	Treatment facility
TNB	Trinitrobenzene
TNT	Trinitrotoluene
$^{235}U/^{238}U$	Atom ratio of the isotopes uranium-235 and uranium-238
U.S.	United States
USFWS	U.S. Fish and Wildlife Service
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.
Upper $Tnbs_1$ = Upper member of the Neroly lower blue sandstone, above claystone marker bed.

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:THISO = Thorium isotopes performed by alpha spectrometry.
AS:UISO = Uranium isotopes performed by alpha spectrometry.
CMPTRIMET = Thorium, uranium, and lithium performed by EPA Method 200.7.
DWMETALS = Drinking water metals suite performed by various analytical methods.
E200.7:Ba = Barium performed by EPA Method 200.7.
E200.7:Cd = Cadmium performed by EPA Method 200.7.
E200.7:Cu = Copper performed by EPA Method 200.7.
E200.7:SI = Silica performed by EPA Method 200.7.
E200.7:Zn = Zinc performed by EPA Method 200.7.
E210.2 = Beryllium performed by EPA Method 210.2.
E218.2 = Chromium performed by EPA Method 218.2.
E239.2 = Lead performed by EPA Method 239.2.
E245.2 = Mercury performed by EPA Method 245.2.
E300.0:NO3 = Nitrate performed by EPA Method 300.0.
E300.0:PERC = Perchlorate performed by EPA Method 300.0.
E340.2 = Fluoride performed by EPA method 340.2.
E502.2 = Volatile organic compounds performed by EPA Method 502.2.
E601 = Halogenated volatile organic compounds performed by EPA Method 601.
E624 = Volatile organic compounds performed by EPA Method 624.
E8082A = Polychlorinated biphenyls performed by EPA Method 8082A.
E8260 = Volatile organic compounds performed by EPA Method 8260.
E8330 = 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.
E900 = Gross alpha and beta performed by EPA Method 900.
E906 = Tritium performed by EPA Method 906.
EM8015:DIESEL = Diesel range organic compounds performed by modified EPA Method 8015.
GENMIN = General minerals suite performed by various analytical methods.
ICMSRAD = Uranium isotopes performed by mass spectrometry (LLNL laboratory).
MS = Uranium isotopes performed by mass spectrometry (commercial laboratory).
KPA = Kinetic phosphorescence analysis.
MS:THISO = Thorium isotopes performed by mass spectrometry.
MS:UISO = Uranium isotopes performed by mass spectrometry.
T26METALS = Title 26 metals.
TBOS = Tetrabutylorthosilicate.

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, 2009 through December 31, 2009.

Treatment facility	Volume of ground water treated (thousands of gal)	Volume of soil vapor treated (thousands of ft^3)	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)
CGSA GWTS	981	NA	190	NA	NA	NA	NA
CGSA SVTS	NA	11,109	1,700	NA	NA	NA	NA
834 GWTS	126	NA	1,400	NA	35	NA	3.1
834 SVTS	NA	50,131	9,300	NA	NA	NA	NA
815-SRC GWTS	649	NA	13	16	230	130	NA
815-PRX GWTS	715	NA	82	17	230	NA	NA
815-DSB GWTS	1,470	NA	66	NA	NA	NA	NA
817-SRC GWTS	<1	NA	0	0.099	0.28	0.16	NA
817-PRX GWTS	463	NA	21	40	180	12	NA
829-SRC GWTS	<1	NA	0	0	0	NA	NA
854-SRC GWTS	739	NA	200	8.3	140	NA	NA
854-SRC SVTS	NA	19,535	1,100	NA	NA	NA	NA
854-PRX GWTS	493	NA	56	21	85	NA	NA
854-DIS GWTS	7	NA	1.0	0.14	0.67	NA	NA
832-SRC GWTS	24	NA	3.9	0.66	9.8	NA	NA
832-SRC SVTS	NA	519	20	NA	NA	NA	NA
830-SRC GWTS	1,619	NA	990	2.6	140	NA	NA
830-SRC SVTS	NA	11,557	900	NA	NA	NA	NA
830-DISS GWTS	1,559	NA	160	12	400	NA	NA
Total	8,846	92,850	16,000	120	1,500	140	3.1

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.
ft^3 = Cubic feet.
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.

Table Summ-2. Summary of cumulative remediation.

Treatment facility	Volume of ground water treated (thousands of gallons)	Volume of soil vapor treated (thousands of ft^3)	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)
EGSA GWTS	309,379	NA	7.6	NA	NA	NA	NA
CGSA GWTS	18,760	NA	25	NA	NA	NA	NA
CGSA SVTS	NA	120,546	73	NA	NA	NA	NA
834 GWTS	856	NA	42	NA	200	NA	9.5
834 SVTS	NA	258,823	320	NA	NA	NA	NA
815-SRC GWTS	4,547	NA	0.11	240	1,600	1.2	NA
815-PRX GWTS	6,084	NA	0.68	140	1,800	NA	NA
815-DSB GWTS	11,651	NA	0.41	NA	NA	NA	NA
817-SRC GWTS	29	NA	0	3.0	9.4	0.0050	NA
817-PRX GWTS	2,173	NA	0.089	200	750	0.057	NA
829-SRC GWTS	4	NA	0.00030	0.15	1.3	NA	NA
854-SRC GWTS	7,199	NA	5.0	140	1,400	NA	NA
854-SRC SVTS	NA	57,071	9.7	NA	NA	NA	NA
854-PRX GWTS	2,772	NA	0.61	120	480	NA	NA
854-DIS GWTS	28	NA	0.0036	0.42	2.0	NA	NA
832-SRC GWTS	598	NA	0.19	16	240	NA	NA
832-SRC SVTS	NA	20,192	2.0	NA	NA	NA	NA
830-SRC GWTS	4,823	NA	3.2	10	350	NA	NA
830-SRC SVTS	NA	36,819	50	NA	NA	NA	NA
830-PRXN GWTS	1,949	NA	0.26	NA	22	NA	NA
830-DISS GWTS	5,147	NA	1.3	39	1,200	NA	NA
Total	376,000	493,451	540	910	8,100	1.3	9.5

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.
ft^3 = Cubic feet.
g = Grams.
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.

Table 2.1-1. Central General Services Area (CGSA) volumes of ground water and soil vapor extracted and discharged, July 1, 2009 through December 31, 2009.

Treatment facility	Month	SVTS Operational hours	GWTS Operational hours	Volume of vapor extracted (thousands of ft^3)	Volume of ground water discharged (gal)
CGSA	July	408	432	873	39,548
	August	120	120	251	11,427
	September	696	696	1,398	159,939
	October	696	696	1,458	126,777
	November	624	624	1,265	103,576
	December	336	360	765	55,669
Total		2,880	2,928	6,010	496,936

Table 2.1-2. Central General Services Area OU VOCs in ground water 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-GWTS-E	7/14/09	<0.5	<0.5	<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-GWTS-E[a]	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
CGSA-GWTS-E	9/3/09	<0.5	<0.5	<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-GWTS-E	10/14/09	<0.5	<0.5	<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-GWTS-E	11/3/09	<0.5	<0.5	<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-GWTS-E	12/1/09	<0.5	<0.5	<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-GWTS-I	7/14/09	43	1.5	1.3	<0.5	<0.5	<0.5	<0.5	<0.5	0.71	<0.5	<0.5	<0.5	<0.5	<0.5
CGSA-GWTS-I	10/14/09	21	<0.5	0.53	<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 samples collected in August due to system shutdown.**

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

Table 2.1-2 (Cont.). Analyte detected but not reported in main table.

Location	Date	Detection frequency	1,2-DCE (total) (µg/L)
CGSA-GWTS-E	7/14/09	0 of 18	–
CGSA-GWTS-E[a]	–	–	–
CGSA-GWTS-E	9/3/09	0 of 18	–
CGSA-GWTS-E	10/14/09	0 of 18	–
CGSA-GWTS-E	11/3/09	0 of 18	–
CGSA-GWTS-E	12/1/09	0 of 18	–
CGSA-GWTS-I	7/14/09	1 of 18	1.5
CGSA-GWTS-I	10/14/09	0 of 18	–

Notes:

[a] **No samples collected in August due to system shutdown.**

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

Table 2.1-3. Central General Services Area OU nitrate in ground water treatment system influent and effluent.

Location	Date	Nitrate as NO3 (mg/L)
CGSA-GWTS-E	7/14/09	40
CGSA-GWTS-E[a]	–	–
CGSA-GWTS-E	9/3/09	29
CGSA-GWTS-E	10/14/09	41 D
CGSA-GWTS-E	11/3/09	44
CGSA-GWTS-E	12/1/09	41
CGSA-GWTS-I	7/14/09	45 D
CGSA-GWTS-I	10/14/09	42 D

Notes:

[a] No samples collected in August due to system shutdown.

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

Table 2.1-4. Central General Services Area OU treatment facility sampling and analysis plan.

Sample Location	Sample Identification	Parameter	Frequency
CGSA GWTS			
Influent Port	CGSA-I	VOCs	Quarterly
		pH	Quarterly
		Nitrate	Quarterly
Effluent Port	CGSA-E	VOCs	Monthly
		pH	Monthly
		Nitrate	Monthly
Vapor Samples	CGSA-CFI	VOCs	Weekly[a]
	CGSA -CFE	VOCs	Weekly[a]
	CGSA -CF2I	VOCs	Weekly[a]
CGSA SVE System			
Influent Vapor	CGSA-VI	No Monitoring Requirements	
Effluent Vapor	CGSA-VE	VOCs	Weekly[a]
Intermediate GAC	CGSA-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 2.1-5. Central General Services Area ground water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample Driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-35A-01	PTMW	Qal	B	CMP	E200.7:Cd	2	Y	
W-35A-01	PTMW	Qal	B	CMP	E239.2	2	Y	
W-35A-01	PTMW	Qal	S	CMP	E601	2	Y	
W-35A-01	PTMW	Qal	S	CMP	E601	4	Y	
W-35A-02	PTMW	Qal	B	CMP	E200.7:Zn	2	Y	
W-35A-02	PTMW	Qal	S	CMP	E601	2	Y	
W-35A-02	PTMW	Qal	S	CMP	E601	4	Y	
W-35A-03	PTMW	Qal	S	CMP	E601	2	Y	
W-35A-03	PTMW	Qal	S	CMP	E601	4	Y	
W-35A-04*	PTMW	Qal	B	CMP	E200.7:Cu	2	Y	
W-35A-04*	PTMW	Qal	S	CMP	E601	2	Y	
W-35A-04*	PTMW	Qal		WGMG	E502.2	4	Y	
W-35A-04*	PTMW	Qal	S	CMP	E601	4	Y	
W-35A-05	PTMW	Tnbs$_2$	B	CMP	E239.2	2	Y	
W-35A-05	PTMW	Tnbs$_2$	S	CMP	E601	2	Y	
W-35A-05	PTMW	Tnbs$_2$	S	CMP	E601	4	Y	
W-35A-06	PTMW	Qal	S	CMP	E601	2	Y	
W-35A-06	PTMW	Qal	S	CMP	E601	4	Y	
W-35A-07	PTMW	Tnbs$_1$	S	CMP	E601	2	Y	
W-35A-07	PTMW	Tnbs$_1$	S	CMP	E601	4	Y	
W-35A-08	GW	Tnbs$_2$	Q	CMP	E601	1	Y	
W-35A-08	GW	Tnbs$_2$	Q	CMP	E601	2	Y	
W-35A-08	GW	Tnbs$_2$	Q	CMP	E601	3	Y	
W-35A-08	GW	Tnbs$_2$	Q	CMP	E601	4	Y	
W-35A-09	PTMW	Tnbs$_2$	S	CMP	E601	2	Y	
W-35A-09	PTMW	Tnbs$_2$	S	CMP	E601	4	Y	
W-35A-10	PTMW	Tnbs$_2$	S	CMP	E601	2	Y	
W-35A-10	PTMW	Tnbs$_2$	S	CMP	E601	4	Y	
W-35A-11	PTMW	Tnbs$_1$	S	CMP	E601	2	Y	
W-35A-11	PTMW	Tnbs$_1$	S	CMP	E601	4	Y	
W-35A-12	PTMW	Tnbs$_1$	S	CMP	E601	2	Y	
W-35A-12	PTMW	Tnbs$_1$	S	CMP	E601	4	Y	
W-35A-13	PTMW	Tnbs$_1$	S	CMP	E601	2	Y	
W-35A-13	PTMW	Tnbs$_1$	S	CMP	E601	4	Y	
W-35A-14	GW	Tnbs$_2$	Q	CMP	E601	1	Y	
W-35A-14	GW	Tnbs$_2$	Q	CMP	E601	2	Y	
W-35A-14	GW	Tnbs$_2$	Q	CMP	E601	3	Y	
W-35A-14	GW	Tnbs$_2$	Q	CMP	E601	4	Y	
W-7A	PTMW	Tnbs$_1$	B	CMP	E239.2	2	N	Inoperable pump.
W-7A	PTMW	Tnbs$_1$	S	CMP	E601	2	N	Inoperable pump.
W-7A	PTMW	Tnbs$_1$	S	CMP	E601	4	Y	
W-7B	PTMW	Tnbs$_1$	S	CMP	E601	2	Y	
W-7B	PTMW	Tnbs$_1$	S	CMP	E601	4	Y	
W-7C	PTMW	Tnbs$_1$	S	CMP	E601	2	N	Inoperable pump.
W-7C	PTMW	Tnbs$_1$	S	CMP	E601	4	N	Inoperable pump.
W-7E*	PTMW	Tnbs$_1$	S	CMP	E601	4	Y	
W-7E*	PTMW	Tnbs$_1$	S	CMP	E601	2	Y	
W-7ES*	PTMW	Qal	S	CMP	E601	2	Y	
W-7ES*	PTMW	Qal	S	CMP	E601	4	Y	
W-7F	PTMW	Tnsc$_1$	S	CMP	E601	2	Y	
W-7F	PTMW	Tnsc$_1$	S	CMP	E601	4	Y	
W-7G	PTMW	Tnbs$_1$	S	CMP	E601	2	Y	
W-7G	PTMW	Tnbs$_1$	S	CMP	E601	4	Y	
W-7H	PTMW	Qal	S	CMP	E601	2	Y	
W-7H	PTMW	Qal	S	CMP	E601	4	Y	

Table 2.1-5. Central General Services Area ground water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample Driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-7I	EW	$Tnbs_2$	B	CMP-TF	E245.2	4	N	CGSA extraction well. Insufficient water to collect sample.
W-7I	EW	$Tnbs_2$	S	CMP-TF	E601	2	N	CGSA extraction well. Insufficient water to collect sample.
W-7I	EW	$Tnbs_2$	S	CMP-TF	E601	4	N	CGSA extraction well. Insufficient water to collect sample.
W-7J	PTMW	$Tnbs_2$	S	CMP	E601	2	Y	
W-7J	PTMW	$Tnbs_2$	S	CMP	E601	4	Y	
W-7K	PTMW	$Tnbs_1$	S	CMP	E601	2	Y	
W-7K	PTMW	$Tnbs_1$	S	CMP	E601	4	Y	
W-7L	PTMW	$Tnbs_1$	B	CMP	E200.7:Cu	2	Y	
W-7L	PTMW	$Tnbs_1$	S	CMP	E601	2	Y	
W-7L	PTMW	$Tnbs_1$	S	CMP	E601	4	Y	
W-7M	PTMW	$Tnbs_1$	S	CMP	E601	2	Y	
W-7M	PTMW	$Tnbs_1$	S	CMP	E601	4	Y	
W-7N	PTMW	$Tnbs_1$	B	CMP	E245.2	2	Y	
W-7N	PTMW	$Tnbs_1$	S	CMP	E601	2	Y	
W-7N	PTMW	$Tnbs_1$	S	CMP	E601	4	Y	
W-7O	EW	Qal	B	CMP-TF	E200.7:Cu	2	Y	
W-7O	EW	Qal	B	CMP-TF	E200.7:Zn	2	Y	
W-7O	EW	Qal	S	CMP-TF	E601	1	Y	CGSA extraction well.
W-7O	EW	Qal		DIS	E601	2	Y	CGSA extraction well.
W-7O	EW	Qal	S	CMP-TF	E601	3	Y	CGSA extraction well.
W-7P	EW	$Tnbs_1$	S	CMP-TF	E601	2	N	CGSA extraction well. Insufficient water to collect sample.
W-7P	EW	$Tnbs_1$	S	CMP-TF	E601	4	N	CGSA extraction well. Insufficient water to collect sample.
W-7PS*	PTMW	Qal	Q	CMP	E601	1	Y	
W-7PS*	PTMW	Qal	Q	CMP	E601	2	Y	
W-7PS*	PTMW	Qal	Q	CMP	E601	3	Y	
W-7PS*	PTMW	Qal	Q	CMP	E601	4	Y	
W-7Q	PTMW	$Tnbs_2$		DIS	E601	1	Y	
W-7Q	PTMW	$Tnbs_2$		DIS	E601	2	Y	
W-7Q	PTMW	$Tnbs_2$		DIS	E601	3	Y	
W-7Q	PTMW	$Tnbs_2$		DIS	E601	4	Y	
W-7R	EW	Qal		DIS	E601	1	Y	CGSA extraction well.
W-7R	EW	Qal	S	CMP-TF	E601	2	Y	CGSA extraction well.
W-7R	EW	Qal		DIS	E601	3	Y	CGSA extraction well.
W-7R	EW	Qal	S	CMP-TF	E601	4	Y	CGSA extraction well.
W-7S	PTMW	Qal		DIS	E601	1	Y	
W-7S	PTMW	Qal		DIS	E601	2	Y	
W-7S	PTMW	Qal		DIS	E601	3	Y	
W-7S	PTMW	Qal		DIS	E601	4	Y	
W-7T	PTMW	Qal		DIS	E601	1	Y	
W-7T	PTMW	Qal		DIS	E601	2	Y	
W-7T	PTMW	Qal		DIS	E601	3	Y	
W-7T	PTMW	Qal		DIS	E601	4	Y	
W-843-01	PTMW	$Tnbs_1$	S	CMP	E601	2	Y	
W-843-01	PTMW	$Tnbs_1$	S	CMP	E601	4	Y	
W-843-02	PTMW	$Tnbs_1$	S	CMP	E601	2	Y	
W-843-02	PTMW	$Tnbs_1$	S	CMP	E601	4	Y	

Table 2.1-5. Central General Services Area ground water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample Driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-872-01	PTMW	$Tnbs_2$	B	CMP	E200.7:Cu	2	Y	
W-872-01	PTMW	$Tnbs_2$	B	CMP	E239.2	2	Y	
W-872-01	PTMW	$Tnbs_2$	S	CMP	E601	2	Y	
W-872-01	PTMW	$Tnbs_2$	S	CMP	E601	4	Y	
W-872-02	EW	$Tnbs_2$	S	CMP-TF	E601	2	N	CGSA extraction well. Insufficient water to collect sample.
W-872-02	EW	$Tnbs_2$	S	CMP-TF	E601	4	N	CGSA extraction well. Insufficient water to collect sample.
W-873-01	PTMW	$Tnbs_1$	S	CMP	E601	2	Y	
W-873-01	PTMW	$Tnbs_1$	S	CMP	E601	4	Y	
W-873-02	PTMW	$Tnbs_2$	S	CMP	E601	2	N	Inoperable pump.
W-873-02	PTMW	$Tnbs_2$	S	CMP	E601	4	N	Inoperable pump.
W-873-03	PTMW	$Tnsc_1$	S	CMP	E601	2	Y	
W-873-03	PTMW	$Tnsc_1$	S	CMP	E601	4	Y	
W-873-04	PTMW	$Tnsc_1$	B	CMP	E239.2	2	Y	
W-873-04	PTMW	$Tnsc_1$	S	CMP	E601	2	Y	
W-873-04	PTMW	$Tnsc_1$	S	CMP	E601	4	Y	
W-873-06	PTMW	$Tnbs_2$	B	CMP	E200.7:Cd	2	Y	
W-873-06	PTMW	$Tnbs_2$	S	CMP	E601	2	Y	
W-873-06	PTMW	$Tnbs_2$	S	CMP	E601	4	Y	
W-873-07	EW	$Tnbs_2$	S	CMP-TF	E601	2	Y	CGSA extraction well.
W-873-07	EW	$Tnbs_2$		DIS	E601	3	Y	CGSA extraction well.
W-873-07	EW	$Tnbs_2$	S	CMP-TF	E601	4	Y	CGSA extraction well.
W-875-01	PTMW	$Tnbs_2$	B	CMP	E200.7:Cd	2	Y	
W-875-01	PTMW	$Tnbs_2$	B	CMP	E200.7:Cu	2	Y	
W-875-01	PTMW	$Tnbs_2$	B	CMP	E200.7:Zn	2	Y	
W-875-01	PTMW	$Tnbs_2$	B	CMP	E239.2	2	Y	
W-875-01	PTMW	$Tnbs_2$	S	CMP	E601	2	Y	
W-875-01	PTMW	$Tnbs_2$	S	CMP	E601	4	Y	
W-875-02	PTMW	$Tnsc_1$	S	CMP	E601	2	Y	
W-875-02	PTMW	$Tnsc_1$	S	CMP	E601	4	Y	
W-875-03	PTMW	$Tnbs_2$	S	CMP	E601	2	N	Dry.
W-875-03	PTMW	$Tnbs_2$	S	CMP	E601	4	Y	
W-875-04	PTMW	$Tnbs_2$	B	CMP	E239.2	2	Y	
W-875-04	PTMW	$Tnbs_2$	S	CMP	E601	2	Y	
W-875-04	PTMW	$Tnbs_2$	S	CMP	E601	4	Y	
W-875-05	PTMW	$Tnsc_1$	S	CMP	E601	2	Y	
W-875-05	PTMW	$Tnsc_1$	S	CMP	E601	4	Y	
W-875-06	PTMW	$Tnsc_1$	S	CMP	E601	2	Y	
W-875-06	PTMW	$Tnsc_1$	S	CMP	E601	4	Y	
W-875-07	EW	$Tnbs_2$	B	CMP-TF	E239.2	2	Y	CGSA extraction well.
W-875-07	EW	$Tnbs_2$	S	CMP-TF	E601	2	Y	CGSA extraction well.
W-875-07	EW	$Tnbs_2$		DIS	E601	3	Y	CGSA extraction well.
W-875-07	EW	$Tnbs_2$	S	CMP-TF	E601	4	N	CGSA extraction well. Insufficient water to collect sample.
W-875-08	EW	$Tnbs_2$		DIS	E601	1	Y	CGSA extraction well.
W-875-08	EW	$Tnbs_2$	S	CMP-TF	E601	2	Y	CGSA extraction well.
W-875-08	EW	$Tnbs_2$		DIS	E601	3	Y	CGSA extraction well.
W-875-08	EW	$Tnbs_2$	S	CMP-TF	E601	4	Y	CGSA extraction well.
W-875-09	EW	$Tnbs_2$	S	CMP	E601	2	N	CGSA extraction well. Insufficient water to collect sample.

Table 2.1-5. Central General Services Area ground water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample Driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-875-09	EW	$Tnbs_2$	S	CMP	E601	4	N	CGSA extraction well. Insufficient water to collect sample.
W-875-10	EW	$Tnbs_2$	B	CMP	E200.7:Ba	2	N	CGSA extraction well. Insufficient water to collect sample.
W-875-10	EW	$Tnbs_2$	B	CMP	E239.2	2	N	CGSA extraction well. Insufficient water to collect sample.
W-875-10	EW	$Tnbs_2$	S	CMP	E601	2	N	CGSA extraction well. Insufficient water to collect sample.
W-875-10	EW	$Tnbs_2$	S	CMP	E601	4	N	CGSA extraction well. Insufficient water to collect sample.
W-875-11	EW	$Tnbs_2$	B	CMP	E239.2	2	N	CGSA extraction well. Insufficient water to collect sample.
W-875-11	EW	$Tnbs_2$	B	CMP	E200.7:Ba	2	N	CGSA extraction well. Insufficient water to collect sample.
W-875-11	EW	$Tnbs_2$	S	CMP	E601	2	Y	CGSA extraction well.
W-875-11	EW	$Tnbs_2$	S	CMP	E601	4	N	CGSA extraction well. Insufficient water to collect sample.
W-875-15	EW	$Tnbs_2$	S	CMP	E601	2	N	CGSA extraction well. Insufficient water to collect sample.
W-875-15	EW	$Tnbs_2$	S	CMP	E601	4	N	CGSA extraction well. Insufficient water to collect sample.
W-876-01	PTMW	$Tnbs_2$	S	CMP	E601	2	Y	
W-876-01	PTMW	$Tnbs_2$	S	CMP	E601	4	Y	
W-879-01	PTMW	$Tnsc_1$	S	CMP	E601	2	Y	
W-879-01	PTMW	$Tnsc_1$	S	CMP	E601	4	Y	
W-889-01	PTMW	$Tnsc_1$	S	CMP	E601	2	Y	
W-889-01	PTMW	$Tnsc_1$	S	CMP	E601	4	Y	
W-CGSA-1732	PTMW	Qal		DIS	E601	2	N	Dry.
W-CGSA-1733	PTMW	Qal		DIS	E601	1	Y	
W-CGSA-1733	PTMW	Qal		DIS	E601	2	Y	
W-CGSA-1733	PTMW	Qal		DIS	E601	3	Y	
W-CGSA-1733	PTMW	Qal		DIS	E601	4	N	Insufficient water.
W-CGSA-1735	PTMW	Qal		DIS	E601	2	N	Dry.
W-CGSA-1736	PTMW	Qal		DIS	E601	2	Y	
W-CGSA-1736	PTMW	Qal		DIS	E601	4	Y	
W-CGSA-1737	PTMW	Qal		DIS	E601	2	Y	
W-CGSA-1737	PTMW	Qal		DIS	E601	4	Y	
W-CGSA-1739	PTMW	Qal		DIS	E601	1	Y	
W-CGSA-1739	PTMW	Qal		DIS	E601	2	Y	
W-CGSA-1739	PTMW	Qal		DIS	E601	3	Y	
W-CGSA-1739	PTMW	Qal		DIS	E601	4	Y	

Notes:

***Well sampled as part of the surveillance monitoring performed by the Water Guidance and Monitoring Group (WGMG) for additional constiutents and the results are reported in the LLNL Site Annual Environmental Report.**

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

Table 2.1-6. Eastern General Services Area ground water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample Driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
CDF-1*	WS	Qal-$Tnsc_0$		WGMG	E502.2	1	Y	
CDF-1*	WS	Qal-$Tnsc_0$	M	CMP	E601	1	Y	
CDF-1*	WS	Qal-$Tnsc_0$	M	CMP	E601	1	Y	
CDF-1*	WS	Qal-$Tnsc_0$	M	CMP	E601	1	Y	
CDF-1*	WS	Qal-$Tnsc_0$	M	CMP	E601	2	Y	
CDF-1*	WS	Qal-$Tnsc_0$	M	CMP	E601	2	Y	
CDF-1*	WS	Qal-$Tnsc_0$	M	CMP	E601	2	Y	
CDF-1*	WS	Qal-$Tnsc_0$	M	CMP	E601	3	Y	
CDF-1*	WS	Qal-$Tnsc_0$	M	CMP	E601	3	Y	
CDF-1*	WS	Qal-$Tnsc_0$	M	CMP	E601	3	Y	
CDF-1*	WS	Qal-$Tnsc_0$	M	CMP	E601	4	Y	
CDF-1*	WS	Qal-$Tnsc_0$	M	CMP	E601	4	Y	
CDF-1*	WS	Qal-$Tnsc_0$	M	CMP	E601	4	Y	
CON-1*	WS	$Tnsc_0$		WGMG	E502.2	1	Y	
CON-1*	WS	$Tnsc_0$	M	CMP	E601	1	Y	
CON-1*	WS	$Tnsc_0$	M	CMP	E601	1	Y	
CON-1*	WS	$Tnsc_0$	M	CMP	E601	1	Y	
CON-1*	WS	$Tnsc_0$	M	CMP	E601	2	Y	
CON-1*	WS	$Tnsc_0$	M	CMP	E601	2	Y	
CON-1*	WS	$Tnsc_0$	M	CMP	E601	2	Y	
CON-1*	WS	$Tnsc_0$	M	CMP	E601	3	Y	
CON-1*	WS	$Tnsc_0$	M	CMP	E601	3	Y	
CON-1*	WS	$Tnsc_0$	M	CMP	E601	3	Y	
CON-1*	WS	$Tnsc_0$	M	CMP	E601	4	Y	
CON-1*	WS	$Tnsc_0$	M	CMP	E601	4	Y	
CON-1*	WS	$Tnsc_0$	M	CMP	E601	4	Y	
CON-2	PTMW	Qal-$Tnsc_0$	M	CMP	E601	1	Y	
CON-2	PTMW	Qal-$Tnsc_0$	M	CMP	E601	1	Y	
CON-2	PTMW	Qal-$Tnsc_0$	M	CMP	E601	1	Y	
CON-2	PTMW	Qal-$Tnsc_0$	M	CMP	E601	2	Y	
CON-2	PTMW	Qal-$Tnsc_0$	M	CMP	E601	2	Y	
CON-2	PTMW	Qal-$Tnsc_0$	M	CMP	E601	2	Y	
CON-2	PTMW	Qal-$Tnsc_0$	M	CMP	E601	3	Y	
CON-2	PTMW	Qal-$Tnsc_0$	M	CMP	E601	3	Y	
CON-2	PTMW	Qal-$Tnsc_0$	M	CMP	E601	3	Y	
CON-2	PTMW	Qal-$Tnsc_0$	M	CMP	E601	4	Y	
CON-2	PTMW	Qal-$Tnsc_0$	M	CMP	E601	4	Y	
CON-2	PTMW	Qal-$Tnsc_0$	M	CMP	E601	4	Y	
W-24P-03	PTMW	Qal	A	PSDMP	E601	2	Y	
W-25D-01	PTMW	Qal	A	PSDMP	E601	2	Y	
W-25D-02	PTMW	Qal	A	PSDMP	E601	2	Y	
W-25M-01	PTMW	Qal	A	PSDMP	E601	2	Y	
W-25M-02	PTMW	Qal	A	PSDMP	E601	2	Y	
W-25M-03	PTMW	Qal	A	PSDMP	E601	2	Y	
W-25N-01	PTMW	Qal	S	PSDMP	E601	2	Y	
W-25N-01	PTMW	Qal	S	PSDMP	E601	4	Y	
W-25N-04	PTMW	Tmss	A	PSDMP	E601	2	Y	
W-25N-05	PTMW	$Tnbs_1$	S	PSDMP	E601	2	N	Inoperable pump.
W-25N-05	PTMW	$Tnbs_1$	S	PSDMP	E601	4	N	Inoperable pump.
W-25N-06	PTMW	Qal	A	PSDMP	E601	2	Y	
W-25N-07	GW	Qal	Q	PSDMP	E601	1	Y	
W-25N-07	GW	Qal	Q	PSDMP	E601	2	Y	
W-25N-07	GW	Qal	Q	PSDMP	E601	3	Y	
W-25N-07	GW	Qal	Q	PSDMP	E601	4	Y	
W-25N-08	PTMW	$Tnbs_1$	A	PSDMP	E601	2	Y	

Table 2.1-6. Eastern General Services Area ground water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample Driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-25N-09	PTMW	$Tnbs_1$	A	PSDMP	E601	2	Y	
W-25N-10	GW	$Tnbs_1$	Q	PSDMP	E601	1	N	Inoperable pump.
W-25N-10	GW	$Tnbs_1$	Q	PSDMP	E601	2	N	Inoperable pump.
W-25N-10	GW	$Tnbs_1$	Q	PSDMP	E601	3	N	Inoperable pump.
W-25N-10	GW	$Tnbs_1$	Q	PSDMP	E601	4	N	Inoperable pump.
W-25N-11	GW	$Tnbs_1$	Q	PSDMP	E601	1	Y	
W-25N-11	GW	$Tnbs_1$	Q	PSDMP	E601	2	Y	
W-25N-11	GW	$Tnbs_1$	Q	PSDMP	E601	3	Y	
W-25N-11	GW	$Tnbs_1$	Q	PSDMP	E601	4	Y	
W-25N-12	GW	$Tnbs_1$	Q	PSDMP	E601	1	Y	
W-25N-12	GW	$Tnbs_1$	Q	PSDMP	E601	2	Y	
W-25N-12	GW	$Tnbs_1$	Q	PSDMP	E601	3	Y	
W-25N-12	GW	$Tnbs_1$	Q	PSDMP	E601	4	Y	
W-25N-13	GW	$Tnbs_1$	Q	PSDMP	E601	1	Y	
W-25N-13	GW	$Tnbs_1$	Q	PSDMP	E601	2	Y	
W-25N-13	GW	$Tnbs_1$	Q	PSDMP	E601	3	Y	
W-25N-13	GW	$Tnbs_1$	Q	PSDMP	E601	4	Y	
W-25N-15	PTMW	Qal	A	PSDMP	E601	2	Y	
W-25N-18	PTMW	$Tnbs_1$	A	PSDMP	E601	2	N	Inoperable pump.
W-25N-20*	PTMW	Qal	A	PSDMP	E601	2	Y	
W-25N-21	PTMW	$Tnbs_1$	A	PSDMP	E601	2	Y	
W-25N-22	PTMW	$Tnbs_1$	A	PSDMP	E601	2	Y	
W-25N-23	PTMW	$Tnbs_1$	S	PSDMP	E601	2	Y	
W-25N-23	PTMW	$Tnbs_1$	S	PSDMP	E601	4	Y	
W-25N-24	PTMW	Qal	S	PSDMP	E601	2	Y	
W-25N-24	PTMW	Qal	S	PSDMP	E601	4	Y	
W-25N-25	PTMW	$Tnbs_1$	A	PSDMP	E601	2	Y	
W-25N-26	PTMW	$Tnbs_1$	A	PSDMP	E601	2	Y	
W-25N-28	PTMW	$Tnbs_1$	A	PSDMP	E601	2	Y	
W-26R-01*	PTMW	$Tnbs_1$	S	PSDMP	E601	2	Y	
W-26R-01*	PTMW	$Tnbs_1$	S	PSDMP	E601	4	Y	
W-26R-02	PTMW	$Tnbs_1$	A	PSDMP	E601	2	Y	
W-26R-03	PTMW	Qal	S	PSDMP	E601	2	Y	
W-26R-03	PTMW	Qal	S	PSDMP	E601	4	Y	
W-26R-04	PTMW	Qal	S	PSDMP	E601	2	Y	
W-26R-04	PTMW	Qal	S	PSDMP	E601	4	Y	
W-26R-05*	PTMW	Qal	S	PSDMP	E601	2	Y	
W-26R-05*	PTMW	Qal	S	PSDMP	E601	4	Y	
W-26R-06	PTMW	$Tnbs_1$	S	PSDMP	E601	2	Y	
W-26R-06	PTMW	$Tnbs_1$	S	PSDMP	E601	4	Y	
W-26R-07	PTMW	$Tnbs_1$	A	PSDMP	E601	2	Y	
W-26R-08	PTMW	$Tnbs_1$	A	PSDMP	E601	2	Y	
W-26R-11*	PTMW	Qal	S	CMP	E601	2	Y	
W-26R-11*	PTMW	Qal	S	CMP	E601	4	Y	
W-7D	PTMW	$Tnbs_1$	A	PSDMP	E601	2	Y	
W-7DS*	PTMW	Qal	A	PSDMP	E601	2	Y	

Notes:
EGSA primary COCs: VOCs (E601, E502.2, or E624).
***Well sampled as part of the surveillance monitoring performed by the Water Guidance and Monitoring Group (WGMG) for additional constiutents and the results are reported in the LLNL Site Annual Environmental Report.**

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

Table 2.1-7. Central General Services Area (CGSA) mass removed, July 1, 2009 through December 31, 2009.

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	86	14	NA	NA	NA	NA
	August	25	4.9	NA	NA	NA	NA
	September	300	24	NA	NA	NA	NA
	October	330	10	NA	NA	NA	NA
	November	130	7.4	NA	NA	NA	NA
	December	81	3.8	NA	NA	NA	NA
Total		950	64	NA	NA	NA	NA

Table 2.2-1. Building 834 (834) volumes of ground water and soil vapor extracted and discharged, July 1, 2009 through December 31, 2009.

Treatment facility	Month	SVTS Operational hours	GWTS Operational hours	Volume of vapor extracted (thousands of ft^3)	Volume of ground water discharged (gal)
834	July	690	696	4,433	13,956
	August	695	696	4,434	13,080
	September	808	816	5,174	12,086
	October	666	672	4,299	8,985
	November	643	648	4,083	8,533
	December	305	312	1,977	4,449
Total		3,807	3,840	24,400	61,089

Table 2.2-2. Building 834 OU VOCs in ground water extraction 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-GWTS-E	7/7/09	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5 L	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5 O
834-GWTS-E	8/3/09	<0.5	<0.5	<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-GWTS-E	9/1/09	<0.5	<0.5	<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-GWTS-E	10/6/09	<0.5	<0.5	<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-GWTS-E	11/2/09	<0.5	<0.5	<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-GWTS-E	12/1/09	<0.5	<0.5	<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-GWTS-I	7/7/09	2,000 D	19	400 D	<2.5 D	<0.5	0.61	<0.5	<0.5	0.63	<0.5	1.8	<0.5	<0.5	<0.5 J
834-GWTS-I	10/6/09	2,300 D	18 D	290 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

Notes:

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

Table 2.2-2 (Cont.). Analyte detected but not reported in main table.

Location	Date	Detection frequency	1,2-DCE (total) (µg/L)
834-GWTS-E	7/7/09	0 of 18	–
834-GWTS-E	8/3/09	0 of 18	–
834-GWTS-E	9/1/09	0 of 18	–
834-GWTS-E	10/6/09	0 of 18	–
834-GWTS-E	11/2/09	0 of 18	–
834-GWTS-E	12/1/09	0 of 18	–
834-GWTS-I	7/7/09	1 of 18	400 D
834-GWTS-I	10/6/09	1 od 18	290 D

Notes:

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

Table 2.2-3. Building 834 OU nitrate in ground water extraction treatment system influent and effluent.

Location	Date	Nitrate (as NO3) (mg/L)
834-GWTS-E	7/7/09	80
834-GWTS-E	8/3/09	77
834-GWTS-E	9/1/09	83
834-GWTS-E	10/6/09	70
834-GWTS-E	11/2/09	75
834-GWTS-E	12/1/09	70
834-GWTS-I	7/7/09	76
834-GWTS-I	10/6/09	84

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

Table 2.2-4. Building 834 OU diesel range organic compounds in ground water extraction treatment system influent and effluent.

Location	Date	Diesel Range Organics (C12-C24) (µg/L)
834-GWTS-E	7/7/09	<200
834-GWTS-E	8/3/09	<200
834-GWTS-E	9/1/09	<200
834-GWTS-E	10/6/09	<200
834-GWTS-E	11/2/09	<200
834-GWTS-E	12/1/09	<200
834-GWTS-I	7/7/09	<200
834-GWTS-I	10/6/09	<200

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

Table 2.2-5. Building 834 OU tetrabutyl orthosilicate (TBOS) and tetrakis (2-ethylbutyl) silane (TKEBS) in ground water extraction treatment system influent and effluent.

Location	Date	TBOS (μg/L)
834-GWTS-E	7/7/09	<10
834-GWTS-E	8/3/09	<10
834-GWTS-E	9/1/09	<10
834-GWTS-E	10/6/09	<10
834-GWTS-E	11/2/09	<10
834-GWTS-E	12/1/09	<10
834-GWTS-I	7/7/09	<10
834-GWTS-I	10/6/09	<10

Notes:

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

Table 2.2-6. Building 834 OU treatment facility sampling and analysis plan.

Sample location	Sample identification	Parameter	Frequency
834 GWTS			
Influent Port	**834-I**	**VOCs**	**Quarterly**
		TBOS	**Quarterly**
		Diesel	**Quarterly**
		Nitrate	**Quarterly**
		pH	**Quarterly**
Effluent Port	**834-E**	**VOCs**	**Monthly**
		TBOS	**Monthly**
		Diesel	**Monthly**
		Nitrate	**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:

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

[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.**

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

Table 2.2-7. Building 834 OU ground water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	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		DIS	E300.0:PERC	3	Y	
W-834-1709	PTMW	Tpsg	S	CMP	E601	1	Y	
W-834-1709	PTMW	Tpsg	S	CMP	E601	3	Y	
W-834-1709	PTMW	Tpsg	A	CMP	TBOS	1	Y	
W-834-1711	PTMW	Tps		DIS	DWMETALS	3	Y	
W-834-1711	PTMW	Tps	A	CMP	E300.0:NO3	1	Y	
W-834-1711	PTMW	Tps	S	CMP	E601	1	Y	
W-834-1711	PTMW	Tps	S	CMP	E601	3	Y	
W-834-1711	PTMW	Tps	A	CMP	TBOS	1	N	Insufficient water.
W-834-1824	PTMW	Tpsg		DIS	E200.7:FE	4	Y	
W-834-1824	PTMW	Tpsg		DIS	E200.8:AS	4	Y	
W-834-1824	PTMW	Tpsg		DIS	E200.8:MN	4	Y	
W-834-1824	PTMW	Tpsg	A	CMP	E300.0:NO3	1	Y	
W-834-1824	PTMW	Tpsg	S	CMP	E601	1	Y	
W-834-1824	PTMW	Tpsg	S	CMP	E601	3	Y	
W-834-1824	PTMW	Tpsg		DIS	E601	4	Y	
W-834-1824	PTMW	Tpsg		DIS	LITEHCS	4	Y	
W-834-1824	PTMW	Tpsg		DIS	LOWVFAS	4	Y	
W-834-1824	PTMW	Tpsg	A	CMP	TBOS	1	N	Insufficient water.
W-834-1825	PTMW	Tpsg		DIS	E200.7:FE	3	Y	
W-834-1825	PTMW	Tpsg		DIS	E200.7:FE	4	Y	
W-834-1825	PTMW	Tpsg	A	CMP	E300.0:NO3	1	Y	
W-834-1825	PTMW	Tpsg		DIS	E200.8:AS	3	Y	
W-834-1825	PTMW	Tpsg		DIS	E200.8:AS	4	Y	
W-834-1825	PTMW	Tpsg		DIS	E200.8:CR	3	Y	
W-834-1825	PTMW	Tpsg		DIS	E200.8:MN	3	Y	
W-834-1825	PTMW	Tpsg		DIS	E200.8:MN	4	Y	
W-834-1825	PTMW	Tpsg		DIS	E200.8:SE	3	Y	
W-834-1825	PTMW	Tpsg	S	CMP	E601	1	Y	
W-834-1825	PTMW	Tpsg		DIS	E601	2	Y	
W-834-1825	PTMW	Tpsg	S	CMP	E601	3	Y	
W-834-1825	PTMW	Tpsg		DIS	E601	4	Y	
W-834-1825	PTMW	Tpsg		DIS	GENMIN	3	Y	
W-834-1825	PTMW	Tpsg		DIS	LITEHCS	1	Y	
W-834-1825	PTMW	Tpsg		DIS	LOWVFAS	1	Y	
W-834-1825	PTMW	Tpsg		DIS	LOWVFAS	4	Y	
W-834-1825	PTMW	Tpsg	A	CMP	TBOS	1	N	Insufficient water.
W-834-1833	PTMW	Tpsg		DIS	E200.7:FE	3	Y	
W-834-1833	PTMW	Tpsg		DIS	E200.7:FE	4	Y	
W-834-1833	PTMW	Tpsg		DIS	E200.8:MN	3	Y	
W-834-1833	PTMW	Tpsg		DIS	E200.8:MN	4	Y	
W-834-1833	PTMW	Tpsg	A	CMP	E300.0:NO3	1	Y	
W-834-1833	PTMW	Tpsg		DIS	E200.8:AS	3	Y	
W-834-1833	PTMW	Tpsg		DIS	E200.8:AS	4	Y	
W-834-1833	PTMW	Tpsg		DIS	E200.8:CR	3	Y	
W-834-1833	PTMW	Tpsg		DIS	E200.8:SE	3	Y	
W-834-1833	PTMW	Tpsg	S	CMP	E601	1	Y	
W-834-1833	PTMW	Tpsg		DIS	E601	2	Y	
W-834-1833	PTMW	Tpsg	S	CMP	E601	3	Y	
W-834-1833	PTMW	Tpsg		DIS	E601	4	Y	
W-834-1833	PTMW	Tpsg		DIS	GENMIN	3	Y	
W-834-1833	PTMW	Tpsg		DIS	LITEHCS	1	Y	
W-834-1833	PTMW	Tpsg		DIS	LITEHCS	4	Y	
W-834-1833	PTMW	Tpsg		DIS	LOWVFAS	1	Y	

Table 2.2-7. Building 834 OU ground water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-834-1833	PTMW	Tpsg		DIS	LOWVFAS	4	Y	
W-834-1833	PTMW	Tpsg	A	CMP	TBOS	1	N	Insufficient water.
W-834-2001	EW	Tpsg	A	CMP-TF	E300.0:NO3	1	Y	834 extraction well.
W-834-2001	EW	Tpsg	S	CMP-TF	E601	3	Y	834 extraction well.
W-834-2001	EW	Tpsg	S	CMP-TF	E624	1	Y	834 extraction well.
W-834-2001	EW	Tpsg		DIS	E624	2	Y	834 extraction well.
W-834-2001	EW	Tpsg		DIS	E624	4	Y	834 extraction well.
W-834-2001	EW	Tpsg	A	CMP-TF	EM8015:DIESEL	1	Y	834 extraction well.
W-834-2001	EW	Tpsg		DIS	EM8015:DIESEL	3	Y	834 extraction well.
W-834-2001	EW	Tpsg	A	CMP-TF	TBOS	1	Y	834 extraction well.
W-834-2001	EW	Tpsg		DIS	TBOS	3	Y	834 extraction well.
W-834-2113	PTMW	Tpsg	A	CMP	E300.0:NO3	1	Y	
W-834-2113	PTMW	Tpsg	S	CMP	E601	3	Y	
W-834-2113	PTMW	Tpsg	S	CMP	E624	1	Y	
W-834-2113	PTMW	Tpsg	A	CMP	TBOS	1	Y	
W-834-2117	PTMW	Tpsg	A	CMP	E300.0:NO3	1	Y	
W-834-2117	PTMW	Tpsg	S	CMP	E601	3	Y	
W-834-2117	PTMW	Tpsg	S	CMP	E624	1	Y	
W-834-2117	PTMW	Tpsg	A	CMP	TBOS	1	Y	
W-834-2118	PTMW	Tpsg	A	CMP	E300.0:NO3	1	Y	
W-834-2118	PTMW	Tpsg		DIS	E300.0:PERC	1	Y	
W-834-2118	PTMW	Tpsg		DIS	E300.0:PERC	3	Y	
W-834-2118	PTMW	Tpsg	S	CMP	E601	3	Y	
W-834-2118	PTMW	Tpsg	S	CMP	E624	1	Y	
W-834-2118	PTMW	Tpsg	A	CMP	TBOS	1	Y	
W-834-2119	PTMW	Tpsg	A	CMP	E300.0:NO3	1	Y	
W-834-2119	PTMW	Tpsg	S	CMP	E601	3	Y	
W-834-2119	PTMW	Tpsg	S	CMP	E624	1	Y	
W-834-2119	PTMW	Tpsg		DIS	GENMIN	3	Y	
W-834-2119	PTMW	Tpsg	A	CMP	TBOS	1	Y	
W-834-A1	PTMW	Tps	A	CMP	E300.0:NO3	1	Y	
W-834-A1	PTMW	Tps	S	CMP	E601	3	Y	
W-834-A1	PTMW	Tps	S	CMP	E624	1	Y	
W-834-A1	PTMW	Tps	A	CMP	EM8015:DIESEL	1	Y	
W-834-A1	PTMW	Tps	A	CMP	TBOS	1	Y	
W-834-A2	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Dry.
W-834-A2	PTMW	Tpsg		DIS	E300.0:PERC	3	N	Dry.
W-834-A2	PTMW	Tpsg	S	CMP	E601	1	N	Dry.
W-834-A2	PTMW	Tpsg	S	CMP	E601	3	N	Dry.
W-834-A2	PTMW	Tpsg	A	CMP	EM8015:DIESEL	1	N	Dry.
W-834-A2	PTMW	Tpsg	A	CMP	TBOS	1	N	Dry.
W-834-B2	EW	Tpsg	A	CMP-TF	E300.0:NO3	1	Y	834 extraction well.
W-834-B2	EW	Tpsg	S	CMP-TF	E601	1	Y	834 extraction well.
W-834-B2	EW	Tpsg		DIS	E601	2	Y	834 extraction well.
W-834-B2	EW	Tpsg	S	CMP-TF	E601	3	Y	834 extraction well.
W-834-B2	EW	Tpsg		DIS	E601	4	Y	834 extraction well.
W-834-B2	EW	Tpsg	A	CMP-TF	TBOS	1	Y	834 extraction well.
W-834-B2	EW	Tpsg		DIS	TBOS	3	Y	834 extraction well.
W-834-B3	EW	Tpsg	A	CMP-TF	E300.0:NO3	1	Y	834 extraction well.
W-834-B3	EW	Tpsg	S	CMP-TF	E601	1	Y	834 extraction well.
W-834-B3	EW	Tpsg		DIS	E601	2	Y	834 extraction well.
W-834-B3	EW	Tpsg	S	CMP-TF	E601	3	Y	834 extraction well.
W-834-B3	EW	Tpsg		DIS	E601	4	Y	834 extraction well.
W-834-B3	EW	Tpsg	A	CMP-TF	TBOS	1	Y	834 extraction well.
W-834-B3	EW	Tpsg		DIS	TBOS	3	Y	834 extraction well.

Table 2.2-7. Building 834 OU ground water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-834-B4	PTMW	Tpsg	A	CMP	E300.0:NO3	1	Y	
W-834-B4	PTMW	Tpsg	S	CMP	E601	1	Y	
W-834-B4	PTMW	Tpsg	S	CMP	E601	3	N	Dry.
W-834-B4	PTMW	Tpsg	A	CMP	TBOS	1	N	Insufficient water.
W-834-C2	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Dry.
W-834-C2	PTMW	Tpsg	S	CMP	E601	1	N	Dry.
W-834-C2	PTMW	Tpsg	S	CMP	E601	3	N	Dry.
W-834-C2	PTMW	Tpsg	A	CMP	TBOS	1	N	Dry.
W-834-C4	PTMW	Tpsg	A	CMP	E300.0:NO3	1	Y	
W-834-C4	PTMW	Tpsg	S	CMP	E601	1	Y	
W-834-C4	PTMW	Tpsg	S	CMP	E601	3	Y	
W-834-C4	PTMW	Tpsg	A	CMP	TBOS	1	Y	
W-834-C5	PTMW	Tpsg	A	CMP	E300.0:NO3	1	Y	
W-834-C5	PTMW	Tpsg	S	CMP	E601	1	Y	
W-834-C5	PTMW	Tpsg	S	CMP	E601	3	Y	
W-834-C5	PTMW	Tpsg	A	CMP	TBOS	1	Y	
W-834-D10	PTMW	Tps	A	CMP	E300.0:NO3	1	N	Dry.
W-834-D10	PTMW	Tps	S	CMP	E624	1	N	Dry.
W-834-D10	PTMW	Tps	S	CMP	E624	3	N	Insufficient water.
W-834-D10	PTMW	Tps	A	CMP	EM8015:DIESEL	1	N	Dry.
W-834-D10	PTMW	Tps	A	CMP	TBOS	1	N	Dry.
W-834-D11	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Dry.
W-834-D11	PTMW	Tpsg	S	CMP	E601	1	N	Dry.
W-834-D11	PTMW	Tpsg	S	CMP	E601	3	N	Insufficient water.
W-834-D11	PTMW	Tpsg	A	CMP	EM8015:DIESEL	1	N	Dry.
W-834-D11	PTMW	Tpsg	A	CMP	TBOS	1	N	Dry.
W-834-D12	EW	Tpsg	A	CMP-TF	E300.0:NO3	1	Y	834 extraction well.
W-834-D12	EW	Tpsg		DIS	E601	2	Y	834 extraction well.
W-834-D12	EW	Tpsg	S	CMP-TF	E601	3	Y	834 extraction well.
W-834-D12	EW	Tpsg		DIS	E601	4	Y	834 extraction well.
W-834-D12	EW	Tpsg	S	CMP-TF	E624	1	Y	834 extraction well.
W-834-D12	EW	Tpsg	A	CMP-TF	EM8015:DIESEL	1	Y	834 extraction well.
W-834-D12	EW	Tpsg		DIS	EM8015:DIESEL	3	Y	834 extraction well.
W-834-D12	EW	Tpsg	A	CMP-TF	TBOS	1	Y	834 extraction well.
W-834-D12	EW	Tpsg		DIS	TBOS	3	Y	834 extraction well.
W-834-D13	EW	Tpsg	A	CMP-TF	E300.0:NO3	1	Y	834 extraction well.
W-834-D13	EW	Tpsg	S	CMP-TF	E601	1	Y	834 extraction well.
W-834-D13	EW	Tpsg		DIS	E601	2	Y	834 extraction well.
W-834-D13	EW	Tpsg	S	CMP-TF	E601	3	Y	834 extraction well.
W-834-D13	EW	Tpsg		DIS	E601	4	Y	834 extraction well.
W-834-D13	EW	Tpsg	A	CMP-TF	TBOS	1	Y	834 extraction well.
W-834-D13	EW	Tpsg		DIS	TBOS	3	Y	834 extraction well.
W-834-D14	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Insufficient water.
W-834-D14	PTMW	Tpsg	S	CMP	E601	1	N	Insufficient water.
W-834-D14	PTMW	Tpsg	S	CMP	E601	3	N	Insufficient water.
W-834-D14	PTMW	Tpsg	A	CMP	TBOS	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	1	N	Dry.
W-834-D15	PTMW	Tpsg	S	CMP	E601	3	N	Dry.
W-834-D15	PTMW	Tpsg	A	CMP	TBOS	1	N	Dry.
W-834-D16	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Dry.
W-834-D16	PTMW	Tpsg	S	CMP	E601	1	N	Dry.
W-834-D16	PTMW	Tpsg	S	CMP	E601	3	N	Dry.
W-834-D16	PTMW	Tpsg	A	CMP	EM8015:DIESEL	1	N	Dry.
W-834-D16	PTMW	Tpsg	A	CMP	TBOS	1	N	Dry.

Table 2.2-7. Building 834 OU ground water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-834-D17	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Dry.
W-834-D17	PTMW	Tpsg	S	CMP	E601	1	N	Dry.
W-834-D17	PTMW	Tpsg	S	CMP	E601	3	N	Dry.
W-834-D17	PTMW	Tpsg	A	CMP	EM8015:DIESEL	1	N	Dry.
W-834-D17	PTMW	Tpsg	A	CMP	TBOS	1	N	Dry.
W-834-D18	PTMW	Tpsg	A	CMP	E300.0:NO3	1	Y	
W-834-D18	PTMW	Tpsg	S	CMP	E601	1	Y	
W-834-D18	PTMW	Tpsg	S	CMP	E601	3	Y	
W-834-D18	PTMW	Tpsg	A	CMP	TBOS	1	Y	
W-834-D2	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	1	N	Dry.
W-834-D2	PTMW	$Tnbs_1$	A	CMP	E601	1	N	Dry.
W-834-D2	PTMW	$Tnbs_1$	A	CMP	TBOS	1	N	Dry.
W-834-D3	PTMW	Tpsg	A	CMP	E300.0:NO3	1	Y	
W-834-D3	PTMW	Tpsg	S	CMP	E601	1	Y	
W-834-D3	PTMW	Tpsg	S	CMP	E601	3	Y	
W-834-D3	PTMW	Tpsg	A	CMP	TBOS	1	Y	
W-834-D4	EW	Tpsg	A	CMP-TF	E300.0:NO3	1	Y	834 extraction well.
W-834-D4	EW	Tpsg	S	CMP-TF	E601	1	Y	834 extraction well.
W-834-D4	EW	Tpsg		DIS	E601	2	Y	834 extraction well.
W-834-D4	EW	Tpsg	S	CMP-TF	E601	3	Y	834 extraction well.
W-834-D4	EW	Tpsg		DIS	E601	4	Y	834 extraction well.
W-834-D4	EW	Tpsg	A	CMP-TF	TBOS	1	Y	834 extraction well.
W-834-D4	EW	Tpsg		DIS	TBOS	3	Y	834 extraction well.
W-834-D5	EW	Tpsg	A	CMP-TF	E300.0:NO3	1	Y	834 extraction well.*
W-834-D5	EW	Tpsg	S	CMP-TF	E601	1	Y	834 extraction well.*
W-834-D5	EW	Tpsg		DIS	E601	2	Y	834 extraction well.*
W-834-D5	EW	Tpsg	S	CMP-TF	E601	3	Y	834 extraction well.*
W-834-D5	EW	Tpsg	A	CMP-TF	TBOS	1	Y	834 extraction well.*
W-834-D5	EW	Tpsg		DIS	TBOS	3	Y	834 extraction well.*
W-834-D6	EW	Tpsg	A	CMP-TF	E300.0:NO3	1	Y	834 extraction well.
W-834-D6	EW	Tpsg	S	CMP-TF	E601	1	Y	834 extraction well.
W-834-D6	EW	Tpsg		DIS	E601	2	Y	834 extraction well.
W-834-D6	EW	Tpsg	S	CMP-TF	E601	3	Y	834 extraction well.
W-834-D6	EW	Tpsg		DIS	E601	4	Y	834 extraction well.
W-834-D6	EW	Tpsg		DIS	EM8015:DIESEL	1	Y	834 extraction well.
W-834-D6	EW	Tpsg		DIS	EM8015:DIESEL	3	Y	834 extraction well.
W-834-D6	EW	Tpsg	A	CMP-TF	TBOS	1	Y	834 extraction well.
W-834-D6	EW	Tpsg		DIS	TBOS	3	Y	834 extraction well.
W-834-D7	EW	Tpsg	A	CMP-TF	E300.0:NO3	1	Y	834 extraction well.
W-834-D7	EW	Tpsg		DIS	E601	2	Y	834 extraction well.
W-834-D7	EW	Tpsg	S	CMP-TF	E601	3	Y	834 extraction well.
W-834-D7	EW	Tpsg		DIS	E601	4	Y	834 extraction well.
W-834-D7	EW	Tpsg	S	CMP-TF	E624	1	Y	834 extraction well.
W-834-D7	EW	Tpsg	A	CMP-TF	EM8015:DIESEL	1	Y	834 extraction well.
W-834-D7	EW	Tpsg		DIS	EM8015:DIESEL	3	Y	834 extraction well.
W-834-D7	EW	Tpsg	A	CMP-TF	TBOS	1	Y	834 extraction well.
W-834-D7	EW	Tpsg		DIS	TBOS	3	Y	834 extraction well.
W-834-D9A	PTMW	$Tnbs_2$	A	CMP	E300.0:NO3	1	N	Dry.
W-834-D9A	PTMW	$Tnbs_2$	A	CMP	E601	1	N	Dry.
W-834-D9A	PTMW	$Tnbs_2$	A	CMP	TBOS	1	N	Dry.
W-834-G3	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Dry.
W-834-G3	PTMW	Tpsg	A	CMP	E601	1	N	Dry.
W-834-G3	PTMW	Tpsg	A	CMP	TBOS	1	N	Dry.
W-834-H2	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Insufficient water.
W-834-H2	PTMW	Tpsg	S	CMP	E601	1	N	Insufficient water.

Table 2.2-7. Building 834 OU ground water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-834-H2	PTMW	Tpsg	S	CMP	E601	3	N	Dry.
W-834-H2	PTMW	Tpsg	A	CMP	TBOS	1	N	Insufficient water.
W-834-J1	EW	Tpsg	A	CMP-TF	E300.0:NO3	1	Y	834 extraction well.
W-834-J1	EW	Tpsg	S	CMP-TF	E601	1	Y	834 extraction well.
W-834-J1	EW	Tpsg		DIS	E601	2	Y	834 extraction well.
W-834-J1	EW	Tpsg	S	CMP-TF	E601	3	Y	834 extraction well.
W-834-J1	EW	Tpsg		DIS	E601	4	Y	834 extraction well.
W-834-J1	EW	Tpsg	A	CMP-TF	TBOS	1	Y	834 extraction well.
W-834-J1	EW	Tpsg		DIS	TBOS	3	Y	834 extraction well.
W-834-J2	PTMW	Tpsg	A	CMP	E300.0:NO3	1	Y	
W-834-J2	PTMW	Tpsg	S	CMP	E601	1	Y	
W-834-J2	PTMW	Tpsg	S	CMP	E601	3	Y	
W-834-J2	PTMW	Tpsg	A	CMP	TBOS	1	Y	
W-834-J3	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Dry.
W-834-J3	PTMW	Tpsg	S	CMP	E601	1	N	Dry.
W-834-J3	PTMW	Tpsg	S	CMP	E601	3	N	Dry.
W-834-J3	PTMW	Tpsg	A	CMP	TBOS	1	N	Dry.
W-834-K1A	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Dry.
W-834-K1A	PTMW	Tpsg	S	CMP	E601	1	N	Dry.
W-834-K1A	PTMW	Tpsg	S	CMP	E601	3	N	Dry.
W-834-K1A	PTMW	Tpsg	A	CMP	EM8015:DIESEL	1	N	Dry.
W-834-K1A	PTMW	Tpsg	A	CMP	TBOS	1	N	Dry.
W-834-M1	PTMW	Tpsg	A	CMP	E300.0:NO3	1	Y	
W-834-M1	PTMW	Tpsg	S	CMP	E601	1	Y	
W-834-M1	PTMW	Tpsg	S	CMP	E601	3	Y	
W-834-M1	PTMW	Tpsg	A	CMP	TBOS	1	Y	
W-834-M2	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Dry.
W-834-M2	PTMW	Tpsg	S	CMP	E601	1	N	Dry.
W-834-M2	PTMW	Tpsg	S	CMP	E601	3	N	Dry.
W-834-M2	PTMW	Tpsg	A	CMP	TBOS	1	N	Dry.
W-834-S1	EW	Tpsg	A	CMP-TF	E300.0:NO3	1	Y	834 extraction well.
W-834-S1	EW	Tpsg		DIS	E300.0:NO3	3	Y	834 extraction well.
W-834-S1	EW	Tpsg	S	CMP-TF	E601	3	Y	834 extraction well.
W-834-S1	EW	Tpsg	S	CMP-TF	E624	1	Y	834 extraction well.
W-834-S1	EW	Tpsg		DIS	E624	2	Y	834 extraction well.
W-834-S1	EW	Tpsg		DIS	E624	4	Y	834 extraction well.
W-834-S1	EW	Tpsg	A	CMP-TF	EM8015:DIESEL	1	Y	834 extraction well.
W-834-S1	EW	Tpsg		DIS	EM8015:DIESEL	2	Y	834 extraction well.
W-834-S1	EW	Tpsg	A	CMP-TF	TBOS	1	Y	834 extraction well.
W-834-S1	EW	Tpsg	S	DIS	TBOS	3	Y	834 extraction well.
W-834-S10	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Dry.
W-834-S10	PTMW	Tpsg	S	CMP	E601	1	N	Dry.
W-834-S10	PTMW	Tpsg	S	CMP	E601	3	N	Dry.
W-834-S10	PTMW	Tpsg	S	CMP	EM8015:DIESEL	1	N	Dry.
W-834-S10	PTMW	Tpsg	A	CMP	TBOS	1	N	Dry.
W-834-S12A	EW	Tpsg	A	CMP-TF	E300.0:NO3	1	Y	834 extraction well.
W-834-S12A	EW	Tpsg		DIS	E601	2	Y	834 extraction well.
W-834-S12A	EW	Tpsg	S	CMP-TF	E601	3	Y	834 extraction well.
W-834-S12A	EW	Tpsg		DIS	E601	4	Y	834 extraction well.
W-834-S12A	EW	Tpsg	S	CMP-TF	E624	1	Y	834 extraction well.
W-834-S12A	EW	Tpsg	A	CMP-TF	TBOS	1	Y	834 extraction well.
W-834-S12A	EW	Tpsg		DIS	TBOS	3	Y	834 extraction well.
W-834-S13	EW	Tpsg	A	CMP-TF	E300.0:NO3	1	Y	834 extraction well.
W-834-S13	EW	Tpsg	S	CMP-TF	E601	1	Y	834 extraction well.
W-834-S13	EW	Tpsg		DIS	E601	2	Y	834 extraction well.

Table 2.2-7. Building 834 OU ground water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-834-S13	EW	Tpsg	S	CMP-TF	E601	3	Y	834 extraction well.
W-834-S13	EW	Tpsg		DIS	E601	4	Y	834 extraction well.
W-834-S13	EW	Tpsg	A	CMP-TF	TBOS	1	Y	834 extraction well.
W-834-S13	EW	Tpsg		DIS	TBOS	3	Y	834 extraction well.
W-834-S4	PTMW	Tpsg	A	CMP	E300.0:NO3	1	Y	
W-834-S4	PTMW	Tpsg	S	CMP	E601	1	Y	
W-834-S4	PTMW	Tpsg	S	CMP	E601	3	Y	
W-834-S4	PTMW	Tpsg	A	CMP	TBOS	3	Y	
W-834-S5	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Dry.
W-834-S5	PTMW	Tpsg	S	CMP	E601	1	N	Dry.
W-834-S5	PTMW	Tpsg	S	CMP	E601	3	N	Dry.
W-834-S5	PTMW	Tpsg	A	CMP	TBOS	1	N	Dry.
W-834-S6	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Insufficient water.
W-834-S6	PTMW	Tpsg	S	CMP	E601	1	N	Insufficient water.
W-834-S6	PTMW	Tpsg	S	CMP	E601	3	N	Insufficient water.
W-834-S6	PTMW	Tpsg	A	CMP	TBOS	1	N	Insufficient water.
W-834-S7	PTMW	Tpsg	A	CMP	E300.0:NO3	1	Y	
W-834-S7	PTMW	Tpsg		DIS	E300.0:PERC	1	Y	
W-834-S7	PTMW	Tpsg		DIS	E300.0:PERC	3	Y	
W-834-S7	PTMW	Tpsg	S	CMP	E601	1	Y	
W-834-S7	PTMW	Tpsg	S	CMP	E601	3	Y	
W-834-S7	PTMW	Tpsg	A	CMP	TBOS	1	Y	
W-834-S8	PTMW	$Tnsc_2$	A	CMP	E300.0:NO3	1	Y	
W-834-S8	PTMW	$Tnsc_2$	S	CMP	E601	3	Y	
W-834-S8	PTMW	$Tnsc_2$	S	CMP	E624	1	Y	
W-834-S8	PTMW	$Tnsc_2$	A	CMP	EM8015:DIESEL	1	Y	
W-834-S8	PTMW	$Tnsc_2$	A	CMP	TBOS	1	Y	
W-834-S9	PTMW	$Tnsc_2$	A	CMP	E300.0:NO3	1	Y	
W-834-S9	PTMW	$Tnsc_2$	S	CMP	E601	3	Y	
W-834-S9	PTMW	$Tnsc_2$	S	CMP	E624	1	Y	
W-834-S9	PTMW	$Tnsc_2$	A	CMP	EM8015:DIESEL	1	Y	
W-834-S9	PTMW	$Tnsc_2$	A	CMP	TBOS	1	Y	
W-834-T1	GW	$Tnbs_1$		DIS	E200.7:FE	4	Y	
W-834-T1	GW	$Tnbs_1$		DIS	E200.8:AS	4	Y	
W-834-T1	GW	$Tnbs_1$		DIS	E200.8:CR	4	Y	
W-834-T1	GW	$Tnbs_1$		DIS	E200.8:MN	4	Y	
W-834-T1	GW	$Tnbs_1$		DIS	E200.8:SE	4	Y	
W-834-T1	GW	$Tnbs_1$	S	CMP	E300.0:NO3	1	Y	
W-834-T1	GW	$Tnbs_1$	S	CMP	E300.0:NO3	3	Y	
W-834-T1	GW	$Tnbs_1$	Q	CMP	E601	1	Y	
W-834-T1	GW	$Tnbs_1$	Q	CMP	E601	2	Y	
W-834-T1	GW	$Tnbs_1$	Q	CMP	E601	3	Y	
W-834-T1	GW	$Tnbs_1$	Q	CMP	E601	4	Y	
W-834-T1	GW	$Tnbs_1$	S	CMP	TBOS	1	Y	
W-834-T1	GW	$Tnbs_1$	S	CMP	TBOS	3	Y	
W-834-T11	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Dry.
W-834-T11	PTMW	Tpsg	S	CMP	E601	1	N	Dry.
W-834-T11	PTMW	Tpsg	S	CMP	E601	3	N	Dry.
W-834-T11	PTMW	Tpsg	A	CMP	TBOS	1	N	Dry.
W-834-T2	PTMW	Tpsg		DIS	E200.7:FE	3	Y	
W-834-T2	PTMW	Tpsg		DIS	E200.7:FE	4	Y	
W-834-T2	PTMW	Tpsg		DIS	E200.8:AS	3	Y	
W-834-T2	PTMW	Tpsg		DIS	E200.8:AS	4	Y	
W-834-T2	PTMW	Tpsg		DIS	E200.8:CR	3	Y	
W-834-T2	PTMW	Tpsg		DIS	E200.8:MN	3	Y	

Table 2.2-7. Building 834 OU ground water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-834-T2	PTMW	Tpsg		DIS	E200.8:MN	4	Y	
W-834-T2	PTMW	Tpsg		DIS	E200.8:SE	3	Y	
W-834-T2	PTMW	Tpsg		DIS	E200.8:SE	Y	Y	
W-834-T2	PTMW	Tpsg	A	CMP	E300.0:NO3	1	Y	
W-834-T2	PTMW	Tpsg	S	CMP	E601	1	Y	
W-834-T2	PTMW	Tpsg		DIS	E601	2	Y	
W-834-T2	PTMW	Tpsg	S	CMP	E601	3	Y	
W-834-T2	PTMW	Tpsg		DIS	E601	4	Y	
W-834-T2	PTMW	Tpsg		DIS	GENMIN	3	Y	
W-834-T2	PTMW	Tpsg		DIS	LITEHCS	1	Y	
W-834-T2	PTMW	Tpsg		DIS	LITEHCS	4	Y	
W-834-T2	PTMW	Tpsg		DIS	LOWVFAS	1	Y	
W-834-T2	PTMW	Tpsg		DIS	LOWVFAS	4	Y	
W-834-T2	PTMW	Tpsg	A	CMP	TBOS	1	N	Insufficient water.
W-834-T2A	PTMW	Tpsg	A	CMP	E300.0:NO3	1	Y	
W-834-T2A	PTMW	Tpsg	S	CMP	E601	1	Y	
W-834-T2A	PTMW	Tpsg	S	CMP	E601	3	Y	
W-834-T2A	PTMW	Tpsg		DIS	LITEHCS	1	Y	
W-834-T2A	PTMW	Tpsg		DIS	LOWVFAS	1	Y	
W-834-T2A	PTMW	Tpsg	A	CMP	TBOS	3	Y	
W-834-T2B	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Dry.
W-834-T2B	PTMW	Tpsg	S	CMP	E601	1	N	Dry.
W-834-T2B	PTMW	Tpsg	S	CMP	E601	3	N	Dry.
W-834-T2B	PTMW	Tpsg	A	CMP	TBOS	1	N	Dry.
W-834-T2C	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Dry.
W-834-T2C	PTMW	Tpsg	S	CMP	E601	1	N	Dry.
W-834-T2C	PTMW	Tpsg	S	CMP	E601	3	N	Dry.
W-834-T2C	PTMW	Tpsg	A	CMP	TBOS	1	N	Dry.
W-834-T2D	PTMW	Tpsg	A	CMP	E300.0:NO3	1	Y	
W-834-T2D	PTMW	Tpsg	S	CMP	E601	1	Y	
W-834-T2D	PTMW	Tpsg	S	CMP	E601	3	Y	
W-834-T2D	PTMW	Tpsg	A	CMP	TBOS	1	N	Insufficient water.
W-834-T3	GW	$Tnbs_1$	S	CMP	E300.0:NO3	1	Y	
W-834-T3	GW	$Tnbs_1$	S	CMP	E300.0:NO3	3	Y	
W-834-T3	GW	$Tnbs_1$	Q	CMP	E601	1	Y	
W-834-T3	GW	$Tnbs_1$	Q	CMP	E601	2	Y	
W-834-T3	GW	$Tnbs_1$	Q	CMP	E601	3	Y	
W-834-T3	GW	$Tnbs_1$	Q	CMP	E601	4	Y	
W-834-T3	GW	$Tnbs_1$	S	CMP	TBOS	1	Y	
W-834-T3	GW	$Tnbs_1$	S	CMP	TBOS	3	Y	
W-834-T5	PTMW	Tpsg	A	CMP	E300.0:NO3	1	Y	
W-834-T5	PTMW	Tpsg	S	CMP	E601	1	Y	
W-834-T5	PTMW	Tpsg	S	CMP	E601	3	Y	
W-834-T5	PTMW	Tpsg	A	CMP	TBOS	1	Y	
W-834-T7A	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Dry.
W-834-T7A	PTMW	Tpsg	S	CMP	E601	1	N	Dry.
W-834-T7A	PTMW	Tpsg	S	CMP	E601	3	N	Dry.
W-834-T7A	PTMW	Tpsg	A	CMP	TBOS	1	N	Dry.
W-834-T8A	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Dry.
W-834-T8A	PTMW	Tpsg	S	CMP	E601	1	N	Dry.
W-834-T8A	PTMW	Tpsg	S	CMP	E601	3	N	Dry.
W-834-T8A	PTMW	Tpsg	A	CMP	TBOS	1	N	Dry.
W-834-T9	PTMW	Tpsg	A	CMP	E300.0:NO3	1	N	Dry.
W-834-T9	PTMW	Tpsg	S	CMP	E601	1	N	Dry.
W-834-T9	PTMW	Tpsg	S	CMP	E601	3	N	Dry.

Table 2.2-7. Building 834 OU ground water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-834-T9	PTMW	Tpsg	A	CMP	TBOS	1	N	Dry.
W-834-U1	PTMW	Tps	A	CMP	E300.0:NO3	1	Y	
W-834-U1	PTMW	Tps	S	CMP	E624	1	Y	
W-834-U1	PTMW	Tps	S	CMP	E624	3	Y	
W-834-U1	PTMW	Tps	A	CMP	EM8015:DIESEL	1	Y	
W-834-U1	PTMW	Tps	A	CMP	TBOS	1	Y	

Notes:
Building 834 primary COC: VOCs (E601, 502.2, or E624).
Building 834 secondary COC: Nitrate (E300.0:NO3).
Building 834 secondary COC: TBOS/TKEBS.
Building 834 secondary COC: Diesel.
***Well W-834-D5 is hooked up to the Building 834 treatment system but is not currently being used as an extraction well.**
See Acronyms and Abbreviations in the Tables section of this report for acronym and abbreviation definitions.

Table 2.2-8. Building 834 (834) mass removed, July 1, 2009 through December 31, 2009.

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	650	110	NA	4.5	NA	0.48
	August	650	100	NA	4.3	NA	0.36
	September	780	110	NA	3.4	NA	0.46
	October	660	120	NA	2.3	NA	0.32
	November	1,100	120	NA	2.1	NA	0.32
	December	520	62	NA	1.1	NA	0.17
Total		4,300	630	NA	18	NA	2.1

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

Sampling location	Location type	Completion interval	Sampling frequency required	Sample Driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
BC6-10	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	1	Y	
BC6-10	PTMW	$Tnbs_1$	A	CMP	E300.0:PERC	1	Y	
BC6-10	PTMW	$Tnbs_1$	S	CMP	E601	1	Y	
BC6-10	PTMW	$Tnbs_1$	S	CMP	E906	1	Y	
BC6-10	PTMW	$Tnbs_1$	S	CMP	E601	3	Y	
BC6-10	PTMW	$Tnbs_1$	S	CMP	E906	3	Y	
BC6-13	PTMW	$Qt/Tnbs_1$	A	CMP	E300.0:NO3	1	N	Dry.
BC6-13	PTMW	$Qt/Tnbs_1$	A	CMP	E300.0:PERC	1	N	Dry.
BC6-13	PTMW	$Qt/Tnbs_1$	A	CMP	E601	1	N	Dry.
BC6-13	PTMW	$Qt/Tnbs_1$	A	CMP	E906	1	N	Dry.
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E300.0:NO3	1	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E300.0:NO3	1	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E300.0:NO3	1	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E300.0:PERC	1	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E300.0:PERC	1	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E300.0:PERC	1	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E601	1	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E601	1	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E601	1	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$		WGMG	E624	1	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E906	1	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E906	1	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E906	1	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E300.0:NO3	2	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E300.0:NO3	2	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E300.0:NO3	2	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E300.0:PERC	2	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E300.0:PERC	2	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E300.0:PERC	2	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E601	2	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E601	2	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E601	2	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$		WGMG	E624	2	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E906	2	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E906	2	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E906	2	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E300.0:NO3	3	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E300.0:NO3	3	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E300.0:NO3	3	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E300.0:PERC	3	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E300.0:PERC	3	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E300.0:PERC	3	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E601	3	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E601	3	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E601	3	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$		WGMG	E624	3	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E906	3	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E906	3	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E906	3	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E300.0:NO3	4	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E300.0:NO3	4	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E300.0:NO3	4	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E300.0:PERC	4	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E300.0:PERC	4	Y	
CARNRW1*	WS	$Tnbs_1/Tmss$	M	CMP	E300.0:PERC	4	Y	

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

Sampling location	Location type	Completion interval	Sampling frequency required	Sample Driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
CARNRW1*	WS	$Tnbs_1$/Tmss	M	CMP	E601	4	Y	
CARNRW1*	WS	$Tnbs_1$/Tmss	M	CMP	E601	4	Y	
CARNRW1*	WS	$Tnbs_1$/Tmss	M	CMP	E601	4	Y	
CARNRW1*	WS	$Tnbs_1$/Tmss		WGMG	E624	4	Y	
CARNRW1*	WS	$Tnbs_1$/Tmss	M	CMP	E906	4	Y	
CARNRW1*	WS	$Tnbs_1$/Tmss	M	CMP	E906	4	Y	
CARNRW1*	WS	$Tnbs_1$/Tmss	M	CMP	E906	4	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:NO3	1	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:NO3	1	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:NO3	1	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:PERC	1	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:PERC	1	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:PERC	1	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss		WGMG	E502.2	1	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E601	1	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E601	1	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E601	1	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E906	1	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E906	1	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E906	1	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:NO3	2	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:NO3	2	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:NO3	2	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:PERC	2	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:PERC	2	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:PERC	2	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E601	2	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E601	2	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E601	2	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E906	2	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E906	2	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E906	2	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:NO3	3	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:NO3	3	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:NO3	3	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:PERC	3	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:PERC	3	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:PERC	3	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss		WGMG	E502.2	3	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E601	3	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E601	3	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E601	3	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E906	3	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E906	3	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E906	3	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:NO3	4	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:NO3	4	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:NO3	4	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:PERC	4	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:PERC	4	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:PERC	4	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss		WGMG	E502.2	4	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E601	4	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E601	4	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E601	4	Y	

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

Sampling location	Location type	Completion interval	Sampling frequency required	Sample Driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E906	4	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E906	4	Y	
CARNRW2*	WS	$Tnbs_1$/Tmss	M	CMP	E906	4	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:NO3	1	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:NO3	1	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:NO3	1	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:PERC	1	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:PERC	1	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:PERC	1	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E601	1	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E601	1	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E601	1	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E906	1	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E906	1	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E906	1	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:NO3	2	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:NO3	2	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:NO3	2	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:PERC	2	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:PERC	2	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:PERC	2	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E601	2	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E601	2	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E601	2	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E906	2	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E906	2	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E906	2	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:NO3	3	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:NO3	3	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:NO3	3	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:PERC	3	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:PERC	3	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:PERC	3	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E601	3	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E601	3	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E601	3	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E906	3	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E906	3	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E906	3	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:NO3	4	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:NO3	4	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:NO3	4	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:PERC	4	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:PERC	4	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E300.0:PERC	4	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E601	4	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E601	4	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E601	4	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E906	4	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E906	4	Y	
CARNRW3	WS	$Tnbs_1$/Tmss	M	CMP	E906	4	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E300.0:NO3	1	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E300.0:NO3	1	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E300.0:NO3	1	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E300.0:PERC	1	Y	

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

Sampling location	Location type	Completion interval	Sampling frequency required	Sample Driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
CARNRW4	WS	Qal/Tts	M	CMP	E300.0:PERC	1	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E300.0:PERC	1	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E601	1	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E601	1	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E601	1	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E906	1	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E906	1	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E906	1	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E300.0:NO3	2	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E300.0:NO3	2	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E300.0:NO3	2	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E300.0:PERC	2	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E300.0:PERC	2	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E300.0:PERC	2	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E601	2	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E601	2	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E601	2	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E906	2	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E906	2	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E906	2	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E300.0:NO3	3	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E300.0:NO3	3	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E300.0:NO3	3	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E300.0:PERC	3	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E300.0:PERC	3	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E300.0:PERC	3	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E601	3	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E601	3	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E601	3	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E906	3	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E906	3	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E906	3	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E300.0:NO3	4	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E300.0:NO3	4	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E300.0:NO3	4	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E300.0:PERC	4	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E300.0:PERC	4	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E300.0:PERC	4	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E601	4	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E601	4	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E601	4	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E906	4	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E906	4	Y	
CARNRW4	WS	Qal/Tts	M	CMP	E906	4	Y	
EP6-06	DMW	$Qt/Tnbs_1$		WGMG	E300.0:NO3	1	Y	
EP6-06	DMW	$Qt/Tnbs_1$		WGMG	E300.0:PERC	1	Y	
EP6-06	DMW	$Qt/Tnbs_1$		WGMG	E8260	1	Y	
EP6-06	DMW	$Qt/Tnbs_1$		WGMG	E906	1	Y	
EP6-06	DMW	$Qt/Tnbs_1$		WGMG	E300.0:NO3	2	Y	
EP6-06	DMW	$Qt/Tnbs_1$		WGMG	E300.0:PERC	2	Y	
EP6-06	DMW	$Qt/Tnbs_1$		WGMG	E8260	2	Y	
EP6-06	DMW	$Qt/Tnbs_1$		WGMG	E906	2	Y	
EP6-06	DMW	$Qt/Tnbs_1$		WGMG	E300.0:NO3	3	Y	
EP6-06	DMW	$Qt/Tnbs_1$		WGMG	E300.0:PERC	3	Y	
EP6-06	DMW	$Qt/Tnbs_1$		WGMG	E8260	3	Y	

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

Sampling location	Location type	Completion interval	Sampling frequency required	Sample Driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
EP6-06	DMW	Qt/Tnbs$_1$		WGMG	E906	3	Y	
EP6-06	DMW	Qt/Tnbs$_1$		WGMG	E300.0:NO3	4	Y	
EP6-06	DMW	Qt/Tnbs$_1$		WGMG	E300.0:PERC	4	Y	
EP6-06	DMW	Qt/Tnbs$_1$		WGMG	E8260	4	Y	
EP6-06	DMW	Qt/Tnbs$_1$		WGMG	E906	4	Y	
EP6-07	PTMW	Tnbs$_1$	A	CMP	E300.0:NO3	1	Y	
EP6-07	PTMW	Tnbs$_1$	A	CMP	E300.0:PERC	1	Y	
EP6-07	PTMW	Tnbs$_1$	S	CMP	E601	1	Y	
EP6-07	PTMW	Tnbs$_1$	S	CMP	E906	1	Y	
EP6-07	PTMW	Tnbs$_1$	S	CMP	E601	3	Y	
EP6-07	PTMW	Tnbs$_1$	S	CMP	E906	3	Y	
EP6-08	DMW	Tnbs$_1$		WGMG	E300.0:NO3	1	N	Dry.
EP6-08	DMW	Tnbs$_1$		WGMG	E300.0:PERC	1	N	Dry.
EP6-08	DMW	Tnbs$_1$		WGMG	E8260	1	N	Dry.
EP6-08	DMW	Tnbs$_1$		WGMG	E906	1	N	Dry.
EP6-08	DMW	Tnbs$_1$		WGMG	E300.0:NO3	2	N	Dry.
EP6-08	DMW	Tnbs$_1$		WGMG	E300.0:PERC	2	N	Dry.
EP6-08	DMW	Tnbs$_1$		WGMG	E8260	2	N	Dry.
EP6-08	DMW	Tnbs$_1$		WGMG	E906	2	N	Dry.
EP6-08	DMW	Tnbs$_1$		WGMG	E300.0:NO3	3	N	Dry.
EP6-08	DMW	Tnbs$_1$		WGMG	E300.0:PERC	3	N	Dry.
EP6-08	DMW	Tnbs$_1$		WGMG	E8260	3	N	Dry.
EP6-08	DMW	Tnbs$_1$		WGMG	E906	3	N	Dry.
EP6-08	DMW	Tnbs$_1$		WGMG	E300.0:NO3	4	N	Dry.
EP6-08	DMW	Tnbs$_1$		WGMG	E300.0:PERC	4	N	Dry.
EP6-08	DMW	Tnbs$_1$		WGMG	E8260	4	N	Dry.
EP6-08	DMW	Tnbs$_1$		WGMG	E906	4	N	Dry.
EP6-09	DMW	Tnbs$_1$		WGMG	E300.0:NO3	1	Y	
EP6-09	DMW	Tnbs$_1$		WGMG	E300.0:PERC	1	Y	
EP6-09	DMW	Tnbs$_1$		WGMG	E8260	1	Y	
EP6-09	DMW	Tnbs$_1$		WGMG	E906	1	Y	
EP6-09	DMW	Tnbs$_1$		WGMG	E300.0:NO3	2	Y	
EP6-09	DMW	Tnbs$_1$		WGMG	E300.0:PERC	2	Y	
EP6-09	DMW	Tnbs$_1$		WGMG	E8260	2	Y	
EP6-09	DMW	Tnbs$_1$		WGMG	E906	2	Y	
EP6-09	DMW	Tnbs$_1$		WGMG	E300.0:NO3	3	Y	
EP6-09	DMW	Tnbs$_1$		WGMG	E300.0:PERC	3	Y	
EP6-09	DMW	Tnbs$_1$		WGMG	E8260	3	Y	
EP6-09	DMW	Tnbs$_1$		WGMG	E906	3	Y	
EP6-09	DMW	Tnbs$_1$		WGMG	E300.0:NO3	4	Y	
EP6-09	DMW	Tnbs$_1$		WGMG	E300.0:PERC	4	Y	
EP6-09	DMW	Tnbs$_1$		WGMG	E8260	4	Y	
EP6-09	DMW	Tnbs$_1$		WGMG	E906	4	Y	
K6-01**	DMW	Tnbs$_1$		WGMG	E300.0:NO3	1	Y	
K6-01**	DMW	Tnbs$_1$		WGMG	E300.0:PERC	1	Y	
K6-01**	DMW	Tnbs$_1$		WGMG	E601	1	Y	
K6-01**	DMW	Tnbs$_1$		WGMG	E906	1	Y	
K6-01**	DMW	Tnbs$_1$		WGMG	E601	3	Y	
K6-01**	DMW	Tnbs$_1$		WGMG	E906	3	Y	
K6-01S	DMW	Qt/Tnbs$_1$		WGMG	E300.0:NO3	1	Y	
K6-01S	DMW	Qt/Tnbs$_1$		WGMG	E300.0:PERC	1	Y	
K6-01S	DMW	Qt/Tnbs$_1$		WGMG	E8260	1	Y	
K6-01S	DMW	Qt/Tnbs$_1$		WGMG	E906	1	Y	
K6-01S	DMW	Qt/Tnbs$_1$		WGMG	E300.0:NO3	2	Y	
K6-01S	DMW	Qt/Tnbs$_1$		WGMG	E300.0:PERC	2	Y	

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

Sampling location	Location type	Completion interval	Sampling frequency required	Sample Driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
K6-01S	DMW	$Qt/Tnbs_1$		WGMG	E8260	2	Y	
K6-01S	DMW	$Qt/Tnbs_1$		WGMG	E906	2	Y	
K6-01S	DMW	$Qt/Tnbs_1$		WGMG	E300.0:NO3	3	Y	
K6-01S	DMW	$Qt/Tnbs_1$		WGMG	E300.0:PERC	3	Y	
K6-01S	DMW	$Qt/Tnbs_1$		WGMG	E8260	3	Y	
K6-01S	DMW	$Qt/Tnbs_1$		WGMG	E906	3	Y	
K6-01S	DMW	$Qt/Tnbs_1$		WGMG	E300.0:NO3	4	Y	
K6-01S	DMW	$Qt/Tnbs_1$		WGMG	E300.0:PERC	4	Y	
K6-01S	DMW	$Qt/Tnbs_1$		WGMG	E8260	4	Y	
K6-01S	DMW	$Qt/Tnbs_1$		WGMG	E906	4	Y	
K6-03	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	1	Y	
K6-03	PTMW	$Tnbs_1$	A	CMP	E300.0:PERC	1	Y	
K6-03	PTMW	$Tnbs_1$	S	CMP	E601	1	Y	
K6-03	PTMW	$Tnbs_1$	S	CMP	E906	1	Y	
K6-03	PTMW	$Tnbs_1$	S	CMP	E601	3	Y	
K6-03	PTMW	$Tnbs_1$	S	CMP	E906	3	Y	
K6-04	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	1	N	Insufficient water.
K6-04	PTMW	$Tnbs_1$	A	CMP	E300.0:PERC	1	N	Insufficient water.
K6-04	PTMW	$Tnbs_1$	S	CMP	E601	1	N	Insufficient water.
K6-04	PTMW	$Tnbs_1$	S	CMP	E906	1	N	Insufficient water.
K6-04	PTMW	$Tnbs_1$	S	CMP	E601	3	N	Inoperable pump.
K6-04	PTMW	$Tnbs_1$	S	CMP	E906	3	N	Inoperable pump.
K6-14	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	1	Y	
K6-14	PTMW	$Tnbs_1$	A	CMP	E300.0:PERC	1	Y	
K6-14	PTMW	$Tnbs_1$	S	CMP	E601	1	Y	
K6-14	PTMW	$Tnbs_1$	S	CMP	E906	1	Y	
K6-14	PTMW	$Tnbs_1$	S	CMP	E601	3	Y	
K6-14	PTMW	$Tnbs_1$	S	CMP	E906	3	Y	
K6-15	PTMW	$Qt/Tnbs_1$	A	CMP	E300.0:NO3	1	N	Dry.
K6-15	PTMW	$Qt/Tnbs_1$	A	CMP	E300.0:PERC	1	N	Dry.
K6-15	PTMW	$Qt/Tnbs_1$	S	CMP	E601	1	N	Dry.
K6-15	PTMW	$Qt/Tnbs_1$	S	CMP	E906	1	N	Dry.
K6-15	PTMW	$Qt/Tnbs_1$	S	CMP	E601	3	N	Dry.
K6-15	PTMW	$Qt/Tnbs_1$	S	CMP	E906	3	N	Dry.
K6-16	PTMW	$Qt/Tnbs_1$	A	CMP	E300.0:NO3	1	Y	
K6-16	PTMW	$Qt/Tnbs_1$	A	CMP	E300.0:PERC	1	Y	
K6-16	PTMW	$Qt/Tnbs_1$	S	CMP	E601	1	Y	
K6-16	PTMW	$Qt/Tnbs_1$	S	CMP	E906	1	Y	
K6-16	PTMW	$Qt/Tnbs_1$	S	CMP	E601	3	Y	
K6-16	PTMW	$Qt/Tnbs_1$	S	CMP	E906	3	Y	
K6-17	GW	$Qt/Tnbs_1$	S	CMP	E300.0:NO3	1	Y	
K6-17	GW	$Qt/Tnbs_1$	S	CMP	E300.0:PERC	1	Y	
K6-17	GW	$Qt/Tnbs_1$	Q	CMP	E601	1	Y	
K6-17	GW	$Qt/Tnbs_1$	Q	CMP	E906	1	Y	
K6-17	GW	$Qt/Tnbs_1$	Q	CMP	E601	2	Y	
K6-17	GW	$Qt/Tnbs_1$	Q	CMP	E906	2	Y	
K6-17	GW	$Qt/Tnbs_1$	S	CMP	E300.0:NO3	3	Y	
K6-17	GW	$Qt/Tnbs_1$	S	CMP	E300.0:PERC	3	Y	
K6-17	GW	$Qt/Tnbs_1$	Q	CMP	E601	3	Y	
K6-17	GW	$Qt/Tnbs_1$	Q	CMP	E906	3	Y	
K6-17	GW	$Qt/Tnbs_1$	Q	CMP	E601	4	Y	
K6-17	GW	$Qt/Tnbs_1$	Q	CMP	E906	4	Y	
K6-18	PTMW	$Qt/Tnbs_1$	A	CMP	E300.0:NO3	1	Y	
K6-18	PTMW	$Qt/Tnbs_1$	A	CMP	E300.0:PERC	1	Y	
K6-18	PTMW	$Qt/Tnbs_1$	S	CMP	E601	1	Y	

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

Sampling location	Location type	Completion interval	Sampling frequency required	Sample Driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
K6-18	PTMW	$Qt/Tnbs_1$	S	CMP	E906	1	Y	
K6-18	PTMW	$Qt/Tnbs_1$		DIS	E300.0:NO3	2	Y	
K6-18	PTMW	$Qt/Tnbs_1$	S	CMP	E601	3	Y	
K6-18	PTMW	$Qt/Tnbs_1$	S	CMP	E906	3	Y	
K6-19	DMW	$Qt/Tnbs_1$		WGMG	E300.0:NO3	1	Y	
K6-19	DMW	$Qt/Tnbs_1$		WGMG	E300.0:PERC	1	Y	
K6-19	DMW	$Qt/Tnbs_1$		WGMG	E8260	1	Y	
K6-19	DMW	$Qt/Tnbs_1$		WGMG	E906	1	Y	
K6-19	DMW	$Qt/Tnbs_1$		WGMG	E300.0:NO3	2	Y	
K6-19	DMW	$Qt/Tnbs_1$		WGMG	E300.0:PERC	2	Y	
K6-19	DMW	$Qt/Tnbs_1$		WGMG	E8260	2	Y	
K6-19	DMW	$Qt/Tnbs_1$		WGMG	E906	2	Y	
K6-19	DMW	$Qt/Tnbs_1$		WGMG	E300.0:NO3	3	Y	
K6-19	DMW	$Qt/Tnbs_1$		WGMG	E300.0:PERC	3	Y	
K6-19	DMW	$Qt/Tnbs_1$		WGMG	E8260	3	Y	
K6-19	DMW	$Qt/Tnbs_1$		WGMG	E906	3	Y	
K6-19	DMW	$Qt/Tnbs_1$		WGMG	E300.0:NO3	4	Y	
K6-19	DMW	$Qt/Tnbs_1$		WGMG	E300.0:PERC	4	Y	
K6-19	DMW	$Qt/Tnbs_1$		WGMG	E8260	4	Y	
K6-19	DMW	$Qt/Tnbs_1$		WGMG	E906	4	Y	
K6-21	PTMW	Qt	A	CMP	E300.0:NO3	1	N	Dry.
K6-21	PTMW	Qt	A	CMP	E300.0:PERC	1	N	Dry.
K6-21	PTMW	Qt	A	CMP	E601	1	N	Dry.
K6-21	PTMW	Qt	A	CMP	E906	1	N	Dry.
K6-22	GW	$Tnbs_1$	S	CMP	E300.0:NO3	1	Y	
K6-22	GW	$Tnbs_1$	S	CMP	E300.0:PERC	1	Y	
K6-22	GW	$Tnbs_1$	Q	CMP	E601	1	Y	
K6-22	GW	$Tnbs_1$	Q	CMP	E906	1	Y	
K6-22	GW	$Tnbs_1$	Q	CMP	E601	2	Y	
K6-22	GW	$Tnbs_1$	Q	CMP	E906	2	Y	
K6-22	GW	$Tnbs_1$	S	CMP	E300.0:NO3	3	Y	
K6-22	GW	$Tnbs_1$	S	CMP	E300.0:PERC	3	Y	
K6-22	GW	$Tnbs_1$	Q	CMP	E601	3	Y	
K6-22	GW	$Tnbs_1$	Q	CMP	E906	3	Y	
K6-22	GW	$Tnbs_1$	Q	CMP	E601	4	Y	
K6-22	GW	$Tnbs_1$	Q	CMP	E906	4	Y	
K6-23	PTMW	Tmss	A	CMP	E300.0:NO3	1	Y	
K6-23	PTMW	Tmss	A	CMP	E300.0:PERC	1	Y	
K6-23	PTMW	Tmss	S	CMP	E601	1	Y	
K6-23	PTMW	Tmss	S	CMP	E906	1	Y	
K6-23	PTMW	Tmss		WGMG	E300.0:NO3	3	Y	
K6-23	PTMW	Tmss	S	CMP	E601	3	Y	
K6-23	PTMW	Tmss	S	CMP	E906	3	Y	
K6-24	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	1	N	Dry.
K6-24	PTMW	$Tnbs_1$	A	CMP	E300.0:PERC	1	N	Dry.
K6-24	PTMW	$Tnbs_1$	S	CMP	E601	1	N	Dry.
K6-24	PTMW	$Tnbs_1$	S	CMP	E906	1	N	Dry.
K6-24	PTMW	$Tnbs_1$	S	CMP	E601	3	N	Dry.
K6-24	PTMW	$Tnbs_1$	S	CMP	E906	3	N	Dry.
K6-25	PTMW	Tmss	A	CMP	E300.0:NO3	1	Y	
K6-25	PTMW	Tmss	A	CMP	E300.0:PERC	1	Y	
K6-25	PTMW	Tmss	S	CMP	E601	1	Y	
K6-25	PTMW	Tmss	S	CMP	E906	1	Y	
K6-25	PTMW	Tmss	S	CMP	E601	3	Y	
K6-25	PTMW	Tmss	S	CMP	E906	3	Y	

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

Sampling location	Location type	Completion interval	Sampling frequency required	Sample Driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
K6-26	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	1	Y	
K6-26	PTMW	$Tnbs_1$	A	CMP	E300.0:PERC	1	Y	
K6-26	PTMW	$Tnbs_1$	S	CMP	E601	1	Y	
K6-26	PTMW	$Tnbs_1$	S	CMP	E906	1	Y	
K6-26	PTMW	$Tnbs_1$	S	CMP	E601	3	Y	
K6-26	PTMW	$Tnbs_1$	S	CMP	E906	3	Y	
K6-27	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	1	Y	
K6-27	PTMW	$Tnbs_1$	A	CMP	E300.0:PERC	1	Y	
K6-27	PTMW	$Tnbs_1$	S	CMP	E601	1	Y	
K6-27	PTMW	$Tnbs_1$	S	CMP	E906	1	Y	
K6-27	PTMW	$Tnbs_1$	S	CMP	E601	3	Y	
K6-27	PTMW	$Tnbs_1$	S	CMP	E906	3	Y	
K6-32	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	1	N	Dry.
K6-32	PTMW	$Tnbs_1$	A	CMP	E300.0:PERC	1	N	Dry.
K6-32	PTMW	$Tnbs_1$	S	CMP	E601	1	N	Dry.
K6-32	PTMW	$Tnbs_1$	S	CMP	E906	1	N	Dry.
K6-32	PTMW	$Tnbs_1$	S	CMP	E601	3	N	Dry.
K6-32	PTMW	$Tnbs_1$	S	CMP	E906	3	N	Dry.
K6-33	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	1	N	Dry.
K6-33	PTMW	$Tnbs_1$	A	CMP	E300.0:PERC	1	N	Dry.
K6-33	PTMW	$Tnbs_1$	S	CMP	E601	1	N	Dry.
K6-33	PTMW	$Tnbs_1$	S	CMP	E906	1	N	Dry.
K6-33	PTMW	$Tnbs_1$	S	CMP	E601	3	N	Inoperable pump.
K6-33	PTMW	$Tnbs_1$	S	CMP	E906	3	N	Inoperable pump.
K6-34	GW	$Tnbs_1$	S	CMP	E300.0:NO3	1	Y	
K6-34	GW	$Tnbs_1$	S	CMP	E300.0:PERC	1	Y	
K6-34	GW	$Tnbs_1$	Q	CMP	E601	1	Y	
K6-34	GW	$Tnbs_1$	Q	CMP	E906	1	Y	
K6-34	GW	$Tnbs_1$	Q	CMP	E601	2	Y	
K6-34	GW	$Tnbs_1$	Q	CMP	E906	2	Y	
K6-34	GW	$Tnbs_1$	S	CMP	E300.0:NO3	3	Y	
K6-34	GW	$Tnbs_1$	S	CMP	E300.0:PERC	3	Y	
K6-34	GW	$Tnbs_1$	Q	CMP	E601	3	Y	
K6-34	GW	$Tnbs_1$	Q	CMP	E906	3	Y	
K6-34	GW	$Tnbs_1$	Q	CMP	E601	4	Y	
K6-34	GW	$Tnbs_1$	Q	CMP	E906	4	Y	
K6-35	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	1	Y	
K6-35	PTMW	$Tnbs_1$	A	CMP	E300.0:PERC	1	Y	
K6-35	PTMW	$Tnbs_1$	S	CMP	E601	1	Y	
K6-35	PTMW	$Tnbs_1$	S	CMP	E906	1	Y	
K6-35	PTMW	$Tnbs_1$	S	CMP	E601	3	Y	
K6-35	PTMW	$Tnbs_1$	S	CMP	E906	3	Y	
K6-36	DMW	$Tnbs_1$		WGMG	E300.0:NO3	1	N	Dry.
K6-36	DMW	$Tnbs_1$		WGMG	E300.0:PERC	1	N	Dry.
K6-36	DMW	$Tnbs_1$		WGMG	E8260	1	N	Dry.
K6-36	DMW	$Tnbs_1$		WGMG	E906	1	N	Dry.
K6-36	DMW	$Tnbs_1$		WGMG	E300.0:NO3	2	N	Dry.
K6-36	DMW	$Tnbs_1$		WGMG	E300.0:PERC	2	N	Dry.
K6-36	DMW	$Tnbs_1$		WGMG	E8260	2	N	Dry.
K6-36	DMW	$Tnbs_1$		WGMG	E906	2	N	Dry.
K6-36	DMW	$Tnbs_1$		WGMG	E300.0:NO3	3	N	Dry.
K6-36	DMW	$Tnbs_1$		WGMG	E300.0:PERC	3	N	Dry.
K6-36	DMW	$Tnbs_1$		WGMG	E8260	3	N	Dry.
K6-36	DMW	$Tnbs_1$		WGMG	E906	3	N	Dry.
K6-36	DMW	$Tnbs_1$		WGMG	E300.0:NO3	4	N	Dry.

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

Sampling location	Location type	Completion interval	Sampling frequency required	Sample Driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
K6-36	DMW	$Tnbs_1$		WGMG	E300.0:PERC	4	N	Dry.
K6-36	DMW	$Tnbs_1$		WGMG	E8260	4	N	Dry.
K6-36	DMW	$Tnbs_1$		WGMG	E906	4	N	Dry.
SPRING15	SPR	Qt	A	CMP	E300.0:NO3	1	N	Dry.
SPRING15	SPR	Qt	A	CMP	E300.0:PERC	1	N	Dry.
SPRING15	SPR	Qt	A	CMP	E601	1	N	Dry.
SPRING15	SPR	Qt	A	CMP	E906	1	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	1	Y	
W-33C-01	PTMW	Tts	S	CMP	E906	1	Y	
W-33C-01	PTMW	Tts	S	CMP	E601	3	Y	
W-33C-01	PTMW	Tts	S	CMP	E906	3	Y	
W-34-01	MWB	$Tnsc_1$		DIS	E300.0:NO3	1	Y	
W-34-01	MWB	$Tnsc_1$		DIS	E300.0:PERC	1	Y	
W-34-01	MWB	$Tnsc_1$		DIS	E601	1	Y	
W-34-01	MWB	$Tnsc_1$		DIS	E906	1	Y	
W-34-02	MWB	Upper $Tnbs_1$		DIS	E300.0:NO3	1	Y	
W-34-02	MWB	Upper $Tnbs_1$		DIS	E300.0:PERC	1	Y	
W-34-02	MWB	Upper $Tnbs_1$		DIS	E601	1	Y	
W-34-02	MWB	Upper $Tnbs_1$		DIS	E906	1	Y	
W-PIT6-1819	GW	$Tnbs_1$	S	CMP	E300.0:NO3	1	Y	
W-PIT6-1819	GW	$Tnbs_1$	S	CMP	E300.0:PERC	1	Y	
W-PIT6-1819	GW	$Tnbs_1$	Q	CMP	E601	1	Y	
W-PIT6-1819	GW	$Tnbs_1$	Q	CMP	E906	1	Y	
W-PIT6-1819	GW	$Tnbs_1$	Q	CMP	E601	2	Y	
W-PIT6-1819	GW	$Tnbs_1$	Q	CMP	E906	2	Y	
W-PIT6-1819	GW	$Tnbs_1$	S	CMP	E300.0:NO3	3	Y	
W-PIT6-1819	GW	$Tnbs_1$	S	CMP	E300.0:PERC	3	Y	
W-PIT6-1819	GW	$Tnbs_1$	Q	CMP	E601	3	Y	
W-PIT6-1819	GW	$Tnbs_1$	Q	CMP	E906	3	Y	
W-PIT6-1819	GW	$Tnbs_1$	Q	CMP	E601	4	Y	
W-PIT6-1819	GW	$Tnbs_1$	Q	CMP	E906	4	Y	

Notes:

DWM Analytes and sampling frequency are specified in the Pit 6 Landfill Post-Closure Plan.

***Well sampled as part of the surveillance monitoring performed by the Water Guidance and Monitoring Group (WGMG) for additional constiutents and the results are reported in the LLNL Site Annual Environmental Report.**

****K6-01 to be sampled quarterly if K6-01S is dry.**

Pit 6 primary COC: VOCs (E601, E502.2, or E624).

Pit 6 primary COC: tritium (E906).

Pit 6 secondary COC: nitrate (E300:NO3).

Pit 6 secondary COC: perchlorate (E300.0:PERC).

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

Table 2.4-1. Building 815-Source (815-SRC) volumes of ground water and soil vapor extracted and discharged, July 1, 2009 through December 31, 2009.

Treatment facility	Month	SVTS Operational hours	GWTS Operational hours	Volume of vapor extracted (thousands of ft^3)	Volume of ground water discharged (gal)
815-SRC	July	NA	666	NA	48,058
	August	NA	837	NA	61,070
	September	NA	717	NA	52,904
	October	NA	646	NA	49,020
	November	NA	818	NA	63,128
	December	NA	657	NA	51,017
Total		NA	4,341	NA	325,197

Table 2.4-2. Building 815-Proximal (815-PRX) volumes of ground water and soil vapor extracted and discharged, July 1, 2009 through December 31, 2009.

Treatment facility	Month	SVTS Operational hours	GWTS Operational hours	Volume of vapor extracted (thousands of ft^3)	Volume of ground water discharged (gal)
815-PRX	July	NA	673	NA	69,440
	August	NA	840	NA	88,417
	September	NA	728	NA	73,748
	October	NA	655	NA	66,437
	November	NA	830	NA	82,750
	December	NA	164	NA	16,063
Total		NA	3,890	NA	396,855

Table 2.4-3. Building 815-Distal Site Boundary (815-DSB) volumes of ground water and soil vapor extracted and discharged, July 1, 2009 through December 31, 2009.

Treatment facility	Month	SVTS Operational hours	GWTS Operational hours	Volume of vapor extracted (thousands of ft^3)	Volume of ground water discharged (gal)
815-DSB	July	NA	717	NA	81,511
	August	NA	681	NA	101,625
	September	NA	814	NA	178,971
	October	NA	714	NA	151,719
	November	NA	636	NA	136,224
	December	NA	845	NA	179,161
Total		NA	4,407	NA	829,211

Table 2.4-4. Building 817-Source (817-SRC) volumes of ground water and soil vapor extracted and discharged, July 1, 2009 through December 31, 2009.

Treatment facility	Month	SVTS Operational hours	GWTS Operational hours	Volume of vapor extracted (thousands of ft^3)	Volume of ground water discharged (gal)
817-SRC	July	NA	3	NA	41
	August	NA	1	NA	29
	September	NA	2	NA	108
	October	NA	1	NA	119
	November	NA	2	NA	127
	December	NA	1	NA	51
Total		NA	10	NA	475

Table 2.4-5. Building 817-Proximal (817-PRX) volumes of ground water and soil vapor extracted and discharged, July 1, 2009 through December 31, 2009.

Treatment facility	Month	SVTS Operational hours	GWTS Operational hours	Volume of vapor extracted (thousands of ft^3)	Volume of ground water discharged (gal)
817-PRX	July	NA	656	NA	54,482
	August	NA	845	NA	50,671
	September	NA	635	NA	1,822
	October	NA	502	NA	934
	November	NA	520	NA	54,682
	December	NA	674	NA	57,166
Total		NA	3,832	NA	219,757

Table 2.4-6. Building 829-Source (829-SRC) volumes of ground water and soil vapor extracted and discharged, July 1, 2009 through December 31, 2009.

Treatment facility	Month	SVTS Operational hours	GWTS Operational hours	Volume of vapor extracted (thousands of ft^3)	Volume of ground water discharged (gal)
829-SRC	July	NA	0	NA	0
	August	NA	0	NA	0
	September	NA	0	NA	0
	October	NA	0	NA	0
	November	NA	0	NA	0
	December	NA	0	NA	0
Total		NA	0	NA	0

Table 2.4-7. High Explosive Process Area OU VOCs in ground water 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 Boundry															
815-DSB-GWTS-E	7/7/09	<0.5	<0.5	<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
815-DSB-GWTS-E	8/17/09	<0.5	<0.5	<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-GWTS-E	9/3/09	<0.5	<0.5	<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-GWTS-E	10/12/09	<0.5	<0.5	<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-GWTS-E	11/3/09	<0.5	<0.5	<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-GWTS-E	12/1/09	<0.5	<0.5	<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-GWTS-I	7/7/09	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 J
815-DSB-GWTS-I	10/12/09	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
Building 815-Proximal															
815-PRX-GWTS-E	7/7/09	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5 L	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5 O
815-PRX-GWTS-E	8/3/09	<0.5	<0.5	<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-GWTS-E	9/14/09	<0.5	<0.5	<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-GWTS-E	10/7/09	<0.5	<0.5	<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-GWTS-E	11/3/09	<0.5	<0.5	<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-GWTS-E	12/1/09	<0.5	<0.5	<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-GWTS-I	7/7/09	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 J
815-PRX-GWTS-I	10/7/09	28	<0.5	<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-Source															
815-SRC-GWTS-E	7/7/09	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5 L	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5 O
815-SRC-GWTS-E	8/3/09	<0.5	<0.5	<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-GWTS-E	9/14/09	<0.5	<0.5	<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-GWTS-E	10/7/09	<0.5	<0.5	<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-GWTS-E	11/4/09	<0.5	<0.5	<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-GWTS-E	12/1/09	<0.5	<0.5	<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-GWTS-I	7/7/09	4.3	<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 OJ
815-SRC-GWTS-I	10/7/09	4.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.67	<0.5	<0.5	<0.5	<0.5	<0.5

Table 2.4-7. High Explosive Process Area OU VOCs in ground water 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-Proximal															
817-PRX-GWTS-E	7/8/09	<0.5	<0.5	<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
817-PRX-GWTS-E	8/3/09	<0.5	<0.5	<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-GWTS-E	9/14/09	<0.5	<0.5	<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-GWTS-E	10/14/09	<0.5	<0.5	<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-GWTS-E	11/10/09	<0.5	<0.5	<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-GWTS-E	12/1/09	<0.5	<0.5	<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-GWTS-I	7/8/09	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
817-PRX-GWTS-I	10/14/09	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
Building 817-Source[a]															
817-SRC-GWTS-E	7/8/09	<0.5	<0.5	<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-GWTS-E	8/3/09	<0.5	<0.5	<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-GWTS-E	9/14/09	<0.5	<0.5	<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-GWTS-E	10/7/09	<0.5	<0.5	<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-GWTS-E	11/3/09	<0.5	<0.5	<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-GWTS-E	12/1/09	<0.5	<0.5	<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-GWTS-I	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
817-SRC-GWTS-I	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Building 829-Source[b]															

Notes:

[a] **No influent VOC samples collected during this semester.**

[b] **No samples were collected during this semester due to compressor power problems.**

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

Table 2.4-7 (Cont.). Analyte detected but not reported in main table.

Location	Date	Detection frequency
Building 815-Distal Site Boundry		
815-DSB-GWTS-E	7/7/09	0 of 18
815-DSB-GWTS-E	8/17/09	0 of 18
815-DSB-GWTS-E	9/3/09	0 of 18
815-DSB-GWTS-E	10/12/09	0 of 18
815-DSB-GWTS-E	11/3/09	0 of 18
815-DSB-GWTS-E	12/1/09	0 of 18
815-DSB-GWTS-I	7/7/09	0 of 18
815-DSB-GWTS-I	10/12/09	0 of 18
Building 815-Proximal		
815-PRX-GWTS-E	7/7/09	0 of 18
815-PRX-GWTS-E	8/3/09	0 of 18
815-PRX-GWTS-E	9/14/09	0 of 18
815-PRX-GWTS-E	10/7/09	0 of 18
815-PRX-GWTS-E	11/3/09	0 of 18
815-PRX-GWTS-E	12/1/09	0 of 18
815-PRX-GWTS-I	7/7/09	0 of 18
815-PRX-GWTS-I	10/7/09	0 of 18
Building 815-Source		
815-SRC-GWTS-E	7/7/09	0 of 18
815-SRC-GWTS-E	8/3/09	0 of 18
815-SRC-GWTS-E	9/14/09	0 of 18
815-SRC-GWTS-E	10/7/09	0 of 18
815-SRC-GWTS-E	11/4/09	0 of 18
815-SRC-GWTS-E	12/1/09	0 of 18
815-SRC-GWTS-I	7/7/09	0 of 18
815-SRC-GWTS-I	10/7/09	0 of 18
Building 817-Proximal		
817-PRX-GWTS-E	7/8/09	0 of 18
817-PRX-GWTS-E	8/3/09	0 of 18
817-PRX-GWTS-E	9/14/09	0 of 18
817-PRX-GWTS-E	10/14/09	0 of 18
817-PRX-GWTS-E	11/10/09	0 of 18
817-PRX-GWTS-E	12/1/09	0 of 18
817-PRX-GWTS-I	7/8/09	0 of 18
817-PRX-GWTS-I	10/14/09	0 of 18
Building 817-Source[a]		
817-SRC-GWTS-E	7/8/09	0 of 18
817-SRC-GWTS-E	8/3/09	0 of 18
817-SRC-GWTS-E	9/14/09	0 of 18
817-SRC-GWTS-E	10/7/09	0 of 18
817-SRC-GWTS-E	11/3/09	0 of 18
817-SRC-GWTS-E	12/1/09	0 of 18
817-SRC-GWTS-I	–	–
817-SRC-GWTS-I	–	–
Building 829-Source[b]		

Notes:

[a] No influent VOC samples collected during second semester due to sampling error.

[b] No samples were collected during this semester due to compressor power problems.

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

Table 2.4-8. High Explosive Process Area OU nitrate and perchlorate in ground water treatment system influent and effluent.

Location	Date	Nitrate (as NO3) (mg/L)	Perchlorate (μg/L)
Building 815-Distal Site Boundry			
815-DSB-GWTS-E	7/7/09	1.2	NR
815-DSB-GWTS-E	8/17/09	1.7	NR
815-DSB-GWTS-E	9/3/09	<0.44	NR
815-DSB-GWTS-E	10/12/09	<0.5	NR
815-DSB-GWTS-E	11/3/09	<0.5	NR
815-DSB-GWTS-E	12/1/09	<0.5	NR
815-DSB-GWTS-I	7/7/09	1.4	NR
815-DSB-GWTS-I	10/12/09	<0.5	NR
Building 815-Proximal			
815-PRX-GWTS-E	7/7/09	64	<4
815-PRX-GWTS-E	8/3/09	81	<4
815-PRX-GWTS-E	9/14/09	110 D	<4
815-PRX-GWTS-E	10/7/09	78	<4 L
815-PRX-GWTS-E	11/3/09	120 DO	<4
815-PRX-GWTS-E	12/1/09	93 D	<4
815-PRX-GWTS-I	7/7/09	81	6.7
815-PRX-GWTS-I	10/7/09	81	7.8
Building 815-Source			
815-SRC-GWTS-E	7/7/09	110 D	<4
815-SRC-GWTS-E	8/3/09	110 DO	<4
815-SRC-GWTS-E	9/14/09	110 D	<4
815-SRC-GWTS-E	10/7/09	110 D	<4 L
815-SRC-GWTS-E	11/4/09	110 D	<4
815-SRC-GWTS-E	12/1/09	110 D	<4
815-SRC-GWTS-I	7/7/09	98 D	6.3
815-SRC-GWTS-I	10/7/09	100 D	5.8
Building 817-Proximal			
817-PRX-GWTS-E	7/8/09	96 D	<4
817-PRX-GWTS-E	8/3/09	110 D	<4
817-PRX-GWTS-E	9/14/09	110 D	<4
817-PRX-GWTS-E	10/14/09	83 D	<4
817-PRX-GWTS-E	11/10/09	92 D	<4 L
817-PRX-GWTS-E	12/1/09	98 D	<4
817-PRX-GWTS-I	7/8/09	95 D	23 D
817-PRX-GWTS-I	10/14/09	94 D	25 D
Building 817-Source			
817-SRC-GWTS-E	7/8/09	69	<4
817-SRC-GWTS-E	8/3/09	89 DO	<4
817-SRC-GWTS-E	9/14/09	80	<4
817-SRC-GWTS-E	10/7/09	67	<4 L
817-SRC-GWTS-E	11/3/09	64	<4
817-SRC-GWTS-E	12/1/09	54	<4
817-SRC-GWTS-I[a]	11/3/09	-	28 D
817-SRC-GWTS-I[a]	12/3/09	-	30 D
Building 829-Source[b]			

Notes:

[a] No influent nitrate samples collected this semester.

[b] No samples collected during this semester due to compressor power problems.

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

Table 2.4-9. High Explosive Process Area OU high explosive compounds in ground water treatment system influent and effluent.

Location	Date	1,3,5-TNB (μg/L)	1,3-DNB (μg/L)	TNT (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)
Building 815-Proximal														
815-PRX-GWTS-E	7/7/09	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<0.9	<1.8	<0.9
815-PRX-GWTS-E	8/3/09	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<0.74	<1.5	<0.74
815-PRX-GWTS-E	9/14/09	<2.7 D	<2.7 D	<2.7 D	<2.7 D	<2.7 D	<2.7 D	<2.7 D	<2.7 D	<2.7 D	<2.7 D	<1.4 D	<2.7 D	<1.4 D
815-PRX-GWTS-E	10/7/09	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<0.72	<1.4	<0.72
815-PRX-GWTS-E	11/3/09	<2.5 D	<2.5 D	<2.5 D	<2.5 DO	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<1.2 D	<2.5 D	<1.2 D
815-PRX-GWTS-E	12/1/09	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<0.77	<1.5	<0.77
815-PRX-GWTS-I	7/7/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
815-PRX-GWTS-I	10/12/09	<1.4	<1.4 O	<1.4 O	<1.4 O	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<0.68	<1.4	<0.68
Building 815-Source														
815-SRC-GWTS-E	7/7/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
815-SRC-GWTS-E	8/3/09	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<0.75	<1.5	<0.75
815-SRC-GWTS-E	9/14/09	<2.4 D	<2.4 D	<2.4 D	<2.4 D	<2.4 D	<2.4 D	<2.4 D	<2.4 D	<2.4 D	<2.4 D	<1.2 D	<2.4 D	<1.2 D
815-SRC-GWTS-E	10/12/09	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<0.69	<1.4	<0.69
815-SRC-GWTS-E	11/4/09	<2	<2	<2	<2 O	<2	<2	<2	<2	<2	<2	<1	<2	<1
815-SRC-GWTS-E	12/1/09	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<0.7	<1.4	<0.7
815-SRC-GWTS-I	7/7/09	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	5	<1.5	58
815-SRC-GWTS-I	10/12/09	<1.6	<1.6 O	<1.6 O	<1.6 O	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	7.9	<1.6	63
Building 817-Proximal														
817-PRX-GWTS-E	7/8/09	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<0.67	<1.3	<0.67
817-PRX-GWTS-E	8/3/09	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<0.69	<1.4	<0.69
817-PRX-GWTS-E	9/14/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
817-PRX-GWTS-E	10/14/09	<2	<2 O	<2 O	<2 O	<2	<2	<2	<2	<2	<2	<1	<2	<1
817-PRX-GWTS-E	11/10/09	<1.4	<1.4	<1.4	<1.4	<1.4	R	<1.4	<1.4	<1.4	<1.4	<0.68	<1.4	<0.68
817-PRX-GWTS-E	12/1/09	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<0.67	<1.3	<0.67
817-PRX-GWTS-I	7/8/09	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<0.85	<1.7	8.1
817-PRX-GWTS-I	10/14/09	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<0.89	<1.8	15

Table 2.4-9. High Explosive Process Area OU high explosive compounds in ground water treatment system influent and effluent.

Location	Date	1,3,5-TNB (µg/L)	1,3-DNB (µg/L)	TNT (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)
Building 817-Source														
817-SRC-GWTS-E	7/8/09	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<0.81	<1.6	<0.81
817-SRC-GWTS-E	8/3/09	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<0.76	<1.5	<0.76
817-SRC-GWTS-E	9/14/09	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<0.88	<1.8	<0.88
817-SRC-GWTS-E	10/12/09	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<0.68	<1.4	<0.68
817-SRC-GWTS-E	11/3/09	<2 D	<2 D	<2 D	<2 DO	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<1 D	<2 D	<1 D
817-SRC-GWTS-E	12/1/09	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<0.76	<1.5	<0.76
817-SRC-GWTS-I	11/3/09	<2.9 D	<2.9 DL	<2.9 DO	<2.9 D	<2.9 D	<2.9 D	<2.9 D	<2.9 D	<2.9 D	<2.9 D	8.4 D	<2.9 D	24 D
817-SRC-GWTS-I	12/3/09	<1.7 IJ	<1.7 IJ	<1.7 IJ	<1.7 IJ	<1.7 IJ	<1.7 IJ	<1.7 IJ	<1.7 IJ	<1.7 IJ	<1.7 IJ	14 IJ	<1.7 IJ	27 IJ
Building 829-Source[a]														

Notes:

[a] **High Explosives monitoring at 829-SRC-GWTS not 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 OU 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**
		Nitrate	**Quarterly**
		pH	**Quarterly**
Effluent Port	**815-SRC-E**	**VOCs**	**Monthly**
		HE Compounds	**Monthly**
		Perchlorate	**Monthly**
		Nitrate	**Monthly**
		pH	**Monthly**
815-PRX GWTS			
Influent Port	**815-PRX-I**	**VOCs**	**Quarterly**
		HE Compounds	**Quarterly**
		Perchlorate	**Quarterly**
		Nitrate	**Quarterly**
		pH	**Quarterly**
Effluent Port	**815-PRX-E**	**VOCs**	**Monthly**
		HE Compounds	**Monthly**
		Perchlorate	**Monthly**
		Nitrate	**Monthly**
		pH	**Monthly**
815-DSB GWTS			
Influent Port	**815-DSB-I**	**VOCs**	**Quarterly**
		Nitrate	**Quarterly**
		pH	**Quarterly**
Effluent Port	**815-DSB-E**	**VOCs**	**Monthly**
		Nitrate	**Monthly**
		pH	**Monthly**

Table 2.4-10 (Cont.). High Explosives Process Area OU treatment facility sampling and analysis plans.

Sample location	Sample identification	Parameter	Frequency
817-SRC GWTS			
Influent Port	**817-SRC-I**	**VOCs**	**Quarterly**
		HE Compounds	**Quarterly**
		Perchlorate	**Quarterly**
		Nitrate	**Quarterly**
		pH	**Quarterly**
Effluent Port	**817-SRC-E**	**VOCs**	**Monthly**
		HE Compounds	**Monthly**
		Perchlorate	**Monthly**
		Nitrate	**Monthly**
		pH	**Monthly**
817-PRX GWTS			
Influent Port	**817-PRX-I**	**VOCs**	**Quarterly**
		HE Compounds	**Quarterly**
		Perchlorate	**Quarterly**
		Nitrate	**Quarterly**
		pH	**Quarterly**
Effluent Port	**817-PRX-E**	**VOCs**	**Monthly**
		HE Compounds	**Monthly**
		Perchlorate	**Monthly**
		Nitrate	**Monthly**
		pH	**Monthly**
829-SRC GWTS			
Influent Port	**W-829-06-829-SRC-I**	**VOCs**	**Quarterly**
		Perchlorate	**Quarterly**
		Nitrate	**Quarterly**
		pH	**Quarterly**
Effluent Port	**829-SRC-BTU-I**	**VOCs**	**Monthly**
Effluent Port	**829-SRC-E**	**Perchlorate**	**Monthly**
		Nitrate	**Monthly**
		pH	**Monthly**

Notes:

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 OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
GALLO1*	WS	$Tnbs_2$	M	CMP	E300.0:NO3	1	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E300.0:NO3	1	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E300.0:NO3	1	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E300.0:NO3	2	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E300.0:NO3	2	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E300.0:NO3	2	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E300.0:NO3	3	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E300.0:NO3	3	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E300.0:NO3	3	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E300.0:NO3	4	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E300.0:NO3	4	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E300.0:NO3	4	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E300.0:PERC	1	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E300.0:PERC	1	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E300.0:PERC	1	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E300.0:PERC	2	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E300.0:PERC	2	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E300.0:PERC	2	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E300.0:PERC	3	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E300.0:PERC	3	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E300.0:PERC	3	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E300.0:PERC	4	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E300.0:PERC	4	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E300.0:PERC	4	Y	
GALLO1*	WS	$Tnbs_2$		WGMG	E502.2	1	Y	
GALLO1*	WS	$Tnbs_2$		WGMG	E502.2	2	Y	
GALLO1*	WS	$Tnbs_2$		WGMG	E502.2	3	Y	
GALLO1*	WS	$Tnbs_2$		WGMG	E502.2	4	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E601	1	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E601	1	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E601	1	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E601	2	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E601	2	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E601	2	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E601	3	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E601	3	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E601	3	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E601	4	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E601	4	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E601	4	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E8330	1	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E8330	1	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E8330	1	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E8330	2	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E8330	2	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E8330	2	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E8330	3	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E8330	3	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E8330	3	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E8330	4	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E8330	4	Y	
GALLO1*	WS	$Tnbs_2$	M	CMP	E8330	4	Y	
SPRING14	SPR	$Tnbs_2$	B	CMP	E300.0:NO3	1	Y	Next sample required 1stQ 2011.

Table 2.4-11. High Explosives Process Area OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
SPRING14	SPR	$Tnbs_2$	B	CMP	E300.0:PERC	1	Y	Next sample required 1stQ 2011.
SPRING14	SPR	$Tnbs_2$	B	CMP	E601	1	Y	Next sample required 1stQ 2011.
SPRING14	SPR	$Tnbs_2$	B	CMP	E8330	1	Y	Next sample required 1stQ 2011.
SPRING5	SPR	Tps	A	CMP	E300.0:NO3	1	N	Dry. Sampled as W-817-03A.
SPRING5	SPR	Tps	A	CMP	E300.0:PERC	1	N	Dry. Sampled as W-817-03A.
SPRING5	SPR	Tps	S	CMP	E601	1	N	Dry. Sampled as W-817-03A.
SPRING5	SPR	Tps	S	CMP	E601	3	N	Dry. Sampled as W-817-03A.
SPRING5	SPR	Tps	A	CMP	E8330	1	N	Dry. Sampled as W-817-03A.
W-35B-01	GW	Qal	S	CMP	E300.0:NO3	1	Y	
W-35B-01	GW	Qal	S	CMP	E300.0:NO3	3	Y	
W-35B-01	GW	Qal	S	CMP	E300.0:PERC	1	Y	
W-35B-01	GW	Qal	S	CMP	E300.0:PERC	3	Y	
W-35B-01	GW	Qal	Q	CMP	E601	1	Y	
W-35B-01	GW	Qal	Q	CMP	E601	2	Y	
W-35B-01	GW	Qal	Q	CMP	E601	3	Y	
W-35B-01	GW	Qal	Q	CMP	E601	4	Y	
W-35B-01	GW	Qal	S	CMP	E8330	1	Y	
W-35B-01	GW	Qal	S	CMP	E8330	3	Y	
W-35B-02	GW	$Tnbs_2$	S	CMP	E300.0:NO3	1	Y	
W-35B-02	GW	$Tnbs_2$	S	CMP	E300.0:NO3	3	Y	
W-35B-02	GW	$Tnbs_2$	S	CMP	E300.0:PERC	1	Y	
W-35B-02	GW	$Tnbs_2$	S	CMP	E300.0:PERC	3	Y	
W-35B-02	GW	$Tnbs_2$	Q	CMP	E601	1	Y	
W-35B-02	GW	$Tnbs_2$	Q	CMP	E601	2	Y	
W-35B-02	GW	$Tnbs_2$	Q	CMP	E601	3	Y	
W-35B-02	GW	$Tnbs_2$	Q	CMP	E601	4	Y	
W-35B-02	GW	$Tnbs_2$	S	CMP	E8330	1	Y	
W-35B-02	GW	$Tnbs_2$	S	CMP	E8330	3	Y	
W-35B-03	GW	$Tnbs_2$	S	CMP	E300.0:NO3	1	Y	
W-35B-03	GW	$Tnbs_2$	S	CMP	E300.0:NO3	3	Y	
W-35B-03	GW	$Tnbs_2$	S	CMP	E300.0:PERC	1	Y	
W-35B-03	GW	$Tnbs_2$	S	CMP	E300.0:PERC	3	Y	
W-35B-03	GW	$Tnbs_2$	Q	CMP	E601	1	Y	
W-35B-03	GW	$Tnbs_2$	Q	CMP	E601	2	Y	
W-35B-03	GW	$Tnbs_2$	Q	CMP	E601	3	Y	
W-35B-03	GW	$Tnbs_2$	Q	CMP	E601	4	Y	
W-35B-03	GW	$Tnbs_2$	S	CMP	E8330	1	Y	
W-35B-03	GW	$Tnbs_2$	S	CMP	E8330	3	Y	
W-35B-04	GW	$Tnbs_2$	S	CMP	E300.0:NO3	1	Y	
W-35B-04	GW	$Tnbs_2$	S	CMP	E300.0:NO3	3	Y	
W-35B-04	GW	$Tnbs_2$	S	CMP	E300.0:PERC	1	Y	
W-35B-04	GW	$Tnbs_2$	S	CMP	E300.0:PERC	3	Y	
W-35B-04	GW	$Tnbs_2$	Q	CMP	E601	1	Y	
W-35B-04	GW	$Tnbs_2$	Q	CMP	E601	2	Y	
W-35B-04	GW	$Tnbs_2$	Q	CMP	E601	3	Y	
W-35B-04	GW	$Tnbs_2$	Q	CMP	E601	4	Y	
W-35B-04	GW	$Tnbs_2$	S	CMP	E8330	1	Y	
W-35B-04	GW	$Tnbs_2$	S	CMP	E8330	3	Y	
W-35B-05	GW	$Tnbs_2$	S	CMP	E300.0:NO3	1	Y	
W-35B-05	GW	$Tnbs_2$	S	CMP	E300.0:NO3	3	Y	
W-35B-05	GW	$Tnbs_2$	S	CMP	E300.0:PERC	1	Y	

Table 2.4-11. High Explosives Process Area OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-35B-05	GW	$Tnbs_2$	S	CMP	E300.0:PERC	3	Y	
W-35B-05	GW	$Tnbs_2$	Q	CMP	E601	1	Y	
W-35B-05	GW	$Tnbs_2$	Q	CMP	E601	2	Y	
W-35B-05	GW	$Tnbs_2$	Q	CMP	E601	3	Y	
W-35B-05	GW	$Tnbs_2$	Q	CMP	E601	4	Y	
W-35B-05	GW	$Tnbs_2$	S	CMP	E8330	1	Y	
W-35B-05	GW	$Tnbs_2$	S	CMP	E8330	3	Y	
W-35C-01	PTMW	$Tnsc_2$	A	CMP	E300.0:NO3	1	Y	
W-35C-01	PTMW	$Tnsc_2$	A	CMP	E300.0:PERC	1	Y	
W-35C-01	PTMW	$Tnsc_2$	S	CMP	E601	1	Y	
W-35C-01	PTMW	$Tnsc_2$	S	CMP	E601	3	Y	
W-35C-01	PTMW	$Tnsc_2$	A	CMP	E8330	1	Y	
W-35C-02	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	1	Y	
W-35C-02	PTMW	$Tnbs_1$	A	CMP	E300.0:PERC	1	Y	
W-35C-02	PTMW	$Tnbs_1$	S	CMP	E601	1	Y	
W-35C-02	PTMW	$Tnbs_1$	S	CMP	E601	3	Y	
W-35C-02	PTMW	$Tnbs_1$	A	CMP	E8330	1	Y	
W-35C-04	EW	$Tnbs_2$	A	CMP-TF	E300.0:NO3	1	Y	815-DSB extraction well.
W-35C-04	EW	$Tnbs_2$	A	CMP-TF	E300.0:PERC	1	Y	815-DSB extraction well.
W-35C-04	EW	$Tnbs_2$	S	CMP-TF	E601	1	Y	815-DSB extraction well.
W-35C-04	EW	$Tnbs_2$		DIS	E601	2	Y	815-DSB extraction well.
W-35C-04	EW	$Tnbs_2$	S	CMP-TF	E601	3	Y	815-DSB extraction well.
W-35C-04	EW	$Tnbs_2$		DIS	E601	4	Y	815-DSB extraction well.
W-35C-04	EW	$Tnbs_2$	A	CMP-TF	E8330	1	Y	815-DSB extraction well.
W-35C-05	PTMW	Tps	A	CMP	E300.0:NO3	1	Y	
W-35C-05	PTMW	Tps	A	CMP	E300.0:PERC	1	Y	
W-35C-05	PTMW	Tps	S	CMP	E601	1	Y	
W-35C-05	PTMW	Tps	S	CMP	E601	3	Y	
W-35C-05	PTMW	Tps	A	CMP	E8330	1	Y	
W-35C-06	PTMW	Qal	A	CMP	E300.0:NO3	1	Y	
W-35C-06	PTMW	Qal	A	CMP	E300.0:PERC	1	Y	
W-35C-06	PTMW	Qal	S	CMP	E601	1	Y	
W-35C-06	PTMW	Qal	S	CMP	E601	3	Y	
W-35C-06	PTMW	Qal	A	CMP	E8330	1	Y	
W-35C-07	PTMW	$Tnsc_2$	A	CMP	E300.0:NO3	1	Y	
W-35C-07	PTMW	$Tnsc_2$	A	CMP	E300.0:PERC	1	Y	
W-35C-07	PTMW	$Tnsc_2$	S	CMP	E601	1	Y	
W-35C-07	PTMW	$Tnsc_2$	S	CMP	E601	3	Y	
W-35C-07	PTMW	$Tnsc_2$	A	CMP	E8330	1	Y	
W-35C-08	PTMW	$Tnsc_2$	A	CMP	E300.0:NO3	1	Y	
W-35C-08	PTMW	$Tnsc_2$	A	CMP	E300.0:PERC	1	Y	
W-35C-08	PTMW	$Tnsc_2$	S	CMP	E601	1	Y	
W-35C-08	PTMW	$Tnsc_2$	S	CMP	E601	3	Y	
W-35C-08	PTMW	$Tnsc_2$	A	CMP	E8330	1	Y	
W-4A	PTMW	$Tnbs_2$	A	CMP	E300.0:NO3	1	Y	
W-4A	PTMW	$Tnbs_2$	A	CMP	E300.0:PERC	1	Y	
W-4A	PTMW	$Tnbs_2$	S	CMP	E601	1	Y	
W-4A	PTMW	$Tnbs_2$	S	CMP	E601	3	Y	
W-4A	PTMW	$Tnbs_2$	A	CMP	E8330	1	Y	
W-4AS	PTMW	Tps	A	CMP	E300.0:NO3	1	Y	
W-4AS	PTMW	Tps	A	CMP	E300.0:PERC	1	Y	
W-4AS	PTMW	Tps	S	CMP	E601	1	Y	
W-4AS	PTMW	Tps	S	CMP	E601	3	Y	
W-4AS	PTMW	Tps	A	CMP	E8330	1	Y	
W-4B	PTMW	$Tnbs_2$	A	CMP	E300.0:NO3	1	Y	

Table 2.4-11. High Explosives Process Area OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-4B	PTMW	$Tnbs_2$	A	CMP	E300.0:PERC	1	Y	
W-4B	PTMW	$Tnbs_2$	S	CMP	E601	1	Y	
W-4B	PTMW	$Tnbs_2$	S	CMP	E601	3	Y	
W-4B	PTMW	$Tnbs_2$	A	CMP	E8330	1	Y	
W-4C	GW	$Tnsc_1$	S	CMP	E300.0:NO3	1	Y	
W-4C	GW	$Tnsc_1$	S	CMP	E300.0:NO3	3	Y	
W-4C	GW	$Tnsc_1$	S	CMP	E300.0:PERC	1	Y	
W-4C	GW	$Tnsc_1$	S	CMP	E300.0:PERC	3	Y	
W-4C	GW	$Tnsc_1$	Q	CMP	E601	1	Y	
W-4C	GW	$Tnsc_1$	Q	CMP	E601	2	Y	
W-4C	GW	$Tnsc_1$	Q	CMP	E601	3	Y	
W-4C	GW	$Tnsc_1$	Q	CMP	E601	4	Y	
W-6BD	PTMW	Tps	A	CMP	E300.0:NO3	1	Y	
W-6BD	PTMW	Tps	A	CMP	E300.0:PERC	1	Y	
W-6BD	PTMW	Tps	S	CMP	E601	1	Y	
W-6BD	PTMW	Tps	S	CMP	E601	3	Y	
W-6BD	PTMW	Tps	A	CMP	E8330	1	Y	
W-6BS	PTMW	Tps	A	CMP	E300.0:NO3	1	Y	
W-6BS	PTMW	Tps	A	CMP	E300.0:PERC	1	Y	
W-6BS	PTMW	Tps	S	CMP	E601	1	Y	
W-6BS	PTMW	Tps	S	CMP	E601	3	Y	
W-6BS	PTMW	Tps	A	CMP	E8330	1	Y	
W-6CD	PTMW	$Tnbs_2$	A	CMP	E300.0:NO3	1	Y	
W-6CD	PTMW	$Tnbs_2$	A	CMP	E300.0:PERC	1	Y	
W-6CD	PTMW	$Tnbs_2$	S	CMP	E601	1	Y	
W-6CD	PTMW	$Tnbs_2$	S	CMP	E601	3	Y	
W-6CD	PTMW	$Tnbs_2$	A	CMP	E8330	1	Y	
W-6CI	PTMW	$Tnsc_2$	A	CMP	E300.0:NO3	1	Y	
W-6CI	PTMW	$Tnsc_2$	A	CMP	E300.0:PERC	1	Y	
W-6CI	PTMW	$Tnsc_2$	S	CMP	E601	1	Y	
W-6CI	PTMW	$Tnsc_2$	S	CMP	E601	3	Y	
W-6CI	PTMW	$Tnsc_2$	A	CMP	E8330	1	Y	
W-6CS	PTMW	Tps	A	CMP	E300.0:NO3	1	Y	
W-6CS	PTMW	Tps	A	CMP	E300.0:PERC	1	Y	
W-6CS	PTMW	Tps	S	CMP	E601	1	Y	
W-6CS	PTMW	Tps	S	CMP	E601	3	Y	
W-6CS	PTMW	Tps	A	CMP	E8330	1	Y	
W-6EI	PTMW	$Tnsc_2$	A	CMP	E300.0:NO3	1	Y	
W-6EI	PTMW	$Tnsc_2$	A	CMP	E300.0:PERC	1	Y	
W-6EI	PTMW	$Tnsc_2$	S	CMP	E601	1	Y	
W-6EI	PTMW	$Tnsc_2$	S	CMP	E601	3	Y	
W-6EI	PTMW	$Tnsc_2$	A	CMP	E8330	1	Y	
W-6ER	EW	$Tnbs_2$	A	CMP-TF	E300.0:NO3	1	Y	815-DSB extraction well.
W-6ER	EW	$Tnbs_2$	A	CMP-TF	E300.0:PERC	1	Y	815-DSB extraction well.
W-6ER	EW	$Tnbs_2$	S	CMP-TF	E601	1	Y	815-DSB extraction well.
W-6ER	EW	$Tnbs_2$		DIS	E601	2	Y	815-DSB extraction well.
W-6ER	EW	$Tnbs_2$	S	CMP-TF	E601	3	Y	815-DSB extraction well.
W-6ER	EW	$Tnbs_2$		DIS	E601	4	Y	815-DSB extraction well.
W-6ER	EW	$Tnbs_2$	A	CMP-TF	E8330	1	Y	815-DSB extraction well.
W-6ES	PTMW	Qal	A	CMP	E300.0:NO3	1	Y	
W-6ES	PTMW	Qal	A	CMP	E300.0:PERC	1	Y	
W-6ES	PTMW	Qal	S	CMP	E601	1	Y	
W-6ES	PTMW	Qal	S	CMP	E601	3	Y	
W-6ES	PTMW	Qal	A	CMP	E8330	1	Y	
W-6F	PTMW	$Tnbs_2$	A	CMP	E300.0:NO3	1	Y	

Table 2.4-11. High Explosives Process Area OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-6F	PTMW	$Tnbs_2$	A	CMP	E300.0:PERC	1	Y	
W-6F	PTMW	$Tnbs_2$	S	CMP	E601	1	Y	
W-6F	PTMW	$Tnbs_2$	S	CMP	E601	3	Y	
W-6F	PTMW	$Tnbs_2$	A	CMP	E8330	1	Y	
W-6G	PTMW	$Tnbs_2$	A	CMP	E300.0:NO3	1	Y	
W-6G	PTMW	$Tnbs_2$	A	CMP	E300.0:PERC	1	Y	
W-6G	PTMW	$Tnbs_2$	S	CMP	E601	1	Y	
W-6G	PTMW	$Tnbs_2$	S	CMP	E601	3	Y	
W-6G	PTMW	$Tnbs_2$	A	CMP	E8330	1	Y	
W-6H	GW	$Tnbs_2$	S	CMP	E300.0:NO3	1	Y	
W-6H	GW	$Tnbs_2$	S	CMP	E300.0:NO3	3	Y	
W-6H	GW	$Tnbs_2$	S	CMP	E300.0:PERC	1	Y	
W-6H	GW	$Tnbs_2$	S	CMP	E300.0:PERC	3	Y	
W-6H	GW	$Tnbs_2$	Q	CMP	E601	1	Y	
W-6H	GW	$Tnbs_2$	Q	CMP	E601	2	Y	
W-6H	GW	$Tnbs_2$	Q	CMP	E601	3	Y	
W-6H	GW	$Tnbs_2$	Q	CMP	E601	4	Y	
W-6H	GW	$Tnbs_2$	S	CMP	E8330	1	Y	
W-6H	GW	$Tnbs_2$	S	CMP	E8330	3	Y	
W-6I	PTMW	Tps	A	CMP	E300.0:NO3	1	Y	
W-6I	PTMW	Tps	A	CMP	E300.0:PERC	1	Y	
W-6I	PTMW	Tps	S	CMP	E601	1	Y	
W-6I	PTMW	Tps	S	CMP	E601	3	Y	
W-6I	PTMW	Tps	A	CMP	E8330	1	Y	
W-6J	GW	$Tnbs_2$	S	CMP	E300.0:NO3	1	Y	
W-6J	GW	$Tnbs_2$	S	CMP	E300.0:NO3	3	Y	
W-6J	GW	$Tnbs_2$	S	CMP	E300.0:PERC	1	Y	
W-6J	GW	$Tnbs_2$	S	CMP	E300.0:PERC	3	Y	
W-6J	GW	$Tnbs_2$	Q	CMP	E601	1	Y	
W-6J	GW	$Tnbs_2$	Q	CMP	E601	2	Y	
W-6J	GW	$Tnbs_2$	Q	CMP	E601	3	Y	
W-6J	GW	$Tnbs_2$	Q	CMP	E601	4	Y	
W-6J	GW	$Tnbs_2$	S	CMP	E8330	1	Y	
W-6J	GW	$Tnbs_2$	S	CMP	E8330	3	Y	
W-6K	PTMW	$Tnbs_2$	A	CMP	E300.0:NO3	1	Y	
W-6K	PTMW	$Tnbs_2$	A	CMP	E300.0:PERC	1	Y	
W-6K	PTMW	$Tnbs_2$	S	CMP	E601	1	Y	
W-6K	PTMW	$Tnbs_2$	S	CMP	E601	3	Y	
W-6K	PTMW	$Tnbs_2$	A	CMP	E8330	1	Y	
W-6L	PTMW	$Tnbs_2$	A	CMP	E300.0:NO3	1	Y	
W-6L	PTMW	$Tnbs_2$	A	CMP	E300.0:PERC	1	Y	
W-6L	PTMW	$Tnbs_2$	S	CMP	E601	1	Y	
W-6L	PTMW	$Tnbs_2$	S	CMP	E601	3	Y	
W-6L	PTMW	$Tnbs_2$	A	CMP	E8330	1	Y	
W-806-06A	MWB	$Tnsc_1$	B	CMP	E300.0:NO3	1	Y	Next sample required 1stQ 2011.
W-806-06A	MWB	$Tnsc_1$	B	CMP	E300.0:PERC	1	Y	Next sample required 1stQ 2011.
W-806-06A	MWB	$Tnsc_1$	B	CMP	E601	1	Y	Next sample required 1stQ 2011.
W-806-06A	MWB	$Tnsc_1$	B	CMP	E8330	1	Y	Next sample required 1stQ 2011.
W-806-07	MWB	$Tnbs_2$	B	CMP	E300.0:NO3	1	N	Dry. Next sample required 1stQ 2011.

Table 2.4-11. High Explosives Process Area OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-806-07	MWB	$Tnbs_2$	B	CMP	E300.0:PERC	1	N	Dry. Next sample required 1stQ 2011.
W-806-07	MWB	$Tnbs_2$	B	CMP	E601	1	N	Dry. Next sample required 1stQ 2011.
W-806-07	MWB	$Tnbs_2$	B	CMP	E8330	1	N	Dry. Next sample required 1stQ 2011.
W-808-01	PTMW	Tps	A	CMP	E300.0:NO3	1	Y	
W-808-01	PTMW	Tps	A	CMP	E300.0:PERC	1	Y	
W-808-01	PTMW	Tps	S	CMP	E601	1	Y	
W-808-01	PTMW	Tps	S	CMP	E601	3	Y	
W-808-01	PTMW	Tps	A	CMP	E8330	1	Y	
W-808-02	PTMW	$Tnsc_2$	A	CMP	E300.0:NO3	1	N	Dry.
W-808-02	PTMW	$Tnsc_2$	A	CMP	E300.0:PERC	1	N	Dry.
W-808-02	PTMW	$Tnsc_2$	S	CMP	E601	1	N	Dry.
W-808-02	PTMW	$Tnsc_2$	S	CMP	E601	3	N	Dry.
W-808-02	PTMW	$Tnsc_2$	A	CMP	E8330	1	N	Dry.
W-808-03	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	1	Y	
W-808-03	PTMW	$Tnbs_1$	A	CMP	E300.0:PERC	1	Y	
W-808-03	PTMW	$Tnbs_1$	S	CMP	E601	1	Y	
W-808-03	PTMW	$Tnbs_1$	S	CMP	E601	3	Y	
W-808-03	PTMW	$Tnbs_1$	A	CMP	E8330	1	Y	
W-809-01	PTMW	Tps	A	CMP	E300.0:NO3	1	Y	
W-809-01	PTMW	Tps	A	CMP	E300.0:PERC	1	Y	
W-809-01	PTMW	Tps	S	CMP	E601	1	Y	
W-809-01	PTMW	Tps	S	CMP	E601	3	Y	
W-809-01	PTMW	Tps	A	CMP	E8330	1	Y	
W-809-02	PTMW	$Tnbs_2$	B	CMP	E300.0:NO3	1	Y	Next sample required 1stQ 2011.
W-809-02	PTMW	$Tnbs_2$		DIS	E300.0:PERC	1	Y	
W-809-02	PTMW	$Tnbs_2$		DIS	E300.0:PERC	3	Y	
W-809-02	PTMW	$Tnbs_2$		DIS	E601	1	Y	
W-809-02	PTMW	$Tnbs_2$	B	CMP	E8330	1	Y	Next sample required 1stQ 2011.
W-809-03	PTMW	$Tnbs_2$	B	CMP	E300.0:NO3	1	Y	Next sample required 1stQ 2011.
W-809-03	PTMW	$Tnbs_2$		DIS	E300.0:PERC	1	Y	
W-809-03	PTMW	$Tnbs_2$		DIS	E300.0:PERC	3	Y	
W-809-03	PTMW	$Tnbs_2$		DIS	E601	1	Y	
W-809-03	PTMW	$Tnbs_2$		DIS	E8330	1	Y	
W-809-04	PTMW	Tps	A	CMP	E300.0:NO3	1	Y	
W-809-04	PTMW	Tps	A	CMP	E300.0:PERC	1	Y	
W-809-04	PTMW	Tps	S	CMP	E601	1	Y	
W-809-04	PTMW	Tps	S	CMP	E601	3	Y	
W-809-04	PTMW	Tps	A	CMP	E8330	1	Y	
W-810-01	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	1	Y	
W-810-01	PTMW	$Tnbs_1$	A	CMP	E300.0:PERC	1	Y	
W-810-01	PTMW	$Tnbs_1$	S	CMP	E601	1	Y	
W-810-01	PTMW	$Tnbs_1$	S	CMP	E601	3	Y	
W-810-01	PTMW	$Tnbs_1$	A	CMP	E8330	1	Y	
W-814-01	PTMW	Tps	A	CMP	E300.0:NO3	1	Y	
W-814-01	PTMW	Tps	A	CMP	E300.0:PERC	1	Y	
W-814-01	PTMW	Tps	S	CMP	E601	1	Y	
W-814-01	PTMW	Tps	S	CMP	E601	3	Y	
W-814-01	PTMW	Tps	A	CMP	E8330	1	Y	

Table 2.4-11. High Explosives Process Area OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-814-02	PTMW	$Tnbs_2$	A	CMP	E300.0:NO3	1	Y	
W-814-02	PTMW	$Tnbs_2$	A	CMP	E300.0:PERC	1	Y	
W-814-02	PTMW	$Tnbs_2$	S	CMP	E601	1	Y	
W-814-02	PTMW	$Tnbs_2$	S	CMP	E601	3	Y	
W-814-02	PTMW	$Tnbs_2$	A	CMP	E8330	1	Y	
W-814-03	PTMW	Tps	A	CMP	E300.0:NO3	1	N	Dry.
W-814-03	PTMW	Tps	A	CMP	E300.0:PERC	1	N	Dry.
W-814-03	PTMW	Tps	S	CMP	E601	1	N	Dry.
W-814-03	PTMW	Tps	S	CMP	E601	3	N	Dry.
W-814-03	PTMW	Tps	A	CMP	E8330	1	N	Dry.
W-814-04	GW	$Tnsc_1$	S	CMP	E300.0:NO3	1	Y	
W-814-04	GW	$Tnsc_1$	S	CMP	E300.0:NO3	3	Y	
W-814-04	GW	$Tnsc_1$	S	CMP	E300.0:PERC	1	Y	
W-814-04	GW	$Tnsc_1$	S	CMP	E300.0:PERC	3	Y	
W-814-04	GW	$Tnsc_1$	Q	CMP	E601	1	Y	
W-814-04	GW	$Tnsc_1$	Q	CMP	E601	2	Y	
W-814-04	GW	$Tnsc_1$	Q	CMP	E601	3	Y	
W-814-04	GW	$Tnsc_1$	Q	CMP	E601	4	Y	
W-814-04	GW	$Tnsc_1$		DIS	E8330	1	Y	
W-814-2138	PTMW	Tpsg	A	CMP	E300.0:NO3	1	Y	
W-814-2138	PTMW	Tpsg	A	CMP	E300.0:PERC	1	Y	
W-814-2138	PTMW	Tpsg	A	CMP	E601	1	Y	
W-814-2138	PTMW	Tpsg	A	CMP	E8330	1	Y	
W-815-01	PTMW	Tps	A	CMP	E300.0:NO3	1	N	Dry.
W-815-01	PTMW	Tps	A	CMP	E300.0:PERC	1	N	Dry.
W-815-01	PTMW	Tps	S	CMP	E601	1	N	Dry.
W-815-01	PTMW	Tps	S	CMP	E601	3	N	Dry.
W-815-01	PTMW	Tps	A	CMP	E8330	1	N	Dry.
W-815-02	EW	$Tnbs_2$	A	CMP-TF	E300.0:NO3	1	Y	815-SRC extraction well.
W-815-02	EW	$Tnbs_2$	A	CMP-TF	E300.0:PERC	1	Y	815-SRC extraction well.
W-815-02	EW	$Tnbs_2$		DIS	E300.0:PERC	3	Y	815-SRC extraction well.
W-815-02	EW	$Tnbs_2$	S	CMP-TF	E601	1	Y	815-SRC extraction well.
W-815-02	EW	$Tnbs_2$		DIS	E601	2	Y	815-SRC extraction well.
W-815-02	EW	$Tnbs_2$	S	CMP-TF	E601	3	Y	815-SRC extraction well.
W-815-02	EW	$Tnbs_2$		DIS	E601	4	Y	815-SRC extraction well.
W-815-02	EW	$Tnbs_2$	A	CMP-TF	E8330	1	Y	815-SRC extraction well.
W-815-02	EW	$Tnbs_2$		DIS	E8330	3	Y	815-SRC extraction well.
W-815-03	PTMW	Tps	A	CMP	E300.0:NO3	1	N	Dry.
W-815-03	PTMW	Tps	A	CMP	E300.0:PERC	1	N	Dry.
W-815-03	PTMW	Tps	S	CMP	E601	1	N	Dry.
W-815-03	PTMW	Tps	S	CMP	E601	3	N	Dry.
W-815-03	PTMW	Tps	A	CMP	E8330	1	N	Dry.
W-815-04	EW	$Tnbs_2$	A	CMP-TF	E300.0:NO3	1	Y	815-SRC extraction well.
W-815-04	EW	$Tnbs_2$	A	CMP-TF	E300.0:PERC	1	Y	815-SRC extraction well.
W-815-04	EW	$Tnbs_2$		DIS	E300.0:PERC	3	Y	815-SRC extraction well.
W-815-04	EW	$Tnbs_2$	S	CMP-TF	E601	1	Y	815-SRC extraction well.
W-815-04	EW	$Tnbs_2$		DIS	E601	2	Y	815-SRC extraction well.
W-815-04	EW	$Tnbs_2$	S	CMP-TF	E601	3	Y	815-SRC extraction well.
W-815-04	EW	$Tnbs_2$		DIS	E601	4	Y	815-SRC extraction well.
W-815-04	EW	$Tnbs_2$	A	CMP-TF	E8330	1	Y	815-SRC extraction well.
W-815-04	EW	$Tnbs_2$		DIS	E8330	3	Y	815-SRC extraction well.
W-815-05	PTMW	Tps	A	CMP	E300.0:NO3	1	Y	
W-815-05	PTMW	Tps	A	CMP	E300.0:PERC	1	Y	
W-815-05	PTMW	Tps	S	CMP	E601	1	Y	
W-815-05	PTMW	Tps	S	CMP	E601	3	Y	

Table 2.4-11. High Explosives Process Area OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-815-05	PTMW	Tps	A	CMP	E8330	1	Y	
W-815-06	PTMW	$Tnbs_2$	A	CMP	E300.0:NO3	1	Y	
W-815-06	PTMW	$Tnbs_2$	A	CMP	E300.0:PERC	1	Y	
W-815-06	PTMW	$Tnbs_2$	S	CMP	E601	1	Y	
W-815-06	PTMW	$Tnbs_2$	S	CMP	E601	3	Y	
W-815-06	PTMW	$Tnbs_2$	A	CMP	E8330	1	Y	
W-815-07	PTMW	$Tnbs_2$	A	CMP	E300.0:NO3	1	Y	
W-815-07	PTMW	$Tnbs_2$	A	CMP	E300.0:PERC	1	Y	
W-815-07	PTMW	$Tnbs_2$	S	CMP	E601	1	Y	
W-815-07	PTMW	$Tnbs_2$	S	CMP	E601	3	Y	
W-815-07	PTMW	$Tnbs_2$	A	CMP	E8330	1	Y	
W-815-08	GW	$Tnbs_1$	S	CMP	E300.0:NO3	1	Y	
W-815-08	GW	$Tnbs_1$	S	CMP	E300.0:NO3	3	Y	
W-815-08	GW	$Tnbs_1$	S	CMP	E300.0:PERC	1	Y	
W-815-08	GW	$Tnbs_1$	S	CMP	E300.0:PERC	3	Y	
W-815-08	GW	$Tnbs_1$	Q	CMP	E601	1	Y	
W-815-08	GW	$Tnbs_1$	Q	CMP	E601	2	Y	
W-815-08	GW	$Tnbs_1$	Q	CMP	E601	3	Y	
W-815-08	GW	$Tnbs_1$	Q	CMP	E601	4	Y	
W-815-08	GW	$Tnbs_1$	S	CMP	E8330	1	Y	
W-815-08	GW	$Tnbs_1$	S	CMP	E8330	3	Y	
W-815-1928	PTMW	Tps	A	CMP	E300.0:NO3	1	N	Dry.
W-815-1928	PTMW	Tps	A	CMP	E300.0:PERC	1	N	Dry.
W-815-1928	PTMW	Tps	S	CMP	E601	1	N	Dry.
W-815-1928	PTMW	Tps	S	CMP	E601	3	N	Dry.
W-815-1928	PTMW	Tps	A	CMP	E8330	1	N	Dry.
W-815-2110	GW	$Tnbs_2$	S	CMP	E300.0:NO3	1	Y	
W-815-2110	GW	$Tnbs_2$	S	CMP	E300.0:NO3	3	Y	
W-815-2110	GW	$Tnbs_2$	S	CMP	E300.0:PERC	1	Y	
W-815-2110	GW	$Tnbs_2$	S	CMP	E300.0:PERC	3	Y	
W-815-2110	GW	$Tnbs_2$	Q	CMP	E601	1	Y	
W-815-2110	GW	$Tnbs_2$	Q	CMP	E601	2	Y	
W-815-2110	GW	$Tnbs_2$	Q	CMP	E601	3	Y	
W-815-2110	GW	$Tnbs_2$	Q	CMP	E601	4	Y	
W-815-2110	GW	$Tnbs_2$	S	CMP	E8330	1	Y	
W-815-2110	GW	$Tnbs_2$	S	CMP	E8330	3	Y	
W-815-2111	GW	$Tnbs_2$	S	CMP	E300.0:NO3	1	Y	
W-815-2111	GW	$Tnbs_2$	S	CMP	E300.0:NO3	3	Y	
W-815-2111	GW	$Tnbs_2$	S	CMP	E300.0:PERC	1	Y	
W-815-2111	GW	$Tnbs_2$	S	CMP	E300.0:PERC	3	Y	
W-815-2111	GW	$Tnbs_2$	Q	CMP	E601	1	Y	
W-815-2111	GW	$Tnbs_2$	Q	CMP	E601	2	Y	
W-815-2111	GW	$Tnbs_2$	Q	CMP	E601	3	Y	
W-815-2111	GW	$Tnbs_2$	Q	CMP	E601	4	Y	
W-815-2111	GW	$Tnbs_2$	S	CMP	E8330	1	Y	
W-815-2111	GW	$Tnbs_2$	S	CMP	E8330	3	Y	
W-815-2217	PTMW	$Tnbs_2$	A	CMP	E300.0:NO3	1	Y	
W-815-2217	PTMW	$Tnbs_2$	A	CMP	E300.0:PERC	1	Y	
W-815-2217	PTMW	$Tnbs_2$	S	CMP	E601	1	Y	
W-815-2217	PTMW	$Tnbs_2$	S	CMP	E601	3	Y	
W-815-2217	PTMW	$Tnbs_2$	A	CMP	E8330	1	Y	
W-817-01	EW	$Tnbs_2$	A	CMP-TF	E300.0:NO3	1	Y	817-SRC extraction well.
W-817-01	EW	$Tnbs_2$		DIS	E300.0:NO3	2	Y	817-SRC extraction well.

Table 2.4-11. High Explosives Process Area OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-817-01	EW	$Tnbs_2$		DIS	E300.0:NO3	3	N	817-SRC extraction well. No sample collected due to sampling error.
W-817-01	EW	$Tnbs_2$		DIS	E300.0:NO3	4	N	817-SRC extraction well. No sample collected due to sampling error.
W-817-01	EW	$Tnbs_2$	A	CMP-TF	E300.0:PERC	1	Y	817-SRC extraction well.
W-817-01	EW	$Tnbs_2$		DIS	E300.0:PERC	2	Y	817-SRC extraction well.
W-817-01	EW	$Tnbs_2$		DIS	E300.0:PERC	3	N	817-SRC extraction well. No sample collected due to sampling error.
W-817-01	EW	$Tnbs_2$		DIS	E300.0:PERC	4	N	817-SRC extraction well. No sample collected due to sampling error.
W-817-01	EW	$Tnbs_2$	S	CMP-TF	E601	1	Y	817-SRC extraction well.
W-817-01	EW	$Tnbs_2$		DIS	E601	2	Y	817-SRC extraction well.
W-817-01	EW	$Tnbs_2$	S	CMP-TF	E601	3	N	817-SRC extraction well. No sample collected due to sampling error.
W-817-01	EW	$Tnbs_2$		DIS	E601	4	N	817-SRC extraction well. No sample collected due to sampling error.
W-817-01	EW	$Tnbs_2$	A	CMP-TF	E8330	1	Y	817-SRC extraction well.
W-817-01	EW	$Tnbs_2$		DIS	E8330	2	Y	817-SRC extraction well.
W-817-01	EW	$Tnbs_2$		DIS	E8330	3	N	817-SRC extraction well. No sample collected due to sampling error.
W-817-01	EW	$Tnbs_2$		DIS	E8330	4	N	817-SRC extraction well. No sample collected due to sampling error.
W-817-03	EW	$Tnbs_2$	A	CMP-TF	E300.0:NO3	1	Y	817-PRX extraction well.
W-817-03	EW	$Tnbs_2$	A	CMP-TF	E300.0:PERC	1	Y	817-PRX extraction well.
W-817-03	EW	$Tnbs_2$		DIS	E300.0:PERC	3	Y	817-PRX extraction well.
W-817-03	EW	$Tnbs_2$	S	CMP-TF	E601	1	Y	817-PRX extraction well.
W-817-03	EW	$Tnbs_2$		DIS	E601	2	Y	817-PRX extraction well.
W-817-03	EW	$Tnbs_2$	S	CMP-TF	E601	3	Y	817-PRX extraction well.
W-817-03	EW	$Tnbs_2$		DIS	E601	4	Y	817-PRX extraction well.
W-817-03	EW	$Tnbs_2$	A	CMP-TF	E8330	1	Y	817-PRX extraction well.
W-817-03	EW	$Tnbs_2$		DIS	E8330	3	Y	817-PRX extraction well.
W-817-03A	PTMW	Tps	A	CMP	E300.0:NO3	1	Y	
W-817-03A	PTMW	Tps	A	CMP	E300.0:PERC	1	Y	
W-817-03A	PTMW	Tps	S	CMP	E601	1	Y	
W-817-03A	PTMW	Tps	S	CMP	E601	3	Y	
W-817-03A	PTMW	Tps	A	CMP	E8330	1	Y	
W-817-04	EW	$Tnbs_2$	A	CMP-TF	E300.0:NO3	1	Y	817-PRX extraction well.
W-817-04	EW	$Tnbs_2$	A	CMP-TF	E300.0:PERC	1	Y	817-PRX extraction well.
W-817-04	EW	$Tnbs_2$	S	CMP-TF	E601	1	Y	817-PRX extraction well.
W-817-04	EW	$Tnbs_2$	S	CMP-TF	E601	3	Y	817-PRX extraction well.
W-817-04	EW	$Tnbs_2$	A	CMP-TF	E8330	1	Y	817-PRX extraction well.
W-817-05	PTMW	$Tnsc_1$	A	CMP	E300.0:NO3	1	Y	
W-817-05	PTMW	$Tnsc_1$	A	CMP	E300.0:PERC	1	Y	
W-817-05	PTMW	$Tnsc_1$	S	CMP	E601	1	Y	
W-817-05	PTMW	$Tnsc_1$	S	CMP	E601	3	Y	
W-817-05	PTMW	$Tnsc_1$	A	CMP	E8330	1	Y	
W-817-07	PTMW	$Tnbs_2$	A	CMP	E300.0:NO3	1	Y	
W-817-07	PTMW	$Tnbs_2$	A	CMP	E300.0:PERC	1	Y	

Table 2.4-11. High Explosives Process Area OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-817-07	PTMW	$Tnbs_2$	S	CMP	E601	1	Y	
W-817-07	PTMW	$Tnbs_2$	S	CMP	E601	3	Y	
W-817-07	PTMW	$Tnbs_2$	A	CMP	E8330	1	Y	
W-817-2318	EW	Tpsg	A	CMP	E300.0:NO3	1	Y	817-PRX extraction well.
W-817-2318	EW	Tpsg	A	CMP	E300.0:PERC	1	Y	817-PRX extraction well.
W-817-2318	EW	Tpsg		DIS	E300.0:PERC	3	Y	817-PRX extraction well.
W-817-2318	EW	Tpsg	S	CMP	E601	1	Y	817-PRX extraction well.
W-817-2318	EW	Tpsg		DIS	E601	2	Y	817-PRX extraction well.
W-817-2318	EW	Tpsg	S	CMP	E601	3	Y	817-PRX extraction well.
W-817-2318	EW	Tpsg		DIS	E601	4	Y	817-PRX extraction well.
W-817-2318	EW	Tpsg	A	CMP	E8330	1	Y	817-PRX extraction well.
W-817-2318	EW	Tpsg		DIS	E8330	3	Y	817-PRX extraction well.
W-818-01	PTMW	$Tnbs_2$	A	CMP	E300.0:NO3	1	Y	
W-818-01	PTMW	$Tnbs_2$	A	CMP	E300.0:PERC	1	Y	
W-818-01	PTMW	$Tnbs_2$	S	CMP	E601	1	Y	
W-818-01	PTMW	$Tnbs_2$	S	CMP	E601	3	Y	
W-818-01	PTMW	$Tnbs_2$	A	CMP	E8330	1	Y	
W-818-03	PTMW	$Tnbs_2$	A	CMP	E300.0:NO3	1	Y	
W-818-03	PTMW	$Tnbs_2$	A	CMP	E300.0:PERC	1	Y	
W-818-03	PTMW	$Tnbs_2$	S	CMP	E601	1	Y	
W-818-03	PTMW	$Tnbs_2$	S	CMP	E601	3	Y	
W-818-03	PTMW	$Tnbs_2$	A	CMP	E8330	1	Y	
W-818-04	PTMW	$Tnsc_2$	A	CMP	E300.0:NO3	1	Y	
W-818-04	PTMW	$Tnsc_2$	A	CMP	E300.0:PERC	1	Y	
W-818-04	PTMW	$Tnsc_2$	S	CMP	E601	1	Y	
W-818-04	PTMW	$Tnsc_2$	S	CMP	E601	3	Y	
W-818-04	PTMW	$Tnsc_2$	A	CMP	E8330	1	Y	
W-818-06	PTMW	$Tnbs_2$	A	CMP	E300.0:NO3	1	Y	
W-818-06	PTMW	$Tnbs_2$	A	CMP	E300.0:PERC	1	Y	
W-818-06	PTMW	$Tnbs_2$	S	CMP	E601	1	Y	
W-818-06	PTMW	$Tnbs_2$	S	CMP	E601	3	Y	
W-818-06	PTMW	$Tnbs_2$	A	CMP	E8330	1	Y	
W-818-07	PTMW	$Tnbs_2$	A	CMP	E300.0:NO3	1	Y	
W-818-07	PTMW	$Tnbs_2$	A	CMP	E300.0:PERC	1	Y	
W-818-07	PTMW	$Tnbs_2$	S	CMP	E601	1	Y	
W-818-07	PTMW	$Tnbs_2$	S	CMP	E601	3	Y	
W-818-07	PTMW	$Tnbs_2$	A	CMP	E8330	1	Y	
W-818-08	EW	$Tnbs_2$	A	CMP-TF	E300.0:NO3	1	Y	815-PRX extraction well.
W-818-08	EW	$Tnbs_2$	A	CMP-TF	E300.0:PERC	1	Y	815-PRX extraction well.
W-818-08	EW	$Tnbs_2$		DIS	E300.0:PERC	3	Y	815-PRX extraction well.
W-818-08	EW	$Tnbs_2$	S	CMP-TF	E601	1	Y	815-PRX extraction well.
W-818-08	EW	$Tnbs_2$		DIS	E601	2	Y	815-PRX extraction well.
W-818-08	EW	$Tnbs_2$	S	CMP-TF	E601	3	Y	815-PRX extraction well.
W-818-08	EW	$Tnbs_2$		DIS	E601	4	Y	815-PRX extraction well.
W-818-08	EW	$Tnbs_2$	A	CMP-TF	E8330	1	Y	815-PRX extraction well.
W-818-09	EW	$Tnbs_2$	A	CMP-TF	E300.0:NO3	1	Y	815-PRX extraction well.
W-818-09	EW	$Tnbs_2$	A	CMP-TF	E300.0:PERC	1	Y	815-PRX extraction well.
W-818-09	EW	$Tnbs_2$		DIS	E300.0:PERC	3	Y	815-PRX extraction well.
W-818-09	EW	$Tnbs_2$	S	CMP-TF	E601	1	Y	815-PRX extraction well.
W-818-09	EW	$Tnbs_2$		DIS	E601	2	Y	815-PRX extraction well.
W-818-09	EW	$Tnbs_2$	S	CMP-TF	E601	3	Y	815-PRX extraction well.
W-818-09	EW	$Tnbs_2$		DIS	E601	4	Y	815-PRX extraction well.
W-818-09	EW	$Tnbs_2$		DIS	E624	2	Y	815-PRX extraction well.
W-818-09	EW	$Tnbs_2$	A	CMP-TF	E8330	1	Y	815-PRX extraction well.
W-818-11	PTMW	$Tnbs_2$	A	CMP	E300.0:NO3	1	Y	

Table 2.4-11. High Explosives Process Area OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-818-11	PTMW	$Tnbs_2$	A	CMP	E300.0:PERC	1	Y	
W-818-11	PTMW	$Tnbs_2$	S	CMP	E601	1	Y	
W-818-11	PTMW	$Tnbs_2$	S	CMP	E601	3	Y	
W-818-11	PTMW	$Tnbs_2$	A	CMP	E8330	1	Y	
W-819-02	PTMW	$Tnsc_1$	A	CMP	E300.0:NO3	1	Y	
W-819-02	PTMW	$Tnsc_1$	A	CMP	E300.0:PERC	1	Y	
W-819-02	PTMW	$Tnsc_1$	S	CMP	E601	1	Y	
W-819-02	PTMW	$Tnsc_1$	S	CMP	E601	3	Y	
W-819-02	PTMW	$Tnsc_1$	A	CMP	E8330	1	Y	
W-823-01	PTMW	Tps	A	CMP	E300.0:NO3	1	Y	
W-823-01	PTMW	Tps	A	CMP	E300.0:PERC	1	Y	
W-823-01	PTMW	Tps	S	CMP	E601	1	Y	
W-823-01	PTMW	Tps	S	CMP	E601	3	Y	
W-823-01	PTMW	Tps	A	CMP	E8330	1	Y	
W-823-02	PTMW	$Tnbs_2$	A	CMP	E300.0:NO3	1	Y	
W-823-02	PTMW	$Tnbs_2$	A	CMP	E300.0:PERC	1	Y	
W-823-02	PTMW	$Tnbs_2$	S	CMP	E601	1	Y	
W-823-02	PTMW	$Tnbs_2$	S	CMP	E601	3	Y	
W-823-02	PTMW	$Tnbs_2$	A	CMP	E8330	1	Y	
W-823-02	PTMW	$Tnbs_2$		DIS	EM8015:DIESEL	3	Y	
W-823-03	PTMW	$Tnbs_2$	A	CMP	E300.0:NO3	1	Y	
W-823-03	PTMW	$Tnbs_2$	A	CMP	E300.0:PERC	1	Y	
W-823-03	PTMW	$Tnbs_2$	S	CMP	E601	1	Y	
W-823-03	PTMW	$Tnbs_2$	S	CMP	E601	3	Y	
W-823-03	PTMW	$Tnbs_2$	A	CMP	E8330	1	Y	
W-823-13	PTMW	$Tnbs_2$	A	CMP	E300.0:NO3	1	Y	
W-823-13	PTMW	$Tnbs_2$	A	CMP	E300.0:PERC	1	Y	
W-823-13	PTMW	$Tnbs_2$	S	CMP	E601	1	Y	
W-823-13	PTMW	$Tnbs_2$	S	CMP	E601	3	Y	
W-823-13	PTMW	$Tnbs_2$	A	CMP	E8330	1	Y	
W-827-01	MWB	$Tnbs_2$	B	CMP	E300.0:NO3	1	N	Dry. Next sample required 1stQ 2011.
W-827-01	MWB	$Tnbs_2$	B	CMP	E300.0:PERC	1	N	Dry. Next sample required 1stQ 2011.
W-827-01	MWB	$Tnbs_2$	B	CMP	E601	1	N	Dry. Next sample required 1stQ 2011.
W-827-01	MWB	$Tnbs_2$	B	CMP	E8330	1	N	Dry. Next sample required 1stQ 2011.
W-827-02	MWB	$Tnsc_1$	B	CMP	E300.0:NO3	1	Y	Next sample required 1stQ 2011.
W-827-02	MWB	$Tnsc_1$	B	CMP	E300.0:PERC	1	Y	Next sample required 1stQ 2011.
W-827-02	MWB	$Tnsc_1$	B	CMP	E601	1	Y	Next sample required 1stQ 2011.
W-827-02	MWB	$Tnsc_1$	B	CMP	E8330	1	Y	Next sample required 1stQ 2011.
W-827-03	MWB	$Tnsc_1$	B	CMP	E300.0:NO3	1	Y	Next sample required 1stQ 2011.
W-827-03	MWB	$Tnsc_1$	B	CMP	E300.0:PERC	1	Y	Next sample required 1stQ 2011.
W-827-03	MWB	$Tnsc_1$	B	CMP	E601	1	Y	Next sample required 1stQ 2011.
W-827-03	MWB	$Tnsc_1$	B	CMP	E8330	1	Y	Next sample required 1stQ 2011.

Table 2.4-11. High Explosives Process Area OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-827-05	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	1	Y	
W-827-05	PTMW	$Tnbs_1$	A	CMP	E300.0:PERC	1	Y	
W-827-05	PTMW	$Tnbs_1$	S	CMP	E601	1	Y	
W-827-05	PTMW	$Tnbs_1$	S	CMP	E601	3	Y	
W-827-05	PTMW	$Tnbs_1$	A	CMP	E8330	1	Y	
W-829-06	EW	$Tnsc_1$	A	CMP-TF	E300.0:NO3	1	N	829-SRC extraction well. Pump was non-operational.
W-829-06	EW	$Tnsc_1$	A	CMP-TF	E300.0:PERC	1	N	829-SRC extraction well. Pump was non-operational.
W-829-06	EW	$Tnsc_1$	S	CMP-TF	E601	1	N	829-SRC extraction well. Pump was non-operational.
W-829-06	EW	$Tnsc_1$	S	CMP-TF	E601	3	N	829-SRC extraction well. Pump was non-operational.
W-829-06	EW	$Tnsc_1$	A	CMP-TF	E8330	2	N	829-SRC extraction well. Pump was non-operational.
W-829-15	DMW	$Tnbs_1$		WGMG	E300.0:PERC	2	Y	
W-829-15	DMW	$Tnbs_1$		WGMG	E624	2	Y	
W-829-15	DMW	$Tnbs_1$		WGMG	E8330	2	Y	
W-829-1938	DMW	$Tnbs_1$		WGMG	ANIONS	1	Y	
W-829-1938	DMW	$Tnbs_1$		WGMG	E300.0:PERC	1	Y	
W-829-1938	DMW	$Tnbs_1$		WGMG	E300.0:PERC	2	Y	
W-829-1938	DMW	$Tnbs_1$		WGMG	E300.0:PERC	3	Y	
W-829-1938	DMW	$Tnbs_1$		WGMG	E300.0:PERC	4	Y	
W-829-1938	DMW	$Tnbs_1$		WGMG	E624	1	Y	
W-829-1938	DMW	$Tnbs_1$		WGMG	E624	2	Y	
W-829-1938	DMW	$Tnbs_1$		WGMG	E624	3	Y	
W-829-1938	DMW	$Tnbs_1$		WGMG	E624	4	Y	
W-829-1938	DMW	$Tnbs_1$		WGMG	E8330	1	Y	
W-829-1938	DMW	$Tnbs_1$		WGMG	E8330	2	Y	
W-829-1938	DMW	$Tnbs_1$		WGMG	E8330	3	Y	
W-829-1938	DMW	$Tnbs_1$		WGMG	E8330	4	Y	
W-829-1938	DMW	$Tnbs_1$		WGMG	E8330:TNT	1	Y	
W-829-1940	PTMW	$Tnsc_1$	A	CMP	E300.0:NO3	1	Y	
W-829-1940	PTMW	$Tnsc_1$	A	CMP	E300.0:PERC	1	Y	
W-829-1940	PTMW	$Tnsc_1$	S	CMP	E601	1	Y	
W-829-1940	PTMW	$Tnsc_1$	S	CMP	E601	3	Y	
W-829-1940	PTMW	$Tnsc_1$	A	CMP	E8330	1	Y	
W-829-22	DMW	$Tnbs_1$		WGMG	E300.0:PERC	2	Y	
W-829-22	DMW	$Tnbs_1$		WGMG	E624	2	Y	
W-829-22	DMW	$Tnbs_1$		WGMG	E8330	2	Y	
W-880-01	GW	$Tnbs_2$	S	CMP	E300.0:NO3	1	Y	
W-880-01	GW	$Tnbs_2$	S	CMP	E300.0:NO3	3	Y	
W-880-01	GW	$Tnbs_2$	S	CMP	E300.0:PERC	1	Y	
W-880-01	GW	$Tnbs_2$	S	CMP	E300.0:PERC	3	Y	
W-880-01	GW	$Tnbs_2$	Q	CMP	E601	1	Y	
W-880-01	GW	$Tnbs_2$	Q	CMP	E601	2	Y	
W-880-01	GW	$Tnbs_2$	Q	CMP	E601	3	Y	
W-880-01	GW	$Tnbs_2$	Q	CMP	E601	4	Y	
W-880-01	GW	$Tnbs_2$	S	CMP	E8330	1	Y	
W-880-01	GW	$Tnbs_2$	S	CMP	E8330	3	Y	
W-880-02	GW	Qal	S	CMP	E300.0:NO3	1	Y	
W-880-02	GW	Qal	S	CMP	E300.0:NO3	3	Y	
W-880-02	GW	Qal	S	CMP	E300.0:PERC	1	Y	
W-880-02	GW	Qal	S	CMP	E300.0:PERC	3	Y	

Table 2.4-11. High Explosives Process Area OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-880-02	GW	Qal	Q	CMP	E601	1	Y	
W-880-02	GW	Qal	Q	CMP	E601	2	Y	
W-880-02	GW	Qal	Q	CMP	E601	3	Y	
W-880-02	GW	Qal	Q	CMP	E601	4	Y	
W-880-02	GW	Qal	S	CMP	E8330	1	Y	
W-880-02	GW	Qal	S	CMP	E8330	3	Y	
W-880-03	GW	$Tnsc_1$	S	CMP	E300.0:NO3	1	N	Dry.
W-880-03	GW	$Tnsc_1$	S	CMP	E300.0:NO3	3	N	Inoperable pump.
W-880-03	GW	$Tnsc_1$	S	CMP	E300.0:PERC	1	N	Dry.
W-880-03	GW	$Tnsc_1$	S	CMP	E300.0:PERC	3	N	Inoperable pump.
W-880-03	GW	$Tnsc_1$	Q	CMP	E601	1	N	Dry.
W-880-03	GW	$Tnsc_1$	Q	CMP	E601	2	N	Inoperable pump.
W-880-03	GW	$Tnsc_1$	Q	CMP	E601	3	N	Inoperable pump.
W-880-03	GW	$Tnsc_1$	Q	CMP	E601	4	N	Inoperable pump.
W-880-03	GW	$Tnsc_1$	S	CMP	E8330	1	N	Dry.
W-880-03	GW	$Tnsc_1$	S	CMP	E8330	3	N	Inoperable pump.
WELL 18*	WS	$Tnbs_1$	M	CMP	E300.0:NO3	1	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E300.0:NO3	1	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E300.0:NO3	1	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E300.0:NO3	2	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E300.0:NO3	2	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E300.0:NO3	2	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E300.0:NO3	3	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E300.0:NO3	3	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E300.0:NO3	3	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E300.0:NO3	4	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E300.0:NO3	4	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E300.0:NO3	4	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E300.0:PERC	1	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E300.0:PERC	1	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E300.0:PERC	1	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E300.0:PERC	2	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E300.0:PERC	2	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E300.0:PERC	2	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E300.0:PERC	3	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E300.0:PERC	3	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E300.0:PERC	3	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E300.0:PERC	4	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E300.0:PERC	4	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E300.0:PERC	4	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E601	1	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E601	1	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E601	1	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E601	2	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E601	2	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E601	2	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E601	3	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E601	3	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E601	3	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E601	4	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E601	4	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E601	4	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E8330	1	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E8330	1	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E8330	1	Y	

Table 2.4-11. High Explosives Process Area OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
WELL 18*	WS	$Tnbs_1$	M	CMP	E8330	2	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E8330	2	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E8330	2	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E8330	3	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E8330	3	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E8330	3	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E8330	4	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E8330	4	Y	
WELL 18*	WS	$Tnbs_1$	M	CMP	E8330	4	Y	
WELL 20*	WS	$Tnbs_1$	M	CMP	E300.0:NO3	1	Y	
WELL 20*	WS	$Tnbs_1$	M	CMP	E300.0:NO3	1	Y	
WELL 20*	WS	$Tnbs_1$	M	CMP	E300.0:NO3	1	Y	
WELL 20*	WS	$Tnbs_1$	M	CMP	E300.0:NO3	2	Y	
WELL 20*	WS	$Tnbs_1$	M	CMP	E300.0:NO3	2	Y	
WELL 20*	WS	$Tnbs_1$	M	CMP	E300.0:NO3	2	Y	
WELL 20*	WS	$Tnbs_1$	M	CMP	E300.0:NO3	3	Y	
WELL 20*	WS	$Tnbs_1$	M	CMP	E300.0:NO3	3	Y	
WELL 20*	WS	$Tnbs_1$	M	CMP	E300.0:NO3	3	Y	
WELL 20*	WS	$Tnbs_1$	M	CMP	E300.0:NO3	4	Y	
WELL 20*	WS	$Tnbs_1$	M	CMP	E300.0:NO3	4	Y	
WELL 20*	WS	$Tnbs_1$	M	CMP	E300.0:NO3	4	Y	
WELL 20*	WS	$Tnbs_1$	M	CMP	E300.0:PERC	1	Y	
WELL 20*	WS	$Tnbs_1$	M	CMP	E300.0:PERC	1	Y	
WELL 20*	WS	$Tnbs_1$	M	CMP	E300.0:PERC	1	Y	
WELL 20*	WS	$Tnbs_1$	M	CMP	E300.0:PERC	2	Y	
WELL 20*	WS	$Tnbs_1$	M	CMP	E300.0:PERC	2	Y	
WELL 20*	WS	$Tnbs_1$	M	CMP	E300.0:PERC	2	Y	
WELL 20*	WS	$Tnbs_1$	M	CMP	E300.0:PERC	3	Y	
WELL 20*	WS	$Tnbs_1$	M	CMP	E300.0:PERC	3	Y	
WELL 20*	WS	$Tnbs_1$	M	CMP	E300.0:PERC	3	Y	
WELL 20*	WS	$Tnbs_1$	M	CMP	E300.0:PERC	4	Y	
WELL 20*	WS	$Tnbs_1$	M	CMP	E300.0:PERC	4	Y	
WELL 20*	WS	$Tnbs_1$	M	CMP	E300.0:PERC	4	Y	
WELL 20*	WS	$Tnbs_1$		WGMG	E502.2	1	Y	
WELL 20*	WS	$Tnbs_1$		WGMG	E502.2	1	Y	
WELL 20*	WS	$Tnbs_1$		WGMG	E502.2	1	Y	
WELL 20*	WS	$Tnbs_1$		WGMG	E502.2	2	Y	
WELL 20*	WS	$Tnbs_1$		WGMG	E502.2	2	Y	
WELL 20*	WS	$Tnbs_1$		WGMG	E502.2	2	Y	
WELL 20*	WS	$Tnbs_1$	M	WGMG	E502.2	3	Y	
WELL 20*	WS	$Tnbs_1$	M	WGMG	E502.2	3	Y	
WELL 20*	WS	$Tnbs_1$	M	WGMG	E502.2	3	Y	
WELL 20*	WS	$Tnbs_1$		WGMG	E502.2	4	Y	
WELL 20*	WS	$Tnbs_1$		WGMG	E502.2	4	Y	
WELL 20*	WS	$Tnbs_1$		WGMG	E502.2	4	Y	
WELL 20*	WS	$Tnbs_1$	M	CMP	E601	1	N	See 502.2
WELL 20*	WS	$Tnbs_1$	M	CMP	E601	1	N	See 502.2
WELL 20*	WS	$Tnbs_1$	M	CMP	E601	1	N	See 502.2
WELL 20*	WS	$Tnbs_1$	M	CMP	E601	4	N	See 502.2.
WELL 20*	WS	$Tnbs_1$	M	CMP	E601	4	N	See 502.2.
WELL 20*	WS	$Tnbs_1$	M	CMP	E601	4	N	See 502.2.
WELL 20*	WS	$Tnbs_1$	M	CMP	E8330	1	Y	
WELL 20*	WS	$Tnbs_1$	M	CMP	E8330	1	Y	
WELL 20*	WS	$Tnbs_1$	M	CMP	E8330	1	Y	
WELL 20*	WS	$Tnbs_1$	M	CMP	E8330	2	Y	

Table 2.4-11. High Explosives Process Area OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
WELL 20*	WS	$Tnbs_1$	M	CMP	E8330	2	Y	
WELL 20*	WS	$Tnbs_1$	M	CMP	E8330	2	Y	
WELL 20*	WS	$Tnbs_1$	M	CMP	E8330	3	Y	
WELL 20*	WS	$Tnbs_1$	M	CMP	E8330	3	Y	
WELL 20*	WS	$Tnbs_1$	M	CMP	E8330	3	Y	
WELL 20*	WS	$Tnbs_1$	M	CMP	E8330	4	Y	
WELL 20*	WS	$Tnbs_1$	M	CMP	E8330	4	Y	
WELL 20*	WS	$Tnbs_1$	M	CMP	E8330	4	Y	

Notes:

***Well sampled as part of the surveillance monitoring performed by the Water Guidance and Monitoring Group (WGMG) for additional constiutents and the results are reported in the LLNL Site Annual Environmental Report.**

W-829-15, W-829-22, and W-829-1938 are detection monitoring wells. Analytes and sampling frequency are specified in the RCRA Closure Plan for the High Explosives Open Burn Facility.

HEPA primary COC: VOCs (E601, E502.2, or E624).
HEPA secondary COC: nitrate (E300:NO3).
HEPA secondary COC: perchlorate (E300.0:PERC).
HEPA secondary COC: RDX (E8330).
See Acronyms and Abbreviations in the Tables section of this report for acronym and abbreviation definitions.

Table 2.4-12. Building 815-Source (815-SRC) mass removed, July 1, 2009 through December 31, 2009.

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	0.99	1.1	17	9.9	NA
	August	NA	1.3	1.4	22	13	NA
	September	NA	1.1	1.3	19	11	NA
	October	NA	0.87	1.2	18	10	NA
	November	NA	1.1	1.5	23	13	NA
	December	NA	0.91	1.2	18	11	NA
Total		NA	6.3	7.8	120	67	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, 2009 through December 31, 2009.

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	8.5	1.7	22	NA	NA
	August	NA	11	2.2	28	NA	NA
	September	NA	9.0	1.8	24	NA	NA
	October	NA	7.1	1.6	21	NA	NA
	November	NA	8.9	2.0	27	NA	NA
	December	NA	1.7	0.39	5.2	NA	NA
Total		NA	46	9.7	130	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, 2009 through December 31, 2009.

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	4.0	NA	NA	NA	NA
	August	NA	4.5	NA	NA	NA	NA
	September	NA	7.1	NA	NA	NA	NA
	October	NA	6.3	NA	NA	NA	NA
	November	NA	5.7	NA	NA	NA	NA
	December	NA	7.5	NA	NA	NA	NA
Total		NA	35	NA	NA	NA	NA

Table 2.4-15. Building 817-Source (817-SRC) mass removed, July 1, 2009 through December 31, 2009.

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	0.0044	0.013	0.0075	NA
	August	NA	0	0.0031	0.0089	0.0053	NA
	September	NA	0	0.011	0.033	0.020	NA
	October	NA	0	0.013	0.037	0.022	NA
	November	NA	0	0.014	0.039	0.023	NA
	December	NA	0	0.0058	0.016	0.0052	NA
Total		NA	0	0.051	0.15	0.082	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, 2009 through December 31, 2009.

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	2.1	4.6	21	1.6	NA
	August	NA	1.8	4.4	19	1.5	NA
	September	NA	0.19	0.097	1.1	0.00038	NA
	October	NA	0.067	0.050	0.56	0.00028	NA
	November	NA	1.7	4.7	20	1.7	NA
	December	NA	1.7	5.0	21	1.8	NA
Total		NA	7.6	19	83	6.6	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, 2009 through December 31, 2009.

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	0	0	NA	NA
	August	NA	0	0	0	NA	NA
	September	NA	0	0	0	NA	NA
	October	NA	0	0	0	NA	NA
	November	NA	0	0	0	NA	NA
	December	NA	0	0	0	NA	NA
Total		NA	0	0	0	NA	NA

Table 2.5-1. Building 850 OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
K1-01C	DMW	$Tnbs_1$		WGMG	AS:THISO	1	Y	
K1-01C	DMW	$Tnbs_1$		WGMG	AS:THISO	2	Y	
K1-01C	DMW	$Tnbs_1$		WGMG	AS:THISO	3	Y	
K1-01C	DMW	$Tnbs_1$		WGMG	AS:THISO	4	Y	
K1-01C	DMW	$Tnbs_1$		WGMG	AS:UISO	1	Y	
K1-01C	DMW	$Tnbs_1$		WGMG	AS:UISO	2	Y	
K1-01C	DMW	$Tnbs_1$		WGMG	AS:UISO	3	Y	
K1-01C	DMW	$Tnbs_1$		WGMG	AS:UISO	4	Y	
K1-01C	DMW	$Tnbs_1$		WGMG	E300.0:NO3	1	Y	
K1-01C	DMW	$Tnbs_1$		WGMG	E300.0:NO3	2	Y	
K1-01C	DMW	$Tnbs_1$		WGMG	E300.0:NO3	3	Y	
K1-01C	DMW	$Tnbs_1$		WGMG	E300.0:NO3	4	Y	
K1-01C	DMW	$Tnbs_1$		WGMG	E300.0:PERC	1	Y	
K1-01C	DMW	$Tnbs_1$		WGMG	E300.0:PERC	2	Y	
K1-01C	DMW	$Tnbs_1$		WGMG	E300.0:PERC	3	Y	
K1-01C	DMW	$Tnbs_1$		WGMG	E300.0:PERC	4	Y	
K1-01C	DMW	$Tnbs_1$		WGMG	E8260	1	Y	
K1-01C	DMW	$Tnbs_1$		WGMG	E8260	2	Y	
K1-01C	DMW	$Tnbs_1$		WGMG	E8260	3	Y	
K1-01C	DMW	$Tnbs_1$		WGMG	E8260	4	Y	
K1-01C	DMW	$Tnbs_1$		WGMG	E906	1	Y	
K1-01C	DMW	$Tnbs_1$		WGMG	E906	2	Y	
K1-01C	DMW	$Tnbs_1$		WGMG	E906	3	Y	
K1-01C	DMW	$Tnbs_1$		WGMG	E906	4	Y	
K1-02B	DMW	$Tnbs_0$		WGMG	AS:THISO	1	Y	
K1-02B	DMW	$Tnbs_0$		WGMG	AS:THISO	2	Y	
K1-02B	DMW	$Tnbs_0$		WGMG	AS:THISO	3	Y	
K1-02B	DMW	$Tnbs_0$		WGMG	AS:THISO	4	Y	
K1-02B	DMW	$Tnbs_0$		WGMG	AS:UISO	1	Y	
K1-02B	DMW	$Tnbs_0$		WGMG	AS:UISO	2	Y	
K1-02B	DMW	$Tnbs_0$		WGMG	AS:UISO	3	Y	
K1-02B	DMW	$Tnbs_0$		WGMG	AS:UISO	4	Y	
K1-02B	DMW	$Tnbs_0$		WGMG	E300.0:NO3	1	Y	
K1-02B	DMW	$Tnbs_0$		WGMG	E300.0:NO3	2	Y	
K1-02B	DMW	$Tnbs_0$		WGMG	E300.0:NO3	3	Y	
K1-02B	DMW	$Tnbs_0$		WGMG	E300.0:NO3	4	Y	
K1-02B	DMW	$Tnbs_0$		WGMG	E300.0:PERC	1	Y	
K1-02B	DMW	$Tnbs_0$		WGMG	E300.0:PERC	2	Y	
K1-02B	DMW	$Tnbs_0$		WGMG	E300.0:PERC	3	Y	
K1-02B	DMW	$Tnbs_0$		WGMG	E300.0:PERC	4	Y	
K1-02B	DMW	$Tnbs_0$		WGMG	E8260	1	Y	
K1-02B	DMW	$Tnbs_0$		WGMG	E8260	2	Y	
K1-02B	DMW	$Tnbs_0$		WGMG	E8260	3	Y	
K1-02B	DMW	$Tnbs_0$		WGMG	E8260	4	Y	
K1-02B	DMW	$Tnbs_0$		WGMG	E906	1	Y	
K1-02B	DMW	$Tnbs_0$		WGMG	E906	2	Y	
K1-02B	DMW	$Tnbs_0$		WGMG	E906	3	Y	
K1-02B	DMW	$Tnbs_0$		WGMG	E906	4	Y	
K1-04	DMW	$Tnbs_1/Tnbs_0$		WGMG	AS:THISO	1	Y	
K1-04	DMW	$Tnbs_1/Tnbs_0$		WGMG	AS:THISO	2	Y	
K1-04	DMW	$Tnbs_1/Tnbs_0$		WGMG	AS:THISO	3	Y	

Table 2.5-1. Building 850 OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
K1-04	DMW	$Tnbs_1/Tnbs_0$		WGMG	AS:THISO	4	Y	
K1-04	DMW	$Tnbs_1/Tnbs_0$		WGMG	AS:UISO	1	Y	
K1-04	DMW	$Tnbs_1/Tnbs_0$		WGMG	AS:UISO	2	Y	
K1-04	DMW	$Tnbs_1/Tnbs_0$		WGMG	AS:UISO	3	Y	
K1-04	DMW	$Tnbs_1/Tnbs_0$		WGMG	AS:UISO	4	Y	
K1-04	DMW	$Tnbs_1/Tnbs_0$		WGMG	E300.0:NO3	1	Y	
K1-04	DMW	$Tnbs_1/Tnbs_0$		WGMG	E300.0:NO3	2	Y	
K1-04	DMW	$Tnbs_1/Tnbs_0$		WGMG	E300.0:NO3	3	Y	
K1-04	DMW	$Tnbs_1/Tnbs_0$		WGMG	E300.0:NO3	4	Y	
K1-04	DMW	$Tnbs_1/Tnbs_0$		WGMG	E300.0:PERC	1	Y	
K1-04	DMW	$Tnbs_1/Tnbs_0$		WGMG	E300.0:PERC	2	Y	
K1-04	DMW	$Tnbs_1/Tnbs_0$		WGMG	E300.0:PERC	3	Y	
K1-04	DMW	$Tnbs_1/Tnbs_0$		WGMG	E300.0:PERC	4	Y	
K1-04	DMW	$Tnbs_1/Tnbs_0$		WGMG	E8260	1	Y	
K1-04	DMW	$Tnbs_1/Tnbs_0$		WGMG	E8260	2	Y	
K1-04	DMW	$Tnbs_1/Tnbs_0$		WGMG	E8260	3	Y	
K1-04	DMW	$Tnbs_1/Tnbs_0$		WGMG	E8260	4	Y	
K1-04	DMW	$Tnbs_1/Tnbs_0$		WGMG	E906	1	Y	
K1-04	DMW	$Tnbs_1/Tnbs_0$		WGMG	E906	2	Y	
K1-04	DMW	$Tnbs_1/Tnbs_0$		WGMG	E906	3	Y	
K1-04	DMW	$Tnbs_1/Tnbs_0$		WGMG	E906	4	Y	
K1-05	DMW	$Tnbs_1$		WGMG	AS:THISO	1	Y	
K1-05	DMW	$Tnbs_1$		WGMG	AS:THISO	2	Y	
K1-05	DMW	$Tnbs_1$		WGMG	AS:THISO	3	Y	
K1-05	DMW	$Tnbs_1$		WGMG	AS:THISO	4	Y	
K1-05	DMW	$Tnbs_1$		WGMG	AS:UISO	1	Y	
K1-05	DMW	$Tnbs_1$		WGMG	AS:UISO	2	Y	
K1-05	DMW	$Tnbs_1$		WGMG	AS:UISO	3	Y	
K1-05	DMW	$Tnbs_1$		WGMG	AS:UISO	4	Y	
K1-05	DMW	$Tnbs_1$		WGMG	E300.0:NO3	1	Y	
K1-05	DMW	$Tnbs_1$		WGMG	E300.0:NO3	2	Y	
K1-05	DMW	$Tnbs_1$		WGMG	E300.0:NO3	3	Y	
K1-05	DMW	$Tnbs_1$		WGMG	E300.0:NO3	4	Y	
K1-05	DMW	$Tnbs_1$		WGMG	E300.0:PERC	1	Y	
K1-05	DMW	$Tnbs_1$		WGMG	E300.0:PERC	2	Y	
K1-05	DMW	$Tnbs_1$		WGMG	E300.0:PERC	3	Y	
K1-05	DMW	$Tnbs_1$		WGMG	E300.0:PERC	4	Y	
K1-05	DMW	$Tnbs_1$		WGMG	E8260	1	Y	
K1-05	DMW	$Tnbs_1$		WGMG	E8260	2	Y	
K1-05	DMW	$Tnbs_1$		WGMG	E8260	3	Y	
K1-05	DMW	$Tnbs_1$		WGMG	E8260	4	Y	
K1-05	DMW	$Tnbs_1$		WGMG	E906	1	Y	
K1-05	DMW	$Tnbs_1$		WGMG	E906	2	Y	
K1-05	DMW	$Tnbs_1$		WGMG	E906	3	Y	
K1-05	DMW	$Tnbs_1$		WGMG	E906	4	Y	
K1-06	PTMW	$Tnbs_1$	A	CMP	AS:UISO	2	Y	
K1-06	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
K1-06	PTMW	$Tnbs_1$		DIS	E300.0:PERC	1	Y	
K1-06	PTMW	$Tnbs_1$		DIS	E300.0:PERC	2	Y	
K1-06	PTMW	$Tnbs_1$		DIS	E300.0:PERC	3	Y	
K1-06	PTMW	$Tnbs_1$		DIS	E300.0:PERC	4	Y	

Table 2.5-1. Building 850 OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
K1-06	PTMW	$Tnbs_1$	S	CMP	E906	2	Y	
K1-06	PTMW	$Tnbs_1$	S	CMP	E906	4	Y	
K1-07	DMW	$Tnbs_1$		WGMG	AS:THISO	1	Y	
K1-07	DMW	$Tnbs_1$		WGMG	AS:THISO	2	Y	
K1-07	DMW	$Tnbs_1$		WGMG	AS:THISO	3	Y	
K1-07	DMW	$Tnbs_1$		WGMG	AS:THISO	4	Y	
K1-07	DMW	$Tnbs_1$		WGMG	AS:UISO	1	Y	
K1-07	DMW	$Tnbs_1$		WGMG	AS:UISO	2	Y	
K1-07	DMW	$Tnbs_1$		WGMG	AS:UISO	3	Y	
K1-07	DMW	$Tnbs_1$		WGMG	AS:UISO	4	Y	
K1-07	DMW	$Tnbs_1$		WGMG	E300.0:NO3	1	Y	
K1-07	DMW	$Tnbs_1$		WGMG	E300.0:NO3	2	Y	
K1-07	DMW	$Tnbs_1$		WGMG	E300.0:NO3	3	Y	
K1-07	DMW	$Tnbs_1$		WGMG	E300.0:NO3	4	Y	
K1-07	DMW	$Tnbs_1$		WGMG	E300.0:PERC	1	Y	
K1-07	DMW	$Tnbs_1$		WGMG	E300.0:PERC	2	Y	
K1-07	DMW	$Tnbs_1$		WGMG	E300.0:PERC	3	Y	
K1-07	DMW	$Tnbs_1$		WGMG	E300.0:PERC	4	Y	
K1-07	DMW	$Tnbs_1$		WGMG	E8260	1	Y	
K1-07	DMW	$Tnbs_1$		WGMG	E8260	2	Y	
K1-07	DMW	$Tnbs_1$		WGMG	E8260	3	Y	
K1-07	DMW	$Tnbs_1$		WGMG	E8260	4	Y	
K1-07	DMW	$Tnbs_1$		WGMG	E906	1	Y	
K1-07	DMW	$Tnbs_1$		WGMG	E906	2	Y	
K1-07	DMW	$Tnbs_1$		WGMG	E906	3	Y	
K1-07	DMW	$Tnbs_1$		WGMG	E906	4	Y	
K1-07	DMW	$Tnbs_1$		DIS	MS:UISO	2	Y	
K1-08	DMW	$Tnbs_1$		WGMG	AS:THISO	1	Y	
K1-08	DMW	$Tnbs_1$		WGMG	AS:THISO	2	Y	
K1-08	DMW	$Tnbs_1$		WGMG	AS:THISO	3	Y	
K1-08	DMW	$Tnbs_1$		WGMG	AS:THISO	4	Y	
K1-08	DMW	$Tnbs_1$		WGMG	AS:UISO	1	Y	
K1-08	DMW	$Tnbs_1$		WGMG	AS:UISO	2	Y	
K1-08	DMW	$Tnbs_1$		WGMG	AS:UISO	3	Y	
K1-08	DMW	$Tnbs_1$		WGMG	AS:UISO	4	Y	
K1-08	DMW	$Tnbs_1$		WGMG	E300.0:NO3	1	Y	
K1-08	DMW	$Tnbs_1$		WGMG	E300.0:NO3	2	Y	
K1-08	DMW	$Tnbs_1$		WGMG	E300.0:NO3	3	Y	
K1-08	DMW	$Tnbs_1$		WGMG	E300.0:NO3	4	Y	
K1-08	DMW	$Tnbs_1$		WGMG	E300.0:PERC	1	Y	
K1-08	DMW	$Tnbs_1$		WGMG	E300.0:PERC	2	Y	
K1-08	DMW	$Tnbs_1$		WGMG	E300.0:PERC	3	Y	
K1-08	DMW	$Tnbs_1$		WGMG	E300.0:PERC	4	Y	
K1-08	DMW	$Tnbs_1$		WGMG	E8260	1	Y	
K1-08	DMW	$Tnbs_1$		WGMG	E8260	2	Y	
K1-08	DMW	$Tnbs_1$		WGMG	E8260	3	Y	
K1-08	DMW	$Tnbs_1$		WGMG	E8260	4	Y	
K1-08	DMW	$Tnbs_1$		WGMG	E906	1	Y	
K1-08	DMW	$Tnbs_1$		WGMG	E906	2	Y	
K1-08	DMW	$Tnbs_1$		WGMG	E906	3	Y	
K1-08	DMW	$Tnbs_1$		WGMG	E906	4	Y	

Table 2.5-1. Building 850 OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
K1-09	DMW	$Tnbs_1$		WGMG	AS:THISO	1	Y	
K1-09	DMW	$Tnbs_1$		WGMG	AS:THISO	2	Y	
K1-09	DMW	$Tnbs_1$		WGMG	AS:THISO	3	Y	
K1-09	DMW	$Tnbs_1$		WGMG	AS:THISO	4	Y	
K1-09	DMW	$Tnbs_1$		WGMG	AS:UISO	1	Y	
K1-09	DMW	$Tnbs_1$		WGMG	AS:UISO	2	Y	
K1-09	DMW	$Tnbs_1$		WGMG	AS:UISO	3	Y	
K1-09	DMW	$Tnbs_1$		WGMG	AS:UISO	4	Y	
K1-09	DMW	$Tnbs_1$		WGMG	E300.0:NO3	1	Y	
K1-09	DMW	$Tnbs_1$		WGMG	E300.0:NO3	2	Y	
K1-09	DMW	$Tnbs_1$		WGMG	E300.0:NO3	3	Y	
K1-09	DMW	$Tnbs_1$		WGMG	E300.0:NO3	4	Y	
K1-09	DMW	$Tnbs_1$		WGMG	E300.0:PERC	1	Y	
K1-09	DMW	$Tnbs_1$		WGMG	E300.0:PERC	2	Y	
K1-09	DMW	$Tnbs_1$		WGMG	E300.0:PERC	3	Y	
K1-09	DMW	$Tnbs_1$		WGMG	E300.0:PERC	4	Y	
K1-09	DMW	$Tnbs_1$		WGMG	E8260	1	Y	
K1-09	DMW	$Tnbs_1$		WGMG	E8260	2	Y	
K1-09	DMW	$Tnbs_1$		WGMG	E8260	3	Y	
K1-09	DMW	$Tnbs_1$		WGMG	E8260	4	Y	
K1-09	DMW	$Tnbs_1$		WGMG	E906	1	Y	
K1-09	DMW	$Tnbs_1$		WGMG	E906	2	Y	
K1-09	DMW	$Tnbs_1$		WGMG	E906	3	Y	
K1-09	DMW	$Tnbs_1$		WGMG	E906	4	Y	
K2-03	PTMW	$Tnbs_1$	A	CMP	AS:UISO	2	Y	
K2-03	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
K2-03	PTMW	$Tnbs_1$	S	CMP	E906	2	Y	
K2-03	PTMW	$Tnbs_1$	S	CMP	E906	4	Y	
K2-04D*	PTMW	$Tnbs_1$	A	CMP	AS:UISO	2	Y	
K2-04D*	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
K2-04D*	PTMW	$Tnbs_1$		WGMG	E300.0:PERC	2	Y	
K2-04D*	PTMW	$Tnbs_1$		DIS	E300.0:PERC	4	Y	
K2-04D*	PTMW	$Tnbs_1$	S	CMP	E906	2	Y	
K2-04D*	PTMW	$Tnbs_1$	S	CMP	E906	4	Y	
K2-04S*	PTMW	$Tnbs_1$	A	CMP	AS:UISO	2	Y	
K2-04S*	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
K2-04S*	PTMW	$Tnbs_1$		WGMG	E300.0:PERC	2	Y	
K2-04S*	PTMW	$Tnbs_1$		WGMG	E300.0:PERC	4	Y	
K2-04S*	PTMW	$Tnbs_1$	S	CMP	E906	2	Y	
K2-04S*	PTMW	$Tnbs_1$	S	CMP	E906	4	Y	
NC2-05	PTMW	$Tnbs_1$	A	CMP	AS:UISO	2	Y	
NC2-05	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
NC2-05	PTMW	$Tnbs_1$		DIS	E300.0:PERC	2	Y	
NC2-05	PTMW	$Tnbs_1$	S	CMP	E906	2	Y	
NC2-05	PTMW	$Tnbs_1$	S	CMP	E906	4	Y	
NC2-05A	PTMW	$Tnbs_1$	A	CMP	AS:UISO	2	Y	
NC2-05A	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
NC2-05A	PTMW	$Tnbs_1$		DIS	E300.0:PERC	2	Y	
NC2-05A	PTMW	$Tnbs_1$	S	CMP	E906	2	Y	
NC2-05A	PTMW	$Tnbs_1$	S	CMP	E906	4	Y	
NC2-06	PTMW	$Tnbs_1$	A	CMP	AS:UISO	2	Y	

Table 2.5-1. Building 850 OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
NC2-06	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
NC2-06	PTMW	$Tnbs_1$		DIS	E300.0:PERC	2	Y	
NC2-06	PTMW	$Tnbs_1$	S	CMP	E906	2	Y	
NC2-06	PTMW	$Tnbs_1$	S	CMP	E906	4	Y	
NC2-06A	PTMW	$Tnbs_1$		DIS	AS:UISO	2	Y	
NC2-06A	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
NC2-06A	PTMW	$Tnbs_1$		DIS	E300.0:PERC	2	Y	
NC2-06A	PTMW	$Tnbs_1$	S	CMP	E906	2	Y	
NC2-06A	PTMW	$Tnbs_1$	S	CMP	E906	4	Y	
NC2-06A	PTMW	$Tnbs_1$	A	CMP	MS:UISO	2	Y	
NC2-06A	PTMW	$Tnbs_1$		DIS	MS:UISO	4	Y	
NC2-09	PTMW	$Tnbs_1$	A	CMP	AS:UISO	2	Y	
NC2-09	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
NC2-09	PTMW	$Tnbs_1$		DIS	E300.0:PERC	2	Y	
NC2-09	PTMW	$Tnbs_1$	S	CMP	E906	2	Y	
NC2-09	PTMW	$Tnbs_1$	S	CMP	E906	4	Y	
NC2-10	PTMW	$Tnbs_1$	A	CMP	AS:UISO	2	Y	
NC2-10	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
NC2-10	PTMW	$Tnbs_1$		DIS	E300.0:PERC	2	Y	
NC2-10	PTMW	$Tnbs_1$	S	CMP	E906	2	Y	
NC2-10	PTMW	$Tnbs_1$	S	CMP	E906	4	Y	
NC2-11D*	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
NC2-11D*	PTMW	$Tnbs_1$		DIS	E300.0:PERC	2	Y	
NC2-11D*	PTMW	$Tnbs_1$		DIS	E300.0:PERC	4	Y	
NC2-11D*	PTMW	$Tnbs_1$	S	CMP	E906	2	Y	
NC2-11D*	PTMW	$Tnbs_1$	S	CMP	E906	4	Y	
NC2-11D*	PTMW	$Tnbs_1$	A	CMP	MS:UISO	2	Y	
NC2-11D*	PTMW	$Tnbs_1$		DIS	MS:UISO	4	Y	
NC2-11I	PTMW	$Tnbs_1$	A	CMP	AS:UISO	2	Y	
NC2-11I	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
NC2-11I	PTMW	$Tnbs_1$		DIS	E300.0:PERC	2	Y	
NC2-11I	PTMW	$Tnbs_1$		DIS	E300.0:PERC	4	Y	
NC2-11I	PTMW	$Tnbs_1$	S	CMP	E906	2	Y	
NC2-11I	PTMW	$Tnbs_1$	S	CMP	E906	4	Y	
NC2-11S	PTMW	$Tnbs_1$	A	CMP	AS:UISO	2	Y	
NC2-11S	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
NC2-11S	PTMW	$Tnbs_1$		DIS	E300.0:PERC	2	Y	
NC2-11S	PTMW	$Tnbs_1$		DIS	E300.0:PERC	4	Y	
NC2-11S	PTMW	$Tnbs_1$	S	CMP	E906	2	Y	
NC2-11S	PTMW	$Tnbs_1$	S	CMP	E906	4	Y	
NC2-12D*	PTMW	$Tnbs_1$	A	CMP	AS:UISO	2	Y	
NC2-12D*	PTMW	$Tnbs_1$		DIS	AS:UISO	4	Y	
NC2-12D*	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
NC2-12D*	PTMW	$Tnbs_1$		DIS	E300.0:PERC	2	Y	
NC2-12D*	PTMW	$Tnbs_1$		DIS	E300.0:PERC	4	Y	
NC2-12D*	PTMW	$Tnbs_1$	S	CMP	E906	2	Y	
NC2-12D*	PTMW	$Tnbs_1$	S	CMP	E906	4	Y	
NC2-12I	PTMW	$Tnbs_1$	A	CMP	AS:UISO	2	Y	
NC2-12I	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
NC2-12I	PTMW	$Tnbs_1$		DIS	E300.0:PERC	2	Y	
NC2-12I	PTMW	$Tnbs_1$	S	CMP	E906	2	Y	

Table 2.5-1. Building 850 OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
NC2-12I	PTMW	$Tnbs_1$	S	CMP	E906	4	N	Inoperable pump.
NC2-12S	PTMW	$Tnbs_1$	A	CMP	AS:UISO	2	Y	
NC2-12S	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
NC2-12S	PTMW	$Tnbs_1$		DIS	E300.0:PERC	2	Y	
NC2-12S	PTMW	$Tnbs_1$		DIS	E300.0:PERC	4	Y	
NC2-12S	PTMW	$Tnbs_1$	S	CMP	E906	2	Y	
NC2-12S	PTMW	$Tnbs_1$	S	CMP	E906	4	Y	
NC2-13	PTMW	$Tnbs_1$	A	CMP	AS:UISO	2	Y	
NC2-13	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
NC2-13	PTMW	$Tnbs_1$		DIS	E300.0:PERC	1	Y	
NC2-13	PTMW	$Tnbs_1$	S	CMP	E906	2	Y	
NC2-13	PTMW	$Tnbs_1$	S	CMP	E906	4	Y	
NC2-14S	PTMW	$Tnbs_1$	A	CMP	AS:UISO	2	Y	
NC2-14S	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
NC2-14S	PTMW	$Tnbs_1$		DIS	E300.0:PERC	1	Y	
NC2-14S	PTMW	$Tnbs_1$		DIS	E300.0:PERC	3	Y	
NC2-14S	PTMW	$Tnbs_1$	S	CMP	E906	2	Y	
NC2-14S	PTMW	$Tnbs_1$	S	CMP	E906	4	Y	
NC2-15	PTMW	$Tnbs_1$	A	CMP	AS:UISO	2	Y	
NC2-15	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
NC2-15	PTMW	$Tnbs_1$		DIS	E300.0:PERC	2	Y	
NC2-15	PTMW	$Tnbs_1$	S	CMP	E906	2	Y	
NC2-15	PTMW	$Tnbs_1$	S	CMP	E906	4	Y	
NC2-16	PTMW	$Tnbs_1$	A	CMP	AS:UISO	2	Y	
NC2-16	PTMW	$Tnbs_1$	S	CMP	E300.0:NO3	2	Y	
NC2-16	PTMW	$Tnbs_1$		DIS	E300.0:PERC	1	Y	
NC2-16	PTMW	$Tnbs_1$		DIS	E300.0:PERC	3	Y	
NC2-16	PTMW	$Tnbs_1$	A	CMP	E906	2	Y	
NC2-16	PTMW	$Tnbs_1$	S	CMP	E906	4	Y	
NC2-17	PTMW	$Tnbs_1$	A	CMP	AS:UISO	2	Y	
NC2-17	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
NC2-17	PTMW	$Tnbs_1$		DIS	E300.0:PERC	2	Y	
NC2-17	PTMW	$Tnbs_1$	S	CMP	E906	2	Y	
NC2-17	PTMW	$Tnbs_1$	S	CMP	E906	4	Y	
NC2-18	PTMW	$Tnbs_1$	A	CMP	AS:UISO	2	Y	
NC2-18	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
NC2-18	PTMW	$Tnbs_1$		DIS	E300.0:PERC	2	Y	
NC2-18	PTMW	$Tnbs_1$	S	CMP	E906	2	Y	
NC2-18	PTMW	$Tnbs_1$	S	CMP	E906	4	Y	
NC2-19	PTMW	$Tnbs_1$	A	CMP	AS:UISO	2	Y	
NC2-19	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
NC2-19	PTMW	$Tnbs_1$		DIS	E300.0:PERC	2	Y	
NC2-19	PTMW	$Tnbs_1$	S	CMP	E906	2	Y	
NC2-19	PTMW	$Tnbs_1$	S	CMP	E906	4	Y	
NC2-20	PTMW	$Tnbs_0$	A	CMP	AS:UISO	2	Y	
NC2-20	PTMW	$Tnbs_0$	A	CMP	E300.0:NO3	2	Y	
NC2-20	PTMW	$Tnbs_0$		DIS	E300.0:PERC	2	Y	
NC2-20	PTMW	$Tnbs_0$	S	CMP	E906	2	Y	
NC2-20	PTMW	$Tnbs_0$	S	CMP	E906	4	Y	
NC2-21	PTMW	$Tnbs_1$	A	CMP	AS:UISO	2	Y	
NC2-21	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	

Table 2.5-1. Building 850 OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
NC2-21	PTMW	$Tnbs_1$		DIS	E300.0:PERC	2	Y	
NC2-21	PTMW	$Tnbs_1$	S	CMP	E906	2	Y	
NC2-21	PTMW	$Tnbs_1$	S	CMP	E906	4	Y	
NC7-10	PTMW	$Tnbs_1$		DIS	AS:UISO	2	Y	
NC7-10	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
NC7-10	PTMW	$Tnbs_1$		WGMG	E300.0:NO3	3	Y	
NC7-10	PTMW	$Tnbs_1$		DIS	E300.0:PERC	1	Y	
NC7-10	PTMW	$Tnbs_1$		DIS	E8330	2	Y	
NC7-10	PTMW	$Tnbs_1$		DIS	E8330	4	Y	
NC7-10	PTMW	$Tnbs_1$	S	CMP	E906	2	Y	
NC7-10	PTMW	$Tnbs_1$	S	CMP	E906	4	Y	
NC7-10	PTMW	$Tnbs_1$		WGMG	GENMIN	4	Y	
NC7-10	PTMW	$Tnbs_1$	A	CMP	MS:UISO	2	Y	
NC7-11	PTMW	$Qal/Tnbs_1$	A	CMP	AS:UISO	2	Y	
NC7-11	PTMW	$Qal/Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
NC7-11	PTMW	$Qal/Tnbs_1$		DIS	E300.0:PERC	1	Y	
NC7-11	PTMW	$Qal/Tnbs_1$		DIS	E300.0:PERC	3	Y	
NC7-11	PTMW	$Qal/Tnbs_1$		DIS	E8330	2	Y	
NC7-11	PTMW	$Qal/Tnbs_1$		DIS	E8330	4	Y	
NC7-11	PTMW	$Qal/Tnbs_1$	S	CMP	E906	2	Y	
NC7-11	PTMW	$Qal/Tnbs_1$	S	CMP	E906	4	Y	
NC7-11	PTMW	$Qal/Tnbs_1$		WGMG	GENMIN	4	Y	
NC7-14	PTMW	$Qal/Tnbs_1$	A	CMP	AS:UISO	2	N	Dry.
NC7-14	PTMW	$Qal/Tnbs_1$	A	CMP	E300.0:NO3	2	N	Dry.
NC7-14	PTMW	$Qal/Tnbs_1$		DIS	E300.0:PERC	2	N	Dry.
NC7-14	PTMW	$Qal/Tnbs_1$	S	CMP	E906	2	N	Dry.
NC7-14	PTMW	$Qal/Tnbs_1$	S	CMP	E906	4	N	Dry.
NC7-15	PTMW	$Tnbs_1$	A	CMP	AS:UISO	2	Y	
NC7-15	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
NC7-15	PTMW	$Tnbs_1$		DIS	E300.0:PERC	2	Y	
NC7-15	PTMW	$Tnbs_1$		DIS	E8330	4	Y	
NC7-15	PTMW	$Tnbs_1$	S	CMP	E906	2	Y	
NC7-15	PTMW	$Tnbs_1$	S	CMP	E906	4	Y	
NC7-19	PTMW	$Qal/Tnbs_1$	A	CMP	AS:UISO	2	Y	
NC7-19	PTMW	$Qal/Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
NC7-19	PTMW	$Qal/Tnbs_1$		DIS	E300.0:PERC	2	Y	
NC7-19	PTMW	$Qal/Tnbs_1$		DIS	E8330	2	Y	
NC7-19	PTMW	$Qal/Tnbs_1$		DIS	E8330	4	Y	
NC7-19	PTMW	$Qal/Tnbs_1$	S	CMP	E906	2	Y	
NC7-19	PTMW	$Qal/Tnbs_1$	S	CMP	E906	4	Y	
NC7-27	PTMW	$Tnsc_0$	A	CMP	AS:UISO	2	Y	
NC7-27	PTMW	$Tnsc_0$	A	CMP	E300.0:NO3	2	Y	
NC7-27	PTMW	$Tnsc_0$		DIS	E300.0:PERC	2	Y	
NC7-27	PTMW	$Tnsc_0$		DIS	E8330	2	Y	
NC7-27	PTMW	$Tnsc_0$	S	CMP	E906	2	Y	
NC7-27	PTMW	$Tnsc_0$	S	CMP	E906	4	Y	
NC7-28	PTMW	$Tnbs_1$		DIS	AS:UISO	2	Y	
NC7-28	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
NC7-28	PTMW	$Tnbs_1$		DIS	E300.0:PERC	1	Y	
NC7-28	PTMW	$Tnbs_1$		DIS	E300.0:PERC	2	Y	

Table 2.5-1. Building 850 OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
NC7-28	PTMW	$Tnbs_1$		DIS	E300.0:PERC	3	N	No access due to the soil removal project.
NC7-28	PTMW	$Tnbs_1$		DIS	E300.0:PERC	4	N	No access due to the soil removal project.
NC7-28	PTMW	$Tnbs_1$		DIS	E8330	2	Y	
NC7-28	PTMW	$Tnbs_1$	S	CMP	E906	2	Y	
NC7-28	PTMW	$Tnbs_1$	S	CMP	E906	4	N	No access due to the soil removal project.
NC7-28	PTMW	$Tnbs_1$		DIS	MS:UISO	1	Y	
NC7-28	PTMW	$Tnbs_1$	A	CMP	MS:UISO	2	Y	
NC7-29	PTMW	$Tnbs_1$	A	CMP	AS:UISO	2	Y	
NC7-29	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
NC7-29	PTMW	$Tnbs_1$		DIS	E300.0:PERC	1	Y	
NC7-29	PTMW	$Tnbs_1$		DIS	E300.0:PERC	3	Y	
NC7-29	PTMW	$Tnbs_1$	S	CMP	E906	2	Y	
NC7-29	PTMW	$Tnbs_1$	S	CMP	E906	4	Y	
NC7-43	PTMW	$Tnbs_1$	A	CMP	AS:UISO	2	Y	
NC7-43	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
NC7-43	PTMW	$Tnbs_1$		DIS	E300.0:PERC	1	Y	
NC7-43	PTMW	$Tnbs_1$		DIS	E8330	2	Y	
NC7-43	PTMW	$Tnbs_1$		DIS	E8330	4	Y	
NC7-43	PTMW	$Tnbs_1$	S	CMP	E906	2	Y	
NC7-43	PTMW	$Tnbs_1$	S	CMP	E906	4	Y	
NC7-44	PTMW	$Tnbs_1$	A	CMP	AS:UISO	2	Y	
NC7-44	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
NC7-44	PTMW	$Tnbs_1$		DIS	E300.0:PERC	2	Y	
NC7-44	PTMW	$Tnbs_1$		DIS	E8330	2	Y	
NC7-44	PTMW	$Tnbs_1$		DIS	E8330	4	Y	
NC7-44	PTMW	$Tnbs_1$	S	CMP	E906	2	Y	
NC7-44	PTMW	$Tnbs_1$	S	CMP	E906	4	Y	
NC7-44	PTMW	$Tnbs_1$		WGMG	GENMIN	4	Y	
NC7-45	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	N	Bent casing. Unable to sample. Replaced with well W-850-2313.
NC7-45	PTMW	$Tnbs_1$	S	CMP	E906	2	N	Bent casing. Unable to sample. Replaced with well W-850-2313.
NC7-45	PTMW	$Tnbs_1$	S	CMP	E906	4	N	Bent casing. Unable to sample. Replaced with well W-850-2313.
NC7-45	PTMW	$Tnbs_1$	A	CMP	MS:UISO	2	N	Bent casing. Unable to sample. Replaced with well W-850-2313.
NC7-46	PTMW	$Tnbs_1$	A	CMP	AS:UISO	2	Y	
NC7-46	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
NC7-46	PTMW	$Tnbs_1$		DIS	E300.0:PERC	3	Y	
NC7-46	PTMW	$Tnbs_1$	S	CMP	E906	2	Y	
NC7-46	PTMW	$Tnbs_1$	S	CMP	E906	4	Y	
NC7-54	PTMW	Qal	A	CMP	E300.0:NO3	2	Y	
NC7-54	PTMW	Qal		DIS	E300.0:PERC	3	Y	
NC7-54	PTMW	Qal		DIS	E8330	2	Y	
NC7-54	PTMW	Qal	S	CMP	E906	2	Y	

Table 2.5-1. Building 850 OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
NC7-54	PTMW	Qal	S	CMP	E906	4	N	Insufficient water.
NC7-54	PTMW	Qal		WGMG	GENMIN	4	Y	
NC7-54	PTMW	Qal	A	CMP	MS:UISO	2	Y	
NC7-55	PTMW	$Tnbs_1$	A	CMP	AS:UISO	2	N	Dry.
NC7-55	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	N	Dry.
NC7-55	PTMW	$Tnbs_1$		DIS	E300.0:PERC	1	N	Dry.
NC7-55	PTMW	$Tnbs_1$	S	CMP	E906	2	N	Dry.
NC7-55	PTMW	$Tnbs_1$	S	CMP	E906	4	N	Dry.
NC7-56	PTMW	Qal/$Tnbs_1$	A	CMP	AS:UISO	2	Y	
NC7-56	PTMW	Qal/$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
NC7-56	PTMW	Qal/$Tnbs_1$		DIS	E300.0:PERC	1	Y	
NC7-56	PTMW	Qal/$Tnbs_1$		DIS	E300.0:PERC	3	Y	
NC7-56	PTMW	Qal/$Tnbs_1$		DIS	E8330	4	Y	
NC7-56	PTMW	Qal/$Tnbs_1$	S	CMP	E906	2	Y	
NC7-56	PTMW	Qal/$Tnbs_1$	S	CMP	E906	4	Y	
NC7-57	PTMW	Qal	A	CMP	AS:UISO	2	N	Dry.
NC7-57	PTMW	Qal	A	CMP	E300.0:NO3	2	N	Dry.
NC7-57	PTMW	Qal		DIS	E300.0:PERC	1	N	Dry.
NC7-57	PTMW	Qal	S	CMP	E906	2	N	Dry.
NC7-57	PTMW	Qal	S	CMP	E906	4	N	Dry.
NC7-58	PTMW	Qal	A	CMP	AS:UISO	2	Y	
NC7-58	PTMW	Qal	A	CMP	E300.0:NO3	2	Y	
NC7-58	PTMW	Qal		DIS	E300.0:PERC	1	Y	
NC7-58	PTMW	Qal		DIS	E300.0:PERC	3	Y	
NC7-58	PTMW	Qal	S	CMP	E906	2	Y	
NC7-58	PTMW	Qal	S	CMP	E906	4	Y	
NC7-59	PTMW	Qal/$Tnbs_1$	A	CMP	AS:UISO	2	Y	
NC7-59	PTMW	Qal/$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
NC7-59	PTMW	Qal/$Tnbs_1$		DIS	E300.0:PERC	1	Y	
NC7-59	PTMW	Qal/$Tnbs_1$		DIS	E300.0:PERC	3	Y	
NC7-59	PTMW	Qal/$Tnbs_1$	S	CMP	E906	2	Y	
NC7-59	PTMW	Qal/$Tnbs_1$	S	CMP	E906	4	Y	
NC7-60	PTMW	$Tnbs_0$	A	CMP	AS:UISO	2	Y	
NC7-60	PTMW	$Tnbs_0$	A	CMP	E300.0:NO3	2	Y	
NC7-60	PTMW	$Tnbs_0$		DIS	E300.0:PERC	1	Y	
NC7-60	PTMW	$Tnbs_0$		DIS	E300.0:PERC	3	Y	
NC7-60	PTMW	$Tnbs_0$	S	CMP	E906	2	Y	
NC7-60	PTMW	$Tnbs_0$	S	CMP	E906	4	Y	
NC7-61*	PTMW	$Tnbs_0$		DIS	AS:UISO	2	Y	
NC7-61*	PTMW	$Tnbs_0$		DIS	AS:UISO	4	Y	
NC7-61*	PTMW	$Tnbs_0$		WGMG	E300.0:NO3	1	Y	
NC7-61*	PTMW	$Tnbs_0$	A	CMP	E300.0:NO3	2	Y	
NC7-61*	PTMW	$Tnbs_0$		WGMG	E300.0:NO3	3	Y	
NC7-61*	PTMW	$Tnbs_0$		DIS	E300.0:PERC	1	Y	
NC7-61*	PTMW	$Tnbs_0$		WGMG	E300.0:PERC	2	Y	
NC7-61*	PTMW	$Tnbs_0$		WGMG	E300.0:PERC	3	Y	
NC7-61*	PTMW	$Tnbs_0$		WGMG	E300.0:PERC	4	Y	
NC7-61*	PTMW	$Tnbs_0$		DIS	E8330	2	Y	
NC7-61*	PTMW	$Tnbs_0$		DIS	E8330	4	Y	
NC7-61*	PTMW	$Tnbs_0$	S	CMP	E906	2	Y	
NC7-61*	PTMW	$Tnbs_0$	S	CMP	E906	4	Y	

Table 2.5-1. Building 850 OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
NC7-61*	PTMW	$Tnbs_0$	A	CMP	MS:UISO	2	Y	
NC7-62	PTMW	$Tnbs_1$	A	CMP	AS:UISO	2	Y	
NC7-62	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
NC7-62	PTMW	$Tnbs_1$		DIS	E300.0:PERC	2	Y	
NC7-62	PTMW	$Tnbs_1$		DIS	E300.0:PERC	4	Y	
NC7-62	PTMW	$Tnbs_1$	S	CMP	E906	2	Y	
NC7-62	PTMW	$Tnbs_1$	S	CMP	E906	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		DIS	E300.0:PERC	4	Y	
NC7-69*	PTMW	Tmss		DIS	E601	2	Y	
NC7-69*	PTMW	Tmss		DIS	E601	2	Y	
NC7-69*	PTMW	Tmss		DIS	E601	4	Y	
NC7-69*	PTMW	Tmss		DIS	E8330	2	Y	
NC7-69*	PTMW	Tmss		DIS	E8330	4	Y	
NC7-69*	PTMW	Tmss	S	CMP	E906	2	Y	
NC7-69*	PTMW	Tmss	S	CMP	E906	4	Y	
NC7-70	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
NC7-70	PTMW	$Tnbs_1$		DIS	E300.0:PERC	1	Y	
NC7-70	PTMW	$Tnbs_1$		DIS	E8330	2	Y	
NC7-70	PTMW	$Tnbs_1$	S	CMP	E906	2	Y	
NC7-70	PTMW	$Tnbs_1$	A	CMP	MS:UISO	2	Y	
NC7-71	PTMW	$Tnbs_1$	A	CMP	AS:UISO	2	Y	
NC7-71	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
NC7-71	PTMW	$Tnbs_1$		DIS	E300.0:PERC	1	Y	
NC7-71	PTMW	$Tnbs_1$		DIS	E300.0:PERC	2	Y	
NC7-71	PTMW	$Tnbs_1$		DIS	E8330	2	Y	
NC7-71	PTMW	$Tnbs_1$	S	CMP	E906	2	Y	
NC7-71	PTMW	$Tnbs_1$	S	CMP	E906	4	N	No access due to the soil removal project.
NC7-71	PTMW	$Tnbs_1$		DIS	MS:UISO	1	Y	
NC7-72	PTMW	$Tnbs_1$	A	CMP	AS:UISO	2	Y	
NC7-72	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
NC7-72	PTMW	$Tnbs_1$		DIS	E300.0:PERC	1	Y	
NC7-72	PTMW	$Tnbs_1$		DIS	E300.0:PERC	3	Y	
NC7-72	PTMW	$Tnbs_1$		DIS	E8330	4	Y	
NC7-72	PTMW	$Tnbs_1$	S	CMP	E906	2	Y	
NC7-72	PTMW	$Tnbs_1$	S	CMP	E906	4	Y	
NC7-73	PTMW	$Tnbs_1$	A	CMP	AS:UISO	2	Y	
NC7-73	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
NC7-73	PTMW	$Tnbs_1$		DIS	E300.0:PERC	2	Y	
NC7-73	PTMW	$Tnbs_1$		DIS	E300.0:PERC	4	Y	
NC7-73	PTMW	$Tnbs_1$		DIS	E8330	4	Y	
NC7-73	PTMW	$Tnbs_1$	S	CMP	E906	2	Y	
NC7-73	PTMW	$Tnbs_1$	S	CMP	E906	4	Y	
NC7-76	PTMW	$Tnbs_1$	A	CMP	AS:UISO	2	Y	
NC7-76	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
NC7-76	PTMW	$Tnbs_1$		DIS	E300.0:PERC	2	Y	
NC7-76	PTMW	$Tnbs_1$	S	CMP	E906	2	Y	
NC7-76	PTMW	$Tnbs_1$	S	CMP	E906	4	Y	
SPRING24	SPR	$Tnbs_0/Tnbs_1$	A	CMP	AS:UISO	2	N	Dry.

Table 2.5-1. Building 850 OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
SPRING24	SPR	$Tnbs_0/Tnbs_1$	A	CMP	E300.0:NO3	2	N	Dry.
SPRING24	SPR	$Tnbs_0/Tnbs_1$		DIS	E300.0:PERC	2	N	Dry.
SPRING24	SPR	$Tnbs_0/Tnbs_1$	S	CMP	E906	2	N	Dry.
SPRING24	SPR	$Tnbs_0/Tnbs_1$	S	CMP	E906	4	N	Dry.
W-850-05	PTMW	$Tnbs_1$	A	CMP	AS:UISO	2	Y	
W-850-05	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
W-850-05	PTMW	$Tnbs_1$		DIS	E300.0:PERC	1	Y	
W-850-05	PTMW	$Tnbs_1$	S	CMP	E906	2	Y	
W-850-05	PTMW	$Tnbs_1$	S	CMP	E906	4	N	No access due to the soil removal project.
W-850-2145	PTMW	$Tnbs_1/Tnbs_0$	A	CMP	AS:UISO	2	Y	
W-850-2145	PTMW	$Tnbs_1/Tnbs_0$	A	CMP	E300.0:NO3	2	Y	
W-850-2145	PTMW	$Tnbs_1/Tnbs_0$		DIS	E300.0:PERC	2	Y	
W-850-2145	PTMW	$Tnbs_1/Tnbs_0$	S	CMP	E906	2	Y	
W-850-2145	PTMW	$Tnbs_1/Tnbs_0$	S	CMP	E906	4	Y	
W-850-2145	PTMW	$Tnbs_1/Tnbs_0$		DIS	TBOS	4	Y	
W-850-2312	PTMW	$Tnbs_0$	A	CMP	AS:UISO	2	Y	
W-850-2312	PTMW	$Tnbs_0$	A	CMP	E300.0:NO3	2	Y	
W-850-2312	PTMW	$Tnbs_0$	A	CMP	E300.0:PERC	2	Y	
W-850-2312	PTMW	$Tnbs_0$		DIS	E8330	2	Y	
W-850-2312	PTMW	$Tnbs_0$	S	CMP	E906	2	Y	
W-850-2312	PTMW	$Tnbs_0$	S	CMP	E906	4	Y	
W-850-2313	PTMW	$Tnbs_0$	A	CMP	E300.0:NO3	2	Y	
W-850-2313	PTMW	$Tnbs_0$		DIS	E300.0:NO3	4	Y	
W-850-2313	PTMW	$Tnbs_0$	A	CMP	E300.0:PERC	2	Y	
W-850-2313	PTMW	$Tnbs_0$		DIS	E8330	2	Y	
W-850-2313	PTMW	$Tnbs_0$		DIS	E8330	4	Y	
W-850-2313	PTMW	$Tnbs_0$	S	CMP	E906	2	Y	
W-850-2313	PTMW	$Tnbs_0$		DIS	E906	3	Y	
W-850-2313	PTMW	$Tnbs_0$	S	CMP	E906	4	Y	
W-850-2313	PTMW	$Tnbs_0$	A	CMP	MS:UISO	2	Y	
W-850-2314	PTMW	$Tnbs_0$	A	CMP	AS:UISO	2	Y	
W-850-2314	PTMW	$Tnbs_0$	A	CMP	E300.0:NO3	2	Y	
W-850-2314	PTMW	$Tnbs_0$	A	CMP	E300.0:PERC	2	Y	
W-850-2314	PTMW	$Tnbs_0$		DIS	E8330	2	Y	
W-850-2314	PTMW	$Tnbs_0$		DIS	E906	1	Y	
W-850-2314	PTMW	$Tnbs_0$	S	CMP	E906	2	Y	
W-850-2314	PTMW	$Tnbs_0$		DIS	E906	3	Y	
W-850-2314	PTMW	$Tnbs_0$	S	CMP	E906	4	N	Inoperable pump.
W-850-2315	PTMW	$Tnbs_0$	A	CMP	AS:UISO	2	Y	
W-850-2315	PTMW	$Tnbs_0$		DIS	E300.0:NO3	1	Y	
W-850-2315	PTMW	$Tnbs_0$	A	CMP	E300.0:NO3	2	Y	
W-850-2315	PTMW	$Tnbs_0$		DIS	E300.0:NO3	3	Y	
W-850-2315	PTMW	$Tnbs_0$	A	CMP	E300.0:PERC	2	Y	
W-850-2315	PTMW	$Tnbs_0$		DIS	E300.0:PERC	4	Y	
W-850-2315	PTMW	$Tnbs_0$		DIS	E906	1	Y	
W-850-2315	PTMW	$Tnbs_0$	S	CMP	E906	2	Y	
W-850-2315	PTMW	$Tnbs_0$		DIS	E906	3	Y	
W-850-2315	PTMW	$Tnbs_0$	S	CMP	E906	4	Y	
W-850-2316	PTMW	$Tnbs_0$	A	CMP	AS:UISO	2	Y	
W-850-2316	PTMW	$Tnbs_0$	A	CMP	E300.0:NO3	2	Y	

Table 2.5-1. Building 850 OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-850-2316	PTMW	$Tnbs_0$	A	CMP	E300.0:PERC	2	Y	
W-850-2316	PTMW	$Tnbs_0$	S	CMP	E906	2	Y	
W-850-2316	PTMW	$Tnbs_0$	S	CMP	E906	4	Y	
W-850-2416	PTMW	$Tnbs_0$	A	CMP	AS:UISO	2	N	No access due to the soil removal project.
W-850-2416	PTMW	$Tnbs_0$	A	CMP	E300.0:NO3	1	Y	
W-850-2416	PTMW	$Tnbs_0$	A	CMP	E300.0:PERC	2	N	No access due to the soil removal project.
W-850-2416	PTMW	$Tnbs_0$	S	CMP	E906	2	N	No access due to the soil removal project.
W-850-2416	PTMW	$Tnbs_0$	S	CMP	E906	4	N	No access due to the soil removal project.
W-850-2417	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	1	N	No access due to the soil removal project.
W-850-2417	PTMW	$Tnbs_1$	A	CMP	E300.0:PERC	4	N	No access due to the soil removal project.
W-850-2417	PTMW	$Tnbs_1$	S	CMP	E906	2	N	No access due to the soil removal project.
W-850-2417	PTMW	$Tnbs_1$	S	CMP	E906	4	N	No access due to the soil removal project.
W-850-2417	PTMW	$Tnbs_1$	A	CMP	MS:UISO	2	N	No access due to the soil removal project.
W-865-1802	PTMW	$Tnbs_0$-$Tnsc_0$	A	CMP	AS:UISO	2	Y	
W-865-1802	PTMW	$Tnbs_0$-$Tnsc_0$	A	CMP	E300.0:NO3	2	Y	
W-865-1802	PTMW	$Tnbs_0$-$Tnsc_0$		DIS	E601	3	Y	
W-865-1802	PTMW	$Tnbs_0$-$Tnsc_0$	S	CMP	E906	2	Y	
W-865-1802	PTMW	$Tnbs_0$-$Tnsc_0$	S	CMP	E906	4	Y	
W-865-1803	PTMW	$Tnbs_0$-$Tnsc_0$	A	CMP	AS:UISO	2	Y	
W-865-1803	PTMW	$Tnbs_0$-$Tnsc_0$	A	CMP	E300.0:NO3	2	Y	
W-865-1803	PTMW	$Tnbs_0$-$Tnsc_0$		DIS	E300.0:PERC	2	Y	
W-865-1803	PTMW	$Tnbs_0$-$Tnsc_0$		DIS	E300.0:PERC	4	Y	
W-865-1803	PTMW	$Tnbs_0$-$Tnsc_0$		DIS	E601	3	Y	
W-865-1803	PTMW	$Tnbs_0$-$Tnsc_0$	S	CMP	E906	2	Y	
W-865-1803	PTMW	$Tnbs_0$-$Tnsc_0$	S	CMP	E906	4	Y	
W-PIT1-02*	PTMW	$Tnbs_1$		DIS	DWMETALS	1	N	Inoperable pump.
W-PIT1-02*	PTMW	$Tnbs_1$		DIS	E300.0:NO3	1	N	Inoperable pump.
W-PIT1-02*	PTMW	$Tnbs_1$		DIS	E300.0:PERC	1	N	Inoperable pump.
W-PIT1-02*	PTMW	$Tnbs_1$		DIS	E601	1	N	Inoperable pump.
W-PIT1-02*	PTMW	$Tnbs_1$		DIS	E906	1	N	Inoperable pump.
W-PIT1-2204	PTMW	Qal/$Tnbs_1$-	A	CMP	AS:UISO	2	N	Insufficient water.
W-PIT1-2204	PTMW	Qal/$Tnbs_1$-	A	CMP	E300.0:NO3	2	N	Insufficient water.
W-PIT1-2204	PTMW	Qal/$Tnbs_1$-		DIS	E300.0:PERC	1	Y	
W-PIT1-2204	PTMW	Qal/$Tnbs_1$-	A	CMP	E300.0:PERC	2	N	Insufficient water.
W-PIT1-2204	PTMW	Qal/$Tnbs_1$-		DIS	E906	1	Y	
W-PIT1-2204	PTMW	Qal/$Tnbs_1$-	S	CMP	E906	2	N	Insufficient water.
W-PIT1-2204	PTMW	Qal/$Tnbs_1$-	S	CMP	E906	4	N	Insufficient water.
W-PIT1-2204	PTMW	Qal/$Tnbs_1$-		DIS	MS:UISO	1	Y	
W-PIT1-2209	PTMW	$Tnbs_1$	A	CMP	AS:UISO	2	Y	
W-PIT1-2209	PTMW	$Tnbs_1$		DIS	AS:UISO	4	Y	
W-PIT1-2209	PTMW	$Tnbs_1$		DIS	E300.0:NO3	1	Y	
W-PIT1-2209	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
W-PIT1-2209	PTMW	$Tnbs_1$		DIS	E300.0:NO3	3	Y	

Table 2.5-1. Building 850 OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-PIT1-2209	PTMW	$Tnbs_1$	A	CMP	E300.0:PERC	1	Y	
W-PIT1-2209	PTMW	$Tnbs_1$		DIS	E300.0:PERC	3	Y	
W-PIT1-2209	PTMW	$Tnbs_1$		DIS	E601	1	Y	
W-PIT1-2209	PTMW	$Tnbs_1$		DIS	E601	3	Y	
W-PIT1-2209	PTMW	$Tnbs_1$		DIS	E906	1	Y	
W-PIT1-2209	PTMW	$Tnbs_1$	S	CMP	E906	2	Y	
W-PIT1-2209	PTMW	$Tnbs_1$		DIS	E906	3	Y	
W-PIT1-2209	PTMW	$Tnbs_1$	S	CMP	E906	4	Y	
W-PIT1-2225	GW	$Tnbs_1/Tnbs_0$	A	CMP	AS:UISO	2	Y	
W-PIT1-2225	GW	$Tnbs_1/Tnbs_0$	A	CMP	E300.0:NO3	2	Y	
W-PIT1-2225	GW	$Tnbs_1/Tnbs_0$		DIS	E300.0:PERC	1	Y	
W-PIT1-2225	GW	$Tnbs_1/Tnbs_0$	A	CMP	E300.0:PERC	2	Y	
W-PIT1-2225	GW	$Tnbs_1/Tnbs_0$		DIS	E300.0:PERC	3	Y	
W-PIT1-2225	GW	$Tnbs_1/Tnbs_0$		DIS	E300.0:PERC	4	Y	
W-PIT1-2225	GW	$Tnbs_1/Tnbs_0$	Q	CMP	E906	1	Y	
W-PIT1-2225	GW	$Tnbs_1/Tnbs_0$	Q	CMP	E906	2	Y	
W-PIT1-2225	GW	$Tnbs_1/Tnbs_0$	Q	CMP	E906	3	Y	
W-PIT1-2225	GW	$Tnbs_1/Tnbs_0$	Q	CMP	E906	4	Y	
W-PIT1-2326	DMW	$Tnbs_1/Tnbs_0$		WGMG	AS:THISO	1	Y	
W-PIT1-2326	DMW	$Tnbs_1/Tnbs_0$		WGMG	AS:THISO	2	Y	
W-PIT1-2326	DMW	$Tnbs_1/Tnbs_0$		WGMG	AS:UISO	1	Y	
W-PIT1-2326	DMW	$Tnbs_1/Tnbs_0$		WGMG	AS:UISO	2	Y	
W-PIT1-2326	DMW	$Tnbs_1/Tnbs_0$		WGMG	E300.0:NO3	1	Y	
W-PIT1-2326	DMW	$Tnbs_1/Tnbs_0$		WGMG	E300.0:NO3	2	Y	
W-PIT1-2326	DMW	$Tnbs_1/Tnbs_0$		WGMG	E300.0:PERC	1	Y	
W-PIT1-2326	DMW	$Tnbs_1/Tnbs_0$		WGMG	E300.0:PERC	2	Y	
W-PIT1-2326	DMW	$Tnbs_1/Tnbs_0$		WGMG	E8260	1	Y	
W-PIT1-2326	DMW	$Tnbs_1/Tnbs_0$		WGMG	E8260	2	Y	
W-PIT1-2326	DMW	$Tnbs_1/Tnbs_0$		WGMG	E906	1	Y	
W-PIT1-2326	DMW	$Tnbs_1/Tnbs_0$		WGMG	E906	2	Y	
W-PIT1-2326	DMW	$Tnbs_1/Tnbs_0$		WGMG	MS:UISO	2	Y	
W-PIT7-16	PTMW	$Tnsc_0$	A	CMP	AS:UISO	2	Y	
W-PIT7-16	PTMW	$Tnsc_0$	A	CMP	E300.0:NO3	2	Y	
W-PIT7-16	PTMW	$Tnsc_0$	S	CMP	E906	2	Y	
W-PIT7-16	PTMW	$Tnsc_0$	S	CMP	E906	4	Y	
W8SPRNG	SPR	$Tnbs_1$	A	CMP	AS:UISO	2	Y	
W8SPRNG	SPR	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
W8SPRNG	SPR	$Tnbs_1$		DIS	E300.0:PERC	1	Y	
W8SPRNG	SPR	$Tnbs_1$		DIS	E300.0:PERC	3	Y	
W8SPRNG	SPR	$Tnbs_1$		DIS	E8330	2	Y	
W8SPRNG	SPR	$Tnbs_1$	S	CMP	E906	2	Y	
W8SPRNG	SPR	$Tnbs_1$	S	CMP	E906	4	N	Dry.

Notes:

K1-01C, K1-02B, K1-04, K1-05, K1-07, K1-08, K1-09, and W-PIT1-2326 are Pit 1 Landfill detection monitoring wells. Analytes and sampling frequency are specified in Waste Discharge Requirements for the Pit 1 Landfill (not included in this CMR).

***Well sampled as part of the surveillance monitoring performed by the Water Guidance and Monitoring Group (WGMG) for additional constiutents and the results are reported in the LLNL Site Annual Environmental Report.**

Building 850 primary COC: tritium (E906).
Building 850 secondary COC: nitrate (E300.0:NO3).
Building 850 secondary COC: perchlorate (E300.0:PERC) for select wells.
Building 850 secondary COC: uranium (MS:UISO).
Contaminants of Concern in the Vadose Zone not detected in Ground Water: PCBs.
See Acronyms and Abbreviations in the Tables section of this report for acronym and abbreviation definitions.

Table 2.6-1. Building 854-Source (854-SRC) volumes of ground water and soil vapor extracted and discharged, July 1, 2009 through December 31, 2009.

Treatment facility	Month	SVTS Operational hours	GWTS Operational hours	Volume of vapor extracted (thousands of ft^3)	Volume of ground water discharged (gal)
854-SRC	July	459	720	1,262	72,527
	August	590	640	1,627	64,223
	September	697	838	1,917	84,305
	October	682	333	1,897	33,530
	November	565	0	1,582	0
	December	378	5	1,044	708
Total		3,371	2,536	9,329	255,293

Table 2.6-2. Building 854-Proximal (854-PRX) volumes of ground water and soil vapor extracted and discharged, July 1, 2009 through December 31, 2009.

Treatment facility	Month	SVTS Operational hours	GWTS Operational hours	Volume of vapor extracted (thousands of ft^3)	Volume of ground water discharged (gal)
854-PRX	July	NA	0	NA	0
	August	NA	0	NA	0
	September	NA	687	NA	60,876
	October	NA	697	NA	61,037
	November	NA	629	NA	53,488
	December	NA	122	NA	9,741
Total		NA	2,135	NA	185,142

Table 2.6-3. Building 854-Distal (854-DIS) volumes of ground water and soil vapor extracted and discharged, July 1, 2009 through December 31, 2009.

Treatment facility	Month	SVTS Operational hours	GWTS Operational hours	Volume of vapor extracted (thousands of ft^3)	Volume of ground water discharged (gal)
854-DIS	July	NA	12	NA	555
	August	NA	8	NA	425
	September	NA	18	NA	869
	October	NA	15	NA	717
	November	NA	11	NA	586
	December	NA	6	NA	315
Total		NA	70	NA	3,467

2.6-4. Building 854 OU VOCs in ground water 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															
854-DIS-GWTS-E	7/7/09	<0.5	<0.5	<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-GWTS-E	8/17/09	<0.5	<0.5	<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-GWTS-E	9/3/09	<0.5	<0.5	<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-GWTS-E	10/7/09	<0.5	<0.5	<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-GWTS-E	11/2/09	<0.5	<0.5	<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-GWTS-E	12/9/09	<0.5	<0.5	<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-GWTS-I	7/7/09	45	<0.5	1.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 J
854-DIS-GWTS-I	10/7/09	31	<0.5	0.62	<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[a]															
854-PRX-GWTS-E	9/2/09	<0.5	<0.5	<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-GWTS-E	9/8/09	<0.5	<0.5	<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-GWTS-E	9/14/09	<0.5	<0.5	<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-GWTS-E	10/7/09	<0.5	<0.5	<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-GWTS-E	11/2/09	<0.5	<0.5	<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-GWTS-I	9/14/09	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
854-PRX-GWTS-I	10/7/09	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
Building 854-Source[b]															
854-SRC-GWTS-E	7/7/09	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5 L	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5 O
854-SRC-GWTS-E	8/10/09	<0.5	<0.5	<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-GWTS-E	9/2/09	<0.5	<0.5	<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-GWTS-E	10/7/09	<0.5	<0.5	<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-GWTS-E	12/15/09	<0.5	<0.5	<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-GWTS-I	7/7/09	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	<0.5 J
854-SRC-GWTS-I	10/7/09	73	<0.5	<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 samples collected in July, August and December due to extraction pump failure. Three sets of start-up samples collected upon restart in September.

[b] No effluent samples collected in November due to electronic problem shutdown.

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

Table 2.6-4 (Cont.). Analyte detected but not reported in main table.

Location	Date	Detection frequency	1,2-DCE (total) (μg/L)
Building 854-Distal [a]			
854-DIS-GWTS-E	7/7/09	0 of 18	–
854-DIS-GWTS-E	8/17/09	0 of 18	–
854-DIS-GWTS-E	9/3/09	0 of 18	–
854-DIS-GWTS-E	10/7/09	0 of 18	–
854-DIS-GWTS-E	11/2/09	0 of 18	–
854-DIS-GWTS-E	12/9/09	0 of 18	–
854-DIS-GWTS-I	7/7/09	1 of 18	1.9
854-DIS-GWTS-I	10/7/09	0 of 18	–
Building 854-Proximal [a]			
854-PRX-GWTS-E	9/2/09	0 of 18	–
854-PRX-GWTS-E	9/8/09	0 of 18	–
854-PRX-GWTS-E	9/14/09	0 of 18	–
854-PRX-GWTS-E	10/7/09	0 of 18	–
854-PRX-GWTS-E	11/2/09	0 of 18	–
854-PRX-GWTS-I	9/14/09	0 of 18	–
854-PRX-GWTS-I	10/7/09	0 of 18	–
Building 854-Source [b]			
854-SRC-GWTS-E	7/7/09	0 of 18	–
854-SRC-GWTS-E	8/10/09	0 of 18	–
854-SRC-GWTS-E	9/2/09	0 of 18	–
854-SRC-GWTS-E	10/7/09	0 of 18	–
854-SRC-GWTS-E	12/15/09	0 of 18	–
854-SRC-GWTS-I	7/7/09	0 of 18	–
854-SRC-GWTS-I	10/7/09	0 of 18	–

Notes:

[a] No samples collected in July, August and December due to extraction pump failure. Three sets of start-up samples collected upon restart in September.

[b] No effluent samples collected in November due to electronic problem shutdown.

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

2.6-5. Building 854 OU nitrate and perchlorate in ground water treatment system influent and effluent.

Location	Date	Nitrate (as NO3) (mg/L)	Perchlorate (μg/L)
Building 854-Distal[a]			
854-DIS-GWTS-E	7/7/09	8.9	<4
854-DIS-GWTS-E	8/17/09	7.8	<4
854-DIS-GWTS-E	9/3/09	0.56	<4
854-DIS-GWTS-E	10/7/09	1.2	<4 L
854-DIS-GWTS-E	11/2/09	0.87	<4 O
854-DIS-GWTS-E	12/9/09	0.63	<4
854-DIS-GWTS-I	7/7/09	24	6.1
854-DIS-GWTS-I	10/7/09	23	4.5
Building 854-Proximal[a]			
854-PRX-GWTS-E	9/2/09	6.2	<4
854-PRX-GWTS-E	9/8/09	12	<4
854-PRX-GWTS-E	9/14/09	15	<4
854-PRX-GWTS-E	10/7/09	16	<4 L
854-PRX-GWTS-E	11/2/09	17	<4 O
854-PRX-GWTS-I	9/14/09	45	11
854-PRX-GWTS-I	10/7/09	45	9.5
Building 854-Source[b]			
854-SRC-GWTS-E	7/7/09	45	<4
854-SRC-GWTS-E	8/10/09	55	<4
854-SRC-GWTS-E	9/2/09	54	<4
854-SRC-GWTS-E	10/7/09	47	<4 L
854-SRC-GWTS-E	12/15/09	0.94	<4
854-SRC-GWTS-I	7/7/09	47	4.3
854-SRC-GWTS-I	10/7/09	49	<4

Notes:

[a] No samples collected in July, August and December due to extraction pump failure. Three sets of start-up samples collected upon restart in September.

[b] No effluent samples collected in November due to electronic problem shutdown.

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

Table 2.6-6. Building 854 OU treatment facility sampling and analysis plan.

Sample location	Sample identification	Parameter	Frequency
854-SRC GWTS			
Influent Port	**854-SRC-I**	**VOCs**	**Quarterly**
		Perchlorate	**Quarterly**
		Nitrate	**Quarterly**
		pH	**Quarterly**
Effluent Port	**854-SRC-E**	**VOCs**	**Monthly**
		Perchlorate	**Monthly**
		Nitrate	**Monthly**
		pH	**Monthly**
854-SRC SVTS			
Influent Port	**W-854-1834-854-SRC-VI**	**No Monitoring Requirements**	
Effluent Port	**854-SRC-E**	**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-BTU-I**	**VOCs**	**Monthly**
Effluent Port	**854-PRX-E**	**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:

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

[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.**

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

Table 2.6-7. Building 854 OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
SPRING10	SPR	Qls	Q	CMP	E601	1	Y	
SPRING10	SPR	Qls	Q	CMP	E601	2	N	Dry.
SPRING10	SPR	Qls	Q	CMP	E601	3	Y	
SPRING10	SPR	Qls	Q	CMP	E601	4	Y	
SPRING10	SPR	Qls	A	CMP	E300.0:NO3	2	N	Dry.
SPRING10	SPR	Qls	A	CMP	E300.0:PERC	2	N	Dry.
SPRING11	SPR	Qls-$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
SPRING11	SPR	Qls-$Tnbs_1$	A	CMP	E300.0:PERC	2	Y	
SPRING11	SPR	Qls-$Tnbs_1$	Q	CMP	E601	1	Y	
SPRING11	SPR	Qls-$Tnbs_1$	Q	CMP	E601	2	Y	
SPRING11	SPR	Qls-$Tnbs_1$	Q	CMP	E601	3	N	Dry.
SPRING11	SPR	Qls-$Tnbs_1$	Q	CMP	E601	4	Y	
W-854-01	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
W-854-01	PTMW	$Tnbs_1$	A	CMP	E300.0:PERC	2	Y	
W-854-01	PTMW	$Tnbs_1$	S	CMP	E601	2	Y	
W-854-01	PTMW	$Tnbs_1$	S	CMP	E601	4	Y	
W-854-02	EW	$Tnbs_1$		DIS	E300.0:NO3	1	Y	854-SRC extraction well.
W-854-02	EW	$Tnbs_1$	A	CMP-TF	E300.0:NO3	2	Y	854-SRC extraction well.
W-854-02	EW	$Tnbs_1$		DIS	E300.0:NO3	3	Y	854-SRC extraction well.
W-854-02	EW	$Tnbs_1$		DIS	E300.0:PERC	1	Y	854-SRC extraction well.
W-854-02	EW	$Tnbs_1$	A	CMP-TF	E300.0:PERC	2	Y	854-SRC extraction well.
W-854-02	EW	$Tnbs_1$		DIS	E300.0:PERC	3	Y	854-SRC extraction well.
W-854-02	EW	$Tnbs_1$		DIS	E601	1	Y	854-SRC extraction well.
W-854-02	EW	$Tnbs_1$	S	CMP-TF	E601	2	Y	854-SRC extraction well.
W-854-02	EW	$Tnbs_1$		DIS	E601	3	Y	854-SRC extraction well.
W-854-02	EW	$Tnbs_1$	S	CMP-TF	E601	4	Y	854-SRC extraction well.
W-854-03	EW	$Tnbs_1$		DIS	E300.0:NO3	1	Y	854-PRX extraction well.
W-854-03	EW	$Tnbs_1$	A	CMP-TF	E300.0:NO3	2	Y	854-PRX extraction well.
W-854-03	EW	$Tnbs_1$		DIS	E300.0:NO3	3	Y	854-PRX extraction well.
W-854-03	EW	$Tnbs_1$		DIS	E300.0:NO3	4	Y	854-PRX extraction well.
W-854-03	EW	$Tnbs_1$		DIS	E300.0:PERC	1	Y	854-PRX extraction well.
W-854-03	EW	$Tnbs_1$	A	CMP-TF	E300.0:PERC	2	Y	854-PRX extraction well.
W-854-03	EW	$Tnbs_1$		DIS	E300.0:PERC	3	Y	854-PRX extraction well.
W-854-03	EW	$Tnbs_1$		DIS	E300.0:PERC	4	Y	854-PRX extraction well.
W-854-03	EW	$Tnbs_1$		DIS	E601	1	Y	854-PRX extraction well.
W-854-03	EW	$Tnbs_1$	S	CMP-TF	E601	2	Y	854-PRX extraction well.
W-854-03	EW	$Tnbs_1$		DIS	E601	3	Y	854-PRX extraction well.
W-854-03	EW	$Tnbs_1$	S	CMP-TF	E601	4	Y	854-PRX extraction well.
W-854-04	PTMW	Tmss	A	CMP	E300.0:NO3	2	Y	
W-854-04	PTMW	Tmss	A	CMP	E300.0:PERC	2	Y	
W-854-04	PTMW	Tmss	S	CMP	E601	2	Y	
W-854-04	PTMW	Tmss	S	CMP	E601	4	Y	
W-854-05	PTMW	Qls-$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
W-854-05	PTMW	Qls-$Tnbs_1$	A	CMP	E300.0:PERC	2	Y	
W-854-05	PTMW	Qls-$Tnbs_1$	S	CMP	E601	2	Y	
W-854-05	PTMW	Qls-$Tnbs_1$	S	CMP	E601	4	Y	
W-854-06	PTMW	$Tnsc_0$	A	CMP	E300.0:NO3	2	Y	
W-854-06	PTMW	$Tnsc_0$	A	CMP	E300.0:PERC	2	Y	
W-854-06	PTMW	$Tnsc_0$	S	CMP	E601	2	Y	
W-854-06	PTMW	$Tnsc_0$	S	CMP	E601	4	Y	
W-854-07	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
W-854-07	PTMW	$Tnbs_1$	A	CMP	E300.0:PERC	2	Y	
W-854-07	PTMW	$Tnbs_1$	S	CMP	E601	2	Y	

Table 2.6-7. Building 854 OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-854-07	PTMW	$Tnbs_1$	S	CMP	E601	4	Y	
W-854-08	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
W-854-08	PTMW	$Tnbs_1$	A	CMP	E300.0:PERC	2	Y	
W-854-08	PTMW	$Tnbs_1$	S	CMP	E601	2	Y	
W-854-08	PTMW	$Tnbs_1$	S	CMP	E601	4	N	Inoperable pump.
W-854-09	PTMW	$Tnsbs_0$	A	CMP	E300.0:NO3	2	Y	
W-854-09	PTMW	$Tnsbs_0$	A	CMP	E300.0:PERC	2	Y	
W-854-09	PTMW	$Tnsbs_0$	S	CMP	E601	2	Y	
W-854-09	PTMW	$Tnsbs_0$	S	CMP	E601	4	Y	
W-854-10	PTMW	$Tnsbs_0$	A	CMP	E300.0:NO3	2	Y	
W-854-10	PTMW	$Tnsbs_0$	A	CMP	E300.0:PERC	2	Y	
W-854-10	PTMW	$Tnsbs_0$	S	CMP	E601	2	Y	
W-854-10	PTMW	$Tnsbs_0$	S	CMP	E601	4	Y	
W-854-11	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	N	Dry.
W-854-11	PTMW	$Tnbs_1$	A	CMP	E300.0:PERC	2	N	Dry.
W-854-11	PTMW	$Tnbs_1$	S	CMP	E601	2	N	Dry.
W-854-11	PTMW	$Tnbs_1$	S	CMP	E601	4	N	Dry.
W-854-12	PTMW	Tmss	B	CMP	E300.0:NO3	2	NA	Next sample required 2ndQ 2010.
W-854-12	PTMW	Tmss	B	CMP	E300.0:PERC	2	NA	Next sample required 2ndQ 2010.
W-854-12	PTMW	Tmss	B	CMP	E601	2	NA	Next sample required 2ndQ 2010.
W-854-13	PTMW	$Tnsc_0$	A	CMP	E300.0:NO3	2	Y	
W-854-13	PTMW	$Tnsc_0$	A	CMP	E300.0:PERC	2	Y	
W-854-13	PTMW	$Tnsc_0$	S	CMP	E601	2	Y	
W-854-13	PTMW	$Tnsc_0$	S	CMP	E601	4	Y	
W-854-13	PTMW	$Tnsc_0$	B	CMP	E8082A	2	Y	Next sample required 2ndQ
W-854-14	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
W-854-14	PTMW	$Tnbs_1$	A	CMP	E300.0:PERC	2	Y	
W-854-14	PTMW	$Tnbs_1$	A	CMP	E601	2	Y	
W-854-15	PTMW	Qls	A	CMP	E300.0:NO3	2	Y	
W-854-15	PTMW	Qls	A	CMP	E300.0:PERC	2	Y	
W-854-15	PTMW	Qls	S	CMP	E601	2	Y	
W-854-15	PTMW	Qls	S	CMP	E601	4	Y	
W-854-17	EW	$Tnsbs_0$-$Tnsc_0$		DIS	E300.0:NO3	1	Y	854-SRC extraction well.
W-854-17	EW	$Tnsbs_0$-$Tnsc_0$	A	CMP-TF	E300.0:NO3	2	Y	854-SRC extraction well.
W-854-17	EW	$Tnsbs_0$-$Tnsc_0$		DIS	E300.0:NO3	3	Y	854-SRC extraction well.
W-854-17	EW	$Tnsbs_0$-$Tnsc_0$		DIS	E300.0:PERC	1	Y	854-SRC extraction well.
W-854-17	EW	$Tnsbs_0$-$Tnsc_0$	A	CMP-TF	E300.0:PERC	2	Y	854-SRC extraction well.
W-854-17	EW	$Tnsbs_0$-$Tnsc_0$		DIS	E300.0:PERC	3	Y	854-SRC extraction well.
W-854-17	EW	$Tnsbs_0$-$Tnsc_0$		DIS	E601	1	Y	854-SRC extraction well.
W-854-17	EW	$Tnsbs_0$-$Tnsc_0$	S	CMP-TF	E601	2	Y	854-SRC extraction well.
W-854-17	EW	$Tnsbs_0$-$Tnsc_0$		DIS	E601	3	Y	854-SRC extraction well.
W-854-17	EW	$Tnsbs_0$-$Tnsc_0$	S	CMP-TF	E601	4	Y	854-SRC extraction well.
W-854-1701	PTMW	$Tnsc_0$	A	CMP	E300.0:NO3	2	Y	
W-854-1701	PTMW	$Tnsc_0$	A	CMP	E300.0:PERC	2	Y	
W-854-1701	PTMW	$Tnsc_0$	S	CMP	E601	2	Y	
W-854-1701	PTMW	$Tnsc_0$	S	CMP	E601	4	Y	
W-854-1706	PTMW	Qal-$Tnbs_1$	A	CMP	E300.0:NO3	2	N	Dry.
W-854-1706	PTMW	Qal-$Tnbs_1$	A	CMP	E300.0:PERC	2	N	Dry.
W-854-1706	PTMW	Qal-$Tnbs_1$	A	CMP	E601	2	N	Dry.
W-854-1707	PTMW	$Tnsc_0$	A	CMP	E300.0:NO3	2	Y	
W-854-1707	PTMW	$Tnsc_0$	A	CMP	E300.0:PERC	2	Y	

Table 2.6-7. Building 854 OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-854-1707	PTMW	$Tnsc_0$	S	CMP	E601	2	Y	
W-854-1707	PTMW	$Tnsc_0$	S	CMP	E601	4	Y	
W-854-1731	PTMW	Tmss	A	CMP	E300.0:NO3	2	Y	
W-854-1731	PTMW	Tmss	A	CMP	E300.0:PERC	2	Y	
W-854-1731	PTMW	Tmss	S	CMP	E601	2	Y	
W-854-1731	PTMW	Tmss	S	CMP	E601	4	Y	
W-854-1822	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
W-854-1822	PTMW	$Tnbs_1$	A	CMP	E300.0:PERC	2	Y	
W-854-1822	PTMW	$Tnbs_1$	S	CMP	E601	2	Y	
W-854-1822	PTMW	$Tnbs_1$	S	CMP	E601	4	Y	
W-854-1823	PTMW	$Tnsbs_1$-$Tnsc_0$	A	CMP	E300.0:NO3	2	Y	
W-854-1823	PTMW	$Tnsbs_1$-$Tnsc_0$	A	CMP	E300.0:PERC	2	Y	
W-854-1823	PTMW	$Tnsbs_1$-$Tnsc_0$	S	CMP	E601	2	Y	
W-854-1823	PTMW	$Tnsbs_1$-$Tnsc_0$	S	CMP	E601	4	Y	
W-854-18A	EW	$Tnbs_1$		DIS	E300.0:NO3	1	Y	854-SRC extraction well.
W-854-18A	EW	$Tnbs_1$	A	CMP-TF	E300.0:NO3	2	Y	854-SRC extraction well.
W-854-18A	EW	$Tnbs_1$		DIS	E300.0:NO3	3	Y	854-SRC extraction well.
W-854-18A	EW	$Tnbs_1$		DIS	E300.0:PERC	1	Y	854-SRC extraction well.
W-854-18A	EW	$Tnbs_1$	A	CMP-TF	E300.0:PERC	2	Y	854-SRC extraction well.
W-854-18A	EW	$Tnbs_1$		DIS	E300.0:PERC	3	Y	854-SRC extraction well.
W-854-18A	EW	$Tnbs_1$		DIS	E601	1	Y	854-SRC extraction well.
W-854-18A	EW	$Tnbs_1$	S	CMP-TF	E601	2	Y	854-SRC extraction well.
W-854-18A	EW	$Tnbs_1$		DIS	E601	3	Y	854-SRC extraction well.
W-854-18A	EW	$Tnbs_1$	S	CMP-TF	E601	4	Y	854-SRC extraction well.
W-854-19	PTMW	Qls	A	CMP	E300.0:NO3	2	N	Dry.
W-854-19	PTMW	Qls	A	CMP	E300.0:PERC	2	N	Dry.
W-854-19	PTMW	Qls	A	CMP	E601	2	N	Dry.
W-854-1902	PTMW	$Tnsbs_1$-$Tnsc_0$	A	CMP	E300.0:NO3	2	Y	
W-854-1902	PTMW	$Tnsbs_1$-$Tnsc_0$	A	CMP	E300.0:PERC	2	Y	
W-854-1902	PTMW	$Tnsbs_1$-$Tnsc_0$	S	CMP	E601	2	Y	
W-854-1902	PTMW	$Tnsbs_1$-$Tnsc_0$	S	CMP	E601	4	Y	
W-854-2115	PTMW	$Tnsbs_1$-$Tnsc_0$	A	CMP	E300.0:NO3	2	Y	
W-854-2115	PTMW	$Tnsbs_1$-$Tnsc_0$	A	CMP	E300.0:PERC	2	Y	
W-854-2115	PTMW	$Tnsbs_1$-$Tnsc_0$	S	CMP	E601	2	Y	
W-854-2115	PTMW	$Tnsbs_1$-$Tnsc_0$	S	CMP	E601	4	Y	
W-854-2115	PTMW	$Tnsbs_1$-$Tnsc_0$		DIS	TBOS	1	Y	
W-854-2139	EW	$Tnsbs_1$-$Tnsc_0$		DIS	E300.0:NO3	1	Y	854-DIS extraction well.
W-854-2139	EW	$Tnsbs_1$-$Tnsc_0$	A	CMP-TF	E300.0:NO3	2	Y	854-DIS extraction well.
W-854-2139	EW	$Tnsbs_1$-$Tnsc_0$		DIS	E300.0:NO3	3	Y	854-DIS extraction well.
W-854-2139	EW	$Tnsbs_1$-$Tnsc_0$		DIS	E300.0:NO3	4	Y	854-DIS extraction well.
W-854-2139	EW	$Tnsbs_1$-$Tnsc_0$		DIS	E300.0:PERC	1	Y	854-DIS extraction well.
W-854-2139	EW	$Tnsbs_1$-$Tnsc_0$	A	CMP-TF	E300.0:PERC	2	Y	854-DIS extraction well.
W-854-2139	EW	$Tnsbs_1$-$Tnsc_0$		DIS	E300.0:PERC	3	Y	854-DIS extraction well.
W-854-2139	EW	$Tnsbs_1$-$Tnsc_0$		DIS	E300.0:PERC	4	Y	854-DIS extraction well.
W-854-2139	EW	$Tnsbs_1$-$Tnsc_0$		DIS	E601	1	Y	854-DIS extraction well.
W-854-2139	EW	$Tnsbs_1$-$Tnsc_0$	S	CMP-TF	E601	2	Y	854-DIS extraction well.
W-854-2139	EW	$Tnsbs_1$-$Tnsc_0$		DIS	E601	3	Y	854-DIS extraction well.
W-854-2139	EW	$Tnsbs_1$-$Tnsc_0$	S	CMP-TF	E601	4	Y	854-DIS extraction well.
W-854-2218	EW	$Tnbs_1$		DIS	E300.0:NO3	1	Y	854-SRC extraction well.
W-854-2218	EW	$Tnbs_1$	A	CMP-TF	E300.0:NO3	2	Y	854-SRC extraction well.
W-854-2218	EW	$Tnbs_1$		DIS	E300.0:NO3	3	Y	854-SRC extraction well.
W-854-2218	EW	$Tnbs_1$		DIS	E300.0:PERC	1	Y	854-SRC extraction well.
W-854-2218	EW	$Tnbs_1$	A	CMP-TF	E300.0:PERC	2	Y	854-SRC extraction well.

Table 2.6-7. Building 854 OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-854-2218	EW	$Tnbs_1$		DIS	E300.0:PERC	3	Y	854-SRC extraction well.
W-854-2218	EW	$Tnbs_1$		DIS	E601	1	Y	854-SRC extraction well.
W-854-2218	EW	$Tnbs_1$	S	CMP-TF	E601	2	Y	854-SRC extraction well.
W-854-2218	EW	$Tnbs_1$		DIS	E601	3	Y	854-SRC extraction well.
W-854-2218	EW	$Tnbs_1$	S	CMP-TF	E601	4	Y	854-SRC extraction well.
W-854-45	PTMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
W-854-45	PTMW	$Tnbs_1$	A	CMP	E300.0:PERC	2	Y	
W-854-45	PTMW	$Tnbs_1$	S	CMP	E601	2	Y	
W-854-45	PTMW	$Tnbs_1$	S	CMP	E601	4	Y	
W-854-F2	PTMW	Qls-$Tnbs_1$	B	CMP	E300.0:NO3	2	N	Dry.
W-854-F2	PTMW	Qls-$Tnbs_1$	B	CMP	E300.0:PERC	2	N	Dry.
W-854-F2	PTMW	Qls-$Tnbs_1$	B	CMP	E601	2	N	Dry.

Notes:
Building 854 primary Contaminants of Concern in Ground Water: VOCs (E601 or E624).
Building 854 secondary COC: nitrate (E300:NO3).
Building 854 secondary COC: perchlorate (E300.0:PERC).
Contaminants of Concern in the Vadose Zone not detected in Ground Water: PCBs.
See Acronyms and Abbreviations in the Tables section of this report for acronym and abbreviation definitions.

Table 2.6-8. Building 854-Source (854-SRC) mass removed, July 1, 2009 through December 31, 2009.

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	75	21	0.84	13	NA	NA
	August	97	19	0.73	12	NA	NA
	September	110	25	0.95	15	NA	NA
	October	140	8.0	0.36	6.1	NA	NA
	November	120	0	0	0	NA	NA
	December	78	0.19	0.0095	0.13	NA	NA
Total		620	73	2.9	46	NA	NA

Table 2.6-9. Building 854-Proximal (854-PRX) mass removed, July 1, 2009 through December 31, 2009.

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	July	NA	0	0	0	NA	NA
	August	NA	0	0	0	NA	NA
	September	NA	5.8	2.5	10	NA	NA
	October	NA	6.2	2.2	10	NA	NA
	November	NA	5.5	1.9	9.1	NA	NA
	December	NA	1.0	0.35	1.7	NA	NA
Total		NA	18	7.0	32	NA	NA

Table 2.6-10. Building 854-Distal (854-DIS) mass removed, July 1, 2009 through December 31, 2009.

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	0.099	0.013	0.050	NA	NA
	August	NA	0.075	0.0098	0.039	NA	NA
	September	NA	0.15	0.020	0.079	NA	NA
	October	NA	0.086	0.012	0.062	NA	NA
	November	NA	0.070	0.010	0.051	NA	NA
	December	NA	0.038	0.0054	0.027	NA	NA
Total		NA	0.52	0.070	0.31	NA	NA

Table 2.7-1. Building 832-Source (832-SRC) volumes of ground water and soil vapor extracted and discharged, July 1, 2009 through December 31, 2009.

Treatment facility	Month	SVTS Operational hours	GWTS Operational hours	Volume of vapor extracted (thousands of ft^3)	Volume of ground water discharged (gal)
832-SRC	July	0	0	0	0
	August	0	0	0	0
	September	0	0	0	0
	October	0	0	0	0
	November	0	0	0	0
	December	0	0	0	0
Total		0	0	0	0

Table 2.7-2. Building 830-Source (830-SRC) volumes of ground water and soil vapor extracted and discharged, July 1, 2009 through December 31, 2009.

Treatment facility	Month	SVTS Operational hours	GWTS Operational hours	Volume of vapor extracted (thousands of ft^3)	Volume of ground water discharged (gal)
830-SRC	July	697	696	729	159,905
	August	390	696	499	180,651
	September	562	864	659	151,355
	October	672	672	956	136,519
	November	653	648	1,157	248,450
	December	837	840	1,496	263,585
Total		3,811	4,416	5,496	1,140,465

Table 2.7-3. Building 830-Distal South (830-DISS) volumes of ground water and soil vapor extracted and discharged, July 1, 2009 through December 31, 2009.

Treatment facility	Month	SVTS Operational hours	GWTS Operational hours	Volume of vapor extracted (thousands of ft^3)	Volume of ground water discharged (gal)
830-DISS	July	NA	432	NA	104,435
	August	NA	120	NA	60,179
	September	NA	552	NA	136,400
	October	NA	696	NA	114,661
	November	NA	624	NA	117,541
	December	NA	360	NA	78,597
Total		NA	2,784	NA	611,813

2.7-4. Building 832 Canyon OU VOCs in ground water 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															
830-SRC-GWTS-E	7/7/09	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5 L	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5 O
830-SRC-GWTS-E	8/3/09	<0.5	<0.5	<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-GWTS-E	9/1/09	<0.5	<0.5	<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-GWTS-E	10/6/09	<0.5	<0.5	<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-GWTS-E	11/2/09	<0.5	<0.5	<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-GWTS-E	12/1/09	<0.5	<0.5	<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-GWTS-I	7/7/09	38	<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 OJ
830-SRC-GWTS-I	10/6/09	410 D	2.4	<0.5	<0.5	<0.5	0.85	<0.5	0.87	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Building 832-Source[b]															

Notes:

[a] **No influent or effluent monitoring conducted due to VOC treatment at CGSA GWTS.**

[b] **No influent or effluent monitoring conducted this semester due to Control System failure.**

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

Table 2.7-4 (Cont.). Analyte detected but not reported in main table.

Location	Date	Detection frequency	
Building 830-Distal South[a]			
Building 830-Source			
830-SRC-GWTS-E	**7/7/09**	**0 of 18**	**-**
830-SRC-GWTS-E	**8/3/09**	**0 of 18**	**-**
830-SRC-GWTS-E	**9/1/09**	**0 of 18**	**-**
830-SRC-GWTS-E	**10/6/09**	**0 of 18**	**-**
830-SRC-GWTS-E	**11/2/09**	**0 of 18**	**-**
830-SRC-GWTS-E	**12/1/09**	**0 of 18**	**-**
830-SRC-GWTS-I	**7/7/09**	**1 of 18**	**1.6**
830-SRC-GWTS-I	**10/6/09**	**0 of 18**	**-**
Building 832-Source[b]			

Notes:

[a] **No influent or effluent monitoring conducted due to VOC treatment at CGSA GWTS.**

[b] **No influent or effluent monitoring conducted this semester due to Control System failure.**

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

2.7-5. Building 832 Canyon OU nitrate and perchlorate in ground water treatment system influent and effluent.

Location	Date	Nitrate (as NO3) (mg/L)	Perchlorate (μg/L)
Building 830-Distal South[a]			
830-DISS-GWTS-E	7/7/09	68 D	<4
830-DISS-GWTS-E	9/3/09	72	<4
830-DISS-GWTS-E	10/7/09	62 D	<4 L
830-DISS-GWTS-E	11/3/09	70	<4
830-DISS-GWTS-E	12/1/09	70	<4
830-DISS-GWTS-I	7/7/09	69 D	<4
830-DISS-GWTS-I	10/7/09	74 D	<4
Building 830-Source			
830-SRC-GWTS-E	7/7/09	59 D	<4
830-SRC-GWTS-E	8/3/09	14	<4
830-SRC-GWTS-E	9/1/09	9.3 D	<4
830-SRC-GWTS-E	10/6/09	30 D	<4 L
830-SRC-GWTS-E	11/2/09	11	<4 O
830-SRC-GWTS-E	12/1/09	15 D	<4
830-SRC-GWTS-I	7/7/09	20 D	<4
830-SRC-GWTS-I[b]	7/7/09	-	<4
830-SRC-GWTS-I	10/6/09	110 D	4.3
Building 832-Source[c]			

Notes:

[a] No effluent monitoring conducted in August due to shut down of CGSA GWTS.

[b] Duplicate perchlorate sample submitted to secondary contract laboratory.

[c] No influent or effluent monitoring conducted this semester due to Control System failure.

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

Table 2.7-6. Building 832 Canyon OU treatment facility sampling and analysis plan.

Sample location	Sample identification	Parameter	Frequency
832-SRC GWTS			
Influent Port	832-SRC-I	VOCs	Quarterly
		Perchlorate	Quarterly
		Nitrate	Quarterly
		pH	Quarterly
Effluent Port	832-SRC-E	VOCs	Monthly
		Perchlorate	Monthly
		Nitrate	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
		Nitrate	Quarterly
		PH	Quarterly
Effluent Port	830-SRC-E	VOCs	Monthly
		Perchlorate	Monthly
		Nitrate	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]

Table 2.7-6 (Cont.). Building 832 Canyon treatment facility sampling and analysis plans.

Sample Location	Sample Identification	Parameter	Frequency
830-DISS GWTS			
Influent Port	**830-DISS-I**	**Perchlorate**	**Quarterly**
		Nitrate	**Quarterly**
		pH	**Quarterly**
Effluent Port	**830-DISS-E**	**Perchlorate**	**Monthly**
		Nitrate	**Monthly**
		pH	**Monthly**

Notes:

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

[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.**

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

Table 2.7-7. Building 832 Canyon OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
SPRING3	SPR	Qal	A	CMP	E300.0:NO3	1	Y	
SPRING3	SPR	Qal	A	CMP	E300.0:PERC	1	Y	
SPRING3	SPR	Qal	S	CMP	E601	1	Y	
SPRING3	SPR	Qal	S	CMP	E601	3	Y	
SPRING4	SPR	Tps	B	CMP	E300.0:NO3	1	N	Dry. Next sample required 1stQ 2011.
SPRING4	SPR	Tps	B	CMP	E300.0:PERC	1	N	Dry. Next sample required 1stQ 2011.
SPRING4	SPR	Tps	B	CMP	E601	1	N	Dry. Next sample required 1stQ 2011.
SVI-830-031	PTMW	$Tnsc_1$	A	CMP	E300.0:NO3	1	Y	
SVI-830-031	PTMW	$Tnsc_1$	A	CMP	E300.0:PERC	1	Y	
SVI-830-031	PTMW	$Tnsc_1$	S	CMP	E601	1	Y	
SVI-830-031	PTMW	$Tnsc_1$	S	CMP	E601	3	Y	
SVI-830-032	PTMW	$Tnsc_1$	A	CMP	E300.0:NO3	1	Y	
SVI-830-032	PTMW	$Tnsc_1$	A	CMP	E300.0:PERC	1	Y	
SVI-830-032	PTMW	$Tnsc_1$	S	CMP	E601	1	Y	
SVI-830-032	PTMW	$Tnsc_1$	S	CMP	E601	3	Y	
SVI-830-033	PTMW	$Tnsc_1$	A	CMP	E300.0:NO3	1	Y	
SVI-830-033	PTMW	$Tnsc_1$	A	CMP	E300.0:PERC	1	Y	
SVI-830-033	PTMW	$Tnsc_1$	S	CMP	E601	1	Y	
SVI-830-033	PTMW	$Tnsc_1$	S	CMP	E601	3	Y	
SVI-830-035	PTMW	$Tnsc_1$	A	CMP	E300.0:NO3	1	Y	
SVI-830-035	PTMW	$Tnsc_1$	A	CMP	E300.0:PERC	1	Y	
SVI-830-035	PTMW	$Tnsc_1$	S	CMP	E601	1	Y	
SVI-830-035	PTMW	$Tnsc_1$	S	CMP	E601	3	Y	
W-830-04A	PTMW	$Tnsc_{1b}$	A	CMP	E300.0:NO3	1	Y	
W-830-04A	PTMW	$Tnsc_{1b}$	A	CMP	E300.0:PERC	1	Y	
W-830-04A	PTMW	$Tnsc_{1b}$	S	CMP	E601	1	Y	
W-830-04A	PTMW	$Tnsc_{1b}$	S	CMP	E601	3	Y	
W-830-05	PTMW	$Tnbs_2$-$Tnsc_{1c}$	A	CMP	E300.0:NO3	1	Y	
W-830-05	PTMW	$Tnbs_2$-$Tnsc_{1c}$	A	CMP	E300.0:PERC	1	Y	
W-830-05	PTMW	$Tnbs_2$-$Tnsc_{1c}$	S	CMP	E601	1	Y	
W-830-05	PTMW	$Tnbs_2$-$Tnsc_{1c}$	S	CMP	E601	3	Y	
W-830-07	PTMW	$Tnsc_1$	A	CMP	E300.0:NO3	1	N	Dry.
W-830-07	PTMW	$Tnsc_1$	A	CMP	E300.0:PERC	1	N	Dry.
W-830-07	PTMW	$Tnsc_1$	S	CMP	E601	1	N	Dry.
W-830-07	PTMW	$Tnsc_1$	S	CMP	E601	3	N	Dry.
W-830-09	PTMW	Upper $Tnbs_1$	A	CMP	E300.0:NO3	1	Y	
W-830-09	PTMW	Upper $Tnbs_1$	A	CMP	E300.0:PERC	1	Y	
W-830-09	PTMW	Upper $Tnbs_1$	S	CMP	E601	1	Y	
W-830-09	PTMW	Upper $Tnbs_1$	S	CMP	E601	3	Y	
W-830-10	PTMW	$Tnsc_{1b}$	A	CMP	E300.0:NO3	1	Y	
W-830-10	PTMW	$Tnsc_{1b}$	A	CMP	E300.0:PERC	1	Y	
W-830-10	PTMW	$Tnsc_{1b}$	S	CMP	E601	1	Y	
W-830-10	PTMW	$Tnsc_{1b}$	S	CMP	E601	3	Y	
W-830-11	PTMW	$Tnsc_{1c}$	A	CMP	E300.0:NO3	1	Y	
W-830-11	PTMW	$Tnsc_{1c}$	A	CMP	E300.0:PERC	1	Y	
W-830-11	PTMW	$Tnsc_{1c}$	S	CMP	E601	1	Y	
W-830-11	PTMW	$Tnsc_{1c}$	S	CMP	E601	3	Y	
W-830-12	PTMW	Lower $Tnbs_1$	A	CMP	E300.0:NO3	1	N	Inoperable pump.
W-830-12	PTMW	Lower $Tnbs_1$	A	CMP	E300.0:PERC	1	N	Inoperable pump.
W-830-12	PTMW	Lower $Tnbs_1$	S	CMP	E601	1	N	Inoperable pump.
W-830-12	PTMW	Lower $Tnbs_1$	S	CMP	E601	3	N	Inoperable pump.

Table 2.7-7. Building 832 Canyon OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-830-13	PTMW	$Tnbs_2$	A	CMP	E300.0:NO3	1	Y	
W-830-13	PTMW	$Tnbs_2$	A	CMP	E300.0:PERC	1	Y	
W-830-13	PTMW	$Tnbs_2$	S	CMP	E601	1	Y	
W-830-13	PTMW	$Tnbs_2$	S	CMP	E601	3	Y	
W-830-14	PTMW	$Tnsc_{1b}$	A	CMP	E300.0:NO3	1	Y	
W-830-14	PTMW	$Tnsc_{1b}$	A	CMP	E300.0:PERC	1	Y	
W-830-14	PTMW	$Tnsc_{1b}$	S	CMP	E601	1	Y	
W-830-14	PTMW	$Tnsc_{1b}$	S	CMP	E601	3	Y	
W-830-15	PTMW	Upper $Tnbs_1$	A	CMP	E300.0:NO3	1	Y	
W-830-15	PTMW	Upper $Tnbs_1$	A	CMP	E300.0:PERC	1	Y	
W-830-15	PTMW	Upper $Tnbs_1$	S	CMP	E601	1	Y	
W-830-15	PTMW	Upper $Tnbs_1$	S	CMP	E601	3	Y	
W-830-16	GW	$Tnsc_{1b}$	S	CMP	E300.0:NO3	1	Y	
W-830-16	GW	$Tnsc_{1b}$	S	CMP	E300.0:NO3	3	Y	
W-830-16	GW	$Tnsc_{1b}$	S	CMP	E300.0:PERC	1	Y	
W-830-16	GW	$Tnsc_{1b}$	S	CMP	E300.0:PERC	3	Y	
W-830-16	GW	$Tnsc_{1b}$	Q	CMP	E601	1	Y	
W-830-16	GW	$Tnsc_{1b}$	Q	CMP	E601	2	Y	
W-830-16	GW	$Tnsc_{1b}$	Q	CMP	E601	3	Y	
W-830-16	GW	$Tnsc_{1b}$	Q	CMP	E601	4	Y	
W-830-17	PTMW	$Tnbs_2$	A	CMP	E300.0:NO3	1	Y	
W-830-17	PTMW	$Tnbs_2$	A	CMP	E300.0:PERC	1	Y	
W-830-17	PTMW	$Tnbs_2$	S	CMP	E601	1	Y	
W-830-17	PTMW	$Tnbs_2$	S	CMP	E601	3	Y	
W-830-1730	GW	$Tnsc_{1b}$	S	CMP	E300.0:NO3	1	Y	
W-830-1730	GW	$Tnsc_{1b}$	S	CMP	E300.0:NO3	3	Y	
W-830-1730	GW	$Tnsc_{1b}$	S	CMP	E300.0:PERC	1	Y	
W-830-1730	GW	$Tnsc_{1b}$	S	CMP	E300.0:PERC	3	Y	
W-830-1730	GW	$Tnsc_{1b}$	Q	CMP	E601	1	Y	
W-830-1730	GW	$Tnsc_{1b}$	Q	CMP	E601	2	Y	
W-830-1730	GW	$Tnsc_{1b}$	Q	CMP	E601	3	Y	
W-830-1730	GW	$Tnsc_{1b}$	Q	CMP	E601	4	Y	
W-830-18	PTMW	Upper $Tnbs_1$	A	CMP	E300.0:NO3	1	Y	
W-830-18	PTMW	Upper $Tnbs_1$	A	CMP	E300.0:PERC	1	Y	
W-830-18	PTMW	Upper $Tnbs_1$	S	CMP	E601	1	Y	
W-830-18	PTMW	Upper $Tnbs_1$	S	CMP	E601	3	Y	
W-830-1807	EW	Qal/$Tnsc_1$	A	CMP-TF	E300.0:NO3	1	Y	830-SRC extraction well.
W-830-1807	EW	Qal/$Tnsc_1$	A	CMP-TF	E300.0:PERC	1	Y	830-SRC extraction well.
W-830-1807	EW	Qal/$Tnsc_1$		DIS	E300.0:PERC	3	Y	830-SRC extraction well.
W-830-1807	EW	Qal/$Tnsc_1$	S	CMP-TF	E601	1	Y	830-SRC extraction well.
W-830-1807	EW	Qal/$Tnsc_1$		DIS	E601	2	Y	830-SRC extraction well.
W-830-1807	EW	Qal/$Tnsc_1$	S	CMP-TF	E601	3	Y	830-SRC extraction well.
W-830-1807	EW	Qal/$Tnsc_1$		DIS	E601	4	Y	830-SRC extraction well.
W-830-1829	EW	$Tnsc_{1b}$	A	CMP-TF	E300.0:NO3	1	Y	830-SRC extraction well.
W-830-1829	EW	$Tnsc_{1b}$	A	CMP-TF	E300.0:PERC	1	Y	830-SRC extraction well.
W-830-1829	EW	$Tnsc_{1b}$	S	CMP-TF	E601	1	Y	830-SRC extraction well.
W-830-1829	EW	$Tnsc_{1b}$	S	CMP-TF	E601	3	N	Converted to MW; insufficient water to collected sample.
W-830-1830	PTMW	$Tnsc_{1b}$	A	CMP	E300.0:NO3	1	Y	
W-830-1830	PTMW	$Tnsc_{1b}$	A	CMP	E300.0:PERC	1	Y	
W-830-1830	PTMW	$Tnsc_{1b}$	S	CMP	E601	1	Y	
W-830-1830	PTMW	$Tnsc_{1b}$	S	CMP	E601	3	Y	
W-830-1831	GW	$Tnsc_{1b}$	S	CMP	E300.0:NO3	1	Y	
W-830-1831	GW	$Tnsc_{1b}$	S	CMP	E300.0:NO3	3	Y	

Table 2.7-7. Building 832 Canyon OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-830-1831	GW	$Tnsc_{1b}$	S	CMP	E300.0:PERC	1	Y	
W-830-1831	GW	$Tnsc_{1b}$	S	CMP	E300.0:PERC	3	Y	
W-830-1831	GW	$Tnsc_{1b}$	Q	CMP	E601	1	Y	
W-830-1831	GW	$Tnsc_{1b}$	Q	CMP	E601	2	Y	
W-830-1831	GW	$Tnsc_{1b}$	Q	CMP	E601	3	Y	
W-830-1831	GW	$Tnsc_{1b}$	Q	CMP	E601	4	Y	
W-830-1832	PTMW	Upper $Tnbs_1$	A	CMP	E300.0:NO3	1	Y	
W-830-1832	PTMW	Upper $Tnbs_1$	A	CMP	E300.0:PERC	1	Y	
W-830-1832	PTMW	Upper $Tnbs_1$	S	CMP	E601	1	Y	
W-830-1832	PTMW	Upper $Tnbs_1$	S	CMP	E601	3	Y	
W-830-19	EW	$Tnsc_{1b}$	A	CMP-TF	E300.0:NO3	1	Y	830-SRC extraction well.
W-830-19	EW	$Tnsc_{1b}$	A	CMP-TF	E300.0:PERC	1	Y	830-SRC extraction well.
W-830-19	EW	$Tnsc_{1b}$		DIS	E300.0:PERC	3	Y	830-SRC extraction well.
W-830-19	EW	$Tnsc_{1b}$	S	CMP-TF	E601	1	Y	830-SRC extraction well.
W-830-19	EW	$Tnsc_{1b}$		DIS	E601	2	Y	830-SRC extraction well.
W-830-19	EW	$Tnsc_{1b}$	S	CMP-TF	E601	3	Y	830-SRC extraction well.
W-830-19	EW	$Tnsc_{1b}$		DIS	E601	4	Y	830-SRC extraction well.
W-830-20	GW	Upper $Tnbs_1$	S	CMP	E300.0:NO3	1	Y	
W-830-20	GW	Upper $Tnbs_1$	S	CMP	E300.0:NO3	3	Y	
W-830-20	GW	Upper $Tnbs_1$	S	CMP	E300.0:PERC	1	Y	
W-830-20	GW	Upper $Tnbs_1$	S	CMP	E300.0:PERC	3	Y	
W-830-20	GW	Upper $Tnbs_1$	Q	CMP	E601	1	Y	
W-830-20	GW	Upper $Tnbs_1$	Q	CMP	E601	2	Y	
W-830-20	GW	Upper $Tnbs_1$	Q	CMP	E601	3	Y	
W-830-20	GW	Upper $Tnbs_1$	Q	CMP	E601	4	Y	
W-830-21	PTMW	$Tnsc_{1b}$	A	CMP	E300.0:NO3	1	Y	
W-830-21	PTMW	$Tnsc_{1b}$	A	CMP	E300.0:PERC	1	Y	
W-830-21	PTMW	$Tnsc_{1b}$	S	CMP	E601	1	Y	
W-830-21	PTMW	$Tnsc_{1b}$	S	CMP	E601	3	Y	
W-830-22	PTMW	$Tnsc_{1a}$	A	CMP	E300.0:NO3	1	Y	
W-830-22	PTMW	$Tnsc_{1a}$	A	CMP	E300.0:PERC	1	Y	
W-830-22	PTMW	$Tnsc_{1a}$	S	CMP	E601	1	Y	
W-830-22	PTMW	$Tnsc_{1a}$	S	CMP	E601	3	Y	
W-830-2213	EW	$Tnsc_{1b}$	A	CMP-TF	E300.0:NO3	1	Y	830-SRC extraction well.
W-830-2213	EW	$Tnsc_{1b}$	A	CMP-TF	E300.0:PERC	1	Y	830-SRC extraction well.
W-830-2213	EW	$Tnsc_{1b}$		DIS	E300.0:PERC	3	Y	830-SRC extraction well.
W-830-2213	EW	$Tnsc_{1b}$	S	CMP-TF	E601	1	Y	830-SRC extraction well.
W-830-2213	EW	$Tnsc_{1b}$	S	CMP-TF	E601	3	Y	830-SRC extraction well.
W-830-2214	EW	$Tnsc_{1a}$	A	CMP-TF	E300.0:NO3	1	N	Inoperable pump. 830-SRC extraction well.
W-830-2214	EW	$Tnsc_{1a}$	A	CMP-TF	E300.0:PERC	1	N	Inoperable pump. 830-SRC extraction well.
W-830-2214	EW	$Tnsc_{1a}$	S	CMP-TF	E601	1	N	Inoperable pump. 830-SRC extraction well.
W-830-2214	EW	$Tnsc_{1a}$	S	CMP-TF	E601	4	Y	830-SRC extraction well.
W-830-2215	EW	Upper $Tnbs_1$	A	CMP-TF	E300.0:NO3	1	Y	830-SRC extraction well.
W-830-2215	EW	Upper $Tnbs_1$	A	CMP-TF	E300.0:PERC	1	Y	830-SRC extraction well.
W-830-2215	EW	Upper $Tnbs_1$	S	CMP-TF	E601	1	Y	830-SRC extraction well.
W-830-2215	EW	Upper $Tnbs_1$	S	CMP-TF	E601	3	Y	830-SRC extraction well.
W-830-2215	EW	Upper $Tnbs_1$		DIS	E601	4	Y	830-SRC extraction well.
W-830-2216	EW	$Tnbs_2$	A	CMP-TF	E300.0:NO3	1	Y	830-DISS extraction well.
W-830-2216	EW	$Tnbs_2$	A	CMP-TF	E300.0:PERC	1	Y	830-DISS extraction well.
W-830-2216	EW	$Tnbs_2$		DIS	E300.0:PERC	3	Y	830-DISS extraction well.
W-830-2216	EW	$Tnbs_2$	S	CMP-TF	E601	1	Y	830-DISS extraction well.

Table 2.7-7. Building 832 Canyon OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-830-2216	EW	$Tnbs_2$		DIS	E601	2	Y	830-DISS extraction well.
W-830-2216	EW	$Tnbs_2$	S	CMP-TF	E601	3	Y	830-DISS extraction well.
W-830-2216	EW	$Tnbs_2$		DIS	E601	4	Y	830-DISS extraction well.
W-830-2216	EW	$Tnbs_2$		DIS	E8330	3	Y	830-DISS extraction well.
W-830-2311	PTMW	$Tnsc_{1a}$	S	CMP	E300.0:NO3	1	Y	
W-830-2311	PTMW	$Tnsc_{1a}$		DIS	E300.0:NO3	3	Y	
W-830-2311	PTMW	$Tnsc_{1a}$	S	CMP	E300.0:PERC	1	Y	
W-830-2311	PTMW	$Tnsc_{1a}$		DIS	E300.0:PERC	3	Y	
W-830-2311	PTMW	$Tnsc_{1a}$		DIS	E601	2	Y	
W-830-2311	PTMW	$Tnsc_{1a}$	S	CMP	E601	3	Y	
W-830-2311	PTMW	$Tnsc_{1a}$		DIS	E601	4	Y	
W-830-2311	PTMW	$Tnsc_{1a}$	S	CMP	E624	1	Y	
W-830-2311	PTMW	$Tnsc_{1a}$	A	CMP	E8330	1	N	No longer required.
W-830-25	PTMW	$Tnsc_{1b}$	A	CMP	E300.0:NO3	1	N	Dry.
W-830-25	PTMW	$Tnsc_{1b}$	A	CMP	E300.0:PERC	1	N	Dry.
W-830-25	PTMW	$Tnsc_{1b}$	S	CMP	E601	1	N	Dry.
W-830-25	PTMW	$Tnsc_{1b}$	S	CMP	E601	3	N	Dry.
W-830-26	PTMW	Upper $Tnbs_1$	A	CMP	E300.0:NO3	1	N	Dry.
W-830-26	PTMW	Upper $Tnbs_1$	A	CMP	E300.0:PERC	1	N	Dry.
W-830-26	PTMW	Upper $Tnbs_1$	S	CMP	E601	1	N	Dry.
W-830-26	PTMW	Upper $Tnbs_1$	S	CMP	E601	3	N	Dry.
W-830-27	PTMW	$Tnsc_{1a}$	A	CMP	E300.0:NO3	1	Y	
W-830-27	PTMW	$Tnsc_{1a}$	A	CMP	E300.0:PERC	1	Y	
W-830-27	PTMW	$Tnsc_{1a}$	S	CMP	E601	1	Y	
W-830-27	PTMW	$Tnsc_{1a}$	S	CMP	E601	3	Y	
W-830-28	PTMW	Upper $Tnbs_1$	A	CMP	E300.0:NO3	1	Y	
W-830-28	PTMW	Upper $Tnbs_1$	A	CMP	E300.0:PERC	1	Y	
W-830-28	PTMW	Upper $Tnbs_1$	S	CMP	E601	1	Y	
W-830-28	PTMW	Upper $Tnbs_1$	S	CMP	E601	3	Y	
W-830-29	PTMW	Lower $Tnbs_1$	A	CMP	E300.0:NO3	1	Y	
W-830-29	PTMW	Lower $Tnbs_1$	A	CMP	E300.0:PERC	1	Y	
W-830-29	PTMW	Lower $Tnbs_1$	S	CMP	E601	1	Y	
W-830-29	PTMW	Lower $Tnbs_1$	S	CMP	E601	3	Y	
W-830-30	PTMW	Qal/$Tnsc_1$	A	CMP	E300.0:NO3	1	Y	
W-830-30	PTMW	Qal/$Tnsc_1$	A	CMP	E300.0:PERC	1	Y	
W-830-30	PTMW	Qal/$Tnsc_1$	S	CMP	E601	1	Y	
W-830-30	PTMW	Qal/$Tnsc_1$	S	CMP	E601	3	Y	
W-830-34	PTMW	Qal/$Tnsc_1$	A	CMP	E300.0:NO3	1	Y	
W-830-34	PTMW	Qal/$Tnsc_1$	A	CMP	E300.0:PERC	1	Y	
W-830-34	PTMW	Qal/$Tnsc_1$	S	CMP	E601	1	Y	
W-830-34	PTMW	Qal/$Tnsc_1$	S	CMP	E601	3	Y	
W-830-49	EW	$Tnsc_{1b}$	A	CMP-TF	E300.0:NO3	1	Y	830-SRC extraction well.
W-830-49	EW	$Tnsc_{1b}$	A	CMP-TF	E300.0:PERC	1	Y	830-SRC extraction well.
W-830-49	EW	$Tnsc_{1b}$		DIS	E601	2	Y	830-SRC extraction well.
W-830-49	EW	$Tnsc_{1b}$	S	CMP-TF	E624	1	Y	830-SRC extraction well.
W-830-49	EW	$Tnsc_{1b}$	S	CMP-TF	E624	3	N	830-SRC extraction well. Inoperable pump.
W-830-50	PTMW	$Tnsc_{1b}$	A	CMP	E300.0:NO3	1	Y	
W-830-50	PTMW	$Tnsc_{1b}$	A	CMP	E300.0:PERC	1	Y	
W-830-50	PTMW	$Tnsc_{1b}$	S	CMP	E601	1	Y	
W-830-50	PTMW	$Tnsc_{1b}$	S	CMP	E601	3	Y	
W-830-51	EW	$Tnsc_{1b}$	A	CMP-TF	E300.0:NO3	1	Y	830-DISS extraction well.
W-830-51	EW	$Tnsc_{1b}$	A	CMP-TF	E300.0:PERC	1	Y	830-DISS extraction well.
W-830-51	EW	$Tnsc_{1b}$		DIS	E300.0:PERC	3	Y	830-DISS extraction well.
W-830-51	EW	$Tnsc_{1b}$	S	CMP-TF	E601	1	Y	830-DISS extraction well.

Table 2.7-7. Building 832 Canyon OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-830-51	EW	$Tnsc_{1b}$		DIS	E601	2	Y	830-DISS extraction well.
W-830-51	EW	$Tnsc_{1b}$	S	CMP-TF	E601	3	Y	830-DISS extraction well.
W-830-51	EW	$Tnsc_{1b}$		DIS	E601	4	Y	830-DISS extraction well.
W-830-52	EW	$Tnsc_{1b}$	A	CMP-TF	E300.0:NO3	1	Y	830-DISS extraction well.
W-830-52	EW	$Tnsc_{1b}$	A	CMP-TF	E300.0:PERC	1	Y	830-DISS extraction well.
W-830-52	EW	$Tnsc_{1b}$	S	CMP-TF	E601	1	Y	830-DISS extraction well.
W-830-52	EW	$Tnsc_{1b}$	S	CMP-TF	E601	3	N	830-DISS extraction well. Artesian well not flowing at the time of the sampling event.
W-830-53	EW	$Tnsc_{1b}$	A	CMP-TF	E300.0:NO3	1	Y	830-DISS extraction well.
W-830-53	EW	$Tnsc_{1b}$	A	CMP-TF	E300.0:PERC	1	Y	830-DISS extraction well.
W-830-53	EW	$Tnsc_{1b}$	S	CMP-TF	E601	1	Y	830-DISS extraction well.
W-830-53	EW	$Tnsc_{1b}$	S	CMP-TF	E601	3	N	830-DISS extraction well. Artesian well not flowing at the time of the sampling event.
W-830-54	PTMW	$Tnsc_{1c}$	A	CMP	E300.0:NO3	1	Y	
W-830-54	PTMW	$Tnsc_{1c}$	A	CMP	E300.0:PERC	1	Y	
W-830-54	PTMW	$Tnsc_{1c}$	S	CMP	E601	1	Y	
W-830-54	PTMW	$Tnsc_{1c}$	S	CMP	E601	3	Y	
W-830-55	PTMW	$Tnsc_{1b}$	A	CMP	E300.0:NO3	1	Y	
W-830-55	PTMW	$Tnsc_{1b}$	A	CMP	E300.0:PERC	1	Y	
W-830-55	PTMW	$Tnsc_{1b}$	S	CMP	E601	1	Y	
W-830-55	PTMW	$Tnsc_{1b}$	S	CMP	E601	3	Y	
W-830-56	PTMW	$Tnsc_{1b}$	A	CMP	E300.0:NO3	1	Y	
W-830-56	PTMW	$Tnsc_{1b}$	A	CMP	E300.0:PERC	1	Y	
W-830-56	PTMW	$Tnsc_{1b}$	S	CMP	E601	1	Y	
W-830-56	PTMW	$Tnsc_{1b}$	S	CMP	E601	3	Y	
W-830-57	EW	Upper $Tnbs_1$	A	CMP-TF	E300.0:NO3	1	Y	830-SRC extraction well.
W-830-57	EW	Upper $Tnbs_1$	A	CMP-TF	E300.0:PERC	1	Y	830-SRC extraction well.
W-830-57	EW	Upper $Tnbs_1$	S	CMP-TF	E601	1	Y	830-SRC extraction well.
W-830-57	EW	Upper $Tnbs_1$		DIS	E601	2	Y	830-SRC extraction well.
W-830-57	EW	Upper $Tnbs_1$	S	CMP-TF	E601	3	Y	830-SRC extraction well.
W-830-57	EW	Upper $Tnbs_1$		DIS	E601	4	Y	830-SRC extraction well.
W-830-58	PTMW	$Tnsc_{1b}$	A	CMP	E300.0:NO3	1	Y	
W-830-58	PTMW	$Tnsc_{1b}$	A	CMP	E300.0:PERC	1	Y	
W-830-58	PTMW	$Tnsc_{1b}$	S	CMP	E601	1	Y	
W-830-58	PTMW	$Tnsc_{1b}$	S	CMP	E601	3	Y	
W-830-59	EW	$Tnsc_{1b}$	A	CMP-TF	E300.0:NO3	1	Y	830-SRC extraction well.
W-830-59	EW	$Tnsc_{1b}$	A	CMP-TF	E300.0:PERC	1	Y	830-SRC extraction well.
W-830-59	EW	$Tnsc_{1b}$		DIS	E300.0:PERC	3	Y	830-SRC extraction well.
W-830-59	EW	$Tnsc_{1b}$	S	CMP-TF	E601	1	Y	830-SRC extraction well.
W-830-59	EW	$Tnsc_{1b}$		DIS	E601	2	Y	830-SRC extraction well.
W-830-59	EW	$Tnsc_{1b}$	S	CMP-TF	E601	3	Y	830-SRC extraction well.
W-830-59	EW	$Tnsc_{1b}$		DIS	E601	4	Y	830-SRC extraction well.
W-830-60	EW	Upper $Tnbs_1$	A	CMP-TF	E300.0:NO3	1	Y	830-SRC extraction well.
W-830-60	EW	Upper $Tnbs_1$	A	CMP-TF	E300.0:PERC	1	Y	830-SRC extraction well.
W-830-60	EW	Upper $Tnbs_1$	S	CMP-TF	E601	1	Y	830-SRC extraction well.
W-830-60	EW	Upper $Tnbs_1$		DIS	E601	2	Y	830-SRC extraction well.
W-830-60	EW	Upper $Tnbs_1$	S	CMP-TF	E601	3	Y	830-SRC extraction well.
W-830-60	EW	Upper $Tnbs_1$		DIS	E601	4	Y	830-SRC extraction well.
W-831-01	MWB	Lower $Tnbs_1$	B	CMP	E300.0:NO3	1	Y	Next sample required 1stQ 2011.

Table 2.7-7. Building 832 Canyon OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-831-01	MWB	Lower $Tnbs_1$	B	CMP	E300.0:PERC	1	Y	Next sample required 1stQ 2011.
W-831-01	MWB	Lower $Tnbs_1$	B	CMP	E601	1	Y	Next sample required 1stQ 2011.
W-832-01	EW	$Tnsc_{1b}$	A	CMP-TF	E300.0:NO3	1	Y	832-SRC extraction well.
W-832-01	EW	$Tnsc_{1b}$	A	CMP-TF	E300.0:PERC	1	Y	832-SRC extraction well.
W-832-01	EW	$Tnsc_{1b}$		DIS	E300.0:PERC	3	Y	832-SRC extraction well.
W-832-01	EW	$Tnsc_{1b}$	S	CMP-TF	E601	1	Y	832-SRC extraction well.
W-832-01	EW	$Tnsc_{1b}$		DIS	E601	2	Y	832-SRC extraction well.
W-832-01	EW	$Tnsc_{1b}$	S	CMP-TF	E601	3	Y	832-SRC extraction well.
W-832-01	EW	$Tnsc_{1b}$		DIS	E601	4	Y	832-SRC extraction well.
W-832-06	PTMW	$Tnsc_{1b}$	A	CMP	E300.0:NO3	1	Y	
W-832-06	PTMW	$Tnsc_{1b}$	A	CMP	E300.0:PERC	1	Y	
W-832-06	PTMW	$Tnsc_{1b}$	S	CMP	E601	1	Y	
W-832-06	PTMW	$Tnsc_{1b}$	S	CMP	E601	3	Y	
W-832-09	PTMW	Lower $Tnbs_1$	A	CMP	E300.0:NO3	1	Y	
W-832-09	PTMW	Lower $Tnbs_1$	A	CMP	E300.0:PERC	1	Y	
W-832-09	PTMW	Lower $Tnbs_1$	S	CMP	E601	1	Y	
W-832-09	PTMW	Lower $Tnbs_1$	S	CMP	E601	3	Y	
W-832-10	EW	$Tnsc_{1b}$	A	CMP-TF	E300.0:NO3	1	Y	832-SRC extraction well.
W-832-10	EW	$Tnsc_{1b}$	A	CMP-TF	E300.0:PERC	1	Y	832-SRC extraction well.
W-832-10	EW	$Tnsc_{1b}$		DIS	E300.0:PERC	3	Y	832-SRC extraction well.
W-832-10	EW	$Tnsc_{1b}$	S	CMP-TF	E601	1	Y	832-SRC extraction well.
W-832-10	EW	$Tnsc_{1b}$	S	CMP-TF	E601	3	Y	832-SRC extraction well.
W-832-10	EW	$Tnsc_{1b}$		DIS	E601	4	Y	832-SRC extraction well.
W-832-11	EW	$Tnsc_{1b}$	A	CMP-TF	E300.0:NO3	1	Y	832-SRC extraction well.
W-832-11	EW	$Tnsc_{1b}$	A	CMP-TF	E300.0:PERC	1	Y	832-SRC extraction well.
W-832-11	EW	$Tnsc_{1b}$		DIS	E300.0:PERC	3	Y	832-SRC extraction well.
W-832-11	EW	$Tnsc_{1b}$	S	CMP-TF	E601	1	Y	832-SRC extraction well.
W-832-11	EW	$Tnsc_{1b}$		DIS	E601	2	Y	832-SRC extraction well.
W-832-11	EW	$Tnsc_{1b}$	S	CMP-TF	E601	3	Y	832-SRC extraction well.
W-832-11	EW	$Tnsc_{1b}$		DIS	E601	4	Y	832-SRC extraction well.
W-832-12	EW	Qal/fill	A	CMP-TF	E300.0:NO3	1	Y	832-SRC extraction well.
W-832-12	EW	Qal/fill	A	CMP-TF	E300.0:PERC	1	Y	832-SRC extraction well.
W-832-12	EW	Qal/fill		DIS	E300.0:PERC	3	Y	832-SRC extraction well.
W-832-12	EW	Qal/fill	S	CMP-TF	E601	1	Y	832-SRC extraction well.
W-832-12	EW	Qal/fill		DIS	E601	2	Y	832-SRC extraction well.
W-832-12	EW	Qal/fill	S	CMP-TF	E601	3	Y	832-SRC extraction well.
W-832-12	EW	Qal/fill		DIS	E601	4	Y	832-SRC extraction well.
W-832-12	EW	Qal/fill		DIS	E8330	4	Y	832-SRC extraction well.
W-832-13	PTMW	Qal/fill	A	CMP	E300.0:NO3	1	Y	Non-active 832-SRC extraction well.
W-832-13	PTMW	Qal/fill	A	CMP	E300.0:PERC	1	Y	Non-active 832-SRC extraction well.
W-832-13	PTMW	Qal/fill	S	CMP	E601	1	Y	Non-active 832-SRC extraction well.
W-832-13	PTMW	Qal/fill	S	CMP	E601	3	Y	Non-active 832-SRC extraction well.
W-832-14	PTMW	Qal/fill	A	CMP	E300.0:NO3	1	N	Dry. Non-active 832-SRC extraction well.
W-832-14	PTMW	Qal/fill	A	CMP	E300.0:PERC	1	N	Dry. Non-active 832-SRC extraction well.
W-832-14	PTMW	Qal/fill	S	CMP	E601	1	N	Dry. Non-active 832-SRC extraction well.

Table 2.7-7. Building 832 Canyon OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-832-14	PTMW	Qal/fill	S	CMP	E601	3	N	Dry. Non-active 832-SRC extraction well.
W-832-15	EW	Qal/fill	B	CMP-TF	E8330:R+H	1	N	832-SRC extraction well. No longer required. HE compounds have not been detected in this area.
W-832-15	EW	Qal/fill	A	CMP-TF	E300.0:NO3	1	Y	832-SRC extraction well.
W-832-15	EW	Qal/fill	A	CMP-TF	E300.0:PERC	1	Y	832-SRC extraction well.
W-832-15	EW	Qal/fill	S	CMP-TF	E601	1	Y	832-SRC extraction well.
W-832-15	EW	Qal/fill		DIS	E601	2	Y	832-SRC extraction well.
W-832-15	EW	Qal/fill	S	CMP-TF	E601	3	Y	832-SRC extraction well.
W-832-16	PTMW	Qal/fill	A	CMP	E300.0:NO3	1	N	Dry. Non-active 832-SRC extraction well.
W-832-16	PTMW	Qal/fill	A	CMP	E300.0:PERC	1	N	Dry. Non-active 832-SRC extraction well.
W-832-16	PTMW	Qal/fill	S	CMP	E601	1	N	Dry. Non-active 832-SRC extraction well.
W-832-16	PTMW	Qal/fill	S	CMP	E601	3	N	Dry. Non-active 832-SRC extraction well.
W-832-17	PTMW	Qal/fill	A	CMP	E300.0:NO3	1	N	Dry. Non-active 832-SRC extraction well.
W-832-17	PTMW	Qal/fill	A	CMP	E300.0:PERC	1	N	Dry. Non-active 832-SRC extraction well.
W-832-17	PTMW	Qal/fill	S	CMP	E601	1	N	Dry. Non-active 832-SRC extraction well.
W-832-17	PTMW	Qal/fill	S	CMP	E601	3	N	Dry. Non-active 832-SRC extraction well.
W-832-18	PTMW	Qal/fill	A	CMP	E300.0:NO3	1	N	Dry. Non-active 832-SRC extraction well.
W-832-18	PTMW	Qal/fill	A	CMP	E300.0:PERC	1	N	Dry. Non-active 832-SRC extraction well.
W-832-18	PTMW	Qal/fill	S	CMP	E601	1	N	Dry. Non-active 832-SRC extraction well.
W-832-18	PTMW	Qal/fill	S	CMP	E601	3	N	Dry. Non-active 832-SRC extraction well.
W-832-19	PTMW	Qal/fill	A	CMP	E300.0:NO3	1	N	Dry.
W-832-19	PTMW	Qal/fill	A	CMP	E300.0:PERC	1	N	Dry.
W-832-19	PTMW	Qal/fill	S	CMP	E601	1	N	Dry.
W-832-19	PTMW	Qal/fill	S	CMP	E601	3	Y	
W-832-1927	PTMW	$Tnsc_{1b}$	A	CMP	E300.0:NO3	1	Y	
W-832-1927	PTMW	$Tnsc_{1b}$	A	CMP	E300.0:PERC	1	Y	
W-832-1927	PTMW	$Tnsc_{1b}$	S	CMP	E601	1	Y	
W-832-1927	PTMW	$Tnsc_{1b}$	S	CMP	E601	3	Y	
W-832-20	PTMW	Qal/fill	A	CMP	E300.0:NO3	1	N	Dry. Non-active 832-SRC extraction well.
W-832-20	PTMW	Qal/fill	A	CMP	E300.0:PERC	1	N	Dry. Non-active 832-SRC extraction well.
W-832-20	PTMW	Qal/fill	S	CMP	E601	1	N	Dry. Non-active 832-SRC extraction well.
W-832-20	PTMW	Qal/fill	S	CMP	E601	3	N	Dry. Non-active 832-SRC extraction well.
W-832-21	PTMW	Qal/fill	A	CMP	E300.0:NO3	1	Y	
W-832-21	PTMW	Qal/fill	A	CMP	E300.0:PERC	1	Y	
W-832-21	PTMW	Qal/fill	S	CMP	E601	1	Y	
W-832-21	PTMW	Qal/fill	S	CMP	E601	3	N	Dry.

Table 2.7-7. Building 832 Canyon OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-832-2112	GW	Upper $Tnbs_1$	S	CMP	E300.0:NO3	1	Y	
W-832-2112	GW	Upper $Tnbs_1$	S	CMP	E300.0:NO3	3	Y	
W-832-2112	GW	Upper $Tnbs_1$	S	CMP	E300.0:PERC	1	Y	
W-832-2112	GW	Upper $Tnbs_1$	S	CMP	E300.0:PERC	3	Y	
W-832-2112	GW	Upper $Tnbs_1$	Q	CMP	E601	1	Y	
W-832-2112	GW	Upper $Tnbs_1$	Q	CMP	E601	2	Y	
W-832-2112	GW	Upper $Tnbs_1$	Q	CMP	E601	3	Y	
W-832-2112	GW	Upper $Tnbs_1$	Q	CMP	E601	4	Y	
W-832-22	PTMW	Upper $Tnbs_1$	A	CMP	E300.0:NO3	1	N	Non-active 832-SRC extraction well.
W-832-22	PTMW	Upper $Tnbs_1$	A	CMP	E300.0:PERC	1	N	Non-active 832-SRC extraction well.
W-832-22	PTMW	Upper $Tnbs_1$	S	CMP	E601	1	N	Non-active 832-SRC extraction well.
W-832-22	PTMW	Upper $Tnbs_1$	S	CMP	E601	3	N	Dry. Non-active 832-SRC extraction well.
W-832-23	PTMW	$Tnsc_{1b}$	A	CMP	E300.0:NO3	1	Y	
W-832-23	PTMW	$Tnsc_{1b}$	A	CMP	E300.0:PERC	1	Y	
W-832-23	PTMW	$Tnsc_{1b}$	S	CMP	E601	1	Y	
W-832-23	PTMW	$Tnsc_{1b}$	S	CMP	E601	3	Y	
W-832-24	PTMW	$Tnsc_{1b}$	A	CMP	E300.0:NO3	1	Y	
W-832-24	PTMW	$Tnsc_{1b}$	A	CMP	E300.0:PERC	1	Y	
W-832-24	PTMW	$Tnsc_{1b}$	S	CMP	E601	1	Y	
W-832-24	PTMW	$Tnsc_{1b}$	S	CMP	E601	3	Y	
W-832-25	EW	$Tnsc_{1b}$	A	CMP-TF	E300.0:NO3	1	Y	832-SRC extraction well.
W-832-25	EW	$Tnsc_{1b}$	A	CMP-TF	E300.0:PERC	1	Y	832-SRC extraction well.
W-832-25	EW	$Tnsc_{1b}$		DIS	E300.0:PERC	3	Y	832-SRC extraction well.
W-832-25	EW	$Tnsc_{1b}$	S	CMP-TF	E601	1	Y	832-SRC extraction well.
W-832-25	EW	$Tnsc_{1b}$		DIS	E601	2	Y	832-SRC extraction well.
W-832-25	EW	$Tnsc_{1b}$	S	CMP-TF	E601	3	Y	832-SRC extraction well.
W-832-25	EW	$Tnsc_{1b}$		DIS	E601	4	Y	832-SRC extraction well.
W-832-SC1	PTMW	Qal	A	CMP	E300.0:NO3	1	N	Dry.
W-832-SC1	PTMW	Qal	A	CMP	E300.0:PERC	1	N	Dry.
W-832-SC1	PTMW	Qal	S	CMP	E601	1	N	Dry.
W-832-SC1	PTMW	Qal	S	CMP	E601	3	N	Dry.
W-832-SC2	PTMW	Qal	A	CMP	E300.0:NO3	1	N	Dry.
W-832-SC2	PTMW	Qal	A	CMP	E300.0:PERC	1	N	Dry.
W-832-SC2	PTMW	Qal	S	CMP	E601	1	N	Dry.
W-832-SC2	PTMW	Qal	S	CMP	E601	3	N	Dry.
W-832-SC3	PTMW	Qal	A	CMP	E300.0:NO3	1	Y	
W-832-SC3	PTMW	Qal	A	CMP	E300.0:PERC	1	Y	
W-832-SC3	PTMW	Qal	S	CMP	E601	1	Y	
W-832-SC3	PTMW	Qal	S	CMP	E601	3	Y	
W-832-SC4	PTMW	Qal	A	CMP	E300.0:NO3	1	N	Dry.
W-832-SC4	PTMW	Qal	A	CMP	E300.0:PERC	1	N	Dry.
W-832-SC4	PTMW	Qal	S	CMP	E601	1	N	Dry.
W-832-SC4	PTMW	Qal	S	CMP	E601	3	N	Dry.
W-870-01	PTMW	Qal	A	CMP	E300.0:NO3	1	N	Dry.
W-870-01	PTMW	Qal	A	CMP	E300.0:PERC	1	N	Dry.
W-870-01	PTMW	Qal	S	CMP	E601	1	N	Dry.
W-870-01	PTMW	Qal	S	CMP	E601	3	N	Dry.
W-870-02	PTMW	$Tnbs_2$	A	CMP	E300.0:NO3	1	Y	
W-870-02	PTMW	$Tnbs_2$	A	CMP	E300.0:PERC	1	Y	
W-870-02	PTMW	$Tnbs_2$	S	CMP	E601	1	Y	

Table 2.7-7. Building 832 Canyon OU ground and surface water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-870-02	PTMW	$Tnbs_2$	S	CMP	E601	3	Y	
W-880-01	GW	$Tnbs_2$	S	CMP	E300.0:NO3	NA		See High Explosives Process Area.
W-880-01	GW	$Tnbs_2$	S	CMP	E300.0:PERC	NA		See High Explosives Process Area.
W-880-01	GW	$Tnbs_2$	Q	CMP	E601	NA		See High Explosives Process Area.
W-880-02	GW	Qal	S	CMP	E300.0:NO3	NA		See High Explosives Process Area.
W-880-02	GW	Qal	S	CMP	E300.0:PERC	NA		See High Explosives Process Area.
W-880-02	GW	Qal	Q	CMP	E601	NA		See High Explosives Process Area.
W-880-03	GW	$Tnsc_{1b}$	S	CMP	E300.0:NO3	NA		See High Explosives Process Area.
W-880-03	GW	$Tnsc_{1b}$	S	CMP	E300.0:PERC	NA		See High Explosives Process Area.
W-880-03	GW	$Tnsc_{1b}$	Q	CMP	E601	NA		See High Explosives Process Area.

Notes:
Building 830 primary Contaminants of Concern in Ground Water: VOCs (E601 or E624).
Building 830 secondary COC: nitrate (E300:NO3).
Building 830 secondary COC: perchlorate (E300.0:PERC).
Building 832 primary Contaminants of Concern in Ground Water: VOCs (E601 or E624).
Building 832 secondary COC: nitrate (E300:NO3).
Building 832 secondary COC: perchlorate (E300.0:PERC).
See Acronyms and Abbreviations in the Tables section of this report for acronym and abbreviation definitions.

Table 2.7-8. Building 832-Source (832-SRC) mass removed, July 1, 2009 through December 31, 2009.

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	0	0	0	0	NA	NA
	August	0	0	0	0	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		0	0	0	0	NA	NA

Table 2.7-9. Building 830-Source (830-SRC) mass removed, July 1, 2009 through December 31, 2009.

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	91	88	0	10	NA	NA
	August	510	69	0.022	9.8	NA	NA
	September	0.61	97	0	12	NA	NA
	October	0.89	82	0.0014	10	NA	NA
	November	1.1	120	0.75	17	NA	NA
	December	14	52	0.26	16	NA	NA
Total		610	500	1.0	75	NA	NA

Table 2.7-10. Building 830-Distal South (830-DISS) mass removed, July 1, 2009 through December 31, 2009.

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	12	NA	27	NA	NA
	August	NA	7.4	NA	16	NA	NA
	September	NA	17	NA	35	NA	NA
	October	NA	11	NA	29	NA	NA
	November	NA	12	NA	31	NA	NA
	December	NA	7.5	NA	20	NA	NA
Total		NA	66	NA	160	NA	NA

Table 2.8-1. Building 801 and Pit 8 Landfill area ground water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
K8-01	PTMW	Upper $Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
K8-01	PTMW	Upper $Tnbs_1$	A	CMP	E300.0:PERC	2	Y	
K8-01	PTMW	Upper $Tnbs_1$	S	CMP	E601	2	Y	
K8-01	PTMW	Upper $Tnbs_1$	S	CMP	E601	4	Y	
K8-01	PTMW	Upper $Tnbs_1$		DIS	E906	2	Y	
K8-01	PTMW	Upper $Tnbs_1$		DIS	E906	4	Y	
K8-02B	CMP DMW	$Tnsc_1$/Upper $Tnbs_1$	A	CMP	CMPTRIMET	2	Y	
K8-02B	CMP DMW	$Tnsc_1$/Upper $Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
K8-02B	CMP DMW	$Tnsc_1$/Upper $Tnbs_1$	A	CMP	E300.0:PERC	2	Y	
K8-02B	CMP DMW	$Tnsc_1$/Upper $Tnbs_1$	A	CMP	E340.2	2	Y	
K8-02B	CMP DMW	$Tnsc_1$/Upper $Tnbs_1$	A	CMP	E601	2	Y	
K8-02B	CMP DMW	$Tnsc_1$/Upper $Tnbs_1$		DIS	E601	4	Y	
K8-02B	CMP DMW	$Tnsc_1$/Upper $Tnbs_1$	A	CMP	E8330	2	Y	
K8-02B	CMP DMW	$Tnsc_1$/Upper $Tnbs_1$	Q	CMP	E906	1	Y	
K8-02B	CMP DMW	$Tnsc_1$/Upper $Tnbs_1$	Q	CMP	E906	2	Y	
K8-02B	CMP DMW	$Tnsc_1$/Upper $Tnbs_1$	Q	CMP	E906	3	Y	
K8-02B	CMP DMW	$Tnsc_1$/Upper $Tnbs_1$	Q	CMP	E906	4	Y	
K8-02B	CMP DMW	$Tnsc_1$/Upper $Tnbs_1$	B	CMP	MS:THISO	2	Y	Next sample required 2ndQ 2011.
K8-02B	CMP DMW	$Tnsc_1$/Upper $Tnbs_1$	B	CMP	MS:UISO	2	Y	Next sample required 2ndQ 2011.
K8-02B	CMP DMW	$Tnsc_1$/Upper $Tnbs_1$	A	CMP	T26METALS	2	Y	
K8-03B	PTMW	Upper $Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
K8-03B	PTMW	Upper $Tnbs_1$	A	CMP	E300.0:PERC	2	Y	
K8-03B	PTMW	Upper $Tnbs_1$	S	CMP	E601	2	Y	
K8-03B	PTMW	Upper $Tnbs_1$	S	CMP	E601	4	Y	
K8-04	CMP DMW	Upper $Tnbs_1$	A	CMP	CMPTRIMET	2	Y	
K8-04	CMP DMW	Upper $Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
K8-04	CMP DMW	Upper $Tnbs_1$	A	CMP	E300.0:PERC	2	Y	
K8-04	CMP DMW	Upper $Tnbs_1$	A	CMP	E340.2	2	Y	
K8-04	CMP DMW	Upper $Tnbs_1$	A	CMP	E601	2	Y	
K8-04	CMP DMW	Upper $Tnbs_1$		DIS	E601	4	Y	
K8-04	CMP DMW	Upper $Tnbs_1$	A	CMP	E8330	2	Y	
K8-04	CMP DMW	Upper $Tnbs_1$	Q	CMP	E906	1	Y	
K8-04	CMP DMW	Upper $Tnbs_1$	Q	CMP	E906	2	Y	
K8-04	CMP DMW	Upper $Tnbs_1$	Q	CMP	E906	3	Y	
K8-04	CMP DMW	Upper $Tnbs_1$	Q	CMP	E906	4	Y	
K8-04	CMP DMW	Upper $Tnbs_1$	B	CMP	MS:THISO	2	Y	Next sample required 2ndQ
K8-04	CMP DMW	Upper $Tnbs_1$	B	CMP	MS:UISO	2	Y	Next sample required 2ndQ

Table 2.8-1. Building 801 and Pit 8 Landfill area ground water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
K8-04	CMP DMW	Upper $Tnbs_1$	A	CMP	T26METALS	2	Y	
K8-05	CMP DMW	$Tnbs_2$	B	CMP	CMPTRIMET	2	N	Dry.
K8-05	CMP DMW	$Tnbs_2$	B	CMP	E300.0:NO3	2	N	Dry.
K8-05	CMP DMW	$Tnbs_2$	B	CMP	E300.0:PERC	2	N	Dry.
K8-05	CMP DMW	$Tnbs_2$	B	CMP	E340.2	2	N	Dry.
K8-05	CMP DMW	$Tnbs_2$	B	CMP	E601	2	N	Dry.
K8-05	CMP DMW	$Tnbs_2$	B	CMP	E8330	2	N	Dry.
K8-05	CMP DMW	$Tnbs_2$	B	CMP	E906	2	N	Dry.
K8-05	CMP DMW	$Tnbs_2$	B	CMP	MS:THISO	2	N	Dry.
K8-05	CMP DMW	$Tnbs_2$	B	CMP	MS:UISO	2	N	Dry.
K8-05	CMP DMW	$Tnbs_2$	B	CMP	T26METALS	2	N	Dry.

Notes:
No COCs in ground water.
CMP Detection monitoring analyte: tritium (E906) sampled quarterly.
CMP Detection monitoring analyte: VOCs (E601 or E624) sampled annually.
CMP Detection monitoring analyte: fluoride (E340.2) sampled annually.
CMP Detection monitoring analyte: HE compounds (E8330:R+H) sampled annually.
CMP Detection monitoring analyte: nitrate (E300.0:NO3) sampled annually.
CMP Detection monitoring analyte: perchlorate (E300.0:PERC) sampled annually.
CMP Detection monitoring analytes: Title 26 metals plus U, Th, Li, Be (T26METALS and CMPTRIMET) sampled annually.
CMP Detection monitoring analytes: uranium and thorium isotopes by mass spectrometry (MS:UISO and MS:THISO) sampled biennially.
Contaminants of Concern in the Vadose Zone not detected in Ground Water: HE Compounds and uranium.
Building 801 primary COC: VOCs (E601 or E624).
Building 801 secondary COC: nitrate (E300.0:NO3).
Building 801 secondary COC: uranium (MS:UISO) .
See Acronyms and Abbreviations in the Tables section of this report for acronym and abbreviation definitions.

Table 2.8-2. Building 833 area ground water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-833-03	PTMW	Tps	A	CMP	E601	1	N	Dry.
W-833-12	PTMW	Tps	A	CMP	E601	1	N	Insufficient water.
W-833-18	PTMW	Tps	A	CMP	E601	1	N	Dry.
W-833-22	PTMW	Tps	B	CMP	E601	1	NA	Next sample required 1stQ 2010.
W-833-28	PTMW	Tps	A	CMP	E601	1	N	Dry.
W-833-30	PTMW	Lower $Tnbs_1$	S	CMP	E601	1	Y	
W-833-30	PTMW	Lower $Tnbs_1$	S	CMP	E601	3	Y	
W-833-33	PTMW	Tps	B	CMP	E601	1	NA	Next sample required 1stQ 2010.
W-833-34	PTMW	Tps	A	CMP	E601	1	N	Insufficient water.
W-833-43	PTMW	Tps	B	CMP	E601	1	N	Dry.
W-840-01	PTMW	Lower $Tnbs_1$		DIS	E300.0:NO3	1	Y	
W-840-01	PTMW	Lower $Tnbs_1$		DIS	E300.0:PERC	1	Y	
W-840-01	PTMW	Lower $Tnbs_1$		DIS	E601	1	Y	
W-841-01	PTMW	Upper $Tnbs_1$		DIS	E300.0:NO3	1	N	Dry.
W-841-01	PTMW	Upper $Tnbs_1$		DIS	E300.0:PERC	1	N	Dry.
W-841-01	PTMW	Upper $Tnbs_1$		DIS	E601	1	N	Dry.

Notes:
Building 833 primary COC: VOCs (E601).
See Acronyms and Abbreviations in the Tables section of this report for acronym and abbreviation definitions.

Table 2.8-3. Building 845 Firing Table and Pit 9 Landfill area ground water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
K9-01	CMP DMW	Tmss	Q	CMP	E906	1	Y	
K9-01	CMP DMW	Tmss	A	CMP	CMPTRIMET	2	Y	
K9-01	CMP DMW	Tmss	A	CMP	E300.0:NO3	2	Y	
K9-01	CMP DMW	Tmss	A	CMP	E300.0:PERC	2	Y	
K9-01	CMP DMW	Tmss	A	CMP	E340.2	2	Y	
K9-01	CMP DMW	Tmss	A	CMP	E601	2	Y	
K9-01	CMP DMW	Tmss	A	CMP	E8330	2	Y	
K9-01	CMP DMW	Tmss	Q	CMP	E906	2	Y	
K9-01	CMP DMW	Tmss	B	CMP	MS:THISO	2	Y	
K9-01	CMP DMW	Tmss	B	CMP	MS:UISO	2	Y	
K9-01	CMP DMW	Tmss	A	CMP	T26METALS	2	Y	
K9-01	CMP DMW	Tmss	Q	CMP	E906	3	Y	
K9-01	CMP DMW	Tmss	Q	CMP	E906	4	Y	
K9-02	CMP DMW	Tmss	Q	CMP	E906	1	Y	
K9-02	CMP DMW	Tmss	A	CMP	CMPTRIMET	2	Y	
K9-02	CMP DMW	Tmss	A	CMP	E300.0:NO3	2	Y	
K9-02	CMP DMW	Tmss	A	CMP	E300.0:PERC	2	Y	
K9-02	CMP DMW	Tmss	A	CMP	E340.2	2	Y	
K9-02	CMP DMW	Tmss	A	CMP	E601	2	Y	
K9-02	CMP DMW	Tmss	A	CMP	E8330	2	Y	
K9-02	CMP DMW	Tmss	Q	CMP	E906	2	Y	
K9-02	CMP DMW	Tmss	B	CMP	MS:THISO	2	Y	
K9-02	CMP DMW	Tmss	B	CMP	MS:UISO	2	Y	
K9-02	CMP DMW	Tmss	A	CMP	T26METALS	2	Y	
K9-02	CMP DMW	Tmss	Q	CMP	E906	3	Y	
K9-02	CMP DMW	Tmss	Q	CMP	E906	4	Y	
K9-03	CMP DMW	Tmss	Q	CMP	E906	1	Y	
K9-03	CMP DMW	Tmss	A	CMP	CMPTRIMET	2	Y	
K9-03	CMP DMW	Tmss	A	CMP	E300.0:NO3	2	Y	
K9-03	CMP DMW	Tmss	A	CMP	E300.0:PERC	2	Y	
K9-03	CMP DMW	Tmss	A	CMP	E340.2	2	Y	
K9-03	CMP DMW	Tmss	A	CMP	E601	2	Y	
K9-03	CMP DMW	Tmss	A	CMP	E8330	2	Y	
K9-03	CMP DMW	Tmss	Q	CMP	E906	2	Y	
K9-03	CMP DMW	Tmss	B	CMP	MS:THISO	2	Y	
K9-03	CMP DMW	Tmss	B	CMP	MS:UISO	2	Y	
K9-03	CMP DMW	Tmss	A	CMP	T26METALS	2	Y	
K9-03	CMP DMW	Tmss	Q	CMP	E906	3	Y	
K9-03	CMP DMW	Tmss	Q	CMP	E906	4	Y	
K9-04	CMP DMW	Tmss	Q	CMP	E906	1	Y	
K9-04	CMP DMW	Tmss	A	CMP	CMPTRIMET	2	Y	
K9-04	CMP DMW	Tmss	A	CMP	E300.0:NO3	2	Y	
K9-04	CMP DMW	Tmss	A	CMP	E300.0:PERC	2	Y	
K9-04	CMP DMW	Tmss	A	CMP	E340.2	2	Y	
K9-04	CMP DMW	Tmss	A	CMP	E601	2	Y	
K9-04	CMP DMW	Tmss	A	CMP	E8330	2	Y	
K9-04	CMP DMW	Tmss	Q	CMP	E906	2	Y	
K9-04	CMP DMW	Tmss	B	CMP	MS:THISO	2	Y	
K9-04	CMP DMW	Tmss	B	CMP	MS:UISO	2	Y	
K9-04	CMP DMW	Tmss	A	CMP	T26METALS	2	Y	
K9-04	CMP DMW	Tmss	Q	CMP	E906	3	Y	
K9-04	CMP DMW	Tmss	Q	CMP	E906	4	Y	

Notes appear on the following page.

Table 2.8-3. Building 845 Firing Table and Pit 9 Landfill area ground water sampling and analysis plan.

Notes:
No COCs in ground water.
CMP Detection monitoring analyte: tritium (E906) sampled quarterly.
CMP Detection monitoring analyte: VOCs (E601 or E624) sampled annually.
CMP Detection monitoring analyte: fluoride (E340.2) sampled annually.
CMP Detection monitoring analyte: HE compounds (E8330:R+H) sampled annually.
CMP Detection monitoring analyte: nitrate (E300.0:NO3) sampled annually.
CMP Detection monitoring analyte: perchlorate (E300.0:PERC) sampled annually.
CMP Detection monitoring analytes: Title 26 metals plus U, Th, Li, Be (T26METALS and CMPTRIMET) sampled annually.
CMP Detection monitoring analytes: uranium and thorium isotopes by mass spectrometry (MS:UISO and MS:THISO) sampled biennially.
Contaminants of Concern in the Vadose Zone not detected in Ground Water: HE Compounds and uranium.
See Acronyms and Abbreviations in the Tables section of this report for acronym and abbreviation definitions.

Table 2.8-4. Building 851 area ground water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-851-05	PTMW	Tmss	B	CMP	E601	2	Y	Next sample required 2ndQ 2011.
W-851-05	PTMW	Tmss	A	CMP	E906	2	Y	
W-851-05	PTMW	Tmss	S	CMP	MS:UISO	2	Y	
W-851-05	PTMW	Tmss	S	CMP	MS:UISO	4	Y	
W-851-06	PTMW	Tmss	A	CMP	E906	2	Y	
W-851-06	PTMW	Tmss	S	CMP	MS:UISO	2	Y	
W-851-06	PTMW	Tmss	S	CMP	MS:UISO	4	Y	
W-851-07	PTMW	Tmss	A	CMP	E906	2	Y	
W-851-07	PTMW	Tmss	S	CMP	MS:UISO	2	Y	
W-851-07	PTMW	Tmss	S	CMP	MS:UISO	4	Y	
W-851-08	PTMW	Tmss	A	CMP	E906	2	Y	
W-851-08	PTMW	Tmss	S	CMP	MS:UISO	2	Y	
W-851-08	PTMW	Tmss	S	CMP	MS:UISO	4	Y	

Notes:

Building 851 primary COC: uranium (MS:UISO).

Contaminants of Concern in the Vadose Zone not detected in Ground Water: VOCs (E601).

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

Table 3.1-1. Pit 2 Landfill area ground water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
K2-01C*	DMW	$Tnbs_1$		DIS	E300.0:PERC	1	Y	
K2-01C*	DMW	$Tnbs_1$	Q	CMP	E906	1	Y	
K2-01C*	DMW	$Tnbs_1$		DIS	MS:UISO	1	Y	
K2-01C*	DMW	$Tnbs_1$	A	CMP	CMPTRIMET	2	Y	
K2-01C*	DMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
K2-01C*	DMW	$Tnbs_1$	A	CMP	E300.0:PERC	2	Y	
K2-01C*	DMW	$Tnbs_1$	A	CMP	E340.2	2	Y	
K2-01C*	DMW	$Tnbs_1$	A	CMP	E601	2	Y	
K2-01C*	DMW	$Tnbs_1$	A	CMP	E8330	2	Y	
K2-01C*	DMW	$Tnbs_1$	Q	CMP	E906	2	Y	
K2-01C*	DMW	$Tnbs_1$	B	CMP	MS:THISO	2	Y	
K2-01C*	DMW	$Tnbs_1$	B	CMP	MS:UISO	2	Y	
K2-01C*	DMW	$Tnbs_1$	A	CMP	T26METALS	2	Y	
K2-01C*	DMW	$Tnbs_1$		DIS	E300.0:PERC	3	Y	
K2-01C*	DMW	$Tnbs_1$	Q	CMP	E906	3	Y	
K2-01C*	DMW	$Tnbs_1$		DIS	MS:UISO	3	Y	
K2-01C*	DMW	$Tnbs_1$	Q	CMP	E906	4	Y	
K2-01C*	DMW	$Tnbs_1$		DIS	AS:UISO	4	Y	
NC2-08	DMW	$Tnbs_1$		DIS	E300.0:PERC	1	Y	
NC2-08	DMW	$Tnbs_1$	Q	CMP	E906	1	Y	
NC2-08	DMW	$Tnbs_1$	A	CMP	CMPTRIMET	2	Y	
NC2-08	DMW	$Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
NC2-08	DMW	$Tnbs_1$	A	CMP	E300.0:PERC	2	Y	
NC2-08	DMW	$Tnbs_1$	A	CMP	E340.2	2	Y	
NC2-08	DMW	$Tnbs_1$	A	CMP	E601	2	Y	
NC2-08	DMW	$Tnbs_1$	A	CMP	E8330	2	Y	
NC2-08	DMW	$Tnbs_1$	Q	CMP	E906	2	Y	
NC2-08	DMW	$Tnbs_1$	B	CMP	MS:THISO	2	Y	
NC2-08	DMW	$Tnbs_1$	B	CMP	MS:UISO	2	Y	
NC2-08	DMW	$Tnbs_1$	A	CMP	T26METALS	2	Y	
NC2-08	DMW	$Tnbs_1$		DIS	E300.0:PERC	3	Y	
NC2-08	DMW	$Tnbs_1$	Q	CMP	E906	3	Y	
NC2-08	DMW	$Tnbs_1$	Q	CMP	E906	4	Y	
NC2-08	DMW	$Tnbs_1$		DIS	MS:UISO	4	Y	
W-PIT2-1934	DMW	Lower $Tnbs_1$		DIS	E300.0:PERC	1	Y	
W-PIT2-1934	DMW	Lower $Tnbs_1$	Q	CMP	E906	1	Y	
W-PIT2-1934	DMW	Lower $Tnbs_1$		DIS	MS:UISO	1	Y	
W-PIT2-1934	DMW	Lower $Tnbs_1$	A	CMP	CMPTRIMET	2	Y	
W-PIT2-1934	DMW	Lower $Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
W-PIT2-1934	DMW	Lower $Tnbs_1$	A	CMP	E300.0:PERC	2	Y	
W-PIT2-1934	DMW	Lower $Tnbs_1$	A	CMP	E340.2	2	Y	
W-PIT2-1934	DMW	Lower $Tnbs_1$	A	CMP	E601	2	Y	
W-PIT2-1934	DMW	Lower $Tnbs_1$	A	CMP	E8330	2	Y	
W-PIT2-1934	DMW	Lower $Tnbs_1$	Q	CMP	E906	2	Y	
W-PIT2-1934	DMW	Lower $Tnbs_1$	B	CMP	MS:THISO	2	Y	Next sample required 2ndQ 2011.
W-PIT2-1934	DMW	Lower $Tnbs_1$	B	CMP	MS:UISO	2	Y	Next sample required 2ndQ 2011.
W-PIT2-1934	DMW	Lower $Tnbs_1$	A	CMP	T26METALS	2	Y	
W-PIT2-1934	DMW	Lower $Tnbs_1$		DIS	E300.0:PERC	3	Y	
W-PIT2-1934	DMW	Lower $Tnbs_1$	Q	CMP	E906	3	Y	
W-PIT2-1934	DMW	Lower $Tnbs_1$		DIS	MS:UISO	3	Y	
W-PIT2-1934	DMW	Lower $Tnbs_1$	Q	CMP	E906	4	Y	
W-PIT2-1935	DMW	Lower $Tnbs_1$		DIS	E300.0:PERC	1	Y	
W-PIT2-1935	DMW	Lower $Tnbs_1$	Q	CMP	E906	1	Y	

Table 3.1-1. Pit 2 Landfill area ground water sampling and analysis plan.

Sampling location	Location type	Completion interval	Sampling frequency required	Sample driver	Requested analysis	Sampling quarter	Sampled Y/N	Comment
W-PIT2-1935	DMW	Lower $Tnbs_1$		DIS	MS:UISO	1	Y	
W-PIT2-1935	DMW	Lower $Tnbs_1$	A	CMP	CMPTRIMET	2	Y	
W-PIT2-1935	DMW	Lower $Tnbs_1$	A	CMP	E300.0:NO3	2	Y	
W-PIT2-1935	DMW	Lower $Tnbs_1$	A	CMP	E300.0:PERC	2	Y	
W-PIT2-1935	DMW	Lower $Tnbs_1$	A	CMP	E340.2	2	Y	
W-PIT2-1935	DMW	Lower $Tnbs_1$	A	CMP	E601	2	Y	
W-PIT2-1935	DMW	Lower $Tnbs_1$	A	CMP	E8330	2	Y	
W-PIT2-1935	DMW	Lower $Tnbs_1$	Q	CMP	E906	2	Y	
W-PIT2-1935	DMW	Lower $Tnbs_1$	B	CMP	MS:THISO	2	Y	Next sample required 2ndQ 2011.
W-PIT2-1935	DMW	Lower $Tnbs_1$	B	CMP	MS:UISO	2	Y	Next sample required 2ndQ 2011.
W-PIT2-1935	DMW	Lower $Tnbs_1$	A	CMP	T26METALS	2	Y	
W-PIT2-1935	DMW	Lower $Tnbs_1$		DIS	E300.0:PERC	3	Y	
W-PIT2-1935	DMW	Lower $Tnbs_1$	Q	CMP	E906	3	Y	
W-PIT2-1935	DMW	Lower $Tnbs_1$		DIS	MS:UISO	3	Y	
W-PIT2-1935	DMW	Lower $Tnbs_1$	Q	CMP	E906	4	Y	
W-PIT2-2226	GW	$Tnbs_1$/$Tnbs_0$	Q	CMP	E906	1	Y	
W-PIT2-2226	GW	$Tnbs_1$/$Tnbs_0$	Q	CMP	E906	2	Y	
W-PIT2-2226	GW	$Tnbs_1$/$Tnbs_0$	Q	CMP	E906	3	Y	
W-PIT2-2226	GW	$Tnbs_1$/$Tnbs_0$	Q	CMP	E906	4	Y	
W-PIT2-2301	PTMW	Qal/WBR		DIS	E300.0:PERC	1	Y	
W-PIT2-2301	PTMW	Qal/WBR		DIS	E906	1	Y	
W-PIT2-2301	PTMW	Qal/WBR		DIS	MS:UISO	1	Y	
W-PIT2-2301	PTMW	Qal/WBR	A	CMP	E300.0:NO3	2	N	Insufficient water.
W-PIT2-2301	PTMW	Qal/WBR	A	CMP	E300.0:PERC	2	N	Insufficient water.
W-PIT2-2301	PTMW	Qal/WBR	S	CMP	E906	2	N	Insufficient water.
W-PIT2-2301	PTMW	Qal/WBR	A	CMP	MS:UISO	2	N	Insufficient water.
W-PIT2-2301	PTMW	Qal/WBR	S	CMP	E906	4	N	Insufficient water.
W-PIT2-2302	PTMW	Qal/WBR		DIS	E300.0:PERC	1	Y	
W-PIT2-2302	PTMW	Qal/WBR		DIS	E906	1	Y	
W-PIT2-2302	PTMW	Qal/WBR		DIS	MS:UISO	1	Y	
W-PIT2-2302	PTMW	Qal/WBR	A	CMP	E300.0:NO3	2	N	Insufficient water.
W-PIT2-2302	PTMW	Qal/WBR	A	CMP	E300.0:PERC	2	N	Insufficient water.
W-PIT2-2302	PTMW	Qal/WBR	S	CMP	E906	2	N	Insufficient water.
W-PIT2-2302	PTMW	Qal/WBR	A	CMP	MS:UISO	2	N	Insufficient water.
W-PIT2-2302	PTMW	Qal/WBR	S	CMP	E906	4	N	Insufficient water.
W-PIT2-2303	PTMW	Qal/WBR		DIS	E300.0:PERC	1	Y	
W-PIT2-2303	PTMW	Qal/WBR		DIS	E906	1	Y	
W-PIT2-2303	PTMW	Qal/WBR		DIS	MS:UISO	1	Y	
W-PIT2-2303	PTMW	Qal/WBR	A	CMP	E300.0:NO3	2	N	Dry.
W-PIT2-2303	PTMW	Qal/WBR	A	CMP	E300.0:PERC	2	N	Dry.
W-PIT2-2303	PTMW	Qal/WBR	S	CMP	E906	2	N	Dry.
W-PIT2-2303	PTMW	Qal/WBR	A	CMP	MS:UISO	2	N	Dry.
W-PIT2-2303	PTMW	Qal/WBR	S	CMP	E906	4	N	Dry.
W-PIT2-2304	PTMW	Qal/WBR	A	CMP	E300.0:NO3	2	N	Dry.
W-PIT2-2304	PTMW	Qal/WBR	A	CMP	E300.0:PERC	2	N	Dry.
W-PIT2-2304	PTMW	Qal/WBR	S	CMP	E906	2	N	Dry.
W-PIT2-2304	PTMW	Qal/WBR	A	CMP	MS:UISO	2	N	Dry.
W-PIT2-2304	PTMW	Qal/WBR	S	CMP	E906	4	N	Dry.
W-PIT2-2304	PTMW	Qal/WBR		DIS	MS:UISO	4	N	Dry.

Notes appear on the following page.

Table 3.1-1. Pit 2 Landfill area ground water sampling and analysis plan.

Notes:
Pit 2 Landfill primary COC: nitrate (E300:NO3).
CMP Detection monitoring analyte: tritium (E906) sampled quarterly.
CMP Detection monitoring analyte: VOCs (E601 or E624) sampled annually.
CMP Detection monitoring analyte: fluoride (E340.2) sampled annually.
CMP Detection monitoring analyte: HE compounds (E8330:R+H) sampled annually.
CMP Detection monitoring analyte: nitrate (E300.0:NO3) sampled annually.
CMP Detection monitoring analyte: perchlorate (E300.0:PERC) sampled annually.
CMP Detection monitoring analytes: Title 26 metals plus U, Th, Li, Be (T26METALS and CMPTRIMET) sampled annually.
CMP Detection monitoring analytes: uranium and thorium isotopes by mass spectrometry (MS:UISO and MS:THISO) sampled biennially.
***Well sampled as part of the surveillance monitoring performed by the Water Guidance and Monitoring Group (WGMG) for additional constiutents and the results are reported in the LLNL Site Annual Environmental Report.**
See Acronyms and Abbreviations in the Tables section of this report for acronym and abbreviation definitions.

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	3.8×10^{-5}	7.3×10^{-2}	Based on a TCE concentration of 15,000 µg/L (20-Apr-2009) in well W-834-D4
	Indoor – JEM	PCE	1.9×10^{-6}	1.2×10^{-1}	Based on a PCE concentration of 180 µg/L (29-Jan-2009) in well W-834-D13
Cumulative risk and hazard index			**4.0×10^{-5}**	2.0×10^{-1}	**Institutional controls in place, building only used for storage.**
Building 830	Indoor – JEM	Vinyl Chloride	3.1×10^{-8}	5.9×10^{-5}	Based on the Vinyl Chloride detection limit of 2.5 µg/L (25-Aug-2009) in well W-830-34
	Indoor – JEM	TCE	7.5×10^{-7}	1.5×10^{-3}	Based on a TCE concentration of 190 µg/L (25-Apr-2009) in well W-830-1807
Cumulative risk and hazard index			7.8×10^{-7}	1.6×10^{-3}	**Institutional controls in place.**
Building 833	Indoor – JEM	TCE	4.0×10^{-7}	7.7×10^{-4}	Based on a TCE concentration of 170 µg/L (5-Feb-2008) in well W-833-33
	Indoor – JEM	Chloroform	1.8×10^{-9}	2.7×10^{-5}	Based on the Chloroform detection limit of 0.5 µg/L (5-Feb-2008) in well W-833-33
Cumulative risk and hazard index			4.0×10^{-7}	8.0×10^{-4}	**Institutional and engineering controls are in place. The air conditioning unit in Bldg. 833 is operated continuously to maintain neutral pressure differential between the subsurface and indoor air, and to maintain high exchange rates.**

Note:

JEM – Johnson-Ettinger Model for indoor air pathway (USEPA, GW-ADV Version 3.1; 02/04), incorporates the updated risk values in DTSC (2005) Interim 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, and effluent dissolved oxygen monitoring, July through December 2009.

A-1. Results of infuent and effluent pH, and effluent dissolved oxygen monitoring, July through December 2009.

Sample Location	Sample Date	Influent pH Result	Effluent pH Result	Effluent Dissolved Oxygen (mg/L)
GSA OU				
CGSA GWTS	**07/14/2009**	**7**	**7**	**NR**
CGSA GWTS	**08/31/2009**	**NA**	**NA**	**NR**
CGSA GWTS	**09/03/2009**	**NA**	**7.2**	**NR**
CGSA GWTS	**10/14/2009**	**7.2**	**7.2**	**NR**
CGSA GWTS	**11/03/2009**	**NA**	**7.2**	**NR**
CGSA GWTS	**12/01/2009**	**NA**	**7.2**	**NR**
Building 834 OU				
834 GWTS	**07/07/2009**	**8**	**7.96**	**NR**
834 GWTS	**08/03/2009**	**NA**	**7.81**	**NR**
834 GWTS	**09/01/2009**	**NA**	**7.84**	**NR**
834 GWTS	**10/06/2009**	**7.85**	**7.7**	**NR**
834 GWTS	**11/02/2009**	**NA**	**7.8**	**NR**
834 GWTS	**12/01/2009**	**NA**	**7.7**	**NR**
HEPA OU				
815-SRC GWTS	**07/07/2009**	**7.74**	**7.65**	**NR**
815-SRC GWTS	**07/28/2009**	**NA**	**7.49**	**NR**
815-SRC GWTS	**09/14/2009**	**NA**	**7.25**	**NR**
815-SRC GWTS	**10/07/2009**	**7.75**	**7.54**	**NR**
815-SRC GWTS	**11/04/2009**	**NA**	**7.33**	**NR**
815-SRC GWTS	**12/01/2009**	**NA**	**7.48**	**NR**
815-PRX GWTS	**07/07/2009**	**7**	**7**	**NR**
815-PRX GWTS	**08/03/2009**	**NA**	**7**	**NR**
815-PRX GWTS	**09/14/2009**	**NA**	**7.67**	**NR**
815-PRX GWTS	**10/07/2009**	**7**	**7.5**	**NR**
815-PRX GWTS	**11/03/2009**	**NA**	**7**	**NR**
815-PRX GWTS	**12/01/2009**	**NA**	**7.78**	**NR**
815-DSB GWTS	**07/07/2009**	**7**	**7**	**NR**
815-DSB GWTS	**08/17/2009**	**NA**	**7**	**NR**

A-1. Results of infuent and effluent pH, and effluent dissolved oxygen monitoring, July through December 2009.

Sample Location	Sample Date	Influent pH Result	Effluent pH Result	Effluent Dissolved Oxygen (mg/L)
815-DSB GWTS	09/03/2009	NA	7	NR
815-DSB GWTS	10/12/2009	7.2	7	NR
815-DSB GWTS	11/03/2009	NA	7	NR
815-DSB GWTS	12/01/2009	NA	7.1	NR
817-SRC GWTS	07/08/2009	8.43	8.01	NR
817-SRC GWTS	07/28/2009	NA	7.72	NR
817-SRC GWTS	09/14/2009	NA	7.67	NR
817-SRC GWTS	10/07/2009	7.34	7.75	NR
817-SRC GWTS	11/03/2009	NA	7	NR
817-SRC GWTS	12/01/2009	NA	7.72	NR
817-PRX GWTS	07/08/2009	7.88	7.64	NR
817-PRX GWTS	08/03/2009	NA	7.47	NR
817-PRX GWTS	09/14/2009	NA	7.32	NR
817-PRX GWTS	10/14/2009	7.87	7.39	NR
817-PRX GWTS	11/10/2009	NA	7.86	NR
817-PRX GWTS	12/01/2009	NA	7.55	NR
Building 854 OU				
854-SRC GWTS	07/07/2009	7	7	NR
854-SRC GWTS	08/10/2009	NA	7	NR
854-SRC GWTS	09/02/2009	NA	7	NR
854-SRC GWTS	10/14/2009	7	7	NR
854-SRC GWTS	11/30/2009	NA	NA	NR
854-SRC GWTS	12/15/2009	NA	7	NR
854-PRX GWTS	07/31/2009	NA	NA	NR
854-PRX GWTS	08/31/2009	NA	NA	NR
854-PRX GWTS	09/14/2009	7	7	NR
854-PRX GWTS	10/07/2009	7	7	NR
854-PRX GWTS	11/02/2009	NA	7	NR
854-PRX GWTS	12/31/2009	NA	NA	NR

A-1. Results of infuent and effluent pH, and effluent dissolved oxygen monitoring, July through December 2009.

Sample Location	Sample Date	Influent pH Result	Effluent pH Result	Effluent Dissolved Oxygen (mg/L)
854-DIS GWTS	07/07/2009	7	7	NR
854-DIS GWTS	08/17/2009	NA	7	NR
854-DIS GWTS	09/03/2009	NA	7	NR
854-DIS GWTS	10/07/2009	7	7	NR
854-DIS GWTS	11/02/2009	NA	7	NR
854-DIS GWTS	12/09/2009	NA	7	NR
832 Canyon OU				
830-SRC GWTS	07/07/2009	7.73	7.88	NR
830-SRC GWTS	08/03/2009	NA	7.64	NR
830-SRC GWTS	09/01/2009	NA	7.79	NR
830-SRC GWTS	10/06/2009	7.8	7.3	NR
830-SRC GWTS	11/02/2009	NA	7.42	NR
830-SRC GWTS	12/01/2009	NA	7.1	NR
830-DISS GWTS	07/07/2009	7	7	NR
830-DISS GWTS	08/31/2009	NA	NA	NR
830-DISS GWTS	09/03/2009	NA	7	NR
830-DISS GWTS	10/07/2009	7	7	NR
830-DISS GWTS	11/03/2009	NA	7	NR
830-DISS GWTS	12/01/2009	NA	7	NR

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.

A-1. Results of infuent and effluent pH, and effluent dissolved oxygen monitoring, July through December 2009.

Sample Location	Sample Date	Influent pH Result	Effluent pH Result	Effluent Dissolved Oxygen (mg/L)

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 2009

Appendix B

Analytical Results for Routine Monitoring During 2009

B-1.1. 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 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)
CDF1	1/13/09	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
CDF1	1/13/09	E601	<0.5	<0.5	<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	01/13/09 DUP	E502.2	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 HL	<0.5 H	<0.5 H	<0.5 HL	<0.5 H	<0.5 H	<0.5 H	<1 H	<0.5 H
CDF1	01/13/09 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	2/18/09	E601	<0.5	<0.5	<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	02/18/09 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	3/12/09	E601	<0.5	<0.5	<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	03/12/09 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	4/21/09	E601	<0.5	<0.5	<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	04/21/09 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	5/20/09	E601	<0.5	<0.5	<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	05/20/09 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	6/9/09	E601	<0.5	<0.5	<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	06/09/09 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	7/20/09	E601	<0.5	<0.5	<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	07/20/09 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	8/17/09	E601	<0.5	<0.5	<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	08/17/09 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	9/10/09	E601	<0.5	<0.5	<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	09/10/09 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	10/19/09	E601	<0.5	<0.5	<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	10/19/09 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	11/16/09	E601	<0.5	<0.5	<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	11/16/09 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	12/9/09	E601	<0.5	<0.5	<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	12/09/09 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CON1	1/13/09	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	1/13/09	E601	<0.5	<0.5	<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	01/13/09 DUP	E502.2	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 HL	<0.5 H	<0.5 H	<0.5 HL	<0.5 H	<0.5 H	<0.5 H	<1 H	<0.5 H
CON1	01/13/09 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	2/18/09	E601	<0.5	<0.5	<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	02/18/09 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	3/12/09	E601	<0.5	<0.5	<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	03/12/09 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	4/21/09	E601	<0.5	<0.5	<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	04/21/09 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	5/20/09	E601	<0.5	<0.5	<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	05/20/09 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	6/9/09	E601	<0.5	<0.5	<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	06/09/09 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	7/20/09	E601	<0.5	<0.5	<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	07/20/09 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	8/17/09	E601	<0.5	<0.5	<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	08/17/09 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	9/10/09	E601	<0.5	<0.5	<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	09/10/09 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	10/19/09	E601	<0.5	<0.5	<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	10/19/09 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	11/16/09	E601	<0.5	<0.5	<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	11/16/09 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	12/9/09	E601	<0.5	<0.5	<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	12/09/09 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

B-1.1. 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 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)
CON2	1/13/09	E601	<0.5	<0.5	<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	2/18/09	E601	<0.5	<0.5	<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	3/12/09	E601	<0.5	<0.5	<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	4/22/09	E601	<0.5	<0.5	<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	5/20/09	E601	<0.5	<0.5	<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	6/9/09	E601	<0.5	<0.5	<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	7/20/09	E601	<0.5	<0.5	<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	07/20/09 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	8/17/09	E601	<0.5	<0.5	<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	08/17/09 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	9/10/09	E601	<0.5	<0.5	<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	09/10/09 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	10/19/09	E601	<0.5	<0.5	<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	11/16/09	E601	<0.5	<0.5	<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	12/9/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-24P-03	6/10/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-25D-01	6/10/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-25D-02	6/3/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-25M-01	6/3/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-25M-02	6/3/09	E601	0.63	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-25M-03	6/3/09	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-25N-01	6/8/09	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-25N-01	11/18/09	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-25N-04	6/10/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-25N-06	6/3/09	E601	0.56	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-25N-07	2/19/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-25N-07	6/2/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-25N-07	8/19/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-25N-07	11/17/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-25N-08	6/8/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-25N-09	6/8/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-25N-11	2/19/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-25N-11	6/2/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-25N-11	8/19/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-25N-11	11/17/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-25N-12	2/19/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-25N-12	6/2/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-25N-12	8/19/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-25N-12	11/17/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-25N-13	2/19/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-25N-13	6/2/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-25N-13	8/19/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-25N-13	11/17/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-25N-15	6/3/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-25N-20	5/6/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-25N-21	6/8/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-25N-22	6/8/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-25N-23	6/10/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-25N-23	06/10/09 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-25N-23	12/14/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-25N-24	6/8/09	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-25N-24	11/18/09	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

B-1.1. 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 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-25N-25	6/8/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-25N-26	6/3/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-25N-28	6/3/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-26R-01	5/6/09	E601	6.9	0.9	<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-26R-01	6/24/09	E601	3	<0.5	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-26R-01	6/24/09	E601	3.4	0.53	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-26R-01	6/24/09	E601	3.5	0.5	<0.5	<0.5	<0.5	1.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-26R-01	6/24/09	E601	4	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-26R-01	11/4/09	E601	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-26R-01	11/04/09 DUP	E601	4.1	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-26R-02	6/8/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-26R-03	6/8/09	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-26R-03	11/18/09	E601	2.1	<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-26R-04	6/8/09	E601	4.1	0.53	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-26R-04	6/24/09	E601	4.4	0.53	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-26R-04	6/24/09	E601	4.5	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-26R-04	6/24/09	E601	4.9	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-26R-04	6/24/09	E601	4.8	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-26R-04	11/30/09	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-26R-05	5/11/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-26R-05	11/9/09	E601	<0.5	<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-26R-06	6/8/09	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-26R-06	11/30/09	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-26R-06	11/30/09 DUP	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-26R-07	6/8/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-26R-08	6/8/09	E601	<0.5	<0.5	<0.5	<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	5/11/09	E601	0.98	<0.5	<0.5	<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	11/4/09	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-35A-01	6/4/09	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-35A-01	12/14/09	E601	55	3.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.99	<0.5	<0.5	0.52	<0.5	<0.5
W-35A-02	6/4/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35A-02	12/15/09	E601	<0.5	<0.5	<0.5	<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	6/2/09	E601	<0.5	<0.5	<0.5	<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	12/3/09	E601	<0.5	<0.5	<0.5	<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	5/13/09	E601	<0.5	<0.5	<0.5	<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	12/16/09	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	12/16/09	E601	<0.5	<0.5	<0.5	<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	12/16/09 DUP	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	0.64 S	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35A-04	12/16/09 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-35A-05	6/4/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35A-05	12/14/09	E601	<0.5	<0.5	<0.5	<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	6/2/09	E601	<0.5	<0.5	<0.5	<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	12/3/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35A-07	6/4/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35A-07	12/8/09	E601	<0.5	<0.5	<0.5	<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	3/24/09	E601	<0.5	<0.5	<0.5	<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	6/4/09	E601	<0.5	<0.5	<0.5	<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	9/15/09	E601	<0.5	<0.5	<0.5	<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	12/15/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35A-09	6/4/09	E601	0.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.7	<0.5	<0.5
W-35A-09	12/15/09	E601	0.79	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.8	<0.5	<0.5
W-35A-10	6/4/09	E601	15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	12	<0.5	<0.5

B-1.1. 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 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-35A-10	12/8/09	E601	8.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	7.5	<0.5	<0.5
W-35A-10	12/08/09 DUP	E601	9.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	8.5	<0.5	<0.5
W-35A-11	6/2/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35A-11	12/3/09	E601	<0.5	<0.5	<0.5	<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	6/2/09	E601	<0.5	<0.5	<0.5	<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	12/3/09	E601	<0.5	<0.5	<0.5	<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	6/2/09	E601	<0.5	<0.5	<0.5	<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	12/3/09	E601	<0.5	<0.5	<0.5	<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	12/03/09 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-35A-14	3/24/09	E601	<0.5	<0.5	<0.5	<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	6/4/09	E601	<0.5	<0.5	<0.5	<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	9/15/09	E601	<0.5	<0.5	<0.5	<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	12/15/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7A	12/2/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7B	6/18/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7B	12/2/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7B	12/02/09 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-7D	6/10/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7DS	5/11/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7E	5/13/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7E	05/13/09 DUP	E601	<0.5	<0.5	<0.5	<0.5	<0.5	0.62	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7E	11/9/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7ES	5/13/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7ES	11/9/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7F	6/4/09	E601	0.55	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7F	11/19/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7G	6/23/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7G	11/30/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7H	6/22/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7H	11/19/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7J	6/4/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7J	11/19/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7K	6/22/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7K	12/2/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7L	6/22/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7L	12/2/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7M	6/29/09	E601	<0.5	<0.5	<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
W-7M	12/17/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7N	6/22/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7N	12/17/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7O	1/21/09	E601	80	5.5	0.59	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5	0.59	<0.5	<0.5
W-7O	4/22/09	E601	63	4.4	0.59	<0.5	<0.5	<0.5	<0.5	<0.5	1.1	<0.5	<0.5	<0.5	<0.5	<0.5
W-7O	7/14/09	E601	71	5.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.1	<0.5	<0.5	0.5	<0.5	<0.5
W-7PS	2/3/09	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-7PS	5/6/09	E601	2.6	<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-7PS	8/11/09	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-7PS	08/11/09 DUP	E601	2.2	<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-7PS	11/4/09	E601	2.2	<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-7Q	3/24/09	E601	60	5.9	<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-7Q	6/22/09	E601	31	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
W-7Q	8/20/09	E601	29	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
W-7Q	12/8/09	E601	22	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

B-1.1. 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 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-7R	1/21/09	E601	4.6	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 E	<0.5	<0.5
W-7R	4/22/09	E601	3.1	<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-7R	7/14/09	E601	3.8	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-7R	11/3/09	E601	3.2	<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-7S	2/26/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7S	6/18/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7S	8/20/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7S	12/8/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7T	2/26/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7T	6/18/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7T	8/20/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-7T	12/8/09	E601	<0.5	<0.5	<0.5	<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	6/10/09	E601	<0.5	<0.5	<0.5	<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	12/16/09	E601	<0.5	<0.5	<0.5	<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	6/10/09	E601	<0.5	<0.5	<0.5	<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	12/16/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-872-01	6/8/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-872-01	12/17/09	E601	<0.5	<0.5	<0.5	<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	6/8/09	E601	<0.5	<0.5	<0.5	<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	12/14/09	E601	<0.5	<0.5	<0.5	<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	6/8/09	E601	<0.5	<0.5	<0.5	<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	12/14/09	E601	<0.5	<0.5	<0.5	<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	6/8/09	E601	<0.5	<0.5	<0.5	<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	12/14/09	E601	<0.5	<0.5	<0.5	<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	6/9/09	E601	5.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.56	<0.5	<0.5
W-873-06	06/09/09 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
W-873-06	12/14/09	E601	4.3	<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-873-07	4/22/09	E601	15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.8	<0.5	<0.5
W-873-07	9/3/09	E601	8.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	13	<0.5	<0.5
W-873-07	11/3/09	E601	17	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.8	<0.5	<0.5
W-CGSA-1733	3/24/09	E601	8.1	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-CGSA-1733	6/18/09	E601	12	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
W-CGSA-1733	8/20/09	E601	11	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
W-CGSA-1736	6/18/09	E601	5.9	0.89	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-CGSA-1736	12/8/09	E601	5.6	0.79	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-CGSA-1737	6/18/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-CGSA-1737	12/8/09	E601	<0.5	<0.5	<0.5	<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	3/24/09	E601	3.2	<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-CGSA-1739	6/18/09	E601	2.6	<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-CGSA-1739	8/20/09	E601	2.8	<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-CGSA-1739	12/14/09	E601	2.7	<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-875-01	6/9/09	E601	2.8	<0.5	4.2	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-875-01	06/09/09 DUP	E601	3.3	<0.5	5.2	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	12/17/09	E601	2.6	<0.5	5.2	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-875-02	6/9/09	E601	<0.5	<0.5	<0.5	<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	12/17/09	E601	<0.5	<0.5	<0.5	<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	12/17/09	E601	<0.5	<0.5	<0.5	<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	6/10/09	E601	<0.5	<0.5	<0.5	<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	12/17/09	E601	<0.5	<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-875-05	6/16/09	E601	<0.5	<0.5	<0.5	<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	12/16/09	E601	<0.5	<0.5	<0.5	<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	6/16/09	E601	0.56	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

B-1.1. 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 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-875-06	12/17/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-875-07	4/22/09	E601	160 D	13	11	<0.5	<0.5	<0.5	<0.5	0.87	0.74	<0.5	1.1	<0.5	<0.5	<0.5
W-875-07	7/14/09	E601	240 D	13	12	0.71	<0.5	<0.5	<0.5	<0.5	2.6	<0.5	<0.5	<0.5	<0.5	<0.5
W-875-08	3/3/09	E601	310 D	2.8	26	2.5	<0.5	<0.5	<0.5	<0.5	5.9	<0.5	<0.5	<0.5	<0.5	<0.5
W-875-08	4/22/09	E601	320 D	1.8	22	2.1	<0.5	<0.5	<0.5	<0.5	6.1	<0.5	<0.5	<0.5	<0.5	<0.5
W-875-08	7/14/09	E601	360 D	1.3	20	1.8	<0.5	<0.5	<0.5	<0.5	6.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-875-08	11/3/09	E601	310 D	<0.5	25	2.5	<0.5	<0.5	<0.5	<0.5	5.8	<0.5	<0.5	<0.5	<0.5	<0.5
W-875-11	1/21/09	E601	20	1.5	1.3	<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	6/16/09	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-876-01	06/16/09 DUP	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-876-01	12/06/09 DUP	E601	2.2	<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-876-01	12/16/09	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-879-01	6/16/09	E601	<0.5	<0.5	<0.5	<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	12/16/09	E601	<0.5	<0.5	<0.5	<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	6/10/09	E601	27	<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-889-01	12/16/09	E601	23	<0.5	0.77	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Analytes detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloro-ethene (total) (µg/L)	Bromo-dichloro-methane (µg/L)	Bromoform (µg/L)	Chloro-methane (µg/L)	Dibromo-chloro-methane (µg/L)
CDF1	1/13/09	E502.2	0 of 46	-	-	-	-	-
CDF1	1/13/09	E601	0 of 18	-	-	-	-	-
CDF1	01/13/09 DUP	E502.2	0 of 45	-	-	-	-	-
CDF1	01/13/09 DUP	E601	0 of 18	-	-	-	-	-
CDF1	2/18/09	E601	0 of 18	-	-	-	-	-
CDF1	02/18/09 DUP	E601	0 of 18	-	-	-	-	-
CDF1	3/12/09	E601	0 of 18	-	-	-	-	-
CDF1	03/12/09 DUP	E601	0 of 18	-	-	-	-	-
CDF1	4/21/09	E601	0 of 18	-	-	-	-	-
CDF1	04/21/09 DUP	E601	0 of 18	-	-	-	-	-
CDF1	5/20/09	E601	0 of 18	-	-	-	-	-
CDF1	05/20/09 DUP	E601	0 of 18	-	-	-	-	-
CDF1	6/9/09	E601	0 of 18	-	-	-	-	-
CDF1	06/09/09 DUP	E601	0 of 18	-	-	-	-	-
CDF1	7/20/09	E601	0 of 18	-	-	-	-	-
CDF1	07/20/09 DUP	E601	0 of 18	-	-	-	-	-
CDF1	8/17/09	E601	0 of 18	-	-	-	-	-
CDF1	08/17/09 DUP	E601	0 of 18	-	-	-	-	-
CDF1	9/10/09	E601	0 of 18	-	-	-	-	-
CDF1	09/10/09 DUP	E601	0 of 18	-	-	-	-	-
CDF1	10/19/09	E601	0 of 18	-	-	-	-	-
CDF1	10/19/09 DUP	E601	0 of 18	-	-	-	-	-
CDF1	11/16/09	E601	0 of 18	-	-	-	-	-
CDF1	11/16/09 DUP	E601	0 of 18	-	-	-	-	-
CDF1	12/9/09	E601	0 of 18	-	-	-	-	-
CDF1	12/09/09 DUP	E601	0 of 18	-	-	-	-	-
CON1	1/13/09	E502.2	0 of 46	-	-	-	-	-
CON1	1/13/09	E601	0 of 18	-	-	-	-	-
CON1	01/13/09 DUP	E502.2	0 of 45	-	-	-	-	-
CON1	01/13/09 DUP	E601	0 of 18	-	-	-	-	-

Analytes detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloro-ethene (total) (µg/L)	Bromo-dichloro-methane (µg/L)	Bromoform (µg/L)	Chloro-methane (µg/L)	Dibromo-chloro-methane (µg/L)
CON1	2/18/09	E601	0 of 18	-	-	-	-	-
CON1	02/18/09 DUP	E601	0 of 18	-	-	-	-	-
CON1	3/12/09	E601	0 of 18	-	-	-	-	-
CON1	03/12/09 DUP	E601	0 of 18	-	-	-	-	-
CON1	4/21/09	E601	0 of 18	-	-	-	-	-
CON1	04/21/09 DUP	E601	0 of 18	-	-	-	-	-
CON1	5/20/09	E601	0 of 18	-	-	-	-	-
CON1	05/20/09 DUP	E601	0 of 18	-	-	-	-	-
CON1	6/9/09	E601	0 of 18	-	-	-	-	-
CON1	06/09/09 DUP	E601	0 of 18	-	-	-	-	-
CON1	7/20/09	E601	0 of 18	-	-	-	-	-
CON1	07/20/09 DUP	E601	0 of 18	-	-	-	-	-
CON1	8/17/09	E601	0 of 18	-	-	-	-	-
CON1	08/17/09 DUP	E601	0 of 18	-	-	-	-	-
CON1	9/10/09	E601	0 of 18	-	-	-	-	-
CON1	09/10/09 DUP	E601	0 of 18	-	-	-	-	-
CON1	10/19/09	E601	0 of 18	-	-	-	-	-
CON1	10/19/09 DUP	E601	0 of 18	-	-	-	-	-
CON1	11/16/09	E601	0 of 18	-	-	-	-	-
CON1	11/16/09 DUP	E601	0 of 18	-	-	-	-	-
CON1	12/9/09	E601	0 of 18	-	-	-	-	-
CON1	12/09/09 DUP	E601	0 of 18	-	-	-	-	-
CON2	1/13/09	E601	0 of 18	-	-	-	-	-
CON2	2/18/09	E601	0 of 18	-	-	-	-	-
CON2	3/12/09	E601	0 of 18	-	-	-	-	-
CON2	4/22/09	E601	0 of 18	-	-	-	-	-
CON2	5/20/09	E601	0 of 18	-	-	-	-	-
CON2	6/9/09	E601	0 of 18	-	-	-	-	-
CON2	7/20/09	E601	0 of 18	-	-	-	-	-
CON2	07/20/09 DUP	E601	0 of 18	-	-	-	-	-
CON2	8/17/09	E601	0 of 18	-	-	-	-	-
CON2	08/17/09 DUP	E601	0 of 18	-	-	-	-	-
CON2	9/10/09	E601	0 of 18	-	-	-	-	-
CON2	09/10/09 DUP	E601	0 of 18	-	-	-	-	-
CON2	10/19/09	E601	0 of 18	-	-	-	-	-
CON2	11/16/09	E601	0 of 18	-	-	-	-	-
CON2	12/9/09	E601	0 of 18	-	-	-	-	-
W-24P-03	6/10/09	E601	0 of 18	-	-	-	-	-
W-25D-01	6/10/09	E601	0 of 18	-	-	-	-	-
W-25D-02	6/3/09	E601	0 of 18	-	-	-	-	-
W-25M-01	6/3/09	E601	0 of 18	-	-	-	-	-
W-25M-02	6/3/09	E601	0 of 18	-	-	-	-	-
W-25M-03	6/3/09	E601	0 of 18	-	-	-	-	-
W-25N-01	6/8/09	E601	0 of 18	-	-	-	-	-
W-25N-01	11/18/09	E601	0 of 18	-	-	-	-	-
W-25N-04	6/10/09	E601	0 of 18	-	-	-	-	-
W-25N-06	6/3/09	E601	0 of 18	-	-	-	-	-
W-25N-07	2/19/09	E601	0 of 18	-	-	-	-	-
W-25N-07	6/2/09	E601	0 of 18	-	-	-	-	-
W-25N-07	8/19/09	E601	0 of 18	-	-	-	-	-
W-25N-07	11/17/09	E601	0 of 18	-	-	-	-	-
W-25N-08	6/8/09	E601	0 of 18	-	-	-	-	-

Analytes detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloro-ethene (total) (µg/L)	Bromo-dichloro-methane (µg/L)	Bromoform (µg/L)	Chloro-methane (µg/L)	Dibromo-chloro-methane (µg/L)
W-25N-09	6/8/09	E601	0 of 18	-	-	-	-	-
W-25N-11	2/19/09	E601	0 of 18	-	-	-	-	-
W-25N-11	6/2/09	E601	0 of 18	-	-	-	-	-
W-25N-11	8/19/09	E601	0 of 18	-	-	-	-	-
W-25N-11	11/17/09	E601	0 of 18	-	-	-	-	-
W-25N-12	2/19/09	E601	0 of 18	-	-	-	-	-
W-25N-12	6/2/09	E601	0 of 18	-	-	-	-	-
W-25N-12	8/19/09	E601	0 of 18	-	-	-	-	-
W-25N-12	11/17/09	E601	0 of 18	-	-	-	-	-
W-25N-13	2/19/09	E601	0 of 18	-	-	-	-	-
W-25N-13	6/2/09	E601	0 of 18	-	-	-	-	-
W-25N-13	8/19/09	E601	0 of 18	-	-	-	-	-
W-25N-13	11/17/09	E601	0 of 18	-	-	-	-	-
W-25N-15	6/3/09	E601	0 of 18	-	-	-	-	-
W-25N-20	5/6/09	E601	0 of 18	-	-	-	-	-
W-25N-21	6/8/09	E601	0 of 18	-	-	-	-	-
W-25N-22	6/8/09	E601	0 of 18	-	-	-	-	-
W-25N-23	6/10/09	E601	0 of 18	-	-	-	-	-
W-25N-23	06/10/09 DUP	E601	0 of 18	-	-	-	-	-
W-25N-23	12/14/09	E601	0 of 18	-	-	-	-	-
W-25N-24	6/8/09	E601	0 of 18	-	-	-	-	-
W-25N-24	11/18/09	E601	0 of 18	-	-	-	-	-
W-25N-25	6/8/09	E601	0 of 18	-	-	-	-	-
W-25N-26	6/3/09	E601	0 of 18	-	-	-	-	-
W-25N-28	6/3/09	E601	0 of 18	-	-	-	-	-
W-26R-01	5/6/09	E601	0 of 18	-	-	-	-	-
W-26R-01	6/24/09	E601	3 of 18	-	0.59	1.7	-	0.54
W-26R-01	6/24/09	E601	0 of 18	-	-	-	-	-
W-26R-01	6/24/09	E601	3 of 18	-	0.7	2.1	-	0.7
W-26R-01	6/24/09	E601	0 of 18	-	-	-	-	-
W-26R-01	11/4/09	E601	0 of 18	-	-	-	-	-
W-26R-01	11/04/09 DUP	E601	0 of 18	-	-	-	-	-
W-26R-02	6/8/09	E601	0 of 18	-	-	-	-	-
W-26R-03	6/8/09	E601	0 of 18	-	-	-	-	-
W-26R-03	11/18/09	E601	0 of 18	-	-	-	-	-
W-26R-04	6/8/09	E601	0 of 18	-	-	-	-	-
W-26R-04	6/24/09	E601	0 of 18	-	-	-	-	-
W-26R-04	6/24/09	E601	0 of 18	-	-	-	-	-
W-26R-04	6/24/09	E601	0 of 18	-	-	-	-	-
W-26R-04	6/24/09	E601	0 of 18	-	-	-	-	-
W-26R-04	11/30/09	E601	0 of 18	-	-	-	-	-
W-26R-05	5/11/09	E601	0 of 18	-	-	-	-	-
W-26R-05	11/9/09	E601	0 of 18	-	-	-	-	-
W-26R-06	6/8/09	E601	0 of 18	-	-	-	-	-
W-26R-06	11/30/09	E601	0 of 18	-	-	-	-	-
W-26R-06	11/30/09 DUP	E601	0 of 18	-	-	-	-	-
W-26R-07	6/8/09	E601	0 of 18	-	-	-	-	-
W-26R-08	6/8/09	E601	0 of 18	-	-	-	-	-
W-26R-11	5/11/09	E601	0 of 18	-	-	-	-	-
W-26R-11	11/4/09	E601	0 of 18	-	-	-	-	-
W-35A-01	6/4/09	E601	0 of 18	-	-	-	-	-
W-35A-01	12/14/09	E601	0 of 18	-	-	-	-	-

Analytes detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloro-ethene (total) (µg/L)	Bromo-dichloro-methane (µg/L)	Bromoform (µg/L)	Chloro-methane (µg/L)	Dibromo-chloro-methane (µg/L)
W-35A-02	6/4/09	E601	0 of 18	-	-	-	-	-
W-35A-02	12/15/09	E601	0 of 18	-	-	-	-	-
W-35A-03	6/2/09	E601	0 of 18	-	-	-	-	-
W-35A-03	12/3/09	E601	0 of 18	-	-	-	-	-
W-35A-04	5/13/09	E601	0 of 18	-	-	-	-	-
W-35A-04	12/16/09	E502.2	0 of 46	-	-	-	-	-
W-35A-04	12/16/09	E601	0 of 18	-	-	-	-	-
W-35A-04	12/16/09 DUP	E502.2	3 of 46	-	0.6 S	-	6 S	2 S
W-35A-04	12/16/09 DUP	E601	0 of 18	-	-	-	-	-
W-35A-05	6/4/09	E601	0 of 18	-	-	-	-	-
W-35A-05	12/14/09	E601	0 of 18	-	-	-	-	-
W-35A-06	6/2/09	E601	0 of 18	-	-	-	-	-
W-35A-06	12/3/09	E601	0 of 18	-	-	-	-	-
W-35A-07	6/4/09	E601	0 of 18	-	-	-	-	-
W-35A-07	12/8/09	E601	0 of 18	-	-	-	-	-
W-35A-08	3/24/09	E601	0 of 18	-	-	-	-	-
W-35A-08	6/4/09	E601	0 of 18	-	-	-	-	-
W-35A-08	9/15/09	E601	0 of 18	-	-	-	-	-
W-35A-08	12/15/09	E601	0 of 18	-	-	-	-	-
W-35A-09	6/4/09	E601	0 of 18	-	-	-	-	-
W-35A-09	12/15/09	E601	0 of 18	-	-	-	-	-
W-35A-10	6/4/09	E601	0 of 18	-	-	-	-	-
W-35A-10	12/8/09	E601	0 of 18	-	-	-	-	-
W-35A-10	12/08/09 DUP	E601	0 of 18	-	-	-	-	-
W-35A-11	6/2/09	E601	0 of 18	-	-	-	-	-
W-35A-11	12/3/09	E601	0 of 18	-	-	-	-	-
W-35A-12	6/2/09	E601	0 of 18	-	-	-	-	-
W-35A-12	12/3/09	E601	0 of 18	-	-	-	-	-
W-35A-13	6/2/09	E601	0 of 18	-	-	-	-	-
W-35A-13	12/3/09	E601	0 of 18	-	-	-	-	-
W-35A-13	12/03/09 DUP	E601	0 of 18	-	-	-	-	-
W-35A-14	3/24/09	E601	0 of 18	-	-	-	-	-
W-35A-14	6/4/09	E601	0 of 18	-	-	-	-	-
W-35A-14	9/15/09	E601	0 of 18	-	-	-	-	-
W-35A-14	12/15/09	E601	0 of 18	-	-	-	-	-
W-7A	12/2/09	E601	0 of 18	-	-	-	-	-
W-7B	6/18/09	E601	0 of 18	-	-	-	-	-
W-7B	12/2/09	E601	0 of 18	-	-	-	-	-
W-7B	12/02/09 DUP	E601	0 of 18	-	-	-	-	-
W-7D	6/10/09	E601	0 of 18	-	-	-	-	-
W-7DS	5/11/09	E601	0 of 18	-	-	-	-	-
W-7E	5/13/09	E601	0 of 18	-	-	-	-	-
W-7E	05/13/09 DUP	E601	0 of 18	-	-	-	-	-
W-7E	11/9/09	E601	0 of 18	-	-	-	-	-
W-7ES	5/13/09	E601	0 of 18	-	-	-	-	-
W-7ES	11/9/09	E601	0 of 18	-	-	-	-	-
W-7F	6/4/09	E601	0 of 18	-	-	-	-	-
W-7F	11/19/09	E601	0 of 18	-	-	-	-	-
W-7G	6/23/09	E601	0 of 18	-	-	-	-	-
W-7G	11/30/09	E601	0 of 18	-	-	-	-	-
W-7H	6/22/09	E601	0 of 18	-	-	-	-	-
W-7H	11/19/09	E601	0 of 18	-	-	-	-	-

Analytes detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloro-ethene (total) (µg/L)	Bromo-dichloro-methane (µg/L)	Bromoform (µg/L)	Chloro-methane (µg/L)	Dibromo-chloro-methane (µg/L)
W-7J	6/4/09	E601	0 of 18	-	-	-	-	-
W-7J	11/19/09	E601	0 of 18	-	-	-	-	-
W-7K	6/22/09	E601	0 of 18	-	-	-	-	-
W-7K	12/2/09	E601	0 of 18	-	-	-	-	-
W-7L	6/22/09	E601	0 of 18	-	-	-	-	-
W-7L	12/2/09	E601	0 of 18	-	-	-	-	-
W-7M	6/29/09	E601	0 of 18	-	-	-	-	-
W-7M	12/17/09	E601	0 of 18	-	-	-	-	-
W-7N	6/22/09	E601	0 of 18	-	-	-	-	-
W-7N	12/17/09	E601	0 of 18	-	-	-	-	-
W-7O	1/21/09	E601	0 of 18	-	-	-	-	-
W-7O	4/22/09	E601	0 of 18	-	-	-	-	-
W-7O	7/14/09	E601	0 of 18	-	-	-	-	-
W-7PS	2/3/09	E601	0 of 18	-	-	-	-	-
W-7PS	5/6/09	E601	0 of 18	-	-	-	-	-
W-7PS	8/11/09	E601	0 of 18	-	-	-	-	-
W-7PS	08/11/09 DUP	E601	0 of 18	-	-	-	-	-
W-7PS	11/4/09	E601	0 of 18	-	-	-	-	-
W-7Q	3/24/09	E601	0 of 18	-	-	-	-	-
W-7Q	6/22/09	E601	0 of 18	-	-	-	-	-
W-7Q	8/20/09	E601	0 of 18	-	-	-	-	-
W-7Q	12/8/09	E601	0 of 18	-	-	-	-	-
W-7R	1/21/09	E601	0 of 18	-	-	-	-	-
W-7R	4/22/09	E601	0 of 18	-	-	-	-	-
W-7R	7/14/09	E601	0 of 18	-	-	-	-	-
W-7R	11/3/09	E601	0 of 18	-	-	-	-	-
W-7S	2/26/09	E601	0 of 18	-	-	-	-	-
W-7S	6/18/09	E601	0 of 18	-	-	-	-	-
W-7S	8/20/09	E601	0 of 18	-	-	-	-	-
W-7S	12/8/09	E601	0 of 18	-	-	-	-	-
W-7T	2/26/09	E601	0 of 18	-	-	-	-	-
W-7T	6/18/09	E601	0 of 18	-	-	-	-	-
W-7T	8/20/09	E601	0 of 18	-	-	-	-	-
W-7T	12/8/09	E601	0 of 18	-	-	-	-	-
W-843-01	6/10/09	E601	0 of 18	-	-	-	-	-
W-843-01	12/16/09	E601	0 of 18	-	-	-	-	-
W-843-02	6/10/09	E601	0 of 18	-	-	-	-	-
W-843-02	12/16/09	E601	0 of 18	-	-	-	-	-
W-872-01	6/8/09	E601	0 of 18	-	-	-	-	-
W-872-01	12/17/09	E601	0 of 18	-	-	-	-	-
W-873-01	6/8/09	E601	0 of 18	-	-	-	-	-
W-873-01	12/14/09	E601	0 of 18	-	-	-	-	-
W-873-03	6/8/09	E601	0 of 18	-	-	-	-	-
W-873-03	12/14/09	E601	0 of 18	-	-	-	-	-
W-873-04	6/8/09	E601	0 of 18	-	-	-	-	-
W-873-04	12/14/09	E601	0 of 18	-	-	-	-	-
W-873-06	6/9/09	E601	0 of 18	-	-	-	-	-
W-873-06	06/09/09 DUP	E601	0 of 18	-	-	-	-	-
W-873-06	12/14/09	E601	0 of 18	-	-	-	-	-
W-873-07	4/22/09	E601	0 of 18	-	-	-	-	-
W-873-07	9/3/09	E601	0 of 18	-	-	-	-	-
W-873-07	11/3/09	E601	0 of 18	-	-	-	-	-

Analytes detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloro-ethene (total) (µg/L)	Bromo-dichloro-methane (µg/L)	Bromoform (µg/L)	Chloro-methane (µg/L)	Dibromo-chloro-methane (µg/L)
W-CGSA-1733	3/24/09	E601	0 of 18	-	-	-	-	-
W-CGSA-1733	6/18/09	E601	0 of 18	-	-	-	-	-
W-CGSA-1733	8/20/09	E601	0 of 18	-	-	-	-	-
W-CGSA-1736	6/18/09	E601	0 of 18	-	-	-	-	-
W-CGSA-1736	12/8/09	E601	0 of 18	-	-	-	-	-
W-CGSA-1737	6/18/09	E601	0 of 18	-	-	-	-	-
W-CGSA-1737	12/8/09	E601	0 of 18	-	-	-	-	-
W-CGSA-1739	3/24/09	E601	0 of 18	-	-	-	-	-
W-CGSA-1739	6/18/09	E601	0 of 18	-	-	-	-	-
W-CGSA-1739	8/20/09	E601	0 of 18	-	-	-	-	-
W-CGSA-1739	12/14/09	E601	0 of 18	-	-	-	-	-
W-875-01	6/9/09	E601	1 of 18	5.3	-	-	-	-
W-875-01	06/09/09 DUP	E601	1 of 18	6.8	-	-	-	-
W-875-01	12/17/09	E601	1 of 18	6.3	-	-	-	-
W-875-02	6/9/09	E601	0 of 18	-	-	-	-	-
W-875-02	12/17/09	E601	0 of 18	-	-	-	-	-
W-875-03	12/17/09	E601	0 of 18	-	-	-	-	-
W-875-04	6/10/09	E601	0 of 18	-	-	-	-	-
W-875-04	12/17/09	E601	1 of 18	1.6	-	-	-	-
W-875-05	6/16/09	E601	0 of 18	-	-	-	-	-
W-875-05	12/16/09	E601	0 of 18	-	-	-	-	-
W-875-06	6/16/09	E601	0 of 18	-	-	-	-	-
W-875-06	12/17/09	E601	0 of 18	-	-	-	-	-
W-875-07	4/22/09	E601	1 of 18	11	-	-	-	-
W-875-07	7/14/09	E601	1 of 18	12	-	-	-	-
W-875-08	3/3/09	E601	1 of 18	28	-	-	-	-
W-875-08	4/22/09	E601	1 of 18	24	-	-	-	-
W-875-08	7/14/09	E601	1 of 18	22	-	-	-	-
W-875-08	11/3/09	E601	1 of 18	28	-	-	-	-
W-875-11	1/21/09	E601	1 of 18	1.3	-	-	-	-
W-876-01	6/16/09	E601	0 of 18	-	-	-	-	-
W-876-01	06/16/09 DUP	E601	0 of 18	-	-	-	-	-
W-876-01	12/06/09 DUP	E601	0 of 18	-	-	-	-	-
W-876-01	12/16/09	E601	0 of 18	-	-	-	-	-
W-879-01	6/16/09	E601	0 of 18	-	-	-	-	-
W-879-01	12/16/09	E601	0 of 18	-	-	-	-	-
W-889-01	6/10/09	E601	1 of 18	1	-	-	-	-
W-889-01	12/16/09	E601	0 of 18	-	-	-	-	-

B-1.2. General Services Area Operable Unit metals in ground water.

Location	Date	Cadmium (mg/L)	Copper (mg/L)	Lead (mg/L)	Mercury (mg/L)	Potassium (mg/L)	Zinc (mg/L)
W-35A-01	6/4/09	<0.01	-	<0.002	-	-	-
W-35A-02	6/4/09	-	-	-	-	-	<0.01 O
W-35A-04	5/13/09	-	<0.01	-	-	-	-
W-35A-04	12/16/09	-	-	-	-	6	-
W-35A-04	12/16/09 DUP	-	-	-	-	6	-
W-35A-05	6/4/09	-	-	<0.002	-	-	-
W-7L	6/22/09	-	<0.01	-	-	-	-
W-7N	6/22/09	-	-	-	<0.0002	-	-
W-7O	4/22/09	-	<0.01	-	-	-	0.049
W-872-01	6/8/09	-	<0.01	<0.002	-	-	-
W-873-04	6/8/09	-	-	<0.002	-	-	-
W-873-06	6/9/09	<0.01	-	-	-	-	-
W-873-06	06/09/09 DUP	<0.01	-	-	-	-	-
W-875-01	6/9/09	<0.01	<0.01	<0.002	-	-	<0.01
W-875-01	06/09/09 DUP	<0.005	<0.01	<0.0002	-	-	<0.02
W-875-04	6/10/09	-	-	<0.002	-	-	-
W-875-07	4/22/09	-	-	<0.002	-	-	-

B-2.1. 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 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-834-1709	1/6/09	E601	11,000 D	44 D	680 D	<25 D	<25 D	44 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D
W-834-1709	8/12/09	E601	4,000 D	25 D	250 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 DJ
W-834-1711	1/6/09	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-834-1711	8/12/09	E601	920 D	1.1	0.62	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 J
W-834-1824	3/2/09	E601	0.62	<0.5	49	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-1824	5/19/09	E601	0.65	<0.5	25	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-1824	8/12/09	E601	1.2	<0.5	30	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	3.3
W-834-1824	12/3/09	E601	5.1	<0.5	4.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.6
W-834-1825	3/2/09	E601	1.1	<0.5	200 D	<25 D	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	140 D
W-834-1825	5/19/09	E601	5.1	<0.5	21	1.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	24
W-834-1825	8/12/09	E601	32	<0.5	8.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	11
W-834-1825	12/3/09	E601	<0.5	<0.5	4.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	51
W-834-1833	3/2/09	E601	10,000 D	<25 D	370 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D
W-834-1833	5/19/09	E601	7,600 D	18 D	230 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D
W-834-1833	8/12/09	E601	8,600 D	16 D	280 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D
W-834-1833	12/3/09	E601	6,400 D	11 D	160 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D
W-834-2001	1/29/09	E624	1,800 D	39 D	2,500 DJL	<50 D	<10 D	<10 D	<10 D	<10 D	<10 DL	<10 D	<10 D	<10 D	<10 D	<10 D
W-834-2001	4/20/09	E624	3,100 D	32 D	2,700 D	<50 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D
W-834-2001	7/8/09	E601	760 D	17 D	300 D	<50 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	10/20/09	E624	2,700 D	40 D	2,200 D	<50 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D	<10 D
W-834-2113	2/17/09	E601	8,100 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-834-2113	8/17/09	E601	14,000 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-834-2117	2/17/09	E601	13,000 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-834-2117	8/17/09	E601	9,900 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-834-2118	2/25/09	E601	210 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-834-2118	8/19/09	E601	110 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-834-2119	2/17/09	E624	14,000 D	<250 D	<250 D	<250 D	<250 D	<250 D	<250 D	<250 D	<250 D	<250 D	<250 D	<250 D	<500 D	<250 D
W-834-2119	8/17/09	E601	11,000 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-A1	2/18/09	E624	150,000 D	760 D	620 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	8/12/09	E601	170,000 D	900 D	3,700 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	1/29/09	E601	3,800 D	33 D	690 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-B2	4/20/09	E601	930 D	13 D	290 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	7/8/09	E601	1,800 D	14 D	320 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-B2	10/20/09	E601	2,800 DJ	25 D	810 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	1/29/09	E601	270 D	<2.5 D	1,900 D	<25 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	4.6 DJ	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D
W-834-B3	4/20/09	E601	660 D	<5 D	2,200 D	<25 D	<5 D	<5 D	<5 D	<5 D	7.1 D	<5 D	<5 D	<5 D	<5 D	<5 D
W-834-B3	7/8/09	E601	650 D	<5 D	2,400 D	<50 D	<5 D	<5 D	<5 D	<5 D	9.3 D	<5 D	<5 D	<5 D	<5 D	5.7 D
W-834-B3	10/20/09	E601	370 DJ	<5 D	2,100 D	<25 D	<5 D	<5 D	<5 D	<5 D	6.2 D	<5 D	<5 D	<5 D	<5 D	<5 D
W-834-B4	2/18/09	E601	810 DL	<5 D	3,000 D	<25 D	<5 D	<5 D	<5 D	<5 D	9.1 D	<5 D	<5 D	<5 D	<5 D	<5 D
W-834-C4	2/18/09	E601	84 L	<0.5	27	<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	8/12/09	E601	64	<0.5	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-C5	2/18/09	E601	19,000 DL	53 D	4,700 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-C5	8/12/09	E601	38,000 D	130 D	23,000 D	<250 D	<50 D	<50 D	<50 D	<50 D	87 D	<50 D	<50 D	<50 D	<50 D	<50 DJ
W-834-D3	2/18/09	E601	<5 DL	<5 D	3,100 D	<25 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	180 D
W-834-D3	8/12/09	E601	<5 D	<5 D	2,100 D	<25 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	93 DJ
W-834-D3	08/12/09 DUP	E601	26 DS	<5 D	2,300 D	<25 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	98 DJ
W-834-D4	1/29/09	E601	7,800 D	32 D	14,000 D	<250 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D
W-834-D4	4/20/09	E601	15,000 D	48 D	12,000 D	<250 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D
W-834-D4	7/8/09	E601	13,000 D	52 D	6,500 D	<250 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D
W-834-D4	10/20/09	E601	5,900 DJ	35 D	14,000 D	<250 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D	<25 D
W-834-D5	1/29/09	E601	1,500 D	<5 D	2,700 D	39 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	28 D

B-2.1. 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 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-834-D5	4/20/09	E601	2,000 D	<5 D	2,300 D	30 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	26 D
W-834-D5	7/8/09	E601	210 D	<0.5	210 D	<100 D	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-D6	1/29/09	E601	1,000 D	4.6 D	360 DJL	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 DL	<2.5 D	<2.5 D	<2.5 D	5.9 D	<2.5 D
W-834-D6	4/20/09	E601	2,700 D	9.1 D	510 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	<5 D	8.8 D	<5 D
W-834-D6	7/8/09	E601	3,700 D	9.8 D	750 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-D6	10/20/09	E601	430 DJ	1.9	120 D	<5 D	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	4.5	<0.5
W-834-D7	1/29/09	E624	3,500 D	14 D	150 DJL	<10 D	<10 D	<10 D	<10 D	<10 D	<10 DL	<10 D	<10 D	<10 D	<10 D	<10 D
W-834-D7	4/20/09	E601	3,900 D	12 D	200 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	7/8/09	E601	4,500 D	10 D	190 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	10/20/09	E601	7,800 DJ	22 D	200 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-D12	1/29/09	E624	230 D	<1	<1 L	<1	<1	<1	<1	<1	<1 L	<1	<1	<1	<1	<1
W-834-D12	4/20/09	E601	530 D	1.8	42	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.61	<0.5	<0.5	<0.5
W-834-D12	7/8/09	E601	540 D	1.8	44	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.64	<0.5	<0.5	<0.5
W-834-D12	10/20/09	E601	350 DJ	1.6	19	<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	1/29/09	E601	16,000 D	180 D	230 DJL	<25 D	<25 D	<25 D	<25 D	<25 D	<25 DL	<25 D	<25 D	<25 D	<25 D	<25 D
W-834-D13	4/20/09	E601	13,000 D	140 D	150 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-D13	7/8/09	E601	15,000 DJ	110 D	210 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-D13	10/20/09	E601	16,000 D	110 D	340 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-D18	2/19/09	E601	290 D	0.59	310 D	<5 D	<0.5	<0.5	<0.5	<0.5	1.6	<0.5	<0.5	<0.5	<0.5	0.54
W-834-D18	8/13/09	E601	240 D	0.51	270 D	<5 D	<0.5	<0.5	<0.5	<0.5	1.4	<0.5	<0.5	<0.5	<0.5	0.58
W-834-J1	1/29/09	E601	110 D	1.1	29 JL	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-J1	4/20/09	E601	130 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-834-J1	7/9/09	E601	24	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5 L	<0.5 L
W-834-J1	10/20/09	E601	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
W-834-J2	2/23/09	E601	210 D	<0.5	1.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-J2	02/23/09 DUP	E601	190 D	<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-834-J2	8/13/09	E601	83	<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-834-M1	2/23/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	1.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-M1	8/17/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	0.92	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-S1	1/21/09	E624	4,600 D	92 D	290 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-S1	4/20/09	E624	5,000 D	120 D	340 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-S1	8/4/09	E601	4,300 D	96 D	310 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	10/20/09	E624	3,400 D	59 D	240 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-S12A	1/29/09	E624	2,200 D	<10 D	<10 DL	<10 D	<10 D	<10 D	<10 D	<10 D	<10 DL	<10 D	<10 D	<10 D	<10 D	<10 D
W-834-S12A	4/20/09	E601	3,000 D	<5 D	5.9 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-S12A	7/9/09	E601	1,500 D	1.1	3.3	<0.5	<0.5	0.84	<0.5 L	<0.5	<0.5	<0.5	1.6	<0.5	<0.5	<0.5
W-834-S12A	10/20/09	E601	1,400 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-834-S13	1/29/09	E601	370 D	1.2	12 JL	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	0.53	<0.5	<0.5	<0.5
W-834-S13	4/20/09	E601	460 D	1.5	12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.63	<0.5	<0.5	<0.5
W-834-S13	7/9/09	E601	240 D	0.76	9.4	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-S13	07/09/09 DUP	E601	250 D	0.67	8.4	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-S13	10/20/09	E601	250 D	0.79	9.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-S4	1/21/09	E601	6.5	<0.5	<0.5	<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	8/4/09	E601	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-834-S4	08/04/09 DUP	E601	7.4	<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-834-S7	2/24/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-S7	8/19/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-S8	2/25/09	E624	3,800 D	56 D	57 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-S8	8/17/09	E601	5,600 D	83 D	72 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-S8	08/17/09 DUP	E601	4,900 D	130 D	91 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-S9	2/23/09	E624	2,400 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

B-2.1. 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 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-834-S9	02/23/09 DUP	E624	2,000 DH	<100 DH	<100 DH	<100 DH	<100 DH	<100 DH	<100 DH	<100 DH	<100 DH	<100 DH	<100 DH	<100 DH	<200 DH	<100 DH
W-834-S9	8/17/09	E601	1,900 D	3.8 D	3.6 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	08/17/09 DUP	E601	1,600 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	2/25/09	E601	<0.5	<0.5	<0.5	<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	6/1/09	E601	<0.5	<0.5	<0.5	<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	06/01/09 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-834-T1	8/18/09	E601	<0.5	<0.5	<0.5	<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	12/1/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-834-T2	3/2/09	E601	2	<0.5	32	2.4	<0.5	<0.5	<0.5	0.62	<0.5	<0.5	<0.5	<0.5	<0.5	15
W-834-T2	5/19/09	E601	1	<0.5	21	<0.5	<0.5	<0.5	<0.5	0.66	<0.5	<0.5	<0.5	<0.5	<0.5	12
W-834-T2	05/19/09 DUP	E601	4.6	<0.5	46 D	<0.5	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	<0.5	<0.5	22
W-834-T2	8/12/09	E601	6.9	<0.5	35	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	19
W-834-T2	12/3/09	E601	100	<0.5	430 D	<5 D	<0.5	<0.5	<0.5	0.51	1	<0.5	<0.5	<0.5	<0.5	190 D
W-834-T2A	3/2/09	E601	12,000 D	<25 D	120 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-T2A	8/12/09	E601	11,000 D	<25 D	110 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-T2D	3/2/09	E601	9,600 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-T2D	8/19/09	E601	8,100 D	14 D	<12 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-T3	2/25/09	E601	<0.5	<0.5	<0.5	<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	6/1/09	E601	<0.5	<0.5	<0.5	<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	8/18/09	E601	<0.5	<0.5	<0.5	<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	12/1/09	E601	<0.5	<0.5	<0.5	<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	2/25/09	E601	<0.5	<0.5	<0.5	<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	8/18/09	E601	<0.5	<0.5	<0.5	<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	2/19/09	E624	3,300 D	23 D	250 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-U1	02/19/09 DUP	E624	3,300 D	23 D	240 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-U1	4/29/09	E624	16,000 D	120 D	940 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	4/29/09	E624	37,000 D	260 D	4,500 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-U1	8/17/09	E601	51,000 D	280 D	11,000 D	<250 D	<50 D	<50 D	<50 D	<50 D	80 D	<50 D	<50 D	<50 D	<50 D	<50 D

Analytes detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloro-ethene (total) (µg/L)	Chloroethane (µg/L)	Methylene chloride (µg/L)
W-834-1709	1/6/09	E601	1 of 18	680 D	-	-
W-834-1709	8/12/09	E601	1 of 18	250 D	-	-
W-834-1711	1/6/09	E601	0 of 18	-	-	-
W-834-1711	8/12/09	E601	0 of 18	-	-	-
W-834-1824	3/2/09	E601	1 of 18	49	-	-
W-834-1824	5/19/09	E601	1 of 18	25	-	-
W-834-1824	8/12/09	E601	1 of 18	30	-	-
W-834-1824	12/3/09	E601	1 of 18	4.4	-	-
W-834-1825	3/2/09	E601	1 of 18	200 D	-	-
W-834-1825	5/19/09	E601	1 of 18	22	-	-
W-834-1825	8/12/09	E601	1 of 18	9.8	-	-
W-834-1825	12/3/09	E601	1 of 18	4.4	-	-
W-834-1833	3/2/09	E601	1 of 18	370 D	-	-
W-834-1833	5/19/09	E601	1 of 18	230 D	-	-
W-834-1833	8/12/09	E601	1 of 18	280 D	-	-
W-834-1833	12/3/09	E601	1 of 18	160 D	-	-
W-834-2001	1/29/09	E624	1 of 30	2,500 DJ	-	-
W-834-2001	4/20/09	E624	1 of 30	2,700 D	-	-

Analytes detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloro-ethene (total) (µg/L)	Chloroethane (µg/L)	Methylene chloride (µg/L)
W-834-2001	7/8/09	E601	1 of 18	300 D	-	-
W-834-2001	10/20/09	E624	1 of 30	2,200 D	-	-
W-834-2113	2/17/09	E601	0 of 18	-	-	-
W-834-2113	8/17/09	E601	0 of 18	-	-	-
W-834-2117	2/17/09	E601	0 of 18	-	-	-
W-834-2117	8/17/09	E601	0 of 18	-	-	-
W-834-2118	2/25/09	E601	0 of 18	-	-	-
W-834-2118	8/19/09	E601	0 of 18	-	-	-
W-834-2119	2/17/09	E624	0 of 30	-	-	-
W-834-2119	8/17/09	E601	0 of 18	-	-	-
W-834-A1	2/18/09	E624	1 of 30	620 D	-	-
W-834-A1	8/12/09	E601	1 of 18	3,700 D	-	-
W-834-B2	1/29/09	E601	1 of 18	690 D	-	-
W-834-B2	4/20/09	E601	1 of 18	290 D	-	-
W-834-B2	7/8/09	E601	1 of 18	320 D	-	-
W-834-B2	10/20/09	E601	1 of 18	810 D	-	-
W-834-B3	1/29/09	E601	1 of 18	1,900 D	-	-
W-834-B3	4/20/09	E601	1 of 18	2,200 D	-	-
W-834-B3	7/8/09	E601	1 of 18	2,400 D	-	-
W-834-B3	10/20/09	E601	1 of 18	2,100 D	-	-
W-834-B4	2/18/09	E601	1 of 18	3,000 D	-	-
W-834-C4	2/18/09	E601	1 of 18	27	-	-
W-834-C4	8/12/09	E601	1 of 18	83	-	-
W-834-C5	2/18/09	E601	1 of 18	4,700 D	-	-
W-834-C5	8/12/09	E601	1 of 18	23,000 D	-	-
W-834-D3	2/18/09	E601	1 of 18	3,100 D	-	-
W-834-D3	8/12/09	E601	1 of 18	2,100 D	-	-
W-834-D3	08/12/09 DUP	E601	1 of 18	2,300 D	-	-
W-834-D4	1/29/09	E601	1 of 18	14,000 D	-	-
W-834-D4	4/20/09	E601	1 of 18	12,000 D	-	-
W-834-D4	7/8/09	E601	1 of 18	6,500 D	-	-
W-834-D4	10/20/09	E601	1 of 18	14,000 D	-	-
W-834-D5	1/29/09	E601	1 of 18	2,700 D	-	-
W-834-D5	4/20/09	E601	1 of 18	2,300 D	-	-
W-834-D5	7/8/09	E601	1 of 18	210 D	-	-
W-834-D6	1/29/09	E601	1 of 18	360 DJ	-	-
W-834-D6	4/20/09	E601	1 of 18	510 D	-	-
W-834-D6	7/8/09	E601	1 of 18	750 D	-	-
W-834-D6	10/20/09	E601	1 of 18	120 D	-	-
W-834-D7	1/29/09	E624	1 of 30	150 DJ	-	-
W-834-D7	4/20/09	E601	1 of 18	200 D	-	-
W-834-D7	7/8/09	E601	1 of 18	190 D	-	-
W-834-D7	10/20/09	E601	1 of 18	200 D	-	-
W-834-D12	1/29/09	E624	0 of 30	-	-	-
W-834-D12	4/20/09	E601	1 of 18	42	-	-
W-834-D12	7/8/09	E601	1 of 18	44	-	-
W-834-D12	10/20/09	E601	1 of 18	19	-	-
W-834-D13	1/29/09	E601	1 of 18	230 DJ	-	-
W-834-D13	4/20/09	E601	1 of 18	150 D	-	-
W-834-D13	7/8/09	E601	1 of 18	210 D	-	-
W-834-D13	10/20/09	E601	1 of 18	340 D	-	-
W-834-D18	2/19/09	E601	1 of 18	310 D	-	-

Analytes detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloro-ethene (total) (µg/L)	Chloroethane (µg/L)	Methylene chloride (µg/L)
W-834-D18	8/13/09	E601	1 of 18	270 D	-	-
W-834-J1	1/29/09	E601	1 of 18	29 J	-	-
W-834-J1	4/20/09	E601	0 of 18	-	-	-
W-834-J1	7/9/09	E601	0 of 18	-	-	-
W-834-J1	10/20/09	E601	0 of 18	-	-	-
W-834-J2	2/23/09	E601	1 of 18	1.9	-	-
W-834-J2	02/23/09 DUP	E601	1 of 18	2	-	-
W-834-J2	8/13/09	E601	0 of 18	-	-	-
W-834-M1	2/23/09	E601	0 of 18	-	-	-
W-834-M1	8/17/09	E601	0 of 18	-	-	-
W-834-S1	1/21/09	E624	1 of 30	290 D	-	-
W-834-S1	4/20/09	E624	1 of 30	340 D	-	-
W-834-S1	8/4/09	E601	1 of 18	310 D	-	-
W-834-S1	10/20/09	E624	1 of 30	240 D	-	-
W-834-S12A	1/29/09	E624	0 of 30	-	-	-
W-834-S12A	4/20/09	E601	0 of 18	-	-	-
W-834-S12A	7/9/09	E601	1 of 18	3.3	-	-
W-834-S12A	10/20/09	E601	0 of 18	-	-	-
W-834-S13	1/29/09	E601	1 of 18	12 J	-	-
W-834-S13	4/20/09	E601	1 of 18	12	-	-
W-834-S13	7/9/09	E601	1 of 18	9.4	-	-
W-834-S13	07/09/09 DUP	E601	1 of 18	8.4	-	-
W-834-S13	10/20/09	E601	1 of 18	9.2	-	-
W-834-S4	1/21/09	E601	0 of 18	-	-	-
W-834-S4	8/4/09	E601	0 of 18	-	-	-
W-834-S4	08/04/09 DUP	E601	0 of 18	-	-	-
W-834-S7	2/24/09	E601	0 of 18	-	-	-
W-834-S7	8/19/09	E601	0 of 18	-	-	-
W-834-S8	2/25/09	E624	1 of 30	57 D	-	-
W-834-S8	8/17/09	E601	1 of 18	72 D	-	-
W-834-S8	08/17/09 DUP	E601	0 of 18	-	-	-
W-834-S9	2/23/09	E624	0 of 30	-	-	-
W-834-S9	02/23/09 DUP	E624	0 of 30	-	-	-
W-834-S9	8/17/09	E601	0 of 18	-	-	-
W-834-S9	08/17/09 DUP	E601	0 of 18	-	-	-
W-834-T1	2/25/09	E601	0 of 18	-	-	-
W-834-T1	6/1/09	E601	0 of 18	-	-	-
W-834-T1	06/01/09 DUP	E601	0 of 18	-	-	-
W-834-T1	8/18/09	E601	0 of 18	-	-	-
W-834-T1	12/1/09	E601	0 of 18	-	-	-
W-834-T2	3/2/09	E601	1 of 18	34	-	-
W-834-T2	5/19/09	E601	1 of 18	21	-	-
W-834-T2	05/19/09 DUP	E601	2 of 18	61	-	0.8
W-834-T2	8/12/09	E601	1 of 18	36	-	-
W-834-T2	12/3/09	E601	2 of 18	430 D	1.4	-
W-834-T2A	3/2/09	E601	1 of 18	120 D	-	-
W-834-T2A	8/12/09	E601	1 of 18	110 D	-	-
W-834-T2D	3/2/09	E601	0 of 18	-	-	-
W-834-T2D	8/19/09	E601	0 of 18	-	-	-
W-834-T3	2/25/09	E601	0 of 18	-	-	-
W-834-T3	6/1/09	E601	0 of 18	-	-	-
W-834-T3	8/18/09	E601	0 of 18	-	-	-

Analytes detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloro-ethene (total) (µg/L)	Chloroethane (µg/L)	Methylene chloride (µg/L)
W-834-T3	12/1/09	E601	0 of 18	-	-	-
W-834-T5	2/25/09	E601	0 of 18	-	-	-
W-834-T5	8/18/09	E601	0 of 18	-	-	-
W-834-U1	2/19/09	E624	1 of 30	250 D	-	-
W-834-U1	02/19/09 DUP	E624	1 of 30	240 D	-	-
W-834-U1	4/29/09	E624	1 of 30	940 D	-	-
W-834-U1	4/29/09	E624	1 of 30	4,600 D	-	-
W-834-U1	8/17/09	E601	1 of 18	11,000 D	-	-

B-2.2. Building 834 Operable Unit nitrate and perchlorate in ground water.

Location	Date	Nitrate (as NO3) (mg/L)	Perchlorate (µg/L)
W-834-1709	1/6/09	3.3	-
W-834-1709	8/12/09	-	<4
W-834-1711	1/6/09	93	-
W-834-1824	3/2/09	<1 D	-
W-834-1833	3/2/09	47	-
W-834-2001	1/29/09	16	-
W-834-2113	2/17/09	82 D	-
W-834-2117	2/17/09	67 D	-
W-834-2118	2/25/09	110 D	<4
W-834-2118	8/19/09	-	4.1 L
W-834-2119	2/17/09	82 D	-
W-834-A1	2/18/09	2.4	-
W-834-B2	1/29/09	54	-
W-834-B3	1/29/09	20	-
W-834-B4	2/18/09	7.9	-
W-834-C4	2/18/09	33	-
W-834-C5	2/18/09	58	-
W-834-D3	2/18/09	<0.5	-
W-834-D4	1/29/09	<0.5	-
W-834-D5	1/29/09	<0.5	-
W-834-D6	1/29/09	32	-
W-834-D7	1/29/09	57	-
W-834-D12	1/29/09	61	-
W-834-D13	1/29/09	25	-
W-834-D18	2/19/09	64	-
W-834-J1	1/29/09	130	-
W-834-J2	2/23/09	190 D	-
W-834-J2	02/23/09 DUP	210 D	-
W-834-M1	2/23/09	300 D	-
W-834-S1	1/21/09	94 D	-
W-834-S1	8/4/09	110 D	-
W-834-S12A	1/29/09	100	-
W-834-S13	1/29/09	99	-
W-834-S4	1/21/09	160 D	-
W-834-S4	8/4/09	170 DO	-
W-834-S4	08/04/09 DUP	140 DL	-
W-834-S7	2/24/09	310 D	11
W-834-S7	8/19/09	-	11
W-834-S8	2/25/09	83	-
W-834-S9	2/23/09	92 D	-
W-834-S9	02/23/09 DUP	78 D	-
W-834-T1	2/25/09	0.89	-
W-834-T1	8/18/09	<0.5	-
W-834-T2	3/2/09	<0.5	-
W-834-T2A	3/2/09	61	-
W-834-T2D	3/2/09	100 D	-

B-2.2. Building 834 Operable Unit nitrate and perchlorate in ground water.

Location	Date	Nitrate (as NO3) (mg/L)	Perchlorate (µg/L)
W-834-T3	2/25/09	<0.5	-
W-834-T3	8/18/09	<0.5	-
W-834-T5	2/25/09	91 D	-
W-834-U1	2/19/09	2.7	-
W-834-U1	02/19/09 DUP	2.6	-

B-2.3. Building 834 Operable Unit tetrabutyl orthosilicate (TBOS) and tetrakis (2-ethylbutyl) silane (TKEBS) in ground water.

Location	Date	TBOS/TKEBS (µg/L)
W-834-1709	1/6/09	66 D
W-834-2001	1/29/09	<10
W-834-2001	7/8/09	<10
W-834-2113	2/17/09	<10
W-834-2117	2/17/09	<10
W-834-2118	2/25/09	<10
W-834-2119	2/17/09	<10
W-834-A1	2/18/09	<10 D
W-834-B2	1/29/09	37
W-834-B2	7/8/09	<10
W-834-B3	1/29/09	35
W-834-B3	7/8/09	<10
W-834-C4	2/18/09	120 D
W-834-C5	2/18/09	170 D
W-834-D3	2/18/09	270,000 D
W-834-D4	1/29/09	22
W-834-D4	7/8/09	1,100 D
W-834-D5	1/29/09	<10
W-834-D5	7/8/09	<10
W-834-D6	1/29/09	<10
W-834-D6	7/8/09	<10
W-834-D7	1/29/09	<10
W-834-D7	7/8/09	<10
W-834-D12	1/29/09	23
W-834-D12	7/8/09	34
W-834-D13	1/29/09	<10
W-834-D13	7/8/09	<10
W-834-D18	2/19/09	<10 D
W-834-J1	1/29/09	<10
W-834-J1	7/9/09	<10
W-834-J2	2/23/09	<10 D
W-834-J2	02/23/09 DUP	<10 D
W-834-M1	2/23/09	<11 D
W-834-S1	1/21/09	<10 D
W-834-S1	8/4/09	<50 D
W-834-S12A	1/29/09	<10
W-834-S12A	7/9/09	<10
W-834-S13	1/29/09	<10
W-834-S13	7/9/09	<10
W-834-S13	07/09/09 DUP	<10
W-834-S4	8/4/09	<50 D
W-834-S4	08/04/09 DUP	<10
W-834-S7	2/24/09	<11 D
W-834-S8	2/25/09	<10 D
W-834-S9	2/23/09	<11 D
W-834-S9	02/23/09 DUP	<10
W-834-T1	2/25/09	<10
W-834-T1	8/18/09	<10
W-834-T2A	8/12/09	<10
W-834-T3	2/25/09	<10
W-834-T3	8/18/09	<10
W-834-T5	2/25/09	<10
W-834-U1	2/19/09	110 D
W-834-U1	02/19/09 DUP	88 D

B-2.4. 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	1/29/09	1,200	-
W-834-2001	7/8/09	110,000 D	-
W-834-A1	2/18/09	-	<200 D
W-834-D6	1/29/09	-	<200
W-834-D6	7/8/09	-	<200
W-834-D7	1/29/09	-	<200
W-834-D7	7/8/09	-	<200
W-834-D12	1/29/09	-	<200
W-834-D12	7/8/09	-	<200
W-834-S1	1/21/09	-	<200 DE
W-834-S1	4/20/09	-	<200
W-834-S8	2/25/09	-	<200
W-834-S9	2/23/09	-	<200
W-834-S9	02/23/09 DUP	<50	-
W-834-U1	2/19/09	<200	-
W-834-U1	02/19/09 DUP	<200	-

B-2.5. Building 834 Operable Unit metals in ground water.

Location	Date	Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Iron (mg/L)	Lead (mg/L)	Manganese (mg/L)	Mercury (mg/L)	Selenium (mg/L)	Silver (mg/L)
W-834-1711	8/12/09	<0.05	0.04	<0.001	0.013	-	<0.005	-	<0.0002	<0.05	<0.001
W-834-1824	12/3/09	<0.25 D	-	-	-	26 D	-	0.23 D	-	-	-
W-834-1825	8/12/09	<1 DL	-	-	<0.2 D	-	-	10 D	-	<1 D	-
W-834-1825	12/3/09	<0.25 D	-	-	-	2.7 D	-	2.4 D	-	-	-
W-834-1833	8/12/09	<0.05 L	-	-	<0.01	-	-	0.047	-	<0.05	-
W-834-1833	12/3/09	<0.05	-	-	-	<0.1	-	0.013	-	-	-
W-834-T1	12/1/09	<0.05	-	-	<0.01	<0.1	-	0.13	-	<0.05	-
W-834-T2	8/12/09	<0.1 DL	-	-	<0.02 D	-	-	0.83 D	-	<0.1 D	-
W-834-T2	12/3/09	<0.05	-	-	-	<0.1	-	0.92	-	-	-

B-2.6. Building 834 Operable Unit general minerals in ground water.

Constituents of concern	W-834-1825 8/12/09	W-834-1833 8/12/09	W-834-2119 8/17/09	W-834-T2 8/12/09
Total Alkalinity (as CaCO3) (mg/L)	9,900	360	200	1,100
Aluminum (mg/L)	<2 D	<0.2	<0.05	<0.4 D
Bicarbonate Alk (as CaCO3) (mg/L)	9,900 D	360 D	190	1,100 D
Calcium (mg/L)	290 D	22	25	52 D
Carbonate Alk (as CaCO3) (mg/L)	<160 D	<8.2 D	11	<8.2 D
Chloride (mg/L)	670 D	180	200 D	96
Copper (mg/L)	<0.5 D	<0.05	<0.01	<0.1 D
Fluoride (mg/L)	<1 D	0.92	0.88 HL	0.85
Hydroxide Alk (as CaCO3) (mg/L)	<160 D	<8.2 D	<10	<8.2 D
Iron (mg/L)	1.3 D	<0.1	<0.1	<0.2 D
Magnesium (mg/L)	480 D	20	20	57 D
Manganese (mg/L)	10 D	0.048	<0.03	0.84 D
Nickel (mg/L)	<1 D	<0.1	<0.1	<0.2 D
Nitrate (as N) (mg/L)	<2 D	8.4	20 D	0.29
Nitrate (as NO3) (mg/L)	<0.44	37	87 D	<0.5
Nitrite (as N) (mg/L)	<0.05	<0.05	<0.1	<0.05
pH (Units)	7.13 H	8.14	8.3 H	7.71
Ortho-Phosphate (mg/L)	0.68	0.52	<0.1	<0.05
Total Phosphorus (as P) (mg/L)	3.4 DH	0.19 H	-	0.064 H
Total Phosphorus (as PO4) (mg/L)	-	-	<0.1 H	-
Potassium (mg/L)	54 D	13	14	12 D
Sodium (mg/L)	5,100 D	240	200 D	370 D
Total dissolved solids (TDS) (mg/L)	25,000 DH	840 DH	780 H	1,500 DH
Specific Conductance (µmhos/cm)	17,100 H	1,310	1,300 H	2,070
Sulfate (mg/L)	<20 D	74	51 D	<1
Surfactants (mg/L)	<0.5	<0.5	<0.5	<0.5
Total Hardness (as CaCO3) (mg/L)	2,700	140	140	370
Zinc (mg/L)	<0.5 D	<0.05	<0.01	<0.1 D

B-3.1. 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)
CARNRW1	1/7/09	E601	<0.5	<0.5	<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	1/7/09	E624	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
CARNRW1	01/07/09 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	01/07/09 DUP	E624	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
CARNRW1	2/2/09	E601	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW1	02/02/09 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	3/2/09	E601	<0.5	<0.5	<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	03/02/09 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	4/1/09	E601	<0.5	<0.5	<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	4/1/09	E624	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
CARNRW1	04/01/09 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	04/01/09 DUP	E624	<0.5	<1	<1	<1	<1	<1 L	<1	<1	<1 L	<1	<1	<1	<1	<1
CARNRW1	5/4/09	E601	<0.5	<0.5	<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	05/04/09 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	6/1/09	E601	<0.5	<0.5	<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	06/01/09 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	7/7/09	E601	<0.5	<0.5	<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	7/7/09	E624	<0.5	<1	<1	<1	<1	<1	<1 L	<1	<1	<1	<1	<1	<1	<1
CARNRW1	07/07/09 DUP	E601	<0.5 O	<0.5	<0.5	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW1	07/07/09 DUP	E624	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
CARNRW1	8/3/09	E601	<0.5	<0.5	<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	08/03/09 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	9/1/09	E601	<0.5	<0.5	<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	09/01/09 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	10/5/09	E601	<0.5	<0.5	<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	10/5/09	E624	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
CARNRW1	10/05/09 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	10/05/09 DUP	E624	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
CARNRW1	11/3/09	E601	<0.5	<0.5	<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	11/03/09 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	12/1/09	E601	<0.5	<0.5	<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	12/01/09 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	1/7/09	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	1/7/09	E601	<0.5	<0.5	<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	01/07/09 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	01/07/09 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	2/2/09	E601	<0.5	<0.5	<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	02/02/09 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	3/2/09	E601	<0.5	<0.5	<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	03/02/09 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	4/1/09	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	4/1/09	E601	<0.5	<0.5	<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	04/01/09 DUP	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<1	<0.5
CARNRW2	04/01/09 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	5/4/09	E601	<0.5	<0.5	<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	05/04/09 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	6/1/09	E601	<0.5	<0.5	<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	06/01/09 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	7/7/09	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW2	7/7/09	E601	<0.5	<0.5	<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	07/07/09 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

B-3.1. 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	07/07/09 DUP	E601	<0.5 O	<0.5	<0.5	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW2	8/3/09	E601	<0.5	<0.5	<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	08/03/09 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	9/1/09	E601	<0.5	<0.5	<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	09/01/09 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	10/5/09	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	10/5/09	E601	<0.5	<0.5	<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	10/05/09 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	10/05/09 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	11/3/09	E601	<0.5	<0.5	<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	11/03/09 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	12/1/09	E601	<0.5	<0.5	<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	12/01/09 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	1/7/09	E601	<0.5	<0.5	<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	01/07/09 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	2/2/09	E601	<0.5	<0.5	<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	02/02/09 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	3/2/09	E601	<0.5	<0.5	<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	03/02/09 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	4/1/09	E601	<0.5	<0.5	<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	04/01/09 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	5/4/09	E601	<0.5	<0.5	<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	05/04/09 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	6/1/09	E601	<0.5	<0.5	<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	06/01/09 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	7/7/09	E601	<0.5	<0.5	<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	07/07/09 DUP	E601	<0.5 O	<0.5	<0.5	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CARNRW3	8/3/09	E601	<0.5	<0.5	<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	08/03/09 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	9/1/09	E601	<0.5	<0.5	<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	09/01/09 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	10/5/09	E601	<0.5	<0.5	<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	10/05/09 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	11/3/09	E601	<0.5	<0.5	<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	11/03/09 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	12/1/09	E601	<0.5	<0.5	<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	12/01/09 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	1/7/09	E601	<0.5	<0.5	<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	01/07/09 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	2/2/09	E601	<0.5	<0.5	<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	02/02/09 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	3/2/09	E601	<0.5	<0.5	<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	03/02/09 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	4/1/09	E601	<0.5	<0.5	<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	04/01/09 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	5/4/09	E601	<0.5	<0.5	<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	05/04/09 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	6/1/09	E601	<0.5	<0.5	<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	06/01/09 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	7/7/09	E601	<0.5	<0.5	<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	07/07/09 DUP	E601	<0.5 O	<0.5	<0.5	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

B-3.1. 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)
CARNRW4	8/3/09	E601	<0.5	<0.5	<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	08/03/09 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	9/1/09	E601	<0.5	<0.5	<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	09/01/09 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	10/6/09	E601	<0.5	<0.5	<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	10/06/09 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	11/3/09	E601	<0.5	<0.5	<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	11/03/09 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	12/1/09	E601	<0.5	<0.5	<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	12/01/09 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
BC6-10	3/19/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
BC6-10	7/27/09	E601	<0.5	<0.5	<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	1/12/09	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
EP6-06	5/5/09	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
EP6-06	7/9/09	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
EP6-06	10/8/09	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
EP6-07	3/19/09	E601	<0.5	<0.5	<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	7/27/09	E601	<0.5	<0.5	<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	1/14/09	E8260	8.9	<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
EP6-09	01/14/09 DUP	E8260	8.5	<0.5	<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	5/5/09	E8260	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
EP6-09	7/8/09	E8260	8.7	<0.5	<0.5	<0.5 J	<0.5	<0.5	<0.5 L	<0.5 E	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 J
EP6-09	10/8/09	E8260	8.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 E	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
EP6-09	10/08/09 DUP	E8260	9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 E	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-PIT6-1819	3/19/09	E601	<0.5	<0.5	<0.5	<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	6/9/09	E601	<0.5	<0.5	<0.5	<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	06/09/09 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-PIT6-1819	7/28/09	E601	<0.5	<0.5	<0.5	<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	10/5/09	E601	<0.5	<0.5	<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	3/19/09	E601	<0.5	<0.5	<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	9/21/09	E601	<0.5	<0.5	<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	1/12/09	E8260	<0.5	<0.5	1.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K6-01S	5/5/09	E8260	<0.5	<0.5	2.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K6-01S	05/05/09 DUP	E8260	<0.5	<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
K6-01S	7/8/09	E8260	<0.5	<0.5	2	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K6-01S	10/8/09	E8260	<0.5 E	<0.5	2.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K6-03	3/19/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K6-03	7/28/09	E601	<0.5	<0.5	<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	3/23/09	E601	<0.5	<0.5	<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	7/27/09	E601	<0.5	<0.5	<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	3/23/09	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
K6-16	7/27/09	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
K6-16	07/27/09 DUP	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
K6-17	2/5/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K6-17	02/05/09 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
K6-17	6/9/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K6-17	8/6/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K6-17	08/06/09 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
K6-17	10/5/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K6-17	10/05/09 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
K6-18	3/19/09	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

B-3.1. 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)
K6-18	03/19/09 DUP	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
K6-18	7/28/09	E601	2.2	<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
K6-19	1/12/09	E8260	2.7	<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	01/12/09 DUP	E8260	2.6	<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	5/5/09	E8260	<0.5 E	<0.5	<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	7/8/09	E8260	2.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K6-19	07/08/09 DUP	E8260	2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K6-19	10/8/09	E8260	3.3	<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
K6-22	3/19/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K6-22	6/9/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K6-22	7/28/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K6-22	10/5/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K6-23	2/5/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K6-23	8/6/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K6-25	3/23/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K6-25	7/27/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K6-26	3/19/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K6-26	7/28/09	E601	<0.5	<0.5	<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	3/19/09	E601	<0.5	<0.5	<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	7/28/09	E601	<0.5	<0.5	<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	3/19/09	E601	<0.5	<0.5	<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	6/9/09	E601	<0.5	<0.5	<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	7/28/09	E601	<0.5	<0.5	<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	10/5/09	E601	<0.5	<0.5	<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	3/19/09	E601	<0.5	<0.5	<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	7/27/09	E601	<0.5	<0.5	<0.5	<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	3/24/09	E601	<0.5	<0.5	<0.5	<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	7/30/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-34-01	3/23/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-34-02	3/23/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Analytes detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloro-ethene (total) (µg/L)	Acetone (µg/L)
CARNRW1	1/7/09	E601	0 of 18	-	-
CARNRW1	1/7/09	E624	0 of 30	-	-
CARNRW1	01/07/09 DUP	E601	0 of 18	-	-
CARNRW1	01/07/09 DUP	E624	0 of 30	-	-
CARNRW1	2/2/09	E601	0 of 18	-	-
CARNRW1	02/02/09 DUP	E601	0 of 18	-	-
CARNRW1	3/2/09	E601	0 of 18	-	-
CARNRW1	03/02/09 DUP	E601	0 of 18	-	-
CARNRW1	4/1/09	E601	0 of 18	-	-
CARNRW1	4/1/09	E624	0 of 30	-	-
CARNRW1	04/01/09 DUP	E601	0 of 18	-	-
CARNRW1	04/01/09 DUP	E624	0 of 30	-	-
CARNRW1	5/4/09	E601	0 of 18	-	-
CARNRW1	05/04/09 DUP	E601	0 of 18	-	-
CARNRW1	6/1/09	E601	0 of 18	-	-
CARNRW1	06/01/09 DUP	E601	0 of 18	-	-

Analytes detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloro-ethene (total) (µg/L)	Acetone (µg/L)
CARNRW1	7/7/09	E601	0 of 18	-	-
CARNRW1	7/7/09	E624	0 of 30	-	-
CARNRW1	07/07/09 DUP	E601	0 of 18	-	-
CARNRW1	07/07/09 DUP	E624	0 of 30	-	-
CARNRW1	8/3/09	E601	0 of 18	-	-
CARNRW1	08/03/09 DUP	E601	0 of 18	-	-
CARNRW1	9/1/09	E601	0 of 18	-	-
CARNRW1	09/01/09 DUP	E601	0 of 18	-	-
CARNRW1	10/5/09	E601	0 of 18	-	-
CARNRW1	10/5/09	E624	0 of 30	-	-
CARNRW1	10/05/09 DUP	E601	0 of 18	-	-
CARNRW1	10/05/09 DUP	E624	0 of 30	-	-
CARNRW1	11/3/09	E601	0 of 18	-	-
CARNRW1	11/03/09 DUP	E601	0 of 18	-	-
CARNRW1	12/1/09	E601	0 of 18	-	-
CARNRW1	12/01/09 DUP	E601	0 of 18	-	-
CARNRW2	1/7/09	E502.2	0 of 46	-	-
CARNRW2	1/7/09	E601	0 of 18	-	-
CARNRW2	01/07/09 DUP	E502.2	0 of 45	-	-
CARNRW2	01/07/09 DUP	E601	0 of 18	-	-
CARNRW2	2/2/09	E601	0 of 18	-	-
CARNRW2	02/02/09 DUP	E601	0 of 18	-	-
CARNRW2	3/2/09	E601	0 of 18	-	-
CARNRW2	03/02/09 DUP	E601	0 of 18	-	-
CARNRW2	4/1/09	E502.2	0 of 46	-	-
CARNRW2	4/1/09	E601	0 of 18	-	-
CARNRW2	04/01/09 DUP	E502.2	0 of 45	-	-
CARNRW2	04/01/09 DUP	E601	0 of 18	-	-
CARNRW2	5/4/09	E601	0 of 18	-	-
CARNRW2	05/04/09 DUP	E601	0 of 18	-	-
CARNRW2	6/1/09	E601	0 of 18	-	-
CARNRW2	06/01/09 DUP	E601	0 of 18	-	-
CARNRW2	7/7/09	E502.2	0 of 46	-	-
CARNRW2	7/7/09	E601	0 of 18	-	-
CARNRW2	07/07/09 DUP	E502.2	0 of 45	-	-
CARNRW2	07/07/09 DUP	E601	0 of 18	-	-
CARNRW2	8/3/09	E601	0 of 18	-	-
CARNRW2	08/03/09 DUP	E601	0 of 18	-	-
CARNRW2	9/1/09	E601	0 of 18	-	-
CARNRW2	09/01/09 DUP	E601	0 of 18	-	-
CARNRW2	10/5/09	E502.2	0 of 46	-	-
CARNRW2	10/5/09	E601	0 of 18	-	-
CARNRW2	10/05/09 DUP	E502.2	0 of 45	-	-
CARNRW2	10/05/09 DUP	E601	0 of 18	-	-
CARNRW2	11/3/09	E601	0 of 18	-	-
CARNRW2	11/03/09 DUP	E601	0 of 18	-	-
CARNRW2	12/1/09	E601	0 of 18	-	-
CARNRW2	12/01/09 DUP	E601	0 of 18	-	-
CARNRW3	1/7/09	E601	0 of 18	-	-
CARNRW3	01/07/09 DUP	E601	0 of 18	-	-
CARNRW3	2/2/09	E601	0 of 18	-	-
CARNRW3	02/02/09 DUP	E601	0 of 18	-	-

Analytes detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloro-ethene (total) (µg/L)	Acetone (µg/L)
CARNRW3	3/2/09	E601	0 of 18	-	-
CARNRW3	03/02/09 DUP	E601	0 of 18	-	-
CARNRW3	4/1/09	E601	0 of 18	-	-
CARNRW3	04/01/09 DUP	E601	0 of 18	-	-
CARNRW3	5/4/09	E601	0 of 18	-	-
CARNRW3	05/04/09 DUP	E601	0 of 18	-	-
CARNRW3	6/1/09	E601	0 of 18	-	-
CARNRW3	06/01/09 DUP	E601	0 of 18	-	-
CARNRW3	7/7/09	E601	0 of 18	-	-
CARNRW3	07/07/09 DUP	E601	0 of 18	-	-
CARNRW3	8/3/09	E601	0 of 18	-	-
CARNRW3	08/03/09 DUP	E601	0 of 18	-	-
CARNRW3	9/1/09	E601	0 of 18	-	-
CARNRW3	09/01/09 DUP	E601	0 of 18	-	-
CARNRW3	10/5/09	E601	0 of 18	-	-
CARNRW3	10/05/09 DUP	E601	0 of 18	-	-
CARNRW3	11/3/09	E601	0 of 18	-	-
CARNRW3	11/03/09 DUP	E601	0 of 18	-	-
CARNRW3	12/1/09	E601	0 of 18	-	-
CARNRW3	12/01/09 DUP	E601	0 of 18	-	-
CARNRW4	1/7/09	E601	0 of 18	-	-
CARNRW4	01/07/09 DUP	E601	0 of 18	-	-
CARNRW4	2/2/09	E601	0 of 18	-	-
CARNRW4	02/02/09 DUP	E601	0 of 18	-	-
CARNRW4	3/2/09	E601	0 of 18	-	-
CARNRW4	03/02/09 DUP	E601	0 of 18	-	-
CARNRW4	4/1/09	E601	0 of 18	-	-
CARNRW4	04/01/09 DUP	E601	0 of 18	-	-
CARNRW4	5/4/09	E601	0 of 18	-	-
CARNRW4	05/04/09 DUP	E601	0 of 18	-	-
CARNRW4	6/1/09	E601	0 of 18	-	-
CARNRW4	06/01/09 DUP	E601	0 of 18	-	-
CARNRW4	7/7/09	E601	0 of 18	-	-
CARNRW4	07/07/09 DUP	E601	0 of 18	-	-
CARNRW4	8/3/09	E601	0 of 18	-	-
CARNRW4	08/03/09 DUP	E601	0 of 18	-	-
CARNRW4	9/1/09	E601	0 of 18	-	-
CARNRW4	09/01/09 DUP	E601	0 of 18	-	-
CARNRW4	10/6/09	E601	0 of 18	-	-
CARNRW4	10/06/09 DUP	E601	0 of 18	-	-
CARNRW4	11/3/09	E601	0 of 18	-	-
CARNRW4	11/03/09 DUP	E601	0 of 18	-	-
CARNRW4	12/1/09	E601	0 of 18	-	-
CARNRW4	12/01/09 DUP	E601	0 of 18	-	-
BC6-10	3/19/09	E601	0 of 18	-	-
BC6-10	7/27/09	E601	0 of 18	-	-
EP6-06	1/12/09	E8260	0 of 36	-	-
EP6-06	5/5/09	E8260	0 of 36	-	-
EP6-06	7/9/09	E8260	0 of 36	-	-
EP6-06	10/8/09	E8260	0 of 36	-	-
EP6-07	3/19/09	E601	0 of 18	-	-
EP6-07	7/27/09	E601	0 of 18	-	-

Analytes detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloro-ethene (total) (µg/L)	Acetone (µg/L)
EP6-09	1/14/09	E8260	1 of 36	-	18
EP6-09	01/14/09 DUP	E8260	1 of 36	-	18
EP6-09	5/5/09	E8260	0 of 36	-	-
EP6-09	7/8/09	E8260	1 of 36	-	220
EP6-09	10/8/09	E8260	0 of 36	-	-
EP6-09	10/08/09 DUP	E8260	0 of 36	-	-
W-PIT6-1819	3/19/09	E601	0 of 18	-	-
W-PIT6-1819	6/9/09	E601	0 of 18	-	-
W-PIT6-1819	06/09/09 DUP	E601	0 of 18	-	-
W-PIT6-1819	7/28/09	E601	0 of 18	-	-
W-PIT6-1819	10/5/09	E601	0 of 18	-	-
K6-01	3/19/09	E601	0 of 18	-	-
K6-01	9/21/09	E601	0 of 18	-	-
K6-01S	1/12/09	E8260	1 of 36	1.8	-
K6-01S	5/5/09	E8260	1 of 36	2.2	-
K6-01S	05/05/09 DUP	E8260	1 of 36	2	-
K6-01S	7/8/09	E8260	1 of 36	2	-
K6-01S	10/8/09	E8260	1 of 36	2.2	-
K6-03	3/19/09	E601	0 of 18	-	-
K6-03	7/28/09	E601	0 of 18	-	-
K6-14	3/23/09	E601	0 of 18	-	-
K6-14	7/27/09	E601	0 of 18	-	-
K6-16	3/23/09	E601	0 of 18	-	-
K6-16	7/27/09	E601	0 of 18	-	-
K6-16	07/27/09 DUP	E601	0 of 18	-	-
K6-17	2/5/09	E601	0 of 18	-	-
K6-17	02/05/09 DUP	E601	0 of 18	-	-
K6-17	6/9/09	E601	0 of 18	-	-
K6-17	8/6/09	E601	0 of 18	-	-
K6-17	08/06/09 DUP	E601	0 of 18	-	-
K6-17	10/5/09	E601	0 of 18	-	-
K6-17	10/05/09 DUP	E601	0 of 18	-	-
K6-18	3/19/09	E601	0 of 18	-	-
K6-18	03/19/09 DUP	E601	0 of 18	-	-
K6-18	7/28/09	E601	0 of 18	-	-
K6-19	1/12/09	E8260	0 of 36	-	-
K6-19	01/12/09 DUP	E8260	0 of 36	-	-
K6-19	5/5/09	E8260	0 of 36	-	-
K6-19	7/8/09	E8260	0 of 36	-	-
K6-19	07/08/09 DUP	E8260	0 of 36	-	-
K6-19	10/8/09	E8260	0 of 36	-	-
K6-22	3/19/09	E601	0 of 18	-	-
K6-22	6/9/09	E601	0 of 18	-	-
K6-22	7/28/09	E601	0 of 18	-	-
K6-22	10/5/09	E601	0 of 18	-	-
K6-23	2/5/09	E601	0 of 18	-	-
K6-23	8/6/09	E601	0 of 18	-	-
K6-25	3/23/09	E601	0 of 18	-	-
K6-25	7/27/09	E601	0 of 18	-	-
K6-26	3/19/09	E601	0 of 18	-	-
K6-26	7/28/09	E601	0 of 18	-	-
K6-27	3/19/09	E601	0 of 18	-	-

Analytes detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloro-ethene (total) (µg/L)	Acetone (µg/L)
K6-27	7/28/09	E601	0 of 18	-	-
K6-34	3/19/09	E601	0 of 18	-	-
K6-34	6/9/09	E601	0 of 18	-	-
K6-34	7/28/09	E601	0 of 18	-	-
K6-34	10/5/09	E601	0 of 18	-	-
K6-35	3/19/09	E601	0 of 18	-	-
K6-35	7/27/09	E601	0 of 18	-	-
W-33C-01	3/24/09	E601	0 of 18	-	-
W-33C-01	7/30/09	E601	0 of 18	-	-
W-34-01	3/23/09	E601	0 of 18	-	-
W-34-02	3/23/09	E601	0 of 18	-	-

B-3.2. Pit 6 Landfill Operable Unit nitrate and perchlorate in ground water.

Location	Date	Nitrate (as NO3) (mg/L)	Perchlorate (µg/L)
CARNRW1	1/7/09	0.73 O	<4
CARNRW1	01/07/09 DUP	<0.5	<4
CARNRW1	2/2/09	<0.5	<4
CARNRW1	02/02/09 DUP	<0.5 L	<4
CARNRW1	3/2/09	<0.5	<4
CARNRW1	03/02/09 DUP	<0.5	<4
CARNRW1	4/1/09	<0.5	<4
CARNRW1	04/01/09 DUP	<0.5 L	<4
CARNRW1	5/4/09	0.69	<4
CARNRW1	05/04/09 DUP	<0.5	<4
CARNRW1	6/1/09	<0.5	<4
CARNRW1	06/01/09 DUP	<0.5 L	<4
CARNRW1	7/7/09	<0.5 O	<4
CARNRW1	07/07/09 DUP	<0.5	<4
CARNRW1	8/3/09	<0.5	<4
CARNRW1	08/03/09 DUP	<0.5	<4
CARNRW1	9/1/09	<0.44	<4
CARNRW1	09/01/09 DUP	<0.5	<4
CARNRW1	10/5/09	<0.5	<4 LO
CARNRW1	10/05/09 DUP	<0.5 L	<4 L
CARNRW1	11/3/09	<0.5	<4
CARNRW1	11/03/09 DUP	<0.5	<4
CARNRW1	12/1/09	0.85	<4
CARNRW1	12/01/09 DUP	<0.5	<4 L
CARNRW2	1/7/09	0.75 O	<4
CARNRW2	01/07/09 DUP	<0.5	<4
CARNRW2	2/2/09	<0.5	<4
CARNRW2	02/02/09 DUP	<0.5 L	<4
CARNRW2	3/2/09	1.4	<4
CARNRW2	03/02/09 DUP	0.57	<4
CARNRW2	4/1/09	0.61	<4
CARNRW2	04/01/09 DUP	0.53 L	<4
CARNRW2	5/4/09	<0.5	<4
CARNRW2	05/04/09 DUP	<0.5	<4
CARNRW2	6/1/09	<0.5	<4
CARNRW2	06/01/09 DUP	<0.5 L	<4
CARNRW2	7/7/09	0.68 O	<4
CARNRW2	07/07/09 DUP	<0.5	<4
CARNRW2	8/3/09	1.9	<4
CARNRW2	08/03/09 DUP	0.96	<4
CARNRW2	9/1/09	0.5	<4
CARNRW2	09/01/09 DUP	<0.5	<4
CARNRW2	10/5/09	<0.5	<4 LO
CARNRW2	10/05/09 DUP	0.57 L	<4 L
CARNRW2	11/3/09	<0.5	<4
CARNRW2	11/03/09 DUP	<0.5	<4

B-3.2. Pit 6 Landfill Operable Unit nitrate and perchlorate in ground water.

Location	Date	Nitrate (as NO3) (mg/L)	Perchlorate (µg/L)
CARNRW2	12/1/09	<0.5	<4
CARNRW2	12/01/09 DUP	<0.5	<4 L
CARNRW3	1/7/09	<0.5 O	<4
CARNRW3	01/07/09 DUP	<0.5	<4
CARNRW3	2/2/09	<0.5	<4
CARNRW3	02/02/09 DUP	<0.5 L	<4
CARNRW3	3/2/09	<0.5	<4
CARNRW3	03/02/09 DUP	<0.5	<4
CARNRW3	4/1/09	<0.5	<4
CARNRW3	04/01/09 DUP	<0.5 L	<4
CARNRW3	5/4/09	<0.5	<4
CARNRW3	05/04/09 DUP	<0.5	<4
CARNRW3	6/1/09	<0.5	<4
CARNRW3	06/01/09 DUP	<0.5 L	<4
CARNRW3	7/7/09	<0.5 O	<4
CARNRW3	07/07/09 DUP	<0.5	<4
CARNRW3	8/3/09	<0.5	<4
CARNRW3	08/03/09 DUP	<0.5	<4
CARNRW3	9/1/09	<0.44	<4
CARNRW3	09/01/09 DUP	<0.5	<4
CARNRW3	10/5/09	<0.5	<4 LO
CARNRW3	10/05/09 DUP	<0.5 L	<4 L
CARNRW3	11/3/09	<0.5	<4
CARNRW3	11/03/09 DUP	<0.5	<4
CARNRW3	12/1/09	<0.5	<4
CARNRW3	12/01/09 DUP	<0.5	<4 L
CARNRW4	1/7/09	<0.5 O	<4
CARNRW4	01/07/09 DUP	<0.5	<4
CARNRW4	2/2/09	<0.5	<4
CARNRW4	02/02/09 DUP	<0.5 L	<4
CARNRW4	3/2/09	<1 D	<4
CARNRW4	03/02/09 DUP	<0.5	<4
CARNRW4	4/1/09	6.5	<4
CARNRW4	04/01/09 DUP	5 L	<4
CARNRW4	5/4/09	3.7	<4
CARNRW4	05/04/09 DUP	2.9	<4
CARNRW4	6/1/09	1.1	<4
CARNRW4	06/01/09 DUP	1 L	<4
CARNRW4	7/7/09	<1 DO	<4
CARNRW4	07/07/09 DUP	<0.5	<4
CARNRW4	8/3/09	<0.5	<4
CARNRW4	08/03/09 DUP	<0.5	<4
CARNRW4	9/1/09	<0.44	<4
CARNRW4	09/01/09 DUP	<0.5	<4
CARNRW4	10/6/09	<0.5	<4
CARNRW4	10/06/09 DUP	<0.5	<4 L

B-3.2. Pit 6 Landfill Operable Unit nitrate and perchlorate in ground water.

Location	Date	Nitrate (as NO3) (mg/L)	Perchlorate (µg/L)
CARNRW4	11/3/09	<0.5	<4
CARNRW4	11/03/09 DUP	<0.5	<4
CARNRW4	12/1/09	<0.5	<4
CARNRW4	12/01/09 DUP	<0.5	<4 L
BC6-10	3/19/09	0.57	<4
EP6-06	1/12/09	<0.5	<4
EP6-06	5/5/09	<0.5	<4
EP6-06	7/9/09	0.75	<4
EP6-06	10/8/09	<0.5	<4
EP6-07	3/19/09	0.66	<4
EP6-09	1/14/09	4.7 DO	<4 EL
EP6-09	01/14/09 DUP	4.7 DO	4 L
EP6-09	5/5/09	<0.5	<4
EP6-09	7/8/09	<0.5	<4
EP6-09	10/8/09	<0.5	<4 E
EP6-09	10/08/09 DUP	<0.5	<4
W-PIT6-1819	3/19/09	0.85	<4
W-PIT6-1819	7/28/09	1.1	<4
K6-01	3/19/09	<0.5	<4
K6-01S	1/12/09	<1 D	<4
K6-01S	5/5/09	<2.5 D	<4
K6-01S	05/05/09 DUP	<1 D	<4
K6-01S	7/8/09	<2.5 D	<4
K6-01S	10/8/09	<1 D	<4
K6-03	3/19/09	<0.5	<4
K6-14	3/23/09	2.1 D	<4 L
K6-16	3/23/09	16	<4
K6-17	2/5/09	<0.5 E	<4
K6-17	02/05/09 DUP	<0.5	<4 L
K6-17	8/6/09	0.78	<4
K6-17	08/06/09 DUP	<0.44	<4
K6-17	08/06/09 REX	<0.5	-
K6-18	3/19/09	52 D	6.2
K6-18	03/19/09 DUP	52 D	6.9
K6-18	5/5/09	54 D	-
K6-19	1/12/09	<0.5	<4
K6-19	01/12/09 DUP	0.6	<4
K6-19	5/5/09	<0.5	<4
K6-19	7/8/09	<0.5	<4
K6-19	07/08/09 DUP	<0.5	<4 E
K6-19	10/8/09	<0.5	<4 E
K6-22	3/19/09	<1 D	<4
K6-22	7/28/09	<1 D	<4
K6-23	2/5/09	170 D	<4
K6-23	8/6/09	180 D	-
K6-25	3/23/09	<0.5	<4

B-3.2. Pit 6 Landfill Operable Unit nitrate and perchlorate in ground water.

Location	Date	Nitrate (as NO3) (mg/L)	Perchlorate (µg/L)
K6-26	3/19/09	<0.5	<4
K6-27	3/19/09	<0.5	<4
K6-34	3/19/09	<0.5	<4
K6-34	7/28/09	<0.5	<4
K6-35	3/19/09	<0.5	<4
W-33C-01	3/24/09	3.6 D	<4
W-34-01	3/23/09	<0.5	<4
W-34-02	3/23/09	<0.5	<4

B-3.3. Pit 6 Landfill Operable Unit tritium in ground water.

Location	Date	Tritium (pCi/L)
CARNRW1	1/7/09	<100
CARNRW1	01/07/09 DUP	<100
CARNRW1	2/2/09	<100
CARNRW1	02/02/09 DUP	<100
CARNRW1	3/2/09	<100
CARNRW1	03/02/09 DUP	<100
CARNRW1	4/1/09	<100
CARNRW1	04/01/09 DUP	<100
CARNRW1	5/4/09	<100
CARNRW1	05/04/09 DUP	<100
CARNRW1	6/1/09	<100
CARNRW1	7/7/09	<100
CARNRW1	07/07/09 DUP	<100
CARNRW1	8/3/09	<100
CARNRW1	08/03/09 DUP	<100
CARNRW1	9/1/09	<100
CARNRW1	09/01/09 DUP	<100
CARNRW1	10/5/09	<100
CARNRW1	10/05/09 DUP	<100
CARNRW1	11/3/09	<100
CARNRW1	11/03/09 DUP	<100
CARNRW1	12/1/09	<100
CARNRW1	12/01/09 DUP	<100
CARNRW2	1/7/09	<100
CARNRW2	01/07/09 DUP	<100
CARNRW2	2/2/09	<100
CARNRW2	02/02/09 DUP	<100
CARNRW2	3/2/09	<100
CARNRW2	03/02/09 DUP	<100
CARNRW2	4/1/09	<100
CARNRW2	04/01/09 DUP	<100
CARNRW2	5/4/09	<100
CARNRW2	05/04/09 DUP	<100
CARNRW2	6/1/09	<100
CARNRW2	06/01/09 DUP	<100
CARNRW2	7/7/09	<100
CARNRW2	07/07/09 DUP	<100
CARNRW2	8/3/09	<100
CARNRW2	08/03/09 DUP	<100
CARNRW2	9/1/09	<100
CARNRW2	09/01/09 DUP	<100
CARNRW2	10/5/09	<100
CARNRW2	10/05/09 DUP	<100
CARNRW2	11/3/09	<100
CARNRW2	11/03/09 DUP	<100
CARNRW2	12/1/09	<100

B-3.3. Pit 6 Landfill Operable Unit tritium in ground water.

Location	Date	Tritium (pCi/L)
CARNRW2	12/01/09 DUP	108 ± 51.0
CARNRW3	1/7/09	<100
CARNRW3	01/07/09 DUP	<100
CARNRW3	2/2/09	<100
CARNRW3	02/02/09 DUP	<100
CARNRW3	3/2/09	<100
CARNRW3	03/02/09 DUP	<100
CARNRW3	4/1/09	<100
CARNRW3	04/01/09 DUP	<100
CARNRW3	5/4/09	<100
CARNRW3	05/04/09 DUP	<100
CARNRW3	6/1/09	<100
CARNRW3	7/7/09	<100
CARNRW3	07/07/09 DUP	<100
CARNRW3	8/3/09	<100
CARNRW3	08/03/09 DUP	<100
CARNRW3	9/1/09	<100
CARNRW3	09/01/09 DUP	<100
CARNRW3	10/5/09	<100
CARNRW3	10/05/09 DUP	<100
CARNRW3	11/3/09	<100
CARNRW3	11/03/09 DUP	<100
CARNRW3	12/1/09	<100
CARNRW3	12/01/09 DUP	100 ± 50.0
CARNRW4	1/7/09	<100
CARNRW4	01/07/09 DUP	<100
CARNRW4	2/2/09	<100
CARNRW4	02/02/09 DUP	<100
CARNRW4	3/2/09	<100
CARNRW4	03/02/09 DUP	<100
CARNRW4	4/1/09	<100
CARNRW4	04/01/09 DUP	<100
CARNRW4	5/4/09	<100
CARNRW4	05/04/09 DUP	<100
CARNRW4	6/1/09	<100
CARNRW4	06/01/09 DUP	<100
CARNRW4	7/7/09	<100
CARNRW4	07/07/09 DUP	<100
CARNRW4	8/3/09	<100
CARNRW4	08/03/09 DUP	<100
CARNRW4	9/1/09	<100
CARNRW4	09/01/09 DUP	<100
CARNRW4	10/6/09	<100
CARNRW4	10/06/09 DUP	<100
CARNRW4	11/3/09	<100
CARNRW4	11/03/09 DUP	<100

B-3.3. Pit 6 Landfill Operable Unit tritium in ground water.

Location	Date	Tritium (pCi/L)
CARNRW4	12/1/09	<100
CARNRW4	12/01/09 DUP	<100
BC6-10	3/19/09	<100
BC6-10	7/27/09	<100
EP6-06	1/12/09	<100
EP6-06	5/5/09	<100
EP6-06	7/9/09	<100
EP6-06	10/8/09	<100
EP6-07	3/19/09	<100
EP6-07	7/27/09	<100
EP6-09	1/14/09	<100
EP6-09	01/14/09 DUP	<100
EP6-09	5/5/09	<100
EP6-09	7/8/09	<100
EP6-09	10/8/09	<100
EP6-09	10/08/09 DUP	<100
W-PIT6-1819	3/19/09	204 ± 57.0
W-PIT6-1819	6/9/09	<100
W-PIT6-1819	06/09/09 DUP	188 ± 76.9
W-PIT6-1819	7/28/09	126 ± 52.0
W-PIT6-1819	10/5/09	156 ± 78.3
K6-01	3/19/09	125 ± 53.0
K6-01	9/21/09	<100
K6-01S	1/12/09	120 ± 55.0
K6-01S	5/5/09	<100
K6-01S	05/05/09 DUP	<100
K6-01S	7/8/09	<100
K6-01S	10/8/09	113 ± 48.9
K6-03	3/19/09	119 ± 52.0
K6-03	7/28/09	<100
K6-14	3/23/09	<100
K6-14	7/27/09	<100
K6-16	3/23/09	<100
K6-16	7/27/09	<100
K6-16	07/27/09 DUP	<100
K6-17	2/5/09	<100
K6-17	02/05/09 DUP	<100
K6-17	6/9/09	<100
K6-17	8/6/09	R
K6-17	08/06/09 DUP	R
K6-17	10/5/09	<100
K6-17	10/05/09 DUP	<100
K6-18	3/19/09	354 ± 65.0
K6-18	03/19/09 DUP	298 ± 84.6
K6-18	7/28/09	120 ± 51.0
K6-19	1/12/09	262 ± 63.0

B-3.3. Pit 6 Landfill Operable Unit tritium in ground water.

Location	Date	Tritium (pCi/L)
K6-19	01/12/09 DUP	287 ± 65.0
K6-19	5/5/09	201 ± 56.0
K6-19	7/8/09	212 ± 59.0
K6-19	07/08/09 DUP	218 ± 59.0
K6-19	10/8/09	276 ± 73.4
K6-22	3/19/09	119 ± 52.0
K6-22	6/9/09	<100
K6-22	7/28/09	<100
K6-22	10/5/09	<100
K6-23	2/5/09	<100
K6-23	8/6/09	R
K6-25	3/23/09	<100
K6-25	7/27/09	<100
K6-26	3/19/09	108 ± 52.0
K6-26	7/28/09	<100
K6-27	3/19/09	111 ± 52.0
K6-27	7/28/09	<100
K6-34	3/19/09	133 ± 53.0
K6-34	6/9/09	<100
K6-34	7/28/09	<100
K6-34	10/5/09	117 ± 73.8
K6-35	3/19/09	140 ± 53.0
K6-35	7/27/09	<100
W-33C-01	3/24/09	<100
W-33C-01	7/30/09	<100
W-34-01	3/23/09	<100
W-34-02	3/23/09	<100

B-4.1. 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-815-2110	3/10/09	E601	1.9	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-2110	5/26/09	E601	2.6 O	<0.5	<0.5	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-2110	05/26/09 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-815-2110	9/16/09	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-815-2110	12/8/09	E601	1.9	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-2111	3/10/09	E601	2.3	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-2111	5/26/09	E601	2.8 O	<0.5	<0.5	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-2111	9/16/09	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	12/8/09	E601	1.9	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-2111	12/08/09 DUP	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-817-2318	3/11/09	E601	48	<0.5	<0.5	<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	4/6/09	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-817-2318	7/8/09	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-817-2318	10/14/09	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
GALLO1	1/13/09	E502.2	<0.5 E	<0.5	<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	1/13/09	E601	<0.5	<0.5	<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	01/13/09 DUP	E502.2	0.6 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 HL	<0.5 H	<0.5 H	<0.5 HL	<0.5 H	<0.5 H	<0.5 H	<1 H	<0.5 H
GALLO1	01/13/09 DUP	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
GALLO1	2/18/09	E601	<0.5	<0.5	<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	02/18/09 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	3/12/09	E601	<0.5	<0.5	<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	03/12/09 DUP	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
GALLO1	4/22/09	E502.2	<0.5 E	<0.5	<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	4/22/09	E601	<0.5	<0.5	<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	04/22/09 DUP	E502.2	0.7 L	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
GALLO1	04/22/09 DUP	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
GALLO1	5/20/09	E601	<0.5	<0.5	<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	05/20/09 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	6/10/09	E601	<0.5	<0.5	<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	06/10/09 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	7/23/09	E502.2	<0.5 E	<0.5	<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	7/23/09	E601	<0.5	<0.5	<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	07/23/09 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	07/23/09 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	8/17/09	E601	<0.5	<0.5	<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	08/17/09 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	9/10/09	E601	<0.5	<0.5	<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	09/10/09 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	10/14/09	E502.2	<0.5 E	<0.5	<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	10/14/09	E601	<0.5	<0.5	<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	10/14/09 DUP	E502.2	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<1 H	<0.5 H
GALLO1	10/14/09 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	11/11/09	E601	<0.5	<0.5	<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	11/11/09 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	12/10/09	E601	<0.5	<0.5	<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	12/10/09 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	2/19/09	E601	<0.5	<0.5	<0.5	<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	5/19/09	E601	<0.5	<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-35B-01	8/25/09	E601	<0.5 L	<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-35B-01	11/17/09	E601	<0.5	<0.5	<0.5	<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	2/19/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

B-4.1. 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-02	5/19/09	E601	<0.5	<0.5	<0.5	<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	8/25/09	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-35B-02	11/17/09	E601	<0.5	<0.5	<0.5	<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	2/19/09	E601	<0.5	<0.5	<0.5	<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	5/19/09	E601	<0.5	<0.5	<0.5	<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	8/25/09	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-35B-03	11/17/09	E601	<0.5	<0.5	<0.5	<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	2/19/09	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-35B-04	5/19/09	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-35B-04	8/25/09	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-35B-04	11/17/09	E601	<0.5	<0.5	<0.5	<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	2/19/09	E601	<0.5	<0.5	<0.5	<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	5/19/09	E601	<0.5	<0.5	<0.5	<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	8/25/09	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-35B-05	11/17/09	E601	<0.5	<0.5	<0.5	<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	3/10/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35C-01	9/8/09	E601	<0.5	<0.5	<0.5	<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	3/17/09	E601	<0.5	<0.5	<0.5	<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	9/9/09	E601	<0.5	<0.5	<0.5	<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	1/12/09	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-35C-04	4/7/09	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	8/17/09	E601	7.9	<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-04	10/12/09	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-35C-05	2/24/09	E601	<0.5	<0.5	<0.5	<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	8/26/09	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-35C-06	2/24/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-35C-06	8/26/09	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-35C-07	2/23/09	E601	3.1	<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-35C-07	02/23/09 DUP	E601	3.1	<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-35C-07	8/25/09	E601	2.6 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-35C-07	08/25/09 DUP	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-35C-08	2/23/09	E601	<0.5	<0.5	<0.5	<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	8/25/09	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-4A	3/17/09	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-4A	03/17/09 DUP	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-4A	9/17/09	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-4AS	3/17/09	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-4AS	9/17/09	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-4B	3/9/09	E601	3.3	<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-4B	9/2/09	E601	2.7 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-4C	3/9/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-4C	5/27/09	E601	<0.5 O	<0.5	<0.5	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5	<0.5	<0.5
W-4C	9/2/09	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-4C	12/2/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6BD	3/9/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6BD	9/1/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6BS	3/9/09	E601	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6BS	9/1/09	E601	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6CD	3/17/09	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-6CD	9/17/09	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-6CI	3/16/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

B-4.1. 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-6CI	9/9/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6CS	3/16/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6CS	9/9/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6EI	2/26/09	E601	3.9	<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-6EI	8/26/09	E601	4.1 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-6ER	1/12/09	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-6ER	4/7/09	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	7/7/09	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	10/12/09	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-6ES	2/26/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6ES	8/26/09	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-6F	3/16/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6F	9/9/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6G	3/16/09	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-6G	9/9/09	E601	7.6 IJ	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6H	3/10/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6H	5/26/09	E601	<0.5 O	<0.5	<0.5	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5	<0.5	<0.5
W-6H	9/8/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6H	12/8/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6I	3/10/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6I	9/8/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6J	3/10/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6J	5/26/09	E601	<0.5 O	<0.5	<0.5	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5	<0.5	<0.5
W-6J	9/8/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6J	12/8/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6K	2/24/09	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-6K	02/24/09 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-6K	8/26/09	E601	19 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-6L	2/24/09	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-6L	02/24/09 DUP	E601	28	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-6L	8/26/09	E601	19 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-6L	08/26/09 DUP	E601	17 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-806-06A	3/12/09	E601	<0.5	<0.5	<0.5	<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	3/11/09	E601	<0.5	<0.5	<0.5	<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	8/26/09	E601	<0.5	<0.5	<0.5	<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	3/11/09	E601	<0.5	<0.5	<0.5	<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	8/26/09	E601	<0.5	<0.5	<0.5	<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	3/11/09	E601	2.1	<0.5	<0.5	<0.5	<0.5	1.6	<0.5	<0.5	1.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-809-01	8/26/09	E601	2.2	<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-809-01	08/26/09 DUP	E601	2	<0.5	<0.5	<0.5	<0.5	1.5	<0.5	<0.5	1.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-809-02	3/11/09	E601	<0.5	<0.5	<0.5	<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	3/11/09	E601	<0.5	<0.5	<0.5	<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	3/11/09	E601	<0.5	<0.5	<0.5	<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	8/26/09	E601	<0.5	<0.5	<0.5	<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	3/12/09	E601	<0.5	<0.5	<0.5	<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	9/8/09	E601	<0.5	<0.5	<0.5	<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	3/11/09	E601	2.3	<0.5	1.3	<0.5	0.69	0.78	<0.5	0.59	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-814-01	3/11/09	E601	2.5	<0.5	1.5	<0.5	1.1	0.9	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-814-01	9/1/09	E601	2.2	<0.5	1.3	<0.5	0.9	0.8	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-814-02	3/17/09	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-814-02	9/1/09	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

B-4.1. 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-814-04	2/25/09	E601	<0.5	<0.5	<0.5	<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	5/26/09	E601	<0.5 O	<0.5	<0.5	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5	<0.5	<0.5
W-814-04	8/31/09	E601	<0.5	<0.5	<0.5	<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	12/2/09	E601	<0.5	<0.5	<0.5	<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	3/11/09	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-815-02	1/12/09	E601	6.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.63	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-02	4/6/09	E601	7.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.74	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-02	7/7/09	E601	6.8	<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 OJ
W-815-02	10/7/09	E601	5.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.75	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-04	1/12/09	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	4/6/09	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	7/7/09	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 OJ
W-815-04	10/7/09	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-815-05	3/10/09	E601	8.6	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-05	8/31/09	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-815-06	3/10/09	E601	18	<0.5	<0.5	<0.5	<0.5	0.6 L	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-06	03/10/09 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-815-06	9/1/09	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-815-06	09/01/09 DUP	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-815-07	3/10/09	E601	19	<0.5	<0.5	<0.5	<0.5	0.7 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-07	9/1/09	E601	16	<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	3/10/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-08	6/4/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-08	8/31/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-815-08	12/2/09	E601	<0.5	<0.5	<0.5	<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	3/16/09	E601	<0.5	<0.5	<0.5	<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	9/9/09	E601	<0.5	<0.5	<0.5	<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	3/11/09	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-817-03	4/6/09	E601	9.2	<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-817-03	7/8/09	E601	8.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-817-03	10/14/09	E601	7.8	<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-817-03A	3/10/09	E601	46	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-817-03A	8/31/09	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-817-03A	08/31/09 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-817-04	3/17/09	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-817-04	8/31/09	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-817-05	3/12/09	E601	<0.5	<0.5	<0.5	<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	9/8/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-817-07	3/11/09	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-817-07	9/8/09	E601	<0.5	<0.5	<0.5	<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	3/11/09	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-818-01	9/1/09	E601	17	<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-818-01	09/01/09 DUP	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-818-03	3/17/09	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	9/2/09	E601	8.6 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-818-04	2/25/09	E601	<0.5	<0.5	<0.5	<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	8/31/09	E601	<0.5	<0.5	<0.5	<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	2/25/09	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-818-06	02/25/09 DUP	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-818-06	8/31/09	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-818-07	2/25/09	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

B-4.1. 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-818-07	8/31/09	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-818-08	2/11/09	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-818-08	4/6/09	E601	48	<0.5	<0.5	<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	7/7/09	E601	48	<0.5	<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
W-818-08	10/7/09	E601	43	<0.5	<0.5	<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	2/11/09	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	4/6/09	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-818-09	5/4/09	E624	15	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
W-818-09	7/7/09	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 J
W-818-09	10/7/09	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-818-11	3/11/09	E601	51	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<0.5
W-818-11	9/1/09	E601	43	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<0.5
W-819-02	3/9/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-819-02	8/31/09	E601	<0.5	<0.5	<0.5	<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	3/10/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-823-01	9/8/09	E601	<0.5	<0.5	<0.5	<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	3/10/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-823-02	9/8/09	E601	<0.5	<0.5	<0.5	<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	3/10/09	E601	0.8	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-823-03	9/8/09	E601	<0.5	<0.5	<0.5	<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	3/10/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-823-13	9/8/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-827-02	3/16/09	E601	3.6	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-827-03	3/16/09	E601	<0.5	<0.5	<0.5	<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	3/16/09	E601	<0.5	<0.5	<0.5	<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	9/8/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-829-15	4/14/09	E624	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
W-829-15	04/14/09 DUP	E624	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
W-829-1938	2/12/09	E624	<0.5	<1	<1	<1	<1	<1	<1	<1	<1 L	<1	<1	<1	<1	<1
W-829-1938	02/12/09 DUP	E624	<0.5	<1	<1	<1	<1	<1	<1	<1	<1 L	<1	<1	<1	<1	<1
W-829-1938	4/16/09	E624	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
W-829-1938	7/16/09	E624	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
W-829-1938	07/16/09 DUP	E624	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
W-829-1938	10/21/09	E624	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
W-829-1938	10/21/09 DUP	E624	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
W-829-1940	3/16/09	E601	<0.5	<0.5	<0.5	<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	9/8/09	E601	<0.5	<0.5	<0.5	<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	4/14/09	E624	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
WELL18	1/21/09	E601	<0.5	<0.5	<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	01/21/09 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	2/11/09	E601	<0.5	<0.5	<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	02/11/09 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	3/12/09	E601	<0.5	<0.5	<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	03/12/09 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	4/21/09	E601	<0.5	<0.5	<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	04/21/09 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	5/21/09	E601	<0.5	<0.5	<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	05/21/09 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	6/10/09	E601	<0.5	<0.5	<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	06/10/09 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	7/15/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

B-4.1. 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	07/15/09 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	8/12/09	E601	<0.5	<0.5	<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	08/12/09 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	9/17/09	E601	<0.5	<0.5	<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	09/17/09 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	10/14/09	E601	<0.5	<0.5	<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	10/14/09 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	11/11/09	E601	<0.5	<0.5	<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	11/11/09 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	12/10/09	E601	<0.5	<0.5	<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	12/10/09 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	1/21/09	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	01/21/09 DUP	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<1	<0.5
WELL20	2/11/09	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	02/11/09 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	3/12/09	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	03/12/09 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	4/21/09	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	04/21/09 DUP	E502.2	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
WELL20	5/21/09	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	05/21/09 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	6/10/09	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	06/10/09 DUP	E502.2	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<1	<0.5
WELL20	06/10/09 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	7/15/09	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	07/15/09 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	8/12/09	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	08/12/09 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	9/17/09	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	10/14/09	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	10/14/09 DUP	E502.2	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<0.5 H	<1 H	<0.5 H
WELL20	11/11/09	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	11/11/09 DUP	E502.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<1	<0.5
WELL20	12/10/09	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	12/10/09 DUP	E502.2	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<0.5 L	<1 L	<0.5 L
SPRING14	3/24/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Analytes detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloro-ethene (total) (µg/L)	Acetone (µg/L)	Bromodi-chloro-methane (µg/L)	Methylene chloride (µg/L)
W-815-2110	3/10/09	E601	0 of 18	-	-	-	-
W-815-2110	5/26/09	E601	0 of 18	-	-	-	-
W-815-2110	05/26/09 DUP	E601	0 of 18	-	-	-	-
W-815-2110	9/16/09	E601	0 of 18	-	-	-	-
W-815-2110	12/8/09	E601	0 of 18	-	-	-	-
W-815-2111	3/10/09	E601	0 of 18	-	-	-	-
W-815-2111	5/26/09	E601	0 of 18	-	-	-	-
W-815-2111	9/16/09	E601	0 of 18	-	-	-	-
W-815-2111	12/8/09	E601	0 of 18	-	-	-	-

Analytes detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloro-ethene (total) (µg/L)	Acetone (µg/L)	Bromodi-chloro-methane (µg/L)	Methylene chloride (µg/L)
W-815-2111	12/08/09 DUP	E601	0 of 18	-	-	-	-
W-817-2318	3/11/09	E601	0 of 18	-	-	-	-
W-817-2318	4/6/09	E601	0 of 18	-	-	-	-
W-817-2318	7/8/09	E601	0 of 18	-	-	-	-
W-817-2318	10/14/09	E601	0 of 18	-	-	-	-
GALLO1	1/13/09	E502.2	0 of 46	-	-	-	-
GALLO1	1/13/09	E601	0 of 18	-	-	-	-
GALLO1	01/13/09 DUP	E502.2	0 of 45	-	-	-	-
GALLO1	01/13/09 DUP	E601	0 of 18	-	-	-	-
GALLO1	2/18/09	E601	0 of 18	-	-	-	-
GALLO1	02/18/09 DUP	E601	0 of 18	-	-	-	-
GALLO1	3/12/09	E601	0 of 18	-	-	-	-
GALLO1	03/12/09 DUP	E601	0 of 18	-	-	-	-
GALLO1	4/22/09	E502.2	0 of 46	-	-	-	-
GALLO1	4/22/09	E601	0 of 18	-	-	-	-
GALLO1	04/22/09 DUP	E502.2	0 of 45	-	-	-	-
GALLO1	04/22/09 DUP	E601	0 of 18	-	-	-	-
GALLO1	5/20/09	E601	0 of 18	-	-	-	-
GALLO1	05/20/09 DUP	E601	0 of 18	-	-	-	-
GALLO1	6/10/09	E601	0 of 18	-	-	-	-
GALLO1	06/10/09 DUP	E601	0 of 18	-	-	-	-
GALLO1	7/23/09	E502.2	0 of 46	-	-	-	-
GALLO1	7/23/09	E601	0 of 18	-	-	-	-
GALLO1	07/23/09 DUP	E502.2	0 of 45	-	-	-	-
GALLO1	07/23/09 DUP	E601	0 of 18	-	-	-	-
GALLO1	8/17/09	E601	0 of 18	-	-	-	-
GALLO1	08/17/09 DUP	E601	0 of 18	-	-	-	-
GALLO1	9/10/09	E601	0 of 18	-	-	-	-
GALLO1	09/10/09 DUP	E601	0 of 18	-	-	-	-
GALLO1	10/14/09	E502.2	0 of 46	-	-	-	-
GALLO1	10/14/09	E601	0 of 18	-	-	-	-
GALLO1	10/14/09 DUP	E502.2	0 of 45	-	-	-	-
GALLO1	10/14/09 DUP	E601	0 of 18	-	-	-	-
GALLO1	11/11/09	E601	0 of 18	-	-	-	-
GALLO1	11/11/09 DUP	E601	0 of 18	-	-	-	-
GALLO1	12/10/09	E601	0 of 18	-	-	-	-
GALLO1	12/10/09 DUP	E601	0 of 18	-	-	-	-
W-35B-01	2/19/09	E601	0 of 18	-	-	-	-
W-35B-01	5/19/09	E601	0 of 18	-	-	-	-
W-35B-01	8/25/09	E601	0 of 18	-	-	-	-
W-35B-01	11/17/09	E601	0 of 18	-	-	-	-
W-35B-02	2/19/09	E601	0 of 18	-	-	-	-
W-35B-02	5/19/09	E601	0 of 18	-	-	-	-
W-35B-02	8/25/09	E601	0 of 18	-	-	-	-
W-35B-02	11/17/09	E601	0 of 18	-	-	-	-
W-35B-03	2/19/09	E601	0 of 18	-	-	-	-
W-35B-03	5/19/09	E601	0 of 18	-	-	-	-
W-35B-03	8/25/09	E601	0 of 18	-	-	-	-
W-35B-03	11/17/09	E601	0 of 18	-	-	-	-
W-35B-04	2/19/09	E601	0 of 18	-	-	-	-
W-35B-04	5/19/09	E601	0 of 18	-	-	-	-

Analytes detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloro-ethene (total) (µg/L)	Acetone (µg/L)	Bromodi-chloro-methane (µg/L)	Methylene chloride (µg/L)
W-35B-04	8/25/09	E601	0 of 18	-	-	-	-
W-35B-04	11/17/09	E601	0 of 18	-	-	-	-
W-35B-05	2/19/09	E601	0 of 18	-	-	-	-
W-35B-05	5/19/09	E601	0 of 18	-	-	-	-
W-35B-05	8/25/09	E601	0 of 18	-	-	-	-
W-35B-05	11/17/09	E601	0 of 18	-	-	-	-
W-35C-01	3/10/09	E601	0 of 18	-	-	-	-
W-35C-01	9/8/09	E601	0 of 18	-	-	-	-
W-35C-02	3/17/09	E601	0 of 18	-	-	-	-
W-35C-02	9/9/09	E601	0 of 18	-	-	-	-
W-35C-04	1/12/09	E601	0 of 18	-	-	-	-
W-35C-04	4/7/09	E601	0 of 18	-	-	-	-
W-35C-04	8/17/09	E601	0 of 18	-	-	-	-
W-35C-04	10/12/09	E601	0 of 18	-	-	-	-
W-35C-05	2/24/09	E601	0 of 18	-	-	-	-
W-35C-05	8/26/09	E601	0 of 18	-	-	-	-
W-35C-06	2/24/09	E601	0 of 18	-	-	-	-
W-35C-06	8/26/09	E601	0 of 18	-	-	-	-
W-35C-07	2/23/09	E601	1 of 18	-	-	-	0.9
W-35C-07	02/23/09 DUP	E601	1 of 18	-	-	-	0.9
W-35C-07	8/25/09	E601	1 of 18	-	-	-	1
W-35C-07	08/25/09 DUP	E601	1 of 18	-	-	-	1.2
W-35C-08	2/23/09	E601	0 of 18	-	-	-	-
W-35C-08	8/25/09	E601	0 of 18	-	-	-	-
W-4A	3/17/09	E601	0 of 18	-	-	-	-
W-4A	03/17/09 DUP	E601	0 of 18	-	-	-	-
W-4A	9/17/09	E601	0 of 18	-	-	-	-
W-4AS	3/17/09	E601	0 of 18	-	-	-	-
W-4AS	9/17/09	E601	0 of 18	-	-	-	-
W-4B	3/9/09	E601	0 of 18	-	-	-	-
W-4B	9/2/09	E601	0 of 18	-	-	-	-
W-4C	3/9/09	E601	0 of 18	-	-	-	-
W-4C	5/27/09	E601	0 of 18	-	-	-	-
W-4C	9/2/09	E601	0 of 18	-	-	-	-
W-4C	12/2/09	E601	0 of 18	-	-	-	-
W-6BD	3/9/09	E601	0 of 18	-	-	-	-
W-6BD	9/1/09	E601	0 of 18	-	-	-	-
W-6BS	3/9/09	E601	0 of 18	-	-	-	-
W-6BS	9/1/09	E601	0 of 18	-	-	-	-
W-6CD	3/17/09	E601	0 of 18	-	-	-	-
W-6CD	9/17/09	E601	0 of 18	-	-	-	-
W-6CI	3/16/09	E601	0 of 18	-	-	-	-
W-6CI	9/9/09	E601	0 of 18	-	-	-	-
W-6CS	3/16/09	E601	0 of 18	-	-	-	-
W-6CS	9/9/09	E601	0 of 18	-	-	-	-
W-6EI	2/26/09	E601	0 of 18	-	-	-	-
W-6EI	8/26/09	E601	0 of 18	-	-	-	-
W-6ER	1/12/09	E601	0 of 18	-	-	-	-
W-6ER	4/7/09	E601	0 of 18	-	-	-	-
W-6ER	7/7/09	E601	0 of 18	-	-	-	-
W-6ER	10/12/09	E601	0 of 18	-	-	-	-

Analytes detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloro-ethene (total) (µg/L)	Acetone (µg/L)	Bromodi-chloro-methane (µg/L)	Methylene chloride (µg/L)
W-6ES	2/26/09	E601	0 of 18	-	-	-	-
W-6ES	8/26/09	E601	0 of 18	-	-	-	-
W-6F	3/16/09	E601	0 of 18	-	-	-	-
W-6F	9/9/09	E601	0 of 18	-	-	-	-
W-6G	3/16/09	E601	0 of 18	-	-	-	-
W-6G	9/9/09	E601	0 of 18	-	-	-	-
W-6H	3/10/09	E601	0 of 18	-	-	-	-
W-6H	5/26/09	E601	0 of 18	-	-	-	-
W-6H	9/8/09	E601	0 of 18	-	-	-	-
W-6H	12/8/09	E601	0 of 18	-	-	-	-
W-6I	3/10/09	E601	0 of 18	-	-	-	-
W-6I	9/8/09	E601	0 of 18	-	-	-	-
W-6J	3/10/09	E601	0 of 18	-	-	-	-
W-6J	5/26/09	E601	0 of 18	-	-	-	-
W-6J	9/8/09	E601	0 of 18	-	-	-	-
W-6J	12/8/09	E601	0 of 18	-	-	-	-
W-6K	2/24/09	E601	0 of 18	-	-	-	-
W-6K	02/24/09 DUP	E601	0 of 18	-	-	-	-
W-6K	8/26/09	E601	0 of 18	-	-	-	-
W-6L	2/24/09	E601	0 of 18	-	-	-	-
W-6L	02/24/09 DUP	E601	0 of 18	-	-	-	-
W-6L	8/26/09	E601	0 of 18	-	-	-	-
W-6L	08/26/09 DUP	E601	0 of 18	-	-	-	-
W-806-06A	3/12/09	E601	0 of 18	-	-	-	-
W-808-01	3/11/09	E601	0 of 18	-	-	-	-
W-808-01	8/26/09	E601	0 of 18	-	-	-	-
W-808-03	3/11/09	E601	0 of 18	-	-	-	-
W-808-03	8/26/09	E601	0 of 18	-	-	-	-
W-809-01	3/11/09	E601	0 of 18	-	-	-	-
W-809-01	8/26/09	E601	0 of 18	-	-	-	-
W-809-01	08/26/09 DUP	E601	0 of 18	-	-	-	-
W-809-02	3/11/09	E601	0 of 18	-	-	-	-
W-809-03	3/11/09	E601	0 of 18	-	-	-	-
W-809-04	3/11/09	E601	0 of 18	-	-	-	-
W-809-04	8/26/09	E601	0 of 18	-	-	-	-
W-810-01	3/12/09	E601	0 of 18	-	-	-	-
W-810-01	9/8/09	E601	0 of 18	-	-	-	-
W-814-01	3/11/09	E601	1 of 18	1.3	-	-	-
W-814-01	3/11/09	E601	1 of 18	1.5	-	-	-
W-814-01	9/1/09	E601	1 of 18	1.3	-	-	-
W-814-02	3/17/09	E601	0 of 18	-	-	-	-
W-814-02	9/1/09	E601	0 of 18	-	-	-	-
W-814-04	2/25/09	E601	0 of 18	-	-	-	-
W-814-04	5/26/09	E601	0 of 18	-	-	-	-
W-814-04	8/31/09	E601	0 of 18	-	-	-	-
W-814-04	12/2/09	E601	0 of 18	-	-	-	-
W-814-2138	3/11/09	E601	0 of 18	-	-	-	-
W-815-02	1/12/09	E601	0 of 18	-	-	-	-
W-815-02	4/6/09	E601	0 of 18	-	-	-	-
W-815-02	7/7/09	E601	0 of 18	-	-	-	-
W-815-02	10/7/09	E601	0 of 18	-	-	-	-

Analytes detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloro-ethene (total) (µg/L)	Acetone (µg/L)	Bromodi-chloro-methane (µg/L)	Methylene chloride (µg/L)
W-815-04	1/12/09	E601	0 of 18	-	-	-	-
W-815-04	4/6/09	E601	0 of 18	-	-	-	-
W-815-04	7/7/09	E601	0 of 18	-	-	-	-
W-815-04	10/7/09	E601	0 of 18	-	-	-	-
W-815-05	3/10/09	E601	0 of 18	-	-	-	-
W-815-05	8/31/09	E601	0 of 18	-	-	-	-
W-815-06	3/10/09	E601	0 of 18	-	-	-	-
W-815-06	03/10/09 DUP	E601	0 of 18	-	-	-	-
W-815-06	9/1/09	E601	0 of 18	-	-	-	-
W-815-06	09/01/09 DUP	E601	0 of 18	-	-	-	-
W-815-07	3/10/09	E601	0 of 18	-	-	-	-
W-815-07	9/1/09	E601	0 of 18	-	-	-	-
W-815-08	3/10/09	E601	0 of 18	-	-	-	-
W-815-08	6/4/09	E601	0 of 18	-	-	-	-
W-815-08	8/31/09	E601	0 of 18	-	-	-	-
W-815-08	12/2/09	E601	0 of 18	-	-	-	-
W-815-2217	3/16/09	E601	0 of 18	-	-	-	-
W-815-2217	9/9/09	E601	0 of 18	-	-	-	-
W-817-03	3/11/09	E601	0 of 18	-	-	-	-
W-817-03	4/6/09	E601	0 of 18	-	-	-	-
W-817-03	7/8/09	E601	0 of 18	-	-	-	-
W-817-03	10/14/09	E601	0 of 18	-	-	-	-
W-817-03A	3/10/09	E601	0 of 18	-	-	-	-
W-817-03A	8/31/09	E601	0 of 18	-	-	-	-
W-817-03A	08/31/09 DUP	E601	0 of 18	-	-	-	-
W-817-04	3/17/09	E601	0 of 18	-	-	-	-
W-817-04	8/31/09	E601	0 of 18	-	-	-	-
W-817-05	3/12/09	E601	0 of 18	-	-	-	-
W-817-05	9/8/09	E601	0 of 18	-	-	-	-
W-817-07	3/11/09	E601	0 of 18	-	-	-	-
W-817-07	9/8/09	E601	0 of 18	-	-	-	-
W-818-01	3/11/09	E601	0 of 18	-	-	-	-
W-818-01	9/1/09	E601	0 of 18	-	-	-	-
W-818-01	09/01/09 DUP	E601	0 of 18	-	-	-	-
W-818-03	3/17/09	E601	0 of 18	-	-	-	-
W-818-03	9/2/09	E601	0 of 18	-	-	-	-
W-818-04	2/25/09	E601	0 of 18	-	-	-	-
W-818-04	8/31/09	E601	0 of 18	-	-	-	-
W-818-06	2/25/09	E601	0 of 18	-	-	-	-
W-818-06	02/25/09 DUP	E601	0 of 18	-	-	-	-
W-818-06	8/31/09	E601	0 of 18	-	-	-	-
W-818-07	2/25/09	E601	0 of 18	-	-	-	-
W-818-07	8/31/09	E601	0 of 18	-	-	-	-
W-818-08	2/11/09	E601	0 of 18	-	-	-	-
W-818-08	4/6/09	E601	0 of 18	-	-	-	-
W-818-08	7/7/09	E601	0 of 18	-	-	-	-
W-818-08	10/7/09	E601	0 of 18	-	-	-	-
W-818-09	2/11/09	E601	0 of 18	-	-	-	-
W-818-09	4/6/09	E601	0 of 18	-	-	-	-
W-818-09	5/4/09	E624	1 of 30	-	13	-	-
W-818-09	7/7/09	E601	0 of 18	-	-	-	-

Analytes detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloro-ethene (total) (µg/L)	Acetone (µg/L)	Bromodi-chloro-methane (µg/L)	Methylene chloride (µg/L)
W-818-09	10/7/09	E601	0 of 18	-	-	-	-
W-818-11	3/11/09	E601	0 of 18	-	-	-	-
W-818-11	9/1/09	E601	0 of 18	-	-	-	-
W-819-02	3/9/09	E601	0 of 18	-	-	-	-
W-819-02	8/31/09	E601	0 of 18	-	-	-	-
W-823-01	3/10/09	E601	0 of 18	-	-	-	-
W-823-01	9/8/09	E601	0 of 18	-	-	-	-
W-823-02	3/10/09	E601	0 of 18	-	-	-	-
W-823-02	9/8/09	E601	0 of 18	-	-	-	-
W-823-03	3/10/09	E601	0 of 18	-	-	-	-
W-823-03	9/8/09	E601	0 of 18	-	-	-	-
W-823-13	3/10/09	E601	0 of 18	-	-	-	-
W-823-13	9/8/09	E601	0 of 18	-	-	-	-
W-827-02	3/16/09	E601	1 of 18	-	-	0.6	-
W-827-03	3/16/09	E601	0 of 18	-	-	-	-
W-827-05	3/16/09	E601	0 of 18	-	-	-	-
W-827-05	9/8/09	E601	0 of 18	-	-	-	-
W-829-15	4/14/09	E624	0 of 30	-	-	-	-
W-829-15	04/14/09 DUP	E624	0 of 30	-	-	-	-
W-829-1938	2/12/09	E624	0 of 30	-	-	-	-
W-829-1938	02/12/09 DUP	E624	0 of 30	-	-	-	-
W-829-1938	4/16/09	E624	0 of 30	-	-	-	-
W-829-1938	7/16/09	E624	0 of 30	-	-	-	-
W-829-1938	07/16/09 DUP	E624	0 of 30	-	-	-	-
W-829-1938	10/21/09	E624	0 of 30	-	-	-	-
W-829-1938	10/21/09 DUP	E624	0 of 30	-	-	-	-
W-829-1940	3/16/09	E601	0 of 18	-	-	-	-
W-829-1940	9/8/09	E601	0 of 18	-	-	-	-
W-829-22	4/14/09	E624	0 of 30	-	-	-	-
WELL18	1/21/09	E601	0 of 18	-	-	-	-
WELL18	01/21/09 DUP	E601	0 of 18	-	-	-	-
WELL18	2/11/09	E601	0 of 18	-	-	-	-
WELL18	02/11/09 DUP	E601	0 of 18	-	-	-	-
WELL18	3/12/09	E601	0 of 18	-	-	-	-
WELL18	03/12/09 DUP	E601	0 of 18	-	-	-	-
WELL18	4/21/09	E601	0 of 18	-	-	-	-
WELL18	04/21/09 DUP	E601	0 of 18	-	-	-	-
WELL18	5/21/09	E601	0 of 18	-	-	-	-
WELL18	05/21/09 DUP	E601	0 of 18	-	-	-	-
WELL18	6/10/09	E601	0 of 18	-	-	-	-
WELL18	06/10/09 DUP	E601	0 of 18	-	-	-	-
WELL18	7/15/09	E601	0 of 18	-	-	-	-
WELL18	07/15/09 DUP	E601	0 of 18	-	-	-	-
WELL18	8/12/09	E601	0 of 18	-	-	-	-
WELL18	08/12/09 DUP	E601	0 of 18	-	-	-	-
WELL18	9/17/09	E601	0 of 18	-	-	-	-
WELL18	09/17/09 DUP	E601	0 of 18	-	-	-	-
WELL18	10/14/09	E601	0 of 18	-	-	-	-
WELL18	10/14/09 DUP	E601	0 of 18	-	-	-	-
WELL18	11/11/09	E601	0 of 18	-	-	-	-
WELL18	11/11/09 DUP	E601	0 of 18	-	-	-	-

Analytes detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloro-ethene (total) (µg/L)	Acetone (µg/L)	Bromodi-chloro-methane (µg/L)	Methylene chloride (µg/L)
WELL18	12/10/09	E601	0 of 18	-	-	-	-
WELL18	12/10/09 DUP	E601	0 of 18	-	-	-	-
WELL20	1/21/09	E502.2	0 of 46	-	-	-	-
WELL20	01/21/09 DUP	E502.2	0 of 45	-	-	-	-
WELL20	2/11/09	E502.2	0 of 46	-	-	-	-
WELL20	02/11/09 DUP	E502.2	0 of 45	-	-	-	-
WELL20	3/12/09	E502.2	0 of 46	-	-	-	-
WELL20	03/12/09 DUP	E502.2	0 of 45	-	-	-	-
WELL20	4/21/09	E502.2	0 of 46	-	-	-	-
WELL20	04/21/09 DUP	E502.2	0 of 45	-	-	-	-
WELL20	5/21/09	E502.2	0 of 46	-	-	-	-
WELL20	05/21/09 DUP	E502.2	0 of 45	-	-	-	-
WELL20	6/10/09	E502.2	0 of 46	-	-	-	-
WELL20	06/10/09 DUP	E502.2	0 of 45	-	-	-	-
WELL20	06/10/09 DUP	E601	0 of 18	-	-	-	-
WELL20	7/15/09	E502.2	0 of 46	-	-	-	-
WELL20	07/15/09 DUP	E502.2	0 of 45	-	-	-	-
WELL20	8/12/09	E502.2	0 of 46	-	-	-	-
WELL20	08/12/09 DUP	E502.2	0 of 45	-	-	-	-
WELL20	9/17/09	E502.2	0 of 46	-	-	-	-
WELL20	10/14/09	E502.2	0 of 46	-	-	-	-
WELL20	10/14/09 DUP	E502.2	0 of 45	-	-	-	-
WELL20	11/11/09	E502.2	0 of 46	-	-	-	-
WELL20	11/11/09 DUP	E502.2	0 of 45	-	-	-	-
WELL20	12/10/09	E502.2	0 of 46	-	-	-	-
WELL20	12/10/09 DUP	E502.2	0 of 45	-	-	-	-
SPRING14	3/24/09	E601	0 of 18	-	-	-	-

B-4.2. 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-815-2110	3/10/09	<0.5	<4
W-815-2110	9/16/09	0.58 L	<4 L
W-815-2111	3/10/09	<0.5	<4
W-815-2111	9/16/09	<0.5 L	<4 L
W-817-2318	3/11/09	160 D	16
W-817-2318	7/8/09	-	14
GALLO1	1/13/09	<0.5	<4
GALLO1	01/13/09 DUP	<0.5	<4 L
GALLO1	2/18/09	<0.5	<4
GALLO1	02/18/09 DUP	<0.5	<4
GALLO1	3/12/09	<0.5	<4
GALLO1	03/12/09 DUP	<0.5	<4
GALLO1	4/22/09	<0.5	<4
GALLO1	04/22/09 DUP	<0.5	<4
GALLO1	5/20/09	<0.44	<4
GALLO1	05/20/09 DUP	<0.5	<4 L
GALLO1	6/10/09	<0.5	<4
GALLO1	06/10/09 DUP	<0.5	<4
GALLO1	7/23/09	0.8	<4
GALLO1	07/23/09 DUP	<0.5	<4
GALLO1	8/17/09	<0.44	<4
GALLO1	08/17/09 DUP	<0.5	<4 L
GALLO1	9/10/09	<0.44	<4
GALLO1	09/10/09 DUP	<0.5	<4 L
GALLO1	10/14/09	<0.5	<4
GALLO1	10/14/09 DUP	<0.5	<4 L
GALLO1	11/11/09	<0.5	<4
GALLO1	11/11/09 DUP	<0.5	<4
GALLO1	12/10/09	<0.5	<4
GALLO1	12/10/09 DUP	<0.5 L	<4
W-35B-01	2/19/09	<0.5	<4
W-35B-01	8/25/09	<0.5	<4
W-35B-02	2/19/09	15	<4
W-35B-02	8/25/09	1.3	<4
W-35B-03	2/19/09	1	<4
W-35B-03	8/25/09	13	<4
W-35B-04	2/19/09	<0.5	<4
W-35B-04	8/25/09	1.1	<4
W-35B-05	2/19/09	1.1	<4
W-35B-05	8/25/09	1.2	<4
W-35C-01	3/10/09	<0.5	<4
W-35C-02	3/17/09	<0.5	<4
W-35C-04	1/12/09	0.89	<4
W-35C-05	2/24/09	2.2 L	<4
W-35C-06	2/24/09	8.9 L	<4
W-35C-07	2/23/09	<0.5	<4
W-35C-07	02/23/09 DUP	<0.5	<4
W-35C-08	2/23/09	0.72	<4
W-4A	3/17/09	<0.5	<4

B-4.2. 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-4A	03/17/09 DUP	<0.5	<4
W-4AS	3/17/09	0.69	<4
W-4B	3/9/09	<0.5	<4
W-4C	3/9/09	<0.5	<4
W-4C	9/2/09	<0.5 L	<4
W-6BD	3/9/09	15 D	<4
W-6BS	3/9/09	14 D	<4
W-6CD	3/17/09	<0.5	<4
W-6CI	3/16/09	<0.5	<4
W-6CS	3/16/09	660 D	4.6
W-6EI	2/26/09	<0.5	<4
W-6ER	1/12/09	<0.5	<4
W-6ES	2/26/09	8.2	<4
W-6F	3/16/09	0.78	<4
W-6G	3/16/09	15	<4
W-6H	3/10/09	<0.5	<4
W-6H	9/8/09	<0.5	<4 L
W-6I	3/10/09	1.2	<4
W-6J	3/10/09	<0.5	<4
W-6J	9/8/09	<0.5	<4 L
W-6K	2/24/09	10 L	<4
W-6K	02/24/09 DUP	10	<4
W-6L	2/24/09	18 L	<4
W-6L	02/24/09 DUP	18 L	<4
W-806-06A	3/12/09	<5 D	<4
W-808-01	3/11/09	80 DL	<4
W-808-03	3/11/09	<0.5 L	<4
W-809-01	3/11/09	85 DL	<4
W-809-02	3/11/09	51 DL	8.8
W-809-02	8/26/09	-	7.6
W-809-03	3/11/09	83 DL	6.3
W-809-03	8/26/09	-	7.9
W-809-04	3/11/09	2.1 L	<4
W-810-01	3/12/09	<5 D	<4
W-814-01	3/11/09	64	6
W-814-01	3/11/09	53 D	4.2
W-814-02	3/17/09	71 D	<4
W-814-04	2/25/09	<0.5	<4
W-814-04	8/31/09	<0.5	<4
W-814-2138	3/11/09	72 D	4.5
W-815-02	1/12/09	95 D	11
W-815-02	7/7/09	-	9.7
W-815-04	1/12/09	95 D	<4
W-815-04	7/7/09	-	<4
W-815-05	3/10/09	76 D	6
W-815-06	3/10/09	83 D	6.8
W-815-06	03/10/09 DUP	94 D	8.7
W-815-07	3/10/09	80 D	6.2
W-815-08	3/10/09	<0.5	<4

B-4.2. 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-815-08	8/31/09	<0.5	<4
W-815-2217	3/16/09	1.1	<4
W-817-01	12/3/09	-	30 D
W-817-03	3/11/09	96 D	25
W-817-03	7/8/09	-	23 D
W-817-03A	3/10/09	160 D	14
W-817-04	3/17/09	92 D	20
W-817-05	3/12/09	1	<4
W-817-07	3/11/09	75 DL	11
W-818-01	3/11/09	76 D	5.6
W-818-03	3/17/09	43 D	<4
W-818-04	2/25/09	<0.5	<4
W-818-06	2/25/09	48 D	4.5
W-818-06	02/25/09 DUP	63 D	5.8
W-818-07	2/25/09	0.57	<4
W-818-08	2/11/09	82	9.6
W-818-08	7/7/09	-	7.2
W-818-09	2/11/09	87	5.5
W-818-09	7/7/09	-	6
W-818-11	3/11/09	71 D	6.5
W-819-02	3/9/09	<0.5	<4
W-823-01	3/10/09	17	<4
W-823-02	3/10/09	<0.5	<4
W-823-03	3/10/09	25 D	<4
W-823-13	3/10/09	43 D	<4
W-827-02	3/16/09	17	<4
W-827-03	3/16/09	1.3	<4
W-827-05	3/16/09	<0.5	<4
W-829-15	4/14/09	-	<4
W-829-15	04/14/09 DUP	-	<4
W-829-1938	2/12/09	-	<4
W-829-1938	02/12/09 DUP	-	<4
W-829-1938	4/16/09	-	<4 L
W-829-1938	7/16/09	-	<4
W-829-1938	07/16/09 DUP	-	<4 E
W-829-1938	10/21/09	-	<4 O
W-829-1938	10/21/09 DUP	-	<4 O
W-829-1940	3/16/09	56 D	4
W-829-22	4/14/09	-	<4
WELL18	1/21/09	<0.5	<4 O
WELL18	01/21/09 DUP	<0.5	<4
WELL18	2/11/09	<0.5	<4
WELL18	02/11/09 DUP	<0.5	<4
WELL18	3/12/09	<0.5	<4
WELL18	03/12/09 DUP	<0.5	<4
WELL18	4/21/09	<0.5	<4
WELL18	04/21/09 DUP	<0.5	<4
WELL18	5/21/09	0.7	<4
WELL18	05/21/09 DUP	<0.5	<4 L

B-4.2. High Explosives Process Area Operable Unit nitrate and perchlorate in ground and surface water.

Location	Date	Nitrate (as NO3) (mg/L)	Perchlorate (µg/L)
WELL18	6/10/09	<0.5	<4
WELL18	06/10/09 DUP	<0.5	<4
WELL18	7/15/09	<0.5	<4
WELL18	07/15/09 DUP	<0.5	<4
WELL18	8/12/09	0.53	<4
WELL18	08/12/09 DUP	<0.5	<4
WELL18	9/17/09	<0.5	<4
WELL18	09/17/09 DUP	<0.5	<4 L
WELL18	10/14/09	<0.5	<4
WELL18	10/14/09 DUP	<0.5	<4 L
WELL18	11/11/09	<0.5	<4
WELL18	11/11/09 DUP	<0.5	<4
WELL18	12/10/09	<0.5	<4
WELL18	12/10/09 DUP	<0.5 L	<4
WELL20	1/21/09	<0.5	<4 O
WELL20	01/21/09 DUP	<0.5	<4
WELL20	2/11/09	<0.5	<4
WELL20	02/11/09 DUP	<0.5	<4
WELL20	3/12/09	<0.5	<4
WELL20	03/12/09 DUP	<5 D	<4
WELL20	4/21/09	<0.5	<4
WELL20	04/21/09 DUP	<0.5	<4
WELL20	5/21/09	<0.5	<4
WELL20	05/21/09 DUP	<0.5	<4 L
WELL20	6/10/09	<0.5	<4
WELL20	06/10/09 DUP	<0.5	<4
WELL20	7/15/09	<0.5	<4
WELL20	07/15/09 DUP	<0.5	<4
WELL20	8/12/09	<0.44	<4
WELL20	08/12/09 DUP	<0.5	<4
WELL20	9/17/09	<0.5	<4
WELL20	09/17/09 DUP	<0.5	<4 L
WELL20	10/14/09	<0.5	<4
WELL20	10/14/09 DUP	<0.5	<4 L
WELL20	11/11/09	<0.5	<4
WELL20	11/11/09 DUP	<0.5	<4
WELL20	12/10/09	<0.5	<4
WELL20	12/10/09 DUP	<0.5 L	<4
SPRING14	3/24/09	11	<4

B-4.3. 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)	2,4,6-TNT (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)
GALLO1	1/13/09	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<0.86	<1.7	<0.86
GALLO1	01/13/09 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
GALLO1	2/18/09	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<0.78	<1.6	<0.78 O
GALLO1	02/18/09 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
GALLO1	3/12/09	<2.5 D	<2.5 DO	<2.5 DO	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<1.3 DO	<2.5 DO	<1.3 DO
GALLO1	03/12/09 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
GALLO1	4/22/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
GALLO1	04/22/09 DUP	<2 LO	<2 LO	<2 LO	<2 LO	<2 LO	<2 LO	<2 LO	<2 LO	<2 LO	<2 LO	<1 LO	<2 LO	<1 LO
GALLO1	5/20/09	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1	<1.6	<1
GALLO1	05/20/09 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
GALLO1	6/10/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
GALLO1	06/10/09 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	R
GALLO1	7/23/09	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<0.74	<1.5	<0.74
GALLO1	07/23/09 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
GALLO1	8/17/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
GALLO1	08/17/09 DUP	<2	<2	<2	<2	<2	<2	<2 L	LR	<2	LR	<1	<2	<1
GALLO1	9/10/09	<2.3 D	<2.3 D	<2.3 D	<2.3 D	<2.3 D	<2.3 D	<2.3 D	<2.3 D	<2.3 D	<2.3 D	<1.2 D	<2.3 D	<1.2 D
GALLO1	09/10/09 DUP	<2	<2	<2	-	-	-	<2	<2	-	<2	<1	<2	<1
GALLO1	10/14/09	<2.3 D	<2.3 DL	<2.3 DL	<2.3 DL	<2.3 DL	<2.3 DL	<2.3 DL	<2.3 DL	<2.3 DL	<2.3 DL	<1.2 D	<2.3 DL	<1.2 D
GALLO1	10/14/09 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
GALLO1	11/11/09	<2.3 D	<2.3 DO	<2.3 D	<2.3 D	<2.3 D	<2.3 D	<2.3 D	<2.3 D	<2.3 D	<2.3 D	<1.1 D	<2.3 D	<1.1 D
GALLO1	11/11/09 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
GALLO1	12/10/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
GALLO1	12/10/09 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
SPRING14	3/24/09	<2.4 D	<2.4 D	<2.4 D	<2.4 D	<2.4 D	<2.4 D	<2.4 D	<2.4 D	<2.4 D	<2.4 D	<1.2 D	<2.4 D	<1.2 D
W-35B-01	2/19/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-35B-01	8/25/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-35B-02	2/19/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-35B-02	8/25/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-35B-03	2/19/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-35B-03	8/25/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-35B-04	2/19/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-35B-04	8/25/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-35B-05	2/19/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-35B-05	8/25/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-35C-01	3/10/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-35C-02	3/17/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-35C-04	1/12/09	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<1 IJ	<2 IJ	<1 IJ
W-35C-05	2/24/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-35C-06	2/24/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-35C-07	2/23/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-35C-07	02/23/09 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-35C-08	2/23/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-4A	3/17/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-4A	03/17/09 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-4AS	3/17/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-4B	3/9/09	<2	<2	<2	<2	<2	<2	<2	<2	-	<2	<1	<2	<1

B-4.3. 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)	2,4,6-TNT (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)
W-6BD	3/9/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-6BS	3/9/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-6CD	3/17/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-6CI	3/16/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-6CS	3/16/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-6EI	2/26/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-6ER	1/12/09	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<0.79	<1.6	<0.79
W-6ES	2/26/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-6F	3/16/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-6G	3/16/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-6H	3/10/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-6H	9/8/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-6I	3/10/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-6J	3/10/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-6J	9/8/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-6K	2/24/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-6K	02/24/09 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<0.69	<2	<0.69
W-6L	2/24/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-6L	02/24/09 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-806-06A	3/12/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-808-01	3/11/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-808-03	3/11/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-809-01	3/11/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-809-02	3/11/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-809-03	3/11/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	1.2	<2	26 D
W-809-04	3/11/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	3.4	<2	<1
W-810-01	3/12/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-814-01	3/11/09	<2	<2 O	<2 O	<2	<2	<2	<2	<2	<2	<2	<1 O	<2 O	<1 O
W-814-01	3/11/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-814-02	3/17/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-814-2138	3/11/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-815-02	1/12/09	<2 DIJ	<2 DIJ	<2 DIJ	<2 DIJ	<2 DIJ	<2 DIJ	<2 DIJ	<2 DIJ	<2 DIJ	<2 DIJ	5.5 DIJ	<2 DIJ	50 DIJ
W-815-02	7/7/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	3.9	<2	60
W-815-04	1/12/09	<2.2 DIJ	<2.2 DIJ	<2.2 DIJ	<2.2 DIJ	<2.2 DIJ	<2.2 DIJ	<2.2 DIJ	<2.2 DIJ	<2.2 DIJ	<2.2 DIJ	6.6 DIJ	<2.2 DIJ	47 DIJ
W-815-04	7/7/09	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	4.2	<1.7	44
W-815-05	3/10/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-815-06	3/10/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	9.8
W-815-06	03/10/09 DUP	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<0.73	<1.5	7.7
W-815-07	3/10/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-815-08	3/10/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-815-08	8/31/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	LR
W-815-2110	3/10/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-815-2110	9/16/09	<2	<2	<2	-	-	-	<2	<2	-	<2	<1	<2	<1
W-815-2111	3/10/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-815-2111	9/16/09	<2	<2	<2	-	-	-	<2	<2	-	<2	<1	<2	<1
W-815-2217	3/16/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-817-01	12/3/09	<1.7 IJ	<1.7 IJ	<1.7 IJ	<1.7 IJ	<1.7 IJ	<1.7 IJ	<1.7 IJ	<1.7 IJ	<1.7 IJ	<1.7 IJ	14 IJ	<1.7 IJ	27 IJ

B-4.3. 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)	2,4,6-TNT (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)
W-817-03	3/11/09	<2	<2 O	<2 O	<2	<2	<2	<2	<2	<2	<2	<1 O	<2 O	7.3 O
W-817-03	7/8/09	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<1 D	<2 D	8.3 D
W-817-03A	3/10/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-817-04	3/17/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	11
W-817-05	3/12/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-817-07	3/11/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-817-2318	3/11/09	<2	<2 O	<2 O	<2	<2	<2	<2	<2	<2	<2	<1 O	<2 O	<1 O
W-817-2318	7/8/09	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<1 D	<2 D	<1 D
W-818-01	3/11/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-818-03	3/17/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-818-04	2/25/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-818-06	2/25/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-818-06	02/25/09 DUP	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<1 D	<2 D	<1 D
W-818-07	2/25/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-818-08	2/11/09	<2.3 D	<2.3 D	<2.3 D	<2.3 D	<2.3 D	<2.3 D	<2.3 D	<2.3 D	<2.3 D	<2.3 D	<1.1 D	<2.3 D	<1.1 D
W-818-09	2/11/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-818-11	3/11/09	<2	<2	<2	-	-	-	<2	<2	2.2	<2	<1	<2	23
W-819-02	3/9/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-823-01	3/10/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-823-02	3/10/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-823-03	3/10/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-823-13	3/10/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-827-02	3/16/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-827-03	3/16/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-827-05	3/16/09	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<0.87	<1.7	<0.87
W-829-15	4/14/09	-	-	<5	<5	<5	-	-	-	-	-	<1	<5	<1
W-829-15	04/14/09 DUP	-	-	<5	<5	<5	-	-	-	-	-	<1 I	<5	<1 I
W-829-1938	2/12/09	-	-	<5	<5	<5	-	-	-	-	-	<1	<5	<1
W-829-1938	02/12/09 DUP	-	-	<5	<5	<5	-	-	-	-	-	<1	<5	<1
W-829-1938	4/16/09	-	-	<5	<5	<5	-	-	-	-	-	<1	<5	<1
W-829-1938	7/16/09	-	-	<5	<5	<5	-	-	-	-	-	<1	<5	<1
W-829-1938	07/16/09 DUP	-	-	<5	<5	<5	-	-	-	-	-	<1	<5	<1
W-829-1938	10/21/09	-	-	<5	<5	<5	-	-	-	-	-	<1	<5	<1
W-829-1938	10/21/09 DUP	-	-	<5	<5	<5	-	-	-	-	-	<1	<5	<1
W-829-1940	3/16/09	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<0.67	<1.3	<0.67
W-829-22	4/14/09	-	-	<5	<5	<5	-	-	-	-	-	<1 I	<5	<1 I
WELL18	1/21/09	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<1 IJ	<2 IJ	<1 IJ
WELL18	01/21/09 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
WELL18	2/11/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
WELL18	02/11/09 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
WELL18	3/12/09	<2.5 D	<2.5 DO	<2.5 DO	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<2.5 D	<1.3 DO	<2.5 DO	<1.3 DO
WELL18	03/12/09 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
WELL18	4/21/09	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<0.74	<1.5	<0.74
WELL18	04/21/09 DUP	<2 LO	<2 LO	<2 LO	<2 LO	<2 LO	<2 LO	<2 LO	<2 LO	<2 LO	<2 LO	<1 LO	<2 LO	<1 LO
WELL18	5/21/09	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1	<1.3	<1
WELL18	05/21/09 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
WELL18	6/10/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1

B-4.3. 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)	2,4,6-TNT (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)
WELL18	06/10/09 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	R
WELL18	7/15/09	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<0.69	<1.4	<0.69
WELL18	07/15/09 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
WELL18	8/12/09	<1.4	<1.4 O	<1.4 O	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<0.72	<1.4	<0.72 O
WELL18	08/12/09 DUP	<2	<2	<2	-	-	-	<2	<2	-	<2	<1	<2	<1
WELL18	9/17/09	<1.3 IJ	<1.3 IJ	<1.3 IJ	<1.3 IJ	<1.3 IJ	<1.3 IJ	<1.3 IJ	<1.3 IJ	<1.3 IJ	<1.3 IJ	<0.67 IJ	<1.3 IJ	<0.67 IJ
WELL18	09/17/09 DUP	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<2 IJ	<1 IJ	<2 IJ	<1 IJ
WELL18	10/14/09	<2.9 D	<2.9 DL	<2.9 DL	<2.9 DL	<2.9 DL	<2.9 DL	<2.9 DL	<2.9 DL	<2.9 DL	<2.9 DL	<1.4 D	<2.9 DL	<1.4 D
WELL18	10/14/09 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
WELL18	11/11/09	<2.3 D	<2.3 DO	<2.3 D	<2.3 D	<2.3 D	<2.3 D	<2.3 D	<2.3 D	<2.3 D	<2.3 D	<1.2 D	<2.3 D	<1.2 D
WELL18	11/11/09 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
WELL18	12/10/09	<2.2 D	<2.2 D	<2.2 D	<2.2 D	<2.2 D	<2.2 D	<2.2 D	<2.2 D	<2.2 D	<2.2 D	<1.1 D	<2.2 D	<1.1 D
WELL18	12/10/09 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
WELL20	1/21/09	<2 DIJ	<2 DIJ	<2 DIJ	<2 DIJ	<2 DIJ	<2 DIJ	<2 DIJ	<2 DIJ	<2 DIJ	<2 DIJ	<1 DIJ	<2 DIJ	<1 DIJ
WELL20	01/21/09 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
WELL20	2/11/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
WELL20	02/11/09 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
WELL20	3/12/09	<2.6 D	<2.6 DO	<2.6 DO	<2.6 D	<2.6 D	<2.6 D	<2.6 D	<2.6 D	<2.6 D	<2.6 D	<1.3 DO	<2.6 DO	<1.3 DO
WELL20	03/12/09 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
WELL20	4/21/09	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<0.69	<1.4	<0.69
WELL20	04/21/09 DUP	<2 LO	<2 LO	<2 LO	<2 LO	<2 LO	<2 LO	<2 LO	<2 LO	<2 LO	<2 LO	<1 LO	<2 LO	<1 LO
WELL20	5/21/09	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1	<1.3	<1
WELL20	05/21/09 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
WELL20	6/10/09	<2.9 D	<2.9 D	<2.9 D	<2.9 D	<2.9 D	<2.9 D	<2.9 D	<2.9 D	<2.9 D	<2.9 D	<1.5 D	<2.9 D	<1.5 D
WELL20	06/10/09 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	R
WELL20	7/15/09	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<0.67	<1.3	<0.67
WELL20	07/15/09 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
WELL20	8/12/09	<1.4	<1.4 O	<1.4 O	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<0.69	<1.4	<0.69 O
WELL20	08/12/09 DUP	<2	<2	<2	-	-	-	<2	<2	-	<2	<1	<2	<1
WELL20	9/17/09	<1.8 IJ	<1.8 IJ	<1.8 IJ	<1.8 IJ	<1.8 IJ	<1.8 IJ	<1.8 IJ	<1.8 IJ	<1.8 IJ	<1.8 IJ	<0.9 IJ	<1.8 IJ	<0.9 IJ
WELL20	09/17/09 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
WELL20	10/14/09	<2 D	<2 DL	<2 DL	<2 DL	<2 DL	<2 DL	<2 DL	<2 DL	<2 DL	<2 DL	<1 D	<2 DL	<1 D
WELL20	10/14/09 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
WELL20	11/11/09	<1.3	<1.3 O	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<0.67	<1.3	<0.67
WELL20	11/11/09 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
WELL20	12/10/09	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<0.82	<1.6	<0.82
WELL20	12/10/09 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1

B-4.4. High Explosives Process Area Operable Unit diesel range organic compounds in ground water.

Location	Date	Diesel Fuel (µg/L)	Oil (µg/L)
W-823-02	9/8/09	2,200	<200

B-5.1. 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)
K1-01C	1/29/09	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
K1-01C	4/30/09	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
K1-01C	7/21/09	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
K1-01C	10/28/09	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
K1-01C	10/28/09 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
K1-02B	1/29/09	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	01/29/09 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
K1-02B	4/27/09	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	7/14/09	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	10/28/09	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
K1-04	1/27/09	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
K1-04	4/27/09	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
K1-04	7/21/09	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
K1-04	07/21/09 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
K1-04	10/27/09	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	1/26/09	E8260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 F	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	20	<0.5
K1-05	4/27/09	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	7/14/09	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	19	<0.5
K1-05	10/22/09	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	17	<0.5
K1-07	1/26/09	E8260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 F	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K1-07	4/28/09	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	04/28/09 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
K1-07	7/13/09	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	10/22/09	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	1/27/09	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	24	<0.5
K1-08	4/28/09	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	19	<0.5
K1-08	7/13/09	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	10/22/09	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	16	<0.5
K1-09	1/27/09	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	42	<0.5
K1-09	4/28/09	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	50	<0.5
K1-09	7/14/09	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	10/27/09	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
NC7-69	4/2/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
NC7-69	04/02/09 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
NC7-69	11/18/09	E601	<0.5	<0.5	<0.5	<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	1/12/09	E601	<0.5	<0.5	<0.5	<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	7/23/09	E601	<0.5	<0.5	<0.5	<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	07/23/09 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-PIT1-2326	1/29/09	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	4/29/09	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	7/21/09	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	10/27/09	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-865-1802	1/14/09	E601	<0.5	<0.5	<0.5	<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	8/3/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-1803	2/3/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-1803	7/15/09	E601	<0.5 O	<0.5	<0.5	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5	<0.5	<0.5
W-865-2005	2/4/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	10	<0.5
W-865-2005	8/3/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	5.3	<0.5
W-865-2005	08/03/09 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	5.1	<0.5

Analytes detected but not reported in main table.

Location	Date	Method	Detection frequency
K1-01C	1/29/09	E8260	0 of 36
K1-01C	4/30/09	E8260	0 of 36
K1-01C	7/21/09	E8260	0 of 36
K1-01C	10/28/09	E8260	0 of 36
K1-01C	10/28/09 DUP	E8260	0 of 36
K1-02B	1/29/09	E8260	0 of 36
K1-02B	01/29/09 DUP	E8260	0 of 36
K1-02B	4/27/09	E8260	0 of 36
K1-02B	7/14/09	E8260	0 of 36
K1-02B	10/28/09	E8260	0 of 36
K1-04	1/27/09	E8260	0 of 36
K1-04	4/27/09	E8260	0 of 36
K1-04	7/21/09	E8260	0 of 36
K1-04	07/21/09 DUP	E8260	0 of 36
K1-04	10/27/09	E8260	0 of 36
K1-05	1/26/09	E8260	0 of 36
K1-05	4/27/09	E8260	0 of 36
K1-05	7/14/09	E8260	0 of 36
K1-05	10/22/09	E8260	0 of 36
K1-07	1/26/09	E8260	0 of 36
K1-07	4/28/09	E8260	0 of 36
K1-07	04/28/09 DUP	E8260	0 of 36
K1-07	7/13/09	E8260	0 of 36
K1-07	10/22/09	E8260	0 of 36
K1-08	1/27/09	E8260	0 of 36
K1-08	4/28/09	E8260	0 of 36
K1-08	7/13/09	E8260	0 of 36
K1-08	10/22/09	E8260	0 of 36
K1-09	1/27/09	E8260	0 of 36
K1-09	4/28/09	E8260	0 of 36
K1-09	7/14/09	E8260	0 of 36
K1-09	10/27/09	E8260	0 of 36
NC7-69	4/2/09	E601	0 of 18
NC7-69	04/02/09 DUP	E601	0 of 18
NC7-69	11/18/09	E601	0 of 18
W-PIT1-2209	1/12/09	E601	0 of 18
W-PIT1-2209	7/23/09	E601	0 of 18
W-PIT1-2209	07/23/09 DUP	E601	0 of 18
W-PIT1-2326	1/29/09	E8260	0 of 36
W-PIT1-2326	4/29/09	E8260	0 of 36
W-PIT1-2326	7/21/09	E8260	0 of 36
W-PIT1-2326	10/27/09	E8260	0 of 36
W-865-1802	1/14/09	E601	0 of 18
W-865-1802	8/3/09	E601	0 of 18
W-865-1803	2/3/09	E601	0 of 18
W-865-1803	7/15/09	E601	0 of 18
W-865-2005	2/4/09	E601	0 of 22
W-865-2005	2/4/09	E602	0 of 9
W-865-2005	8/3/09	E601	0 of 18
W-865-2005	8/3/09	E602	0 of 9
W-865-2005	08/03/09 DUP	E601	0 of 18
W-865-2005	08/03/09 DUP	E602	0 of 9

B-5.2. Building 850 area in Operable Unit 5 nitrate and perchlorate in ground and surface water.

Location	Date	Nitrate (as NO3) (mg/L)	Perchlorate (µg/L)
W-850-2313	4/2/09	35	18
W-850-2313	11/11/09	38	-
W-850-2314	4/6/09	<0.5	<4
W-850-2416	2/11/09	<0.5	-
K1-01C	1/29/09	34	<4 E
K1-01C	4/30/09	35	<4 E
K1-01C	7/21/09	35 F	<4 EL
K1-01C	10/28/09	36 F	<4 E
K1-01C	10/28/09 DUP	36 F	<4 E
K1-02B	1/29/09	36	5.8
K1-02B	01/29/09 DUP	36	5.4
K1-02B	4/27/09	36 F	7.3
K1-02B	7/14/09	36	7.1
K1-02B	10/28/09	35 F	5.9
K1-04	1/27/09	34	<4 E
K1-04	4/27/09	35 F	<4 E
K1-04	7/21/09	32 F	<4 EL
K1-04	07/21/09 DUP	31 F	<4 EL
K1-04	10/27/09	33	<4 E
K1-05	1/26/09	36 F	<4 E
K1-05	4/27/09	36 F	<4 E
K1-05	7/14/09	37	<4 E
K1-05	10/22/09	36	<4
K1-06	1/12/09	-	4.6 L
K1-06	5/6/09	40 D	4.6
K1-06	7/20/09	-	<4
K1-06	10/21/09	-	<4
K1-07	1/26/09	33 F	<4
K1-07	4/28/09	31	<4
K1-07	04/28/09 DUP	32	<4
K1-07	7/13/09	33	<4 E
K1-07	10/22/09	31	<4
K1-08	1/27/09	35	<4 E
K1-08	4/28/09	35	<4 E
K1-08	7/13/09	36	<4
K1-08	10/22/09	35	<4
K1-09	1/27/09	35	<4 E
K1-09	4/28/09	34	<4
K1-09	7/14/09	36	<4 E
K1-09	10/27/09	35	<4
K2-03	5/6/09	10	-
K2-04D	4/9/09	37	4
K2-04D	04/09/09 DUP	37	<4 E
K2-04D	11/19/09	-	<4
K2-04S	4/9/09	-	6.9
K2-04S	4/14/09	40	-

B-5.2. Building 850 area in Operable Unit 5 nitrate and perchlorate in ground and surface water.

Location	Date	Nitrate (as NO3) (mg/L)	Perchlorate (µg/L)
K2-04S	10/14/09	-	4
NC2-05	5/5/09	27 D	<4
NC2-05A	5/5/09	36 D	4.6
NC2-06	5/4/09	35 D	4.3
NC2-06A	5/4/09	0.56	<4
NC2-09	5/5/09	<0.5	<4
NC2-10	5/4/09	61 D	<4
NC2-11D	4/15/09	30 D	<4 E
NC2-11D	10/15/09	-	<4 E
NC2-11D	10/15/09 DUP	-	4.6
NC2-11I	5/7/09	40 L	<4
NC2-11I	10/15/09	-	<4 L
NC2-11S	5/7/09	43 L	<4
NC2-11S	10/15/09	-	<4 L
NC2-12D	4/15/09	28 D	5.9
NC2-12D	04/15/09 DUP	27 D	4.4
NC2-12D	10/19/09	-	<4
NC2-12I	5/5/09	28 D	<4
NC2-12S	5/5/09	100 D	<4
NC2-12S	10/19/09	-	<4
NC2-13	1/12/09	-	<4 L
NC2-13	4/30/09	37	-
NC2-13	04/30/09 DUP	37	-
NC2-14S	1/8/09	-	<4 L
NC2-14S	01/08/09 DUP	-	4.8 O
NC2-14S	4/27/09	30 D	-
NC2-14S	7/16/09	-	<4
NC2-14S	07/16/09 DUP	-	4.1
NC2-15	4/28/09	35 L	<4
NC2-16	1/8/09	-	<4 L
NC2-16	4/27/09	1.9	-
NC2-16	7/15/09	-	<4
NC2-17	4/28/09	29 DL	5.3
NC2-18	4/28/09	33 DL	7.7
NC2-18	04/28/09 DUP	37	10
NC2-19	4/30/09	75 D	<4
NC2-20	5/4/09	40 D	<4
NC2-21	5/4/09	27 D	<4
NC7-10	2/11/09	48 D	22
NC7-10	4/2/09	47 D	-
NC7-10	8/6/09	50 D	21 L
NC7-11	1/7/09	-	18
NC7-11	4/2/09	56 D	-
NC7-11	7/14/09	-	16 L
NC7-15	4/6/09	30 D	<4
NC7-19	4/2/09	26 D	<4

B-5.2. Building 850 area in Operable Unit 5 nitrate and perchlorate in ground and surface water.

Location	Date	Nitrate (as NO3) (mg/L)	Perchlorate (µg/L)
NC7-27	4/6/09	46 D	12
NC7-28	1/8/09	-	69 L
NC7-28	4/1/09	79 D	59
NC7-29	1/8/09	-	12 L
NC7-29	4/21/09	180 D	-
NC7-29	7/20/09	-	11
NC7-43	1/27/09	-	<4
NC7-43	4/1/09	<0.5	-
NC7-44	4/1/09	52 D	<4
NC7-46	4/27/09	<0.5	-
NC7-46	7/16/09	-	<4
NC7-54	4/2/09	20 D	-
NC7-54	7/14/09	-	14 L
NC7-56	1/15/09	-	9.3 L
NC7-56	4/23/09	33	-
NC7-56	7/16/09	-	7.5
NC7-58	1/15/09	-	6.4 L
NC7-58	4/23/09	31 D	-
NC7-58	7/16/09	-	4.8
NC7-59	1/15/09	-	7.3 L
NC7-59	4/23/09	27 D	-
NC7-59	7/16/09	-	5.4
NC7-60	1/28/09	-	<4
NC7-60	4/6/09	0.58	-
NC7-60	04/06/09 DUP	0.72	-
NC7-60	7/14/09	-	<4 L
NC7-61	1/21/09	66	51 O
NC7-61	4/6/09	60	58 D
NC7-61	8/6/09	65	61 D
NC7-61	08/06/09 DUP	65	58 D
NC7-61	11/12/09	-	55 D
NC7-61	11/17/09 DUP	-	54 D
NC7-62	4/23/09	31 D	6.6
NC7-62	10/28/09	-	8.2
NC7-69	4/2/09	<0.5	-
NC7-69	04/02/09 DUP	<0.5	-
NC7-69	11/18/09	-	<4 L
NC7-70	1/27/09	-	39
NC7-70	4/1/09	37 D	-
NC7-71	1/27/09	-	<4
NC7-71	4/1/09	<0.5	<4
NC7-72	1/15/09	-	5.7 L
NC7-72	4/27/09	31 D	-
NC7-72	04/27/09 DUP	32 D	-
NC7-72	7/16/09	-	<4
NC7-73	4/27/09	34 D	5.7

B-5.2. Building 850 area in Operable Unit 5 nitrate and perchlorate in ground and surface water.

Location	Date	Nitrate (as NO3) (mg/L)	Perchlorate (µg/L)
NC7-73	11/2/09	-	6.8
NC7-76	4/6/09	25 D	<4
W-850-05	2/2/09	-	<4
W-850-05	4/1/09	<0.5	-
W-850-2145	4/28/09	31 DL	5.5
W-850-2312	4/28/09	3.6	<4
W-850-2315	1/20/09	87	-
W-850-2315	4/21/09	81	11
W-850-2315	7/20/09	83	-
W-850-2315	11/4/09	-	9.2
W-850-2316	4/28/09	0.86	<4
W-PIT1-2204	3/4/09	-	<4
W-PIT1-2209	1/12/09	36	<4
W-PIT1-2209	5/4/09	37	-
W-PIT1-2209	7/23/09	37	4.3
W-PIT1-2209	07/23/09 DUP	37 L	<4
W-PIT1-2225	1/13/09	-	<4
W-PIT1-2225	5/7/09	<0.5	<4
W-PIT1-2225	7/29/09	-	<4
W-PIT1-2225	10/26/09	-	<4
W-PIT1-2326	1/29/09	32	4.5
W-PIT1-2326	4/29/09	33	6.2
W-PIT1-2326	7/21/09	32 F	6.2 L
W-PIT1-2326	10/27/09	33	5.1
W-PIT7-16	4/6/09	<0.5	-
W-865-1802	4/15/09	28 D	-
W-865-1803	4/15/09	27	<4
W-865-1803	04/15/09 DUP	-	<4
W-865-1803	4/15/09	25 D	-
W-865-1803	10/20/09	-	<4
W-865-2005	2/4/09	32 D	<4
W-865-2005	8/3/09	30 D	<4
W-865-2005	08/03/09 DUP	38 D	<4
W8SPRNG	3/18/09	-	16
W8SPRNG	4/23/09	42 D	-
W8SPRNG	7/14/09	-	19 L

B-5.3. Building 850 area in Operable Unit 5 uranium isotopes by mass spectrometry in ground and surface water.

Location	Date	Uranium (pCi/L)	Uranium 233 by mass (pCi/L)	Uranium 234 by mass (pCi/L)	Uranium 235 by mass (pCi/L)	Uranium 236 by mass (pCi/L)	Uranium 238 by mass (pCi/L)	Uranium 235/238 (ratio)
W-850-2313	4/2/09	5.30 ± 0.0840	-	3.00 ± 0.0830	0.110 ± 0.000940	<0.00051	2.20 ± 0.0150	0.00739 ± 0.0000450
K1-07	4/28/09	2.70 ± 0.0470	-	1.90 ± 0.0470	0.0400 ± 0.000380	<0.00016	0.850 ± 0.00460	0.00731 ± 0.0000570
K1-07	04/28/09 DUP	2.70 ± 0.0520	-	1.90 ± 0.0520	0.0400 ± 0.000320	<0.00016	0.850 ± 0.00170	0.00732 ± 0.0000560
NC2-06A	5/4/09	0.350 ± 0.0150	-	0.190 ± 0.0150	0.00600 ± 0.0000570	<0.00025	0.150 ± 0.00130	0.00609 ± 0.0000290
NC2-06A	10/8/09	0.360 ± 0.00800	-	0.210 ± 0.00790	0.00580 ± 0.0000560	<0.007	0.150 ± 0.00110	0.00619 ± 0.0000380
NC2-11D	4/15/09	4.90 ± 0.0690	-	3.00 ± 0.0670	0.0870 ± 0.000980	<0.00036	1.90 ± 0.0170	0.00730 ± 0.0000480
NC2-11D	10/15/09	5.20 ± 0.0510	-	3.20 ± 0.0510	0.0900 ± 0.000470	<0.00042	1.90 ± 0.00540	0.00722 ± 0.0000320
NC2-11D	10/15/09 DUP	5.20 ± 0.110	-	3.20 ± 0.110	0.0900 ± 0.00110	<0.00037	1.90 ± 0.0190	0.00727 ± 0.0000540
NC7-10	4/2/09	2.70 ± 0.0330	-	1.60 ± 0.0330	0.0470 ± 0.000430	<0.0008	1.10 ± 0.00330	0.00678 ± 0.0000590
NC7-28	1/8/09	14.9	<312	<312 E	0.170 ± 0.0160	<3.2 E	11.6 ± 1.48	0.0023
NC7-28	4/1/09	16.0 ± 0.220	-	3.90 ± 0.220	0.190 ± 0.00320	0.0700 ± 0.000180	12.0 ± 0.0340	0.00248 ± 0.0000400
NC7-54	4/2/09	5.20 ± 0.0680	-	2.80 ± 0.0680	0.0910 ± 0.000530	<0.007	2.30 ± 0.00690	0.00615 ± 0.0000300
NC7-61	4/6/09	5.70 ± 0.0950	-	2.60 ± 0.0920	0.0810 ± 0.000630	0.0100 ± 0.0000590	3.00 ± 0.0210	0.00425 ± 0.0000150
NC7-70	4/1/09	2.20 ± 0.0330	-	1.40 ± 0.0320	0.0330 ± 0.000360	<0.007	0.770 ± 0.00680	0.00666 ± 0.0000420
W-PIT1-2204	3/4/09	7.30 ± 0.180	-	4.80 ± 0.180	0.110 ± 0.00170	<0.0012	2.40 ± 0.0300	0.00706 ± 0.0000600
W-PIT1-2326	4/29/09	2.80 ± 0.0360	-	1.80 ± 0.0360	0.0440 ± 0.000350	<0.00018	0.940 ± 0.00700	0.00730 ± 0.0000190

B-5.4. Building 850 area in Operable Unit 5 uranium and thorium isotopes by alpha spectrometry in ground and surface water.

Location	Date	Thorium 228 (pCi/L)	Thorium 230 (pCi/L)	Thorium 232 (pCi/L)	Uranium 234 and Uranium 233 (pCi/L)	Uranium 235 and Uranium 236 (pCi/L)	Uranium 238 (pCi/L)
W-850-2314	4/6/09	-	-	-	<0.1	<0.1	<0.1
K1-01C	1/29/09	<0.25	<0.15	<0.15	2.49 ± 0.380	<0.1	1.33 ± 0.250
K1-01C	4/30/09	<0.25	<0.15	<0.15	2.93 ± 0.300	0.110 ± 0.0380	1.34 ± 0.160
K1-01C	7/22/09	<0.25	<0.15	<0.15	2.76 ± 0.320	<0.1	1.16 ± 0.170
K1-01C	10/28/09	<0.25 LO	<0.15	<0.15 LO	2.60 ± 0.544 LO	<0.1 LO	1.18 ± 0.295
K1-01C	10/28/09 DUP	<0.25 LO	<0.15	<0.15 LO	2.64 ± 0.534 LO	<0.1 LO	0.965 ± 0.245
K1-02B	1/29/09	<0.25	<0.15	<0.15	2.05 ± 0.290	<0.1	1.30 ± 0.220
K1-02B	01/29/09 DUP	<0.25	<0.15	<0.15	2.10 ± 0.280	0.170 ± 0.0740	1.24 ± 0.200
K1-02B	4/27/09	<0.25	<0.15	<0.15	1.99 ± 0.230	<0.1	1.21 ± 0.150
K1-02B	7/14/09	<0.25	<0.15	<0.15	2.30 ± 0.260	<0.1	1.20 ± 0.170
K1-02B	10/26/09	<0.25 LO	<0.15	<0.15 LO	2.17 ± 0.463 LO	<0.1 LO	1.26 ± 0.305
K1-04	1/27/09	<0.25	<0.15	<0.15	0.982 ± 0.140	<0.1	0.519 ± 0.0960
K1-04	4/27/09	<0.25	<0.15	<0.15	1.30 ± 0.180	<0.1	0.675 ± 0.110
K1-04	7/21/09	<0.25	<0.15	<0.15	1.26 ± 0.220	<0.1	0.490 ± 0.120
K1-04	07/21/09 DUP	<0.25	<0.15	<0.15	1.13 ± 0.180	<0.1	0.557 ± 0.110
K1-04	10/27/09	<0.25 LO	<0.15	<0.15 LO	1.30 ± 0.296 LO	<0.1 LO	0.661 ± 0.183
K1-05	1/26/09	<0.25	<0.15	<0.15	1.91 ± 0.250	<0.1	0.906 ± 0.150
K1-05	4/27/09	<0.25	<0.15	<0.15	2.00 ± 0.250	<0.1	0.900 ± 0.140
K1-05	7/14/09	<0.25	<0.15	<0.15	1.87 ± 0.230	<0.1	0.944 ± 0.150
K1-05	10/22/09	<0.25 LO	<0.15	<0.15 LO	1.67 ± 0.351 LO	<0.1 LO	0.898 ± 0.220
K1-06	5/6/09	-	-	-	5.36 ± 0.510	0.140 ± 0.0480	2.46 ± 0.270
K1-07	1/26/09	<0.25	<0.15	<0.15	1.95 ± 0.270	<0.1	0.755 ± 0.140
K1-07	4/28/09	<0.25	<0.15	<0.15	1.72 ± 0.200	<0.1	0.878 ± 0.120
K1-07	04/28/09 DUP	<0.25	<0.15	<0.15	2.02 ± 0.230	<0.1	1.04 ± 0.140
K1-07	7/13/09	<0.25	<0.15	<0.15	1.77 ± 0.240	<0.1	0.885 ± 0.150
K1-07	10/22/09	<0.25 LO	<0.15	<0.15 LO	1.50 ± 0.330 LO	<0.1 LO	0.831 ± 0.213
K1-08	1/27/09	<0.25	<0.15	<0.15	2.24 ± 0.260	<0.1	0.893 ± 0.140
K1-08	02/24/09 REX	-	-	-	1.92 ± 0.240	<0.1	0.903 ± 0.140
K1-08	4/28/09	<0.25	<0.15	<0.15	1.87 ± 0.230	<0.1	0.927 ± 0.130
K1-08	7/13/09	<0.25	<0.15	<0.15	2.06 ± 0.260	<0.1	0.924 ± 0.150
K1-08	10/22/09	<0.25 LO	<0.15	<0.15 LO	1.88 ± 0.385 LO	<0.1 LO	0.813 ± 0.205
K1-09	1/27/09	<0.25	<0.15	<0.15	2.08 ± 0.250	<0.1	0.976 ± 0.150
K1-09	4/28/09	<0.25	<0.15	<0.15	2.04 ± 0.240	<0.1	0.971 ± 0.140
K1-09	7/14/09	<0.25	<0.15	<0.15	2.04 ± 0.240	<0.1	0.937 ± 0.130
K1-09	10/27/09	<0.25 LO	<0.15	<0.15 LO	2.09 ± 0.445 LO	0.109 ± 0.0753 LO	1.00 ± 0.255
K2-03	5/6/09	-	-	-	4.47 ± 0.440	0.230 ± 0.0610	3.03 ± 0.310
K2-04D	4/9/09	-	-	-	1.86 ± 0.230	<0.1	1.13 ± 0.160
K2-04D	04/09/09 DUP	-	-	-	1.64 ± 0.210	<0.1	1.13 ± 0.160
K2-04S	4/9/09	-	-	-	1.82 ± 0.220	<0.1	1.29 ± 0.170
NC2-05	5/5/09	-	-	-	7.27 ± 0.670	0.274 ± 0.0670	4.97 ± 0.480
NC2-05A	5/5/09	-	-	-	2.44 ± 0.260	<0.1	1.58 ± 0.190
NC2-06	5/4/09	-	-	-	1.52 ± 0.190	<0.1	0.916 ± 0.140
NC2-06A	5/4/09	-	-	-	0.208 ± 0.0600	<0.1	0.204 ± 0.0540
NC2-09	5/5/09	-	-	-	<0.1	<0.1	<0.1
NC2-10	5/4/09	-	-	-	3.38 ± 0.360	0.132 ± 0.0450	1.76 ± 0.210
NC2-11I	5/7/09	-	-	-	2.90 ± 0.310	0.113 ± 0.0410	1.69 ± 0.190
NC2-11S	5/7/09	-	-	-	2.73 ± 0.280	0.124 ± 0.0420	1.46 ± 0.170
NC2-12D	4/15/09	-	-	-	1.95 ± 0.290	<0.1	1.11 ± 0.200
NC2-12D	04/15/09 DUP	-	-	-	2.17 ± 0.260	<0.1	1.34 ± 0.180
NC2-12D	10/19/09	-	-	-	2.16 ± 0.351	<0.1	1.20 ± 0.216
NC2-12I	5/5/09	-	-	-	2.16 ± 0.240	<0.1	1.34 ± 0.170
NC2-12S	5/5/09	-	-	-	3.31 ± 0.350	<0.1	1.74 ± 0.210
NC2-13	4/30/09	-	-	-	3.42 ± 0.340	0.114 ± 0.0410	2.02 ± 0.230
NC2-13	04/30/09 DUP	-	-	-	3.20 ± 0.799	0.268 ± 0.418	1.35 ± 0.629
NC2-14S	4/27/09	-	-	-	2.24 ± 0.270	<0.1	1.24 ± 0.170
NC2-15	4/28/09	-	-	-	1.74 ± 0.250	<0.1	0.888 ± 0.170
NC2-16	4/27/09	-	-	-	0.826 ± 0.130	<0.1	0.524 ± 0.0970
NC2-17	4/28/09	-	-	-	1.47 ± 0.200	<0.1	1.00 ± 0.150
NC2-18	4/28/09	-	-	-	1.96 ± 0.230	<0.1	1.39 ± 0.180
NC2-18	04/28/09 DUP	-	-	-	2.27 ± 0.492	0.102 ± 0.0777	1.36 ± 0.334
NC2-19	4/30/09	-	-	-	4.32 ± 0.430	0.160 ± 0.0490	3.04 ± 0.310
NC2-20	5/4/09	-	-	-	2.76 ± 0.290	0.147 ± 0.0470	2.05 ± 0.230

B-5.4. Building 850 area in Operable Unit 5 uranium and thorium isotopes by alpha spectrometry in ground and surface water.

Location	Date	Thorium 228 (pCi/L)	Thorium 230 (pCi/L)	Thorium 232 (pCi/L)	Uranium 234 and Uranium 233 (pCi/L)	Uranium 235 and Uranium 236 (pCi/L)	Uranium 238 (pCi/L)
NC2-21	5/4/09	-	-	-	2.03 ± 0.230	0.108 ± 0.0430	1.60 ± 0.190
NC7-10	4/2/09	-	-	-	1.65 ± 0.200	<0.1	1.05 ± 0.150
NC7-11	4/2/09	-	-	-	1.68 ± 0.210	<0.1	1.19 ± 0.160
NC7-15	4/6/09	-	-	-	1.02 ± 0.150	<0.1	0.902 ± 0.130
NC7-19	4/2/09	-	-	-	1.88 ± 0.230	<0.1	1.78 ± 0.210
NC7-27	4/6/09	-	-	-	1.55 ± 0.180	<0.1	1.38 ± 0.160
NC7-28	4/1/09	-	-	-	3.38 ± 0.400	0.255 ± 0.0880	11.4 ± 1.10
NC7-29	4/21/09	-	-	-	9.08 ± 0.830	0.418 ± 0.0790	7.53 ± 0.700
NC7-43	4/1/09	-	-	-	<0.1	<0.1	0.103 ± 0.0440
NC7-44	4/1/09	-	-	-	1.30 ± 0.170	<0.1	0.707 ± 0.110
NC7-46	4/27/09	-	-	-	<0.1	<0.1	<0.1
NC7-56	4/23/09	-	-	-	1.86 ± 0.270	<0.1	1.64 ± 0.240
NC7-58	4/23/09	-	-	-	1.87 ± 0.250	<0.1	1.50 ± 0.220
NC7-59	4/23/09	-	-	-	1.79 ± 0.240	0.112 ± 0.0570	1.45 ± 0.210
NC7-60	4/6/09	-	-	-	0.426 ± 0.0750	<0.1	0.327 ± 0.0660
NC7-60	04/06/09 DUP	-	-	-	0.566 ± 0.175	<0.1 O	0.258 ± 0.111
NC7-61	4/6/09	-	-	-	2.40 ± 0.270	0.138 ± 0.0450	2.86 ± 0.300
NC7-61	11/12/09	-	-	-	2.39 ± 0.367	<0.1 B	2.75 ± 0.417
NC7-61	11/12/09 DUP	-	-	-	2.46 ± 0.382	<0.1 B	2.75 ± 0.422
NC7-62	4/23/09	-	-	-	2.12 ± 0.290	<0.1	1.64 ± 0.240
NC7-69	4/2/09	-	-	-	<0.1	<0.1	<0.1
NC7-69	04/02/09 DUP	-	-	-	<0.1	<0.1	<0.1
NC7-71	1/27/09	-	-	-	<0.1	<0.1	<0.1
NC7-71	4/1/09	-	-	-	<0.1	<0.1	<0.1
NC7-72	4/27/09	-	-	-	2.08 ± 0.250	<0.1	1.68 ± 0.210
NC7-72	04/27/09 DUP	-	-	-	2.02 ± 0.260	<0.1	1.59 ± 0.220
NC7-73	4/27/09	-	-	-	2.29 ± 0.290	<0.1	1.78 ± 0.240
NC7-76	4/6/09	-	-	-	1.37 ± 0.160	<0.1	1.22 ± 0.150
W-850-05	4/1/09	-	-	-	<0.1	<0.1	<0.1
W-850-2145	4/28/09	-	-	-	2.26 ± 0.260	<0.1	1.66 ± 0.200
W-850-2312	4/28/09	-	-	-	1.25 ± 0.160	<0.1	0.626 ± 0.100
W-850-2315	4/21/09	-	-	-	9.60 ± 0.880	0.371 ± 0.0770	6.45 ± 0.610
W-850-2316	4/28/09	-	-	-	7.38 ± 0.700	0.313 ± 0.0750	5.09 ± 0.510
W-PIT1-2209	5/4/09	-	-	-	1.72 ± 0.200	<0.1	0.904 ± 0.130
W-PIT1-2209	10/6/09	-	-	-	1.59 ± 0.232	<0.1	0.848 ± 0.133
W-PIT1-2225	5/7/09	-	-	-	0.125 ± 0.0470	<0.1	<0.1
W-PIT1-2326	1/29/09	<0.25	<0.15	<0.15	1.70 ± 0.230	0.115 ± 0.0580	0.828 ± 0.150
W-PIT1-2326	4/29/09	<0.25	).157 ± 0.062(	<0.15	1.75 ± 0.200	<0.1	0.984 ± 0.140
W-PIT1-2326	7/21/09	<0.25	<0.15	<0.15	1.71 ± 0.230	<0.1	1.04 ± 0.160
W-PIT1-2326	10/27/09	<0.25 LO	<0.15	<0.15 LO	1.84 ± 0.398 LO	<0.1 LO	0.874 ± 0.228
W-PIT7-16	4/6/09	-	-	-	0.190 ± 0.0470	<0.1	<0.1
W-865-1802	4/15/09	-	-	-	1.19 ± 0.150	<0.1	0.651 ± 0.100
W-865-1803	4/15/09	-	-	-	2.02 ± 0.230	<0.1	0.955 ± 0.140
W-865-1803	04/15/09 DUP	-	-	-	2.06 ± 0.425	<0.1	1.15 ± 0.278
W-865-2005	4/29/09	-	-	-	1.58 ± 0.190	<0.1	0.615 ± 0.0940
W8SPRNG	4/23/09	-	-	-	1.56 ± 0.210	<0.1	1.29 ± 0.180

B-5.5. Building 850 area in Operable Unit 5 tritium in ground and surface water.

Location	Date	Tritium (pCi/L)
W-850-2313	1/20/09	19800 ± 2000
W-850-2313	4/2/09	19400 ± 2000
W-850-2313	7/14/09	18500 ± 1900
W-850-2313	11/11/09	21900 ± 4260
W-850-2314	2/4/09	1310 ± 150
W-850-2314	4/6/09	1250 ± 140
W-850-2314	7/14/09	1170 ± 140
K1-01C	1/29/09	796 ± 100
K1-01C	4/30/09	823 ± 100
K1-01C	7/22/09	821 ± 100
K1-01C	10/28/09	1070 ± 219
K1-01C	10/28/09 DUP	952 ± 197
K1-02B	1/29/09	3700 ± 380
K1-02B	01/29/09 DUP	3940 ± 410
K1-02B	4/27/09	3720 ± 380
K1-02B	7/14/09	3780 ± 390
K1-02B	10/26/09	4260 ± 834
K1-04	1/27/09	260 ± 64.0 O
K1-04	4/27/09	453 ± 70.0
K1-04	7/21/09	352 ± 67.0
K1-04	07/21/09 DUP	363 ± 68.0
K1-04	10/27/09	519 ± 116
K1-05	1/26/09	105 ± 60.0 FO
K1-05	4/27/09	295 ± 59.0
K1-05	7/14/09	214 ± 56.0
K1-05	10/22/09	249 ± 69.1
K1-06	5/6/09	3010 ± 310
K1-06	10/21/09	3450 ± 696
K1-07	1/26/09	<100 O
K1-07	4/28/09	119 ± 49.0
K1-07	04/28/09 DUP	<100
K1-07	7/13/09	<100
K1-07	10/22/09	<100
K1-08	1/27/09	148 ± 59.0 O
K1-08	4/28/09	251 ± 56.0
K1-08	7/13/09	192 ± 55.0
K1-08	10/22/09	235 ± 65.9
K1-09	1/27/09	199 ± 75.0 O
K1-09	4/28/09	271 ± 57.0
K1-09	7/14/09	131 ± 52.0
K1-09	10/27/09	226 ± 64.4
K2-03	5/6/09	<100
K2-03	10/6/09	123 ± 62.7
K2-04D	4/9/09	3970 ± 410
K2-04D	04/09/09 DUP	4070 ± 420
K2-04D	11/19/09	4080 ± 810

B-5.5. Building 850 area in Operable Unit 5 tritium in ground and surface water.

Location	Date	Tritium (pCi/L)
K2-04S	4/9/09	6750 ± 690
K2-04S	10/14/09	6010 ± 1170
NC2-05	5/5/09	129 ± 52.0
NC2-05	10/7/09	<100
NC2-05A	5/5/09	3600 ± 370
NC2-05A	10/7/09	3970 ± 786
NC2-06	5/4/09	5180 ± 530
NC2-06	10/8/09	5740 ± 1120
NC2-06A	5/4/09	<100
NC2-06A	10/8/09	<100
NC2-09	5/5/09	135 ± 52.0
NC2-09	10/7/09	<100
NC2-10	5/4/09	293 ± 62.0
NC2-10	10/21/09	457 ± 152
NC2-11D	4/15/09	3300 ± 340
NC2-11D	10/15/09	3520 ± 711
NC2-11D	10/15/09 DUP	3560 ± 717
NC2-11I	5/7/09	4050 ± 420
NC2-11I	10/15/09	4310 ± 862
NC2-11S	5/7/09	4490 ± 460
NC2-11S	10/15/09	4780 ± 951
NC2-12D	4/15/09	5840 ± 600
NC2-12D	04/15/09 DUP	5820 ± 590
NC2-12D	10/19/09	5910 ± 1170
NC2-12I	5/5/09	5810 ± 590
NC2-12S	5/5/09	3060 ± 320
NC2-12S	10/19/09	3030 ± 616
NC2-13	4/30/09	3700 ± 380
NC2-13	04/30/09 DUP	3820 ± 754
NC2-13	10/7/09	4020 ± 795
NC2-14S	4/27/09	3780 ± 390
NC2-14S	10/27/09	2970 ± 586 L
NC2-14S	10/27/09 DUP	3060 ± 602 L
NC2-15	4/28/09	4680 ± 480
NC2-15	10/27/09	5050 ± 987 L
NC2-16	4/27/09	726 ± 95.0
NC2-16	10/27/09	1720 ± 343 L
NC2-17	4/28/09	9900 ± 1000
NC2-17	10/27/09	10400 ± 2020 L
NC2-18	4/28/09	12800 ± 1300
NC2-18	04/28/09 DUP	12500 ± 2440
NC2-18	10/27/09	13500 ± 2620 L
NC2-18	10/27/09 DUP	12100 ± 1800
NC2-19	4/30/09	<100
NC2-19	10/27/09	<100 L
NC2-20	5/4/09	<100

B-5.5. Building 850 area in Operable Unit 5 tritium in ground and surface water.

Location	Date	Tritium (pCi/L)
NC2-20	10/7/09	<100
NC2-21	5/4/09	<100
NC2-21	10/7/09	<100
NC7-10	4/2/09	16200 ± 1600
NC7-10	11/11/09	21000 ± 4070
NC7-11	4/2/09	13400 ± 1400
NC7-11	11/11/09	16900 ± 3290
NC7-15	4/6/09	964 ± 120
NC7-15	11/3/09	1440 ± 384
NC7-19	4/2/09	4000 ± 410
NC7-19	11/10/09	4090 ± 810
NC7-27	4/6/09	12300 ± 1200
NC7-27	11/11/09	13700 ± 2670
NC7-28	4/1/09	25400 ± 2600
NC7-29	4/21/09	<100
NC7-29	11/4/09	<100
NC7-43	4/1/09	5700 ± 580
NC7-43	11/18/09	6430 ± 1280
NC7-44	4/1/09	133 ± 53.0
NC7-44	12/9/09	<100
NC7-46	4/27/09	<100
NC7-46	11/2/09	<100
NC7-54	4/2/09	16200 ± 1600
NC7-56	4/23/09	9080 ± 920
NC7-56	10/28/09	10400 ± 2020 L
NC7-58	4/23/09	7260 ± 740
NC7-58	10/28/09	8410 ± 1640 L
NC7-59	4/23/09	8840 ± 900
NC7-59	10/28/09	9940 ± 1930 L
NC7-60	4/6/09	1310 ± 150
NC7-60	04/06/09 DUP	1230 ± 395
NC7-60	11/11/09	1400 ± 292
NC7-61	4/6/09	26600 ± 2700
NC7-61	11/12/09	29600 ± 5750
NC7-61	11/12/09 DUP	30300 ± 5900
NC7-62	4/23/09	9400 ± 950
NC7-62	10/28/09	10200 ± 1980 L
NC7-69	4/2/09	<100
NC7-69	04/02/09 DUP	<100
NC7-69	11/18/09	<100
NC7-70	4/1/09	57400 ± 5800
NC7-71	4/1/09	566 ± 82.0
NC7-72	4/27/09	8630 ± 870
NC7-72	04/27/09 DUP	8200 ± 830
NC7-72	11/2/09	11600 ± 2350
NC7-73	4/27/09	8740 ± 890

B-5.5. Building 850 area in Operable Unit 5 tritium in ground and surface water.

Location	Date	Tritium (pCi/L)
NC7-73	11/2/09	9440 ± 1930
NC7-76	4/6/09	3790 ± 390
NC7-76	11/3/09	4680 ± 1020
W-850-05	4/1/09	19600 ± 2000
W-850-2145	4/28/09	9050 ± 910
W-850-2145	11/2/09	9580 ± 1970
W-850-2312	4/28/09	4520 ± 460
W-850-2312	11/2/09	3800 ± 843
W-850-2315	1/20/09	<100
W-850-2315	4/21/09	<100
W-850-2315	7/20/09	<100
W-850-2315	11/4/09	<100
W-850-2316	4/28/09	11300 ± 1100
W-850-2316	11/2/09	11700 ± 2370
W-PIT1-2204	3/4/09	<100
W-PIT1-2209	1/12/09	<100
W-PIT1-2209	5/4/09	<100
W-PIT1-2209	7/23/09	<100
W-PIT1-2209	07/23/09 DUP	<100
W-PIT1-2209	10/6/09	<100
W-PIT1-2225	1/13/09	<100
W-PIT1-2225	5/7/09	<100
W-PIT1-2225	7/29/09	<100
W-PIT1-2225	10/26/09	<100 L
W-PIT1-2326	1/29/09	2780 ± 290
W-PIT1-2326	4/29/09	2740 ± 290
W-PIT1-2326	7/21/09	2710 ± 290
W-PIT1-2326	10/27/09	3140 ± 617
W-PIT7-16	4/6/09	<100
W-PIT7-16	11/3/09	<100
W-865-1802	4/15/09	221 ± 57.0
W-865-1802	10/6/09	362 ± 107
W-865-1803	4/15/09	2240 ± 240
W-865-1803	04/15/09 DUP	2390 ± 480
W-865-1803	10/20/09	3020 ± 615
W-865-2005	4/29/09	<100
W-865-2005	10/14/09	<100
W8SPRNG	4/23/09	17500 ± 1800

B-5.6. Building 850 Operable Unit high explosive compounds in ground and surface water.

Location	Date	1,3,5-Trinitrobenzene (µg/L)	1,3-Dinitrobenzene (µg/L)	2,4,6-TNT (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)
NC7-10	4/2/09	<2	<2	<2	-	-	-	<2	<2	-	<2	2.6	<2	<1
NC7-10	11/11/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	2.3	<2	2.6
NC7-11	4/2/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	2	<2	<1
NC7-11	11/11/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	1.7	<2	2
NC7-15	11/3/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
NC7-19	4/2/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
NC7-19	11/10/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
NC7-27	4/6/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
NC7-28	4/1/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	10	<2	6.7
NC7-43	4/1/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
NC7-43	11/18/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
NC7-44	4/1/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
NC7-44	12/9/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
NC7-54	4/2/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	1.3	<2	1.2
NC7-56	10/28/09	<2	<2 O	<2 O	<2 O	<2 O	<2 O	<2 O	<2 O	<2 O	<2 O	<1	<2 O	<1 O
NC7-61	4/6/09	<2 O	<2 O	<2 O	<2 O	<2	<2	<2	<2	<2	<2	5.7	<2 O	4.5 O
NC7-61	11/12/09	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<0.75	<1.5	<0.75
NC7-61	11/12/09 DUP	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	7.1	<1.3	5.3
NC7-69	4/2/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
NC7-69	04/02/09 DUP	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
NC7-69	11/18/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
NC7-70	4/1/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
NC7-71	4/1/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
NC7-72	11/2/09	<2 O	<2 O	<2 O	<2 O	<2 O	<2 O	<2 O	<2 O	<2 O	<2 O	<1	<2 O	<1 O
NC7-73	11/2/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-850-2312	4/28/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-850-2313	4/2/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-850-2313	11/11/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-850-2314	4/6/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-865-2005	4/29/09	<2.4 D	<2.4 D	<2.4 D	<2.4 D	<2.4 D	<2.4 D	<2.4 D	<2.4 D	<2.4 D	<2.4 D	<1.2 D	<2.4 D	<1.2 D
W8SPRNG	4/23/09	<2 LO	<2 LO	<2 LO	<2 LO	<2 LO	<2 LO	<2 LO	<2 LO	<2 LO	<2 LO	<1 LO	<2 LO	<1 LO

B-5.7. Buillding 850 area in Operable Unit 5 tetrabutyl orthosilicate (TBOS) and tetrakis (2-ethylbutyl) silane (TKEBS) in ground water.

Location	Date	TBOS/TKEBs
W-850-2145	11/2/09	<10

B-5.8. 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)
K2-01C	5/6/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
NC2-08	5/5/09	E601	<0.5	<0.5	<0.5	<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	5/14/09	E601	<0.5	<0.5	<0.5	<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	5/14/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Analytes detected but not reported in main table.

Location	Date	Method	Detection frequency
K2-01C	5/6/09	E601	0 of 18
NC2-08	5/5/09	E601	0 of 18
W-PIT2-1934	5/14/09	E601	0 of 18
W-PIT2-1935	5/14/09	E601	0 of 18

B-5.9. Pit 2 Landfill uranium and thorium isotopes by mass spectrometry and alpha spectrometry in ground water.

Location	Date	Thorium 232 (pCi/L)	Uranium (pCi/L)	Uranium 233 by mass (pCi/L)	Uranium 234 and Uranium 233 (pCi/L)	Uranium 234 by mass (pCi/L)	Uranium 235 and Uranium 236 (pCi/L)	Uranium 235 by mass (pCi/L)	Uranium 236 by mass (pCi/L)	Uranium 238 (pCi/L)	Uranium 238 by mass (pCi/L)	Uranium 235/238 (ratio)
K2-01C	1/13/09	-	4.7	<312	-	<312 E	-	<0.11 E	<3.2	-	2.10 ± 0.269	0.0059
K2-01C	01/13/09 DUP	-	4.7	<312	-	<312 E	-	<0.11 E	<3.2	-	2.10 ± 0.269	0.006
K2-01C	5/6/09	<0.0004	9.30 ± 0.170	-	4.58 ± 0.460	4.90 ± 0.170	0.203 ± 0.0600	0.170 ± 0.00130	<0.007	4.05 ± 0.410	4.20 ± 0.0140	0.00641 ± 0.0000420
K2-01C	7/23/09	-	-	-	3.59 ± 0.370	-	0.248 ± 0.0690	-	-	3.13 ± 0.330	-	-
K2-01C	10/26/09	-	-	-	2.88 ± 0.570 LO	-	0.108 ± 0.0713 LO	-	-	2.65 ± 0.532	-	-
NC2-08	5/5/09	<0.0004	2.50 ± 0.0290	-	-	1.60 ± 0.0280	-	0.0440 ± 0.000430	<0.00018	-	0.940 ± 0.00590	0.00727 ± 0.0000540
NC2-08	10/8/09	-	2.70 ± 0.0350	-	-	1.70 ± 0.0340	-	0.0460 ± 0.000310	<0.00019	-	1.00 ± 0.00480	0.00722 ± 0.0000340
W-PIT2-1934	1/14/09	-	4.5	<312	-	<312 E	-	<0.11 E	<3.2	-	1.90 ± 0.243	0.0055
W-PIT2-1934	01/14/09 DUP	-	4.7	<312	-	<312 E	-	<0.11 E	<3.2	-	2.10 ± 0.269	0.0054
W-PIT2-1934	5/14/09	<0.0004	4.40 ± 0.0790	-	-	2.60 ± 0.0790	-	0.0700 ± 0.000580	<0.0032	-	1.80 ± 0.0120	0.00614 ± 0.0000290
W-PIT2-1934	7/20/09	-	4.40 ± 0.0560	-	-	2.60 ± 0.0550	-	0.0700 ± 0.000770	<0.007	-	1.80 ± 0.0110	0.00608 ± 0.0000560
W-PIT2-1935	1/14/09	-	2.3	<312	-	<312 E	-	<0.11 E	<3.2	-	0.990 ± 0.127	0.0064
W-PIT2-1935	5/14/09	<0.0004	2.00 ± 0.0370	-	-	1.30 ± 0.0370	-	0.0330 ± 0.000200	<0.00018	-	0.700 ± 0.000850	0.00723 ± 0.0000440
W-PIT2-1935	7/20/09	-	2.80 ± 0.0200	-	-	1.80 ± 0.0200	-	0.0440 ± 0.000800	<0.00029	-	0.960 ± 0.00330	0.00718 ± 0.000128
W-PIT2-2301	3/4/09	-	0.460 ± 0.00980	-	-	0.230 ± 0.00930	-	0.00950 ± 0.000160	<0.00027	-	0.220 ± 0.00330	0.00675 ± 0.0000460
W-PIT2-2302	3/4/09	-	0.210 ± 0.00920	-	-	0.110 ± 0.00920	-	0.00420 ± 0.0000630	<0.00014	-	0.100 ± 0.000910	0.00643 ± 0.0000780

B-5.10. Pit 2 Landfill nitrate and perchlorate in ground water.

Location	Date	Nitrate (as NO3) (mg/L)	Perchlorate (µg/L)
K2-01C	1/13/09	-	<4 L
K2-01C	01/13/09 DUP	-	4.1 L
K2-01C	5/6/09	27 L	<4
K2-01C	7/23/09	-	<4
NC2-08	1/7/09	-	4.3
NC2-08	5/5/09	33 D	<4
NC2-08	7/20/09	-	<4
W-PIT2-1934	1/14/09	-	<4 L
W-PIT2-1934	01/14/09 DUP	-	<4 L
W-PIT2-1934	5/14/09	37 D	<4
W-PIT2-1934	7/20/09	-	<4
W-PIT2-1935	1/14/09	-	<4 L
W-PIT2-1935	5/14/09	34 D	<4
W-PIT2-1935	7/20/09	-	<4 L
W-PIT2-1935	7/20/09	-	<4
W-PIT2-2301	3/4/09	-	<4
W-PIT2-2302	3/4/09	-	<4

B-5.11. Pit 2 Landfill high explosive compounds in ground water.

Location	Date	1,3,5-Trinitrobenzene (µg/L)	1,3-Dinitrobenzene (µg/L)	2,4,6-TNT (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)
K2-01C	5/6/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
NC2-08	5/5/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-PIT2-1934	5/14/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-PIT2-1935	5/14/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1

B-5.12. Pit 2 Landfill tritium in ground water.

Location	Date	Tritium (pCi/L)
K2-01C	1/13/09	5310 ± 540
K2-01C	01/13/09 DUP	5290 ± 540
K2-01C	5/6/09	2650 ± 280
K2-01C	7/23/09	3350 ± 350
K2-01C	10/26/09	5250 ± 1030 L
NC2-08	1/7/09	5060 ± 520
NC2-08	5/5/09	5060 ± 520
NC2-08	7/20/09	4760 ± 490
NC2-08	10/8/09	5430 ± 1060
W-PIT2-1934	1/14/09	1320 ± 150
W-PIT2-1934	01/14/09 DUP	1330 ± 150
W-PIT2-1934	5/14/09	1290 ± 150
W-PIT2-1934	7/20/09	1310 ± 150
W-PIT2-1934	10/28/09	1490 ± 299 L
W-PIT2-1935	1/14/09	2550 ± 270
W-PIT2-1935	5/14/09	2630 ± 280
W-PIT2-1935	7/20/09	2550 ± 270
W-PIT2-1935	07/20/09 DUP	2360 ± 483
W-PIT2-1935	10/28/09	2790 ± 551 L
W-PIT2-2226	1/14/09	<100
W-PIT2-2226	5/14/09	<100
W-PIT2-2226	7/29/09	<100
W-PIT2-2226	10/22/09	<100
W-PIT2-2301	3/4/09	116 ± 53.0
W-PIT2-2302	3/4/09	<100

B-5.13. Pit 2 Landfill fluoride in ground water.

Location	Date	Fluoride (mg/L)
K2-01C	5/6/09	0.14 L
NC2-08	5/5/09	0.28
W-PIT2-1934	5/14/09	0.25
W-PIT2-1935	5/14/09	0.22

B-5.14. Pit 2 Landfill metals in ground water.

Constituents of concern	K2-01C 5/6/09	NC2-08 5/5/09	W-PIT2-1934 5/14/09	W-PIT2-1935 5/14/09
Antimony (mg/L)	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic (mg/L)	0.007	0.012	0.01	0.01
Barium (mg/L)	0.04	0.03	0.02	0.04
Beryllium (mg/L)	<0.0001	<0.0001 L	<0.0001	<0.0001
Cadmium (mg/L)	<0.0001	0.0003	<0.0001	<0.0001
Chromium (mg/L)	0.0007	0.0007	<0.0005	0.001
Cobalt (mg/L)	<0.0005	<0.0005	<0.0005	<0.0005
Copper (mg/L)	0.02	0.001	<0.0005	<0.0005
Lead (mg/L)	0.0006	<0.0002	<0.0002	<0.0002
Lithium (mg/L)	0.0162	0.0216	0.018	0.0236
Mercury (mg/L)	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (mg/L)	0.003	0.004	0.003	0.002
Nickel (mg/L)	0.001	0.0009	<0.0005	<0.0005
Selenium (mg/L)	<0.002	<0.002	0.002	0.002
Silver (mg/L)	<0.0001	<0.0001	<0.0001	<0.0001
Thallium (mg/L)	<0.0001	<0.0001	<0.0001	<0.0001
Thorium (mg/L)	<0.001	<0.001	<0.001	<0.001
Uranium (mg/L)	0.0149	0.00496	0.00593 B	0.00299 B
Vanadium (mg/L)	0.05	0.07	0.06	0.06
Zinc (mg/L)	0.01	0.01	<0.01	<0.01

B-6.1. 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-854-2218	1/12/09	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-854-2218	4/6/09	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-854-2218	7/7/09	E601	38	<0.5	<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
W-854-2218	10/7/09	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-854-01	5/27/09	E601	<0.5 O	<0.5	<0.5	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-01	11/9/09	E601	<0.5	<0.5	<0.5	<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	1/12/09	E601	110 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-854-02	4/6/09	E601	120 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-854-02	7/7/09	E601	120 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 OJ
W-854-02	10/7/09	E601	100 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-854-03	2/3/09	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-854-03	4/6/09	E601	34	<0.5	<0.5	<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	04/06/09 DUP	E601	34	<0.5	<0.5	<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	9/14/09	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-854-03	10/7/09	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-854-04	5/19/09	E601	<0.5	<0.5	<0.5	<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	11/9/09	E601	<0.5	<0.5	<0.5	<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	5/20/09	E601	<0.5	<0.5	<0.5	<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	11/9/09	E601	<0.5	<0.5	<0.5	<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	5/19/09	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-854-06	11/5/09	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
W-854-07	5/19/09	E601	58	<0.5	<0.5	<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	05/19/09 DUP	E601	57	<0.5	<0.5	<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	11/5/09	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-854-08	5/27/09	E601	<0.5 O	<0.5	<0.5	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-09	5/27/09	E601	14 O	<0.5	<0.5	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-09	11/9/09	E601	7.2	<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-854-09	11/09/09 DUP	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-854-10	5/27/09	E601	17 O	<0.5	<0.5	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-10	05/27/09 DUP	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-854-10	11/9/09	E601	9.2	<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-854-10	11/09/09 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-854-13	5/28/09	E601	<0.5	<0.5	<0.5	<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	11/10/09	E601	<0.5	<0.5	<0.5	<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	5/28/09	E601	<0.5	<0.5	<0.5	<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	5/20/09	E601	<0.5	<0.5	<0.5	<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	11/10/09	E601	<0.5	<0.5	<0.5	<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	1/20/09	E601	1.5	<0.5	1.8	<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	4/6/09	E601	1.7	<0.5	1.7	<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	7/7/09	E601	30	<0.5	2.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 OJ
W-854-17	10/7/09	E601	43	<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-854-18A	1/20/09	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	4/6/09	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-854-18A	7/7/09	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 J
W-854-18A	10/7/09	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-854-45	5/28/09	E601	<0.5	<0.5	<0.5	<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	11/10/09	E601	<0.5	<0.5	<0.5	<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	5/20/09	E601	<0.5	<0.5	<0.5	<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	11/5/09	E601	<0.5	<0.5	<0.5	<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	6/23/09	E601	<0.5	<0.5	<0.5	<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	11/16/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

B-6.1. 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-854-1731	5/28/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-1731	11/10/09	E601	<0.5	<0.5	<0.5	<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	5/19/09	E601	<0.5	<0.5	<0.5	<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	11/5/09	E601	<0.5	<0.5	<0.5	<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	5/20/09	E601	<0.5	<0.5	<0.5	<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	11/16/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-1902	5/19/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-854-1902	11/5/09	E601	<0.5	<0.5	<0.5	<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	5/20/09	E601	<0.5	<0.5	<0.5	<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	11/5/09	E601	<0.5	<0.5	<0.5	<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	2/24/09	E601	48	<0.5	0.7	<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	4/7/09	E601	26	<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
W-854-2139	04/07/09 DUP	E601	26	<0.5	0.56	<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	7/7/09	E601	45	<0.5	1.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 J
W-854-2139	10/7/09	E601	31	<0.5	0.62	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SPRING10	2/2/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SPRING10	9/14/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SPRING10	11/16/09	E601	<0.5	<0.5	<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	2/2/09	E601	<0.5	<0.5	<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	6/23/09	E601	<0.5	<0.5	<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	11/16/09	E601	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Analytes detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloro-ethene (total) (µg/L)
W-854-2218	1/12/09	E601	0 of 18	-
W-854-2218	4/6/09	E601	0 of 18	-
W-854-2218	7/7/09	E601	0 of 18	-
W-854-2218	10/7/09	E601	0 of 18	-
W-854-01	5/27/09	E601	0 of 18	-
W-854-01	11/9/09	E601	0 of 18	-
W-854-02	1/12/09	E601	0 of 18	-
W-854-02	4/6/09	E601	0 of 18	-
W-854-02	7/7/09	E601	0 of 18	-
W-854-02	10/7/09	E601	0 of 18	-
W-854-03	2/3/09	E601	0 of 18	-
W-854-03	4/6/09	E601	0 of 18	-
W-854-03	04/06/09 DUP	E601	0 of 18	-
W-854-03	9/14/09	E601	0 of 18	-
W-854-03	10/7/09	E601	0 of 18	-
W-854-04	5/19/09	E601	0 of 18	-
W-854-04	11/9/09	E601	0 of 18	-
W-854-05	5/20/09	E601	0 of 18	-
W-854-05	11/9/09	E601	0 of 18	-
W-854-06	5/19/09	E601	0 of 18	-
W-854-06	11/5/09	E601	0 of 18	-
W-854-07	5/19/09	E601	0 of 18	-
W-854-07	05/19/09 DUP	E601	0 of 18	-
W-854-07	11/5/09	E601	0 of 18	-
W-854-08	5/27/09	E601	0 of 18	-

Analytes detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloro-ethene (total) (µg/L)
W-854-09	5/27/09	E601	0 of 18	-
W-854-09	11/9/09	E601	0 of 18	-
W-854-09	11/09/09 DUP	E601	0 of 18	-
W-854-10	5/27/09	E601	0 of 18	-
W-854-10	05/27/09 DUP	E601	0 of 18	-
W-854-10	11/9/09	E601	0 of 18	-
W-854-10	11/09/09 DUP	E601	0 of 18	-
W-854-13	5/28/09	E601	0 of 18	-
W-854-13	11/10/09	E601	0 of 18	-
W-854-14	5/28/09	E601	0 of 18	-
W-854-15	5/20/09	E601	0 of 18	-
W-854-15	11/10/09	E601	0 of 18	-
W-854-17	1/20/09	E601	1 of 18	1.8
W-854-17	4/6/09	E601	1 of 18	1.7
W-854-17	7/7/09	E601	1 of 18	2.4
W-854-17	10/7/09	E601	1 of 18	2
W-854-18A	1/20/09	E601	0 of 18	-
W-854-18A	4/6/09	E601	0 of 18	-
W-854-18A	7/7/09	E601	0 of 18	-
W-854-18A	10/7/09	E601	0 of 18	-
W-854-45	5/28/09	E601	0 of 18	-
W-854-45	11/10/09	E601	0 of 18	-
W-854-1701	5/20/09	E601	0 of 18	-
W-854-1701	11/5/09	E601	0 of 18	-
W-854-1707	6/23/09	E601	0 of 18	-
W-854-1707	11/16/09	E601	0 of 18	-
W-854-1731	5/28/09	E601	0 of 18	-
W-854-1731	11/10/09	E601	0 of 18	-
W-854-1822	5/19/09	E601	0 of 18	-
W-854-1822	11/5/09	E601	0 of 18	-
W-854-1823	5/20/09	E601	0 of 18	-
W-854-1823	11/16/09	E601	0 of 18	-
W-854-1902	5/19/09	E601	0 of 18	-
W-854-1902	11/5/09	E601	0 of 18	-
W-854-2115	5/20/09	E601	0 of 18	-
W-854-2115	11/5/09	E601	0 of 18	-
W-854-2139	2/24/09	E601	0 of 18	-
W-854-2139	4/7/09	E601	0 of 18	-
W-854-2139	04/07/09 DUP	E601	0 of 18	-
W-854-2139	7/7/09	E601	1 of 18	1.9
W-854-2139	10/7/09	E601	0 of 18	-
SPRING10	2/2/09	E601	0 of 18	-
SPRING10	9/14/09	E601	0 of 18	-
SPRING10	11/16/09	E601	0 of 18	-
SPRING11	2/2/09	E601	0 of 18	-
SPRING11	6/23/09	E601	0 of 18	-
SPRING11	11/16/09	E601	0 of 18	-

B-6.2. Building 854 Operable Unit nitrate and perchlorate in ground and surface water.

Location	Date	Nitrate (as NO3) (mg/L)	Perchlorate (µg/L)
W-854-2218	1/12/09	46	<4
W-854-2218	4/6/09	47	<4
W-854-2218	7/7/09	45	<4
W-854-01	5/27/09	<0.5 L	<4 L
W-854-02	1/12/09	51	7.1
W-854-02	4/6/09	53	7
W-854-02	7/7/09	52	6.2
W-854-03	2/3/09	45	11
W-854-03	4/6/09	47	13
W-854-03	04/06/09 DUP	47	10
W-854-03	9/14/09	45	11
W-854-03	10/7/09	45	9.5
W-854-04	5/19/09	<0.5	<4 L
W-854-05	5/20/09	60 D	<4 L
W-854-06	5/19/09	<0.5	<4 L
W-854-07	5/19/09	28 D	4.2 L
W-854-07	05/19/09 DUP	29 D	4.1 L
W-854-08	5/27/09	42 DL	<4 L
W-854-09	5/27/09	51 DL	<4 L
W-854-10	5/27/09	20 L	<4 L
W-854-10	05/27/09 DUP	16	<4
W-854-13	5/28/09	<0.5	<4 L
W-854-14	5/28/09	270 D	<4 L
W-854-15	5/20/09	4.9	<4 L
W-854-17	1/20/09	9.6	<4 O
W-854-17	4/6/09	9.9	4.4
W-854-17	7/7/09	41	5.9
W-854-18A	1/20/09	33	<4 O
W-854-18A	4/6/09	32	<4
W-854-18A	7/7/09	34	<4
W-854-45	5/28/09	45 D	9.6 L
W-854-1701	5/20/09	<0.5	<4 L
W-854-1707	6/23/09	4.7	<4
W-854-1731	5/28/09	0.58	<4 L
W-854-1822	5/19/09	0.98	<4 L
W-854-1823	5/20/09	29	17 L
W-854-1823	8/4/09	30	22 D
W-854-1823	9/9/09	-	18
W-854-1902	5/19/09	3.3	<4 L
W-854-2115	5/20/09	<2 D	<4 L
W-854-2139	2/24/09	25	4.8
W-854-2139	4/7/09	24	5.3
W-854-2139	04/07/09 DUP	25	4.5
W-854-2139	7/7/09	24	6.1
W-854-2139	10/7/09	23	4.5
SPRING11	6/23/09	<0.5	<4

B-6.3. Building 854 Operable Unit polychlorinated biphenyls 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)
W-854-13	5/28/09	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

B-7.1. 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-832-2112	3/11/09	E601	<0.5	<0.5	<0.5	<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	5/28/09	E601	<0.5 O	<0.5	<0.5	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5	<0.5	<0.5
W-832-2112	9/17/09	E601	<0.5	<0.5	<0.5	<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	11/30/09	E601	<0.5	<0.5	<0.5	<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	3/18/09	E601	8.1	<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	9/15/09	E601	6.7	<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	3/4/09	E601	<0.5	<0.5	<0.5	<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	9/10/09	E601	<0.5	<0.5	<0.5	<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	3/9/09	E601	<0.5	<0.5	<0.5	<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	8/24/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-10	3/18/09	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-830-10	9/15/09	E601	49	<0.5	<0.5	<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	3/18/09	E601	<0.5	<0.5	<0.5	<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	9/15/09	E601	<0.5	<0.5	<0.5	<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	3/24/09	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-830-13	9/22/09	E601	6.8	<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-830-14	3/18/09	E601	6.5	<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-830-14	9/21/09	E601	4.2	<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-830-15	3/4/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-15	9/15/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-16	3/23/09	E601	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-16	5/28/09	E601	<0.5 O	<0.5	<0.5	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-16	9/15/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-16	11/23/09	E601	<0.5	<0.5	<0.5	<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	3/23/09	E601	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-17	9/15/09	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-830-18	3/4/09	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-830-18	9/2/09	E601	19 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-830-19	2/25/09	E601	3,600 D	<5 D	660 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	4/16/09	E601	4,300 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-830-19	7/7/09	E601	4,700 D	5.4	0.88	<0.5 J	<0.5	1.4	<0.5	1.8	0.65	<0.5	1.1	<0.5	<0.5	<0.5 OJ
W-830-19	11/2/09	E601	4,500 D	5.6 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	3/4/09	E601	<0.5	<0.5	<0.5	<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	5/27/09	E601	<0.5	<0.5	<0.5	<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	9/10/09	E601	<0.5	<0.5	<0.5	<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	11/23/09	E601	<0.5	<0.5	<0.5	<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	3/4/09	E601	34	<0.5	3.5	7.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-21	03/04/09 DUP	E601	35	<0.5	3.6	7.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-21	9/2/09	E601	25 L	<0.5	3.3	9.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-21	09/02/09 DUP	E601	28 L	<0.5	3.8	11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-22	3/2/09	E601	14	<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
W-830-22	8/24/09	E601	9.3	<0.5	0.89	<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	3/9/09	E601	600 D	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
W-830-27	03/09/09 DUP	E601	530 D	0.66	<0.5	<0.5	<0.5	0.54	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-27	9/2/09	E601	460 DL	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D
W-830-28	3/9/09	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-830-28	9/2/09	E601	24 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-830-29	3/3/09	E601	<0.5	<0.5	<0.5	<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	8/24/09	E601	0.5	<0.5	<0.5	<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	3/3/09	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-830-30	03/03/09 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

B-7.1. 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-830-30	8/24/09	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-830-30	08/24/09 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-830-34	3/9/09	E601	160 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-830-34	8/25/09	E601	77 DLO	<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	1/20/09	E624	960 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-830-49	4/16/09	E601	1,400 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-830-50	3/4/09	E601	13	<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-830-50	9/10/09	E601	20 IJ	<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-830-51	1/13/09	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-830-51	4/7/09	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-830-51	7/7/09	E601	38	<0.5	<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
W-830-51	10/7/09	E601	30	<0.5	<0.5	<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	2/24/09	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-830-53	2/24/09	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-830-54	3/17/09	E601	<0.5	<0.5	<0.5	<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	9/10/09	E601	<0.5	<0.5	<0.5	<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	3/23/09	E601	7.3 L	<0.5	0.7	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-55	9/15/09	E601	8.1	<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
W-830-56	3/4/09	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-830-56	9/10/09	E601	4.1 IJ	<0.5	<0.5	<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	1/20/09	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-830-57	4/16/09	E601	30	<0.5	<0.5	<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	7/7/09	E601	34	<0.5	<0.5	<0.5 J	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 OJ
W-830-57	11/2/09	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-830-58	3/9/09	E601	940 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-830-58	9/2/09	E601	700 DL	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D
W-830-58	09/02/09 DUP	E601	720 D	0.72	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-59	1/20/09	E601	2,600 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-830-59	4/16/09	E601	2,600 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-830-59	7/7/09	E601	2,500 D	2.7	<0.5	<0.5 J	<0.5	1.2	<0.5	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 OJ
W-830-59	11/2/09	E601	2,400 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-830-60	1/20/09	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-830-60	4/16/09	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-830-60	7/7/09	E601	38	<0.5	<0.5	<0.5 J	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 OJ
W-830-60	11/2/09	E601	28	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-831-01	3/4/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-831-01	03/04/09 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-830-1730	3/4/09	E601	<0.5	<0.5	<0.5	<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	5/27/09	E601	<0.5	<0.5	<0.5	<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	9/15/09	E601	<0.5	<0.5	<0.5	<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	11/23/09	E601	<0.5	<0.5	<0.5	<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	1/20/09	E601	150 D	0.75	<0.5	<0.5	<0.5	<0.5	<0.5	0.58	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-1807	4/16/09	E601	190 D	1	<0.5	<0.5	<0.5	<0.5	<0.5	0.53	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-1807	7/7/09	E601	180 D	0.73	<0.5	<0.5 J	<0.5	<0.5	<0.5	0.71	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 OJ
W-830-1807	11/2/09	E601	93	<0.5	<0.5	<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	2/25/09	E601	1,200 D	<2.5 D	3.4 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-830-1830	3/3/09	E601	1,900 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	8/25/09	E601	1,900 DLO	<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	3/23/09	E601	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-1831	5/28/09	E601	<0.5 O	<0.5	<0.5	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5 O	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-1831	05/28/09 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

B-7.1. 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-830-1831	9/15/09	E601	<0.5	<0.5	<0.5	<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	11/23/09	E601	<0.5	<0.5	<0.5	<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	3/23/09	E601	<0.5 L	0.6	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-830-1832	9/15/09	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-830-2213	1/20/09	E601	270 D	<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-830-2213	7/7/09	E601	210 D	<0.5	6.5	<0.5 J	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 OJ
W-830-2214	11/2/09	E601	600 D	0.72	1.8	<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	1/20/09	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-830-2215	7/7/09	E601	35	<0.5	<0.5	<0.5 J	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 OJ
W-830-2215	11/2/09	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-830-2216	1/13/09	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-830-2216	4/7/09	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-830-2216	7/7/09	E601	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 J
W-830-2216	10/7/09	E601	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-830-2311	3/26/09	E624	28	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
W-830-2311	5/28/09	E624	24	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
W-830-2311	9/22/09	E624	27	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
W-830-2311	12/21/09	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-832-01	2/23/09	E601	45	<0.5	2.4	<0.5	<0.5	0.64	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-832-01	4/22/09	E601	180 D	<0.5	5.3	<0.5	<0.5	1.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-832-01	9/22/09	E601	140 D	<0.5	5.4	<0.5	<0.5	1.4	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5
W-832-01	11/9/09	E601	84	<0.5	3.8	<0.5	<0.5	0.99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-832-09	3/2/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-832-09	8/24/09	E601	<0.5	<0.5	<0.5	<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	2/23/09	E601	92	<0.5	2.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.5	<0.5	<0.5
W-832-10	9/22/09	E601	12	<0.5	0.65	<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	11/9/09	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-832-11	2/23/09	E601	89	<0.5	3.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.69	<0.5	<0.5
W-832-11	4/22/09	E601	83	<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
W-832-11	9/22/09	E601	38	<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-832-11	11/9/09	E601	28	<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-832-12	2/23/09	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-832-12	4/22/09	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-832-12	9/22/09	E601	5.3	<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-832-12	11/9/09	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-832-13	2/23/09	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-832-13	9/22/09	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-832-15	2/23/09	E601	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-832-15	4/22/09	E601	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
W-832-15	9/22/09	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-832-19	8/20/09	E601	<0.5	<0.5	<0.5	<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	3/17/09	E601	44	<0.5	<0.5	<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	8/25/09	E601	29 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-832-21	3/2/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-832-23	3/2/09	E601	460 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D
W-832-23	8/20/09	E601	400 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D	<12 D
W-832-24	3/2/09	E601	35 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-832-24	8/20/09	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-832-25	2/23/09	E601	55	<0.5	1.3	<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	4/22/09	E601	60	<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-832-25	9/22/09	E601	24	<0.5	0.52	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.78

B-7.1. 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-832-25	11/9/09	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-832-SC3	3/25/09	E601	4.4 D	<1 D	<1 D	<1 D	<1 D	<1 D	<1 D	<1 D	<1 D	<1 D	<1 D	<1 D	<1 D	<1 D
W-832-SC3	9/10/09	E601	16 IJ	<0.5	<0.5	<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	3/25/09	E601	<0.5	<0.5	<0.5	<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	9/23/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SVI-830-031	3/3/09	E601	190 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
SVI-830-031	8/20/09	E601	1,400 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
SVI-830-032	3/3/09	E601	480 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
SVI-830-032	8/24/09	E601	1,000 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
SVI-830-033	3/3/09	E601	260 D	2.7 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
SVI-830-033	8/20/09	E601	68 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
SVI-830-035	3/3/09	E601	610 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	8/24/09	E601	660 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
SPRING3	3/25/09	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
SPRING3	9/14/09	E601	8	<0.5	3	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SPRING3	09/14/09 DUP	E601	7.7	<0.5	3.3	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-880-01	2/26/09	E601	<0.5	<0.5	<0.5	<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	5/27/09	E601	<0.5	<0.5	<0.5	<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	05/27/09 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	9/2/09	E601	<0.5	<0.5	<0.5	<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	11/30/09	E601	<0.5	<0.5	<0.5	<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	2/26/09	E601	<0.5	<0.5	<0.5	<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	5/27/09	E601	<0.5	0.53	<0.5	<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	9/2/09	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-880-02	11/30/09	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

Analytes detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloro-ethene (total) (µg/L)	Chloroethane (µg/L)	Chloro-methane (µg/L)	Methylene chloride (µg/L)
W-832-2112	3/11/09	E601	0 of 18	-	-	-	-
W-832-2112	5/28/09	E601	0 of 18	-	-	-	-
W-832-2112	9/17/09	E601	0 of 18	-	-	-	-
W-832-2112	11/30/09	E601	0 of 18	-	-	-	-
W-830-04A	3/18/09	E601	0 of 18	-	-	-	-
W-830-04A	9/15/09	E601	0 of 18	-	-	-	-
W-830-05	3/4/09	E601	0 of 18	-	-	-	-
W-830-05	9/10/09	E601	0 of 18	-	-	-	-
W-830-09	3/9/09	E601	0 of 18	-	-	-	-
W-830-09	8/24/09	E601	0 of 18	-	-	-	-
W-830-10	3/18/09	E601	0 of 18	-	-	-	-
W-830-10	9/15/09	E601	0 of 18	-	-	-	-
W-830-11	3/18/09	E601	0 of 18	-	-	-	-
W-830-11	9/15/09	E601	0 of 18	-	-	-	-
W-830-13	3/24/09	E601	0 of 18	-	-	-	-
W-830-13	9/22/09	E601	0 of 18	-	-	-	-
W-830-14	3/18/09	E601	1 of 18	1.5	-	-	-
W-830-14	9/21/09	E601	1 of 18	1	-	-	-
W-830-15	3/4/09	E601	0 of 18	-	-	-	-
W-830-15	9/15/09	E601	0 of 18	-	-	-	-
W-830-16	3/23/09	E601	0 of 18	-	-	-	-

Analytes detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloro-ethene (total) (µg/L)	Chloroethane (µg/L)	Chloro-methane (µg/L)	Methylene chloride (µg/L)
W-830-16	5/28/09	E601	0 of 18	-	-	-	-
W-830-16	9/15/09	E601	0 of 18	-	-	-	-
W-830-16	11/23/09	E601	0 of 18	-	-	-	-
W-830-17	3/23/09	E601	0 of 18	-	-	-	-
W-830-17	9/15/09	E601	0 of 18	-	-	-	-
W-830-18	3/4/09	E601	0 of 18	-	-	-	-
W-830-18	9/2/09	E601	0 of 18	-	-	-	-
W-830-19	2/25/09	E601	1 of 18	660 D	-	-	-
W-830-19	4/16/09	E601	0 of 18	-	-	-	-
W-830-19	7/7/09	E601	0 of 18	-	-	-	-
W-830-19	11/2/09	E601	0 of 18	-	-	-	-
W-830-20	3/4/09	E601	0 of 18	-	-	-	-
W-830-20	5/27/09	E601	0 of 18	-	-	-	-
W-830-20	9/10/09	E601	0 of 18	-	-	-	-
W-830-20	11/23/09	E601	0 of 18	-	-	-	-
W-830-21	3/4/09	E601	1 of 18	11	-	-	-
W-830-21	03/04/09 DUP	E601	1 of 18	11	-	-	-
W-830-21	9/2/09	E601	1 of 18	13	-	-	-
W-830-21	09/02/09 DUP	E601	1 of 18	15	-	-	-
W-830-22	3/2/09	E601	0 of 18	-	-	-	-
W-830-22	8/24/09	E601	0 of 18	-	-	-	-
W-830-27	3/9/09	E601	0 of 18	-	-	-	-
W-830-27	03/09/09 DUP	E601	0 of 18	-	-	-	-
W-830-27	9/2/09	E601	0 of 18	-	-	-	-
W-830-28	3/9/09	E601	0 of 18	-	-	-	-
W-830-28	9/2/09	E601	0 of 18	-	-	-	-
W-830-29	3/3/09	E601	0 of 18	-	-	-	-
W-830-29	8/24/09	E601	0 of 18	-	-	-	-
W-830-30	3/3/09	E601	0 of 18	-	-	-	-
W-830-30	03/03/09 DUP	E601	0 of 18	-	-	-	-
W-830-30	8/24/09	E601	0 of 18	-	-	-	-
W-830-30	08/24/09 DUP	E601	0 of 18	-	-	-	-
W-830-34	3/9/09	E601	0 of 18	-	-	-	-
W-830-34	8/25/09	E601	0 of 18	-	-	-	-
W-830-49	1/20/09	E624	0 of 30	-	-	-	-
W-830-49	4/16/09	E601	0 of 18	-	-	-	-
W-830-50	3/4/09	E601	0 of 18	-	-	-	-
W-830-50	9/10/09	E601	0 of 18	-	-	-	-
W-830-51	1/13/09	E601	0 of 18	-	-	-	-
W-830-51	4/7/09	E601	0 of 18	-	-	-	-
W-830-51	7/7/09	E601	0 of 18	-	-	-	-
W-830-51	10/7/09	E601	0 of 18	-	-	-	-
W-830-52	2/24/09	E601	0 of 18	-	-	-	-
W-830-53	2/24/09	E601	0 of 18	-	-	-	-
W-830-54	3/17/09	E601	0 of 18	-	-	-	-
W-830-54	9/10/09	E601	0 of 18	-	-	-	-
W-830-55	3/23/09	E601	0 of 18	-	-	-	-
W-830-55	9/15/09	E601	0 of 18	-	-	-	-
W-830-56	3/4/09	E601	0 of 18	-	-	-	-
W-830-56	9/10/09	E601	0 of 18	-	-	-	-
W-830-57	1/20/09	E601	0 of 18	-	-	-	-
W-830-57	4/16/09	E601	0 of 18	-	-	-	-

Analytes detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloro-ethene (total) (µg/L)	Chloroethane (µg/L)	Chloro-methane (µg/L)	Methylene chloride (µg/L)
W-830-57	7/7/09	E601	0 of 18	-	-	-	-
W-830-57	11/2/09	E601	0 of 18	-	-	-	-
W-830-58	3/9/09	E601	0 of 18	-	-	-	-
W-830-58	9/2/09	E601	0 of 18	-	-	-	-
W-830-58	09/02/09 DUP	E601	0 of 18	-	-	-	-
W-830-59	1/20/09	E601	0 of 18	-	-	-	-
W-830-59	4/16/09	E601	0 of 18	-	-	-	-
W-830-59	7/7/09	E601	0 of 18	-	-	-	-
W-830-59	11/2/09	E601	0 of 18	-	-	-	-
W-830-60	1/20/09	E601	0 of 18	-	-	-	-
W-830-60	4/16/09	E601	0 of 18	-	-	-	-
W-830-60	7/7/09	E601	0 of 18	-	-	-	-
W-830-60	11/2/09	E601	0 of 18	-	-	-	-
W-831-01	3/4/09	E601	0 of 18	-	-	-	-
W-831-01	03/04/09 DUP	E601	0 of 18	-	-	-	-
W-830-1730	3/4/09	E601	0 of 18	-	-	-	-
W-830-1730	5/27/09	E601	0 of 18	-	-	-	-
W-830-1730	9/15/09	E601	0 of 18	-	-	-	-
W-830-1730	11/23/09	E601	0 of 18	-	-	-	-
W-830-1807	1/20/09	E601	0 of 18	-	-	-	-
W-830-1807	4/16/09	E601	0 of 18	-	-	-	-
W-830-1807	7/7/09	E601	0 of 18	-	-	-	-
W-830-1807	11/2/09	E601	0 of 18	-	-	-	-
W-830-1829	2/25/09	E601	0 of 18	-	-	-	-
W-830-1830	3/3/09	E601	0 of 18	-	-	-	-
W-830-1830	8/25/09	E601	0 of 18	-	-	-	-
W-830-1831	3/23/09	E601	0 of 18	-	-	-	-
W-830-1831	5/28/09	E601	0 of 18	-	-	-	-
W-830-1831	05/28/09 DUP	E601	0 of 18	-	-	-	-
W-830-1831	9/15/09	E601	0 of 18	-	-	-	-
W-830-1831	11/23/09	E601	0 of 18	-	-	-	-
W-830-1832	3/23/09	E601	0 of 18	-	-	-	-
W-830-1832	9/15/09	E601	0 of 18	-	-	-	-
W-830-2213	1/20/09	E601	1 of 18	3.9	-	-	-
W-830-2213	7/7/09	E601	1 of 18	6.5	-	-	-
W-830-2214	11/2/09	E601	1 of 18	1.8	-	-	-
W-830-2215	1/20/09	E601	0 of 18	-	-	-	-
W-830-2215	7/7/09	E601	0 of 18	-	-	-	-
W-830-2215	11/2/09	E601	0 of 18	-	-	-	-
W-830-2216	1/13/09	E601	0 of 18	-	-	-	-
W-830-2216	4/7/09	E601	0 of 18	-	-	-	-
W-830-2216	7/7/09	E601	0 of 18	-	-	-	-
W-830-2216	10/7/09	E601	0 of 18	-	-	-	-
W-830-2311	3/26/09	E624	0 of 30	-	-	-	-
W-830-2311	5/28/09	E624	0 of 30	-	-	-	-
W-830-2311	9/22/09	E624	0 of 30	-	-	-	-
W-830-2311	12/21/09	E601	0 of 18	-	-	-	-
W-832-01	2/23/09	E601	2 of 18	2.4	-	-	2.5
W-832-01	4/22/09	E601	1 of 18	5.3	-	-	-
W-832-01	9/22/09	E601	2 of 18	5.4	-	-	2.5
W-832-01	11/9/09	E601	1 of 18	3.8	-	-	-
W-832-09	3/2/09	E601	0 of 18	-	-	-	-

Analytes detected but not reported in main table.

Location	Date	Method	Detection frequency	1,2-Dichloro-ethene (total) (µg/L)	Chloroethane (µg/L)	Chloro-methane (µg/L)	Methylene chloride (µg/L)
W-832-09	8/24/09	E601	0 of 18	-	-	-	-
W-832-10	2/23/09	E601	1 of 18	2.6	-	-	-
W-832-10	9/22/09	E601	0 of 18	-	-	-	-
W-832-10	11/9/09	E601	1 of 18	-	-	-	1
W-832-11	2/23/09	E601	2 of 18	3.3	1.6	-	-
W-832-11	4/22/09	E601	1 of 18	2.1	-	-	-
W-832-11	9/22/09	E601	2 of 18	1.6	2.9	-	-
W-832-11	11/9/09	E601	1 of 18	-	0.57	-	-
W-832-12	2/23/09	E601	0 of 18	-	-	-	-
W-832-12	4/22/09	E601	0 of 18	-	-	-	-
W-832-12	9/22/09	E601	0 of 18	-	-	-	-
W-832-12	11/9/09	E601	1 of 18	-	0.7	-	-
W-832-13	2/23/09	E601	0 of 18	-	-	-	-
W-832-13	9/22/09	E601	0 of 18	-	-	-	-
W-832-15	2/23/09	E601	0 of 18	-	-	-	-
W-832-15	4/22/09	E601	0 of 18	-	-	-	-
W-832-15	9/22/09	E601	0 of 18	-	-	-	-
W-832-19	8/20/09	E601	0 of 18	-	-	-	-
W-832-1927	3/17/09	E601	0 of 18	-	-	-	-
W-832-1927	8/25/09	E601	0 of 18	-	-	-	-
W-832-21	3/2/09	E601	0 of 18	-	-	-	-
W-832-23	3/2/09	E601	0 of 18	-	-	-	-
W-832-23	8/20/09	E601	0 of 18	-	-	-	-
W-832-24	3/2/09	E601	0 of 18	-	-	-	-
W-832-24	8/20/09	E601	0 of 18	-	-	-	-
W-832-25	2/23/09	E601	2 of 18	1.3	2.2	-	-
W-832-25	4/22/09	E601	1 of 18	1.4	-	-	-
W-832-25	9/22/09	E601	1 of 18	-	-	0.87 J	-
W-832-25	11/9/09	E601	1 of 18	-	-	0.55	-
W-832-SC3	3/25/09	E601	0 of 18	-	-	-	-
W-832-SC3	9/10/09	E601	0 of 18	-	-	-	-
W-870-02	3/25/09	E601	0 of 18	-	-	-	-
W-870-02	9/23/09	E601	0 of 18	-	-	-	-
SVI-830-031	3/3/09	E601	0 of 18	-	-	-	-
SVI-830-031	8/20/09	E601	0 of 18	-	-	-	-
SVI-830-032	3/3/09	E601	0 of 18	-	-	-	-
SVI-830-032	8/24/09	E601	0 of 18	-	-	-	-
SVI-830-033	3/3/09	E601	0 of 18	-	-	-	-
SVI-830-033	8/20/09	E601	0 of 18	-	-	-	-
SVI-830-035	3/3/09	E601	0 of 18	-	-	-	-
SVI-830-035	8/24/09	E601	0 of 18	-	-	-	-
SPRING3	3/25/09	E601	0 of 18	-	-	-	-
SPRING3	9/14/09	E601	1 of 18	4	-	-	-
SPRING3	09/14/09 DUP	E601	1 of 18	4.4	-	-	-
W-880-01	2/26/09	E601	0 of 18	-	-	-	-
W-880-01	5/27/09	E601	0 of 18	-	-	-	-
W-880-01	05/27/09 DUP	E601	0 of 18	-	-	-	-
W-880-01	9/2/09	E601	0 of 18	-	-	-	-
W-880-01	11/30/09	E601	0 of 18	-	-	-	-
W-880-02	2/26/09	E601	0 of 18	-	-	-	-
W-880-02	5/27/09	E601	0 of 18	-	-	-	-
W-880-02	9/2/09	E601	0 of 18	-	-	-	-
W-880-02	11/30/09	E601	0 of 18	-	-	-	-

B-7.2. Building 832 Canyon Operable Unit nitrate and perchlorate in ground and surface water.

Location	Date	Nitrate (as NO3) (mg/L)	Perchlorate (µg/L)
W-832-2112	3/11/09	<0.5	<4
W-832-2112	9/17/09	<0.5	<4 L
W-830-04A	3/18/09	86	4
W-830-05	3/4/09	62 D	<4
W-830-09	3/9/09	<0.5	<4
W-830-10	3/18/09	66 D	<4
W-830-11	3/18/09	9.5	<4
W-830-13	3/24/09	53 D	<4
W-830-14	3/18/09	<0.5	<4
W-830-15	3/4/09	1.5	<4
W-830-16	3/23/09	<0.5 L	<4
W-830-16	9/15/09	<0.5	<4 L
W-830-17	3/23/09	84 DL	<4
W-830-18	3/4/09	4.2	<4
W-830-19	2/25/09	150 D	<4
W-830-19	7/7/09	-	<4
W-830-20	3/4/09	<1 D	<4
W-830-20	9/10/09	<0.44	<4
W-830-21	3/4/09	19 D	<4
W-830-21	03/04/09 DUP	19 D	<4
W-830-22	3/2/09	3.8	<4
W-830-27	3/9/09	55 D	4.7
W-830-27	03/09/09 DUP	84 D	6.5
W-830-28	3/9/09	11 D	<4
W-830-29	3/3/09	<0.5	<4
W-830-30	3/3/09	100 D	<4
W-830-30	03/03/09 DUP	100 D	<4
W-830-34	3/9/09	120 D	<4
W-830-49	1/20/09	220 D	6.3 O
W-830-50	3/4/09	7.6	<4
W-830-51	1/13/09	72 D	4.4
W-830-51	7/7/09	-	<4
W-830-52	2/24/09	76 D	4.2
W-830-53	2/24/09	75 D	4.3
W-830-54	3/17/09	1.4	<4
W-830-55	3/23/09	9 L	<4
W-830-56	3/4/09	24 D	<4
W-830-57	1/20/09	13 D	<4 O
W-830-58	3/9/09	93 D	6.1
W-830-59	1/20/09	130 D	6.7 O
W-830-59	7/7/09	-	<4
W-830-60	1/20/09	6.3 D	<4 O
W-831-01	3/4/09	<0.5	<4
W-831-01	03/04/09 DUP	<0.5	<4
W-830-1730	3/4/09	2	<4

B-7.2. Building 832 Canyon Operable Unit nitrate and perchlorate in ground and surface water.

Location	Date	Nitrate (as NO3) (mg/L)	Perchlorate (µg/L)
W-830-1730	9/15/09	1.2	<4 L
W-830-1807	1/20/09	130 D	4.4 O
W-830-1807	7/7/09	-	<4
W-830-1829	2/25/09	61 D	<4
W-830-1830	3/3/09	80 D	5.8
W-830-1831	3/23/09	1.8 L	<4
W-830-1831	9/15/09	2	<4 L
W-830-1832	3/23/09	2.4 L	<4
W-830-2213	1/20/09	53 D	5.4 O
W-830-2213	7/7/09	-	4.1
W-830-2214	12/10/09	-	7
W-830-2215	1/20/09	11 D	<4 O
W-830-2216	1/13/09	54 D	<4
W-830-2216	7/7/09	-	<4
W-830-2311	3/26/09	53 D	<4
W-830-2311	9/22/09	60	<4
W-832-01	2/23/09	63 D	4.9
W-832-01	9/22/09	-	4.1
W-832-09	3/2/09	<0.5	<4
W-832-10	2/23/09	84 D	8.2
W-832-10	9/22/09	-	7.1
W-832-11	2/23/09	78 D	6.3
W-832-11	9/22/09	-	<4
W-832-12	2/23/09	100 D	5.8
W-832-12	9/22/09	-	<4
W-832-13	2/23/09	160 D	18
W-832-15	2/23/09	130 D	9.8
W-832-15	9/22/09	-	<4
W-832-1927	3/17/09	45 D	4.1
W-832-21	3/2/09	13 D	<4
W-832-23	3/2/09	89 D	16
W-832-24	3/2/09	49 D	<4
W-832-25	2/23/09	110 D	8.3
W-832-25	9/22/09	-	6.8
W-832-SC3	3/25/09	16	<4
W-870-02	3/25/09	1.4	<4
SVI-830-031	3/3/09	120 D	<4
SVI-830-032	3/3/09	87 D	<4
SVI-830-033	3/3/09	200 D	<4
SVI-830-035	3/3/09	110 D	<4
SPRING3	3/25/09	30 D	<4
W-880-01	2/26/09	<0.5	<4
W-880-01	9/2/09	<0.44	<4
W-880-02	2/26/09	<2.5 D	<4
W-880-02	9/2/09	<2.2 D	<4

B-7.3. Building 832 Canyon Operable Unit high explosive compounds in ground water.

Location	Date	1,3,5-Trinitrobenzene (µg/L)	1,3-Dinitrobenzene (µg/L)	2,4,6-TNT (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)
W-830-2216	7/7/09	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<0.81	<1.6	<0.81
W-832-12	11/9/09	<2 D	<2 DO	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<2 D	<1 D	<2 D	<1 D
W-880-01	2/26/09	DIR	DIR	DIR	DIR	DIR	DIR	DIR	DIR	DIR	DIR	DIR	DIR	DIR
W-880-01	9/2/09	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<0.69	<1.4	<0.69
W-880-02	2/26/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
W-880-02	9/2/09	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<0.75	<1.5	<0.75

B-8.1. Building 851 Firing Table uranium isotopes by mass spectrometry in ground water.

Location	Date	Uranium (pCi/L)	Uranium 234 by mass (pCi/L)	Uranium 235 by mass (pCi/L)	Uranium 236 by mass (pCi/L)	Uranium 238 by mass (pCi/L)	Uranium 235/238 (ratio)
W-851-05	5/26/09	<0.0627	<0.1	0.000350 ± 0.0000130	<0.00044	0.00840 ± 0.000210	0.00656 ± 0.000184
W-851-05	11/5/09	<0.0627	<0.062	<0.00042	<0.00015	0.00780 ± 0.000250	<0.008315
W-851-06	5/26/09	<0.0627	<0.16	0.00190 ± 0.0000750	<0.0002	0.0500 ± 0.00120	0.00583 ± 0.000189
W-851-06	11/4/09	0.160 ± 0.0120	0.110 ± 0.0120	0.00190 ± 0.0000610	<0.00016	0.0500 ± 0.000420	0.00579 ± 0.000185
W-851-07	5/26/09	<0.0627	<0.2	0.00170 ± 0.0000330	<0.00054	0.0370 ± 0.000550	0.00710 ± 0.0000890
W-851-07	11/4/09	<0.0627	<0.16	0.00160 ± 0.0000520	<0.00019	0.0350 ± 0.000610	0.00724 ± 0.000191
W-851-08	5/26/09	1.10 ± 0.0570	0.610 ± 0.0570	0.0210 ± 0.000200	<0.00038	0.470 ± 0.00380	0.00690 ± 0.0000330
W-851-08	11/4/09	1.40 ± 0.0290	0.730 ± 0.0290	0.0270 ± 0.000160	<0.00024	0.600 ± 0.00110	0.00694 ± 0.0000390

B-8.2. Building 851 Firing Table tritium in ground water.

Location	Date	Tritium (pCi/L)
W-851-05	5/26/09	<100
W-851-06	5/26/09	<100
W-851-07	5/26/09	<100
W-851-08	5/26/09	<100

B-8.3. Building 851 Firing Table 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-851-05	5/26/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Analytes detected but not reported in main table.

Location	Date	Method	Detection frequency
W-851-05	5/26/09	E601	0 of 18

B-8.4. Building 845 Firing Table and Pit 9 Landfill tritium in ground water.

Location	Date	Tritium (pCi/L)
K9-01	1/20/09	<100
K9-01	5/11/09	<100
K9-01	8/5/09	<100
K9-01	10/20/09	<100
K9-02	1/20/09	<100
K9-02	5/11/09	<100
K9-02	8/5/09	<100
K9-02	10/20/09	<100
K9-03	1/20/09	<100
K9-03	5/11/09	<100
K9-03	8/5/09	<100
K9-03	10/20/09	<100
K9-04	1/20/09	<100
K9-04	5/11/09	<100
K9-04	8/5/09	<100
K9-04	10/20/09	<100

B-8.5. Building 845 Firing Table and Pit 9 Landfill metals in ground water.

Constituents of concern	K9-01 5/11/09	K9-02 5/11/09	K9-03 5/11/09	K9-04 5/11/09
Antimony (mg/L)	<0.0005	<0.0005	<0.0005	<0.0005
Arsenic (mg/L)	0.003	0.03	0.0046	0.00086
Barium (mg/L)	0.01	0.02	0.01	0.01
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	0.0008
Lead (mg/L)	<0.0002	<0.0002	<0.0002	<0.0002
Lithium (mg/L)	0.0816	0.0678	0.084	0.0712
Mercury (mg/L)	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum (mg/L)	0.03	0.05	0.03	0.03
Nickel (mg/L)	<0.0005	0.0008	0.0006	0.0007
Selenium (mg/L)	<0.001	<0.001	<0.002	<0.002
Silver (mg/L)	<0.0001	<0.0001	<0.0001	<0.0001
Thallium (mg/L)	<0.0001	<0.0001	<0.0001	<0.0001
Thorium (mg/L)	<0.001 E	<0.001	<0.001	<0.001
Uranium (mg/L)	<0.0002 BE	0.000215 B	0.00031 B	<0.0002 BE
Vanadium (mg/L)	<0.002	<0.002	<0.002	<0.002
Zinc (mg/L)	<0.01	<0.01	<0.01	<0.01

B-8.6. 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	5/11/09	E601	<0.5	<0.5	<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	5/11/09	E601	<0.5	<0.5	<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	5/11/09	E601	<0.5	<0.5	<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	5/11/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Analytes detected but not reported in main table.

Location	Date	Method	Detection frequency
K9-01	5/11/09	E601	0 of 18
K9-02	5/11/09	E601	0 of 18
K9-03	5/11/09	E601	0 of 18
K9-04	5/11/09	E601	0 of 18

B-8.7. 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)	2,4,6-TNT (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)
K9-01	5/11/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
K9-02	5/11/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
K9-03	5/11/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
K9-04	5/11/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1

B-8.8. 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	5/11/09	<0.5	<4
K9-02	5/11/09	<0.5	<4
K9-03	5/11/09	<0.5	<4
K9-04	5/11/09	<0.5	<4

B-8.9. Building 845 Firing Table and Pit 9 Landfill fluoride in ground water.

Location	Date	Fluoride (mg/L)
K9-01	5/11/09	0.13
K9-02	5/11/09	0.25
K9-03	5/11/09	0.18
K9-04	5/11/09	0.24

B-8.10. Building 845 Firing Table and Pit 9 Landfill uranium and thorium isotopes by mass spectrometry in ground water.

Location	Date	Thorium 232 (pCi/L)	Uranium (pCi/L)	Uranium 234 by mass (pCi/L)	Uranium 235 by mass (pCi/L)	Uranium 236 by mass (pCi/L)	Uranium 238 by mass (pCi/L)	Uranium 235/238 (ratio)
K9-01	5/11/09	<0.0004	<0.06273	<0.075	0.00110 ± 0.0000250	<0.00013	0.0240 ± 0.000370	0.00726 ± 0.000121
K9-02	5/11/09	<0.0004	0.220 ± 0.0130	0.170 ± 0.0130	0.00220 ± 0.0000650	<0.00012	0.0470 ± 0.000940	0.00731 ± 0.000159
K9-03	5/11/09	<0.0004	0.400 ± 0.0200	0.300 ± 0.0200	0.00440 ± 0.0000850	<0.00014	0.0940 ± 0.00120	0.00733 ± 0.000108
K9-04	5/12/09	<0.0004	0.150 ± 0.0130	0.110 ± 0.0130	0.00160 ± 0.0000680	<0.00012	0.0340 ± 0.000570	0.00719 ± 0.000284

B-8.11. 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-840-01	2/24/09	E601	<0.5	<0.5	<0.5	<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	2/9/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
W-833-30	8/3/09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Analytes detected but not reported in main table.

Location	Date	Method	Detection frequency
W-840-01	2/24/09	E601	0 of 18
W-833-30	2/9/09	E601	0 of 18
W-833-30	8/3/09	E601	0 of 18

B-8.12. Building 833 nitrate and perchlorate in ground water.

Location	Date	Nitrate (as NO3) (mg/L)	Perchlorate (µg/L)
W-840-01	2/24/09	<0.5 L	<4

B-8.13. Building 801 Firing Table and Pit 8 Landfill tritium in ground water.

Location	Date	Tritium (pCi/L)
K8-01	5/12/09	<100
K8-01	05/12/09 DUP	117 ± 56.0
K8-01	10/22/09	118 ± 48.5
K8-02B	1/13/09	<100
K8-02B	01/13/09 DUP	<100
K8-02B	5/12/09	<100
K8-02B	8/10/09	R
K8-02B	10/22/09	<100
K8-04	1/13/09	<100
K8-04	5/12/09	<100
K8-04	8/10/09	R
K8-04	10/22/09	<100
K8-04	10/22/09 DUP	<100

B-8.14. Building 801 Firing Table and Pit 8 Landfill metals in ground water.

Constituents of concern	K8-02B	K8-04
	5/12/09	5/12/09
Antimony (mg/L)	<0.0005	<0.0005
Arsenic (mg/L)	0.02	0.02
Barium (mg/L)	0.007	0.006
Beryllium (mg/L)	<0.0001	<0.0001
Cadmium (mg/L)	<0.0001	0.002
Chromium (mg/L)	0.002	0.009
Cobalt (mg/L)	<0.0005	<0.0005
Copper (mg/L)	0.07	<0.0005
Lead (mg/L)	0.0007	<0.0002
Lithium (mg/L)	0.0349	0.0355
Mercury (mg/L)	<0.0005	<0.0005
Molybdenum (mg/L)	0.005	0.006
Nickel (mg/L)	0.008	<0.0005
Selenium (mg/L)	0.004	0.009
Silver (mg/L)	<0.0001	<0.0001
Thallium (mg/L)	<0.0001	<0.0001
Thorium (mg/L)	<0.001	<0.001
Uranium (mg/L)	0.0123 B	0.0148 B
Vanadium (mg/L)	0.06	0.09
Zinc (mg/L)	0.06	<0.01

B-8.15. 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)
K8-01	5/12/09	E601	4.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K8-01	05/12/09 DUP	E601	3.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K8-01	10/22/09	E601	3.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K8-02B	5/12/09	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
K8-02B	10/22/09	E601	1.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K8-03B	5/12/09	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
K8-03B	10/22/09	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
K8-04	5/12/09	E601	1.6	<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	10/22/09	E601	1.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
K8-04	10/22/09 DUP	E601	1.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Analytes detected but not reported in main table.

Location	Date	Method	Detection frequency
K8-01	5/12/09	E601	0 of 18
K8-01	05/12/09 DUP	E601	0 of 18
K8-01	10/22/09	E601	0 of 18
K8-02B	5/12/09	E601	0 of 18
K8-02B	10/22/09	E601	0 of 18
K8-03B	5/12/09	E601	0 of 18
K8-03B	10/22/09	E601	0 of 18
K8-04	5/12/09	E601	0 of 18
K8-04	10/22/09	E601	0 of 18
K8-04	10/22/09 DUP	E601	0 of 18

B-8.16. 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)	2,4,6-TNT (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)
K8-02B	5/12/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1
K8-04	5/12/09	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<1

B-8.17. Building 801 Firing Table and Pit 8 Landfill nitrate and perchlorate in ground water.

Location	Date	Nitrate (as NO3) (mg/L)	Perchlorate (µg/L)
K8-01	5/12/09	44 DL	<4
K8-01	05/12/09 DUP	45	4.3
K8-02B	5/12/09	39 DL	<4
K8-03B	5/12/09	27 DL	<4
K8-04	5/12/09	61 DL	<4

B-8.18. Building 801 Firing Table and Pit 8 Landfill fluoride in ground water.

Location	Date	Fluoride (mg/L)
K8-02B	5/12/09	0.3
K8-04	5/12/09	0.24

B-8.19. Building 801 Firing Table and Pit 8 Landfill uranium and thorium isotopes by mass spectrometry in ground water.

Location	Date	Thorium 232 (pCi/L)	Uranium (pCi/L)	Uranium 234 by mass (pCi/L)	Uranium 235 by mass (pCi/L)	Uranium 236 by mass (pCi/L)	Uranium 238 by mass (pCi/L)	Uranium 235/238 (ratio)
K8-02B	5/12/09	<0.0004	10.0 ± 0.200	6.30 ± 0.200	0.180 ± 0.00190	<0.00073	3.80 ± 0.0180	0.00731 ± 0.0000680
K8-04	5/12/09	<0.0004	12.0 ± 0.180	7.00 ± 0.180	0.210 ± 0.00170	<0.00087	4.50 ± 0.0160	0.00730 ± 0.0000510

Appendix C

Ground Water Elevations Measured During 2009

Appendix C

Ground Water Elevations Measured During 2009

C-1. General Services Area Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
CDF1	2/3/09	12.2	490.42	
CDF1	4/1/09	17.18	485.44	
CDF1	7/13/09	20.2	482.42	
CDF1	10/7/09	14	488.62	FARMER PUMPING
CON1	2/3/09	10.12	490.96	
CON1	4/1/09	10.07	491.01	
CON1	7/13/09	40.8	460.28	
CON1	10/7/09	12.5	488.58	FARMER PUMPING
CON2	2/3/09	15.54	489.75	
CON2	4/1/09	14.53	490.76	
CON2	7/13/09	14.7	490.59	
CON2	10/7/09	14.9	490.39	
W-24P-03	2/4/09	1.9	425.84	
W-24P-03	4/2/09	1.98	425.76	
W-24P-03	7/13/09	2.61	425.13	
W-24P-03	10/7/09	2.43	425.31	
W-25D-01	2/4/09	18.11	447.38	NEEDS WEEDS AND TREES CLEARED
W-25D-01	4/2/09	17.42	448.07	
W-25D-01	7/13/09	19.98	445.51	
W-25D-01	10/7/09	19.77	445.72	
W-25D-02	2/4/09	10.7	447.49	
W-25D-02	4/2/09	9.96	448.23	
W-25D-02	7/13/09	12.6	445.59	
W-25D-02	10/7/09	12.31	445.88	
W-25M-01	2/4/09	22.01	457.55	
W-25M-01	4/2/09	20.59	458.97	
W-25M-01	7/13/09	23.36	456.2	
W-25M-01	10/7/09	22.75	456.81	
W-25M-02	2/4/09	10.73	474.51	
W-25M-02	4/2/09	9.98	475.26	
W-25M-02	7/13/09	11.35	473.89	
W-25M-02	10/7/09	10.8	474.44	
W-25M-03	2/4/09	11.37	476.06	
W-25M-03	4/2/09	10.54	476.89	
W-25M-03	7/13/09	11.92	475.51	
W-25M-03	10/7/09	11.4	476.03	
W-25N-01	2/4/09	17.96	489.16	CB
W-25N-01	4/2/09	17.12	490	
W-25N-01	7/14/09	17.02	490.1	
W-25N-01	10/5/09	17.19	489.93	
W-25N-04	2/4/09	41	486.89	
W-25N-04	4/2/09	41.18	486.71	
W-25N-04	7/14/09	41.32	486.57	
W-25N-04	10/5/09	41.43	486.46	
W-25N-05	2/4/09	12.81	484.66	

C-1. General Services Area Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-25N-05	4/2/09	12.22	485.25	
W-25N-05	7/13/09	12.59	484.88	
W-25N-05	10/7/09	12.52	484.95	
W-25N-06	2/4/09	15.55	481.27	
W-25N-06	4/2/09	14.81	482.01	
W-25N-06	7/13/09	15.55	481.27	
W-25N-06	10/7/09	15.37	481.45	
W-25N-07	2/3/09	15.96	489.44	
W-25N-07	4/1/09	15.11	490.29	
W-25N-07	7/13/09	15.07	490.33	
W-25N-07	10/7/09	15.33	490.07	
W-25N-08	2/4/09	23.4	487.42	
W-25N-08	4/2/09	22.7	488.12	
W-25N-08	7/14/09	23.03	487.79	
W-25N-08	10/5/09	22.88	487.94	
W-25N-09	2/4/09	19.05	491.41	
W-25N-09	4/2/09	19.05	491.41	
W-25N-09	7/14/09	19.84	490.62	
W-25N-09	10/5/09	20.52	489.94	
W-25N-10	2/3/09	14.85	491.01	
W-25N-10	4/1/09	14.75	491.11	
W-25N-10	7/13/09	21.4	484.46	
W-25N-10	10/7/09	19.73	486.13	
W-25N-11	2/3/09	14.55	490.59	
W-25N-11	4/1/09	14.97	490.17	
W-25N-11	7/13/09	23.52	481.62	
W-25N-11	10/7/09	18.63	486.51	
W-25N-12	2/3/09	15.31	490.21	
W-25N-12	4/1/09	15.25	490.27	
W-25N-12	7/13/09	20.46	485.06	
W-25N-12	10/7/09	20.76	484.76	
W-25N-13	2/3/09	16.79	488.59	
W-25N-13	4/1/09	16.16	489.22	
W-25N-13	7/13/09	16.38	489	
W-25N-13	10/7/09	16.27	489.11	
W-25N-15	2/4/09	13.87	487.5	
W-25N-15	4/2/09	13.16	488.21	
W-25N-15	7/13/09	13.36	488.01	
W-25N-15	10/7/09	13.4	487.97	
W-25N-18	2/4/09	14.66	487.16	
W-25N-18	4/2/09	14.02	487.8	
W-25N-18	7/13/09	14.92	486.9	
W-25N-18	10/7/09	14.75	487.07	
W-25N-20	2/4/09	15.63	489.31	
W-25N-20	4/2/09	14.73	490.21	
W-25N-20	7/14/09	14.7	490.24	

C-1. General Services Area Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-25N-20	10/5/09	14.83	490.11	
W-25N-21	2/4/09	21.71	491.47	
W-25N-21	4/2/09	21.79	491.39	
W-25N-21	7/14/09	22.59	490.59	
W-25N-21	10/5/09	23.28	489.9	
W-25N-22	2/4/09	22.64	490.42	
W-25N-22	4/2/09	22.97	490.09	
W-25N-22	7/14/09	23.92	489.14	
W-25N-22	10/5/09	24	489.06	
W-25N-23	2/4/09	21.86	488.53	
W-25N-23	4/2/09	21.33	489.06	
W-25N-23	7/14/09	21.52	488.87	
W-25N-23	10/5/09	21.62	488.77	
W-25N-24	2/4/09	17.75	488.87	
W-25N-24	4/2/09	16.91	489.71	
W-25N-24	7/14/09	16.86	489.76	
W-25N-24	10/5/09	17	489.62	
W-25N-25	2/3/09	13	488.07	
W-25N-25	4/1/09	12.26	488.81	
W-25N-25	7/13/09	12.6	488.47	
W-25N-25	10/7/09	12.5	488.57	
W-25N-26	2/4/09	12.14	487.23	
W-25N-26	4/2/09	11.46	487.91	
W-25N-26	7/13/09	12.26	487.11	
W-25N-26	10/7/09	12.05	487.32	
W-25N-28	2/4/09	12.92	484.23	
W-25N-28	4/2/09	12.31	484.84	
W-25N-28	7/13/09	12.87	484.28	
W-25N-28	10/7/09	12.75	484.4	
W-26R-01	2/4/09	20.34	489.37	
W-26R-01	4/2/09	19.32	490.39	
W-26R-01	7/14/09	19.29	490.42	
W-26R-01	10/5/09	19.43	490.28	
W-26R-02	2/4/09	36.6	491.6	
W-26R-02	4/2/09	36.71	491.49	
W-26R-02	7/14/09	27.47	500.73	
W-26R-02	10/5/09	28.26	499.94	
W-26R-03	2/4/09	16.75	489.47	
W-26R-03	4/2/09	16.02	490.2	
W-26R-03	7/14/09	15.74	490.48	
W-26R-03	10/5/09	15.95	490.27	
W-26R-04	2/4/09	19.36	489.6	
W-26R-04	4/2/09	18.45	490.51	
W-26R-04	7/14/09	18.36	490.6	
W-26R-04	10/5/09	18.58	490.38	
W-26R-05	2/4/09	24.95	488.16	

C-1. General Services Area Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-26R-05	4/2/09	22.76	490.35	
W-26R-05	7/14/09	23	490.11	
W-26R-05	10/5/09	22.87	490.24	
W-26R-06	2/4/09	25.59	489.25	
W-26R-06	4/2/09	24.67	490.17	
W-26R-06	7/14/09	24.57	490.27	
W-26R-06	10/5/09	24.78	490.06	
W-26R-07	2/4/09	29.1	491.49	
W-26R-07	4/2/09	29.22	491.37	
W-26R-07	7/14/09	30.03	490.56	
W-26R-07	10/5/09	30.71	489.88	
W-26R-08	2/4/09	21.4	501.71	
W-26R-08	4/2/09	31.62	491.49	
W-26R-08	7/14/09	32.32	490.79	
W-26R-08	10/5/09	33.21	489.9	
W-26R-11	2/4/09	17.53	489.68	
W-26R-11	4/2/09	16.62	490.59	
W-26R-11	7/14/09	16.52	490.69	
W-26R-11	10/5/09	16.72	490.49	
W-35A-01	2/3/09	16.16	492.25	CB
W-35A-01	4/1/09	15.05	493.36	
W-35A-01	7/13/09	14.84	493.57	
W-35A-01	10/7/09	15.24	493.17	
W-35A-02	2/3/09	15.2	494.5	CB
W-35A-02	4/1/09	14.16	495.54	
W-35A-02	7/14/09	13.53	496.17	
W-35A-02	10/7/09	14.13	495.57	
W-35A-03	2/3/09	15.01	491.83	CB
W-35A-03	4/1/09	13.97	492.87	
W-35A-03	7/13/09	13.8	493.04	
W-35A-03	10/7/09	14.2	492.64	
W-35A-04	2/3/09	13.66	490.32	
W-35A-04	4/1/09	12.67	491.31	
W-35A-04	7/13/09	12.56	491.42	
W-35A-04	10/7/09	12.86	491.12	
W-35A-05	2/3/09	16.02	491.95	CB
W-35A-05	4/1/09	14.97	493	
W-35A-05	7/13/09	14.74	493.23	
W-35A-05	10/7/09	15.2	492.77	
W-35A-06	2/3/09	13.85	490.47	
W-35A-06	4/1/09	12.89	491.43	
W-35A-06	7/13/09	12.79	491.53	
W-35A-06	10/7/09	13.1	491.22	
W-35A-07	2/3/09	2.78	510.54	
W-35A-07	4/1/09	2.24	511.08	
W-35A-07	7/14/09	2.96	510.36	

C-1. General Services Area Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-35A-07	10/7/09	3.23	510.09	
W-35A-08	2/3/09	17.5	500.46	
W-35A-08	4/1/09	17.12	500.84	
W-35A-08	7/14/09	17.14	500.82	
W-35A-08	10/7/09	17.56	500.4	
W-35A-09	2/3/09	18.7	496.95	
W-35A-09	4/1/09	17.72	497.93	
W-35A-09	7/14/09	17.33	498.32	
W-35A-09	10/7/09	18.12	497.53	
W-35A-10	2/3/09	16.1	496.06	
W-35A-10	4/1/09	14.63	497.53	
W-35A-10	7/14/09	15.01	497.15	
W-35A-10	10/7/09	15.38	496.78	
W-35A-11	2/3/09	3.81	501.54	
W-35A-11	4/1/09	3.51	501.84	
W-35A-11	7/13/09	4.3	501.05	
W-35A-11	10/7/09	4.59	500.76	
W-35A-12	2/3/09	8.25	497.57	
W-35A-12	4/1/09	7.36	498.46	
W-35A-12	7/13/09	7.65	498.17	
W-35A-12	10/7/09	7.71	498.11	
W-35A-13	2/3/09	12.12	491.22	
W-35A-13	4/1/09	11.15	492.19	
W-35A-13	7/13/09	11.04	492.3	
W-35A-13	10/7/09	11.42	491.92	
W-35A-14	2/3/09	15.79	496.74	
W-35A-14	4/7/09	15	497.53	
W-35A-14	7/14/09	14.24	498.29	
W-35A-14	10/7/09	14.94	497.59	
W-7A	2/4/09	14.35	510.53	
W-7A	4/6/09	14.14	510.74	
W-7A	7/14/09	14.64	510.24	
W-7A	10/5/09	14.86	510.02	
W-7B	2/4/09	20.35	491.09	
W-7B	4/2/09	22.45	488.99	
W-7B	7/14/09	19.16	492.28	
W-7B	10/5/09	19.47	491.97	
W-7C	2/4/09	13.89	503.98	
W-7C	4/2/09	13	504.87	
W-7C	7/14/09	13.77	504.1	
W-7C	10/5/09	13.82	504.05	
W-7D	2/4/09	15.37	491.75	
W-7D	4/2/09	15.63	491.49	
W-7D	7/14/09	16.39	490.73	
W-7D	10/5/09	17.36	489.76	
W-7DS	2/4/09	16.81	489.79	

C-1. General Services Area Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-7DS	4/2/09	16.01	490.59	
W-7DS	7/14/09	15.78	490.82	
W-7DS	10/5/09	16.07	490.53	
W-7E	2/4/09	-	NA	NM/RA CONSTRUCTION
W-7E	4/2/09	17.55	491.73	
W-7E	7/14/09	17.09	492.19	
W-7E	10/5/09	17.56	491.72	
W-7ES	2/4/09	-	NA	NM/RA CONSTRUCTION
W-7ES	4/2/09	17.42	492.29	
W-7ES	7/14/09	17.14	492.57	
W-7ES	10/5/09	17.5	492.21	
W-7F	2/4/09	42.16	484.92	
W-7F	4/6/09	41.9	485.18	
W-7F	7/15/09	42.38	484.7	
W-7F	10/5/09	43.48	483.6	
W-7G	2/4/09	14.24	498.68	
W-7G	4/6/09	14.16	498.76	
W-7G	7/14/09	14.08	498.84	
W-7G	10/5/09	14.56	498.36	
W-7H	2/4/09	15.98	495.46	
W-7H	4/6/09	-	NA	NM/RA LID STUCK
W-7H	7/14/09	15.82	495.62	
W-7H	10/5/09	16.23	495.21	
W-7I	2/5/09	46.82	482.47	PUMP ON
W-7I	4/6/09	46.95	482.34	
W-7I	7/15/09	47	482.29	
W-7I	10/5/09	47.56	481.73	
W-7J	2/5/09	46.9	480.99	
W-7J	4/6/09	45.71	482.18	
W-7J	7/15/09	45.49	482.4	
W-7J	10/5/09	46.85	481.04	
W-7K	2/4/09	-	NA	NM/RA CONSTRUCTION
W-7K	4/2/09	10.66	499.27	
W-7K	7/14/09	10.69	499.24	
W-7K	10/5/09	11.31	498.62	
W-7L	2/4/09	14	498.76	
W-7L	4/2/09	13.56	499.2	
W-7L	7/14/09	13.58	499.18	
W-7L	10/5/09	14.11	498.65	
W-7M	2/4/09	-	NA	NM/RA CONSTRUCTION
W-7M	4/2/09	12.61	495.14	
W-7M	7/14/09	12.52	495.23	
W-7M	10/5/09	12.86	494.89	
W-7N	2/4/09	-	NA	NM/RA CONSTRUCTION
W-7N	4/2/09	16.14	492.04	
W-7N	7/14/09	15.8	492.38	

C-1. General Services Area Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-7N	10/5/09	16.24	491.94	
W-7O	2/4/09	24.65	491.44	
W-7O	4/6/09	24.13	491.96	
W-7O	7/14/09	23.7	492.39	
W-7O	10/5/09	23.7	492.39	
W-7P	2/4/09	-	NA	DRY
W-7P	4/2/09	18.07	491.85	
W-7P	7/14/09	17.92	492	
W-7P	10/5/09	18.21	491.71	
W-7PS	2/4/09	18	490.78	
W-7PS	4/2/09	17.03	491.75	
W-7PS	7/14/09	16.73	492.05	
W-7PS	10/5/09	17.12	491.66	
W-7Q	2/5/09	24.84	492.78	
W-7Q	4/6/09	23.82	493.8	
W-7Q	7/14/09	24.19	493.43	
W-7Q	10/5/09	24.34	493.28	
W-7R	2/4/09	19.1	491.3	
W-7R	4/2/09	18.12	492.28	
W-7R	7/14/09	17.82	492.58	
W-7R	10/5/09	18.39	492.01	
W-7S	2/4/09	-	NA	NM/RA CONSTRUCTION
W-7S	4/2/09	17.54	492.34	
W-7S	7/14/09	17.26	492.62	
W-7S	10/5/09	17.62	492.26	
W-7T	2/4/09	-	NA	NM/RA CONSTRUCTION
W-7T	4/2/09	17.42	492.35	
W-7T	7/14/09	17.09	492.68	
W-7T	10/5/09	17.46	492.31	
W-843-01	2/4/09	115.76	508	
W-843-01	4/6/09	115.55	508.21	
W-843-01	7/15/09	115.82	507.94	
W-843-01	10/5/09	116.74	507.02	
W-843-02	2/4/09	102.56	520.03	
W-843-02	4/6/09	102.62	519.97	
W-843-02	7/15/09	103.11	519.48	
W-843-02	10/5/09	103.28	519.31	
W-872-01	2/5/09	33.68	496.96	
W-872-01	4/6/09	32.91	497.73	
W-872-01	7/15/09	33.19	497.45	
W-872-01	10/5/09	33.34	497.3	
W-872-02	2/5/09	36.09	496.9	
W-872-02	4/6/09	34.47	498.52	
W-872-02	7/15/09	35.86	497.13	
W-872-02	10/5/09	36.31	496.68	
W-873-01	2/5/09	22.79	511.14	

C-1. General Services Area Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-873-01	4/6/09	22.68	511.25	
W-873-01	7/15/09	23.87	510.06	
W-873-01	10/5/09	24.77	509.16	
W-873-02	2/5/09	34.78	498.35	
W-873-02	4/6/09	33.21	499.92	
W-873-02	7/15/09	34.42	498.71	
W-873-02	10/5/09	34.98	498.15	
W-873-03	2/5/09	30.65	503.14	
W-873-03	4/6/09	29.66	504.13	
W-873-03	7/15/09	30.89	502.9	
W-873-03	10/5/09	31.41	502.38	
W-873-04	2/5/09	20.09	511.32	
W-873-04	4/6/09	19.75	511.66	
W-873-04	7/15/09	20.15	511.26	
W-873-04	10/5/09	20.19	511.22	
W-873-06	2/5/09	34.15	498.91	
W-873-06	4/6/09	32.37	500.69	
W-873-06	7/15/09	33.91	499.15	
W-873-06	10/5/09	34.41	498.65	
W-873-07	2/5/09	36.32	496.58	
W-873-07	4/6/09	42.72	490.18	
W-873-07	7/15/09	35.84	497.06	
W-873-07	10/5/09	44.5	488.4	
W-875-01	2/5/09	20.36	512.04	
W-875-01	4/6/09	20.94	511.46	
W-875-01	7/15/09	21.72	510.68	
W-875-01	10/5/09	21.24	511.16	
W-875-02	2/5/09	21.21	510.15	
W-875-02	4/6/09	21.17	510.19	
W-875-02	7/15/09	22.05	509.31	
W-875-02	10/5/09	22.18	509.18	
W-875-03	2/5/09	-	NA	DRY
W-875-03	4/6/09	-	NA	DRY
W-875-03	7/15/09	-	NA	DRY
W-875-03	10/5/09	-	NA	DRY
W-875-04	2/5/09	20.93	511.3	
W-875-04	4/6/09	20.94	511.29	
W-875-04	7/15/09	21.77	510.46	
W-875-04	10/5/09	21.86	510.37	
W-875-05	2/5/09	23.01	513.69	
W-875-05	4/6/09	23.06	513.64	
W-875-05	7/15/09	23.33	513.37	
W-875-05	10/5/09	23.4	513.3	
W-875-06	2/5/09	23.89	505.53	CB
W-875-06	4/6/09	27.45	501.97	
W-875-06	7/15/09	24.7	504.72	

C-1. General Services Area Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-875-06	10/5/09	25.24	504.18	
W-875-07	2/5/09	35.08	493.36	
W-875-07	4/6/09	35.8	492.64	
W-875-07	7/15/09	35.8	492.64	
W-875-07	10/5/09	34.68	493.76	
W-875-08	2/5/09	-	NA	DRY
W-875-08	4/6/09	-	NA	DRY
W-875-08	7/15/09	51.52	476.63	
W-875-08	10/5/09	-	NA	DRY
W-875-09	2/5/09	-	NA	DRY
W-875-09	4/6/09	-	NA	DRY
W-875-09	7/15/09	-	NA	DRY
W-875-09	10/5/09	-	NA	DRY
W-875-10	2/5/09	-	NA	DRY
W-875-10	4/6/09	-	NA	DRY
W-875-10	7/15/09	-	NA	DRY
W-875-10	10/5/09	-	NA	DRY
W-875-11	2/5/09	42.03	487.13	
W-875-11	4/6/09	41.86	487.3	
W-875-11	7/15/09	41.72	487.44	
W-875-11	10/5/09	40.5	488.66	
W-875-15	2/5/09	-	NA	DRY
W-875-15	4/6/09	-	NA	DRY
W-875-15	7/15/09	-	NA	DRY
W-875-15	10/5/09	-	NA	DRY
W-876-01	2/5/09	23.16	514.82	
W-876-01	4/6/09	23.03	514.95	
W-876-01	7/15/09	24	513.98	
W-876-01	10/5/09	24.75	513.23	
W-879-01	2/10/09	38.94	512.92	
W-879-01	4/6/09	38.69	513.17	
W-879-01	7/15/09	39.21	512.65	
W-879-01	10/5/09	39.54	512.32	
W-889-01	2/10/09	39.06	514.57	
W-889-01	4/6/09	39.04	514.59	
W-889-01	7/15/09	39.1	514.53	
W-889-01	10/5/09	39.11	514.52	
W-CGSA-1732	2/4/09	19.15	503.7	
W-CGSA-1732	4/6/09	19.23	503.62	
W-CGSA-1732	7/14/09	19.22	503.63	
W-CGSA-1732	10/5/09	19.51	503.34	
W-CGSA-1733	2/4/09	-	NA	DRY
W-CGSA-1733	4/2/09	-	NA	DRY
W-CGSA-1733	7/14/09	-	NA	DRY
W-CGSA-1733	10/5/09	-	NA	DRY
W-CGSA-1735	2/4/09	-	NA	DRY

C-1. General Services Area Operable Unit ground water elevations.

Well	Date	Depth to water	Water elevation	Notes
W-CGSA-1735	4/2/09	-	NA	DRY
W-CGSA-1735	7/14/09	-	NA	DRY
W-CGSA-1735	10/5/09	-	NA	DRY
W-CGSA-1736	2/4/09	19.4	489.97	
W-CGSA-1736	4/2/09	18.52	490.85	
W-CGSA-1736	7/14/09	18.43	490.94	
W-CGSA-1736	10/5/09	18.61	490.76	
W-CGSA-1737	2/4/09	-	NA	NM/RA CONSTRUCTION
W-CGSA-1737	4/2/09	15.68	491.93	
W-CGSA-1737	7/14/09	15.46	492.15	
W-CGSA-1737	10/5/09	15.75	491.86	
W-CGSA-1739	2/4/09	19.59	492.88	
W-CGSA-1739	4/2/09	19.2	493.27	
W-CGSA-1739	7/14/09	18.96	493.51	
W-CGSA-1739	10/5/09	19.18	493.29	

C-2. Building 834 Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-834-1709	3/11/09	22.85	993.73	
W-834-1709	4/22/09	22.95	993.63	
W-834-1709	7/28/09	23.94	992.64	
W-834-1709	10/28/09	25.47	991.11	
W-834-1711	3/11/09	36.67	980.27	
W-834-1711	4/22/09	36.53	980.41	
W-834-1711	7/28/09	36.22	980.72	
W-834-1711	10/28/09	37.02	979.92	
W-834-1712	3/11/09	-	NA	DRY
W-834-1712	4/22/09	-	NA	DRY
W-834-1712	7/28/09	-	NA	DRY
W-834-1712	10/28/09	-	NA	DRY
W-834-1824	1/26/09	33.88	926.9	
W-834-1824	2/25/09	35.97	924.81	
W-834-1824	3/2/09	36.29	924.49	
W-834-1824	3/11/09	36.89	923.89	
W-834-1824	3/24/09	37.27	923.51	
W-834-1824	3/31/09	37.5	923.28	
W-834-1824	4/16/09	37.9	922.88	
W-834-1824	4/22/09	38.04	922.74	
W-834-1824	4/29/09	38.15	922.63	
W-834-1824	7/27/09	39.06	921.72	
W-834-1824	10/21/09	39.63	921.15	
W-834-1825	1/26/09	39.91	917.76	
W-834-1825	2/25/09	40.02	917.65	
W-834-1825	3/2/09	39.94	917.73	
W-834-1825	3/11/09	40.09	917.58	
W-834-1825	3/24/09	40.03	917.64	
W-834-1825	3/31/09	39.91	917.76	
W-834-1825	4/16/09	39.83	917.84	
W-834-1825	4/22/09	39.85	917.82	
W-834-1825	4/29/09	39.75	917.92	
W-834-1825	7/27/09	39.9	917.77	
W-834-1825	10/21/09	40.27	917.4	
W-834-1833	1/26/09	40.22	915.89	
W-834-1833	2/25/09	40.28	915.83	
W-834-1833	3/2/09	40.17	915.94	
W-834-1833	3/11/09	40	916.11	
W-834-1833	3/24/09	39.76	916.35	
W-834-1833	3/31/09	39.62	916.49	
W-834-1833	4/16/09	39.59	916.52	
W-834-1833	4/22/09	39.57	916.54	
W-834-1833	4/29/09	39.59	916.52	
W-834-1833	7/27/09	40.06	916.05	
W-834-1833	10/21/09	40.3	915.81	
W-834-2001	3/11/09	24.1	990.19	

C-2. Building 834 Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-834-2001	4/22/09	23.68	990.61	
W-834-2001	7/28/09	24.04	990.25	
W-834-2001	10/27/09	-	NA	DRY
W-834-2113	3/11/09	38.82	960.19	
W-834-2113	4/22/09	38.97	960.04	
W-834-2113	7/28/09	39.2	959.81	
W-834-2113	10/27/09	39.31	959.7	
W-834-2117	3/11/09	41.76	932.13	
W-834-2117	4/22/09	41.71	932.18	
W-834-2117	7/27/09	41.56	932.33	
W-834-2117	10/21/09	41.75	932.14	
W-834-2118	3/11/09	30.01	909.28	
W-834-2118	4/22/09	29.43	909.86	
W-834-2118	7/28/09	30.02	909.27	
W-834-2118	10/21/09	30.5	908.79	
W-834-2119	3/11/09	55.32	899.89	
W-834-2119	4/22/09	54.93	900.28	
W-834-2119	7/27/09	55.23	899.98	
W-834-2119	10/21/09	55.48	899.73	
W-834-A1	3/11/09	31.75	983.34	CB
W-834-A1	4/22/09	29.87	985.22	
W-834-A1	7/28/09	29.14	985.95	
W-834-A1	10/27/09	30.2	984.89	
W-834-A2	3/11/09	17.84	997.64	
W-834-A2	4/22/09	18.17	997.31	
W-834-A2	7/28/09	-	NA	DRY
W-834-A2	10/27/09	-	NA	DRY
W-834-B2	3/11/09	16.43	1001.96	
W-834-B2	4/22/09	17.02	1001.37	
W-834-B2	7/28/09	16.45	1001.94	
W-834-B2	10/27/09	-	NA	DRY
W-834-B3	3/11/09	11.33	1006.82	
W-834-B3	4/22/09	11.26	1006.89	
W-834-B3	7/28/09	11.33	1006.82	
W-834-B3	10/27/09	11.39	1006.76	
W-834-B4	3/11/09	13.02	1002.55	
W-834-B4	4/22/09	13.55	1002.02	
W-834-B4	7/28/09	14.74	1000.83	
W-834-B4	10/27/09	-	NA	DRY
W-834-C2	3/11/09	-	NA	DRY
W-834-C2	4/22/09	8.53	1011.27	
W-834-C2	7/28/09	-	NA	DRY
W-834-C2	10/27/09	-	NA	DRY
W-834-C4	3/11/09	6.88	1012.38	
W-834-C4	4/22/09	8.25	1011.01	
W-834-C4	7/28/09	10.61	1008.65	

C-2. Building 834 Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-834-C4	10/27/09	10.45	1008.81	
W-834-C5	3/11/09	10.03	1005.64	
W-834-C5	4/22/09	11.13	1004.54	
W-834-C5	7/28/09	12.7	1002.97	
W-834-C5	10/27/09	11.85	1003.82	
W-834-D10	3/11/09	-	NA	DRY
W-834-D10	4/23/09	-	NA	DRY
W-834-D10	7/28/09	33.8	982.61	
W-834-D10	10/28/09	-	NA	DRY
W-834-D11	3/11/09	24.23	993.31	
W-834-D11	4/23/09	24.31	993.23	
W-834-D11	7/28/09	24.23	993.31	
W-834-D11	10/28/09	24.16	993.38	
W-834-D12	3/11/09	29.4	986.89	
W-834-D12	4/23/09	29.42	986.87	
W-834-D12	7/28/09	29.5	986.79	
W-834-D12	10/28/09	29.41	986.88	
W-834-D13	3/11/09	28.89	989.1	
W-834-D13	4/22/09	28.8	989.19	
W-834-D13	7/28/09	28.9	989.09	
W-834-D13	10/28/09	28.91	989.08	
W-834-D14	3/11/09	30.42	987.95	
W-834-D14	4/23/09	30.14	988.23	
W-834-D14	7/28/09	30.5	987.87	
W-834-D14	10/28/09	-	NA	DRY
W-834-D15	3/11/09	23.52	994.64	
W-834-D15	4/22/09	23.7	994.46	
W-834-D15	7/28/09	24.8	993.36	
W-834-D15	10/28/09	-	NA	DRY
W-834-D16	3/11/09	-	NA	DRY
W-834-D16	4/22/09	-	NA	DRY
W-834-D16	7/28/09	-	NA	DRY
W-834-D16	10/28/09	-	NA	DRY
W-834-D17	3/11/09	-	NA	DRY
W-834-D17	4/22/09	-	NA	DRY
W-834-D17	7/28/09	-	NA	DRY
W-834-D17	10/27/09	-	NA	DRY
W-834-D18	3/11/09	26.98	991.48	
W-834-D18	4/22/09	26.76	991.7	
W-834-D18	7/28/09	26.02	992.44	
W-834-D18	10/27/09	26.47	991.99	
W-834-D2	3/11/09	-	NA	DRY
W-834-D2	4/22/09	-	NA	DRY
W-834-D2	7/28/09	-	NA	DRY
W-834-D2	10/27/09	-	NA	DRY
W-834-D3	3/11/09	27.44	991.11	

C-2. Building 834 Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-834-D3	4/22/09	27.03	991.52	
W-834-D3	7/28/09	27.74	990.81	
W-834-D3	10/28/09	29.25	989.3	
W-834-D4	3/11/09	31.25	987.11	
W-834-D4	4/22/09	31.94	986.42	
W-834-D4	7/28/09	34.75	983.61	
W-834-D4	10/28/09	34.75	983.61	
W-834-D5	3/11/09	30.71	987.76	
W-834-D5	4/23/09	30.14	988.33	
W-834-D5	7/28/09	30.6	987.87	
W-834-D5	10/28/09	31.29	987.18	
W-834-D6	3/11/09	34.21	984.07	
W-834-D6	4/23/09	34.32	983.96	
W-834-D6	7/28/09	33.85	984.43	
W-834-D6	10/28/09	26.69	991.59	
W-834-D7	3/11/09	32.68	981.24	
W-834-D7	4/23/09	32.45	981.47	
W-834-D7	7/28/09	32.56	981.36	
W-834-D7	10/28/09	32.97	980.95	
W-834-D9A	3/11/09	-	NA	DRY
W-834-G3	3/11/09	-	NA	DRY
W-834-G3	4/22/09	-	NA	DRY
W-834-G3	7/28/09	-	NA	DRY
W-834-G3	10/27/09	-	NA	DRY
W-834-H2	3/11/09	-	NA	DRY
W-834-H2	4/22/09	31.94	992.01	
W-834-H2	7/28/09	-	NA	DRY
W-834-H2	10/27/09	-	NA	DRY
W-834-J1	3/11/09	30.72	989.11	
W-834-J1	4/22/09	30.68	989.15	
W-834-J1	7/28/09	29.72	990.11	
W-834-J1	10/27/09	30.76	989.07	
W-834-J2	3/11/09	33.86	986.09	
W-834-J2	4/22/09	33.58	986.37	
W-834-J2	7/28/09	33.81	986.14	
W-834-J2	10/27/09	34.37	985.58	
W-834-J3	3/11/09	-	NA	DRY
W-834-J3	4/22/09	75.36	963.07	
W-834-J3	7/28/09	75.5	962.93	
W-834-J3	10/27/09	-	NA	DRY MUDDY
W-834-K1A	3/11/09	-	NA	DRY
W-834-M1	3/11/09	61	963.51	
W-834-M1	4/22/09	60.98	963.53	
W-834-M1	7/28/09	61.11	963.4	
W-834-M1	10/27/09	61.36	963.15	
W-834-M2	3/11/09	-	NA	DRY

C-2. Building 834 Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-834-M2	4/22/09	-	NA	DRY
W-834-M2	7/28/09	-	NA	DRY
W-834-M2	10/27/09	-	NA	DRY
W-834-S1	3/11/09	35.05	967.03	
W-834-S1	4/22/09	35.06	967.02	
W-834-S1	7/28/09	35	967.08	
W-834-S1	10/27/09	35.07	967.01	
W-834-S10	3/11/09	-	NA	DRY
W-834-S10	4/22/09	-	NA	DRY
W-834-S10	7/28/09	-	NA	DRY
W-834-S10	10/27/09	-	NA	DRY
W-834-S12A	3/11/09	50.77	953.96	
W-834-S12A	4/22/09	50.74	953.99	
W-834-S12A	7/28/09	50.75	953.98	
W-834-S12A	10/27/09	50.81	953.92	
W-834-S13	3/11/09	46.94	956.8	
W-834-S13	4/22/09	46.91	956.83	
W-834-S13	7/28/09	46.02	957.72	
W-834-S13	10/27/09	46.64	957.1	
W-834-S4	3/11/09	78.48	948.19	
W-834-S4	4/22/09	78.47	948.2	
W-834-S4	7/28/09	79.09	947.58	
W-834-S4	10/27/09	78.62	948.05	
W-834-S5	3/11/09	-	NA	DRY
W-834-S5	4/22/09	-	NA	DRY
W-834-S5	7/28/09	-	NA	DRY
W-834-S5	10/21/09	-	NA	DRY
W-834-S6	3/11/09	38.59	890.83	
W-834-S6	4/22/09	38.61	890.81	
W-834-S6	7/28/09	38.64	890.78	
W-834-S6	10/21/09	-	NA	DRY
W-834-S7	3/11/09	51.08	887.49	
W-834-S7	4/22/09	50.97	887.6	
W-834-S7	7/28/09	51.07	887.5	
W-834-S7	10/21/09	51.23	887.34	
W-834-S8	3/11/09	60.38	942.34	
W-834-S8	4/22/09	60.72	942	
W-834-S8	7/28/09	60.7	942.02	
W-834-S8	10/27/09	61.02	941.7	
W-834-S9	3/11/09	57.47	942.54	
W-834-S9	4/22/09	56.56	943.45	
W-834-S9	7/28/09	56.11	943.9	
W-834-S9	10/27/09	56.34	943.67	
W-834-T1	3/11/09	315.74	643.18	
W-834-T1	4/22/09	315.64	643.28	
W-834-T1	7/27/09	315.5	643.42	

C-2. Building 834 Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-834-T1	10/21/09	316.07	642.85	
W-834-T11	3/11/09	-	NA	DRY
W-834-T11	4/22/09	-	NA	DRY
W-834-T11	7/27/09	-	NA	DRY
W-834-T11	10/21/09	-	NA	DRY
W-834-T2	1/26/09	41.23	918.53	
W-834-T2	2/25/09	41.36	918.4	
W-834-T2	3/2/09	41.34	918.42	
W-834-T2	3/11/09	41.28	918.48	
W-834-T2	3/24/09	41.1	918.66	
W-834-T2	3/31/09	41.02	918.74	
W-834-T2	4/16/09	40.94	918.82	
W-834-T2	4/22/09	40.94	918.82	
W-834-T2	4/29/09	40.94	918.82	
W-834-T2	7/27/09	41.33	918.43	
W-834-T2	10/21/09	41.58	918.18	
W-834-T2A	1/26/09	39.5	919.44	
W-834-T2A	2/25/09	39.65	919.29	
W-834-T2A	3/2/09	39.55	919.39	
W-834-T2A	3/11/09	39.54	919.4	
W-834-T2A	3/24/09	39.35	919.59	
W-834-T2A	3/31/09	39.2	919.74	
W-834-T2A	4/16/09	39.05	919.89	
W-834-T2A	4/22/09	38.98	919.96	
W-834-T2A	4/29/09	39.02	919.82	
W-834-T2A	7/27/09	39.44	919.5	
W-834-T2A	10/21/09	39.71	919.23	
W-834-T2B	3/11/09	-	NA	DRY
W-834-T2B	4/22/09	-	NA	DRY
W-834-T2B	7/27/09	-	NA	DRY
W-834-T2B	10/21/09	-	NA	DRY
W-834-T2C	3/11/09	-	NA	DRY
W-834-T2C	4/22/09	-	NA	DRY
W-834-T2C	7/27/09	-	NA	DRY
W-834-T2C	10/21/09	-	NA	DRY
W-834-T2D	3/11/09	37.29	917.1	
W-834-T2D	4/22/09	36.81	917.58	
W-834-T2D	7/28/09	137.4	816.99	
W-834-T2D	10/21/09	37.43	916.96	
W-834-T3	3/11/09	325.17	607.37	
W-834-T3	4/22/09	324.87	607.67	
W-834-T3	7/27/09	323.74	608.8	
W-834-T3	10/21/09	325.63	606.91	
W-834-T5	3/11/09	77.14	853.83	
W-834-T5	4/21/09	77.09	853.88	
W-834-T5	7/28/09	77.26	853.71	

C-2. Building 834 Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-834-T5	10/21/09	77.29	853.68	
W-834-T7A	3/11/09	-	NA	DRY
W-834-T7A	4/22/09	-	NA	DRY
W-834-T7A	7/27/09	-	NA	DRY
W-834-T7A	10/21/09	-	NA	DRY
W-834-T8A	3/11/09	-	NA	DRY
W-834-T8A	4/22/09	-	NA	DRY
W-834-T8A	7/28/09	-	NA	DRY
W-834-T8A	10/21/09	-	NA	DRY
W-834-T9	3/11/09	-	NA	DRY
W-834-T9	4/22/09	-	NA	DRY
W-834-T9	7/27/09	-	NA	DRY
W-834-T9	10/21/09	-	NA	DRY
W-834-U1	3/11/09	23.42	988.84	CB
W-834-U1	4/22/09	23.33	988.93	
W-834-U1	7/28/09	25.17	987.09	
W-834-U1	10/28/09	25.85	986.41	

C-3. Pit 6 Landfill Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
BC6-10	2/3/09	29.07	658.48	
BC6-10	4/1/09	29.56	657.99	
BC6-10	7/13/09	29.31	658.24	
BC6-10	10/6/09	29.92	657.63	
BC6-13	2/3/09	-	NA	DRY
BC6-13	4/1/09	-	NA	DRY
BC6-13	7/13/09	-	NA	DRY
BC6-13	10/6/09	-	NA	DRY
CARNRW1	2/3/09	50.9	627.83	PF
CARNRW1	4/1/09	50.25	628.48	
CARNRW1	7/13/09	84.8	593.93	PUMP ON
CARNRW1	10/6/09	47.92	630.81	
CARNRW2	2/3/09	-	NA	NM/RA
CARNRW3	2/3/09	47.5	655.5	PF
CARNRW3	4/1/09	46.8	656.2	
CARNRW3	7/13/09	47.42	655.58	
CARNRW3	10/6/09	47.75	655.25	
CARNRW4	2/3/09	14.3	637.45	
CARNRW4	4/1/09	6.57	645.18	
CARNRW4	7/13/09	10.6	641.15	
CARNRW4	10/6/09	14.54	637.21	
EP6-06	2/3/09	29.81	658.3	
EP6-06	4/1/09	27.77	660.34	
EP6-06	7/13/09	32.25	655.86	
EP6-06	10/6/09	28.3	659.81	
EP6-07	2/3/09	69.67	637.88	
EP6-07	4/1/09	69.51	638.04	
EP6-07	7/13/09	68.36	639.19	
EP6-07	10/6/09	44.79	662.76	
EP6-08	2/3/09	61.46	646.95	
EP6-08	4/1/09	61.5	646.91	
EP6-08	7/13/09	-	NA	DRY
EP6-08	10/6/09	-	NA	DRY
EP6-09	2/3/09	30.31	663.97	
EP6-09	4/1/09	30.37	663.91	
EP6-09	7/13/09	30.6	663.68	
EP6-09	10/6/09	30.7	663.58	
K6-01	2/3/09	27.6	663.86	
K6-01	4/1/09	27.7	663.76	
K6-01	7/13/09	28	663.46	
K6-01	10/6/09	28	663.46	
K6-01S	2/3/09	28.53	663.99	
K6-01S	4/1/09	28.62	663.9	
K6-01S	7/13/09	28.83	663.69	
K6-01S	10/6/09	28.95	663.57	
K6-03	2/3/09	88.65	637.9	

C-3. Pit 6 Landfill Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
K6-03	4/1/09	88.74	637.81	
K6-03	7/13/09	86.7	639.85	
K6-03	10/6/09	87.11	639.44	
K6-04	2/3/09	65.67	642.5	
K6-04	4/1/09	66.53	641.64	
K6-04	7/13/09	65.66	642.51	
K6-04	10/6/09	-	NA	DRY
K6-14	2/3/09	23.65	657.22	
K6-14	4/1/09	20.34	660.53	
K6-14	7/13/09	21.8	659.07	
K6-14	10/6/09	23.02	657.85	
K6-15	2/3/09	-	NA	DRY
K6-15	4/1/09	-	NA	DRY
K6-15	7/13/09	-	NA	DRY
K6-15	10/6/09	-	NA	DRY
K6-16	2/3/09	17.82	661.63	
K6-16	4/1/09	17.73	661.72	
K6-16	7/13/09	18.44	661.01	
K6-16	10/6/09	19	660.45	
K6-17	2/3/09	22.96	655.75	
K6-17	4/1/09	22.21	656.5	
K6-17	7/13/09	22.91	655.8	
K6-17	10/6/09	25.92	652.79	
K6-18	2/3/09	25.08	660.21	
K6-18	4/1/09	25.23	660.06	
K6-18	7/13/09	25.72	659.57	
K6-18	10/6/09	25.9	659.39	
K6-19	2/3/09	29.55	663.52	
K6-19	4/1/09	29.62	663.45	
K6-19	7/13/09	31.33	661.74	
K6-19	10/6/09	29.77	663.3	
K6-21	2/3/09	-	NA	DRY
K6-21	4/1/09	-	NA	DRY
K6-21	7/13/09	-	NA	DRY
K6-21	10/6/09	-	NA	DRY
K6-22	2/3/09	35.99	645.54	
K6-22	4/1/09	36.15	645.38	
K6-22	7/13/09	36.23	645.3	
K6-22	10/6/09	36.44	645.09	
K6-23	2/3/09	24.57	656.41	
K6-23	4/1/09	24.36	656.62	
K6-23	7/13/09	24.17	656.81	
K6-23	10/6/09	24.65	656.33	
K6-24	2/3/09	-	NA	DRY
K6-24	4/1/09	-	NA	DRY
K6-24	7/13/09	-	NA	DRY

C-3. Pit 6 Landfill Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
K6-24	10/6/09	-	NA	DRY
K6-25	2/3/09	18.45	661.3	
K6-25	4/1/09	18.41	661.34	
K6-25	7/13/09	18.9	660.85	
K6-25	10/6/09	19.3	660.45	
K6-26	2/3/09	49.5	637.83	
K6-26	4/1/09	49.77	637.56	
K6-26	7/13/09	47.52	639.81	
K6-26	10/6/09	48.02	639.31	
K6-27	2/3/09	51.71	635.48	
K6-27	4/1/09	51.82	635.37	
K6-27	7/13/09	49.36	637.83	
K6-27	10/6/09	49.9	637.29	
K6-32	2/3/09	-	NA	DRY
K6-32	4/1/09	-	NA	DRY
K6-32	7/13/09	-	NA	DRY
K6-32	10/6/09	-	NA	DRY
K6-33	2/3/09	51.97	630.27	
K6-33	4/1/09	51.97	630.27	
K6-33	7/13/09	50.83	631.41	
K6-33	10/6/09	-	NA	DRY
K6-34	2/3/09	80.62	622.66	
K6-34	4/1/09	78.83	624.45	
K6-34	7/13/09	71.93	631.35	
K6-34	10/6/09	73.4	629.88	
K6-35	2/3/09	55.3	637.66	
K6-35	4/1/09	55.43	637.53	
K6-35	7/13/09	53.24	639.72	
K6-35	10/6/09	53.87	639.09	
K6-36	2/3/09	38.6	651.78	
K6-36	4/1/09	38.67	651.71	
K6-36	7/13/09	-	NA	DRY
K6-36	10/6/09	-	NA	DRY
SPRING15	3/9/09	-	NA	NM/RA
SPRING8	3/9/09	-	NA	NM/RA
W-33C-01	2/3/09	19.1	633.41	
W-33C-01	4/1/09	9.85	642.66	
W-33C-01	7/13/09	12.3	640.21	
W-33C-01	10/6/09	19.73	632.78	
W-34-01	2/3/09	11.11	673.35	
W-34-01	4/1/09	12.07	672.39	
W-34-01	7/13/09	12.13	672.33	
W-34-01	10/6/09	12.5	671.96	
W-34-02	2/3/09	42.64	642.22	
W-34-02	4/1/09	42.74	642.12	
W-34-02	7/13/09	43.11	641.75	

C-3. Pit 6 Landfill Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-34-02	10/6/09	42.65	642.21	
W-PIT6-1819	2/3/09	93.47	622.4	
W-PIT6-1819	4/1/09	92.53	623.34	
W-PIT6-1819	7/13/09	86.17	629.7	
W-PIT6-1819	10/6/09	87.95	627.92	

C-4. High Explosive Process Area Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
GALLO1	2/3/09	-	NA	NM/RA
SPRING14	2/26/09	-	NA	NM/UC
SPRING5	3/2/09	-	NA	NM/UC
W-35B-01	2/3/09	19.1	503.92	
W-35B-01	4/1/09	19.08	503.94	
W-35B-01	7/14/09	18.7	504.32	
W-35B-01	10/7/09	19.31	503.71	
W-35B-02	2/3/09	18.79	504.24	
W-35B-02	4/1/09	18.62	504.41	
W-35B-02	7/14/09	17.53	505.5	
W-35B-02	10/7/09	18.68	504.35	
W-35B-03	2/3/09	17.17	505.93	
W-35B-03	4/1/09	17.2	505.9	
W-35B-03	7/14/09	16.76	506.34	
W-35B-03	10/7/09	17.55	505.55	
W-35B-04	2/3/09	5.82	523.14	
W-35B-04	4/1/09	10.34	518.62	
W-35B-04	7/30/09	5.98	522.98	
W-35B-04	10/7/09	13.2	515.76	
W-35B-05	2/3/09	5.95	522.78	
W-35B-05	4/1/09	10.28	518.45	
W-35B-05	7/30/09	5.62	523.11	
W-35B-05	10/7/09	13.2	515.53	
W-35C-01	2/9/09	1.15	540.57	
W-35C-01	4/14/09	1.34	540.38	
W-35C-01	7/30/09	1.37	540.35	
W-35C-01	10/8/09	1.8	539.92	
W-35C-02	2/9/09	30.86	541.94	
W-35C-02	4/7/09	58.51	514.29	
W-35C-02	7/30/09	58.55	514.25	
W-35C-02	10/8/09	51.02	521.78	
W-35C-04	2/9/09	1.3	530.42	PF
W-35C-04	4/7/09	79.45	452.27	
W-35C-04	7/16/09	5	526.7	Unable to pull transducer to get accurate reading.
W-35C-04	10/8/09	-	NA	NM
W-35C-05	2/9/09	23.47	507.66	
W-35C-05	4/7/09	24.81	506.32	
W-35C-05	7/16/09	22.8	508.33	
W-35C-05	10/8/09	23.45	507.68	
W-35C-06	2/9/09	25.89	505.84	
W-35C-06	4/7/09	24.92	506.81	
W-35C-06	7/16/09	22.94	508.79	
W-35C-06	10/8/09	24.8	506.93	
W-35C-07	2/9/09	1.1	531.04	
W-35C-07	4/7/09	0.45	531.69	

C-4. High Explosive Process Area Operable Unit ground water elevations.

Well	Date	Depth to water	Water elevation		Notes
W-35C-07	7/16/09	0.38	531.76		
W-35C-07	10/8/09	5.81	526.33		
W-35C-08	2/9/09	25.39	506.9		
W-35C-08	4/7/09	24.32	507.97		
W-35C-08	7/16/09	22.66	509.63		
W-35C-08	10/8/09	24.11	508.18		
W-4A	2/9/09	3.01	527.46		
W-4A	4/7/09	5.63	524.84		
W-4A	7/16/09	3.67	526.8		
W-4A	10/8/09	7.25	523.22		
W-4AS	2/9/09	7.06	524.59		
W-4AS	4/7/09	8.29	523.36		
W-4AS	7/16/09	7.42	524.23		
W-4AS	10/8/09	9.82	521.83		
W-4B	2/9/09	0.07	530.13		
W-4B	4/7/09	5.72	524.48		
W-4B	7/16/09	0.81	529.39		
W-4B	10/8/09	6.49	523.71		
W-4C	2/9/09	3.81	525.97		
W-4C	4/7/09	3.69	526.09		
W-4C	7/16/09	8.16	521.62		
W-4C	10/8/09	9.78	520		
W-6BD	2/10/09	24.67	508.6		
W-6BD	4/7/09	23.8	509.47		
W-6BD	7/15/09	21.77	511.5		
W-6BD	10/29/09	24.05	509.22		
W-6BS	2/9/09	24.54	508.69	CB	
W-6BS	4/7/09	23.71	509.52		
W-6BS	7/15/09	21.56	511.67		
W-6BS	10/8/09	23.52	509.71		
W-6CD	2/9/09	28.93	551.11		
W-6CD	4/7/09	29.03	551.01		
W-6CD	7/30/09	30.15	549.89		
W-6CD	10/8/09	31.72	548.32		
W-6CI	2/9/09	28.86	551.65		
W-6CI	4/7/09	28.82	551.69		
W-6CI	7/30/09	30.15	550.36		
W-6CI	10/8/09	31.23	549.28		
W-6CS	2/9/09	30.83	548.85		
W-6CS	4/7/09	27.22	552.46		
W-6CS	7/30/09	29.81	549.87		
W-6CS	10/8/09	30.25	549.43		
W-6EI	2/9/09	4	527.32		
W-6EI	4/7/09	0.55	530.77		
W-6EI	7/16/09	0.7	530.62		
W-6EI	10/8/09	6.91	524.41		
W-6ER	2/9/09	1.4	530.17		

C-4. High Explosive Process Area Operable Unit ground water elevations.

Well	Date	Depth to water	Water elevation	Notes
W-6ER	4/7/09	67.5	464.07	
W-6ER	7/16/09	75.82	455.75	
W-6ER	10/8/09	86.18	445.39	
W-6ES	2/9/09	25.78	505.71	
W-6ES	4/7/09	24.85	506.64	
W-6ES	7/16/09	22.95	508.54	
W-6ES	10/8/09	24.71	506.78	
W-6F	2/9/09	58.66	560.2	
W-6F	4/7/09	59.62	559.24	
W-6F	7/30/09	59.47	559.39	
W-6F	10/8/09	60.74	558.12	
W-6G	2/9/09	59.02	560.9	
W-6G	4/7/09	59.05	560.87	
W-6G	7/30/09	59.87	560.05	
W-6G	10/8/09	61.02	558.9	
W-6H	2/9/09	6.07	555.27	
W-6H	4/14/09	6.7	554.64	
W-6H	7/30/09	7.88	553.46	
W-6H	10/8/09	8.54	552.8	
W-6I	2/9/09	24.24	537.05	
W-6I	4/14/09	23.85	537.44	
W-6I	7/30/09	28.34	532.95	
W-6I	11/8/09	28.42	532.87	
W-6J	2/9/09	6.65	554.71	
W-6J	4/14/09	6.96	554.4	
W-6J	7/30/09	8.42	552.94	
W-6J	10/8/09	9.05	552.31	
W-6K	2/9/09	0.28	533.56	FL
W-6K	4/7/09	2.03	531.81	
W-6K	7/16/09	0.98	532.86	
W-6K	10/8/09	4.13	529.71	
W-6L	2/9/09	0.17	533.74	FL
W-6L	4/7/09	0.7	533.21	
W-6L	7/16/09	2.08	531.83	
W-6L	10/8/09	2.87	531.04	
W-806-06A	3/2/09	-	NA	NM/UC
W-806-06A	4/8/09	125.93	695.38	
W-806-06A	7/29/09	125.6	695.71	
W-806-06A	10/22/09	126	695.31	
W-806-07	3/2/09	-	NA	NM/UC
W-806-07	4/8/09	-	NA	DRY
W-806-07	7/29/09	-	NA	DRY
W-806-07	10/22/09	-	NA	DRY
W-808-01	3/2/09	50.23	851.78	
W-808-01	4/8/09	49.82	852.19	
W-808-01	7/29/09	49.85	852.16	
W-808-01	10/22/09	50.22	851.79	

C-4. High Explosive Process Area Operable Unit ground water elevations.

Well	Date	Depth to water	Water elevation	Notes
W-808-02	3/2/09	87.69	814.55	
W-808-02	4/8/09	-	NA	DRY
W-808-02	7/29/09	-	NA	DRY
W-808-02	10/22/09	-	NA	DRY
W-808-03	3/2/09	296.63	606.26	
W-808-03	4/8/09	296.75	606.14	
W-808-03	7/29/09	296.37	606.52	
W-808-03	10/22/09	297.05	605.84	
W-809-01	3/2/09	67.96	722.27	
W-809-01	4/8/09	68.38	721.85	
W-809-01	7/29/09	68.34	721.89	
W-809-01	10/22/09	68.33	721.9	
W-809-02	3/2/09	135.37	656.45	
W-809-02	4/8/09	141.07	650.75	
W-809-02	7/29/09	141.02	650.8	
W-809-02	10/22/09	141.23	650.59	
W-809-03	3/2/09	101.84	644.23	
W-809-03	4/8/09	102.13	643.94	
W-809-03	7/29/09	102.48	643.59	
W-809-03	10/22/09	102.5	643.57	
W-809-04	3/2/09	68.3	707.75	
W-809-04	4/8/09	71.97	704.08	
W-809-04	7/29/09	78.43	697.62	
W-809-04	10/22/09	70.05	706	
W-810-01	3/2/09	-	NA	NM/UC
W-810-01	4/8/09	240.82	600.21	
W-810-01	7/29/09	240.07	600.96	
W-810-01	10/22/09	241.34	599.69	
W-814-01	2/10/09	110.57	698.26	
W-814-01	4/8/09	110.35	698.48	
W-814-01	7/29/09	110.57	698.26	
W-814-01	10/21/09	110.59	698.24	
W-814-02	2/10/09	160.92	632.76	
W-814-02	4/8/09	158.34	635.34	
W-814-02	7/29/09	158.48	635.2	
W-814-02	10/21/09	158.18	635.5	
W-814-03	2/10/09	-	NA	DRY
W-814-03	4/8/09	-	NA	DRY
W-814-03	7/29/09	-	NA	DRY
W-814-03	10/21/09	-	NA	DRY
W-814-04	2/10/09	236.48	577.94	
W-814-04	4/8/09	236.3	578.12	
W-814-04	7/29/09	237.25	577.17	
W-814-04	10/21/09	236.97	577.45	
W-814-2134	2/10/09	107.23	687.66	
W-814-2134	4/8/09	86.22	708.67	
W-814-2134	7/29/09	101.11	693.78	

C-4. High Explosive Process Area Operable Unit ground water elevations.

Well	Date	Depth to water	Water elevation	Notes
W-814-2134	10/21/09	95.63	699.26	
W-814-2138	2/10/09	98.89	696.02	
W-814-2138	4/8/09	97.65	697.26	
W-814-2138	7/29/09	98.43	696.48	
W-814-2138	10/21/09	98.04	696.87	
W-815-01	3/2/09	-	NA	DRY
W-815-01	4/8/09	-	NA	DRY
W-815-01	7/29/09	-	NA	DRY
W-815-01	10/22/09	-	NA	DRY
W-815-02	3/2/09	100.75	620.86	
W-815-02	4/8/09	101.2	620.41	
W-815-02	7/29/09	100.65	620.96	
W-815-02	10/22/09	101.45	620.16	
W-815-03	3/2/09	-	NA	DRY
W-815-03	4/8/09	-	NA	DRY
W-815-03	7/29/09	-	NA	DRY
W-815-03	10/22/09	-	NA	DRY
W-815-04	3/2/09	95.31	627.34	
W-815-04	4/8/09	96.74	625.91	
W-815-04	7/29/09	96.24	626.41	
W-815-04	10/22/09	96.48	626.17	
W-815-05	3/2/09	33.83	678.38	
W-815-05	4/8/09	34.05	678.16	
W-815-05	7/29/09	35.06	677.15	
W-815-05	10/22/09	34.4	677.81	
W-815-06	2/10/09	130.72	625.06	
W-815-06	4/8/09	130.19	625.59	
W-815-06	7/29/09	130.11	625.67	
W-815-06	10/21/09	130.11	625.67	
W-815-07	2/10/09	138.7	623.79	
W-815-07	4/8/09	138.25	624.24	
W-815-07	7/29/09	138.27	624.22	
W-815-07	10/21/09	138.21	624.28	
W-815-08	3/2/09	129.23	594.56	
W-815-08	4/8/09	129.05	594.74	
W-815-08	7/29/09	128.87	594.92	
W-815-08	10/22/09	129.76	594.03	
W-815-1918	3/2/09	45.62	699.99	
W-815-1918	4/8/09	95.45	650.16	
W-815-1918	7/29/09	95.1	650.51	
W-815-1918	10/22/09	95.73	649.88	
W-815-1928	3/2/09	-	NA	DRY
W-815-1928	4/8/09	-	NA	DRY
W-815-1928	7/29/09	-	NA	DRY
W-815-1928	10/22/09	23.87	722.18	
W-815-2110	2/9/09	-	NA	NM/FL
W-815-2110	4/14/09	-1.33	547.82	FL

C-4. High Explosive Process Area Operable Unit ground water elevations.

Well	Date	Depth to water	Water elevation	Notes
W-815-2110	7/30/09	0.25	546.24	
W-815-2110	10/8/09	0.65	545.84	
W-815-2111	2/9/09	-2.4	NA	FL
W-815-2111	4/14/09	-1.37	547.36	FL
W-815-2111	7/30/09	0.13	545.86	
W-815-2111	10/8/09	1.45	544.54	
W-815-2217	2/9/09	28.72	551.2	
W-815-2217	4/7/09	28.82	551.1	
W-815-2217	7/15/09	29.5	550.42	
W-815-2217	10/8/09	31.43	548.49	
W-817-01	3/2/09	138.15	635.96	
W-817-01	4/8/09	-	NA	DRY
W-817-01	7/29/09	141.67	632.44	
W-817-01	10/22/09	142.28	631.53	
W-817-02	3/2/09	-	NA	NM/RA
W-817-02	4/8/09	-	NA	NM/RA
W-817-02	7/29/09	-	NA	NM/RA
W-817-02	10/22/09	-	NA	NM/RA
W-817-03	3/2/09	100.64	573.27	
W-817-03	4/8/09	101.98	571.93	
W-817-03	7/29/09	102.29	571.62	
W-817-03	10/22/09	101.64	569.96	
W-817-03A	3/2/09	6.45	671.55	
W-817-03A	4/8/09	11.2	666.8	
W-817-03A	7/29/09	12.57	665.43	
W-817-03A	10/22/09	-	NA	DRY
W-817-04	3/2/09	75.99	607.05	
W-817-04	4/8/09	76.28	606.76	
W-817-04	7/29/09	76.01	607.03	
W-817-04	10/22/09	76.27	606.77	
W-817-05	3/2/09	129.06	635.27	
W-817-05	4/8/09	129.31	635.02	
W-817-05	7/29/09	128.99	635.34	
W-817-05	10/22/09	129.22	635.11	
W-817-06A	3/2/09	106.65	661.81	
W-817-06A	4/8/09	90.48	677.98	
W-817-06A	7/29/09	90.02	678.44	
W-817-06A	10/22/09	103.87	664.59	
W-817-07	3/2/09	95.22	572.73	
W-817-07	4/8/09	95.35	572.6	
W-817-07	7/29/09	95.83	572.12	
W-817-07	10/22/09	95.94	572.01	
W-817-2109	3/2/09	-	NA	NM/RA
W-817-2109	4/8/09	-	NA	NM/RA
W-817-2109	7/29/09	-	NA	NM/RA
W-817-2109	10/22/09	-	NA	NM/RA
W-817-2318	3/2/09	4.38	671.64	

C-4. High Explosive Process Area Operable Unit ground water elevations.

Well	Date	Depth to water	Water elevation	Notes
W-817-2318	4/8/09	12.6	663.42	
W-817-2318	7/29/09	14.12	661.9	
W-817-2318	10/22/09	12.57	663.45	
W-818-01	2/10/09	95.63	584.94	
W-818-01	4/8/09	95.62	584.95	
W-818-01	7/29/09	95.24	585.33	
W-818-01	10/21/09	95.75	584.82	
W-818-03	2/10/09	56.49	542.38	
W-818-03	4/14/09	56.89	541.98	
W-818-03	7/29/09	56.73	542.14	
W-818-03	10/19/09	58.7	540.17	
W-818-04	2/9/09	64.97	549.09	
W-818-04	4/14/09	64.76	549.3	
W-818-04	7/29/09	64.65	549.41	
W-818-04	10/19/09	66.5	547.56	
W-818-06	2/9/09	68.2	545.32	
W-818-06	4/14/09	69.9	543.62	
W-818-06	8/29/09	69.53	543.99	
W-818-06	10/19/09	71.55	541.97	
W-818-07	2/9/09	68.4	545.81	
W-818-07	4/14/09	70.04	544.17	
W-818-07	7/29/09	69.63	544.58	
W-818-07	10/19/09	71.72	542.49	
W-818-08	2/10/09	89.61	559.45	
W-818-08	4/8/09	102.34	546.72	
W-818-08	7/29/09	102.95	546.11	
W-818-08	10/21/09	108.07	540.99	
W-818-09	2/10/09	93.08	548.82	
W-818-09	4/8/09	106.66	535.24	
W-818-09	7/29/09	100.11	541.79	
W-818-09	10/21/09	107.63	534.27	
W-818-11	2/1/09	150.02	599.65	
W-818-11	4/8/09	150.02	599.65	
W-818-11	7/29/09	150.04	599.63	
W-818-11	10/29/09	150.27	599.4	
W-819-02	2/10/09	230.97	590.85	
W-819-02	4/8/09	222.83	598.99	
W-819-02	7/29/09	230.9	590.92	
W-819-02	10/21/09	232.04	589.78	
W-823-01	2/10/09	16.36	574.89	
W-823-01	4/14/09	16.23	575.02	
W-823-01	7/30/09	18.67	572.58	
W-823-01	10/8/09	18.47	572.78	
W-823-02	2/10/09	15.5	574.88	
W-823-02	4/14/09	15.36	575.02	
W-823-02	7/30/09	17.85	572.53	
W-823-02	10/8/09	17.66	572.72	

C-4. High Explosive Process Area Operable Unit ground water elevations.

Well	Date	Depth to water	Water elevation	Notes
W-823-03	2/10/09	15.78	574.24	
W-823-03	4/14/09	15.57	574.45	
W-823-03	7/30/09	16.94	573.08	
W-823-03	10/8/09	17.21	572.81	
W-823-13	2/10/09	49.36	572.88	
W-823-13	4/14/09	49.04	573.2	
W-823-13	7/30/09	50.12	572.12	
W-823-13	10/8/09	50.44	571.8	
W-827-01	3/9/09	-	NA	DRY
W-827-01	5/11/09	-	NA	DRY
W-827-01	7/30/09	-	NA	DRY
W-827-01	10/22/09	-	NA	DRY
W-827-02	3/9/09	54.55	868.3	
W-827-02	5/11/09	54.45	868.4	
W-827-02	7/30/09	53.75	869.1	
W-827-02	10/22/09	56.56	866.29	
W-827-03	3/9/09	194.58	729.82	
W-827-03	5/11/09	194.47	729.93	
W-827-03	7/30/09	195.07	729.33	
W-827-03	10/22/09	195.71	728.69	
W-827-04	3/9/09	-	NA	DRY
W-827-04	4/14/09	-	NA	DRY
W-827-04	7/30/09	-	NA	DRY
W-827-04	10/22/09	-	NA	DRY
W-827-05	3/9/09	383.09	650.79	
W-827-05	4/14/09	382.98	650.9	
W-827-05	7/30/09	383.15	650.73	
W-827-05	10/22/09	383.15	650.73	
W-829-06	2/11/09	96.87	975.42	PF
W-829-06	4/14/09	96.65	975.64	
W-829-06	7/30/09	963.98	108.31	
W-829-06	10/22/09	97.15	975.14	
W-829-08	2/11/09	89.9	984.85	PF
W-829-08	4/14/09	98.63	976.12	
W-829-08	7/30/09	98.83	975.92	
W-829-08	10/22/09	99	975.75	
W-829-15	2/11/09	337.11	696.89	
W-829-15	4/14/09	337.05	696.95	
W-829-15	7/30/09	336.55	697.45	
W-829-15	10/22/09	337.2	696.8	
W-829-1938	2/11/09	378.2	701.8	
W-829-1938	4/14/09	373.4	706.6	
W-829-1938	7/30/09	373.2	706.8	
W-829-1938	10/22/09	373.56	706.44	
W-829-1940	2/11/09	108.11	976.06	
W-829-1940	4/14/09	108.06	976.11	
W-829-1940	7/30/09	108.1	976.07	

C-4. High Explosive Process Area Operable Unit ground water elevations.

Well	Date	Depth to water	Water elevation	Notes
W-829-1940	10/22/09	108.18	975.99	
W-829-22	2/11/09	400.23	652.84	
W-829-22	4/14/09	400	653.07	
W-829-22	7/30/09	400.12	652.95	
W-829-22	10/22/09	400.35	652.72	
WELL18	2/3/09	-	NA	NM/RA
WELL20	2/9/09	-	NA	NM/RA
WELL20	4/14/09	-	NA	NM/RA
WELL20	7/30/09	-	NA	NM/RA
WELL20	10/6/09	-	NA	NM/RA

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	2/17/09	106.83	975.11	
K1-01C	4/29/09	107.21	974.73	
K1-01C	8/4/09	107.42	974.52	
K1-01C	11/2/09	107.75	974.19	
K1-02B	2/17/09	135.16	972.07	
K1-02B	4/29/09	135.45	971.78	
K1-02B	8/4/09	135.7	971.53	
K1-02B	11/2/09	135.94	971.29	
K1-04	2/17/09	156.38	966.29	
K1-04	4/29/09	156.62	966.05	
K1-04	8/4/09	156.94	965.73	
K1-04	11/2/09	157.01	965.66	
K1-05	2/17/09	171.41	959.45	
K1-05	4/29/09	171.54	959.32	
K1-05	8/4/09	171.75	959.11	
K1-05	11/2/09	171.93	958.93	
K1-06	2/17/09	114.84	974.7	
K1-06	4/29/09	115.24	974.3	
K1-06	8/4/09	115.49	974.05	
K1-06	11/2/09	115.72	973.82	
K1-07	2/17/09	141.24	968.39	
K1-07	4/29/09	141.45	968.18	
K1-07	8/4/09	141.72	967.91	
K1-07	11/2/09	141.89	967.74	
K1-08	2/17/09	155.48	967.26	
K1-08	4/29/09	155.7	967.04	
K1-08	8/4/09	155.98	966.76	
K1-08	11/2/09	156.22	966.52	
K1-09	2/17/09	161.89	964.79	
K1-09	4/29/09	0.8	1125.88	NM/RA NO ACCESS FOR PROBE
K1-09	8/14/09	162.55	964.13	
K1-09	11/2/09	162.62	964.06	
K2-03	2/17/09	53.09	1013.55	
K2-03	4/29/09	53.21	1013.43	
K2-03	8/4/09	53.55	1013.09	
K2-03	11/2/09	53.71	1012.93	
K2-04D	2/18/09	27.83	1064.69	
K2-04D	4/27/09	26.62	1065.9	
K2-04D	8/10/09	28.8	1063.72	
K2-04D	11/3/09	29.2	1063.32	
K2-04S	2/18/09	28.89	1063.06	
K2-04S	4/27/09	25.45	1066.5	
K2-04S	8/10/09	27.85	1064.1	
K2-04S	11/3/09	28.55	1063.4	
NC2-05	2/12/09	52.69	982.22	
NC2-05	4/20/09	52.93	981.98	

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	8/3/09	53.23	981.68	
NC2-05	11/2/09	53.63	981.28	
NC2-05A	2/12/09	52.88	982.55	
NC2-05A	4/28/09	53.78	981.65	
NC2-05A	8/3/09	53.45	981.98	
NC2-05A	11/2/09	53.92	981.51	
NC2-06	2/17/09	50.1	983.44	
NC2-06	4/28/09	50.46	983.08	
NC2-06	8/3/09	50.75	982.79	
NC2-06	11/2/09	51.14	982.4	
NC2-06A	2/17/09	50.84	983.39	
NC2-06A	4/28/09	51.2	983.03	
NC2-06A	8/3/09	51.5	982.73	
NC2-06A	11/2/09	52	982.23	
NC2-09	2/12/09	52.44	983.03	
NC2-09	4/28/09	52.76	982.71	
NC2-09	8/3/09	53.04	982.43	
NC2-09	11/2/09	53.27	982.2	
NC2-10	2/12/09	64.54	975.55	
NC2-10	4/28/09	64.79	975.3	
NC2-10	8/3/09	64.93	975.16	
NC2-10	11/2/09	65.17	974.92	
NC2-11D	2/12/09	51.77	976.85	
NC2-11D	4/28/09	51.96	976.66	
NC2-11D	8/3/09	52.22	976.4	
NC2-11D	11/2/09	52.51	976.11	
NC2-11I	2/12/09	51.95	976.81	
NC2-11I	4/28/09	52.24	976.52	
NC2-11I	8/3/09	52.3	976.46	
NC2-11I	11/2/09	52.93	975.83	
NC2-11S	2/12/09	51.73	976.79	
NC2-11S	4/28/09	51.85	976.67	
NC2-11S	8/3/09	52.05	976.47	
NC2-11S	11/2/09	52.38	976.14	
NC2-12D	2/11/09	50.61	977.83	
NC2-12D	4/28/09	51	977.44	
NC2-12D	8/3/09	51.13	977.31	
NC2-12D	11/2/09	51.36	977.08	
NC2-12I	2/11/09	50.94	977.81	
NC2-12I	4/28/09	51.32	977.43	
NC2-12I	8/3/09	51.5	977.25	
NC2-12I	11/2/09	51.76	976.99	
NC2-12S	2/11/09	50.68	977.84	
NC2-12S	4/28/09	51.09	977.43	
NC2-12S	8/3/09	51.15	977.37	
NC2-12S	11/2/09	51.5	977.02	

C-5. Building 850 area in Operable Unit 5 ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
NC2-13	2/12/09	44.06	977.44	
NC2-13	4/28/09	44.21	977.29	
NC2-13	8/3/09	44.38	977.12	
NC2-13	11/2/09	44.76	976.74	
NC2-14S	2/18/09	16.26	1057.64	
NC2-14S	4/27/09	15.23	1058.67	
NC2-14S	8/10/09	17.01	1056.89	
NC2-14S	11/3/09	17.35	1056.55	
NC2-15	2/17/09	81.5	991.96	
NC2-15	4/28/09	81.57	991.89	
NC2-15	8/4/09	82.11	991.35	
NC2-15	11/2/09	82.56	990.9	
NC2-16	2/18/09	24.7	1057.76	
NC2-16	4/27/09	24.42	1058.04	
NC2-16	8/10/09	25.21	1057.25	
NC2-16	11/3/09	25.55	1056.91	
NC2-17	2/17/09	105.66	983.83	
NC2-17	4/28/09	106.13	983.36	
NC2-17	8/3/09	106.25	983.24	
NC2-17	11/2/09	106.72	982.77	
NC2-18	2/17/09	75.05	1056.12	
NC2-18	4/27/09	74.13	1057.04	
NC2-18	8/10/09	75.4	1055.77	
NC2-18	11/3/09	75.92	1055.25	
NC2-19	2/12/09	110.98	981.41	
NC2-19	4/28/09	111.19	981.2	
NC2-19	8/3/09	111.4	980.99	
NC2-19	11/2/09	11.59	1080.8	
NC2-20	2/12/09	35.62	966.65	
NC2-20	4/28/09	35.71	966.56	
NC2-20	8/3/09	35.85	966.42	
NC2-20	11/2/09	36.06	966.21	
NC2-21	2/12/09	35.35	966.79	
NC2-21	4/28/09	35.51	966.63	
NC2-21	8/3/09	35.6	966.54	
NC2-21	11/2/09	35.81	966.33	
NC7-10	2/18/09	10.47	1215.83	
NC7-10	4/23/09	10.34	1215.96	
NC7-10	8/5/09	-	NA	NM/RA CONSTRUCTION
NC7-10	11/3/09	-	NA	NM/RA
NC7-11	2/19/09	20.17	1224.22	
NC7-11	4/23/09	20.47	1223.92	
NC7-11	8/5/09	-	NA	NM/RA CONSTRUCTION
NC7-11	11/3/09	-	NA	NM/RA
NC7-14	2/19/09	29.21	1227.78	
NC7-14	4/27/09	-	NA	DRY

C-5. Building 850 area in Operable Unit 5 ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
NC7-14	8/5/09	-	NA	NM/RA CONSTRUCTION
NC7-14	11/3/09	-	NA	NM/RA
NC7-15	2/19/09	21.11	1248.3	
NC7-15	4/27/09	21.35	1248.06	
NC7-15	8/5/09	-	NA	NM/RA CONSTRUCTION
NC7-15	11/3/09	-	NA	NM/RA
NC7-19	2/19/09	21.13	1241.85	
NC7-19	4/27/09	21.47	1241.51	
NC7-19	8/5/09	-	NA	NM/RA CONSTRUCTION
NC7-19	11/3/09	-	NA	NM/RA
NC7-27	2/19/09	86.49	1195.91	
NC7-27	4/27/09	86.15	1196.25	
NC7-27	8/5/09	86.76	1195.64	
NC7-27	11/4/09	86.68	1195.72	
NC7-28	2/19/09	41.02	1258.51	
NC7-28	4/23/09	40.86	1258.67	
NC7-28	8/5/09	-	NA	NM/RA CONSTRUCTION
NC7-28	11/3/09	-	NA	NM/RA
NC7-29	2/24/09	53.22	1201.52	
NC7-29	4/23/09	53.17	1201.57	
NC7-29	8/10/09	53.35	1201.39	
NC7-29	11/3/09	53.47	1201.27	
NC7-43	2/18/09	46.01	1244.17	
NC7-43	4/23/09	45.77	1244.41	
NC7-43	8/5/09	-	NA	NM/RA CONSTRUCTION
NC7-43	11/3/09	-	NA	NM/RA
NC7-44	2/19/09	33.93	1322.2	
NC7-44	4/23/09	33.81	1322.32	
NC7-44	8/5/09	-	NA	NM/RA CONSTRUCTION
NC7-44	11/3/09	-	NA	NM/RA
NC7-45	2/18/09	35.64	1153.05	
NC7-45	4/23/09	34.78	1153.91	
NC7-45	8/5/09	-	NA	NM/RA CONSTRUCTION
NC7-45	11/3/09	-	NA	NM/RA
NC7-46	2/18/09	23.86	1107.57	
NC7-46	4/27/09	23.92	1107.51	
NC7-46	8/10/09	24.35	1107.08	
NC7-46	11/3/09	24.11	1107.32	
NC7-54	2/18/09	11.45	1195.8	
NC7-54	4/23/09	11.65	1195.6	
NC7-54	8/5/09	-	NA	NM/RA CONSTRUCTION
NC7-54	11/3/09	-	NA	NM/RA
NC7-55	2/18/09	57.24	1159.9	
NC7-55	4/23/09	-	NA	DRY
NC7-55	8/10/09	-	NA	DRY
NC7-55	11/3/09	-	NA	DRY

C-5. Building 850 area in Operable Unit 5 ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
NC7-56	2/18/09	18.87	1113.3	
NC7-56	4/27/09	19.54	1112.63	
NC7-56	8/10/09	20.31	1111.86	
NC7-56	11/3/09	20.05	1112.12	
NC7-57	2/18/09	17.95	1088.55	
NC7-57	4/27/09	-	NA	DRY
NC7-57	8/10/09	-	NA	DRY
NC7-57	11/3/09	-	NA	DRY
NC7-58	2/18/09	22.48	1084.25	
NC7-58	4/27/09	23.03	1083.7	
NC7-58	8/10/09	24.65	1082.08	
NC7-58	11/3/09	24.39	1082.34	
NC7-59	2/18/09	12.64	1102.67	
NC7-59	4/27/09	12.92	1102.39	
NC7-59	8/10/09	13.6	1101.71	
NC7-59	11/3/09	13.5	1101.81	
NC7-60	2/19/09	159.52	1168.1	
NC7-60	4/23/09	160.44	1167.18	
NC7-60	8/5/09	159.37	1168.25	
NC7-60	11/4/09	159.07	1168.55	
NC7-61	2/18/09	48.38	1230.99	
NC7-61	4/23/09	48.29	1231.08	
NC7-61	8/5/09	-	NA	NM/RA CONSTRUCTION
NC7-61	11/3/09	-	NA	NM/RA
NC7-62	2/18/09	21.58	1103.53	
NC7-62	4/27/09	21.9	1103.21	
NC7-62	8/10/09	22.72	1102.39	
NC7-62	11/3/09	22.62	1102.49	
NC7-69	2/19/09	2.79	1249.67	
NC7-69	4/23/09	3.01	1249.45	
NC7-69	8/5/09	-	NA	NM/RA CONSTRUCTION
NC7-69	11/3/09	-	NA	NM/RA
NC7-70	2/19/09	34.14	1273.28	
NC7-70	4/23/09	33.9	1273.52	
NC7-70	8/5/09	-	NA	NM/RA CONSTRUCTION
NC7-70	11/3/09	-	NA	NM/RA
NC7-71	2/19/09	57.2	1246.02	
NC7-71	4/23/09	56.75	1246.47	
NC7-71	8/5/09	-	NA	NM/RA CONSTRUCTION
NC7-71	11/3/09	-	NA	NM/RA
NC7-72	2/18/09	31.42	1124.93	
NC7-72	4/23/09	32.09	1124.26	
NC7-72	8/10/09	32.95	1123.4	
NC7-72	11/3/09	32.67	1123.68	
NC7-73	2/18/09	26.93	1139.34	
NC7-73	4/27/09	27.54	1138.73	

C-5. Building 850 area in Operable Unit 5 ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
NC7-73	8/10/09	28.2	1138.07	
NC7-73	11/3/09	28.14	1138.13	
NC7-76	2/19/09	22.81	1254.07	
NC7-76	4/27/09	22.71	1254.17	
NC7-76	8/5/09	23.5	1253.38	
NC7-76	11/4/09	23.65	1253.23	
W-850-05	2/19/09	31.21	1272.18	
W-850-05	4/23/09	30.61	1272.78	
W-850-05	8/5/09	-	NA	NM/RA CONSTRUCTION
W-850-05	11/3/09	-	NA	NM/RA
W-850-2145	2/17/09	176.72	1030.25	
W-850-2145	4/27/09	176.64	1030.33	
W-850-2145	8/10/09	176.72	1030.25	
W-850-2145	11/3/09	176.8	1030.17	
W-850-2312	2/17/09	70.54	1061.42	
W-850-2312	4/27/09	69.55	1062.41	
W-850-2312	8/10/09	71.26	1060.7	
W-850-2312	11/3/09	71.84	1060.12	
W-850-2313	2/18/09	22.92	1159.81	
W-850-2313	4/23/09	23.27	1159.46	
W-850-2313	8/5/09	-	NA	NM/RA CONSTRUCTION
W-850-2313	11/3/09	-	NA	NM/RA
W-850-2314	2/19/09	156.55	1179.22	
W-850-2314	4/23/09	156.57	1179.2	
W-850-2314	8/5/09	156.25	1179.52	
W-850-2314	11/4/09	156.95	1178.82	
W-850-2315	2/24/09	53.57	1201.76	
W-850-2315	4/23/09	53.51	1201.82	
W-850-2315	8/10/09	53.71	1201.62	
W-850-2315	11/3/09	53.85	1201.48	
W-850-2316	2/17/09	176.96	1030.16	
W-850-2316	4/27/09	176.89	1030.23	
W-850-2316	8/10/09	177.01	1030.11	
W-850-2316	11/3/09	177	1030.12	
W-850-2416	2/19/09	50.32	1251.58	
W-850-2416	4/23/09	49.72	1252.18	
W-850-2416	8/5/09	-	NA	
W-850-2416	11/3/09	-	NA	NM/RA CONSTRUCTION
W-850-2417	2/19/09	41.41	1260.65	
W-850-2417	4/23/09	41.04	1261.02	
W-850-2417	8/5/09	-	NA	NM/RA CONSTRUCTION
W-850-2417	11/3/09	-	NA	NM/RA CONSTRUCTION
W-865-1802	2/17/09	50.89	1018.16	
W-865-1802	4/29/09	50.79	1018.26	
W-865-1802	8/4/09	51.14	1017.91	
W-865-1802	11/2/09	51.23	1017.82	

C-5. Building 850 area in Operable Unit 5 ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-865-1803	2/18/09	105.65	1074.34	
W-865-1803	4/27/09	105.27	1074.72	
W-865-1803	8/4/09	105.37	1074.62	
W-865-1803	11/2/09	105.5	1074.49	
W-865-2005	2/12/09	325.73	949.14	
W-865-2005	4/29/09	325.8	949.07	
W-865-2005	8/4/09	325.9	948.97	
W-865-2005	11/2/09	325.98	948.89	
W-PIT1-01	2/12/09	-	NA	DRY
W-PIT1-01	4/29/09	-	NA	DRY
W-PIT1-01	8/4/09	-	NA	DRY
W-PIT1-01	11/2/09	-	NA	DRY
W-PIT1-02	2/12/09	231.71	949.59	
W-PIT1-02	4/29/09	231.83	949.47	
W-PIT1-02	8/4/09	232.05	949.25	
W-PIT1-02	11/2/09	231.68	949.62	
W-PIT1-2204	2/17/09	40.8	1032.36	
W-PIT1-2204	4/29/09	41.34	1031.82	
W-PIT1-2204	8/4/09	41.39	1031.77	
W-PIT1-2204	10/15/09	41.38	1031.78	
W-PIT1-2204	11/2/09	46.37	1026.79	
W-PIT1-2204	12/3/09	41.4	1031.76	
W-PIT1-2204	12/9/09	41.38	1031.78	
W-PIT1-2204	12/16/09	41.4	1031.76	
W-PIT1-2209	2/12/09	214.24	951.81	
W-PIT1-2209	4/29/09	214.52	951.53	
W-PIT1-2209	8/4/09	214.66	951.39	
W-PIT1-2209	11/2/09	214.8	951.25	
W-PIT1-2225	2/24/09	225.26	967.88	
W-PIT1-2225	4/28/09	225.62	967.52	
W-PIT1-2225	8/3/09	225.71	967.43	
W-PIT1-2225	10/29/09	226.1	967.04	
W-PIT1-2326	2/12/09	178.96	968.83	
W-PIT1-2326	4/29/09	179.31	968.48	
W-PIT1-2326	8/4/09	179.56	968.23	
W-PIT1-2326	11/2/09	179.63	968.16	
W-PIT7-16	2/19/09	21.56	1249.44	
W-PIT7-16	4/27/09	21.77	1249.23	
W-PIT7-16	8/5/09	-	NA	NM/RA CONSTRUCTION
W-PIT7-16	11/5/09	-	NA	NM/RA

C-6. Building 854 Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-854-01	2/26/09	217.86	1118.29	
W-854-01	5/11/09	217.75	1118.4	
W-854-01	7/20/09	217.77	1118.38	
W-854-01	11/3/09	217.87	1118.28	
W-854-02	2/26/09	145.61	1188.66	
W-854-02	5/11/09	146	1188.27	
W-854-02	7/20/09	146.71	1187.56	
W-854-02	11/3/09	146.32	1187.95	
W-854-03	2/26/09	118.84	1121.69	
W-854-03	5/11/09	118.34	1122.19	
W-854-03	7/20/09	116.87	1123.66	
W-854-03	11/3/09	118.58	1121.95	
W-854-04	2/26/09	296.21	943.88	
W-854-04	5/11/09	295.95	944.14	
W-854-04	7/20/09	295.53	944.56	
W-854-04	11/3/09	295.43	944.66	
W-854-05	2/26/09	89.58	1242.46	
W-854-05	5/11/09	89.96	1242.08	
W-854-05	7/20/09	89.63	1242.41	
W-854-05	11/3/09	89.69	1242.35	
W-854-06	3/9/09	118.17	992.28	
W-854-06	5/11/09	118.46	991.99	
W-854-06	7/20/09	118.49	991.96	
W-854-06	11/3/09	118.56	991.89	
W-854-07	3/9/09	117.5	993.36	
W-854-07	5/11/09	117.69	993.17	
W-854-07	7/20/09	117.74	993.12	
W-854-07	11/3/09	117.72	993.14	
W-854-08	2/26/09	121.03	1155.17	
W-854-08	5/11/09	120.25	1155.95	
W-854-08	7/20/09	120.47	1155.73	
W-854-08	11/3/09	120.75	1155.45	
W-854-09	3/9/09	188.04	1173.17	
W-854-09	5/11/09	188.05	1173.16	
W-854-09	7/20/09	188.12	1173.09	
W-854-09	11/3/09	188.77	1172.44	
W-854-10	2/26/09	115.62	1210.76	
W-854-10	5/11/09	115.69	1210.69	
W-854-10	7/20/09	115.58	1210.8	
W-854-10	11/3/09	115.76	1210.62	
W-854-11	2/26/09	-	NA	DRY
W-854-11	5/11/09	-	NA	DRY
W-854-11	7/20/09	-	NA	DRY
W-854-11	11/3/09	-	NA	DRY
W-854-12	3/3/09	-	NA	NM/RA
W-854-12	5/11/09	-	NA	NM/RA

C-6. Building 854 Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-854-12	7/20/09	-	NA	NM/RA
W-854-12	11/3/09	-	NA	NM/RA
W-854-13	3/3/09	-	NA	NM/RA
W-854-13	5/11/09	-	NA	NM/RA
W-854-13	7/20/09	-	NA	NM/RA
W-854-13	11/3/09	-	NA	NM/RA
W-854-14	2/26/09	64.45	939.25	
W-854-14	5/11/09	64.06	939.64	
W-854-14	7/20/09	63.87	939.83	
W-854-14	11/3/09	63.61	940.09	
W-854-15	2/26/09	76.97	1055.03	
W-854-15	5/11/09	76.86	1055.14	
W-854-15	7/20/09	76.7	1055.3	
W-854-15	11/3/09	77.15	1054.85	
W-854-17	2/26/09	147.46	1188.68	
W-854-17	5/11/09	147.26	1188.88	
W-854-17	7/20/09	146.73	1189.41	
W-854-17	11/3/09	143.76	1192.38	
W-854-1701	3/9/09	240.58	1009.74	
W-854-1701	5/11/09	240.46	1009.86	
W-854-1701	7/20/09	240.42	1009.9	
W-854-1701	11/3/09	240.54	1009.78	
W-854-1706	3/9/09	16.27	816.54	
W-854-1706	5/11/09	16.17	816.64	
W-854-1706	7/20/09	16.33	816.48	
W-854-1706	11/3/09	16.07	816.74	
W-854-1707	3/9/09	26.85	805.36	
W-854-1707	5/11/09	28.43	803.78	
W-854-1707	7/20/09	29.32	802.89	
W-854-1707	11/3/09	29.52	802.69	
W-854-1731	2/26/09	62.06	941.43	
W-854-1731	5/11/09	61.72	941.77	
W-854-1731	7/20/09	61.56	941.93	
W-854-1731	11/3/09	61.34	942.15	
W-854-1822	3/9/09	145.71	1041.75	
W-854-1822	5/11/09	145.83	1041.63	
W-854-1822	7/20/09	145.79	1041.67	
W-854-1822	11/3/09	145.92	1041.54	
W-854-1823	2/26/09	55.51	1098.75	
W-854-1823	5/11/09	55.62	1098.64	
W-854-1823	7/20/09	47.02	1107.24	
W-854-1823	11/3/09	47.94	1106.32	
W-854-1834	2/26/09	-	NA	DRY
W-854-1834	5/11/09	-	NA	DRY
W-854-1834	7/20/09	-	NA	DRY
W-854-1834	11/3/09	-	NA	DRY

C-6. Building 854 Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-854-1835	2/26/09	-	NA	NM NO ACCESS FOR PROBE
W-854-1835	5/11/09	-	NA	NM CAP GLUED TO SOUND TUBE
W-854-1835	7/20/09	-	NA	NM Unable to remove plug from sound tube (glued together)
W-854-1835	11/3/09	-	NA	NM NO ACCESS FOR PROBE
W-854-18A	2/26/09	144.62	1191.28	
W-854-18A	5/11/09	144.92	1190.98	
W-854-18A	7/20/09	145.02	1190.88	
W-854-18A	11/3/09	142.15	1193.75	
W-854-19	2/26/09	-	NA	DRY
W-854-19	5/11/09	-	NA	DRY
W-854-19	7/20/09	-	NA	DRY
W-854-19	11/3/09	-	NA	DRY
W-854-1902	3/9/09	147.62	1040.66	
W-854-1902	5/11/09	147.75	1040.53	
W-854-1902	7/20/09	147.65	1040.63	
W-854-1902	11/3/09	147.82	1040.46	
W-854-2115	3/9/09	118.02	993.68	
W-854-2115	5/11/09	118.14	993.56	
W-854-2115	7/20/09	118.24	993.46	
W-854-2115	11/3/09	118.24	993.46	
W-854-2139	3/9/09	118.46	993.22	
W-854-2139	5/11/09	119.8	991.88	
W-854-2139	7/20/09	120.1	991.58	
W-854-2139	11/3/09	119.17	992.51	
W-854-2218	2/26/09	146.14	1188.56	PUMP ON
W-854-2218	5/11/09	146.17	1188.53	
W-854-2218	7/20/09	146.28	1188.42	
W-854-2218	11/3/09	146.11	1188.59	
W-854-45	2/26/09	88.39	909.5	
W-854-45	5/11/09	88.15	909.74	
W-854-45	7/20/09	88	909.89	
W-854-45	11/3/09	87.88	910.01	
W-854-F2	2/26/09	-	NA	DRY

C-7. Building 832 Canyon Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
SPRING3	2/10/09	-	NA	NM UC
SVI-830-031	3/12/09	22.22	670.11	
SVI-830-032	3/12/09	29.24	663.16	
SVI-830-033	3/12/09	22.55	669.8	
SVI-830-035	3/12/09	19.7	672.66	
W-830-04A	2/9/09	47.27	576.83	
W-830-04A	4/9/09	48.74	575.36	
W-830-04A	7/23/09	49.65	574.45	
W-830-04A	10/8/09	48.95	575.15	
W-830-05	2/9/09	25.27	559.1	
W-830-05	4/9/09	25.83	558.54	
W-830-05	7/23/09	26.44	557.93	
W-830-05	10/8/09	26.28	558.09	
W-830-07	3/12/09	-	NA	NM/RA
W-830-07	4/9/09	-	NA	DRY
W-830-07	7/21/09	-	NA	DRY
W-830-07	10/21/09	-	NA	DRY
W-830-09	3/12/09	113.19	582.57	
W-830-09	4/21/09	112.62	583.13	
W-830-09	7/21/09	112.16	583.6	
W-830-09	10/28/09	114.68	581.08	
W-830-10	2/9/09	20.32	576.38	
W-830-10	4/9/09	21.67	575.03	
W-830-10	7/23/09	22.4	574.3	
W-830-10	10/8/09	21.5	575.2	
W-830-11	2/9/09	34.44	561.75	
W-830-11	4/9/09	35.46	560.73	
W-830-11	7/23/09	36.96	559.23	
W-830-11	10/8/09	36.51	559.68	
W-830-12	3/12/09	95.41	597.21	
W-830-12	4/21/09	95.4	597.22	
W-830-12	7/21/09	96.54	596.08	
W-830-12	10/28/09	97.46	595.16	
W-830-13	2/9/09	29.35	535.16	
W-830-13	4/9/09	29.17	535.34	
W-830-13	7/23/09	30.14	534.37	
W-830-13	10/8/09	31.2	533.31	
W-830-14	2/9/09	20.46	545.04	
W-830-14	4/9/09	20.69	544.81	
W-830-14	7/23/09	20.6	544.9	
W-830-14	10/8/09	20.56	544.94	
W-830-15	2/9/09	4.69	560.4	CB
W-830-15	4/9/09	4.15	560.94	
W-830-15	7/23/09	7.39	557.7	
W-830-15	10/8/09	7.32	557.77	
W-830-16	2/10/09	97.93	572.95	

C-7. Building 832 Canyon Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-830-16	4/9/09	98.71	572.17	
W-830-16	7/29/09	99.75	571.13	
W-830-16	10/19/09	99.55	571.33	
W-830-17	2/10/09	109.04	565.65	
W-830-17	4/9/09	109.03	565.66	
W-830-17	7/29/09	108.9	565.79	
W-830-17	10/19/09	108.85	565.84	
W-830-1730	2/5/09	24.77	523.33	
W-830-1730	4/9/09	24.81	523.29	
W-830-1730	7/23/09	24.88	523.22	
W-830-1730	10/8/09	25.02	523.08	
W-830-18	2/9/09	77.8	576.69	
W-830-18	4/9/09	75.5	578.99	
W-830-18	7/21/09	75.81	578.68	
W-830-18	10/8/09	76.8	577.69	
W-830-1807	3/12/09	-	NA	NM/RA
W-830-1807	4/21/09	-	NA	NM/RA
W-830-1807	7/21/09	-	NA	NM/RA
W-830-1807	10/28/09	-	NA	NM/RA
W-830-1829	3/12/09	54.47	606.04	
W-830-1829	4/21/09	54.45	606.06	
W-830-1829	7/21/09	55.07	605.44	
W-830-1829	10/28/09	55.51	605	
W-830-1830	3/12/09	54.93	606.07	
W-830-1830	4/21/09	54.83	606.17	
W-830-1830	7/21/09	55.01	605.99	
W-830-1830	10/28/09	55.3	605.7	
W-830-1831	2/10/09	168.28	576.43	
W-830-1831	4/9/09	169.28	575.43	
W-830-1831	7/29/09	170.04	574.67	
W-830-1831	10/19/09	169.62	575.09	
W-830-1832	2/10/09	170.89	578.98	
W-830-1832	4/9/09	168.83	581.04	
W-830-1832	7/29/09	169.32	580.55	
W-830-1832	10/19/09	170.62	579.25	
W-830-19	3/12/09	-	NA	DRY
W-830-19	4/21/09	-	NA	DRY
W-830-19	7/21/09	-	NA	DRY
W-830-19	10/28/09	-	NA	DRY
W-830-20	2/9/09	22.53	574.43	
W-830-20	4/9/09	22.52	574.44	
W-830-20	7/23/09	23.13	573.83	
W-830-20	10/8/09	23.5	573.46	
W-830-21	2/9/09	68.84	585.1	
W-830-21	4/9/09	67.91	586.03	
W-830-21	7/21/09	67.36	586.58	

C-7. Building 832 Canyon Operable Unit ground water elevations.

Well	Date	Depth to water	Water elevation	Notes
W-830-21	10/8/09	67.6	586.34	
W-830-22	3/12/09	51.63	603.39	
W-830-22	4/21/09	51.93	603.09	
W-830-22	7/21/09	51.85	603.17	
W-830-22	10/28/09	52.15	602.87	
W-830-2213	2/9/09	70.58	585.31	
W-830-2213	4/9/09	67.43	588.46	
W-830-2213	7/21/09	66.73	589.16	
W-830-2213	10/8/09	67.17	588.72	
W-830-2214	2/9/09	70.4	585.25	
W-830-2214	4/9/09	67.01	588.64	
W-830-2214	7/21/09	66.11	589.54	
W-830-2214	10/8/09	66.92	588.73	
W-830-2215	2/9/09	78.63	577.18	
W-830-2215	4/9/09	74.83	580.98	
W-830-2215	7/21/09	76.94	578.87	
W-830-2215	10/8/09	76.05	579.76	
W-830-2216	2/9/09	18.05	534.62	
W-830-2216	4/9/09	17.77	534.89	
W-830-2216	7/29/09	18.67	534	
W-830-2216	10/19/09	22.53	530.13	
W-830-2311	2/9/09	22.04	576.26	
W-830-2311	4/9/09	23.42	574.88	
W-830-2311	7/23/09	24.12	574.18	
W-830-2311	10/8/09	23.27	575.03	
W-830-25	2/10/09	-	NA	DRY
W-830-25	4/9/09	-	NA	DRY
W-830-25	7/21/09	-	NA	DRY
W-830-25	10/21/09	-	NA	DRY
W-830-26	3/12/09	-	NA	DRY
W-830-26	4/21/09	77.27	581.26	
W-830-26	7/21/09	77.58	580.95	
W-830-26	10/28/09	-	NA	DRY
W-830-27	2/10/09	35.98	588.54	
W-830-27	4/9/09	31.54	592.98	
W-830-27	7/21/09	30.77	593.75	
W-830-27	10/21/09	31.66	592.86	
W-830-28	2/10/09	46.39	578.47	
W-830-28	4/9/09	44.05	580.81	
W-830-28	7/21/09	44.07	580.79	
W-830-28	10/21/09	46.07	578.79	
W-830-29	3/12/09	89.08	571.95	
W-830-29	4/21/09	89.22	571.81	
W-830-29	7/21/09	92.06	568.97	
W-830-29	10/28/09	92.72	568.31	
W-830-30	3/12/09	14.98	677.53	
W-830-30	4/21/09	15.48	677.03	

C-7. Building 832 Canyon Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-830-30	7/21/09	17.45	675.06	
W-830-30	10/28/09	17.26	675.25	
W-830-34	3/12/09	17.57	674.78	
W-830-34	4/21/09	17.77	674.58	
W-830-34	7/21/09	18.63	673.72	
W-830-34	10/28/09	18.34	674.01	
W-830-49	3/12/09	-	NA	NM/RA
W-830-49	4/21/09	-	NA	NM/RA
W-830-49	7/29/09	-	NA	NM/RA WELL HEAD SEALED
W-830-49	10/28/09	37.8	630.14	
W-830-50	2/9/09	32.29	576.85	
W-830-50	4/9/09	34.15	574.99	
W-830-50	7/23/09	34.86	574.28	
W-830-50	10/8/09	34.05	575.09	
W-830-51	2/9/09	2.76	568.02	FA
W-830-51	4/9/09	-1.18	571.96	FL
W-830-51	7/23/09	-	NA	FA
W-830-51	10/8/09	-	NA	FA
W-830-52	2/9/09	0.93	572.45	FA
W-830-52	4/9/09	1.2	572.18	
W-830-52	7/23/09	1.15	572.23	
W-830-52	10/8/09	1.2	572.18	
W-830-53	2/9/09	0.78	575.29	FA
W-830-53	4/9/09	1	575.07	
W-830-53	7/29/09	1.12	574.95	
W-830-53	10/8/09	1.12	574.95	
W-830-54	2/9/09	57.7	545.32	
W-830-54	4/9/09	57.16	545.86	
W-830-54	7/29/09	58.19	544.83	
W-830-54	10/19/09	58.31	544.71	
W-830-55	2/9/09	88.83	575.21	
W-830-55	4/9/09	90.14	573.9	
W-830-55	7/29/09	90.85	573.19	
W-830-55	10/19/09	90.73	573.31	
W-830-56	2/9/09	31.36	545.46	
W-830-56	4/9/09	31.43	545.39	
W-830-56	7/23/09	31.48	545.34	
W-830-56	10/8/09	31.6	545.22	
W-830-57	2/10/09	60.79	578.4	
W-830-57	4/9/09	58.29	580.9	
W-830-57	7/21/09	58.03	581.16	
W-830-57	10/21/09	62.4	576.79	
W-830-58	2/10/09	24.05	608.82	
W-830-58	4/9/09	23.8	609.07	
W-830-58	7/21/09	24.42	608.45	
W-830-58	10/21/09	24.58	608.29	
W-830-59	3/12/09	59.37	606.74	

C-7. Building 832 Canyon Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-830-59	4/21/09	59	607.11	
W-830-59	7/21/09	59.83	606.28	
W-830-59	10/28/09	-	NA	DRY
W-830-60	2/9/09	59.02	578.37	
W-830-60	4/9/09	56.84	580.55	
W-830-60	7/21/09	57.26	580.13	
W-830-60	10/8/09	58.23	579.18	
W-831-01	3/12/09	131.58	641.91	
W-831-01	4/21/09	131.63	641.86	
W-831-01	7/22/09	132.62	640.87	
W-831-01	10/28/09	133.08	640.41	
W-832-01	3/12/09	32.34	673.72	
W-832-01	4/21/09	33.04	673.02	PUMPING
W-832-01	7/22/09	30.01	676.05	
W-832-01	10/28/09	31	675.06	
W-832-09	3/12/09	73.42	633.8	
W-832-09	4/21/09	73.33	633.89	
W-832-09	7/22/09	73.86	633.36	
W-832-09	10/28/09	74.42	632.8	
W-832-10	3/12/09	36.54	649.61	NOT PUMPING
W-832-10	4/21/09	35.52	650.63	NOT PUMPING
W-832-10	7/22/09	31.33	654.82	
W-832-10	10/28/09	31.56	654.59	
W-832-11	3/12/09	33.06	665.59	NOT PUMPING
W-832-11	4/21/09	33.19	665.46	
W-832-11	7/22/09	31.72	666.93	
W-832-11	10/28/09	32.25	666.4	
W-832-12	3/12/09	18.8	702.67	
W-832-12	4/21/09	19.31	702.16	
W-832-12	7/22/09	19.17	702.3	
W-832-12	10/28/09	20.57	700.9	
W-832-13	3/12/09	20.09	702.57	
W-832-13	4/21/09	19.93	702.73	
W-832-13	7/22/09	19.71	702.95	
W-832-13	10/28/09	21	701.66	
W-832-14	3/12/09	-	NA	DRY
W-832-14	4/21/09	25.25	695.92	
W-832-14	7/22/09	24.29	696.88	
W-832-14	10/28/09	-	NA	DRY
W-832-15	3/12/09	-	NA	DRY
W-832-15	4/21/09	22.68	698.2	
W-832-15	7/22/09	19.64	701.24	
W-832-15	10/28/09	20.91	699.97	
W-832-16	3/12/09	-	NA	DRY
W-832-16	4/21/09	-	NA	DRY
W-832-16	7/22/09	-	NA	DRY
W-832-16	10/28/09	-	NA	DRY

C-7. Building 832 Canyon Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-832-17	3/12/09	-	NA	DRY
W-832-17	4/21/09	18.51	703.49	
W-832-17	7/22/09	18.54	703.46	
W-832-17	10/28/09	-	NA	DRY
W-832-18	3/12/09	-	NA	DRY
W-832-18	4/21/09	-	NA	DRY
W-832-18	7/22/09	25.26	695.94	
W-832-18	10/28/09	-	NA	DRY
W-832-19	3/12/09	-	NA	DRY
W-832-19	4/21/09	-	NA	DRY
W-832-19	7/22/09	24.02	696	
W-832-19	10/28/09	-	NA	DRY
W-832-1927	2/10/09	233.88	592.12	
W-832-1927	4/9/09	234	592	
W-832-1927	7/28/09	233.7	592.3	
W-832-1927	10/19/09	234	592	
W-832-20	3/12/09	-	NA	DRY
W-832-20	4/21/09	-	NA	DRY
W-832-20	7/22/09	25.35	695.54	
W-832-20	10/28/09	-	NA	DRY
W-832-21	3/12/09	12.26	709.69	
W-832-21	4/22/09	-	NA	DRY
W-832-21	7/22/09	-	NA	DRY
W-832-21	10/28/09	-	NA	DRY
W-832-2112	2/10/09	70.07	584.02	
W-832-2112	4/8/09	69.12	584.97	
W-832-2112	7/29/09	70.21	583.88	
W-832-2112	10/21/09	71.27	582.82	
W-832-22	3/12/09	-	NA	DRY
W-832-22	4/21/09	-	NA	DRY
W-832-22	7/22/09	56.32	664.65	
W-832-22	10/28/09	-	NA	DRY
W-832-23	3/12/09	31.8	688.34	
W-832-23	4/21/09	31.62	688.52	
W-832-23	7/22/09	31.85	688.29	
W-832-23	10/28/09	32.79	687.35	
W-832-24	3/12/09	39.16	623.33	
W-832-24	4/21/09	38.23	624.26	
W-832-24	7/22/09	38.04	624.45	
W-832-24	10/28/09	38.59	623.9	
W-832-25	2/10/09	35.36	631.45	
W-832-25	4/21/09	40.12	626.69	PUMPING
W-832-25	7/22/09	35.02	631.79	
W-832-25	10/28/09	35.16	631.65	
W-832-SC1	2/10/09	6.95	577.75	
W-832-SC1	4/9/09	6.92	577.78	
W-832-SC1	7/23/09	-	NA	MUDDY

C-7. Building 832 Canyon Operable Unit ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-832-SC1	10/8/09	-	NA	DRY MUDDY
W-832-SC2	2/10/09	-	NA	DRY
W-832-SC2	4/9/09	-	NA	DRY
W-832-SC2	7/23/09	-	NA	DRY
W-832-SC2	10/8/09	-	NA	DRY
W-832-SC3	2/10/09	4.89	558.78	
W-832-SC3	4/9/09	6.9	556.77	
W-832-SC3	7/23/09	-	NA	MUDDY
W-832-SC3	10/8/09	-	NA	DRY MUDDY
W-832-SC4	2/10/09	-	NA	DRY
W-832-SC4	4/9/09	8.62	528.68	
W-832-SC4	7/23/09	-	NA	DRY
W-832-SC4	10/8/09	-	NA	DRY
W-870-01	2/5/09	-	NA	DRY
W-870-01	4/6/09	-	NA	DRY
W-870-01	8/3/09	-	NA	DRY
W-870-01	10/8/09	-	NA	DRY
W-870-02	2/5/09	18	505.82	CB
W-870-02	4/6/09	18.31	505.51	
W-870-02	8/3/09	17.85	505.97	
W-870-02	10/8/09	18.24	505.58	
W-880-01	2/5/09	17.6	508.45	
W-880-01	4/6/09	17.62	508.43	
W-880-01	7/15/09	17.5	508.55	
W-880-01	10/8/09	18.11	507.94	
W-880-02	2/5/09	18.64	507.16	
W-880-02	4/6/09	18.45	507.35	
W-880-02	7/15/09	18.41	507.39	
W-880-02	10/8/09	18.65	507.15	
W-880-03	2/5/09	0.05	526	SOUND TUBE FULL OF WATER(HEAVY RAIN)
W-880-03	4/6/09	-	NA	NM FL
W-880-03	7/15/09	3.9	522.15	
W-880-03	10/8/09	6.24	519.81	

C-8. Building 801 Firing Table and Pit 8 Landfill ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
K8-01	2/24/09	131.73	968.71	
K8-01	4/28/09	131.85	968.59	
K8-01	8/3/09	132.07	968.37	
K8-01	10/29/09	132.33	968.11	
K8-02B	2/24/09	160.92	967.2	
K8-02B	4/28/09	161.11	967.01	
K8-02B	8/3/09	161.2	966.92	
K8-02B	10/29/09	161.42	966.7	
K8-03B	2/24/09	-	NA	NM/RA
K8-04	2/24/09	165.85	967	
K8-04	4/28/09	166.07	966.78	
K8-04	8/3/09	166.08	966.77	
K8-04	10/29/09	166.32	966.53	
K8-05	2/24/09	-	NA	DRY
K8-05	4/28/09	-	NA	DRY
K8-05	8/3/09	-	NA	DRY
K8-05	10/29/09	-	NA	DRY

C-9. Building 845 Firing Table and Pit 9 Landfill ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
K9-01	2/11/09	78.5	997.01	
K9-01	5/5/09	78.68	996.83	
K9-01	8/10/09	78.62	996.89	
K9-01	10/29/09	78.85	996.66	
K9-02	2/11/09	128.82	1006.57	
K9-02	5/5/09	128.88	1006.51	
K9-02	8/10/09	128.83	1006.56	
K9-02	10/29/09	129.02	1006.37	
K9-03	2/11/09	119.91	997.17	
K9-03	5/5/09	119.91	997.17	
K9-03	8/10/09	120	997.08	
K9-03	10/29/09	120.19	996.89	
K9-04	2/11/09	94.49	989.83	
K9-04	5/5/09	89.79	994.53	
K9-04	8/10/09	90.69	993.63	
K9-04	10/29/09	97.66	986.66	

C-10. Building 833 ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-833-03	2/11/09	-	NA	DRY
W-833-03	4/14/09	-	NA	DRY
W-833-03	7/27/09	-	NA	DRY
W-833-03	10/21/09	-	NA	DRY
W-833-12	2/11/09	19.97	827.25	
W-833-12	4/14/09	20.11	827.11	
W-833-12	7/27/09	-	NA	DRY
W-833-12	10/21/09	-	NA	DRY
W-833-18	3/11/09	-	NA	DRY
W-833-18	4/22/09	-	NA	DRY
W-833-18	7/27/09	-	NA	DRY
W-833-18	10/21/09	-	NA	DRY
W-833-22	2/11/09	-	NA	DRY
W-833-22	4/14/09	-	NA	DRY
W-833-22	7/27/09	-	NA	DRY
W-833-22	10/21/09	-	NA	DRY
W-833-28	2/11/09	-	NA	DRY
W-833-28	4/14/09	-	NA	DRY
W-833-28	8/3/09	-	NA	DRY
W-833-28	10/21/09	-	NA	DRY
W-833-30	2/11/09	279.89	571.77	
W-833-30	4/14/09	279.07	572.59	
W-833-30	7/27/09	280.71	570.95	
W-833-30	10/21/09	281.8	569.86	
W-833-33	2/11/09	-	NA	DRY
W-833-33	4/14/09	-	NA	DRY
W-833-33	7/27/09	-	NA	DRY
W-833-33	10/21/09	26.12	822.68	
W-833-34	2/11/09	-	NA	DRY
W-833-34	4/14/09	-	NA	DRY
W-833-34	7/27/09	-	NA	DRY
W-833-34	10/21/09	33.27	815.65	
W-833-43	3/11/09	-	NA	DRY
W-833-43	4/22/09	-	NA	DRY
W-833-43	7/27/09	-	NA	DRY
W-833-43	10/21/09	-	NA	DRY
W-840-01	2/4/09	118.72	578.36	
W-840-01	4/14/09	118.72	578.36	
W-840-01	7/27/09	118.63	578.45	
W-840-01	10/29/09	118.81	578.27	
W-841-01	2/4/09	-	NA	DRY
W-841-01	4/14/09	-	NA	DRY
W-841-01	7/27/09	-	NA	DRY
W-841-01	10/29/09	-	NA	DRY

C-11. Building 851 Firing Table ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-851-05	2/24/09	139.3	1132.49	
W-851-05	4/23/09	139.29	1132.5	
W-851-05	8/10/09	139.44	1132.35	
W-851-05	11/3/09	139.36	1132.43	
W-851-06	2/24/09	-	NA	NM/RA
W-851-06	4/23/09	132.79	1132.71	
W-851-06	8/10/09	-	NA	NM/RA
W-851-06	11/3/09	-	NA	NM/RA
W-851-07	2/24/09	139	1132.59	
W-851-07	4/23/09	138.97	1132.62	
W-851-07	8/10/09	138.93	1132.66	
W-851-07	11/3/09	139.11	1132.48	
W-851-08	2/24/09	182.67	1089.65	
W-851-08	4/23/09	182.52	1089.8	
W-851-08	8/10/09	182.54	1089.78	
W-851-08	11/3/09	182.6	1089.72	

C-12. Pit 2 Landfill ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
K2-01C	2/17/09	64.79	986.11	
K2-01C	4/29/09	64.46	986.44	
K2-01C	8/4/09	65.33	985.57	
K2-01C	11/2/09	65.86	985.04	
NC2-08	2/17/09	60.59	988.78	
NC2-08	4/28/09	60.61	988.76	
NC2-08	8/3/09	61.12	988.25	
NC2-08	11/2/09	61.44	987.93	
W-PIT2-1934	2/17/09	55.79	1005.32	
W-PIT2-1934	4/29/09	55.74	1005.37	
W-PIT2-1934	8/4/09	56.04	1005.07	
W-PIT2-1934	11/2/09	56.23	1004.88	
W-PIT2-1935	2/17/09	72.6	983.26	
W-PIT2-1935	4/29/09	72.73	983.13	
W-PIT2-1935	8/4/09	73.23	982.63	
W-PIT2-1935	11/2/09	73.63	982.23	
W-PIT2-2226	2/26/09	327.47	966.65	
W-PIT2-2226	4/28/09	327.54	966.58	
W-PIT2-2226	8/3/09	327.3	966.82	
W-PIT2-2226	10/29/09	327.28	966.84	
W-PIT2-2301	2/17/09	20.42	1022.71	
W-PIT2-2301	4/28/09	21.7	1021.43	
W-PIT2-2301	8/3/09	31.02	1012.11	
W-PIT2-2301	10/15/09	-	NA	DRY
W-PIT2-2301	11/2/09	30.7	1012.43	
W-PIT2-2301	12/3/09	30.77	1012.36	
W-PIT2-2301	12/9/09	30.83	1012.3	
W-PIT2-2301	12/16/09	30.81	1012.32	
W-PIT2-2302	2/17/09	15.14	1027.36	
W-PIT2-2302	4/28/09	15.9	1026.6	
W-PIT2-2302	8/3/09	16.65	1025.85	
W-PIT2-2302	10/15/09	16.71	1025.79	POST RAIN
W-PIT2-2302	11/2/09	16.63	1025.87	
W-PIT2-2302	12/3/09	16.71	1025.79	
W-PIT2-2302	12/9/09	16.74	1025.76	
W-PIT2-2302	12/16/09	16.72	1025.78	
W-PIT2-2303	2/17/09	-	NA	DRY
W-PIT2-2303	4/28/09	-	NA	DRY
W-PIT2-2303	8/3/09	-	NA	DRY
W-PIT2-2303	10/15/09	-	NA	DRY
W-PIT2-2303	11/2/09	-	NA	DRY
W-PIT2-2303	12/3/09	-	NA	DRY
W-PIT2-2303	12/9/09	-	NA	DRY
W-PIT2-2303	12/16/09	-	NA	DRY
W-PIT2-2304	2/17/09	56.31	984.08	
W-PIT2-2304	4/28/09	56.7	983.69	

C-12. Pit 2 Landfill ground water elevations.

Well	Date	Depth to water (ft)	Water elevation (ft MSL)	Notes
W-PIT2-2304	8/3/09	-	NA	DRY
W-PIT2-2304	11/2/09	-	NA	DRY

Appendix D

Building 834 T2 Area *In Situ* Bioremediation Monitoring Data

Appendix D

Building 834 T2 Area *In Situ* Bioremediation Monitoring Data

D-1. Results of light hydrocarbon monitoring for the Building 834 T2 Area bioremediation treatability Study.

Sample Location	Sample Date	Ethane (μg/L)	Ethene (μg/L)	Methane (μg/L)
W-834-1825	8/12/09	0.15	99	7,600
W-834-1825	12/3/09	0.018	37	19,000
W-834-1833	8/12/09	0.053	0.73	50
W-834-1833	12/3/09	0.032	0.38	1.2
W-834-T2	8/12/09	1.5	830	14,000
W-834-T2	12/3/09	2.2	970	15,000

Notes:

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

D-2. Results of oxygen-reduction potential (ORP) monitoring for the Building 834 T2 Area bioremediation treatability Study.

Date	W-834-1825 (mv)	W-834-1833 (mv)	W-834-T2 (mv)	W-834-T2A (mv)
7/5/09	-366.6	-219.2	-360.8	431.9
7/15/09	-367.4	-219.9	-340.9	454.8
8/1/09	-357.4	-228.1	-329.6	459.1
8/12/09	-359.1	-229.2	-289.7	463.6
8/18/09	-348.4	-8.1	-304.7	464.4
8/25/09	-367.8	-40.2	-292.7	462.6

Notes:

***In Situ* ORP monitoring discontinued after August.**

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

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