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Livermore Site Office, Livermore, California 94550

## Lawrence Livermore National Laboratory

University of California, Livermore, California 94550 UCRL-AR-206319

# 2003 Annual Compliance Report for Lawrence Livermore National Laboratory Site 300


*Authors:*

V. Dibley
R. Blake
T. Carlsen
M. Denton*
R. Goodrich
S. Gregory
K. Grote*
V. Madrid
C. Stoker
M. Taffet
J. Valett*

*Contributors:*

W. Daily
R. Depue
J. Garrison
K. Heyward
J. Johnson
S. Lambaren
D. MacQueen
S. Martins
P. McKereghan*
M. Van Hattem
J. Woollett


## March 31, 2004


*Weiss Associates, Emeryville, California


## Environmental Protection Department

### Environmental Restoration Division

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# Appendices

Appendix A. Results of Influent and Effluent pH Monitoring....................................................A-1

# 1. Introduction

This report summarizes the Lawrence Livermore National Laboratory (LLNL) Site 300 Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Remedial Action compliance monitoring activities performed during 2003. 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 General Services Area (GSA) monitoring data, which were collected in compliance with the GSA CMP (Rueth, 1998), are also included in this report. This report does not cover the Eastern GSA, which is governed by the RWQCB National Pollutant Discharge Elimination System (NPDES) Order No. 97-242 and reported separately.

During the reporting period of January 1, 2003 through December 31, 2003, 5,075,353 gallons of ground water and 11,873,000 cubic feet of vapor were treated at Site 300, removing approximately 2,616 grams (g) of volatile organic compounds (VOCs), 765,760 g nitrate, 93 g RDX, and 83 g perchlorate (Table Summ-1).

Since remediation began in 1992, approximately 20,865,036 gallons of ground water and over 141,236 of thousands of cubic feet of vapor have been treated, removing approximately 360 kilograms (kg) of VOCs, 112,634 kg nitrate, 0.68 kg RDX, 9.6 kg tetrabutyl ortho silicate (TBOS), and 6.3 kg perchlorate (Table Summ-2).

During 2003, 30 monitoring wells, 2 soil vapor extraction wells, 1 dewatering (horizontal) well, and1 injection well were installed. Ten boreholes were also drilled & sealed. Table 1-1 lists the wells and boreholes installed during 2003. Analytical data from the associated soil samples are presented in Tables 1.2-1 through -7.

# 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 OU as follows:

2.1. General Services Area OU 1

2.2. Building 834 OU 2

2.3. Pit 6 Landfill (Pit 6) OU 3

2.4. High Explosive Process Area OU 4

2.5. Building 850 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 are shown in Figure 2-1. The Pit 2, 8, and 9 Landfills (OU 8) are discussed in Section 3.

## 2.1. General Services Area (GSA) OU1

The GSA OU consists of the Eastern GSA and Central GSA areas. This report does not cover the Eastern GSA, which is governed by the RWQCB NPDES Order No. 97-242 and reported separately. At the Central GSA, chlorinated solvents, mainly trichloroethylene (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 deep and two feet in diameter. The Central GSA dry wells were used until 1982. In 1983 and 1984, these dry wells were decommissioned and excavated.

A ground water extraction and treatment system has been operating in the Central GSA since 1992. Contaminated ground water is extracted from six wells (W-7I, W-875-07, W-875-08, W-873-07, W-872-02, and W-7O). The current treatment configuration includes particulate filtration, air stripping to remove VOCs from extracted water, granular activated carbon (GAC) to treat vapor effluent from the air stripper, and discharge to the surrounding natural vegetation using misting towers.

A soil vapor extraction and treatment system began operating in the GSA adjacent to Building 875 dry well contaminant source area in 1994. Seven wells (W-7I, W-875-07, W-875-08, W-875-09, W-875-10, W-875-11 and W-875-15) are used as vapor extraction or passive air inlet wells. Simultaneous ground water extraction in the vicinity lowers the elevation of the ground water surface and maximizes the volume of unsaturated soil influenced by vapor extraction. The current treatment configuration includes a water knockout chamber, a rotary vane blower, and four 140-lb vapor-phase GAC vessels arranged in series. Treated vapors are discharged to the atmosphere under 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 in Figure 2.1-1.

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

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

#### *2.1.1.1. Central GSA Facility Performance Assessment*

The Central GSA ground water treatment facility discharge is regulated by the RWQCB Substantive Requirements for Waste Discharge.

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 mass removed during the reporting period is presented in Table Summ-1. The cumulative volume of ground water and soil vapor treated and discharged and mass removed is summarized in Table Summ-2. Analytical results for influent and effluent samples are shown in Table 2.1-2 through 3. The pH measurement results are presented in Appendix A.

#### *2.1.1.2. Central GSA Operations and Maintenance Issues*

The treatment facility operated continuously throughout the 2003, except for six days in late February when maintenance on the misting towers was performed and two days in late November and two days in late December due to power outages.

#### *2.1.1.3. Central GSA Receiving Water Monitoring*

During 2003, no surface water was present at the Central GSA discharge location. Therefore, receiving water monitoring was not conducted.

#### *2.1.1.4. Central GSA Compliance Summary*

The Central GSA ground water and soil vapor extraction and treatment systems operated in compliance with the Substantive Requirements for Wastewater Discharge. No Environmental Protection Agency (EPA) Method 601 compounds were detected above the detection limit of 0.5 $\mu$g/L in any of the ground water treatment system effluent samples collected during 2003. Measurements of pH (Appendix A) were within permit limitations.

#### *2.1.1.5. Central GSA Facility Sampling Plan Evaluation and Modifications*

The Central GSA treatment facility sampling plan complies with Substantive Requirements and the GSA CMP (1998) monitoring requirements. The treatment facility sampling plan is presented in Table 2.1-4. There were no modifications made to the plan during the reporting period.

### 2.1.2. Central GSA Surface Water and Ground Water Monitoring

During 2003, ground water monitoring was conducted in accordance with the GSA CMP sampling schedule with the following exceptions; 7 samples were not collected due to insufficient water and 7 samples were not collected due to missing or malfunctioning equipment. The sampling plan and schedule by quarter for ground water and surface water is presented in Table 2.1-5. This table also delineates and explains deviations from the sampling plan and indicates any additions made to the CMP. Analytical results are summarized in Tables 2.1-6 and 9.

Ground water elevations measured during the reporting period are summarized in Table 2.1-10. Ground water elevation data collected from wells within the OU are similar to those collected during past quarters. A ground water potentiometric surface map is presented in Figure 2.1-2.

### 2.1.3. Central GSA Remediation Progress Analysis

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

#### 2.1.3.1. Central GSA Mass Removal

The monthly ground water and soil vapor mass removal estimates are summarized in Table 2.1-11. The cumulative mass estimates are summarized in Table SUMM-2.

#### 2.1.3.2. Central GSA Contaminant Concentrations and Distribution

At the Central GSA, VOCs are the primary contaminants of concern (COC) in ground water and soil vapor. VOCs are present in three hydrostratigraphic units (HSU). In the western portion of the Central GSA, a VOC plume exists within a shallow HSU (Qt-$Tnsc_1$) contained within the Quaternary terrace deposits (Qt) and portions of the $Tnbs_2$ and $Tnsc_1$ bedrock units that subcrop beneath the Qt. Underlying the Qt-$Tnsc_1$ HSU, very low and intermittent VOC concentrations exist within a deeper HSU ($Tnbs_1$) consisting of the $Tnbs_1$ bedrock units where they are hydraulically separate from the shallow Qt deposits. A total VOC isoconcentration contour map for the Qt-$Tnsc_1$HSU is presented in Figure 2.1-3. In the eastern portion of the Central GSA area (near the sewage treatment pond), the Qt deposits and the $Tnbs_2$ and $Tnsc_1$ bedrock units are not present. Quaternary alluvial deposits (Qal) directly overlie the shallow $Tnbs_1$ bedrock that comprise the (Qal- $Tnbs_1$) HSU in this area.

The current extent of detectable total VOCs in the shallow Qt-$Tnsc_1$ HSU is similar to that shown in past quarterly reports and in the first semester 2003. The current maximum total VOC concentration in the Qt-$Tnsc_1$ HSU (457.1 $\mu$g/L) occurs in well W-875-08, located in the Building 875 dry well pad area where the historical maximum total VOC concentrations have been detected. The current total VOC concentrations in these source area wells have decreased by two orders-of-magnitude since remediation began in 1994. VOCs are not detected in ground water samples from wells in the deeper $Tnbs_1$ HSU that underlies the Qt-$Tnsc_1$ HSU.

Toward the sewage treatment ponds, lower concentrations of VOCs are present in the shallow alluvium (Qal) and shallow $Tnbs_1$ bedrock (Qal-$Tnbs_1$ HSU). As the $Tnsc_1$ confining layer is absent in this area, VOCs have migrated from the Qal into the unconfined $Tnbs_1$ bedrock. VOCs have been detected at low concentrations in only three shallow $Tnbs_1$ wells, W-7N, W-7L, and W-35A-13 at concentrations of 1.1, 0.57, and 0.59 $\mu$g/L, respectively. In light of the relatively low concentrations and small plume size, maps depicting VOCs in the deeper $Tnbs_1$ HSU are not included in this report.

#### 2.1.3.3. Central GSA Remediation Optimization Evaluation

During the second semester of 2003, extraction well W-7O removed the majority of ground water while the dry pad extraction wells W-7I, W-875-07, and W-875-08 removed lesser amounts of ground water. Based on the ground water elevation map shown in Figure 2.1-2, pumping at W-7O, W-7I, W-875-07, and W-875-08 appear to adequately capture the highest concentrations in ground water in the Building 875 dry wells pad source area. The Central GSA soil vapor extraction system was turned off near the end of second semester 2003 to evaluate soil vapor rebound in the source area. This rebound test will be continuing throughout most of the first semester of 2004 and results will be discussed in the 2004 semi-annual CMP report.

#### 2.1.3.4. Central GSA OU Performance Issues

There were no performance issues during this reporting period.

## 2.2. Building 834 (B834) OU2

Past spills, piping leaks, and septic-system effluent at the Building 834 Complex have resulted in soil and ground water contamination, primarily of VOCs. Secondary COCs include TBOS and nitrate. In addition, a former underground diesel storage tank released diesel to the subsurface. Although diesel has been included as a secondary COC, the extent of diesel contamination has been recently evaluated and monitoring requirements have been modified accordingly. The distribution of diesel in ground water is discussed in Section 2.2.3.2. A map of the Building 834 OU showing the locations of monitoring and extraction wells is presented in Figure 2.2-1. Ground water and soil vapor extraction and treatment systems have been operating in the Building 834 OU since 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 area to the south of the core area is referred to as the distal area. Due to the very low ground water yield from individual extraction wells (< 0.1 gallons per minute), the ground water and soil vapor extraction and treatment systems have been operated simultaneously in batch mode. The treatment process utilized an oil-water separator to remove the floating silicon oil, TBOS, followed by air sparging to remove VOCs from ground water. The VOC laden vapors were removed using vapor phase GAC. Treated ground water was then discharged via a misting system. The soil vapor extraction system utilized 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. Until recently, the extraction well field consisted of 15 extraction wells, of which 13 were used for both ground water and soil vapor extraction, and two were solely used for vapor extraction. The treatment system and extraction well field are currently being modified. These modifications include:

- Replacement of the oil-water separator with floating hydrocarbon adsorption devices (pigs) that will be placed in the influent ground water storage tank to remove any floating product that is extracted.
- Conversion from air sparging with vapor-phase GAC treatment to the use of aqueous-phase GAC to remove VOCs from ground water.
- Installation of a new electronic treatment facility control system.
- Installation of individual monitoring equipment to measure volumes of ground water and soil vapor extracted from each well independently.

The results of the soil vapor extraction tests described in Section 2.2.3.3 indicate that the number of extraction wells could be reduced without decreasing mass removal. The proposed core area extraction well field will consist of eight wells for both ground water and soil vapor extraction. The remaining core area wells will be used to more accurately monitor remediation system performance.

In addition to the core area modifications, three additional ground water and soil vapor extraction wells will be added to the extraction wellfield in the Building 834 distal area. The average ground water extraction rate for the expanded extraction wellfield is estimated at 4,000 gallons per month.

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

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

#### *2.2.1.1. Building 834 OU Facility Performance Assessment*

With the exception of short-term soil vapor extraction tests conducted in July, the Building 834 treatment facility was off-line the entire second semester of 2003. The treatment system is undergoing major modifications, as described above, and is expected to remain off-line into 2004. The milestone completion date for start-up of the upgraded system is December 31, 2004. Therefore, no data related to facility activities are presented. The cumulative volume of ground water and soil vapor treated and discharged and mass removed are summarized in Table Summ-2.

#### *2.2.1.2. Building 834 OU Operations and Maintenance Issues*

There are no operational or maintenance issues to report, as this facility did not operate during the reporting period.

#### *2.2.1.3. Building 834 OU Compliance Summary*

The Building 834 ground water treatment facility discharge is regulated by the RWQCB Substantive Requirements for Waste Discharge. There are no waste discharge compliance issues to report since the Building 834 treatment facility was not operated during the entire semester.

#### *2.2.1.4. Building 834 OU Facility Sampling Plan Evaluation and Modifications*

The Building 834 facility sampling plan complies with CMP monitoring requirements. The sampling plan is presented in Table 2.2-1.

### 2.2.2. Building 834 OU Ground Water Monitoring

During 2003, ground water monitoring was conducted in accordance with the CMP monitoring requirements with the following exceptions; 48 samples were not collected due to access limitations due to Defense Program experiments and 104 samples were not collected due to insufficient water in the monitor wells. The monitoring well sampling plan and schedule for ground water and surface water monitoring are presented by quarter in Table 2.2-2. This table also delineates and explains deviations from the sampling plan and indicates any additions made to the CMP. Analytical results are summarized in Tables 2.2-3 through 8.

Ground water elevations measured during this reporting period are summarized in Table 2.2-9. A ground water potentiometric surface map is presented in Figure 2.2-2. Ground water elevation data collected from wells within the OU are similar to those collected during past quarters.

### 2.2.3. Building 834 OU Remediation Progress Analysis

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

### *2.2.3.1. Building 834 OU Mass Removal*

No monthly ground water and soil vapor mass removal estimates are reported since the facility was not operational during the entire reporting period. The cumulative mass removed presented in Table SUMM-2 is the same as reported in the first semester 2003 report.

### *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, diesel, and nitrate are the secondary COCs. The highest concentrations of these constituents have always been detected in the core area. These constituents have been identified in two shallow HSUs, the Tpsg perched water-bearing gravel zone and the underlying Tps-clay perching horizon. A total VOC isoconcentration contour map for the Tpsg perched water-bearing zone is presented in Figure 2.2-3. Isoconcentration contour maps for the secondary COCs will be presented in the next CMP report.

The extent of total VOCs in the Tpsg HSU differs from the last report mainly due to increases in the extent of saturation. The increased saturation extent is due to the combined effects of recharge from late season rainfall and ground water rebound as a result of the discontinuation of ground water extraction since June 2002. Although the extent of VOC ground water contamination has increased during the last 6 months, the magnitude has not changed significantly since the last report.

In the Building 834 core area, the current maximum total VOC concentration in the Tpsg HSU (73,000 $\mu$g/L) was detected in well W-834-C5. In the core area, high total VOC concentrations have also been detected in the underlying Tps clay HSU. The highest total VOC ground water concentrations in the Building 834 OU occurred in the Tps-clay perching horizon. A ground water sample collected from the Tps clay (core area well W-834-A1) contained 200,000 $\mu$g/L of total VOCs during 2003.

VOCs have also been detected at high concentrations in the distal area Tpsg HSU. The maximum total VOC concentration (26,000 $\mu$g/L) outside the core area in 2003 was detected in Tpsg well W-834-T2, located about 500 feet south of the core area.

To date, VOCs have not been detected in the $Tnbs_1$ regional aquifer guard wells W-834-T1 and W-834-T3. These deep guard wells are screened about 300 feet below the shallow contaminated Tpsg and Tps HSUs in the distal portion of the Building 834 OU.

During December, three passive soil vapor VOC monitoring devises (Gore Sorbers) were used to detect the presence of VOC vapors in the unsaturated zone between the contaminated Tpsg and Tps perched water-bearing zones and the regional aquifer. One Gore Sorber was installed in well W-834-1712 screened in the shallow vadose zone (Tpsg) beneath Building 834 D. Total VOCs were measured at 123 $\mu$g/sorber, which was predominately TCE. A second Gore Sorber was placed in monitor well W-834-D9A, which is completed in the unsaturated $Tnbs_2$ geologic unit, that underlies the Tps clay perching horizon. Analytical results from this Gore Sorber indicated total VOCs at 489 $\mu$g/sorber, also predominately TCE. A third Gore Sorber was placed into monitor well W-834-D2, which is completed in the upper unsaturated portion of the $Tnbs_1$ geologic unit. TCE was not detected above the 0.05 $\mu$g/sorber analytical laboratory limit of detection. These data indicate that VOC contamination has not migrated into the unsaturated zone overlying the regional aquifer.

Among the secondary COCs for the Building 834 OU, TBOS continues to be detected at high concentrations almost exclusively in the core area. The current maximum TBOS concentration (520,000 $\mu$g/L) was measured in well W-834-D4. TBOS was detected in only one well outside of the core area, W-834-T2D, at a low concentration of 1.7 $\mu$g/L, and remains below detection limits in the deep $Tnbs_1$ guard wells W-834-T1 and W-834-T3.

Nitrate is detected in samples from wells located in both the core and distal areas of the Building 834 OU. The maximum nitrate concentration (110 milligrams per liter [mg/L], as $NO_3$) was detected in well W-834-C5, located in the core area. Historically, nitrate concentrations in this well have ranged from 49 to 120 mg/L. The maximum nitrate concentration in the distal area was detected in well W-834-1824 at 90 mg/L. Nitrate concentrations remain below detection limits in ground water samples from the deep $Tnbs_1$ guard wells W-834- T1 and W-834-T3.

As discussed in the first semester report, after a review of diesel analytical results and chromatograms, only one well (W-834-U1) matched the diesel fingerprint indicative of weathered diesel fuel. This well, although completed in the deeper Tps clay perching horizon, was completed directly beneath the former underground diesel storage tank location. The storage tank was removed in 1994. A Tpsg well (W-834-2001) was installed adjacent to the former tank location during the second semester of 2003. Floating diesel product was encountered at this location. At this time, only these two wells appear to have diesel contamination. Therefore, the current CMP diesel monitoring requirements have been amended to include these two wells and a smaller subset of wells that will be used to track potential migration of diesel (W-834-2001, -A1, -A2, -D10, -D11, -D12, -D16, -D17, -D7, -U1, -K1A, -S1, -S8, and -S9). All other diesel detections were related to the presence of a new compound, n-Butyl-Benzenesulfonamide (BBSA), and in some cases also TBOS. Both of these compounds elute within the diesel range, and were incorrectly identified as diesel fuel. BBSA was tentatively identified using EPA method 8270 analyses. Subsequently, a new analytical method was developed at LLNL using Liquid Chromatography and Mass Spectroscopy (LCMS) to positively identify and quantify BBSA. An investigation was conducted to determine the source of the BBSA. Evidence indicates that the nylon tubing used with a particular type of ground water extraction pump is leaching BBSA. BBSA was also detected in samples obtained with these types of pumps in the Central GSA and in the Building 832 Canyon OUs. The LCMS BBSA analytical results are included in Table 2.2-7. Additional studies were conducted to determine the extent of BBSA ground water contamination. Bailed ground water samples were collected from wells that contained the pumps. These samples contained BBSA concentrations that were several orders of magnitude lower than the sample collected from the pump. In addition, when the pump was removed and the well was bailed dry, the BBSA concentration rapidly decreased to non-detect. The BBSA contamination apparently remains very localized. The reported BBSA concentrations are due to contact with the tubing and do not represent actual ground water concentrations. LLNL is working with the pump manufacturer to remove the tubing and replace it with an inert material.

In addition to the BBSA data, several new compounds were detected in the 8270 method from four wells. These included 2-methylnaphthalene at 190 $\mu$g/L in W-834-2001, bis(2-ethylhexyl)phthalate at 19 $\mu$g/L in W-834-1825, bis(2-ethylhexyl)phthalate at 11 $\mu$g/L in well W-834-C5, phenol and cresol at 3.0 $\mu$g/L and 6.8 $\mu$g/L, respectively, in well W-834-D3, and bis(2-ethylhexyl)phthalate at 7.7 $\mu$g/L in W-834-T2. Although diesel range compounds were detected in the $Tnbs_1$ guard well W-834-T3 at a concentration of 60 $\mu$g/L during the previous semester, analysis by EPA Method 8270 indicated that this detection was actually non-regulated common fatty acids. Upon re-sampling, no diesel range compounds were detected.

As reported in previous quarterly monitoring reports, chromium monitoring continues in wells that were affected by improperly wired pressure transducers that produced electrical short circuits. Chromium samples were collected from three wells during the second semester of 2003. One of the samples collected from well W-834-M1 on September 11 was analyzed without filtration prior to acidification and analysis. The corresponding result was much higher than historical data and does not represent the dissolved chromium concentrations in the ground water. All other concentrations remain below the maximum contaminant level (MCL) of 0.05 mg/L for chromium. Additional organic compounds related to galvanic reactions associated with the shorting transducers were detected in W-834-M1 during the second semester sampling. These additional compounds include 1,3-dichlorobenzene, bromodichloromethane, bromoform, and dibromochloromethane.

#### *2.2.3.3. Building 834 OU Remediation Optimization Evaluation*

The ground water and soil vapor extraction systems were primarily non-operational for the entire reporting period due to treatment facility modification and construction activities. However, soil vapor extraction testing and associated soil vapor concentration rebound monitoring was conducted in July just prior to starting these modifications. A two to three hour soil vapor extraction test was conducted on each existing extraction well as part of ongoing remedial performance monitoring. Soil vapor VOC concentration monitoring was conducted to assess the level of VOC rebound that occurred during the facility shutdown since the second quarter of 2002. Data from these tests were used to determine which core area wells will be used to extract contaminated ground water to optimize VOC mass removal and increase the effectiveness of remediation monitoring. The results of the soil vapor extraction tests and the proposed extraction well field configuration were presented at the December 2003 Remedial Project Manager's (RPM) meeting. In summary, all but one of the fifteen existing extraction wells showed some rebound of VOC concentrations. Six wells showed significant increases. The modified extraction well field will consist of eight wells for vapor and ground water extraction with an alternate ninth well. The soil vapor test results indicate that these eight extraction wells adequately capture soil vapors associated with VOC sources in the Building 834 core area. The remaining six wells showed very poor zones-of-influence and vapor flow rates and low soil vapor VOC concentrations. Subsequently, these wells will be discontinued as extraction wells and used for performance monitoring only.

#### *2.2.3.4. Building 834 OU Performance Issues*

There was no performance issues because the Building 834 ground water and soil vapor extraction and treatment systems did not operate during this time period.

## 2.3. Pit 6 Landfill (Pit 6) OU3

The Pit 6 Landfill is a 14-acre area near the southern boundary of Site 300 that 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. Further to the east, the fault trends to the south of two nearby water-supply wells CARNRW1 and CARNRW2. These active water-supply wells are located about 1,000 feet east of the Pit 6 landfill. They provide water for the nearby Carnegie State Vehicular Recreation Area and are monitored on a monthly basis.

The Pit 6 Landfill was capped and closed in 1997 under CERCLA to prevent further leaching of contaminants resulting from percolation of rainwater through the buried waste. The engineered, multi-layer cap is intended to prevent rainwater infiltration into the landfill, mitigate potential damage by burrowing animals and vegetation, prevent potential hazards from the collapse of void spaces in the buried waste, and prevent the potential flux of volatile organic compound 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 OU showing the locations of monitoring and water supply wells is presented in Figure 2.3-1

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

During 2003, ground water monitoring was conducted in accordance with the CMP monitoring and post-closure requirements with the following exceptions; 36 samples were not collected due to insufficient water dry, 22 samples were not collected due to the sampling personnel shortage, and 12 samples were not collected due to pump failure. The sampling plan and schedule by quarter for ground water and surface water 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. Analytical results are summarized in Tables 2.3-2 through 7.

In addition to satisfying the CMP and post-closure sampling requirements, ground water is also monitored at Pit 6 to verify that the COCs continue to decline as a result of natural attenuation processes. The selected remedy for tritium and VOCs in ground water at Pit 6 in the Site 300 Interim Record of Decision (ROD) is Monitored Natural Attenuation, which requires monitoring to verify that tritium and VOC ground water contamination is decreasing in magnitude and extent.

Ground water beneath Pit 6 dropped about 3 ft to 21-23 ft below the buried waste trenches during the second semester. Ground water north of the fault flows eastward. Hydraulic test results indicate that pumping of the two nearby water-supply wells, CARNRW1 and CARNRW2, may also be influencing ground water flow in this area. Wells located south of the fault exhibit little or no response to pumping. Ground water elevations south of the fault indicate southerly and easterly flow directions. Ground water elevations measured during the reporting period are summarized in Table 2.3-8. A ground water potentiometric surface map is presented in Figure 2.3-2.

### 2.3.2. Pit 6 Landfill OU Remediation Progress Analysis

This section is organized into three sub-sections; 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 Trends*

At the Pit 6 Landfill OU, VOCs and tritium are the primary COCs detected in ground water. Perchlorate and nitrate are secondary COCs. Ground water contaminant isoconcentration contour maps for the primary COCs are presented in Figures 2.3-3 and 4. Isoconcentration contour maps for the secondary COCs will be presented in the next CMP report.

No significant changes were observed in ground water TCE concentrations compared to the previous report. The maximum TCE concentration (5.5 $\mu$g/L; August 20, 2003) was detected in well EP6-09 located about 100 feet due south of Pit 6. Although this maximum TCE concentration is slightly above the 5 $\mu$g/L drinking water maximum contaminant level (MCL) for TCE, it is significantly lower than the historical maximum concentration (> 200 $\mu$g/L) that was detected in the late 1980s. A sample collected from EP6-09 on October 22, 2003 contained 4.9 $\mu$g/L TCE. TCE concentrations in Pit 6 ground water continue to decrease indicating that the monitored natural attenuation remedy is effective.

Other VOCs detected in ground water include cis-1,2-dichloroethylene (DCE) and perchloroethylene (PCE). Cis-1,2 DCE was most recently detected in ground water from well K6-01S at a concentration of 2.2 $\mu$g/L. PCE has been detected in ground water samples from several Pit 6 OU wells during the past 16 years. During 2003, PCE was detected in wells EP6-08 and K6-36 at concentrations ranging from non-detect (<0.5) to 1.0 $\mu$g/L. Trace detections of PCE have occurred in ground water samples from these wells for several years. Trihalomethanes were detected in CARNRW2 in February and March and are most likely due to the chlorination of the well.

Ground water tritium activities measured during this reporting period remained far below the 20,000 picocuries per liter (pCi/L) MCL. However, tritium continues to be detected above background (> 100 pCi/L) in ground water from wells located north and south of the fault. During the second semester, elevated tritium activities were detected in ground water samples from wells K6-24, K6-33, K6-36, and W-PIT6-1819 located north of the fault, and wells K6-01, K6-01S, K6-16, K6-18 and K6-19 located south of the fault.

Along a transect north and sub-parallel to the fault, ground water tritium activities decrease from a maximum of 1,850 pCi/L at well K6-36 (2$^{nd}$ Quarter 2003 data), located immediately east of Pit 6, to 146 pCi/L at well W-PIT6-1819, located immediately west of the CARNRW1 and CARNRW2 water-supply wells. Well K6-36 was dry during the 3$^{rd}$ and 4$^{th}$ Quarters of 2003. This current maximum ground water tritium activity is about half the maximum historical activity of 3,420 pCi/L, indicating that tritium activity is decreasing with time. All of the wells along the transect are screened in a fractured bedrock water-bearing zone that responds to pumping from CARNRW1 and CARNRW2.

Tritium remains below 100 pCi/L in ground water sampled from the CARNRW1 well, however, tritium was detected at 136 pCi/L in the February 2003 ground water sample from CARNRW2. The twelve ground water samples collected from CARNRW2 after February did not contain tritium above the reporting limit. TCE, nitrate, and perchlorate concentrations in ground water in these water-supply wells remain below detection limits.

Wells K6-26, K6-27, K6-34, K6-35, and EP6-07 are screened in a deeper water-bearing zone than the wells along the transect discussed above. During the second semester, elevated tritium was detected in ground water samples from well K6-35 (388 pCi/L). This well shows some response to pumping from CARNRW1 and CARNRW2.

There were no significant changes in perchlorate ground water concentrations during the second semester when compared to those from the previous quarter. Perchlorate was detected above the new State Public Health Goal of 6 $\mu$g/L in ground water from well, K6-18 at 14 $\mu$g/L. In general, perchlorate ground water concentrations have been steadily decreasing from their historical maximum concentration of 65 $\mu$g/L in well K6-19 in 1998. Perchlorate concentrations remain below detection limits in water supply wells CARNRW1 and CARNRW2.

Similar to first semester, nitrate was detected above the 45 mg/L MCL in only one ground water sample from one well, K6–23 (170 mg/L as $NO_3$). Nitrate was not detected in ground water samples from water supply wells CARNRW1 and CARNRW2.

#### *2.3.2.2. Pit 6 Landfill OU Remediation Optimization Evaluation*

In the Pit 6 Landfill OU, ground water elevations and contaminants are monitored on a regular basis to: (1) evaluate the effectiveness 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 OU exhibit stable to decreasing trends and ground water elevations beneath the landfill remain a well below the buried waste. Several ground water monitoring wells have been installed during the past two years to monitor tritium between the landfill and the CARNRW1 and CARNRW2 water-supply wells. Each of these new monitoring wells was carefully evaluated and screened in a fractured bedrock unit that responds to pumping from the water-supply wells. Tritium activities continue to decrease and all tritium in ground water in this area remains far below the 20,000 pCi/L MCL.

#### *2.3.2.3. Pit 6 Landfill OU Performance Issues*

There were no performance issues during this reporting period.

## 2.4. High Explosives Process Area (HEPA) OU4

The HEPA has been used since the 1950s for the chemical formulation, mechanical pressing, and machining of 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 to former unlined rinsewater lagoons.

Four ground water extraction and treatment systems operate in the HEPA: Building 815-Source (B815-SRC), Building 815-Proximal (B815-PRX), Building 815-Distal Site Boundary (B815-DSB), and Building 817- Source (B817-SRC). A map of the HEPA OU showing the locations of monitoring and extraction wells and treatment facilities is presented in Figure 2.4-1.

The B815-SRC facility treats ground water extracted from well W-815-02 for TCE, RDX, perchlorate, and nitrate at a rate of about 1.0 gpm. This facility has been in operation since September 2000. It consists of aqueous phase GAC and ion exchange that are connected in series; the treated effluent is discharged to a misting system.

The B815-PRX facility treats ground water extracted from wells W-818-08 and W-818-09 for TCE, perchlorate, and nitrate. Wells W-818-08 and W-818-09 extract ground water at 1 and 2 gpm, respectively. This facility has been in operation since October 2002 and consists of aqueous phase GAC and ion exchange that are connected in series; treated effluent is discharged to a misting system.

The B815-DSB facility treats low concentrations (< 10 $\mu$g/L) of TCE contained in ground water extracted from wells W-35C-04 and W-6ER located near the Site 300 boundary. Wells W-35C-04 and W-6ER extract ground water at 2 and 1.5 gpm, respectively. This treatment facility has been in operation since September 1999 and consists of solar-powered aqueous phase GAC treatment. The facility is designed to treat up to 5 gpm of ground water at the expected influent concentrations; treated effluent is discharged to an infiltration trench.

The B817-SRC facility treats ground water extracted from well W-817-01 for TCE, RDX, and perchlorate. Well W-817-01 extracts ground water from a very low yield portion of the $Tnbs_2$ aquifer. It pumps ground water intermittently at low flow rates at an average of 200 to 475 gallons per month. This facility has been in operation since September 2003 and consists of solar powered ion exchange and aqueous phase GAC treatment; treated effluent is injected into upgradient injection well W-817-06A.

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

This section is organized into four sections; 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 HEPA ground water treatment facility discharge is regulated by the RWQCB Substantive Requirements for Waste Discharge.

The monthly ground water and soil vapor discharge volumes and extraction flow rates and operational hours are summarized in Tables 2.4-1 through 4. The total volume of ground water extracted and treated and contaminant mass removed during this reporting period are presented in Table Summ-1. The cumulative volume of ground water and discharged and mass removed is summarized in Table Summ-2. Analytical results for influent and effluent samples are shown in Table 2.4-5 through 7. The pH measurement results are presented in Appendix A.

#### *2.4.1.2. HEPA OU Operations and Maintenance Issues*

During 2003, the B815-SRC ground water treatment system operated intermittently. It was shut down for three days in late May when the misting tower pipe line was drained and misting heads replaced, twenty-five days during July and August when an O-ring on the bag filter and the diaphragm on the flow meter were replaced, and fifty days from mid-September through early November due to a diaphragm retention valve malfunction. B815-PRX also operated intermittently throughout 2003 due to misting tower problems. This facility was also shut down in late March to replace the flow meter on extraction well W-818-08 and in late May to replace misting tower parts. The pump on extraction well W-6ER at the B815-DSB facility failed in mid-August and was off-line for the remainder of this reporting period. Despite the loss of extraction at well W-6ER, B815-DSB operated continually throughout this reporting period. B817-SRC was shut down in October for 20 days due to methylene chloride detections in the effluent. The source of the methylene chloride was found to be the ion exchange system. The problem was corrected and the facility returned to operation. This facility was also shut down for the last fourteen days of this reporting period due to a leak in one of the GAC canisters and for routine shut down for freeze protection.

#### *2.4.1.3. HEPA OU Compliance Summary*

The B815-SRC, B815-PRX, B815-DSB, and B817-SRC ground water treatment systems operated in compliance with the Substantive Requirements for Wastewater Discharge with the exception of a one-time pH measurement of 9 in the treated effluent at B817-SRC. This measurement was taken at the startup of the facility and is not considered to be representative of typical facility effluent. The pH measurements taken since that time have ranged from 7 to 7.5.

Trace concentrations of TCE were detected in three site boundary guard wells during 2003 ranging from 0.6 to 0.62 µg/L. The most recent samples collected from these wells did not contain VOCs above the EPA 601 method detection limit of 0.5 µg/L. These detections are discussed further under Section 2.4.3.2. HEPA OU Analysis of Contaminant Distribution and Concentration Trends.

#### *2.4.1.4. HEPA OU Facility Sampling Plan Evaluation and Modifications*

The HEPA facility sampling plans comply with CMP monitoring requirements. The sampling plans are presented in Table 2.4-8. There were no additional modifications made to the plans.

### 2.4.2. HEPA OU Ground Water and Surface Water Monitoring

During 2003, ground water monitoring was conducted in accordance with the CMP monitoring requirements with the following exceptions; 5 samples were not collected due to access restrictions, 10 samples were not collected due to pump failure, 24 samples were not collected due to a personnel shortage, 53 samples were not collected due to insufficient water, and 10 samples were left off the sampling plan. The sampling plan and schedule by quarter for ground water and surface water is presented in Table 2.4-9. This table also explains deviations from the sampling plan and indicates any additions made to the CMP. Analytical results are summarized in Tables 2.4-10 through 15.

Ground water elevations measured during this reporting period are summarized in Table 2.4-16. A ground water potentiometric surface map is presented in Figure 2.4-2 which shows a mean flow direction to the southeast. Ground water elevation data collected from wells within the OU are similar to those collected during past quarters.

### 2.4.3. HEPA OU Remediation Progress Analysis

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

#### *2.4.3.1. HEPA OU Mass Removal*

The monthly ground water and soil vapor mass removal estimates are summarized in Tables 2.4-17 through 20. The cumulative mass estimates are summarized in Table SUMM-2.

### *2.4.3.2. HEPA OU Analysis of Contaminant Distribution and Concentration Trends*

At the HEPA OU, VOCs (primarily TCE) are the primary COCs detected in ground water; RDX, perchlorate, and nitrate are the secondary COCs. These constituents have been identified in the $Tnbs_2$ aquifer. A total VOC isoconcentration contour map based on data collected during the later six months of this reporting period is presented in Figure 2.4-3. Isoconcentration contour maps for the secondary COCs will be presented in the next CMP report.

During 2003, TCE was detected at 0.6 $\mu$g/L and 0.62 $\mu$g/L in two (W-35B-02 and W-35B-04, respectively) of the five offsite guard wells for the HE Process Area. Historically, these $Tnbs_2$ wells have had sporadic trace detections of TCE ranging from 0.6 to 1.3 $\mu$g/L. As shown in Figure 2.4-1, these offsite guard wells are located just southeast of the HE Process Area. TCE was also detected in one of the onsite guard wells (W-880-02) at 0.62 $\mu$g/L in the first semester and 0.59 $\mu$g/L in the second semester. W-880-02 is screened in the Quaternary alluvial (Qal) HSU and it is located where the $Tnbs_2$ aquifer subcrops beneath the Qal HSU (Figure 2.4-1). It acts as a guard well for both the HE Process Area and Building 832 Canyon to monitor for plume migration toward the site boundary. It has had sporadic trace detections ranging from 0.55 to 1.0 $\mu$g/L. TCE was also detected in offsite water-supply well Gallo-1 at concentrations ranging from 0.26 to 0.64 $\mu$g/L. This well has a long screen that extends from the Qal HSU near the surface to a depth of nearly 200 feet at the base of the $Tnbs_2$ aquifer. Although Gallo-1 has had sporadic detections of TCE ranging from 0.2 to 1.5 $\mu$g/L, TCE has never been detected above a 0.5 $\mu$g/L detection limit in ground water samples collected from upgradient guard wells (W-6H and W-6J). If TCE continues to be detected in these guard wells, modifications will be considered to the extraction wellfield to prevent further offsite migration of contaminants.

The shape of the TCE plume remains similar to that shown in recent quarterly reports. The current maximum TCE concentrations (49 and 44 $\mu$g/L) occur in wells W-818-08 and W-818-11, respectively. These wells have historically contained the highest TCE plume concentrations. The leading edge of the TCE plume at the 0.5 $\mu$g/L detection limit remains in the vicinity of the site boundary. TCE was not detected in ground water samples from offsite guard wells W-35B-01, W-35B-03 and W-35B-05, located just south of the Site 300 boundary, during this reporting period.

During 2003, secondary COCs RDX and perchlorate were not detected in any of the HEPA site boundary or water-supply guard wells. The extent of RDX and perchlorate in the $Tnbs_2$ HSU is more limited than TCE and the shape of these plumes remained essentially the same as shown in previous quarterly reports. The current maximum RDX concentration (83 $\mu$g/L) occurs where it has historically in well W-815-04. Well W-815-04 is planned as an extraction well as part of a future B815-SRC expansion. RDX decreases rapidly downgradient to below the 0.6 $\mu$g/L Preliminary Remediation Goal (PRG) limit just north of well W-818-08. The current maximum perchlorate concentration (24 $\mu$g/L) occurs in well W-817-01. Well W-817-01 is the extraction well for the B817-SRC facility that was started in September 2003. Perchlorate decreases rapidly downgradient of W-817-01 to the 6 $\mu$g/L detection limit north of guard wells W-6H and W-6J.

During 2003, nitrate was not detected above the 45 mg/L MCL in any of the HE Process Area guard wells. The current maximum nitrate concentration (130 mg/L) occurs in well W-809-02, located near the former HE rinse water lagoons. Nitrate concentrations decrease significantly due to microbial denitrification near the Site 300 boundary where the $Tnbs_2$ aquifer is under confined conditions. Nitrate concentrations near the Site 300 boundary are significantly lower than the drinking-water standard of 45 mg/L and in many wells nitrate is below the method detection limit of 0.4 mg/L (as nitrate).

#### *2.4.3.3. HEPA OU Remediation Optimization Evaluation*

The key to remediation optimization at the HE Process Area OU is to manage extraction well field flow rates to balance the influence of site boundary pumping with source area pumping. The only increase in extraction flow rates during this reporting period was due to the startup of the B817-SRC treatment facility. Although extraction flow rates at this facility are very low, the startup of this facility contributed to the total contaminant mass removal rates in the RDX and perchlorate source area. The addition of the B817-SRC facility has not contributed significantly to TCE mass removal because the concentrations of TCE in extraction well W-817-01 are very low to non-detect. Based on the ground water elevation and total VOC isoconcentration maps shown in Figures 2.4-2 and 2.4-3, the existing extraction well field captures the center-of-mass of this plume (Total VOC > 50 $\mu$g/L) upgradient of wells W-818-08 and W-818-09. The current total VOC concentrations in source area wells W-818-08 and W-818-11 have decreased by 20 to 40% since remediation began.

#### *2.4.3.4. HEPA OU Performance Issues*

Although sporadic, low concentrations of TCE were detected in some of the site boundary guard wells during this reporting period; continued pumping at B815-SRC, B815-PRX and B817-SRC should address this issue. These detections may have resulted from the decrease in the capture area created by the B815-DSB extraction well field located near the site boundary due to the shut down of extraction well W-6ER after its pump failed. If TCE continues to be detected in the site boundary guard wells, modifications to the extraction wellfield will be considered, including increased pumping in existing upgradient extraction wells or adding new extraction wells.

## 2.5. Building 850 (B850) OU5

High explosives experiments have been conducted at the Building 850 firing table. Until 1989, gravels on the firing table surface were disposed of in several disposal pits in the northern portion of the site. Presently, the firing table is used very rarely. Infiltrating ground water has mobilized chemicals from contaminated gravel and debris to underlying soil, bedrock, and ground water. A map of Building 850 OU showing the locations of monitoring wells is presented in Figure 2.5-1.

### 2.5.1. Building 850 OU Ground Water Monitoring

During 2003, ground water monitoring was conducted in accordance with the CMP monitoring requirements with the following exceptions; 22 samples were not collected due to insufficient water, 3 were not collected due to failed equipment/unsafe sampling conditions, and 1 was inadvertently left off the plan. Additionally, as described in the first semester report, several uranium water samples were inadvertently analyzed by alpha spectrometry, rather than by mass spectrometry as specified in the sampling plan. The sampling plan and schedule by quarter for ground water and surface water 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. Analytical results are summarized in Tables 2.5-2 through 2.5-12.

Barcad samplers K1-01A, K1-01B, and K1-02A, and lysimeters K1-03A, K1-05A, and K1-02C were listed in the CMP as monitoring locations for Building 850. However, the lysimeters are inoperable and the functioning barcard samplers monitor deep ground water and do not provide chemical data for the first (shallowest) water-bearing zone. Thus, these locations were not sampled during the reporting period and will be removed from future sampling plans. Abandoned wells K2-04C and NC2-09A were also taken off the CMP sampling plan.

Ground water elevations measured during the reporting period are summarized in Table 2.5-13. A ground water potentiometric surface map for the OU is presented in Figure 2.5-2. Ground water elevation data collected from wells within the OU are similar to those collected during past quarters.

## 2.5.2. Building 850 OU Remediation Progress Analysis

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

### *2.5.2.1. Building 850 OU Analysis of Contaminant Distribution and Concentration Trends*

At the Building 850 OU, tritium is the primary COC detected in ground water; nitrate and uranium are the secondary COCs. A tritium isoconcentration contour map based on data collected during second semester 2003 is presented in Figure 2.5-3. Isoconcentration contour maps for the secondary COCs will be presented in the next CMP report.

During 2003, the maximum detected tritium activity in ground water within the OU was 77,700 pCi/L in a sample collected from well NC7-70 during the second semester. The highest tritium activities in ground water in the OU 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 tritium activity contour also continues to diminish, as indicated by the decline in ground water tritium activities at well K2-04S (14,900 pCi/L last semester to 14,000 pCi/L this semester) and in samples from other wells completed in alluvium and bedrock in Doall Ravine. Tritium activities in ground water north of Pit 2 and Pit 1 are generally below recent highs detected during the last few years. The maximum current ground water tritium activity detected in this area was 4,880 pCi/L and 4,760 in first semester and second semester samples, respectively, from well K1-06. Immediately south and east of Pit 2, maximum ground water tritium activities were 8,580 pCi/L last semester and 7,260 pCi/L this semester and 10,400 pCi/L last semester and again 10,400 pCi/L this semester at wells K2-01C and NC2-08, respectively. These activities are below recent highs of 19,200 pCi/L and 17,600 pCi/L, respectively, observed in ground water samples collected in 1999. Ground water samples collected in recent years from wells further south in Elk Ravine show very gradual increases in tritium activities over time, as the distal, low activity portion of the tritium plume continues to migrate south beneath Elk Ravine. These increases have recently been leveling off. During the reporting period, the maximum tritium activity in southern Elk Ravine was 8,550 pCi/L in a ground water sample from well NC2-12D. During this semester, the maximum activity in this area had dropped to 8,370 pCi/L (also at well NC2-12D). During 2002, the maximum tritium activity detected in ground water in this area was 8,880 pCi/L in a sample collected from this well.

Evidence of depleted uranium was identified in ground water samples collected from several wells in the OU and analyzed by mass spectrometry. The natural mass ratio of $^{235}U/^{238}U$ is about

0.0072 +/- 0.001. Mass ratios below this range indicate some addition of depleted uranium to the naturally-occurring uranium activity in the water. Mass ratios indicative of depleted uranium were detected in ground water samples collected during the first semester from several wells and a spring in the OU. The wells in which depleted uranium was detected during the first semester (W-850-05, NC2-06A, NC7-70, NC7-10, Well 8 Spring, and NC7-54) are proximal and downgradient of the Building 850 firing table except for well NC2-06A, located in Elk Ravine. The maximum total uranium activity in ground water samples collected from these wells during the first semester was 11.2 pCi/L in the sample from NC7-28. During the second semester, depleted uranium was detected in water samples collected from wells NC2-06A, NC7-28, and NC7-70. The maximum total uranium activity detected in ground water containing depleted uranium was 11.5 pCi/L in the sample from NC7-28. Alpha spectrometry was also used for analysis of uranium isotopes. Although this technique cannot be used to determine uranium provenance, it does provide uranium activity data. The distribution of uranium in ground water downgradient of Building 850 is similar to that seen in past years. The first semester ground water sample from well NC2-06A contained 1.16 pCi/L of total uranium. During the second semester, the ground water sample from this well yielded 1.11 pCi/L of uranium. The source of depleted uranium in these latter samples is being investigated. The MCL for uranium in drinking water is 20 pCi/L. Ground water uranium activities above the MCL have not been found in the Building 850 OU.

During the first semester, nitrate was detected in the OU at a maximum concentration of 140 mg/L in a ground water sample from well NC2-10. Nitrate was also detected above the 45 mg/L MCL in ground water samples from wells NC7-29, NC7-44, NC7-70, and NC7-61, at concentrations of 120 mg/L, 72 mg/L, 67 mg/L, and 63 mg/L, respectively. During the second semester, nitrate was only detected above the MCL, at 60 mg/L, in a ground water sample from well NC7-61. These latter nitrate concentrations may be at least partly a result of leachate from the Building 850 septic system. Ground water samples from the vast majority of wells in the OU yield tens of mg/L of nitrate, although ground water samples from several wells do not contain nitrate above the method detection limit.

During the first semester, perchlorate was detected in ground water samples from two wells in the OU, NC7-61 and K2-04S, at concentrations of 39 and 8.1 $\mu$g/L, respectively. During the second semester, perchlorate was detected at maximum concentrations of 6.7, 4.4, 10, 5.4, and 53 $\mu$g/L in ground water samples from wells K1-01B, K2-04D, K2-04S, NC2-11D, and NC7-61, respectively.

Analytical results for ground water samples collected in the OU for other constituents (metals; VOCs; HE compounds; gross alpha and beta radioactivity; general minerals; PCBs; and diesel range organic compounds) are presented in Table 2.5-2, Table 2.5-4, and Tables 2.5-7 through 2.5-12. These analytical results do not indicate releases of chemicals to the environment.

#### *2.5.2.2. Building 850 OU Remediation Optimization Evaluation*

Monitored Natural Attenuation (MNA) is the selected remedy for remediation of tritium in ground water emanating from the Building 850 area. MNA continues to be effective for reducing tritium activities in ground water. The highest tritium activities in ground water in the OU 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 tritium activity contour also continues to diminish. In general, ground water tritium activities continue to decline or are below historic highs in all areas except in southern Elk Ravine where there have been very gradual increases in tritium activities over time, as the distal, low activity portion of the tritium plume continues to migrate south beneath Elk Ravine. These increases have recently been leveling off and are well below the 20,000 pCi/L MCL for tritium in drinking water. The distribution of depleted uranium is similar to previous years and total uranium in ground water continues to be well below the 20 pCi/L MCL in all wells in the Building 850 area. The extent of nitrate and perchlorate in ground water is also similar to that observed in previous years.

#### *2.5.2.3. Building 850 OU Performance Issues*

The increases in ground water tritium activities in the distal portion of the Building 850 plume (in southern Elk Ravine) are to be expected and will continue to be monitored on a regular basis.

The depleted uranium detected in a ground water sample from well NC2-06A will be investigated to determine the likely source. Several additional wells in the area will be sampled and the water analyzed by mass spectrometry to facilitate this source evaluation.

## 2.6. Building 854 (B854) OU6

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

Two ground water extraction and treatment systems currently operate in the Building 854 OU; Building 854-Source (B854-SRC) and Building 854-Proximal (B854-PRX).

The B854-SRC ground water extraction and treatment system began operation in December 1999 and treats ground water extracted at a rate of approximately 1 gpm from well W-854-02. Influent water passes from the filtration system into two ion-exchange vessels containing SR-7 resin connected in series for perchlorate removal prior to entering the portable Solar-powered Treatment Unit outfitted with aqueous-phase GAC for VOC removal. The effluent water is discharged through misting towers to remove nitrate.

The B854-PRX ground water extraction and treatment system began operation in November 2000 and treats ground water extracted at a rate of 1 gpm from well W-854-03 located southeast of the Building 854 complex. This facility has been in operation since November 2000. It consists of aqueous-phase GAC for VOC removal, above ground containerized wetland bio-treatment for perchlorate and nitrate removal, and an ion-exchange resin treatment for polishing prior to being discharged into an infiltration trench.

### 2.6.1. Building 854 OU Ground Water and Soil Vapor Extraction and Treatment System Operations and Monitoring

This section is organized into five sections; 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 Building 854 ground water treatment facility discharge is regulated by the RWQCB Substantive Requirements for Waste Discharge.

The monthly ground water and soil vapor discharge volumes and rates and operational hours are summarized in Tables 2.6-1 and 2. The total volume of ground water and vapor extracted and treated and mass removed during the reporting period is 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 Table 2.6-3 and 2.6-4. The pH measurement results are presented in Appendix A.

There were no performance issues at B854-SRC during the reporting period. Perchlorate continues to be sporadically detected in samples collected between the B854-PRX wetland bioreactor and the ion-exchange resin. The wetland bioreactor may not be treating all the perchlorate because residence time has decreased due to a decrease in pore space caused by silting and root growth. Until maintenance can be performed, the resin columns are treating perchlorate prior to discharge.

### *2.6.1.2. Building 854 OU Operations and Maintenance Issues*

The following maintenance was performed on the B854-SRC facility during 2003:

- The power supplied by Building 854F was turned off from January 11$^{th}$ to 13$^{th}$ for building maintenance.
- The B854-SRC treatment facility was taken off-line for routine maintenance of plant growth around the misting towers from February 18$^{th}$ to 24$^{th}$.
- The facility was shut down from February 27$^{th}$ to March 5$^{th}$ to repair a water level transducer in extraction well W-854-02.
- A power outage in the Building 854 area interrupted operations from March 17$^{th}$ to 24$^{th}$, 2003.
- The facility intermittently shut off between July 21$^{st}$ to the 30$^{th}$. The low-flow alarm reset to 0.5 gpm.
- A power cord from a junction box to the facility found frayed on August 7$^{th}$. Cord was replaced and the facility was restarted on the 21$^{st}$.
- A leaking hose connection to the misting tower was repaired in November.

The following maintenance was performed on the B854-PRX facility during 2003:

- The facility was shut down from February 12$^{th}$ through 19$^{th}$ to replace pressure gauges.
- The feed line from the acetic acid tank was replaced in July due to rodent damage.
- Leaking carbon and resin drums were patched in August.
- The diaphragm pump on the transfer tank failed in September. Gravity flow is used to keep the system running.

- On October 8th, a failed well pump was replaced and a leaking carbon drum was patched.
- A leaking carbon drum was patched in November.
- The facility was shut-down for freeze protection on December 18th.

#### *2.6.1.3. Building 854 OU Compliance Summary*

The B854-SRC and B854-PRX ground water treatment systems operated in compliance with the Substantive Requirements for Wastewater Discharge.

#### *2.6.1.4. Building 854 OU Facility Sampling Plan Evaluation and Modifications*

The Building 854 facility sampling plans comply with CMP monitoring requirements. The sampling plans are presented in Table 2.6-5. There were no additional modifications made to the plan.

### 2.6.2. Building 854 OU Ground Water Monitoring

During 2003, ground water monitoring was conducted in accordance with the CMP monitoring requirements with the following exceptions: 24 samples were not collected due to insufficient water. The sampling plan and schedule by quarter for ground water and surface water are presented in Table 2.6-6. This table also delineates and explains deviations from the sampling plan and indicates any additions made to the CMP. Analytical results are summarized in Table 2.6-7 through 2.6-13.

Ground water elevations measured during the reporting period are summarized in Table 2.6-14. A ground water potentiometric surface map is presented in Figure 2.6-2. Ground water elevation data collected from wells within the OU are similar to those collected during past quarters.

### 2.6.3. Building 854 OU Remediation Progress Analysis

This section is organized into four sub-sections; 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 and soil vapor mass removal estimates are summarized in Tables 2.6-15 and 16. The cumulative mass estimates are summarized in Table SUMM-2.

#### *2.6.3.2. Building 854 OU Analysis Of Contaminant Distribution and Concentration Trends*

At the Building 854 OU, VOCs (primarily TCE) are the primary COCs detected in ground water and perchlorate and nitrate are the secondary COCs. Past quarterly reports have shown the $Tnbs_1$ sandstone bedrock to be the main contaminated water-bearing zone, however this conceptual model was revised for the Building 854 Remedial Design (RD) report (Daily et al., 2003). Although the lower Neroly $Tnbs_1$ and the $Tnsc_0$ are distinct stratigraphic units, the ground water contained in these units appears to be in hydraulic communication. These stratigraphic units comprise a single HSU, the $Tnbs_1$/$Tnsc_0$ HSU. A total VOC isoconcentration contour map for this

HSU is presented in Figure 2.6-3. Isoconcentration contour maps for the secondary COCs will be presented in the next CMP report.

The TCE plume has been revised significantly from plumes shown in past quarterly reports due to the installation of ground water monitoring wells W-854-1701, W-854-1822, and W-854-1902. TCE has not been detected in these wells, therefore the plume is not as extensive downgradient of the Building 854 source area as previously shown. For the purposes of this report, total VOCs (rather than TCE) were contoured to be consistent with primary COC plume maps from the other operable units. The only VOC detected in the ground water of this OU is TCE. During the second semester, the VOC plume shape is similar to the TCE plume shape shown in the Building 854 Remedial Design report. The current maximum total VOC concentration (200 $\mu$g/L) occurs where it has historically in well W-854-02. Total VOC concentrations decrease to below the 0.5 $\mu$g/L detection limit north of wells W-854-1701, W-854-1822, and W-854-1902. Localized VOC contamination occurs in wells W-854-06 (2 $\mu$g/L) and W-854-07 (35 $\mu$g/L) located in the vicinity of a former water-supply well (Well 13) and downgradient of the main VOC plume.

Perchlorate is a secondary COC at Building 854, so it is sampled annually, usually during the first semester of each year. During the second semester of 2003, only wells W-854-1823 and W-854-1902 were sampled for perchlorate, with results of 18 $\mu$g/L and 5 $\mu$g/L, respectively. During the first semester of 2003, the perchlorate plume shape was slightly different than that shown in the Building 854 Remedial Design report. The previous northernmost (upgradient) detection of perchlorate in the Building 854 OU occurred in well W-854-02 with concentrations ranging from 4.5 to 8.3 $\mu$g/L. However, during the first semester of 2003, perchlorate was not detected in ground water from that well above the 4 $\mu$g/L detection limit. During 2003, the northernmost detection of perchlorate occurred in well W-854-03 at a concentration of 11 $\mu$g/L and the maximum perchlorate concentration (27 $\mu$g/L) was detected in well W-854-1823. Perchlorate concentrations in ground water decreased to below the detection limit north of well W-854-07.

Nitrate, also a secondary COC, is sampled annually during the first semester of each year at the Building 854 OU. Two wells were sampled for nitrate during the second semester of 2003: W-854-1823 and W-854-1902, with results of <0.1 mg/L and 14 mg/L, respectively. During the first semester of 2003, the nitrate plume shape remained similar to that shown in the Building 854 Remedial Design report. During 2003, the maximum nitrate concentration (53 mg/L) occurred in well W-854-02. Nitrate decreased to below the drinking water standard of 45 mg/L just south of well W-854-03.

#### *2.6.3.3. Building 854 OU Remediation Optimization Evaluation*

The B854-SRC treatment facility extraction well, W-854-02, consistently pumped at about 1.1 gpm during the second semester of 2003. Based on the ground water elevation map shown in Figure 2.6-2, pumping at W-854-02 appears to adequately capture the VOC contamination in ground water with concentrations greater than 100 $\mu$g/L in the Building 854 source area. Additionally, as mentioned in the B854 Remedial Design Report, the water level response in monitoring well W-854-11 from pumping at W-854-02, suggests some preferential flow along fractures which has resulted in a decline in the water table below the bottom of the W-854-11 well screen.

The B854-PRX treatment facility extraction well, W-854-03, pumped intermittently at about 1 gpm during the second semester of 2003. The system was off during late September and early

October due to pump failure and again during late December for freeze protection purposes. Due to the lack of pumping at this facility during this reporting period, ground water has rebounded to near pre-pumping levels.

#### *2.6.3.4. Building 854 OU Performance Issues*

As mentioned in the First Semester 2003 Compliance Report, the main issue influencing mass removal performance at the Building 854 OU continues to be low permeability and well yield. Although fractures appear to be important ground water flow-controlling features in this area, the overall primary and secondary permeability in many wells is relatively low. At the B854-SRC facility, extraction well W-854-02 continues to be pumped at 1.1 gpm. This well has approximately 5 more feet of available drawdown under pumping conditions and is being considered for increased pumping to 1.5 to 2 gpm. Performance of the B854-PRX facility is limited by well yield and the constructed wetland treatment technology that is being used to treat perchlorate. An expansion of the constructed wetland would be necessary to increase the flow rate at this facility above the current rate of 1.1 gpm. The expansion is scheduled for Fiscal Year 2007.

## 2.7. Building 832 Canyon (B832) OU7

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.

Four ground water extraction and treatment systems operate in the Building 832 Canyon OU: Building 832-Source (B832-SRC), Building 830-Source (B830-SRC), Building 830-Proximal North (B830-PRXN), and Building 830-Distal South (B830-DISS). The B832-SRC and B830-SRC facilities extract and treat both ground water and soil vapor, while the B830-PRXN and B830-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 in Figure 2.7-1.

The B832-SRC facility treats ground water for VOCs, perchlorate, and nitrate and has been in operation since October 1999. Ground water is extracted from nine wells (W-832-12, W-832-13, W-832-14, W-832-15, W-832-16, W-832-17, W-832-18, W-832-20, and W-832-22) to remove source contamination and to mitigate plume migration. Ground water extraction rates at this facility are seasonally variable, ranging from 10 to 200 gallons per day. Ground water is treated using a Cuno filter for particulate filtration, three aqueous-phase GAC units connected in series to remove VOCs, and two ion exchange units, (also connected in series) to remove perchlorate. Treated ground water is discharged via a misting system to indigenous grasses to remove nitrate. Soil vapor is extracted from the same nine wells used for ground water extraction. A positive displacement rotary lobe blower is used to create a vacuum at each wellhead 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 B830-SRC facility treats ground water for VOCs, perchlorate, and nitrate and has been in operation since February 2003. Ground water is extracted from three wells (W-830-1807, W-830-19, and W-830-59) to remove source contamination and to mitigate plume migration. These wells exhibit very low sustainable yield and are operated by timers that pump the wells at low flow rates until dry and then shut off while the water levels recover. Ground water from these wells is treated using three aqueous-phase GAC units connected in series to remove VOCs followed by treatment using two ion exchange units also connected in series to remove perchlorate. Treated water is then discharged via a misting tower to indigenous grasses to remove nitrate. The B830-SRC soil vapor extraction and treatment system is being tested to evaluate whether this is a viable remediation technology for this low permeability source area. Soil vapor is extracted from well W-830-1807 using a regenerative blower and 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 B830-PRXN facility treats ground water for VOCs and nitrate and has been in operation since June 2000. Approximately 800 gallons per day of ground water are extracted from one well (W-830-57) using a solar-powered ground water treatment unit. The ground water is treated using three aqueous-phase GAC units connected in series to remove VOCs; the effluent is discharged to the ground via a French drain.

The B830-DISS facility treats ground water for VOCs, perchlorate, and nitrate and has been in operation since July 2000. Approximately 1,300 gallons per day of ground water are extracted from three wells (W-830-51, W-830-52, and W-830-53) using natural artesian pressure. The ground water is treated using GAC units to remove VOCs. Nitrate and trace amounts of perchlorate are removed from the extracted ground water using bioreactor technology. Water flows through three open container bioreactors containing microorganisms that use nitrate during cellular respiration. Acetic acid is added to the process stream as a carbon source. Treatment system effluent is discharged via a storm drain that empties to the alluvial deposits on the south side of Corral Hollow Road.

### 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 sub-sections; 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 4. 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 Table 2.7-5 and 2.7-6. The pH measurement results are presented in Appendix A.

The main performance issue impacting mass removal from the Building 832 Canyon OU facilities is low ground water yield. The contaminated water-bearing zones have low hydraulic conductivity and low ground water yield therefore the extraction wells cannot be operated continuously. Instead these wells are operated intermittently at low extraction rates with pumps that are turned on and off by timers.

#### *2.7.1.2. Building 832 Canyon OU Operations and Maintenance Issues*

The B832-SRC ground water treatment facility operated continually throughout this reporting period. Operations at the B832-SRC soil vapor extraction and treatment system were interrupted periodically (about 20 days) due to overheating during the hottest days of the summer. The soil vapor extraction and treatment system was shut down in October through the end of the year as part of a soil vapor rebound test.

The B830-SRC ground water treatment facility was operated intermittently during this reporting period while system operational parameters were adjusted to accommodate low ground water yield from the extraction wells and to address various maintenance issues including trace concentrations of methylene chloride detected in the ion-exchange system. Operations at the B830-SRC soil vapor extraction and treatment system were interrupted periodically (about 10 days) due to overheating during the hottest days of the summer.

The B830-PRXN ground water treatment facility is solar-powered and operated approximately 50% of the time during first semester 2003 and was down one day in October due to failure of the solar battery. The B830-DISS facility operated continually throughout this reporting period.

#### *2.7.1.3. Building 832 Canyon OU Compliance Summary*

The Building 832 ground water treatment facility discharge is regulated by the RWQCB Substantive Requirements for Waste Discharge. The B832-SRC, B830-SRC, B830-PRXN, and B830-DISS ground water treatment systems operated in compliance with these requirements.

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

The Building 832 Canyon OU treatment facility sampling plans comply with CMP monitoring requirements. The sampling plan is presented in Table 2.7-7. There were no additional modifications made to the plan.

### 2.7.2. Building 832 Canyon OU Ground Water Monitoring

During this reporting period, ground water monitoring was conducted in accordance with the CMP monitoring requirements with the following exceptions; 7 samples were not collected due to personnel shortages, 47 samples were not collected due to insufficient water, and 9 samples were not collected due to access problems. The sampling plan and schedule by quarter for ground water and surface water are presented in Table 2.7-8. This table explains deviations from the sampling plan and indicates any additions made to the CMP. Analytical results are summarized in Tables 2.7-9 through 2.7-15.

Ground water elevations measured during the reporting period are summarized in Table 2.7-16. Ground water potentiometric surface maps for the Qal/fill and $Tnsc_{1b}$ HSUs are presented in Figures 2.7-2 and 2.7-3, respectively. Ground water elevation data collected from wells within the OU are similar to those collected during past quarters.

### 2.7.3. Building 832 Canyon OU Remediation Progress Analysis

This section is organized into four sub-sections; mass removal; analysis of contaminant distribution and concentration trends; 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 2.7-17 through 20. The cumulative mass estimates are summarized in Table SUMM-2.

#### *2.7.3.2. Building 832 Canyon OU Analysis of Contaminant Distribution and Concentration Trends*

At the Building 832 Canyon OU, VOCs (primarily TCE) are the primary COCs detected in ground water. Perchlorate and nitrate are the secondary COCs. These constituents have been identified primarily in the $Tnsc_{1b}$ and Qal/fill HSUs. TCE has also been detected at lower concentrations in the $Tnbs_2$ and $Tnbs_1$ HSUs. Isoconcentration contour maps of the primary COC in the ground water for the Qal/fill and Tnsc1b HSUs are presented in Figures 2.7-4 and 2.7-5, respectively. Isoconcentration contour maps for the secondary COCs will be presented in the next CMP report.

During 2003, TCE was detected at 0.62 $\mu$g/L and 0.59 $\mu$g/L in well W-880-02, one of six site-boundary guard wells for the Building 832 OU. Historically, this Quaternary alluvial guard well has had sporadic trace detections of TCE ranging from 0.55 to 1.0 $\mu$g/L. The current maximum TCE concentration (10,000 $\mu$g/L) in this OU was detected in the $Tnsc_{1b}$ HSU in well W-830-49. This well, which is located just south of the Building 830 source area, has historically contained the highest TCE concentrations. The leading edge of the plume at the 0.5 $\mu$g/L TCE detection limit remains in the vicinity of the site boundary.

Perchlorate, a secondary COC, was not detected in any of the Building 832 Canyon guard wells. The extent of perchlorate and nitrate is more limited than TCE. The current maximum nitrate concentration (190 mg/L) occurs in well W-830-19 and the current maximum perchlorate concentration (9.4 $\mu$g/L) occurs in well W-830-25.

#### *2.7.3.3. Building 832 Canyon OU Remediation Optimization Evaluation*

The B832-SRC soil vapor extraction (SVE) system was shut down in October 2003 to evaluate soil vapor rebound. TCE was not detected in preliminary vapor samples above 0.2 $ppm_v$. Additional soil vapor sampling is planned for the 1$^{st}$ semester of 2004. Rebound test results will be used to determine whether this facility meets SVE system shut off criteria and will be discussed in the 2004 semi-annual CMP report.

Ground water yield is so low in the Building 832 Canyon source area extraction wells that capture is difficult to assess. Based on the map shown in Figure 2.7-5, the plumes emanating from Buildings 832 and 830 have much the same shape and extent as that shown in recent quarterly reports; however, VOC concentrations in the Building 830 source area have decreased. The current total VOC concentration in source area well W-830-49 has decreased by 48% since the beginning of this reporting period. Total VOC concentrations in the facility influent for B832-SRC, B830-SRC, B830-PRXN, and B830-DISS have remained relatively constant throughout this reporting period.

#### *2.7.3.4. Building 832 Canyon OU Performance Issues*

Overall well yields remain low due to a combination of dewatering and low hydraulic conductivity in the B832-SRC and B830-SRC facility areas. An evaluation will be conducted to determine how to increase well yield and mass removal at the OU treatment facilities.

Generally, COCs were not detected in the guard wells at the Site 300 boundary above their analytical detection limits with a few exceptions. Trace concentrations of TCE (0.62 $\mu$g/L and 0.59 $\mu$g/L) were detected in two of the four samples collected during this reporting period in the Qal site boundary guard well W-880-02. In addition, low concentrations of TCE (1.4 $\mu$g/L and 1.7 $\mu$g/L) were detected in a recently installed well W-830-1832 located between the former leading edge of the $Tnbs_1$ TCE plume and Site 300 water-supply well 20. A new Upper $Tnbs_1$ guard well is proposed downgradient (southwest) of well W-830-1832, and upgradient of Well 20 for installation in Fiscal Year 2005. Expansion of the B830-SRC extraction wellfield, including $Tnbs_1$ extraction wells, will be considered to prevent further migration of contaminants toward Well 20.

## 2.8 Site 300 Site-Wide OU8

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 is present. For this reason, a monitoring-only interim remedy was selected for the release sites in the Interim Site-Wide Record of Decision (U.S. DOE, 2001). The monitoring conducted during the reporting period for these release sites is discussed below.

### 2.8.1. Building 801 and Pit 8 Landfill

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.

Minor VOC contamination is present in the subsurface as a result of discharges of waste fluid to a dry well adjacent to Building 801D from the late 1950s to 1984. A map showing the locations of monitoring wells is presented in Figure 2.8-1. During 2003, ground water monitoring was conducted in accordance with the CMP monitoring requirements with the following exceptions; 12 samples were not collected due to insufficient water and 2 samples were not collected due to a personnel shortage. The sampling plan and schedule by quarter for ground water are presented in Table 2.8-1. This table delineates and explains deviations from the sampling plan and indicates any additions made to the CMP.

During the second semester of 2003, the maximum VOC concentration detected in the Building 801 area was 3.7 $\mu$g/L of TCE in a ground water sample from well K8-01. Figure 2.8-2 shows the measured concentration of TCE in the $Tnbs_1$ aquifer for each well. Similar to the results of VOC monitoring at this site over the last ten years, the VOC concentrations for this semester remain low. For the last ten years TCE in ground water from wells K8-01 and K8-03B, located downgradient from the former Building 801D dry well, has ranged from below detection limits (<0.5) $\mu$g/L to a maximum of 4.9 $\mu$g/L. The MCL for TCE is 5 $\mu$g/L. The analytical results for the Building 801 and Pit 8 Landfill monitoring well samples are presented in Tables 2.8-2 through 2.8-8.

Ground water elevation measurements for the detection monitoring wells screened in the $Tnbs_1$ HSU are presented in Table 2.8-9. These ground water elevation data are similar to those collected during past years. A map showing the ground water elevation for each well in the Building 801/Pit 8 Landfill area is presented in Figure 2.8-3. The ground water in this aquifer is confined, with an average hydraulic gradient of 0.03 to the northeast. One of the wells in this area, K8-03B, has a significant point of measurement error and could not be used to determine the ground water elevation; the surface elevation of this well will be resurveyed.

To date, no contaminant releases have been identified from the Pit 8 Landfill. Detection monitoring of this landfill, which is discussed in Section 3.2, is conducted to determine if releases have occurred.

### 2.8.2. Building 833

VOCs are the primary COC in ground water at Building 833. Spills and rinsewater disposal at Building 833 resulted in minor VOC contamination of the shallow soil/bedrock and perched ground water in the Tpsg HSU. A map showing the locations of monitoring wells is presented in Figure 2.8-4. The sampling plan and schedule by quarter for ground water are presented in Table 2.8-10. This table also delineates and explains deviations from the sampling plan and indicates any additions made to the CMP.

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 2003 has shown little evidence of saturation. During the second half of 2003, all the wells screened in the Tpsg HSU at Building 833 were dry or had insufficient water to collect a valid sample, so no VOC data were obtained from this HSU. Similar conditions have existed for several years at this site; the most recent sample that could be collected from the Tpsg HSU was from well W-833-03 in 2000, at which time all the other shallow wells were dry. Because there was no VOC data collected during 2003, no isoconcentration map will be presented.

Only well W-833-30, which is screened in the deep regional aquifer ($Tnbs_1$ HSU), contained sufficient water to a collect sample during this reporting period. VOCs were not detected in the ground water sample from this well during this monitoring period, indicating that the VOC contamination continues to be confined to the shallow, Tpsg perched water-bearing zone. The analytical results for Building 833 are presented in Tables 2.8-11 and 12. Ground water elevation measurements for the detection monitoring wells are presented in Table 2.8-13.

Six of the seven Tpsg monitoring wells were dry during the second semester of 2003. The only well that was not dry, W-833-28, showed a ground water elevation 0.1 ft above the bottom of the screened interval. Based upon these measurements, this area can be considered largely unsaturated, and a ground water elevation map was not generated.

### 2.8.3. Building 845 Firing Table and Pit 9 Landfill

Leaching from the Building 845 firing table debris resulted in minor contamination of subsurface soil with depleted uranium and HMX. There are no COCs in ground water at Building 845 and the Pit 9 landfill as no ground water contamination has been detected. A map showing the locations of monitoring wells is presented in Figure 2.8-5. The sampling plan and schedule by quarter for ground water are presented in Table 2.8-14. All required CMP detection monitoring samples were collected. The analytical results for Building 845 and Pit 9 Landfill are presented in Tables 2.8-15 through 2.8-21. There continues to be no ground water contamination in Building 845 and Pit 9 Landfill area as shown by the analytical data collected during 2003.

The monitoring wells near Pit 9 are screened in the lower Neroly Formation ($Tnsc_0$ HSU). Ground water elevation measurements for these monitoring wells are presented in Table 2.8-22 and a map showing the ground water elevation for each well is presented in Figure 2.8-6. The ground water in this unit is confined, with an average hydraulic gradient of 0.03 to the north-northeast. Ground water elevation data collected from wells within the OU are similar to those collected during past quarters.

Detection monitoring of this landfill, which is discussed in Section 3.3, is conducted to determine any releases to ground water.

### 2.8.4. Building 851 Firing Table

At the Building 851 Firing Table, uranium and tritium are the primary and secondary COCs detected in ground water, respectively. High explosives experiments at the Building 851 firing table resulted in minor VOC and RDX contamination in soil and low activities of uranium with a measurable depleted uranium component in ground water. A map showing the locations of monitoring wells is presented in Figure 2.8-7. During 2003, ground water monitoring was conducted in accordance with the CMP monitoring requirements. The sampling plan and schedule by quarter for ground water and surface water is presented in Table 2.8-23.

The analytical results for the Building 851 monitoring well samples are presented in Tables 2.8-24 through 2.8-30. Ground water elevation measurements for the detection monitoring wells are presented in Table 2.8-31. A map showing the ground water elevation for each well in the OU is presented in Figure 2.8-8. Ground water elevation data collected from wells within the OU are similar to those collected during past quarters. For the confined Tmss aquifer, ground water elevation data indicate an average gradient of 0.003 to the south-southwest.

Uranium analysis of ground water samples collected during the second semester of 2003 showed that the three wells screened in the confined portion of the Tmss aquifer (W-851-05, W-851-06, and W-851-07) have low uranium activities. The maximum activity in the confined portion of the Tmss aquifer was 0.15 pCi/L, detected in the ground water sample from well W-851-06. Based on $^{235}U/^{238}U$ mass ratios, there was some added depleted uranium in this sample. The $^{235}U/^{238}U$ mass ratio from W-851-07 showed no addition of depleted uranium in ground water. The $^{235}U$ mass in the ground water from well W-851-05 was so low that an accurate $^{235}U/^{238}U$ mass ratio could not be calculated for this sample. The sample from the well screened in the unconfined (upper) portion of the Tmss aquifer (W-851-08) contained a slightly higher total uranium activity (0.17 pCi/L) and a greater degree of depletion ($^{235}U/^{238}U$ of 0.0052) than samples from the deeper zone. The total uranium activities and $^{235}U/^{238}U$ mass ratios for each well are shown in Figure 2.8-9. These measurements suggest that most of the depleted uranium occurs in the unconfined Tmss upper aquifer, but that some depleted uranium has also entered the confined portion of the aquifer. The distribution of uranium in ground water is similar to previous years. The maximum total uranium activities continue to be a fraction of the 20 pCi/L MCL.

Tritium was detected in a ground water sample from well W-851-08 at an activity of 270 pCi/L during the first half of 2003. This is a typical result compared to the previous year and continues the trend of decreasing tritium activities in this well from the one-time high of 3,790 pCi/L in late 1998. As specified in the sampling plan, no samples for tritium analysis were collected during the second semester.

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

The Pits 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, 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. Section 3 presents the results for the Pit 2, 8, and 9 Landfills ground water detection monitoring network, and any landfill inspections or maintenance that was conducted during the second semester of 2003

## 3.1 Pit 2 Landfill

### 3.1.1. Contaminant Detection Monitoring Results

During 2003, ground water samples were collected from Pit 2 detection monitoring wells K2-01C and NC2-08 and analyzed for the CMP detection monitoring analytes. Depleted uranium was detected in a ground water sample from well K2-01C during the second semester. No other constituents that were monitored in 2003 as part of the Detection Monitoring Program were detected in ground water. A map showing the locations of monitoring wells is presented in Figure 2.5-1. The analytical data for the Pit 2 detection monitoring well samples are presented in Tables 3.1-1 through 3.1-7. Depth to ground water was measured at 50–55 ft beneath the Pit 2 Landfill. These data are consistent with previous water elevations. Ground water elevation measurements for the detection monitoring wells are presented in Table 3.1-8. A ground water potentiometric surface map for the OU is presented in Figure 2.5-2.

During the second semester, two new monitoring wells, W-PIT2-1934 and W-PIT2-1935, were installed at Pit 2 to partially satisfy CMP requirements for additional monitoring wells (additional wells are scheduled for 2007). These wells will be added to the 2004 CMP sampling plan. Soil and rock samples were collected from the boreholes for these two wells and analyzed for tritium to confirm that the tritium detected in ground water under Pit 2 has migrated from Building 850 and was not released from Pit 2. The tritium analytical results confirm that Pit 2 is not a release site for tritium. Maximum rock moisture tritium activities of 2,020 and 3,760 $pCi/L_{sm}$ were detected in rock samples collected from boreholes B-PIT2-1934 and B-PIT2-1935, respectively. Although these elevated tritium activities were detected in the unsaturated zone, the activities were of the same order of magnitude as those from the underlying saturated zone and likely represent vapor diffusion of ground water tritium upward within the unsaturated zone.

As stated above, depleted uranium was detected in a second semester ground water sample from well K2-01C. The $^{235}U/^{238}U$ atom ratio in the sample was 0.0062 and contained 9.75 pCi/L of total uranium. 3.13 pCi/L of total uranium was detected in the second semester ground water sample from well NC2-08, but the $^{235}U/^{238}U$ atom ratio indicated that this uranium was natural in origin. The uranium activities detected in these wells are well below the drinking water standard of 20 pCi/L. Next semester, ground water will be sampled from both of these wells and from the two new detection monitoring wells (W-PIT2-1934 and W-PIT2-1935) and analyzed by mass spectrometry to determine if the depleted uranium detected in ground water is likely to have been released from Pit 2.

### 3.1.2. Sampling and Analysis Plan Modifications

The sampling plan and schedule for the Pit 2 ground water Detection Monitoring Program are presented in Table 3.1-9. There were no deviations from the sampling plan.

### 3.1.3. Landfill Inspection Results

The Pit 2 Landfill was not inspected during the second semester of 2003.

### 3.1.4. Annual Subsidence Monitoring Results

The annual subsidence monitoring was conducted during the second semester of 2003 and indicated no measurable subsidence.

### 3.1.5. Maintenance

Inspections were not conducted during 2003, therefore maintenance of the landfill cover was not performed.

## 3.2. Pit 8 Landfill

### 3.2.1. Contaminant Detection Monitoring Results

During the first half of 2003, ground water samples were collected from the Pit 8 monitoring wells and analyzed for a suite of chemicals., Perchlorate and fluoride were detected in ground water samples from K8-04 at concentrations of 5 $\mu$g/L and 10 mg/L, respectively. Confirmation sampling and analysis of perchlorate and fluoride will be performed during the first semester of 2004 as part of the regular CMP program. In addition, first semester samples were analyzed for VOCs, high explosives compounds RDX and HMX, nitrate, uranium and thorium isotopes, and Title 26 metals. Second semester 2003 ground water samples were collected and analyzed for tritium, VOCs, perchlorate, and nitrate. Well K8-05 continued to be dry.

Except for the perchlorate and fluoride detections cited above, there were no new detections of constituents of concern from Pit 8 area wells as indicated by the Detection Monitoring Program ground water data collected during the first or second semesters of 2003. The concentration of perchlorate (5 $\mu$g/L) detected in the ground water sample from well K8-04 is below the Public Health Goal of 6 $\mu$g/L. The concentration of fluoride (10 mg/L) detected in the ground water sample from this well exceeds the State primary MCL for fluoride of 2 mg/L. The analytical results for the Pit 8 detection monitoring well samples are presented in Tables 2.8-2 through 2.8-8. Ground water elevation measurements for the detection monitoring wells are presented in Table 2.8-3. There was no significant change in ground water elevations during the first or second semesters of 2003 compared to the previous year. Depth to ground water was approximately 60 ft beneath the Pit 8 Landfill.

### 3.2.2. Sampling and Analysis Plan Modifications

The sampling plan and schedule for the Pit 8 ground water Detection Monitoring Program are presented in Table 2.8-1. Several discretionary samples for VOCs, nitrate, and perchlorate were added to the sampling plan. There were no other modifications to the plan. As stated above, well K8-05 was dry during 2003 and could not be sampled.

### 3.2.3. Landfill Inspection Results

Inspections of the landfill with repeated surveys to observe changes with time are currently being developed and were not completed during the second half of 2003.

### 3.2.4. Annual Subsidence Monitoring Results

The annual subsidence monitoring was conducted during the second semester of 2003 and did not indicate landfill subsidence.

### 3.2.5. Maintenance

Inspections were not conducted during 2003, therefore maintenance of the landfill cover was not performed.

## 3.3. Pit 9 Landfill

### 3.3.1. Contaminant Detection Monitoring Results

During the first half of 2003, ground water samples were collected from the four Pit 9 monitoring wells and analyzed for a suite of chemicals including VOCs; nitrate; perchlorate; high explosives compounds; RDX and HMX; uranium and thorium isotopes; and Title 26 metals. Fluoride was detected in ground water from each of the four wells at a concentration of 0.5 mg/L or less. During the second semester of 2003, ground water samples were analyzed for tritium. During 2003, there were no new detections of constituents of concern in Pit 9 area wells as indicated by the Detection Monitoring Program ground water sample analytical results presented in Tables 2.8-15 through 2.8-21. Ground water elevation measurements for the detection monitoring wells are presented in Table 2.8-22. There was no significant change in ground water elevations during the first or second semesters of 2003 compared to the previous year. Depth to ground water was approximately 110 ft beneath the Pit 9 Landfill.

### 3.3.2. Sampling and Analysis Plan Modifications

The sampling plan and schedule for the Pit 9 ground water Detection Monitoring Program are presented in Table 2.8-14. There were no additional modifications made to the plan.

### 3.3.3. Landfill Inspection Results

Inspections of the landfill with repeated surveys to observe changes with time are currently being developed and were not completed during the second half of 2003.

### 3.3.4. Annual Subsidence Monitoring Results

A subsidence survey was conducted during the second half of 2003 and did not indicate landfill subsidence.

### 3.3.5. Maintenance

Inspections were not conducted during 2003, therefore maintenance of the landfill cover was not performed.

# 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 $1 \times 10^{-6}$ or the hazard index exceeded 1 in the baseline risk assessment. The results of this risk evaluation are presented in Section 4.1. In addition, sampling and biological surveys were conducted during the second semester of 2003 as part of the Ecological Risk and Management Program specified in the CMP. The sampling and survey results are discussed in Section 4.2.

## 4.1 Human Health Risk and Hazard Management

The risk to human health posed by contamination at Site 300 was re-evaluated during the second semester of 2003 based on recent data as specified in the CMP Human Health Risk and Hazard Management Plan, Section 4.1 presents the results of soil sampling and analyses for polychlorinated biphenyl compounds (PCBs) conducted at Buildings 854 and 850 and the results of the annual modeling and sampling programs to assess human health risk. Institutional controls, such as restricting access to or activities in areas of elevated risk, remained in place during 2003 to prevent unacceptable exposure to contaminants during remediation.

### 4.1.1. Building 834 OU

#### *4.1.1.1. VOC Risk Evaluation for Outdoor Ambient Air Near Building 834D*

Inhalation risk and hazard resulting from transport of TCE and PCE vapors from ground water to the ground surface and subsequently to outdoor ambient air was estimated using the Jury (Jury et al., 1983) infinite source model. As presented in Table 4.1-1, a cumulative risk of $6 \times 10^{-14}$ and hazard index of $5 \times 10^{-11}$ were estimated using site-specific parameter values. Human health risk and hazard for inhalation of VOCs in outdoor ambient air did not exist at Building 834D in the year 2003.

#### *4.1.1.2. VOC Risk Evaluation for Indoor Ambient Air in Building 834D*

Inhalation risk and hazard resulting from transport of TCE and PCE vapors from ground water to the building foundations and subsequently to indoor ambient air was estimated using the Johnson-Ettinger Model (EQM, 2003). As presented in Table 4.1-1, a cumulative risk of $8 \times 10^{-3}$ and a hazard index of 4.3 were estimated using site-specific parameter values. Institutional controls will remain in place for Building 834D that is currently used only for storage.

### 4.1.2. Pit 6 Landfill OU

#### *4.1.2.1. Spring 7 Ambient Air Sampling*

On July 24, 2003, Spring 7 was monitored for the presence of surface water or green hydrophilic vegetation indicating the presence of near surface water. No surface water or green hydrophilic vegetation was present. Therefore, ambient air sampling was not conducted at this spring. The spring will be monitored for the presence of surface water or green hydrophilic vegetation, and if either is observed, ambient air sampling will be conducted.

### 4.1.3. High Explosive Process Area OU

#### *4.1.3.1. VOC Risk Evaluation for Outdoor Ambient Air Near Building 815*

Inhalation risk and hazard resulting from transport of TCE and PCE vapors from ground water to the ground surface and subsequently to outdoor ambient air was estimated using the Jury (Jury et al., 1983) infinite source model. As presented in Table 4.1-1, a cumulative risk of $2 \times 10^{-18}$ and hazard index of $2 \times 10^{-15}$ were estimated using site-specific parameter values. Human health risk and hazard for inhalation of outdoor ambient air did not exist at Building 815 in the year 2003.

#### *4.1.3.2. Spring 5 Ambient Air Sampling*

On July 24, 2003, Spring 5 was monitored for the presence of surface water or green hydrophilic vegetation indicating the presence of near surface water. No surface water or green hydrophilic vegetation was present. Therefore, ambient air sampling was not conducted at this spring. The spring will be monitored for the presence of surface water or green hydrophilic vegetation, and if either is observed, ambient air sampling will be conducted.

### 4.1.4. Building 850 OU

#### *4.1.4.1. Building 850 Firing Table Surface Soil Sampling*

During the second semester of 2003, to better define the extent of PCBs in surface soil in the vicinity of the Building 850 firing table, 31 surface soil samples were collected and analyzed by EPA Method 8082. The results of these analyses are presented in Table 4.1-2. The maximum detected polychlorinated biphenyls (PCB) concentration was 130 mg/kg in a sample from location 3SS-850-206. A map of the sampling locations and the PCB concentration distribution is presented in the Building 850 Remedial Design report (Taffet et al., 2003).

### 4.1.5. Building 854 OU

#### *4.1.5.1. Building 854 Surface Soil Sampling*

As reported in the First Semester 2003 Compliance Report, surface soil samples were collected in the Building 854 OU during 2003 to verify whether PCBs are present in soil in the Building 854 OU at concentrations and frequencies that pose a risk to onsite workers warranting a remedial action.

During January 2003, LLNL collected 38 surface soil samples that were analyzed by the immunoassay onsite technique, EPA Method 4020. The locations of the samples collected in January 2003 are shown on Figure 4.1-1. One sample (3SS-854-112) located within the Building 855 lagoon gave an absorbance reading that was extrapolated to equal 26 mg/kg PCBs using EPA Method 4020. The absorbance for all other samples indicated PCB concentrations lower then 1 mg/kg. Eight duplicate samples were submitted to an offsite analytical laboratory and analyzed by EPA Method 8082. Two samples had PCB detections above the reporting limit of 0.007 mg/kg. Both of these samples were collected within the Building 855 former disposal lagoon (see Figure 4.1-2). The sample collected from location 3SS-854-112 contained 3.6 mg/kg of Aroclor-1248 and 4.7 mg/kg of Aroclor-1254 and a sample collected from the edge of the lagoon, 3SS-854-113, contained 0.023 mg/kg of Aroclor-1254. The sample 3SS-854-112 was also analyzed for dioxins and furans as reported in the First Semester 2003 Compliance Report.

In April 2003, LLNL collected several additional samples from two locations (3SS-854-112 and 3SS-854-200) within the former disposal lagoon (see Figure 4.1-2). The samples were collected at 0.5 ft intervals starting at 0 ft and ending at 2.5 ft to profile the vertical extent of PCB contamination within the former disposal lagoon. The PCB Aroclor-1248 was detected slightly above the PCB PRG of 0.74 mg/kg (0.9 mg/kg) in the 0.5 ft sample from location 3SS-854-112. However, Aroclor-1248 was detected above the PRG for PCBs in soil collected at all depths from sample location 3SS-854-200 located directly under the former outfall trench. The PCB concentration ranged from 10 mg/kg to 62 mg/kg. In September 2003, LLNL continued sample collection at these locations starting at 3 ft and ending at 6 ft. Aroclor-1248 was detected above the PCB PRG at all depths at location B-854-200 (formerly known as 3SS-854-200). The 6 ft sample from this location was reported to contain 33.4 mg/kg of Aroclor-1248. No PCBs were detected above the reporting limit of 1 mg/kg at location B-854-112 (formerly known as 3SS-854-112). Table 4.1-3 summarizes the PCB data collected at the Building 854 OU during 2003.

Additional samples from depths greater than 6 ft will be collected to determine the vertical extent of the PCB contamination within the former Building 855 disposal lagoon.

#### *4.1.5.2. VOC Risk Evaluation for Indoor Ambient Air in Building 854A*

Inhalation risk and hazard resulting from transport of VOC vapors from ground water to the building foundations and subsequently to indoor ambient air was estimated using the Johnson-Ettinger Model (EQM, 2003). As presented in Table 4.1-1, a cumulative risk of $1 \times 10^{-6}$ and a hazard index of $7 \times 10^{-4}$ were estimated using site-specific parameter values. Institutional controls will remain in place for Building 854A which is not currently occupied or used.

### *4.1.5.3. VOC Risk Evaluation for Indoor Ambient Air in Building 854F*

Inhalation risk and hazard resulting from transport of chloroform, TCE and other VOC vapors from ground water to the building foundations and subsequently to indoor ambient air was estimated using the Johnson-Ettinger Model (EQM, 2003). As presented in Table 4.1-1, a cumulative risk of $6 \times 10^{-5}$ and a hazard index of 0.03 were estimated using site-specific parameter values. Institutional controls will remain in place for Building 854F which is not currently occupied or used.

### *4.1.5.4. VOC Risk Evaluation for Outdoor Ambient Air in Building 854F*

Inhalation risk and hazard resulting from transport of chloroform and 1,2-dichloroethane vapors from ground water to the ground surface and subsequently to outdoor ambient air was estimated using the Jury (Jury et al., 1983) infinite source model. As presented in Table 4.1-1, a cumulative risk of $4 \times 10^{-20}$ and hazard index of $2 \times 10^{-15}$ were estimated using site-specific parameter values. Human health risk and hazard for inhalation of outdoor ambient air did not exist at Building 854F in the year 2003.

## 4.1.6. Building 832 Canyon OU

### *4.1.6.1. VOC Risk Evaluation for Indoor Ambient Air in Building 830*

Inhalation risk and hazard resulting from transport of vinyl chloride and TCE vapors from ground water to the building foundations and subsequently to indoor ambient air was estimated using the Johnson-Ettinger Model (EQM, 2003). As presented in Table 4.1-1, a cumulative risk of $5 \times 10^{-4}$ and a hazard index of 0.27 were estimated using site-specific parameter values. Institutional controls will remain in place for Building 830 which is currently used for storage.

### *4.1.6.2. VOC Risk Evaluation for Outdoor Ambient Air Near Building 830*

Inhalation risk and hazard resulting from transport of chloroform, 1,2-dichloroethane, and vinyl chloride vapors from ground water to the ground surface and subsequently to outdoor ambient air was estimated using the Jury (Jury et al., 1983) infinite source model. As presented in Table 4.1-1, a cumulative risk of $6 \times 10^{-18}$ and hazard index of $2 \times 10^{-13}$ were estimated using site-specific parameter values. Human health risk and hazard for inhalation of outdoor ambient air did not exist at Building 830 in the year 2003.

### *4.1.6.3. VOC Risk Evaluation for Indoor Ambient Air Near Building 832F*

Inhalation risk and hazard resulting from transport of dichloropropane vapors from ground water to the building foundations and subsequently to indoor ambient air was estimated using the Johnson-Ettinger Model (EQM, 2003). As presented in Table 4.1-1, a cumulative risk of $4 \times 10^{-9}$ and a hazard index of 0.0001 were estimated using site-specific parameter values. Institutional controls will remain in place for Building 832F which is not currently used or occupied.

### *4.1.6.4. Spring 3 Ambient Air Sampling*

On July 24, 2003, Spring 3 was monitored for the presence of surface water or hydrophilic vegetation indicating the presence of near surface water. Substantial hydrophilic vegetation was present at Spring 3, indicating the presence of near surface water. Therefore, air sampling was conducted.

Air sampling was conducted near the water sampling port for Spring 3 in a region of dense cattails and rushes. On July 24, 2003, a uni-strut stand was erected consisting of a platform on the ground and a center 5.5 ft pipe. Two six-liter SIM-certified SUMMA canisters were fitted with 8-hour integrators and placed next to each other on the platform at ground level. These canisters were labeled 3AA-SRPING3-001 and 3AA-SPRING3-002. New 1/8 inch Teflon tubing was cut into two lengths of about 5.5 ft and purged with ambient air using a pump. New swagelok fittings were used to attach a length of tubing to the integrators on each of the SUMMA canisters. The free end of tubing was attached to the top of the pipe on the uni-strut stand with tie-wraps.

The integrators were opened in the early morning. The time of opening, canister vacuum, temperature, wind speed and direction were recorded. The integrators were closed at the end of the day, and time, residual vacuum, wind speed and direction were again recorded. The canisters were sent to Air Toxics LTD of Folsom, California and analyzed by a modified TO-14S SIM analysis (low level analysis) for TCE and PCE only.

The results of the collocated samples were difficult to interpret since TCE and PCE were detected in one canister but not the other canister. On October 13, 2003, a second set of confirmatory samples was collected. The same sampling apparatus was used, although on this date the tubing was not purged. Again TCE and PCE were detected in one sample, but not the other sample. Since the components were not segregated by sampling ID, it is not known if components used for the 3AA-SPRING3-001 and 002 samples were the same ones used on both sample dates. The variation between samples may have been caused by residual contamination on the sampling components, equipment malfunction, or highly variable ambient air concentrations. The sample results and sampling parameters are shown in Tables 4.1-4 and 4.1-5, respectively.

Per the requirements of the CMP, the ambient air sample concentrations were compared to TCE and PCE PRGs (Table 4.1-4). Although the results suggest the presence of TCE and PCE may be of concern to onsite workers, currently the area is not used on a routine basis except for semiannual sampling of Spring 3. Thus, additional controls are not warranted. Air monitoring of the spring will continue to further evaluate the potential presence of TCE and PCE in the ambient air at this location.

### 4.1.6. Building 833

#### *4.1.6.1. VOC Risk Evaluation for Indoor Ambient Air in Building 833*

Inhalation risk and hazard resulting from transport of TCE and chloroform vapors from ground water to the building foundations and subsequently to indoor ambient air was estimated using the Johnson-Ettinger Model (EQM, 2003). As presented in Table 4.1-1, a cumulative risk of $2 \times 10^{-6}$ and a hazard index of 0.001 were estimated using site-specific parameter values. Institutional and engineering controls will remain in place for Building 833. The air conditioning unit in Building 833 is operated continuously to maintain a positive or neutral pressure differential between the subsurface and the indoor air. The air exchange rate for this building is also maintained at a higher level than the default modeled rate of 0.25 exchanges per hour.

# 4.2. Ecological Risk and Hazard Management

During the late fall of 2003, surveys for important burrowing species were conducted in the survey areas specified in the Compliance Monitoring Plan (2002). In addition, quarterly burrow air sampling for the presence of VOCs in the Pit 6 and Building 834 survey areas, as specified in the Compliance Monitoring Plan (2002), was initiated. Surface soil sampling and analysis for the presence of cadmium was also conducted in the Building 834 survey area. The ecological significance of the results of surface soil sampling for the presence of PCBs and dioxins/furans at Buildings 854 and 850 was also evaluated.

## 4.2.1. Wildlife Surveys Spring 2003

Wildlife surveys were conducted in November of 2003 to satisfy the requirements of the Compliance Monitoring Plan (2002). These requirements included semiannual surveys for important burrowing species in areas associated with hazard indices greater than 1. Three areas were identified as requiring semiannual monitoring: Building 834, Building 850, and Pit 6. Important species include special status species such as State of California or federally listed threatened or endangered species or State of California species of special concern.

### *4.2.1.1. Review of Historic Observations and Habitat Requirements*

Historic observations of special status species at each survey location were reviewed to determine which species should be targeted during future field surveys. Based on this review the fossorial special status species most likely to be observed in the area are the San Joaquin coachwhip (*Masticophis flagellum ruddocki*), coast horned lizards *(Phrynosoma coronatum frontale)*, silvery legless lizard (*Anniella pulchra pulchra*), burrowing owls (*Athene cunicularia*), San Joaquin pocket mice *(Perognathus inornatus)* and American badgers *(Taxidea taxus)*. We also reviewed the historic occurrences for the San Joaquin kit fox (*Vulpes macrotis mutica*). The results of this review were reported in detail in the semi-annual Compliance Monitoring Report (2003).

### *4.2.1.2. Field Surveys*

Field surveys consisted of walking the perimeter of each area and transects through the areas delineated around Building 834, Building 850 and Pit 6 in the Compliance Monitoring Plan (2002). At each area, easily identifiable features were chosen to delineate the survey areas in the field. Because of this, the survey areas are slightly larger then the actual areas of concern. The boundaries of the actual field survey areas are shown in Figures 4.2-1 through 3. Pit 6 was surveyed twice and Building 834 and 850 were surveyed once during the fall survey period.

The results of the surveys are shown in Table 4.2-1. Two groups of badger dens and a burrowing owl were observed at Building 850. A badger den was observed at B834 near the western fence line. No other special status species were observed during field surveys.

### *4.2.1.3. Future Work*

Two semi-annual surveys will be conducted in 2004, during the spring (April or May) and the fall (September or October), using similar methods as for the fall 2003 survey. As noted in the Spring 2003 report, coast horned lizards have been observed within 1/3 mile of the Building 834 and Building 850 survey areas. To better determine the presence of this species in these two survey areas, the first of the semi-annual surveys in 2004 will be conducted in April or May, which are the months in which horned lizards are most active at Site 300. The distribution of the San Joaquin pocket mouse, San Joaquin coachwhip and silvery legless lizard at Site 300 is unknown. We are considering conducting small mammal trapping using Sherman live traps and reptile trapping using pit fall traps to determine if these special status species occur in any of the survey areas. Walking and driving surveys will continue to monitor for the presence of burrowing owls and American badgers. It is unlikely that California red-legged frogs or California tiger salamanders occur in any of the survey areas. The distribution of these species at Site 300 will continue to be monitored as part of the Site's routine endangered species monitoring program, and the seep at well 8 will be surveyed for California red-legged frogs during the walking surveys.

Birds, reptiles and amphibians were not explicitly addressed in the original baseline ecological risk assessment (Webster-Scholten 1994). Because a burrowing owl was observed within one of the areas of concern (Building 850), we are in the process of developing an exposure model and determining appropriate toxicity reference values (TRVs) for burrowing owls. Future models and TRVs may be developed for reptiles and amphibians (such as coast horned lizards, and red-legged frogs) in the event these species are observed in the survey areas.

### 4.2.2. Burrow Air Sampling for VOCs

In the baseline ecological assessment (Webster-Scholten, 1994), hazard (defined as a hazard index greater than 1) to species important at the individual level (referred to as "important" species) was associated with the inhalation of TCE and PCE in burrow air in the Building 834 and Pit 6 landfill areas. In the baseline assessment, kit fox (a State and Federal endangered species) was used as a representative important fossorial (burrowing) vertebrate species. As part of the risk and hazard management measures developed and presented in the Compliance Monitoring Plan (Ferry et al., 2002), a burrow air sampling program was initiated to determine current exposure concentrations at Building 834 and Pit 6.

Because there is little experience to draw upon when it comes to sampling subsurface burrow air, during the first year quarterly samples will be collected from both locations. This will allow us to evaluate seasonal fluctuations and determine the optimal timing for annual monitoring. The results of two quarters of monitoring (late summer and late fall) are presented here.

#### *4.2.2.1. Burrow Air Sampling Methods*

On September 3, 2003 and December 19, 2003, air from animal burrows in the Building 834 and Pit 6 ecological survey areas were sampled and analyzed for the presence of TCE, PCE, cis-1,2-DCE and trans-1,2-DCE. Locations are shown on Figures 4.2-4 and 5, respectively. Three burrows from each area were selected on each sampling date. Burrow selection criteria included the degree to which their distribution was representative of burrows in the survey area, characteristics such as diameter that were consistent with burrows that could be used by Site 300 special status species, and whether the burrow was in an area of high soil vapor concentrations as indicated from previous studies. Selected burrows were generally between four and eight inches in diameter. The location of each burrow was recorded with Trimble GPS CE Handheld units and TerraSync software (Trimble Navigation Limited 749 North Mary Avenue, Sunnyvale CA 94086).

Air from these burrows was sampled using a 4 ft AMS Vapor Probe model 427.01 (AMS, Inc. 105 Harrison, American Falls, ID 83211) connected with 1/8 in new Teflon tubing to a 6 L SIM-certified SUMMA canister fitted with an 8 hr integrator. Samples were collected from depths of between one and five feet within the burrows. Prior to using these probes, each was tested under field conditions for the presence of VOC contaminants and was found to contain no VOCs at concentrations higher than background (i.e ambient air). At least one air sample was taken from each burrow. Co-located samples were taken at one burrow in each area at each sampling date. The exception was the December 2003 sampling at Building 834. A co-located sample was not obtained from this area due to insufficient vacuum in one of the SUMMA canisters. Ambient air samples were also taken at the same time and location as the co-located samples.

The day before samples were collected, the vapor probes and SUMMA canisters were deployed at the burrows. The soil vapor probes and tubing were purged with about 3 liters of burrow air before connecting them to the integrators. Early in the morning of the following day the valves on all SUMMA canisters were opened to the integrators. The time of opening, canister vacuum, temperature, wind speed and direction were recorded. The SUMMA canister valves were closed at the end of the day, and time, residual vacuum, wind speed and direction were again recorded. Table 4.2-2 lists the sampling parameters for each sample date. Canisters were sent to Air Toxics LTD of Folsom, California for modified TO-14S SIM analysis (low level analysis) for TCE, PCE, cis-1, 2-DCE and trans-1,2-DCE.

#### *4.2.2.2. Burrow Air Sampling Results*

Results of the burrow air sampling are presented in Table 4.2-3. On the September 4, 2003 sampling date, low concentrations of PCE were detected in one burrow at Pit 6 (0.34 $\mu g/m^3$) and in one of the co-located samples (but not the associated co-located sample) from a burrow at Building 834 (0.26 $\mu g/m^3$). The measured concentrations were just above the detection limit of 0.25 and 0.26 $\mu g/m^3$, respectively. During the December 19, 2003 sampling, two burrows in the Pit 6 survey area and all three burrows in the Building 834 survey area had detectable concentrations of TCE and/or PCE. These burrows were not located in the same area as the burrows with the detectable concentrations of PCE from the September 2003 sampling. In addition, TCE was also detected in the ambient air at concentrations similar to those found in the two co-located samples at the same burrow.

TCE and PCE concentrations appeared to be more uniform and consistent during the December 19, 2003 sampling compared to the September 4, 2003 sampling date. The December sampling occurred after a period of heavy rain resulting in saturated soil. It is possible the wet soil prevented outgassing of the VOCs to the surface, resulting in higher accumulation within the burrows. However, all detected concentrations were quite low. Concentrations of PCE and TCE in burrows at Building 834 predicted in the Site-Wide Remedial Investigation Report (Webster-Scholten, 1994) were $8.83 \times 10^2$ mg/m$^3$ and $2.91 \times 10^4$ mg/m$^3$ respectively. At the Pit 6 area, predicted concentrations were $3.27 \times 10^1$ mg/m$^3$ and $9.30 \times 10^1$ mg/m$^3$, respectively. Clearly the concentrations detected during the two sampling events are substantially below predicted concentrations.

#### *4.2.2.3. Future Work*

Two more rounds of quarterly burrow air sampling will be conducted. During this period we will evaluate our sampling method to determine if it is feasible to obtain samples from deeper depths in more intact burrows. At the end of the sampling period, the four quarterly results will be evaluated and final results compared to model predictions from the SWRI to determine if the exposure model should be updated.

### 4.2.3. Surface Soil Sampling for Cadmium, PCBs, Dioxins and Furans in Surface Soil.

In the baseline ecological assessment, hazard (defined as a hazard index greater than 1 for important fossorial species) was associated with the combined oral ingestion and inhalation of cadmium in surface soil at Building 834 (Webster-Scholten, 1994). In addition, PCBs, dioxins and furans in the Building 854 and 850 areas have not been fully evaluated for their potential ecological hazard. The ecological risk and hazard management measures currently implemented to address these hazards are described here.

#### *4.2.3.1. Cadmium at Building 834*

As discussed above, the baseline ecological assessment identified an ecological hazard associated with the combined oral ingestion and inhalation of cadmium in surface soil at Building 834 (Webster-Scholten 1994). However, only two surface soil samples have been previously collected and analyzed for this metal at Building 834. Cadmium was not reported in one of the samples at a detection limit of 0.1 mg/kg, but was detected in the second sample at 16.0 mg/kg. Thus, the cadmium hazard calculated in the baseline risk assessment for the Building 834 area was due to this single analysis.

In October 2003, additional surface soil sampling was conducted at Building 834 to more fully characterize cadmium concentrations in surface soil in this area. Twenty-four locations were sampled (Figure 4.2-6). Sampling locations were distributed throughout the ecological survey area and were located around obvious burrowing activity. Sampling was conducted as outlined in the preliminary sampling and analysis plan presented in the Compliance Monitoring Plan (Ferry, 2002). Following Standard Operating Procedure 1.12 (Dibley and Depue, 2000), surface vegetation was scraped away using a clean hand trowel, and the top 6 inches of soil was mixed in an area of about 1 $ft^2$. A clean 500 ml glass wide-mouth jar was filled with this mixed soil. Three co-located samples were collected. In addition, three samples were collected from soil within burrows adjacent to the surface soil location. Samples were extracted using EPA method SW-3050 and analyzed using EPA method 7131, which provided a PQL of 0.05 mg/kg.

Results are presented in Table 4.2-4. All cadmium concentrations in surface soil were well below 0.5 mg/kg (the detection limit for method 6010), and most results were below 0.1 mg/kg (the detection limit for the previously collected surface soil samples). Although samples were collected near the location that had a previously reported cadmium concentration of 16.0 mg/kg, such a high concentration was not observed. The average concentration of all samples was 0.11 mg/kg with a standard deviation of 0.05 mg/kg. This is well below the Site 300 background concentration for cadmium of 1.9 mg/kg, reported in the Site-Wide Feasibility Study (Ferry et al., 1999).

From these results, we conclude there is no hazard to important fossorial species from cadmium in surface soil at Building 834. However, special status wildlife surveys will continue in this area while the presence of VOCs in subsurface burrow air is under evaluation (see Section 4.2.2).

#### *4.2.3.2. Ecological Significance of PCBs at Building 854*

As described in Section 4.1.5.1, the PCBs Aroclor-1242, Arochlor-1248 and Aroclor-1254 have been detected in a lagoon adjacent to Building 855 at concentrations up to 34, 52 and 0.16 mg/kg, respectively. Additional surface soil sampling conducted in January 2003 shows the PCBs to be primarily confined to the Building 855 lagoon. A sample from this lagoon was also analyzed for dioxin and furan compounds, and contained a maximum calculated tetrachloro-di-benzodioxin (TCDD) equivalent concentration of $2.6 \times 10^{-5}$ mg/kg. In general, the very limited extent of the PCB, dioxin and furan contamination would preclude significant ecological impact due to the limited potential for exposure. However, the lagoon does act as a water catchment during the winter months, and at this time contains standing water. Both California tiger salamanders and California red-legged frogs are known to occur in springs and pools in the general vicinity of Building 854. The lagoon could provide limited habitat for either species during the winter months. Therefore, we will evaluate the lagoon for its suitability for either of these species. Should the lagoon provide suitable habitat, then exposure and hazard to these species from PCBs, dioxins and furans will be estimated.

#### *4.2.3.3. Ecological Significance of PCBs at Building 850*

As described in the Draft Interim Remedial Design report for the Building 850 Subarea (Taffet et al., 2003), a total of 60 surface soil samples from the slopes above the Building 850 firing table were collected in 1994 and 2003 and analyzed for PCB compounds. PCBs were detected in surface soil samples at concentrations ranging from 0.09 to 180 mg/kg and were primarily confined to a 150 to 225 ft radius around the firing table. In addition, dioxin and furan compounds have been detected in samples from this area, with a maximum calculated TCDD equivalent concentration of $2.27 \times 10^{-3}$ mg/kg.

Although the extent of PCB/dioxin/furan contamination is limited to the area adjacent to the firing table, wildlife surveys have revealed the presence of burrowing owl in this area (Section 4.2.1). The exposure and hazard of burrowing owl to these compounds have not been estimated. Therefore, we are in the process of developing an exposure model for the burrowing owl to estimate hazard to this species from these compounds. In addition, we will further evaluate the area for the presence of standing pools of water generated by runoff from the firing table that could be used as breeding habitat for aquatic invertebrates or amphibians. If such surface water is present, sampling the water for the presence of PCB and dioxin/furans compounds will be explored.

# 5. Data Management Program

The management of data collected as part of the first semester 2003 compliance monitoring at Site 300 was subject to the standard Environmental Restoration Division (ERD) data management process and standard operating procedures. This process tracks sample and analytical information from the initial sampling plan through data storage in a relational database. As part of the standard procedures for data quality, this process includes 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 uniformly on all data.

## 5.1. Modifications to Existing Procedures

There were no modifications to existing procedures.

## 5.2. New Procedures

The Site 300 CMP sampling plan was developed based upon the negotiated sampling locations and frequencies. New web generated scripts were developed to query the database for ground water data and for the analytical data at all CMP locations. The locations and requested analyses to be reported for each area were reviewed by the responsible task leaders for accuracy prior to table generation.

# 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 Manual, Site Safety Plan, and Quality Assurance Management Plan. Section 6 discusses any modifications to existing LLNL quality assurance/quality control (QA/QC) procedures or any new QA/QC procedures that were implemented during this reporting period, as well as self-assessments, quality issues and corrective actions, and analytical and field quality control.

## 6.1. Modifications to Existing Procedures

In September 2003, SOPs were reviewed, revised, controlled and released as Revision 11. Revision 11 included all of chapter 2 and portions of chapters 1 and 4 consisting mostly of ground water sampling related procedures. Operational Safety Procedures, “Treatability Testing and Facility Operations” and “Environmental Protection Department Off-Pavement Driving and Hiking” were reviewed and renewed in June and July 2003, respectively.

## 6.2. New Procedures

There were no new procedures written during this reporting period.

## 6.3. Self-assessments

Self-assessments are performed by the ERD on an annual basis and by Safety and Environmental Protection Environmental Safety and Health (ES&H) teams on a triennial basis. These assessments are used to evaluate ongoing treatment facility activities to QA and ES&H requirements and procedures. During this reporting period, there were a total of seven assessments performed, mostly by agencies outside LLNL.

## 6.4. Quality Issues and Corrective Actions

Quality improvement, nonconformance, and corrective action reporting is documented using the Quality Improvement Form (QIF). A total of nine QIFs were processed during this reporting period. Suggested improvements were addressed and corrective measures employed to improve related processes. Some of the specific corrective actions implemented this reporting period included: assigning the appropriate parameter code for total phosphorous and reporting correct units of measurement for EPA 8021 and chromium analyses by outside contract analytical labs (CALs); labeling of sampling ports in the TF834, and proper storage of analytical data derived from the EM8015 analysis. The QIFs are successfully closed-out as suggested improvements are implemented.

## 6.5. Analytical Quality Control

Data review, validation, and verification are conducted on 100% of the incoming analytical data. CALs are contractually required to provide internal quality control checks in the form of method blanks, laboratory control samples, matrix spikes, and matrix spike or sample duplicate results with every analysis. These results are evaluated during the data review process and are used to determine data quality. Data flags are used to inform the end user of insufficiencies detected during the data review process. A data qualifier flag is being assigned to recently obtained EM8015 analytical results in response to the QIF generated regarding proper storage of said results. The CAL reports the EM8015 results as "diesel range organics" and as part of the corrective action to better manage these data a "G"flag stating that data are "quantified using fuel calibration, but do not match typical fuel fingerprint" is being applied to the analytical results. Corrective measures are still underway to improve the management of these data and successfully close out the QIF.

## 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 occurs 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 significant problems encountered during this reporting period.

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# Figures

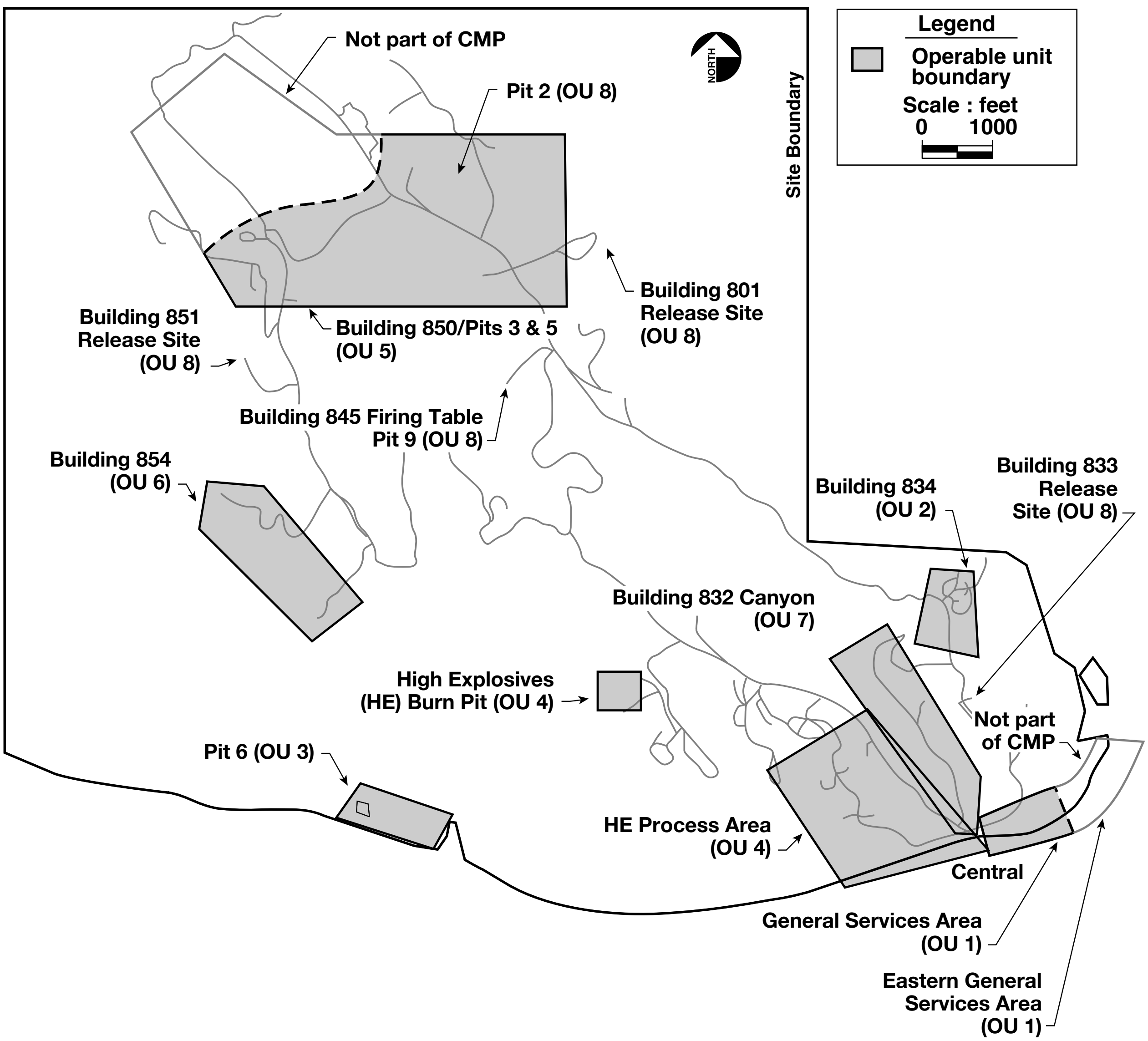


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**Figure 2-1. Site 300 map showing OU locations.**

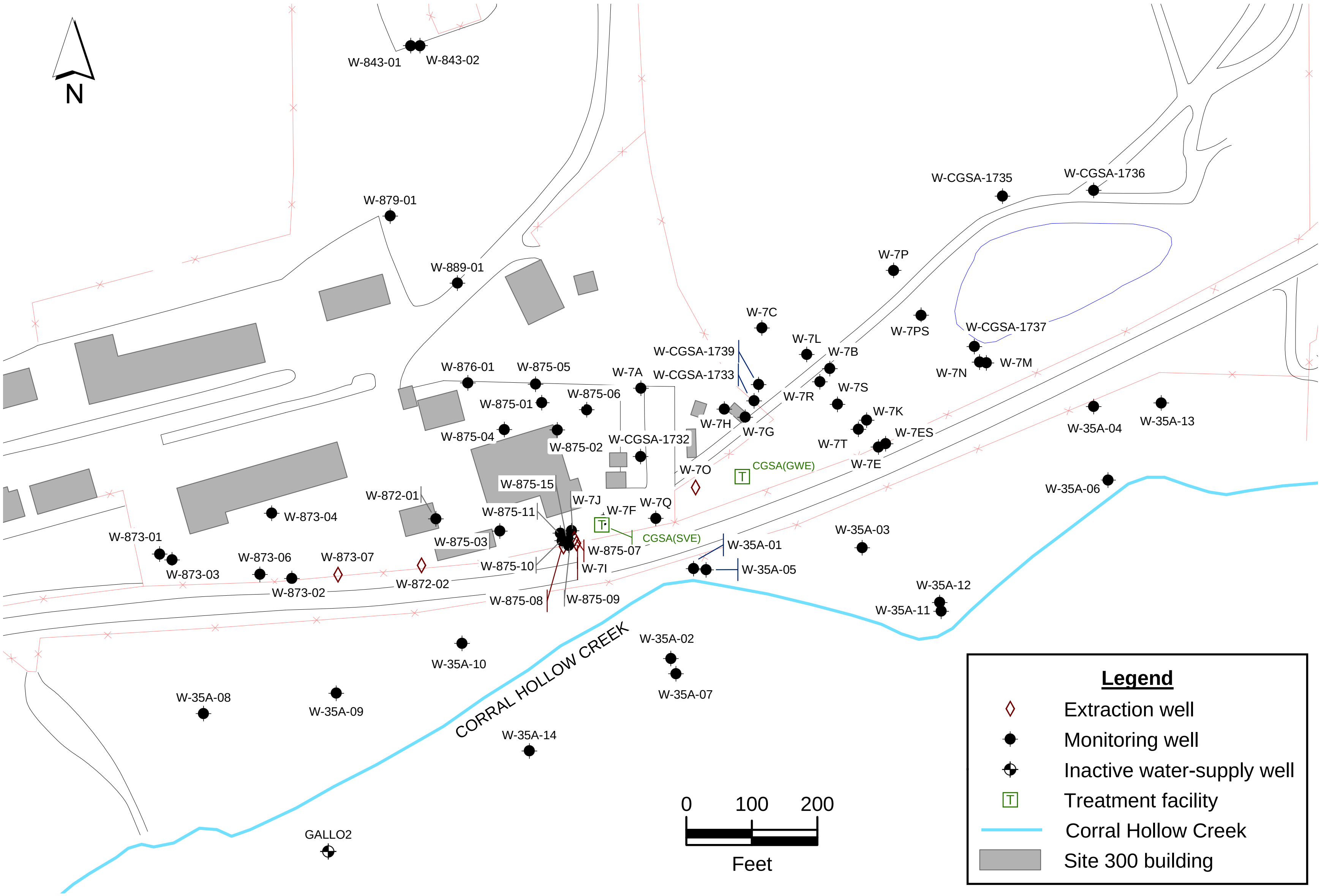



**Figure 2.1-1. Central General Services Area OU site map showing monitoring, extraction and water-supply wells, and treatment facilities.**

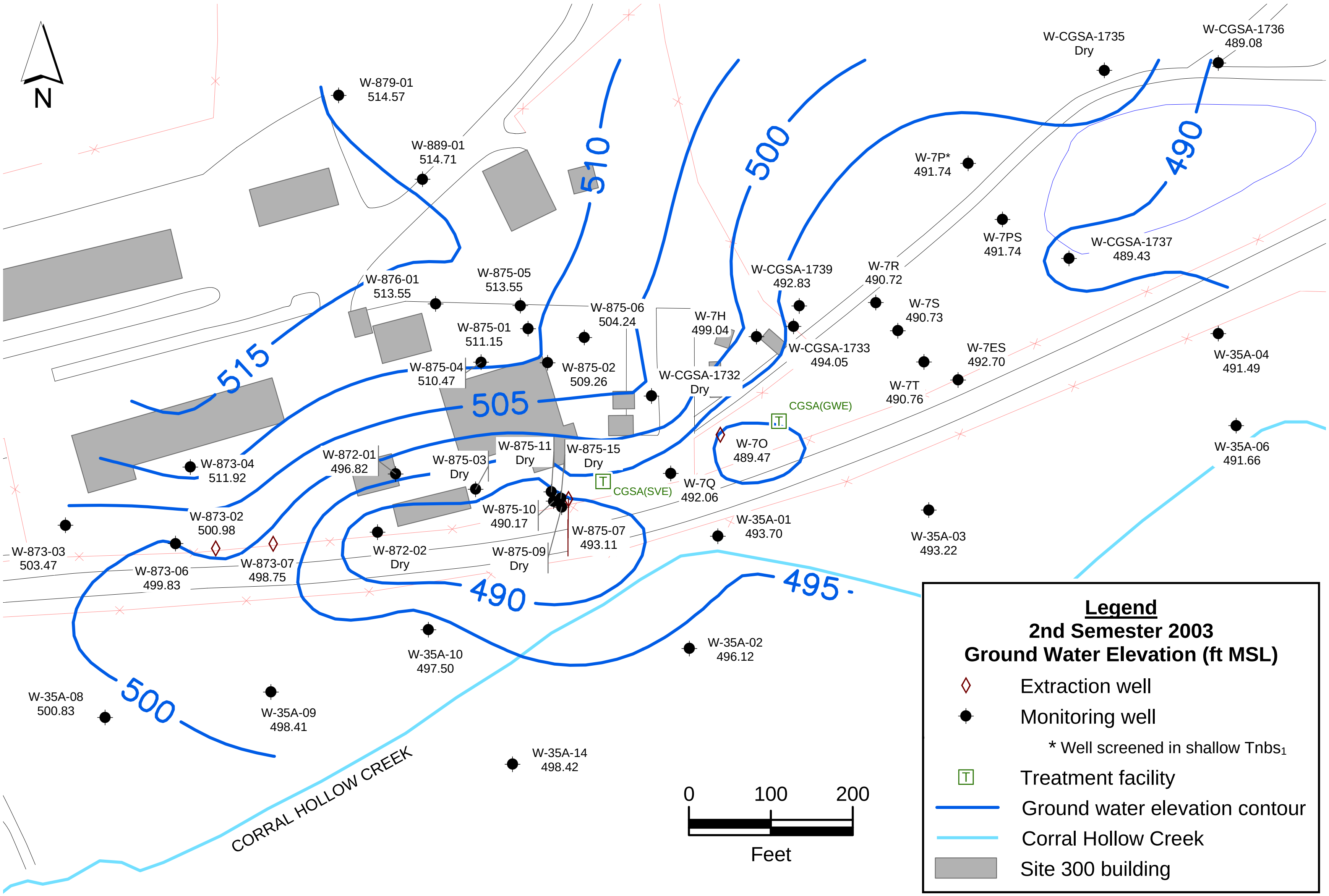



**Figure 2.1-2. Central General Services Area OU ground water potentiometric surface map for the Qt-Tnsc$_1$ HSU.**

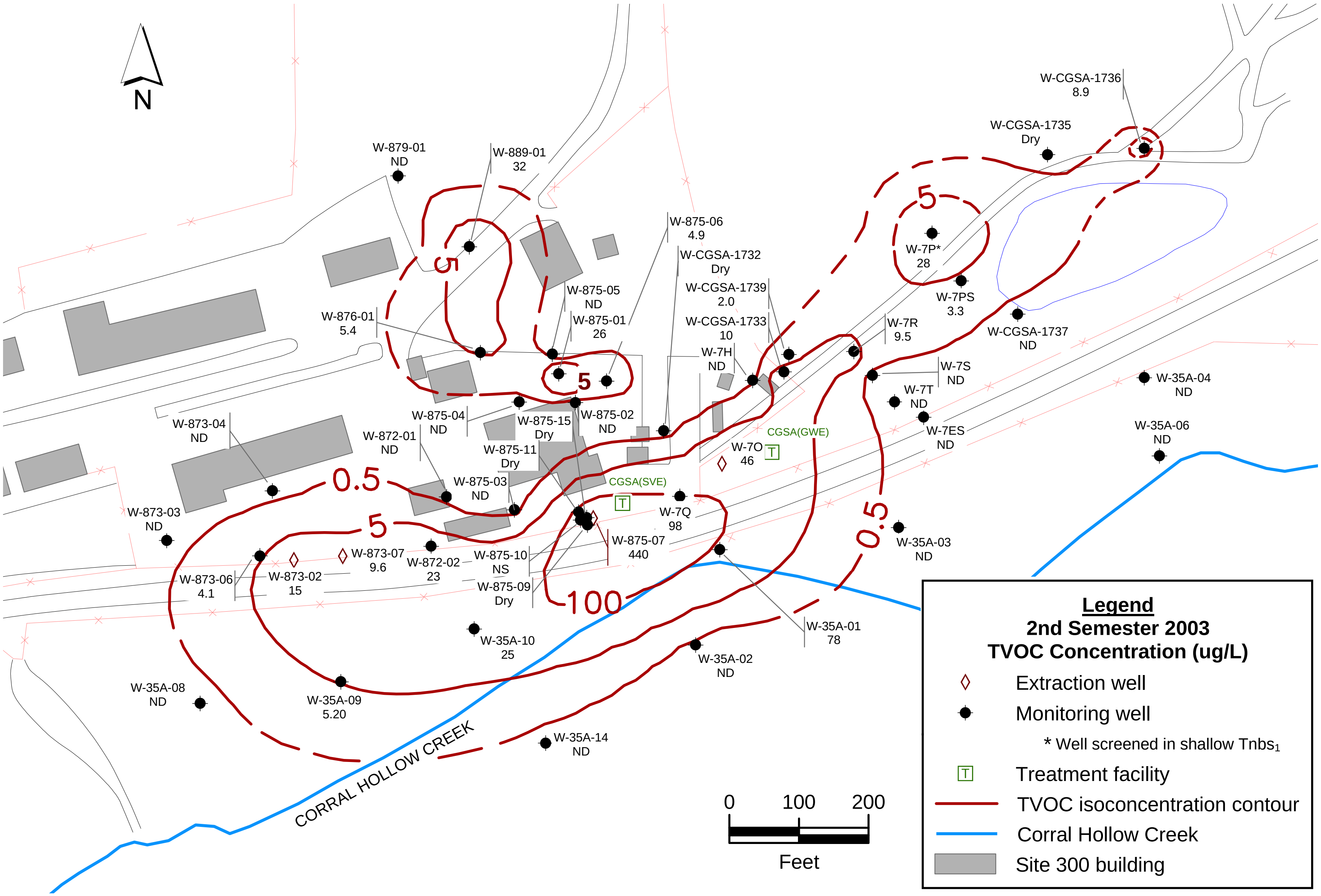



**Figure 2.1-3. Central General Services Area OU TVOC isoconcentration contour map for the Qt-Tnsc$_1$ HSU.**

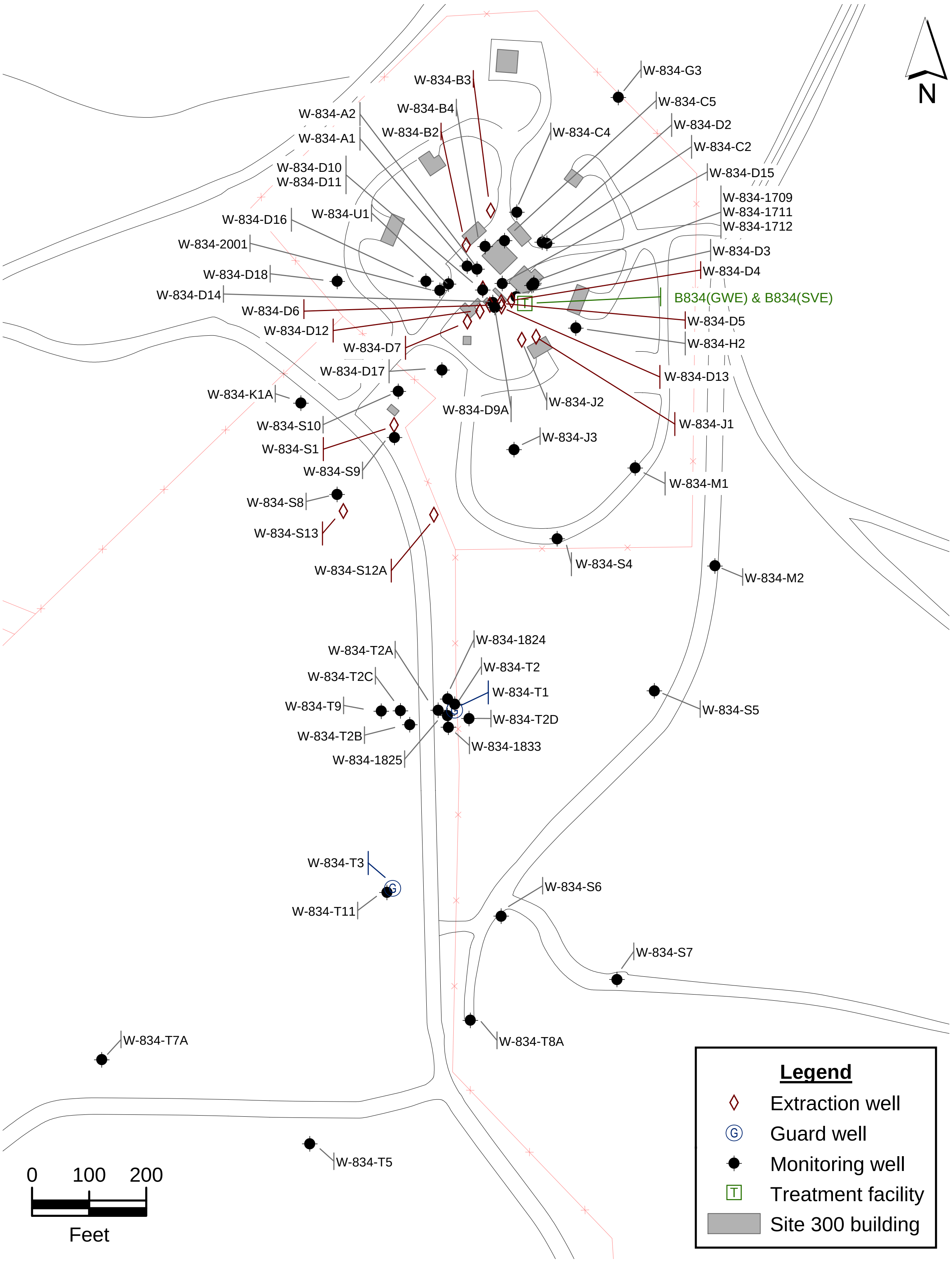



**Figure 2.2-1. Building 834 OU site map showing monitoring, extraction, and guard wells.**

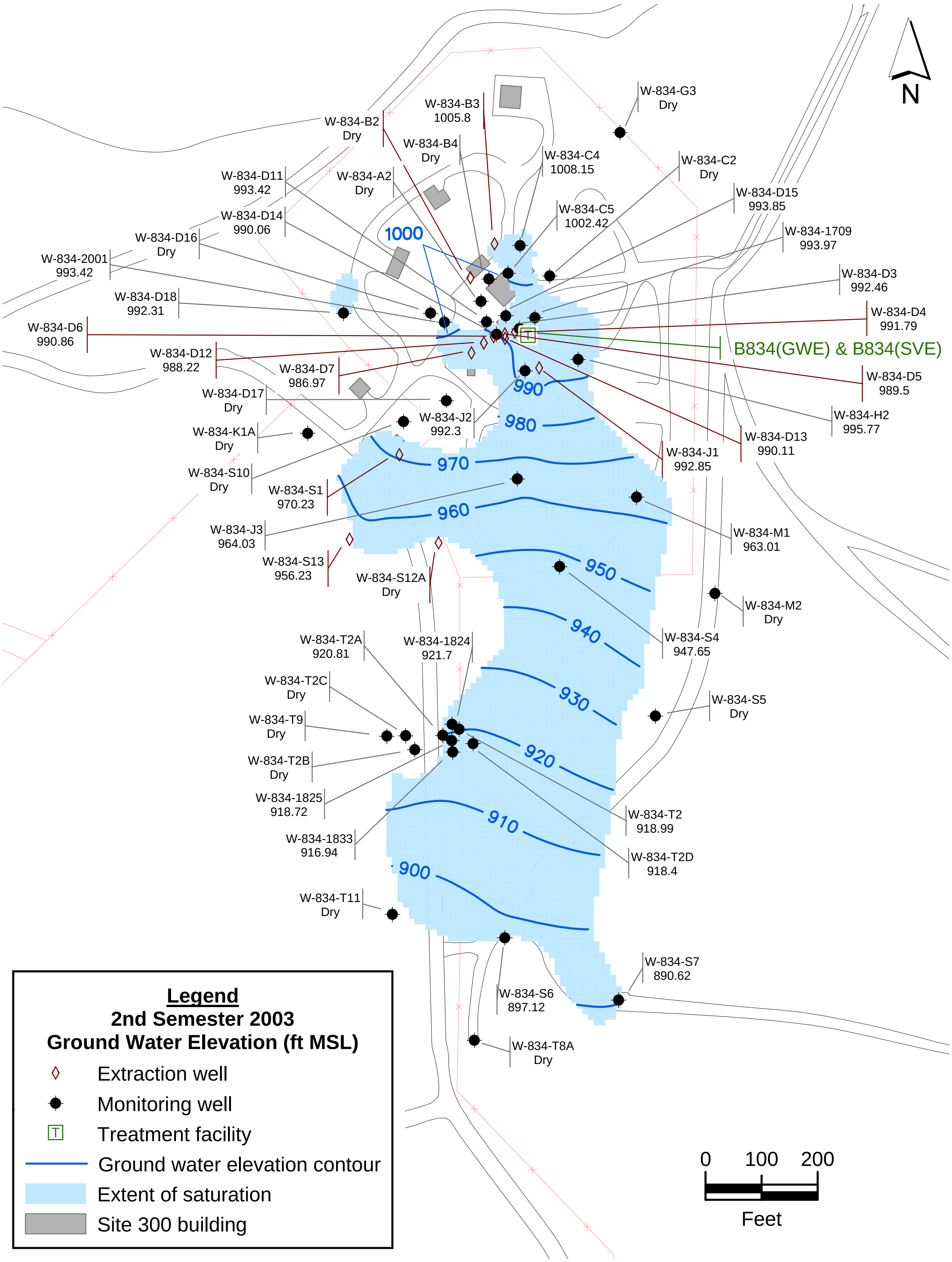



**Figure 2.2-2. Building 834 OU ground water potentiometric surface map for the Tpsg perched water-bearing zone.**

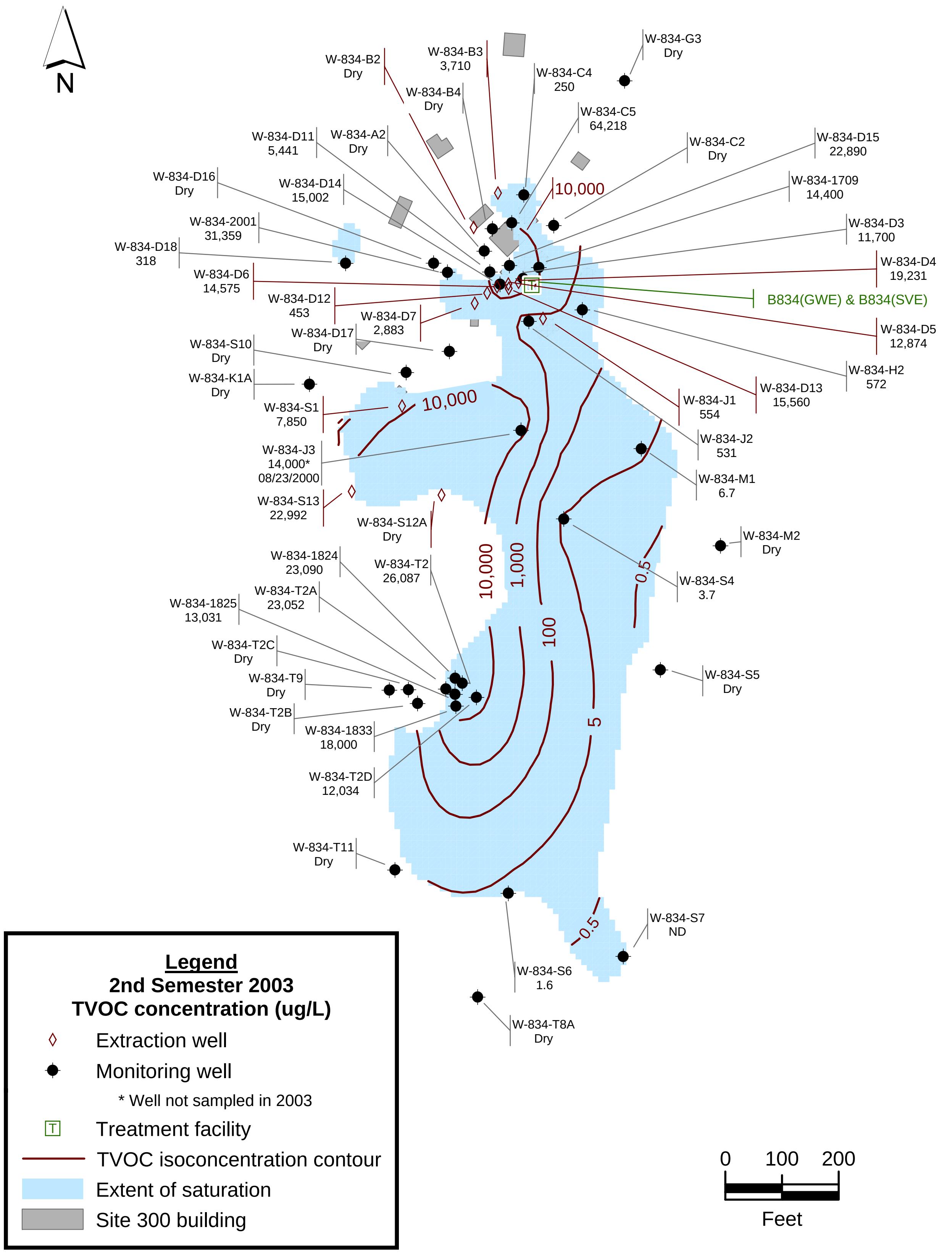



**Figure 2.2-3. Building 834 OU TVOC isoconcentration contour map for the Tpsg perched water-bearing zone.**

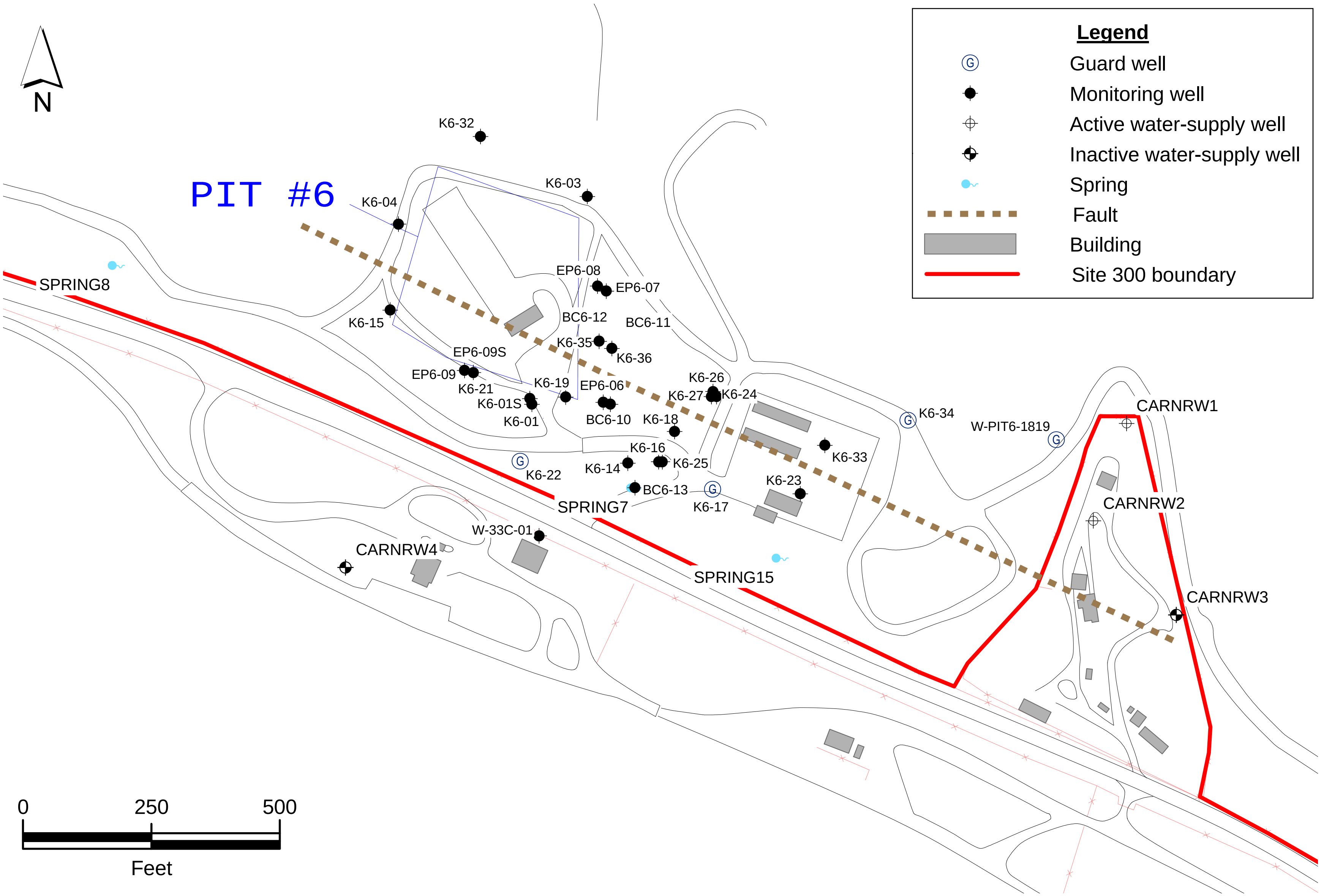



**Figure 2.3-1. Pit 6 Landfill OU site map showing monitoring and water-supply wells.**

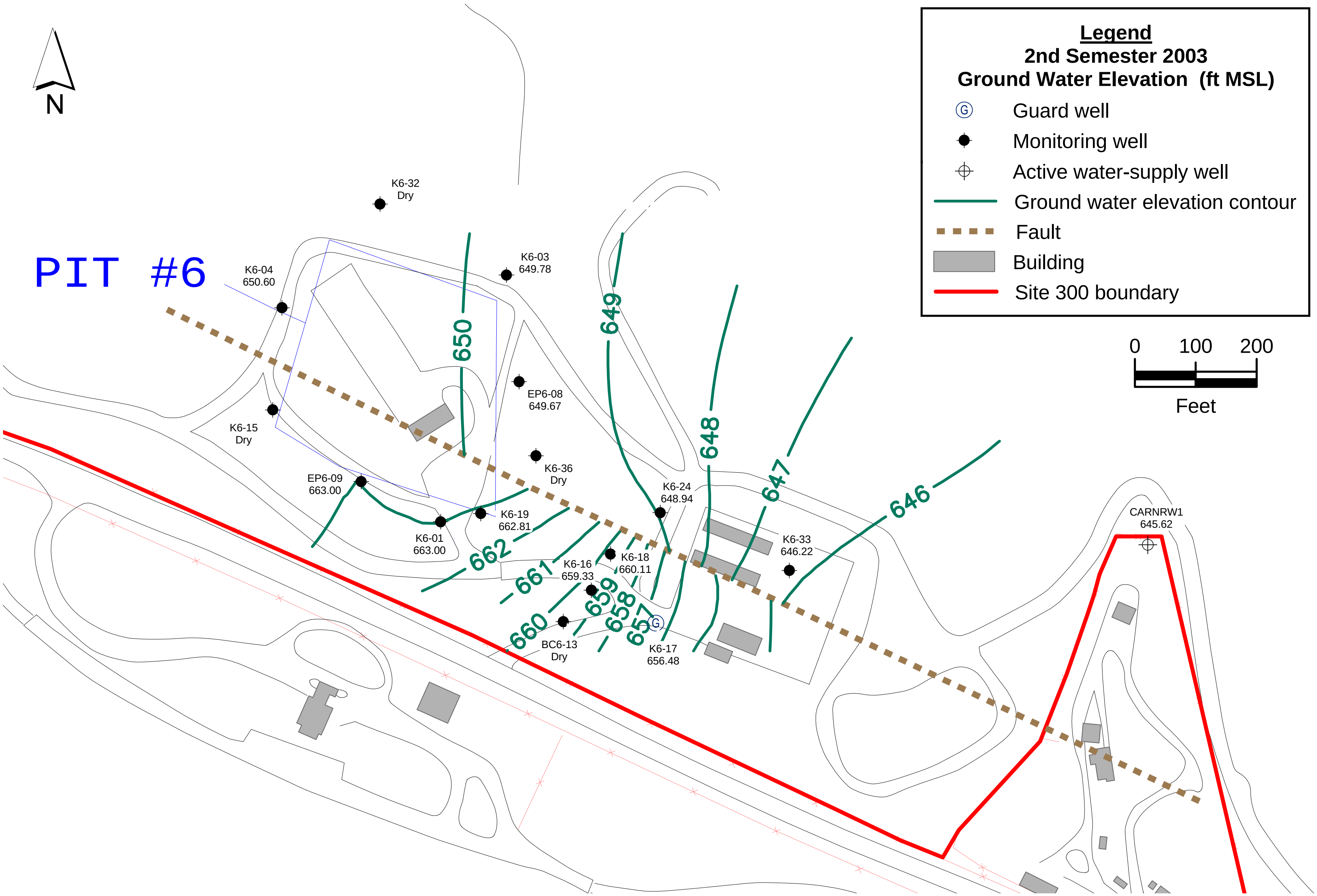



**Figure 2.3-2. Pit 6 Landfill OU ground water potentiometric surface map for the first water-bearing zone.**

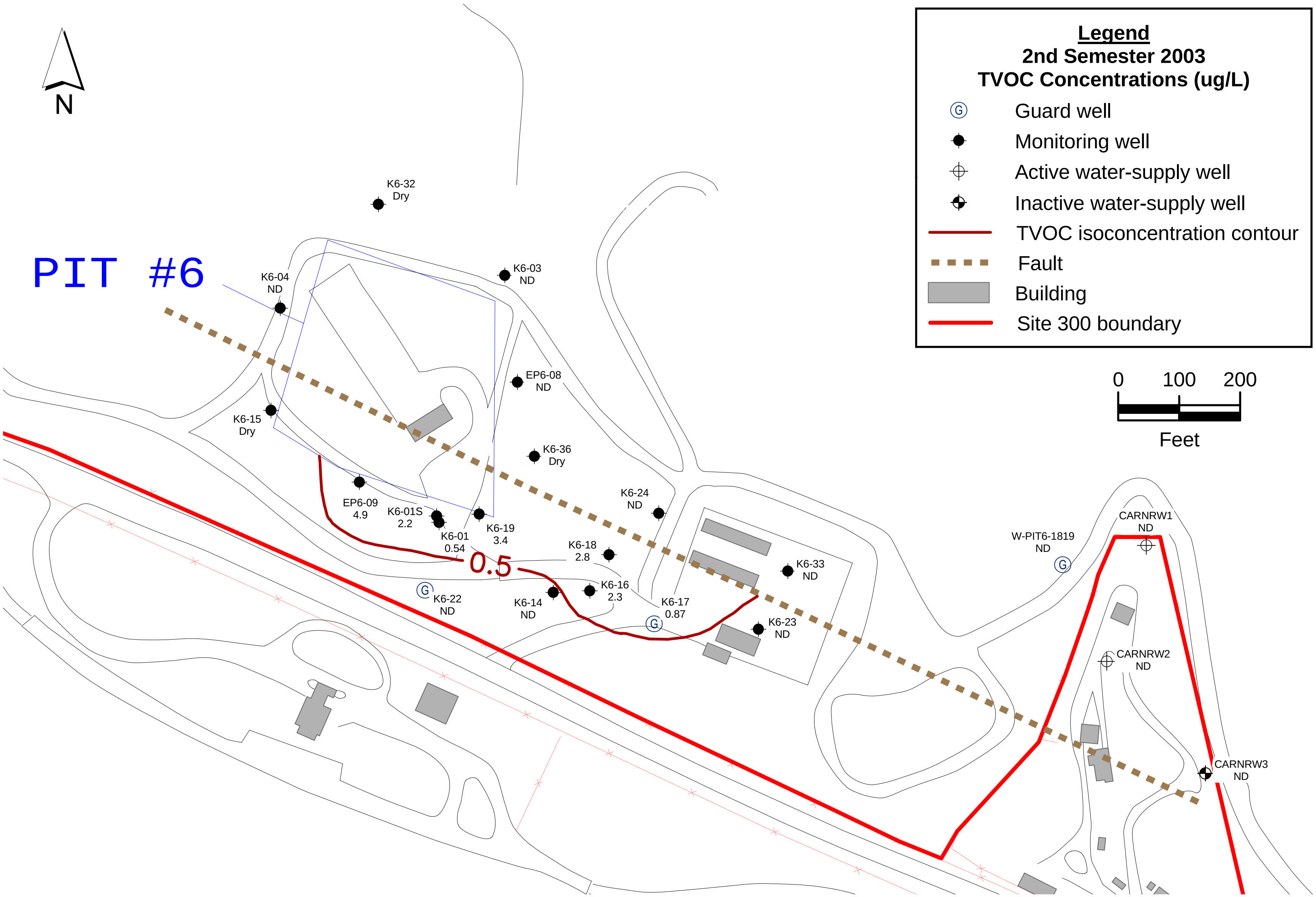



**Figure 2.3-3. Pit 6 Landfill OU TVOC isoconcentration contour map for the first water-bearing zone.**

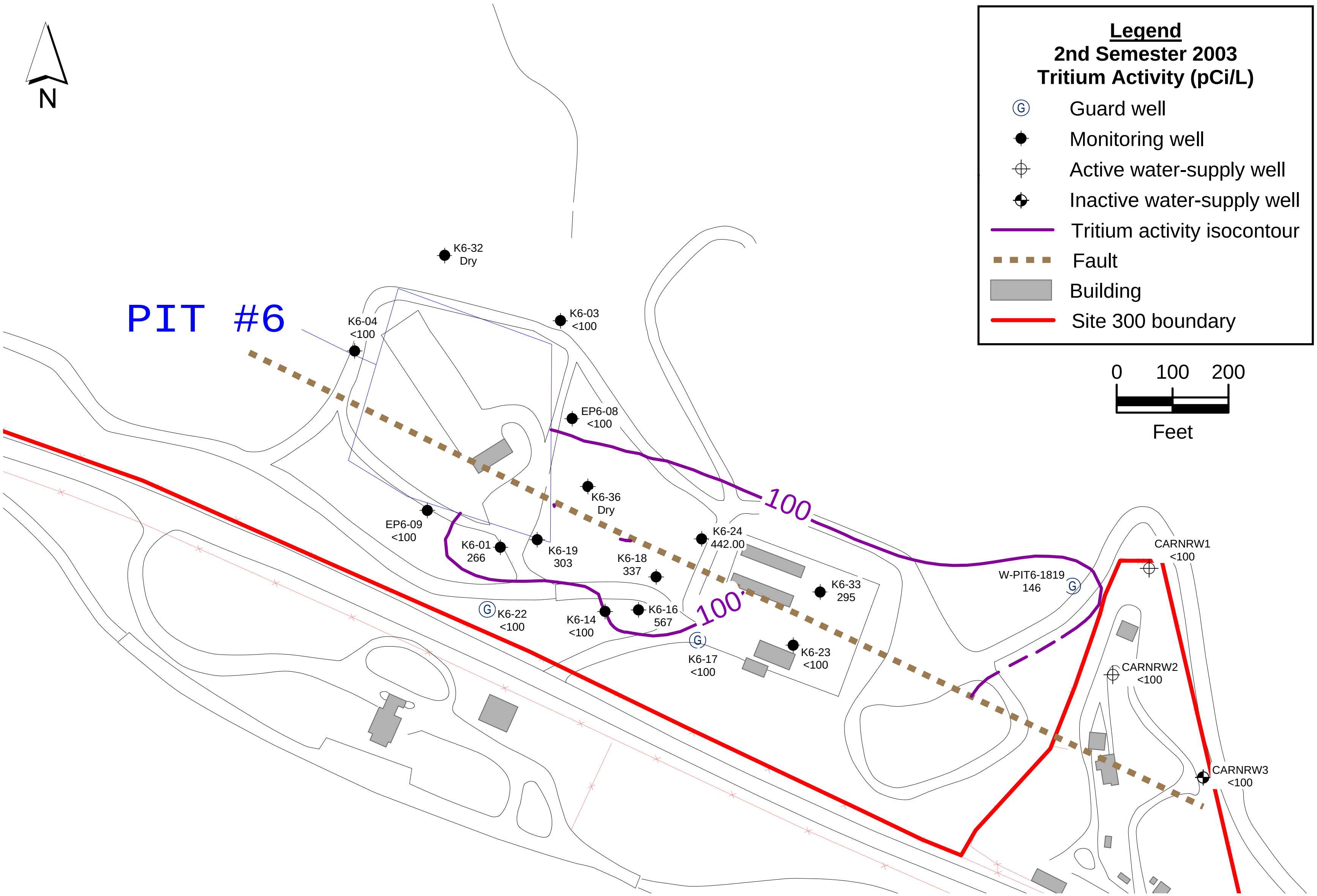



**Figure 2.3-4. Pit 6 Landfill OU tritium isoconcentration contour map for the first water-bearing zone.**

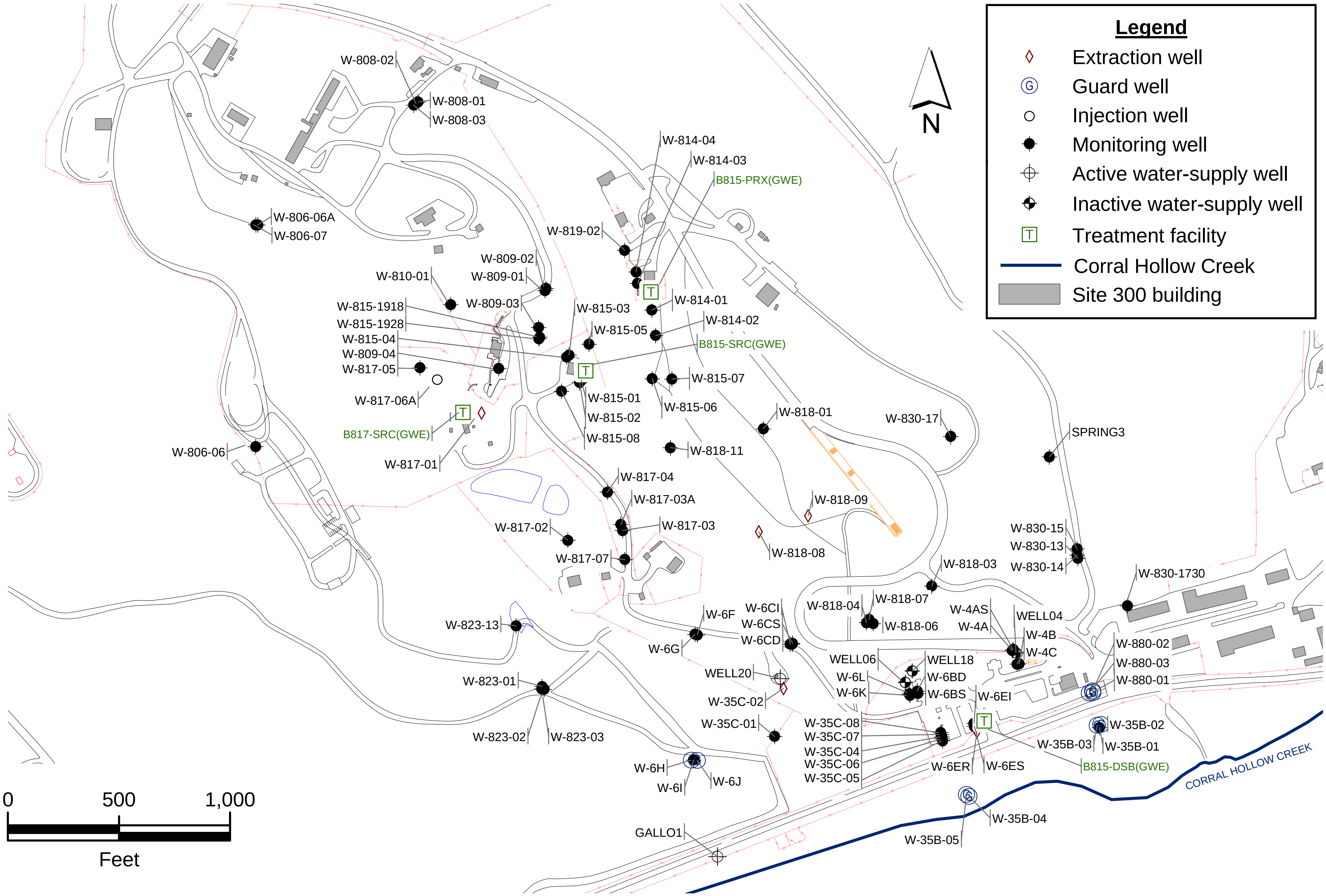



**Figure 2.4-1. High Explosive Process Area OU site map showing monitoring, extraction and water-supply wells, and treatment facilities.**

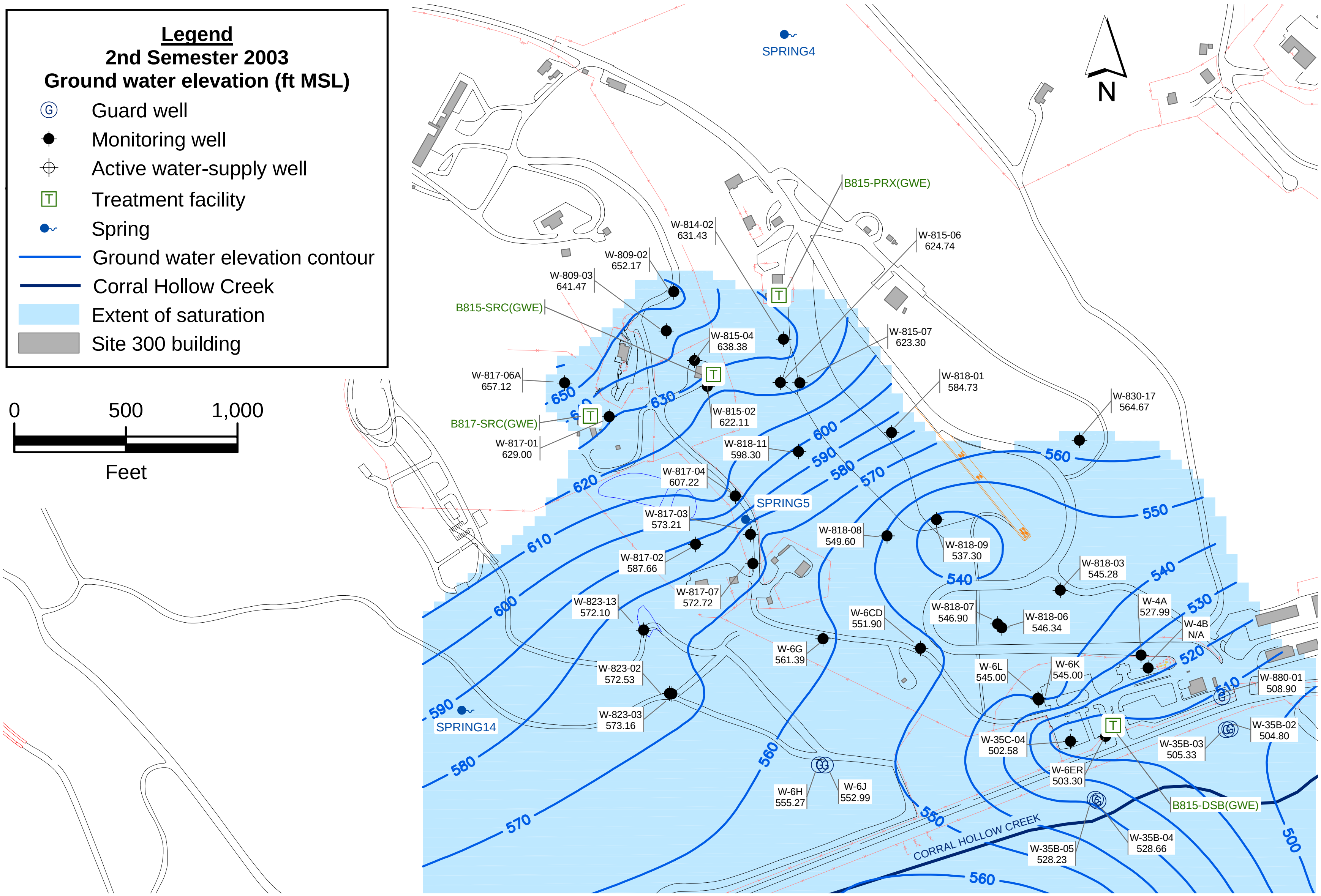



**Figure 2.4-2. High Explosive Process Area OU ground water potentiometric surface map for the Tnbs$_2$ HSU.**

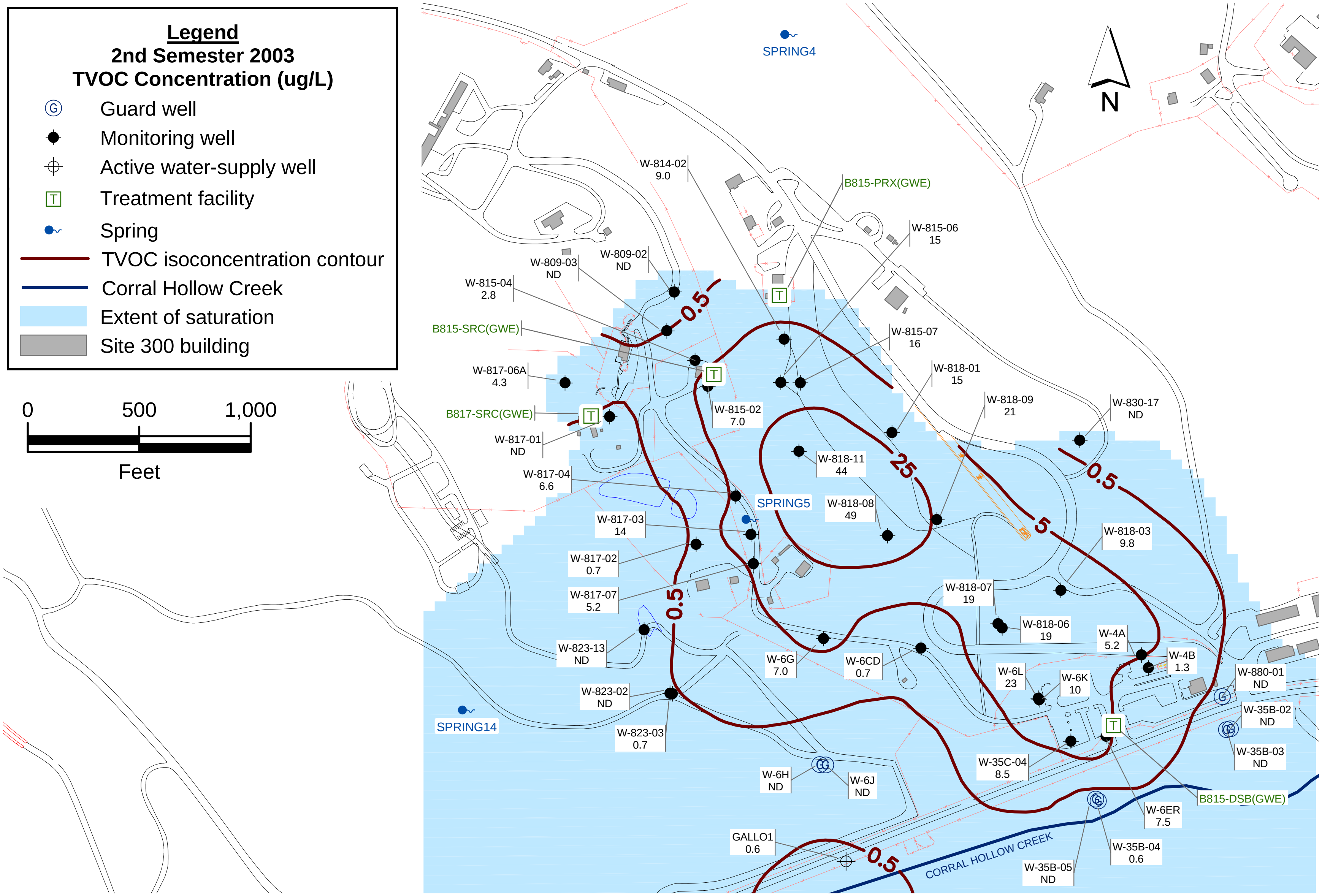



**Figure 2.4-3. High Explosive Process Area TVOC isoconcentration contour map for the Tnbs$_2$ HSU.**

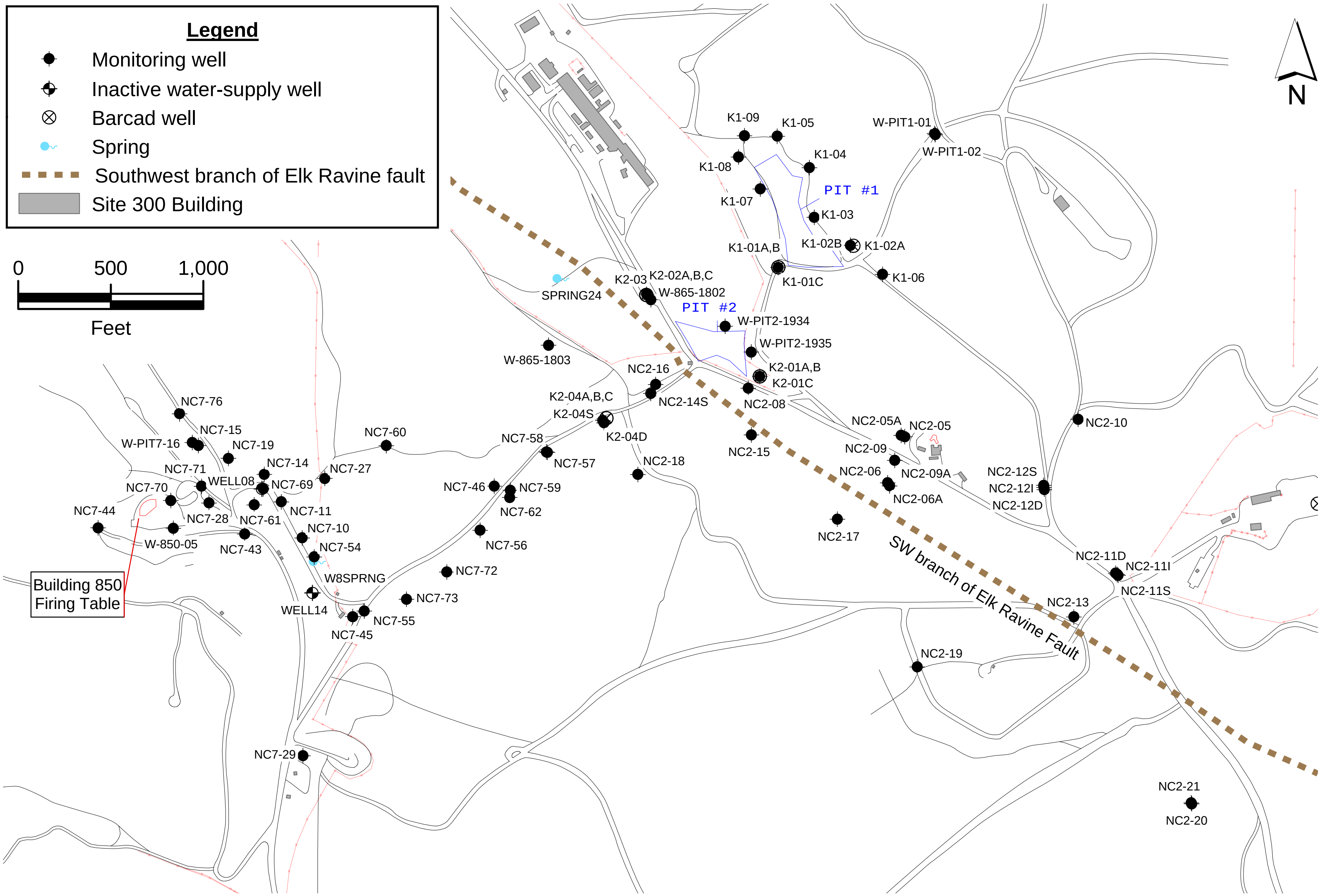



**Figure 2.5-1. Building 850 OU site map showing monitoring wells and springs.**

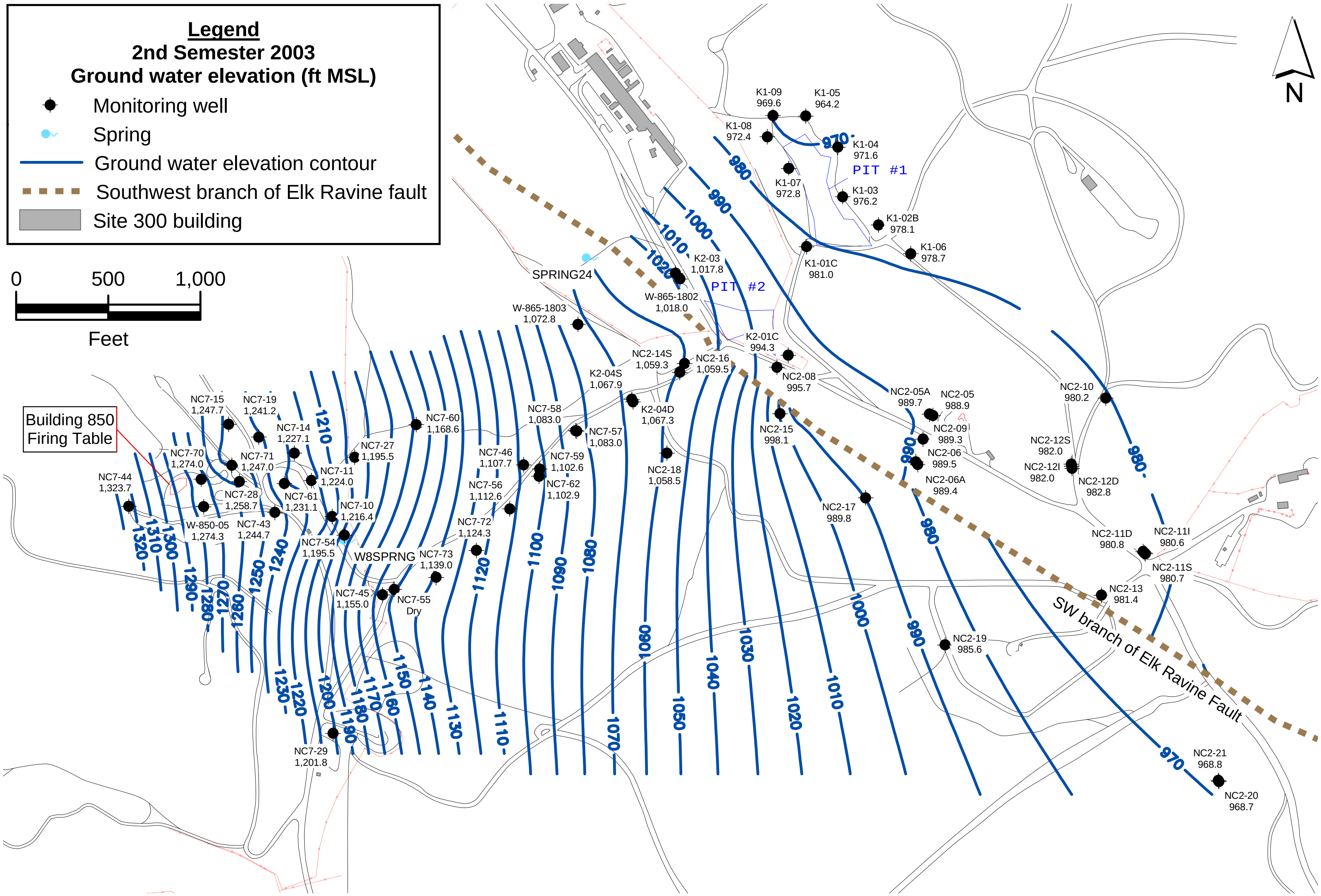



**Figure 2.5-2. Building 850 OU ground water potentiometric surface map for the Qal-Tnbs$_1$ HSU.**

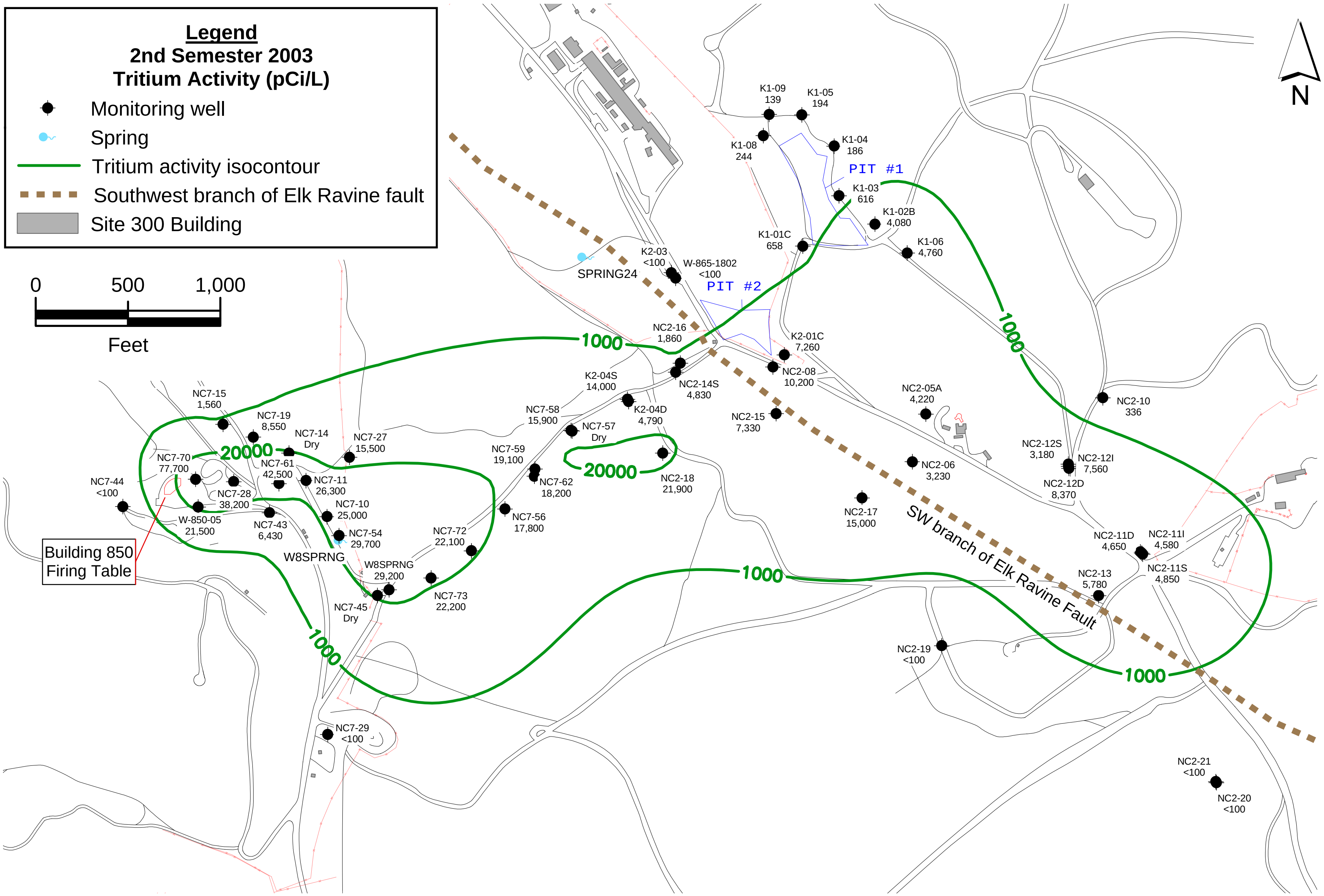



**Figure 2.5-3. Building 850 OU tritium isoconcentration contour map for the Qal-Tnbs$_1$ HSU.**

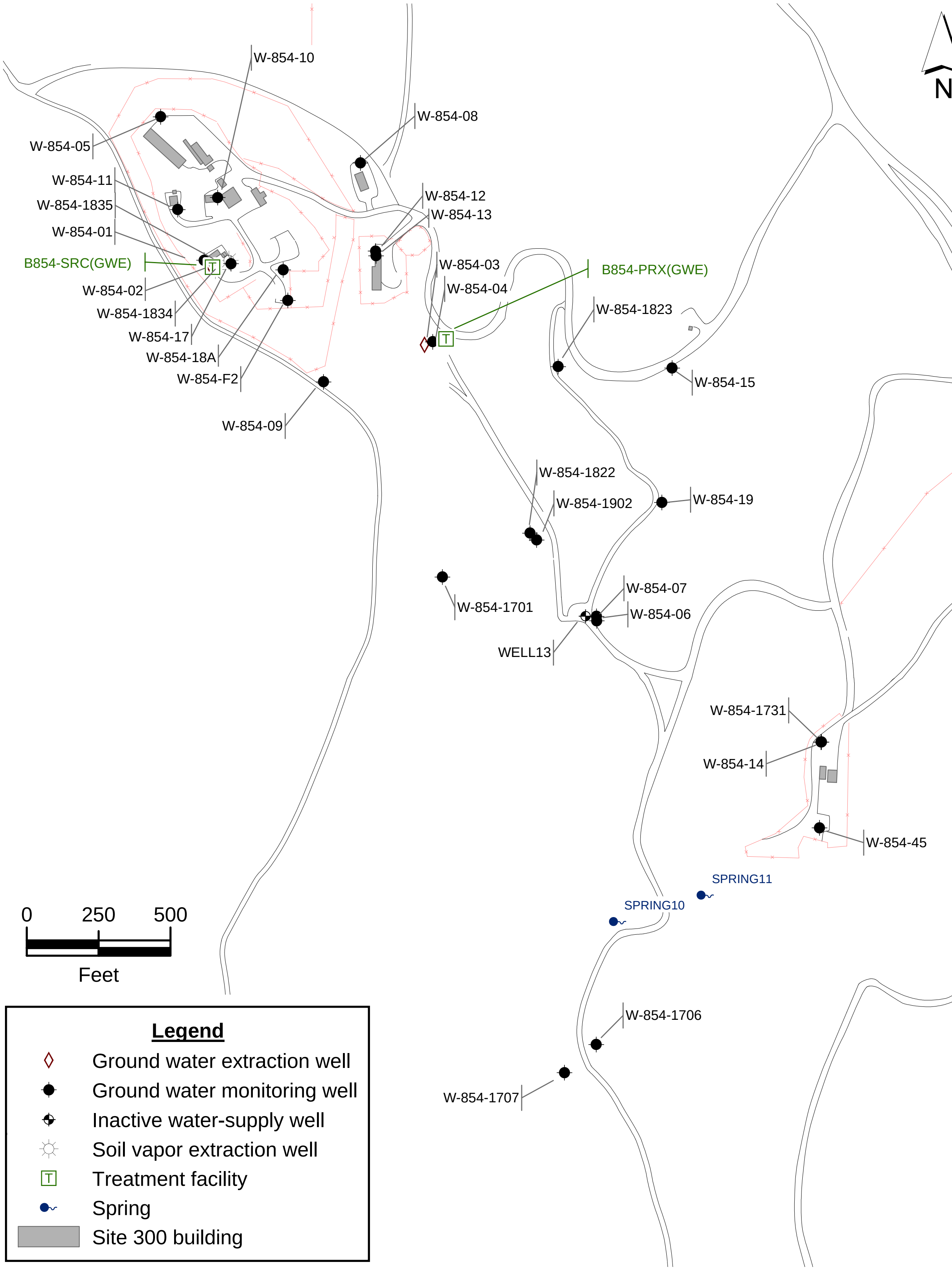



**Figure 2.6-1. Building 854 OU site map showing monitoring and extraction wells, and treatment facilities.**

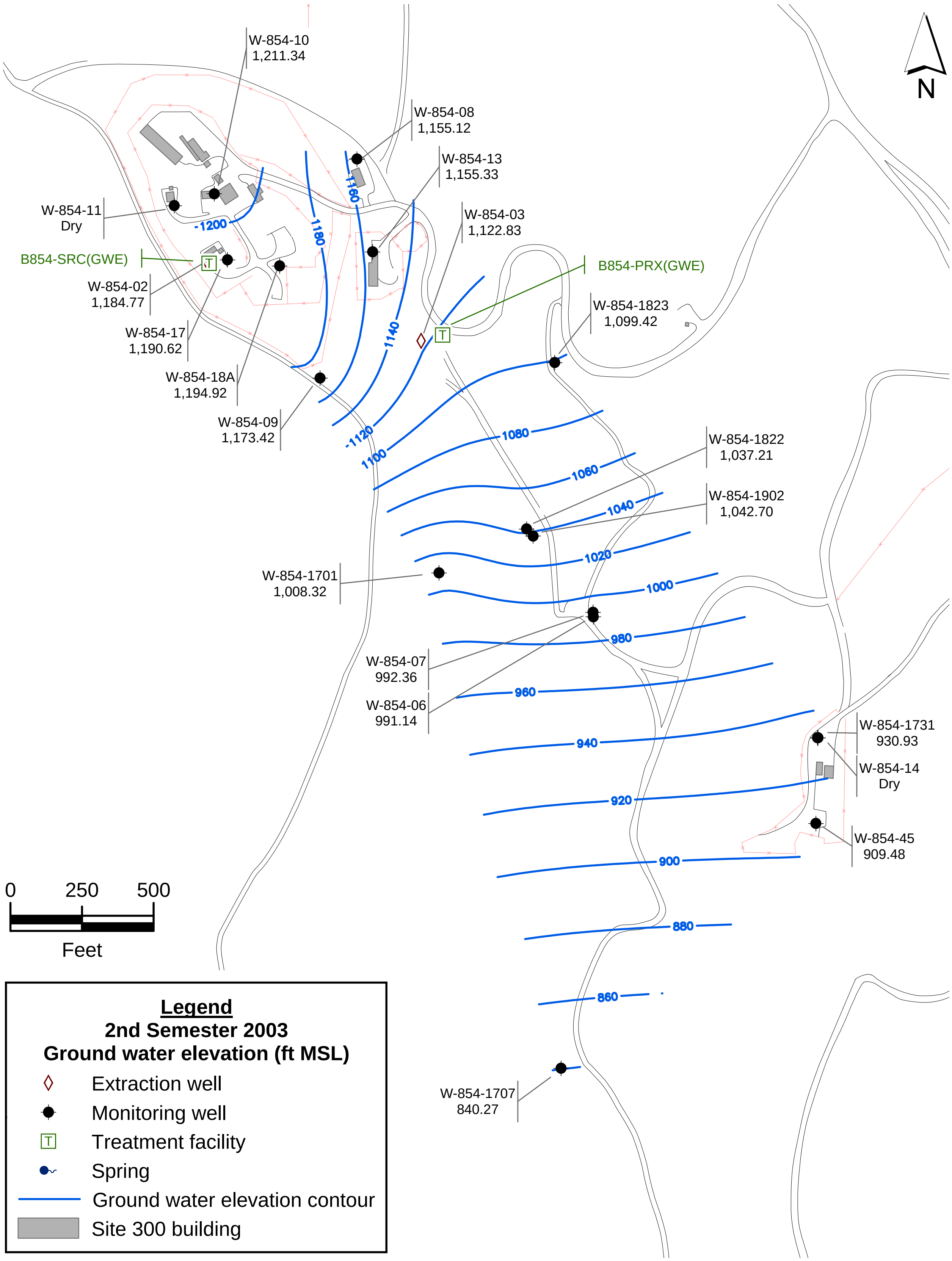



**Figure 2.6-2. Building 854 OU ground water potentiometric surface map for the $Tnbs_0/Tnsc_1$ HSU.**

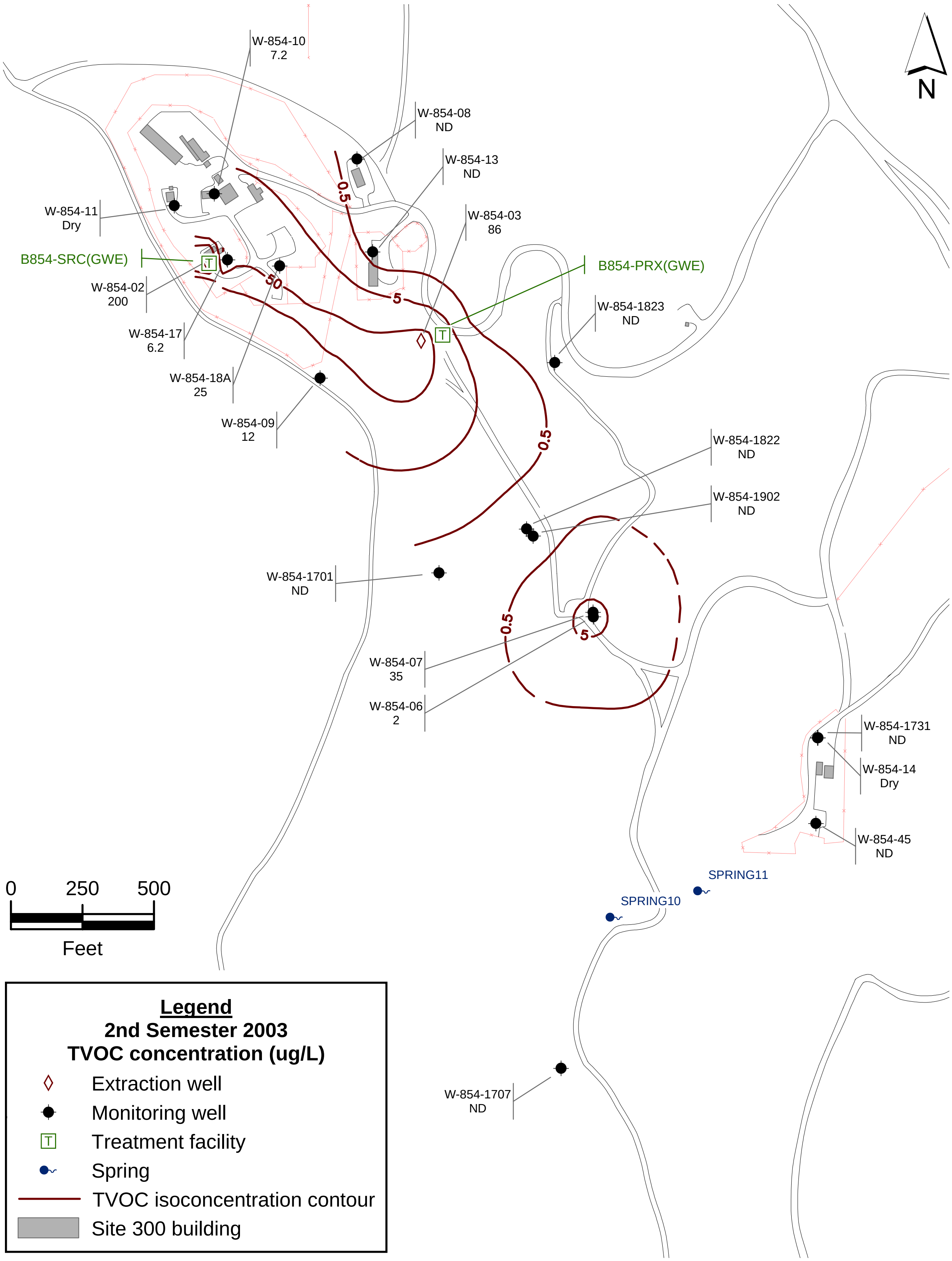
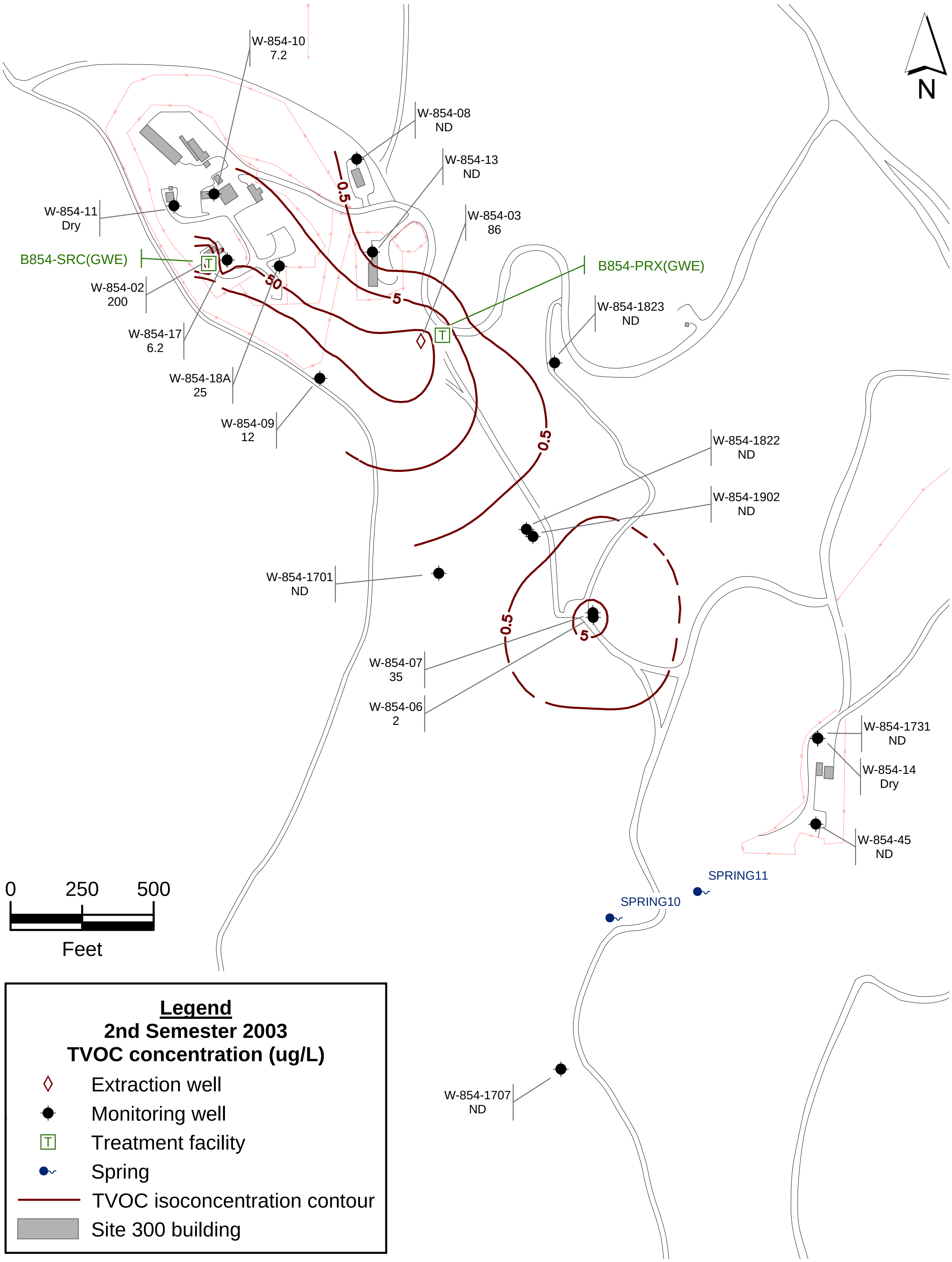



**Figure 2.6-3. Building 854 OU TVOC isoconcentration contour map for the $Tnbs_0$ /$Tnsc_1$ HSU.**

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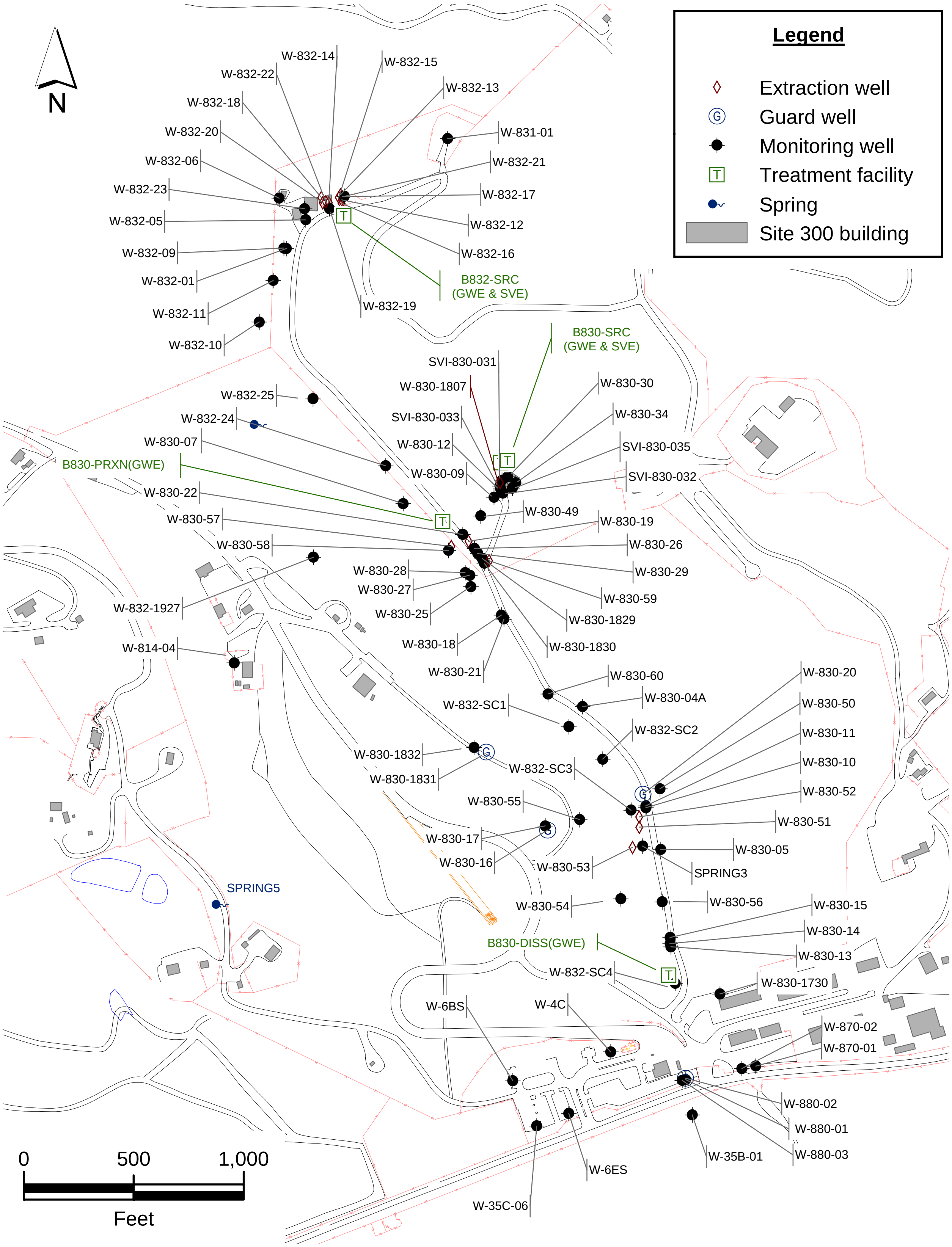


**Figure 2.7-1. Building 832 Canyon OU site map showing monitoring, extraction and water-supply wells, and treatment facilities.**

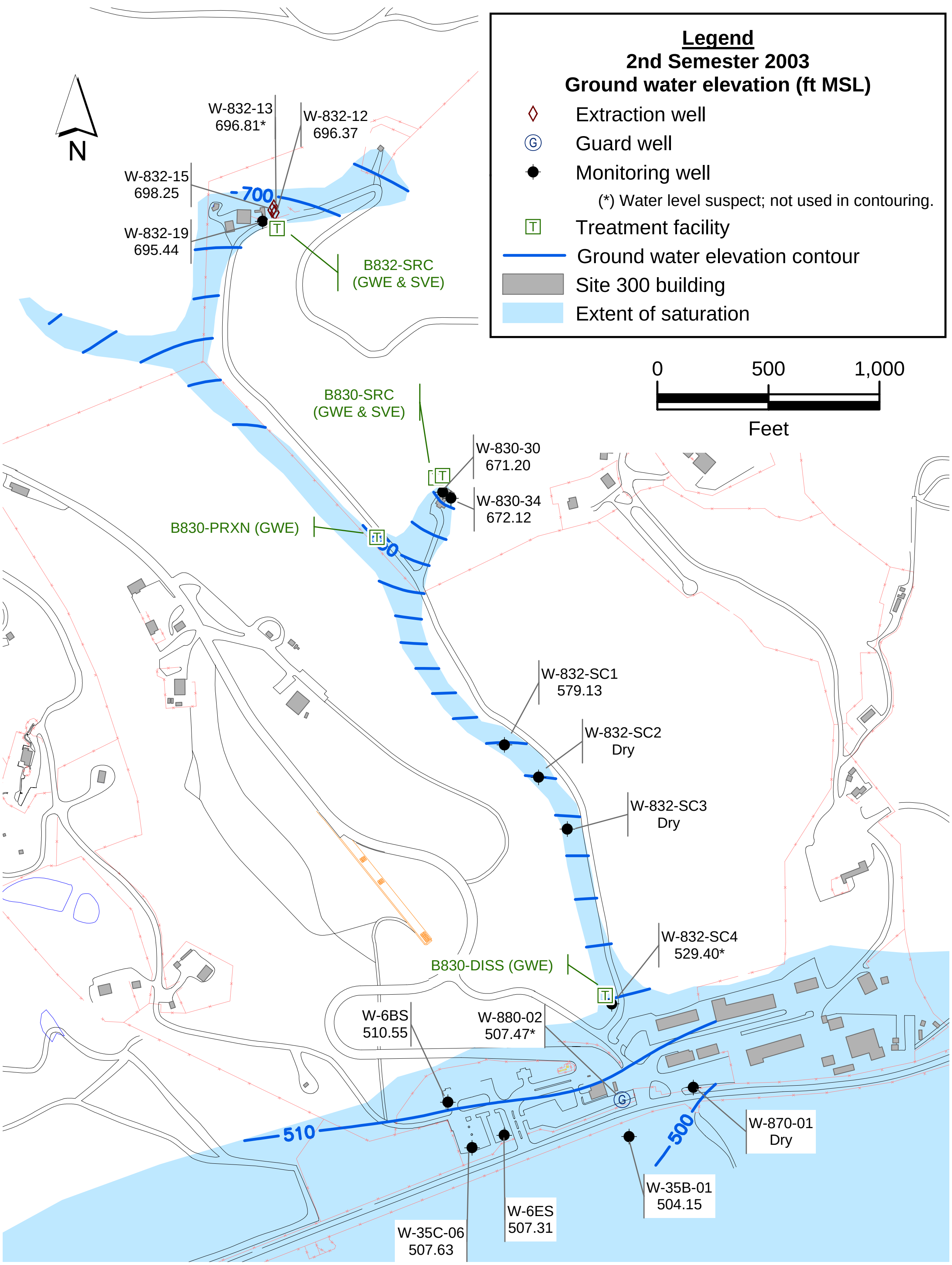


**Figure 2.7-2. Building 832 Canyon OU ground water potentiometric surface map for the Qal /Fill.**

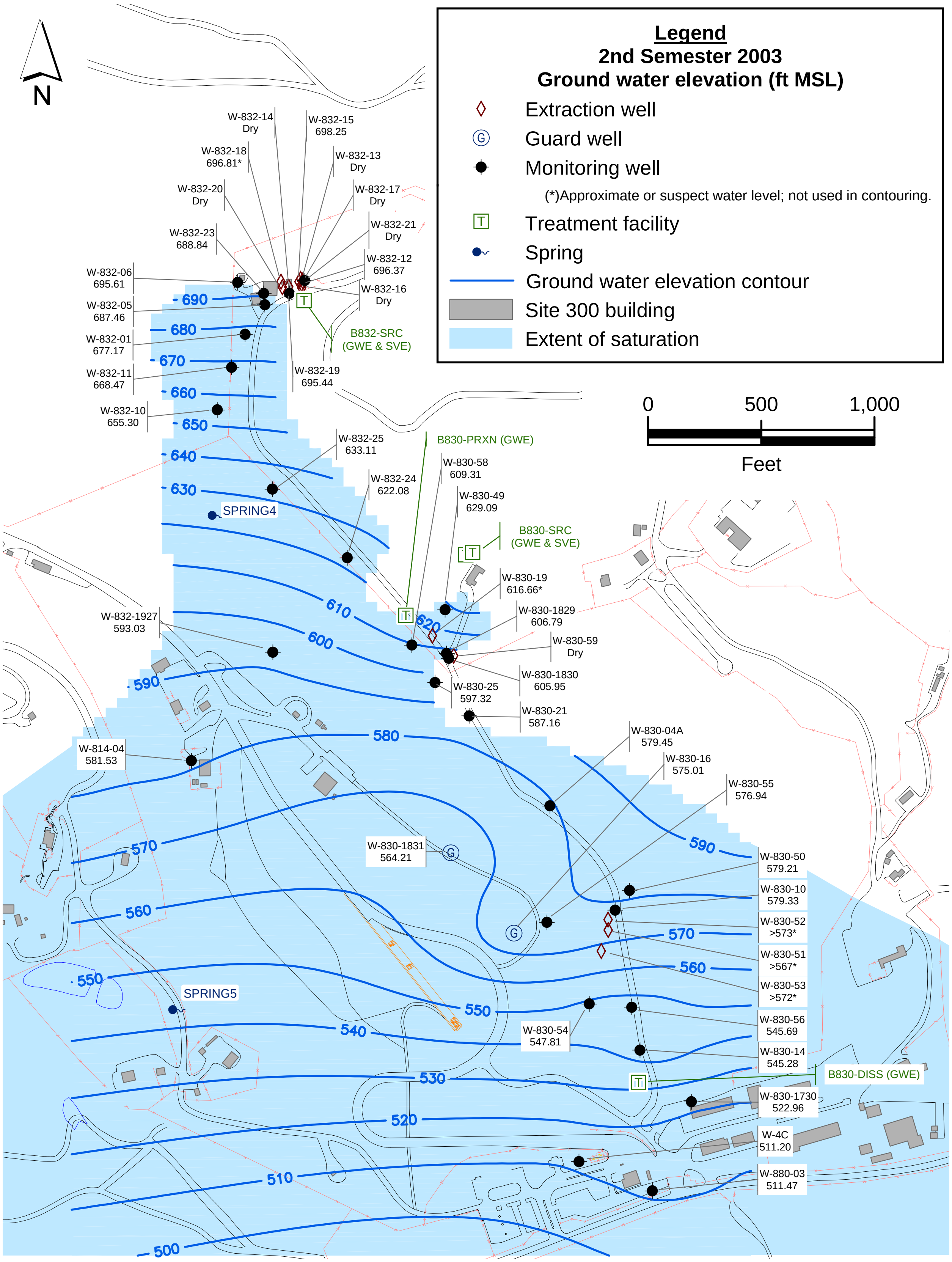


**Figure 2.7-3. Building 832 Canyon OU ground water potentiometric surface map for the $Tnsc_{1b}$ HSU.**

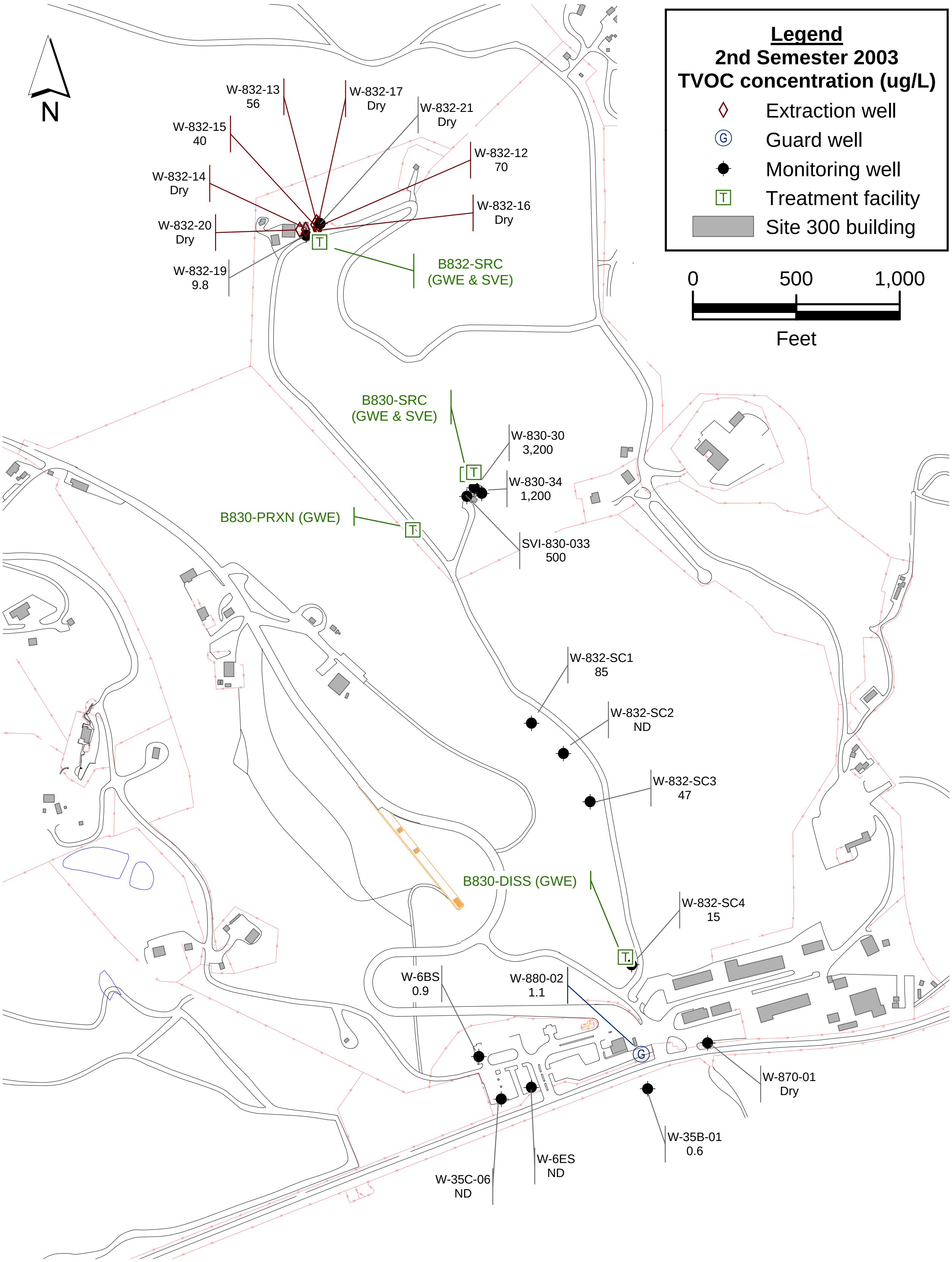


**Figure 2.7-4. Building 832 Canyon OU map showing TVOC concentrations for the Qal /Fill.**

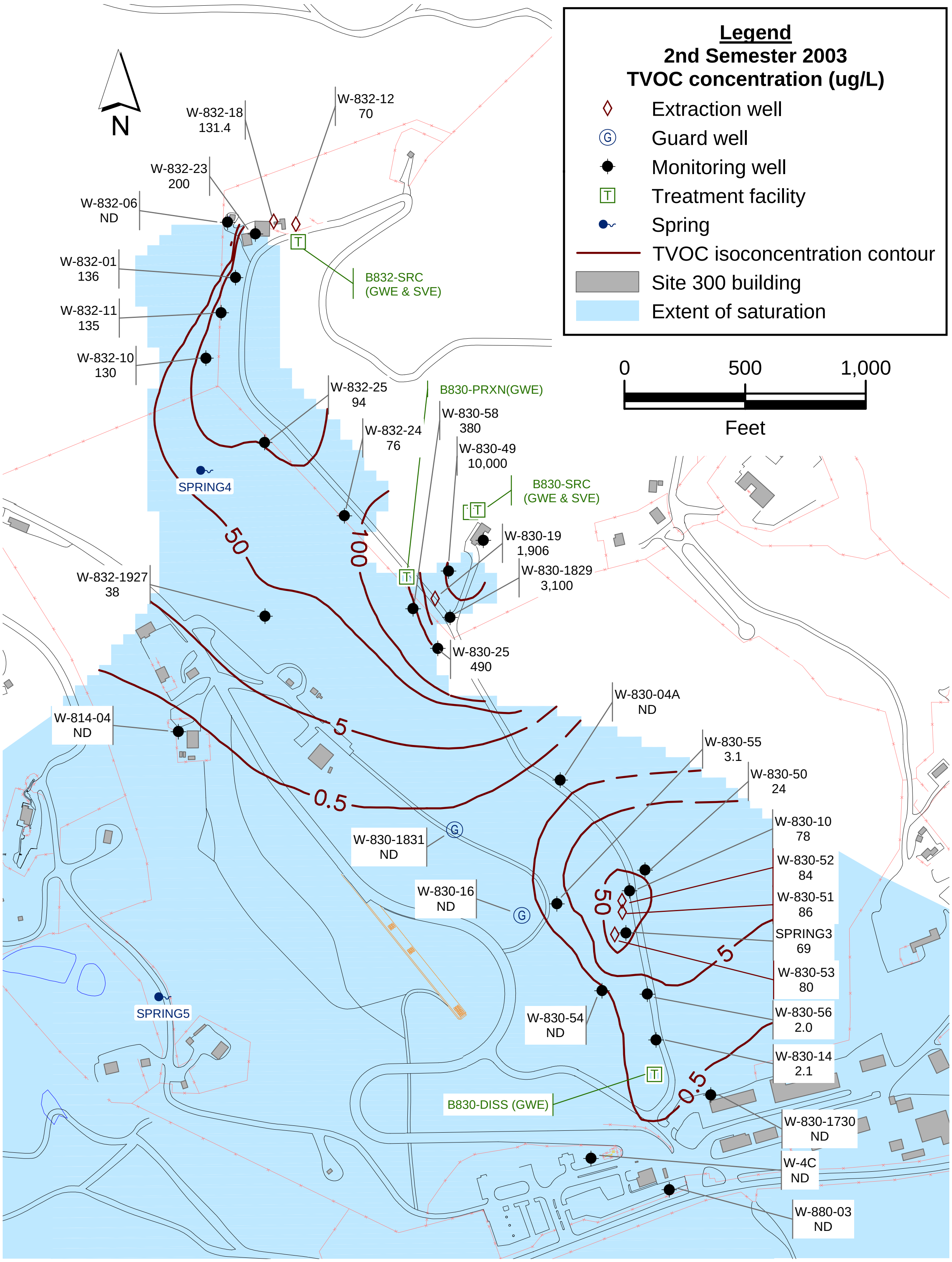


**Figure 2.7-5. Building 832 Canyon OU TVOC isoconcentration contour map for the Tnsc$_{1b}$ HSU.**

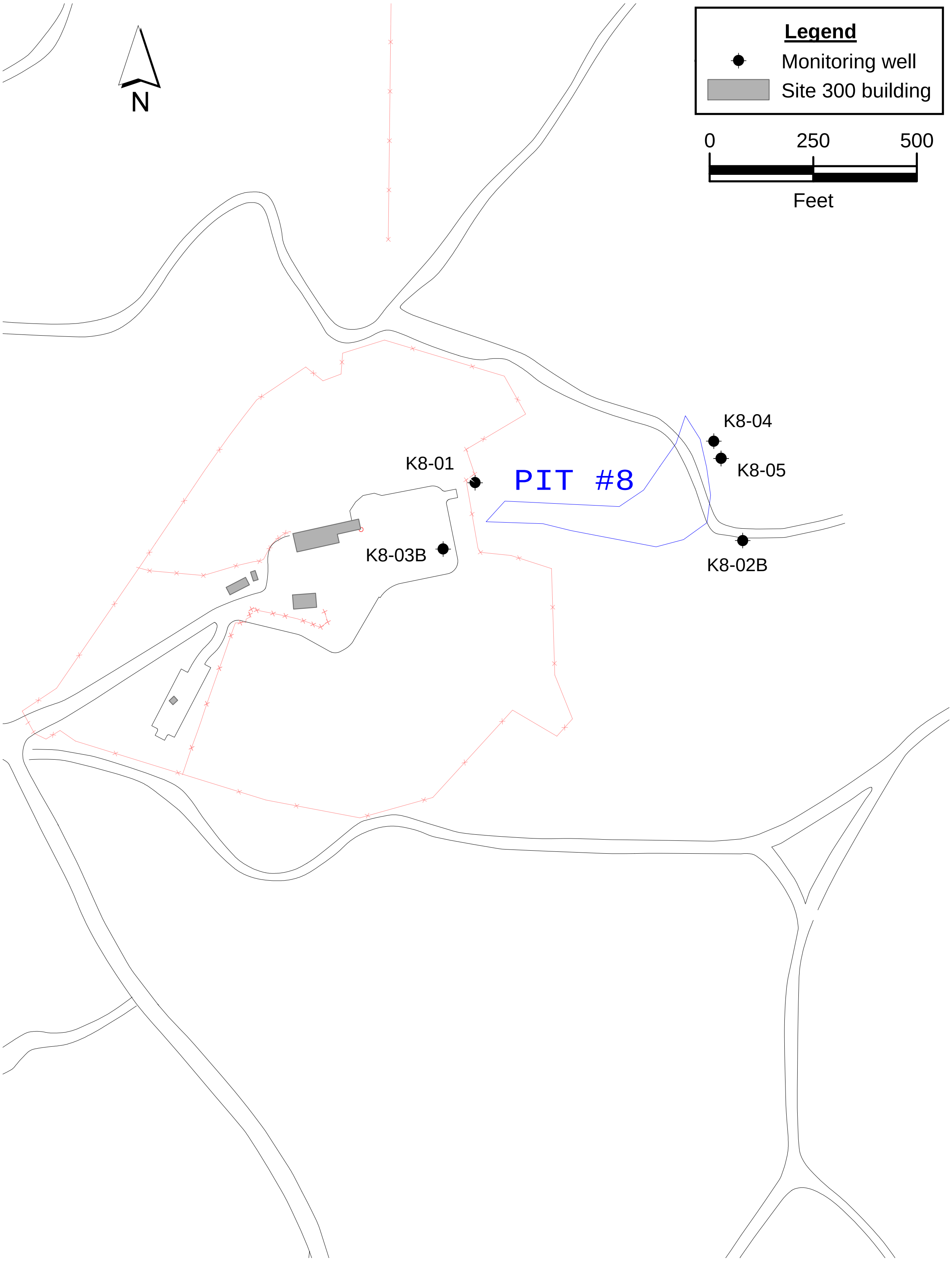


**Figure 2.8-1. Building 801 Firing Table and Pit 8 Landfill site map showing monitoring wells.**

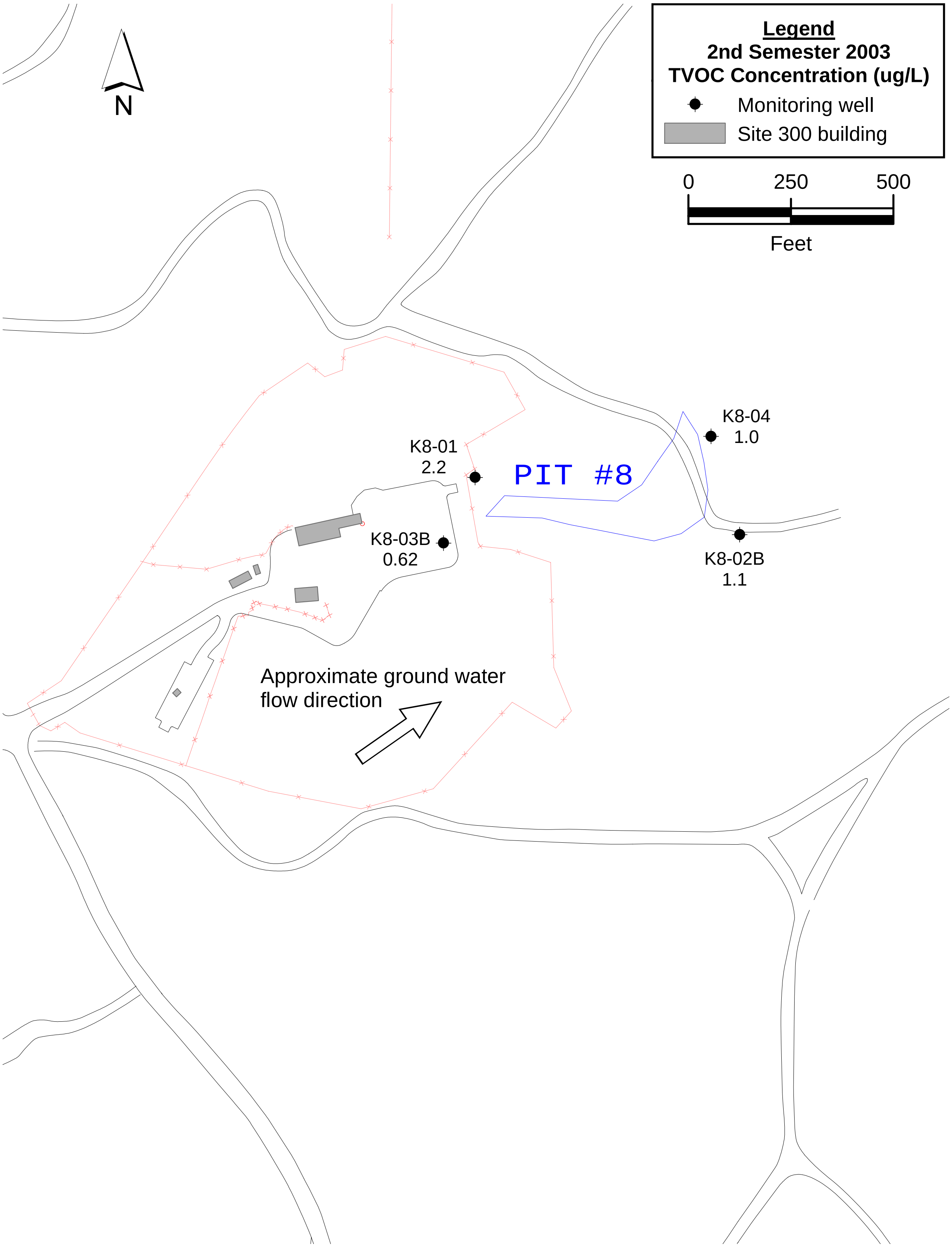


**Figure 2.8-2. Building 801 Firing Table and Pit 8 Landfill site map showing TVOC concentrations in $Tnbs_1$ HSU wells.**

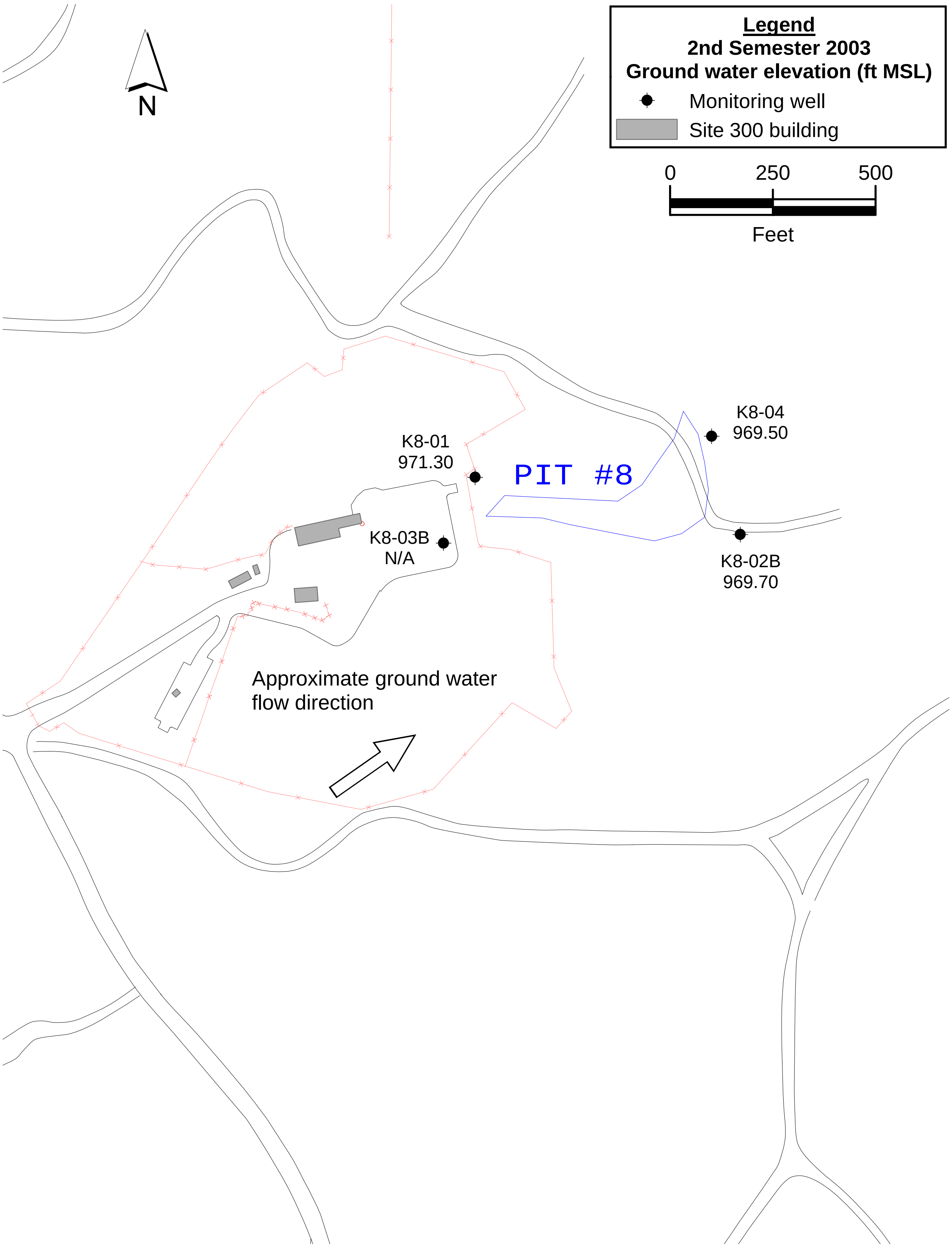


**Figure 2.8-3. Building 801 Firing Table and Pit 8 Landfill site map showing ground water elevations and hydraulic gradient direction in the Tnbs$_1$ HSU.**

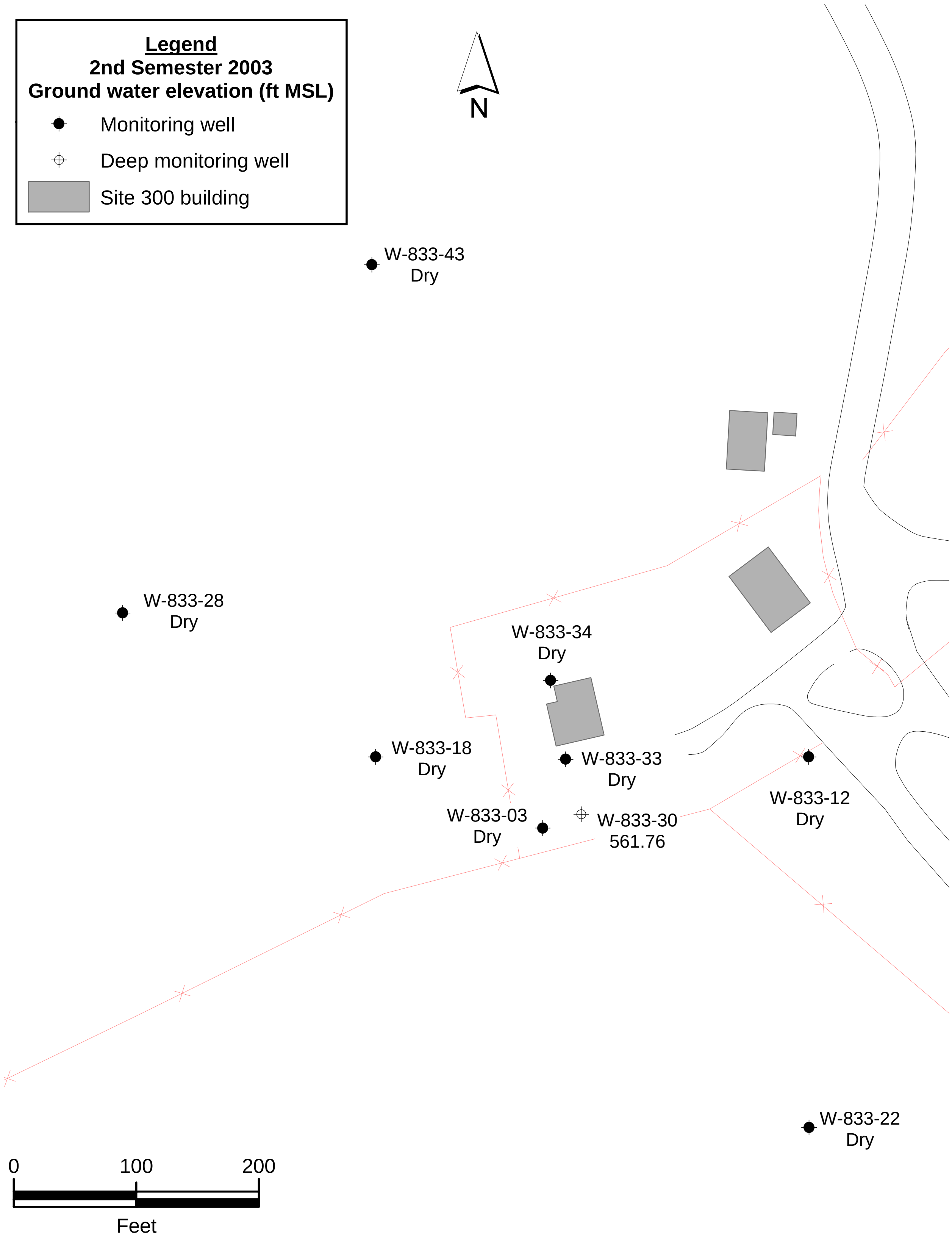


**Figure 2.8-4. Building 833 site map showing monitoring wells.**

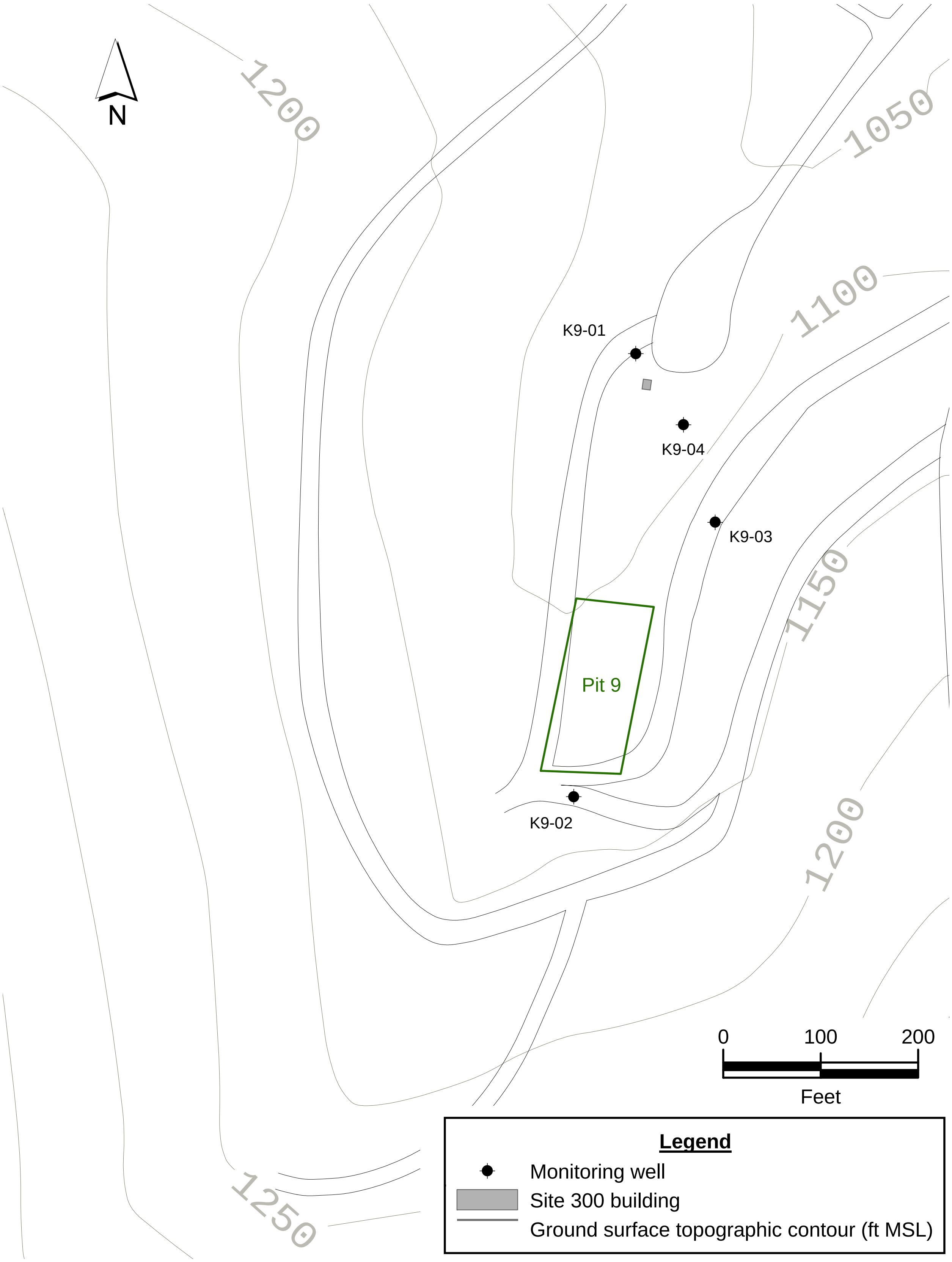


**Figure 2.8-5. Building 845 Firing Table and Pit 9 Landfill site map showing monitoring wells.**

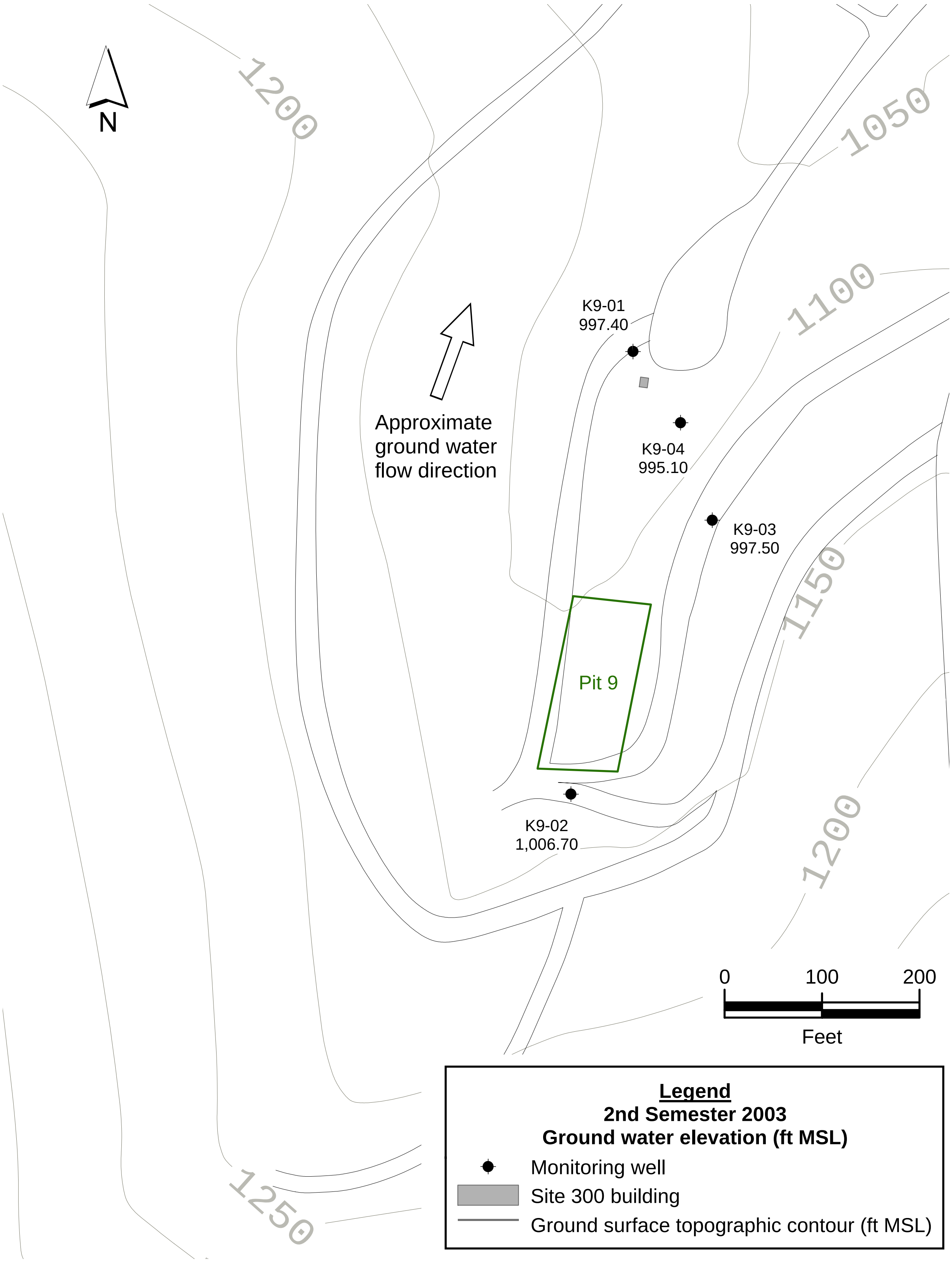


**Figure 2.8-6. Building 845 Firing Table and Pit 9 Landfill site map showing ground water elevations and hydraulic gradient direction in the Tnsc$_0$ HSU.**

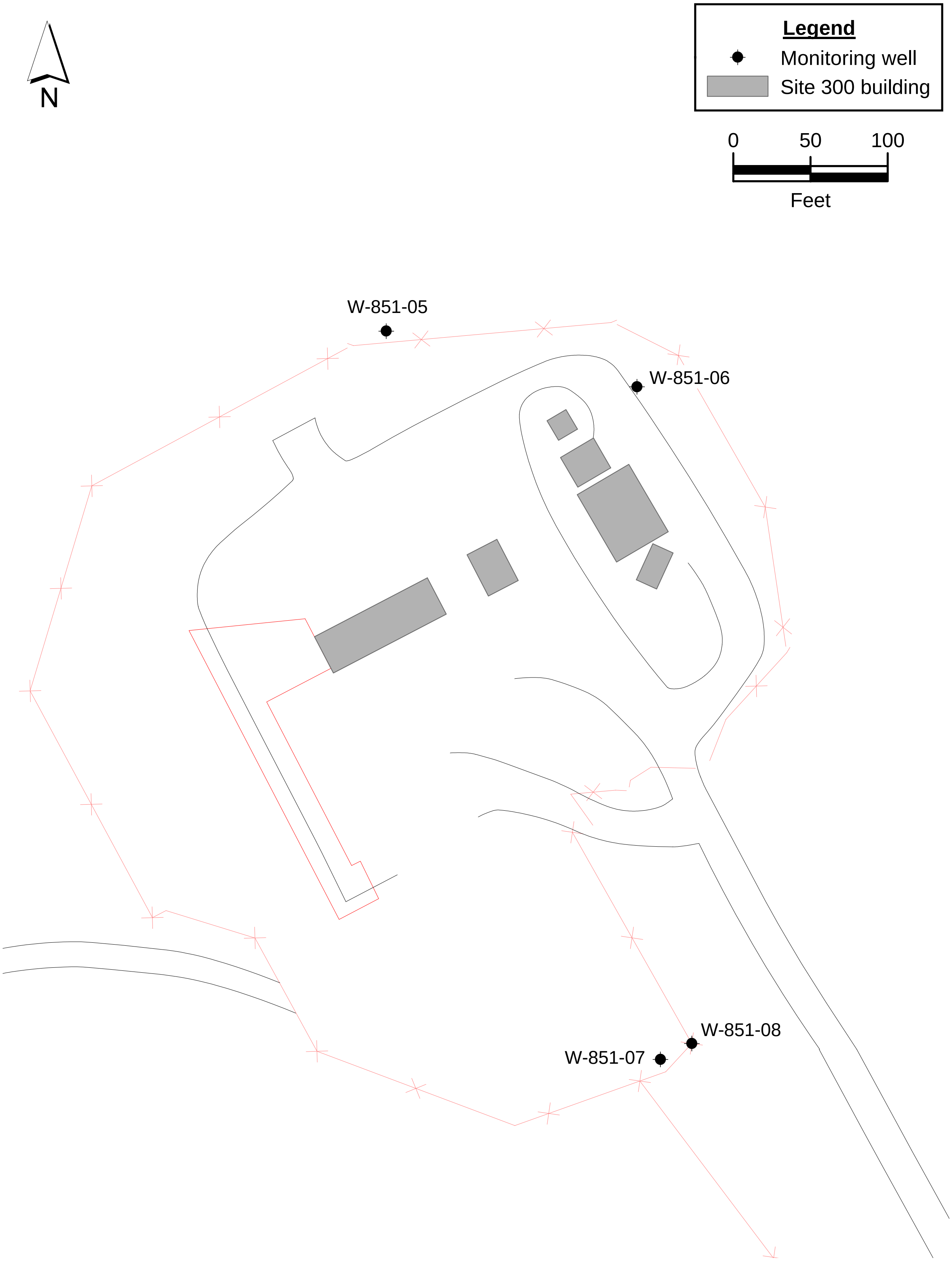


**Figure 2.8-7. Building 851 Firing Table site map showing monitoring wells.**

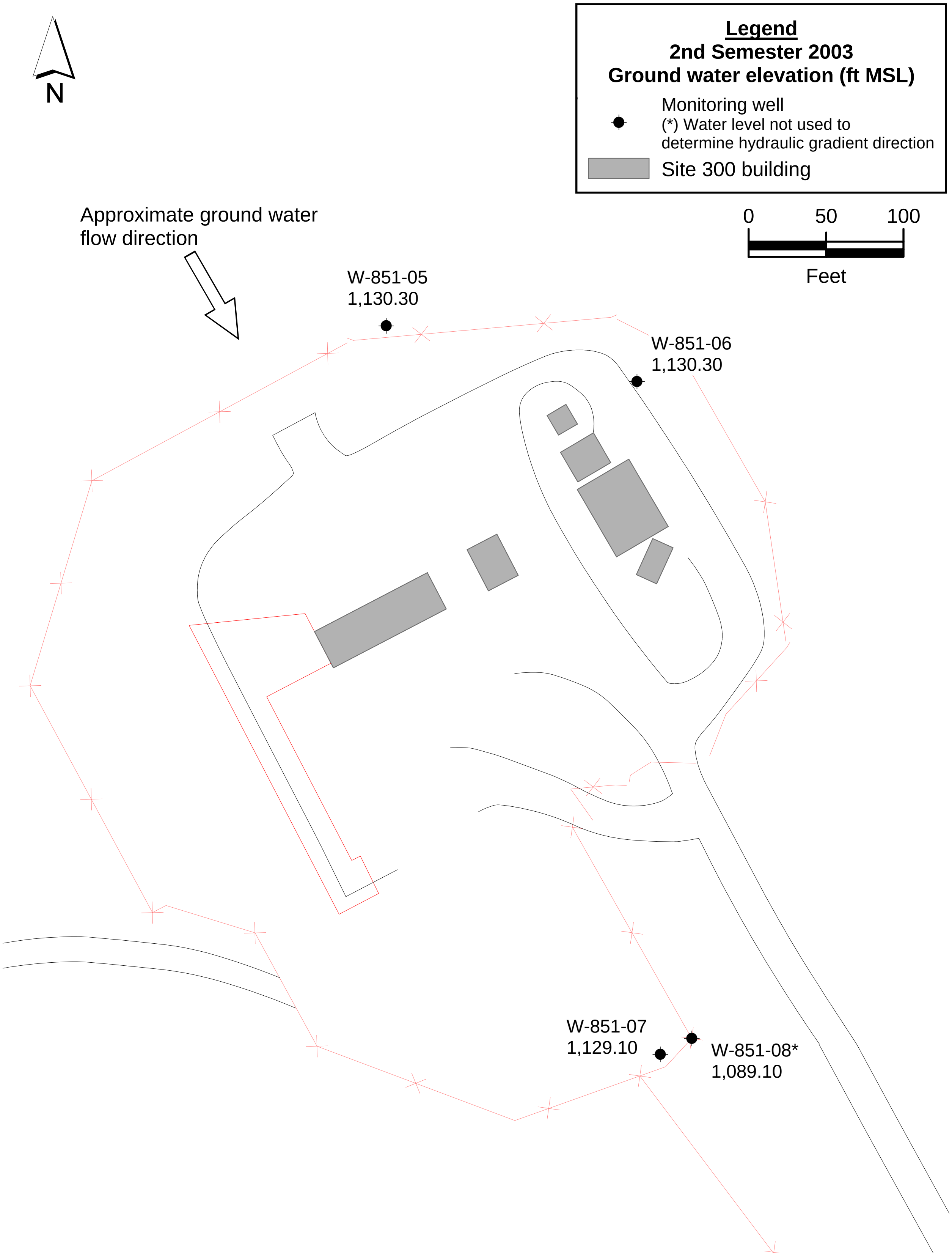


**Figure 2.8-8. Building 851 Firing Table site map showing ground water elevations and hydraulic gradient direction in the Tmss HSU.**

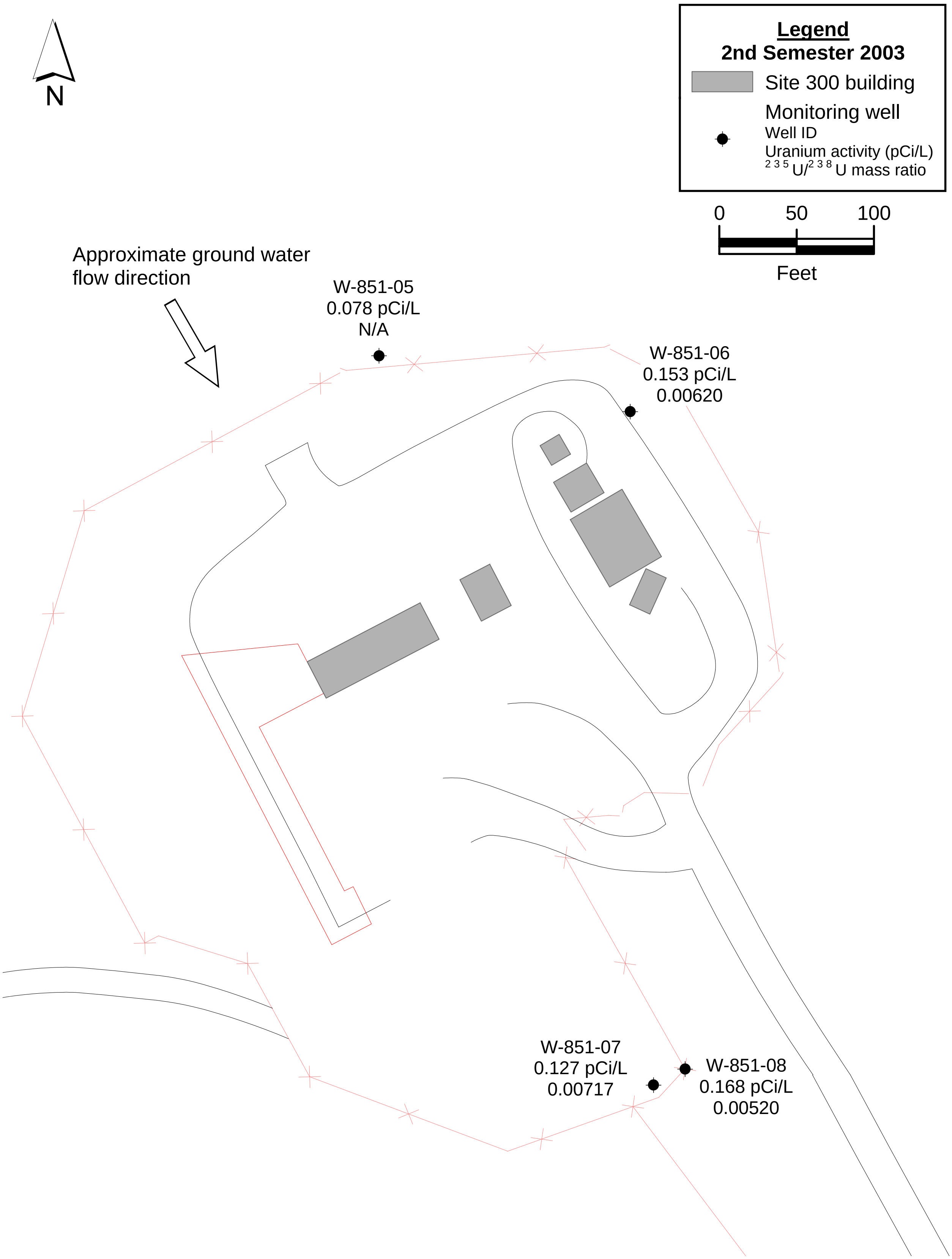


**Figure 2.8-9. Building 851 Firing Table site map showing total uranium activities and $^{235}U/^{238}U$ isotope mass ratios in ground water samples from Tmss HSU wells.**

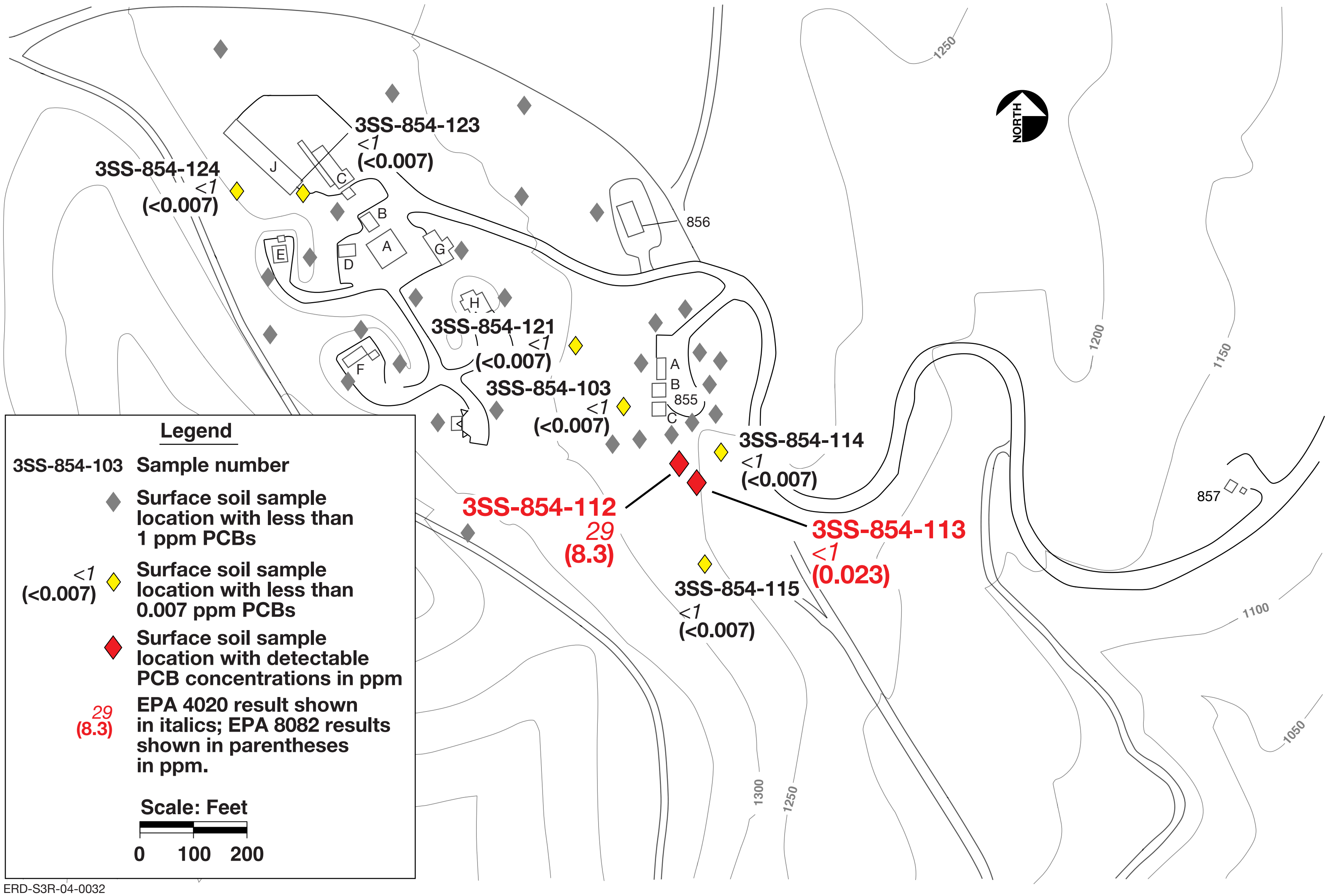


Figure 4.1-1. Surface soil sample locations collected during January 2003 in the Building 854 OU.

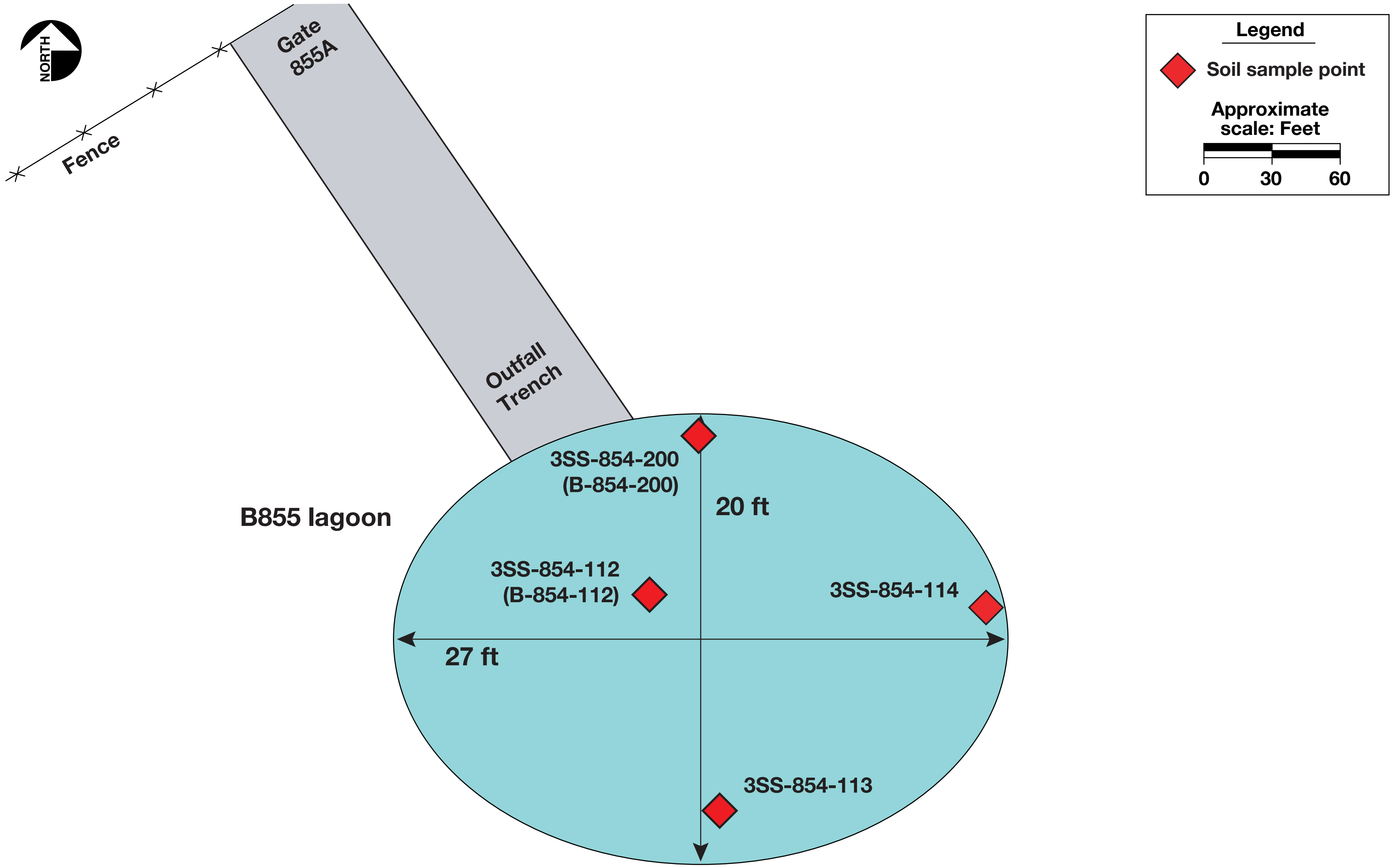


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**Figure 4.1-2. Surface soil sample locations collected in the Building 855 former disposal lagoon in the Building 854 OU.**

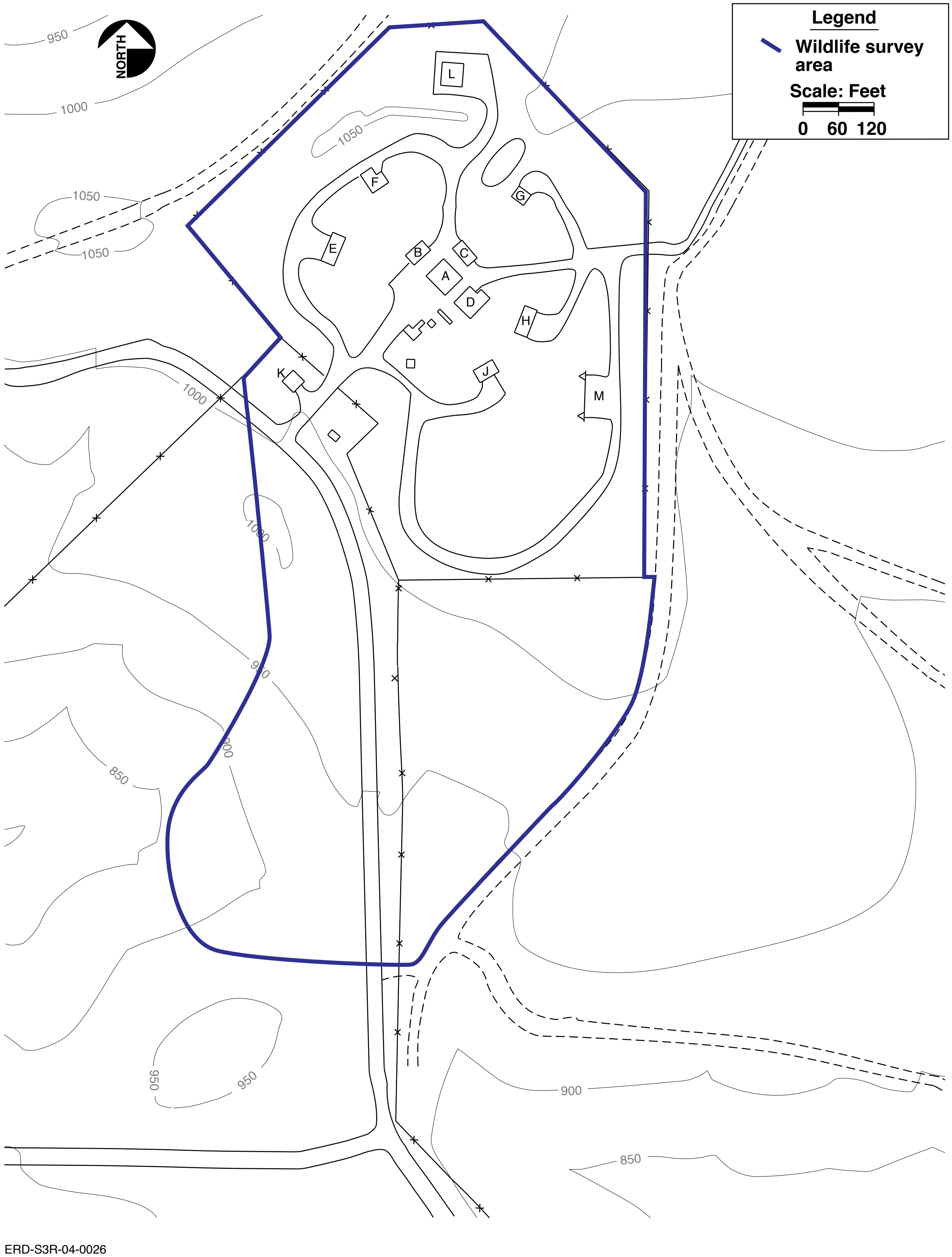


**Figure 4.2-1. Area surveyed for important burrowing species at Building 834.**

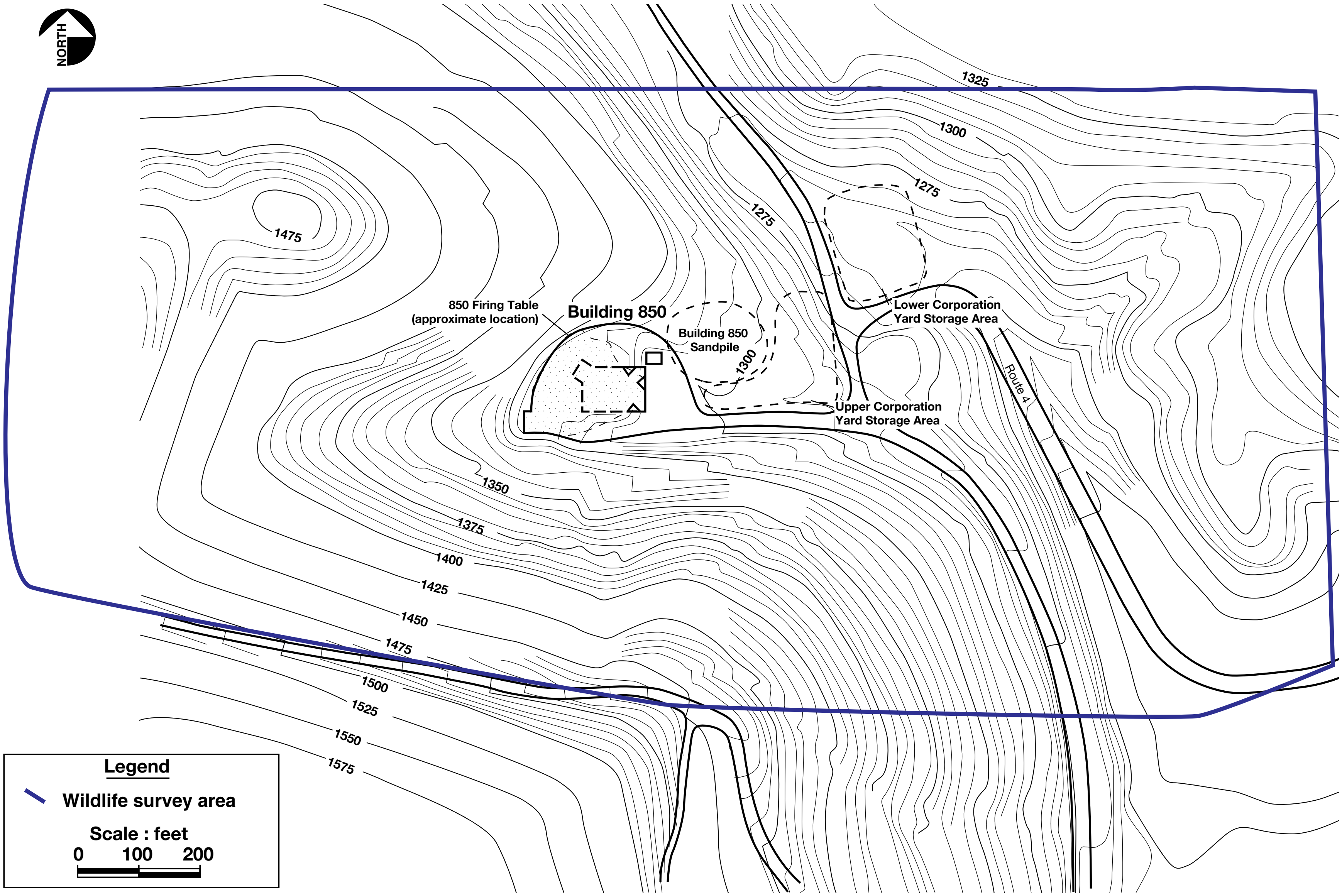


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**Figure 4.2-2. Area surveyed for important burrowing species at Building 850.**

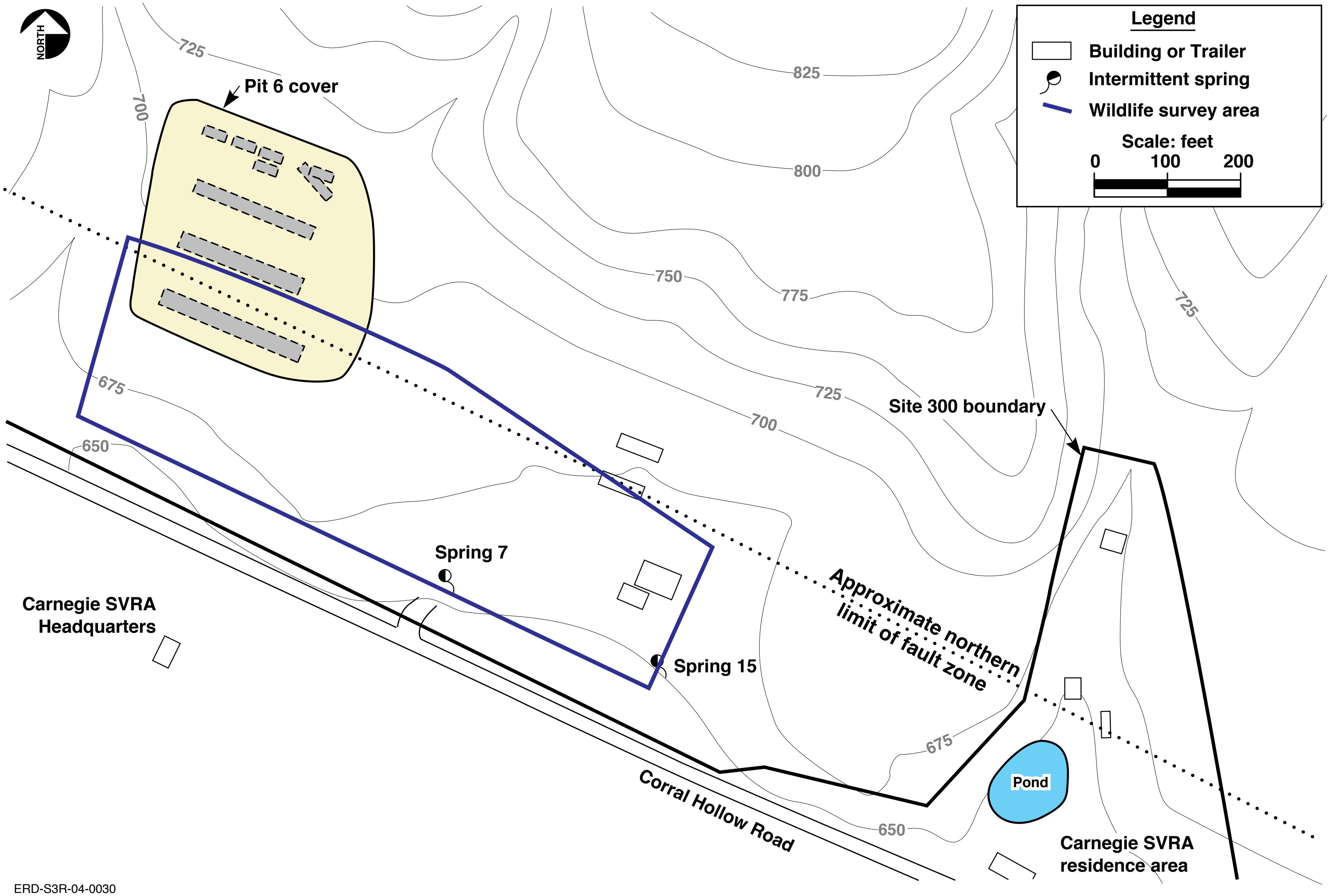


Figure 4.2-3. Area surveyed for important burrowing species at Pit 6.


**Figure 4.2-4. Burrow air sampling locations at Bldg 834.**

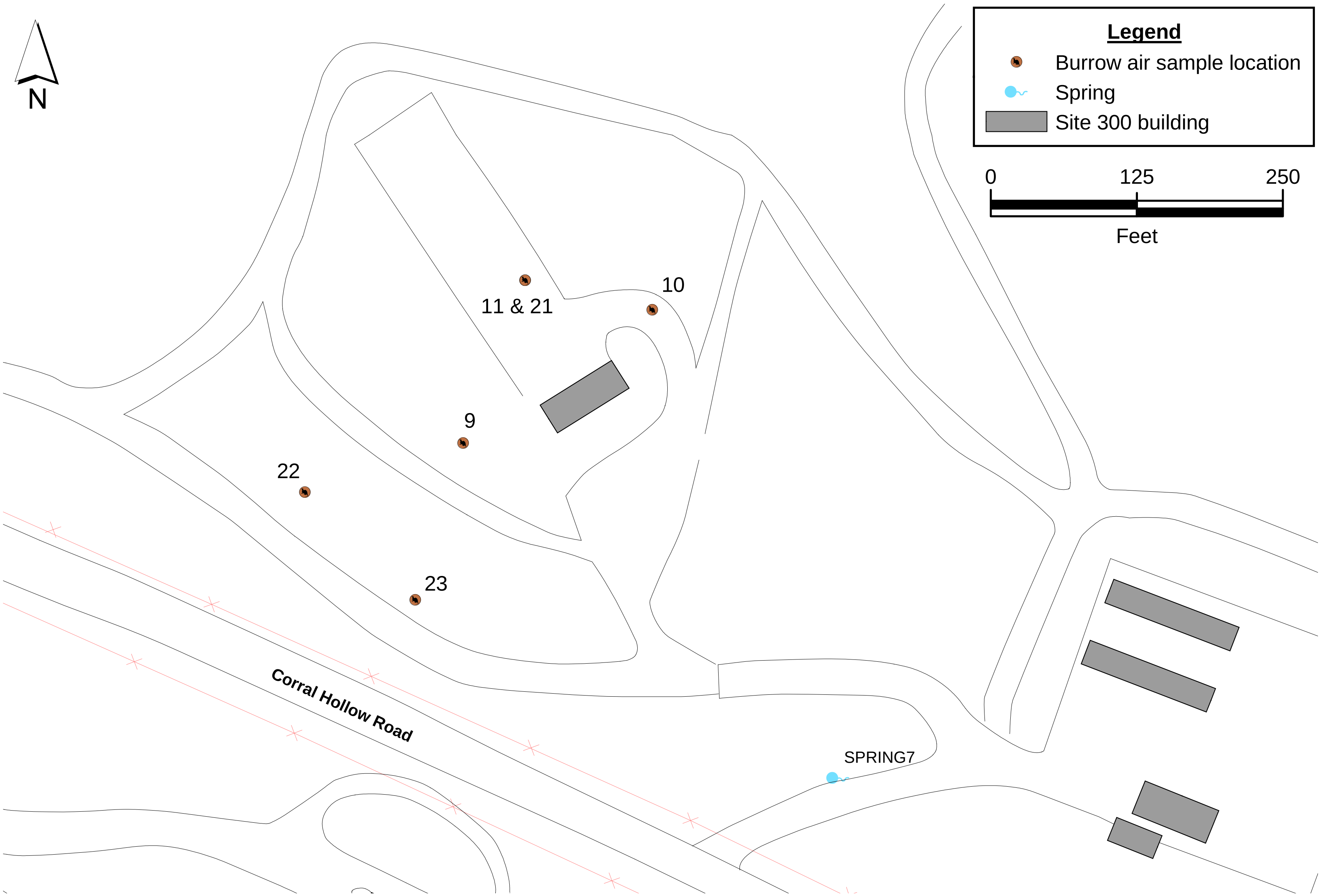


**Figure 4.2-5. Burrow air sampling locations at Pit 6.**

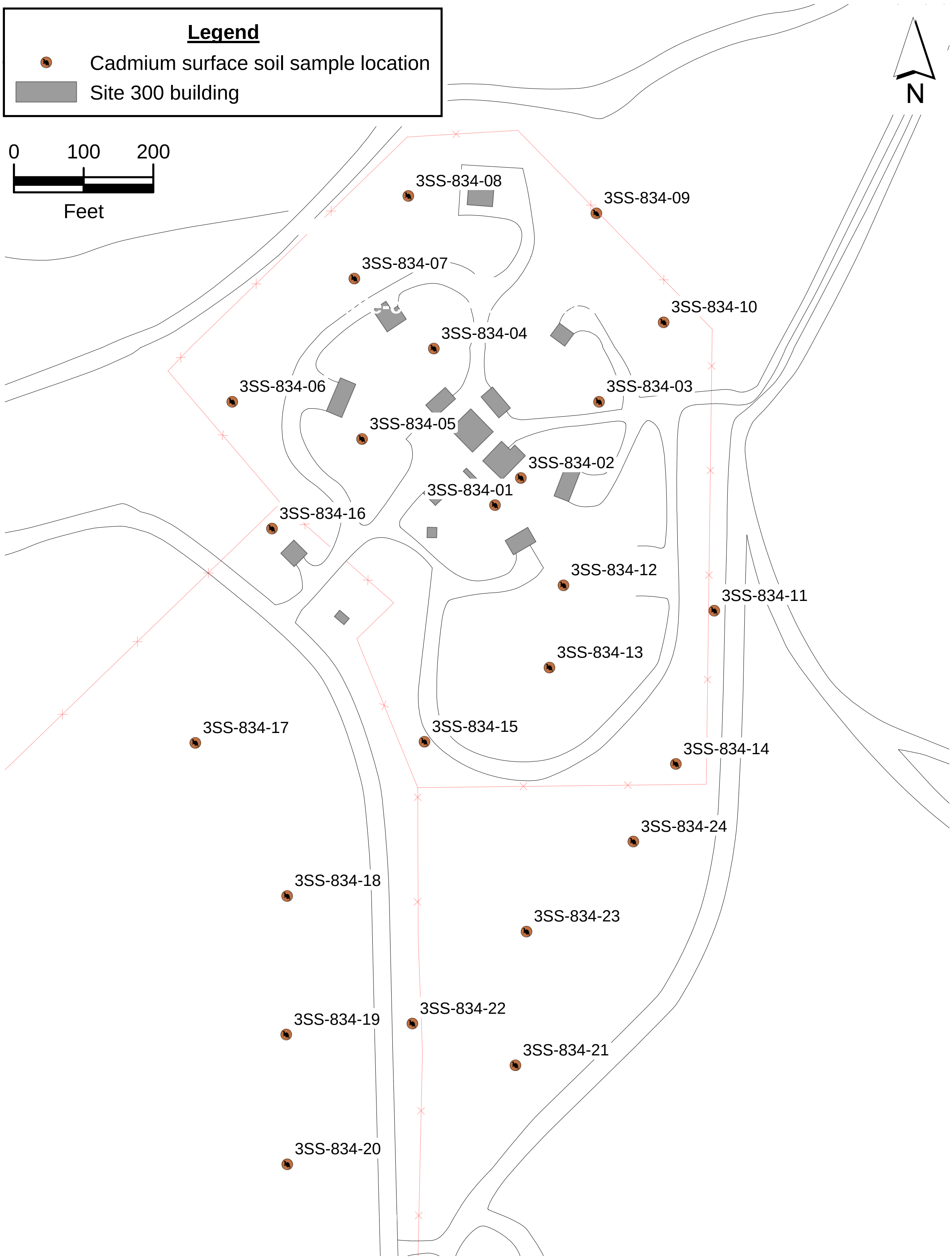


**Figure 4.2-6. Cadmium surface soil sampling locations at Building 834.**

# Tables

# Table Acronyms and Abbreviations

| | |
|---|---|
| 1,1,1-TCA | 1,1,1-trichloroethane |
| 1,1-DCA | 1,1-dichloroethane |
| 1,2-DCA | 1,2-dichloroethane |
| 1,2-DCE | 1,2-dichloroethylene |
| A | Annual |
| B | Biennial |
| BBSA | n-Butyl-Benzenesulfonamide |
| BTU | Biotreatment Unit |
| BUD | Borehole undeclared. |
| CDD | Chlorinated dibenzo-p-dioxin. |
| CDF | Chlorinated dibenzofuran |
| CMP | Compliance Monitoring Plan |
| COC | Contaminants of Concern |
| CB | Christy box |
| DIS | Discretionary sampling of non-required analyte |
| DISS | Distal south |
| DMW | Detection monitor well (non-CMP) |
| DSB | Distal Site Boundary |
| EPA | Environmental Protection Agency |
| ERD | Environmental Restoration Division |
| $ft^3$ | Cubic feet |
| FL | Flowing |
| g | Gram(s) |
| GAC | Granular activated carbon |
| gal | gallon(s) |
| GSA | General Services Area |
| GTU | GAC Treatment Unit |
| GWTS | Ground Water Treatment System |
| $H_2O$ | Water |
| HEPA | High Explosives Process Area |
| HMX | High-Melting Explosive |
| HpCDD | Heptachlorinated dibenzo-p-dioxin |
| HpCDF | Heptachlorinated dibenzofuran. |
| HxCDD | Hexachlorinated dibenzo-p-dioxin |
| HxCDF | Hexachlorinated dibenzofuran |
| $\mu$g/L | Micrograms per liter |
| $\mu$mhos/cm | Micro ohms per centimeter |
| M | Monthly |
| MCL | Maximum Contaminant Level |
| MT | Measured twice |
| ME | Measurement error |

| | |
|---|---|
| mg/L | Milligrams per liter |
| mg/kg | Milligrams per kilogram |
| MSL | Mean sea level |
| N | No |
| $NO_3$ | Nitrate |
| NA | Not applicable |
| NM | No measurement |
| OCDD | Octachlorodibenzo-p-dioxin |
| OCDF | Octachlorodibenzofuran |
| OU | Operable unit |
| PCB | Polychlorinated biphenyl |
| PCE | Tetrachloroethylene |
| PeCDD | Pentachlorinated dibenzo-p-dioxin |
| PeCDF | Pentachlorinated dibenzofuran |
| PE | Pump extraction |
| pCi/L | Picocuries per liter |
| pg/g | picogram per gram |
| pH | A measure of the acidity or alkalinity of an aqueous solution |
| ppb | Parts per billion |
| $ppm_{v/v}$ | Parts per million on a volume-to-volume basis |
| PRG | Preliminary Remediation Goal |
| PRXN | Proximal north |
| PTU | Portable Treatment Unit |
| PTU | Portable treatment unit |
| Q | Quarterly |
| RA | Restricted access |
| RDX | Research Department explosive |
| S | Semi-annual |
| SRC | Source |
| STU | Solor-powered Treatment Unit |
| SVE | Soil Vapor Extraction |
| TBOS | Tetra-butyl-orthosilicate |
| TCDD | Tetrachlorodibenzo-p-dioxin |
| TCDF | Tetrachlorodibenzofuran |
| TCE | Trichloroethylene |
| TEF | Toxicity Equivalency Factor. |
| TF | Treatment facility |
| Y | Yes |

## Requested Analyses

ANIONS = Anions suite performed by various analytical methods.

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:Be = Beryllium 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:SiO2 = Silica performed by EPA Method 200.7.
E200.7:Zn = Zinc performed by EPA Method 200.7.
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:NO2 = Nitrite performed by EPA Method 300.0.
E300.0:NO3 = Nitrate performed by EPA Method 300.0.
E300.0:O-PO2 = Orthophosphate 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.
E350.2 = Ammonia nitrogen (as N) performed by EPA Method 350.2
E502.2 = Drinking water volatile organic compounds performed by EPA Method 502.2.
E601 = Halogenated volatile organic compounds performed by EPA Method 601.
E602 = Aromatic volatile organic compounds performed by EPA Method 602.
E624 = Volatile organic compounds performed by EPA Method 624.
E8082A = Polychlorinated biphenyls performed by EPA Method 8082A.
E8330:R+H = High explosive compounds RDX and HMX 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.
MS:THISO = Thorium isotopes performed by mass spectrometry.
MS:UISO = Uranium isotopes performed by mass spectrometry.
NUTRIENTS = Nutrients suite performed by various analytical methods.
T26METALS = Title 26 metals.
TBOS = Tetrabutylorthosilicate.

## Hydrogeologic Units

Qal = Quaternary alluvium.
Tmss = Miocene Cierbo Formation—lower siltstone/claystone member.
$Tnbs_2$ = Miocene Neroly upper blue sandstone.

$Tnsc_{1a}$, $Tnsc_{1b}$, $Tnsc_{1c}$ = Sandstone bodies within the $Tnsc_1$ Neroly middle siltstone/claystone (1a = deepest).

$Tnsc_0$ = Tertiary Neroly Formation—lower 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.

Lower $Tnbs_1$ = Lower member of the Neroly lower blue sandstone, below claystone marker bed (regional aquifer).

## Data Qualifier Flag Definitions

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.

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.

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.

U = Compound was analyzed for, but not detected above detection limit.

**Table Summ-1. Mass removed, January 1, 2003 through December 31, 2003.**

| Treatment facility | Volume of ground water treated (gal) | Volume of soil vapor treated ($ft^3$) | Estimated total VOC mass removed (g) | Estimated total perchlorate mass removed (g) | Estimated total nitrate mass removed (g) | Estimated total RDX mass removed (g) | Estimated total TBOS mass removed (g) |
|---|---|---|---|---|---|---|---|
| CGSA GWTS | 1,419,985 | NA | 417 | NA | NA | NA | NA |
| CGSA SVE | NA | 9,794,000 | 1,149 | NA | NA | NA | NA |
| B834 GWTS | 0 | NA | 0 | 0 | 0 | 0 | 0 |
| B834 SVE | NA | 0 | 0 | 0 | 0 | 0 | 0 |
| B815-SRC GWTS | 360,971 | NA | 8.8 | 25 | 121,495 | 93 | NA |
| B815-PRX GWTS | 1,074,939 | NA | 134 | 29 | 353,625 | NA | NA |
| B815-DSB GWTS | 729,136 | NA | 22 | NA | NA | NA | NA |
| B817-SRC GWTS | 1,322 | NA | 0 | 0.13 | 0 | 0.25 | NA |
| B854-SRC GWTS | 505,309 | NA | 389 | 15 | 99,300 | NA | NA |
| B854-PRX GWTS | 235,220 | NA | 71 | 9.2 | 41,200 | NA | NA |
| B832-SRC GWTS | 25,760 | NA | 5.4 | 0.9 | 12,125 | NA | NA |
| B832-SRC SVE | NA | 2,079,000 | 175 | NA | NA | NA | NA |
| B830-SRC GWTS | 3,861 | NA | 45.6 | 0.027 | 1,678 | NA | NA |
| B830-SRC SVE | NA | 0 | 0 | NA | NA | NA | NA |
| B830-PRXN GWTS | 244,220 | NA | 30 | NA | 15,740 | NA | NA |
| B830-DISS GWTS | 474,630 | NA | 169 | 3.6 | 120,597 | NA | NA |
| Total | 5,075,353 | 11,873,000 | 2,616 | 83 | 765,760 | 93 | 0 |

**Notes:**

B815 = Building 815.
B830 = Building 830.
B832 = Building 832
B834 = Building 834.
CGSA = Central General Services Area.
DISS = Distal south.
DSB = Distal site boundary.
$ft^3$ = cubic feet.
g = Grams.
gal = Gallons.
GWTS = Ground water treatment system.
NA = Not applicable.
PRX = Proximal.
PRXN = Proximal north.
RDX= Research Department Explosive.
SRC = Source.
SVE = Soil vapor extraction.
TBOS = Tetra 2-ethylbutylorthosilicate.
VOC = Volatile organic compound.
B817 = Building 817.

[a] B834-SRC was non-operational during the reporting period.

[b] B830-SRC SVE system in testing phase.

**Table Summ-2. Summary of cumulative remediation.**

| Treatment facility | Volume of ground water treated (gal) | Volume of soil vapor treated ($kft^3$) | Estimated total VOC mass removed (kg) | Estimated total perchlorate mass removed (kg) | Estimated total nitrate mass removed (kg) | Estimated total RDX mass removed (kg) | Estimated total TBOS mass removed (kg) |
|---|---|---|---|---|---|---|---|
| CGSA GWTS | 9,124,657 | NA | .01265 | NA | NA | NA | NA |
| CGSA SVE | NA | 69,199 | 66.73 | NA | NA | NA | NA |
| B834 GWTS | 245,279 | NA | 31.8 | NA | 49.3 | NA | 9.6 |
| B834 SVE | NA | 58,536 | 108 | NA | NA | NA | NA |
| B815-SRC GWTS | 1,452,067 | NA | 0.034 | 0.105 | 510.5 | 0.432 | NA |
| B815-PRX GWTS | 1,798,054 | NA | 0.229 | 0.046 | 575.6 | NA | NA |
| B815-DSB GWTS | 3,086,181 | NA | 0.072 | NA | NA | NA | NA |
| B817-SRC GWTS | 1,322 | NA | 0 | 0.13 | 0 | 0.25 | NA |
| B854-SRC GWTS | 3,294,470 | NA | 3.6 | 0.078 | 668 | NA | NA |
| B854-PRX GWTS | 724,507 | NA | 0.3 | 0.028 | 115 | NA | NA |
| B832-SRC GWTS | 144,585 | NA | 31.6 | 4.3 | 59,985 | NA | NA |
| B832-SRC SVE | NA | 13,501 | 1.42 | NA | NA | NA | NA |
| B830-SRC GWTS | 6,126 | NA | 27.2 | 0.01 | 954.7 | NA | NA |
| B830-SRC SVE | NA | 0[a] | 0[a] | NA | NA | NA | NA |
| B830-PRXN GWTS | 344,708 | NA | 12.6 | 0 | 6,573 | NA | NA |
| B830-DISS GWTS | 643,080 | NA | 63.5 | 1.6 | 43,203 | NA | NA |
| Total | 20,865,036 | 141,236 | 360 | 6.3 | 112,634 | 0.68 | 9.6 |

**Notes:**

B815 = Building 815.
B830 = Building 830.
B832 = Building 832.
B834 = Building 834.
B854 = Building 854.
CGSA = Central General Services Area.
DISS = Distal south.
DSB = Distal site boundary.
gal = Gallons.
GWTS = Ground water treatment system.
$kft^3$ = Thousands of cubic feet.
Kg = Kilograms.
Mgal = Millions of gallons.
NA = Not applicable.
PRX = Proximal.
RDX = Research Department Explosive.
SRC = Source.
SVE = Soil vapor extraction.
TBOS = Tetra 2-ethylbutylorthosilicate.
VOC = Volatile organic compound.

[a] SVE system in testing phase.

**Table 1-1. Wells and boreholes installed during 2003.**

| Well name | Well type | OU | Well installation date | Strat Unit | Drill depth (ft) | Casing depth (ft) | Primary COC(s) | Primary COC sampling frequency | Secondary COC(s) | Secondary COC sampling frequency |
|---|---|---|---|---|---|---|---|---|---|---|
| W-Pit7-1838 | Horizontal well for de-watering experiments | NC | 01/07/03 | Colluvium/Tn | 150 | 147 | NA | NA | NA | NA |
| W-Pit7-1903 | PRB Monitor | NC | 01/09/03 | Qal/WBR | 23.5 | 23.5 | NC | NC | NC | NC |
| W-Pit7-1904 | PRB Monitor | NC | 01/13/03 | Qal/WBR | 23.5 | 23.5 | NC | NC | NC | NC |
| W-Pit7-1905 | PRB Monitor | NC | 01/14/03 | Qal/WBR | 23.5 | 23.5 | NC | NC | NC | NC |
| B-Pit7-1906 | Borehole | NC | 01/16/03 | Qal/WBR | 25 | NA | NA | NA | NA | NA |
| W-Pit7-1907 | PRB Monitor | NC | 01/22/03 | Qal/WBR | 25 | 25 | NC | NC | NC | NC |
| B-Pit7-1908 | PRB Borehole | NC | 01/23/03 | Qal/WBR | 25 | NA | NA | NA | NA | NA |
| B-Pit7-1909 | PRB Borehole | NC | 01/28/03 | Qal/WBR | 25 | NA | NA | NA | NA | NA |
| B-Pit7-1910 | PRB Borehole | NC | 01/29/03 | Qal/WBR | 25 | NA | NA | NA | NA | NA |
| B-Pit7-1911 | PRB Borehole | NC | 02/04/03 | Qal/WBR | 25 | NA | NA | NA | NA | NA |
| B-Pit7-1912 | PRB Borehole | NC | 02/05/03 | Qal/WBR | 25 | NA | NA | NA | NA | NA |
| W-854-1834 | Soil Vapor | 6 | 02/06/03 | $Tnbs_1$ | 4 | 120.8 | NA | NA | NA | NA |
| B-Pit7-1913 | PRB Borehole | NC | 02/06/03 | Qal/WBR | 25 | NA | NA | NA | NA | NA |
| B-Pit7-1914 | PRB Borehole | NC | 02/11/03 | Qal/WBR | 25 | NA | NA | NA | NA | NA |
| W-Pit7-1915 | PRB Monitor | NC | 02/13/03 | Qal/WBR | 25 | 25 | NC | NC | NC | NC |
| W-Pit7-1916 | PRB Monitor | NC | 02/13/03 | Qal/WBR | 25 | 25 | NC | NC | NC | NC |
| W-Pit7-1917 | PRB Monitor | NC | 02/18/03 | Qal/WBR | 25.2 | 25.2 | NC | NC | NC | NC |
| W-Pit7-1918 | PRB Monitor | NC | 10/01/03 | Qal/WBR | 25.2 | 25.2 | NC | NC | NC | NC |
| W-Pit7-1919 | PRB Monitor | NC | 02/18/03 | Qal/WBR | 25.2 | 25.2 | NC | NC | NC | NC |
| W-815-1918 | Injection | 4 | 02/24/03 | Tnbs2 | 121 | 110.6 | NA | NA | NA | NA |
| W-815-1928 | Monitor | 4 | 03/03/03 | Tps | 30 | 26.3 | VOCs | S | Nitrate, Perchlorate, RDX | A |
| W-832-1927 | Monitor | 7 | 03/19/03 | $Tnsc_{1b}$ | 297.6 | 243 | VOCs | S | Nitrate, Perchlorate | A |
| W-812-1929 | Monitor | NC | 04/07/03 | $Tnbs_1$ | 138.3 | 74.8 | NC | NC | NC | NC |
| W-812-1926 | Monitor | NC | 04/17/03 | $Tnbs_1$ | 100.5 | 43.3 | NC | NC | NC | NC |
| W-812-1931 | Monitor | NC | 04/24/03 | $Tnbs_1$ | 26 | 19.2 | NC | NC | NC | NC |
| W-854-1835 | Soil Vapor | 6 | 05/06/03 | $Tnbs_1$ | 135 | 120.8 | NA | NA | NA | NA |

**Table 1-1. Wells and boreholes installed during 2003. (Cont. Page 2 of 2)**

| Well name | Well type | OU | Well installation date | Strat Unit | Drill depth (ft) | Casing depth (ft) | Primary COC(s) | Primary COC sampling frequency | Secondary COC(s) | Secondary COC sampling frequency |
|---|---|---|---|---|---|---|---|---|---|---|
| W-812-1924 | Monitor | NC | 05/12/03 | $Tnbs_1$ | 159 | 153.5 | NC | NC | NC | NC |
| W-812-1932 | Monitor | NC | 05/20/03 | $Tnbs_1$ | 52 | 15.5 | NC | NC | NC | NC |
| W-812-1925 | Monitor | NC | 05/28/03 | $Tnbs_1$ | 32 | 30.5 | NC | NC | NC | NC |
| W-812-1933 | Monitor | NC | 06/11/03 | $Tnbs_1$ | 111 | 85.5 | NC | NC | NC | NC |
| W-812-1937 | Monitor | NC | 06/19/03 | $Tnbs_1$ | 42 | 40.5 | NC | NC | NC | NC |
| W-812-1923 | Monitor | NC | 07/02/03 | $Tnbs_1$ | 92 | 52.5 | NC | NC | NC | NC |
| W-812-1920 | Monitor | NC | 07/15/03 | $Tnbs_1$ | 70 | 27.5 | NC | NC | NC | NC |
| W-812-1939 | Monitor | NC | 07/22/03 | $Tnbs_1$ | 60 | 51.5 | NC | NC | NC | NC |
| W-812-1921 | Monitor | NC | 07/22/03 | $Tnbs_1$ | 21 | 12.5 | NC | NC | NC | NC |
| W-812-1922 | Monitor | NC | 07/30/03 | Cierbo | 90.5 | 76.5 | NC | NC | NC | NC |
| W-829-1938 | DMW | 4 | 09/11/03 | L $Tnbs_1$ | 392 | 381 | * | * | * | * |
| W-829-1940 | Monitor | 4 | 10/01/03 | $Tnsc_1$ | 122 | 121 | VOCs | S | Nitrate, Perchlorate, RDX | A |
| W-Pit2-1935 | DMW | 5b | 10/13/03 | L $Tnbs_1$ | 120 | 82.5 | ** | ** | ** | ** |
| W-Pit2-1934 | DMW | 5b | 10/23/03 | L $Tnbs_1$ | 120 | 70.5 | ** | ** | ** | ** |
| W-834-2001 | Monitor | 2 | 10/26/03 | Tpsg | 25 | 24.5 | VOCs | S | Nitrate, TBOS, Diesel | A |
| W-865-2005 | Monitor | NC | 12/11/03 | $Tnbs_0$ | 400 | 350.5 | NC | NC | NC | NC |
| B-854-1836 | Borehole | 6 | NA | $Tnbs_1$ | 90 | NA | NA | NA | NA | NA |
| B-854-1862 | Borehole | 6 | NA | $Tnbs_1$ | 92 | NA | NA | NA | NA | NA |

Notes:

NA = Not applicable.

NC = Non-CMP well/borehole.

DMW = Detection monitor well (non-CMP).

* = To be sampled quarterly for detection monitoring analytes as specified in the HE Burn Pit Post-closure monitoring plan.

** = To be sampled annually for detection monitoring analytes: tritium, VOCs, fluoride, HE compounds, nitrate, perchlorate, Title 26 metals plus uranium, thorium, lithium and beryllium, and uranium and thorium isotopes.

**Table 1.2-1. Volatile organic compounds in soil for boreholes drilled during 2003.**

| Location | Date | Depth (ft) | Carbon tetra-chloride (mg/kg) | Chloroform (mg/kg) | Dichloro-difluoro-methane (mg/kg) | 1,1-Dichloro-ethane (mg/kg) | 1,2-Dichloro-ethane (mg/kg) | 1,1-Dichloro-ethene (mg/kg) | 1,2-Dichloro-ethene (total) (mg/kg) | Freon 113 (mg/kg) | Methylene chloride (mg/kg) | Tetrachloro-ethene (mg/kg) | 1,1,1-Trichloro-ethane (mg/kg) | Trichloro-ethene (mg/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B-815-1918 | 02/13/03 BUD | 7.5 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.00069 | <0.002 | <0.002 | <0.0005 | <0.0005 | <0.0005 |
| B-815-1918 | 02/13/03 BUD | 10 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.00069 | <0.002 | <0.002 | <0.0005 | <0.0005 | <0.0005 |
| B-815-1918 | 02/13/03 BUD | 15 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.00069 | <0.002 | <0.002 | <0.0005 | <0.0005 | <0.0005 |
| B-815-1918 | 02/13/03 BUD | 28.5 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.00069 | <0.002 | <0.002 | <0.0005 | <0.0005 | <0.0005 |
| B-815-1918 | 02/13/03 BUD | 38.9 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.00069 | <0.002 | <0.002 | <0.0005 | <0.0005 | <0.0005 |
| B-815-1918 | 02/13/03 BUD | 48.2 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.00069 | <0.002 | <0.002 | <0.0005 | <0.0005 | <0.0005 |
| B-815-1918 | 02/13/03 BUD | 60.2 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.00069 | <0.002 | <0.002 | <0.0005 | <0.0005 | <0.0005 |
| B-815-1918 | 02/18/03 BUD | 67 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.00069 | <0.002 | <0.002 | <0.0005 | <0.0005 | <0.0005 |
| B-815-1918 | 02/18/03 BUD | 80.4 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.00069 | <0.002 | <0.002 | <0.0005 | <0.0005 | <0.0005 |
| B-815-1918 | 02/18/03 BUD | 88.9 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.00069 | <0.002 | <0.002 | <0.0005 | <0.0005 | <0.0005 |
| B-815-1918 | 02/18/03 BUD | 100.4 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.00069 | <0.002 | <0.002 | <0.0005 | <0.0005 | <0.0005 |
| B-815-1918 | 02/18/03 BUD | 109.2 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.00069 | <0.002 | <0.002 | <0.0005 | <0.0005 | <0.0005 |
| B-815-1928 | 02/27/03 BUD | 10 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.0005 | <0.00069 | <0.002 | <0.002 | <0.0005 | <0.0005 | <0.0005 |
| B-829-1940 | 09/18/03 BUD | 0 | <0.00056 | <0.00053 | <0.0005 | <0.00056 | <0.0005 | <0.0007 | <0.00087 | <0.002 | <0.002 | <0.0005 | <0.0005 | <0.0005 |
| B-829-1940 | 09/22/03 BUD | 10 | <0.00056 | <0.00053 | <0.0005 | <0.00056 | <0.0005 | <0.0007 | <0.00087 | <0.002 | <0.002 | <0.0005 | <0.0005 | <0.0005 |
| B-829-1940 | 09/22/03 BUD | 20 | <0.00056 | <0.00053 | <0.0005 | <0.00056 | <0.0005 | <0.0007 | <0.00087 | <0.002 | <0.002 | <0.0005 | <0.0005 | <0.0005 |
| B-829-1940 | 09/22/03 BUD | 30 | <0.00056 | <0.00053 | <0.0005 | <0.00056 | <0.0005 | <0.0007 | <0.00087 | <0.002 | <0.002 | <0.0005 | <0.0005 | <0.0005 |
| B-829-1940 | 09/22/03 BUD | 40 | <0.00056 | <0.00053 | <0.0005 | <0.00056 | <0.0005 | <0.0007 | <0.00087 | <0.002 | <0.002 | <0.0005 | <0.0005 | <0.0005 |
| B-829-1940 | 09/22/03 BUD | 50 | <0.00056 | <0.00053 | <0.0005 | <0.00056 | <0.0005 | <0.0007 | <0.00087 | <0.002 | <0.002 | <0.0005 | <0.0005 | 0.0012 |
| B-829-1940 | 09/22/03 BUD | 60 | <0.00056 | <0.00053 | <0.0005 | <0.00056 | <0.0005 | <0.0007 | <0.00087 | <0.002 | <0.002 | <0.0005 | <0.0005 | 0.0035 |
| B-829-1940 | 09/22/03 BUD | 70 | <0.00056 | <0.00053 | <0.0005 | <0.00056 | <0.0005 | <0.0007 | 0.0015 | <0.002 | <0.002 | <0.0005 | <0.0005 | 0.053 |
| B-829-1940 | 09/23/03 BUD | 80 | <0.00056 | <0.00053 | <0.0005 | <0.00056 | <0.0005 | <0.0007 | <0.00087 | <0.002 | <0.002 | <0.0005 | <0.0005 | 0.0049 |
| B-829-1940 | 09/23/03 BUD | 90 | <0.00056 | <0.00053 | <0.0005 | <0.00056 | <0.0005 | <0.0007 | <0.00087 | <0.002 | <0.002 | <0.0005 | <0.0005 | <0.0005 |
| B-829-1940 | 09/23/03 BUD | 99.7 | <0.00056 | <0.00053 | <0.0005 | <0.00056 | <0.0005 | <0.0007 | <0.00087 | <0.002 | <0.002 | <0.0005 | <0.0005 | <0.0005 |
| B-829-1940 | 09/23/03 DUP | 90 | <0.00056 | <0.00053 | <0.0005 | <0.00056 | <0.0005 | <0.0007 | <0.00087 | <0.002 | <0.002 | <0.0005 | <0.0005 | <0.0005 |
| B-829-1940 | 09/24/03 BUD | 110 | <0.00056 | <0.00053 | <0.0005 | <0.00056 | <0.0005 | <0.0007 | <0.00087 | <0.002 | <0.002 | <0.0005 | <0.0005 | <0.0005 |
| B-829-1940 | 09/24/03 BUD | 117 | <0.00056 | <0.00053 | <0.0005 | <0.00056 | <0.0005 | <0.0007 | <0.00087 | <0.002 | <0.002 | <0.0005 | <0.0005 | <0.0005 |
| B-829-1938 | 08/07/03 BUD | 0 | <0.00056 | <0.00053 | <0.0005 | <0.00056 | <0.0005 | <0.0007 | <0.00087 | <0.002 | <0.002 | <0.0005 | <0.0005 | <0.0005 |
| B-829-1938 | 08/07/03 BUD | 10 | <0.00056 | <0.00053 | <0.0005 | <0.00056 | <0.0005 | <0.0007 | <0.00087 | <0.002 | <0.002 | <0.0005 | <0.0005 | 0.0056 |
| B-829-1938 | 08/07/03 BUD | 15 | <0.00056 | <0.00053 | <0.0005 | <0.00056 | <0.0005 | <0.0007 | <0.00087 | <0.002 | <0.002 | <0.0005 | <0.0005 | 0.0023 |
| B-829-1938 | 08/07/03 BUD | 20 | <0.00056 | <0.00053 | <0.0005 | <0.00056 | <0.0005 | <0.0007 | <0.00087 | <0.002 | <0.002 | <0.0005 | <0.0005 | 0.0013 |
| B-829-1938 | 08/07/03 BUD | 25 | <0.00056 | <0.00053 | <0.0005 | <0.00056 | <0.0005 | <0.0007 | <0.00087 | <0.002 | <0.002 | <0.0005 | <0.0005 | 0.00099 |
| B-829-1938 | 08/07/03 BUD | 30 | <0.00056 | <0.00053 | <0.0005 | <0.00056 | <0.0005 | <0.0007 | <0.00087 | <0.002 | <0.002 | <0.0005 | <0.0005 | <0.0005 |
| B-829-1938 | 08/07/03 BUD | 32.5 | <0.00056 | <0.00053 | <0.0005 | <0.00056 | <0.0005 | <0.0007 | <0.00087 | <0.002 | <0.002 | <0.0005 | <0.0005 | <0.0005 |
| B-829-1938 | 08/07/03 BUD | 40 | <0.00056 | <0.00053 | <0.0005 | <0.00056 | <0.0005 | <0.0007 | <0.00087 | <0.002 | <0.002 | <0.0005 | <0.0005 | <0.0005 |
| B-829-1938 | 08/07/03 BUD | 44.2 | <0.00056 | <0.00053 | <0.0005 | <0.00056 | <0.0005 | <0.0007 | <0.00087 | <0.002 | <0.002 | <0.0005 | <0.0005 | 0.0011 |
| B-829-1938 | 08/07/03 BUD | 50 | <0.00056 | <0.00053 | <0.0005 | <0.00056 | <0.0005 | <0.0007 | <0.00087 | <0.002 | <0.002 | <0.0005 | <0.0005 | 0.00058 |
| B-829-1938 | 08/07/03 BUD | 55 | <0.00056 | <0.00053 | <0.0005 | <0.00056 | <0.0005 | <0.0007 | <0.00087 | <0.002 | <0.002 | <0.0005 | <0.0005 | <0.0005 |
| B-829-1938 | 08/11/03 BUD | 60 | <0.00056 | <0.00053 | <0.0005 | <0.00056 | <0.0005 | <0.0007 | <0.00087 | <0.002 | <0.002 | <0.0005 | <0.0005 | <0.0005 |
| B-829-1938 | 08/11/03 BUD | 65 | <0.00056 | <0.00053 | <0.0005 | <0.00056 | <0.0005 | <0.0007 | <0.00087 | <0.002 | <0.002 | <0.0005 | <0.0005 | 0.00098 |
| B-829-1938 | 08/11/03 BUD | 70 | <0.00056 | <0.00053 | <0.0005 | <0.00056 | <0.0005 | <0.0007 | <0.00087 | <0.002 | <0.002 | <0.0005 | <0.0005 | 0.0026 |
| B-829-1938 | 08/11/03 BUD | 75 | <0.00056 | <0.00053 | <0.0005 | <0.00056 | <0.0005 | <0.0007 | <0.00087 | <0.002 | <0.002 | <0.0005 | <0.0005 | 0.038 |
| B-829-1938 | 08/11/03 BUD | 80 | <0.00056 | <0.00053 | <0.0005 | <0.00056 | <0.0005 | <0.0007 | <0.00087 | <0.002 | <0.002 | <0.0005 | <0.0005 | <0.0005 |
| B-829-1938 | 08/11/03 BUD | 85 | <0.00056 | <0.00053 | <0.0005 | <0.00056 | <0.0005 | <0.0007 | <0.00087 | <0.002 | <0.002 | <0.0005 | <0.0005 | <0.0005 |
| B-829-1938 | 08/11/03 BUD | 90 | <0.00056 | <0.00053 | <0.0005 | <0.00056 | <0.0005 | <0.0007 | <0.00087 | <0.002 | <0.002 | <0.0005 | <0.0005 | <0.0005 |
| B-829-1938 | 08/11/03 BUD | 95 | <0.00056 | <0.00053 | <0.0005 | <0.00056 | <0.0005 | <0.0007 | <0.00087 | <0.002 | <0.002 | <0.0005 | <0.0005 | <0.0005 |
| B-829-1938 | 08/11/03 BUD | 99.5 | <0.00056 | <0.00053 | <0.0005 | <0.00056 | <0.0005 | <0.0007 | <0.00087 | <0.002 | <0.002 | <0.0005 | <0.0005 | <0.0005 |

**Table 1.2-2. High explosive compounds in soil for boreholes drilled during 2003.**

| Location | Date | Depth (ft) | HMX (mg/kg) | RDX (mg/kg) |
|---|---|---|---|---|
| B-815-1918 | 02/13/03 BUD | 7.8 | <0.3 | <0.3 |
| B-815-1918 | 02/13/03 BUD | 10.25 | <0.3 | <0.3 |
| B-815-1918 | 02/13/03 BUD | 15.25 | <0.3 | <0.3 |
| B-815-1918 | 02/13/03 BUD | 28.75 | <0.3 | <0.3 |
| B-815-1918 | 02/13/03 BUD | 39.2 | <0.3 | <0.3 |
| B-815-1918 | 02/13/03 BUD | 48.5 | <0.3 | <0.3 |
| B-815-1918 | 02/13/03 BUD | 60.5 | <0.3 | <0.3 |
| B-815-1918 | 02/18/03 BUD | 67.25 | <0.3 | <0.3 |
| B-815-1918 | 02/18/03 BUD | 80.7 | <0.3 | <0.3 |
| B-815-1918 | 02/18/03 BUD | 89.2 | <0.3 | <0.3 |
| B-815-1918 | 02/18/03 BUD | 100.7 | <0.3 | <0.3 |
| B-815-1918 | 02/18/03 BUD | 109.5 | <0.3 | <0.3 |
| B-815-1928 | 02/27/03 BUD | 10.3 | <0.3 | <0.3 |
| B-815-1928 | 02/27/03 BUD | 26 | <0.3 | <0.3 |
| B-829-1940 | 09/18/03 BUD | 0 | <0.3 | <0.3 |
| B-829-1940 | 09/22/03 BUD | 10 | <300 | <300 |
| B-829-1940 | 09/22/03 BUD | 20 | <300 | <300 |
| B-829-1940 | 09/22/03 BUD | 30 | <300 | <300 |
| B-829-1940 | 09/22/03 BUD | 40 | <300 | <300 |
| B-829-1940 | 09/22/03 BUD | 50 | <300 | <300 |
| B-829-1940 | 09/22/03 BUD | 60 | <300 | <300 |
| B-829-1940 | 09/22/03 BUD | 70 | <300 | <300 |
| B-829-1940 | 09/23/03 BUD | 80 | <0.3 | <0.3 |
| B-829-1940 | 09/23/03 BUD | 90 | <0.3 | <0.3 |
| B-829-1940 | 09/23/03 BUD | 99.7 | <0.3 | <0.3 |
| B-829-1940 | 09/24/03 BUD | 110 | <0.3 | <0.3 |
| B-829-1940 | 09/24/03 BUD | 117 | <0.3 | <0.3 |
| B-829-1938 | 08/07/03 BUD | 0 | <500 | <500 |
| B-829-1938 | 08/07/03 BUD | 10 | <500 | <500 |
| B-829-1938 | 08/07/03 BUD | 20 | <500 | <500 |
| B-829-1938 | 08/07/03 BUD | 30 | <500 | <500 |
| B-829-1938 | 08/07/03 BUD | 40 | <500 | <500 |
| B-829-1938 | 08/07/03 BUD | 50 | <500 | <500 |
| B-829-1938 | 08/11/03 BUD | 60 | <500 | <500 |
| B-829-1938 | 08/11/03 BUD | 70 | <500 | <500 |
| B-829-1938 | 08/11/03 BUD | 80 | <500 | <500 |

**Table 1.2-2. High explosive compounds in soil for boreholes drilled during 2003.**

| Location | Date | Depth (ft) | HMX (mg/kg) | RDX (mg/kg) |
|---|---|---|---|---|
| B-829-1938 | 08/11/03 BUD | 90 | <500 | <500 |
| B-829-1938 | 08/11/03 BUD | 99.5 | <500 | <500 |
| B-829-1938 | 08/11/03 BUD | 110 | <500 | <500 |
| B-829-1938 | 08/11/03 BUD | 120 | <500 | <500 |

**Table 1.2-3. Perchlorate in soil for boreholes drilled during 2003.**

| Location | Date | Depth (ft) | Perchlorate (μg/kg) |
|---|---|---|---|
| B-832-1927 | 03/05/03 BUD | 25 | <10 |
| B-832-1927 | 03/05/03 BUD | 36.4 | <10 |

**Table 1.2-4. Radiological constituents in soil for boreholes drilled during 2003.**

| Location | Date | Depth (ft) | Tritium (pCi/L) |
|---|---|---|---|
| B-PIT2-1934 | 10/15/2003 BUD | 5 | <200 |
| B-PIT2-1934 | 10/15/2003 BUD | 10 | <2,020 |
| B-PIT2-1934 | 10/15/2003 BUD | 13.4 | <200 |
| B-PIT2-1934 | 10/15/2003 BUD | 20 | <200 |
| B-PIT2-1934 | 10/15/2003 BUD | 25 | <200 |
| B-PIT2-1934 | 10/15/03 BUD | 30 | <632 |
| B-PIT2-1934 | 10/15/03 BUD | 35 | <605 |
| B-PIT2-1934 | 10/15/03 BUD | 40 | <633 |
| B-PIT2-1934 | 10/15/03 BUD | 47 | 2,020 |
| B-PIT2-1934 | 10/15/03 BUD | 50 | 1,460 |
| B-PIT2-1934 | 10/15/03 BUD | 60 | 1,850 |
| B-PIT2-1934 | 10/15/03 BUD | 70 | 972 |
| B-PIT2-1934 | 10/15/03 BUD | 105 | <200 |
| B-PIT2-1935 | 10/02/03 BUD | 10 | <200 |
| B-PIT2-1935 | 10/02/03 BUD | 15 | 287 |
| B-PIT2-1935 | 10/02/03 BUD | 20 | <295 |
| B-PIT2-1935 | 10/02/03 BUD | 25 | <274 |
| B-PIT2-1935 | 10/02/03 BUD | 30 | <204 |
| B-PIT2-1935 | 10/02/03 BUD | 39.5 | 3,760 |
| B-PIT2-1935 | 10/02/03 BUD | 50 | 1,700 |
| B-PIT2-1935 | 10/06/03 BUD | 60 | 1,630 |
| B-PIT2-1935 | 10/06/03 BUD | 70 | 3,820 |
| B-PIT2-1935 | 10/06/03 BUD | 80 | 2,600 |
| B-PIT2-1935 | 10/06/03 BUD | 90 | 3,780 |

**Table 1.2-5. TBOS in soil for boreholes drilled during 2003.**

| Location | Date | Depth (ft) | TBOS (mg/kg) |
|---|---|---|---|
| B-834-2001 | 10/23/03 BUD | 15 | <0.06 D |
| B-834-2001 | 10/23/03 BUD | 17.5 | <1.5 DIJ |
| B-834-2001 | 10/23/03 BUD | 21 | <0.3 D |
| B-834-2001 | 10/23/03 BUD | 24.7 | <0.6 D |

**Table 1.2-6. STLC metals in soil for boreholes drilled during 2003.**

| Constituents of concern | B-812-1926 04/10/23 BUD | B-812-1926 04/10/03 BUD | B-812-1926 04/10/03 BUD |
|---|---|---|---|
| Antimony (mg/L) | <0.06 | <0.6 | <0.6 |
| Arsenic (mg/L) | 0.29 | <0.5 | <0.5 E |
| Barium (mg/L) | 10 | 1.7 | 1.1 |
| Beryllium (mg/L) | <0.04 | <0.4 | <0.4 |
| Boron (mg/L) | 1 | <0.5 | <0.5 |
| Cadmium (mg/L) | <0.05 | <0.5 | <0.5 |
| Chromium (mg/L) | <0.5 | 1.1 | 2.2 |
| Cobalt (mg/L) | <0.5 | <0.5 | <0.5 |
| Copper (mg/L) | 0.62 | <0.5 | <0.5 |
| Iron (mg/L) | 78 | 940 D | 1,800 D |
| Lead (mg/L) | <0.5 | <0.5 | <0.5 |
| Manganese (mg/L) | 210 L | 2.5 | 4.1 |
| Mercury (mg/L) | <0.003 | <0.005 | <0.005 |
| Molybdenum (mg/L) | <0.5 | <0.5 | <0.5 |
| Nickel (mg/L) | 1.1 | <0.5 | 0.88 |
| Selenium (mg/L) | <0.05 | <0.5 | <0.5 |
| Silver (mg/L) | <0.5 | <0.5 | <0.5 |
| Thallium (mg/L) | 0.02 | <0.2 | <0.2 |
| Vanadium (mg/L) | 0.7 | 1.8 | 4 |
| Zinc (mg/L) | <0.5 | <0.5 | <0.5 |

**Table 1.2-7. Diesel range organic compounds in soil for boreholes drilled during 2003.**

| Location | Date | Depth (ft) | Diesel fuel (mg/kg) |
|---|---|---|---|
| B-834-2001 | 10/23/03 BUD | 15 | 40 D |
| B-834-2001 | 10/23/03 BUD | 17.5 | 2,000 DIJ |
| B-834-2001 | 10/23/03 BUD | 21 | 130 D |
| B-834-2001 | 10/23/03 BUD | 24.7 | 460 D |

**Table 2.1-1. Central General Services Area (CGSA) volumes of ground water and soil vapor extracted and discharged, January 1, 2003 through December 31, 2003.**

| Treatment facility | Month | Operational hours | Volume of ground water discharged (gal) | Volume of vapor extracted (thousands of $ft^3$) | Average weekly volume of water treated (gal) |
|---|---|---|---|---|---|
| CGSA | January | 840 | 127,211 | 876 | 31,802 |
| | February | 672 | 91,693 | 287 | 22,923 |
| | March | 768 | 137,398 | 313 | 27,479 |
| | April | 720 | 123,757 | 260 | 24,751 |
| | May | 696 | 126,699 | 465 | 31,674 |
| | June | 792 | 145,135 | 627 | 29,027 |
| | July | 720 | 131,976 | 1,030 | 32,994 |
| | August | 672 | 115,898 | 1,099 | 28,974 |
| | September | 816 | 142,692 | 1,544 | 28,517 |
| | October | 696 | 88,357 | 1,322 | 22,089 |
| | November | 624 | 71,875 | 1,126 | 17,968 |
| | December | 840 | 117,294 | 845 | 23,458 |
| Total | | 8,856 | 1,419,985 | 9,794 | |

**Table 2.1-2. Central General Services Area volumes 2003 VOCs in ground water treatment system influent and efluent.**

| Location | Date | Method | TCE (µg/L) | PCE (µg/L) | Total 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) | Freon 11 (µg/L) | Freon 113 (µg/L) | Methylene chloride (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PTU7-E | 01/07/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| PTU7-E | 02/13/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| PTU7-E | 03/05/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| PTU7-E | 04/03/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| PTU7-E | 05/07/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| PTU7-E | 06/10/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| PTU7-E | 07/08/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| PTU7-E | 09/03/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| PTU7-E | 10/02/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| PTU7-E | 11/11/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| PTU7-E | 12/03/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| PTU7-I | 01/07/03 | E601 | 100 | 5 | 2.1 | <0.5 | <0.5 | <0.5 | <0.5 | 1.8 | <0.5 | 0.53 | <0.5 | <0.5 |
| PTU7-I | 05/12/03 | E601 | 70 | 3.1 | 2.1 | <0.5 | <0.5 | <0.5 | <0.5 | 1.3 | <0.5 | <0.5 | <0.5 | <0.5 |
| PTU7-I | 07/08/03 | E601 | 61 | 3.1 | 1.3 | <0.5 | <0.5 | <0.5 | <0.5 | 0.97 | <0.5 | 0.82 | <0.5 | <0.5 |
| PTU7-I | 10/02/03 | E601 | 49 | 3.2 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | 0.9 | <0.5 | 0.66 | <0.5 | <0.5 |

**Other VOCs detected not in the table above:**

| Location | Date | Method | cis-1,2-Dichloroethene (µg/L) |
|---|---|---|---|
| PTU7-E | 01/07/03 | E601 | - |
| PTU7-E | 02/13/03 | E601 | - |
| PTU7-E | 03/05/03 | E601 | - |
| PTU7-E | 04/03/03 | E601 | - |
| PTU7-E | 05/07/03 | E601 | - |
| PTU7-E | 06/10/03 | E601 | - |
| PTU7-E | 07/08/03 | E601 | - |
| PTU7-E | 09/03/03 | E601 | - |
| PTU7-E | 10/02/03 | E601 | - |
| PTU7-E | 11/11/03 | E601 | - |
| PTU7-E | 12/03/03 | E601 | - |
| PTU7-I | 01/07/03 | E601 | 2.1 |
| PTU7-I | 05/12/03 | E601 | 2 |
| PTU7-I | 07/08/03 | E601 | 1.3 |
| PTU7-I | 10/02/03 | E601 | 0.7 |

**Table 2.1-3. Central General Services Area 2003 VOCs in soil vapor extraction treatment system influent and effluent.**

| Location | Date | 1,1-Dichloroethene ($ppm_{V/V}$) | cis-1,2-Dichloroethene ($ppm_{V/V}$) | Tetrachloroethene ($ppm_{V/V}$) | Trichloroethene $ppm_{V/V}$ |
|---|---|---|---|---|---|
| TF-GSA2-IV | 03/10/03 | <0.2 | <0.2 | <0.2 | 1.9 |
| TF-GSA2-IV | 04/03/03 | <0.2 | <0.2 | <0.2 | 0.9 |
| TF-GSA2-IV | 05/07/03 | <0.2 | <0.2 | <0.2 | 1.2 |
| TF-GSA2-IV | 06/02/03 | <0.2 | <0.2 | 0.4 | 1.5 |

**Table 2.1-4. Central General Services Area (CGSA) treatment facility sampling plan.**

| Sample Location | Sample Identification | Parameter | Frequency |
|---|---|---|---|
| *CGSA GWTS* | | | |
| Influent Port | PTU7-I | VOCs | Quarterly |
| | | pH | Quarterly |
| Effluent Port | PTU7-E | VOCs | Monthly |
| | | pH | Monthly |
| Vapor Samples | PTU7-CFI | VOCs | Weekly |
| | PTU7-CFE | VOCs | Weekly |
| *CGSA SVE System* | | | |
| Influent Vapor | TF-GSA2-IV | VOCs | Monthly |
| Effluent Vapor | TF-GSA2-EV | VOCs | Monthly |
| Intermediate GAC | TF-GSA2-CFV2 | VOCs | Monthly |

**Table 2.1-5. Central GSA 2003 ground water sampling and analysis plan.**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-35A-01 | MWPT | Qal | B | B | CGSA CMP | E200.7:Cd | 2 | Y | Next sample required 2005. |
| W-35A-01 | MWPT | Qal | B | B | CGSA CMP | E239.2 | 2 | Y | Next sample required 2005. |
| W-35A-01 | MWPT | Qal | | Q | DIS | E601 | 1 | Y | |
| W-35A-01 | MWPT | Qal | S | Q | CGSA CMP | E601 | 2 | Y | |
| W-35A-01 | MWPT | Qal | | Q | DIS | E601 | 3 | Y | |
| W-35A-01 | MWPT | Qal | S | Q | CGSA CMP | E601 | 4 | Y | |
| W-35A-02 | MWPT | Qal | B | B | CGSA CMP | E200.7:Zn | 2 | Y | Next sample required 2005. |
| W-35A-02 | MWPT | Qal | S | S | CGSA CMP | E601 | 1 | Y | |
| W-35A-02 | MWPT | Qal | | S | DIS | E601 | 2 | Y | |
| W-35A-02 | MWPT | Qal | S | S | CGSA CMP | E601 | 3 | Y | |
| W-35A-03 | MWPT | Qal | S | S | CGSA CMP | E601 | 2 | N | Pump down. |
| W-35A-03 | MWPT | Qal | S | S | CGSA CMP | E601 | 4 | N | Pump down. |
| W-35A-04 | MWPT | Qal | B | B | CGSA CMP/WGMG | E200.7:Cu | 2 | Y | Next sample required 2005. |
| W-35A-04 | MWPT | Qal | | Q | ERD/WGMG | E601 | 1 | Y | |
| W-35A-04 | MWPT | Qal | S | Q | CGSA CMP/WGMG | E601 | 2 | Y | |
| W-35A-04 | MWPT | Qal | | Q | ERD/WGMG | E601 | 3 | Y | |
| W-35A-04 | MWPT | Qal | S | Q | CGSA CMP/WGMG | E601 | 4 | Y | |
| W-35A-05 | MWPT | $Tnbs_2$ | B | B | CGSA CMP | E239.2 | 2 | Y | Next sample required 2005. |
| W-35A-05 | MWPT | $Tnbs_2$ | S | S | CGSA CMP | E601 | 2 | Y | |
| W-35A-05 | MWPT | $Tnbs_2$ | S | S | CGSA CMP | E601 | 4 | Y | |
| W-35A-06 | MWPT | Qal | S | S | CGSA CMP | E601 | 2 | Y | |
| W-35A-06 | MWPT | Qal | S | S | CGSA CMP | E601 | 4 | Y | |
| W-35A-07 | MWPT | $Tnbs_1$ | S | S | CGSA CMP | E601 | 2 | Y | |
| W-35A-07 | MWPT | $Tnbs_1$ | S | S | CGSA CMP | E601 | 4 | Y | |
| W-35A-08 | MWPT | $Tnbs_2$ | S | S | CGSA CMP | E601 | 2 | Y | |
| W-35A-08 | MWPT | $Tnbs_2$ | S | S | CGSA CMP | E601 | 4 | Y | |
| W-35A-09 | MWPT | $Tnbs_2$ | S | S | CGSA CMP | E601 | 2 | Y | |

**Table 2.1-5. Central GSA 2003 ground water sampling and analysis plan.**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-35A-09 | MWPT | $Tnbs_2$ | S | S | CGSA CMP | E601 | 4 | Y | |
| W-35A-10 | MWPT | $Tnbs_2$ | S | S | CGSA CMP | E601 | 2 | Y | |
| W-35A-10 | MWPT | $Tnbs_2$ | S | S | CGSA CMP | E601 | 4 | Y | |
| W-35A-11 | MWPT | $Tnbs_1$ | S | S | CGSA CMP | E601 | 2 | Y | |
| W-35A-11 | MWPT | $Tnbs_1$ | S | S | CGSA CMP | E601 | 4 | Y | |
| W-35A-12 | MWPT | $Tnbs_1$ | S | S | CGSA CMP | E601 | 2 | Y | |
| W-35A-12 | MWPT | $Tnbs_1$ | S | S | CGSA CMP | E601 | 4 | Y | |
| W-35A-13 | MWPT | $Tnbs_1$ | S | S | CGSA CMP | E601 | 2 | Y | |
| W-35A-13 | MWPT | $Tnbs_1$ | S | S | CGSA CMP | E601 | 4 | Y | |
| W-35A-14 | MWPT | $Tnbs_2$ | S | S | CGSA CMP | E601 | 2 | Y | |
| W-35A-14 | MWPT | $Tnbs_2$ | S | S | CGSA CMP | E601 | 4 | Y | |
| W-7A | MWPT | $Tnbs_1$ | B | B | CGSA CMP | E239.2 | 2 | Y | Next sample required 2005. |
| W-7A | MWPT | $Tnbs_1$ | S | S | CGSA CMP | E601 | 2 | Y | |
| W-7A | MWPT | $Tnbs_1$ | S | S | CGSA CMP | E601 | 4 | Y | |
| W-7B | MWPT | $Tnbs_1$ | S | S | CGSA CMP | E601 | 2 | Y | |
| W-7B | MWPT | $Tnbs_1$ | S | S | CGSA CMP | E601 | 4 | Y | |
| W-7C | MWPT | $Tnbs_1$ | S | S | CGSA CMP | E601 | 2 | Y | |
| W-7C | MWPT | $Tnbs_1$ | S | S | CGSA CMP | E601 | 4 | Y | |
| W-7E | MWPT | $Tnbs_1$ | | Q | ERD/WGMG | E601 | 1 | Y | |
| W-7E | MWPT | $Tnbs_1$ | S | Q | CGSA CMP/WGMG | E601 | 2 | Y | |
| W-7E | MWPT | $Tnbs_1$ | | Q | ERD/WGMG | E601 | 3 | Y | |
| W-7E | MWPT | $Tnbs_1$ | S | Q | CGSA CMP/WGMG | E601 | 4 | Y | |
| W-7ES | MWPT | Qal | | Q | ERD/WGMG | E300.0:PERC | 1 | Y | |

**Table 2.1-5. Central GSA 2003 ground water sampling and analysis plan.**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-7ES | MWPT | Qal | | Q | ERD/WGMG | E300.0:PERC | 2 | Y | |
| W-7ES | MWPT | Qal | | Q | ERD/WGMG | E300.0:PERC | 3 | Y | |
| W-7ES | MWPT | Qal | | Q | ERD/WGMG | E300.0:PERC | 4 | N | |
| W-7ES | MWPT | Qal | S | S | CGSA CMP | E601 | 1 | Y | |
| W-7ES | MWPT | Qal | | S | DIS | E601 | 2 | Y | |
| W-7ES | MWPT | Qal | S | S | CGSA CMP | E601 | 3 | Y | |
| W-7F | MWPT | $Tnsc_1$ | S | S | CGSA CMP | E601 | 2 | N | Pump down. |
| W-7F | MWPT | $Tnsc_1$ | S | S | CGSA CMP | E601 | 4 | Y | |
| W-7G | MWPT | $Tnbs_1$ | S | S | CGSA CMP | E601 | 2 | Y | |
| W-7G | MWPT | $Tnbs_1$ | S | S | CGSA CMP | E601 | 4 | Y | |
| W-7H | MWPT | Qal | S | S | CGSA CMP | E601 | 2 | Y | |
| W-7H | MWPT | Qal | S | S | CGSA CMP | E601 | 4 | Y | |
| W-7I | EW | $Tnbs_2$ | S | S | CGSA CMP | E601 | 1 | N | Manpower shortage. |
| W-7I | EW | $Tnbs_2$ | S | S | CGSA CMP | E601 | 2 | Y | |
| W-7I | EW | $Tnbs_2$ | S | S | CGSA CMP | E601 | 3 | Y | |
| W-7J | MWPT | $Tnbs_2$ | S | S | CGSA CMP | E601 | 2 | Y | |
| W-7J | MWPT | $Tnbs_2$ | S | S | CGSA CMP | E601 | 4 | Y | |
| W-7K | MWPT | $Tnbs_1$ | S | S | CGSA CMP | E601 | 2 | Y | |
| W-7K | MWPT | $Tnbs_1$ | S | S | CGSA CMP | E601 | 4 | Y | |
| W-7L | MWPT | $Tnbs_1$ | B | B | CGSA CMP | E200.7:Cu | 2 | Y | Next sample required 2005. |
| W-7L | MWPT | $Tnbs_1$ | S | S | CGSA CMP | E601 | 2 | Y | |
| W-7L | MWPT | $Tnbs_1$ | S | S | CGSA CMP | E601 | 4 | Y | |
| W-7M | MWPT | $Tnbs_1$ | S | S | CGSA CMP | E601 | 2 | Y | |
| W-7M | MWPT | $Tnbs_1$ | S | S | CGSA CMP | E601 | 4 | Y | |
| W-7N | MWPT | $Tnbs_1$ | B | B | CGSA CMP | E245.2 | 2 | Y | Next sample required 2005. |
| W-7N | MWPT | $Tnbs_1$ | S | S | CGSA CMP | E601 | 2 | Y | |

**Table 2.1-5. Central GSA 2003 ground water sampling and analysis plan.**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-7N | MWPT | $Tnbs_1$ | S | S | CGSA CMP | E601 | 4 | Y | |
| W-7O | EW | Qal | B | B | CGSA CMP | E200.7:Cu | 2 | N | Manpower shortage. |
| W-7O | EW | Qal | B | B | CGSA CMP | E200.7:Cu | 4 | Y | Next sample required 2005. |
| W-7O | EW | Qal | B | B | CGSA CMP | E200.7:Zn | 2 | N | Manpower shortage. |
| W-7O | EW | Qal | B | B | CGSA CMP | E200.7:Zn | 4 | Y | Next sample required 2005. |
| W-7O | EW | Qal | S | S | CGSA CMP | E601 | 1 | N | Manpower shortage. |
| W-7O | EW | Qal | S | S | CGSA CMP | E601 | 2 | Y | |
| W-7O | EW | Qal | S | S | CGSA CMP | E601 | 3 | Y | |
| W-7P | MWPT | $Tnbs_1$ | Q | Q | CGSA CMP | E601 | 1 | Y | |
| W-7P | MWPT | $Tnbs_1$ | Q | Q | CGSA CMP | E601 | 2 | Y | |
| W-7P | MWPT | $Tnbs_1$ | Q | Q | CGSA CMP | E601 | 3 | Y | |
| W-7P | MWPT | $Tnbs_1$ | Q | Q | CGSA CMP | E601 | 4 | Y | |
| W-7PS | MWPT | Qal | Q | Q | CGSA CMP/WGMG | E601 | 1 | Y | |
| W-7PS | MWPT | Qal | Q | Q | CGSA CMP/WGMG | E601 | 2 | Y | |
| W-7PS | MWPT | Qal | Q | Q | CGSA CMP/WGMG | E601 | 3 | Y | |
| W-7PS | MWPT | Qal | Q | Q | CGSA CMP/WGMG | E601 | 4 | Y | |
| W-7Q | MWPT | $Tnbs_2$ | | S | DIS | E601 | 1 | Y | |
| W-7Q | MWPT | $Tnbs_2$ | | S | DIS | E601 | 2 | Y | |
| W-7Q | MWPT | $Tnbs_2$ | | S | DIS | E601 | 3 | Y | |
| W-7R | MWPT | Qal | | S | DIS | E601 | 1 | Y | |
| W-7R | MWPT | Qal | | S | DIS | E601 | 2 | Y | |
| W-7R | MWPT | Qal | | S | DIS | E601 | 3 | Y | |
| W-7S | MWPT | Qal | | S | DIS | E601 | 1 | Y | |
| W-7S | MWPT | Qal | | S | DIS | E601 | 2 | Y | |
| W-7S | MWPT | Qal | | S | DIS | E601 | 3 | Y | |

**Table 2.1-5. Central GSA 2003 ground water sampling and analysis plan.**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-7T | MWPT | Qal | | S | DIS | E601 | 1 | Y | |
| W-7T | MWPT | Qal | | S | DIS | E601 | 2 | Y | |
| W-7T | MWPT | Qal | | S | DIS | E601 | 3 | Y | |
| W-843-01 | MWPT | $Tnbs_1$ | S | S | CGSA CMP | E601 | 2 | Y | |
| W-843-01 | MWPT | $Tnbs_1$ | S | S | CGSA CMP | E601 | 4 | Y | |
| W-843-02 | MWPT | $Tnbs_1$ | S | S | CGSA CMP | E601 | 2 | Y | |
| W-843-02 | MWPT | $Tnbs_1$ | S | S | CGSA CMP | E601 | 4 | Y | |
| W-872-01 | MWPT | $Tnbs_2$ | B | B | CGSA CMP | E200.7:Cu | 2 | Y | Next sample required 2005. |
| W-872-01 | MWPT | $Tnbs_2$ | B | B | CGSA CMP | E239.2 | 2 | Y | Next sample required 2005. |
| W-872-01 | MWPT | $Tnbs_2$ | S | S | CGSA CMP | E601 | 2 | Y | |
| W-872-01 | MWPT | $Tnbs_2$ | S | S | CGSA CMP | E601 | 4 | N | Dry. |
| W-872-02 | EW | $Tnbs_2$ | S | S | CGSA CMP | E601 | 1 | N | Manpower shortage. |
| W-872-02 | EW | $Tnbs_2$ | | S | DIS | E601 | 2 | Y | |
| W-872-02 | EW | $Tnbs_2$ | S | S | CGSA CMP | E601 | 3 | Y | |
| W-873-01 | MWPT | $Tnbs_1$ | S | S | CGSA CMP | E601 | 2 | Y | |
| W-873-01 | MWPT | $Tnbs_1$ | S | S | CGSA CMP | E601 | 4 | Y | |
| W-873-02 | MWPT | $Tnbs_2$ | S | S | CGSA CMP | E601 | 2 | Y | |
| W-873-02 | MWPT | $Tnbs_2$ | S | S | CGSA CMP | E601 | 4 | Y | |
| W-873-03 | MWPT | $Tnsc_1$ | S | S | CGSA CMP | E601 | 2 | Y | |
| W-873-03 | MWPT | $Tnsc_1$ | S | S | CGSA CMP | E601 | 4 | Y | |
| W-873-04 | MWPT | $Tnsc_1$ | B | B | CGSA CMP | E239.2 | 2 | Y | Next sample required 2005. |
| W-873-04 | MWPT | $Tnsc_1$ | S | S | CGSA CMP | E601 | 2 | Y | |
| W-873-04 | MWPT | $Tnsc_1$ | S | S | CGSA CMP | E601 | 4 | Y | |
| W-873-06 | MWPT | $Tnbs_2$ | B | B | CGSA CMP | E200.7:Cd | 2 | Y | Next sample required 2005. |
| W-873-06 | MWPT | $Tnbs_2$ | S | S | CGSA CMP | E601 | 2 | Y | |

**Table 2.1-5. Central GSA 2003 ground water sampling and analysis plan.**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-873-06 | MWPT | $Tnbs_2$ | S | S | CGSA CMP | E601 | 4 | Y | |
| W-873-07 | EW | $Tnbs_2$ | S | S | CGSA CMP | E601 | 1 | N | Manpower shortage. |
| W-873-07 | EW | $Tnbs_2$ | | S | DIS | E601 | 2 | Y | |
| W-873-07 | EW | $Tnbs_2$ | S | S | CGSA CMP | E601 | 3 | Y | |
| W-875-01 | MWPT | $Tnbs_2$ | B | B | CGSA CMP | E200.7:Cd | 2 | Y | Next sample required 2005. |
| W-875-01 | MWPT | $Tnbs_2$ | B | B | CGSA CMP | E200.7:Cu | 2 | Y | Next sample required 2005. |
| W-875-01 | MWPT | $Tnbs_2$ | B | B | CGSA CMP | E200.7:Zn | 2 | Y | Next sample required 2005. |
| W-875-01 | MWPT | $Tnbs_2$ | B | B | CGSA CMP | E239.2 | 2 | Y | Next sample required 2005. |
| W-875-01 | MWPT | $Tnbs_2$ | S | S | CGSA CMP | E601 | 2 | Y | |
| W-875-01 | MWPT | $Tnbs_2$ | S | S | CGSA CMP | E601 | 4 | Y | |
| W-875-02 | MWPT | $Tnsc_1$ | S | S | CGSA CMP | E601 | 2 | Y | |
| W-875-02 | MWPT | $Tnsc_1$ | S | S | CGSA CMP | E601 | 4 | Y | |
| W-875-03 | MWPT | $Tnbs_2$ | S | S | CGSA CMP | E601 | 2 | Y | |
| W-875-03 | MWPT | $Tnbs_2$ | S | S | CGSA CMP | E601 | 4 | Y | |
| W-875-04 | MWPT | $Tnbs_2$ | B | B | CGSA CMP | E239.2 | 2 | Y | Next sample required 2005. |
| W-875-04 | MWPT | $Tnbs_2$ | S | S | CGSA CMP | E601 | 2 | Y | |
| W-875-04 | MWPT | $Tnbs_2$ | S | S | CGSA CMP | E601 | 4 | Y | |
| W-875-05 | MWPT | $Tnsc_1$ | S | S | CGSA CMP | E601 | 2 | Y | |
| W-875-05 | MWPT | $Tnsc_1$ | S | S | CGSA CMP | E601 | 4 | Y | |
| W-875-06 | MWPT | $Tnsc_1$ | S | S | CGSA CMP | E601 | 2 | Y | |
| W-875-06 | MWPT | $Tnsc_1$ | S | S | CGSA CMP | E601 | 4 | Y | |
| W-875-07 | EW | $Tnbs_2$ | B | B | CGSA CMP | E239.2 | 2 | Y | Next sample required 2005. |
| W-875-07 | EW | $Tnbs_2$ | S | S | CGSA CMP | E601 | 1 | N | Manpower shortage. |
| W-875-07 | EW | $Tnbs_2$ | | S | DIS | E601 | 2 | Y | |

Table 2.1-5. Central GSA 2003 ground water sampling and analysis plan.

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-875-07 | EW | $Tnbs_2$ | S | S | CGSA CMP | E601 | 3 | Y | |
| W-875-08 | EW | $Tnbs_2$ | S | S | CGSA CMP | E601 | 1 | N | Manpower shortage. |
| W-875-08 | EW | $Tnbs_2$ | | S | DIS | E601 | 2 | Y | |
| W-875-08 | EW | $Tnbs_2$ | S | S | CGSA CMP | E601 | 3 | Y | |
| W-875-09 | MWPT | $Tnbs_2$ | S | S | CGSA CMP | E601 | 2 | N | Insufficient water. |
| W-875-09 | MWPT | $Tnbs_2$ | S | S | CGSA CMP | E601 | 4 | N | No sample port. |
| W-875-10 | MWPT | $Tnbs_2$ | B | B | CGSA CMP | E200.7:Ba | 2 | N | Insufficient water. |
| W-875-10 | MWPT | $Tnbs_2$ | B | B | CGSA CMP | E200.7:Ba | 4 | N | No sample port. |
| W-875-10 | MWPT | $Tnbs_2$ | B | B | CGSA CMP | E239.2 | 2 | N | Insufficient water. |
| W-875-10 | MWPT | $Tnbs_2$ | B | B | CGSA CMP | E239.2 | 4 | N | No sample port. |
| W-875-10 | MWPT | $Tnbs_2$ | S | S | CGSA CMP | E601 | 2 | N | Insufficient water. |
| W-875-10 | MWPT | $Tnbs_2$ | S | S | CGSA CMP | E601 | 4 | N | No sample port. |
| W-875-11 | MWPT | $Tnbs_2$ | S | S | CGSA CMP | E601 | 2 | N | Insufficient water. |
| W-875-11 | MWPT | $Tnbs_2$ | S | S | CGSA CMP | E601 | 4 | N | No sample port. |
| W-875-15 | MWPT | $Tnbs_2$ | S | S | CGSA CMP | E601 | 2 | N | Insufficient water. |
| W-875-15 | MWPT | $Tnbs_2$ | S | S | CGSA CMP | E601 | 4 | N | No sample port. |
| W-876-01 | MWPT | $Tnbs_2$ | S | S | CGSA CMP | E601 | 2 | Y | |
| W-876-01 | MWPT | $Tnbs_2$ | S | S | CGSA CMP | E601 | 4 | Y | |
| W-879-01 | MWPT | $Tnsc_1$ | S | S | CGSA CMP | E601 | 2 | Y | |
| W-879-01 | MWPT | $Tnsc_1$ | S | S | CGSA CMP | E601 | 4 | Y | |
| W-889-01 | MWPT | $Tnsc_1$ | S | S | CGSA CMP | E601 | 2 | Y | |
| W-889-01 | MWPT | $Tnsc_1$ | S | S | CGSA CMP | E601 | 4 | Y | |
| W-CGSA-1732 | MWPT | Qal | | A | DIS | E601 | 2 | N | Dry. |
| W-CGSA-1733 | MWPT | Qal | | S | DIS | E601 | 2 | Y | |
| W-CGSA-1733 | MWPT | Qal | | S | DIS | E601 | 4 | Y | |

**Table 2.1-5. Central GSA 2003 ground water sampling and analysis plan.**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-CGSA-1735 | MWPT | Qal | | A | DIS | E601 | 2 | N | Dry. |
| W-CGSA-1736 | MWPT | Qal | | S | DIS | E601 | 2 | Y | |
| W-CGSA-1736 | MWPT | Qal | | S | DIS | E601 | 4 | Y | |
| W-CGSA-1737 | MWPT | Qal | | S | DIS | E601 | 2 | Y | |
| W-CGSA-1737 | MWPT | Qal | | S | DIS | E601 | 4 | Y | |
| W-CGSA-1739 | MWPT | Qal | | S | DIS | E601 | 2 | Y | |
| W-CGSA-1739 | MWPT | Qal | | S | DIS | E601 | 4 | Y | |

CGSA CMP/DIS = Sampling more frequently then required.

CGSA CMP/WGMG = Well shared with the Operations and Regulatory Affairs Division, Water Guidance and Monitoring Group and may be sampled at a greater frequency and for additional analytes then required by the CMP. Non-CMP analytes are reported separately by ORAD.

CGSA CMP = Central GSA groundwater sampling and analysis plan specified in the GSA RD.

CMP DMW = CMP detection monitor well.

CMP/DIS = Sampling required analyte more frequently then required.

CMP/WGMG = Well shared with the Operations and Regulatory Affairs Division, Water Guidance and Monitoring Group and may be sampled at a greater frequency and for additional analytes then required by the CMP. Non-CMP analytes are reported separately by ORAD.

CMP = Compliance Monitoring.

DIS = Discretionary sampling of non-required analyte.

DMW = Detection monitor well (non-CMP).

ERD/WGMG = Non-CMP analyte sampled from a well shared by ERD and WGMG.

EW = Extraction well.

GW = Guard well.

MWB = Monitor well used for background.

MWPT = Monitor well used for plume tracking.

SPR = Spring.

WS = Water supply well.

**Table 2.1-6. Central GSA Services Area 2003 VOCs in ground water.**

| Location | Date | Method | TCE (μg/L) | PCE (μg/L) | Total 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) | Freon 11 (μg/L) | Freon 113 (μg/L) | Methylene chloride (μg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W-35A-01 | 04/29/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-35A-01 | 10/15/03 | E601 | 71 | 4.4 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | 1.2 | <0.5 | 0.61 | <0.5 | <0.5 |
| W-35A-02 | 01/27/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-35A-02 | 05/19/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-35A-02 | 08/05/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-35A-04 | 01/27/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-35A-04 | 05/09/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-35A-04 | 09/03/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-35A-04 | 10/15/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-35A-05 | 05/09/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-35A-05 | 10/27/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-35A-06 | 05/09/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-35A-06 | 10/15/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-35A-07 | 04/30/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-35A-07 | 10/22/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-35A-08 | 05/10/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-35A-08 | 10/22/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-35A-09 | 04/30/03 | E601 | 1.3 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 1.3 | <0.5 | <0.5 |
| W-35A-09 | 04/30/03 DUP | E601 | 1.5 LO | <0.5 LO | <0.5 LO | <0.5 LO | <0.5 LO | <0.5 LO | <0.5 LO | <0.5 LO | <0.5 LO | 1.8 LO | <0.5 LO | <0.5 LO |
| W-35A-09 | 10/27/03 | E601 | 2.7 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 2.5 | <0.5 | <0.5 |
| W-35A-10 | 04/30/03 | E601 | 8.9 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 11 | <0.5 | <0.5 |
| W-35A-10 | 12/15/03 | E601 | 15 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 10 | <0.5 | <0.5 |
| W-35A-11 | 05/09/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-35A-11 | 10/15/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-35A-12 | 05/10/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-35A-12 | 10/15/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-35A-13 | 05/09/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-35A-13 | 10/24/03 | E601 | 0.59 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-35A-13 | 10/24/03 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 |
| W-35A-14 | 05/10/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-35A-14 | 10/27/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7A | 05/07/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7A | 10/17/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

**Table 2.1-6. Central GSA Services Area 2003 VOCs in ground water. (Cont. Page 2 of 6)**

| Location | Date | Method | TCE (µg/L) | PCE (µg/L) | Total 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) | Freon 11 (µg/L) | Freon 113 (µg/L) | Methylene chloride (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W-7B | 05/07/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7B | 05/07/03 DUP | E601 | <0.5 | <0.5 | - | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7B | 10/20/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7C | 05/07/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7C | 10/20/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7E | 01/25/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7E | 05/07/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | 13 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7E | 09/10/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7E | 12/11/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7E | 12/11/03 DUP | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7ES | 03/06/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7ES | 05/07/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7ES | 09/03/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7F | 10/29/03 | E601 | 0.75 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7G | 04/26/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7G | 04/26/03 DUP | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7G | 10/16/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7H | 04/23/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7H | 10/17/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7I | 05/20/03 | E601 | 580 D | 41 | 24 | <0.5 | <0.5 | 0.64 | 1.7 | 4.1 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7I | 07/09/03 | E601 | 390 D | 4.6 | 21 | <0.5 | <0.5 | <0.5 | <0.5 | 5.7 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7I | 10/07/03 | E601 | 150 D | 4.9 | 22 | <0.5 | <0.5 | <0.5 | <0.5 | 2.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7J | 04/29/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7J | 10/28/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7K | 05/13/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7K | 10/20/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7L | 05/13/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7L | 10/20/03 | E601 | 0.57 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7M | 05/13/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7M | 10/20/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7N | 05/13/03 | E601 | 0.96 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7N | 10/20/03 | E601 | 1.1 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7O | 05/20/03 | E601 | 42 | 3.4 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | 0.72 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7O | 07/09/03 | E601 | 40 | 2.9 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | 0.67 | <0.5 | <0.5 | <0.5 | <0.5 |

**Table 2.1-6. Central GSA Services Area 2003 VOCs in ground water. (Cont. Page 3 of 6)**

| Location | Date | Method | TCE (μg/L) | PCE (μg/L) | Total 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) | Freon 11 (μg/L) | Freon 113 (μg/L) | Methylene chloride (μg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W-7O | 10/07/03 | E601 | 42 | 3.4 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | 0.67 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7P | 03/06/03 | E601 | 24 | 1.7 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7P | 05/13/03 | E601 | 21 | 1.7 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7P | 08/05/03 | E601 | 26 | 1.8 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7P | 10/28/03 | E601 | 25 | 1.7 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7PS | 01/25/03 | E601 | 3.3 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7PS | 05/13/03 | E601 | 2.2 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7PS | 08/26/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7PS | 10/21/03 | E601 | 2.8 | 0.51 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7Q | 01/25/03 | E601 | 190 D | 13 | 1.6 | <0.5 | <0.5 | <0.5 | <0.5 | 1.9 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7Q | 04/23/03 | E601 | 100 D | 9.3 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | 0.94 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7Q | 07/28/03 | E601 | 88 | 8.6 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | 0.78 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7R | 01/25/03 | E601 | 11 | 1.4 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7R | 04/28/03 | E601 | 9.3 | 1.2 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7R | 08/04/03 | E601 | 8.4 | 1.1 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7S | 01/25/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7S | 05/13/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7S | 08/05/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7T | 01/25/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7T | 05/13/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-7T | 08/05/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-843-01 | 05/08/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-843-01 | 10/24/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-843-02 | 04/29/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-843-02 | 12/09/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-872-01 | 04/23/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-872-02 | 05/20/03 | E601 | 210 D | 15 | 12 | <0.5 | <0.5 | <0.5 | <0.5 | 4.7 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-872-02 | 07/09/03 | E601 | 11 | 0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | 0.85 | <0.5 | 15 | <0.5 | <0.5 |
| W-872-02 | 10/07/03 | E601 | 10 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | 0.69 | <0.5 | 12 | <0.5 | <0.5 |
| W-873-01 | 04/26/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-873-01 | 10/24/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-873-02 | 04/26/03 | E601 | 7.3 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 12 | <0.5 | <0.5 |
| W-873-02 | 10/24/03 | E601 | 6.3 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 9.1 | <0.5 | <0.5 |
| W-873-03 | 04/26/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

**Table 2.1-6. Central GSA Services Area 2003 VOCs in ground water. (Cont. Page 4 of 6)**

| Location | Date | Method | TCE ($\mu$g/L) | PCE ($\mu$g/L) | Total 1,2-DCE ($\mu$g/L) | Carbon tetrachloride ($\mu$g/L) | Chloroform ($\mu$g/L) | 1,1-DCA ($\mu$g/L) | 1,2-DCA ($\mu$g/L) | 1,1-DCE ($\mu$g/L) | 1,1,1-TCA ($\mu$g/L) | Freon 11 ($\mu$g/L) | Freon 113 ($\mu$g/L) | Methylene chloride ($\mu$g/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W-873-03 | 10/24/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-873-04 | 04/23/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-873-04 | 10/15/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-873-06 | 04/23/03 | E601 | 4.8 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-873-06 | 04/23/03 DUP | E601 | 6.4 | <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 | 10/14/03 | E601 | 4.1 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-873-07 | 05/20/03 | E601 | 91 | 4.4 | 4.8 | <0.5 | <0.5 | <0.5 | <0.5 | 1.8 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-873-07 | 07/09/03 | E601 | 36 | 2.2 | 1.6 | <0.5 | <0.5 | <0.5 | <0.5 | 1.3 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-873-07 | 10/07/03 | E601 | 9 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | 0.6 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-CGSA-1733 | 02/20/03 | E601 | 9.7 | 1.4 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-CGSA-1733 | 04/28/03 | E601 | 7 | 1.1 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-CGSA-1733 | 10/20/03 | E601 | 8.9 | 1.4 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-CGSA-1736 | 02/20/03 | E601 | 10 | 1 | <1 | <0.5 | 0.73 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-CGSA-1736 | 04/28/03 | E601 | 9.8 | 0.99 | <1 | <0.5 | 0.59 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-CGSA-1736 | 10/21/03 | E601 | 8 | 0.89 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-CGSA-1737 | 02/20/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-CGSA-1737 | 04/28/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-CGSA-1737 | 10/20/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-CGSA-1739 | 02/20/03 | E601 | 2.7 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-CGSA-1739 | 04/28/03 | E601 | 2.2 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-CGSA-1739 | 10/20/03 | E601 | 2 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-875-01 | 04/29/03 | E601 | 28 | 1.8 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-875-01 | 10/16/03 | E601 | 24 | 1.6 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-875-02 | 04/24/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-875-02 | 12/09/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-875-03 | 04/24/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-875-03 | 04/24/03 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 |
| W-875-03 | 10/17/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-875-04 | 04/24/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-875-04 | 10/16/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-875-05 | 04/24/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-875-05 | 10/16/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-875-06 | 04/24/03 | E601 | 0.79 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-875-06 | 10/16/03 | E601 | 2.7 | <0.5 | 2.2 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

**Table 2.1-6. Central GSA Services Area 2003 VOCs in ground water. (Cont. Page 5 of 6)**

| Location | Date | Method | TCE (µg/L) | PCE (µg/L) | Total 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) | Freon 11 (µg/L) | Freon 113 (µg/L) | Methylene chloride (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W-875-07 | 05/20/03 | E601 | 710 D | 93 D | 21 D | <3 D | <3 D | <3 D | <3 D | 7.2 D | <3 D | <3 D | <3 D | <3 D |
| W-875-07 | 07/09/03 | E601 | 460 D | 45 | 14 | <0.5 | <0.5 | <0.5 | 1.2 | 3.2 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-875-07 | 10/07/03 | E601 | 410 D | 1.6 | 21 | <0.5 | <0.5 | <0.5 | <0.5 | 7.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-875-08 | 05/20/03 | E601 | 430 D | 1.8 | 24 | <0.5 | <0.5 | <0.5 | <0.5 | 9.2 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-875-08 | 07/09/03 | E601 | 460 D | 1.5 | 22 | <0.5 | <0.5 | <0.5 | <0.5 | 8.4 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-875-08 | 10/07/03 | E601 | 430 D | 1.1 | 19 | <0.5 | <0.5 | <0.5 | <0.5 | 7 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-876-01 | 04/28/03 | E601 | 22 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-876-01 | 10/16/03 | E601 | 5.4 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-879-01 | 04/28/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-879-01 | 10/17/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-879-01 | 10/17/03 DUP | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-889-01 | 05/08/03 | E601 | 36 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-889-01 | 05/08/03 DUP | E601 | 39 | <0.5 | 0.7 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-889-01 | 10/17/03 | E601 | 31 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

**Table 2.1-6. Central GSA Services Area 2003 VOCs in ground water. (Cont. Page 6 of 6) Other VOCs not included in Table 2.1.6. Pages 1 through 5:**

| Location | Date | Method | 1,1,2-trichloroethane ($\mu$g/L) | Bromo-dichloromethane ($\mu$g/L) | Chloromethane ($\mu$g/L) | Methylene chloride ($\mu$g/L) | Total trihalomethanes ($\mu$g/L) | cis-1,2-dichloroethene ($\mu$g/L) | trans-1,2-dichloroethene ($\mu$g/L) |
|---|---|---|---|---|---|---|---|---|---|
| W-35A-01 | 10/15/03 | E601 | - | - | - | - | - | 0.59 | - |
| W-7A | 10/17/03 | E601 | - | - | - | - | - | 0.7 | - |
| W-7B | 10/20/03 | E601 | - | - | - | 1.2 | - | - | - |
| W-7C | 10/20/03 | E601 | - | - | - | 2 | - | - | - |
| W-7E | 05/07/03 | E601 | - | 0.99 | - | - | 15 | - | - |
| W-7F | 10/29/03 | E601 | - | - | 0.54 | - | - | - | - |
| W-7G | 10/16/03 | E601 | - | - | - | 1.9 | - | - | - |
| W-7H | 10/17/03 | E601 | - | - | - | 1.1 | - | - | - |
| W-7I | 05/20/03 | E601 | 2 | - | - | - | - | 24 | - |
| W-7I | 07/09/03 | E601 | - | - | - | - | - | 20 | 0.94 |
| W-7I | 10/07/03 | E601 | - | - | - | - | - | 21 | 1.1 |
| W-7L | 10/20/03 | E601 | - | - | - | 2.5 | - | - | - |
| W-7P | 08/05/03 | E601 | - | - | - | - | - | 0.66 | - |
| W-7P | 10/28/03 | E601 | - | - | - | - | - | 0.84 | - |
| W-7Q | 01/25/03 | E601 | - | - | - | - | - | 1.6 | - |
| W-7Q | 04/23/03 | E601 | - | - | - | - | - | 0.78 | - |
| W-7Q | 07/28/03 | E601 | - | - | - | - | - | 0.79 | - |
| W-872-02 | 05/20/03 | E601 | - | - | - | - | - | 11 | 0.98 |
| W-873-07 | 05/20/03 | E601 | - | - | - | - | - | 4.2 | 0.65 |
| W-873-07 | 07/09/03 | E601 | - | - | - | - | - | 1.3 | - |
| W-CGSA-1739 | 10/20/03 | E601 | - | - | - | 1.2 | - | - | - |
| W-875-05 | 10/16/03 | E601 | - | - | - | 1.1 | - | - | - |
| W-875-06 | 10/16/03 | E601 | - | - | - | - | - | 1.3 | 0.88 |
| W-875-07 | 05/20/03 | E601 | - | - | - | - | - | 21 D | - |
| W-875-07 | 07/09/03 | E601 | 1.4 | - | - | - | - | 14 | - |
| W-875-07 | 10/07/03 | E601 | - | - | - | - | - | 20 | 0.88 |
| W-875-08 | 05/20/03 | E601 | - | - | - | - | - | 23 | 0.97 |
| W-875-08 | 07/09/03 | E601 | - | - | - | - | - | 21 | 0.92 |
| W-875-08 | 10/07/03 | E601 | - | - | - | - | - | 19 | 0.87 |
| W-879-01 | 10/17/03 DUP | E601 | - | - | - | 1 | - | - | - |
| W-889-01 | 05/08/03 | E601 | - | - | - | - | - | 0.61 | - |
| W-889-01 | 05/08/03 DUP | E601 | - | - | - | - | - | 0.7 | - |
| W-889-01 | 10/17/03 | E601 | - | - | - | - | - | 0.54 | - |

**Table 2.1-7. Central General Services Area 2003 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 | 04/29/03 | <0.01 | - | <0.002 | - | - | - |
| W-35A-02 | 05/19/03 | - | - | - | - | - | <0.01 |
| W-35A-04 | 05/09/03 | - | <0.01 | - | - | - | - |
| W-35A-04 | 09/03/03 | - | - | - | - | 6.2 | - |
| W-7A | 05/07/03 | - | - | <0.008 D | - | - | - |
| W-7L | 05/13/03 | - | <0.01 | - | - | - | - |
| W-7N | 05/13/03 | - | - | - | <0.0002 | - | - |
| W-7O | 12/08/03 | - | <0.01 | - | - | - | <0.01 |
| W-872-01 | 04/23/03 | - | <0.01 | 0.002 | - | - | - |
| W-873-04 | 04/23/03 | - | - | <0.002 | - | - | - |
| W-873-06 | 04/23/03 | <0.01 | - | <0.002 | - | - | - |
| W-873-06 | 04/23/03 DUP | <0.005 | - | - | - | - | - |
| W-875-01 | 04/29/03 | <0.01 | <0.01 | <0.002 | - | - | <0.01 |
| W-875-04 | 04/24/03 | - | - | <0.002 | - | - | - |
| W-875-07 | 05/20/03 | - | - | <0.008 D | - | - | - |
| W-875-07 | 07/09/03 | - | - | <0.02 D | - | - | - |
| W-875-07 | 10/07/03 | - | - | <0.008 D | - | - | - |

**Table 2.1-8. Central General Services Area 2003 in vapor.**

| Location | Date | 1,1-Dichloroethene (ppmv/v) | cis-1,2-Dichloroethene (ppmv/v) | Tetrachloroethene (ppmv/v) | Trichloroethene (ppmv/v) |
|---|---|---|---|---|---|
| W-7I | 03/10/03 | <0.2 | <0.2 | <0.2 | 1.5 |
| W-7I | 06/02/03 | <0.2 | <0.2 | 0.5 | 3.9 |
| W-875-07 | 03/10/03 | <0.2 | <0.2 | <0.2 | 2.1 |
| W-875-07 | 06/02/03 | <0.2 | <0.2 | 0.4 | 2.9 |
| W-875-08 | 03/10/03 | <0.2 | <0.2 | <0.2 | <0.2 |
| W-875-08 | 06/02/03 | <0.2 | <0.2 | <0.2 | 1.9 |
| W-875-09 | 03/11/03 | <0.2 | <0.2 | <0.2 | 5.6 |
| W-875-09 | 06/03/03 | <0.2 | <0.2 | <0.2 | 0.6 |
| W-875-10 | 03/10/03 | 2.3 | <0.2 | 6.6 | 59 |
| W-875-10 | 06/03/03 | <0.2 | <0.2 | 0.5 | 2.2 |
| W-875-11 | 03/11/03 | <0.2 | <0.2 | <0.2 | <0.2 |
| W-875-11 | 06/03/03 | <0.2 | <0.2 | <0.2 | <0.2 |
| W-875-15 | 03/10/03 | <0.2 | <0.2 | <0.2 | 1.4 |
| W-875-15 | 06/03/03 | <0.2 | <0.2 | <0.2 | <0.2 |

**Table 2.1-9. Central General Services Area 2003 perchlorate in ground water.**

| Location | Date | Perchlorate (μg/L) |
|---|---|---|
| W-7ES | 03/06/03 | <3 |
| W-7ES | 05/07/03 | <4 |
| W-7ES | 09/04/03 | <4 |

**Table 2.1-10. Central General Services Area 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-35A-01 | 01/08/03 | 13.6 | 494.81 | |
| W-35A-01 | 04/09/03 | 10.92 | 497.49 | |
| W-35A-01 | 07/14/03 | 12.43 | 495.98 | |
| W-35A-01 | 10/02/03 | 14.71 | 493.7 | |
| W-35A-02 | 01/08/03 | 12.47 | 497.23 | |
| W-35A-02 | 02/03/03 | 11.76 | 497.94 | |
| W-35A-02 | 03/05/03 | 10.66 | 499.04 | |
| W-35A-02 | 04/09/03 | 9.33 | 500.37 | |
| W-35A-02 | 07/14/03 | 11.12 | 498.58 | |
| W-35A-02 | 10/08/03 | 13.58 | 496.12 | |
| W-35A-03 | 01/08/03 | 12.7 | 494.14 | |
| W-35A-03 | 04/14/03 | 9.8 | 497.04 | |
| W-35A-03 | 07/14/03 | 11.55 | 495.29 | |
| W-35A-03 | 10/02/03 | 13.62 | 493.22 | |
| W-35A-04 | 01/08/03 | 11.5 | 492.48 | |
| W-35A-04 | 04/14/03 | 8.93 | 495.05 | |
| W-35A-04 | 07/14/03 | 10.4 | 493.58 | |
| W-35A-04 | 10/02/03 | 12.49 | 491.49 | |
| W-35A-05 | 01/08/03 | 13.61 | 494.36 | |
| W-35A-05 | 04/09/03 | 10.9 | 497.07 | |
| W-35A-05 | 07/14/03 | 12.41 | 495.56 | |
| W-35A-05 | 10/02/03 | 14.68 | 493.29 | |
| W-35A-06 | 01/08/03 | 11.76 | 492.56 | |
| W-35A-06 | 04/09/03 | 9.09 | 495.23 | |
| W-35A-06 | 07/14/03 | 10.5 | 493.82 | |
| W-35A-06 | 10/02/03 | 12.66 | 491.66 | |
| W-35A-07 | 01/08/03 | 2.27 | 508.32 | |
| W-35A-07 | 02/03/03 | 1.81 | 508.78 | |
| W-35A-07 | 03/05/03 | 1.27 | 509.32 | |
| W-35A-07 | 04/09/03 | 0.98 | 509.61 | |
| W-35A-07 | 07/14/03 | 1.06 | 509.53 | |
| W-35A-07 | 10/08/03 | 2.18 | 508.41 | |

**Table 2.1-10. Central General Services Area 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-35A-08 | 01/08/03 | 15.9 | 501.96 | |
| W-35A-08 | 02/03/03 | 15.56 | 502.3 | |
| W-35A-08 | 03/05/03 | 14.69 | 503.17 | |
| W-35A-08 | 04/09/03 | 13.57 | 504.29 | |
| W-35A-08 | 07/14/03 | 15.41 | 502.45 | |
| W-35A-08 | 10/08/03 | 17.03 | 500.83 | |
| W-35A-09 | 01/08/03 | 15.98 | 499.57 | |
| W-35A-09 | 02/03/03 | 15.2 | 500.35 | |
| W-35A-09 | 03/05/03 | 14.03 | 501.52 | |
| W-35A-09 | 04/09/03 | 12.75 | 502.8 | |
| W-35A-09 | 07/14/03 | 14.6 | 500.95 | |
| W-35A-09 | 10/08/03 | 17.14 | 498.41 | |
| W-35A-10 | 01/08/03 | 13.31 | 498.41 | |
| W-35A-10 | 02/03/03 | 12.77 | 498.95 | |
| W-35A-10 | 03/05/03 | 11.84 | 499.88 | |
| W-35A-10 | 04/09/03 | 10.53 | 501.19 | |
| W-35A-10 | 07/14/03 | 11.91 | 499.81 | |
| W-35A-10 | 10/08/03 | 14.22 | 497.5 | |
| W-35A-11 | 01/08/03 | 5.85 | 499.5 | |
| W-35A-11 | 02/03/03 | 5.24 | 500.11 | |
| W-35A-11 | 03/05/03 | 4.73 | 500.62 | |
| W-35A-11 | 04/09/03 | 3.94 | 501.41 | |
| W-35A-11 | 07/14/03 | 4.73 | 500.62 | |
| W-35A-11 | 10/02/03 | 6.38 | 498.97 | |
| W-35A-12 | 01/08/03 | 6.63 | 499.19 | |
| W-35A-12 | 02/03/03 | 6.44 | 499.38 | |
| W-35A-12 | 03/05/03 | 5.62 | 500.2 | |
| W-35A-12 | 04/09/03 | 4.76 | 501.06 | |
| W-35A-12 | 07/14/03 | 5.83 | 499.99 | |
| W-35A-12 | 10/02/03 | 7.29 | 498.53 | |
| W-35A-13 | 01/08/03 | 10.08 | 493.26 | |
| W-35A-13 | 02/03/03 | 9.78 | 493.56 | |
| W-35A-13 | 03/05/03 | 8.85 | 494.49 | |

**Table 2.1-10. Central General Services Area 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-35A-13 | 04/14/03 | 7.62 | 495.72 | |
| W-35A-13 | 07/14/03 | 9.12 | 494.22 | |
| W-35A-13 | 10/02/03 | 10.33 | 493.01 | |
| W-35A-14 | 01/08/03 | 13.23 | 499.3 | |
| W-35A-14 | 02/03/03 | 12.46 | 500.07 | |
| W-35A-14 | 03/05/03 | 11.38 | 501.15 | |
| W-35A-14 | 04/14/03 | 10.07 | 502.46 | |
| W-35A-14 | 07/14/03 | 11.71 | 500.82 | |
| W-35A-14 | 10/08/03 | 14.11 | 498.42 | |
| W-7A | 01/09/03 | 13.81 | 511.5 | |
| W-7A | 04/11/03 | 12.51 | 512.8 | |
| W-7A | 07/15/03 | 12.73 | 512.58 | |
| W-7A | 10/08/03 | 13.93 | 511.38 | |
| W-7B | 01/09/03 | 18.4 | 493.04 | |
| W-7B | 04/11/03 | 15.9 | 495.54 | |
| W-7B | 07/16/03 | 17.31 | 494.13 | |
| W-7B | 10/04/03 | 17.3 | 494.14 | |
| W-7C | 01/09/03 | 12.14 | 505.73 | |
| W-7C | 04/11/03 | 10.75 | 507.12 | |
| W-7C | 07/16/03 | 11.31 | 506.56 | |
| W-7C | 10/04/03 | 12.82 | 505.05 | |
| W-7E | 01/09/03 | 16.44 | 493.56 | |
| W-7E | 04/11/03 | 13.95 | 496.05 | |
| W-7E | 07/15/03 | 15.33 | 494.67 | |
| W-7E | 10/04/03 | 17.3 | 492.7 | |
| W-7ES | 01/09/03 | 16.16 | 493.55 | |
| W-7ES | 04/11/03 | 13.5 | 496.21 | |
| W-7ES | 07/15/03 | 15.03 | 494.68 | |
| W-7ES | 10/08/03 | 17.01 | 492.7 | |
| W-7F | 01/09/03 | 41.78 | 485.3 | |
| W-7F | 04/11/03 | 28.58 | 498.5 | |
| W-7F | 07/16/03 | 42.35 | 484.73 | |
| W-7F | 10/08/03 | 42.16 | 484.92 | |

**Table 2.1-10. Central General Services Area 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-7G | 01/09/03 | 16.52 | 496.37 | |
| W-7G | 02/01/03 | 16.02 | 496.87 | |
| W-7G | 03/01/03 | 11.24 | 501.65 | |
| W-7G | 04/11/03 | 14.6 | 498.29 | |
| W-7G | 07/15/03 | 15.11 | 497.78 | |
| W-7G | 10/04/03 | 16.5 | 496.39 | |
| W-7H | 01/09/03 | 11.44 | 500 | |
| W-7H | 04/11/03 | 10.79 | 500.65 | |
| W-7H | 07/15/03 | 11.19 | 500.25 | |
| W-7H | 10/04/03 | 12.4 | 499.04 | |
| W-7I | 01/13/03 | 43.38 | 485.8 | |
| W-7I | 04/11/03 | 23.46 | 505.72 | |
| W-7I | 07/16/03 | 48.76 | 480.42 | |
| W-7I | 10/08/03 | 50.71 | 478.47 | |
| W-7J | 01/09/03 | 44.08 | 484.08 | |
| W-7J | 04/11/03 | 29.34 | 498.82 | |
| W-7J | 07/15/03 | 46.58 | 481.58 | |
| W-7J | 10/04/03 | 45.75 | 482.41 | |
| W-7K | 01/09/03 | 13.27 | 497.66 | |
| W-7K | 04/11/03 | 11.29 | 499.64 | |
| W-7K | 07/16/03 | 11.84 | 499.09 | |
| W-7K | 10/04/03 | 13.22 | 497.71 | |
| W-7L | 01/09/03 | 16.17 | 496.59 | |
| W-7L | 04/11/03 | 14.15 | 498.61 | |
| W-7L | 07/16/03 | 14.7 | 498.06 | |
| W-7L | 10/04/03 | 16.03 | 496.73 | |
| W-7M | 01/09/03 | 12.62 | 495.13 | |
| W-7M | 04/11/03 | 10.63 | 497.12 | |
| W-7M | 07/16/03 | 11.75 | 496 | |
| W-7M | 10/04/03 | 13.25 | 494.5 | |
| W-7N | 01/09/03 | 15.07 | 493.11 | |
| W-7N | 04/11/03 | 12.62 | 495.56 | |
| W-7N | 07/16/03 | 14.02 | 494.16 | |

**Table 2.1-10. Central General Services Area 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-7N | 10/09/03 | 16.15 | 492.03 | |
| W-7O | 01/09/03 | 24.56 | 491.53 | |
| W-7O | 04/11/03 | 22.18 | 493.91 | |
| W-7O | 07/16/03 | 24.66 | 491.43 | |
| W-7O | 10/08/03 | 26.62 | 489.47 | |
| W-7P | 01/09/03 | 17 | 492.64 | |
| W-7P | 02/01/03 | 16.68 | 492.96 | |
| W-7P | 03/01/03 | 15.83 | 493.81 | |
| W-7P | 04/11/03 | 14.53 | 495.11 | |
| W-7P | 07/16/03 | 15.95 | 493.69 | |
| W-7P | 10/04/03 | 17.9 | 491.74 | |
| W-7PS | 01/09/03 | 15.85 | 492.65 | |
| W-7PS | 02/01/03 | 15.52 | 492.98 | |
| W-7PS | 03/01/03 | 14.64 | 493.86 | |
| W-7PS | 04/11/03 | 13.37 | 495.13 | |
| W-7PS | 07/15/03 | 14.8 | 493.7 | |
| W-7PS | 10/04/03 | 16.76 | 491.74 | |
| W-7Q | 01/09/03 | 21.77 | 493.85 | |
| W-7Q | 02/01/03 | 22.09 | 493.53 | |
| W-7Q | 03/01/03 | 20.57 | 495.05 | |
| W-7Q | 04/11/03 | 19.19 | 496.43 | |
| W-7Q | 07/15/03 | 21.25 | 494.37 | |
| W-7Q | 10/04/03 | 23.56 | 492.06 | |
| W-7R | 01/09/03 | 16.81 | 491.69 | |
| W-7R | 02/01/03 | 16.46 | 492.04 | |
| W-7R | 03/01/03 | 15.51 | 492.99 | |
| W-7R | 04/11/03 | 14.19 | 494.31 | |
| W-7R | 07/16/03 | 15.73 | 492.77 | |
| W-7R | 10/04/03 | 17.78 | 490.72 | |
| W-7S | 01/09/03 | 16.31 | 491.65 | |
| W-7S | 02/01/03 | 15.92 | 492.04 | |
| W-7S | 03/01/03 | 15 | 492.96 | |
| W-7S | 04/11/03 | 13.65 | 494.31 | |

**Table 2.1-10. Central General Services Area 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-7S | 07/16/03 | 15.2 | 492.76 | |
| W-7S | 10/04/03 | 17.23 | 490.73 | |
| W-7T | 01/09/03 | 16.16 | 491.7 | |
| W-7T | 02/01/03 | 15.75 | 492.11 | |
| W-7T | 03/01/03 | 14.88 | 492.98 | |
| W-7T | 04/11/03 | 13.49 | 494.37 | |
| W-7T | 07/16/03 | 14.99 | 492.87 | |
| W-7T | 10/04/03 | 17.1 | 490.76 | |
| W-843-01 | 01/13/03 | 120.61 | 503.15 | |
| W-843-01 | 04/15/03 | 118.98 | 504.78 | |
| W-843-01 | 07/15/03 | 119.43 | 504.33 | |
| W-843-01 | 10/10/03 | 120.77 | 502.99 | |
| W-843-02 | 01/13/03 | 101.48 | 521.11 | |
| W-843-02 | 02/07/03 | 101.51 | 521.08 | |
| W-843-02 | 03/01/03 | 100.84 | 521.75 | |
| W-843-02 | 04/15/03 | 100.41 | 522.18 | |
| W-843-02 | 07/15/03 | 100.12 | 522.47 | |
| W-843-02 | 10/10/03 | 100.73 | 521.86 | |
| W-872-01 | 01/13/03 | 32.59 | 498.05 | |
| W-872-01 | 04/09/03 | 30.37 | 500.27 | |
| W-872-01 | 07/15/03 | - | - | DRY |
| W-872-01 | 10/04/03 | 33.82 | 496.82 | |
| W-872-02 | 01/13/03 | 34.5 | 497.27 | |
| W-872-02 | 04/15/03 | 32.31 | 499.46 | |
| W-872-02 | 07/15/03 | - | - | DRY |
| W-872-02 | 10/11/03 | - | - | DRY |
| W-873-01 | 01/13/03 | 28.29 | 505.64 | |
| W-873-01 | 04/12/03 | 26.26 | 507.67 | |
| W-873-01 | 07/15/03 | 28.75 | 505.18 | |
| W-873-01 | 10/04/03 | 29.96 | 503.97 | |
| W-873-02 | 01/13/03 | 32.23 | 500.9 | |
| W-873-02 | 04/12/03 | 30.46 | 502.67 | |
| W-873-02 | 07/15/03 | 30.6 | 502.53 | |

**Table 2.1-10. Central General Services Area 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-873-02 | 10/04/03 | 32.15 | 500.98 | |
| W-873-03 | 01/13/03 | 29.3 | 504.49 | |
| W-873-03 | 02/05/03 | 29.21 | 504.58 | |
| W-873-03 | 03/01/03 | 29.28 | 504.51 | |
| W-873-03 | 04/12/03 | 28.57 | 505.22 | |
| W-873-03 | 07/15/03 | 29.26 | 504.53 | |
| W-873-03 | 10/04/03 | 30.32 | 503.47 | |
| W-873-04 | 01/13/03 | 19.43 | 511.98 | |
| W-873-04 | 04/15/03 | 19.38 | 512.03 | |
| W-873-04 | 07/15/03 | 19.12 | 512.29 | |
| W-873-04 | 10/10/03 | 19.49 | 511.92 | |
| W-873-06 | 01/13/03 | 32.03 | 499.8 | |
| W-873-06 | 02/05/03 | 31.53 | 500.3 | |
| W-873-06 | 03/01/03 | 31.13 | 500.7 | |
| W-873-06 | 04/12/03 | 30.13 | 501.7 | |
| W-873-06 | 07/15/03 | 30.38 | 501.45 | |
| W-873-06 | 10/04/03 | 32 | 499.83 | |
| W-873-07 | 01/13/03 | 33.18 | 498.33 | |
| W-873-07 | 04/12/03 | 31.14 | 500.37 | |
| W-873-07 | 07/15/03 | 31.13 | 500.38 | |
| W-873-07 | 10/10/03 | 32.76 | 498.75 | |
| W-875-01 | 01/13/03 | 20.26 | 512.14 | |
| W-875-01 | 04/09/03 | 20.67 | 511.73 | |
| W-875-01 | 07/15/03 | 21.1 | 511.3 | |
| W-875-01 | 10/04/03 | 21.25 | 511.15 | |
| W-875-02 | 01/13/03 | 21.52 | 509.84 | |
| W-875-02 | 04/09/03 | 21.59 | 509.77 | |
| W-875-02 | 07/15/03 | 21.83 | 509.53 | |
| W-875-02 | 10/13/03 | 22.1 | 509.26 | |
| W-875-03 | 01/13/03 | 30.78 | 497.86 | |
| W-875-03 | 04/09/03 | 28.21 | 500.43 | |
| W-875-03 | 07/15/03 | - | - | DRY |
| W-875-03 | 10/10/03 | - | - | DRY |

**Table 2.1-10. Central General Services Area 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-875-04 | 01/13/03 | 21.05 | 511.18 | |
| W-875-04 | 04/09/03 | 21.45 | 510.78 | |
| W-875-04 | 07/15/03 | 21.65 | 510.58 | |
| W-875-04 | 10/04/03 | 21.76 | 510.47 | |
| W-875-05 | 01/13/03 | 22.88 | 513.82 | |
| W-875-05 | 04/09/03 | 22.93 | 513.77 | |
| W-875-05 | 07/15/03 | 23.09 | 513.61 | |
| W-875-05 | 10/04/03 | 23.15 | 513.55 | |
| W-875-06 | 01/13/03 | 22.25 | 507.17 | |
| W-875-06 | 04/09/03 | 23.4 | 506.02 | |
| W-875-06 | 07/15/03 | - | - | NM/LID STUCK |
| W-875-06 | 10/04/03 | 25.18 | 504.24 | |
| W-875-07 | 01/13/03 | 33.62 | 494.82 | |
| W-875-07 | 04/11/03 | 24 | 504.44 | |
| W-875-07 | 07/16/03 | 33.68 | 494.76 | |
| W-875-07 | 10/08/03 | 35.33 | 493.11 | |
| W-875-08 | 01/13/03 | 49.17 | 478.98 | |
| W-875-08 | 04/11/03 | 26.98 | 501.17 | |
| W-875-08 | 07/16/03 | 50.91 | 477.24 | |
| W-875-08 | 10/08/03 | 52.68 | 475.47 | |
| W-875-09 | 01/13/03 | - | - | DRY |
| W-875-09 | 04/11/03 | 29.12 | 500.43 | |
| W-875-09 | 07/16/03 | - | - | DRY |
| W-875-09 | 10/08/03 | - | - | DRY |
| W-875-10 | 01/13/03 | - | - | DRY |
| W-875-10 | 04/11/03 | 23.7 | 505.62 | |
| W-875-10 | 07/16/03 | 37.14 | 492.18 | |
| W-875-10 | 10/10/03 | 39.15 | 490.17 | |
| W-875-11 | 01/13/03 | 40.41 | 488.75 | |
| W-875-11 | 04/11/03 | 29.48 | 499.68 | |
| W-875-11 | 07/16/03 | - | - | DRY/MUD |
| W-875-11 | 10/08/03 | - | - | DRY |
| W-875-15 | 01/13/03 | - | - | DRY |

**Table 2.1-10. Central General Services Area 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-875-15 | 04/11/03 | 28.55 | 499.79 | |
| W-875-15 | 07/15/03 | - | - | DRY |
| W-875-15 | 10/08/03 | - | - | DRY |
| W-876-01 | 01/13/03 | 23.41 | 514.57 | |
| W-876-01 | 04/11/03 | 23.14 | 514.84 | |
| W-876-01 | 07/15/03 | 23.98 | 514 | |
| W-876-01 | 10/04/03 | 24.43 | 513.55 | |
| W-879-01 | 01/13/03 | 37.95 | 514.37 | |
| W-879-01 | 04/15/03 | 36.71 | 515.61 | |
| W-879-01 | 07/15/03 | 36.74 | 515.58 | |
| W-879-01 | 10/10/03 | 37.75 | 514.57 | |
| W-889-01 | 01/13/03 | 38.79 | 514.84 | |
| W-889-01 | 04/15/03 | 38.8 | 514.83 | |
| W-889-01 | 07/15/03 | 38.86 | 514.77 | |
| W-889-01 | 10/10/03 | 38.92 | 514.71 | |
| W-CGSA-1732 | 01/09/03 | - | - | DRY |
| W-CGSA-1732 | 02/01/03 | - | - | DRY |
| W-CGSA-1732 | 03/01/03 | - | - | DRY |
| W-CGSA-1732 | 04/11/03 | - | - | DRY |
| W-CGSA-1732 | 07/01/03 | - | - | DRY |
| W-CGSA-1732 | 10/08/03 | - | - | DRY |
| W-CGSA-1733 | 01/09/03 | 18.23 | 495.02 | |
| W-CGSA-1733 | 02/01/03 | 17.83 | 495.42 | |
| W-CGSA-1733 | 03/01/03 | 16.93 | 496.32 | |
| W-CGSA-1733 | 04/11/03 | 15.62 | 497.63 | |
| W-CGSA-1733 | 07/16/03 | 17.15 | 496.1 | |
| W-CGSA-1733 | 10/04/03 | 19.2 | 494.05 | |
| W-CGSA-1735 | 01/09/03 | - | - | DRY |
| W-CGSA-1735 | 02/01/03 | - | - | DRY |
| W-CGSA-1735 | 03/01/03 | - | - | DRY |
| W-CGSA-1735 | 04/11/03 | - | - | DRY |
| W-CGSA-1735 | 07/01/03 | - | - | DRY |
| W-CGSA-1735 | 10/08/03 | - | - | DRY |

**Table 2.1-10. Central General Services Area 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-CGSA-1736 | 01/09/03 | 18.12 | 489.45 | |
| W-CGSA-1736 | 02/01/03 | 17.97 | 489.6 | |
| W-CGSA-1736 | 03/01/03 | 16.51 | 491.06 | |
| W-CGSA-1736 | 04/11/03 | 15.19 | 492.38 | |
| W-CGSA-1736 | 07/16/03 | 16.51 | 491.06 | |
| W-CGSA-1736 | 10/04/03 | 18.49 | 489.08 | |
| W-CGSA-1737 | 01/09/03 | 14.53 | 490.35 | |
| W-CGSA-1737 | 02/01/03 | 14.22 | 490.66 | |
| W-CGSA-1737 | 03/01/03 | 13.34 | 491.54 | |
| W-CGSA-1737 | 04/11/03 | 12.05 | 492.83 | |
| W-CGSA-1737 | 07/16/03 | 13.48 | 491.4 | |
| W-CGSA-1737 | 10/04/03 | 15.45 | 489.43 | |
| W-CGSA-1739 | 01/09/03 | 18.07 | 493.95 | |
| W-CGSA-1739 | 02/01/03 | 17.89 | 494.13 | |
| W-CGSA-1739 | 03/01/03 | 17.45 | 494.57 | |
| W-CGSA-1739 | 04/11/03 | 16.17 | 495.85 | |
| W-CGSA-1739 | 07/16/03 | 17.58 | 494.44 | |
| W-CGSA-1739 | 10/04/03 | 19.19 | 492.83 | |

**Table 2.1-11. Central General Services Area (CGSA) mass removed, January 1, 2003 through December 31, 2003.**

| Treatment facility | Month | GWTS VOC mass removed (g) | SVE VOC mass removed (g) |
|---|---|---|---|
| CGSA | January | 52.7 | 253.3 |
| | February | 38.0 | 68.1 |
| | March | 56.9 | 90.4 |
| | April | 51.3 | 75.2 |
| | May | 36.7 | 84.8 |
| | June | 25.8 | 143.2 |
| | July | 33.2 | 145.8 |
| | August | 29.1 | 55.2 |
| | September | 35.8 | 75.1 |
| | October | 18.2 | 75.4 |
| | November | 14.8 | 65.9 |
| | December | 24.2 | 16.1 |
| Total | | 417 | 1,149 |

**Table 2.2-1. Building 834 OU treatment facility sampling plan.**

| Sample location | Sample identification | Parameter | Frequency |
|---|---|---|---|
| *B834 GTWS* | | | |
| **Influent Port** | **TF-834-I** | **VOCs** | **Quarterly** |
| | | **TBOS** | **Quarterly** |
| | | **Diesel** | **Quarterly** |
| | | **Nitrate** | **Quarterly** |
| | | **pH** | **Quarterly** |
| **Effluent Port** | **TF-834-E** | **VOCs** | **Monthly** |
| | | **TBOS** | **Monthly** |
| | | **Diesel** | **Monthly** |
| | | **Nitrate** | **Monthly** |
| | | **pH** | **Monthly** |
| *B834 SVTS* | | | |
| **Influent Port** | **TF-834-VI** | **No CMP requirements** | **NA** |
| **Effluent Port** | **TF-834-VE** | **VOCs** | **Weekly**[a] |

[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.**

**Table 2.2-2. Building 834 2003 ground water sampling and analysis plan.**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-834-1709 | MWPT | Tpsg | | A | DIS | ANIONS | 2 | Y | |
| W-834-1709 | MWPT | Tpsg | A | | CMP | E300.0:NO3 | 2 | Y | NO3 part of ANIONS analyte suite. |
| W-834-1709 | MWPT | Tpsg | | Q | DIS | E624 | 1 | N | Access limitations. |
| W-834-1709 | MWPT | Tpsg | S | Q | CMP | E624 | 2 | Y | |
| W-834-1709 | MWPT | Tpsg | | Q | DIS | E624 | 3 | Y | |
| W-834-1709 | MWPT | Tpsg | S | Q | CMP | E601 | 4 | Y | |
| W-834-1709 | MWPT | Tpsg | A | A | CMP | EM8015:DIESEL | 1 | N | Access limitations. |
| W-834-1709 | MWPT | Tpsg | | Q | DIS | TBOS | 1 | N | Access limitations. |
| W-834-1709 | MWPT | Tpsg | A | Q | CMP | TBOS | 2 | Y | |
| W-834-1709 | MWPT | Tpsg | | Q | DIS | TBOS | 3 | Y | |
| W-834-1709 | MWPT | Tpsg | | Q | DIS | TBOS | 4 | Y | |
| W-834-1711 | MWPT | Tps | A | A | CMP | E300.0:NO3 | 2 | N | Insufficient water. |
| W-834-1711 | MWPT | Tps | A | A | CMP | E300.0:NO3 | 4 | Y | |
| W-834-1711 | MWPT | Tps | | Q | DIS | E624 | 1 | N | Access limitations. |
| W-834-1711 | MWPT | Tps | S | Q | CMP | E624 | 2 | Y | |
| W-834-1711 | MWPT | Tps | | Q | DIS | E624 | 3 | Y | |
| W-834-1711 | MWPT | Tps | S | Q | CMP | E601 | 4 | Y | |
| W-834-1711 | MWPT | Tps | A | A | CMP | EM8015:DIESEL | 2 | N | Insufficient water. |
| W-834-1711 | MWPT | Tps | A | A | CMP | EM8015:DIESEL | 4 | N | Insufficient water. |
| W-834-1711 | MWPT | Tps | | Q | DIS | TBOS | 1 | N | Access limitations. |
| W-834-1711 | MWPT | Tps | | Q | DIS | TBOS | 2 | N | Insufficient water. |
| W-834-1711 | MWPT | Tps | A | Q | CMP | TBOS | 3 | Y | |
| W-834-1711 | MWPT | Tps | | Q | DIS | TBOS | 4 | N | Insufficient water. |
| W-834-1712 | MWPT | Tps | A | | CMP | E300.0:NO3 | | N | Vadose zone well, remove from CMP list. |
| W-834-1712 | MWPT | Tps | S | | CMP | E624 | | N | Vadose zone well, remove from CMP list. |
| W-834-1712 | MWPT | Tps | S | | CMP | E624 | | N | Vadose zone well, remove from CMP list. |
| W-834-1712 | MWPT | Tps | A | | CMP | EM8015:DIESEL | | N | Vadose zone well, remove from CMP list. |
| W-834-1712 | MWPT | Tps | A | | CMP | TBOS | | N | Vadose zone well, remove from CMP list. |
| W-834-1824 | MWPT | Tpsg | | Q | DIS | ANIONS | 1 | N | Access limitations. |
| W-834-1824 | MWPT | Tpsg | | Q | DIS | ANIONS | 2 | Y | |
| W-834-1824 | MWPT | Tpsg | | Q | DIS | ANIONS | 3 | N | |
| W-834-1824 | MWPT | Tpsg | | Q | DIS | ANIONS | 4 | N | Changed to semi-annual |

**Table 2.2-2. Building 834 2003 ground water sampling and analysis plan. (Cont. Page 2 of 16)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-834-1824 | MWPT | Tpsg | A | | CMP | E300.0:NO3 | 2 | Y | NO3 part of ANIONS analyte suite. |
| W-834-1824 | MWPT | Tpsg | | Q | DIS | E624 | 1 | N | Access limitations. |
| W-834-1824 | MWPT | Tpsg | S | Q | CMP | E624 | 2 | Y | |
| W-834-1824 | MWPT | Tpsg | | Q | DIS | E624 | 3 | Y | |
| W-834-1824 | MWPT | Tpsg | S | Q | CMP | E601 | 4 | Y | |
| W-834-1824 | MWPT | Tpsg | A | A | CMP | EM8015:DIESEL | 1 | N | Access limitations. |
| W-834-1824 | MWPT | Tpsg | | Q | DIS | TBOS | 1 | N | Access limitations. |
| W-834-1824 | MWPT | Tpsg | A | Q | CMP | TBOS | 2 | Y | |
| W-834-1824 | MWPT | Tpsg | | Q | DIS | TBOS | 3 | N | |
| W-834-1824 | MWPT | Tpsg | | Q | DIS | TBOS | 4 | N | Changed to semi-annual |
| W-834-1825 | MWPT | Tpsg | A | | CMP | E300.0:NO3 | 2 | Y | NO3 part of ANIONS analyte suite. |
| W-834-1825 | MWPT | Tpsg | | Q | DIS | ANIONS | 1 | N | |
| W-834-1825 | MWPT | Tpsg | | Q | DIS | ANIONS | 2 | Y | |
| W-834-1825 | MWPT | Tpsg | | Q | DIS | ANIONS | 3 | N | |
| W-834-1825 | MWPT | Tpsg | | Q | DIS | ANIONS | 4 | N | Changed to semi -annual |
| W-834-1825 | MWPT | Tpsg | | Q | DIS | DWMETALS | 1 | N | Removed from plan |
| W-834-1825 | MWPT | Tpsg | | Q | DIS | DWMETALS | 2 | Y | |
| W-834-1825 | MWPT | Tpsg | | Q | DIS | DWMETALS | 3 | N | Removed from plan |
| W-834-1825 | MWPT | Tpsg | | Q | DIS | DWMETALS | 4 | N | Removed from plan |
| W-834-1825 | MWPT | Tpsg | | Q | DIS | E624 | 1 | N | Access limitations. |
| W-834-1825 | MWPT | Tpsg | S | Q | CMP | E624 | 2 | Y | |
| W-834-1825 | MWPT | Tpsg | | Q | DIS | E624 | 3 | Y | |
| W-834-1825 | MWPT | Tpsg | S | Q | CMP | E601 | 4 | Y | |
| W-834-1825 | MWPT | Tpsg | A | A | CMP | EM8015:DIESEL | 1 | N | Access limitations. |
| W-834-1825 | MWPT | Tpsg | | Q | DIS | TBOS | 1 | N | Access limitations. |
| W-834-1825 | MWPT | Tpsg | A | Q | CMP | TBOS | 2 | Y | |
| W-834-1825 | MWPT | Tpsg | | Q | DIS | TBOS | 3 | N | |
| W-834-1825 | MWPT | Tpsg | | Q | DIS | TBOS | 4 | N | Changed to semi -annual |
| W-834-1833 | MWPT | Tpsg | A | | CMP | E300.0:NO3 | 2 | Y | NO3 part of ANIONS analyte suite. |
| W-834-1833 | MWPT | Tpsg | | Q | DIS | ANIONS | 1 | N | Access limitations. |
| W-834-1833 | MWPT | Tpsg | | Q | DIS | ANIONS | 2 | Y | |

**Table 2.2-2. Building 834 2003 ground water sampling and analysis plan. (Cont. Page 3 of 16)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-834-1833 | MWPT | Tpsg | | Q | DIS | ANIONS | 3 | N | |
| W-834-1833 | MWPT | Tpsg | | Q | DIS | ANIONS | 4 | N | |
| W-834-1833 | MWPT | Tpsg | | Q | DIS | DWMETALS | 1 | N | Access limitations. |
| W-834-1833 | MWPT | Tpsg | | Q | DIS | DWMETALS | 2 | Y | |
| W-834-1833 | MWPT | Tpsg | | Q | DIS | DWMETALS | 3 | N | |
| W-834-1833 | MWPT | Tpsg | | Q | DIS | DWMETALS | 4 | N | |
| W-834-1833 | MWPT | Tpsg | | Q | DIS | E624 | 1 | N | Access limitations. |
| W-834-1833 | MWPT | Tpsg | S | Q | CMP | E624 | 2 | Y | |
| W-834-1833 | MWPT | Tpsg | | Q | DIS | E624 | 3 | Y | |
| W-834-1833 | MWPT | Tpsg | S | Q | CMP | E601 | 4 | Y | |
| W-834-1833 | MWPT | Tpsg | A | A | CMP | EM8015:DIESEL | 1 | N | Access limitations. |
| W-834-1833 | MWPT | Tpsg | | Q | DIS | TBOS | 1 | N | Access limitations. |
| W-834-1833 | MWPT | Tpsg | A | Q | CMP | TBOS | 2 | Y | |
| W-834-1833 | MWPT | Tpsg | | Q | DIS | TBOS | 3 | N | |
| W-834-1833 | MWPT | Tpsg | | Q | DIS | TBOS | 4 | N | Changed to semi -annual |
| W-834-A1 | MWPT | Tps | | A | DIS | ANIONS | 2 | Y | |
| W-834-A1 | MWPT | Tps | A | A | CMP | E300.0:NO3 | 2 | Y | NO3 part of ANIONS analyte suite. |
| W-834-A1 | MWPT | Tps | S | S | CMP | E601 | 2 | Y | |
| W-834-A1 | MWPT | Tps | S | S | CMP | E601 | 3 | Y | |
| W-834-A1 | MWPT | Tps | A | A | CMP | EM8015:DIESEL | 2 | Y | |
| W-834-A1 | MWPT | Tps | A | A | CMP | TBOS | 2 | Y | |
| W-834-A1 | MWPT | Tps | | | DIS | E8270 | 3 | Y | |
| W-834-A2 | MWPT | Tpsg | A | A | CMP | E300.0:NO3 | 1 | N | Access limitations. |
| W-834-A2 | MWPT | Tpsg | S | S | CMP | E601 | 1 | Y | |
| W-834-A2 | MWPT | Tpsg | S | S | CMP | E601 | 3 | N | Dry. |
| W-834-A2 | MWPT | Tpsg | A | A | CMP | EM8015:DIESEL | 1 | N | Access limitations. |
| W-834-A2 | MWPT | Tpsg | A | A | CMP | TBOS | 1 | Y | |
| W-834-B2 | EW | Tpsg | A | A | CMP | E300.0:NO3 | 1 | N | Dry. |
| W-834-B2 | EW | Tpsg | S | S | CMP | E601 | 1 | N | Dry. |
| W-834-B2 | EW | Tpsg | S | S | CMP | E601 | 2 | N | Dry. |
| W-834-B2 | EW | Tpsg | S | S | CMP | E601 | 3 | N | Dry. |

**Table 2.2-2. Building 834 2003 ground water sampling and analysis plan. (Cont. Page 4 of 16)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-834-B2 | EW | Tpsg | S | S | CMP | E601 | 4 | N | System down. |
| W-834-B2 | EW | Tpsg | A | A | CMP | EM8015:DIESEL | 1 | N | Dry. |
| W-834-B2 | EW | Tpsg | A | A | CMP | EM8015:DIESEL | 4 | N | System down. |
| W-834-B2 | EW | Tpsg | A | Q | CMP | TBOS | 1 | N | Dry. |
| W-834-B2 | EW | Tpsg | | Q | DIS | TBOS | 2 | N | Dry. |
| W-834-B2 | EW | Tpsg | | Q | DIS | TBOS | 3 | N | Dry. |
| W-834-B2 | EW | Tpsg | | Q | DIS | TBOS | 4 | N | System down. |
| W-834-B3 | EW | Tpsg | A | A | CMP | E300.0:NO3 | 1 | N | Insufficient water. |
| W-834-B3 | EW | Tpsg | A | A | CMP | E300.0:NO3 | 4 | N | System down. |
| W-834-B3 | EW | Tpsg | S | S | CMP | E601 | 2 | Y | |
| W-834-B3 | EW | Tpsg | S | S | CMP | E601 | 3 | Y | |
| W-834-B3 | EW | Tpsg | S | S | CMP | E601 | 4 | N | System down. |
| W-834-B3 | EW | Tpsg | A | A | CMP | EM8015:DIESEL | 2 | Y | |
| W-834-B3 | EW | Tpsg | A | Q | CMP | TBOS | 1 | N | Access limitations. |
| W-834-B3 | EW | Tpsg | | Q | DIS | TBOS | 2 | Y | |
| W-834-B3 | EW | Tpsg | | Q | DIS | TBOS | 3 | N | |
| W-834-B3 | EW | Tpsg | | Q | DIS | TBOS | 4 | N | System down. |
| W-834-B4 | MWPT | Tpsg | | A | DIS | ANIONS | 2 | Y | |
| W-834-B4 | MWPT | Tpsg | A | | CMP | E300.0:NO3 | 2 | Y | NO3 part of ANIONS analyte suite. |
| W-834-B4 | MWPT | Tpsg | S | S | CMP | E601 | 1 | Y | |
| W-834-B4 | MWPT | Tpsg | S | S | CMP | E601 | 3 | N | Dry. |
| W-834-B4 | MWPT | Tpsg | A | A | CMP | EM8015:DIESEL | 2 | Y | |
| W-834-B4 | MWPT | Tpsg | A | A | CMP | TBOS | 1 | Y | |
| W-834-C2 | EW | Tpsg | A | A | CMP | E300.0:NO3 | 2 | N | Dry. |
| W-834-C2 | EW | Tpsg | S | S | CMP | E601 | 2 | N | Dry. |
| W-834-C2 | EW | Tpsg | S | S | CMP | E601 | 3 | N | Dry. |
| W-834-C2 | EW | Tpsg | S | S | CMP | E601 | 4 | N | System down. |
| W-834-C2 | EW | Tpsg | A | A | CMP | EM8015:DIESEL | 2 | N | Dry. |
| W-834-C2 | EW | Tpsg | A | A | CMP | EM8015:DIESEL | 4 | N | System down. |
| W-834-C2 | EW | Tpsg | | A | DIS | GENMIN | 2 | N | Dry. |
| W-834-C2 | EW | Tpsg | | Q | DIS | TBOS | 1 | N | Dry. |

**Table 2.2-2. Building 834 2003 ground water sampling and analysis plan. (Cont. Page 5 of 16)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-834-C2 | EW | Tpsg | | Q | DIS | TBOS | 2 | N | Dry. |
| W-834-C2 | EW | Tpsg | | Q | DIS | TBOS | 3 | N | Dry. |
| W-834-C2 | EW | Tpsg | A | Q | CMP | TBOS | 4 | N | System down. |
| W-834-C4 | MWPT | Tpsg | | A | DIS | ANIONS | 2 | Y | |
| W-834-C4 | MWPT | Tpsg | A | | CMP | E300.0:NO3 | 2 | Y | NO3 part of ANIONS analyte suite. |
| W-834-C4 | MWPT | Tpsg | S | S | CMP | E601 | 2 | Y | |
| W-834-C4 | MWPT | Tpsg | S | S | CMP | E601 | 3 | Y | |
| W-834-C4 | MWPT | Tpsg | A | A | CMP | EM8015:DIESEL | 2 | N | Insufficient water. |
| W-834-C4 | MWPT | Tpsg | A | A | CMP | TBOS | 2 | Y | |
| W-834-C5 | MWPT | Tpsg | | A | DIS | ANIONS | 2 | Y | |
| W-834-C5 | MWPT | Tpsg | A | | CMP | E300.0:NO3 | 2 | Y | NO3 part of ANIONS analyte suite. |
| W-834-C5 | MWPT | Tpsg | S | S | CMP | E601 | 2 | Y | |
| W-834-C5 | MWPT | Tpsg | | S | DIS | E601 | 3 | Y | |
| W-834-C5 | MWPT | Tpsg | S | S | CMP | E601 | 4 | Y | |
| W-834-C5 | MWPT | Tpsg | A | A | CMP | EM8015:DIESEL | 2 | Y | |
| W-834-C5 | MWPT | Tpsg | A | A | CMP | TBOS | 2 | Y | |
| W-834-C5 | MWPT | Tpsg | | | DIS | E8270 | 3 | Y | |
| W-834-D10 | MWPT | Tps | A | A | CMP | E300.0:NO3 | 2 | N | Insufficient water. |
| W-834-D10 | MWPT | Tps | S | S | CMP | E601 | 2 | Y | |
| W-834-D10 | MWPT | Tps | S | S | CMP | E601 | 3 | Y | |
| W-834-D10 | MWPT | Tps | A | A | CMP | EM8015:DIESEL | 2 | N | Insufficient water. |
| W-834-D10 | MWPT | Tps | A | A | CMP | TBOS | 2 | N | Insufficient water. |
| W-834-D11 | EW | Tpsg | A | A | CMP | E300.0:NO3 | 2 | N | Insufficient water. |
| W-834-D11 | EW | Tpsg | A | A | CMP | E300.0:NO3 | 4 | N | System down. |
| W-834-D11 | EW | Tpsg | S | S | CMP | E601 | 2 | Y | |
| W-834-D11 | EW | Tpsg | S | S | CMP | E601 | 3 | Y | |
| W-834-D11 | EW | Tpsg | S | S | CMP | E601 | 4 | N | System down. |
| W-834-D11 | EW | Tpsg | A | A | CMP | EM8015:DIESEL | 2 | N | Insufficient water. |
| W-834-D11 | EW | Tpsg | A | A | CMP | EM8015:DIESEL | 4 | N | System down. |
| W-834-D11 | EW | Tpsg | A | A | CMP | TBOS | 2 | N | Insufficient water. |
| W-834-D11 | EW | Tpsg | A | A | CMP | TBOS | 4 | N | System down. |

**Table 2.2-2. Building 834 2003 ground water sampling and analysis plan. (Cont. Page 6 of 16)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-834-D12 | EW | Tpsg | | A | DIS | ANIONS | 2 | Y | |
| W-834-D12 | EW | Tpsg | A | | CMP | E300.0:NO3 | 2 | Y | NO3 part of ANIONS analyte suite. |
| W-834-D12 | EW | Tpsg | S | S | CMP | E601 | 1 | Y | |
| W-834-D12 | EW | Tpsg | S | S | CMP | E601 | 3 | Y | |
| W-834-D12 | EW | Tpsg | A | A | CMP | EM8015:DIESEL | 1 | Y | |
| W-834-D12 | EW | Tpsg | A | A | CMP | TBOS | 1 | Y | |
| W-834-D13 | EW | Tpsg | | A | DIS | ANIONS | 2 | Y | |
| W-834-D13 | EW | Tpsg | A | | CMP | E300.0:NO3 | 2 | Y | NO3 part of ANIONS analyte suite. |
| W-834-D13 | EW | Tpsg | S | S | CMP | E601 | 2 | Y | |
| W-834-D13 | EW | Tpsg | S | S | CMP | E601 | 3 | Y | |
| W-834-D13 | EW | Tpsg | S | S | CMP | E601 | 4 | N | System down. |
| W-834-D13 | EW | Tpsg | A | A | CMP | EM8015:DIESEL | 2 | Y | |
| W-834-D13 | EW | Tpsg | | Q | DIS | TBOS | 1 | N | |
| W-834-D13 | EW | Tpsg | A | Q | CMP | TBOS | 2 | Y | |
| W-834-D13 | EW | Tpsg | | Q | DIS | TBOS | 3 | Y | |
| W-834-D13 | EW | Tpsg | | Q | DIS | TBOS | 4 | N | System down. |
| W-834-D14 | EW | Tpsg | | A | DIS | ANIONS | 2 | Y | |
| W-834-D14 | EW | Tpsg | A | | CMP | E300.0:NO3 | 2 | Y | NO3 part of ANIONS analyte suite. |
| W-834-D14 | EW | Tpsg | S | S | CMP | E601 | 2 | Y | |
| W-834-D14 | EW | Tpsg | S | S | CMP | E601 | 3 | Y | |
| W-834-D14 | EW | Tpsg | S | S | CMP | E601 | 4 | N | System down. |
| W-834-D14 | EW | Tpsg | A | A | CMP | EM8015:DIESEL | 2 | Y | |
| W-834-D14 | EW | Tpsg | | Q | DIS | TBOS | 1 | N | |
| W-834-D14 | EW | Tpsg | A | Q | CMP | TBOS | 2 | Y | |
| W-834-D14 | EW | Tpsg | | Q | DIS | TBOS | 3 | Y | |
| W-834-D14 | EW | Tpsg | | Q | DIS | TBOS | 4 | N | System down. |
| W-834-D15 | MWPT | Tpsg | | A | DIS | ANIONS | 2 | Y | |
| W-834-D15 | MWPT | Tpsg | A | | CMP | E300.0:NO3 | 2 | Y | NO3 part of ANIONS analyte suite. |
| W-834-D15 | MWPT | Tpsg | S | S | CMP | E601 | 2 | Y | |
| W-834-D15 | MWPT | Tpsg | S | S | CMP | E601 | 3 | Y | |
| W-834-D15 | MWPT | Tpsg | A | A | CMP | EM8015:DIESEL | 2 | Y | |

**Table 2.2-2. Building 834 2003 ground water sampling and analysis plan. (Cont. Page 7 of 16)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-834-D15 | MWPT | Tpsg | A | A | CMP | TBOS | 2 | Y | |
| W-834-D16 | MWPT | Tpsg | A | A | CMP | E300.0:NO3 | 1 | N | Dry. |
| W-834-D16 | MWPT | Tpsg | S | S | CMP | E601 | 1 | N | Dry. |
| W-834-D16 | MWPT | Tpsg | S | S | CMP | E601 | 3 | N | Dry. |
| W-834-D16 | MWPT | Tpsg | A | A | CMP | EM8015:DIESEL | 1 | N | Dry. |
| W-834-D16 | MWPT | Tpsg | A | A | CMP | TBOS | 1 | N | Dry. |
| W-834-D17 | MWPT | Tpsg | A | A | CMP | E300.0:NO3 | 2 | N | Insufficient water. |
| W-834-D17 | MWPT | Tpsg | S | S | CMP | E601 | 2 | N | Insufficient water. |
| W-834-D17 | MWPT | Tpsg | S | S | CMP | E601 | 3 | N | Dry. |
| W-834-D17 | MWPT | Tpsg | A | A | CMP | EM8015:DIESEL | 2 | N | Insufficient water. |
| W-834-D17 | MWPT | Tpsg | A | A | CMP | TBOS | 2 | N | Insufficient water. |
| W-834-D18 | MWPT | Tpsg | A | A | CMP | E300.0:NO3 | 2 | N | Insufficient water. |
| W-834-D18 | MWPT | Tpsg | S | S | CMP | E601 | 2 | N | Insufficient water. |
| W-834-D18 | MWPT | Tpsg | S | S | CMP | E601 | 3 | Y | |
| W-834-D18 | MWPT | Tpsg | A | A | CMP | EM8015:DIESEL | 2 | N | Insufficient water. |
| W-834-D18 | MWPT | Tpsg | A | A | CMP | TBOS | 2 | N | Insufficient water. |
| W-834-D2 | MWPT | Tnbs$_1$ | A | A | CMP | E300.0:NO3 | 1 | N | Dry. |
| W-834-D2 | MWPT | Tnbs$_1$ | S | S | CMP | E601 | 1 | N | Dry. |
| W-834-D2 | MWPT | Tnbs$_1$ | S | S | CMP | E601 | 4 | N | DRY |
| W-834-D2 | MWPT | Tnbs$_1$ | A | A | CMP | EM8015:DIESEL | 1 | N | Dry. |
| W-834-D2 | MWPT | Tnbs$_1$ | A | A | CMP | TBOS | 1 | N | Dry. |
| W-834-D3 | EW | Tpsg | | A | DIS | ANIONS | 2 | Y | |
| W-834-D3 | EW | Tpsg | A | | CMP | E300.0:NO3 | 2 | Y | NO3 part of ANIONS analyte suite. |
| W-834-D3 | EW | Tpsg | S | S | CMP | E601 | 2 | Y | |
| W-834-D3 | EW | Tpsg | S | S | CMP | E601 | 3 | Y | |
| W-834-D3 | EW | Tpsg | S | S | CMP | E601 | 4 | N | System down. |
| W-834-D3 | EW | Tpsg | A | A | CMP | EM8015:DIESEL | 2 | Y | |
| W-834-D3 | EW | Tpsg | | Q | DIS | TBOS | 1 | N | Access limitations. |
| W-834-D3 | EW | Tpsg | A | Q | CMP | TBOS | 2 | Y | |
| W-834-D3 | EW | Tpsg | | Q | DIS | TBOS | 3 | Y | |
| W-834-D3 | EW | Tpsg | | Q | DIS | TBOS | 4 | N | System down. |

**Table 2.2-2. Building 834 2003 ground water sampling and analysis plan. (Cont. Page 8 of 16)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-834-D4 | EW | Tpsg | | A | DIS | ANIONS | 2 | Y | |
| W-834-D4 | EW | Tpsg | A | | CMP | E300.0:NO3 | 2 | Y | NO3 part of ANIONS analyte suite. |
| W-834-D4 | EW | Tpsg | S | S | CMP | E601 | 2 | Y | |
| W-834-D4 | EW | Tpsg | S | S | CMP | E601 | 3 | Y | |
| W-834-D4 | EW | Tpsg | S | S | CMP | E601 | 4 | N | System down. |
| W-834-D4 | EW | Tpsg | A | A | CMP | EM8015:DIESEL | 2 | Y | |
| W-834-D4 | EW | Tpsg | | Q | DIS | TBOS | 1 | N | Access limitations. |
| W-834-D4 | EW | Tpsg | A | Q | CMP | TBOS | 2 | Y | |
| W-834-D4 | EW | Tpsg | | Q | DIS | TBOS | 3 | Y | |
| W-834-D4 | EW | Tpsg | | Q | DIS | TBOS | 4 | N | System down. |
| W-834-D5 | EW | Tpsg | | A | DIS | ANIONS | 2 | Y | |
| W-834-D5 | EW | Tpsg | A | | CMP | E300.0:NO3 | 2 | Y | NO3 part of ANIONS analyte suite. |
| W-834-D5 | EW | Tpsg | S | S | CMP | E601 | 2 | Y | |
| W-834-D5 | EW | Tpsg | S | S | CMP | E601 | 3 | Y | |
| W-834-D5 | EW | Tpsg | S | S | CMP | E601 | 4 | N | System down. |
| W-834-D5 | EW | Tpsg | A | A | CMP | EM8015:DIESEL | 2 | Y | |
| W-834-D5 | EW | Tpsg | | Q | DIS | TBOS | 1 | N | Access limitations. |
| W-834-D5 | EW | Tpsg | A | Q | CMP | TBOS | 2 | Y | |
| W-834-D5 | EW | Tpsg | | Q | DIS | TBOS | 3 | Y | |
| W-834-D5 | EW | Tpsg | | Q | DIS | TBOS | 4 | N | System down. |
| W-834-D6 | EW | Tpsg | | A | DIS | ANIONS | 2 | Y | |
| W-834-D6 | EW | Tpsg | A | | CMP | E300.0:NO3 | 2 | Y | NO3 part of ANIONS analyte suite. |
| W-834-D6 | EW | Tpsg | S | S | CMP | E601 | 2 | Y | |
| W-834-D6 | EW | Tpsg | S | S | CMP | E601 | 3 | Y | |
| W-834-D6 | EW | Tpsg | S | S | CMP | E601 | 4 | N | System down. |
| W-834-D6 | EW | Tpsg | A | A | CMP | EM8015:DIESEL | 2 | Y | |
| W-834-D6 | EW | Tpsg | | Q | DIS | TBOS | 1 | N | Access limitations. |
| W-834-D6 | EW | Tpsg | A | Q | CMP | TBOS | 2 | Y | |
| W-834-D6 | EW | Tpsg | | Q | DIS | TBOS | 3 | Y | |
| W-834-D6 | EW | Tpsg | | Q | DIS | TBOS | 4 | N | System down. |
| W-834-D7 | EW | Tpsg | | A | DIS | ANIONS | 2 | Y | |

**Table 2.2-2. Building 834 2003 ground water sampling and analysis plan. (Cont. Page 9 of 16)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-834-D7 | EW | Tpsg | A | | CMP | E300.0:NO3 | 2 | Y | NO3 part of ANIONS analyte suite. |
| W-834-D7 | EW | Tpsg | S | S | CMP | E601 | 2 | Y | |
| W-834-D7 | EW | Tpsg | S | S | CMP | E601 | 3 | Y | |
| W-834-D7 | EW | Tpsg | S | S | CMP | E601 | 4 | N | System down. |
| W-834-D7 | EW | Tpsg | A | A | CMP | EM8015:DIESEL | 2 | Y | |
| W-834-D7 | EW | Tpsg | | A | DIS | TBOS | 1 | N | Access limitations. |
| W-834-D7 | EW | Tpsg | A | Q | CMP | TBOS | 2 | Y | |
| W-834-D7 | EW | Tpsg | | Q | DIS | TBOS | 3 | N | |
| W-834-D7 | EW | Tpsg | | Q | DIS | TBOS | 4 | N | System down. |
| W-834-D9A | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 1 | N | Dry. |
| W-834-D9A | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 1 | N | Dry. |
| W-834-D9A | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 3 | N | Dry. |
| W-834-D9A | MWPT | $Tnbs_2$ | A | A | CMP | EM8015:DIESEL | 1 | N | Dry. |
| W-834-D9A | MWPT | $Tnbs_2$ | A | A | CMP | TBOS | 1 | N | Dry. |
| W-834-G3 | MWPT | Tpsg | A | A | CMP | E300.0:NO3 | 1 | N | Dry. |
| W-834-G3 | MWPT | Tpsg | S | S | CMP | E601 | 1 | N | Dry. |
| W-834-G3 | MWPT | Tpsg | S | S | CMP | E601 | 3 | N | Dry. |
| W-834-G3 | MWPT | Tpsg | A | A | CMP | EM8015:DIESEL | 1 | N | Dry. |
| W-834-G3 | MWPT | Tpsg | A | A | CMP | TBOS | 1 | N | Dry. |
| W-834-H2 | EW | Tpsg | A | A | CMP | E300.0:NO3 | 2 | N | Insufficient water. |
| W-834-H2 | EW | Tpsg | A | A | CMP | E300.0:NO3 | 4 | N | System down. |
| W-834-H2 | EW | Tpsg | S | S | CMP | E601 | 2 | Y | |
| W-834-H2 | EW | Tpsg | S | S | CMP | E601 | 3 | Y | |
| W-834-H2 | EW | Tpsg | S | S | CMP | E601 | 4 | N | System down. |
| W-834-H2 | EW | Tpsg | A | A | CMP | EM8015:DIESEL | 2 | Y | |
| W-834-H2 | EW | Tpsg | | Q | DIS | TBOS | 1 | N | Access limitations. |
| W-834-H2 | EW | Tpsg | A | Q | CMP | TBOS | 2 | Y | |
| W-834-H2 | EW | Tpsg | | Q | DIS | TBOS | 3 | N | Insufficient water. |
| W-834-H2 | EW | Tpsg | | Q | DIS | TBOS | 4 | N | System down. |
| W-834-J1 | EW | Tpsg | | A | DIS | ANIONS | 2 | Y | |
| W-834-J1 | EW | Tpsg | A | | CMP | E300.0:NO3 | 2 | Y | NO3 part of ANIONS analyte suite. |

**Table 2.2-2. Building 834 2003 ground water sampling and analysis plan. (Cont. Page 10 of 16)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-834-J1 | EW | Tpsg | S | S | CMP | E601 | 2 | Y | |
| W-834-J1 | EW | Tpsg | S | S | CMP | E601 | 3 | Y | |
| W-834-J1 | EW | Tpsg | S | S | CMP | E601 | 4 | N | System down. |
| W-834-J1 | EW | Tpsg | A | A | CMP | EM8015:DIESEL | 2 | Y | |
| W-834-J1 | EW | Tpsg | | Q | DIS | TBOS | 1 | N | Access limitations. |
| W-834-J1 | EW | Tpsg | A | Q | CMP | TBOS | 2 | Y | |
| W-834-J1 | EW | Tpsg | | Q | DIS | TBOS | 3 | N | Insufficient water. |
| W-834-J1 | EW | Tpsg | | Q | DIS | TBOS | 4 | N | System down. |
| W-834-J2 | EW | Tpsg | A | | CMP | E300.0:NO3 | 2 | Y | NO3 part of ANIONS analyte suite. |
| W-834-J2 | EW | Tpsg | S | S | CMP | E601 | 2 | Y | |
| W-834-J2 | EW | Tpsg | S | S | CMP | E601 | 3 | Y | |
| W-834-J2 | EW | Tpsg | S | S | CMP | E601 | 4 | N | System down. |
| W-834-J2 | EW | Tpsg | A | A | CMP | EM8015:DIESEL | 2 | Y | |
| W-834-J2 | EW | Tpsg | | Q | DIS | TBOS | 1 | N | Access limitations. |
| W-834-J2 | EW | Tpsg | A | Q | CMP | TBOS | 2 | Y | |
| W-834-J2 | EW | Tpsg | | Q | DIS | TBOS | 3 | Y | |
| W-834-J2 | EW | Tpsg | | Q | DIS | TBOS | 4 | N | System down. |
| W-834-J3 | MWPT | Tpsg | A | A | CMP | E300.0:NO3 | 1 | N | Dry. |
| W-834-J3 | MWPT | Tpsg | S | S | CMP | E601 | 1 | N | Dry. |
| W-834-J3 | MWPT | Tpsg | S | S | CMP | E601 | 3 | N | Dry. |
| W-834-J3 | MWPT | Tpsg | A | A | CMP | EM8015:DIESEL | 1 | N | Dry. |
| W-834-J3 | MWPT | Tpsg | A | A | CMP | TBOS | 1 | N | Dry. |
| W-834-K1A | MWPT | Tpsg | A | A | CMP | E300.0:NO3 | 1 | N | Insufficient water. |
| W-834-K1A | MWPT | Tpsg | S | S | CMP | E601 | 1 | N | Insufficient water. |
| W-834-K1A | MWPT | Tpsg | S | S | CMP | E601 | 3 | N | Dry. |
| W-834-K1A | MWPT | Tpsg | A | A | CMP | EM8015:DIESEL | 1 | N | Insufficient water. |
| W-834-K1A | MWPT | Tpsg | A | A | CMP | TBOS | 1 | N | Insufficient water. |
| W-834-M1 | MWPT | Tpsg | | S | DIS | E218.2 | 2 | Y | |
| W-834-M1 | MWPT | Tpsg | | S | DIS | E218.2 | 3 | Y | |
| W-834-M1 | MWPT | Tpsg | A | A | CMP | E300.0:NO3 | 1 | N | Access limitations. |
| W-834-M1 | MWPT | Tpsg | S | S | CMP | E601 | 2 | Y | |

**Table 2.2-2. Building 834 2003 ground water sampling and analysis plan. (Cont. Page 11 of 16)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-834-M1 | MWPT | Tpsg | S | S | CMP | E601 | 3 | Y | |
| W-834-M1 | MWPT | Tpsg | A | A | CMP | EM8015:DIESEL | 1 | N | Access limitations. |
| W-834-M1 | MWPT | Tpsg | A | A | CMP | TBOS | 1 | N | Access limitations. |
| W-834-M2 | MWPT | Tpsg | A | A | CMP | E300.0:NO3 | 1 | N | Dry. |
| W-834-M2 | MWPT | Tpsg | S | S | CMP | E601 | 1 | N | Dry. |
| W-834-M2 | MWPT | Tpsg | S | S | CMP | E601 | 3 | N | Dry. |
| W-834-M2 | MWPT | Tpsg | A | A | CMP | EM8015:DIESEL | 1 | N | Dry. |
| W-834-M2 | MWPT | Tpsg | A | A | CMP | TBOS | 1 | N | Dry. |
| W-834-S1 | MWPT | Tpsg | A | A | CMP | E300.0:NO3 | 1 | N | Access limitations. |
| W-834-S1 | MWPT | Tpsg | S | S | CMP | E601 | 1 | N | Access limitations. |
| W-834-S1 | MWPT | Tpsg | S | S | CMP | E601 | 3 | Y | |
| W-834-S1 | MWPT | Tpsg | S | S | CMP | E601 | 4 | Y | |
| W-834-S1 | MWPT | Tpsg | A | A | CMP | EM8015:DIESEL | 1 | N | Access limitations. |
| W-834-S1 | MWPT | Tpsg | A | A | CMP | TBOS | 1 | N | Access limitations. |
| W-834-S10 | MWPT | Tpsg | A | A | CMP | E300.0:NO3 | 1 | N | Dry. |
| W-834-S10 | MWPT | Tpsg | S | S | CMP | E601 | 1 | N | Dry. |
| W-834-S10 | MWPT | Tpsg | S | S | CMP | E601 | 3 | N | Dry. |
| W-834-S10 | MWPT | Tpsg | A | A | CMP | EM8015:DIESEL | 1 | N | Dry. |
| W-834-S10 | MWPT | Tpsg | A | A | CMP | TBOS | 1 | N | Dry. |
| W-834-S12A | MWPT | Tpsg | A | A | CMP | E300.0:NO3 | 1 | N | Dry. |
| W-834-S12A | MWPT | Tpsg | S | S | CMP | E601 | 1 | N | Dry. |
| W-834-S12A | MWPT | Tpsg | S | S | CMP | E601 | 3 | N | Dry. |
| W-834-S12A | MWPT | Tpsg | S | S | CMP | E601 | 4 | N | Dry. |
| W-834-S12A | MWPT | Tpsg | A | A | CMP | EM8015:DIESEL | 1 | N | Dry. |
| W-834-S12A | MWPT | Tpsg | A | A | CMP | TBOS | 1 | N | Dry. |
| W-834-S13 | MWPT | Tpsg | A | A | CMP | E300.0:NO3 | 1 | N | Access limitations. |
| W-834-S13 | MWPT | Tpsg | S | S | CMP | E601 | 1 | N | Access limitations. |
| W-834-S13 | MWPT | Tpsg | S | S | CMP | E601 | 3 | Y | |
| W-834-S13 | MWPT | Tpsg | S | S | CMP | E601 | 4 | Y | |
| W-834-S13 | MWPT | Tpsg | A | A | CMP | EM8015:DIESEL | 1 | N | Access limitations. |
| W-834-S13 | MWPT | Tpsg | A | A | CMP | TBOS | 1 | N | Access limitations. |

**Table 2.2-2. Building 834 2003 ground water sampling and analysis plan. (Cont. Page 12 of 16)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-834-S13 | MWPT | Tpsg | | | DIS | E8270 | 3 | Y | |
| W-834-S4 | MWPT | Tpsg | A | A | CMP | E300.0:NO3 | 1 | N | Access limitations. |
| W-834-S4 | MWPT | Tpsg | S | S | CMP | E601 | 1 | N | Access limitations. |
| W-834-S4 | MWPT | Tpsg | S | S | CMP | E601 | 3 | Y | |
| W-834-S4 | MWPT | Tpsg | A | A | CMP | EM8015:DIESEL | 1 | N | Access limitations. |
| W-834-S4 | MWPT | Tpsg | A | A | CMP | TBOS | 1 | N | Access limitations. |
| W-834-S5 | MWPT | Tpsg | A | A | CMP | E300.0:NO3 | 1 | N | Access limitations. |
| W-834-S5 | MWPT | Tpsg | S | S | CMP | E601 | 1 | N | Access limitations. |
| W-834-S5 | MWPT | Tpsg | S | S | CMP | E601 | 3 | N | Dry. |
| W-834-S5 | MWPT | Tpsg | A | A | CMP | EM8015:DIESEL | 1 | N | Access limitations. |
| W-834-S5 | MWPT | Tpsg | A | A | CMP | TBOS | 1 | N | Access limitations. |
| W-834-S6 | MWPT | Tpsg | A | A | CMP | E300.0:NO3 | 1 | N | Access limitations. |
| W-834-S6 | MWPT | Tpsg | S | S | CMP | E601 | 1 | N | Access limitations. |
| W-834-S6 | MWPT | Tpsg | S | S | CMP | E601 | 3 | Y | |
| W-834-S6 | MWPT | Tpsg | A | A | CMP | EM8015:DIESEL | 1 | N | Access limitations. |
| W-834-S6 | MWPT | Tpsg | A | A | CMP | TBOS | 1 | N | Access limitations. |
| W-834-S7 | MWPT | Tpsg | A | A | CMP | E300.0:NO3 | 1 | N | Access limitations. |
| W-834-S7 | MWPT | Tpsg | S | S | CMP | E601 | 1 | N | Access limitations. |
| W-834-S7 | MWPT | Tpsg | A | A | CMP | EM8015:DIESEL | 1 | N | Access limitations. |
| W-834-S7 | MWPT | Tpsg | A | A | CMP | TBOS | 1 | N | Access limitations. |
| W-834-S8 | MWPT | $Tnsc_2$ | | S | DIS | E218.2 | 1 | N | Access limitations. |
| W-834-S8 | MWPT | $Tnsc_2$ | | S | DIS | E218.2 | 3 | Y | |
| W-834-S8 | MWPT | $Tnsc_2$ | A | A | CMP | E300.0:NO3 | 1 | N | Access limitations. |
| W-834-S8 | MWPT | $Tnsc_2$ | S | S | CMP | E601 | 1 | N | Access limitations. |
| W-834-S8 | MWPT | $Tnsc_2$ | S | S | CMP | E601 | 3 | Y | |
| W-834-S8 | MWPT | $Tnsc_2$ | | S | DIS | E602 | 1 | N | Access limitations. |
| W-834-S8 | MWPT | $Tnsc_2$ | | S | DIS | E602 | 3 | Y | |
| W-834-S8 | MWPT | $Tnsc_2$ | A | A | CMP | EM8015:DIESEL | 1 | N | Access limitations. |
| W-834-S8 | MWPT | $Tnsc_2$ | A | A | CMP | TBOS | 1 | N | Access limitations. |
| W-834-S9 | MWPT | $Tnsc_2$ | | S | DIS | E218.2 | 1 | N | Access limitations. |

**Table 2.2-2. Building 834 2003 ground water sampling and analysis plan. (Cont. Page 13 of 16)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-834-S9 | MWPT | $Tnsc_2$ | | S | DIS | E218.2 | 3 | Y | |
| W-834-S9 | MWPT | $Tnsc_2$ | A | A | CMP | E300.0:NO3 | 1 | N | Access limitations. |
| W-834-S9 | MWPT | $Tnsc_2$ | S | S | CMP | E601 | 1 | N | Access limitations. |
| W-834-S9 | MWPT | $Tnsc_2$ | S | S | CMP | E601 | 3 | Y | |
| W-834-S9 | MWPT | $Tnsc_2$ | A | A | CMP | EM8015:DIESEL | 1 | N | Access limitations. |
| W-834-S9 | MWPT | $Tnsc_2$ | A | A | CMP | TBOS | 1 | N | Access limitations. |
| W-834-T1 | GW | $Tnbs_1$ | S | S | CMP | E300.0:NO3 | 1 | Y | |
| W-834-T1 | GW | $Tnbs_1$ | S | S | CMP | E300.0:NO3 | 3 | Y | |
| W-834-T1 | GW | $Tnbs_1$ | Q | Q | CMP | E601 | 1 | Y | |
| W-834-T1 | GW | $Tnbs_1$ | Q | Q | CMP | E601 | 2 | Y | |
| W-834-T1 | GW | $Tnbs_1$ | Q | Q | CMP | E601 | 3 | Y | |
| W-834-T1 | GW | $Tnbs_1$ | Q | Q | CMP | E601 | 4 | Y | |
| W-834-T1 | GW | $Tnbs_1$ | S | S | CMP | EM8015:DIESEL | 1 | Y | |
| W-834-T1 | GW | $Tnbs_1$ | S | S | CMP | EM8015:DIESEL | 3 | Y | |
| W-834-T1 | GW | $Tnbs_1$ | | A | DIS | GENMIN | 1 | Y | |
| W-834-T1 | GW | $Tnbs_1$ | S | S | CMP | TBOS | 1 | Y | |
| W-834-T1 | GW | $Tnbs_1$ | S | S | CMP | TBOS | 3 | Y | |
| W-834-T11 | MWPT | Tpsg | A | A | CMP | E300.0:NO3 | 1 | N | Dry. |
| W-834-T11 | MWPT | Tpsg | S | S | CMP | E601 | 1 | N | Dry. |
| W-834-T11 | MWPT | Tpsg | S | S | CMP | E601 | 3 | N | Dry. |
| W-834-T11 | MWPT | Tpsg | A | A | CMP | EM8015:DIESEL | 1 | N | Dry. |
| W-834-T11 | MWPT | Tpsg | A | A | CMP | TBOS | 1 | N | Dry. |
| W-834-T2 | MWPT | Tpsg | | A | DIS | ANIONS | 2 | Y | |
| W-834-T2 | MWPT | Tpsg | | A | DIS | DWMETALS | 2 | Y | |
| W-834-T2 | MWPT | Tpsg | | A | DIS | E218.2 | 2 | Y | |
| W-834-T2 | MWPT | Tpsg | A | | CMP | E300.0:NO3 | 2 | Y | NO3 part of ANIONS analyte suite. |
| W-834-T2 | MWPT | Tpsg | S | S | CMP | E601 | 2 | Y | |
| W-834-T2 | MWPT | Tpsg | S | S | CMP | E601 | 3 | Y | |
| W-834-T2 | MWPT | Tpsg | A | A | CMP | EM8015:DIESEL | 1 | N | Access limitations. |

**Table 2.2-2. Building 834 2003 ground water sampling and analysis plan. (Cont. Page 14 of 16)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-834-T2 | MWPT | Tpsg | A | A | CMP | TBOS | 2 | Y | |
| W-834-T2A | MWPT | Tpsg | | A | DIS | ANIONS | 2 | Y | |
| W-834-T2A | MWPT | Tpsg | A | | CMP | E300.0:NO3 | 2 | Y | NO3 part of ANIONS analyte suite. |
| W-834-T2A | MWPT | Tpsg | S | S | CMP | E601 | 2 | Y | |
| W-834-T2A | MWPT | Tpsg | S | S | CMP | E601 | 3 | Y | |
| W-834-T2A | MWPT | Tpsg | A | A | CMP | EM8015:DIESEL | 1 | N | Access limitations. |
| W-834-T2A | MWPT | Tpsg | A | A | CMP | TBOS | 2 | Y | |
| W-834-T2A | MWPT | Tpsg | | A | DIS | DWMETALS | 2 | Y | |
| W-834-T2B | MWPT | Tpsg | A | A | CMP | E300.0:NO3 | 1 | N | Dry. |
| W-834-T2B | MWPT | Tpsg | S | S | CMP | E601 | 1 | N | Dry. |
| W-834-T2B | MWPT | Tpsg | S | S | CMP | E601 | 3 | N | Dry. |
| W-834-T2B | MWPT | Tpsg | A | A | CMP | EM8015:DIESEL | 1 | N | Dry. |
| W-834-T2B | MWPT | Tpsg | A | A | CMP | TBOS | 1 | N | Dry. |
| W-834-T2C | MWPT | Tpsg | A | A | CMP | E300.0:NO3 | 1 | N | Dry. |
| W-834-T2C | MWPT | Tpsg | S | S | CMP | E601 | 1 | N | Dry. |
| W-834-T2C | MWPT | Tpsg | S | S | CMP | E601 | 3 | N | Dry. |
| W-834-T2C | MWPT | Tpsg | A | A | CMP | EM8015:DIESEL | 1 | N | Dry. |
| W-834-T2C | MWPT | Tpsg | A | A | CMP | TBOS | 1 | N | Dry. |
| W-834-T2D | MWPT | Tpsg | | A | DIS | ANIONS | 2 | Y | |
| W-834-T2D | MWPT | Tpsg | A | | CMP | E300.0:NO3 | 2 | Y | NO3 part of ANIONS analyte suite. |
| W-834-T2D | MWPT | Tpsg | S | S | CMP | E601 | 2 | Y | |
| W-834-T2D | MWPT | Tpsg | A | A | CMP | EM8015:DIESEL | 1 | N | Access limitations. |
| W-834-T2D | MWPT | Tpsg | A | A | CMP | TBOS | 2 | Y | |
| W-834-T3 | GW | $Tnbs_1$ | S | S | CMP | E300.0:NO3 | 1 | Y | |
| W-834-T3 | GW | $Tnbs_1$ | S | S | CMP | E300.0:NO3 | 3 | Y | |
| W-834-T3 | GW | $Tnbs_1$ | Q | Q | CMP | E601 | 1 | Y | |
| W-834-T3 | GW | $Tnbs_1$ | Q | Q | CMP | E601 | 2 | Y | |
| W-834-T3 | GW | $Tnbs_1$ | Q | Q | CMP | E601 | 3 | Y | |
| W-834-T3 | GW | $Tnbs_1$ | Q | Q | CMP | E601 | 4 | Y | |
| W-834-T3 | GW | $Tnbs_1$ | S | S | CMP | EM8015:DIESEL | 1 | Y | |

**Table 2.2-2. Building 834 2003 ground water sampling and analysis plan. (Cont. Page 15 of 16)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-834-T3 | GW | $Tnbs_1$ | S | S | CMP | EM8015:DIESEL | 3 | Y | |
| W-834-T3 | GW | $Tnbs_1$ | | A | DIS | GENMIN | 1 | Y | |
| W-834-T3 | GW | $Tnbs_1$ | S | S | CMP | TBOS | 1 | Y | |
| W-834-T3 | GW | $Tnbs_1$ | S | S | CMP | TBOS | 3 | Y | |
| W-834-T5 | MWPT | Tpsg | A | A | CMP | E300.0:NO3 | 1 | N | Access limitations. |
| W-834-T5 | MWPT | Tpsg | S | S | CMP | E601 | 1 | N | Access limitations. |
| W-834-T5 | MWPT | Tpsg | S | S | CMP | E601 | 3 | Y | |
| W-834-T5 | MWPT | Tpsg | A | A | CMP | EM8015:DIESEL | 1 | N | Access limitations. |
| W-834-T5 | MWPT | Tpsg | A | A | CMP | TBOS | 1 | N | Access limitations. |
| W-834-T7A | MWPT | Tpsg | A | A | CMP | E300.0:NO3 | 1 | N | Access limitations. |
| W-834-T7A | MWPT | Tpsg | S | S | CMP | E601 | 1 | N | Access limitations. |
| W-834-T7A | MWPT | Tpsg | S | S | CMP | E601 | 3 | Y | |
| W-834-T7A | MWPT | Tpsg | A | A | CMP | EM8015:DIESEL | 1 | N | Access limitations. |
| W-834-T7A | MWPT | Tpsg | A | A | CMP | TBOS | 1 | N | Access limitations. |
| W-834-T8A | MWPT | Tpsg | A | A | CMP | E300.0:NO3 | 1 | N | Dry. |
| W-834-T8A | MWPT | Tpsg | S | S | CMP | E601 | 1 | N | Dry. |
| W-834-T8A | MWPT | Tpsg | S | S | CMP | E601 | 3 | N | Dry. |
| W-834-T8A | MWPT | Tpsg | A | A | CMP | EM8015:DIESEL | 1 | N | Dry. |
| W-834-T8A | MWPT | Tpsg | A | A | CMP | TBOS | 1 | N | Dry. |
| W-834-T9 | MWPT | Tpsg | A | A | CMP | E300.0:NO3 | 1 | N | Dry. |
| W-834-T9 | MWPT | Tpsg | S | S | CMP | E601 | 1 | N | Dry. |
| W-834-T9 | MWPT | Tpsg | S | S | CMP | E601 | 3 | N | Dry. |
| W-834-T9 | MWPT | Tpsg | A | A | CMP | EM8015:DIESEL | 1 | N | Dry. |
| W-834-T9 | MWPT | Tpsg | A | A | CMP | TBOS | 1 | N | Dry. |
| W-834-U1 | MWPT | Tps | | A | DIS | ANIONS | 2 | Y | |
| W-834-U1 | MWPT | Tps | A | | CMP | E300.0:NO3 | 2 | Y | NO3 part of ANIONS analyte suite. |
| W-834-U1 | MWPT | Tps | S | S | CMP | E601 | 2 | Y | |
| W-834-U1 | MWPT | Tps | S | S | CMP | E601 | 3 | Y | |
| W-834-U1 | MWPT | Tps | A | A | CMP | EM8015:DIESEL | 2 | Y | |
| W-834-U1 | MWPT | Tps | A | A | CMP | TBOS | 2 | Y | |
| W-834-U1 | MWPT | Tps | | | DIS | E8270 | 3 | Y | |

**Table 2.2-2. Building 834 2003 ground water sampling and analysis plan. (Cont. Page 16 of 16)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|

**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.**

**CGSA CMP/DIS = Sampling more frequently then required.**

**CGSA CMP/WGMG = Well shared with the Operations and Regulatory Affairs Division, Water Guidance and Monitoring Group and may be sampled at a greater frequency and for additional analytes then required by the CMP. Non-CMP analytes are reported separately by ORAD.**

**CGSA CMP = Central GSA groundwater sampling and analysis plan specified in the GSA RD**

**CMP DMW = CMP detection monitor well.**

**CMP/DIS = Sampling required analyte more frequently then required.**

**CMP/WGMG = Well shared with the Operations and Regulatory Affairs Division, Water Guidance and Monitoring Group and may be sampled at a greater frequency and for additional analytes then required by the CMP. Non-CMP analytes are reported separately by ORAD.**

**CMP = Compliance Monitoring.**

**DIS = Discretionary sampling of non-required analyte.**

**DMW = Detection monitor well (non-CMP).**

**ERD/WGMG = Non-CMP analyte sampled from a well shared by ERD and WGMG.**

**EW = Extraction well.**

**GW = Guard well.**

**MWB = Monitor well used for background.**

**MWPT = Monitor well used for plume tracking.**

**SPR = Spring.**

**WS = Water supply well.**

**Table 2.2-3. Building 834 OU 2003 VOCs in ground water.**

| Location | Date | Method | TCE (μg/L) | PCE (μg/L) | Total 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) | Freon 11 (μg/L) | Freon 113 (μg/L) | Methylene chloride (μg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W-834-2001 | 10/30/03 | E601 | 31,000 D | 59 D | 300 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D |
| W-834-2001 | 10/30/03 DUP | E601 | 14,000 D | 59 D | 300 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D |
| W-834-1709 | 06/11/03 | E624 | 11,000 D | 58 D | 95 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D |
| W-834-1709 | 09/16/03 | E624 | 14,000 D | 88 | 650 D | <0.5 | 1.3 | <0.5 | <0.5 | 2.2 | 0.58 | <0.5 | <0.5 | <0.5 |
| W-834-1709 | 11/04/03 | E601 | 1,200 D | 100 D | 300 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D |
| W-834-1711 | 06/11/03 | E624 | 1,400 D | 24 | 1.4 | <0.5 | 0.63 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-834-1711 | 09/16/03 | E624 | 1,400 D | 20 | 1.6 | <0.5 | 0.52 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-834-1711 | 11/04/03 | E601 | 24,000 D | 20 D | <5 D | <3 D | <3 D | <3 D | <3 D | <3 D | <3 D | <3 D | <3 D | <3 D |
| W-834-1824 | 06/17/03 | E624 | 25,000 D | 49 D | 42 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D |
| W-834-1824 | 09/16/03 | E624 | 23,000 D | 59 | 42 | 4.1 | 5.3 | <0.5 | 0.61 | 5.4 | <0.5 | 4 | <0.5 | <0.5 |
| W-834-1824 | 11/04/03 | E601 | 16,000 D | 90 D | <100 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D |
| W-834-1825 | 06/17/03 | E601 | 18,000 D | 27 D | 23 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D |
| W-834-1825 | 09/16/03 | E624 | 13,000 D | 33 | 27 | 3 | 4 | <0.5 | 0.59 | 3.8 | <0.5 | 2.5 | <0.5 | <0.5 |
| W-834-1825 | 11/04/03 | E601 | 17,000 D | 31 D | <50 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D |
| W-834-1833 | 06/23/03 | E624 | 20,000 D | 32 D | <50 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D |
| W-834-1833 | 09/16/03 | E624 | 18,000 D | 37 | 33 | 3.4 | 4.7 | <0.5 | 0.75 | 5 | <0.5 | 2.9 | <0.5 | <0.5 |
| W-834-1833 | 11/04/03 | E601 | 120,000 D | <50 D | <100 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D |
| W-834-1709 | 06/11/03 | E624 | 200,000 D | 58 D | 95 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D |
| W-834-1709 | 09/16/03 | E624 | 13,000 D | 88 | 650 D | <0.5 | 1.3 | <0.5 | <0.5 | 2.2 | 0.58 | <0.5 | <0.5 | <0.5 |
| W-834-1709 | 11/04/03 | E601 | 82 D | 100 D | 300 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D |
| W-834-1711 | 06/11/03 | E624 | 200 D | 24 | 1.4 | <0.5 | 0.63 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-834-1711 | 09/16/03 | E624 | - | 20 | 1.6 | <0.5 | 0.52 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-834-1711 | 11/04/03 | E601 | 8,900 D | 20 D | <5 D | <3 D | <3 D | <3 D | <3 D | <3 D | <3 D | <3 D | <3 D | <3 D |
| W-834-1824 | 06/17/03 | E624 | 17,000 D | 49 D | 42 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D |
| W-834-1824 | 09/16/03 | E624 | 39 | 59 | 42 | 4.1 | 5.3 | <0.5 | 0.61 | 5.4 | <0.5 | 4 | <0.5 | <0.5 |
| W-834-1824 | 11/04/03 | E601 | 120 D | 90 D | <100 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D |
| W-834-1825 | 06/17/03 | E601 | 33,000 D | 27 D | 23 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D |
| W-834-1825 | 09/16/03 | E624 | 48,000 D | 33 | 27 | 3 | 4 | <0.5 | 0.59 | 3.8 | <0.5 | 2.5 | <0.5 | <0.5 |
| W-834-1825 | 11/04/03 | E601 | 36,000 D | 31 D | <50 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D |
| W-834-1833 | 06/23/03 | E624 | 31,000 D | 32 D | <50 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D |
| W-834-1833 | 09/16/03 | E624 | 550 D | 37 | 33 | 3.4 | 4.7 | <0.5 | 0.75 | 5 | <0.5 | 2.9 | <0.5 | <0.5 |
| W-834-1833 | 11/04/03 | E601 | 1,700 D | <50 D | <100 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D |
| W-834-A1 | 06/16/03 | E601 | - | 640 D | <300 D | <200 D | <200 D | <200 D | <200 D | <200 D | <200 D | <200 D | <200 D | <200 D |
| W-834-A1 | 09/03/03 | E601 | 50 D | 1,100 D | <500 D | <300 D | <300 D | <300 D | <300 D | <300 D | <300 D | <300 D | <300 D | <300 D |
| W-834-A2 | 04/01/03 | E601 | 120 D | 40 D | 1,000 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D |
| W-834-B3 | 06/20/03 | E601 | 1,200 D | <3 D | 1,000 D | <3 D | <3 D | <3 D | <3 D | 4.0 D | <3 D | <3 D | <3 D | <3 D |

**Table 2.2-3. Building 834 OU 2003 VOCs in ground water. (Cont. Page 2 of 6)**

| Location | Date | Method | TCE (µg/L) | PCE (µg/L) | Total 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) | Freon 11 (µg/L) | Freon 113 (µg/L) | Methylene chloride (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W-834-B3 | 09/19/03 | E601 | <30 D | <5 D | 3,500 D | <5 D | <5 D | <5 D | <5 D | 9.7 D | <5 D | <5 D | <5 D | <5 D |
| W-834-B3 | 10/08/03 | E601 | <50 D | - | - | - | - | - | - | - | - | - | - | - |
| W-834-B4 | 04/01/03 | E601 | - | 19 D | 2,000 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D |
| W-834-B4 | 06/12/03 | E601 | 1,400 D | 43 D | 4,300 D | <10 D | <10 D | <10 D | <10 D | 23 D | <10 D | <10 D | <10 D | <10 D |
| W-834-C4 | 06/12/03 | E601 | 8,300 D | <0.5 | 35 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-834-C4 | 09/03/03 | E601 | 8,500 D | <0.5 | 130 D | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-834-C5 | 06/12/03 | E601 | - | 130 D | 8,700 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D |
| W-834-C5 | 09/15/03 | E601 | 9,500 D | 150 D | 25,000 D | <100 D | <100 D | <100 D | <100 D | <100 D | <100 D | <100 D | <100 D | <100 D |
| W-834-C5 | 09/15/03 DUP | E601 | 14,000 D | 140 D | 20,000 D | <0.5 | 4.4 | 1.3 | 4.7 | 110 D | 2.8 | <0.5 | <0.5 | 5 |
| W-834-C5 | 11/04/03 | E601 | 4,000 D | 120 D | 33,000 D | <50 D | <50 D | <50 D | <50 D | 98 D | <50 D | <50 D | <50 D | <50 D |
| W-834-D3 | 06/18/03 | E601 | 2,800 D | <50 D | 17,000 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | 520 D |
| W-834-D3 | 09/19/03 | E601 | 4,600 D | <50 D | 10,000 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | 83 D |
| W-834-D3 | 10/08/03 | E601 | 2,200 D | - | - | - | - | - | - | - | - | - | - | - |
| W-834-D4 | 06/18/03 | E601 | 39,000 D | <30 D | 17,000 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | 140 D |
| W-834-D4 | 06/19/03 | E601 | 5,400 D | <30 D | 20,000 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | 200 D |
| W-834-D4 | 07/09/03 | E601 | 4,100 D | <30 D | 18,000 D | <30 D | <30 D | <30 D | <30 D | 31 D | <30 D | <30 D | <30 D | 100 D |
| W-834-D4 | 08/13/03 | E601 | 3,100 D | <30 D | 17,000 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | 68 D |
| W-834-D4 | 09/19/03 | E601 | 420 D | <50 D | 18,000 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | 88 D |
| W-834-D4 | 10/08/03 | E601 | 21,000 D | - | - | - | - | - | - | - | - | - | - | - |
| W-834-D5 | 06/18/03 | E601 | 15,000 D | 13 D | 7,600 D | <3 D | <3 D | <3 D | <3 D | 13 D | <3 D | <3 D | <3 D | 180 D |
| W-834-D5 | 09/19/03 | E601 | 15,000 D | 69 D | 3,600 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | 23 D |
| W-834-D5 | 09/19/03 DUP | E601 | 14,000 D | 74 D | 4,300 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | 21 D |
| W-834-D5 | 10/08/03 | E601 | 18,000 D | - | - | - | - | - | - | - | - | - | - | - |
| W-834-D6 | 06/19/03 | E601 | 22,000 D | 66 D | 350 D | <3 D | <3 D | <3 D | <3 D | <3 D | <3 D | <3 D | <3 D | <3 D |
| W-834-D6 | 09/19/03 | E601 | 1,600 D | 95 D | 480 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D |
| W-834-D7 | 06/23/03 | E601 | 270 D | 18 D | 33 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D |
| W-834-D7 | 09/19/03 | E601 | 540 D | 26 D | 57 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D |
| W-834-D10 | 06/16/03 | E601 | 570 D | 13 D | <20 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D |
| W-834-D10 | 09/23/03 | E601 | 610 D | 15 D | <10 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D |
| W-834-D11 | 06/16/03 | E601 | 550 D | 57 D | 170 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D |
| W-834-D11 | 09/23/03 | E601 | 480 D | 11 D | 30 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D |
| W-834-D12 | 04/01/03 | E601 | 510 D | 20 D | 65 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D |
| W-834-D12 | 06/12/03 | E601 | 530 D | 15 D | 76 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D |
| W-834-D12 | 09/19/03 | E601 | <0.5 | 0.96 | 32 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-834-D13 | 06/18/03 | E601 | <0.5 | 260 D | 1,400 D | <30 D | <30 D | <30 D | <30 D | <30 D | 99 D | <30 D | <30 D | <30 D |
| W-834-D13 | 09/19/03 | E601 | <0.5 | 140 D | 420 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D |

**Table 2.2-3. Building 834 OU 2003 VOCs in ground water. (Cont. Page 3 of 6)**

| Location | Date | Method | TCE (µg/L) | PCE (µg/L) | Total 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) | Freon 11 (µg/L) | Freon 113 (µg/L) | Methylene chloride (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W-834-D14 | 06/18/03 | E601 | 6,800 D | 52 D | 1,600 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D |
| W-834-D14 | 09/19/03 | E601 | 7,300 D | 72 D | 930 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D |
| W-834-D15 | 06/16/03 | E601 | 19,000 D | 31 D | 520 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D |
| W-834-D15 | 09/03/03 | E601 | 19,000 D | <50 D | 890 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D |
| W-834-D17 | 06/16/03 | E601 | 3.7 | 32 D | 400 D | <3 D | <3 D | <3 D | <3 D | <3 D | <3 D | <3 D | <3 D | <3 D |
| W-834-D18 | 09/15/03 | E601 | 1.6 | <0.5 | 48 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-834-H2 | 06/19/03 | E601 | <0.5 | <1 D | <2 D | <1 D | <1 D | <1 D | <1 D | <1 D | <1 D | <1 D | <1 D | <1 D |
| W-834-H2 | 09/23/03 | E601 | 2,500 D | 2.4 D | <2 D | <1 D | <1 D | <1 D | <1 D | <1 D | <1 D | <1 D | <1 D | <1 D |
| W-834-J1 | 06/19/03 | E601 | 2,100 D | 1.4 D | <2 D | <1 D | 1.3 D | <1 D | <1 D | <1 D | <1 D | <1 D | <1 D | <1 D |
| W-834-J1 | 09/19/03 | E601 | <0.5 | <3 D | <5 D | <3 D | <3 D | <3 D | <3 D | <3 D | <3 D | <3 D | <3 D | <3 D |
| W-834-J2 | 06/19/03 | E601 | <0.5 L | 1.2 D | <2 D | <1 D | <1 D | <1 D | <1 D | <1 D | <1 D | <1 D | <1 D | <1 D |
| W-834-J2 | 07/09/03 | E601 | <0.5 | 2.2 D | <2 D | <1 D | 1.2 D | <1 D | <1 D | <1 D | <1 D | <1 D | <1 D | <1 D |
| W-834-J2 | 09/23/03 | E601 | <0.5 | 1.3 D | <2 D | <1 D | <1 D | <1 D | <1 D | <1 D | <1 D | <1 D | <1 D | <1 D |
| W-834-M1 | 06/17/03 | E601 | 25,000 D | <0.5 | <1 | <0.5 | 6.7 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-834-M1 | 09/10/03 | E601 | 26,000 D | <0.5 | <1 | <0.5 | 6.7 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-834-M1 | 09/10/03 DUP | E601 | 24,000 D | <0.5 | <0.5 | <0.5 | 5.1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-834-S1 | 09/11/03 | E601 | 23,000 D | 170 D | 340 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | 69 D | <30 D |
| W-834-S1 | 11/04/03 | E601 | 23,000 D | 190 D | 360 D | <20 D | <20 D | <20 D | <20 D | <20 D | <20 D | <20 D | <20 D | <20 D |
| W-834-S13 | 09/15/03 | E601 | 12,000 D | 96 D | 2,400 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D |
| W-834-S13 | 11/05/03 | E601 | <0.5 | 92 D | 3,900 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D |
| W-834-S4 | 09/10/03 | E601 | <0.5 L | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-834-S6 | 09/10/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-834-S7 | 09/10/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-834-S8 | 09/11/03 | E601 | <0.5 | 22 D | 39 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D |
| W-834-S9 | 09/11/03 | E601 | <0.5 | 5.3 D | <10 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D |
| W-834-T1 | 03/18/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-834-T1 | 05/23/03 | E601 | <0.5 | <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 |
| W-834-T1 | 09/09/03 | E601 | 39,000 D | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-834-T1 | 10/10/03 | E601 | 61,000 D | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-834-T2 | 06/23/03 | E601 | 42,000 DL | 59 D | <100 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D |
| W-834-T2 | 09/11/03 | E601 | 31,000 D | 52 D | <50 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D |
| W-834-T2A | 06/23/03 | E601 | 14,000 D | 48 D | <50 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D |
| W-834-T2A | 09/11/03 | E601 | 11,000 D | <50 D | <100 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D |
| W-834-T2A | 09/11/03 DUP | E601 | 14,000 D | 52 D | <100 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D |
| W-834-T2D | 06/18/03 | E601 | 1,200 D | <30 D | <50 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D | <30 D |
| W-834-T3 | 03/17/03 | E601 | 1,400 D | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

**Table 2.2-3. Building 834 OU 2003 VOCs in ground water. (Cont. Page 4 of 6)**

| Location | Date | Method | TCE (μg/L) | PCE (μg/L) | Total 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) | Freon 11 (μg/L) | Freon 113 (μg/L) | Methylene chloride (μg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W-834-T3 | 05/23/03 | E601 | 1,400 D | <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 |
| W-834-T3 | 09/11/03 | E601 | 24,000 D | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-834-T3 | 09/11/03 DUP | E601 | 25,000 D | <0.5 | - | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-834-T3 | 10/10/03 | E601 | 23,000 D | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-834-T5 | 09/16/03 | E601 | 16,000 D | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-834-T5 | 09/16/03 DUP | E601 | 18,000 D | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-834-T7A | 09/15/03 | E601 | 13,000 D | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-834-U1 | 06/16/03 | E601 | 17,000 D | 230 D | 690 D | <200 D | <200 D | <200 D | <200 D | <200 D | <200 D | <200 D | <200 D | <200 D |
| W-834-U1 | 09/03/03 | E601 | 20,000 D | 290 D | 950 D | <100 D | <100 D | <100 D | <100 D | <100 D | <100 D | <100 D | <100 D | <100 D |
| W-834-U1 | 09/03/03 DUP | E601 | 18,000 D | <1,000 D | <1,000 D | <1,000 D | <1,000 D | <1,000 D | <1,000 D | <1,000 DL | <1,000 D | <1,000 D | <1,000 D | <1,000 D |

**See following pages for other VOCs not detected in this table (pages 1 through 4).**

**Table 2.2-3. Building 834 OU 2003 VOCs in ground water. (Cont. Page 5 of 6) Other VOCs not detected in the table on pages 1 through 4:**

| Location | Date | Method | 1,1,2-Trichloro-ethane (µg/L) | 1,3-Dichloro-benzene (µg/L) | Bromo-Dichloromethane (µg/L) | Bromoform (µg/L) | Carbon disulfide (µg/L) | Chloro-benzene (µg/L) | Dibromo-chloromethane (µg/L) | Total trihalomethanes (µg/L) | cis-1,2-Dichloroethene (µg/L) | trans-1,2-Dichloroethene (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W-834-2001 | 10/30/03 MSC | E601 | - | - | - | - | - | - | - | - | 300 D | - |
| W-834-1709 | 06/11/03 | E624 | - | - | - | - | - | - | - | - | 95 D | - |
| W-834-1709 | 09/16/03 | E624 | 1.8 | - | - | - | - | - | - | - | 650 D | 0.86 |
| W-834-1709 | 11/04/03 | E601 | - | - | - | - | - | - | - | - | 300 D | - |
| W-834-1711 | 06/11/03 | E624 | - | - | - | - | 1.9 | - | - | - | 1.2 | - |
| W-834-1711 | 09/16/03 | E624 | - | - | - | - | - | - | - | - | 1.4 | - |
| W-834-1824 | 06/17/03 | E624 | - | - | - | - | - | - | - | - | 40 D | - |
| W-834-1824 | 09/16/03 | E624 | 5 | - | - | - | - | - | - | - | 41 | 0.89 |
| W-834-1825 | 06/17/03 | E601 | - | - | - | - | - | - | - | - | 22 D | - |
| W-834-1825 | 09/16/03 | E624 | 4.3 | - | - | - | - | - | - | - | 27 | 0.68 |
| W-834-1833 | 09/16/03 | E624 | 4.8 | - | - | - | - | - | - | - | 32 | 0.84 |
| W-834-A2 | 04/01/03 | E601 | - | - | - | - | - | - | - | - | 1,000 D | - |
| W-834-B3 | 06/20/03 | E601 | - | - | - | - | - | - | - | - | 1,000 D | - |
| W-834-B3 | 09/19/03 | E601 | - | - | - | - | - | - | - | - | 3,500 D | - |
| W-834-B4 | 04/01/03 | E601 | - | - | - | - | - | - | - | - | 2,000 D | - |
| W-834-B4 | 06/12/03 | E601 | - | - | - | - | - | - | - | - | 4,300 D | - |
| W-834-C4 | 06/12/03 | E601 | - | - | - | - | - | - | - | - | 35 | - |
| W-834-C4 | 09/03/03 | E601 | - | - | - | - | - | - | - | - | 130 D | - |
| W-834-C5 | 06/12/03 | E601 | - | - | - | - | - | - | - | - | 8,600 D | - |
| W-834-C5 | 09/15/03 | E601 | - | - | - | - | - | - | - | - | 25,000 D | - |
| W-834-C5 | 09/15/03 DUP | E601 | 6.5 | - | - | - | - | - | - | - | 20,000 D | 42 |
| W-834-C5 | 11/04/03 | E601 | - | - | - | - | - | - | - | - | 33,000 D | - |
| W-834-D3 | 06/18/03 | E601 | - | - | - | - | - | - | - | - | 17,000 D | - |
| W-834-D3 | 09/19/03 | E601 | - | - | - | - | - | - | - | - | 10,000 D | - |
| W-834-D4 | 06/18/03 | E601 | - | - | - | - | - | - | - | - | 17,000 D | - |
| W-834-D4 | 06/19/03 | E601 | - | - | - | - | - | - | - | - | 20,000 D | - |
| W-834-D4 | 07/09/03 | E601 | - | - | - | - | - | - | - | - | 18,000 D | - |
| W-834-D4 | 08/13/03 | E601 | - | - | - | - | - | - | - | - | 17,000 D | - |
| W-834-D4 | 09/19/03 | E601 | - | - | - | - | - | - | - | - | 18,000 D | - |
| W-834-D5 | 06/18/03 | E601 | - | - | - | - | - | - | - | - | 7,600 D | 14 D |
| W-834-D5 | 09/19/03 | E601 | - | - | - | - | - | - | - | - | 3,600 D | - |
| W-834-D5 | 09/19/03 DUP | E601 | - | - | - | - | - | - | - | - | 4,300 D | - |
| W-834-D6 | 06/19/03 | E601 | - | - | - | - | - | - | - | - | 350 D | - |
| W-834-D6 | 09/19/03 | E601 | - | - | - | - | - | - | - | - | 480 D | - |
| W-834-D7 | 06/23/03 | E601 | - | - | - | - | - | - | - | - | 33 D | - |
| W-834-D7 | 09/19/03 | E601 | - | - | - | - | - | - | - | - | 57 D | - |
| W-834-D11 | 06/16/03 | E601 | - | - | - | - | - | - | - | - | 170 D | - |
| W-834-D11 | 09/23/03 | E601 | - | - | - | - | - | - | - | - | 30 D | - |
| W-834-D12 | 04/01/03 | E601 | - | - | - | - | - | - | - | - | 65 D | - |
| W-834-D12 | 06/12/03 | E601 | - | - | - | - | - | - | - | - | 76 D | - |
| W-834-D12 | 09/19/03 | E601 | - | - | - | - | - | 0.67 | - | - | 32 | - |
| W-834-D13 | 06/18/03 | E601 | - | - | - | - | - | - | - | - | 1,400 D | - |
| W-834-D13 | 09/19/03 | E601 | - | - | - | - | - | - | - | - | 420 D | - |

**Table 2.2-3. Building 834 OU 2003 VOCs in ground water. (Cont. Page 6 of 6) Other VOCs not detected in the table on pages 1 through 4:**

| Location | Date | Method | 1,1,2-Trichloro-ethane (µg/L) | 1,3-Dichloro-benzene (µg/L) | Bromo-Dichloromethane (µg/L) | Bromoform (µg/L) | Carbon disulfide (µg/L) | Chloro-benzene (µg/L) | Dibromo-chloromethane (µg/L) | Total trihalomethanes (µg/L) | cis-1,2-Dichloroethene (µg/L) | trans-1,2-Dichloroethene (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W-834-D14 | 06/18/03 | E601 | - | - | - | - | - | - | - | - | 1,600 D | - |
| W-834-D14 | 09/19/03 | E601 | - | - | - | - | - | - | - | - | 930 D | - |
| W-834-D15 | 06/16/03 | E601 | - | - | - | - | - | - | - | - | 520 D | - |
| W-834-D15 | 09/03/03 | E601 | - | - | - | - | - | - | - | - | 890 D | - |
| W-834-D17 | 06/16/03 | E601 | - | - | - | - | - | - | - | - | 400 D | - |
| W-834-D18 | 09/15/03 | E601 | - | - | - | - | - | - | - | - | 48 | - |
| W-834-H2 | 06/19/03 | E601 | 2.7 D | - | - | - | - | - | - | - | - | - |
| W-834-H2 | 09/23/03 | E601 | 4.0 D | - | - | - | - | - | - | - | - | - |
| W-834-J1 | 09/19/03 | E601 | - | - | - | - | - | - | - | - | 4.0 D | - |
| W-834-J2 | 06/19/03 | E601 | - | - | - | - | - | - | - | - | - | - |
| W-834-M1 | 06/17/03 | E601 | - | 1.3 | 0.95 | 0.52 | - | - | 0.69 | 8.9 | - | - |
| W-834-M1 | 09/10/03 | E601 | - | 1.7 | 1 | 0.56 | - | - | 0.72 | 8.9 | - | - |
| W-834-M1 | 09/10/03 DUP | E601 | - | 2.1 | 0.8 | 0.5 | - | - | 0.7 | - | - | - |
| W-834-S1 | 09/11/03 | E601 | - | - | - | - | - | - | - | - | 340 D | - |
| W-834-S1 | 11/04/03 | E601 | - | - | - | - | - | - | - | - | 360 D | - |
| W-834-S13 | 09/15/03 | E601 | - | - | - | - | - | - | - | - | 2,400 D | 35 D |
| W-834-S13 | 11/05/03 | E601 | - | - | - | - | - | - | - | - | 3,900 D | 67 D |
| W-834-S8 | 09/11/03 | E601 | - | - | - | - | - | - | - | - | 39 D | - |
| W-834-S9 | 09/11/03 | E601 | - | - | - | - | - | - | - | - | 5.0 D | - |
| W-834-T2 | 09/11/03 | E601 | - | - | - | - | - | - | - | - | 35 D | - |
| W-834-T2A | 06/23/03 | E601 | - | - | - | - | - | - | - | - | 44 D | - |
| W-834-T2D | 06/18/03 | E601 | - | - | - | - | - | - | - | - | 34 D | - |
| W-834-U1 | 06/16/03 | E601 | - | - | - | - | - | - | - | - | 670 D | - |
| W-834-U1 | 09/03/03 | E601 | - | - | - | - | - | - | - | - | 950 D | - |

**Table 2.2-4. Building 834 OU 2003 TBOS in ground water.**

| Location | Date | TBOS ($\mu$g/L) |
|---|---|---|
| W-834-2001 | 10/30/03 | <1 |
| W-834-1709 | 06/11/03 | 14 O |
| W-834-1709 | 09/16/03 | 10 D |
| W-834-1709 | 11/04/03 | 6.9 |
| W-834-1711 | 09/16/03 | 67 D |
| W-834-1824 | 06/17/03 | <1 |
| W-834-1825 | 06/17/03 | <1 |
| W-834-1833 | 06/23/03 | <1 |
| W-834-A1 | 06/16/03 | 1.5 |
| W-834-A2 | 04/01/03 | 1.3 IJ |
| W-834-B3 | 06/20/03 | <500 D |
| W-834-B4 | 04/01/03 | <1 |
| W-834-B4 | 06/12/03 | <1 O |
| W-834-C4 | 06/12/03 | <1 O |
| W-834-C5 | 06/12/03 | <1 O |
| W-834-D3 | 06/18/03 | 10,000 D |
| W-834-D3 | 09/19/03 | 2,100 DIJ |
| W-834-D4 | 06/18/03 | 520,000 D |
| W-834-D4 | 09/19/03 | 9,000 DIJ |
| W-834-D5 | 06/18/03 | 88 D |
| W-834-D5 | 09/19/03 | 44 D |
| W-834-D5 | 09/19/03 DUP | 18 DIJ |
| W-834-D6 | 06/20/03 | <1 |
| W-834-D6 | 09/19/03 | <10 D |
| W-834-D7 | 06/23/03 | <1 |
| W-834-D12 | 04/01/03 | 11 |
| W-834-D12 | 06/12/03 | <1 O |
| W-834-D13 | 06/18/03 | 5.6 |
| W-834-D13 | 09/19/03 | <10 D |
| W-834-D14 | 06/18/03 | 34 D |
| W-834-D14 | 09/19/03 | 2.8 DIJ |
| W-834-D15 | 06/16/03 | <1 |
| W-834-H2 | 06/19/03 | 6.1 O |
| W-834-J1 | 06/19/03 | <1 O |
| W-834-J2 | 06/19/03 | <1 O |
| W-834-J2 | 09/23/03 | <10 D |
| W-834-T1 | 03/18/03 | <1 |
| W-834-T1 | 09/09/03 | <1 |
| W-834-T2 | 06/23/03 | <1 |
| W-834-T2A | 06/23/03 | <1 |
| W-834-T2D | 06/18/03 | 1.7 |
| W-834-T3 | 03/17/03 | <1 O |
| W-834-T3 | 09/11/03 | <1 |
| W-834-U1 | 06/16/03 | <1 |

**Table 2.2-5. Building 834 OU 2003 anions in ground water.**

| Location | Date | Bromide (mg/L) | Chloride (mg/L) | Fluoride (mg/L) | Nitrate (as N) (mg/L) | Nitrate (as $NO_3$) (mg/L) | Nitrate (as $NO_3$) (mg/L) | Nitrate plus Nitrite (as N) (mg/L) | Nitrite (as N) (mg/L) | Nitrite (as $NO_2$) (mg/L) | Ortho-Phosphate (mg/L) | Sulfate (mg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W-834-1709 | 06/11/03 | 0.20 H | 12 H | 0.48 H | 0.23 | 1 | - | 0.28 L | 0.051 | 0.17 | 0.86 D | 18 H |
| W-834-1711 | 11/04/03 | - | - | - | - | - | 81 | - | - | - | - | - |
| W-834-1824 | 06/17/03 | 0.70 H | 180 H | 1.2 H | 20 D | 90 D | - | 20 DL | <0.02 | <0.065 | 0.81 | 78 H |
| W-834-1825 | 06/17/03 | 0.70 H | 190 H | 1.2 H | 16 D | 69 D | - | 16 DL | <0.02 | <0.065 | 1 | 73 H |
| W-834-1833 | 06/23/03 | 0.70 H | 190 H | 1.1 H | 14 DH | 62 DH | - | 14 DH | <0.02 | <0.065 | 0.47 | 72 H |
| W-834-A1 | 06/16/03 | 0.2 | 53 | 0.7 | <0.5 D | <2 D | - | <0.5 D | <0.02 | <0.065 | 1.1 | 22 |
| W-834-B4 | 06/12/03 | 0.20 H | 26 H | 0.47 H | 3.4 DH | 15 DH | - | 3.4 DH | <0.02 | <0.065 | 1.4 | 16 H |
| W-834-C4 | 06/12/03 | 0.20 H | 7.4 H | 0.62 H | 22 DH | 98 DH | - | 22 DH | 0.02 | 0.066 | 0.87 | 29 H |
| W-834-C5 | 06/12/03 | 0.30 H | 14 H | 0.36 H | 25 DH | 110 DH | - | 25 DH | <0.02 | <0.065 | 1.1 | 18 H |
| W-834-D3 | 06/18/03 | 0.20 H | 35 H | 0.35 H | <0.1 | <0.4 | - | <0.1 L | <0.02 | <0.065 | 2.4 D | <1 H |
| W-834-D4 | 06/18/03 | 2.5 H | 75 H | 0.18 H | <0.1 | <0.4 | - | <0.1 L | <0.02 | <0.065 | 2.8 D | <1 H |
| W-834-D5 | 06/18/03 | 0.30 H | 62 H | 0.56 H | 1.4 D | 6.0 D | - | 2.9 DL | 1.5 D | 5.1 D | 0.85 | 90 H |
| W-834-D6 | 06/19/03 | 0.20 H | 37 H | 0.53 H | 7.1 DH | 31 DH | - | 7.1 D | <0.02 | <0.065 | 0.075 H | 100 H |
| W-834-D7 | 06/23/03 | 0.40 H | 60 H | 0.48 H | 8.1 DH | 36 DH | - | 8.1 DH | 0.033 | 0.11 | <0.05 | 71 H |
| W-834-D12 | 06/12/03 | 0.30 H | 78 H | 0.39 H | 14 DH | 62 DH | - | 14 DH | <0.02 | <0.065 | 0.97 | 100 H |
| W-834-D13 | 06/18/03 | 0.20 H | 35 H | 0.39 H | 9.4 D | 42 D | - | 10 DL | 0.75 D | 2.5 D | 1 | 120 H |
| W-834-D14 | 06/18/03 | 0.30 H | 26 H | 0.82 H | 10 D | 45 D | - | 10 DL | <0.02 | <0.065 | 0.91 | 90 H |
| W-834-D15 | 06/16/03 | 0.2 | 24 | 0.51 | 17 D | 74 D | - | 17 D | 0.023 | 0.075 | 0.94 | 61 |
| W-834-J1 | 06/19/03 | 0.40 H | 82 H | 0.60 H | 20 DH | 89 DH | - | 20 D | <0.02 | <0.065 | 0.66 | 35 H |
| W-834-J2 | 06/19/03 | 0.20 H | 39 H | 0.59 H | 16 DH | 71 DH | - | 16 D | <0.02 | <0.065 | 0.6 | 33 H |
| W-834-T1 | 03/18/03 | - | - | - | - | - | <0.44 | - | - | - | - | - |
| W-834-T1 | 09/09/03 | - | - | - | - | - | <0.44 | - | - | - | - | - |
| W-834-T2 | 06/23/03 | 0.70 H | 180 H | 0.87 H | 13 DH | 58 DH | - | 13 DH | <0.02 | <0.065 | <0.05 | 67 H |
| W-834-T2A | 06/23/03 | 0.40 H | 120 H | 1.2 H | 8.6 DH | 38 DH | - | 8.6 DH | <0.02 | <0.065 | <0.05 | 65 H |
| W-834-T2D | 06/18/03 | 0.60 H | 160 H | 0.94 H | 20 D | 89 D | - | 20 DL | <0.02 | <0.065 | 0.54 | 63 H |
| W-834-T3 | 03/17/03 | - | - | - | - | - | <0.44 | - | - | - | - | - |
| W-834-T3 | 09/11/03 | - | - | - | - | - | <0.44 | - | - | - | - | - |
| W-834-T3 | 09/11/03 DUP | - | - | - | - | - | <0.1 | - | - | - | - | - |
| W-834-U1 | 06/16/03 | 0.3 | 56 | 0.87 | <0.5 D | <2 D | - | <0.5 D | <0.02 | <0.065 | 1.2 | 42 |

**Table 2.2-6. Building 834 OU 2003 diesel range organic compounds in ground water.**

| Location | Date | Diesel fuel ($\mu$g/L) |
|---|---|---|
| W-834-2001 | 10/30/03 | 72,000 HD |
| W-834-A1 | 06/16/03 | 89 G |
| W-834-B3 | 06/20/03 | 43,000 DG |
| W-834-B4 | 06/12/03 | 60 G |
| W-834-C5 | 06/12/03 | 77 |
| W-834-D3 | 06/18/03 | <10,000 D |
| W-834-D4 | 06/18/03 | 42,000 DG |
| W-834-D5 | 06/18/03 | 3,800 DG |
| W-834-D6 | 06/20/03 | <50 |
| W-834-D7 | 06/23/03 | 380 L |
| W-834-D12 | 04/01/03 | <50 |
| W-834-D12 | 06/12/03 | <50 |
| W-834-D13 | 06/18/03 | 770 DG |
| W-834-D14 | 06/18/03 | 580 DG |
| W-834-D15 | 06/16/03 | <50 |
| W-834-H2 | 06/19/03 | 1,500 G |
| W-834-J1 | 06/19/03 | 300 G |
| W-834-J2 | 06/19/03 | 1,000 DG |
| W-834-T1 | 03/18/03 | <50 |
| W-834-T1 | 09/09/03 | <50 |
| W-834-T3 | 03/17/03 | 60 |
| W-834-T3 | 09/11/03 | <50 |
| W-834-T3 | 09/11/03 DUP | <56 |
| W-834-U1 | 06/16/03 | 200 G |

**Table 2.2-7. Analytical results for n-Butyl-Benzenesulfonamide (BBSA) at Site 300.**

| Sample ID | Sample date | BBSA conc. ($\mu$g/L) | Sample description |
|---|---|---|---|
| *Building 834 OU* | | | |
| W-834-1709 | 11/18/03 | 14 | Bailed grab sample; no pump installed |
| W-834-1709 | 01/12/04 | < 4 | Bailed grab sample; no pump installed |
| W-834-1711 | 11/18/03 | <5 | Bailed grab sample; no pump installed |
| W-834-A1 | 11/18/03 | <5 | Bailed grab sample; no pump installed |
| W-834-A2 | 01/12/04 | < 4 | Bailed grab sample; no pump installed |
| W-834-B3 | 12/12/03 | 29,500 | Solo pump sample |
| W-834-C4 | 12/12/03 | <5 | Bailed grab sample; no pump installed |
| W-834-C5 | 11/18/03 | <5 | Bailed grab sample; no pump installed |
| W-834-D3 | 11/18/03 | 22,000 | Solo pump sample |
| W-834-D4 | 11/18/03 | 197,000 | Solo pump sample |
| W-834-D5 | 11/18/03 | 22,000 | Solo pump sample |
| W-834-D7 | 11/18/03 | 232,000 | Solo pump sample |
| W-834-D12 | 11/18/03 | 531,000 | Solo pump sample |
| W-834-D13 | 11/18/03 | 16,000 | Solo pump sample |
| W-834-D14 | 11/18/03 | 800 | Bailed grab sample; Solo pump inoperable |
| W-834-D15 | 11/18/03 | <5 | Bailed grab sample; no pump installed |
| W-834-J2 | 11/18/03 | 187,000 | Solo pump sample |
| W-834-M1 | 12/18/03 | <5 | Bailed grab sample; no pump installed |
| W-834-S1 | 11/18/03 | <5 | Bailed grab sample; no pump installed |
| W-834-S8 | 11/18/03 | 6,500 | Bailed grab sample; Solo pump installed |
| W-834-S8 | 120/8/03 | 541,000 | Solo pump sample |
| W-834-S8 | 12/08/03 | 165,000 | Solo pump sample |
| W-834-S8 | 12/08/03 | 2,200 | Bailed grab sample; Solo pump removed |
| W-834-S8 | 12/10/03 | <5 | Bailed grab sample; Solo pump removed |
| W-834-S8 | 12/12/03 | <5 | Bailed grab sample; Solo pump removed |
| W-834-S8 | 01/08/04 | < 4 | Bailed grab sample; Solo pump removed |
| W-834-S9 | 11/18/03 | 508,000 | Solo pump sample |
| W-834-S9 | 12/08/03 | 397,000 | Solo pump sample |
| W-834-S9 | 12/08/03 | 1,500 | Bailed grab sample; Solo pump installed |
| W-834-S9 | 12/10/03 | 2,900 | Bailed grab sample; Solo pump removed on 12/8 |
| W-834-S9 | 12/12/03 | 480 | Bailed grab sample |
| W-834-S9 | 01/08/04 | < 4 | Bailed grab sample |

**Table 2.2-7. Analytical results for n-Butyl-Benzenesulfonamide (BBSA) at Site 300. (Cont. Page 2 of 2)**

| Sample ID | Sample date | BBSA conc. ($\mu$g/L) | Sample description |
|---|---|---|---|
| W-834-S9 | 01/08/04 | 270 | Bailed 90% casing volume sample |
| W-834-S9 | 01/12/04 | < 4 | Bailed grab sample |
| W-834-S13 | 11/18/03 | <5 | Bailed grab sample; no pump installed |
| W-834-T2A | 12/18/03 | <5 | Bailed grab sample; no pump installed |
| W-834-T2 | 12/18/03 | <5 | Bailed grab sample; no pump installed |
| W-834-T5 | 12/18/03 | <5 | Well Wizard sample; 3 casing volumes purged |
| *Building 832 Canyon OU* | | | |
| W-832-05 | 01/30/04 | <4 | Bailed grab sample; no pump installed |
| W-832-12 | 12/11/03 | 17 | Solo pump sample |
| W-832-13 | 12/11/03 | <5 | Solo pump sample |
| W-832-15 | 12/11/03 | 4,500 | Solo pump sample |
| W-832-23 | 01/30/04 | <4 | Bailed grab sample; no pump installed |
| TF-832-I | 01/15/04 | 5 | Treatment Facility Influent grab sample |
| TF-832-I | 01/29/04 | <4 | Treatment Facility Influent grab sample |
| TF-832-E | 01/15/04 | 92 | Treatment Facility Effluent grab sample |
| TF-832-E | 01/29/04 | 87 | Treatment Facility Effluent grab sample |
| *GSA OU* | | | |
| W-7F1 | 01/30/04 | 485,000 | Solo pump sample |
| W-7F2 | 01/30/04 | 482,000 | Solo pump sample |
| W-7I | 12/11/03 | 330 | Solo pump sample |
| W-7Q | 01/30/04 | <4 | Bailed grab sample; no pump installed |
| W-872-01 | 01/30/04 | <4 | Bailed grab sample; no pump installed |
| W-872-02 | 12/11/03 | <5 | Bailed grab sample; Solo pump inoperable |
| W-873-06 | 01/30/04 | <4 | Bailed grab sample; no pump installed |
| W-873-07 | 12/11/03 | <5 | Bailed grab sample; Solo pump inoperable |
| W-875-03 | 01/30/04 | <4 | Bailed grab sample; no pump installed |
| W-875-07 | 12/11/03 | 5 | Solo pump sample |
| W-875-08 | 12/11/03 | 6 | Solo pump sample |
| PTU07-E | 01/15/04 | <4 | Treatment Facility Effluent grab sample |

**Table 2.2-8. Building 834 OU 2003 metals in ground water.**

| Location | Date | Arsenic (mg/L) | Barium (mg/L) | Cadmium (mg/L) | Chromium (mg/L) | Chromium (mg/L) | Lead (mg/L) | Mercury (mg/L) | Selenium (mg/L) | Silver (mg/L) |
|---|---|---|---|---|---|---|---|---|---|---|
| W-834-1824 | 06/17/03 | 0.017 | <0.025 | <0.0005 | 0.0019 | - | <0.005 | <0.0002 | 0.0052 | <0.001 |
| W-834-1825 | 06/17/03 | 0.013 | <0.025 | <0.0005 | 0.0052 | - | <0.005 | <0.0002 | 0.0044 | <0.001 |
| W-834-1833 | 06/23/03 | 0.016 | <0.025 | <0.0005 | 0.0022 | - | <0.005 | <0.0002 | 0.0032 | <0.001 |
| W-834-M1 | 06/17/03 | - | - | - | - | 0.020 D | - | - | - | - |
| W-834-M1 | 09/11/03 | - | - | - | - | 0.019 D | - | - | - | - |
| W-834-M1 | 09/11/03 DUP | - | - | - | - | 3.5 D | - | - | - | - |
| W-834-S8 | 09/11/03 | - | - | - | - | 0.0057 | - | - | - | - |
| W-834-S9 | 09/11/03 | - | - | - | - | 0.004 | - | - | - | - |
| W-834-T2 | 06/23/03 | 0.018 | 0.05 | <0.0005 | <0.001 | - | <0.005 | <0.0002 | 0.003 | <0.001 |
| W-834-T2A | 06/23/03 | 0.028 | 0.037 | <0.0005 | <0.001 | - | <0.005 | <0.0002 | <0.002 | <0.001 |

**Table 2.2-9. Building 834 OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-834-1709 | 04/01/03 | 20.22 | 996.2 | |
| W-834-1709 | 06/11/03 | 20.67 | 995.75 | |
| W-834-1709 | 07/01/03 | - | - | NM |
| W-834-1709 | 10/10/03 | 22.45 | 993.97 | |
| W-834-1711 | 04/01/03 | - | - | DRY |
| W-834-1711 | 06/11/03 | 36.46 | 980.34 | |
| W-834-1711 | 07/01/03 | - | - | DRY |
| W-834-1711 | 10/04/03 | - | - | DRY |
| W-834-1712 | 04/01/03 | - | - | DRY |
| W-834-1712 | 07/01/03 | - | - | DRY |
| W-834-1712 | 10/04/03 | - | - | DRY |
| W-834-1824 | 06/13/03 | 38.41 | 922.37 | |
| W-834-1825 | 06/13/03 | 38.25 | 919.42 | |
| W-834-1833 | 06/13/03 | 38.56 | 917.55 | |
| W-834-A1 | 01/02/03 | - | - | NM/CB |
| W-834-A1 | 02/02/03 | - | - | NM/RA |
| W-834-A1 | 03/12/03 | - | - | CB/NM |
| W-834-A1 | 04/02/03 | - | - | NM |
| W-834-A1 | 06/11/03 | 28.47 | 986.62 | |
| W-834-A1 | 07/02/03 | - | - | NM |
| W-834-A1 | 10/04/03 | 29.65 | 985.44 | |
| W-834-A2 | 01/22/03 | - | - | NM/CB |
| W-834-A2 | 02/22/03 | - | - | NM/RA |
| W-834-A2 | 03/12/03 | - | - | CB/NM |
| W-834-A2 | 04/01/03 | 17.81 | 997.67 | |
| W-834-A2 | 06/10/03 | 18.21 | 997.27 | |
| W-834-A2 | 07/01/03 | - | - | NM |
| W-834-A2 | 10/04/03 | - | - | DRY |
| W-834-B2 | 01/22/03 | - | - | NM |
| W-834-B2 | 02/22/03 | - | - | NM/RA |
| W-834-B2 | 03/12/03 | - | - | NM |
| W-834-B2 | 04/01/03 | 17.02 | 1001.37 | |
| W-834-B2 | 06/10/03 | - | - | DRY |

**Table 2.2-9. Building 834 OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-834-B2 | 07/01/03 | - | - | DRY |
| W-834-B2 | 10/04/03 | - | - | DRY |
| W-834-B3 | 01/02/03 | - | - | NM |
| W-834-B3 | 01/15/03 | 5.52 | 1012.63 | |
| W-834-B3 | 02/02/03 | - | - | NM/RA |
| W-834-B3 | 02/15/03 | 7.38 | 1010.77 | |
| W-834-B3 | 03/04/03 | - | - | NM |
| W-834-B3 | 03/15/03 | 6.87 | 1011.28 | |
| W-834-B3 | 04/01/03 | 8.3 | 1009.85 | |
| W-834-B3 | 04/15/03 | 8.53 | 1009.62 | |
| W-834-B3 | 05/15/03 | 9.34 | 1008.81 | |
| W-834-B3 | 06/09/03 | 10.53 | 1007.62 | |
| W-834-B3 | 06/10/03 | 10.62 | 1007.53 | |
| W-834-B3 | 07/01/03 | - | - | NM |
| W-834-B3 | 10/04/03 | 12.35 | 1005.8 | |
| W-834-B4 | 01/02/03 | - | - | NM/CB |
| W-834-B4 | 02/02/03 | - | - | NM/RA |
| W-834-B4 | 03/12/03 | - | - | CB/NM |
| W-834-B4 | 04/01/03 | 12.83 | 1002.74 | |
| W-834-B4 | 06/10/03 | 13.64 | 1001.93 | |
| W-834-B4 | 07/01/03 | - | - | NM |
| W-834-B4 | 10/04/03 | - | - | DRY |
| W-834-C2 | 01/02/03 | - | - | NM |
| W-834-C2 | 02/02/03 | - | - | NM/RA |
| W-834-C2 | 03/09/03 | - | - | NM |
| W-834-C2 | 04/01/03 | 17.82 | 1001.98 | |
| W-834-C2 | 06/10/03 | - | - | DRY |
| W-834-C2 | 07/01/03 | - | - | DRY |
| W-834-C2 | 10/04/03 | - | - | DRY |
| W-834-C4 | 01/02/03 | - | - | NM |
| W-834-C4 | 02/02/03 | - | - | NM/RA |
| W-834-C4 | 03/12/03 | - | - | NM |
| W-834-C4 | 04/01/03 | 7.48 | 1011.92 | |

**Table 2.2-9. Building 834 OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-834-C4 | 06/10/03 | 9.11 | 1010.29 | |
| W-834-C4 | 07/01/03 | - | - | NM |
| W-834-C4 | 10/04/03 | 11.25 | 1008.15 | |
| W-834-C5 | 01/02/03 | - | - | NM/CB |
| W-834-C5 | 02/02/03 | - | - | NM/RA |
| W-834-C5 | 03/12/03 | - | - | CB/NM |
| W-834-C5 | 04/01/03 | 10.12 | 1005.55 | |
| W-834-C5 | 06/10/03 | 11.34 | 1004.33 | |
| W-834-C5 | 07/01/03 | - | - | NM |
| W-834-C5 | 10/04/03 | 13.25 | 1002.42 | |
| W-834-D10 | 01/02/03 | - | - | NM |
| W-834-D10 | 02/02/03 | - | - | NM/RA |
| W-834-D10 | 03/12/03 | - | - | NM |
| W-834-D10 | 04/01/03 | 34.57 | 983.61 | |
| W-834-D10 | 06/11/03 | 34.24 | 983.94 | |
| W-834-D10 | 07/01/03 | - | - | NM |
| W-834-D10 | 10/10/03 | 34.31 | 983.87 | |
| W-834-D11 | 01/02/03 | - | - | NM |
| W-834-D11 | 02/02/03 | - | - | NM/RA |
| W-834-D11 | 03/12/03 | - | - | NM |
| W-834-D11 | 04/01/03 | 22.97 | 994.57 | |
| W-834-D11 | 06/11/03 | 23.62 | 993.92 | |
| W-834-D11 | 07/01/03 | - | - | NM |
| W-834-D11 | 10/10/03 | 24.12 | 993.42 | |
| W-834-D12 | 01/02/03 | - | - | NM |
| W-834-D12 | 02/02/03 | - | - | NM/RA |
| W-834-D12 | 03/12/03 | - | - | NM |
| W-834-D12 | 04/01/03 | 26.59 | 989.7 | |
| W-834-D12 | 06/11/03 | 26.87 | 989.42 | |
| W-834-D12 | 07/01/03 | - | - | NM |
| W-834-D12 | 10/10/03 | 28.07 | 988.22 | |
| W-834-D13 | 01/02/03 | - | - | NM |
| W-834-D13 | 01/15/03 | 27.78 | 990.21 | |

**Table 2.2-9. Building 834 OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-834-D13 | 02/02/03 | - | - | NM/RA |
| W-834-D13 | 02/15/03 | 26.75 | 991.24 | |
| W-834-D13 | 03/04/03 | - | - | NM |
| W-834-D13 | 03/15/03 | 26.57 | 991.42 | |
| W-834-D13 | 04/01/03 | 26.4 | 991.59 | |
| W-834-D13 | 04/15/03 | 26.4 | 991.59 | |
| W-834-D13 | 05/15/03 | 26.4 | 991.59 | |
| W-834-D13 | 06/09/03 | 26.48 | 991.51 | |
| W-834-D13 | 06/11/03 | 26.51 | 991.48 | |
| W-834-D13 | 07/01/03 | - | - | NM |
| W-834-D13 | 10/10/03 | 27.88 | 990.11 | |
| W-834-D14 | 01/02/03 | - | - | NM |
| W-834-D14 | 02/02/03 | - | - | NM/RA |
| W-834-D14 | 03/04/03 | - | - | NM |
| W-834-D14 | 04/01/03 | 26.61 | 991.76 | |
| W-834-D14 | 06/11/03 | 26.81 | 991.56 | |
| W-834-D14 | 07/01/03 | - | - | NM |
| W-834-D14 | 10/10/03 | 28.31 | 990.06 | |
| W-834-D15 | 01/02/03 | - | - | NM |
| W-834-D15 | 01/15/03 | 21.63 | 996.53 | |
| W-834-D15 | 02/02/03 | - | - | NM/RA |
| W-834-D15 | 02/15/03 | 21.53 | 996.63 | |
| W-834-D15 | 03/04/03 | - | - | NM |
| W-834-D15 | 03/15/03 | 21.74 | 996.42 | |
| W-834-D15 | 04/01/03 | 21.66 | 996.5 | |
| W-834-D15 | 04/15/03 | 21.68 | 996.48 | |
| W-834-D15 | 05/15/03 | 21.88 | 996.28 | |
| W-834-D15 | 06/09/03 | 22.11 | 996.05 | |
| W-834-D15 | 06/10/03 | 22.26 | 995.9 | |
| W-834-D15 | 07/01/03 | - | - | NM |
| W-834-D15 | 10/10/03 | 24.31 | 993.85 | |
| W-834-D16 | 01/05/03 | - | - | NM |
| W-834-D16 | 02/05/03 | - | - | NM/RA |

**Table 2.2-9. Building 834 OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-834-D16 | 03/12/03 | - | - | NM |
| W-834-D16 | 04/01/03 | - | - | DRY |
| W-834-D16 | 06/10/03 | - | - | DRY |
| W-834-D16 | 07/01/03 | - | - | DRY |
| W-834-D16 | 10/04/03 | - | - | DRY |
| W-834-D17 | 01/02/03 | - | - | NM |
| W-834-D17 | 02/02/03 | - | - | NM/RA |
| W-834-D17 | 03/04/03 | - | - | NM |
| W-834-D17 | 04/01/03 | 33.02 | 984.2 | |
| W-834-D17 | 06/10/03 | 32.98 | 984.24 | |
| W-834-D17 | 07/01/03 | - | - | NM |
| W-834-D17 | 10/04/03 | - | - | DRY |
| W-834-D18 | 01/02/03 | - | - | NM |
| W-834-D18 | 02/02/03 | - | - | NM/RA |
| W-834-D18 | 03/09/03 | - | - | NM |
| W-834-D18 | 04/01/03 | 26.34 | 992.12 | |
| W-834-D18 | 06/10/03 | 25.09 | 993.37 | |
| W-834-D18 | 07/01/03 | - | - | NM |
| W-834-D18 | 10/04/03 | 26.15 | 992.31 | |
| W-834-D2 | 01/02/03 | - | - | NM |
| W-834-D2 | 04/01/03 | - | - | NM |
| W-834-D2 | 06/10/03 | - | - | DRY |
| W-834-D2 | 07/01/03 | - | - | NM |
| W-834-D2 | 10/04/03 | - | - | DRY |
| W-834-D3 | 01/02/03 | - | - | NM |
| W-834-D3 | 02/02/03 | - | - | NM/RA |
| W-834-D3 | 03/04/03 | - | - | NM |
| W-834-D3 | 04/01/03 | 24.24 | 994.31 | |
| W-834-D3 | 06/11/03 | 24.42 | 994.13 | |
| W-834-D3 | 07/01/03 | - | - | NM |
| W-834-D3 | 10/10/03 | 26.09 | 992.46 | |
| W-834-D4 | 01/02/03 | - | - | NM |
| W-834-D4 | 02/02/03 | - | - | NM/RA |

**Table 2.2-9. Building 834 OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-834-D4 | 03/04/03 | - | - | NM |
| W-834-D4 | 04/01/03 | 24.82 | 993.54 | |
| W-834-D4 | 06/11/03 | 25.02 | 993.34 | |
| W-834-D4 | 07/01/03 | - | - | NM |
| W-834-D4 | 10/10/03 | 26.57 | 991.79 | |
| W-834-D5 | 01/02/03 | - | - | NM |
| W-834-D5 | 02/02/03 | - | - | NM/RA |
| W-834-D5 | 03/04/03 | - | - | NM |
| W-834-D5 | 04/01/03 | 26.21 | 992.26 | |
| W-834-D5 | 06/11/03 | 26.39 | 992.08 | |
| W-834-D5 | 07/01/03 | - | - | NM |
| W-834-D5 | 10/10/03 | 28.97 | 989.5 | |
| W-834-D6 | 01/02/03 | - | - | NM |
| W-834-D6 | 02/02/03 | - | - | NM/RA |
| W-834-D6 | 03/04/03 | - | - | NM |
| W-834-D6 | 04/01/03 | 27.11 | 991.17 | |
| W-834-D6 | 06/11/03 | 27.21 | 991.07 | |
| W-834-D6 | 07/01/03 | - | - | NM |
| W-834-D6 | 10/10/03 | 27.42 | 990.86 | |
| W-834-D7 | 01/02/03 | - | - | NM |
| W-834-D7 | 01/15/03 | 26.6 | 987.32 | |
| W-834-D7 | 02/02/03 | - | - | NM/RA |
| W-834-D7 | 02/15/03 | 25.95 | 987.97 | |
| W-834-D7 | 03/04/03 | - | - | NM |
| W-834-D7 | 03/15/03 | 25.72 | 988.2 | |
| W-834-D7 | 04/01/03 | 25.53 | 988.39 | |
| W-834-D7 | 04/15/03 | 25.53 | 988.39 | |
| W-834-D7 | 05/15/03 | 25.54 | 988.38 | |
| W-834-D7 | 06/09/03 | 25.71 | 988.21 | |
| W-834-D7 | 06/11/03 | 25.8 | 988.12 | |
| W-834-D7 | 07/01/03 | - | - | NM |
| W-834-D7 | 10/10/03 | 26.95 | 986.97 | |
| W-834-D9A | 01/02/03 | - | - | NM |

**Table 2.2-9. Building 834 OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-834-D9A | 04/01/03 | - | - | NM |
| W-834-D9A | 07/01/03 | - | - | NM |
| W-834-D9A | 10/10/03 | - | - | DRY |
| W-834-G3 | 01/02/03 | - | - | NM |
| W-834-G3 | 04/01/03 | - | - | NM |
| W-834-G3 | 06/10/03 | - | - | DRY |
| W-834-G3 | 07/01/03 | - | - | NM |
| W-834-G3 | 10/10/03 | - | - | DRY |
| W-834-H2 | 01/02/03 | - | - | NM |
| W-834-H2 | 02/02/03 | - | - | NM/RA |
| W-834-H2 | 03/09/03 | - | - | NM |
| W-834-H2 | 04/01/03 | 31.07 | 995.7 | |
| W-834-H2 | 06/10/03 | 30.76 | 996.01 | NEEDS CAP |
| W-834-H2 | 07/01/03 | - | - | NM |
| W-834-H2 | 10/10/03 | 31 | 995.77 | |
| W-834-J1 | 01/02/03 | - | - | NM |
| W-834-J1 | 02/02/03 | - | - | NM/RA |
| W-834-J1 | 03/12/03 | - | - | NM |
| W-834-J1 | 04/01/03 | 29.37 | 993.08 | |
| W-834-J1 | 06/10/03 | 29.05 | 993.4 | |
| W-834-J1 | 07/01/03 | - | - | NM |
| W-834-J1 | 10/04/03 | 29.6 | 992.85 | |
| W-834-J2 | 01/02/03 | - | - | NM |
| W-834-J2 | 02/02/03 | - | - | NM/RA |
| W-834-J2 | 03/04/03 | - | - | NM |
| W-834-J2 | 04/01/03 | 30.15 | 992.7 | |
| W-834-J2 | 06/10/03 | 29.86 | 992.99 | |
| W-834-J2 | 07/01/03 | - | - | NM |
| W-834-J2 | 10/04/03 | 30.55 | 992.3 | |
| W-834-J3 | 01/02/03 | - | - | NM |
| W-834-J3 | 02/02/03 | - | - | NM/RA |
| W-834-J3 | 03/12/03 | - | - | NM |
| W-834-J3 | 04/01/03 | 75.23 | 963.2 | |

**Table 2.2-9. Building 834 OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-834-J3 | 06/10/03 | 75.25 | 963.18 | MUD |
| W-834-J3 | 07/01/03 | - | - | NM |
| W-834-J3 | 10/04/03 | 74.4 | 964.03 | |
| W-834-K1A | 01/02/03 | - | - | NM |
| W-834-K1A | 02/02/03 | - | - | NM/RA |
| W-834-K1A | 03/12/03 | - | - | NM |
| W-834-K1A | 04/01/03 | 30.64 | 967.4 | |
| W-834-K1A | 06/13/03 | 30.66 | 967.38 | |
| W-834-K1A | 07/01/03 | - | - | NM |
| W-834-K1A | 10/01/03 | - | - | DRY |
| W-834-M1 | 01/02/03 | - | - | NM |
| W-834-M1 | 04/01/03 | 61.3 | 963.21 | |
| W-834-M1 | 06/10/03 | 61.38 | 963.13 | |
| W-834-M1 | 07/01/03 | - | - | NM |
| W-834-M1 | 10/04/03 | 61.5 | 963.01 | |
| W-834-M2 | 01/02/03 | - | - | NM |
| W-834-M2 | 04/01/03 | - | - | DRY |
| W-834-M2 | 06/18/03 | - | - | DRY |
| W-834-M2 | 07/01/03 | - | - | DRY |
| W-834-M2 | 10/04/03 | - | - | DRY |
| W-834-S1 | 01/05/03 | - | - | NM |
| W-834-S1 | 02/05/03 | - | - | NM/RA |
| W-834-S1 | 03/04/03 | - | - | NM |
| W-834-S1 | 04/01/03 | 32.19 | 970.19 | |
| W-834-S1 | 06/13/03 | 31.54 | 970.14 | |
| W-834-S1 | 07/01/03 | - | - | NM |
| W-834-S1 | 10/04/03 | 31.23 | 970.45 | |
| W-834-S10 | 01/05/03 | - | - | NM |
| W-834-S10 | 02/05/03 | - | - | NM/RA |
| W-834-S10 | 04/01/03 | - | - | DRY |
| W-834-S10 | 06/13/03 | - | - | DRY |
| W-834-S10 | 07/01/03 | - | - | DRY |
| W-834-S10 | 10/04/03 | - | - | DRY |

**Table 2.2-9. Building 834 OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-834-S12A | 01/05/03 | - | - | NM |
| W-834-S12A | 02/05/03 | - | - | NM/RA |
| W-834-S12A | 04/01/03 | - | - | DRY |
| W-834-S12A | 06/13/03 | - | - | DRY |
| W-834-S12A | 07/01/03 | - | - | DRY |
| W-834-S12A | 10/04/03 | - | - | DRY |
| W-834-S13 | 01/05/03 | - | - | NM |
| W-834-S13 | 02/05/03 | - | - | NM/RA |
| W-834-S13 | 04/01/03 | 46.44 | 956.29 | |
| W-834-S13 | 06/13/03 | 45.55 | 957.18 | |
| W-834-S13 | 07/01/03 | - | - | NM |
| W-834-S13 | 10/04/03 | 46.5 | 956.23 | |
| W-834-S4 | 01/02/03 | - | - | NM |
| W-834-S4 | 04/01/03 | 78.16 | 947.79 | |
| W-834-S4 | 06/10/03 | 78.28 | 947.67 | |
| W-834-S4 | 07/01/03 | - | - | NM |
| W-834-S4 | 10/04/03 | 78.3 | 947.65 | |
| W-834-S5 | 01/02/03 | - | - | NM |
| W-834-S5 | 04/01/03 | 61.02 | 935.62 | |
| W-834-S5 | 06/18/03 | 61.12 | 935.52 | |
| W-834-S5 | 07/01/03 | - | - | NM |
| W-834-S5 | 10/04/03 | - | - | DRY |
| W-834-S6 | 01/02/03 | - | - | NM |
| W-834-S6 | 02/02/03 | - | - | NM/RA |
| W-834-S6 | 03/12/03 | - | - | NM |
| W-834-S6 | 04/01/03 | 31.87 | 897.55 | |
| W-834-S6 | 06/18/03 | 32.07 | 897.35 | |
| W-834-S6 | 07/01/03 | - | - | NM |
| W-834-S6 | 10/04/03 | 32.3 | 897.12 | |
| W-834-S7 | 01/02/03 | - | - | NM |
| W-834-S7 | 04/01/03 | 47.72 | 890.85 | |
| W-834-S7 | 06/18/03 | 47.75 | 890.82 | |
| W-834-S7 | 07/01/03 | - | - | NM |

**Table 2.2-9. Building 834 OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-834-S7 | 10/04/03 | 47.95 | 890.62 | |
| W-834-S8 | 01/05/03 | - | - | NM |
| W-834-S8 | 02/05/03 | - | - | NM/RA |
| W-834-S8 | 03/12/03 | - | - | NM |
| W-834-S8 | 04/01/03 | 56.7 | 946.02 | |
| W-834-S8 | 06/13/03 | 56.14 | 946.58 | |
| W-834-S8 | 07/01/03 | - | - | NM |
| W-834-S8 | 10/04/03 | 55.8 | 946.92 | |
| W-834-S9 | 01/05/03 | - | - | NM |
| W-834-S9 | 02/05/03 | - | - | NM/RA |
| W-834-S9 | 03/09/03 | - | - | NM |
| W-834-S9 | 04/01/03 | 54.83 | 945.67 | |
| W-834-S9 | 06/13/03 | 54.09 | 946.41 | |
| W-834-S9 | 07/01/03 | - | - | NM |
| W-834-S9 | 10/04/03 | 54.15 | 946.35 | |
| W-834-T1 | 01/14/03 | 314.11 | 644.81 | |
| W-834-T1 | 02/06/03 | 314.05 | 644.87 | |
| W-834-T1 | 03/10/03 | 313.94 | 644.98 | |
| W-834-T1 | 04/01/03 | 313.61 | 645.31 | |
| W-834-T1 | 07/01/03 | - | - | NM |
| W-834-T1 | 10/04/03 | 313.6 | 645.32 | |
| W-834-T11 | 01/14/03 | - | - | DRY |
| W-834-T11 | 02/06/03 | - | - | DRY |
| W-834-T11 | 03/10/03 | - | - | DRY |
| W-834-T11 | 04/01/03 | - | - | DRY |
| W-834-T11 | 07/01/03 | - | - | DRY |
| W-834-T11 | 10/04/03 | - | - | DRY |
| W-834-T2 | 01/14/03 | 38.54 | 921.07 | |
| W-834-T2 | 04/01/03 | 37.94 | 921.67 | |
| W-834-T2 | 06/19/03 | 38.79 | 918.72 | |
| W-834-T2 | 07/01/03 | - | - | NM |
| W-834-T2 | 10/04/03 | 39 | 918.96 | |
| W-834-T2A | 01/14/03 | 38.91 | 919.85 | |

**Table 2.2-9. Building 834 OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-834-T2A | 04/01/03 | 37.51 | 921.25 | |
| W-834-T2A | 06/13/03 | 37.73 | 921.03 | |
| W-834-T2A | 07/01/03 | - | - | NM |
| W-834-T2A | 10/04/03 | 37.95 | 920.83 | |
| W-834-T2B | 01/14/03 | - | - | DRY |
| W-834-T2B | 04/01/03 | - | - | DRY |
| W-834-T2B | 06/13/03 | - | - | DRY |
| W-834-T2B | 07/01/03 | - | - | DRY |
| W-834-T2B | 10/04/03 | - | - | DRY |
| W-834-T2C | 01/14/03 | - | - | DRY |
| W-834-T2C | 04/01/03 | - | - | DRY |
| W-834-T2C | 06/13/03 | - | - | DRY |
| W-834-T2C | 07/01/03 | - | - | DRY |
| W-834-T2C | 10/04/03 | - | - | DRY |
| W-834-T2D | 01/14/03 | 36.13 | 918.27 | |
| W-834-T2D | 04/01/03 | 35.44 | 918.96 | |
| W-834-T2D | 06/18/03 | 35.45 | 918.95 | |
| W-834-T2D | 07/01/03 | - | - | NM |
| W-834-T2D | 10/04/03 | 36 | 918.39 | |
| W-834-T3 | 01/14/03 | 326.54 | 606 | |
| W-834-T3 | 02/06/03 | 326.35 | 606.19 | |
| W-834-T3 | 03/10/03 | 326.26 | 606.28 | |
| W-834-T3 | 04/01/03 | 325.83 | 606.71 | |
| W-834-T3 | 07/01/03 | - | - | NM |
| W-834-T3 | 10/04/03 | 326.3 | 606.24 | |
| W-834-T5 | 01/14/03 | 76.4 | 854.57 | |
| W-834-T5 | 02/06/03 | 76.43 | 854.54 | |
| W-834-T5 | 03/04/03 | 76.47 | 854.5 | |
| W-834-T5 | 04/01/03 | - | - | NM |
| W-834-T5 | 07/10/03 | 76.6 | 854.37 | |
| W-834-T5 | 10/03/03 | 76.58 | 854.39 | |
| W-834-T7A | 01/14/03 | 76.04 | 843.84 | |
| W-834-T7A | 02/06/03 | 75.86 | 844.02 | |

**Table 2.2-9. Building 834 OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-834-T7A | 03/10/03 | 76.13 | 843.75 | |
| W-834-T7A | 04/01/03 | - | - | NM |
| W-834-T7A | 07/01/03 | - | - | NM |
| W-834-T7A | 10/10/03 | 76.12 | 843.76 | |
| W-834-T8A | 01/14/03 | - | - | DRY |
| W-834-T8A | 02/14/03 | - | - | NM/RA |
| W-834-T8A | 03/12/03 | - | - | NM |
| W-834-T8A | 04/01/03 | - | - | DRY |
| W-834-T8A | 06/18/03 | - | - | DRY |
| W-834-T8A | 07/01/03 | - | - | DRY |
| W-834-T8A | 10/04/03 | - | - | DRY |
| W-834-T9 | 01/14/03 | - | - | DRY |
| W-834-T9 | 04/01/03 | - | - | DRY |
| W-834-T9 | 06/13/03 | - | - | DRY |
| W-834-T9 | 07/01/03 | - | - | DRY |
| W-834-T9 | 10/04/03 | - | - | DRY |
| W-834-U1 | 01/05/03 | - | - | NM/CB |
| W-834-U1 | 02/05/03 | - | - | NM/RA/CB |
| W-834-U1 | 03/12/03 | - | - | CB/NM |
| W-834-U1 | 04/05/03 | - | - | NM/CB |
| W-834-U1 | 06/11/03 | 22.81 | 989.45 | CB |
| W-834-U1 | 07/01/03 | - | - | NM/CB |
| W-834-U1 | 10/10/03 | 24.35 | 987.91 | CB |

**Table 2.3-1. Pit 6 Landfill OU 2003 ground water sampling and analysis plan.**

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

**Table 2.3-1. Pit 6 Landfill OU 2003 ground water sampling and analysis plan. (Cont. Page 2 of 21)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| CARNRW1 | WS | $Tnbs_1$/Tmss | M | M | CMP | E300.0:PERC | 1 | Y | |
| CARNRW1 | WS | $Tnbs_1$/Tmss | M | M | CMP | E300.0:PERC | 2 | Y | |
| CARNRW1 | WS | $Tnbs_1$/Tmss | M | M | CMP | E300.0:PERC | 2 | Y | |
| CARNRW1 | WS | $Tnbs_1$/Tmss | M | M | CMP | E300.0:PERC | 2 | Y | |
| CARNRW1 | WS | $Tnbs_1$/Tmss | M | M | CMP | E300.0:PERC | 3 | Y | |
| CARNRW1 | WS | $Tnbs_1$/Tmss | M | M | CMP | E300.0:PERC | 3 | Y | |
| CARNRW1 | WS | $Tnbs_1$/Tmss | M | M | CMP | E300.0:PERC | 3 | Y | |
| CARNRW1 | WS | $Tnbs_1$/Tmss | M | M | CMP | E300.0:PERC | 4 | Y | |
| CARNRW1 | WS | $Tnbs_1$/Tmss | M | M | CMP | E300.0:PERC | 4 | Y | |
| CARNRW1 | WS | $Tnbs_1$/Tmss | M | M | CMP | E300.0:PERC | 4 | Y | |
| CARNRW1 | WS | $Tnbs_1$/Tmss | M | M | CMP | E601 | 1 | Y | |
| CARNRW1 | WS | $Tnbs_1$/Tmss | M | M | CMP | E601 | 1 | Y | |
| CARNRW1 | WS | $Tnbs_1$/Tmss | M | M | CMP | E601 | 1 | Y | |
| CARNRW1 | WS | $Tnbs_1$/Tmss | M | M | CMP | E601 | 2 | Y | |
| CARNRW1 | WS | $Tnbs_1$/Tmss | M | M | CMP | E601 | 2 | Y | |
| CARNRW1 | WS | $Tnbs_1$/Tmss | M | M | CMP | E601 | 2 | Y | |
| CARNRW1 | WS | $Tnbs_1$/Tmss | M | M | CMP | E601 | 3 | Y | |
| CARNRW1 | WS | $Tnbs_1$/Tmss | M | M | CMP | E601 | 3 | Y | |
| CARNRW1 | WS | $Tnbs_1$/Tmss | M | M | CMP | E601 | 3 | Y | |
| CARNRW1 | WS | $Tnbs_1$/Tmss | M | M | CMP | E601 | 4 | Y | |
| CARNRW1 | WS | $Tnbs_1$/Tmss | M | M | CMP | E601 | 4 | Y | |
| CARNRW1 | WS | $Tnbs_1$/Tmss | M | M | CMP | E601 | 4 | Y | |
| CARNRW1 | WS | $Tnbs_1$/Tmss | M | M | CMP | E906 | 1 | Y | |
| CARNRW1 | WS | $Tnbs_1$/Tmss | M | M | CMP | E906 | 1 | Y | |
| CARNRW1 | WS | $Tnbs_1$/Tmss | M | M | CMP | E906 | 1 | Y | |
| CARNRW1 | WS | $Tnbs_1$/Tmss | M | M | CMP | E906 | 2 | Y | |
| CARNRW1 | WS | $Tnbs_1$/Tmss | M | M | CMP | E906 | 2 | Y | |

Table 2.3-1. Pit 6 Landfill OU 2003 ground water sampling and analysis plan. (Cont. Page 3 of 21)

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| CARNRW1 | WS | $Tnbs_1$/Tmss | M | M | CMP | E906 | 2 | Y | |
| CARNRW1 | WS | $Tnbs_1$/Tmss | M | M | CMP | E906 | 3 | Y | |
| CARNRW1 | WS | $Tnbs_1$/Tmss | M | M | CMP | E906 | 3 | Y | |
| CARNRW1 | WS | $Tnbs_1$/Tmss | M | M | CMP | E906 | 3 | Y | |
| CARNRW1 | WS | $Tnbs_1$/Tmss | M | M | CMP | E906 | 4 | Y | |
| CARNRW1 | WS | $Tnbs_1$/Tmss | M | M | CMP | E906 | 4 | Y | |
| CARNRW1 | WS | $Tnbs_1$/Tmss | M | M | CMP | E906 | 4 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E300.0:NO3 | 1 | N | Sampling personnel shortage. |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E300.0:NO3 | 1 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E300.0:NO3 | 1 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E300.0:NO3 | 2 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E300.0:NO3 | 2 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E300.0:NO3 | 2 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E300.0:NO3 | 3 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E300.0:NO3 | 3 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E300.0:NO3 | 3 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E300.0:NO3 | 4 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E300.0:NO3 | 4 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E300.0:NO3 | 4 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E300.0:PERC | 1 | N | Sampling personnel shortage. |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E300.0:PERC | 1 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E300.0:PERC | 1 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E300.0:PERC | 2 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E300.0:PERC | 2 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E300.0:PERC | 2 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E300.0:PERC | 3 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E300.0:PERC | 3 | Y | |

**Table 2.3-1. Pit 6 Landfill OU 2003 ground water sampling and analysis plan. (Cont. Page 4 of 21)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E300.0:PERC | 3 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E300.0:PERC | 4 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E300.0:PERC | 4 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E300.0:PERC | 4 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | | Q | ERD/WGMG | E502.2 | 1 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | | Q | ERD/WGMG | E502.2 | 2 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | | Q | ERD/WGMG | E502.2 | 3 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | | Q | ERD/WGMG | E502.2 | 4 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E601 | 1 | N | E502.2 analyzed. |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E601 | 1 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E601 | 1 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E601 | 2 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E601 | 2 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E601 | 2 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E601 | 3 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E601 | 3 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E601 | 3 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E601 | 4 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E601 | 4 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E601 | 4 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E906 | 1 | N | Sampling personnel shortage. |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E906 | 1 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E906 | 1 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E906 | 2 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E906 | 2 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E906 | 2 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E906 | 3 | Y | |

Table 2.3-1. Pit 6 Landfill OU 2003 ground water sampling and analysis plan. (Cont. Page 5 of 21)

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E906 | 3 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E906 | 3 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E906 | 4 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E906 | 4 | Y | |
| CARNRW2 | WS | $Tnbs_1$/Tmss | M | M | CMP/WGMG | E906 | 4 | Y | |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E300.0:NO3 | 1 | N | Pump down. |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E300.0:NO3 | 1 | N | Pump down. |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E300.0:NO3 | 1 | N | Pump down. |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E300.0:NO3 | 2 | N | Sampling personnel shortage. |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E300.0:NO3 | 2 | Y | |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E300.0:NO3 | 2 | Y | |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E300.0:NO3 | 3 | Y | |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E300.0:NO3 | 3 | Y | |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E300.0:NO3 | 3 | Y | |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E300.0:NO3 | 4 | Y | |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E300.0:NO3 | 4 | Y | |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E300.0:NO3 | 4 | Y | |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E300.0:PERC | 1 | N | Pump down. |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E300.0:PERC | 1 | N | Pump down. |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E300.0:PERC | 1 | N | Pump down. |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E300.0:PERC | 2 | N | Sampling personnel shortage. |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E300.0:PERC | 2 | Y | |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E300.0:PERC | 2 | Y | |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E300.0:PERC | 3 | Y | |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E300.0:PERC | 3 | Y | |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E300.0:PERC | 3 | Y | |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E300.0:PERC | 4 | Y | |

Table 2.3-1. Pit 6 Landfill OU 2003 ground water sampling and analysis plan. (Cont. Page 6 of 21)

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E300.0:PERC | 4 | Y | |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E300.0:PERC | 4 | Y | |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E601 | 1 | N | Pump down. |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E601 | 1 | N | Pump down. |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E601 | 1 | N | Pump down. |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E601 | 2 | N | Sampling personnel shortage. |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E601 | 2 | Y | |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E601 | 2 | Y | |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E601 | 3 | Y | |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E601 | 3 | Y | |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E601 | 3 | Y | |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E601 | 4 | Y | |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E601 | 4 | Y | |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E601 | 4 | Y | |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E906 | 1 | N | Pump down. |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E906 | 1 | N | Pump down. |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E906 | 1 | N | Pump down. |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E906 | 2 | N | Sampling personnel shortage. |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E906 | 2 | Y | |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E906 | 2 | Y | |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E906 | 3 | Y | |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E906 | 3 | Y | |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E906 | 3 | Y | |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E906 | 4 | Y | |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E906 | 4 | Y | |
| CARNRW3 | WS | $Tnbs_1$/Tmss | M | M | CMP | E906 | 4 | Y | |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E300.0:NO3 | 1 | N | Sampling personnel shortage. |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E300.0:NO3 | 1 | N | Sampling personnel shortage. |

Table 2.3-1. Pit 6 Landfill OU 2003 ground water sampling and analysis plan. (Cont. Page 7 of 21)

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E300.0:NO3 | 1 | Y | |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E300.0:NO3 | 2 | N | Sampling personnel shortage. |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E300.0:NO3 | 2 | Y | |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E300.0:NO3 | 2 | Y | |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E300.0:NO3 | 3 | Y | |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E300.0:NO3 | 3 | Y | |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E300.0:NO3 | 3 | Y | |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E300.0:NO3 | 4 | Y | |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E300.0:NO3 | 4 | Y | |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E300.0:NO3 | 4 | Y | |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E300.0:PERC | 1 | N | Sampling personnel shortage. |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E300.0:PERC | 1 | N | Sampling personnel shortage. |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E300.0:PERC | 1 | Y | |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E300.0:PERC | 2 | N | Sampling personnel shortage. |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E300.0:PERC | 2 | Y | |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E300.0:PERC | 2 | Y | |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E300.0:PERC | 3 | Y | |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E300.0:PERC | 3 | Y | |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E300.0:PERC | 3 | Y | |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E300.0:PERC | 4 | Y | |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E300.0:PERC | 4 | Y | |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E300.0:PERC | 4 | Y | |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E601 | 1 | N | Sampling personnel shortage. |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E601 | 1 | N | Sampling personnel shortage. |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E601 | 1 | Y | |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E601 | 2 | N | Sampling personnel shortage. |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E601 | 2 | Y | |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E601 | 2 | Y | |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E601 | 3 | Y | |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E601 | 3 | Y | |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E601 | 3 | Y | |

Table 2.3-1. Pit 6 Landfill OU 2003 ground water sampling and analysis plan. (Cont. Page 8 of 21)

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E601 | 4 | Y | |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E601 | 4 | Y | |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E601 | 4 | Y | |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E906 | 1 | N | Sampling personnel shortage. |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E906 | 1 | N | Sampling personnel shortage. |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E906 | 1 | Y | |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E906 | 2 | N | Sampling personnel shortage. |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E906 | 2 | Y | |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E906 | 2 | Y | |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E906 | 3 | Y | |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E906 | 3 | Y | |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E906 | 3 | Y | |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E906 | 4 | Y | |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E906 | 4 | Y | |
| CARNRW4 | WS | Qal/Tts | M | M | CMP | E906 | 4 | Y | |
| EP6-06 | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 1 | Y | |
| EP6-06 | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 2 | Y | |
| EP6-06 | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 3 | Y | |
| EP6-06 | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 4 | Y | |
| EP6-06 | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 1 | Y | |
| EP6-06 | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 2 | Y | |
| EP6-06 | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 3 | Y | |
| EP6-06 | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 4 | Y | |
| EP6-06 | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E624 | 1 | Y | |
| EP6-06 | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E624 | 2 | Y | |
| EP6-06 | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E624 | 3 | Y | |
| EP6-06 | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E624 | 4 | Y | |
| EP6-06 | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 1 | Y | |
| EP6-06 | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 2 | Y | |

**Table 2.3-1. Pit 6 Landfill OU 2003 ground water sampling and analysis plan. (Cont. Page 9 of 21)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| EP6-06 | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 3 | Y | |
| EP6-06 | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 4 | Y | |
| EP6-07 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| EP6-07 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| EP6-07 | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 1 | Y | |
| EP6-07 | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 3 | Y | |
| EP6-07 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 1 | Y | |
| EP6-07 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 3 | Y | |
| EP6-08 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 1 | Y | |
| EP6-08 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 2 | Y | |
| EP6-08 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 3 | Y | |
| EP6-08 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 4 | Y | |
| EP6-08 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 1 | Y | |
| EP6-08 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 2 | Y | |
| EP6-08 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 3 | Y | |
| EP6-08 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 4 | Y | |
| EP6-08 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E624 | 1 | Y | |
| EP6-08 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E624 | 2 | Y | |
| EP6-08 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E624 | 3 | Y | |
| EP6-08 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E624 | 4 | Y | |
| EP6-08 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 1 | Y | |
| EP6-08 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 2 | Y | |
| EP6-08 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 3 | Y | |
| EP6-08 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 4 | Y | |
| EP6-09 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 1 | Y | |
| EP6-09 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 2 | Y | |
| EP6-09 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 3 | Y | |

**Table 2.3-1. Pit 6 Landfill OU 2003 ground water sampling and analysis plan. (Cont. Page 10 of 21)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| EP6-09 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 4 | Y | |
| EP6-09 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 1 | Y | |
| EP6-09 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 2 | Y | |
| EP6-09 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 3 | Y | |
| EP6-09 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 4 | Y | |
| EP6-09 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E624 | 1 | Y | |
| EP6-09 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E624 | 2 | Y | |
| EP6-09 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E624 | 3 | Y | |
| EP6-09 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E624 | 4 | Y | |
| EP6-09 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 1 | Y | |
| EP6-09 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 2 | Y | |
| EP6-09 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 3 | Y | |
| EP6-09 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 4 | Y | |
| K6-01 | DMW | $Tnbs_1$ | Q[a] | A | CMP/WGMG | E300.0:NO3 | 1 | Y | |
| K6-01 | DMW | $Tnbs_1$ | Q[a] | A | CMP/WGMG | E300.0:PERC | 1 | Y | |
| K6-01 | DMW | $Tnbs_1$ | Q[a] | S | CMP/WGMG | E601 | 1 | Y | |
| K6-01 | DMW | $Tnbs_1$ | Q[a] | S | CMP/WGMG | E601 | 3 | N | Not on sampling plan. |
| K6-01 | DMW | $Tnbs_1$ | Q[a] | S | CMP/WGMG | E906 | 1 | Y | |
| K6-01 | DMW | $Tnbs_1$ | Q[a] | S | CMP/WGMG | E906 | 3 | N | Not on sampling plan. |
| K6-01S | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 1 | Y | |
| K6-01S | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 2 | Y | |
| K6-01S | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 3 | Y | |
| K6-01S | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 4 | Y | |
| K6-01S | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 1 | Y | |
| K6-01S | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 2 | Y | |
| K6-01S | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 3 | Y | |
| K6-01S | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 4 | Y | |

**Table 2.3-1. Pit 6 Landfill OU 2003 ground water sampling and analysis plan. (Cont. Page 11 of 21)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| K6-01S | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E624 | 1 | Y | |
| K6-01S | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E624 | 2 | Y | |
| K6-01S | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E624 | 3 | Y | |
| K6-01S | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E624 | 4 | Y | |
| K6-01S | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 1 | Y | |
| K6-01S | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 2 | Y | |
| K6-01S | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 3 | Y | |
| K6-01S | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 4 | Y | |
| K6-03 | MWPT | $Tnbs_1$ | A | Q | CMP/WGMG | E300.0:NO3 | 1 | Y | |
| K6-03 | MWPT | $Tnbs_1$ | | Q | ERD/WGMG | E300.0:NO3 | 2 | Y | |
| K6-03 | MWPT | $Tnbs_1$ | | Q | ERD/WGMG | E300.0:NO3 | 3 | N | No longer on WGMGs quarterly plan. |
| K6-03 | MWPT | $Tnbs_1$ | | Q | ERD/WGMG | E300.0:NO3 | 4 | N | No longer on WGMGs quarterly plan. |
| K6-03 | MWPT | $Tnbs_1$ | A | A | CMP/WGMG | E300.0:PERC | 1 | Y | |
| K6-03 | MWPT | $Tnbs_1$ | S | S | CMP/WGMG | E601 | 1 | Y | |
| K6-03 | MWPT | $Tnbs_1$ | S | S | CMP/WGMG | E601 | 3 | Y | |
| K6-03 | MWPT | $Tnbs_1$ | | A | ERD/WGMG | E624 | 1 | Y | |
| K6-03 | MWPT | $Tnbs_1$ | S | Q | CMP/WGMG | E906 | 1 | Y | |
| K6-03 | MWPT | $Tnbs_1$ | S | Q | CMP/WGMG | E906 | 3 | Y | |
| K6-04 | MWPT | $Tnbs_1$ | | A | DIS | E239.2 | 3 | Y | |
| K6-04 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| K6-04 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| K6-04 | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 1 | Y | |
| K6-04 | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 3 | Y | |
| K6-04 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 1 | Y | |
| K6-04 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 3 | Y | |
| K6-14 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 1 | Y | |

Table 2.3-1. Pit 6 Landfill OU 2003 ground water sampling and analysis plan. (Cont. Page 12 of 21)

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| K6-14 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| K6-14 | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 1 | Y | |
| K6-14 | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 3 | Y | |
| K6-14 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 1 | Y | |
| K6-14 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 3 | Y | |
| K6-15 | MWPT | $Qt/Tnbs_1$ | A | A | CMP/WGMG | E300.0:NO3 | 1 | N | Dry. |
| K6-15 | MWPT | $Qt/Tnbs_1$ | A | A | CMP/WGMG | E300.0:NO3 | 2 | N | Dry. |
| K6-15 | MWPT | $Qt/Tnbs_1$ | A | A | CMP/WGMG | E300.0:NO3 | 3 | N | Dry. |
| K6-15 | MWPT | $Qt/Tnbs_1$ | A | A | CMP/WGMG | E300.0:PERC | 1 | N | Dry. |
| K6-15 | MWPT | $Qt/Tnbs_1$ | A | A | CMP/WGMG | E300.0:PERC | 2 | N | Dry. |
| K6-15 | MWPT | $Qt/Tnbs_1$ | A | A | CMP/WGMG | E300.0:PERC | 3 | N | Dry. |
| K6-15 | MWPT | $Qt/Tnbs_1$ | S | Q | CMP/WGMG | E624 | 1 | N | Dry. |
| K6-15 | MWPT | $Qt/Tnbs_1$ | S | Q | CMP/WGMG | E624 | 2 | N | Dry. |
| K6-15 | MWPT | $Qt/Tnbs_1$ | S | Q | CMP/WGMG | E624 | 3 | N | Dry. |
| K6-15 | MWPT | $Qt/Tnbs_1$ | S | Q | CMP/WGMG | E906 | 1 | N | Dry. |
| K6-15 | MWPT | $Qt/Tnbs_1$ | S | Q | CMP/WGMG | E906 | 2 | N | Dry. |
| K6-15 | MWPT | $Qt/Tnbs_1$ | S | Q | CMP/WGMG | E906 | 3 | N | Dry. |
| K6-16 | MWPT | $Qt/Tnbs_1$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| K6-16 | MWPT | $Qt/Tnbs_1$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| K6-16 | MWPT | $Qt/Tnbs_1$ | S | S | CMP | E601 | 1 | Y | |
| K6-16 | MWPT | $Qt/Tnbs_1$ | S | S | CMP | E601 | 3 | Y | |
| K6-16 | MWPT | $Qt/Tnbs_1$ | S | S | CMP | E906 | 1 | Y | |
| K6-16 | MWPT | $Qt/Tnbs_1$ | S | S | CMP | E906 | 3 | Y | |
| K6-17 | GW | $Qt/Tnbs_1$ | S | S | CMP | E300.0:NO3 | 1 | Y | |
| K6-17 | GW | $Qt/Tnbs_1$ | S | S | CMP | E300.0:NO3 | 3 | Y | |
| K6-17 | GW | $Qt/Tnbs_1$ | S | S | CMP | E300.0:PERC | 1 | Y | |
| K6-17 | GW | $Qt/Tnbs_1$ | S | S | CMP | E300.0:PERC | 3 | Y | |

**Table 2.3-1. Pit 6 Landfill OU 2003 ground water sampling and analysis plan. (Cont. Page 13 of 21)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| K6-17 | GW | $Qt/Tnbs_1$ | Q | Q | CMP | E601 | 1 | Y | |
| K6-17 | GW | $Qt/Tnbs_1$ | Q | Q | CMP | E601 | 2 | Y | |
| K6-17 | GW | $Qt/Tnbs_1$ | Q | Q | CMP | E601 | 3 | Y | |
| K6-17 | GW | $Qt/Tnbs_1$ | Q | Q | CMP | E601 | 4 | Y | |
| K6-17 | GW | $Qt/Tnbs_1$ | Q | Q | CMP | E906 | 1 | Y | |
| K6-17 | GW | $Qt/Tnbs_1$ | Q | Q | CMP | E906 | 2 | Y | |
| K6-17 | GW | $Qt/Tnbs_1$ | Q | Q | CMP | E906 | 3 | Y | |
| K6-17 | GW | $Qt/Tnbs_1$ | Q | Q | CMP | E906 | 4 | Y | |
| K6-18 | MWPT | $Qt/Tnbs_1$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| K6-18 | MWPT | $Qt/Tnbs_1$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| K6-18 | MWPT | $Qt/Tnbs_1$ | | A | DIS | E300.0:PERC | 4 | Y | |
| K6-18 | MWPT | $Qt/Tnbs_1$ | S | S | CMP | E601 | 1 | Y | |
| K6-18 | MWPT | $Qt/Tnbs_1$ | S | S | CMP | E601 | 3 | Y | |
| K6-18 | MWPT | $Qt/Tnbs_1$ | S | S | CMP | E906 | 1 | Y | |
| K6-18 | MWPT | $Qt/Tnbs_1$ | S | S | CMP | E906 | 3 | Y | |
| K6-19 | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 1 | Y | |
| K6-19 | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 2 | Y | |
| K6-19 | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 3 | Y | |
| K6-19 | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 4 | Y | |
| K6-19 | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 1 | Y | |
| K6-19 | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 2 | Y | |
| K6-19 | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 3 | Y | |
| K6-19 | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 4 | Y | |
| K6-19 | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E624 | 1 | Y | |
| K6-19 | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E624 | 2 | Y | |
| K6-19 | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E624 | 3 | Y | |
| K6-19 | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E624 | 4 | Y | |

**Table 2.3-1. Pit 6 Landfill OU 2003 ground water sampling and analysis plan. (Cont. Page 14 of 21)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| K6-19 | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 1 | Y | |
| K6-19 | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 2 | Y | |
| K6-19 | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 3 | Y | |
| K6-19 | DMW | $Qt/Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 4 | Y | |
| K6-21 | MWPT | Qt | A | A | CMP | E300.0:NO3 | 1 | N | Dry. |
| K6-21 | MWPT | Qt | A | A | CMP | E300.0:PERC | 1 | N | Dry. |
| K6-21 | MWPT | Qt | S | S | CMP | E601 | 1 | N | Dry. |
| K6-21 | MWPT | Qt | S | S | CMP | E601 | 3 | N | Dry. |
| K6-21 | MWPT | Qt | S | S | CMP | E906 | 1 | N | Dry. |
| K6-21 | MWPT | Qt | S | S | CMP | E906 | 3 | N | Dry. |
| K6-22 | GW | $Tnbs_1$ | S | S | CMP | E300.0:NO3 | 1 | Y | |
| K6-22 | GW | $Tnbs_1$ | S | S | CMP | E300.0:NO3 | 3 | Y | |
| K6-22 | GW | $Tnbs_1$ | S | S | CMP | E300.0:PERC | 1 | Y | |
| K6-22 | GW | $Tnbs_1$ | S | S | CMP | E300.0:PERC | 3 | Y | |
| K6-22 | GW | $Tnbs_1$ | Q | Q | CMP | E601 | 1 | Y | |
| K6-22 | GW | $Tnbs_1$ | Q | Q | CMP | E601 | 2 | Y | |
| K6-22 | GW | $Tnbs_1$ | Q | Q | CMP | E601 | 3 | Y | |
| K6-22 | GW | $Tnbs_1$ | Q | Q | CMP | E601 | 4 | Y | |
| K6-22 | GW | $Tnbs_1$ | Q | Q | CMP | E906 | 1 | Y | |
| K6-22 | GW | $Tnbs_1$ | Q | Q | CMP | E906 | 2 | Y | |
| K6-22 | GW | $Tnbs_1$ | Q | Q | CMP | E906 | 3 | Y | |
| K6-22 | GW | $Tnbs_1$ | Q | Q | CMP | E906 | 4 | Y | |
| K6-23 | MWPT | Tmss | | Q | DIS | E239.2 | 3 | Y | |
| K6-23 | MWPT | Tmss | | Q | DIS | E239.2 | 4 | Y | |
| K6-23 | MWPT | Tmss | A | Q | CMP | E300.0:NO3 | 1 | Y | |
| K6-23 | MWPT | Tmss | | Q | DIS | E300.0:NO3 | 3 | Y | |
| K6-23 | MWPT | Tmss | | Q | DIS | E300.0:NO3 | 4 | Y | |
| K6-23 | MWPT | Tmss | A | A | CMP | E300.0:PERC | 1 | Y | |
| K6-23 | MWPT | Tmss | S | S | CMP | E601 | 1 | Y | |

**Table 2.3-1. Pit 6 Landfill OU 2003 ground water sampling and analysis plan. (Cont. Page 15 of 21)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| K6-23 | MWPT | Tmss | S | S | CMP | E601 | 3 | Y | |
| K6-23 | MWPT | Tmss | S | S | CMP | E906 | 1 | Y | |
| K6-23 | MWPT | Tmss | S | S | CMP | E906 | 3 | Y | |
| K6-24 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| K6-24 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| K6-24 | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 1 | Y | |
| K6-24 | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 3 | Y | |
| K6-24 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 1 | Y | |
| K6-24 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 3 | Y | |
| K6-25 | MWPT | Tmss | A | A | CMP | E300.0:NO3 | 1 | Y | |
| K6-25 | MWPT | Tmss | A | A | CMP | E300.0:PERC | 1 | Y | |
| K6-25 | MWPT | Tmss | S | S | CMP | E601 | 1 | Y | |
| K6-25 | MWPT | Tmss | S | S | CMP | E601 | 3 | Y | |
| K6-25 | MWPT | Tmss | S | S | CMP | E906 | 1 | Y | |
| K6-25 | MWPT | Tmss | S | S | CMP | E906 | 3 | Y | |
| K6-26 | MWPT | $Tnbs_1$ | | A | DIS | E239.2 | 3 | Y | |
| K6-26 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| K6-26 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| K6-26 | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 1 | Y | |
| K6-26 | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 3 | Y | |
| K6-26 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 1 | Y | |
| K6-26 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 3 | Y | |
| K6-27 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| K6-27 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| K6-27 | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 1 | Y | |
| K6-27 | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 3 | Y | |
| K6-27 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 1 | Y | |
| K6-27 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 3 | Y | |
| K6-32 | MWPT | $Tnbs_1$ | A | A | CMP/WGMG | E300.0:NO3 | 1 | Y | |

**Table 2.3-1. Pit 6 Landfill OU 2003 ground water sampling and analysis plan. (Cont. Page 16 of 21)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| K6-32 | MWPT | $Tnbs_1$ | A | A | CMP/WGMG | E300.0:PERC | 1 | Y | |
| K6-32 | MWPT | $Tnbs_1$ | S | S | CMP/WGMG | E601 | 1 | Y | |
| K6-32 | MWPT | $Tnbs_1$ | S | S | CMP/WGMG | E601 | 3 | Y | |
| K6-32 | MWPT | $Tnbs_1$ | S | S | CMP/WGMG | E906 | 1 | Y | |
| K6-32 | MWPT | $Tnbs_1$ | S | S | CMP/WGMG | E906 | 3 | Y | |
| K6-33 | MWPT | $Tnbs_1$ | | A | DIS | E239.2 | 3 | Y | |
| K6-33 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| K6-33 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| K6-33 | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 1 | Y | |
| K6-33 | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 3 | Y | |
| K6-33 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 1 | Y | |
| K6-33 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 3 | Y | |
| K6-34 | GW | $Tnbs_1$ | S | S | CMP | E300.0:NO3 | 1 | Y | |
| K6-34 | GW | $Tnbs_1$ | S | S | CMP | E300.0:NO3 | 3 | Y | |
| K6-34 | GW | $Tnbs_1$ | S | S | CMP | E300.0:PERC | 1 | Y | |
| K6-34 | GW | $Tnbs_1$ | S | S | CMP | E300.0:PERC | 3 | Y | |
| K6-34 | GW | $Tnbs_1$ | Q | Q | CMP | E601 | 1 | Y | |
| K6-34 | GW | $Tnbs_1$ | Q | Q | CMP | E601 | 2 | Y | |
| K6-34 | GW | $Tnbs_1$ | Q | Q | CMP | E601 | 3 | Y | |
| K6-34 | GW | $Tnbs_1$ | Q | Q | CMP | E601 | 4 | Y | |
| K6-34 | GW | $Tnbs_1$ | Q | Q | CMP | E906 | 1 | Y | |
| K6-34 | GW | $Tnbs_1$ | Q | Q | CMP | E906 | 2 | Y | |
| K6-34 | GW | $Tnbs_1$ | Q | Q | CMP | E906 | 3 | Y | |
| K6-34 | GW | $Tnbs_1$ | Q | Q | CMP | E906 | 4 | Y | |
| K6-35 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| K6-35 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| K6-35 | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 1 | Y | |

**Table 2.3-1. Pit 6 Landfill OU 2003 ground water sampling and analysis plan. (Cont. Page 17 of 21)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| K6-35 | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 3 | Y | |
| K6-35 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 1 | Y | |
| K6-35 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 3 | Y | |
| K6-36 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 1 | Y | |
| K6-36 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 2 | Y | |
| K6-36 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 3 | N | Dry. |
| K6-36 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 4 | N | Dry. |
| K6-36 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 1 | Y | |
| K6-36 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 2 | Y | |
| K6-36 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 3 | N | Dry. |
| K6-36 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 4 | N | Dry. |
| K6-36 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E624 | 1 | Y | |
| K6-36 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E624 | 2 | Y | |
| K6-36 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E624 | 3 | N | Dry. |
| K6-36 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E624 | 4 | N | Dry. |
| K6-36 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 1 | Y | |
| K6-36 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 2 | Y | |
| K6-36 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 3 | N | Dry. |
| K6-36 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 4 | N | Dry. |
| SPRING15 | SPR | Qt | A | A | CMP | E300.0:NO3 | 1 | N | Dry. |
| SPRING15 | SPR | Qt | A | A | CMP | E300.0:NO3 | 4 | | |
| SPRING15 | SPR | Qt | A | A | CMP | E300.0:PERC | 1 | N | Dry. |
| SPRING15 | SPR | Qt | A | A | CMP | E300.0:PERC | 4 | | |
| SPRING15 | SPR | Qt | S | S | CMP | E601 | 1 | N | Dry. |
| SPRING15 | SPR | Qt | S | S | CMP | E601 | 3 | N | Dry. |
| SPRING15 | SPR | Qt | S | S | CMP | E906 | 1 | N | Dry. |
| SPRING15 | SPR | Qt | S | S | CMP | E906 | 3 | N | Dry. |
| SPRING7 | SPR | Qt | A | A | CMP | E300.0:NO3 | 1 | N | Sampling personnel shortage. |
| SPRING7 | SPR | Qt | A | A | CMP | E300.0:NO3 | 4 | N | Dry. |

**Table 2.3-1. Pit 6 Landfill OU 2003 ground water sampling and analysis plan. (Cont. Page 18 of 21)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| SPRING7 | SPR | Qt | A | A | CMP | E300.0:PERC | 1 | N | Sampling personnel shortage. |
| SPRING7 | SPR | Qt | A | A | CMP | E300.0:PERC | 4 | N | Dry. |
| SPRING7 | SPR | Qt | S | S | CMP | E601 | 1 | N | Sampling personnel shortage. |
| SPRING7 | SPR | Qt | S | S | CMP | E601 | 3 | | |
| SPRING7 | SPR | Qt | S | S | CMP | E906 | 1 | N | Sampling personnel shortage. |
| SPRING7 | SPR | Qt | S | S | CMP | E906 | 3 | | |
| SPRING8 | SPR | Qt | | A | DIS | DWMETALS | 4 | N | Dry. |
| SPRING8 | SPR | Qt | | A | DIS | E210.2 | 4 | N | Dry. |
| SPRING8 | SPR | Qt | | A | DIS | E300.0:PERC | 4 | N | Dry. |
| SPRING8 | SPR | Qt | | A | DIS | E601 | 4 | N | Dry. |
| SPRING8 | SPR | Qt | | A | DIS | E8330:R+H | 4 | N | Dry. |
| SPRING8 | SPR | Qt | | A | DIS | E906 | 4 | N | Dry. |
| W-33C-01 | MWPT | Tts | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-33C-01 | MWPT | Tts | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-33C-01 | MWPT | Tts | S | S | CMP | E601 | 1 | Y | |
| W-33C-01 | MWPT | Tts | S | S | CMP | E601 | 3 | Y | |
| W-33C-01 | MWPT | Tts | S | S | CMP | E906 | 1 | Y | |
| W-33C-01 | MWPT | Tts | S | S | CMP | E906 | 3 | Y | |
| W-34-01 | MWB | $Tnsc_1$ | | A | DIS | E300.0:NO3 | 1 | Y | |
| W-34-01 | MWB | $Tnsc_1$ | | A | DIS | E300.0:PERC | 1 | Y | |
| W-34-01 | MWB | $Tnsc_1$ | | S | DIS | E601 | 1 | Y | |
| W-34-01 | MWB | $Tnsc_1$ | | S | DIS | E601 | 3 | Y | |
| W-34-01 | MWB | $Tnsc_1$ | | S | DIS | E906 | 1 | Y | |
| W-34-01 | MWB | $Tnsc_1$ | | S | DIS | E906 | 3 | Y | |
| W-34-02 | MWB | Upper $Tnbs_1$ | | A | DIS | E300.0:NO3 | 1 | Y | |
| W-34-02 | MWB | Upper $Tnbs_1$ | | A | DIS | E300.0:PERC | 1 | Y | |
| W-34-02 | MWB | Upper $Tnbs_1$ | | S | DIS | E601 | 1 | Y | |
| W-34-02 | MWB | Upper $Tnbs_1$ | | S | DIS | E601 | 3 | Y | |

**Table 2.3-1. Pit 6 Landfill OU 2003 ground water sampling and analysis plan. (Cont. Page 19 of 21)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-34-02 | MWB | Upper $Tnbs_1$ | | S | DIS | E906 | 1 | Y | |
| W-34-02 | MWB | Upper $Tnbs_1$ | | S | DIS | E906 | 3 | Y | |
| W-PIT6-1819 | GW | $Tnbs_1$ | | Q | DIS | AS:UISO | 1 | N | Sampling personnel shortage. |
| W-PIT6-1819 | GW | $Tnbs_1$ | | Q | DIS | AS:UISO | 2 | Y | |
| W-PIT6-1819 | GW | $Tnbs_1$ | | Q | DIS | AS:UISO | 3 | Y | |
| W-PIT6-1819 | GW | $Tnbs_1$ | | Q | DIS | AS:UISO | 4 | N | No longer required. |
| W-PIT6-1819 | GW | $Tnbs_1$ | | Q | DIS | DWMETALS | 1 | N | Sampling personnel shortage. |
| W-PIT6-1819 | GW | $Tnbs_1$ | | Q | DIS | DWMETALS | 2 | Y | |
| W-PIT6-1819 | GW | $Tnbs_1$ | | Q | DIS | DWMETALS | 3 | Y | |
| W-PIT6-1819 | GW | $Tnbs_1$ | | Q | DIS | DWMETALS | 4 | N | No longer required. |
| W-PIT6-1819 | GW | $Tnbs_1$ | | Q | DIS | E239.2 | 3 | Y | |
| W-PIT6-1819 | GW | $Tnbs_1$ | S | Q | CMP | E300.0:NO3 | 1 | Y | |
| W-PIT6-1819 | GW | $Tnbs_1$ | | Q | DIS | E300.0:NO3 | 2 | Y | |
| W-PIT6-1819 | GW | $Tnbs_1$ | S | Q | CMP | E300.0:NO3 | 3 | Y | |
| W-PIT6-1819 | GW | $Tnbs_1$ | | Q | DIS | E300.0:NO3 | 4 | Y | |
| W-PIT6-1819 | GW | $Tnbs_1$ | S | Q | CMP | E300.0:PERC | 1 | Y | |
| W-PIT6-1819 | GW | $Tnbs_1$ | | Q | DIS | E300.0:PERC | 2 | Y | |
| W-PIT6-1819 | GW | $Tnbs_1$ | S | Q | CMP | E300.0:PERC | 3 | Y | |
| W-PIT6-1819 | GW | $Tnbs_1$ | | Q | DIS | E300.0:PERC | 4 | Y | |
| W-PIT6-1819 | GW | $Tnbs_1$ | Q | Q | CMP | E601 | 1 | Y | |
| W-PIT6-1819 | GW | $Tnbs_1$ | Q | Q | CMP | E601 | 2 | Y | |
| W-PIT6-1819 | GW | $Tnbs_1$ | Q | Q | CMP | E601 | 3 | Y | |
| W-PIT6-1819 | GW | $Tnbs_1$ | Q | Q | CMP | E601 | 4 | Y | |
| W-PIT6-1819 | GW | $Tnbs_1$ | | Q | DIS | E8330:R+H | 1 | N | Sampling personnel shortage. |
| W-PIT6-1819 | GW | $Tnbs_1$ | | Q | DIS | E8330:R+H | 2 | Y | |
| W-PIT6-1819 | GW | $Tnbs_1$ | | Q | DIS | E8330:R+H | 3 | Y | |
| W-PIT6-1819 | GW | $Tnbs_1$ | | Q | DIS | E8330:R+H | 4 | N | No longer required. |

Table 2.3-1. Pit 6 Landfill OU 2003 ground water sampling and analysis plan. (Cont. Page 20 of 21)

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-PIT6-1819 | GW | $Tnbs_1$ | | Q | DIS | E900 | 1 | N | Sampling personnel shortage. |
| W-PIT6-1819 | GW | $Tnbs_1$ | | Q | DIS | E900 | 2 | Y | |
| W-PIT6-1819 | GW | $Tnbs_1$ | | Q | DIS | E900 | 3 | Y | |
| W-PIT6-1819 | GW | $Tnbs_1$ | | Q | DIS | E900 | 4 | N | No longer required. |
| W-PIT6-1819 | GW | $Tnbs_1$ | Q | Q | CMP | E906 | 1 | Y | |
| W-PIT6-1819 | GW | $Tnbs_1$ | Q | Q | CMP | E906 | 2 | Y | |
| W-PIT6-1819 | GW | $Tnbs_1$ | Q | Q | CMP | E906 | 3 | Y | |
| W-PIT6-1819 | GW | $Tnbs_1$ | Q | Q | CMP | E906 | 4 | Y | |
| W-PIT6-1819 | GW | $Tnbs_1$ | | Q | DIS | GENMIN | 1 | N | Sampling personnel shortage. |
| W-PIT6-1819 | GW | $Tnbs_1$ | | Q | DIS | GENMIN | 2 | Y | |
| W-PIT6-1819 | GW | $Tnbs_1$ | | Q | DIS | GENMIN | 3 | Y | |
| W-PIT6-1819 | GW | $Tnbs_1$ | | Q | DIS | GENMIN | 4 | N | No longer required. |

Notes and footnotes appear on following page.

**Table 2.3-1. Pit 6 Landfill OU 2003 ground water sampling and analysis plan. (Cont. Page 21 of 21)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|

**Notes:**

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

**Pit 6 primary COC: VOCs (E601 or E624).**

**Pit 6 primary COC: tritium (E906).**

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

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

**CGSA CMP/DIS = Sampling more frequently then required.**

**CGSA CMP/WGMG = Well shared with the Operations and Regulatory Affairs Division, Water Guidance and Monitoring Group and may be sampled at a greater frequency and for additional analytes then required by the CMP. Non-CMP analytes are reported separately by ORAD.**

**CGSA CMP = Central GSA groundwater sampling and analysis plan specified in the GSA RD**

**CMP DMW = CMP detection monitor well.**

**CMP/DIS = Sampling required analyte more frequently then required.**

**CMP/WGMG = Well shared with the Operations and Regulatory Affairs Division, Water Guidance and Monitoring Group and may be sampled at a greater frequency and for additional analytes then required by the CMP. Non-CMP analytes are reported separately by ORAD.**

**CMP = Compliance Monitoring.**

**DIS = Discretionary sampling of non-required analyte.**

**DMW = Detection monitor well (non-CMP).**

**ERD/WGMG = non-CMP analyte sampled from a well shared by ERD and WGMG.**

**EW = Extraction well.**

**GW = Guard well.**

**MWB = Monitor well used for background.**

**MWPT = Monitor well used for plume tracking.**

**SPR = Spring.**

**WS = Water supply well.**

[a] **K6-01 TO BE SAMPLED QUARTERLY IF K6-01S IS DRY.**

**Table 2.3-2. Pit 6 Landfill OU 2003 VOCs in ground water.**

| Location | Date | Method | TCE (μg/L) | PCE (μg/L) | Total 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) | Freon 11 (μg/L) | Freon 113 (μg/L) | Methylene chloride (μg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CARNRW1 | 01/30/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| CARNRW1 | 02/27/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| CARNRW1 | 03/12/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| CARNRW1 | 04/28/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| CARNRW1 | 05/15/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| CARNRW1 | 06/12/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| CARNRW1 | 07/22/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| CARNRW1 | 08/13/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| CARNRW1 | 09/10/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| CARNRW1 | 10/16/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| CARNRW1 | 11/13/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| CARNRW1 | 12/10/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| CARNRW2 | 01/30/03 | E502.2 | <0.2 | <0.2 | <0.4 | <0.21 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.21 | <0.23 | <0.24 |
| CARNRW2 | 02/27/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | 1.8 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| CARNRW2 | 03/13/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | 0.83 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| CARNRW2 | 04/28/03 | E502.2 | <0.2 | <0.2 | <0.4 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.25 | <0.2 |
| CARNRW2 | 04/28/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| CARNRW2 | 05/15/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| CARNRW2 | 06/12/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| CARNRW2 | 07/16/03 | E502.2 | <0.2 | <0.2 | <0.4 | <0.21 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.21 | <0.23 | <0.24 |
| CARNRW2 | 07/16/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| CARNRW2 | 08/13/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| CARNRW2 | 09/10/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| CARNRW2 | 10/15/03 | E502.2 | <0.2 | <0.2 | <0.4 | <0.21 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.21 | <0.23 | <0.24 |
| CARNRW2 | 10/15/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| CARNRW2 | 11/13/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| CARNRW2 | 12/10/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| CARNRW3 | 05/15/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| CARNRW3 | 06/12/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| CARNRW3 | 07/22/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| CARNRW3 | 08/13/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| CARNRW3 | 09/10/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| CARNRW3 | 10/15/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| CARNRW3 | 11/13/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| CARNRW3 | 12/10/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| CARNRW4 | 02/27/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| CARNRW4 | 05/14/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| CARNRW4 | 06/11/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| CARNRW4 | 07/16/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| CARNRW4 | 08/13/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

**Table 2.3-2. Pit 6 Landfill OU 2003 VOCs in ground water. (Cont. Page 2 of 4)**

| Location | Date | Method | TCE (µg/L) | PCE (µg/L) | Total 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) | Freon 11 (µg/L) | Freon 113 (µg/L) | Methylene chloride (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CARNRW4 | 09/10/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| CARNRW4 | 10/15/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| CARNRW4 | 11/13/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| CARNRW4 | 12/10/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| BC6-10 | 03/06/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| BC6-10 | 08/06/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| EP6-06 | 02/13/03 | E624 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| EP6-06 | 05/08/03 | E624 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| EP6-06 | 07/30/03 | E624 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| EP6-06 | 10/21/03 | E624 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| EP6-07 | 02/26/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| EP6-07 | 08/06/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| EP6-08 | 02/18/03 | E624 | <0.5 | 1 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| EP6-08 | 05/23/03 | E624 | <0.5 | 0.76 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| EP6-08 | 05/23/03 DUP | E624 | <0.5 | 0.81 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| EP6-08 | 08/25/03 | E624 | <0.5 | 0.53 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 |
| EP6-08 | 10/22/03 | E624 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| EP6-09 | 02/14/03 | E624 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| EP6-09 | 05/22/03 | E624 | 4.8 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| EP6-09 | 08/20/03 | E624 | 5.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| EP6-09 | 10/22/03 | E624 | 4.9 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-01 | 02/14/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-01 | 08/06/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-01S | 02/14/03 | E624 | 5.3 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-01S | 04/02/03 | E624 | <0.5 | <0.5 | 2.2 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-01S | 04/09/03 | E624 | <0.5 | <0.5 | 2.3 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-01S | 05/07/03 | E624 | <0.5 | <0.5 | 2.3 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-01S | 08/20/03 | E624 | <0.5 | <0.5 | 2.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-01S | 08/20/03 DUP | E624 | <0.5 | <0.5 | 2.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-01S | 10/21/03 | E624 | <0.5 | <0.5 | 2.2 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-03 | 02/20/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-03 | 08/06/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-04 | 02/19/03 | E601 | <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 |
| K6-04 | 02/19/03 DUP | E601 | <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 |
| K6-04 | 08/06/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-14 | 02/26/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-14 | 07/30/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-16 | 02/19/03 | E601 | 0.63 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-16 | 02/19/03 DUP | E601 | 0.63 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-16 | 07/30/03 | E601 | 2.2 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-16 | 07/30/03 DUP | E601 | 2.3 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

**Table 2.3-2. Pit 6 Landfill OU 2003 VOCs in ground water. (Cont. Page 3 of 4)**

| Location | Date | Method | TCE (µg/L) | PCE (µg/L) | Total 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) | Freon 11 (µg/L) | Freon 113 (µg/L) | Methylene chloride (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K6-17 | 02/19/03 | E601 | 0.9 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-17 | 05/02/03 | E601 | 0.97 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-17 | 05/02/03 DUP | E601 | 0.9 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-17 | 07/30/03 | E601 | 0.85 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-17 | 10/09/03 | E601 | 0.87 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-18 | 02/26/03 | E601 | 3.2 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-18 | 02/26/03 DUP | E601 | 4 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-18 | 07/30/03 | E601 | 2.8 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-19 | 02/18/03 | E624 | 1.6 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-19 | 05/07/03 | E624 | 1.6 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-19 | 08/19/03 | E624 | 3.9 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-19 | 10/21/03 | E624 | 3.4 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-19 | 10/21/03 DUP | E624 | 3.6 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-22 | 02/26/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-22 | 05/02/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-22 | 07/30/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-22 | 10/09/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-23 | 02/26/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-23 | 08/13/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-24 | 02/26/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-24 | 07/30/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-25 | 03/06/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-25 | 08/13/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-26 | 02/26/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-26 | 08/06/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-27 | 02/26/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-27 | 08/06/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-27 | 08/06/03 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 |
| K6-32 | 02/20/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-32 | 08/13/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-33 | 02/19/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-33 | 08/13/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-34 | 03/07/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-34 | 05/23/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-34 | 08/13/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-34 | 10/09/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-35 | 02/26/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-35 | 08/13/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-35 | 08/13/03 DUP | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 O | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-36 | 02/18/03 | E624 | 0.76 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K6-36 | 05/22/03 | E624 | 0.88 | 0.52 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

**Table 2.3-2. Pit 6 Landfill OU 2003 VOCs in ground water. (Cont. Page 4 of 4)**

| Location | Date | Method | TCE (µg/L) | PCE (µg/L) | Total 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) | Freon 11 (µg/L) | Freon 113 (µg/L) | Methylene chloride (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W-33C-01 | 03/13/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-33C-01 | 08/13/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-34-01 | 03/07/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-34-01 | 08/13/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-34-02 | 03/07/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-34-02 | 08/13/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-PIT6-1819 | 02/26/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-PIT6-1819 | 05/02/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-PIT6-1819 | 06/26/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-PIT6-1819 | 08/13/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-PIT6-1819 | 08/20/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 |
| W-PIT6-1819 | 10/09/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

**Other VOCs not detected in the table above:**

| Location | Date | Method | 2-Butanone (µg/L) | Acetone (µg/L) | Bromo-dichloromethane (µg/L) | Bromoform (µg/L) | Dibromo-chloromethane (µg/L) | Total Trihalomethanes (µg/L) | cis-1,2-Dichloroethene (µg/L) |
|---|---|---|---|---|---|---|---|---|---|
| CARNRW2 | 02/27/03 | E601 | - | - | 4.5 | 19 | 13 | 39 | - |
| CARNRW2 | 03/13/03 | E601 | - | - | 2.6 | 18 | 9.3 | 31 | - |
| EP6-08 | 10/22/03 | E624 | 34 | 78 | - | - | - | - | - |
| K6-01 | 02/14/03 | E601 | - | - | - | - | - | - | 0.5 |
| K6-01 | 08/06/03 | E601 | - | - | - | - | - | - | 0.54 |
| K6-01S | 04/02/03 | E624 | - | - | - | - | - | - | 2.2 |
| K6-01S | 04/09/03 | E624 | - | - | - | - | - | - | 2.3 |
| K6-01S | 05/07/03 | E624 | - | - | - | - | - | - | 2.3 |
| K6-01S | 08/20/03 | E624 | - | - | - | - | - | - | 2.5 |
| K6-01S | 08/20/03 DUP | E624 | - | - | - | - | - | - | 2.5 |
| K6-01S | 10/21/03 | E624 | - | - | - | - | - | - | 2.2 |

**Table 2.3-3. Pit 6 Landfill OU 2003 radiological consituents in ground water.**

| Location | Date | Gross alpha (pCi/L) | Gross beta (pCi/L) | Tritium (pCi/L) | Uranium 234 and Uranium 233 (pCi/L) | Uranium 235 and Uranium 236 (pCi/L) | Uranium 238 (pCi/L) |
|---|---|---|---|---|---|---|---|
| CARNRW1 | 01/30/03 | - | - | <94.3 | - | - | - |
| CARNRW1 | 02/27/03 | - | - | <99.6 | - | - | - |
| CARNRW1 | 03/12/03 | - | - | <98.8 | - | - | - |
| CARNRW1 | 04/28/03 | - | - | <212 | - | - | - |
| CARNRW1 | 05/15/03 | - | - | <92.2 | - | - | - |
| CARNRW1 | 06/12/03 | - | - | <92.3 | - | - | - |
| CARNRW1 | 07/22/03 | - | - | <94.7 | - | - | - |
| CARNRW1 | 08/13/03 | - | - | <90.4 | - | - | - |
| CARNRW1 | 09/10/03 | - | - | <91.2 | - | - | - |
| CARNRW1 | 10/16/03 | - | - | <103 | - | - | - |
| CARNRW1 | 11/13/03 | - | - | <97.4 | - | - | - |
| CARNRW1 | 12/10/03 | - | - | <102 | - | - | - |
| CARNRW2 | 01/30/03 | <2.04 | 8.01 ± 1.80 | - | - | - | - |
| CARNRW2 | 02/27/03 | - | - | 136 ± 62.0 | - | - | - |
| CARNRW2 | 03/13/03 | - | - | <92.8 | - | - | - |
| CARNRW2 | 04/07/03 | - | - | <102 | - | - | - |
| CARNRW2 | 04/16/03 | - | - | <102 | - | - | - |
| CARNRW2 | 04/28/03 | <1.49 LO | <1.91 L | <219 | - | - | - |
| CARNRW2 | 05/15/03 | - | - | <93.1 | - | - | - |
| CARNRW2 | 06/12/03 | - | - | <93.9 | - | - | - |
| CARNRW2 | 07/16/03 | <10.3 | 9.43 ± 6.50 | <87.9 | - | - | - |
| CARNRW2 | 08/13/03 | - | - | <89 | - | - | - |
| CARNRW2 | 09/10/03 | - | - | <90.6 | - | - | - |
| CARNRW2 | 10/15/03 | <1.82 | 6.43 ± 1.50 | <98.1 | - | - | - |
| CARNRW2 | 11/13/03 | - | - | <92 | - | - | - |
| CARNRW2 | 12/10/03 | - | - | <97.6 | - | - | - |
| CARNRW3 | 05/15/03 | - | - | <90.4 | - | - | - |
| CARNRW3 | 06/12/03 | - | - | <94.3 | - | - | - |
| CARNRW3 | 07/22/03 | - | - | <94.6 | - | - | - |
| CARNRW3 | 08/13/03 | - | - | <86.7 | - | - | - |
| CARNRW3 | 09/10/03 | - | - | <90.6 | - | - | - |
| CARNRW3 | 10/15/03 | - | - | <100 | - | - | - |
| CARNRW3 | 11/13/03 | - | - | <93.2 | - | - | - |

**Table 2.3-3. Pit 6 Landfill OU 2003 radiological consituents in ground water.**

| Location | Date | Gross alpha (pCi/L) | Gross beta (pCi/L) | Tritium (pCi/L) | Uranium 234 and Uranium 233 (pCi/L) | Uranium 235 and Uranium 236 (pCi/L) | Uranium 238 (pCi/L) |
|---|---|---|---|---|---|---|---|
| CARNRW3 | 12/10/03 | - | - | <97.6 | - | - | - |
| CARNRW4 | 02/27/03 | - | - | <98.5 | - | - | - |
| CARNRW4 | 05/14/03 | - | - | <88.7 | - | - | - |
| CARNRW4 | 06/11/03 | - | - | <100 | - | - | - |
| CARNRW4 | 07/16/03 | - | - | <86 | - | - | - |
| CARNRW4 | 08/13/03 | - | - | <88.9 | - | - | - |
| CARNRW4 | 09/10/03 | - | - | <93.6 | - | - | - |
| CARNRW4 | 10/15/03 | - | - | <99.9 | - | - | - |
| CARNRW4 | 11/13/03 | - | - | <96.3 | - | - | - |
| CARNRW4 | 12/10/03 | - | - | <97.9 | - | - | - |
| BC6-10 | 03/06/03 | - | - | <97.4 | - | - | - |
| BC6-10 | 08/06/03 | - | - | <89.9 | - | - | - |
| EP6-06 | 02/13/03 | 5.21 ± 3.40 | 8.55 ± 2.50 | <108 | 0.282 ± 0.0570 | <0.022 | 0.198 ± 0.0460 |
| EP6-06 | 05/08/03 | <1.46 | 8.78 ± 1.90 | <98.8 | 0.731 ± 0.120 | <0.025 | 0.488 ± 0.0890 |
| EP6-06 | 07/30/03 | <2.13 | 9.62 ± 2.10 | <88.4 L | 0.254 ± 0.0510 | <0.017 | 0.211 ± 0.0450 |
| EP6-06 | 10/21/03 | <1.87 | 7.07 ± 1.90 | <97.9 | 0.423 ± 0.0830 | <0.025 E | 0.238 ± 0.0600 |
| EP6-07 | 02/26/03 | - | - | 313 ± 74.0 | - | - | - |
| EP6-07 | 08/06/03 | - | - | <88.8 | - | - | - |
| EP6-08 | 02/18/03 | <1.76 | 7.99 ± 2.60 | <104 | 0.596 ± 0.130 | <0.041 | 0.394 ± 0.0960 |
| EP6-08 | 05/23/03 | <1.74 | 9.95 ± 2.00 | <90.5 | 0.630 ± 0.110 | <0.024 | 0.454 ± 0.0830 |
| EP6-08 | 05/23/03 DUP | <1.52 | 10.2 ± 2.10 | <91.8 | 0.626 ± 0.110 | <0.025 | 0.374 ± 0.0760 |
| EP6-08 | 09/12/03 | <2.13 | 9.94 ± 2.30 | <89.9 | 0.616 ± 0.0980 | <0.02 E | 0.445 ± 0.0770 |
| EP6-08 | 10/22/03 | <2.28 | 13.0 ± 2.50 | <96.5 | - | - | - |
| EP6-08 | 12/16/03 | - | - | - | 0.381 ± 0.0680 | <0.017 E | 0.310 ± 0.0580 |
| EP6-09 | 02/14/03 | <2.02 | 9.31 ± 3.50 | <105 | 1.16 ± 0.160 | <0.022 E | 0.962 ± 0.140 |
| EP6-09 | 05/22/03 | <2.32 | 11.0 ± 2.50 | <102 | 1.20 ± 0.170 | <0.025 E | 0.993 ± 0.140 |
| EP6-09 | 08/20/03 | <2.66 | 10.9 ± 2.80 | <89.5 | 1.19 ± 0.160 | <0.022 E | 0.913 ± 0.140 |
| EP6-09 | 10/22/03 | <1.86 | 11.0 ± 2.40 | <94.7 | 1.10 ± 0.160 | <0.025 E | 0.904 ± 0.130 |
| K6-01 | 02/14/03 | - | - | 257 ± 71.0 | - | - | - |
| K6-01 | 08/06/03 | - | - | 266 ± 64.0 | - | - | - |
| K6-01S | 02/14/03 | <6.37 | <18.5 | 104 ± 66.0 | 1.87 ± 0.230 | <0.022 E | 1.23 ± 0.160 |
| K6-01S | 05/07/03 | 4.54 ± 3.40 | 17.2 ± 6.00 | <95.1 | 2.14 ± 0.270 | <0.024 E | 1.56 ± 0.210 |
| K6-01S | 08/20/03 | 6.35 ± 5.30 | <15.2 | 181 ± 60.0 | 2.22 ± 0.280 | <0.024 E | 1.55 ± 0.210 |

**Table 2.3-3. Pit 6 Landfill OU 2003 radiological consituents in ground water.**

| Location | Date | Gross alpha (pCi/L) | Gross beta (pCi/L) | Tritium (pCi/L) | Uranium 234 and Uranium 233 (pCi/L) | Uranium 235 and Uranium 236 (pCi/L) | Uranium 238 (pCi/L) |
|---|---|---|---|---|---|---|---|
| K6-01S | 08/20/03 DUP | <4.81 | 13.9 ± 5.90 | 195 ± 63.0 | 2.58 ± 0.320 | <0.024 E | 1.69 ± 0.220 |
| K6-01S | 10/21/03 | <6.21 | 14.9 ± 7.20 | 107 ± 61.0 | 2.44 ± 0.300 | <0.024 E | 1.82 ± 0.240 |
| K6-03 | 02/20/03 | - | - | 116 ± 64.0 | - | - | - |
| K6-03 | 04/07/03 | - | - | <98.4 | - | - | - |
| K6-03 | 04/16/03 | - | - | <106 | - | - | - |
| K6-03 | 08/06/03 | - | - | <88.2 | - | - | - |
| K6-04 | 02/19/03 | - | - | <105 | - | - | - |
| K6-04 | 02/19/03 DUP | - | - | <106 | - | - | - |
| K6-04 | 08/06/03 | - | - | <88.1 | - | - | - |
| K6-14 | 02/26/03 | - | - | <104 | - | - | - |
| K6-14 | 07/30/03 | - | - | <92.3 L | - | - | - |
| K6-16 | 02/19/03 | - | - | 654 ± 97.0 | - | - | - |
| K6-16 | 02/19/03 DUP | - | - | 584 ± 91.0 | - | - | - |
| K6-16 | 07/30/03 | - | - | 567 ± 85.0 L | - | - | - |
| K6-16 | 07/30/03 DUP | - | - | 524 ± 82.0 L | - | - | - |
| K6-17 | 02/19/03 | - | - | <98 | - | - | - |
| K6-17 | 02/19/03 DUP | - | - | <159 | - | - | - |
| K6-17 | 05/02/03 | - | - | <96.6 | - | - | - |
| K6-17 | 05/02/03 DUP | - | - | <217 L | - | - | - |
| K6-17 | 07/30/03 | - | - | <88.8 L | - | - | - |
| K6-17 | 10/09/03 | - | - | <89.3 | - | - | - |
| K6-18 | 02/26/03 | - | - | 364 ± 79.0 | - | - | - |
| K6-18 | 02/26/03 DUP | - | - | 324 ± 109 | - | - | - |
| K6-18 | 07/30/03 | - | - | 337 ± 68.0 L | - | - | - |
| K6-19 | 02/18/03 | <1.73 | 8.45 ± 2.20 | 253 ± 71.0 | 1.66 ± 0.210 | <0.022 E | 0.981 ± 0.140 |
| K6-19 | 05/07/03 | 2.01 ± 1.60 | 9.71 ± 2.90 | 268 ± 68.0 | 1.84 ± 0.240 | <0.025 E | 1.12 ± 0.160 |
| K6-19 | 08/19/03 | 3.90 ± 2.10 | 8.04 ± 2.20 | 304 ± 67.0 | 1.62 ± 0.210 | <0.021 E | 0.962 ± 0.140 |
| K6-19 | 10/21/03 | <2.36 | 10.6 ± 2.20 | 295 ± 69.0 | 1.85 ± 0.230 | <0.018 E | 1.10 ± 0.150 |
| K6-19 | 10/21/03 DUP | <1.57 E | 8.68 ± 1.80 | 303 ± 70.0 | 1.70 ± 0.230 | <0.027 E | 1.08 ± 0.160 |
| K6-22 | 02/26/03 | - | - | <104 | - | - | - |
| K6-22 | 05/02/03 | - | - | <96.4 | - | - | - |
| K6-22 | 07/30/03 | - | - | <89.1 L | - | - | - |
| K6-22 | 10/09/03 | - | - | <89.2 | - | - | - |

**Table 2.3-3. Pit 6 Landfill OU 2003 radiological consituents in ground water.**

| Location | Date | Gross alpha (pCi/L) | Gross beta (pCi/L) | Tritium (pCi/L) | Uranium 234 and Uranium 233 (pCi/L) | Uranium 235 and Uranium 236 (pCi/L) | Uranium 238 (pCi/L) |
|---|---|---|---|---|---|---|---|
| K6-23 | 02/26/03 | - | - | <102 | - | - | - |
| K6-23 | 08/13/03 | - | - | <91.1 | - | - | - |
| K6-24 | 02/26/03 | - | - | 492 ± 86.0 | - | - | - |
| K6-24 | 07/30/03 | - | - | 442 ± 75.0 L | - | - | - |
| K6-25 | 03/06/03 | - | - | <100 | - | - | - |
| K6-25 | 08/13/03 | - | - | <90.8 | - | - | - |
| K6-26 | 02/26/03 | - | - | <102 | - | - | - |
| K6-26 | 08/06/03 | - | - | <88.3 | - | - | - |
| K6-27 | 02/26/03 | - | - | <103 | - | - | - |
| K6-27 | 08/06/03 | - | - | <88.4 | - | - | - |
| K6-27 | 08/06/03 DUP | - | - | <163 O | - | - | - |
| K6-32 | 02/20/03 | - | - | <104 | - | - | - |
| K6-32 | 08/13/03 | - | - | <92.2 | - | - | - |
| K6-33 | 02/19/03 | - | - | 460 ± 80.0 | - | - | - |
| K6-33 | 08/13/03 | - | - | 295 ± 66.0 | - | - | - |
| K6-34 | 03/07/03 | - | - | <95.6 | - | - | - |
| K6-34 | 05/23/03 | - | - | <104 | - | - | - |
| K6-34 | 08/13/03 | - | - | <89.4 | - | - | - |
| K6-34 | 10/09/03 | - | - | <89.8 | - | - | - |
| K6-35 | 02/26/03 | - | - | 294 ± 75.0 | - | - | - |
| K6-35 | 08/13/03 | - | - | 388 ± 72.0 | - | - | - |
| K6-35 | 08/13/03 DUP | - | - | 383 ± 92.5 O | - | - | - |
| K6-36 | 02/18/03 | <2.8 | 11.4 ± 2.90 | 1,590 ± 180 | 1.58 ± 0.200 | <0.023 E | 1.03 ± 0.150 |
| K6-36 | 04/02/03 | <1.92 | 8.77 ± 1.80 | - | 0.627 ± 0.110 | <0.024 | 0.418 ± 0.0810 |
| K6-36 | 04/09/03 | <1.75 | 8.76 ± 1.80 | - | 0.502 ± 0.0920 | <0.025 | 0.335 ± 0.0690 |
| K6-36 | 05/22/03 | <1.99 | 17.6 ± 4.10 | 1,850 ± 200 | 0.222 ± 0.0600 | <0.029 | 0.166 ± 0.0520 |
| W-33C-01 | 03/13/03 | - | - | <94.3 | - | - | - |
| W-33C-01 | 08/13/03 | - | - | <92.1 | - | - | - |
| W-34-01 | 03/07/03 | - | - | <91.8 | - | - | - |
| W-34-01 | 08/13/03 | - | - | <91.5 | - | - | - |
| W-34-02 | 03/07/03 | - | - | <90.8 | - | - | - |
| W-34-02 | 08/13/03 | - | - | <91.3 | - | - | - |
| W-PIT6-1819 | 02/26/03 | - | - | <104 | - | - | - |

**Table 2.3-3. Pit 6 Landfill OU 2003 radiological consituents in ground water.**

| Location | Date | Gross alpha (pCi/L) | Gross beta (pCi/L) | Tritium (pCi/L) | Uranium 234 and Uranium 233 (pCi/L) | Uranium 235 and Uranium 236 (pCi/L) | Uranium 238 (pCi/L) |
|---|---|---|---|---|---|---|---|
| W-PIT6-1819 | 06/26/03 | <1.87 | 10.0 ± 1.90 | 123 ± 54.0 | 0.485 ± 0.0930 | <0.028 | 0.376 ± 0.0770 |
| W-PIT6-1819 | 08/13/03 | - | - | 145 ± 60.0 | - | - | - |
| W-PIT6-1819 | 08/20/03 | - | - | 263 ± 64.0 | - | - | - |
| W-PIT6-1819 | 10/09/03 | - | - | 146 ± 57.0 | - | - | - |

**Table 2.3-4. Pit 6 Landfill OU 2003 nitrate and perchlorate in ground water.**

| Location | Date | Nitrate (as $NO_3$) (mg/L) | Perchlorate ($\mu$g/L) |
|---|---|---|---|
| CARNRW1 | 01/30/03 | <0.44 | <3 |
| CARNRW1 | 02/27/03 | <0.44 | <3 |
| CARNRW1 | 03/12/03 | <0.44 | <3 |
| CARNRW1 | 04/28/03 | <0.44 | <4 |
| CARNRW1 | 05/15/03 | <0.44 | <4 |
| CARNRW1 | 06/12/03 | <0.44 | <4 |
| CARNRW1 | 07/22/03 | <0.44 | <4 |
| CARNRW1 | 08/13/03 | <0.44 | <4 |
| CARNRW1 | 09/10/03 | <0.44 | <4 |
| CARNRW1 | 10/16/03 | <0.44 | <4 |
| CARNRW1 | 11/13/03 | <0.44 | <4 H |
| CARNRW1 | 12/10/03 | <0.44 | <4 |
| CARNRW2 | 02/27/03 | <0.44 | <3 |
| CARNRW2 | 03/13/03 | <0.44 | <3 |
| CARNRW2 | 04/28/03 | <0.44 | <4 |
| CARNRW2 | 05/15/03 | <0.44 | <4 |
| CARNRW2 | 06/12/03 | <0.44 | <4 |
| CARNRW2 | 07/16/03 | <0.44 | <4 |
| CARNRW2 | 08/13/03 | <0.44 | <4 |
| CARNRW2 | 09/10/03 | <0.44 | <4 |
| CARNRW2 | 10/15/03 | <0.44 | <4 H |
| CARNRW2 | 11/13/03 | <0.44 | <4 H |
| CARNRW2 | 12/10/03 | <0.44 | <4 |
| CARNRW3 | 05/15/03 | <0.44 | <4 |
| CARNRW3 | 06/12/03 | <0.44 | <4 |
| CARNRW3 | 07/22/03 | <0.44 | <4 |
| CARNRW3 | 08/13/03 | <0.44 | <4 |
| CARNRW3 | 09/10/03 | <0.44 | <4 |
| CARNRW3 | 10/15/03 | <0.44 | <4 H |
| CARNRW3 | 11/13/03 | <0.44 | <4 H |
| CARNRW3 | 12/10/03 | <0.44 | <4 |
| CARNRW4 | 02/27/03 | 8.4 D | <3 |
| CARNRW4 | 05/14/03 | 2.8 D | <4 |
| CARNRW4 | 06/11/03 | 1.8 D | <4 |
| CARNRW4 | 07/16/03 | <0.88 D | <4 |
| CARNRW4 | 08/13/03 | <0.88 D | <4 |
| CARNRW4 | 09/10/03 | <0.88 D | <4 |
| CARNRW4 | 10/15/03 | <0.88 D | <4 H |
| CARNRW4 | 11/13/03 | <0.44 | <4 H |
| CARNRW4 | 12/10/03 | <0.44 | <4 |
| BC6-10 | 03/06/03 | 0.75 | <3 |
| EP6-06 | 02/13/03 | 0.62 | <3 |
| EP6-06 | 05/08/03 | <0.44 | <4 |
| EP6-06 | 07/30/03 | <0.44 | <4 |
| EP6-06 | 10/21/03 | <0.44 | <4 |

**Table 2.3-4. Pit 6 Landfill OU 2003 nitrate and perchlorate in ground water.**

| Location | Date | Nitrate (as $NO_3$) (mg/L) | Perchlorate ($\mu$g/L) |
|---|---|---|---|
| EP6-07 | 02/26/03 | <0.44 | <3 |
| EP6-08 | 02/18/03 | 3.5 | <3 |
| EP6-08 | 05/23/03 | 3.5 | <4 |
| EP6-08 | 05/23/03 DUP | 3.5 | <4 |
| EP6-08 | 09/12/03 | 5.7 | <4 |
| EP6-08 | 10/22/03 | <0.44 | - |
| EP6-08 | 12/16/03 | - | <4 |
| EP6-09 | 02/14/03 | 2.8 | 4.2 |
| EP6-09 | 05/22/03 | 2.7 | <4 |
| EP6-09 | 08/20/03 | 2.7 | <4 H |
| EP6-09 | 10/22/03 | 2.6 | <4 |
| K6-01 | 02/14/03 | <0.44 | <3 |
| K6-01S | 02/14/03 | <0.88 D | <3 |
| K6-01S | 05/07/03 | <0.88 D | <4 |
| K6-01S | 08/20/03 | <0.88 D | <4 H |
| K6-01S | 08/20/03 DUP | <0.88 D | <4 H |
| K6-01S | 10/21/03 | <0.88 D | <4 |
| K6-03 | 02/20/03 | <0.44 | <3 |
| K6-03 | 05/22/03 | <0.44 | - |
| K6-04 | 02/19/03 | 12 | <4 |
| K6-04 | 02/19/03 DUP | 12 | <4 |
| K6-04 | 05/23/03 | 10 | - |
| K6-14 | 02/26/03 | 0.45 | <3 |
| K6-16 | 02/19/03 | <2.2 D | <3 |
| K6-16 | 02/19/03 DUP | <2.2 D | <3 |
| K6-17 | 02/19/03 | 1.9 | <3 |
| K6-17 | 07/30/03 | 0.91 | <4 |
| K6-18 | 02/26/03 | 36 D | 12 |
| K6-18 | 02/26/03 DUP | 16 | 8 |
| K6-18 | 07/30/03 | - | 11 |
| K6-18 | 10/21/03 | - | 14 |
| K6-19 | 02/18/03 | <0.44 | <3 |
| K6-19 | 05/07/03 | <0.44 | <4 |
| K6-19 | 08/19/03 | <0.44 | <4 |
| K6-19 | 10/21/03 | <0.44 | <4 |
| K6-19 | 10/21/03 DUP | <0.44 | <4 |
| K6-22 | 02/26/03 | <0.88 D | <3 |
| K6-22 | 07/30/03 | <0.44 | <4 |
| K6-23 | 02/26/03 | 160 D | <15 D |
| K6-23 | 08/13/03 | 160 D | - |
| K6-23 | 10/21/03 | 170 D | - |
| K6-24 | 02/26/03 | <0.44 | <3 |
| K6-25 | 03/06/03 | <0.44 | <3 |
| K6-26 | 02/26/03 | <0.44 | <3 |
| K6-27 | 02/26/03 | <0.44 | <3 |

**Table 2.3-4. Pit 6 Landfill OU 2003 nitrate and perchlorate in ground water.**

| Location | Date | Nitrate (as $NO_3$) (mg/L) | Perchlorate ($\mu$g/L) |
|---|---|---|---|
| K6-32 | 02/20/03 | <0.44 | <3 |
| K6-32 | 05/22/03 | <0.44 | - |
| K6-33 | 02/19/03 | 1.2 | <3 |
| K6-34 | 03/07/03 | <0.44 | 4.4 |
| K6-34 | 08/13/03 | <0.44 | <4 |
| K6-35 | 02/26/03 | <0.44 | <3 |
| K6-35 | 10/21/03 DUP | - | 14 |
| K6-36 | 02/18/03 | 1.6 | <3 |
| K6-36 | 05/22/03 | 0.59 | 5.8 |
| W-33C-01 | 03/13/03 | 3.2 D | <3 |
| W-34-01 | 03/07/03 | <0.44 | <3 |
| W-34-02 | 03/07/03 | <0.44 | <3 |
| W-PIT6-1819 | 02/26/03 | <0.44 | <3 |
| W-PIT6-1819 | 06/26/03 | <0.44 | <4 |
| W-PIT6-1819 | 08/13/03 | <0.44 | <4 |
| W-PIT6-1819 | 08/20/03 | <0.44 | <4 |
| W-PIT6-1819 | 10/09/03 | <0.44 | <4 H |

**Table 2.3-5. Pit 6 Landfill OU 2003 metals in ground water.**

| Location | Date | Arsenic (mg/L) | Barium (mg/L) | Cadmium (mg/L) | Chromium (mg/L) | Lead (mg/L) | Mercury (mg/L) | Selenium (mg/L) | Silver (mg/L) |
|---|---|---|---|---|---|---|---|---|---|
| W-PIT6-1819 | 06/26/03 | 0.021 | <0.025 | <0.0005 | <0.001 | <0.005 | <0.0002 | <0.002 | <0.001 |
| W-PIT6-1819 | 08/20/03 | 0.018 | <0.025 | <0.0005 | <0.001 | <0.005 | <0.0002 | <0.002 | <0.001 |

**2.3-6. Pit 6 Landfill OU 2003 high explosive compounds in ground water.**

| Location | Date | HMX (μg/L) | RDX (μg/L) |
|---|---|---|---|
| CARNRW2 | 01/30/03 | 210 | <5 |
| W-PIT6-1819 | 06/26/03 | <5 | <5 |
| W-PIT6-1819 | 08/20/03 | <5 | <5 |

**Table 2.3-7. Pit 6 Landfill OU 2003 general minerals in ground water.**

| Constituents of concern | W-PIT6-1819 06/26/03 | W-PIT6-1819 08/20/03 |
|---|---|---|
| Total Alkalinity (as CaCO3) (mg/L) | 200 DH | 200 DH |
| Aluminum (mg/L) | <0.05 | <0.05 H |
| Bicarbonate Alk (as CaCO3) (mg/L) | 200 DH | 200 DH |
| Calcium (mg/L) | 45 L | 47 HL |
| Carbonate Alk (as CaCO3) (mg/L) | <5 DH | <10 DH |
| Chloride (mg/L) | 89 | 88 H |
| Copper (mg/L) | <0.01 | <0.01 H |
| Fluoride (mg/L) | 0.40 H | 0.36 H |
| Hydroxide Alk (as CaCO3) (mg/L) | <5 DH | <10 DH |
| Iron (mg/L) | <0.05 | <0.05 H |
| Magnesium (mg/L) | 21 | 22 H |
| Manganese (mg/L) | 0.01 | 0.013 H |
| Nickel (mg/L) | <0.05 | <0.05 H |
| Nitrate (as N) (mg/L) | <0.1 H | <0.1 H |
| Nitrate (as NO3) (mg/L) | <0.4 H | <0.4 H |
| Nitrate plus Nitrite (as N) (mg/L) | <0.1 H | <0.1 H |
| Nitrite (as N) (mg/L) | <0.02 | <0.02 |
| pH (Units) | 8 | 8 |
| Ortho-Phosphate (mg/L) | 0.42 | 0.33 |
| Total Phosphorus (as P) (mg/L) | <0.05 H | <0.05 H |
| Potassium (mg/L) | 9.7 | 9.9 H |
| Sodium (mg/L) | 150 L | 160 HL |
| Total dissolved solids (TDS) (mg/L) | 710 DH | 740 DH |
| Specific Conductance ($\mu$mhos/cm) | 1,000 | 1,000 H |
| Sulfate (mg/L) | 210 H | 220 H |
| Surfactants (mg/L) | <0.5 | - |
| Total Hardness (as CaCO3) (mg/L) | 200 | 210 |
| Zinc (mg/L) | <0.05 | <0.05 H |

**Table 2.3-8. Pit 6 Landfill OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| BC6-10 | 01/02/03 | 25.97 | 661.58 | |
| BC6-10 | 02/04/03 | 25.93 | 661.62 | |
| BC6-10 | 03/06/03 | 25.78 | 661.77 | |
| BC6-10 | 04/09/03 | 26.17 | 661.38 | |
| BC6-10 | 07/21/03 | 25.91 | 661.64 | |
| BC6-10 | 10/02/03 | 26.53 | 661.02 | |
| BC6-13 | 01/02/03 | - | - | DRY |
| BC6-13 | 02/04/03 | - | - | DRY |
| BC6-13 | 03/06/03 | - | - | DRY |
| BC6-13 | 04/09/03 | - | - | DRY |
| BC6-13 | 07/01/03 | - | - | DRY |
| BC6-13 | 10/02/03 | - | - | DRY |
| CARNRW1 | 01/02/03 | 22.38 | 656.35 | |
| CARNRW1 | 02/04/03 | 21.82 | 656.91 | |
| CARNRW1 | 03/06/03 | 28.51 | 650.22 | |
| CARNRW1 | 04/09/03 | 22.12 | 656.61 | |
| CARNRW1 | 07/22/03 | 29.48 | 649.25 | |
| CARNRW1 | 10/02/03 | 33.11 | 645.62 | |
| CARNRW3 | 01/02/03 | 30.84 | 672.16 | |
| CARNRW3 | 02/04/03 | 31.11 | 671.89 | |
| CARNRW3 | 03/06/03 | 31.12 | 671.88 | |
| CARNRW3 | 04/09/03 | 31.01 | 671.99 | |
| CARNRW3 | 07/21/03 | 34.26 | 668.74 | |
| CARNRW3 | 10/02/03 | 36.35 | 666.65 | |
| CARNRW4 | 01/02/03 | 6.67 | 645.08 | |
| CARNRW4 | 02/04/03 | 59.94 | 591.81 | |
| CARNRW4 | 03/06/03 | 6.44 | 645.31 | |
| CARNRW4 | 04/09/03 | 6.92 | 644.83 | |
| CARNRW4 | 07/21/03 | 8.8 | 642.95 | |
| CARNRW4 | 10/02/03 | 12.66 | 639.09 | |
| EP6-06 | 01/02/03 | 27.3 | 660.81 | |
| EP6-06 | 02/04/03 | 26.61 | 661.5 | |
| EP6-06 | 03/06/03 | 30.56 | 657.55 | |

**Table 2.3-8. Pit 6 Landfill OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| EP6-06 | 04/09/03 | 28.06 | 660.05 | |
| EP6-06 | 07/21/03 | 28.67 | 659.44 | |
| EP6-06 | 10/02/03 | 28.27 | 659.84 | |
| EP6-07 | 01/02/03 | 47.09 | 660.46 | |
| EP6-07 | 02/04/03 | 47.14 | 660.41 | |
| EP6-07 | 03/06/03 | 46.44 | 661.11 | |
| EP6-07 | 04/09/03 | 46.86 | 660.69 | |
| EP6-07 | 07/21/03 | 54.85 | 652.7 | |
| EP6-07 | 10/02/03 | 57.72 | 649.83 | |
| EP6-08 | 01/02/03 | 48.09 | 660.32 | |
| EP6-08 | 02/04/03 | 48.23 | 660.18 | |
| EP6-08 | 03/06/03 | 47.98 | 660.43 | |
| EP6-08 | 04/09/03 | 47.88 | 660.53 | |
| EP6-08 | 07/21/03 | 55.97 | 652.44 | |
| EP6-08 | 10/02/03 | 58.74 | 649.67 | |
| EP6-09 | 01/02/03 | 31.22 | 663.06 | |
| EP6-09 | 02/04/03 | 31.17 | 663.11 | |
| EP6-09 | 03/06/03 | 31.19 | 663.09 | |
| EP6-09 | 04/07/03 | 31.2 | 663.08 | |
| EP6-09 | 07/21/03 | 31.2 | 663.08 | |
| EP6-09 | 10/02/03 | 31.39 | 662.89 | |
| K6-01 | 01/02/03 | 28.36 | 663.25 | |
| K6-01 | 02/04/03 | 28.47 | 663.14 | |
| K6-01 | 03/06/03 | 28.43 | 663.18 | |
| K6-01 | 04/07/03 | 28.43 | 663.18 | |
| K6-01 | 07/21/03 | 28.37 | 663.24 | |
| K6-01 | 10/02/03 | 28.61 | 663 | |
| K6-01S | 01/02/03 | 29.46 | 663.06 | |
| K6-01S | 02/04/03 | 29.49 | 663.03 | |
| K6-01S | 03/06/03 | 29.51 | 663.01 | |
| K6-01S | 04/02/03 | 29.51 | 663.01 | |
| K6-01S | 07/21/03 | 29.45 | 663.07 | |
| K6-01S | 10/02/03 | 29.48 | 663.04 | |

**Table 2.3-8. Pit 6 Landfill OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| K6-03 | 01/02/03 | 66.21 | 660.54 | |
| K6-03 | 02/04/03 | 66.24 | 660.51 | |
| K6-03 | 03/06/03 | 66.04 | 660.71 | |
| K6-03 | 04/07/03 | 66.26 | 660.49 | |
| K6-03 | 07/21/03 | 73.96 | 652.79 | |
| K6-03 | 10/02/03 | 76.97 | 649.78 | |
| K6-04 | 01/02/03 | 47.48 | 660.84 | |
| K6-04 | 02/04/03 | 47.26 | 661.06 | |
| K6-04 | 03/06/03 | 47.19 | 661.13 | |
| K6-04 | 04/07/03 | 47.24 | 661.08 | |
| K6-04 | 07/21/03 | 54.65 | 653.67 | |
| K6-04 | 10/02/03 | 57.72 | 650.6 | |
| K6-14 | 01/02/03 | 26.34 | 654.53 | |
| K6-14 | 02/04/03 | 25.85 | 655.02 | |
| K6-14 | 03/06/03 | 25.77 | 655.1 | |
| K6-14 | 04/09/03 | 25.36 | 655.51 | |
| K6-14 | 07/21/03 | 26.4 | 654.47 | |
| K6-14 | 10/02/03 | 26.88 | 653.99 | |
| K6-15 | 01/02/03 | - | - | DRY |
| K6-15 | 02/04/03 | - | - | DRY |
| K6-15 | 03/06/03 | - | - | DRY |
| K6-15 | 04/07/03 | - | - | DRY |
| K6-15 | 07/01/03 | - | - | DRY |
| K6-15 | 10/02/03 | - | - | DRY |
| K6-16 | 01/02/03 | 19.43 | 660.02 | |
| K6-16 | 02/04/03 | 19.18 | 660.27 | |
| K6-16 | 03/06/03 | 18.41 | 661.04 | |
| K6-16 | 04/09/03 | 18.81 | 660.64 | |
| K6-16 | 07/21/03 | 19.57 | 659.88 | |
| K6-16 | 10/02/03 | 20.12 | 659.33 | |
| K6-17 | 01/02/03 | 19.52 | 659.19 | |
| K6-17 | 02/04/03 | 19.21 | 659.5 | |
| K6-17 | 03/06/03 | 18.7 | 660.01 | |

**Table 2.3-8. Pit 6 Landfill OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| K6-17 | 04/09/03 | 18.12 | 660.59 | |
| K6-17 | 07/21/03 | 20 | 658.71 | |
| K6-17 | 10/02/03 | 22.23 | 656.48 | |
| K6-18 | 01/02/03 | 25.17 | 660.43 | |
| K6-18 | 02/04/03 | 25.21 | 660.39 | |
| K6-18 | 03/06/03 | 25.21 | 660.39 | |
| K6-18 | 04/09/03 | 25.3 | 660.3 | |
| K6-18 | 07/21/03 | 25.4 | 660.2 | |
| K6-18 | 10/02/03 | 25.49 | 660.11 | |
| K6-19 | 01/02/03 | 30.3 | 662.74 | |
| K6-19 | 02/04/03 | 30.11 | 662.93 | |
| K6-19 | 03/06/03 | 30.24 | 662.8 | |
| K6-19 | 04/07/03 | 29.93 | 663.11 | |
| K6-19 | 07/21/03 | 30.17 | 662.87 | |
| K6-19 | 10/02/03 | 30.28 | 662.76 | |
| K6-21 | 01/02/03 | - | - | DRY |
| K6-21 | 02/04/03 | - | - | DRY |
| K6-21 | 03/06/03 | - | - | DRY |
| K6-21 | 04/07/03 | - | - | DRY |
| K6-21 | 07/01/03 | - | - | DRY |
| K6-21 | 10/02/03 | - | - | DRY |
| K6-22 | 01/02/03 | 33.15 | 648.38 | |
| K6-22 | 02/04/03 | 33.38 | 648.15 | |
| K6-22 | 03/06/03 | 33.57 | 647.96 | |
| K6-22 | 04/09/03 | 33.69 | 647.84 | |
| K6-22 | 07/21/03 | 34.07 | 647.46 | |
| K6-22 | 10/02/03 | 34.21 | 647.32 | |
| K6-23 | 01/02/03 | 23.12 | 657.87 | |
| K6-23 | 02/04/03 | 23.28 | 657.71 | |
| K6-23 | 03/06/03 | 23.21 | 657.78 | |
| K6-23 | 04/09/03 | 22.32 | 658.67 | |
| K6-23 | 07/21/03 | - | - | NM/ME |
| K6-23 | 10/02/03 | 24.19 | 656.8 | |

**Table 2.3-8. Pit 6 Landfill OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| K6-24 | 01/02/03 | 27.04 | 659.89 | |
| K6-24 | 02/04/03 | 27.16 | 659.77 | |
| K6-24 | 03/06/03 | 26.33 | 660.6 | |
| K6-24 | 04/09/03 | 26.77 | 660.16 | |
| K6-24 | 07/21/03 | 35.1 | 651.83 | |
| K6-24 | 10/02/03 | 37.99 | 648.94 | |
| K6-25 | 01/02/03 | 19.78 | 659.97 | |
| K6-25 | 02/04/03 | 19.63 | 660.12 | |
| K6-25 | 03/06/03 | 19.65 | 660.1 | |
| K6-25 | 04/09/03 | 19.51 | 660.24 | |
| K6-25 | 07/21/03 | 19.86 | 659.89 | |
| K6-25 | 10/02/03 | 20.33 | 659.42 | |
| K6-26 | 01/02/03 | 27.41 | 659.92 | |
| K6-26 | 02/04/03 | 27.45 | 659.88 | |
| K6-26 | 03/06/03 | 26.71 | 660.62 | |
| K6-26 | 04/09/03 | 27.08 | 660.25 | |
| K6-26 | 07/21/03 | 34.95 | 652.38 | |
| K6-26 | 10/02/03 | 37.82 | 649.51 | |
| K6-27 | 01/02/03 | 28.02 | 659.17 | |
| K6-27 | 02/04/03 | 28.2 | 658.99 | |
| K6-27 | 03/06/03 | 27.51 | 659.68 | |
| K6-27 | 04/09/03 | 27.88 | 659.31 | |
| K6-27 | 07/21/03 | 36.13 | 651.06 | |
| K6-27 | 10/02/03 | 38.92 | 648.27 | |
| K6-32 | 01/02/03 | 68.35 | 661.11 | |
| K6-32 | 02/04/03 | 68.31 | 661.15 | |
| K6-32 | 03/06/03 | 68.11 | 661.35 | |
| K6-32 | 04/09/03 | 68.02 | 661.44 | |
| K6-32 | 07/21/03 | 75.45 | 654.01 | |
| K6-32 | 10/02/03 | - | - | DRY |
| K6-33 | 01/02/03 | 25.49 | 656.75 | |
| K6-33 | 02/04/03 | 24.37 | 657.87 | |
| K6-33 | 03/06/03 | 25.18 | 657.06 | |

**Table 2.3-8. Pit 6 Landfill OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| K6-33 | 04/09/03 | 24.86 | 657.38 | |
| K6-33 | 07/21/03 | 34.9 | 647.34 | |
| K6-33 | 10/02/03 | 36.02 | 646.22 | |
| K6-34 | 01/15/03 | - | - | NM/NO ACCESS |
| K6-34 | 02/04/03 | 45.47 | 657.81 | |
| K6-34 | 03/07/03 | 44.73 | 658.55 | |
| K6-34 | 04/09/03 | 45.61 | 657.67 | |
| K6-34 | 07/21/03 | 55.65 | 647.63 | |
| K6-34 | 10/02/03 | - | - | DRY |
| K6-35 | 01/02/03 | 32.67 | 661.33 | |
| K6-35 | 02/04/03 | 32.72 | 661.28 | |
| K6-35 | 03/06/03 | 32.52 | 661.48 | |
| K6-35 | 04/02/03 | 32.51 | 661.49 | |
| K6-35 | 07/21/03 | 40.5 | 653.5 | |
| K6-35 | 10/02/03 | 43.33 | 650.67 | |
| K6-36 | 01/02/03 | 30.04 | 659.96 | CB |
| K6-36 | 02/04/03 | 30.14 | 659.86 | CB |
| K6-36 | 03/06/03 | 29.83 | 660.17 | CB |
| K6-36 | 04/02/03 | 29.89 | 660.11 | CB |
| K6-36 | 07/21/03 | - | - | DRY/CB |
| K6-36 | 10/02/03 | - | - | DRY/CB |
| W-33C-01 | 01/02/03 | 11.22 | 641.29 | |
| W-33C-01 | 02/04/03 | 8.93 | 643.58 | |
| W-33C-01 | 03/06/03 | 9.28 | 643.23 | |
| W-33C-01 | 04/09/03 | 9.74 | 642.77 | |
| W-33C-01 | 07/21/03 | 12.15 | 640.36 | |
| W-33C-01 | 10/02/03 | 16.51 | 636 | |
| W-34-01 | 01/14/03 | 5.51 | 678.95 | |
| W-34-01 | 02/04/03 | 5.64 | 678.82 | |
| W-34-01 | 03/07/03 | 5.78 | 678.68 | |
| W-34-01 | 04/10/03 | 6.5 | 677.96 | |
| W-34-01 | 07/29/03 | 5.95 | 678.51 | |
| W-34-01 | 10/02/03 | 6.41 | 678.05 | |

**Table 2.3-8. Pit 6 Landfill OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-34-02 | 01/14/03 | 23.91 | 660.95 | |
| W-34-02 | 02/04/03 | 23.92 | 660.94 | |
| W-34-02 | 03/07/03 | 23.64 | 661.22 | |
| W-34-02 | 04/10/03 | 23.56 | 661.3 | |
| W-34-02 | 07/29/03 | 29.25 | 655.61 | |
| W-34-02 | 10/02/03 | 30.74 | 654.12 | |

**Table 2.4-1. Building 815-Source (B815-SRC) volumes of ground water extracted and discharged, January 1, 2003 through December 31, 2003.**

| Treatment facility | Month | Operational hours | Volume of ground water discharged (gal) | Average weekly volume of water treated (gal) |
|---|---|---|---|---|
| B815-SRC | January | 548 | 33,017 | 7603 |
| | February | 507 | 33,187 | 11,059 |
| | March | 752 | 49,003 | 9,801 |
| | April | 553 | 35,981 | 8,995 |
| | May | 670 | 43,050 | 10,763 |
| | June | 627 | 39,229 | 7,846 |
| | July | 169 | 9,967 | 4,984 |
| | August | 407 | 25,400 | 8,467 |
| | September | 504 | 29,107 | 9,702 |
| | October | 0 | 0 | 0 |
| | November | 461 | 27,083 | 6,771 |
| | December | 607 | 35,947 | 8,995 |
| Total | | 5,805 | 360,971 | |

**Table 2.4-2. Building 815-Proximal (B815-PRX) volumes of ground water extracted and discharged, January 1, 2003 through December 31, 2003.**

| Treatment facility | Month | Operational hours | Volume of ground water discharged (gal) | Average weekly volume of water treated (gal) |
|---|---|---|---|---|
| B815-PRX | January | 541 | 85,384 | 21,346 |
| | February | 375 | 61,936 | 20,642 |
| | March | 647 | 94,163 | 18,833 |
| | April | 363 | 58.800 | 19,600 |
| | May | 631 | 104,214 | 26,054 |
| | June | 822 | 127,779 | 25,556 |
| | July | 679 | 100,732 | 25,183 |
| | August | 679 | 97,129 | 24,282 |
| | September | 850 | 118,470 | 23,694 |
| | October | 701 | 95,577 | 23,894 |
| | November | 566 | 75,032 | 18,758 |
| | December | 870 | 114,464 | 22,893 |
| Total | | 7,724 | 1,074,939 | |

**Table 2.4-3. Building 815-Distal Site Boundary (B815-DSB) volumes of ground water extracted and discharged, January 1, 2003 through December 31, 2003.**

| Treatment facility | Month | Operational hours | Volume of ground water discharged (gal) | Average weekly volume of water treated (gal) |
|---|---|---|---|---|
| B815-DSB | January | 228 | 53,442 | 10,688 |
| | February | 208 | 54,963 | 13,741 |
| | March | 521 | 89,685 | 17,937 |
| | April | 296 | 71,860 | 17,965 |
| | May | 321 | 78,188 | 19,547 |
| | June | 355 | 87,539 | 17,508 |
| | July | 300 | 73,322 | 18,331 |
| | August | 367 | 53,504 | 13,376 |
| | September | 518 | 62,056 | 12,411 |
| | October | 361 | 43,747 | 10,937 |
| | November | 281 | 33,672 | 8,418 |
| | December | 227 | 27,158 | 5,432 |
| Total | | 3,983 | 729,136 | |

**Table 2.4-4. Building 817-Source (B817-SRC) volumes of ground water extracted and discharged, September 22, 2003 through December 31, 2003.**

| Treatment facility | Month | Operational hours | Volume of ground water discharged (gal) | Average weekly volume of water treated (gal) |
|---|---|---|---|---|
| B817-SRC | September | 11 | 231 | 77 |
| | October | 49 | 185 | 46 |
| | November | 121 | 474 | 119 |
| | December | 253 | 432 | 86 |
| Total | | 434 | 1,322 | |

**Table 2.4-5. High Explosive Process Area OU 2003 VOCs in ground water treatment system influent and effluent.**

| Location | Date | Method | TCE (µg/L) | PCE (µg/L) | Total 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) | Freon 11 (µg/L) | Freon 113 (µg/L) | Methylene chloride (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *B817-SRC* | | | | | | | | | | | | | | |
| STU10-E | 09/22/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU10-E | 10/01/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 1.6 |
| STU10-E | 10/07/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 1.9 |
| STU10-E | 10/27/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU10-E | 10/28/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU10-E | 10/29/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU10-E | 11/12/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU10-E | 12/09/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU10-I | 09/22/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU10-I | 10/01/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| *B815-SRC* | | | | | | | | | | | | | | |
| GTU02-I | 01/14/03 | E601 | 5.8 D | <2.5 D | <2.5 D | <2.5 D | <2.5 D | <2.5 D | <2.5 D | <2.5 D | <2.5 D | <2.5 DO | <2.5 D | <2.5 D |
| GTU02-I | 04/08/03 | E601 | 6 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | 0.65 | <0.5 | <0.5 | <0.5 | <0.5 |
| GTU02-I | 07/15/03 | E601 | 6.4 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | 0.8 | <0.5 | <0.5 | <0.5 | <0.5 |
| GTU02-I | 11/12/03 | E601 | 5.9 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | 0.83 | <0.5 | <0.5 | <0.5 | <0.5 |
| GTU02-I | 12/08/03 | E601 | 5.7 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | 0.9 | <0.5 | <0.5 | <0.5 | <0.5 |
| BTU02-E | 01/14/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 O | <0.5 | <0.5 |
| BTU02-E | 02/13/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| BTU02-E | 03/12/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| BTU02-E | 04/08/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| BTU02-E | 05/06/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| BTU02-E | 06/04/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| BTU02-E | 07/15/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| BTU02-E | 08/13/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| *B815-DSB* | | | | | | | | | | | | | | |
| STU04-I | 01/14/03 | E601 | 8.0 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 DO | <2.5 D | <2.5 D |
| STU04-I | 04/07/03 | E601 | 7.8 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU04-I | 07/09/03 | E601 | 8.2 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU04-I | 10/08/03 | E601 | 8.8 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU04-E | 01/14/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 O | <0.5 | <0.5 |
| STU04-E | 02/18/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU04-E | 03/12/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU04-E | 04/07/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU04-E | 05/06/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU04-E | 06/04/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU04-E | 07/09/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU04-E | 08/11/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU04-E | 09/03/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU04-E | 10/08/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU04-E | 11/11/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU04-E | 12/09/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

**Table 2.4-5. High Explosive Process Area OU 2003 VOCs in ground water treatment system influent and effluent. (Cont. Page 2 of 2)**

| Location | Date | Method | TCE (μg/L) | PCE (μg/L) | Total 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) | Freon 11 (μg/L) | Freon 113 (μg/L) | Methylene chloride (μg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *B815-PRX* | | | | | | | | | | | | | | |
| GTU06-I | 01/14/03 | E601 | 31 D | <1 D | <1 D | <1 D | <1 D | <1 D | <1 D | <1 D | <1 D | <1 DO | <1 D | <1 D |
| GTU06-I | 02/12/03 | E601 | 38 L | <0.5 L | <0.5 L | <0.5 L | 0.59 L | <0.5 L | <0.5 L | <0.5 L | <0.5 L | <0.5 L | <0.5 L | <0.5 L |
| GTU06-I | 03/12/03 | E601 | 31 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GTU06-I | 04/07/03 | E601 | 31 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GTU06-I | 07/15/03 | E601 | 31 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GTU06-I | 10/08/03 | E601 | 30 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GTU06-E | 01/14/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 O | <0.5 | <0.5 |
| GTU06-E | 02/12/03 | E601 | <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 |
| GTU06-E | 03/12/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GTU06-E | 04/07/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GTU06-E | 05/07/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GTU06-E | 06/04/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GTU06-E | 07/15/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GTU06-E | 08/13/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GTU06-E | 09/11/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GTU06-E | 10/08/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GTU06-E | 11/11/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GTU06-E | 12/08/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

**Table 2.4-6. High Explosive Process Area OU 2003 nitrate and perchlorate in ground water treatment system influent and effluent.**

| Location | Date | Nitrate (as $NO_3$) (mg/L) | Perchlorate ($\mu$g/L) |
|---|---|---|---|
| *B815-SRC* | | | |
| GTU02-I | 01/14/03 | 82 D | 18 |
| GTU02-I | 04/08/03 | 93 D | 17 |
| GTU02-I | 07/15/03 | 92 D | 19 |
| GTU02-I | 11/12/03 | 97 D | 22 |
| GTU02-I | 12/08/03 | 95 D | 20 |
| BTU02-E | 01/14/03 | 26 D | <4 |
| BTU02-E | 02/13/03 | - | <3 |
| BTU02-E | 03/12/03 | <0.44 | <3 |
| BTU02-E | 04/08/03 | <0.44 | <4 |
| BTU02-E | 05/06/03 | 14 | <4 |
| BTU02-E | 06/04/03 | <0.44 | <4 |
| BTU02-E | 07/15/03 | 1.9 | <4 |
| BTU02-E | 08/13/03 | <0.44 | <4 |
| *B815-PRX* | | | |
| GTU06-I | 01/14/03 | 84 D | 4.5 |
| GTU06-I | 02/12/03 | 78 D | 5.4 |
| GTU06-I | 03/12/03 | 82 | 7.7 |
| GTU06-I | 04/07/03 | 83 | 7.3 |
| GTU06-I | 07/15/03 | 80 | 7.4 |
| GTU06-I | 10/08/03 | 85 | 5.9 H |
| GTU06-E | 01/14/03 | 76 D | <4 |
| GTU06-E | 02/12/03 | 77 D | <4 |
| GTU06-E | 03/12/03 | 84 | <3 |
| GTU06-E | 04/07/03 | 88 | <4 |
| GTU06-E | 05/07/03 | 81 | <4 |
| GTU06-E | 06/04/03 | 75 | <4 |
| GTU06-E | 07/15/03 | 74 | <4 |
| GTU06-E | 08/13/03 | 39 | <4 |
| GTU06-E | 09/11/03 | 83 | <4 H |
| GTU06-E | 10/08/03 | 82 | <4 H |
| GTU06-E | 11/11/03 | 85 | <4 |
| GTU06-E | 12/08/03 | 84 | <4 |
| *B817-SRC* | | | |
| STU10-E | 09/22/03 | <2.2 D | <4 |
| STU10-E | 10/01/03 | <0.88 D | <4 H |
| STU10-E | 11/12/03 | <0.44 | <4 |
| STU10-E | 12/09/03 | 3.4 | <4 |
| STU10-I | 09/22/03 | 80 | 28 |
| STU10-I | 10/01/03 | 85 | 26 H |

**Table 2.4-6. High Explosive Process Area OU 2003 nitrate and perchlorate in ground water treatment system influent and effluent.**

| Location | Date | Nitrate (as $NO_3$) (mg/L) | Perchlorate ($\mu$g/L) |
|---|---|---|---|
| *B817-SRC (Cont.)* | | | |
| STU04-I | 01/14/03 | 0.64 | - |
| STU04-I | 04/07/03 | <0.44 | - |
| STU04-I | 07/09/03 | <0.44 | - |
| STU04-I | 10/08/03 | <0.44 | - |
| STU04-E | 01/14/03 | 0.86 | - |
| STU04-E | 02/18/03 | <0.44 | - |
| STU04-E | 03/12/03 | <0.44 | - |
| STU04-E | 04/07/03 | <0.44 | - |
| STU04-E | 05/06/03 | <0.44 | - |
| STU04-E | 06/04/03 | <0.44 | - |
| STU04-E | 07/09/03 | <0.44 | - |
| STU04-E | 08/11/03 | <0.44 | - |
| STU04-E | 09/03/03 | <0.44 | - |
| STU04-E | 10/08/03 | <0.44 | - |
| STU04-E | 11/11/03 | <0.44 | - |
| STU04-E | 12/09/03 | <0.44 | - |

**Table 2.4-7. HEPA OU treatment facility sampling plans.**

| Sample location | Sample identification | Parameter | Frequency |
|---|---|---|---|
| ***B815-SRC GTWS*** | | | |
| **Influent Port** | **GTU02-I** | **VOCs** | **Quarterly** |
| | | **RDX** | **Quarterly** |
| | | **Perchlorate** | **Quarterly** |
| | | **Nitrate** | **Quarterly** |
| | | **pH** | **Quarterly** |
| **Effluent Port (influent to misting system)** | **BTU02-E** | **VOCs** | **Monthly** |
| | | **RDX** | **Monthly** |
| | | **Perchlorate** | **Monthly** |
| | | **Nitrate** | **Monthly** |
| | | **pH** | **Monthly** |
| ***B815-PRXN GWTS*** | | | |
| **Influent Port** | **GTU06-I** | **VOCs** | **Quarterly** |
| | | **Nitrate** | **Quarterly** |
| | | **RDX** | **Quarterly** |
| | | **Perchlorate** | **Quarterly** |
| | | **pH** | **Quarterly** |
| **Effluent Port (influent to misting system)** | **GTU06-E** | **VOCs** | **Monthly** |
| | | **Perchlorate** | **Monthly** |
| | | **Nitrate** | **Monthly** |
| | | **pH** | **Monthly** |
| ***B815-DSB GWTS*** | | | |
| **Influent Port** | **STU04-I** | **VOCs** | **Quarterly** |
| | | **Nitrate** | **Quarterly** |
| | | **pH** | **Quarterly** |
| **Effluent Port** | **STU04-E** | **VOCs** | **Monthly** |
| | | **Nitrate** | **Monthly** |
| | | **pH** | **Monthly** |

**Table 2.4-8. High Explosive Process Area OU treatment facility sampling and analysis plans.**

| Sample location | Sample identification | Parameter | Frequency |
|---|---|---|---|
| *B815-SRC GWTS* | | | |
| Influent Port | GTU02-I | VOCs | Quarterly |
| | | RDX | Quarterly |
| | | Perchlorate | Quarterly |
| | | Nitrate | Quarterly |
| | | pH | Quarterly |
| Effluent Port (influent to misting system) | GTU02-E | VOCs | Monthly |
| | | RDX | Monthly |
| | | Perchlorate | Monthly |
| | | Nitrate | Monthly |
| | | pH | Monthly |
| *B815-PRX GWTS* | | | |
| Influent Port | GTU06-I | VOCs | Quarterly |
| | | Nitrate | Quarterly |
| | | RDX | Quarterly |
| | | Perchlorate | Quarterly |
| | | pH | Quarterly |
| Effluent Port (influent to misting system) | GTU06-E | VOCs | Monthly |
| | | Perchlorate | Monthly |
| | | RDX | Monthly |
| | | Nitrate | Monthly |
| | | pH | Monthly |
| *B815-DSB GWTS* | | | |
| Influent Port | STU04-I | VOCs | Quarterly |
| | | Nitrate | Quarterly |
| | | pH | Quarterly |
| Effluent Port | STU04-E | VOCs | Monthly |
| | | Nitrate | Monthly |
| | | pH | Monthly |

**Table 2.4-8. High Explosive Process Area OU treatment facility sampling and analysis plans.**

| Sample location | Sample identification | Parameter | Frequency |
|---|---|---|---|
| *B817-SRC GWTS* | | | |
| **Influent Port** | **STU10-I** | **VOCs** | **Quarterly** |
| | | **Perchlorate** | **Quarterly** |
| | | **Nitrate** | **Quarterly** |
| | | **pH** | **Quarterly** |
| **Effluent Port** | **STU10-E** | **VOCs** | **Monthly** |
| | | **Perchlorate** | **Monthly** |
| | | **Nitrate** | **Monthly** |
| | | **pH** | **Monthly** |

**Table 2.4-9. High Explosive Process Area 2003 ground water sampling and analysis plan.**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E300.0:NO3 | 1 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E300.0:NO3 | 1 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E300.0:NO3 | 1 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E300.0:NO3 | 2 | N | No samples collected 4/03 due to construction. |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E300.0:NO3 | 2 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E300.0:NO3 | 2 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E300.0:NO3 | 3 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E300.0:NO3 | 3 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E300.0:NO3 | 3 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E300.0:NO3 | 4 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E300.0:NO3 | 4 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E300.0:NO3 | 4 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E300.0:PERC | 1 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E300.0:PERC | 1 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E300.0:PERC | 1 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E300.0:PERC | 2 | N | No samples collected 4/03 due to construction. |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E300.0:PERC | 2 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E300.0:PERC | 2 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E300.0:PERC | 3 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E300.0:PERC | 3 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E300.0:PERC | 3 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E300.0:PERC | 4 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E300.0:PERC | 4 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E300.0:PERC | 4 | Y | |
| GALLO1 | WS | $Tnbs_2$ | | Q | ERD/WGMG | E502.2 | 1 | Y | |
| GALLO1 | WS | $Tnbs_2$ | | Q | ERD/WGMG | E502.2 | 2 | Y | |
| GALLO1 | WS | $Tnbs_2$ | | Q | ERD/WGMG | E502.2 | 3 | Y | |
| GALLO1 | WS | $Tnbs_2$ | | Q | ERD/WGMG | E502.2 | 4 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E601 | 1 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E601 | 1 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E601 | 1 | Y | |

**Table 2.4-9. High Explosive Process Area 2003 ground water sampling and analysis plan. (Cont. Page 2 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E601 | 2 | N | No samples collected 4/03 due to construction. |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E601 | 2 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E601 | 2 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E601 | 3 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E601 | 3 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E601 | 3 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E601 | 4 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E601 | 4 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E601 | 4 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E8330:R+H | 1 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E8330:R+H | 1 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E8330:R+H | 1 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E8330:R+H | 2 | N | No samples collected 4/03 due to construction. |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E8330:R+H | 2 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E8330:R+H | 2 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E8330:R+H | 3 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E8330:R+H | 3 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E8330:R+H | 3 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E8330:R+H | 4 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E8330:R+H | 4 | Y | |
| GALLO1 | WS | $Tnbs_2$ | M | M | CMP/WGMG | E8330:R+H | 4 | Y | |
| SPRING14 | SPR | $Tnbs_2$ | | B | DIS | DWMETALS | 2 | N | Sampling personnel shortage. |
| SPRING14 | SPR | $Tnbs_2$ | | B | DIS | DWMETALS | 4 | Y | |
| SPRING14 | SPR | $Tnbs_2$ | | B | DIS | E200.7:Zn | 2 | N | Sampling personnel shortage. |
| SPRING14 | SPR | $Tnbs_2$ | | B | DIS | E200.7:Zn | 4 | Y | |
| SPRING14 | SPR | $Tnbs_2$ | | B | DIS | E210.2 | 2 | N | Sampling personnel shortage. |
| SPRING14 | SPR | $Tnbs_2$ | | B | DIS | E210.2 | 4 | Y | |
| SPRING14 | SPR | $Tnbs_2$ | B | B | CMP | E300.0:NO3 | 2 | N | Sampling personnel shortage. |
| SPRING14 | SPR | $Tnbs_2$ | B | B | CMP | E300.0:NO3 | 4 | Y | |
| SPRING14 | SPR | $Tnbs_2$ | B | B | CMP | E300.0:PERC | 2 | N | Sampling personnel shortage. |
| SPRING14 | SPR | $Tnbs_2$ | B | B | CMP | E300.0:PERC | 4 | Y | |

**Table 2.4-9. High Explosive Process Area 2003 ground water sampling and analysis plan. (Cont. Page 3 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| SPRING14 | SPR | $Tnbs_2$ | B | B | CMP | E601 | 2 | N | Sampling personnel shortage. |
| SPRING14 | SPR | $Tnbs_2$ | B | B | CMP | E601 | 4 | Y | |
| SPRING14 | SPR | $Tnbs_2$ | B | B | CMP | E8330:R+H | 2 | N | Sampling personnel shortage. |
| SPRING14 | SPR | $Tnbs_2$ | B | B | CMP | E8330:R+H | 4 | Y | |
| SPRING14 | SPR | $Tnbs_2$ | | B | DIS | GENMIN | 2 | N | Sampling personnel shortage. |
| SPRING14 | SPR | $Tnbs_2$ | | B | DIS | GENMIN | 4 | Y | |
| SPRING5 | SPR | Tps | A | A | CMP | E300.0:NO3 | 4 | N | Dry. |
| SPRING5 | SPR | Tps | A | A | CMP | E300.0:PERC | 4 | N | Dry. |
| SPRING5 | SPR | Tps | S | S | CMP | E601 | 1 | N | Sampling personnel shortage. |
| SPRING5 | SPR | Tps | S | S | CMP | E601 | 4 | N | Dry. |
| SPRING5 | SPR | Tps | A | A | CMP | E8330:R+H | 4 | N | Dry. |
| W-35B-01 | GW | Qal | S | S | CMP | E300.0:NO3 | 1 | Y | |
| W-35B-01 | GW | Qal | S | S | CMP | E300.0:NO3 | 3 | Y | |
| W-35B-01 | GW | Qal | | S | DIS | E300.0:NO3 | 4 | Y | |
| W-35B-01 | GW | Qal | S | S | CMP | E300.0:PERC | 1 | Y | |
| W-35B-01 | GW | Qal | S | S | CMP | E300.0:PERC | 3 | Y | |
| W-35B-01 | GW | Qal | | S | DIS | E300.0:PERC | 4 | Y | |
| W-35B-01 | GW | Qal | Q | Q | CMP | E601 | 1 | Y | |
| W-35B-01 | GW | Qal | Q | Q | CMP | E601 | 2 | Y | |
| W-35B-01 | GW | Qal | Q | Q | CMP | E601 | 3 | Y | |
| W-35B-01 | GW | Qal | Q | Q | CMP | E601 | 4 | Y | |
| W-35B-01 | GW | Qal | S | S | CMP | E8330:R+H | 1 | Y | |
| W-35B-01 | GW | Qal | S | S | CMP | E8330:R+H | 3 | Y | |
| W-35B-01 | GW | Qal | | S | DIS | E8330:R+H | 4 | Y | |
| W-35B-02 | GW | $Tnbs_2$ | S | S | CMP | E300.0:NO3 | 1 | Y | |
| W-35B-02 | GW | $Tnbs_2$ | S | S | CMP | E300.0:NO3 | 3 | Y | |
| W-35B-02 | GW | $Tnbs_2$ | | S | DIS | E300.0:NO3 | 4 | Y | |
| W-35B-02 | GW | $Tnbs_2$ | S | S | CMP | E300.0:PERC | 1 | Y | |
| W-35B-02 | GW | $Tnbs_2$ | S | S | CMP | E300.0:PERC | 3 | Y | |
| W-35B-02 | GW | $Tnbs_2$ | | S | DIS | E300.0:PERC | 4 | Y | |
| W-35B-02 | GW | $Tnbs_2$ | Q | Q | CMP | E601 | 1 | Y | |

**Table 2.4-9. High Explosive Process Area 2003 ground water sampling and analysis plan. (Cont. Page 4 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-35B-02 | GW | $Tnbs_2$ | Q | Q | CMP | E601 | 2 | Y | |
| W-35B-02 | GW | $Tnbs_2$ | Q | Q | CMP | E601 | 3 | Y | |
| W-35B-02 | GW | $Tnbs_2$ | Q | Q | CMP | E601 | 4 | Y | |
| W-35B-02 | GW | $Tnbs_2$ | S | S | CMP | E8330:R+H | 1 | Y | |
| W-35B-02 | GW | $Tnbs_2$ | S | S | CMP | E8330:R+H | 3 | Y | |
| W-35B-02 | GW | $Tnbs_2$ | | S | DIS | E8330:R+H | 4 | Y | |
| W-35B-03 | GW | $Tnbs_2$ | S | S | CMP | E300.0:NO3 | 1 | Y | |
| W-35B-03 | GW | $Tnbs_2$ | S | S | CMP | E300.0:NO3 | 3 | Y | |
| W-35B-03 | GW | $Tnbs_2$ | *S* | S | CMP | E300.0:PERC | 1 | Y | |
| W-35B-03 | GW | $Tnbs_2$ | *S* | S | CMP | E300.0:PERC | 3 | Y | |
| W-35B-03 | GW | $Tnbs_2$ | Q | Q | CMP | E601 | 1 | Y | |
| W-35B-03 | GW | $Tnbs_2$ | Q | Q | CMP | E601 | 2 | N | Pump down. |
| W-35B-03 | GW | $Tnbs_2$ | Q | Q | CMP | E601 | 3 | Y | |
| W-35B-03 | GW | $Tnbs_2$ | Q | Q | CMP | E601 | 4 | Y | |
| W-35B-03 | GW | $Tnbs_2$ | S | S | CMP | E8330:R+H | 1 | Y | |
| W-35B-03 | GW | $Tnbs_2$ | S | S | CMP | E8330:R+H | 3 | Y | |
| W-35B-04 | GW | $Tnbs_2$ | S | S | CMP | E300.0:NO3 | 1 | Y | |
| W-35B-04 | GW | $Tnbs_2$ | S | S | CMP | E300.0:NO3 | 3 | Y | |
| W-35B-04 | GW | $Tnbs_2$ | S | S | CMP | E300.0:PERC | 1 | Y | |
| W-35B-04 | GW | $Tnbs_2$ | S | S | CMP | E300.0:PERC | 3 | Y | |
| W-35B-04 | GW | $Tnbs_2$ | Q | Q | CMP | E601 | 1 | Y | |
| W-35B-04 | GW | $Tnbs_2$ | Q | Q | CMP | E601 | 2 | Y | |
| W-35B-04 | GW | $Tnbs_2$ | Q | Q | CMP | E601 | 3 | Y | |
| W-35B-04 | GW | $Tnbs_2$ | Q | Q | CMP | E601 | 4 | Y | |
| W-35B-04 | GW | $Tnbs_2$ | S | S | CMP | E8330:R+H | 1 | Y | |
| W-35B-04 | GW | $Tnbs_2$ | S | S | CMP | E8330:R+H | 3 | Y | |
| W-35B-05 | GW | $Tnbs_2$ | S | S | CMP | E300.0:NO3 | 1 | Y | |
| W-35B-05 | GW | $Tnbs_2$ | S | S | CMP | E300.0:NO3 | 3 | Y | |
| W-35B-05 | GW | $Tnbs_2$ | S | S | CMP | E300.0:PERC | 1 | Y | |
| W-35B-05 | GW | $Tnbs_2$ | S | S | CMP | E300.0:PERC | 3 | Y | |
| W-35B-05 | GW | $Tnbs_2$ | Q | Q | CMP | E601 | 1 | Y | |

**Table 2.4-9. High Explosive Process Area 2003 ground water sampling and analysis plan. (Cont. Page 5 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-35B-05 | GW | $Tnbs_2$ | Q | Q | CMP | E601 | 2 | Y | |
| W-35B-05 | GW | $Tnbs_2$ | Q | Q | CMP | E601 | 3 | Y | |
| W-35B-05 | GW | $Tnbs_2$ | Q | Q | CMP | E601 | 4 | Y | |
| W-35B-05 | GW | $Tnbs_2$ | S | S | CMP | E8330:R+H | 1 | Y | |
| W-35B-05 | GW | $Tnbs_2$ | S | S | CMP | E8330:R+H | 3 | Y | |
| W-35C-01 | MWPT | $Tnsc_2$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-35C-01 | MWPT | $Tnsc_2$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-35C-01 | MWPT | $Tnsc_2$ | S | S | CMP | E601 | 1 | Y | |
| W-35C-01 | MWPT | $Tnsc_2$ | S | S | CMP | E601 | 3 | Y | |
| W-35C-01 | MWPT | $Tnsc_2$ | A | A | CMP | E8330:R+H | 1 | Y | |
| W-35C-02 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 1 | N | Sampling personnel shortage. |
| W-35C-02 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 4 | Y | |
| W-35C-02 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:PERC | 1 | N | Sampling personnel shortage. |
| W-35C-02 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:PERC | 4 | Y | |
| W-35C-02 | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 1 | N | Sampling personnel shortage. |
| W-35C-02 | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 3 | Y | |
| W-35C-02 | MWPT | $Tnbs_1$ | A | A | CMP | E8330:R+H | 1 | N | Sampling personnel shortage. |
| W-35C-02 | MWPT | $Tnbs_1$ | A | A | CMP | E8330:R+H | 4 | Y | |
| W-35C-04 | EW | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-35C-04 | EW | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-35C-04 | EW | $Tnbs_2$ | S | S | CMP | E601 | 1 | Y | |
| W-35C-04 | EW | $Tnbs_2$ | S | S | CMP | E601 | 3 | Y | |
| W-35C-04 | EW | $Tnbs_2$ | A | A | CMP | E8330:R+H | 1 | Y | |
| W-35C-05 | MWPT | Tps | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-35C-05 | MWPT | Tps | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-35C-05 | MWPT | Tps | S | S | CMP | E601 | 1 | Y | |
| W-35C-05 | MWPT | Tps | S | S | CMP | E601 | 3 | Y | |
| W-35C-05 | MWPT | Tps | A | A | CMP | E8330:R+H | 1 | Y | |
| W-35C-06 | MWPT | Qal | A | A | CMP | E300.0:NO3 | 1 | N | Sampling personnel shortage. |
| W-35C-06 | MWPT | Qal | A | A | CMP | E300.0:NO3 | 4 | Y | |
| W-35C-06 | MWPT | Qal | A | A | CMP | E300.0:PERC | 1 | N | Sampling personnel shortage. |

**Table 2.4-9. High Explosive Process Area 2003 ground water sampling and analysis plan. (Cont. Page 6 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-35C-06 | MWPT | Qal | A | A | CMP | E300.0:PERC | 4 | Y | |
| W-35C-06 | MWPT | Qal | S | S | CMP | E601 | 1 | N | Sampling personnel shortage. |
| W-35C-06 | MWPT | Qal | S | S | CMP | E601 | 3 | Y | |
| W-35C-06 | MWPT | Qal | A | A | CMP | E8330:R+H | 1 | N | Sampling personnel shortage. |
| W-35C-06 | MWPT | Qal | A | A | CMP | E8330:R+H | 4 | Y | |
| W-35C-07 | MWPT | $Tnsc_2$ | A | A | CMP | E300.0:NO3 | 1 | N | Sampling personnel shortage. |
| W-35C-07 | MWPT | $Tnsc_2$ | A | A | CMP | E300.0:NO3 | 4 | Y | |
| W-35C-07 | MWPT | $Tnsc_2$ | A | A | CMP | E300.0:PERC | 1 | N | Sampling personnel shortage. |
| W-35C-07 | MWPT | $Tnsc_2$ | A | A | CMP | E300.0:PERC | 4 | Y | |
| W-35C-07 | MWPT | $Tnsc_2$ | S | S | CMP | E601 | 1 | N | Sampling personnel shortage. |
| W-35C-07 | MWPT | $Tnsc_2$ | S | S | CMP | E601 | 3 | Y | |
| W-35C-07 | MWPT | $Tnsc_2$ | A | A | CMP | E8330:R+H | 1 | N | Sampling personnel shortage. |
| W-35C-07 | MWPT | $Tnsc_2$ | A | A | CMP | E8330:R+H | 4 | Y | |
| W-35C-08 | MWPT | $Tnsc_2$ | A | A | CMP | E300.0:NO3 | 1 | N | Sampling personnel shortage. |
| W-35C-08 | MWPT | $Tnsc_2$ | A | A | CMP | E300.0:NO3 | 4 | Y | |
| W-35C-08 | MWPT | $Tnsc_2$ | A | A | CMP | E300.0:PERC | 1 | N | Sampling personnel shortage. |
| W-35C-08 | MWPT | $Tnsc_2$ | A | A | CMP | E300.0:PERC | 4 | Y | |
| W-35C-08 | MWPT | $Tnsc_2$ | S | S | CMP | E601 | 1 | N | Sampling personnel shortage. |
| W-35C-08 | MWPT | $Tnsc_2$ | S | S | CMP | E601 | 3 | Y | |
| W-35C-08 | MWPT | $Tnsc_2$ | A | A | CMP | E8330:R+H | 1 | N | Sampling personnel shortage. |
| W-35C-08 | MWPT | $Tnsc_2$ | A | A | CMP | E8330:R+H | 4 | Y | |
| W-4A | MWPT | $Tnsc_2$ | A | A | CMP | E300.0:NO3 | 1 | N | Sampling personnel shortage. |
| W-4A | MWPT | $Tnsc_2$ | A | A | CMP | E300.0:NO3 | 4 | Y | |
| W-4A | MWPT | $Tnsc_2$ | A | A | CMP | E300.0:PERC | 1 | N | Sampling personnel shortage. |
| W-4A | MWPT | $Tnsc_2$ | A | A | CMP | E300.0:PERC | 4 | Y | |
| W-4A | MWPT | $Tnsc_2$ | S | S | CMP | E601 | 1 | N | Sampling personnel shortage. |
| W-4A | MWPT | $Tnsc_2$ | S | S | CMP | E601 | 3 | Y | |
| W-4A | MWPT | $Tnsc_2$ | A | A | CMP | E8330:R+H | 1 | N | Sampling personnel shortage. |
| W-4A | MWPT | $Tnsc_2$ | A | A | CMP | E8330:R+H | 4 | Y | |
| W-4AS | MWPT | Tps | A | A | CMP | E300.0:NO3 | 1 | N | Sampling personnel shortage. |
| W-4AS | MWPT | Tps | A | A | CMP | E300.0:NO3 | 4 | Y | |

**Table 2.4-9. High Explosive Process Area 2003 ground water sampling and analysis plan. (Cont. Page 7 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-4AS | MWPT | Tps | A | A | CMP | E300.0:PERC | 1 | N | Sampling personnel shortage. |
| W-4AS | MWPT | Tps | A | A | CMP | E300.0:PERC | 4 | Y | |
| W-4AS | MWPT | Tps | S | S | CMP | E601 | 1 | N | Sampling personnel shortage. |
| W-4AS | MWPT | Tps | S | S | CMP | E601 | 3 | Y | |
| W-4AS | MWPT | Tps | A | A | CMP | E8330:R+H | 1 | N | Sampling personnel shortage. |
| W-4AS | MWPT | Tps | A | A | CMP | E8330:R+H | 4 | Y | |
| W-4B | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-4B | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-4B | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 1 | Y | |
| W-4B | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 3 | Y | |
| W-4B | MWPT | $Tnbs_2$ | A | A | CMP | E8330:R+H | 1 | Y | |
| W-4C | MWPT | $Tnsc_1$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-4C | MWPT | $Tnsc_1$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-4C | MWPT | $Tnsc_1$ | S | S | CMP | E601 | 1 | Y | |
| W-4C | MWPT | $Tnsc_1$ | S | S | CMP | E601 | 3 | Y | |
| W-4C | MWPT | $Tnsc_1$ | A | A | CMP | E8330:R+H | 1 | Y | |
| W-6BD | MWPT | Tps | A | A | CMP | E300.0:NO3 | 1 | N | Sampling personnel shortage. |
| W-6BD | MWPT | Tps | A | A | CMP | E300.0:NO3 | 4 | Y | |
| W-6BD | MWPT | Tps | A | A | CMP | E300.0:PERC | 1 | N | Sampling personnel shortage. |
| W-6BD | MWPT | Tps | A | A | CMP | E300.0:PERC | 4 | Y | |
| W-6BD | MWPT | Tps | S | S | CMP | E601 | 1 | N | Sampling personnel shortage. |
| W-6BD | MWPT | Tps | S | S | CMP | E601 | 3 | Y | |
| W-6BD | MWPT | Tps | A | A | CMP | E8330:R+H | 1 | N | Sampling personnel shortage. |
| W-6BD | MWPT | Tps | A | A | CMP | E8330:R+H | 4 | Y | |
| W-6BS | MWPT | Tps | A | A | CMP | E300.0:NO3 | 1 | N | Sampling personnel shortage. |
| W-6BS | MWPT | Tps | A | A | CMP | E300.0:NO3 | 4 | Y | |
| W-6BS | MWPT | Tps | A | A | CMP | E300.0:PERC | 1 | N | Sampling personnel shortage. |
| W-6BS | MWPT | Tps | A | A | CMP | E300.0:PERC | 4 | Y | |
| W-6BS | MWPT | Tps | S | S | CMP | E601 | 1 | N | Sampling personnel shortage. |
| W-6BS | MWPT | Tps | S | S | CMP | E601 | 3 | Y | |
| W-6BS | MWPT | Tps | A | A | CMP | E8330:R+H | 1 | N | Sampling personnel shortage. |

**Table 2.4-9. High Explosive Process Area 2003 ground water sampling and analysis plan. (Cont. Page 8 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-6BS | MWPT | Tps | A | A | CMP | E8330:R+H | 4 | Y | |
| W-6CD | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 1 | N | Sampling personnel shortage. |
| W-6CD | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 4 | Y | |
| W-6CD | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 1 | N | Sampling personnel shortage. |
| W-6CD | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 4 | Y | |
| W-6CD | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 1 | N | Sampling personnel shortage. |
| W-6CD | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 3 | Y | |
| W-6CD | MWPT | $Tnbs_2$ | A | A | CMP | E8330:R+H | 1 | N | Sampling personnel shortage. |
| W-6CD | MWPT | $Tnbs_2$ | A | A | CMP | E8330:R+H | 4 | Y | |
| W-6CI | MWPT | $Tnsc_2$ | A | A | CMP | E300.0:NO3 | 1 | N | Sampling personnel shortage. |
| W-6CI | MWPT | $Tnsc_2$ | A | A | CMP | E300.0:NO3 | 4 | Y | |
| W-6CI | MWPT | $Tnsc_2$ | A | A | CMP | E300.0:PERC | 1 | N | Sampling personnel shortage. |
| W-6CI | MWPT | $Tnsc_2$ | A | A | CMP | E300.0:PERC | 4 | Y | |
| W-6CI | MWPT | $Tnsc_2$ | S | S | CMP | E601 | 1 | N | Sampling personnel shortage. |
| W-6CI | MWPT | $Tnsc_2$ | S | S | CMP | E601 | 3 | Y | |
| W-6CI | MWPT | $Tnsc_2$ | A | A | CMP | E8330:R+H | 1 | N | Sampling personnel shortage. |
| W-6CI | MWPT | $Tnsc_2$ | A | A | CMP | E8330:R+H | 4 | Y | |
| W-6CS | MWPT | Tps | A | A | CMP | E300.0:NO3 | 1 | N | Sampling personnel shortage. |
| W-6CS | MWPT | Tps | A | A | CMP | E300.0:NO3 | 4 | Y | |
| W-6CS | MWPT | Tps | A | A | CMP | E300.0:PERC | 1 | N | Sampling personnel shortage. |
| W-6CS | MWPT | Tps | A | A | CMP | E300.0:PERC | 4 | Y | |
| W-6CS | MWPT | Tps | S | S | CMP | E601 | 1 | N | Sampling personnel shortage. |
| W-6CS | MWPT | Tps | S | S | CMP | E601 | 3 | Y | |
| W-6CS | MWPT | Tps | A | A | CMP | E8330:R+H | 1 | N | Sampling personnel shortage. |
| W-6CS | MWPT | Tps | A | A | CMP | E8330:R+H | 4 | Y | |
| W-6EI | MWPT | $Tnsc_2$ | A | A | CMP | E300.0:NO3 | 1 | N | Sampling personnel shortage. |
| W-6EI | MWPT | $Tnsc_2$ | A | A | CMP | E300.0:NO3 | 4 | Y | |
| W-6EI | MWPT | $Tnsc_2$ | A | A | CMP | E300.0:PERC | 1 | N | Sampling personnel shortage. |
| W-6EI | MWPT | $Tnsc_2$ | A | A | CMP | E300.0:PERC | 4 | Y | |
| W-6EI | MWPT | $Tnsc_2$ | S | S | CMP | E601 | 1 | N | Sampling personnel shortage. |
| W-6EI | MWPT | $Tnsc_2$ | S | S | CMP | E601 | 3 | Y | |

**Table 2.4-9. High Explosive Process Area 2003 ground water sampling and analysis plan. (Cont. Page 9 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-6EI | MWPT | $Tnsc_2$ | A | A | CMP | E8330:R+H | 1 | N | Sampling personnel shortage. |
| W-6EI | MWPT | $Tnsc_2$ | A | A | CMP | E8330:R+H | 4 | Y | |
| W-6ER | EW | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 1 | N | Sampling personnel shortage. |
| W-6ER | EW | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 4 | N | Pump down. |
| W-6ER | EW | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 1 | N | Sampling personnel shortage. |
| W-6ER | EW | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 4 | N | Pump down. |
| W-6ER | EW | $Tnbs_2$ | S | S | CMP | E601 | 1 | N | Sampling personnel shortage. |
| W-6ER | EW | $Tnbs_2$ | S | S | CMP | E601 | 3 | Y | |
| W-6ER | EW | $Tnbs_2$ | A | A | CMP | E8330:R+H | 1 | N | Sampling personnel shortage. |
| W-6ER | EW | $Tnbs_2$ | A | A | CMP | E8330:R+H | 4 | N | Pump down. |
| W-6ER | EW | $Tnbs_2$ | | S | DIS | NUTRIENTS | 1 | N | Sampling personnel shortage. |
| W-6ER | EW | $Tnbs_2$ | | S | DIS | NUTRIENTS | 3 | Y | |
| W-6ES | MWPT | Qal | A | A | CMP | E300.0:NO3 | 1 | N | Sampling personnel shortage. |
| W-6ES | MWPT | Qal | A | A | CMP | E300.0:NO3 | 4 | Y | |
| W-6ES | MWPT | Qal | A | A | CMP | E300.0:PERC | 1 | N | Sampling personnel shortage. |
| W-6ES | MWPT | Qal | A | A | CMP | E300.0:PERC | 4 | Y | |
| W-6ES | MWPT | Qal | S | S | CMP | E601 | 1 | N | Sampling personnel shortage. |
| W-6ES | MWPT | Qal | S | S | CMP | E601 | 3 | Y | |
| W-6ES | MWPT | Qal | A | A | CMP | E8330:R+H | 1 | N | Sampling personnel shortage. |
| W-6ES | MWPT | Qal | A | A | CMP | E8330:R+H | 4 | Y | |
| W-6F | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 1 | N | Sampling personnel shortage. |
| W-6F | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 4 | Y | |
| W-6F | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 1 | N | Sampling personnel shortage. |
| W-6F | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 4 | Y | |
| W-6F | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 1 | N | Sampling personnel shortage. |
| W-6F | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 3 | Y | |
| W-6F | MWPT | $Tnbs_2$ | A | A | CMP | E8330:R+H | 1 | N | Sampling personnel shortage. |
| W-6F | MWPT | $Tnbs_2$ | A | A | CMP | E8330:R+H | 4 | Y | |
| W-6G | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 1 | N | Sampling personnel shortage. |
| W-6G | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 4 | Y | |
| W-6G | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 1 | N | Sampling personnel shortage. |

**Table 2.4-9. High Explosive Process Area 2003 ground water sampling and analysis plan. (Cont. Page 10 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-6G | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 4 | Y | |
| W-6G | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 1 | N | Sampling personnel shortage. |
| W-6G | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 3 | Y | |
| W-6G | MWPT | $Tnbs_2$ | A | A | CMP | E8330:R+H | 1 | N | Sampling personnel shortage. |
| W-6G | MWPT | $Tnbs_2$ | A | A | CMP | E8330:R+H | 4 | Y | |
| W-6H | GW | $Tnbs_2$ | S | S | CMP | E300.0:NO3 | 1 | Y | |
| W-6H | GW | $Tnbs_2$ | S | S | CMP | E300.0:NO3 | 3 | Y | |
| W-6H | GW | $Tnbs_2$ | S | S | CMP | E300.0:PERC | 1 | Y | |
| W-6H | GW | $Tnbs_2$ | S | S | CMP | E300.0:PERC | 3 | Y | |
| W-6H | GW | $Tnbs_2$ | Q | Q | CMP | E601 | 1 | Y | |
| W-6H | GW | $Tnbs_2$ | Q | Q | CMP | E601 | 2 | Y | |
| W-6H | GW | $Tnbs_2$ | Q | Q | CMP | E601 | 3 | Y | |
| W-6H | GW | $Tnbs_2$ | Q | Q | CMP | E601 | 4 | Y | |
| W-6H | GW | $Tnbs_2$ | S | S | CMP | E8330:R+H | 1 | Y | |
| W-6H | GW | $Tnbs_2$ | S | S | CMP | E8330:R+H | 3 | Y | |
| W-6H | GW | $Tnbs_2$ | | S | DIS | NUTRIENTS | 1 | Y | |
| W-6H | GW | $Tnbs_2$ | | S | DIS | NUTRIENTS | 3 | Y | |
| W-6I | MWPT | Tps | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-6I | MWPT | Tps | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-6I | MWPT | Tps | S | S | CMP | E601 | 1 | Y | |
| W-6I | MWPT | Tps | S | S | CMP | E601 | 3 | Y | |
| W-6I | MWPT | Tps | A | A | CMP | E8330:R+H | 1 | Y | |
| W-6J | GW | $Tnbs_2$ | S | S | CMP | E300.0:NO3 | 1 | Y | |
| W-6J | GW | $Tnbs_2$ | S | S | CMP | E300.0:NO3 | 3 | Y | |
| W-6J | GW | $Tnbs_2$ | S | S | CMP | E300.0:PERC | 1 | Y | |
| W-6J | GW | $Tnbs_2$ | S | S | CMP | E300.0:PERC | 3 | Y | |
| W-6J | GW | $Tnbs_2$ | Q | Q | CMP | E601 | 1 | Y | |
| W-6J | GW | $Tnbs_2$ | Q | Q | CMP | E601 | 2 | Y | |
| W-6J | GW | $Tnbs_2$ | Q | Q | CMP | E601 | 3 | Y | |
| W-6J | GW | $Tnbs_2$ | Q | Q | CMP | E601 | 4 | Y | |
| W-6J | GW | $Tnbs_2$ | S | S | CMP | E8330:R+H | 1 | Y | |

**Table 2.4-9. High Explosive Process Area 2003 ground water sampling and analysis plan. (Cont. Page 11 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-6J | GW | $Tnbs_2$ | S | S | CMP | E8330:R+H | 3 | Y | |
| W-6J | GW | $Tnbs_2$ | | S | DIS | NUTRIENTS | 1 | Y | |
| W-6J | GW | $Tnbs_2$ | | S | DIS | NUTRIENTS | 3 | Y | |
| W-6K | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-6K | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-6K | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 1 | Y | |
| W-6K | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 3 | Y | |
| W-6K | MWPT | $Tnbs_2$ | A | A | CMP | E8330:R+H | 1 | Y | |
| W-6L | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-6L | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-6L | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 1 | Y | |
| W-6L | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 3 | Y | |
| W-6L | MWPT | $Tnbs_2$ | A | A | CMP | E8330:R+H | 1 | Y | |
| W-806-06 | MWB | $Tnsc_1$ | B | | CMP | E300.0:NO3 | | | Borehole, never completed as a well. |
| W-806-06 | MWB | $Tnsc_1$ | B | | CMP | E300.0:PERC | | | Borehole, never completed as a well. |
| W-806-06 | MWB | $Tnsc_1$ | B | | CMP | E601 | | | Borehole, never completed as a well. |
| W-806-06 | MWB | $Tnsc_1$ | B | | CMP | E8330:R+H | | | Borehole, never completed as a well. |
| W-806-06A | MWB | $Tnsc_1$ | B | B | CMP | E300.0:NO3 | 2 | Y | Next sample required 2005. |
| W-806-06A | MWB | $Tnsc_1$ | B | B | CMP | E300.0:PERC | 2 | Y | Next sample required 2005. |
| W-806-06A | MWB | $Tnsc_1$ | B | B | CMP | E601 | 2 | Y | Next sample required 2005. |
| W-806-06A | MWB | $Tnsc_1$ | B | B | CMP | E8330:R+H | 2 | Y | Next sample required 2005. |
| W-806-07 | MWB | $Tnbs_2$ | B | B | CMP | E300.0:NO3 | 2 | N | Dry. |
| W-806-07 | MWB | $Tnbs_2$ | B | B | CMP | E300.0:NO3 | 4 | N | Dry. |
| W-806-07 | MWB | $Tnbs_2$ | B | B | CMP | E300.0:PERC | 2 | N | Dry. |
| W-806-07 | MWB | $Tnbs_2$ | B | B | CMP | E300.0:PERC | 4 | N | Dry. |
| W-806-07 | MWB | $Tnbs_2$ | B | B | CMP | E601 | 2 | N | Dry. |
| W-806-07 | MWB | $Tnbs_2$ | B | B | CMP | E601 | 4 | N | Dry. |
| W-806-07 | MWB | $Tnbs_2$ | B | B | CMP | E8330:R+H | 2 | N | Dry. |
| W-806-07 | MWB | $Tnbs_2$ | B | B | CMP | E8330:R+H | 4 | N | Dry. |
| W-808-01 | MWPT | Tps | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-808-01 | MWPT | Tps | A | A | CMP | E300.0:PERC | 1 | Y | |

**Table 2.4-9. High Explosive Process Area 2003 ground water sampling and analysis plan. (Cont. Page 12 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-808-01 | MWPT | Tps | S | S | CMP | E601 | 1 | Y | |
| W-808-01 | MWPT | Tps | S | S | CMP | E601 | 3 | Y | |
| W-808-01 | MWPT | Tps | A | A | CMP | E8330:R+H | 1 | Y | |
| W-808-02 | MWPT | $Tnsc_2$ | A | A | CMP | E300.0:NO3 | 1 | N | Dry. |
| W-808-02 | MWPT | $Tnsc_2$ | A | A | CMP | E300.0:NO3 | 4 | N | Dry. |
| W-808-02 | MWPT | $Tnsc_2$ | A | A | CMP | E300.0:PERC | 1 | N | Dry. |
| W-808-02 | MWPT | $Tnsc_2$ | A | A | CMP | E300.0:PERC | 4 | N | Dry. |
| W-808-02 | MWPT | $Tnsc_2$ | S | S | CMP | E601 | 1 | N | Dry. |
| W-808-02 | MWPT | $Tnsc_2$ | S | S | CMP | E601 | 3 | N | Dry. |
| W-808-02 | MWPT | $Tnsc_2$ | A | A | CMP | E8330:R+H | 1 | N | Dry. |
| W-808-02 | MWPT | $Tnsc_2$ | A | A | CMP | E8330:R+H | 4 | N | Dry. |
| W-808-03 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-808-03 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-808-03 | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 1 | Y | |
| W-808-03 | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 3 | Y | |
| W-808-03 | MWPT | $Tnbs_1$ | A | A | CMP | E8330:R+H | 1 | Y | |
| W-809-01 | MWPT | Tps | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-809-01 | MWPT | Tps | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-809-01 | MWPT | Tps | S | S | CMP | E601 | 1 | Y | |
| W-809-01 | MWPT | Tps | S | S | CMP | E601 | 3 | Y | |
| W-809-01 | MWPT | Tps | A | A | CMP | E8330:R+H | 1 | Y | |
| W-809-02 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-809-02 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-809-02 | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 1 | Y | |
| W-809-02 | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 3 | Y | |
| W-809-02 | MWPT | $Tnbs_2$ | A | A | CMP | E8330:R+H | 1 | Y | |
| W-809-03 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-809-03 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-809-03 | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 1 | Y | |
| W-809-03 | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 3 | Y | |
| W-809-03 | MWPT | $Tnbs_2$ | A | A | CMP | E8330:R+H | 1 | Y | |

**Table 2.4-9. High Explosive Process Area 2003 ground water sampling and analysis plan. (Cont. Page 13 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-809-04 | MWPT | Tps | A | A | CMP | E300.0:NO3 | 4 | N | Dry. |
| W-809-04 | MWPT | Tps | A | A | CMP | E300.0:PERC | 4 | N | Dry. |
| W-809-04 | MWPT | Tps | S | S | CMP | E601 | 2 | | |
| W-809-04 | MWPT | Tps | S | S | CMP | E601 | 4 | N | Dry. |
| W-809-04 | MWPT | Tps | A | A | CMP | E8330:R+H | 4 | N | Dry. |
| W-810-01 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-810-01 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-810-01 | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 1 | Y | |
| W-810-01 | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 3 | Y | |
| W-810-01 | MWPT | $Tnbs_1$ | A | A | CMP | E8330:R+H | 1 | Y | |
| W-814-01 | MWPT | Tps | A | A | CMP | E300.0:NO3 | 1 | N | Sampling personnel shortage. |
| W-814-01 | MWPT | Tps | A | A | CMP | E300.0:NO3 | 4 | Y | |
| W-814-01 | MWPT | Tps | A | A | CMP | E300.0:PERC | 1 | N | Sampling personnel shortage. |
| W-814-01 | MWPT | Tps | A | A | CMP | E300.0:PERC | 4 | Y | |
| W-814-01 | MWPT | Tps | S | S | CMP | E601 | 1 | N | Sampling personnel shortage. |
| W-814-01 | MWPT | Tps | S | S | CMP | E601 | 3 | Y | |
| W-814-01 | MWPT | Tps | A | A | CMP | E8330:R+H | 1 | N | Sampling personnel shortage. |
| W-814-01 | MWPT | Tps | A | A | CMP | E8330:R+H | 4 | Y | |
| W-814-02 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 1 | N | Sampling personnel shortage. |
| W-814-02 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 4 | Y | |
| W-814-02 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 1 | N | Sampling personnel shortage. |
| W-814-02 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 4 | Y | |
| W-814-02 | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 1 | N | Sampling personnel shortage. |
| W-814-02 | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 3 | Y | |
| W-814-02 | MWPT | $Tnbs_2$ | A | A | CMP | E8330:R+H | 1 | N | Sampling personnel shortage. |
| W-814-02 | MWPT | $Tnbs_2$ | A | A | CMP | E8330:R+H | 4 | Y | |
| W-814-03 | MWPT | Tps | A | A | CMP | E300.0:NO3 | 1 | N | Sampling personnel shortage. |
| W-814-03 | MWPT | Tps | A | A | CMP | E300.0:NO3 | 4 | N | Dry. |
| W-814-03 | MWPT | Tps | A | A | CMP | E300.0:PERC | 1 | N | Sampling personnel shortage. |
| W-814-03 | MWPT | Tps | A | A | CMP | E300.0:PERC | 4 | N | Dry. |
| W-814-03 | MWPT | Tps | S | S | CMP | E601 | 1 | N | Sampling personnel shortage. |

**Table 2.4-9. High Explosive Process Area 2003 ground water sampling and analysis plan. (Cont. Page 14 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-814-03 | MWPT | Tps | S | S | CMP | E601 | 3 | N | Dry. |
| W-814-03 | MWPT | Tps | A | A | CMP | E8330:R+H | 1 | N | Sampling personnel shortage. |
| W-814-03 | MWPT | Tps | A | A | CMP | E8330:R+H | 4 | N | Dry. |
| W-814-04 | MWPT | $Tnsc_1$ | A | A | CMP | E300.0:NO3 | 1 | N | Sampling personnel shortage. |
| W-814-04 | MWPT | $Tnsc_1$ | A | A | CMP | E300.0:NO3 | 4 | Y | |
| W-814-04 | MWPT | $Tnsc_1$ | A | A | CMP | E300.0:PERC | 1 | N | Sampling personnel shortage. |
| W-814-04 | MWPT | $Tnsc_1$ | A | A | CMP | E300.0:PERC | 4 | Y | |
| W-814-04 | MWPT | $Tnsc_1$ | S | S | CMP | E601 | 1 | N | Sampling personnel shortage. |
| W-814-04 | MWPT | $Tnsc_1$ | S | S | CMP | E601 | 3 | Y | |
| W-814-04 | MWPT | $Tnsc_1$ | A | A | CMP | E8330:R+H | 1 | N | Sampling personnel shortage. |
| W-814-04 | MWPT | $Tnsc_1$ | A | A | CMP | E8330:R+H | 4 | Y | |
| W-815-01 | MWPT | Tps | A | A | CMP | E300.0:NO3 | 2 | N | Dry. |
| W-815-01 | MWPT | Tps | A | A | CMP | E300.0:NO3 | 4 | N | Dry. |
| W-815-01 | MWPT | Tps | A | A | CMP | E300.0:PERC | 2 | N | Dry. |
| W-815-01 | MWPT | Tps | A | A | CMP | E300.0:PERC | 4 | N | Dry. |
| W-815-01 | MWPT | Tps | S | S | CMP | E601 | 2 | N | Dry. |
| W-815-01 | MWPT | Tps | S | S | CMP | E601 | 2 | N | Dry. |
| W-815-01 | MWPT | Tps | A | A | CMP | E8330:R+H | 2 | N | Dry. |
| W-815-01 | MWPT | Tps | A | A | CMP | E8330:R+H | 4 | N | Dry. |
| W-815-02 | EW | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 1 | Y | Sampled as influent to B815-SRC. |
| W-815-02 | EW | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 4 | Y | |
| W-815-02 | EW | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 1 | Y | Sampled as influent to B815-SRC. |
| W-815-02 | EW | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 4 | Y | |
| W-815-02 | EW | $Tnbs_2$ | S | S | CMP | E601 | 1 | Y | Sampled as influent to B815-SRC. |
| W-815-02 | EW | $Tnbs_2$ | S | S | CMP | E601 | 3 | Y | |
| W-815-02 | EW | $Tnbs_2$ | A | A | CMP | E8330:R+H | 1 | Y | Sampled as influent to B815-SRC. |
| W-815-02 | EW | $Tnbs_2$ | A | A | CMP | E8330:R+H | 4 | Y | |
| W-815-03 | MWPT | Tps | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-815-03 | MWPT | Tps | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-815-03 | MWPT | Tps | S | S | CMP | E601 | 1 | Y | |
| W-815-03 | MWPT | Tps | S | S | CMP | E601 | 4 | N | Dry. |

**Table 2.4-9. High Explosive Process Area 2003 ground water sampling and analysis plan. (Cont. Page 15 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-815-03 | MWPT | Tps | A | A | CMP | E8330:R+H | 1 | Y | |
| W-815-04 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-815-04 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-815-04 | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 1 | Y | |
| W-815-04 | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 3 | Y | |
| W-815-04 | MWPT | $Tnbs_2$ | A | A | CMP | E8330:R+H | 1 | Y | |
| W-815-05 | MWPT | Tps | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-815-05 | MWPT | Tps | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-815-05 | MWPT | Tps | S | S | CMP | E601 | 1 | Y | |
| W-815-05 | MWPT | Tps | S | S | CMP | E601 | 3 | Y | |
| W-815-05 | MWPT | Tps | A | A | CMP | E8330:R+H | 1 | Y | |
| W-815-06 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-815-06 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-815-06 | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 1 | Y | |
| W-815-06 | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 3 | Y | |
| W-815-06 | MWPT | $Tnbs_2$ | A | A | CMP | E8330:R+H | 1 | Y | |
| W-815-07 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 1 | N | Sampling personnel shortage. |
| W-815-07 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 4 | Y | |
| W-815-07 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 1 | N | Sampling personnel shortage. |
| W-815-07 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 4 | Y | |
| W-815-07 | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 1 | N | Sampling personnel shortage. |
| W-815-07 | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 3 | Y | |
| W-815-07 | MWPT | $Tnbs_2$ | A | A | CMP | E8330:R+H | 1 | N | Sampling personnel shortage. |
| W-815-07 | MWPT | $Tnbs_2$ | A | A | CMP | E8330:R+H | 4 | Y | |
| W-815-08 | GW | $Tnbs_1$ | S | S | CMP | E300.0:NO3 | 1 | Y | |
| W-815-08 | GW | $Tnbs_1$ | S | S | CMP | E300.0:NO3 | 3 | Y | |
| W-815-08 | GW | $Tnbs_1$ | | S | DIS | E300.0:NO3 | 4 | Y | |
| W-815-08 | GW | $Tnbs_1$ | S | S | CMP | E300.0:PERC | 1 | Y | |
| W-815-08 | GW | $Tnbs_1$ | S | S | CMP | E300.0:PERC | 3 | Y | |
| W-815-08 | GW | $Tnbs_1$ | | S | DIS | E300.0:PERC | 4 | Y | |
| W-815-08 | GW | $Tnbs_1$ | Q | Q | CMP | E601 | 1 | Y | |

**Table 2.4-9. High Explosive Process Area 2003 ground water sampling and analysis plan. (Cont. Page 16 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-815-08 | GW | $Tnbs_1$ | Q | Q | CMP | E601 | 2 | Y | |
| W-815-08 | GW | $Tnbs_1$ | Q | Q | CMP | E601 | 3 | Y | |
| W-815-08 | GW | $Tnbs_1$ | Q | Q | CMP | E601 | 4 | Y | |
| W-815-08 | GW | $Tnbs_1$ | S | S | CMP | E8330:R+H | 1 | Y | |
| W-815-08 | GW | $Tnbs_1$ | S | S | CMP | E8330:R+H | 3 | Y | |
| W-815-08 | GW | $Tnbs_1$ | | S | DIS | E8330:R+H | 4 | Y | |
| W-815-1928 | MWPT | Tps | | A | DIS | DWMETAL | 4 | N | Insufficient water. |
| W-815-1928 | MWPT | Tps | A | A | CMP | E300.0:NO3 | 4 | N | Insufficient water. |
| W-815-1928 | MWPT | Tps | A | A | CMP | E300.0:PERC | 4 | N | Insufficient water. |
| W-815-1928 | MWPT | Tps | S | S | CMP | E624 | 2 | N | Insufficient water. |
| W-815-1928 | MWPT | Tps | S | S | CMP | E624 | 4 | N | Insufficient water. |
| W-815-1928 | MWPT | Tps | | A | DIS | E625 | 4 | N | Insufficient water. |
| W-815-1928 | MWPT | Tps | A | A | CMP | E8330:R+H | 4 | N | Insufficient water. |
| W-815-1928 | MWPT | Tps | | A | DIS | E900 | 4 | N | Insufficient water. |
| W-815-1928 | MWPT | Tps | | A | DIS | E906 | 4 | N | Insufficient water. |
| W-815-1928 | MWPT | Tps | | A | DIS | GENMIN | 4 | N | Insufficient water. |
| W-815-1928 | MWPT | Tps | | A | DIS | MS:UISO | 4 | N | Insufficient water. |
| W-817-01 | EW | $Tnbs_2$ | S | S | CMP/WGMG | E300.0:NO3 | 1 | Y | |
| W-817-01 | EW | $Tnbs_2$ | S | S | CMP/WGMG | E300.0:NO3 | 3 | N | Not on sampling plan. |
| W-817-01 | EW | $Tnbs_2$ | S | S | CMP/WGMG | E300.0:PERC | 1 | Y | |
| W-817-01 | EW | $Tnbs_2$ | S | S | CMP/WGMG | E300.0:PERC | 3 | N | |
| W-817-01 | EW | $Tnbs_2$ | Q | Q | CMP/WGMG | E601 | 1 | Y | |
| W-817-01 | EW | $Tnbs_2$ | Q | Q | CMP/WGMG | E601 | 2 | Y | |
| W-817-01 | EW | $Tnbs_2$ | Q | Q | CMP/WGMG | E601 | 3 | N | Not on sampling plan. |
| W-817-01 | EW | $Tnbs_2$ | Q | Q | CMP/WGMG | E601 | 4 | N | Not on sampling plan. |
| W-817-01 | EW | $Tnbs_2$ | S | S | CMP/WGMG | W8330:LOW | 3 | Y | |
| W-817-01 | EW | $Tnbs_2$ | S | S | CMP/WGMG | W8330:LOW | 4 | Y | |
| W-817-02[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | E300.0:NO3 | 1 | Y | |
| W-817-02[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | E300.0:NO3 | 2 | Y | |
| W-817-02[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | E300.0:NO3 | 3 | N | WDRMIN analyzed. |
| W-817-02[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | E300.0:NO3 | 4 | N | WDRMIN analyzed. |

**Table 2.4-9. High Explosive Process Area 2003 ground water sampling and analysis plan. (Cont. Page 17 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-817-02[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | E300.0:PERC | 1 | Y | |
| W-817-02[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | E300.0:PERC | 2 | Y | |
| W-817-02[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | E300.0:PERC | 3 | N | Not on sampling plan. |
| W-817-02[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | E300.0:PERC | 4 | N | Not on sampling plan. |
| W-817-02[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | W8330:LOW | 1 | Y | |
| W-817-02[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | W8330:LOW | 2 | Y | |
| W-817-02[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | W8330:LOW | 3 | Y | |
| W-817-02[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | W8330:LOW | 4 | Y | |
| W-817-02[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | WDRE624 | 1 | Y | |
| W-817-02[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | WDRE624 | 2 | Y | |
| W-817-02[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | WDRE624 | 3 | Y | |
| W-817-02[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | WDRE624 | 4 | Y | |
| W-817-02[a] | DMW | $Tnbs_2$ | | Q | CMP/WGMG | WDRMIN | 1 | Y | NO3 |
| W-817-02[a] | DMW | $Tnbs_2$ | | Q | CMP/WGMG | WDRMIN | 2 | Y | NO3 |
| W-817-02[a] | DMW | $Tnbs_2$ | | Q | CMP/WGMG | WDRMIN | 3 | Y | NO3 |
| W-817-02[a] | DMW | $Tnbs_2$ | | Q | CMP/WGMG | WDRMIN | 4 | Y | NO3 |
| W-817-03[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | E300.0:NO3 | 1 | Y | |
| W-817-03[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | E300.0:NO3 | 2 | Y | |
| W-817-03[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | E300.0:NO3 | 3 | N | WDRMIN analyzed. |
| W-817-03[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | E300.0:NO3 | 4 | N | WDRMIN analyzed. |
| W-817-03[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | E300.0:PERC | 1 | Y | |
| W-817-03[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | E300.0:PERC | 2 | Y | |
| W-817-03[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | E300.0:PERC | 3 | N | Not on sampling plan. |
| W-817-03[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | E300.0:PERC | 4 | N | Not on sampling plan. |
| W-817-03[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | W8330:LOW | 1 | Y | |
| W-817-03[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | W8330:LOW | 2 | Y | |
| W-817-03[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | W8330:LOW | 3 | Y | |
| W-817-03[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | W8330:LOW | 4 | Y | |
| W-817-03[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | WDRE624 | 1 | Y | |
| W-817-03[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | WDRE624 | 2 | Y | |
| W-817-03[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | WDRE624 | 3 | Y | |

**Table 2.4-9. High Explosive Process Area 2003 ground water sampling and analysis plan. (Cont. Page 18 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-817-03[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | WDRE624 | 4 | Y | |
| W-817-03[a] | DMW | $Tnbs_2$ | | Q | CMP/WGMG | WDRMIN | 1 | Y | NO3 |
| W-817-03[a] | DMW | $Tnbs_2$ | | Q | CMP/WGMG | WDRMIN | 2 | Y | NO3 |
| W-817-03[a] | DMW | $Tnbs_2$ | | Q | CMP/WGMG | WDRMIN | 3 | Y | NO3 |
| W-817-03[a] | DMW | $Tnbs_2$ | | Q | CMP/WGMG | WDRMIN | 4 | Y | NO3 |
| W-817-03A | MWPT | Tps | A | A | CMP | E300.0:NO3 | 1 | N | Dry. |
| W-817-03A | MWPT | Tps | A | A | CMP | E300.0:NO3 | 4 | N | Dry. |
| W-817-03A | MWPT | Tps | A | A | CMP | E300.0:PERC | 1 | N | Dry. |
| W-817-03A | MWPT | Tps | A | A | CMP | E300.0:PERC | 4 | N | Dry. |
| W-817-03A | MWPT | Tps | S | S | CMP | E601 | 1 | N | Dry. |
| W-817-03A | MWPT | Tps | S | S | CMP | E601 | 3 | N | Dry. |
| W-817-03A | MWPT | Tps | A | A | CMP | E8330:R+H | 1 | N | Dry. |
| W-817-03A | MWPT | Tps | A | A | CMP | E8330:R+H | 4 | N | Dry. |
| W-817-04[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | E300.0:NO3 | 1 | Y | |
| W-817-04[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | E300.0:NO3 | 2 | Y | |
| W-817-04[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | E300.0:NO3 | 3 | N | WDRMIN analyzed. |
| W-817-04[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | E300.0:NO3 | 4 | N | WDRMIN analyzed. |
| W-817-04[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | E300.0:PERC | 1 | Y | |
| W-817-04[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | E300.0:PERC | 2 | Y | |
| W-817-04[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | E300.0:PERC | 3 | N | Not on sampling plan. |
| W-817-04[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | E300.0:PERC | 4 | N | Not on sampling plan. |
| W-817-04[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | W8330:LOW | 1 | Y | |
| W-817-04[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | W8330:LOW | 2 | Y | |
| W-817-04[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | W8330:LOW | 3 | Y | |
| W-817-04[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | W8330:LOW | 4 | Y | |
| W-817-04[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | WDRE624 | 1 | Y | |
| W-817-04[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | WDRE624 | 2 | Y | |
| W-817-04[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | WDRE624 | 3 | Y | |
| W-817-04[a] | DMW | $Tnbs_2$ | Q | Q | CMP/WGMG | WDRE624 | 4 | Y | |
| W-817-04[a] | DMW | $Tnbs_2$ | | Q | CMP/WGMG | WDRMIN | 1 | Y | NO3 |
| W-817-04[a] | DMW | $Tnbs_2$ | | Q | CMP/WGMG | WDRMIN | 2 | Y | NO3 |

**Table 2.4-9. High Explosive Process Area 2003 ground water sampling and analysis plan. (Cont. Page 19 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-817-04[a] | DMW | $Tnbs_2$ | | Q | CMP/WGMG | WDRMIN | 3 | Y | NO3 |
| W-817-04[a] | DMW | $Tnbs_2$ | | Q | CMP/WGMG | WDRMIN | 4 | Y | NO3 |
| W-817-05 | MWPT | $Tnsc_1$ | A | A | CMP | E300.0:NO3 | 1 | N | No access-washed out road. |
| W-817-05 | MWPT | $Tnsc_1$ | A | A | CMP | E300.0:NO3 | 4 | Y | |
| W-817-05 | MWPT | $Tnsc_1$ | A | A | CMP | E300.0:PERC | 1 | N | No access-washed out road. |
| W-817-05 | MWPT | $Tnsc_1$ | A | A | CMP | E300.0:PERC | 4 | Y | |
| W-817-05 | MWPT | $Tnsc_1$ | S | S | CMP | E601 | 1 | N | No access-washed out road. |
| W-817-05 | MWPT | $Tnsc_1$ | S | S | CMP | E601 | 3 | N | Pump down. |
| W-817-05 | MWPT | $Tnsc_1$ | A | A | CMP | E8330:R+H | 1 | N | No access-washed out road. |
| W-817-05 | MWPT | $Tnsc_1$ | A | A | CMP | E8330:R+H | 4 | Y | |
| W-817-06A | Inj Well | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 1 | Y | B817-SRC injection well |
| W-817-06A | Inj Well | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 1 | Y | B817-SRC injection well |
| W-817-06A | Inj Well | $Tnbs_2$ | S | S | CMP | E601 | 1 | Y | B817-SRC injection well |
| W-817-06A | Inj Well | $Tnbs_2$ | S | S | CMP | E601 | 3 | Y | B817-SRC injection well |
| W-817-06A | Inj Well | $Tnbs_2$ | A | A | CMP | E8330:R+H | 1 | Y | B817-SRC injection well |
| W-817-07 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-817-07 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-817-07 | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 1 | Y | |
| W-817-07 | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 3 | Y | |
| W-817-07 | MWPT | $Tnbs_2$ | A | A | CMP | E8330:R+H | 1 | Y | |
| W-818-01 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-818-01 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-818-01 | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 1 | Y | |
| W-818-01 | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 3 | Y | |
| W-818-01 | MWPT | $Tnbs_2$ | A | A | CMP | E8330:R+H | 1 | Y | |
| W-818-03 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 1 | N | Sampling personnel shortage. |
| W-818-03 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 4 | Y | |
| W-818-03 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 1 | N | Sampling personnel shortage. |
| W-818-03 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 4 | Y | |
| W-818-03 | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 1 | N | Sampling personnel shortage. |
| W-818-03 | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 3 | Y | |

**Table 2.4-9. High Explosive Process Area 2003 ground water sampling and analysis plan. (Cont. Page 20 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-818-03 | MWPT | $Tnbs_2$ | A | A | CMP | E8330:R+H | 1 | N | Sampling personnel shortage. |
| W-818-03 | MWPT | $Tnbs_2$ | A | A | CMP | E8330:R+H | 4 | Y | |
| W-818-04 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-818-04 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-818-04 | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 1 | Y | |
| W-818-04 | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 3 | Y | |
| W-818-04 | MWPT | $Tnbs_2$ | A | A | CMP | E8330:R+H | 1 | Y | |
| W-818-06 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-818-06 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-818-06 | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 1 | Y | |
| W-818-06 | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 3 | Y | |
| W-818-06 | MWPT | $Tnbs_2$ | A | A | CMP | E8330:R+H | 1 | Y | |
| W-818-07 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-818-07 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-818-07 | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 1 | Y | |
| W-818-07 | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 3 | Y | |
| W-818-07 | MWPT | $Tnbs_2$ | A | A | CMP | E8330:R+H | 1 | Y | |
| W-818-08 | EW | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-818-08 | EW | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-818-08 | EW | $Tnbs_2$ | S | S | CMP | E601 | 1 | Y | |
| W-818-08 | EW | $Tnbs_2$ | S | S | CMP | E601 | 3 | Y | |
| W-818-08 | EW | $Tnbs_2$ | A | A | CMP | E8330:R+H | 1 | Y | |
| W-818-09 | EW | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-818-09 | EW | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-818-09 | EW | $Tnbs_2$ | S | S | CMP | E601 | 1 | Y | |
| W-818-09 | EW | $Tnbs_2$ | S | S | CMP | E601 | 3 | Y | |
| W-818-09 | EW | $Tnbs_2$ | A | A | CMP | E8330:R+H | 1 | Y | |
| W-818-11 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-818-11 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-818-11 | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 1 | Y | |
| W-818-11 | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 3 | Y | |

**Table 2.4-9. High Explosive Process Area 2003 ground water sampling and analysis plan. (Cont. Page 21 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-818-11 | MWPT | $Tnbs_2$ | A | A | CMP | E8330:RDX | 1 | Y | |
| W-819-02 | MWPT | $Tnsc_1$ | A | A | CMP | E300.0:NO3 | 1 | N | Sampling personnel shortage. |
| W-819-02 | MWPT | $Tnsc_1$ | A | A | CMP | E300.0:NO3 | 4 | Y | |
| W-819-02 | MWPT | $Tnsc_1$ | A | A | CMP | E300.0:PERC | 1 | N | Sampling personnel shortage. |
| W-819-02 | MWPT | $Tnsc_1$ | A | A | CMP | E300.0:PERC | 4 | Y | |
| W-819-02 | MWPT | $Tnsc_1$ | S | S | CMP | E601 | 1 | N | Sampling personnel shortage. |
| W-819-02 | MWPT | $Tnsc_1$ | S | S | CMP | E601 | 3 | Y | |
| W-819-02 | MWPT | $Tnsc_1$ | A | A | CMP | E8330:R+H | 1 | N | Sampling personnel shortage. |
| W-819-02 | MWPT | $Tnsc_1$ | A | A | CMP | E8330:R+H | 4 | Y | |
| W-823-01 | MWPT | Tps | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-823-01 | MWPT | Tps | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-823-01 | MWPT | Tps | S | S | CMP | E601 | 1 | Y | |
| W-823-01 | MWPT | Tps | S | S | CMP | E601 | 3 | Y | |
| W-823-01 | MWPT | Tps | A | A | CMP | E8330:R+H | 1 | Y | |
| W-823-02 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-823-02 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-823-02 | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 1 | Y | |
| W-823-02 | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 3 | Y | |
| W-823-02 | MWPT | $Tnbs_2$ | A | A | CMP | E8330:R+H | 1 | Y | |
| W-823-03 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-823-03 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-823-03 | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 1 | Y | |
| W-823-03 | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 3 | Y | |
| W-823-03 | MWPT | $Tnbs_2$ | A | A | CMP | E8330:R+H | 1 | Y | |
| W-823-13 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 1 | N | Sampling personnel shortage. |
| W-823-13 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 4 | Y | |
| W-823-13 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 1 | N | Sampling personnel shortage. |
| W-823-13 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 4 | Y | |
| W-823-13 | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 1 | N | Sampling personnel shortage. |
| W-823-13 | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 3 | Y | |
| W-823-13 | MWPT | $Tnbs_2$ | A | A | CMP | E8330:R+H | 1 | N | Sampling personnel shortage. |

**Table 2.4-9. High Explosive Process Area 2003 ground water sampling and analysis plan. (Cont. Page 22 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-823-13 | MWPT | $Tnbs_2$ | A | A | CMP | E8330:R+H | 4 | Y | |
| W-827-01 | MWB | $Tnbs_2$ | B | B | CMP | E300.0:NO3 | 2 | N | Dry. |
| W-827-01 | MWB | $Tnbs_2$ | B | B | CMP | E300.0:NO3 | 4 | N | Dry. |
| W-827-01 | MWB | $Tnbs_2$ | B | B | CMP | E300.0:PERC | 2 | N | Dry. |
| W-827-01 | MWB | $Tnbs_2$ | B | B | CMP | E300.0:PERC | 4 | N | Dry. |
| W-827-01 | MWB | $Tnbs_2$ | B | B | CMP | E601 | 2 | N | Dry. |
| W-827-01 | MWB | $Tnbs_2$ | B | B | CMP | E601 | 4 | N | Dry. |
| W-827-01 | MWB | $Tnbs_2$ | B | B | CMP | E8330:R+H | 2 | N | Dry. |
| W-827-01 | MWB | $Tnbs_2$ | B | B | CMP | E8330:R+H | 4 | N | Dry. |
| W-827-02 | MWB | $Tnsc_1$ | B | B | CMP | E300.0:NO3 | 2 | Y | Next sample required 2005. |
| W-827-02 | MWB | $Tnsc_1$ | B | B | CMP | E300.0:PERC | 2 | Y | Next sample required 2005. |
| W-827-02 | MWB | $Tnsc_1$ | B | B | CMP | E601 | 2 | Y | Next sample required 2005. |
| W-827-02 | MWB | $Tnsc_1$ | B | B | CMP | E8330:R+H | 2 | Y | Next sample required 2005. |
| W-827-03 | MWB | $Tnsc_1$ | B | B | CMP | E300.0:NO3 | 2 | Y | Next sample required 2005. |
| W-827-03 | MWB | $Tnsc_1$ | B | B | CMP | E300.0:PERC | 2 | Y | Next sample required 2005. |
| W-827-03 | MWB | $Tnsc_1$ | B | B | CMP | E601 | 2 | Y | Next sample required 2005. |
| W-827-03 | MWB | $Tnsc_1$ | B | B | CMP | E8330:R+H | 2 | Y | Next sample required 2005. |
| W-827-03 | MWB | $Tnsc_1$ | | B | DIS | NUTRIENTS | 2 | Y | Next sample required 2005. |
| W-827-04[b] | DMW | $Tnbs_1$ | A | A | CMP/WGMG | E300.0:NO3 | 2 | N | Dry. |
| W-827-04[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 1 | N | Dry. |
| W-827-04[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 2 | N | Dry. |
| W-827-04[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 4 | N | Dry. |
| W-827-04[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E624 | 1 | N | Dry. |
| W-827-04[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E624 | 2 | N | Dry. |
| W-827-04[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E624 | 3 | N | Not on sampling plan. |
| W-827-04[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E624 | 4 | N | Dry. |
| W-827-04[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E8330:R+H | 1 | N | Dry. |
| W-827-04[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E8330:R+H | 2 | N | Dry. |
| W-827-04[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E8330:R+H | 3 | N | Not on sampling plan. |
| W-827-04[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E8330:R+H | 4 | N | Dry. |
| W-827-05 | MWPT | $Tnbs_1$ | S | S | CMP | E300.0:NO3 | 2 | Y | No longer HEBP DMW; Replaced by W-829- |

**Table 2.4-9. High Explosive Process Area 2003 ground water sampling and analysis plan. (Cont. Page 23 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | 1938 |
| W-827-05 | MWPT | $Tnbs_1$ | S | S | CMP | E300.0:NO3 | 4 | Y | No longer HEBP DMW; Replaced by W-829-1938 |
| W-827-05 | MWPT | $Tnbs_1$ | S | S | CMP | E300.0:PERC | 2 | Y | No longer HEBP DMW; Replaced by W-829-1938 |
| W-827-05 | MWPT | $Tnbs_1$ | S | S | CMP | E300.0:PERC | 4 | Y | No longer HEBP DMW; Replaced by W-829-1938 |
| W-827-05 | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 2 | Y | No longer HEBP DMW; Replaced by W-829-1938 |
| W-827-05 | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 4 | Y | No longer HEBP DMW; Replaced by W-829-1938 |
| W-827-05 | MWPT | $Tnbs_1$ | S | S | CMP | E8330:R+H | 2 | Y | No longer HEBP DMW; Replaced by W-829-1938 |
| W-827-05 | MWPT | $Tnbs_1$ | S | S | CMP | E8330:R+H | 4 | Y | No longer HEBP DMW; Replaced by W-829-1938 |
| W-829-06[b] | DMW | $Tnsc_1$ | A | A | CMP/WGMG | E300.0:NO3 | 2 | Y | |
| W-829-06[b] | DMW | $Tnsc_1$ | | S | DIS | E300.0:NO3 | 3 | Y | |
| W-829-06[b] | DMW | $Tnsc_1$ | A | A | CMP/WGMG | E300.0:PERC | 2 | Y | |
| W-829-06[b] | DMW | $Tnsc_1$ | | S | DIS | E300.0:PERC | 3 | Y | |
| W-829-06[b] | DMW | $Tnsc_1$ | Q | Q | CMP/WGMG | E601 | 3 | Y | |
| W-829-06[b] | DMW | $Tnsc_1$ | Q | Q | CMP/WGMG | E601 | 4 | Y | |
| W-829-06[b] | DMW | $Tnsc_1$ | Q | Q | CMP/WGMG | E624 | 1 | Y | |
| W-829-06[b] | DMW | $Tnsc_1$ | Q | Q | CMP/WGMG | E624 | 2 | Y | |
| W-829-06[b] | DMW | $Tnsc_1$ | Q | Q | CMP/WGMG | E8330:R+H | 1 | Y | |
| W-829-06[b] | DMW | $Tnsc_1$ | Q | Q | CMP/WGMG | E8330:R+H | 2 | Y | |
| W-829-06[b] | DMW | $Tnsc_1$ | Q | Q | CMP/WGMG | E8330:R+H | 3 | Y | |
| W-829-06[b] | DMW | $Tnsc_1$ | Q | Q | CMP/WGMG | E8330:R+H | 4 | Y | |
| W-829-08[b] | DMW | $Tnsc_1$ | A | A | CMP/WGMG | E300.0:NO3 | 2 | Y | |
| W-829-08[b] | DMW | $Tnsc_1$ | | S | DIS | E300.0:NO3 | 3 | Y | |
| W-829-08[b] | DMW | $Tnsc_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 1 | Y | |
| W-829-08[b] | DMW | $Tnsc_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 2 | Y | |
| W-829-08[b] | DMW | $Tnsc_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 3 | Y | |
| W-829-08[b] | DMW | $Tnsc_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 4 | Y | |

**Table 2.4-9. High Explosive Process Area 2003 ground water sampling and analysis plan. (Cont. Page 24 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-829-08[b] | DMW | $Tnsc_1$ | Q | Q | CMP/WGMG | E601 | 3 | Y | |
| W-829-08[b] | DMW | $Tnsc_1$ | Q | Q | CMP/WGMG | E601 | 4 | Y | |
| W-829-08[b] | DMW | $Tnsc_1$ | Q | Q | CMP/WGMG | E624 | 1 | Y | |
| W-829-08[b] | DMW | $Tnsc_1$ | Q | Q | CMP/WGMG | E624 | 2 | Y | |
| W-829-08[b] | DMW | $Tnsc_1$ | Q | Q | CMP/WGMG | E8330:R+H | 1 | Y | |
| W-829-08[b] | DMW | $Tnsc_1$ | Q | Q | CMP/WGMG | E8330:R+H | 2 | Y | |
| W-829-08[b] | DMW | $Tnsc_1$ | Q | Q | CMP/WGMG | E8330:R+H | 3 | Y | |
| W-829-08[b] | DMW | $Tnsc_1$ | Q | Q | CMP/WGMG | E8330:R+H | 4 | Y | |
| W-829-15[b] | DMW | $Tnbs_1$ | | Q | CMP/WGMG | ANIONS | 1 | Y | NO3 |
| W-829-15[b] | DMW | $Tnbs_1$ | | Q | CMP/WGMG | ANIONS | 2 | Y | NO3 |
| W-829-15[b] | DMW | $Tnbs_1$ | | Q | CMP/WGMG | ANIONS | 3 | Y | NO3 |
| W-829-15[b] | DMW | $Tnbs_1$ | | Q | CMP/WGMG | ANIONS | 4 | Y | NO3 |
| W-829-15[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 2 | N | ANIONS analyzed. |
| W-829-15[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 4 | Y | |
| W-829-15[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 1 | Y | |
| W-829-15[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 2 | Y | |
| W-829-15[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 3 | Y | |
| W-829-15[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 4 | Y | |
| W-829-15[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E624 | 1 | Y | |
| W-829-15[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E624 | 2 | Y | |
| W-829-15[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E624 | 3 | Y | |
| W-829-15[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E624 | 4 | Y | |
| W-829-15[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E8330:R+H | 1 | Y | |
| W-829-15[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E8330:R+H | 2 | Y | |
| W-829-15[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E8330:R+H | 3 | Y | |
| W-829-15[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E8330:R+H | 4 | Y | |
| W-829-1938[b] | DMW | $Tnbs_1$ | | Q | CMP/WGMG | ANIONS | 4 | N | New HEBP WGMG DMW; Replaces W-827-05. No samples collected-no pump. |
| W-829-1938[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 4 | N | New HEBP WGMG DMW; Replaces W-827-05. No samples collected-no pump. |
| W-829-1938[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 4 | N | New HEBP WGMG DMW; Replaces W-827-05. No samples collected-no pump. |

**Table 2.4-9. High Explosive Process Area 2003 ground water sampling and analysis plan. (Cont. Page 25 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-829-1938[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E624 | 4 | N | New HEBP WGMG DMW; Replaces W-827-05. No samples collected-no pump. |
| W-829-1938[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E8330:R+H | 4 | N | New HEBP WGMG DMW; Replaces W-827-05. No samples collected-no pump. |
| W-829-1940 | MWPT | $Tnsc_1$ | | A | DIS | DWMETAL | 4 | N | Dry. |
| W-829-1940 | MWPT | $Tnsc_1$ | A | A | CMP | E300.0:NO3 | 4 | N | Dry. |
| W-829-1940 | MWPT | $Tnsc_1$ | A | A | CMP | E300.0:PERC | 4 | N | Dry. |
| W-829-1940 | MWPT | $Tnsc_1$ | S | S | CMP | E624 | 2 | N | Not drilled until 4th Q. |
| W-829-1940 | MWPT | $Tnsc_1$ | S | S | CMP | E624 | 4 | N | Dry. |
| W-829-1940 | MWPT | $Tnsc_1$ | | A | DIS | E625 | 4 | N | Dry. |
| W-829-1940 | MWPT | $Tnsc_1$ | A | A | CMP | E8330:R+H | 4 | N | Dry. |
| W-829-1940 | MWPT | $Tnsc_1$ | | A | DIS | E900 | 4 | N | Dry. |
| W-829-1940 | MWPT | $Tnsc_1$ | | A | DIS | E906 | 4 | N | Dry. |
| W-829-1940 | MWPT | $Tnsc_1$ | | A | DIS | GENMIN | 4 | N | Dry. |
| W-829-1940 | MWPT | $Tnsc_1$ | | A | DIS | MS:UISO | 4 | N | Dry. |
| W-829-22[b] | DMW | $Tnbs_1$ | | Q | CMP/WGMG | ANIONS | 1 | Y | NO3 |
| W-829-22[b] | DMW | $Tnbs_1$ | | Q | CMP/WGMG | ANIONS | 2 | Y | NO3 |
| W-829-22[b] | DMW | $Tnbs_1$ | | Q | CMP/WGMG | ANIONS | 3 | Y | NO3 |
| W-829-22[b] | DMW | $Tnbs_1$ | | Q | CMP/WGMG | ANIONS | 4 | Y | NO3 |
| W-829-22[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 2 | N | ANIONS analyzed. |
| W-829-22[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 4 | Y | |
| W-829-22[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 1 | Y | |
| W-829-22[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 2 | Y | |
| W-829-22[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 3 | Y | |
| W-829-22[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:PERC | 4 | Y | |
| W-829-22[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E624 | 1 | Y | |
| W-829-22[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E624 | 2 | Y | |
| W-829-22[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E624 | 3 | Y | |
| W-829-22[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E624 | 4 | Y | |
| W-829-22[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E8330:R+H | 1 | Y | |
| W-829-22[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E8330:R+H | 2 | Y | |
| W-829-22[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E8330:R+H | 3 | Y | |

**Table 2.4-9. High Explosive Process Area 2003 ground water sampling and analysis plan. (Cont. Page 26 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-829-22[b] | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E8330:R+H | 4 | Y | |
| W-880-01 | GW | $Tnbs_2$ | S | S | CMP | E300.0:NO3 | 1 | Y | |
| W-880-01 | GW | $Tnbs_2$ | S | S | CMP | E300.0:NO3 | 3 | Y | |
| W-880-01 | GW | $Tnbs_2$ | S | S | CMP | E300.0:PERC | 1 | Y | |
| W-880-01 | GW | $Tnbs_2$ | S | S | CMP | E300.0:PERC | 3 | Y | |
| W-880-01 | GW | $Tnbs_2$ | Q | Q | CMP | E601 | 1 | Y | |
| W-880-01 | GW | $Tnbs_2$ | Q | Q | CMP | E601 | 2 | Y | |
| W-880-01 | GW | $Tnbs_2$ | Q | Q | CMP | E601 | 3 | Y | |
| W-880-01 | GW | $Tnbs_2$ | Q | Q | CMP | E601 | 4 | Y | |
| W-880-01 | GW | $Tnbs_2$ | S | S | CMP | E8330:R+H | 1 | Y | |
| W-880-01 | GW | $Tnbs_2$ | S | S | CMP | E8330:R+H | 3 | Y | |
| W-880-02 | GW | Qal | S | S | CMP | E300.0:NO3 | 1 | Y | |
| W-880-02 | GW | Qal | S | S | CMP | E300.0:NO3 | 3 | Y | |
| W-880-02 | GW | Qal | S | S | CMP | E300.0:PERC | 1 | Y | |
| W-880-02 | GW | Qal | S | S | CMP | E300.0:PERC | 3 | Y | |
| W-880-02 | GW | Qal | Q | Q | CMP | E601 | 1 | Y | |
| W-880-02 | GW | Qal | Q | Q | CMP | E601 | 2 | Y | |
| W-880-02 | GW | Qal | Q | Q | CMP | E601 | 3 | Y | |
| W-880-02 | GW | Qal | Q | Q | CMP | E601 | 4 | Y | |
| W-880-02 | GW | Qal | S | S | CMP | E8330:R+H | 1 | Y | |
| W-880-02 | GW | Qal | S | S | CMP | E8330:R+H | 3 | Y | |
| W-880-03 | GW | $Tnsc_1$ | S | S | CMP | E300.0:NO3 | 1 | Y | |
| W-880-03 | GW | $Tnsc_1$ | S | S | CMP | E300.0:NO3 | 3 | Y | |
| W-880-03 | GW | $Tnsc_1$ | S | S | CMP | E300.0:PERC | 1 | Y | |
| W-880-03 | GW | $Tnsc_1$ | S | S | CMP | E300.0:PERC | 3 | Y | |
| W-880-03 | GW | $Tnsc_1$ | Q | Q | CMP | E601 | 1 | Y | |
| W-880-03 | GW | $Tnsc_1$ | Q | Q | CMP | E601 | 2 | Y | |
| W-880-03 | GW | $Tnsc_1$ | Q | Q | CMP | E601 | 3 | Y | |
| W-880-03 | GW | $Tnsc_1$ | Q | Q | CMP | E601 | 4 | Y | |
| W-880-03 | GW | $Tnsc_1$ | S | S | CMP | E8330:R+H | 1 | Y | |
| W-880-03 | GW | $Tnsc_1$ | S | S | CMP | E8330:R+H | 3 | Y | |

**Table 2.4-9. High Explosive Process Area 2003 ground water sampling and analysis plan. (Cont. Page 27 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:NO3 | 1 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:NO3 | 1 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:NO3 | 1 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:NO3 | 2 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:NO3 | 2 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:NO3 | 2 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:NO3 | 3 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:NO3 | 3 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:NO3 | 3 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:NO3 | 4 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:NO3 | 4 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:NO3 | 4 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:PERC | 1 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:PERC | 1 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:PERC | 1 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:PERC | 2 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:PERC | 2 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:PERC | 2 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:PERC | 3 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:PERC | 3 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:PERC | 3 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:PERC | 4 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:PERC | 4 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:PERC | 4 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E601 | 1 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E601 | 1 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E601 | 1 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E601 | 2 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E601 | 2 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E601 | 2 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E601 | 3 | Y | |

**Table 2.4-9. High Explosive Process Area 2003 ground water sampling and analysis plan. (Cont. Page 28 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E601 | 3 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E601 | 3 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E601 | 4 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E601 | 4 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E601 | 4 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E8330:R+H | 1 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E8330:R+H | 1 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E8330:R+H | 1 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E8330:R+H | 2 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E8330:R+H | 2 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E8330:R+H | 2 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E8330:R+H | 3 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E8330:R+H | 3 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E8330:R+H | 3 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E8330:R+H | 4 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E8330:R+H | 4 | Y | |
| WELL 18 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E8330:R+H | 4 | Y | |
| WELL 18 | WS | $Tnbs_1$ | | Q | ERD/WGMG | E900 | 1 | Y | |
| WELL 18 | WS | $Tnbs_1$ | | Q | ERD/WGMG | E900 | 2 | Y | |
| WELL 18 | WS | $Tnbs_1$ | | Q | ERD/WGMG | E900 | 3 | Y | |
| WELL 18 | WS | $Tnbs_1$ | | Q | ERD/WGMG | E900 | 4 | Y | |
| WELL 18 | WS | $Tnbs_1$ | | Q | ERD/WGMG | E906 | 1 | Y | |
| WELL 18 | WS | $Tnbs_1$ | | Q | ERD/WGMG | E906 | 2 | Y | |
| WELL 18 | WS | $Tnbs_1$ | | Q | ERD/WGMG | E906 | 3 | Y | |
| WELL 18 | WS | $Tnbs_1$ | | Q | ERD/WGMG | E906 | 4 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:NO3 | 1 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:NO3 | 1 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:NO3 | 1 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:NO3 | 2 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:NO3 | 2 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:NO3 | 2 | Y | |

**Table 2.4-9. High Explosive Process Area 2003 ground water sampling and analysis plan. (Cont. Page 29 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:NO3 | 3 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:NO3 | 3 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:NO3 | 3 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:NO3 | 4 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:NO3 | 4 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:NO3 | 4 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:PERC | 1 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:PERC | 1 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:PERC | 1 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:PERC | 2 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:PERC | 2 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:PERC | 2 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:PERC | 3 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:PERC | 3 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:PERC | 3 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:PERC | 4 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:PERC | 4 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E300.0:PERC | 4 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E502.2 | 1 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E502.2 | 1 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E502.2 | 1 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E502.2 | 2 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E502.2 | 2 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E502.2 | 2 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E502.2 | 3 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E502.2 | 3 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E502.2 | 3 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E502.2 | 4 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E502.2 | 4 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E502.2 | 4 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E601 | 4 | Y | |

**Table 2.4-9. High Explosive Process Area 2003 ground water sampling and analysis plan. (Cont. Page 30 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E601 | 4 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E601 | 4 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E8330:R+H | 1 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E8330:R+H | 1 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E8330:R+H | 1 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E8330:R+H | 2 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E8330:R+H | 2 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E8330:R+H | 2 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E8330:R+H | 3 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E8330:R+H | 3 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E8330:R+H | 3 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E8330:R+H | 4 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E8330:R+H | 4 | Y | |
| WELL 20 | WS | $Tnbs_1$ | M | M | CMP/WGMG | E8330:R+H | 4 | Y | |

Notes and footnotes appear on following page.

**Table 2.4-9. High Explosive Process Area 2003 ground water sampling and analysis plan. (Cont. Page 31 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|

**Notes:**

**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).**

**CGSA CMP/DIS = Sampling more frequently then required.**

**CGSA CMP/WGMG = Well shared with the Operations and Regulatory Affairs Division, Water Guidance and Monitoring Group and may be sampled at a greater frequency and for additional analytes then required by the CMP. Non-CMP analytes are reported separately by ORAD.**

**CGSA CMP = Central GSA groundwater sampling and analysis plan specified in the GSA RD**

**CMP DMW = CMP detection monitor well.**

**CMP/DIS = Sampling required analyte more frequently then required.**

**CMP/WGMG = Well shared with the Operations and Regulatory Affairs Division, Water Guidance and Monitoring Group and may be sampled at a greater frequency and for additional analytes then required by the CMP. Non-CMP analytes are reported separately by ORAD.**

**CMP = Compliance Monitoring.**

**DIS = Discretionary sampling of non-required analyte.**

**DMW = Detection monitor well (non-CMP).**

**ERD/WGMG = Nn-CMP analyte sampled from a well shared by ERD and WGMG.**

**EW = Extraction well.**

**GW = Guard well.**

**MWB = Monitor well used for background.**

**MWPT = Monitor well used for plume tracking.**

**SPR = Spring.**

**WS = Water supply well.**

[a] **Analytes and sampling frequency are specified in the Waste Discharge Requirements for the High Explosives Surface Water Impoundments.**

[b] **Analytes and sampling frequency are specified in the RCRA Closure Plan for the High Explosives Open Burn Facility.**

**Table 2.4-10. High Explosive Process Area OU 2003 VOCs in ground and surface water.**

| Location | Date | Method | TCE (µg/L) | PCE (µg/L) | Total 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) | Freon 11 (µg/L) | Freon 113 (µg/L) | Methylene chloride (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W-815-1928 | 03/04/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-829-1938 | 09/18/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-829-1940 | 10/01/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GALLO1 | 01/30/03 | E502.2 | 0.44 | <0.2 | <0.4 | <0.21 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.21 | <0.23 | <0.24 |
| GALLO1 | 01/30/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GALLO1 | 02/27/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GALLO1 | 03/12/03 | E601 | 0.7 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GALLO1 | 03/12/03 DUP | E502.2 | 0.50 L | <0.2 | <0.5 | <0.2 | <0.5 | <0.2 | <0.2 | <0.5 L | <0.2 | <0.2 | <0.5 | <0.2 |
| GALLO1 | 05/15/03 | E502.2 | 0.45 | <0.2 | <0.4 | <0.21 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.21 | <0.23 | <0.24 |
| GALLO1 | 05/15/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GALLO1 | 06/11/03 | E502.2 | 0.43 | <0.2 | <0.4 | <0.21 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.21 | <0.23 | <0.24 |
| GALLO1 | 06/11/03 | E601 | 0.54 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GALLO1 | 06/11/03 DUP | E502.2 | 0.5 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.5 | <0.2 | <0.2 | <0.5 | <0.2 |
| GALLO1 | 07/16/03 | E502.2 | 0.26 | <0.2 | <0.4 | <0.21 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.21 | <0.23 | <0.24 |
| GALLO1 | 07/16/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GALLO1 | 08/13/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GALLO1 | 09/11/03 | E601 | 0.55 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GALLO1 | 10/22/03 | E502.2 | 0.44 | <0.2 | <0.4 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.25 | <0.2 |
| GALLO1 | 10/22/03 | E601 | 0.52 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GALLO1 | 10/22/03 DUP | E502.2 | 0.45 | <0.2 | <0.4 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.25 | <0.2 |
| GALLO1 | 11/17/03 | E601 | 0.64 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GALLO1 | 12/10/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-35B-01 | 03/14/03 | E601 | <0.5 | <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 | 04/23/03 | E601 | <0.5 | <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 | 07/15/03 | E601 | <0.5 | <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 | 10/10/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 0.6 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-35B-02 | 03/14/03 | E601 | <0.5 | <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 | 04/23/03 | 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 |
| W-35B-02 | 07/15/03 | E601 | <0.5 | <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 | 10/10/03 | E601 | <0.5 | <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 | 03/14/03 | E601 | <0.5 | <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 | 07/15/03 | E601 | <0.5 | <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 | 10/10/03 | E601 | <0.5 | <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 | 03/14/03 | E601 | <0.5 | <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 | 04/23/03 | 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 |
| W-35B-04 | 07/15/03 | E601 | <0.5 | <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 | 10/10/03 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 |
| W-35B-04 | 10/10/03 DUP | E601 | 0.62 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-35B-05 | 03/14/03 | E601 | <0.5 | <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 | 04/23/03 | E601 | <0.5 | <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 | 07/15/03 | E601 | <0.5 | <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 | 10/10/03 | E601 | <0.5 | <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 | 03/26/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

**Table 2.4-10. High Explosive Process Area OU 2003 VOCs in ground and surface water. (Cont. Page 2 of 6)**

| Location | Date | Method | TCE (µg/L) | PCE (µg/L) | Total 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) | Freon 11 (µg/L) | Freon 113 (µg/L) | Methylene chloride (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W-35C-01 | 09/05/03 | E601 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| W-35C-02 | 09/24/03 | E601 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| W-35C-04 | 02/18/03 | E601 | 7.3 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-35C-04 | 08/11/03 | E601 | 8.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-35C-04 | 08/11/03 DUP | E601 | 8.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-35C-05 | 02/21/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-35C-05 | 07/28/03 | E601 | <0.5 | <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 | 08/05/03 | E601 | <0.5 | <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 | 08/21/03 | E601 | 1.8 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| W-35C-08 | 08/05/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-4A | 08/21/03 | E601 | 5.2 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| W-4AS | 08/21/03 | E601 | 1.3 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 |
| W-4AS | 08/21/03 DUP | E601 | 0.90 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| W-4B | 03/28/03 | E601 | 1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-4B | 08/05/03 | 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 |
| W-4C | 03/28/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-4C | 08/05/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-6BD | 08/21/03 | E601 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| W-6BS | 08/21/03 | E601 | 0.90 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| W-6BS | 08/21/03 DUP | E601 | 0.90 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| W-6CD | 09/05/03 | E601 | 0.70 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| W-6CI | 09/05/03 | E601 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| W-6CS | 09/05/03 | E601 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| W-6EI | 08/05/03 | 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 |
| W-6ER | 07/28/03 | 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 |
| W-6ES | 08/21/03 | E601 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| W-6F | 09/05/03 | E601 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| W-6G | 09/17/03 | 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 |
| W-6G | 09/17/03 DUP | E601 | 7 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-6H | 03/21/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-6H | 04/24/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-6H | 09/05/03 | E601 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| W-6H | 10/11/03 | E601 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| W-6I | 03/26/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-6I | 08/28/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-6J | 03/21/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-6J | 04/24/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-6J | 09/05/03 | E601 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| W-6J | 10/11/03 | E601 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| W-6K | 03/21/03 | E601 | 11 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 0.62 |
| W-6K | 08/21/03 | E601 | 10 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |

**Table 2.4-10. High Explosive Process Area OU 2003 VOCs in ground and surface water. (Cont. Page 3 of 6)**

| Location | Date | Method | TCE (μg/L) | PCE (μg/L) | Total 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) | Freon 11 (μg/L) | Freon 113 (μg/L) | Methylene chloride (μg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W-6L | 03/26/03 | E601 | 23 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-6L | 03/26/03 DUP | E601 | 24 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-6L | 08/21/03 | E601 | 23 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| W-806-06A | 06/20/03 | E601 | <0.5 | <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 | 03/31/03 | E601 | <0.5 | <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 | 09/17/03 | E601 | <0.5 | <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 | 03/31/03 | E601 | <0.5 | <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 | 09/17/03 | E601 | <0.5 | <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 | 03/31/03 | E601 | 2 | <0.5 | <0.5 | <0.5 | 2 | <0.5 | <0.5 | 2 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-809-01 | 03/31/03 DUP | E601 | 2 | <0.5 | <0.5 | <0.5 | 2 | <0.5 | <0.5 | 2 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-809-01 | 08/29/03 | E601 | 3 | <0.5 | <0.5 | <0.5 | 2.2 | <0.5 | <0.5 | 2.6 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-809-02 | 03/31/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-809-02 | 08/28/03 | E601 | <0.5 | <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 | 03/28/03 | E601 | <0.5 | <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 | 08/28/03 | E601 | <0.5 | <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 | 03/28/03 | E601 | <0.5 | <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 | 09/18/03 | E601 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| W-814-01 | 09/04/03 | E601 | 1.4 | <0.5 | <0.5 | 0.5 | 0.6 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-814-02 | 09/16/03 | E601 | 7.6 | <0.5 | <0.5 | <0.5 | 0.8 | <0.5 | <0.5 | 0.6 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-814-04 | 09/17/03 | E601 | <0.5 | <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 | 02/13/03 | E601 | 6.3 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | 0.72 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-815-03 | 03/28/03 | E601 | 4 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 3 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-815-04 | 03/28/03 | E601 | 2 | <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 | 08/28/03 | E601 | 1.9 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 0.9 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-815-05 | 03/28/03 | E601 | 21 | <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 | 08/29/03 | E601 | 14 | <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 | 03/28/03 | E601 | 14 | <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 | 03/28/03 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 |
| W-815-06 | 09/16/03 | E601 | 14 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 0.7 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-815-07 | 09/16/03 | E601 | 16 | <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 | 03/18/03 | E601 | <0.5 | <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 | 04/29/03 | E601 | <0.5 | <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 | 08/29/03 | E601 | <0.5 | <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 | 10/14/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-817-01 | 01/24/03 | WDRE624 | <0.5 E | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-817-01 | 04/29/03 | WDRE624 | <0.5 E | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-817-01 | 04/29/03 DUP | WDRE624 | <0.5 E | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-817-01 | 08/18/03 | WDRE624 | <0.5 E | <0.5 E | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-817-01 | 11/18/03 | WDRE624 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-817-02 | 01/28/03 | WDRE624 | 0.62 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-817-02 | 04/18/03 | WDRE624 | 0.59 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

**Table 2.4-10. High Explosive Process Area OU 2003 VOCs in ground and surface water. (Cont. Page 4 of 6)**

| Location | Date | Method | TCE (µg/L) | PCE (µg/L) | Total 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) | Freon 11 (µg/L) | Freon 113 (µg/L) | Methylene chloride (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W-817-02 | 08/19/03 | WDRE624 | 0.55 | <0.5 E | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-817-02 | 10/31/03 | WDRE624 | 0.73 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-817-02 | 10/31/03 DUP | WDRE624 | 0.68 | <0.5 E | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-817-03 | 01/24/03 | WDRE624 | 15 | <0.5 | <1 | <0.5 | <0.5 E | <0.5 | <0.5 | <0.5 E | <0.5 | <0.5 | <0.5 | <0.5 |
| W-817-03 | 01/24/03 DUP | WDRE624 | 14 | <0.5 E | <1 | <0.5 | <0.5 E | <0.5 | <0.5 | <0.5 E | <0.5 | <0.5 | <0.5 | <0.5 |
| W-817-03 | 04/18/03 | WDRE624 | 15 | <0.5 E | <1 | <0.5 | <0.5 E | <0.5 | <0.5 | <0.5 E | <0.5 | <0.5 | <0.5 | <0.5 |
| W-817-03 | 08/18/03 | WDRE624 | 14 | <0.5 E | <1 | <0.5 | <0.5 E | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-817-03 | 08/18/03 DUP | WDRE624 | 14 | <0.5 | <1 | <0.5 | <0.5 E | <0.5 | <0.5 | <0.5 E | <0.5 | <0.5 | <0.5 | <0.5 |
| W-817-03 | 10/31/03 | WDRE624 | 14 | <0.5 E | <1 | <0.5 | <0.5 E | <0.5 | <0.5 | <0.5 E | <0.5 | <0.5 | <0.5 | <0.5 |
| W-817-04 | 01/23/03 | WDRE624 | 10 | <0.5 E | <1 | <0.5 | <0.5 E | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-817-04 | 04/29/03 | WDRE624 | 9.2 | <0.5 | <1 | <0.5 | <0.5 E | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-817-04 | 08/19/03 | WDRE624 | 6.3 | <0.5 | <1 | <0.5 | <0.5 E | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-817-04 | 11/03/03 | WDRE624 | 6.6 | <0.5 | <1 | <0.5 | <0.5 E | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-817-06A | 03/28/03 | E601 | 2 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-817-06A | 08/29/03 | E601 | 1.5 | 2.8 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-817-07 | 03/28/03 | E601 | 6 | <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 | 08/29/03 | E601 | 5.2 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-818-01 | 03/28/03 | E601 | 16 | <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 | 09/18/03 | E601 | 15 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| W-818-03 | 09/18/03 | E601 | 9.8 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| W-818-04 | 03/28/03 | E601 | <0.5 | <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 | 08/29/03 | E601 | <0.5 | <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 | 03/26/03 | E601 | 25 | <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 | 08/29/03 | E601 | 19 | <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 | 03/28/03 | E601 | 15 | <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 | 08/28/03 | E601 | 19 | <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 | 08/29/03 DUP | E601 | 3.7 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-818-08 | 03/26/03 | E601 | 56 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-818-08 | 07/15/03 | E601 | 49 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-818-09 | 03/26/03 | E601 | 20 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-818-09 | 07/15/03 | E601 | 21 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-818-09 | 07/15/03 DUP | E601 | 21 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-818-11 | 03/28/03 | E601 | 56 D | <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 | 09/04/03 | E601 | 44 | <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 | 09/16/03 | E601 | <0.5 | <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 | 03/21/03 | E601 | <0.5 | <0.5 O | <0.5 | <0.5 O | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 O | <0.5 | <0.5 O | <0.5 |
| W-823-01 | 08/28/03 | 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 |
| W-823-02 | 03/21/03 | E601 | <0.5 | <0.5 O | <0.5 | <0.5 O | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 O | <0.5 | <0.5 O | <0.5 |
| W-823-02 | 09/05/03 | E601 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| W-823-03 | 03/21/03 | E601 | 0.74 | <0.5 O | <0.5 | <0.5 O | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 O | <0.5 | <0.5 O | <0.5 |
| W-823-03 | 09/05/03 | E601 | 0.70 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |

**Table 2.4-10. High Explosive Process Area OU 2003 VOCs in ground and surface water. (Cont. Page 5 of 6)**

| Location | Date | Method | TCE (μg/L) | PCE (μg/L) | Total 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) | Freon 11 (μg/L) | Freon 113 (μg/L) | Methylene chloride (μg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W-823-13 | 08/28/03 | E601 | <0.5 | <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 | 05/30/03 | E601 | 2.7 | <0.5 | <0.5 | <0.5 | 0.6 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-827-03 | 05/30/03 | E601 | <0.5 | <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 | 02/21/03 | E624 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-827-05 | 05/23/03 | E601 | <0.5 | <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 | 11/20/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-829-06 | 02/21/03 | E624 | 210 D | <0.5 | 1.2 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-829-06 | 05/23/03 | E601 | 170 D | <0.5 | 0.8 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-829-06 | 09/04/03 | E601 | 150 D | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-829-06 | 11/19/03 | E601 | 130 D | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-829-08 | 02/21/03 | E624 | 21 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-829-08 | 02/21/03 DUP | E624 | 20 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-829-08 | 05/23/03 | E601 | 29 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-829-08 | 09/23/03 | E601 | 23 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-829-08 | 11/19/03 | E601 | 25 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-829-15 | 02/24/03 | E624 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-829-15 | 05/09/03 | E624 | <0.5 H | <0.5 H | <1 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 |
| W-829-15 | 05/09/03 DUP | E624 | <0.5 H | <0.5 H | <1 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 |
| W-829-15 | 07/29/03 | E624 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-829-15 | 10/23/03 | E624 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-829-15 | 10/23/03 DUP | E624 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-829-22 | 02/25/03 | E624 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-829-22 | 05/09/03 | E624 | <0.5 H | <0.5 H | <1 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 |
| W-829-22 | 07/28/03 | E624 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-829-22 | 07/28/03 DUP | E624 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-829-22 | 10/28/03 | E624 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| WELL18 | 01/22/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| WELL18 | 01/22/03 DUP | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| WELL18 | 02/12/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | 1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| WELL18 | 02/12/03 DUP | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| WELL18 | 03/13/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| WELL18 | 03/13/03 DUP | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| WELL18 | 04/16/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 O |
| WELL18 | 04/16/03 DUP | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 O |
| WELL18 | 05/14/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| WELL18 | 05/14/03 DUP | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| WELL18 | 06/11/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| WELL18 | 06/11/03 DUP | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| WELL18 | 07/16/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| WELL18 | 07/16/03 DUP | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| WELL18 | 08/13/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

**Table 2.4-10. High Explosive Process Area OU 2003 VOCs in ground and surface water. (Cont. Page 6 of 6)**

| Location | Date | Method | TCE (µg/L) | PCE (µg/L) | Total 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) | Freon 11 (µg/L) | Freon 113 (µg/L) | Methylene chloride (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WELL18 | 09/10/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| WELL18 | 10/15/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| WELL18 | 11/12/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| WELL18 | 11/12/03 DUP | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| WELL18 | 12/10/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| WELL20 | 01/23/03 | E502.2 | <0.2 | <0.2 | <0.4 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| WELL20 | 02/12/03 | E502.2 | <0.2 | <0.2 | <0.4 | <0.21 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.21 | <0.23 | <0.24 |
| WELL20 | 03/13/03 | E502.2 | <0.2 | <0.2 | <0.4 | <0.21 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.21 | <0.23 | <0.24 |
| WELL20 | 04/16/03 | E502.2 | <0.2 L | <0.2 | <0.4 | <0.21 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.21 | <0.23 | <0.24 |
| WELL20 | 05/14/03 | E502.2 | <0.2 | <0.2 | <0.4 | <0.21 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.21 | <0.23 | <0.24 |
| WELL20 | 06/11/03 | E502.2 | <0.2 | <0.2 | <0.4 | <0.21 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.21 | <0.23 | <0.24 |
| WELL20 | 07/16/03 | E502.2 | <0.2 | <0.2 | <0.4 | <0.21 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.21 | <0.23 | <0.24 |
| WELL20 | 08/13/03 | E502.2 | <0.2 | <0.2 | <0.4 | <0.21 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.21 | <0.23 | <0.24 |
| WELL20 | 09/10/03 | E502.2 | <0.2 | <0.2 | <0.4 | <0.21 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.21 | <0.23 | <0.24 |
| WELL20 | 10/15/03 | E502.2 | <0.2 | <0.2 | <0.4 | <0.21 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.21 | <0.23 | <0.24 |
| WELL20 | 10/15/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| WELL20 | 11/12/03 | E502.2 | <0.2 | <0.2 | <0.4 | <0.21 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.21 | <0.23 | <0.24 |
| WELL20 | 11/12/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| WELL20 | 12/10/03 | E502.2 | <0.2 | <0.2 | <0.4 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 | <0.2 |
| WELL20 | 12/10/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| SPRING14 | 12/18/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

**Other VOCs not detected in the table above:**

| Location | Date | Method | 1,2,4-Trimethylbenzene (µg/L) | Bromo-dichloromethane (µg/L) | Bromoform (µg/L) | Toluene (µg/L) | Total xylene isomers (µg/L) | cis-1,2-Dichloroethene (µg/L) |
|---|---|---|---|---|---|---|---|---|
| W-815-1928 | 03/04/03 | E601 | - | - | 1.1 | - | - | - |
| W-829-1940 | 10/01/03 | E601 | - | - | 1.3 | - | - | - |
| GALLO1 | 06/11/03 | E502.2 | - | - | - | 0.24 | - | - |
| GALLO1 | 06/11/03 DUP | E502.2 | - | - | - | 0.3 | 0.3 | - |
| GALLO1 | 07/16/03 | E502.2 | 0.27 | - | - | 0.73 | 0.99 | - |
| W-814-01 | 09/04/03 | E601 | - | - | - | - | - | 0.5 |
| W-827-02 | 05/30/03 | E601 | - | 0.5 | - | - | - | - |
| W-829-06 | 02/21/03 | E624 | - | - | - | - | - | 1.2 |
| W-829-06 | 05/23/03 | E601 | - | - | - | - | - | 0.8 |

**Table 2.4-11. High Explosive Process Area OU 2003 nitrate, perchlorate, and ortho-phosphate in ground water.**

| Location | Date | Nitrate (as $NO_3$) (mg/L) | Perchlorate ($\mu$g/L) | Ortho-Phosphate (mg/L) |
|---|---|---|---|---|
| W-815-1928 | 03/04/03 | 80 | 3.2 | - |
| GALLO1 | 01/30/03 | <0.44 | <3 | - |
| GALLO1 | 02/27/03 | 1.3 | <3 | - |
| GALLO1 | 03/12/03 | 1.2 | <3 | - |
| GALLO1 | 05/15/03 | <0.44 | <4 | - |
| GALLO1 | 06/11/03 | <0.44 | <4 | - |
| GALLO1 | 07/16/03 | <0.44 | <4 | - |
| GALLO1 | 08/13/03 | <0.44 | <4 | - |
| GALLO1 | 09/11/03 | <0.44 | <4 H | - |
| GALLO1 | 10/22/03 | <0.44 | <4 | - |
| GALLO1 | 11/17/03 | <0.44 | <4 | - |
| GALLO1 | 12/10/03 | <0.44 | <4 | - |
| W-35B-01 | 03/14/03 | <0.1 | <4 | - |
| W-35B-01 | 07/15/03 | <0.1 | <4 | - |
| W-35B-01 | 10/10/03 | <0.1 O | <4 H | - |
| W-35B-02 | 03/14/03 | 19 | <4 | - |
| W-35B-02 | 07/15/03 | 21 D | <4 | - |
| W-35B-02 | 10/10/03 | <0.1 O | <4 H | - |
| W-35B-03 | 03/14/03 | <0.1 | <4 | - |
| W-35B-03 | 07/15/03 | <0.1 | <4 | - |
| W-35B-04 | 03/14/03 | 0.2 | <4 | - |
| W-35B-04 | 07/15/03 | 0.4 | <4 | - |
| W-35B-05 | 03/14/03 | 0.4 | <4 | - |
| W-35B-05 | 07/15/03 | 0.4 | <4 | - |
| W-35C-01 | 03/26/03 | <0.1 | <4 | - |
| W-35C-02 | 11/05/03 | <0.1 | <4 | - |
| W-35C-04 | 02/18/03 | <0.44 | <3 | - |
| W-35C-05 | 02/21/03 | 3.6 | <3 | - |
| W-35C-06 | 10/28/03 | <0.1 | <4 H | - |
| W-35C-07 | 10/28/03 | <0.1 | <4 H | - |
| W-35C-08 | 10/28/03 | <0.1 | <4 H | - |
| W-4A | 10/28/03 | <0.1 | <4 H | - |
| W-4AS | 10/28/03 | <0.1 | <4 H | - |

**Table 2.4-11. High Explosive Process Area OU 2003 nitrate, perchlorate, and ortho-phosphate in ground water.**

| Location | Date | Nitrate (as $NO_3$) (mg/L) | Perchlorate ($\mu$g/L) | Ortho-Phosphate (mg/L) |
|---|---|---|---|---|
| W-4B | 03/28/03 | <0.1 | <4 | - |
| W-4C | 03/28/03 | <0.1 | <4 | - |
| W-6BD | 10/28/03 | <0.1 | <4 H | - |
| W-6BS | 10/28/03 | <0.1 | <4 H | - |
| W-6CD | 11/05/03 | 26 | <4 | - |
| W-6CI | 11/05/03 | <0.1 | <4 | - |
| W-6CS | 11/05/03 | 640 D | <4 | - |
| W-6EI | 10/29/03 | <0.1 | <4 H | - |
| W-6ES | 10/29/03 | <0.1 | <4 H | - |
| W-6F | 11/05/03 | <0.1 | <4 | - |
| W-6G | 11/05/03 | <0.1 | 5 | - |
| W-6H | 03/21/03 | <0.5 H | <4 | - |
| W-6H | 09/05/03 | <0.1 | <4 H | - |
| W-6I | 03/26/03 | <0.1 | <4 | - |
| W-6J | 03/21/03 | <0.5 H | <4 | - |
| W-6J | 09/05/03 | <0.1 | <4 H | - |
| W-6K | 03/21/03 | <0.5 H | <4 | - |
| W-6L | 03/26/03 | 12 | <4 | - |
| W-6L | 03/26/03 DUP | 11 | <4 | - |
| W-806-06A | 06/20/03 | <0.1 H | <4 | - |
| W-808-01 | 03/31/03 | 97 D | <4 | - |
| W-808-03 | 03/31/03 | <0.1 | 10 | - |
| W-809-01 | 03/31/03 | 120 D | <4 | - |
| W-809-01 | 03/31/03 DUP | 120 D | <4 | - |
| W-809-02 | 03/31/03 | 130 D | <4 | - |
| W-809-03 | 03/28/03 | 100 D | 5 | - |
| W-810-01 | 03/28/03 | <0.1 | <4 | - |
| W-814-01 | 11/18/03 | 83 D | <4 | - |
| W-814-02 | 11/18/03 | 100 D | <4 | - |
| W-814-04 | 11/18/03 | <0.1 | <4 | - |
| W-815-02 | 02/13/03 | 90 D | 17 | - |
| W-815-03 | 03/28/03 | 110 D | <4 | - |
| W-815-04 | 03/28/03 | 100 D | 10 | - |

**Table 2.4-11. High Explosive Process Area OU 2003 nitrate, perchlorate, and ortho-phosphate in ground water.**

| Location | Date | Nitrate (as $NO_3$) (mg/L) | Perchlorate ($\mu$g/L) | Ortho-Phosphate (mg/L) |
|---|---|---|---|---|
| W-815-05 | 03/28/03 | 110 D | 7 | - |
| W-815-06 | 03/28/03 | 110 D | 6 | - |
| W-815-06 | 03/28/03 DUP | 120 D | 6 | - |
| W-815-07 | 11/19/03 | 23 D | 4 | - |
| W-815-08 | 03/18/03 | <0.1 | <4 | - |
| W-815-08 | 08/29/03 | <0.1 | <4 H | - |
| W-815-08 | 10/14/03 | <0.1 | <4 H | - |
| W-817-02 | 09/05/03 | - | - | 0.41 |
| W-817-03 | 09/05/03 | - | - | 0.39 |
| W-817-03 | 09/05/03 DUP | - | - | 0.39 |
| W-817-04 | 09/05/03 | - | - | 0.39 |
| W-817-05 | 11/18/03 | <0.1 | <4 | - |
| W-817-06A | 03/28/03 | 110 D | 4 | - |
| W-817-07 | 03/28/03 | 95 D | 17 | - |
| W-818-01 | 03/28/03 | 89 D | 4 | - |
| W-818-03 | 11/25/03 | 52 D | <4 | - |
| W-818-04 | 03/28/03 | <0.1 | <4 | - |
| W-818-06 | 03/26/03 | 62 D | <4 | - |
| W-818-07 | 03/28/03 | 15 | <4 | - |
| W-818-08 | 03/26/03 | 81 | 8.5 | - |
| W-818-09 | 03/26/03 | 85 | 6.3 | - |
| W-818-11 | 03/28/03 | 78 D | 7 | - |
| W-819-02 | 11/18/03 | <0.1 | <4 | - |
| W-823-01 | 03/21/03 | 20 DH | <4 | - |
| W-823-02 | 03/21/03 | <0.5 H | <4 | - |
| W-823-03 | 03/21/03 | <5 DH | <4 | - |
| W-823-13 | 11/05/03 | 77 D | <4 | - |
| W-827-02 | 05/30/03 | 16 | <4 | - |
| W-827-03 | 05/30/03 | 7.9 | <4 | - |
| W-827-05 | 02/21/03 | - | <3 | - |
| W-827-05 | 05/23/03 | 0.2 | <4 | - |
| W-827-05 | 11/20/03 | 0.46 | <4 | - |
| W-829-06 | 05/23/03 | 150 D | 6 | - |

**Table 2.4-11. High Explosive Process Area OU 2003 nitrate, perchlorate, and ortho-phosphate in ground water.**

| Location | Date | Nitrate (as $NO_3$) (mg/L) | Perchlorate (μg/L) | Ortho-Phosphate (mg/L) |
|---|---|---|---|---|
| W-829-06 | 09/04/03 | 140 D | 9.9 | - |
| W-829-08 | 05/23/03 | 110 D | 7 | - |
| W-829-08 | 09/23/03 | 94 D | 9.9 | - |
| W-829-08 | 11/19/03 | - | 11 | - |
| W-829-15 | 02/24/03 | - | <3 | - |
| W-829-15 | 05/09/03 | - | <4 | - |
| W-829-15 | 05/09/03 DUP | - | <4 | - |
| W-829-15 | 07/29/03 | - | <4 H | - |
| W-829-15 | 10/23/03 | <0.44 | <4 | - |
| W-829-15 | 10/23/03 DUP | <0.44 | <4 | - |
| W-829-22 | 02/25/03 | - | <3 | - |
| W-829-22 | 05/09/03 | - | <4 | - |
| W-829-22 | 07/28/03 | - | <4 H | - |
| W-829-22 | 07/28/03 DUP | - | <4 H | - |
| W-829-22 | 10/28/03 | <0.44 | <4 | - |
| WELL18 | 01/22/03 | <0.44 | <3 | - |
| WELL18 | 02/12/03 | <0.44 | <3 | - |
| WELL18 | 03/13/03 | <0.44 | <3 | - |
| WELL18 | 04/16/03 | <0.44 | <4 | - |
| WELL18 | 05/14/03 | <0.44 | <4 | - |
| WELL18 | 06/11/03 | <0.44 | <4 | - |
| WELL18 | 07/16/03 | <0.44 | <4 | - |
| WELL18 | 08/13/03 | <0.44 | <4 | - |
| WELL18 | 09/10/03 | <0.44 | <4 H | - |
| WELL18 | 10/15/03 | <0.44 | <4 | - |
| WELL18 | 11/12/03 | <0.44 | <4 | - |
| WELL18 | 12/10/03 | <0.44 | <4 | - |
| WELL20 | 01/28/03 | <0.44 | <3 | - |
| WELL20 | 02/12/03 | <0.44 | <3 | - |
| WELL20 | 03/13/03 | <0.44 | <3 | - |
| WELL20 | 04/16/03 | <0.44 | <4 | - |
| WELL20 | 05/14/03 | <0.44 | <4 | - |
| WELL20 | 06/11/03 | <0.44 | <4 | - |

**Table 2.4-11. High Explosive Process Area OU 2003 nitrate, perchlorate, and ortho-phosphate in ground water.**

| Location | Date | Nitrate (as $NO_3$) (mg/L) | Perchlorate ($\mu$g/L) | Ortho-Phosphate (mg/L) |
|---|---|---|---|---|
| WELL20 | 07/16/03 | <0.44 | <4 | - |
| WELL20 | 08/13/03 | <0.44 | <4 | - |
| WELL20 | 09/10/03 | <0.44 | <4 | - |
| WELL20 | 10/15/03 | <0.44 | <4 H | - |
| WELL20 | 11/12/03 | <0.44 | <4 | - |
| WELL20 | 12/10/03 | <0.44 | <4 | - |
| SPRING14 | 12/18/03 | 32 | <4 | - |

**Table 2.4-12. High Explosive Process Area 2003 high explosive compounds in ground and surface water.**

| Location | Date | HMX (μg/L) | RDX (μg/L) | TNT (μg/L) |
|---|---|---|---|---|
| W-815-1928 | 03/04/03 | <5 IJ | <5 IJ | - |
| W-829-1938 | 09/18/03 | <5 | <5 | - |
| W-829-1940 | 10/01/03 | <5 | <5 | - |
| GALLO1 | 01/30/03 | <5 L | <5 | - |
| GALLO1 | 02/27/03 | <5 | <5 | - |
| GALLO1 | 03/12/03 | <5 | <5 | - |
| GALLO1 | 05/15/03 | <5 | <5 | - |
| GALLO1 | 06/11/03 | <5 | <5 | - |
| GALLO1 | 07/16/03 | <5 | <5 | - |
| GALLO1 | 08/13/03 | <5 | <5 | - |
| GALLO1 | 09/11/03 | <5 | <5 | - |
| GALLO1 | 10/22/03 | <5 | <5 | - |
| GALLO1 | 11/17/03 | <5 | - | - |
| GALLO1 | 12/10/03 | <5 | <5 | - |
| W-35B-01 | 03/14/03 | <1 | <1 | - |
| W-35B-01 | 07/15/03 | <1 | <1 | - |
| W-35B-01 | 10/10/03 | <1 | <1 | - |
| W-35B-02 | 03/14/03 | <1 | <1 | - |
| W-35B-02 | 07/15/03 | <1 | <1 | - |
| W-35B-02 | 10/10/03 | <1 | <1 | - |
| W-35B-03 | 03/14/03 | <1 | <1 | - |
| W-35B-03 | 07/15/03 | <1 | <1 | - |
| W-35B-04 | 03/14/03 | <1 | <1 | - |
| W-35B-04 | 07/15/03 | <1 | <1 | - |
| W-35B-05 | 03/14/03 | <1 | <1 | - |
| W-35B-05 | 07/15/03 | <1 | <1 | - |
| W-35C-01 | 03/26/03 | <1 | <1 | - |
| W-35C-02 | 11/05/03 | <1 | <1 | - |
| W-35C-04 | 02/18/03 | <5 | <5 | - |
| W-35C-05 | 02/21/03 | <5 | <5 | - |
| W-35C-06 | 10/28/03 | <1 | <1 | - |
| W-35C-07 | 10/28/03 | <1 | <1 | - |
| W-35C-08 | 10/28/03 | <1 | <1 | - |
| W-4A | 10/28/03 | <1 | <1 | - |
| W-4AS | 10/28/03 | <1 | <1 | - |
| W-4B | 03/28/03 | <1 | <1 | - |
| W-4C | 03/28/03 | <1 | <1 | - |
| W-6BD | 10/28/03 | <1 | <1 | - |
| W-6BS | 10/28/03 | <1 | <1 | - |
| W-6CD | 11/05/03 | <1 | <1 | - |
| W-6CI | 11/05/03 | <1 | <1 | - |

**Table 2.4-12. High Explosive Process Area 2003 high explosive compounds in ground and surface water.**

| Location | Date | HMX (μg/L) | RDX (μg/L) | TNT (μg/L) |
|---|---|---|---|---|
| W-6CS | 11/05/03 | <1 | <1 | - |
| W-6EI | 10/29/03 | <1 | <1 | - |
| W-6ES | 10/29/03 | <1 | <1 | - |
| W-6F | 11/05/03 | <1 | <1 | - |
| W-6G | 11/05/03 | <1 | <1 | - |
| W-6H | 03/21/03 | <2.1 | <2.1 | - |
| W-6H | 09/05/03 | <1 | <1 | - |
| W-6I | 03/26/03 | <1 | <1 | - |
| W-6J | 03/21/03 | <2.1 | <2.1 | - |
| W-6J | 09/05/03 | <1 | <1 | - |
| W-6K | 03/21/03 | <2 | <2 | - |
| W-6L | 03/26/03 | <1 | <1 | - |
| W-6L | 03/26/03 DUP | <5 | <5 | - |
| W-806-06A | 06/20/03 | <1 | <1 | - |
| W-808-01 | 03/31/03 | <1 | <1 | - |
| W-808-03 | 03/31/03 | <1 | <1 | - |
| W-809-01 | 03/31/03 | <1 | <1 | - |
| W-809-01 | 03/31/03 DUP | <1 | <1 | - |
| W-809-02 | 03/31/03 | <1 | <1 | - |
| W-809-03 | 03/28/03 | <1 | <1 | - |
| W-810-01 | 03/28/03 | <1 | <1 | - |
| W-814-01 | 11/18/03 | <1 | <1 | - |
| W-814-02 | 11/18/03 | <1 | <1 | - |
| W-814-04 | 11/18/03 | <1 | <1 | - |
| W-815-02 | 02/13/03 | <5 | 73 | - |
| W-815-03 | 03/28/03 | 18 D | 100 D | - |
| W-815-04 | 03/28/03 | 5.0 D | 83 D | - |
| W-815-05 | 03/28/03 | <1 | <1 | - |
| W-815-06 | 03/28/03 | <2 | 18 | - |
| W-815-06 | 03/28/03 DUP | <1 | 18 | - |
| W-815-07 | 11/19/03 | <1 | 1 | - |
| W-815-08 | 03/18/03 | <1 | <1 | - |
| W-815-08 | 08/29/03 | <1 | <1 | - |
| W-815-08 | 10/14/03 | <1 | <1 | - |
| W-817-05 | 11/18/03 | <1 | <1 | - |
| W-817-06A | 03/28/03 | <1 | <1 | - |
| W-817-07 | 03/28/03 | <1 | 2 | - |
| W-818-01 | 03/28/03 | <1 | 1 | - |
| W-818-03 | 11/25/03 | <1 | <1 | - |
| W-818-04 | 03/28/03 | <1 | <1 | - |
| W-818-06 | 03/26/03 | <1 | <1 | - |
| W-818-07 | 03/28/03 | <1 | <1 | - |
| W-818-08 | 03/26/03 | <5 | <5 | - |
| W-818-09 | 03/26/03 | <5 | <5 | - |
| W-818-11 | 03/28/03 | <1 | 12 | - |

**Table 2.4-12. High Explosive Process Area 2003 high explosive compounds in ground and surface water.**

| Location | Date | HMX (μg/L) | RDX (μg/L) | TNT (μg/L) |
|---|---|---|---|---|
| W-819-02 | 11/18/03 | <1 | <1 | - |
| W-823-01 | 03/21/03 | <2.1 | <2.1 | - |
| W-823-02 | 03/21/03 | <2.1 | <2.1 | - |
| W-823-03 | 03/21/03 | <2 | <2 | - |
| W-823-13 | 11/05/03 | <1 | <1 | - |
| W-827-02 | 05/30/03 | <1 | <1 | - |
| W-827-03 | 05/30/03 | <1 | <1 | - |
| W-827-05 | 02/21/03 | <5 | <5 | <5 |
| W-827-05 | 05/23/03 | <1 | <1 | - |
| W-827-05 | 11/20/03 | <5 | - | - |
| W-829-06 | 02/21/03 | <5 | <5 | <5 |
| W-829-06 | 05/23/03 | <1 | <1 | - |
| W-829-06 | 09/04/03 | <5 | <5 | <5 |
| W-829-06 | 11/19/03 | <5 | - | - |
| W-829-08 | 02/21/03 | <5 | <5 | <5 |
| W-829-08 | 02/21/03 DUP | <5 | <5 | <5 |
| W-829-08 | 05/23/03 | <1 | <1 | - |
| W-829-08 | 09/23/03 | <5 | <5 | <5 |
| W-829-08 | 11/19/03 | <5 | - | - |
| W-829-15 | 02/24/03 | <5 | <5 | <5 |
| W-829-15 | 05/09/03 | <5 | <5 | <5 |
| W-829-15 | 05/09/03 DUP | <5 | <5 | <5 |
| W-829-15 | 07/29/03 | <5 | <5 | <5 |
| W-829-15 | 10/23/03 | <5 | <5 | <5 |
| W-829-15 | 10/23/03 DUP | <5 | <5 | <5 |
| W-829-22 | 02/25/03 | <5 | <5 | <5 |
| W-829-22 | 05/09/03 | <5 | <5 | <5 |
| W-829-22 | 07/28/03 | <5 | <5 | <5 |
| W-829-22 | 07/28/03 DUP | <5 | <5 | <5 |
| W-829-22 | 10/28/03 | <5 | <5 | <5 |
| WELL18 | 01/22/03 | <5 | <5 | - |
| WELL18 | 02/12/03 | <5 | <5 | - |
| WELL18 | 03/13/03 | <5 | <5 | - |
| WELL18 | 04/16/03 | <5 O | <5 O | - |
| WELL18 | 05/14/03 | <5 | <5 | - |
| WELL18 | 06/11/03 | <5 | <5 | - |
| WELL18 | 07/16/03 | <5 | <5 | - |
| WELL18 | 08/13/03 | <5 | <5 | - |
| WELL18 | 09/10/03 | <5 | <5 | - |
| WELL18 | 10/15/03 | <5 | <5 | - |
| WELL18 | 11/12/03 | <5 | <5 | - |
| WELL18 | 12/10/03 | <5 | <5 | - |
| WELL20 | 01/28/03 | 19 LS | <5 | - |
| WELL20 | 01/28/03 | 17 | - | - |
| WELL20 | 02/12/03 | <5 | <5 | - |

**Table 2.4-12. High Explosive Process Area 2003 high explosive compounds in ground and surface water.**

| Location | Date | HMX (μg/L) | RDX (μg/L) | TNT (μg/L) |
|---|---|---|---|---|
| WELL20 | 03/13/03 | <5 | <5 | - |
| WELL20 | 03/20/03 | <5 | <5 | - |
| WELL20 | 04/16/03 | <5 O | <5 O | - |
| WELL20 | 05/14/03 | <5 | <5 | - |
| WELL20 | 06/11/03 | <5 | <5 | - |
| WELL20 | 07/16/03 | <5 | <5 | - |
| WELL20 | 08/13/03 | <5 | <5 | - |
| WELL20 | 09/10/03 | <5 | <5 | - |
| WELL20 | 10/15/03 | <5 | <5 | - |
| WELL20 | 11/12/03 | <5 | <5 | - |
| WELL20 | 12/10/03 | <5 | <5 | - |
| SPRING14 | 12/18/03 | <1 | <1 | - |

**Table 2.4-13. High Explosive Process Area OU 2003 nutrients in ground water.**

| Location | Date | Ammonia Nitrogen (as N) (mg/L) | Nitrate (as N) (mg/L) | Nitrate (as $NO_3$) (mg/L) | Nitrite (as N) (mg/L) | Nitrite (as $NO_2$) (mg/L) | Total Kjeldahl Nitrogen (mg/L) |
|---|---|---|---|---|---|---|---|
| W-6ER | 07/28/03 | 0.40 H | <0.1 | <0.1 | <0.1 | <0.1 | 0.40 H |
| W-6H | 03/21/03 | <0.25 H | <0.1 H | <0.5 | <0.1 HO | <0.5 HO | <0.5 H |
| W-6H | 09/05/03 | 0.40 H | <0.1 | <0.1 | <0.1 | <0.1 | 0.40 H |
| W-6J | 03/21/03 | 0.26 H | <0.1 H | <0.5 | <0.1 HO | <0.5 HO | <0.5 H |
| W-6J | 09/05/03 | <0.1 H | <0.1 | <0.1 | <0.1 | <0.1 | <0.2 H |
| W-827-03 | 05/30/03 | 0.20 H | 0.1 | 0.5 | <0.1 | <0.1 | 3.1 HLO |

**Table 2.4-14. High Explosive Process Area OU 2003 radiological constituents in ground water.**

| Location | Date | Gross alpha (pCi/L) | Gross beta (pCi/L) | Tritium (pCi/L) | Uranium 234 and Uranium 233 (pCi/L) | Uranium 235 and Uranium 236 (pCi/L) | Uranium 238 (pCi/L) |
|---|---|---|---|---|---|---|---|
| GALLO1 | 01/30/03 | <2.27 | <1.87 E | <97.1 | - | - | - |
| GALLO1 | 06/11/03 | <2.02 | 4.14 ± 1.40 | <96.5 | - | - | - |
| GALLO1 | 07/16/03 | <13.3 | <12.8 | <85.6 | <0.025 | <0.021 | <0.018 |
| GALLO1 | 10/22/03 | <1.89 | 3.91 ± 1.60 | <98.2 | - | - | - |
| GALLO1 | 10/22/03 DUP | <2.98 | <1.95 E | <97.2 | - | - | - |
| W-827-05 | 02/21/03 | <2.7 | 20.0 ± 4.00 | - | - | - | - |
| W-829-15 | 02/24/03 | <1.66 | 28.6 ± 4.70 | - | - | - | - |
| W-829-15 | 05/09/03 | <1.51 | 30.7 ± 5.00 | 793 ± 110 | - | - | - |
| W-829-15 | 05/09/03 DUP | <1.61 | 29.2 ± 4.70 | 255 ± 66.0 | - | - | - |
| W-829-15 | 05/09/03[a] | - | - | <91.9 | - | - | - |
| W-829-15 | 05/09/03[a] | - | - | <92.1 | - | - | - |
| W-829-15 | 07/22/03 | <2.47 | 32.4 ± 5.30 | - | - | - | - |
| W-829-15 | 08/18/03 | - | - | <132 | - | - | - |
| W-829-15 | 08/18/03 DUP | - | - | <89.3 | - | - | - |
| W-829-15 | 10/23/03 | <2.3 | 29.2 ± 4.80 | - | - | - | - |
| W-829-15 | 10/23/03 DUP | <1.87 | 30.0 ± 4.90 | - | - | - | - |
| W-829-22 | 02/25/03 | <1.76 | 6.83 ± 1.70 | - | - | - | - |
| W-829-22 | 05/09/03 | <2.34 | 6.71 ± 1.70 | <94.8 | - | - | - |
| W-829-22 | 07/23/03 | <1.59 | 7.39 ± 1.70 | - | - | - | - |
| W-829-22 | 07/23/03 DUP | <1.95 | 8.43 ± 1.80 | - | - | - | - |
| W-829-22 | 10/28/03 | <2.2 | 6.25 ± 2.80 | - | - | - | - |
| WELL18 | 01/22/03 | 2.51 ± 1.80 | 5.62 ± 1.70 | <104 | - | - | - |
| WELL18 | 04/16/03 | <2.45 | 5.61 ± 2.00 | <105 | - | - | - |
| WELL18 | 07/16/03 | <1.89 | 5.74 ± 1.70 | <89.2 | - | - | - |
| WELL18 | 10/15/03 | <1.22 | 6.52 ± 1.50 | <93.8 | - | - | - |
| WELL20 | 01/23/03 | <1.64 | 6.52 ± 1.60 | <98.5 | - | - | - |
| WELL20 | 04/16/03 | <1.52 | 7.34 ± 1.70 | <105 | - | - | - |
| WELL20 | 07/16/03 | <2.33 | 7.91 ± 1.80 | <89.1 | - | - | - |
| WELL20 | 01/30/03 | <1.75 | 6.18 ± 2.20 | <98.5 | <0.02 | <0.024 | <0.02 |

[a] **Re-analysis.**

**Table 2.4-15. High Explosive Process Area OU 2003 general minerals in surface water.**

| Constituents of concern | SPRING14 12/18/03 |
|---|---|
| Total Alkalinity (as $CaCO_3$) (mg/L) | 280 DH |
| Aluminum (mg/L) | <0.2 |
| Bicarbonate Alk (as $CaCO_3$) (mg/L) | 280 DH |
| Calcium (mg/L) | 26 |
| Carbonate Alk (as $CaCO_3$) (mg/L) | <2 DH |
| Chloride (mg/L) | 170 D |
| Copper (mg/L) | <0.05 |
| Fluoride (mg/L) | 1.2 |
| Hydroxide Alk (as $CaCO_3$) (mg/L) | <2 DH |
| Iron (mg/L) | <0.1 |
| Magnesium (mg/L) | 14 |
| Manganese (mg/L) | 0.05 |
| Nickel (mg/L) | <0.1 |
| Nitrate (as N) (mg/L) | 6.8 |
| Nitrate (as $NO_3$) (mg/L) | 30 |
| Nitrite (as N) (mg/L) | 0.10 L |
| pH (Units) | 7.6 |
| Ortho-Phosphate (mg/L) | 0.38 |
| Total Phosphorus (as $PO_4$) (mg/L) | 0.70 H |
| Potassium (mg/L) | 18 L |
| Sodium (mg/L) | 230 D |
| Total dissolved solids (TDS) (mg/L) | 840 H |
| Specific Conductance ($\mu$mhos/cm) | 1,300 H |
| Sulfate (mg/L) | 90 D |
| Surfactants (mg/L) | <0.5 |
| Total Hardness (as $CaCO_3$) (mg/L) | 120 H |
| Zinc (mg/L) | <0.05 |

**Table 2.4-16. High Explosive Process Area 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-35B-01 | 01/08/03 | 18.06 | 504.96 | |
| W-35B-01 | 02/03/03 | 17.92 | 505.1 | |
| W-35B-01 | 03/05/03 | 17.21 | 505.81 | |
| W-35B-01 | 04/14/03 | 16.17 | 506.85 | |
| W-35B-01 | 07/14/03 | 17.91 | 505.11 | |
| W-35B-01 | 10/08/03 | 18.87 | 504.15 | |
| W-35B-02 | 01/08/03 | 17.45 | 505.58 | |
| W-35B-02 | 02/03/03 | 16.97 | 506.06 | |
| W-35B-02 | 03/05/03 | 16.22 | 506.81 | |
| W-35B-02 | 04/14/03 | 15.33 | 507.7 | |
| W-35B-02 | 07/14/03 | 16.97 | 506.06 | |
| W-35B-02 | 10/08/03 | 18.23 | 504.8 | |
| W-35B-03 | 01/08/03 | 16.15 | 506.95 | |
| W-35B-03 | 02/03/03 | 16 | 507.1 | |
| W-35B-03 | 03/05/03 | 15.6 | 507.5 | |
| W-35B-03 | 04/14/03 | 14.63 | 508.47 | |
| W-35B-03 | 07/14/03 | 16.04 | 507.06 | |
| W-35B-03 | 10/08/03 | 17.77 | 505.33 | |
| W-35B-04 | 01/08/03 | - | - | FL |
| W-35B-04 | 02/03/03 | - | - | FL |
| W-35B-04 | 03/05/03 | 2.02 | 526.94 | |
| W-35B-04 | 04/15/03 | 0.3 | 528.66 | |
| W-35B-04 | 07/14/03 | 1.86 | 527.1 | |
| W-35B-04 | 10/08/03 | 0.3 | 528.66 | |
| W-35B-05 | 01/08/03 | - | - | FL |
| W-35B-05 | 02/03/03 | - | - | FL |
| W-35B-05 | 03/05/03 | 0.78 | 527.95 | |
| W-35B-05 | 04/15/03 | 0.5 | 528.23 | |
| W-35B-05 | 07/14/03 | 0.76 | 527.97 | |
| W-35B-05 | 10/08/03 | 0.5 | 528.23 | |
| W-35C-01 | 01/14/03 | - | - | NM/NO ACCESS |
| W-35C-01 | 04/15/03 | - | - | FL |

**Table 2.4-16. High Explosive Process Area 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-35C-01 | 07/29/03 | - | - | NM/UC OVERGROWN WITH THORNY WEEDS |
| W-35C-01 | 10/06/03 | - | - | FL |
| W-35C-02 | 01/14/03 | 47.35 | 525.45 | |
| W-35C-02 | 04/14/03 | 42.49 | 530.31 | |
| W-35C-02 | 07/29/03 | 77.6 | 495.2 | |
| W-35C-02 | 10/06/03 | 61.19 | 511.61 | |
| W-35C-04 | 01/06/03 | - | - | FL |
| W-35C-04 | 02/03/03 | - | - | FL |
| W-35C-04 | 03/01/03 | - | - | FL |
| W-35C-04 | 04/12/03 | - | - | FL |
| W-35C-04 | 07/07/03 | - | - | FL |
| W-35C-04 | 10/02/03 | - | - | FL |
| W-35C-05 | 01/06/03 | 24.65 | 507.3 | |
| W-35C-05 | 04/12/03 | 23.02 | 508.93 | |
| W-35C-05 | 07/07/03 | 21.06 | 510.89 | |
| W-35C-05 | 10/02/03 | 23.18 | 508.77 | |
| W-35C-06 | 01/06/03 | 23.23 | 508.69 | |
| W-35C-06 | 02/03/03 | 22.18 | 509.74 | |
| W-35C-06 | 03/01/03 | 21.23 | 510.69 | |
| W-35C-06 | 04/12/03 | 20.45 | 511.47 | |
| W-35C-06 | 07/07/03 | 22.21 | 509.71 | |
| W-35C-06 | 10/02/03 | 24.29 | 507.63 | |
| W-35C-07 | 01/06/03 | - | - | FL |
| W-35C-07 | 04/12/03 | - | - | FL |
| W-35C-07 | 07/07/03 | - | - | FL |
| W-35C-07 | 10/02/03 | - | - | FL |
| W-35C-08 | 01/06/03 | 23.09 | 509.2 | |
| W-35C-08 | 04/12/03 | 20.98 | 511.31 | |
| W-35C-08 | 07/07/03 | 21.2 | 511.09 | |
| W-35C-08 | 10/02/03 | 23.52 | 508.77 | |
| W-4A | 01/14/03 | 2.21 | 528.26 | |
| W-4A | 02/05/03 | 2.71 | 527.76 | |

**Table 2.4-16. High Explosive Process Area 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-4A | 03/01/03 | 2.85 | 527.62 | |
| W-4A | 04/14/03 | 2.65 | 527.82 | |
| W-4A | 07/29/03 | 3.17 | 527.3 | |
| W-4A | 10/02/03 | 2.48 | 527.99 | |
| W-4AS | 01/14/03 | 5.18 | 526.47 | |
| W-4AS | 02/05/03 | 5.6 | 526.05 | |
| W-4AS | 03/01/03 | 5.78 | 525.87 | |
| W-4AS | 04/14/03 | 5.86 | 525.79 | |
| W-4AS | 07/29/03 | 6.3 | 525.35 | |
| W-4AS | 10/02/03 | 5.61 | 526.04 | |
| W-4B | 01/06/03 | - | - | FL |
| W-4B | 02/04/03 | - | - | FL |
| W-4B | 03/04/03 | - | - | FL |
| W-4B | 04/12/03 | - | - | FL |
| W-4B | 07/14/03 | 0.61 | 529.73 | FL |
| W-4B | 10/02/03 | - | - | FL |
| W-4C | 01/06/03 | 11.45 | 518.33 | |
| W-4C | 02/04/03 | 10.02 | 519.76 | |
| W-4C | 03/04/03 | 8.72 | 521.06 | |
| W-4C | 04/12/03 | 7.96 | 521.82 | |
| W-4C | 07/14/03 | 14.44 | 515.34 | MT |
| W-4C | 10/02/03 | 18.58 | 511.2 | |
| W-6BD | 01/06/03 | 23.97 | 509.3 | |
| W-6BD | 04/15/03 | 19.3 | 513.97 | |
| W-6BD | 07/09/03 | 21.18 | 512.09 | |
| W-6BD | 10/02/03 | 22.98 | 510.29 | |
| W-6BS | 01/06/03 | 23.69 | 509.54 | |
| W-6BS | 04/15/03 | 19.3 | 513.93 | |
| W-6BS | 07/10/03 | 20.73 | 512.5 | |
| W-6BS | 10/02/03 | 22.68 | 510.55 | |
| W-6CD | 01/14/03 | 25.86 | 554.18 | |
| W-6CD | 02/04/03 | 26.63 | 553.41 | |
| W-6CD | 03/10/03 | 26.79 | 553.25 | |

**Table 2.4-16. High Explosive Process Area 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-6CD | 04/14/03 | 27.3 | 552.74 | |
| W-6CD | 07/29/03 | 28.16 | 551.88 | |
| W-6CD | 10/06/03 | 28.14 | 551.9 | |
| W-6CI | 01/14/03 | 25.92 | 554.59 | |
| W-6CI | 04/14/03 | 28.43 | 552.08 | |
| W-6CI | 07/29/03 | 29.16 | 551.35 | |
| W-6CI | 10/06/03 | 27.78 | 552.73 | |
| W-6CS | 01/14/03 | 26.28 | 553.4 | |
| W-6CS | 04/14/03 | 28.79 | 550.89 | |
| W-6CS | 07/29/03 | 30.25 | 549.43 | |
| W-6CS | 10/06/03 | 29.87 | 549.81 | |
| W-6EI | 01/06/03 | - | - | FL |
| W-6EI | 04/12/03 | - | - | FL |
| W-6EI | 07/14/03 | - | - | FL |
| W-6EI | 10/02/03 | - | - | FL |
| W-6ER | 01/06/03 | - | - | FL |
| W-6ER | 02/04/03 | - | - | FL |
| W-6ER | 03/01/03 | - | - | FL |
| W-6ER | 04/14/03 | - | - | FL |
| W-6ER | 07/14/03 | - | - | FL |
| W-6ER | 10/02/03 | - | - | FL |
| W-6ES | 01/06/03 | 23.16 | 508.33 | |
| W-6ES | 02/04/03 | 22.18 | 509.31 | |
| W-6ES | 03/01/03 | 21.31 | 510.18 | |
| W-6ES | 04/12/03 | 20.44 | 511.05 | |
| W-6ES | 07/14/03 | 22.41 | 509.08 | |
| W-6ES | 10/02/03 | 24.18 | 507.31 | |
| W-6F | 01/14/03 | 55.79 | 563.07 | |
| W-6F | 04/14/03 | 56.92 | 561.94 | |
| W-6F | 07/29/03 | 57.74 | 561.12 | |
| W-6F | 10/06/03 | 57.88 | 560.98 | |
| W-6G | 01/14/03 | 56.04 | 563.88 | |
| W-6G | 02/04/03 | 56.62 | 563.3 | |

**Table 2.4-16. High Explosive Process Area 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-6G | 03/10/03 | 57.08 | 562.84 | |
| W-6G | 04/14/03 | 57.14 | 562.78 | |
| W-6G | 07/29/03 | 58.04 | 561.88 | |
| W-6G | 10/06/03 | 58.53 | 561.39 | |
| W-6H | 01/14/03 | - | - | NM/NO ACCESS |
| W-6H | 02/14/03 | - | - | NM/NO ACCESS |
| W-6H | 03/05/03 | 8.81 | 552.53 | |
| W-6H | 04/15/03 | 7.78 | 553.56 | |
| W-6H | 07/29/03 | 8.79 | 552.55 | |
| W-6H | 10/06/03 | 6.07 | 555.27 | |
| W-6I | 01/14/03 | - | - | NM/NO ACCESS |
| W-6I | 02/14/03 | - | - | NM/NO ACCESS |
| W-6I | 03/05/03 | 22.71 | 538.58 | |
| W-6I | 04/15/03 | 24.58 | 536.71 | |
| W-6I | 07/29/03 | 28.23 | 533.06 | |
| W-6I | 10/06/03 | 28.03 | 533.26 | |
| W-6J | 01/14/03 | - | - | NM/NO ACCESS |
| W-6J | 02/14/03 | - | - | NM/NO ACCESS |
| W-6J | 03/05/03 | 9.56 | 549.8 | |
| W-6J | 04/15/03 | 8.08 | 551.28 | NM/NO ACCESS |
| W-6J | 07/29/03 | 9.42 | 549.94 | |
| W-6J | 10/06/03 | 6.37 | 552.99 | |
| W-6K | 01/06/03 | - | - | FL |
| W-6K | 02/04/03 | - | - | FL |
| W-6K | 03/01/03 | - | - | FL |
| W-6K | 04/12/03 | - | - | FL |
| W-6K | 07/09/03 | - | - | FL |
| W-6K | 10/02/03 | - | - | FL |
| W-6L | 01/06/03 | - | - | FL |
| W-6L | 02/04/03 | - | - | FL |
| W-6L | 03/01/03 | - | - | FL |
| W-6L | 04/12/03 | - | - | FL |
| W-6L | 07/09/03 | - | - | FL |

**Table 2.4-16. High Explosive Process Area 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-6L | 10/02/03 | - | - | FL |
| W-806-06A | 01/03/03 | 124.98 | 696.33 | |
| W-806-06A | 02/07/03 | 125 | 696.31 | |
| W-806-06A | 03/01/03 | 125.22 | 696.09 | |
| W-806-06A | 04/05/03 | 125.32 | 695.99 | |
| W-806-06A | 07/11/03 | 125.28 | 696.03 | |
| W-806-06A | 10/03/03 | 125 | 696.31 | |
| W-806-07 | 01/03/03 | - | - | DRY |
| W-806-07 | 04/05/03 | - | - | DRY |
| W-806-07 | 07/01/03 | - | - | DRY |
| W-806-07 | 10/03/03 | - | - | DRY |
| W-808-01 | 01/03/03 | 48.37 | 853.64 | |
| W-808-01 | 04/05/03 | 47.98 | 854.03 | |
| W-808-01 | 07/11/03 | 48.38 | 853.63 | |
| W-808-01 | 10/03/03 | 49 | 853.01 | |
| W-808-02 | 01/03/03 | - | - | DRY |
| W-808-02 | 04/05/03 | - | - | DRY |
| W-808-02 | 07/01/03 | - | - | DRY |
| W-808-02 | 10/03/03 | - | - | DRY |
| W-808-03 | 01/03/03 | 296.02 | 606.87 | |
| W-808-03 | 02/06/03 | 296.04 | 606.85 | |
| W-808-03 | 03/01/03 | 296.02 | 606.87 | |
| W-808-03 | 04/05/03 | 295.82 | 607.07 | |
| W-808-03 | 07/11/03 | 295.81 | 607.08 | |
| W-808-03 | 10/03/03 | 295.8 | 607.09 | |
| W-809-01 | 01/03/03 | 68.01 | 722.22 | |
| W-809-01 | 04/05/03 | 67.87 | 722.36 | |
| W-809-01 | 07/11/03 | 67.61 | 722.62 | |
| W-809-01 | 10/03/03 | 68 | 722.23 | |
| W-809-02 | 01/07/03 | 139.62 | 652.2 | |
| W-809-02 | 04/05/03 | 139.71 | 652.11 | |
| W-809-02 | 07/11/03 | 139.71 | 652.11 | |
| W-809-02 | 10/03/03 | 139.65 | 652.17 | |

**Table 2.4-16. High Explosive Process Area 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-809-03 | 01/03/03 | 104.59 | 641.48 | |
| W-809-03 | 02/06/03 | 104.62 | 641.45 | |
| W-809-03 | 03/01/03 | 104.76 | 641.31 | |
| W-809-03 | 04/05/03 | 104.64 | 641.43 | |
| W-809-03 | 07/11/03 | 104.51 | 641.56 | |
| W-809-03 | 10/03/03 | 104.6 | 641.47 | |
| W-809-04 | 01/03/03 | 69.04 | 707.01 | |
| W-809-04 | 02/06/03 | - | - | NM |
| W-809-04 | 03/01/03 | - | - | NM |
| W-809-04 | 04/05/03 | 77.04 | 699.01 | |
| W-809-04 | 07/11/03 | 80.35 | 695.7 | |
| W-809-04 | 10/14/03 | - | - | DRY |
| W-810-01 | 01/03/03 | 238.27 | 602.76 | |
| W-810-01 | 02/07/03 | 238.3 | 602.73 | |
| W-810-01 | 03/01/03 | 237.84 | 603.19 | |
| W-810-01 | 04/05/03 | 237.84 | 603.19 | |
| W-810-01 | 07/11/03 | 237.51 | 603.52 | |
| W-810-01 | 10/03/03 | 237.85 | 603.18 | |
| W-814-01 | 01/10/03 | 110.13 | 698.7 | |
| W-814-01 | 04/22/03 | 110.08 | 698.75 | |
| W-814-01 | 07/28/03 | 110.16 | 698.67 | |
| W-814-01 | 10/03/03 | 110.23 | 698.6 | |
| W-814-02 | 01/15/03 | 162.34 | 631.34 | |
| W-814-02 | 04/22/03 | 162.07 | 631.61 | |
| W-814-02 | 07/28/03 | 162.13 | 631.55 | |
| W-814-02 | 10/03/03 | 162.25 | 631.43 | |
| W-814-03 | 01/10/03 | - | - | DRY |
| W-814-03 | 04/22/03 | - | - | DRY |
| W-814-03 | 07/01/03 | - | - | DRY |
| W-814-03 | 10/03/03 | - | - | DRY |
| W-814-04 | 01/10/03 | 232.87 | 581.82 | |
| W-814-04 | 02/01/03 | 232.94 | 581.75 | |
| W-814-04 | 03/01/03 | 232.73 | 581.96 | |

**Table 2.4-16. High Explosive Process Area 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-814-04 | 04/22/03 | 232.63 | 582.06 | |
| W-814-04 | 07/28/03 | 233.32 | 581.37 | |
| W-814-04 | 10/03/03 | 233.16 | 581.53 | |
| W-815-01 | 01/03/03 | - | - | DRY |
| W-815-01 | 02/06/03 | - | - | DRY |
| W-815-01 | 03/01/03 | - | - | DRY |
| W-815-01 | 04/05/03 | - | - | DRY |
| W-815-01 | 07/01/03 | - | - | DRY |
| W-815-01 | 10/03/03 | - | - | DRY |
| W-815-02 | 01/03/03 | 98.2 | 623.41 | |
| W-815-02 | 02/06/03 | 102.1 | 619.51 | |
| W-815-02 | 03/01/03 | 142.8 | 578.81 | |
| W-815-02 | 04/05/03 | 103.1 | 618.51 | |
| W-815-02 | 07/11/03 | 99.5 | 622.11 | |
| W-815-02 | 10/03/03 | 89.8 | 631.81 | |
| W-815-03 | 01/03/03 | 47.05 | 675.41 | |
| W-815-03 | 02/06/03 | 45.66 | 676.8 | |
| W-815-03 | 03/01/03 | 45.27 | 677.19 | |
| W-815-03 | 04/05/03 | 43.3 | 679.16 | |
| W-815-03 | 07/11/03 | 45.25 | 677.21 | |
| W-815-03 | 10/03/03 | 45.42 | 677.04 | |
| W-815-04 | 01/03/03 | 84.42 | 638.23 | |
| W-815-04 | 02/06/03 | 84.46 | 638.19 | |
| W-815-04 | 03/01/03 | 84.34 | 638.31 | |
| W-815-04 | 04/05/03 | 84.46 | 638.19 | |
| W-815-04 | 07/11/03 | 84.22 | 638.43 | |
| W-815-04 | 10/03/03 | 84.27 | 638.38 | |
| W-815-05 | 01/03/03 | 30.83 | 681.38 | |
| W-815-05 | 02/06/03 | 28.41 | 683.8 | |
| W-815-05 | 03/01/03 | 28.23 | 683.98 | |
| W-815-05 | 04/05/03 | 27.85 | 684.36 | |
| W-815-05 | 07/11/03 | 30.75 | 681.46 | |
| W-815-05 | 10/03/03 | 31.78 | 680.43 | |

**Table 2.4-16. High Explosive Process Area 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-815-06 | 01/15/03 | 131.37 | 624.61 | |
| W-815-06 | 04/22/03 | 131.17 | 624.81 | |
| W-815-06 | 07/28/03 | 131.2 | 624.78 | |
| W-815-06 | 10/03/03 | 131.24 | 624.74 | |
| W-815-07 | 01/15/03 | 139.45 | 623.22 | |
| W-815-07 | 04/22/03 | 139.33 | 623.34 | |
| W-815-07 | 07/28/03 | 139.37 | 623.3 | |
| W-815-07 | 10/03/03 | 139.37 | 623.3 | |
| W-815-08 | 01/03/03 | 124.85 | 598.94 | |
| W-815-08 | 02/06/03 | 124.56 | 599.23 | |
| W-815-08 | 03/01/03 | 124.41 | 599.38 | |
| W-815-08 | 04/05/03 | 124.21 | 599.58 | |
| W-815-08 | 07/11/03 | 124.25 | 599.54 | |
| W-815-08 | 10/03/03 | 124.78 | 599.01 | |
| W-817-01 | 01/03/03 | 138.03 | 636.08 | |
| W-817-01 | 04/05/03 | 138.05 | 636.06 | |
| W-817-01 | 07/11/03 | 138.06 | 636.05 | |
| W-817-01 | 10/03/03 | - | - | DRY |
| W-817-02 | 01/03/03 | 113.04 | 588.72 | |
| W-817-02 | 02/07/03 | 113.12 | 588.64 | |
| W-817-02 | 03/01/03 | 113.01 | 588.75 | |
| W-817-02 | 04/05/03 | 113.33 | 588.43 | |
| W-817-02 | 07/11/03 | 113.92 | 587.84 | |
| W-817-02 | 10/14/03 | 114.1 | 587.66 | |
| W-817-03 | 01/03/03 | 98.78 | 575.13 | |
| W-817-03 | 04/05/03 | 99.45 | 574.46 | |
| W-817-03 | 07/11/03 | 100.2 | 573.71 | |
| W-817-03 | 10/03/03 | 100.7 | 573.21 | |
| W-817-03A | 01/03/03 | 12.75 | 665.25 | |
| W-817-03A | 04/05/03 | - | - | DRY |
| W-817-03A | 07/01/03 | - | - | DRY |
| W-817-03A | 10/03/03 | - | - | DRY |
| W-817-04 | 01/03/03 | 75.44 | 607.75 | |

**Table 2.4-16. High Explosive Process Area 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-817-04 | 04/05/03 | 75.89 | 607.3 | |
| W-817-04 | 07/11/03 | 75.95 | 607.24 | |
| W-817-04 | 10/03/03 | 75.97 | 607.22 | |
| W-817-05 | 01/03/03 | 128.71 | 635.62 | |
| W-817-05 | 02/06/03 | 128.67 | 635.66 | |
| W-817-05 | 03/01/03 | 128.61 | 635.72 | |
| W-817-05 | 04/05/03 | 128.75 | 635.58 | |
| W-817-05 | 07/11/03 | 128.43 | 635.9 | |
| W-817-05 | 10/14/03 | 128.82 | 635.51 | |
| W-817-06A | 01/03/03 | 111.02 | 657.44 | |
| W-817-06A | 04/05/03 | 111.08 | 657.38 | |
| W-817-06A | 07/11/03 | 111.14 | 657.32 | |
| W-817-06A | 10/14/03 | 111.34 | 657.12 | |
| W-817-07 | 01/03/03 | 93.07 | 574.88 | |
| W-817-07 | 04/05/03 | 93.84 | 574.11 | |
| W-817-07 | 07/11/03 | 94.57 | 573.38 | |
| W-817-07 | 10/03/03 | 95.23 | 572.72 | |
| W-818-01 | 01/15/03 | 95.72 | 585.05 | |
| W-818-01 | 02/01/03 | 95.52 | 585.25 | |
| W-818-01 | 03/05/03 | 95.76 | 585.01 | |
| W-818-01 | 04/22/03 | 95.92 | 584.85 | |
| W-818-01 | 07/28/03 | 96 | 584.77 | |
| W-818-01 | 10/03/03 | 96.04 | 584.73 | |
| W-818-03 | 01/15/03 | 51.81 | 547.06 | |
| W-818-03 | 02/07/03 | 51.71 | 547.16 | |
| W-818-03 | 03/05/03 | 52.26 | 546.61 | |
| W-818-03 | 04/18/03 | 52.63 | 546.24 | |
| W-818-03 | 07/28/03 | 53.35 | 545.52 | |
| W-818-03 | 10/08/03 | 53.59 | 545.28 | |
| W-818-04 | 01/10/03 | 60.81 | 553.25 | |
| W-818-04 | 04/12/03 | 61.36 | 552.7 | |
| W-818-04 | 07/28/03 | 61.84 | 552.22 | |
| W-818-04 | 10/03/03 | 62.56 | 551.5 | |

**Table 2.4-16. High Explosive Process Area 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-818-06 | 01/10/03 | 64.89 | 548.63 | |
| W-818-06 | 04/12/03 | 66.46 | 547.06 | |
| W-818-06 | 07/28/03 | 67.8 | 545.72 | |
| W-818-06 | 10/03/03 | 67.18 | 546.34 | |
| W-818-07 | 01/10/03 | 64.94 | 549.27 | |
| W-818-07 | 04/12/03 | 66.41 | 547.8 | |
| W-818-07 | 07/28/03 | 67.85 | 546.36 | |
| W-818-07 | 10/03/03 | 67.31 | 546.9 | |
| W-818-08 | 01/10/03 | 96.6 | 552.3 | |
| W-818-08 | 07/28/03 | 98.45 | 550.45 | |
| W-818-08 | 10/08/03 | 99.3 | 549.6 | |
| W-818-09 | 01/10/03 | 92.7 | 548.2 | |
| W-818-09 | 02/01/03 | - | - | NM |
| W-818-09 | 03/05/03 | 83.7 | 557.2 | |
| W-818-09 | 04/22/03 | 83.3 | 557.6 | |
| W-818-09 | 07/28/03 | - | - | NM/RA |
| W-818-09 | 10/08/03 | 103.6 | 537.3 | |
| W-818-11 | 01/15/03 | 149.02 | 598.67 | |
| W-818-11 | 02/01/03 | 148.72 | 598.97 | |
| W-818-11 | 03/05/03 | 148.9 | 598.79 | |
| W-818-11 | 04/22/03 | 149.56 | 598.13 | |
| W-818-11 | 07/28/03 | 149.23 | 598.46 | |
| W-818-11 | 10/03/03 | 149.39 | 598.3 | |
| W-819-02 | 01/10/03 | 225.32 | 596.8 | |
| W-819-02 | 02/07/03 | 225.37 | 596.75 | |
| W-819-02 | 03/05/03 | 225 | 597.12 | |
| W-819-02 | 04/18/03 | 224.78 | 597.34 | |
| W-819-02 | 07/28/03 | 225.08 | 597.04 | |
| W-819-02 | 10/03/03 | 225.14 | 596.98 | |
| W-823-01 | 01/15/03 | - | - | NM/NO ACCESS |
| W-823-01 | 04/15/03 | 17.57 | 573.68 | |
| W-823-01 | 07/29/03 | 19.53 | 571.72 | |
| W-823-01 | 10/06/03 | 18.67 | 572.58 | |

**Table 2.4-16. High Explosive Process Area 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-823-02 | 01/15/03 | - | - | NM/NO ACCESS |
| W-823-02 | 04/15/03 | 16.68 | 573.7 | |
| W-823-02 | 07/29/03 | 18.65 | 571.73 | |
| W-823-02 | 10/06/03 | 17.85 | 572.53 | |
| W-823-03 | 01/15/03 | - | - | NM/NO ACCESS |
| W-823-03 | 02/15/03 | - | - | NM/NO ACCESS |
| W-823-03 | 03/05/03 | 15.46 | 574.56 | |
| W-823-03 | 04/15/03 | 15.66 | 574.36 | |
| W-823-03 | 07/29/03 | 16.95 | 573.07 | |
| W-823-03 | 10/06/03 | 16.86 | 573.16 | |
| W-823-13 | 01/15/03 | - | - | NM/NO ACCESS |
| W-823-13 | 04/15/03 | 47.19 | 575.05 | |
| W-823-13 | 07/29/03 | 48.15 | 574.09 | |
| W-823-13 | 10/06/03 | 50.14 | 572.1 | |
| W-827-01 | 01/10/03 | - | - | DRY |
| W-827-01 | 04/18/03 | - | - | DRY |
| W-827-01 | 07/01/03 | - | - | DRY |
| W-827-01 | 10/06/03 | - | - | DRY |
| W-827-02 | 01/10/03 | 55.45 | 867.4 | |
| W-827-02 | 04/18/03 | 58.01 | 864.84 | |
| W-827-02 | 07/29/03 | 56.73 | 866.12 | |
| W-827-02 | 10/06/03 | 60.66 | 862.19 | |
| W-827-03 | 01/10/03 | 193.9 | 730.5 | |
| W-827-03 | 04/18/03 | 194.02 | 730.38 | |
| W-827-03 | 07/29/03 | 193.61 | 730.79 | |
| W-827-03 | 10/06/03 | 193.25 | 731.15 | |
| W-827-04 | 01/10/03 | - | - | DRY |
| W-827-04 | 04/18/03 | - | - | DRY |
| W-827-04 | 07/01/03 | - | - | DRY |
| W-827-04 | 10/06/03 | - | - | |
| W-827-05 | 01/10/03 | 382.2 | 651.68 | |
| W-827-05 | 04/18/03 | 382.3 | 651.58 | |
| W-827-05 | 07/29/03 | 382.32 | 651.56 | |

**Table 2.4-16. High Explosive Process Area 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-827-05 | 10/06/03 | 382.27 | 651.61 | |
| W-829-06 | 01/10/03 | 95.4 | 976.89 | |
| W-829-08 | 01/10/03 | 97.25 | 977.5 | |
| W-829-15 | 01/10/03 | 337.56 | 696.44 | |
| W-829-15 | 02/01/03 | 337.66 | 696.34 | |
| W-829-15 | 03/04/03 | 337.46 | 696.54 | |
| W-829-15 | 04/18/03 | 337.54 | 696.46 | |
| W-829-15 | 07/22/03 | 337.68 | 696.32 | |
| W-829-15 | 10/06/03 | 337.66 | 696.34 | |
| W-829-22 | 01/10/03 | 399.7 | 653.37 | |
| W-829-22 | 02/01/03 | 399.86 | 653.21 | |
| W-829-22 | 03/04/03 | 399.49 | 653.58 | |
| W-829-22 | 04/18/03 | 399.74 | 653.33 | |
| W-829-22 | 07/22/03 | 399.98 | 653.09 | |
| W-829-22 | 10/06/03 | 400.01 | 653.06 | |
| WELL18 | 01/06/03 | - | - | FL |
| WELL18 | 04/14/03 | - | - | FL |
| WELL18 | 07/09/03 | - | - | FL |
| WELL18 | 10/02/03 | - | - | FL |

**Table 2.4-17. Building 815-Source (B815-SRC) mass removed, January 1, 2003 through December 31, 2003.**

| Treatment facility | Month | VOC mass removed (g) | RDX mass removed (g) | Nitrate mass removed (g) | Perchlorate mass removed (g) |
|---|---|---|---|---|---|
| B815-SRC | January | 0.7 | 5.3 | 10,248 | 2.2 |
| | February | 0.9 | 5.4 | 10,301 | 2.2 |
| | March | 1.0 | 7.9 | 15,210 | 3.3 |
| | April | 0.9 | 9.2 | 12,680 | 2.3 |
| | May | 1.0 | 11 | 15,171 | 2.7 |
| | June | 0.9 | 10 | 13,824 | 2.5 |
| | July | 0.3 | 2.8 | 3,474 | 0.7 |
| | August | 0.7 | 7.2 | 8,854 | 1.8 |
| | September | 0.8 | 8.3 | 10,147 | 2.1 |
| | October | 0.0 | 0.0 | 0 | 0.0 |
| | November | 0.7 | 7.5 | 9,913 | 2.3 |
| | December | 0.9 | 18 | 12,858 | 2.7 |
| **Total** | | 8.8 | 93 | 121,495 | 25 |

**Table 2.4-18. Building 815-Proximal (B815-PRX) mass removed, January 1, 2003 through December 31, 2003.**

| Treatment facility | Month | VOC mass removed (g) | Perchlorate mass removed (g) | Nitrate mass removed (g) |
|---|---|---|---|---|
| B815-PRX | January | 10.0 | 1.4 | 27,149 |
| | February | 9.0 | 1.2 | 18,287 |
| | March | 11.0 | 2.7 | 29,335 |
| | April | 6.9 | 1.7 | 18,318 |
| | May | 12.3 | 2.8 | 32,545 |
| | June | 15.0 | 3.5 | 39,904 |
| | July | 11.8 | 2.8 | 30,654 |
| | August | 11.4 | 2.7 | 29,558 |
| | September | 13.9 | 3.3 | 36,052 |
| | October | 10.9 | 2.1 | 30,786 |
| | November | 8.5 | 1.7 | 24,168 |
| | December | 13.0 | 2.6 | 36,869 |
| **Total** | | 134 | 29 | 353,625 |

**Table 2.4-19. Building 815-Distal Site Boundary (B815-DSB) mass removed, January 1, 2003 through December 31, 2003.**

| Treatment facility | Month | VOC mass removed (g) |
|---|---|---|
| B815-DSB | January | 1.6 |
| | February | 1.6 |
| | March | 2.7 |
| | April | 2.1 |
| | May | 2.3 |
| | June | 2.5 |
| | July | 2.3 |
| | August | 1.7 |
| | September | 1.9 |
| | October | 1.5 |
| | November | 1.1 |
| | December | 0.9 |
| Total | | 22 |

**Table 2.4-20. Building 817-Source (B817-SRC) mass removed, September 22, 2003 through December 31, 2003.**

| Treatment facility | Month | VOC mass removed (g) | RDX mass removed (g) | Perchlorate mass removed (g) |
|---|---|---|---|---|
| B817-SRC | September | 0.0 | 0.06 | 0.02 |
| | October | 0.0 | 0.04 | 0.02 |
| | November | 0.0 | 0.08 | 0.05 |
| | December | 0.0 | 0.07 | 0.04 |
| Total | | 0.0 | 0.25 | 0.13 |

**Table 2.5-1. Building 850 (OU5A) 2003 ground water sampling and analysis plan.**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| K1-01C | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:THISO | 1 | Y | |
| K1-01C | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:THISO | 2 | Y | |
| K1-01C | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:THISO | 3 | Y | |
| K1-01C | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:THISO | 4 | Y | |
| K1-01C | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:UISO | 1 | Y | |
| K1-01C | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:UISO | 2 | Y | |
| K1-01C | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:UISO | 3 | Y | |
| K1-01C | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:UISO | 4 | Y | |
| K1-01C | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 1 | Y | |
| K1-01C | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 2 | Y | |
| K1-01C | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 3 | Y | |
| K1-01C | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 4 | Y | |
| K1-01C | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E300.0:PERC | 1 | Y | |
| K1-01C | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E300.0:PERC | 2 | Y | |
| K1-01C | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E300.0:PERC | 3 | Y | |
| K1-01C | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E300.0:PERC | 4 | Y | |
| K1-01C | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E601 | 1 | Y | |
| K1-01C | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E601 | 2 | Y | |
| K1-01C | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E601 | 3 | Y | |
| K1-01C | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E601 | 4 | Y | |
| K1-01C | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E624 | 4 | Y | |
| K1-01C | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E8330:R+H | 1 | Y | |
| K1-01C | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E8330:R+H | 2 | Y | |
| K1-01C | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E8330:R+H | 3 | Y | |
| K1-01C | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E8330:R+H | 4 | Y | |

**Table 2.5-1. Building 850 (OU5A) 2003 ground water sampling and analysis plan. (Cont. Page 2 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| K1-01C | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 1 | Y | |
| K1-01C | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 2 | Y | |
| K1-01C | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 3 | Y | |
| K1-01C | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 4 | Y | |
| K1-01C | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | MS:UISO | 1 | N | AS:UISO analyzed. |
| K1-01C | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | MS:UISO | 2 | N | AS:UISO analyzed. |
| K1-01C | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | MS:UISO | 3 | N | AS:UISO analyzed. |
| K1-01C | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | MS:UISO | 4 | Y | |
| K1-01C | DMW | $Tnbs_1$ | | Q | ERD/WGMG | WGMGMET1 | 1 | Y | |
| K1-01C | DMW | $Tnbs_1$ | | Q | ERD/WGMG | WGMGMET1 | 2 | Y | |
| K1-01C | DMW | $Tnbs_1$ | | Q | ERD/WGMG | WGMGMET1 | 3 | Y | |
| K1-01C | DMW | $Tnbs_1$ | | Q | ERD/WGMG | WGMGMET1 | 4 | Y | |
| K1-01C | DMW | $Tnbs_1$ | | Q | ERD/WGMG | WGMGMET2 | 4 | Y | |
| K1-02B | DMW | $Tnbs_0$ | | Q | ERD/WGMG | AS:THISO | 1 | Y | |
| K1-02B | DMW | $Tnbs_0$ | | Q | ERD/WGMG | AS:THISO | 2 | Y | |
| K1-02B | DMW | $Tnbs_0$ | | Q | ERD/WGMG | AS:THISO | 3 | Y | |
| K1-02B | DMW | $Tnbs_0$ | | Q | ERD/WGMG | AS:THISO | 4 | Y | |
| K1-02B | DMW | $Tnbs_0$ | | Q | ERD/WGMG | AS:UISO | 1 | Y | |
| K1-02B | DMW | $Tnbs_0$ | | Q | ERD/WGMG | AS:UISO | 2 | Y | |
| K1-02B | DMW | $Tnbs_0$ | | Q | ERD/WGMG | AS:UISO | 3 | Y | |
| K1-02B | DMW | $Tnbs_0$ | | Q | ERD/WGMG | AS:UISO | 4 | Y | |
| K1-02B | DMW | $Tnbs_0$ | Q | Q | CMP/WGMG | E300.0:NO3 | 1 | Y | |
| K1-02B | DMW | $Tnbs_0$ | Q | Q | CMP/WGMG | E300.0:NO3 | 2 | Y | |
| K1-02B | DMW | $Tnbs_0$ | Q | Q | CMP/WGMG | E300.0:NO3 | 3 | Y | |
| K1-02B | DMW | $Tnbs_0$ | Q | Q | CMP/WGMG | E300.0:NO3 | 4 | Y | |

**Table 2.5-1. Building 850 (OU5A) 2003 ground water sampling and analysis plan. (Cont. Page 3 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| K1-02B | DMW | $Tnbs_0$ | | Q | ERD/WGMG | E300.0:PERC | 1 | Y | |
| K1-02B | DMW | $Tnbs_0$ | | Q | ERD/WGMG | E300.0:PERC | 2 | Y | |
| K1-02B | DMW | $Tnbs_0$ | | Q | ERD/WGMG | E300.0:PERC | 3 | Y | |
| K1-02B | DMW | $Tnbs_0$ | | Q | ERD/WGMG | E300.0:PERC | 4 | Y | |
| K1-02B | DMW | $Tnbs_0$ | | Q | ERD/WGMG | E601 | 1 | Y | |
| K1-02B | DMW | $Tnbs_0$ | | Q | ERD/WGMG | E601 | 2 | Y | |
| K1-02B | DMW | $Tnbs_0$ | | Q | ERD/WGMG | E601 | 3 | Y | |
| K1-02B | DMW | $Tnbs_0$ | | Q | ERD/WGMG | E601 | 4 | Y | |
| K1-02B | DMW | $Tnbs_0$ | | Q | ERD/WGMG | E624 | 4 | Y | |
| K1-02B | DMW | $Tnbs_0$ | | Q | ERD/WGMG | E8330:R+H | 1 | Y | |
| K1-02B | DMW | $Tnbs_0$ | | Q | ERD/WGMG | E8330:R+H | 2 | Y | |
| K1-02B | DMW | $Tnbs_0$ | | Q | ERD/WGMG | E8330:R+H | 3 | Y | |
| K1-02B | DMW | $Tnbs_0$ | | Q | ERD/WGMG | E8330:R+H | 4 | Y | |
| K1-02B | DMW | $Tnbs_0$ | Q | Q | CMP/WGMG | E906 | 1 | Y | |
| K1-02B | DMW | $Tnbs_0$ | Q | Q | CMP/WGMG | E906 | 2 | Y | |
| K1-02B | DMW | $Tnbs_0$ | Q | Q | CMP/WGMG | E906 | 3 | Y | |
| K1-02B | DMW | $Tnbs_0$ | Q | Q | CMP/WGMG | E906 | 4 | Y | |
| K1-02B | DMW | $Tnbs_0$ | Q | Q | CMP/WGMG | MS:UISO | 1 | N | AS:UISO analyzed. |
| K1-02B | DMW | $Tnbs_0$ | Q | Q | CMP/WGMG | MS:UISO | 2 | N | AS:UISO analyzed. |
| K1-02B | DMW | $Tnbs_0$ | Q | Q | CMP/WGMG | MS:UISO | 3 | N | AS:UISO analyzed. |
| K1-02B | DMW | $Tnbs_0$ | Q | Q | CMP/WGMG | MS:UISO | 4 | Y | |
| K1-02B | DMW | $Tnbs_0$ | | Q | ERD/WGMG | WGMGMET1 | 1 | Y | |
| K1-02B | DMW | $Tnbs_0$ | | Q | ERD/WGMG | WGMGMET1 | 2 | Y | |
| K1-02B | DMW | $Tnbs_0$ | | Q | ERD/WGMG | WGMGMET1 | 3 | Y | |

**Table 2.5-1. Building 850 (OU5A) 2003 ground water sampling and analysis plan. (Cont. Page 4 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| K1-02B | DMW | $Tnbs_0$ | | Q | ERD/WGMG | WGMGMET1 | 4 | Y | |
| K1-02B | DMW | $Tnbs_0$ | | Q | ERD/WGMG | WGMGMET2 | 4 | Y | |
| K1-03 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:THISO | 1 | Y | |
| K1-03 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:THISO | 2 | Y | |
| K1-03 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:THISO | 3 | Y | |
| K1-03 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:THISO | 4 | Y | |
| K1-03 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:UISO | 1 | Y | |
| K1-03 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:UISO | 2 | Y | |
| K1-03 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:UISO | 3 | Y | |
| K1-03 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:UISO | 4 | Y | |
| K1-03 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 1 | Y | |
| K1-03 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 2 | Y | |
| K1-03 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 3 | Y | |
| K1-03 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 4 | Y | |
| K1-03 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E300.0:PERC | 1 | Y | |
| K1-03 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E300.0:PERC | 2 | Y | |
| K1-03 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E300.0:PERC | 3 | Y | |
| K1-03 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E300.0:PERC | 4 | Y | |
| K1-03 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E601 | 1 | Y | |
| K1-03 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E601 | 2 | Y | |
| K1-03 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E601 | 3 | Y | |
| K1-03 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E601 | 4 | Y | |
| K1-03 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E624 | 4 | Y | |
| K1-03 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E8330:R+H | 1 | Y | |
| K1-03 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E8330:R+H | 2 | Y | |

**Table 2.5-1. Building 850 (OU5A) 2003 ground water sampling and analysis plan. (Cont. Page 5 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| K1-03 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E8330:R+H | 3 | Y | |
| K1-03 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E8330:R+H | 4 | Y | |
| K1-03 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 1 | Y | |
| K1-03 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 2 | Y | |
| K1-03 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 3 | Y | |
| K1-03 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 4 | Y | |
| K1-03 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | MS:UISO | 1 | N | AS:UISO analyzed. |
| K1-03 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | MS:UISO | 2 | N | AS:UISO analyzed. |
| K1-03 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | MS:UISO | 3 | N | AS:UISO analyzed. |
| K1-03 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | MS:UISO | 4 | Y | |
| K1-03 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | WGMGMET1 | 1 | Y | |
| K1-03 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | WGMGMET1 | 2 | Y | |
| K1-03 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | WGMGMET1 | 3 | Y | |
| K1-03 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | WGMGMET1 | 4 | Y | |
| K1-03 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | WGMGMET2 | 4 | Y | |
| K1-04 | DMW | $Tnbs_1/Tnbs_0$ | | Q | ERD/WGMG | AS:THISO | 1 | Y | |
| K1-04 | DMW | $Tnbs_1/Tnbs_0$ | | Q | ERD/WGMG | AS:THISO | 2 | Y | |
| K1-04 | DMW | $Tnbs_1/Tnbs_0$ | | Q | ERD/WGMG | AS:THISO | 3 | Y | |
| K1-04 | DMW | $Tnbs_1/Tnbs_0$ | | Q | ERD/WGMG | AS:THISO | 4 | Y | |
| K1-04 | DMW | $Tnbs_1/Tnbs_0$ | | Q | ERD/WGMG | AS:UISO | 1 | Y | |
| K1-04 | DMW | $Tnbs_1/Tnbs_0$ | | Q | ERD/WGMG | AS:UISO | 2 | Y | |
| K1-04 | DMW | $Tnbs_1/Tnbs_0$ | | Q | ERD/WGMG | AS:UISO | 3 | Y | |
| K1-04 | DMW | $Tnbs_1/Tnbs_0$ | | Q | ERD/WGMG | AS:UISO | 4 | Y | |
| K1-04 | DMW | $Tnbs_1/Tnbs_0$ | Q | Q | CMP/WGMG | E300.0:NO3 | 1 | Y | |
| K1-04 | DMW | $Tnbs_1/Tnbs_0$ | Q | Q | CMP/WGMG | E300.0:NO3 | 2 | Y | |

**Table 2.5-1. Building 850 (OU5A) 2003 ground water sampling and analysis plan. (Cont. Page 6 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| K1-04 | DMW | $Tnbs_1/Tnbs_0$ | Q | Q | CMP/WGMG | E300.0:NO3 | 3 | Y | |
| K1-04 | DMW | $Tnbs_1/Tnbs_0$ | Q | Q | CMP/WGMG | E300.0:NO3 | 4 | Y | |
| K1-04 | DMW | $Tnbs_1/Tnbs_0$ | | Q | ERD/WGMG | E300.0:PERC | 1 | Y | |
| K1-04 | DMW | $Tnbs_1/Tnbs_0$ | | Q | ERD/WGMG | E300.0:PERC | 2 | Y | |
| K1-04 | DMW | $Tnbs_1/Tnbs_0$ | | Q | ERD/WGMG | E300.0:PERC | 3 | Y | |
| K1-04 | DMW | $Tnbs_1/Tnbs_0$ | | Q | ERD/WGMG | E300.0:PERC | 4 | Y | |
| K1-04 | DMW | $Tnbs_1/Tnbs_0$ | | Q | ERD/WGMG | E601 | 1 | Y | |
| K1-04 | DMW | $Tnbs_1/Tnbs_0$ | | Q | ERD/WGMG | E601 | 2 | Y | |
| K1-04 | DMW | $Tnbs_1/Tnbs_0$ | | Q | ERD/WGMG | E601 | 3 | Y | |
| K1-04 | DMW | $Tnbs_1/Tnbs_0$ | | Q | ERD/WGMG | E601 | 4 | Y | |
| K1-04 | DMW | $Tnbs_1/Tnbs_0$ | | Q | ERD/WGMG | E624 | 4 | Y | |
| K1-04 | DMW | $Tnbs_1/Tnbs_0$ | | Q | ERD/WGMG | E8330:R+H | 1 | Y | |
| K1-04 | DMW | $Tnbs_1/Tnbs_0$ | | Q | ERD/WGMG | E8330:R+H | 2 | Y | |
| K1-04 | DMW | $Tnbs_1/Tnbs_0$ | | Q | ERD/WGMG | E8330:R+H | 3 | Y | |
| K1-04 | DMW | $Tnbs_1/Tnbs_0$ | | Q | ERD/WGMG | E8330:R+H | 4 | Y | |
| K1-04 | DMW | $Tnbs_1/Tnbs_0$ | Q | Q | CMP/WGMG | E906 | 1 | Y | |
| K1-04 | DMW | $Tnbs_1/Tnbs_0$ | Q | Q | CMP/WGMG | E906 | 2 | Y | |
| K1-04 | DMW | $Tnbs_1/Tnbs_0$ | Q | Q | CMP/WGMG | E906 | 3 | Y | |
| K1-04 | DMW | $Tnbs_1/Tnbs_0$ | Q | Q | CMP/WGMG | E906 | 4 | Y | |
| K1-04 | DMW | $Tnbs_1/Tnbs_0$ | Q | Q | CMP/WGMG | MS:UISO | 1 | N | AS:UISO analyzed. |
| K1-04 | DMW | $Tnbs_1/Tnbs_0$ | Q | Q | CMP/WGMG | MS:UISO | 2 | N | AS:UISO analyzed. |
| K1-04 | DMW | $Tnbs_1/Tnbs_0$ | Q | Q | CMP/WGMG | MS:UISO | 3 | N | AS:UISO analyzed. |
| K1-04 | DMW | $Tnbs_1/Tnbs_0$ | Q | Q | CMP/WGMG | MS:UISO | 4 | Y | |
| K1-04 | DMW | $Tnbs_1/Tnbs_0$ | | Q | ERD/WGMG | WGMGMET1 | 1 | Y | |

**Table 2.5-1. Building 850 (OU5A) 2003 ground water sampling and analysis plan. (Cont. Page 7 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| K1-04 | DMW | $Tnbs_1/Tnbs_0$ | | Q | ERD/WGMG | WGMGMET1 | 2 | Y | |
| K1-04 | DMW | $Tnbs_1/Tnbs_0$ | | Q | ERD/WGMG | WGMGMET1 | 3 | Y | |
| K1-04 | DMW | $Tnbs_1/Tnbs_0$ | | Q | ERD/WGMG | WGMGMET1 | 4 | Y | |
| K1-04 | DMW | $Tnbs_1/Tnbs_0$ | | Q | ERD/WGMG | WGMGMET2 | 4 | Y | |
| K1-05 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:THISO | 1 | Y | |
| K1-05 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:THISO | 2 | Y | |
| K1-05 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:THISO | 3 | Y | |
| K1-05 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:THISO | 4 | Y | |
| K1-05 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:UISO | 1 | Y | |
| K1-05 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:UISO | 2 | Y | |
| K1-05 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:UISO | 3 | Y | |
| K1-05 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:UISO | 4 | Y | |
| K1-05 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 1 | Y | |
| K1-05 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 2 | Y | |
| K1-05 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 3 | Y | |
| K1-05 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 4 | Y | |
| K1-05 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E300.0:PERC | 1 | Y | |
| K1-05 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E300.0:PERC | 2 | Y | |
| K1-05 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E300.0:PERC | 3 | Y | |
| K1-05 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E300.0:PERC | 4 | Y | |
| K1-05 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E601 | 1 | Y | |
| K1-05 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E601 | 2 | Y | |
| K1-05 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E601 | 3 | Y | |
| K1-05 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E601 | 4 | Y | |
| K1-05 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E624 | 4 | Y | |

**Table 2.5-1. Building 850 (OU5A) 2003 ground water sampling and analysis plan. (Cont. Page 8 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| K1-05 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E8330:R+H | 1 | Y | |
| K1-05 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E8330:R+H | 2 | Y | |
| K1-05 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E8330:R+H | 3 | Y | |
| K1-05 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E8330:R+H | 4 | Y | |
| K1-05 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 1 | Y | |
| K1-05 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 2 | Y | |
| K1-05 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 3 | Y | |
| K1-05 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 4 | Y | |
| K1-05 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | MS:UISO | 1 | N | AS:UISO analyzed. |
| K1-05 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | MS:UISO | 2 | N | AS:UISO analyzed. |
| K1-05 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | MS:UISO | 3 | N | AS:UISO analyzed. |
| K1-05 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | MS:UISO | 4 | Y | |
| K1-05 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | WGMGMET1 | 1 | Y | |
| K1-05 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | WGMGMET1 | 2 | Y | |
| K1-05 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | WGMGMET1 | 3 | Y | |
| K1-05 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | WGMGMET1 | 4 | Y | |
| K1-05 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | WGMGMET2 | 4 | Y | |
| K1-06 | DMW | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| K1-06 | DMW | $Tnbs_1$ | S | S | CMP | E906 | 2 | Y | |
| K1-06 | DMW | $Tnbs_1$ | S | S | CMP | E906 | 4 | Y | |
| K1-06 | DMW | $Tnbs_1$ | A | A | CMP | MS:UISO | 2 | N | Insufficient water. |
| K1-06 | DMW | $Tnbs_1$ | A | A | CMP | MS:UISO | 3 | N | Inadvertently left off sampling plan. |
| K1-07 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:THISO | 1 | Y | |
| K1-07 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:THISO | 2 | Y | |
| K1-07 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:THISO | 3 | Y | |

**Table 2.5-1. Building 850 (OU5A) 2003 ground water sampling and analysis plan. (Cont. Page 9 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| K1-07 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:THISO | 4 | Y | |
| K1-07 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:UISO | 1 | Y | |
| K1-07 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:UISO | 2 | Y | |
| K1-07 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:UISO | 3 | Y | |
| K1-07 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:UISO | 4 | Y | |
| K1-07 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 1 | Y | |
| K1-07 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 2 | Y | |
| K1-07 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 3 | Y | |
| K1-07 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 4 | Y | |
| K1-07 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E300.0:PERC | 1 | Y | |
| K1-07 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E300.0:PERC | 2 | Y | |
| K1-07 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E300.0:PERC | 3 | Y | |
| K1-07 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E300.0:PERC | 4 | Y | |
| K1-07 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E601 | 1 | Y | |
| K1-07 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E601 | 2 | Y | |
| K1-07 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E601 | 3 | Y | |
| K1-07 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E601 | 4 | Y | |
| K1-07 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E624 | 4 | Y | |
| K1-07 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E8330:R+H | 1 | Y | |
| K1-07 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E8330:R+H | 2 | Y | |
| K1-07 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E8330:R+H | 3 | Y | |
| K1-07 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E8330:R+H | 4 | Y | |
| K1-07 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 1 | Y | |
| K1-07 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 2 | Y | |
| K1-07 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 3 | Y | |

**Table 2.5-1. Building 850 (OU5A) 2003 ground water sampling and analysis plan. (Cont. Page 10 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| K1-07 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 4 | Y | |
| K1-07 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | MS:UISO | 1 | N | AS:UISO analyzed. |
| K1-07 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | MS:UISO | 2 | N | AS:UISO analyzed. |
| K1-07 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | MS:UISO | 3 | N | AS:UISO analyzed. |
| K1-07 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | MS:UISO | 4 | Y | |
| K1-07 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | WGMGMET1 | 1 | Y | |
| K1-07 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | WGMGMET1 | 2 | Y | |
| K1-07 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | WGMGMET1 | 3 | Y | |
| K1-07 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | WGMGMET1 | 4 | Y | |
| K1-07 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | WGMGMET2 | 4 | Y | |
| K1-08 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:THISO | 1 | Y | |
| K1-08 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:THISO | 2 | Y | |
| K1-08 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:THISO | 3 | Y | |
| K1-08 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:THISO | 4 | Y | |
| K1-08 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:UISO | 1 | Y | |
| K1-08 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:UISO | 2 | Y | |
| K1-08 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:UISO | 3 | Y | |
| K1-08 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:UISO | 4 | Y | |
| K1-08 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 1 | Y | |
| K1-08 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 2 | Y | |
| K1-08 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 3 | Y | |
| K1-08 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 4 | Y | |
| K1-08 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E300.0:PERC | 1 | Y | |
| K1-08 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E300.0:PERC | 2 | Y | |
| K1-08 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E300.0:PERC | 3 | Y | |

**Table 2.5-1. Building 850 (OU5A) 2003 ground water sampling and analysis plan. (Cont. Page 11 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| K1-08 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E300.0:PERC | 4 | Y | |
| K1-08 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E601 | 1 | Y | |
| K1-08 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E601 | 2 | Y | |
| K1-08 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E601 | 3 | Y | |
| K1-08 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E601 | 4 | Y | |
| K1-08 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E624 | 4 | Y | |
| K1-08 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E8330:R+H | 1 | Y | |
| K1-08 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E8330:R+H | 2 | Y | |
| K1-08 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E8330:R+H | 3 | Y | |
| K1-08 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E8330:R+H | 4 | Y | |
| K1-08 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 1 | Y | |
| K1-08 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 2 | Y | |
| K1-08 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 3 | Y | |
| K1-08 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 4 | Y | |
| K1-08 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | MS:UISO | 1 | N | AS:UISO analyzed. |
| K1-08 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | MS:UISO | 2 | N | AS:UISO analyzed. |
| K1-08 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | MS:UISO | 3 | N | AS:UISO analyzed. |
| K1-08 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | MS:UISO | 4 | Y | |
| K1-08 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | WGMGMET1 | 1 | Y | |
| K1-08 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | WGMGMET1 | 2 | Y | |
| K1-08 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | WGMGMET1 | 3 | Y | |
| K1-08 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | WGMGMET1 | 4 | Y | |
| K1-08 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | WGMGMET2 | 4 | Y | |
| K1-09 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:THISO | 1 | Y | |
| K1-09 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:THISO | 2 | Y | |

**Table 2.5-1. Building 850 (OU5A) 2003 ground water sampling and analysis plan. (Cont. Page 12 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| K1-09 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:THISO | 3 | Y | |
| K1-09 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:THISO | 4 | Y | |
| K1-09 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:UISO | 1 | Y | |
| K1-09 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:UISO | 2 | Y | |
| K1-09 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:UISO | 3 | Y | |
| K1-09 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | AS:UISO | 4 | Y | |
| K1-09 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 1 | Y | |
| K1-09 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 2 | Y | |
| K1-09 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 3 | Y | |
| K1-09 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E300.0:NO3 | 4 | Y | |
| K1-09 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E300.0:PERC | 1 | Y | |
| K1-09 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E300.0:PERC | 2 | Y | |
| K1-09 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E300.0:PERC | 3 | Y | |
| K1-09 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E300.0:PERC | 4 | Y | |
| K1-09 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E601 | 1 | Y | |
| K1-09 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E601 | 2 | Y | |
| K1-09 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E601 | 3 | Y | |
| K1-09 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E601 | 4 | Y | |
| K1-09 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E624 | 4 | Y | |
| K1-09 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E8330:R+H | 1 | Y | |
| K1-09 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E8330:R+H | 2 | Y | |
| K1-09 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E8330:R+H | 3 | Y | |
| K1-09 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | E8330:R+H | 4 | Y | |
| K1-09 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 1 | Y | |
| K1-09 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 2 | Y | |

**Table 2.5-1. Building 850 (OU5A) 2003 ground water sampling and analysis plan. (Cont. Page 13 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| K1-09 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 3 | Y | |
| K1-09 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 4 | Y | |
| K1-09 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | MS:UISO | 1 | N | AS:UISO analyzed. |
| K1-09 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | MS:UISO | 2 | N | AS:UISO analyzed. |
| K1-09 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | MS:UISO | 3 | N | AS:UISO analyzed. |
| K1-09 | DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | MS:UISO | 4 | Y | |
| K1-09 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | WGMGMET1 | 1 | Y | |
| K1-09 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | WGMGMET1 | 2 | Y | |
| K1-09 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | WGMGMET1 | 3 | Y | |
| K1-09 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | WGMGMET1 | 4 | Y | |
| K1-09 | DMW | $Tnbs_1$ | | Q | ERD/WGMG | WGMGMET2 | 4 | Y | |
| K2-03 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| K2-03 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 2 | Y | |
| K2-03 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 4 | Y | |
| K2-03 | MWPT | $Tnbs_1$ | A | A | CMP | MS:UISO | 2 | Y | |
| K2-04C | MWPT | $Tnbs_1/Tnbs_0$ | A | A | CMP | E300.0:NO3 | 4 | N | Well was abandoned. |
| K2-04C | MWPT | $Tnbs_1/Tnbs_0$ | S | S | CMP | E906 | 2 | N | Well was abandoned. |
| K2-04C | MWPT | $Tnbs_1/Tnbs_0$ | S | S | CMP | E906 | 4 | N | Well was abandoned. |
| K2-04C | MWPT | $Tnbs_1/Tnbs_0$ | A | A | CMP | MS:UISO | 4 | N | Well was abandoned. |
| K2-04D | MWPT | $Tnbs_1$ | A | A | CMP/WGMG | AS:UISO | 2 | Y | |
| K2-04D | MWPT | $Tnbs_1$ | | A | ERD/WGMG | AS:UISO | 4 | Y | |
| K2-04D | MWPT | $Tnbs_1$ | A | S | CMP/WGMG | E300.0:NO3 | 2 | Y | |
| K2-04D | MWPT | $Tnbs_1$ | | S | ERD/WGMG | E300.0:NO3 | 4 | Y | |
| K2-04D | MWPT | $Tnbs_1$ | | S | ERD/WGMG | E300.0:PERC | 2 | Y | |
| K2-04D | MWPT | $Tnbs_1$ | | S | ERD/WGMG | E300.0:PERC | 4 | Y | |

**Table 2.5-1. Building 850 (OU5A) 2003 ground water sampling and analysis plan. (Cont. Page 14 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| K2-04D | MWPT | $Tnbs_1$ | | S | ERD/WGMG | E601 | 2 | Y | |
| K2-04D | MWPT | $Tnbs_1$ | | S | ERD/WGMG | E601 | 4 | Y | |
| K2-04D | MWPT | $Tnbs_1$ | | S | ERD/WGMG | E8330:R+H | 2 | Y | |
| K2-04D | MWPT | $Tnbs_1$ | | S | ERD/WGMG | E8330:R+H | 4 | Y | |
| K2-04D | MWPT | $Tnbs_1$ | S | S | CMP/WGMG | E906 | 2 | Y | |
| K2-04D | MWPT | $Tnbs_1$ | S | S | CMP/WGMG | E906 | 4 | Y | |
| K2-04D | MWPT | $Tnbs_1$ | | S | ERD/WGMG | WGMGMET3 | 2 | Y | |
| K2-04D | MWPT | $Tnbs_1$ | | S | ERD/WGMG | WGMGMET3 | 4 | Y | |
| K2-04S | MWPT | $Tnbs_1$ | A | S | CMP/WGMG | E300.0:NO3 | 2 | Y | |
| K2-04S | MWPT | $Tnbs_1$ | | S | ERD/WGMG | E300.0:NO3 | 4 | Y | |
| K2-04S | MWPT | $Tnbs_1$ | | S | ERD/WGMG | E300.0:PERC | 2 | Y | |
| K2-04S | MWPT | $Tnbs_1$ | | S | ERD/WGMG | E300.0:PERC | 4 | Y | |
| K2-04S | MWPT | $Tnbs_1$ | | S | ERD/WGMG | E601 | 2 | Y | |
| K2-04S | MWPT | $Tnbs_1$ | | S | ERD/WGMG | E601 | 4 | Y | |
| K2-04S | MWPT | $Tnbs_1$ | | S | ERD/WGMG | E8330:R+H | 2 | Y | |
| K2-04S | MWPT | $Tnbs_1$ | | S | ERD/WGMG | E8330:R+H | 4 | Y | |
| K2-04S | MWPT | $Tnbs_1$ | S | S | CMP/WGMG | E906 | 2 | Y | |
| K2-04S | MWPT | $Tnbs_1$ | S | S | CMP/WGMG | E906 | 4 | Y | |
| K2-04S | MWPT | $Tnbs_1$ | A | A | CMP/WGMG | MS:UISO | 2 | Y | |
| K2-04S | MWPT | $Tnbs_1$ | | S | ERD/WGMG | WGMGMET3 | 2 | Y | |
| K2-04S | MWPT | $Tnbs_1$ | | S | ERD/WGMG | WGMGMET3 | 4 | Y | |
| NC2-05 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| NC2-05 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 2 | Y | |
| NC2-05 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 4 | Y | |
| NC2-05 | MWPT | $Tnbs_1$ | A | A | CMP | MS:UISO | 2 | Y | |

**Table 2.5-1. Building 850 (OU5A) 2003 ground water sampling and analysis plan. (Cont. Page 15 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| NC2-05A | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| NC2-05A | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 2 | Y | |
| NC2-05A | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 4 | Y | |
| NC2-05A | MWPT | $Tnbs_1$ | A | A | CMP | MS:UISO | 2 | Y | |
| NC2-06 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| NC2-06 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 2 | Y | |
| NC2-06 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 4 | Y | |
| NC2-06 | MWPT | $Tnbs_1$ | A | A | CMP | MS:UISO | 2 | Y | |
| NC2-06A | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| NC2-06A | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 2 | Y | |
| NC2-06A | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 4 | Y | |
| NC2-06A | MWPT | $Tnbs_1$ | A | S | CMP | MS:UISO | 2 | Y | |
| NC2-06A | MWPT | $Tnbs_1$ | | S | DIS | MS:UISO | 4 | Y | |
| NC2-09 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| NC2-09 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 2 | Y | |
| NC2-09 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 4 | Y | |
| NC2-09 | MWPT | $Tnbs_1$ | A | A | CMP | MS:UISO | 2 | Y | |
| NC2-09A | MWPT | $Tnbs_1$ | A | | CMP | E300.0:NO3 | 4 | N | Well was abandoned. |
| NC2-09A | MWPT | $Tnbs_1$ | S | | CMP | E906 | 2 | N | Well was abandoned. |
| NC2-09A | MWPT | $Tnbs_1$ | S | | CMP | E906 | 4 | N | Well was abandoned. |
| NC2-09A | MWPT | $Tnbs_1$ | A | | CMP | MS:UISO | 4 | N | Well was abandoned. |
| NC2-10 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| NC2-10 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 2 | Y | |
| NC2-10 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 4 | Y | |
| NC2-10 | MWPT | $Tnbs_1$ | A | A | CMP | MS:UISO | 2 | Y | |

**Table 2.5-1. Building 850 (OU5A) 2003 ground water sampling and analysis plan. (Cont. Page 16 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| NC2-11D | MWPT | $Tnbs_1$ | | A | ERD/WGMG | AS:UISO | 4 | Y | |
| NC2-11D | MWPT | $Tnbs_1$ | A | S | CMP/WGMG | E300.0:NO3 | 2 | Y | |
| NC2-11D | MWPT | $Tnbs_1$ | | S | ERD/WGMG | E300.0:NO3 | 4 | Y | |
| NC2-11D | MWPT | $Tnbs_1$ | | S | ERD/WGMG | E300.0:PERC | 2 | Y | |
| NC2-11D | MWPT | $Tnbs_1$ | | S | ERD/WGMG | E300.0:PERC | 4 | Y | |
| NC2-11D | MWPT | $Tnbs_1$ | | S | ERD/WGMG | E601 | 2 | Y | |
| NC2-11D | MWPT | $Tnbs_1$ | | S | ERD/WGMG | E601 | 4 | Y | |
| NC2-11D | MWPT | $Tnbs_1$ | | S | ERD/WGMG | E8330:R+H | 2 | Y | |
| NC2-11D | MWPT | $Tnbs_1$ | | S | ERD/WGMG | E8330:R+H | 4 | Y | |
| NC2-11D | MWPT | $Tnbs_1$ | S | S | CMP/WGMG | E906 | 2 | Y | |
| NC2-11D | MWPT | $Tnbs_1$ | S | S | CMP/WGMG | E906 | 4 | Y | |
| NC2-11D | MWPT | $Tnbs_1$ | A | A | CMP/WGMG | MS:UISO | 2 | Y | |
| NC2-11D | MWPT | $Tnbs_1$ | | S | ERD/WGMG | WGMGMET3 | 2 | Y | |
| NC2-11D | MWPT | $Tnbs_1$ | | S | ERD/WGMG | WGMGMET3 | 4 | Y | |
| NC2-11I | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| NC2-11I | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 2 | Y | |
| NC2-11I | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 4 | Y | |
| NC2-11I | MWPT | $Tnbs_1$ | A | A | CMP | MS:UISO | 2 | Y | |
| NC2-11S | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| NC2-11S | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 2 | Y | |
| NC2-11S | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 4 | Y | |
| NC2-11S | MWPT | $Tnbs_1$ | A | A | CMP | MS:UISO | 2 | Y | |
| NC2-12D | MWPT | $Tnbs_1$ | | A | ERD/WGMG | AS:UISO | 4 | Y | |
| NC2-12D | MWPT | $Tnbs_1$ | A | S | CMP/WGMG | E300.0:NO3 | 2 | Y | |
| NC2-12D | MWPT | $Tnbs_1$ | | S | ERD/WGMG | E300.0:NO3 | 4 | Y | |

**Table 2.5-1. Building 850 (OU5A) 2003 ground water sampling and analysis plan. (Cont. Page 17 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| NC2-12D | MWPT | $Tnbs_1$ | | S | ERD/WGMG | E300.0:PERC | 2 | Y | |
| NC2-12D | MWPT | $Tnbs_1$ | | S | ERD/WGMG | E300.0:PERC | 4 | Y | |
| NC2-12D | MWPT | $Tnbs_1$ | | S | ERD/WGMG | E601 | 2 | Y | |
| NC2-12D | MWPT | $Tnbs_1$ | | S | ERD/WGMG | E601 | 4 | Y | |
| NC2-12D | MWPT | $Tnbs_1$ | | S | ERD/WGMG | E8330:R+H | 2 | Y | |
| NC2-12D | MWPT | $Tnbs_1$ | | S | ERD/WGMG | E8330:R+H | 4 | Y | |
| NC2-12D | MWPT | $Tnbs_1$ | S | S | CMP/WGMG | E906 | 2 | Y | |
| NC2-12D | MWPT | $Tnbs_1$ | S | S | CMP/WGMG | E906 | 4 | Y | |
| NC2-12D | MWPT | $Tnbs_1$ | A | A | CMP/WGMG | MS:UISO | 2 | Y | |
| NC2-12D | MWPT | $Tnbs_1$ | | S | ERD/WGMG | WGMGMET3 | 2 | Y | |
| NC2-12D | MWPT | $Tnbs_1$ | | S | ERD/WGMG | WGMGMET3 | 4 | Y | |
| NC2-12I | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| NC2-12I | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 2 | Y | |
| NC2-12I | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 4 | Y | |
| NC2-12I | MWPT | $Tnbs_1$ | A | A | CMP | MS:UISO | 2 | Y | |
| NC2-12S | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| NC2-12S | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 2 | Y | |
| NC2-12S | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 4 | Y | |
| NC2-12S | MWPT | $Tnbs_1$ | A | A | CMP | MS:UISO | 2 | Y | |
| NC2-13 | MWPT | $Tnbs_1$ | | A | DIS | DWMETALS | 2 | Y | |
| NC2-13 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| NC2-13 | MWPT | $Tnbs_1$ | | A | DIS | E601 | 2 | Y | |
| NC2-13 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 2 | Y | |
| NC2-13 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 4 | Y | |
| NC2-13 | MWPT | $Tnbs_1$ | A | A | CMP | MS:UISO | 2 | Y | |

**Table 2.5-1. Building 850 (OU5A) 2003 ground water sampling and analysis plan. (Cont. Page 18 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| NC2-14S | MWPT | $Tnbs_1$ | | A | DIS | DWMETALS | 2 | Y | |
| NC2-14S | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| NC2-14S | MWPT | $Tnbs_1$ | | A | DIS | E601 | 2 | Y | |
| NC2-14S | MWPT | $Tnbs_1$ | | A | DIS | E8330:R+H | 2 | Y | |
| NC2-14S | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 2 | Y | |
| NC2-14S | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 4 | Y | |
| NC2-14S | MWPT | $Tnbs_1$ | A | A | CMP | MS:UISO | 2 | Y | |
| NC2-15 | MWPT | $Tnbs_1$ | | A | DIS | AS:UISO | 2 | Y | |
| NC2-15 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| NC2-15 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 2 | Y | |
| NC2-15 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 4 | Y | |
| NC2-15 | MWPT | $Tnbs_1$ | A | A | CMP | MS:UISO | 4 | Y | |
| NC2-16 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| NC2-16 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 2 | Y | |
| NC2-16 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 4 | Y | |
| NC2-16 | MWPT | $Tnbs_1$ | A | A | CMP | MS:UISO | 2 | Y | |
| NC2-17 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| NC2-17 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 2 | Y | |
| NC2-17 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 4 | Y | |
| NC2-17 | MWPT | $Tnbs_1$ | A | A | CMP | MS:UISO | 2 | Y | |
| NC2-18 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| NC2-18 | MWPT | $Tnbs_1$ | S | A | CMP | E906 | 2 | Y | |
| NC2-18 | MWPT | $Tnbs_1$ | A | A | CMP | MS:UISO | 2 | Y | |
| NC2-19 | MWPT | $Tnbs_1$ | | A | DIS | AS:UISO | 2 | Y | |
| NC2-19 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |

**Table 2.5-1. Building 850 (OU5A) 2003 ground water sampling and analysis plan. (Cont. Page 19 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| NC2-19 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 2 | Y | |
| NC2-19 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 4 | Y | |
| NC2-19 | MWPT | $Tnbs_1$ | A | A | CMP | MS:UISO | 4 | Y | |
| NC2-20 | MWPT | $Tnbs_0$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| NC2-20 | MWPT | $Tnbs_0$ | S | S | CMP | E906 | 2 | Y | |
| NC2-20 | MWPT | $Tnbs_0$ | S | S | CMP | E906 | 4 | Y | |
| NC2-20 | MWPT | $Tnbs_0$ | A | A | CMP | MS:UISO | 2 | Y | |
| NC2-21 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| NC2-21 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 2 | Y | |
| NC2-21 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 4 | Y | |
| NC2-21 | MWPT | $Tnbs_1$ | A | A | CMP | MS:UISO | 2 | Y | |
| NC7-10 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| NC7-10 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 2 | Y | |
| NC7-10 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 4 | Y | |
| NC7-10 | MWPT | $Tnbs_1$ | A | A | DIS | MS:UISO | 2 | Y | |
| NC7-11 | MWPT | $Qal/Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| NC7-11 | MWPT | $Qal/Tnbs_1$ | S | S | CMP | E906 | 2 | Y | |
| NC7-11 | MWPT | $Qal/Tnbs_1$ | S | S | CMP | E906 | 4 | Y | |
| NC7-11 | MWPT | $Qal/Tnbs_1$ | A | A | DIS | MS:UISO | 2 | Y | |
| NC7-14 | MWPT | $Qal/Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | N | Dry. |
| NC7-14 | MWPT | $Qal/Tnbs_1$ | A | A | CMP | E300.0:NO3 | 4 | N | Dry. |
| NC7-14 | MWPT | $Qal/Tnbs_1$ | S | S | CMP | E906 | 2 | N | Dry. |
| NC7-14 | MWPT | $Qal/Tnbs_1$ | S | S | CMP | E906 | 4 | N | Dry. |
| NC7-14 | MWPT | $Qal/Tnbs_1$ | A | A | CMP | MS:UISO | 2 | N | Dry. |

**Table 2.5-1. Building 850 (OU5A) 2003 ground water sampling and analysis plan. (Cont. Page 20 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| NC7-14 | MWPT | Qal/$Tnbs_1$ | A | A | CMP | MS:UISO | 4 | N | Dry. |
| NC7-15 | MWPT | $Tnbs_1$ | | A | DIS | DWMETALS | 2 | Y | |
| NC7-15 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 4 | Y | |
| NC7-15 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 2 | Y | |
| NC7-15 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 4 | Y | |
| NC7-15 | MWPT | $Tnbs_1$ | A | A | CMP | MS:UISO | 2 | Y | |
| NC7-19 | MWPT | Qal/$Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| NC7-19 | MWPT | Qal/$Tnbs_1$ | S | S | CMP | E906 | 2 | Y | |
| NC7-19 | MWPT | Qal/$Tnbs_1$ | S | S | CMP | E906 | 4 | Y | |
| NC7-19 | MWPT | Qal/$Tnbs_1$ | A | A | CMP | MS:UISO | 2 | Y | |
| NC7-27 | MWPT | $Tnsc_0$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| NC7-27 | MWPT | $Tnsc_0$ | S | S | CMP | E906 | 2 | Y | |
| NC7-27 | MWPT | $Tnsc_0$ | S | S | CMP | E906 | 4 | Y | |
| NC7-27 | MWPT | $Tnsc_0$ | A | A | CMP | MS:UISO | 2 | Y | |
| NC7-28 | MWPT | $Tnbs_1$ | | A | DIS | AS:UISO | 2 | Y | |
| NC7-28 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| NC7-28 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 2 | Y | |
| NC7-28 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 4 | Y | |
| NC7-28 | MWPT | $Tnbs_1$ | A | A | CMP | MS:UISO | 1 | Y | |
| NC7-28 | MWPT | $Tnbs_1$ | A | A | DIS | MS:UISO | 4 | Y | |
| NC7-29 | MWPT | $Tnbs_1$ | | A | DIS | DWMETALS | 2 | Y | |
| NC7-29 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| NC7-29 | MWPT | $Tnbs_1$ | | A | DIS | E601 | 2 | Y | |
| NC7-29 | MWPT | $Tnbs_1$ | | A | DIS | E8330:R+H | 2 | Y | |
| NC7-29 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 2 | Y | |

**Table 2.5-1. Building 850 (OU5A) 2003 ground water sampling and analysis plan. (Cont. Page 21 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| NC7-29 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 4 | Y | |
| NC7-29 | MWPT | $Tnbs_1$ | A | A | CMP | MS:UISO | 2 | Y | |
| NC7-43 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| NC7-43 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 2 | Y | |
| NC7-43 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 4 | Y | |
| NC7-43 | MWPT | $Tnbs_1$ | A | A | CMP | MS:UISO | 2 | Y | |
| NC7-44 | MWPT | $Tnbs_1$ | | A | DIS | AS:UISO | 2 | Y | |
| NC7-44 | MWPT | $Tnbs_1$ | | A | DIS | DWMETALS | 2 | Y | |
| NC7-44 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| NC7-44 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 2 | Y | |
| NC7-44 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 4 | Y | |
| NC7-44 | MWPT | $Tnbs_1$ | A | A | CMP | MS:UISO | 4 | Y | |
| NC7-45 | MWPT | $Tnbs_1$ | | A | DIS | DWMETALS | 2 | N | Dry 4/03. Casing bent 6/03. |
| NC7-45 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | N | Dry 4/03. Casing bent 6/03. |
| NC7-45 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 4 | N | Dry. |
| NC7-45 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 2 | N | Dry 4/03. Casing bent 6/03. |
| NC7-45 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 4 | N | Dry. |
| NC7-45 | MWPT | $Tnbs_1$ | A | A | CMP | MS:UISO | 2 | N | Dry 4/03. Casing bent 6/03. |
| NC7-45 | MWPT | $Tnbs_1$ | A | A | CMP | MS:UISO | 4 | N | Dry. |
| NC7-46 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| NC7-46 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 2 | Y | |
| NC7-46 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 4 | Y | |
| NC7-46 | MWPT | $Tnbs_1$ | A | A | CMP | MS:UISO | 2 | Y | |
| NC7-54 | MWPT | Qal | | A | DIS | AS:UISO | 2 | N | Insufficient water. |
| NC7-54 | MWPT | Qal | | A | DIS | DWMETALS | 2 | Y | |

**Table 2.5-1. Building 850 (OU5A) 2003 ground water sampling and analysis plan. (Cont. Page 22 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| NC7-54 | MWPT | Qal | A | A | CMP | E300.0:NO3 | 2 | N | Insufficient water. |
| NC7-54 | MWPT | Qal | A | A | CMP | E300.0:NO3 | 4 | N | Well surrounded by stinging nettle. |
| NC7-54 | MWPT | Qal | | A | DIS | E601 | 2 | Y | |
| NC7-54 | MWPT | Qal | | A | DIS | E8330:R+H | 2 | N | Insufficient water. |
| NC7-54 | MWPT | Qal | S | S | CMP | E906 | 2 | N | Insufficient water. |
| NC7-54 | MWPT | Qal | S | S | CMP | E906 | 4 | N | Well surrounded by stinging nettle. |
| NC7-54 | MWPT | Qal | A | S | CMP | MS:UISO | 2 | N | Insufficient water. |
| NC7-54 | MWPT | Qal | | S | DIS | MS:UISO | 4 | N | Well surrounded by stinging nettle. |
| NC7-55 | MWPT | $Tnbs_1$ | | A | DIS | DWMETALS | 2 | N | Dry. |
| NC7-55 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | N | Dry. |
| NC7-55 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 4 | N | Dry. |
| NC7-55 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 2 | N | Dry. |
| NC7-55 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 4 | N | Dry. |
| NC7-55 | MWPT | $Tnbs_1$ | A | A | CMP | MS:UISO | 2 | N | Dry. |
| NC7-55 | MWPT | $Tnbs_1$ | A | A | CMP | MS:UISO | 4 | N | Dry. |
| NC7-56 | MWPT | Qal/$Tnbs_1$ | | S | DIS | DWMETALS | 2 | Y | |
| NC7-56 | MWPT | Qal/$Tnbs_1$ | | S | DIS | DWMETALS | 4 | Y | |
| NC7-56 | MWPT | Qal/$Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| NC7-56 | MWPT | Qal/$Tnbs_1$ | S | S | CMP | E906 | 2 | Y | |
| NC7-56 | MWPT | Qal/$Tnbs_1$ | S | S | CMP | E906 | 4 | Y | |
| NC7-56 | MWPT | Qal/$Tnbs_1$ | A | A | CMP | MS:UISO | 2 | Y | |
| NC7-57 | MWPT | Qal | A | A | CMP | E300.0:NO3 | 2 | N | Dry. |
| NC7-57 | MWPT | Qal | A | A | CMP | E300.0:NO3 | 4 | N | Dry. |
| NC7-57 | MWPT | Qal | S | S | CMP | E906 | 2 | N | Dry. |
| NC7-57 | MWPT | Qal | S | S | CMP | E906 | 4 | N | Dry. |

Table 2.5-1. Building 850 (OU5A) 2003 ground water sampling and analysis plan. (Cont. Page 23 of 31)

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| NC7-57 | MWPT | Qal | A | A | CMP | MS:UISO | 2 | N | Dry. |
| NC7-57 | MWPT | Qal | A | A | CMP | MS:UISO | 4 | N | Dry. |
| NC7-58 | MWPT | Qal | | A | DIS | DWMETALS | 2 | Y | |
| NC7-58 | MWPT | Qal | A | A | CMP | E300.0:NO3 | 2 | Y | |
| NC7-58 | MWPT | Qal | S | S | CMP | E906 | 2 | Y | |
| NC7-58 | MWPT | Qal | S | S | CMP | E906 | 4 | Y | |
| NC7-58 | MWPT | Qal | A | A | CMP | MS:UISO | 2 | Y | |
| NC7-59 | MWPT | Qal/Tnbs$_1$ | | A | DIS | DWMETALS | 2 | Y | |
| NC7-59 | MWPT | Qal/Tnbs$_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| NC7-59 | MWPT | Qal/Tnbs$_1$ | S | S | CMP | E906 | 2 | Y | |
| NC7-59 | MWPT | Qal/Tnbs$_1$ | S | S | CMP | E906 | 4 | Y | |
| NC7-59 | MWPT | Qal/Tnbs$_1$ | A | A | CMP | MS:UISO | 2 | Y | |
| NC7-60 | MWPT | Tnbs$_0$ | | A | DIS | DWMETALS | 2 | Y | |
| NC7-60 | MWPT | Tnbs$_0$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| NC7-60 | MWPT | Tnbs$_0$ | S | S | CMP | E906 | 2 | Y | |
| NC7-60 | MWPT | Tnbs$_0$ | S | S | CMP | E906 | 4 | Y | |
| NC7-60 | MWPT | Tnbs$_0$ | A | A | CMP | MS:UISO | 2 | Y | |
| NC7-61 | MWPT | Tnbs$_0$ | | A | ERD/WGMG | AS:UISO | 4 | Y | |
| NC7-61 | MWPT | Tnbs$_0$ | | A | ERD/WGMG | DWMETALS | 2 | Y | |
| NC7-61 | MWPT | Tnbs$_0$ | A | S | CMP/WGMG | E300.0:NO3 | 2 | Y | |
| NC7-61 | MWPT | Tnbs$_0$ | | S | ERD/WGMG | E300.0:NO3 | 4 | Y | |
| NC7-61 | MWPT | Tnbs$_0$ | | S | ERD/WGMG | E300.0:PERC | 2 | Y | |
| NC7-61 | MWPT | Tnbs$_0$ | | S | ERD/WGMG | E300.0:PERC | 4 | Y | |
| NC7-61 | MWPT | Tnbs$_0$ | | S | ERD/WGMG | E601 | 2 | Y | |

**Table 2.5-1. Building 850 (OU5A) 2003 ground water sampling and analysis plan. (Cont. Page 24 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| NC7-61 | MWPT | $Tnbs_0$ | | S | ERD/WGMG | E601 | 4 | Y | |
| NC7-61 | MWPT | $Tnbs_0$ | | S | ERD/WGMG | E8330:R+H | 2 | Y | |
| NC7-61 | MWPT | $Tnbs_0$ | | S | ERD/WGMG | E8330:R+H | 4 | Y | |
| NC7-61 | MWPT | $Tnbs_0$ | S | S | CMP/WGMG | E906 | 2 | Y | |
| NC7-61 | MWPT | $Tnbs_0$ | S | S | CMP/WGMG | E906 | 4 | Y | |
| NC7-61 | MWPT | $Tnbs_0$ | A | A | CMP/WGMG | MS:UISO | 2 | Y | |
| NC7-61 | MWPT | $Tnbs_0$ | | S | ERD/WGMG | WGMGMET3 | 2 | Y | |
| NC7-61 | MWPT | $Tnbs_0$ | | S | ERD/WGMG | WGMGMET3 | 4 | Y | |
| NC7-62 | MWPT | $Tnbs_1$ | | A | DIS | DWMETALS | 2 | Y | |
| NC7-62 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| NC7-62 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 2 | Y | |
| NC7-62 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 4 | Y | |
| NC7-62 | MWPT | $Tnbs_1$ | A | A | CMP | MS:UISO | 2 | Y | |
| NC7-69 | MWPT | Tmss | | A | ERD/WGMG | AS:UISO | 4 | Y | |
| NC7-69 | MWPT | Tmss | | A | ERD/WGMG | AS:UISO | 2 | Y | |
| NC7-69 | MWPT | Tmss | | S | ERD/WGMG | E300.0:NO2 | 2 | Y | |
| NC7-69 | MWPT | Tmss | | S | ERD/WGMG | E300.0:NO2 | 4 | N | Not on sampling plan. |
| NC7-69 | MWPT | Tmss | A | A | CMP/WGMG | E300.0:NO3 | 2 | Y | |
| NC7-69 | MWPT | Tmss | | S | ERD/WGMG | E300.0:O-PO2 | 2 | Y | |
| NC7-69 | MWPT | Tmss | | S | ERD/WGMG | E300.0:O-PO2 | 4 | Y | |
| NC7-69 | MWPT | Tmss | | S | ERD/WGMG | E300.0:PERC | 2 | Y | |
| NC7-69 | MWPT | Tmss | | S | ERD/WGMG | E300.0:PERC | 4 | Y | |
| NC7-69 | MWPT | Tmss | | S | ERD/WGMG | E350.2 | 2 | Y | |
| NC7-69 | MWPT | Tmss | | S | ERD/WGMG | E350.2 | 4 | Y | |
| NC7-69 | MWPT | Tmss | | S | ERD/WGMG | E601 | 2 | Y | |

**Table 2.5-1. Building 850 (OU5A) 2003 ground water sampling and analysis plan. (Cont. Page 25 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| NC7-69 | MWPT | Tmss | | S | ERD/WGMG | E601 | 4 | Y | |
| NC7-69 | MWPT | Tmss | | S | ERD/WGMG | E8330:R+H | 2 | Y | |
| NC7-69 | MWPT | Tmss | | S | ERD/WGMG | E8330:R+H | 4 | Y | |
| NC7-69 | MWPT | Tmss | S | S | CMP/WGMG | E906 | 2 | Y | |
| NC7-69 | MWPT | Tmss | S | S | CMP/WGMG | E906 | 4 | Y | |
| NC7-69 | MWPT | Tmss | A | A | CMP/WGMG | MS:UISO | 4 | Y | |
| NC7-69 | MWPT | Tmss | | S | ERD/WGMG | WGMGMET3 | 2 | Y | |
| NC7-69 | MWPT | Tmss | | S | ERD/WGMG | WGMGMET3 | 4 | Y | |
| NC7-70 | MWPT | $Tnbs_1$ | | A | DIS | AS:UISO | 2 | Y | |
| NC7-70 | MWPT | $Tnbs_1$ | | A | DIS | DWMETALS | 2 | Y | |
| NC7-70 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| NC7-70 | MWPT | $Tnbs_1$ | | A | DIS | E601 | 2 | Y | |
| NC7-70 | MWPT | $Tnbs_1$ | | A | DIS | E8082A | 2 | Y | |
| NC7-70 | MWPT | $Tnbs_1$ | | A | DIS | E8330:R+H | 2 | Y | |
| NC7-70 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 2 | Y | |
| NC7-70 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 4 | Y | |
| NC7-70 | MWPT | $Tnbs_1$ | | A | DIS | EM8015:DIESE L | 2 | Y | |
| NC7-70 | MWPT | $Tnbs_1$ | A | Q | CMP | MS:UISO | 1 | Y | |
| NC7-70 | MWPT | $Tnbs_1$ | | Q | DIS | MS:UISO | 2 | Y | |
| NC7-70 | MWPT | $Tnbs_1$ | | Q | DIS | MS:UISO | 3 | Y | |
| NC7-70 | MWPT | $Tnbs_1$ | | Q | DIS | MS:UISO | 4 | Y | |
| NC7-71 | MWPT | $Tnbs_1$ | | A | DIS | DWMETALS | 2 | N | Unsafe sampling conditions. |
| NC7-71 | MWPT | $Tnbs_1$ | | A | DIS | DWMETALS | 4 | N | Control box down. |
| NC7-71 | MWPT | $Tnbs_1$ | | A | DIS | DWMETALS | 4 | N | Not on samping plan. |

**Table 2.5-1. Building 850 (OU5A) 2003 ground water sampling and analysis plan. (Cont. Page 26 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| NC7-71 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| NC7-71 | MWPT | $Tnbs_1$ | | A | DIS | E8330:R+H | 2 | N | Unsafe sampling conditions. |
| NC7-71 | MWPT | $Tnbs_1$ | | A | DIS | E8330:R+H | 4 | N | Control box down. |
| NC7-71 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 2 | Y | |
| NC7-71 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 4 | N | Control box down. |
| NC7-71 | MWPT | $Tnbs_1$ | A | A | CMP | MS:UISO | 2 | Y | |
| NC7-72 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 4 | Y | |
| NC7-72 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 2 | N | Inadvertently left off sampling plan. |
| NC7-72 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 4 | Y | |
| NC7-72 | MWPT | $Tnbs_1$ | A | A | CMP | MS:UISO | 4 | Y | |
| NC7-73 | MWPT | $Tnbs_1$ | | A | DIS | DWMETALS | 2 | Y | |
| NC7-73 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| NC7-73 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 2 | Y | |
| NC7-73 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 4 | Y | |
| NC7-73 | MWPT | $Tnbs_1$ | A | A | CMP | MS:UISO | 2 | Y | |
| NC7-76 | MWPT | $Tnbs_1$ | | A | DIS | AS:UISO | 2 | Y | |
| NC7-76 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| NC7-76 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 2 | Y | |
| NC7-76 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 4 | Y | |
| NC7-76 | MWPT | $Tnbs_1$ | A | A | CMP | MS:UISO | 4 | Y | |
| SPRING24 | SPR | $Tnbs_0/Tnbs_1$ | | A | DIS | E200.7 SIO2 | 4 | N | Insufficient water. |
| SPRING24 | SPR | $Tnbs_0/Tnbs_1$ | A | A | CMP | E300.0:NO3 | 4 | N | Insufficient water. |
| SPRING24 | SPR | $Tnbs_0/Tnbs_1$ | | Q | DIS | E906 | 1 | N | Sampling personnel shortage. |
| SPRING24 | SPR | $Tnbs_0/Tnbs_1$ | S | Q | CMP | E906 | 2 | N | Sampling personnel shortage. |
| SPRING24 | SPR | $Tnbs_0/Tnbs_1$ | | Q | DIS | E906 | 3 | Y | |

**Table 2.5-1. Building 850 (OU5A) 2003 ground water sampling and analysis plan. (Cont. Page 27 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| SPRING24 | SPR | $Tnbs_0/Tnbs_1$ | S | Q | CMP | E906 | 4 | Y | |
| SPRING24 | SPR | $Tnbs_0/Tnbs_1$ | | A | DIS | GENMIN | 4 | N | Insufficient water. |
| SPRING24 | SPR | $Tnbs_0/Tnbs_1$ | A | A | CMP | MS:UISO | 4 | N | Insufficient water. |
| W-850-05 | MWPT | $Tnbs_1$ | | S | DIS | DWMETALS | 2 | Y | |
| W-850-05 | MWPT | $Tnbs_1$ | | S | DIS | DWMETALS | 4 | Y | |
| W-850-05 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| W-850-05 | MWPT | $Tnbs_1$ | B | A | CMP | E8082A | 2 | Y | |
| W-850-05 | MWPT | $Tnbs_1$ | | A | DIS | E8330:R+H | 2 | Y | |
| W-850-05 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 2 | Y | |
| W-850-05 | MWPT | $Tnbs_1$ | S | S | CMP | E906 | 4 | Y | |
| W-850-05 | MWPT | $Tnbs_1$ | | A | DIS | EM8015:DIESE L | 2 | Y | |
| W-850-05 | MWPT | $Tnbs_1$ | A | A | CMP | MS:UISO | 2 | Y | |
| W-865-1802 | MWPT | $Tnbs_0$-$Tnsc_0$ | | S | DIS | DWMETALS | 2 | Y | |
| W-865-1802 | MWPT | $Tnbs_0$-$Tnsc_0$ | | S | DIS | DWMETALS | 4 | Y | |
| W-865-1802 | MWPT | $Tnbs_0$-$Tnsc_0$ | A | A | CMP | E300.0:NO3 | 4 | Y | GENMIN analyzed. |
| W-865-1802 | MWPT | $Tnbs_0$-$Tnsc_0$ | | S | DIS | E300.0:PERC | 2 | Y | |
| W-865-1802 | MWPT | $Tnbs_0$-$Tnsc_0$ | | S | DIS | E300.0:PERC | 4 | Y | |
| W-865-1802 | MWPT | $Tnbs_0$-$Tnsc_0$ | | Q | DIS | E601 | 3 | Y | |
| W-865-1802 | MWPT | $Tnbs_0$-$Tnsc_0$ | | Q | DIS | E624 | 1 | N | Pump not yet installed. |
| W-865-1802 | MWPT | $Tnbs_0$-$Tnsc_0$ | | Q | DIS | E624 | 2 | Y | |
| W-865-1802 | MWPT | $Tnbs_0$-$Tnsc_0$ | | Q | DIS | E624 | 4 | Y | |
| W-865-1802 | MWPT | $Tnbs_0$-$Tnsc_0$ | | S | DIS | E8330:R+H | 2 | Y | |
| W-865-1802 | MWPT | $Tnbs_0$-$Tnsc_0$ | | S | DIS | E8330:R+H | 4 | Y | |
| W-865-1802 | MWPT | $Tnbs_0$-$Tnsc_0$ | | S | DIS | E900 | 2 | Y | |

**Table 2.5-1. Building 850 (OU5A) 2003 ground water sampling and analysis plan. (Cont. Page 28 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-865-1802 | MWPT | $Tnbs_0$-$Tnsc_0$ | | S | DIS | E900 | 4 | Y | |
| W-865-1802 | MWPT | $Tnbs_0$-$Tnsc_0$ | S | Q | CMP | E906 | 1 | N | Pump not yet installed. |
| W-865-1802 | MWPT | $Tnbs_0$-$Tnsc_0$ | | Q | DIS | E906 | 2 | Y | |
| W-865-1802 | MWPT | $Tnbs_0$-$Tnsc_0$ | S | Q | CMP | E906 | 3 | Y | |
| W-865-1802 | MWPT | $Tnbs_0$-$Tnsc_0$ | | Q | DIS | E906 | 4 | Y | |
| W-865-1802 | MWPT | $Tnbs_0$-$Tnsc_0$ | | A | DIS | GENMIN | 4 | Y | |
| W-865-1802 | MWPT | $Tnbs_0$-$Tnsc_0$ | A | S | CMP | MS:UISO | 2 | Y | |
| W-865-1802 | MWPT | $Tnbs_0$-$Tnsc_0$ | | S | DIS | MS:UISO | 4 | Y | |
| W-865-1803 | MWPT | $Tnbs_0$-$Tnsc_0$ | | A | DIS | AS:UISO | 2 | Y | |
| W-865-1803 | MWPT | $Tnbs_0$-$Tnsc_0$ | | S | DIS | DWMETALS | 2 | Y | |
| W-865-1803 | MWPT | $Tnbs_0$-$Tnsc_0$ | | S | DIS | DWMETALS | 4 | N | Inaccessible due to road conditions. |
| W-865-1803 | MWPT | $Tnbs_0$-$Tnsc_0$ | A | A | CMP | E300.0:NO3 | 2 | Y | GENMIN analyzed. |
| W-865-1803 | MWPT | $Tnbs_0$-$Tnsc_0$ | | S | DIS | E300.0:PERC | 2 | Y | |
| W-865-1803 | MWPT | $Tnbs_0$-$Tnsc_0$ | | S | DIS | E300.0:PERC | 4 | N | Inaccessible due to road conditions. |
| W-865-1803 | MWPT | $Tnbs_0$-$Tnsc_0$ | | Q | DIS | E601 | 3 | Y | |
| W-865-1803 | MWPT | $Tnbs_0$-$Tnsc_0$ | | Q | DIS | E624 | 1 | N | Pump not yet installed. |
| W-865-1803 | MWPT | $Tnbs_0$-$Tnsc_0$ | | Q | DIS | E624 | 2 | Y | |
| W-865-1803 | MWPT | $Tnbs_0$-$Tnsc_0$ | | Q | DIS | E624 | 4 | N | Inaccessible due to road conditions. |
| W-865-1803 | MWPT | $Tnbs_0$-$Tnsc_0$ | | S | DIS | E8330:R+H | 2 | Y | |
| W-865-1803 | MWPT | $Tnbs_0$-$Tnsc_0$ | | S | DIS | E8330:R+H | 4 | N | Inaccessible due to road conditions. |
| W-865-1803 | MWPT | $Tnbs_0$-$Tnsc_0$ | | S | DIS | E900 | 2 | Y | |
| W-865-1803 | MWPT | $Tnbs_0$-$Tnsc_0$ | | S | DIS | E900 | 4 | N | Inaccessible due to road conditions. |
| W-865-1803 | MWPT | $Tnbs_0$-$Tnsc_0$ | | Q | DIS | E906 | 1 | N | Pump not yet installed. |
| W-865-1803 | MWPT | $Tnbs_0$-$Tnsc_0$ | S | Q | CMP | E906 | 2 | Y | |

**Table 2.5-1. Building 850 (OU5A) 2003 ground water sampling and analysis plan. (Cont. Page 29 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-865-1803 | MWPT | $Tnbs_0$-$Tnsc_0$ | S | Q | CMP | E906 | 3 | Y | |
| W-865-1803 | MWPT | $Tnbs_0$-$Tnsc_0$ | | Q | DIS | E906 | 4 | N | Inaccessible due to road conditions. |
| W-865-1803 | MWPT | $Tnbs_0$-$Tnsc_0$ | | A | DIS | GENMIN | 2 | Y | |
| W-865-1803 | MWPT | $Tnbs_0$-$Tnsc_0$ | A | S | CMP | MS:UISO | 2 | Y | AS:UISO analyzed. |
| W-865-1803 | MWPT | $Tnbs_0$-$Tnsc_0$ | | S | DIS | MS:UISO | 4 | N | Inaccessible due to road conditions. |
| W8SPRNG | SPR | $Tnbs_1$ | | A | DIS | DWMETALS | 2 | Y | |
| W8SPRNG | SPR | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| W8SPRNG | SPR | $Tnbs_1$ | S | S | CMP | E906 | 2 | Y | |
| W8SPRNG | SPR | $Tnbs_1$ | S | S | CMP | E906 | 4 | N | No access due to stinging nettles. |
| W8SPRNG | SPR | $Tnbs_1$ | A | A | CMP | MS:UISO | 2 | Y | |
| W-PIT1-01 | MW | $Tnbs_1$ | | Q | DIS | E601 | 1 | N | Dry. |
| W-PIT1-01 | MW | $Tnbs_1$ | | Q | DIS | E601 | 2 | N | Not on sampling plan. |
| W-PIT1-01 | MW | $Tnbs_1$ | | Q | DIS | E601 | 3 | Y | |
| W-PIT1-01 | MW | $Tnbs_1$ | | Q | DIS | E601 | 4 | N | Dry. |
| W-PIT1-01 | MW | $Tnbs_1$ | | Q | DIS | E906 | 1 | N | Dry. |
| W-PIT1-01 | MW | $Tnbs_1$ | | Q | DIS | E906 | 2 | N | Not on sampling plan. |
| W-PIT1-01 | MW | $Tnbs_1$ | | Q | DIS | E906 | 3 | N | Insufficient water. |
| W-PIT1-01 | MW | $Tnbs_1$ | | Q | DIS | E906 | 4 | N | Dry. |
| W-PIT1-02 | MW | $Tnbs_1$ | | Q | DIS | E601 | 1 | N | Not on sampling plan. |
| W-PIT1-02 | MW | $Tnbs_1$ | | Q | DIS | E601 | 2 | N | Not on sampling plan. |
| W-PIT1-02 | MW | $Tnbs_1$ | | Q | DIS | E601 | 3 | Y | |
| W-PIT1-02 | MW | $Tnbs_1$ | | Q | DIS | E601 | 4 | Y | |
| W-PIT1-02 | MW | $Tnbs_1$ | | Q | DIS | E906 | 1 | N | Not on sampling plan. |
| W-PIT1-02 | MW | $Tnbs_1$ | | Q | DIS | E906 | 2 | N | Not on sampling plan. |
| W-PIT1-02 | MW | $Tnbs_1$ | | Q | DIS | E906 | 3 | Y | |

**Table 2.5-1. Building 850 (OU5A) 2003 ground water sampling and analysis plan. (Cont. Page 30 of 31)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-PIT1-02 | MW | $Tnbs_1$ | | Q | DIS | E906 | 4 | Y | |
| W-PIT7-16 | MWPT | $Tnsc_0$ | | Q | DIS | E601 | 1 | N | Not on sampling plan. |
| W-PIT7-16 | MWPT | $Tnsc_0$ | | Q | DIS | E601 | 2 | Y | |
| W-PIT7-16 | MWPT | $Tnsc_0$ | | Q | DIS | E601 | 3 | Y | |
| W-PIT7-16 | MWPT | $Tnsc_0$ | | Q | DIS | E601 | 4 | Y | |
| W-PIT7-16 | MWPT | $Tnsc_0$ | | Q | DIS | E906 | 1 | N | Inadvertently left off sampling plan. |
| W-PIT7-16 | MWPT | $Tnsc_0$ | S | Q | CMP | E906 | 2 | Y | |
| W-PIT7-16 | MWPT | $Tnsc_0$ | | Q | DIS | E906 | 3 | Y | |
| W-PIT7-16 | MWPT | $Tnsc_0$ | S | Q | CMP | E906 | 4 | Y | |
| W-PIT7-16 | MWPT | $Tnsc_0$ | A | A | CMP | MS:UISO | 2 | Y | |

**Notes and footnotes appear on following page.**

**Table 2.5-1. Building 850 (OU5A) 2003 ground water sampling and analysis plan. (Cont. Page 31 of 31)**

**Notes:**

**Analytes and sampling frequency for detection monitoring wells (DMW) are specified in Waste Discharge Requirements for the Pit 1 Landfill.**

**Building 850 primary COC: Tritium (E906).**

**Building 850 secondary COC: Nitrate (E300.0:NO3).**

**Building 850 secondary COC: Uranium (MS:UISO).**

**Contaminants of Concern in the Vadose Zone not detected in Ground Water: PCBs.**

| | |
|---|---|
| **CGSA CMP/WGMG =** | **Sampling more frequently then required.** |
| **CGSA CMP/WGMG =** | **Well shared with the Operations and Regulatory Affairs Division, Water Guidance and Monitoring Group and may be sampled at a greater frequency and for additional analytes then required by the CMP. Non-CMP analytes are reported separately by ORAD.** |
| **CGSA CMP =** | **Central GSA groundwater sampling and analysis plan specified in the GSA RD** |
| **CMP DMW =** | **CMP detection monitor well.** |
| **CMP/DIS =** | **Sampling required analyte more frequently then required.** |
| **CMP/WGMG =** | **Well shared with the Operations and Regulatory Affairs Division, Water Guidance and Monitoring Group and may be sampled at a greater frequency and for additional analytes then required by the CMP. Non-CMP analytes are reported separately by ORAD.** |
| **CMP =** | **Compliance Monitoring.** |
| **DIS =** | **Discretionary sampling of non-required analyte.** |
| **DMW =** | **Detection monitor well (non-CMP).** |
| **ERD/WGMG =** | **non-CMP analyte sampled from a well shared by ERD and WGMG.** |
| **EW =** | **Extraction well.** |
| **GW =** | **Guard well.** |
| **MW =** | **Monitor well.** |
| **MWB =** | **Monitor well used for background.** |
| **MWPT =** | **Monitor well used for plume tracking.** |
| **SPR =** | **Spring.** |
| **WS =** | **Water supply well.** |

**Table 2.5-2. Building 850 OU 2003 VOCs in ground water.**

| Location | Date | Method | TCE (µg/L) | PCE (µg/L) | Total 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) | Freon 11 (µg/L) | Freon 113 (µg/L) | Methylene chloride (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K1-01C | 01/31/03 | E601 | <1 L | <1 L | <1 L | <1 L | <1 L | <1 L | <1 L | <1 L | <1 L | <1 L | <1 L | <1 L |
| K1-01C | 04/17/03 | E601 | <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 | 09/08/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K1-01C | 09/08/03 DUP | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K1-01C | 10/30/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K1-01C | 10/30/03 | E624 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K1-02B | 01/30/03 | E601 | <1 L | <1 L | <1 L | <1 L | <1 L | <1 L | <1 L | <1 L | <1 L | <1 L | <1 L | <1 L |
| K1-02B | 04/17/03 | E601 | <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 | 04/17/03 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 |
| K1-02B | 09/08/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K1-02B | 11/04/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K1-02B | 11/04/03 | E624 | 0.59 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K1-03 | 01/30/03 | E601 | <1 L | <1 L | <1 L | <1 L | <1 L | <1 L | <1 L | <1 L | <1 L | <1 L | <1 L | <1 L |
| K1-03 | 04/17/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K1-03 | 07/24/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K1-03 | 11/04/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K1-03 | 11/04/03 | E624 | 0.51 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K1-04 | 01/29/03 | E601 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| K1-04 | 01/29/03 DUP | E601 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| K1-04 | 04/18/03 | E601 | <0.5 | <0.5 O | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K1-04 | 07/24/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K1-04 | 11/18/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K1-04 | 11/18/03 | E624 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K1-04 | 11/18/03 DUP | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K1-04 | 11/18/03 DUP | E624 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K1-05 | 01/29/03 | E601 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 22 | <1 |
| K1-05 | 04/18/03 | E601 | <0.5 | <0.5 O | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 15 | <0.5 |
| K1-05 | 07/24/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 14 | <0.5 |
| K1-05 | 11/19/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 13 | <0.5 |
| K1-05 | 11/19/03 | E624 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 13 | <0.5 |
| K1-07 | 01/30/03 | E601 | <1 L | <1 L | <1 L | <1 L | <1 L | <1 L | <1 L | <1 L | <1 L | <1 L | <1 L | <1 L |
| K1-07 | 05/01/03 | E601 | <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 | 08/28/03 | E601 | <0.5 IJL | <0.5 | <0.5 IJL | <0.5 IJL | <0.5 IJL | <0.5 IJL | <0.5 IJL | <0.5 IJL | <0.5 IJL | <0.5 IJL | <0.5 | <0.5 IJL |
| K1-07 | 11/24/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K1-07 | 11/24/03 | E624 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K1-08 | 02/07/03 | E601 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | 21 | <1 |
| K1-08 | 05/02/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 18 | <0.5 |
| K1-08 | 09/04/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 17 | <0.5 |
| K1-08 | 11/24/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 19 | <0.5 |
| K1-08 | 11/24/03 | E624 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

**Table 2.5-2. Building 850 OU 2003 VOCs in ground water. (Cont. Page 2 of 2)**

| Location | Date | Method | TCE (μg/L) | PCE (μg/L) | Total 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) | Freon 11 (μg/L) | Freon 113 (μg/L) | Methylene chloride (μg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K1-09 | 01/31/03 | E601 | <1 L | <1 L | <1 L | <1 L | <1 L | <1 L | <1 L | <1 L | <1 L | <1 L | 56 L | <1 L |
| K1-09 | 05/02/03 | E601 | <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 | 09/08/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 40 | <0.5 |
| K1-09 | 11/25/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 41 | <0.5 |
| K1-09 | 11/25/03 | E624 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 41 | <0.5 |
| K2-04D | 05/15/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K2-04D | 11/25/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K2-04D | 11/25/03 DUP | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K2-04S | 05/02/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K2-04S | 12/05/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| NC2-11D | 05/08/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| NC2-11D | 12/10/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| NC2-12D | 05/08/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| NC2-12D | 12/10/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| NC2-13 | 05/03/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| NC2-14S | 06/18/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| NC2-14S | 06/18/03 SLI | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| NC7-29 | 06/17/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| NC7-54 | 05/27/03 | E601 | <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 |
| NC7-61 | 05/02/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| NC7-61 | 05/02/03 DUP | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| NC7-61 | 12/09/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| NC7-69 | 05/08/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| NC7-69 | 12/10/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| NC7-70 | 06/20/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-PIT7-16 | 05/03/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-PIT7-16 | 08/29/03 | E601 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| W-PIT7-16 | 10/17/03 | E601 | <0.5 | <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 | 06/27/03 | E624 | <1 H | <1 H | <1 H | <1 H | <1 H | <1 H | <1 H | <1 H | <1 H | <1 H | <1 H | <1 H |
| W-865-1802 | 08/26/03 | E601 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| W-865-1802 | 12/22/03 | E624 | <1 HL | <1 H | <1 H | <1 H | <1 H | <1 H | <1 H | <1 HL | <1 H | <1 H | <1 H | <1 H |
| W-865-1803 | 06/26/03 | E624 | <1 H | <1 H | <1 H | <1 H | <1 H | <1 H | <1 H | <1 H | <1 H | <1 H | <1 H | <1 H |
| W-865-1803 | 08/26/03 | E601 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |

**Other VOC not detected in the table:**

| Location | Date | Method | Dichlorodifluoromethane (μg/L) |
|---|---|---|---|
| NC7-70 | 06/20/03 | E601 | 1 |

**Table 2.5-3. Building 850 OU 2003 tritium in ground and surface water.**

| Location | Date | Tritium (pCi/L) |
|---|---|---|
| K1-01C | 01/31/03 | 376 ± 76.0 |
| K1-01C | 09/08/03 | 543 ± 83.0 |
| K1-01C | 09/08/03 DUP | 500 ± 80.0 |
| K1-01C | 10/30/03 | 658 ± 94.0 |
| K1-02B | 01/30/03 | 4,100 ± 420 |
| K1-02B | 04/17/03 | 4,010 ± 420 |
| K1-02B | 04/17/03 DUP | 3,910 ± 410 |
| K1-02B | 09/08/03 | 4,060 ± 420 |
| K1-02B | 11/04/03 | 4,080 ± 420 |
| K1-03 | 01/30/03 | 600 ± 90.0 |
| K1-03 | 04/17/03 | 523 ± 91.0 |
| K1-03 | 07/24/03 | 672 ± 96.0 |
| K1-03 | 11/04/03 | 616 ± 96.0 |
| K1-04 | 01/29/03 | 127 ± 62.0 |
| K1-04 | 01/29/03 DUP | <109 |
| K1-04 | 04/18/03 | <105 |
| K1-04 | 07/24/03 | 136 ± 60.0 |
| K1-04 | 11/18/03 | 178 ± 63.0 |
| K1-04 | 11/18/03 DUP | 186 ± 63.0 |
| K1-05 | 01/29/03 | <100 |
| K1-05 | 04/18/03 | <108 |
| K1-05 | 07/24/03 | 194 ± 62.0 |
| K1-05 | 11/19/03 | <94.8 E |
| K1-06 | 06/03/03 | 4,880 ± 500 |
| K1-06 | 11/19/03 | 4,760 ± 490 |
| K1-07 | 01/30/03 | <98.5 |
| K1-07 | 05/01/03 | <98.5 |
| K1-07 | 08/28/03 | <94.1 |
| K1-07 | 11/24/03 | <90.8 |
| K1-08 | 02/07/03 | 155 ± 64.0 E |
| K1-08 | 05/02/03 | <96 |
| K1-08 | 09/04/03 | 226 ± 59.0 |
| K1-08 | 11/24/03 | 244 ± 63.0 |
| K1-09 | 01/31/03 | <97.5 |
| K1-09 | 05/02/03 | <94.5 |
| K1-09 | 09/08/03 | <91.8 E |
| K1-09 | 11/25/03 | 139 ± 57.0 |
| K2-03 | 05/03/03 | <90.8 |
| K2-03 | 11/25/03 | <90.6 |
| K2-03 | 11/25/03 DUP | <141 |
| K2-04D | 05/15/03 | 4,960 ± 510 |
| K2-04D | 11/25/03 | 4,790 ± 490 |
| K2-04D | 11/25/03 DUP | 4,730 ± 490 |
| K2-04S | 05/02/03 | 14,900 ± 1,500 |
| K2-04S | 12/05/03 | 14,000 ± 1,400 |
| NC2-05 | 05/03/03 | <89 |

**Table 2.5-3. Building 850 OU 2003 tritium in ground and surface water.**

| Location | Date | Tritium (pCi/L) |
|---|---|---|
| NC2-05 | 10/11/03 | <91.4 |
| NC2-05A | 05/03/03 | 4,840 ± 500 |
| NC2-05A | 10/11/03 | 4,220 ± 430 |
| NC2-06 | 05/10/03 | 2,920 ± 310 |
| NC2-06 | 10/17/03 | 3,230 ± 340 |
| NC2-06A | 05/10/03 | 102 ± 60.0 |
| NC2-06A | 10/17/03 | <102 |
| NC2-09 | 05/03/03 | <91.4 |
| NC2-09 | 10/25/03 | 131 ± 59.0 |
| NC2-09 | 10/25/03 DUP | <220 |
| NC2-10 | 05/03/03 | 369 ± 71.0 |
| NC2-10 | 11/11/03 | 336 ± 71.0 |
| NC2-11D | 05/08/03 | 4,390 ± 450 |
| NC2-11D | 12/10/03 | 4,650 ± 480 |
| NC2-11I | 04/19/03 | 4,360 ± 450 |
| NC2-11I | 10/11/03 | 4,580 ± 470 |
| NC2-11S | 04/19/03 | 4,990 ± 520 |
| NC2-11S | 10/11/03 | 4,850 ± 500 |
| NC2-11S | 10/11/03 DUP | 4,260 ± 212 |
| NC2-12D | 05/08/03 | 8,550 ± 870 |
| NC2-12D | 12/10/03 | 8,370 ± 850 |
| NC2-12I | 04/19/03 | 7,120 ± 730 |
| NC2-12I | 10/11/03 | 7,560 ± 770 |
| NC2-12S | 04/19/03 | 5,070 ± 520 |
| NC2-12S | 04/19/03 DUP | 5,310 ± 550 |
| NC2-12S | 10/11/03 | 3,180 ± 330 |
| NC2-13 | 05/03/03 | 7,300 ± 740 |
| NC2-13 | 10/17/03 | 5,780 ± 590 |
| NC2-14S | 04/19/03 | 9,130 ± 930 |
| NC2-14S | 04/19/03 DUP | 8,540 ± 345 L |
| NC2-14S | 10/25/03 | 4,830 ± 500 |
| NC2-15 | 04/19/03 | 7,270 ± 740 |
| NC2-15 | 10/25/03 | 7,330 ± 750 |
| NC2-16 | 04/19/03 | 3,140 ± 330 |
| NC2-16 | 10/17/03 | 1,860 ± 200 |
| NC2-16 | 10/17/03 DUP | 1,800 ± 151 |
| NC2-17 | 10/25/03 | 15,000 ± 1,500 |
| NC2-18 | 04/19/03 | 21,900 ± 2,200 |
| NC2-19 | 05/10/03 | <93.4 |
| NC2-19 | 10/17/03 | <104 |
| NC2-20 | 05/10/03 | <89.4 |
| NC2-20 | 10/25/03 | <95.7 |
| NC2-21 | 05/10/03 | <93.1 |
| NC2-21 | 10/25/03 | <92.6 |
| NC2-21 | 10/25/03 DUP | <220 |
| NC7-10 | 04/19/03 | 29,100 ± 2,900 |

**Table 2.5-3. Building 850 OU 2003 tritium in ground and surface water.**

| Location | Date | Tritium (pCi/L) |
|---|---|---|
| NC7-10 | 11/11/03 | 25,000 ± 2,500 |
| NC7-11 | 04/19/03 | 23,700 ± 2,400 |
| NC7-11 | 11/12/03 | 26,300 ± 2,600 |
| NC7-15 | 04/26/03 | 1,470 ± 180 |
| NC7-15 | 04/26/03 DUP | 1,400 ± 175 |
| NC7-15 | 12/09/03 | 1,560 ± 180 |
| NC7-19 | 04/19/03 | 8,050 ± 820 |
| NC7-19 | 05/28/03 | 8,210 ± 830 |
| NC7-19 | 10/25/03 | 8,550 ± 870 |
| NC7-27 | 04/19/03 | <98.3 |
| NC7-27 | 10/17/03 | 15,500 ± 1,600 |
| NC7-28 | 04/26/03 | 38,500 ± 687 |
| NC7-28 | 04/26/03 DUP | 38,700 ± 694 |
| NC7-28 | 12/09/03 | 38,200 ± 3,800 |
| NC7-29 | 04/26/03 | <217 |
| NC7-29 | 10/25/03 | <92.7 |
| NC7-43 | 04/19/03 | 6,770 ± 690 |
| NC7-43 | 04/19/03 DUP | 6,330 ± 304 L |
| NC7-43 | 10/25/03 | 6,430 ± 660 |
| NC7-43 | 10/25/03 DUP | 6,400 ± 650 |
| NC7-44 | 05/10/03 | <94.7 |
| NC7-44 | 10/31/03 | <100 |
| NC7-46 | 04/26/03 | <212 |
| NC7-46 | 04/26/03 DUP | <216 L |
| NC7-46 | 10/31/03 | <102 |
| NC7-46 | 10/31/03 DUP | <99.6 |
| NC7-54 | 04/19/03 | 29,700 ± 3,000 |
| NC7-56 | 04/26/03 | 15,600 ± 569 |
| NC7-56 | 11/18/03 | 17,800 ± 1,800 |
| NC7-58 | 04/26/03 | 15,300 ± 445 |
| NC7-58 | 11/12/03 | 15,900 ± 1,600 |
| NC7-59 | 06/12/03 | 18,500 ± 1,900 |
| NC7-59 | 11/18/03 | 19,100 ± 1,900 |
| NC7-60 | 04/19/03 | 1,830 ± 200 |
| NC7-60 | 10/25/03 | 1,610 ± 180 |
| NC7-61 | 05/02/03 | 44,200 ± 4,400 |
| NC7-61 | 05/02/03 DUP | 44,800 ± 4,500 |
| NC7-61 | 12/09/03 | 42,500 ± 4,300 |
| NC7-62 | 04/26/03 | 18,900 ± 484 |
| NC7-62 | 11/12/03 | 18,200 ± 1,800 |
| NC7-69 | 05/08/03 | <94.6 |
| NC7-69 | 12/10/03 | <101 |
| NC7-70 | 04/19/03 | 81,400 ± 8,200 |
| NC7-70 | 10/31/03 | 77,700 ± 7,800 |
| NC7-71 | 04/19/03 | 162 ± 65.0 |
| NC7-72 | 11/12/03 | 16,600 ± 1,700 |

**Table 2.5-3. Building 850 OU 2003 tritium in ground and surface water.**

| Location | Date | Tritium (pCi/L) |
|---|---|---|
| NC7-72 | 11/12/03 DUP | 22,100 ± 2,200 |
| NC7-73 | 05/21/03 | 19,200 ± 1,900 |
| NC7-73 | 11/12/03 | 22,200 ± 2,200 |
| NC7-76 | 04/26/03 | 9,810 ± 363 |
| NC7-76 | 04/26/03 DUP | 9,520 ± 359 L |
| NC7-76 | 10/25/03 | 8,920 ± 900 |
| W-850-05 | 04/19/03 | 19,900 ± 2,000 |
| W-850-05 | 10/31/03 | 21,500 ± 2,200 |
| W-PIT7-16 | 05/03/03 | <91.2 |
| W-PIT7-16 | 08/29/03 | <87.6 |
| W-PIT7-16 | 10/17/03 | <102 |
| W-865-1802 | 06/27/03 | <85 |
| W-865-1802 | 08/26/03 | <88.9 |
| W-865-1802 | 12/22/03 | <87.5 |
| W-865-1803 | 06/26/03 | 1,410 ± 160 |
| W-865-1803 | 08/26/03 | <88.8 |
| SPRING24 | 09/24/03 | 2,290 ± 240 |
| SPRING24 | 12/08/03 | 2,380 ± 250 |
| W8SPRNG | 06/26/03 | 29,200 ± 2,900 |
| W8SPRNG | 06/26/03 DUP | 29,300 ± 2,900 |

**Table 2.5-4. Building 850 OU 2003 nitrate, nitrite, ortho-phosphate, ammonia nitrtogen, and perchlorate in ground and surface water.**

| Location | Date | Ammonia nitrogen (as N) (mg/L) | Nitrate (as $NO_3$) (mg/L) | Nitrite (as $NO_2$) (mg/L) | Perchlorate (μg/L) | Ortho-Phosphate (mg/L) |
|---|---|---|---|---|---|---|
| K1-01C | 01/31/03 | - | 42 D | - | <4 | - |
| K1-01C | 04/17/03 | - | 35 | - | <4 | - |
| K1-01C | 09/08/03 | - | 36 | - | <4 | - |
| K1-01C | 09/08/03 DUP | - | 36 | - | <4 | - |
| K1-01C | 10/30/03 | - | 38 | - | <4 | - |
| K1-02B | 01/30/03 | - | 38 | - | <4 | - |
| K1-02B | 04/17/03 | - | 37 D | - | <4 | - |
| K1-02B | 04/17/03 DUP | - | 39 D | - | <4 | - |
| K1-02B | 09/08/03 | - | 34 | - | 6.5 | - |
| K1-02B | 11/04/03 | - | 36 | - | 6.7 | - |
| K1-03 | 01/30/03 | - | 35 D | - | <4 | - |
| K1-03 | 04/17/03 | - | 35 D | - | <4 | - |
| K1-03 | 07/24/03 | - | 32 | - | <4 | - |
| K1-03 | 11/04/03 | - | 32 | - | <4 | - |
| K1-04 | 01/29/03 | - | 43 D | - | <4 | - |
| K1-04 | 01/29/03 DUP | - | 44 D | - | <4 | - |
| K1-04 | 04/18/03 | - | 30 D | - | <4 | - |
| K1-04 | 07/24/03 | - | 34 | - | <4 | - |
| K1-04 | 11/18/03 | - | 36 | - | <4 | - |
| K1-04 | 11/18/03 DUP | - | 36 | - | <4 | - |
| K1-05 | 01/29/03 | - | 46 D | - | <4 | - |
| K1-05 | 04/18/03 | - | 35 D | - | <4 | - |
| K1-05 | 07/24/03 | - | 38 | - | <4 | - |
| K1-05 | 11/19/03 | - | 39 | - | <4 | - |
| K1-06 | 06/03/03 | - | 10 | - | - | - |
| K1-07 | 01/30/03 | - | 36 D | - | <4 | - |
| K1-07 | 05/01/03 | - | 37 D | - | <4 | - |
| K1-07 | 08/28/03 | - | 29 | - | <4 H | - |
| K1-07 | 11/24/03 | - | 30 | - | <4 | - |
| K1-08 | 02/07/03 | - | 43 | - | <4 | - |
| K1-08 | 05/02/03 | - | 40 D | - | <4 | - |
| K1-08 | 09/04/03 | - | 38 | - | <4 | - |
| K1-08 | 11/24/03 | - | 38 | - | <4 | - |
| K1-09 | 01/31/03 | - | 42 D | - | <4 | - |
| K1-09 | 05/02/03 | - | 43 D | - | <4 | - |
| K1-09 | 09/08/03 | - | 38 | - | <4 | - |
| K1-09 | 11/25/03 | - | 39 | - | <4 | - |
| K2-03 | 06/05/03 | - | 10 | - | - | - |
| K2-04D | 05/15/03 | - | - | - | <4 | - |
| K2-04D | 05/15/03 DUP | - | 40 D | - | - | - |
| K2-04D | 11/25/03 | - | 37 | - | 4.4 | - |
| K2-04D | 11/25/03 DUP | - | 37 | - | <4 | - |
| K2-04S | 05/02/03 | - | - | - | 8.1 | - |

**Table 2.5-4. Building 850 OU 2003 nitrate, nitrite, ortho-phosphate, ammonia nitrtogen, and perchlorate in ground and surface water.**

| Location | Date | Ammonia nitrogen (as N) (mg/L) | Nitrate (as $NO_3$) (mg/L) | Nitrite (as $NO_2$) (mg/L) | Perchlorate (μg/L) | Ortho-Phosphate (mg/L) |
|---|---|---|---|---|---|---|
| K2-04S | 05/02/03 DUP | - | 43 D | - | - | - |
| K2-04S | 12/05/03 | - | 38 | - | 10 | - |
| NC2-05 | 06/12/03 | - | 39 D | - | - | - |
| NC2-05A | 06/05/03 | - | 41 D | - | - | - |
| NC2-06 | 06/05/03 | - | 15 | - | - | - |
| NC2-06A | 06/20/03 | - | 4.6 | - | - | - |
| NC2-09 | 06/05/03 | - | <0.1 | - | - | - |
| NC2-10 | 06/10/03 | - | 140 D | - | - | - |
| NC2-11D | 05/08/03 | - | 31 | - | <4 | - |
| NC2-11D | 12/10/03 | - | 32 | - | 4.2 | - |
| NC2-11I | 05/23/03 | - | 40 D | - | - | - |
| NC2-11S | 05/23/03 | - | 42 D | - | - | - |
| NC2-12D | 05/08/03 | - | 29 | - | <4 | - |
| NC2-12D | 12/10/03 | - | 29 | - | 5.4 | - |
| NC2-12I | 05/23/03 | - | 35 D | - | - | - |
| NC2-12S | 05/23/03 | - | 52 D | - | - | - |
| NC2-13 | 06/10/03 | - | 52 D | - | - | - |
| NC2-14S | 06/18/03 DUP | - | 42 D | - | - | - |
| NC2-14S | 06/18/03 | - | 33 | - | - | - |
| NC2-15 | 06/23/03 | - | 43 D | - | - | - |
| NC2-16 | 06/10/03 | - | 9 | - | - | - |
| NC2-17 | 06/05/03 | - | 47 D | - | - | - |
| NC2-18 | 06/06/03 | - | 56 D | - | - | - |
| NC2-19 | 06/23/03 | - | 83 D | - | - | - |
| NC2-20 | 06/17/03 | - | 45 D | - | - | - |
| NC2-21 | 06/23/03 | - | 40 D | - | - | - |
| NC7-10 | 05/27/03 | - | 60 D | - | - | - |
| NC7-11 | 05/27/03 | - | 65 D | - | - | - |
| NC7-15 | 12/09/03 | - | 8.0 D | - | - | - |
| NC7-19 | 05/28/03 | - | 39 D | - | - | - |
| NC7-27 | 06/16/03 | - | 56 D | - | - | - |
| NC7-28 | 05/28/03 | - | 69 D | - | - | - |
| NC7-29 | 06/17/03 | - | 120 D | - | - | - |
| NC7-43 | 06/10/03 DUP | - | <0.1 | - | - | - |
| NC7-43 | 06/10/03 DUP | - | 0.75 | - | - | - |
| NC7-44 | 05/28/03 | - | 72 D | - | - | - |
| NC7-46 | 06/12/03 | - | <0.1 | - | - | - |
| NC7-46 | 06/12/03 DUP | - | <0.44 | - | - | - |
| NC7-56 | 06/17/03 | - | 48 D | - | - | - |
| NC7-58 | 06/12/03 | - | 51 D | - | - | - |
| NC7-59 | 06/12/03 | - | 45 D | - | - | - |
| NC7-60 | 06/16/03 | - | 5.2 | - | - | - |
| NC7-61 | 05/02/03 | - | 62 D | - | 39 | - |

**Table 2.5-4. Building 850 OU 2003 nitrate, nitrite, ortho-phosphate, ammonia nitrtogen, and perchlorate in ground and surface water.**

| Location | Date | Ammonia nitrogen (as N) (mg/L) | Nitrate (as $NO_3$) (mg/L) | Nitrite (as $NO_2$) (mg/L) | Perchlorate ($\mu$g/L) | Ortho-Phosphate (mg/L) |
|---|---|---|---|---|---|---|
| NC7-61 | 05/02/03 DUP | - | 63 D | - | 38 | - |
| NC7-61 | 12/09/03 | - | 60 | - | 53 | - |
| NC7-62 | 06/12/03 | - | 51 D | - | - | - |
| NC7-69 | 05/08/03 | 0.52 D | <0.44 | <0.065 | <4 | 0.076 |
| NC7-69 | 12/10/03 | 0.48 | - | <0.065 | <4 | 0.087 |
| NC7-70 | 06/17/03 | - | 67 D | - | - | - |
| NC7-71 | 06/17/03 | - | <0.1 | - | - | - |
| NC7-72 | 11/12/03 | - | 53 D | - | - | - |
| NC7-73 | 05/21/03 | - | 4 | - | - | - |
| NC7-76 | 06/10/03 DUP | - | 39 D | - | - | - |
| NC7-76 | 06/10/03 DUP | - | 30 | - | - | - |
| W-850-05 | 06/10/03 | - | <0.1 | - | - | - |
| W-865-1802 | 06/27/03 | - | - | - | <4 | - |
| W-865-1802 | 12/22/03 | - | - | - | <4 | - |
| W-865-1803 | 06/26/03 | - | - | - | <4 | - |
| W8SPRNG | 06/26/03 | - | 54 D | - | - | - |
| W8SPRNG | 06/26/03 DUP | - | 53 D | - | - | - |

**Table 2.5-5. Building 850 OU 2003 uranium isotopes by alpha spectrometry in ground and surface water.**

| Location | Date | Thorium 228 (pCi/L) | Thorium 230 (pCi/L) | Thorium 232 (pCi/L) | Total uranium (pCi/L) |
|---|---|---|---|---|---|
| K1-01C | 01/31/03 | <0.078 | <0.132 | <0.032 | 2.68 ± 0.240 |
| K1-01C | 04/17/03 | <0.061 | - | <0.025 | 2.68 ± 0.230 |
| K1-01C | 09/08/03 | <0.036 | <0.105 | <0.028 | 3.42 ± 0.290 |
| K1-01C | 09/08/03 DUP | <0.021 | <0.125 | <0.021 | 3.20 ± 0.250 |
| K1-01C | 10/30/03 | <0.065 | <0.107 | <0.037 | 2.87 ± 0.240 |
| K1-02B | 01/30/03 | <0.092 | <0.133 | <0.032 | 2.20 ± 0.180 |
| K1-02B | 04/17/03 | <0.15 | - | <0.071 | 2.43 ± 0.210 |
| K1-02B | 04/17/03 DUP | <0.025 | - | <0.025 | 2.27 ± 0.190 |
| K1-02B | 09/08/03 | <0.032 | <0.105 | <0.028 | 2.86 ± 0.220 |
| K1-02B | 11/04/03 | <0.045 | <0.1 | <0.035 | 2.93 ± 0.250 |
| K1-03 | 01/30/03 | <0.097 | <0.106 | <0.036 | 1.35 ± 0.130 |
| K1-03 | 04/17/03 | <0.041 | - | <0.036 | 1.26 ± 0.130 |
| K1-03 | 07/24/03 | <0.072 | <0.104 L | <0.034 | 1.60 ± 0.160 |
| K1-03 | 11/04/03 | <0.036 | <0.105 | <0.036 | 1.62 ± 0.160 |
| K1-04 | 01/29/03 | <0.038 | <0.113 | <0.024 | 0.759 ± 0.0820 |
| K1-04 | 01/29/03 DUP | <0.078 | <0.124 | <0.03 | 0.781 ± 0.0870 |
| K1-04 | 04/18/03 | <0.042 | - | <0.029 | 1.34 ± 0.140 |
| K1-04 | 07/24/03 | <0.078 | <0.131 L | <0.044 | 1.66 ± 0.150 |
| K1-04 | 11/18/03 | <0.034 | <0.096 | <0.023 | 1.62 ± 0.160 |
| K1-04 | 11/18/03 DUP | <0.032 | <0.102 | <0.035 | 1.74 ± 0.150 |
| K1-05 | 01/29/03 | <0.043 | <0.098 | <0.021 | 1.38 ± 0.130 |
| K1-05 | 04/18/03 | <0.043 | - | <0.037 | 1.85 ± 0.190 |
| K1-05 | 07/24/03 | <0.033 | <0.109 L | <0.026 | 2.36 ± 0.210 |
| K1-05 | 11/19/03 | <0.166 | <0.096 | <0.04 | 2.44 ± 0.210 |
| K1-07 | 01/30/03 | <0.114 | <0.108 | <0.037 | 1.84 ± 0.170 |
| K1-07 | 05/01/03 | <0.077 | <0.105 | <0.023 | 2.37 ± 0.200 |
| K1-07 | 08/28/03 | <0.048 | <0.111 | <0.038 | 2.38 ± 0.220 |
| K1-07 | 11/24/03 | <0.034 | <0.109 | <0.029 | 2.07 ± 0.180 |
| K1-08 | 02/07/03 | <0.073 | <0.109 | <0.023 | 2.16 ± 0.210 |
| K1-08 | 05/02/03 | <0.143 | <0.106 | <0.022 | 2.36 ± 0.220 |
| K1-08 | 09/04/03 | <0.036 | <0.118 O | <0.025 | 2.63 ± 0.250 |
| K1-08 | 11/24/03 | <0.041 | <0.096 | <0.03 | 2.74 ± 0.230 |
| K1-09 | 01/31/03 | <0.043 | <0.1 | <0.043 | 1.81 ± 0.170 |
| K1-09 | 05/02/03 | <0.097 | <0.106 | <0.023 | 2.24 ± 0.210 |
| K1-09 | 09/08/03 | <0.039 | <0.109 | <0.027 | 2.03 ± 0.190 |
| K1-09 | 11/25/03 | <0.03 | <0.099 | <0.03 | 2.31 ± 0.200 |
| K2-04D | 11/25/03 | - | - | - | 2.39 ± 0.190 |
| K2-04D | 11/25/03 DUP | - | - | - | 2.45 ± 0.190 |
| K2-04S | 12/05/03 | - | - | - | 3.19 ± 0.220 |
| NC2-11D | 12/10/03 | - | - | - | 4.91 ± 0.360 |
| NC2-12D | 12/10/03 | - | - | - | 3.20 ± 0.230 |
| NC7-61 | 12/09/03 | - | - | - | 3.20 ± 0.200 |
| NC7-69 | 12/10/03 | - | - | - | <0.036 E |

**Table 2.5-6. Building 850 OU 2003 uranium isotopes by mass spectrometry in ground and surface water.**

| Location | Date | Thorium 232 (pCi/L) | Uranium (pCi/L) | Uranium 234 by mass measurement (pCi/L) | Uranium 235 by mass measurement (pCi/L) | Uranium 236 by mass measurement (pCi/L) | Uranium 238 by mass measurement (pCi/L) | Uranium 235/238 |
|---|---|---|---|---|---|---|---|---|
| K1-01C | 10/30/03 | <0.0001 | 3.38 ± 0.0416 | 2.33 ± 0.0410 | 0.0472 ± 0.000370 | <0.007 | 1.01 ± 0.00699 | 0.00727 ± 0.0000260 |
| K1-02B | 11/04/03 | <0.0001 | 2.88 ± 0.0603 | 1.87 ± 0.0590 | 0.0452 ± 0.000610 | <0.007 | 0.969 ± 0.0125 | 0.00726 ± 0.0000280 |
| K1-03 | 11/04/03 | <0.0001 | 1.64 ± 0.0325 | 1.09 ± 0.0320 | 0.0246 ± 0.000280 | <0.007 | 0.528 ± 0.00564 | 0.00726 ± 0.0000320 |
| K1-04 | 11/18/03 | <0.0001 | 1.85 ± 0.136 | 1.23 ± 0.135 | 0.0275 ± 0.000740 | <0.007 | 0.587 ± 0.0154 | 0.00729 ± 0.0000480 |
| K1-05 | 11/19/03 | <0.0001 | 2.48 ± 0.102 | 1.67 ± 0.0990 | 0.0359 ± 0.00108 | <0.007 | 0.771 ± 0.0229 | 0.00725 ± 0.0000370 |
| K1-07 | 11/24/03 | <0.0001 | 2.53 ± 0.175 | 1.74 ± 0.174 | 0.0351 ± 0.00101 | <0.007 | 0.752 ± 0.0210 | 0.00726 ± 0.0000520 |
| K1-08 | 11/24/03 | <0.0001 | 2.72 ± 0.134 | 1.84 ± 0.132 | 0.0390 ± 0.00105 | <0.007 | 0.835 ± 0.0210 | 0.00727 ± 0.0000670 |
| K1-09 | 11/25/03 | <0.0001 | 2.49 ± 0.0957 | 1.69 ± 0.0940 | 0.0358 ± 0.000870 | <0.007 | 0.764 ± 0.0180 | 0.00729 ± 0.0000420 |
| K2-03 | 06/05/03 | <0.0001 E | 9.02 ± 0.411 | 5.79 ± 0.410 | 0.144 ± 0.00209 | <0.0007 | 3.09 ± 0.0310 | 0.00725 ± 0.0000760 |
| K2-04D | 05/15/03 | <0.0001 E | 2.88 ± 0.125 | 1.84 ± 0.122 | 0.0466 ± 0.00140 | <0.0007 | 0.993 ± 0.0280 | 0.00730 ± 0.0000730 |
| K2-04S | 05/02/03 | <0.0001 E | 2.97 ± 0.0938 | 1.68 ± 0.0930 | 0.0573 ± 0.000810 | <0.0007 | 1.24 ± 0.0120 | 0.00720 ± 0.0000720 |
| NC2-05 | 06/12/03 | 0.000130 ± 0.0000450 | 4.54 ± 0.0541 | <0.062 | 0.187 ± 0.00312 | <0.0007 | 4.35 ± 0.0540 | 0.00668 ± 0.0000750 |
| NC2-05A | 06/05/03 | 0.000154 ± 0.00000810 | 5.14 ± 0.131 | 3.30 ± 0.130 | 0.0805 ± 0.00113 | <0.0007 | 1.76 ± 0.0170 | 0.00710 ± 0.0000710 |
| NC2-06 | 06/05/03 | <0.0001 E | 0.534 ± 0.0140 | <0.062 | 0.0235 ± 0.000710 | <0.0007 | 0.510 ± 0.0140 | 0.00717 ± 0.0000900 |
| NC2-06A | 06/20/03 | <0.0001 E | 1.16 ± 0.0703 | 0.550 ± 0.0700 | 0.0167 ± 0.000250 | 0.00160 ± 0.000570 | 0.595 ± 0.00640 | 0.00436 ± 0.0000440 |
| NC2-06A | 10/17/03 | <0.0001 | 1.11 ± 0.0316 | 0.554 ± 0.0310 | 0.0157 ± 0.000220 | <0.007 | 0.543 ± 0.00625 | 0.00451 ± 0.0000370 |
| NC2-09 | 06/05/03 | <0.0001 E | <0.0627 E | <0.062 | 0.00230 ± 0.0000900 | <0.0007 | 0.0509 ± 0.00120 | 0.00703 ± 0.000210 |
| NC2-10 | 06/10/03 | <0.0001 E | 5.70 ± 0.451 | 3.92 ± 0.450 | 0.0792 ± 0.00150 | <0.0007 | 1.70 ± 0.0280 | 0.00723 ± 0.0000720 |
| NC2-11D | 05/08/03 | <0.0001 E | 4.76 ± 0.131 | 2.99 ± 0.130 | 0.0797 ± 0.00115 | <0.0007 | 1.70 ± 0.0180 | 0.00731 ± 0.0000730 |
| NC2-11I | 05/23/03 | 0.000177 ± 0.0000250 | 4.38 ± 0.340 | 2.80 ± 0.339 | 0.0697 ± 0.00128 | <0.0007 | 1.51 ± 0.0230 | 0.00719 ± 0.0000720 |
| NC2-11S | 05/23/03 | <0.0001 E | 3.98 ± 0.467 | 2.53 ± 0.466 | 0.0643 ± 0.00123 | <0.0007 | 1.39 ± 0.0230 | 0.00719 ± 0.0000730 |
| NC2-12D | 05/08/03 | <0.0001 E | 3.70 ± 0.198 | 2.33 ± 0.197 | 0.0615 ± 0.00110 | <0.0007 | 1.31 ± 0.0190 | 0.00730 ± 0.0000730 |
| NC2-12I | 05/23/03 | 0.000115 ± 0.0000100 | 3.54 ± 0.116 | 2.27 ± 0.115 | 0.0571 ± 0.000810 | <0.0007 | 1.21 ± 0.0120 | 0.00733 ± 0.0000730 |
| NC2-12S | 05/23/03 | 0.000645 ± 0.0000180 | 4.72 ± 0.271 | 3.04 ± 0.270 | 0.0744 ± 0.00136 | <0.0007 | 1.61 ± 0.0230 | 0.00720 ± 0.0000840 |
| NC2-13 | 06/10/03 | 0.000203 ± 0.0000100 | 5.54 ± 0.451 | 3.74 ± 0.450 | 0.0803 ± 0.00157 | <0.0007 | 1.72 ± 0.0250 | 0.00724 ± 0.0000940 |

**Table 2.5-6. Building 850 OU 2003 uranium isotopes by mass spectrometry in ground and surface water.**

| Location | Date | Thorium 232 (pCi/L) | Uranium (pCi/L) | Uranium 234 by mass measurement (pCi/L) | Uranium 235 by mass measurement (pCi/L) | Uranium 236 by mass measurement (pCi/L) | Uranium 238 by mass measurement (pCi/L) | Uranium 235/238 |
|---|---|---|---|---|---|---|---|---|
| NC2-14S | 06/18/03 | 0.000125 ± 0.00000430 | 3.32 ± 0.121 | 1.98 ± 0.120 | 0.0592 ± 0.000950 | <0.0007 | 1.28 ± 0.0160 | 0.00717 ± 0.0000720 |
| NC2-14S | 06/18/03 DUP | 0.000124 ± 0.00000410 | 3.32 ± 0.101 | 1.99 ± 0.100 | 0.0586 ± 0.000830 | <0.0007 | 1.27 ± 0.0130 | 0.00716 ± 0.0000720 |
| NC2-15 | 06/23/03 | <0.0001 E | 2.93 ± 0.110 | 1.88 ± 0.110 | 0.0466 ± 0.000660 | <0.0007 | 1.00 ± 0.0100 | 0.00721 ± 0.0000720 |
| NC2-15 | 10/25/03 | <0.0001 | 3.07 ± 0.0867 | 1.95 ± 0.0850 | 0.0495 ± 0.000850 | <0.007 | 1.06 ± 0.0168 | 0.00724 ± 0.0000490 |
| NC2-16 | 06/10/03 | <0.0001 E | 1.04 ± 0.150 | 0.680 ± 0.150 | 0.0159 ± 0.000410 | <0.0007 | 0.343 ± 0.00810 | 0.00722 ± 0.0000750 |
| NC2-17 | 06/05/03 | 0.000106 ± 0.00000580 | 4.18 ± 0.231 | 2.57 ± 0.230 | 0.0709 ± 0.00139 | <0.0007 | 1.54 ± 0.0200 | 0.00716 ± 0.000106 |
| NC2-18 | 06/06/03 | <0.0001 E | 1.36 ± 0.0200 | <0.062 | 0.0605 ± 0.00113 | <0.0007 | 1.30 ± 0.0200 | 0.00726 ± 0.0000730 |
| NC2-19 | 06/23/03 | 0.000337 ± 0.0000128 | 9.02 ± 0.192 | 5.50 ± 0.191 | 0.157 ± 0.00140 | <0.007 | 3.37 ± 0.0233 | 0.00726 ± 0.0000410 |
| NC2-19 | 10/17/03 | 0.000124 ± 0.00000840 | 8.77 ± 0.135 | 5.27 ± 0.132 | 0.156 ± 0.00143 | <0.007 | 3.34 ± 0.0287 | 0.00725 ± 0.0000240 |
| NC2-20 | 06/17/03 | <0.0001 E | 5.42 ± 0.202 | 3.23 ± 0.200 | 0.0979 ± 0.00172 | <0.0007 | 2.10 ± 0.0300 | 0.00726 ± 0.0000730 |
| NC2-21 | 06/23/03 | <0.0001 E | 3.91 ± 0.330 | 2.38 ± 0.330 | 0.0672 ± 0.000950 | <0.0007 | 1.46 ± 0.0140 | 0.00716 ± 0.0000720 |
| NC7-10 | 05/27/03 | 0.000155 ± 0.00000540 | 2.67 ± 0.174 | 1.60 ± 0.173 | 0.0451 ± 0.000770 | <0.0007 | 1.02 ± 0.0140 | 0.00684 ± 0.0000680 |
| NC7-11 | 05/27/03 | 0.000400 ± 0.0000130 | 2.67 ± 0.193 | 1.59 ± 0.193 | 0.0472 ± 0.000810 | <0.0007 | 1.03 ± 0.0130 | 0.00711 ± 0.0000840 |
| NC7-15 | 05/28/03 | 0.000269 ± 0.00000990 | 2.38 ± 0.169 | 1.33 ± 0.168 | 0.0461 ± 0.000760 | <0.0007 | 0.997 ± 0.0130 | 0.00719 ± 0.0000720 |
| NC7-19 | 05/28/03 | 0.000215 ± 0.00000810 | 3.97 ± 0.166 | 2.13 ± 0.165 | 0.0821 ± 0.00123 | <0.0007 | 1.76 ± 0.0200 | 0.00723 ± 0.0000720 |
| NC7-27 | 06/16/03 | <0.0001 E | 3.15 ± 0.0712 | 1.83 ± 0.0700 | 0.0587 ± 0.000830 | <0.0007 | 1.26 ± 0.0130 | 0.00724 ± 0.0000720 |
| NC7-28 | 01/25/03 | 0.000590 ± 0.0000600 | 10.2 ± 0.0500 | <0.062 | 0.157 ± 0.00160 | 0.0590 ± 0.00700 | 9.94 ± 0.0500 | 0.00246 ± 0.0000200 |
| NC7-28 | 05/28/03 | 0.000279 ± 0.0000166 | 11.2 ± 0.292 | 3.41 ± 0.286 | 0.120 ± 0.00143 | 0.0426 ± 0.00296 | 7.66 ± 0.0601 | 0.00243 ± 0.0000220 |
| NC7-28 | 12/09/03 | 0.000204 ± 0.0000245 | 11.5 ± 0.376 | 2.85 ± 0.376 | 0.131 ± 0.00177 | 0.0473 ± 0.000230 | 8.45 ± 0.0000110 | 0.00241 ± 0.0000330 |
| NC7-29 | 06/17/03 | 0.000397 ± 0.0000950 | 16.1 ± 1.08 | 10.0 ± 1.08 | 0.272 ± 0.00382 | <0.0007 | 5.81 ± 0.0570 | 0.00730 ± 0.0000730 |
| NC7-43 | 06/10/03 | 0.000226 ± 0.00000430 | <0.0627 E | <0.062 | <0.000022 | <0.0007 | 0.0308 ± 0.000570 | <0.005902 |
| NC7-44 | 05/28/03 | 0.000105 ± 0.00000330 | 1.59 ± 0.171 | 1.03 ± 0.171 | 0.0251 ± 0.000610 | <0.0007 | 0.538 ± 0.0100 | 0.00726 ± 0.000113 |
| NC7-44 | 10/31/03 | <0.0001 | 1.44 ± 0.0181 | 0.955 ± 0.0180 | 0.0218 ± 0.000120 | <0.007 | 0.464 ± 0.00223 | 0.00731 ± 0.0000220 |
| NC7-46 | 06/12/03 | 0.000102 ± 0.00000610 | <0.0627 E | <0.062 | <0.000022 | <0.0007 | 0.0417 ± 0.00130 | <0.008022 |
| NC7-46 | 06/12/03 DUP | 0.000101 ± 0.00000650 | <0.0627 E | <0.062 | 0.00200 ± 0.000110 | <0.0007 | 0.0429 ± 0.00150 | 0.00724 ± 0.000290 |

**Table 2.5-6. Building 850 OU 2003 uranium isotopes by mass spectrometry in ground and surface water.**

| Location | Date | Thorium 232 (pCi/L) | Uranium (pCi/L) | Uranium 234 by mass measurement (pCi/L) | Uranium 235 by mass measurement (pCi/L) | Uranium 236 by mass measurement (pCi/L) | Uranium 238 by mass measurement (pCi/L) | Uranium 235/238 |
|---|---|---|---|---|---|---|---|---|
| NC7-56 | 06/17/03 | 0.000732 ± 0.0000231 | 3.92 ± 0.117 | 2.29 ± 0.117 | 0.0718 ± 0.000630 | <0.007 | 1.56 ± 0.00937 | 0.00715 ± 0.0000460 |
| NC7-58 | 06/12/03 | 0.000298 ± 0.0000140 | 3.67 ± 0.240 | 2.21 ± 0.240 | 0.0637 ± 0.000910 | <0.0007 | 1.40 ± 0.0140 | 0.00708 ± 0.0000710 |
| NC7-59 | 06/12/03 | 0.000950 ± 0.00000910 | 3.44 ± 0.0818 | 1.92 ± 0.0800 | 0.0661 ± 0.00101 | <0.0007 | 1.46 ± 0.0170 | 0.00706 ± 0.0000710 |
| NC7-60 | 06/16/03 | 0.000121 ± 0.0000110 | 0.482 ± 0.00471 | <0.062 | 0.0215 ± 0.000330 | <0.0007 | 0.460 ± 0.00470 | 0.00726 ± 0.0000840 |
| NC7-61 | 05/02/03 | <0.0001 E | <0.0627 E | <0.062 | <0.000022 | <0.0007 | 0.00480 ± 0.000970 | <0.00519 |
| NC7-61 | 05/02/03 DUP | <0.0001 E | 3.06 ± 0.111 | 1.55 ± 0.110 | 0.0440 ± 0.000710 | 0.00448 ± 0.000840 | 1.46 ± 0.0180 | 0.00469 ± 0.0000470 |
| NC7-62 | 06/12/03 | 0.000174 ± 0.0000210 | 4.17 ± 0.181 | 2.54 ± 0.180 | 0.0712 ± 0.00100 | <0.0007 | 1.56 ± 0.0150 | 0.00711 ± 0.0000710 |
| NC7-69 | 05/08/03 | <0.0001 E | <0.0627 E | <0.062 | <0.000022 | <0.0007 | 0.0296 ± 0.000840 | <0.00818 |
| NC7-69 | 12/10/03 | <0.0001 | <0.0627 | <0.106 | 0.00157 ± 0.0000250 | <0.0002 | 0.0346 ± 0.0000380 | 0.00705 ± 0.000114 |
| NC7-70 | 01/25/03 | 0.000812 ± 0.0000460 | 2.55 ± 0.0655 | 1.67 ± 0.0650 | 0.0344 ± 0.000480 | 0.00147 ± 0.000330 | 0.849 ± 0.00840 | 0.00631 ± 0.0000630 |
| NC7-70 | 06/17/03 | 0.000150 ± 0.00000570 | 2.25 ± 0.0903 | 1.46 ± 0.0900 | 0.0310 ± 0.000440 | <0.0007 | 0.762 ± 0.00770 | 0.00633 ± 0.0000630 |
| NC7-70 | 09/18/03 | <0.0001 | 2.16 ± 0.0705 | 1.40 ± 0.0700 | 0.0301 ± 0.000440 | <0.007 | 0.738 ± 0.00826 | 0.00634 ± 0.0000590 |
| NC7-70 | 10/31/03 | <0.0001 | 2.01 ± 0.0274 | 1.30 ± 0.0270 | 0.0279 ± 0.000200 | <0.007 | 0.685 ± 0.00450 | 0.00633 ± 0.0000190 |
| NC7-71 | 06/17/03 | <0.0001 E | <0.0627 E | <0.062 | <0.000022 | <0.0007 | 0.0105 ± 0.00110 | <0.007934 |
| NC7-72 | 11/12/03 | 0.000373 ± 0.0000104 | 4.03 ± 0.135 | 2.25 ± 0.132 | 0.0780 ± 0.00131 | <0.007 | 1.71 ± 0.0275 | 0.00711 ± 0.0000330 |
| NC7-73 | 05/21/03 | 0.0110 ± 0.000160 | 4.90 ± 0.404 | 2.86 ± 0.402 | 0.0908 ± 0.00194 | <0.0007 | 1.95 ± 0.0370 | 0.00723 ± 0.0000720 |
| NC7-76 | 06/10/03 | 0.00114 ± 0.000200 | 17.9 ± 0.341 | <0.062 | 0.796 ± 0.0184 | <0.0007 | 17.1 ± 0.340 | 0.00723 ± 0.0000890 |
| NC7-76 | 10/25/03 | <0.0001 | 4.21 ± 0.105 | 2.30 ± 0.104 | 0.0837 ± 0.000870 | <0.007 | 1.82 ± 0.0169 | 0.00714 ± 0.0000330 |
| W-850-05 | 06/10/03 | 0.000121 ± 0.00000240 | 0.0763 ± 0.00110 | <0.062 | 0.00273 ± 0.0000800 | <0.0007 | 0.0736 ± 0.00110 | 0.00577 ± 0.000139 |
| W-PIT7-16 | 06/17/03 | <0.0001 E | 0.0807 ± 0.00200 | <0.062 | 0.00352 ± 0.000120 | <0.0007 | 0.0772 ± 0.00200 | 0.00709 ± 0.000147 |
| W-865-1802 | 06/27/03 | 0.000189 ± 0.0000120 | 3.39 ± 0.381 | 2.20 ± 0.380 | 0.0538 ± 0.00148 | <0.0007 | 1.14 ± 0.0250 | 0.00734 ± 0.000120 |
| W-865-1802 | 12/22/03 | <0.0001 | 1.77 ± 0.0779 | 1.20 ± 0.0780 | 0.0253 ± 0.000163 | <0.00053 | 0.538 ± 0.0000160 | 0.00732 ± 0.0000470 |
| W-865-1803 | 06/26/03 | <0.0001 E | 3.16 ± 0.371 | 2.14 ± 0.370 | 0.0456 ± 0.00112 | <0.0007 | 0.977 ± 0.0220 | 0.00727 ± 0.0000730 |
| W8SPRNG | 06/26/03 | 0.000423 ± 0.0000140 | 3.08 ± 0.431 | 1.75 ± 0.430 | 0.0553 ± 0.00153 | <0.0007 | 1.27 ± 0.0300 | 0.00676 ± 0.0000960 |
| W8SPRNG | 06/26/03 DUP | 0.000364 ± 0.0000160 | 3.05 ± 0.231 | 1.80 ± 0.230 | 0.0518 ± 0.00129 | <0.0007 | 1.20 ± 0.0260 | 0.00674 ± 0.0000800 |

**Table 2.5-7. Building 850 OU 2003 metals in ground and surface water.**

| Location | Date | Arsenic (mg/L) | Barium (mg/L) | Cadmium (mg/L) | Chromium (mg/L) | Lead (mg/L) | Mercury (mg/L) | Selenium (mg/L) | Silver (mg/L) |
|---|---|---|---|---|---|---|---|---|---|
| NC2-13 | 06/10/03 | 0.019 | <0.025 | <0.0005 | 0.001 | <0.005 | <0.0002 | <0.005 | <0.001 |
| NC2-14S | 06/18/03 DUP | 0.009 | 0.066 | <0.0005 | <0.001 | <0.005 | <0.0002 | <0.005 | <0.001 |
| NC2-14S | 06/18/03 DUP | 0.011 | 0.065 | <0.0005 | <0.001 | <0.005 | <0.0002 | <0.002 | <0.001 |
| NC7-15 | 05/28/03 | 0.01 | 0.082 | <0.0005 | <0.001 | <0.005 | <0.0002 | <0.005 | <0.001 |
| NC7-29 | 06/17/03 | 0.035 | 0.18 | <0.0005 | 0.001 | <0.005 | <0.0002 | <0.005 | <0.001 |
| NC7-44 | 05/28/03 | 0.016 | 0.14 | <0.0005 | <0.001 | <0.005 | <0.0002 | <0.005 | <0.001 |
| NC7-54 | 05/27/03 | 0.014 | 0.08 | <0.0005 | <0.001 | <0.005 | <0.0002 | <5 | <0.001 |
| NC7-56 | 06/17/03 | 0.019 | 0.053 | <0.0005 | <0.001 | <0.005 | <0.0002 L | <0.005 | <0.001 |
| NC7-56 | 11/18/03 | 0.018 | 0.061 | <0.0005 | <0.001 | <0.005 | <0.0002 | <0.005 | <0.001 |
| NC7-58 | 06/12/03 | 0.016 | 0.048 | 0.0011 | <0.001 | <0.005 | <0.0002 | <0.005 | <0.001 |
| NC7-59 | 06/12/03 | 0.01 | 0.038 | <0.0005 | <0.001 | <0.005 | <0.0002 | <0.005 | <0.001 |
| NC7-60 | 06/16/03 | 0.015 | 0.036 | 0.0008 | 0.001 | <0.005 | <0.0002 L | <0.005 | <0.001 |
| NC7-61 | 05/02/03 | 0.016 | 0.093 | 0.0006 | 0.002 | <0.005 | <0.0002 | <0.005 | <0.001 |
| NC7-61 | 05/02/03 DUP | 0.016 | 0.094 | 0.0005 | 0.002 | <0.005 | <0.0002 | <0.005 | <0.001 |
| NC7-62 | 06/12/03 | 0.015 | 0.041 | 0.0061 | <0.001 | <0.005 | <0.0002 | <0.005 | <0.001 |
| NC7-70 | 06/20/03 | 0.017 | 0.044 | <0.0005 | <0.001 | <0.005 | <0.0002 | <0.005 | <0.001 |
| NC7-73 | 05/21/03 | 0.015 | 0.074 | 0.0005 | 0.001 | <0.005 | <0.0002 | <0.005 | <0.001 |
| W-850-05 | 06/10/03 | <0.002 | 0.064 | <0.0005 | <0.001 | <0.005 | <0.0002 | <0.005 | <0.001 |
| W-850-05 | 10/31/03 | <0.002 | 0.07 | <0.0005 | <0.001 | <0.005 | <0.0002 | <0.005 | <0.001 |
| W-865-1802 | 06/27/03 | 0.017 | 0.033 | <0.0005 | 0.001 | <0.005 | <0.0002 | <0.005 | <0.001 |
| W-865-1802 | 12/22/03 | 0.014 | 0.055 | <0.0005 | <0.001 | <0.005 | <0.0002 | <0.005 | <0.001 |
| W-865-1803 | 06/26/03 | 0.008 | <0.025 | <0.0005 | <0.001 | <0.005 | <0.0002 | <0.005 | <0.001 |
| W8SPRNG | 06/26/03 | 0.013 | 0.071 | <0.0005 | <0.001 | <0.005 | <0.0002 | <0.005 | <0.001 |
| W8SPRNG | 06/26/03 DUP | 0.014 | 0.074 | <0.0005 | <0.001 | <0.005 | <0.0002 | <0.005 | <0.001 |

**Table 2.5-8. Building 850 OU 2003 high explosive compounds in ground and surface water.**

| Location | Date | 2-Amino-4,6-dinitrotoluene (µg/L) | 4-Amino-2,6-dinitrotoluene (µg/L) | 1,3-Dinitrobenzene (µg/L) | 2,4-Dinitrotoluene (µg/L) | 2,6-Dinitrotoluene (µg/L) | HMX (µg/L) | Nitrobenzene (µg/L) | 2-Nitrotoluene (µg/L) | 3-Nitrotoluene (µg/L) | 4-Nitrotoluene (µg/L) | RDX (µg/L) | Tetryl (µg/L) | TNT (µg/L) | 1,3,5-Trinitrobenzene (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K1-01C | 01/31/03 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <1 |
| K1-01C | 04/17/03 | - | - | - | - | - | <1 | - | - | - | - | <1 | - | - | - |
| K1-01C | 09/08/03 | - | - | - | - | - | <5 | - | - | - | - | <5 | - | - | - |
| K1-01C | 09/08/03 DUP | - | - | - | - | - | <5 | - | - | - | - | <5 | - | - | - |
| K1-01C | 10/30/03 | - | - | - | - | - | <5 | - | - | - | - | <5 | - | - | - |
| K1-02B | 01/30/03 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <1 |
| K1-02B | 04/17/03 | - | - | - | - | - | <1 | - | - | - | - | <1 | - | - | - |
| K1-02B | 04/17/03 DUP | - | - | - | - | - | <1 | - | - | - | - | <1 | - | - | - |
| K1-02B | 09/08/03 | - | - | - | - | - | <5 | - | - | - | - | <5 | - | - | - |
| K1-02B | 11/04/03 | - | - | - | - | - | <5 O | - | - | - | - | <5 O | - | - | - |
| K1-03 | 01/30/03 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <1 |
| K1-03 | 04/17/03 | - | - | - | - | - | <1 | - | - | - | - | <1 | - | - | - |
| K1-03 | 07/24/03 | - | - | - | - | - | <5 | - | - | - | - | <5 | - | - | - |
| K1-03 | 11/04/03 | - | - | - | - | - | <5 O | - | - | - | - | <5 O | - | - | - |
| K1-04 | 01/29/03 | - | - | - | - | - | <1 | - | - | - | - | <1 | - | - | - |
| K1-04 | 01/29/03 DUP | - | - | - | - | - | <1 | - | - | - | - | <1 | - | - | - |
| K1-04 | 04/18/03 | - | - | - | - | - | <2.2 | - | - | - | - | <2.2 | - | - | - |
| K1-04 | 07/24/03 | - | - | - | - | - | <5 | - | - | - | - | <5 | - | - | - |
| K1-04 | 11/18/03 | - | - | - | - | - | <5 | - | - | - | - | - | - | - | - |
| K1-04 | 11/18/03 DUP | - | - | - | - | - | <5 | - | - | - | - | - | - | - | - |
| K1-05 | 01/29/03 | - | - | - | - | - | <1 | - | - | - | - | <1 | - | - | - |
| K1-05 | 04/18/03 | - | - | - | - | - | <2.2 | - | - | - | - | <2.2 | - | - | - |
| K1-05 | 07/24/03 | - | - | - | - | - | <5 | - | - | - | - | <5 | - | - | - |
| K1-05 | 11/19/03 | - | - | - | - | - | <5 | - | - | - | - | - | - | - | - |
| K1-07 | 01/30/03 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <1 |
| K1-07 | 05/01/03 | - | - | - | - | - | <1 | - | - | - | - | <1 | - | - | - |
| K1-07 | 08/28/03 | - | - | - | - | - | <1 | - | - | - | - | <1 | - | - | - |
| K1-07 | 11/24/03 | - | - | - | - | - | <5 | - | - | - | - | <5 | - | - | - |
| K1-08 | 02/07/03 | - | - | - | - | - | <1 | - | - | - | - | <1 | - | - | - |
| K1-08 | 05/02/03 | - | - | - | - | - | <1 | - | - | - | - | <1 | - | - | - |
| K1-08 | 09/04/03 | - | - | - | - | - | <5 | - | - | - | - | <5 | - | - | - |
| K1-08 | 11/24/03 | - | - | - | - | - | <5 | - | - | - | - | <5 | - | - | - |
| K1-09 | 01/31/03 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <5 | <1 |
| K1-09 | 05/02/03 | - | - | - | - | - | <1 | - | - | - | - | <1 | - | - | - |
| K1-09 | 09/08/03 | - | - | - | - | - | <5 | - | - | - | - | <5 | - | - | - |
| K1-09 | 11/25/03 | - | - | - | - | - | <5 | - | - | - | - | <5 | - | - | - |
| K2-04D | 05/15/03 | - | - | - | - | - | <5 | - | - | - | - | <5 | - | - | - |
| K2-04D | 11/25/03 | - | - | - | - | - | <5 | - | - | - | - | <5 | - | - | - |
| K2-04D | 11/25/03 DUP | - | - | - | - | - | <5 | - | - | - | - | <5 | - | - | - |
| K2-04S | 05/02/03 | - | - | - | - | - | <5 | - | - | - | - | <5 | - | - | - |
| K2-04S | 12/05/03 | - | - | - | - | - | <5 | - | - | - | - | <5 | - | - | - |
| NC2-11D | 05/08/03 | - | - | - | - | - | <5 IJ | - | - | - | - | <5 IJ | - | - | - |
| NC2-11D | 12/10/03 | - | - | - | - | - | <5 | - | - | - | - | <5 | - | - | - |

**Table 2.5-8. Building 850 OU 2003 high explosive compounds in ground and surface water.**

| Location | Date | 2-Amino-4,6-dinitrotoluene (µg/L) | 4-Amino-2,6-dinitrotoluene (µg/L) | 1,3-Dinitrobenzene (µg/L) | 2,4-Dinitrotoluene (µg/L) | 2,6-Dinitrotoluene (µg/L) | HMX (µg/L) | Nitrobenzene (µg/L) | 2-Nitrotoluene (µg/L) | 3-Nitrotoluene (µg/L) | 4-Nitrotoluene (µg/L) | RDX (µg/L) | Tetryl (µg/L) | TNT (µg/L) | 1,3,5-Trinitrobenzene (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NC2-12D | 05/08/03 | - | - | - | - | - | <5 IJ | - | - | - | - | <5 IJ | - | - | - |
| NC2-12D | 12/10/03 | - | - | - | - | - | <5 | - | - | - | - | <5 | - | - | - |
| NC2-14S | 06/18/03 DUP | - | - | - | - | - | <1 | - | - | - | - | <1 | - | - | - |
| NC2-14S | 06/18/03 DUP | - | - | - | - | - | <5 | - | - | - | - | <5 | - | - | - |
| NC7-29 | 06/17/03 | - | - | - | - | - | <1 | - | - | - | - | <1 | - | - | - |
| NC7-61 | 05/02/03 | - | - | - | - | - | <5 | - | - | - | - | <5 | - | - | - |
| NC7-61 | 05/02/03 DUP | - | - | - | - | - | <5 | - | - | - | - | <5 | - | - | - |
| NC7-61 | 12/09/03 | - | - | - | - | - | <5 | - | - | - | - | <5 | - | - | - |
| NC7-69 | 05/08/03 | - | - | - | - | - | <5 IJ | - | - | - | - | <5 IJ | - | - | - |
| NC7-69 | 12/10/03 | - | - | - | - | - | <5 | - | - | - | - | <5 | - | - | - |
| NC7-70 | 06/20/03 | - | - | - | - | - | <1 | - | - | - | - | <1 | - | - | - |
| W-850-05 | 06/10/03 | - | - | - | - | - | <1 | - | - | - | - | <1 | - | - | - |
| W-865-1802 | 06/27/03 | - | - | - | - | - | <1 | - | - | - | - | <1 | - | - | - |
| W-865-1802 | 12/22/03 | - | - | - | - | - | <1 | - | - | - | - | <1 | - | - | - |
| W-865-1803 | 06/26/03 | - | - | - | - | - | <1 | - | - | - | - | <1 | - | - | - |

**Table 2.5-9. Building 850 OU 2003 gross alpha and gross beta in ground and surface water.**

| Location | Date | Gross alpha (pCi/L) | Gross beta (pCi/L) |
|---|---|---|---|
| W-865-1802 | 06/27/03 | 2.3 | 3.5 |
| W-865-1802 | 12/22/03 | <2 | 3.6 |
| W-865-1803 | 06/26/03 | 4.1 | 5.1 |

**Table 2.5-10. Building 850 OU 2003 general minerals in ground and surface water.**

| Constituents of concern | W-865-1802 06/27/03 | W-865-1802 12/22/03 | W-865-1803 06/26/03 |
|---|---|---|---|
| Total Alkalinity (as $CaCO_3$) (mg/L) | 130 LH | 120 H | 150 H |
| Aluminum (mg/L) | <0.1 H | <0.2 | <0.2 H |
| Bicarbonate Alk (as $CaCO_3$) (mg/L) | 130 H | 120 H | 150 H |
| Calcium (mg/L) | 35 H | 35 | 47 H |
| Carbonate Alk (as CaCO3) (mg/L) | <5 H | <1 H | <1 H |
| Chloride (mg/L) | 40 D | 30 D | 39 DH |
| Copper (mg/L) | <0.01 H | <0.05 | <0.05 H |
| Fluoride (mg/L) | 0.59 H | 0.44 | 0.54 H |
| Hydroxide Alk (as $CaCO_3$) (mg/L) | <5 H | <1 H | <1 H |
| Iron (mg/L) | <0.1 H | <0.1 | <0.1 H |
| Magnesium (mg/L) | 16 H | 16 | 21 H |
| Manganese (mg/L) | <0.01 H | <0.03 | <0.03 H |
| Nickel (mg/L) | <0.05 H | <0.1 | <0.1 H |
| Nitrate (as N) (mg/L) | 6.1 DH | 4.1 | 7.2 H |
| Nitrate (as $NO_3$) (mg/L) | 27 DH | 18 | 32 H |
| Nitrite (as N) (mg/L) | <0.1 H | <0.1 | <0.1 H |
| pH (Units) | 7.7 | 7.8 | 7.7 H |
| Ortho-Phosphate (mg/L) | <0.1 H | 0.08 | 0.10 H |
| Total Phosphorus (as P) (mg/L) | 0.11 H | - | - |
| Total Phosphorus (as $PO_4$) (mg/L) | - | 0.13 H | 0.080 H |
| Potassium (mg/L) | 3.2 | 5 | 5.0 H |
| Sodium (mg/L) | 58 H | 50 | 48 H |
| Total dissolved solids (TDS) (mg/L) | - | 400 | 410 H |
| Specific Conductance ($\mu$mhos/cm) | 550 | 530 H | 610 H |
| Sulfate (mg/L) | 61 D | 60 D | 50 DH |
| Surfactants (mg/L) | <0.05 | <0.5 | <0.5 H |
| Total Hardness (as $CaCO_{+A17}$) (mg/L) | 160 H | 150 H | 200 H |
| Zinc (mg/L) | <0.05 H | <0.05 | <0.05 H |

**Table 2.5-11. Building 850 OU 2003 PCBs in ground and surface 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) |
|---|---|---|---|---|---|---|---|---|
| NC7-70 | 06/20/03 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-850-05 | 06/10/03 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L |

**Table 2.5-12. Building 850 OU 2003 diesel range organic compounds in ground and surface water.**

| Location | Date | Diesel fuel (µg/L) |
|---|---|---|
| NC7-70 | 06/20/03 | <50 |
| W-850-05 | 06/10/03 | <50 L |

**Table 2.5-13. Building 850 OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| K1-01C | 01/08/03 | 99.02 | 982.2 | |
| K1-01C | 02/01/03 | 99.33 | 981.89 | |
| K1-01C | 03/01/03 | 99.35 | 981.87 | |
| K1-01C | 04/05/03 | 99.5 | 981.72 | |
| K1-01C | 07/11/03 | 99.78 | 981.44 | |
| K1-01C | 10/04/03 | 100.19 | 981.03 | |
| K1-02B | 01/08/03 | 127.64 | 979.59 | |
| K1-02B | 02/01/03 | 128.04 | 979.19 | |
| K1-02B | 03/01/03 | 128.17 | 979.06 | |
| K1-02B | 04/05/03 | 128.2 | 979.03 | |
| K1-02B | 07/11/03 | 128.5 | 978.73 | |
| K1-02B | 10/04/03 | 128.84 | 978.39 | |
| K1-03 | 01/08/03 | 130.65 | 977.4 | |
| K1-03 | 02/01/03 | 130.95 | 977.1 | |
| K1-03 | 03/01/03 | 130.95 | 977.1 | |
| K1-03 | 04/05/03 | 131.15 | 976.9 | |
| K1-03 | 07/11/03 | 131.35 | 976.7 | |
| K1-03 | 10/04/03 | 131.27 | 976.78 | |
| K1-04 | 01/08/03 | 149.71 | 972.96 | |
| K1-04 | 02/01/03 | 150.37 | 972.3 | |
| K1-04 | 03/01/03 | 150.17 | 972.5 | |
| K1-04 | 04/05/03 | 150.2 | 972.47 | |
| K1-04 | 07/11/03 | 150.49 | 972.18 | |
| K1-04 | 10/04/03 | 150.82 | 971.85 | |
| K1-05 | 01/08/03 | 165.58 | 965.28 | |
| K1-05 | 02/01/03 | 165.81 | 965.05 | |
| K1-05 | 03/01/03 | 165.74 | 965.12 | |
| K1-05 | 04/05/03 | 165.9 | 964.96 | |
| K1-05 | 07/11/03 | 166.2 | 964.66 | |
| K1-05 | 10/04/03 | 166.38 | 964.48 | |
| K1-06 | 01/08/03 | 110.1 | 979.44 | |
| K1-06 | 04/05/03 | 110.4 | 979.14 | |
| K1-06 | 07/11/03 | 110.6 | 978.94 | |
| K1-06 | 10/04/03 | 110.87 | 978.67 | |
| K1-07 | 01/08/03 | 134.55 | 975.08 | |

**Table 2.5-13. Building 850 OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| K1-07 | 02/01/03 | 134.83 | 974.8 | |
| K1-07 | 03/01/03 | 134.87 | 974.76 | |
| K1-07 | 04/05/03 | 135 | 974.63 | |
| K1-07 | 07/11/03 | 135.2 | 974.43 | |
| K1-07 | 10/04/03 | 135.68 | 973.95 | |
| K1-08 | 01/08/03 | 149.14 | 973.6 | |
| K1-08 | 02/01/03 | 149.15 | 973.59 | |
| K1-08 | 03/01/03 | 149.15 | 973.59 | |
| K1-08 | 04/05/03 | 149.25 | 973.49 | |
| K1-08 | 07/11/03 | 149.58 | 973.16 | |
| K1-08 | 10/04/03 | 150.06 | 972.68 | |
| K1-09 | 01/08/03 | 156.01 | 970.67 | |
| K1-09 | 02/01/03 | 155.92 | 970.76 | |
| K1-09 | 03/01/03 | 156.08 | 970.6 | |
| K1-09 | 04/05/03 | 156.1 | 970.58 | |
| K1-09 | 07/11/03 | 156.33 | 970.35 | |
| K1-09 | 10/04/03 | 156.84 | 969.84 | |
| K2-03 | 01/10/03 | 48.55 | 1018.09 | |
| K2-03 | 04/12/03 | 48.44 | 1018.2 | |
| K2-03 | 07/11/03 | 49 | 1017.64 | |
| K2-03 | 10/03/03 | 48.8 | 1017.84 | |
| K2-04D | 01/04/03 | 22.45 | 1070.07 | |
| K2-04D | 04/05/03 | 22.65 | 1069.87 | |
| K2-04D | 07/11/03 | 24.45 | 1068.07 | |
| K2-04D | 10/03/03 | 25.17 | 1067.35 | |
| K2-04S | 01/04/03 | 20.98 | 1070.97 | |
| K2-04S | 04/05/03 | 21.2 | 1070.75 | |
| K2-04S | 07/11/03 | 23.23 | 1068.72 | |
| K2-04S | 10/03/03 | 23.99 | 1067.96 | |
| NC2-05 | 01/08/03 | 43.95 | 990.96 | |
| NC2-05 | 04/12/03 | 44.03 | 990.88 | |
| NC2-05 | 07/02/03 | 45.23 | 989.68 | |
| NC2-05 | 10/04/03 | 46.03 | 988.88 | |
| NC2-05A | 01/08/03 | 44.76 | 990.67 | |
| NC2-05A | 04/12/03 | 45.07 | 990.36 | |
| NC2-05A | 07/02/03 | 45.39 | 990.04 | |

**Table 2.5-13. Building 850 OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| NC2-05A | 10/04/03 | 45.75 | 989.68 | |
| NC2-06 | 01/10/03 | 43 | 990.54 | |
| NC2-06 | 04/05/03 | 43.78 | 989.76 | |
| NC2-06 | 07/11/03 | 43.5 | 990.04 | |
| NC2-06 | 10/04/03 | 44.09 | 989.45 | |
| NC2-06A | 01/10/03 | 43.88 | 990.35 | |
| NC2-06A | 04/05/03 | 42.95 | 991.28 | |
| NC2-06A | 07/11/03 | 44.3 | 989.93 | |
| NC2-06A | 10/04/03 | 44.84 | 989.39 | |
| NC2-09 | 01/08/03 | 44.95 | 990.52 | |
| NC2-09 | 04/05/03 | 45 | 990.47 | |
| NC2-09 | 07/02/03 | 45.41 | 990.06 | |
| NC2-09 | 10/04/03 | 46.22 | 989.25 | |
| NC2-10 | 01/03/03 | 60.21 | 980.5 | |
| NC2-10 | 04/05/03 | 60 | 980.71 | |
| NC2-10 | 07/02/03 | 60.18 | 980.53 | |
| NC2-10 | 10/07/03 | 60.53 | 980.18 | |
| NC2-11D | 01/03/03 | 47.05 | 981.57 | |
| NC2-11D | 04/12/03 | 46.77 | 981.85 | |
| NC2-11D | 07/02/03 | 47.43 | 981.19 | |
| NC2-11D | 10/04/03 | 47.87 | 980.75 | |
| NC2-11I | 01/03/03 | 47.23 | 981.53 | |
| NC2-11I | 04/12/03 | 47.03 | 981.73 | |
| NC2-11I | 07/02/03 | 47.61 | 981.15 | |
| NC2-11I | 10/04/03 | 48.13 | 980.63 | |
| NC2-11S | 01/03/03 | 46.94 | 981.58 | |
| NC2-11S | 04/12/03 | 46.79 | 981.73 | |
| NC2-11S | 07/02/03 | 47.42 | 981.1 | |
| NC2-11S | 10/04/03 | 47.85 | 980.67 | |
| NC2-12D | 01/03/03 | 45.76 | 982.68 | |
| NC2-12I | 01/03/03 | 46.13 | 982.62 | |
| NC2-12S | 01/03/03 | 45.83 | 982.69 | |
| NC2-12S | 04/05/03 | 45.8 | 982.72 | |
| NC2-12S | 07/02/03 | 46.09 | 982.43 | |
| NC2-12S | 10/04/03 | 46.55 | 981.97 | |
| NC2-13 | 01/03/03 | 38.95 | 982.55 | |

**Table 2.5-13. Building 850 OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| NC2-13 | 04/05/03 | 39 | 982.5 | |
| NC2-13 | 07/11/03 | 39.67 | 981.83 | |
| NC2-13 | 10/04/03 | 40.08 | 981.42 | |
| NC2-14S | 01/04/03 | 12.41 | 1061.49 | |
| NC2-14S | 04/10/03 | 12.96 | 1060.94 | |
| NC2-14S | 07/11/03 | 14.1 | 1059.8 | |
| NC2-14S | 10/03/03 | 14.64 | 1059.26 | |
| NC2-15 | 01/10/03 | 73.8 | 999.66 | |
| NC2-15 | 04/05/03 | 73.65 | 999.81 | |
| NC2-15 | 07/11/03 | 74.45 | 999.01 | |
| NC2-15 | 10/04/03 | 75.32 | 998.14 | |
| NC2-16 | 01/04/03 | 21.03 | 1061.43 | |
| NC2-16 | 04/10/03 | 21.5 | 1060.96 | |
| NC2-16 | 07/11/03 | 22.45 | 1060.01 | |
| NC2-16 | 10/07/03 | 22.96 | 1059.5 | |
| NC2-17 | 01/10/03 | 98.8 | 990.69 | |
| NC2-17 | 04/05/03 | 98.7 | 990.79 | |
| NC2-17 | 07/11/03 | 99.2 | 990.29 | |
| NC2-17 | 10/04/03 | 99.69 | 989.8 | |
| NC2-18 | 01/10/03 | 71 | 1060.17 | |
| NC2-18 | 04/05/03 | 71 | 1060.17 | |
| NC2-18 | 07/11/03 | 72.13 | 1059.04 | |
| NC2-18 | 10/03/03 | 72.63 | 1058.54 | |
| NC2-19 | 01/10/03 | 106.15 | 986.24 | |
| NC2-19 | 04/05/03 | 106.15 | 986.24 | |
| NC2-19 | 07/11/03 | 106.3 | 986.09 | |
| NC2-19 | 10/04/03 | 106.78 | 985.61 | |
| NC2-20 | 01/10/03 | 32.45 | 969.82 | |
| NC2-20 | 04/18/03 | 32.97 | 969.3 | |
| NC2-20 | 07/11/03 | 33.4 | 968.87 | |
| NC2-20 | 10/04/03 | 33.63 | 968.64 | |
| NC2-21 | 01/10/03 | 32.12 | 970.02 | |
| NC2-21 | 04/18/03 | 32.62 | 969.52 | |
| NC2-21 | 07/11/03 | 33.1 | 969.04 | |
| NC2-21 | 10/04/03 | 33.37 | 968.77 | |
| NC7-10 | 01/04/03 | 9.07 | 1217.23 | |

**Table 2.5-13. Building 850 OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| NC7-10 | 04/17/03 | 9.8 | 1216.5 | |
| NC7-10 | 07/17/03 | 9.9 | 1216.4 | |
| NC7-10 | 10/03/03 | 9.95 | 1216.35 | |
| NC7-11 | 01/04/03 | 19.49 | 1224.9 | |
| NC7-11 | 02/01/03 | 20 | 1224.39 | |
| NC7-11 | 03/01/03 | 20.27 | 1224.12 | |
| NC7-11 | 04/17/03 | 20.34 | 1224.05 | |
| NC7-11 | 07/17/03 | 20.36 | 1224.03 | |
| NC7-11 | 10/03/03 | 20.4 | 1223.99 | |
| NC7-14 | 01/04/03 | 28.97 | 1228.02 | |
| NC7-14 | 04/17/03 | - | - | DRY |
| NC7-14 | 07/01/03 | - | - | DRY |
| NC7-14 | 10/01/03 | - | - | DRY |
| NC7-15 | 01/04/03 | 21.2 | 1248.21 | |
| NC7-15 | 02/01/03 | 21.15 | 1248.26 | |
| NC7-15 | 03/01/03 | 21.22 | 1248.19 | |
| NC7-15 | 04/10/03 | 21.32 | 1248.09 | |
| NC7-15 | 07/11/03 | 21.59 | 1247.82 | |
| NC7-15 | 10/03/03 | 21.67 | 1247.74 | |
| NC7-19 | 01/04/03 | 20.89 | 1242.09 | |
| NC7-19 | 02/01/03 | 21.1 | 1241.88 | |
| NC7-19 | 03/01/03 | 21.3 | 1241.68 | |
| NC7-19 | 04/10/03 | 21.38 | 1241.6 | |
| NC7-19 | 07/01/03 | 21.65 | 1241.33 | |
| NC7-19 | 10/03/03 | 21.83 | 1241.15 | |
| NC7-27 | 01/10/03 | 86.6 | 1195.8 | |
| NC7-27 | 02/01/03 | 86.26 | 1196.14 | |
| NC7-27 | 03/01/03 | 86.54 | 1195.86 | |
| NC7-27 | 04/16/03 | 86.75 | 1195.65 | |
| NC7-27 | 07/17/03 | 87.1 | 1195.3 | |
| NC7-27 | 10/07/03 | 86.93 | 1195.47 | |
| NC7-28 | 01/04/03 | 39.87 | 1259.66 | |
| NC7-28 | 02/01/03 | 40.05 | 1259.48 | |
| NC7-28 | 03/01/03 | 40.55 | 1258.98 | |
| NC7-28 | 04/14/03 | 40.7 | 1258.83 | |
| NC7-28 | 07/17/03 | 40.56 | 1258.97 | |

**Table 2.5-13. Building 850 OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| NC7-28 | 10/03/03 | 40.81 | 1258.72 | |
| NC7-29 | 01/11/03 | 52.53 | 1202.21 | |
| NC7-29 | 04/10/03 | 52.5 | 1202.24 | |
| NC7-29 | 07/11/03 | 52.62 | 1202.12 | |
| NC7-29 | 10/07/03 | 52.91 | 1201.83 | |
| NC7-43 | 01/04/03 | 45.17 | 1245.01 | |
| NC7-43 | 02/01/03 | 44.65 | 1245.53 | |
| NC7-43 | 03/01/03 | 45.11 | 1245.07 | |
| NC7-43 | 04/12/03 | 45.14 | 1245.04 | |
| NC7-43 | 07/11/03 | 46.26 | 1243.92 | |
| NC7-43 | 10/03/03 | 45.5 | 1244.68 | |
| NC7-44 | 01/11/03 | 32.3 | 1323.83 | |
| NC7-44 | 02/01/03 | 32.25 | 1323.88 | |
| NC7-44 | 03/01/03 | 32.31 | 1323.82 | |
| NC7-44 | 04/12/03 | 32.3 | 1323.83 | |
| NC7-44 | 07/27/03 | 32.35 | 1323.78 | |
| NC7-44 | 10/03/03 | 32.45 | 1323.68 | |
| NC7-45 | 01/04/03 | 32.92 | 1158.44 | |
| NC7-45 | 04/17/03 | 35.63 | 1153.06 | |
| NC7-45 | 07/01/03 | - | - | DRY |
| NC7-45 | 10/03/03 | - | - | DRY |
| NC7-46 | 01/04/03 | 23.53 | 1107.9 | |
| NC7-46 | 04/10/03 | 23.73 | 1107.7 | |
| NC7-46 | 07/17/03 | 23.83 | 1107.6 | |
| NC7-46 | 10/03/03 | 23.77 | 1107.66 | |
| NC7-54 | 01/11/03 | 10.85 | 1196.4 | |
| NC7-54 | 02/01/03 | 11.13 | 1196.12 | |
| NC7-54 | 03/01/03 | 11.45 | 1195.8 | |
| NC7-54 | 04/17/03 | 11.57 | 1195.68 | |
| NC7-54 | 07/17/03 | 11.85 | 1195.4 | |
| NC7-54 | 10/01/03 | 11.89 | 1195.36 | |
| NC7-55 | 01/04/03 | - | - | DRY |
| NC7-55 | 04/10/03 | - | - | DRY |
| NC7-55 | 07/01/03 | - | - | DRY |
| NC7-55 | 10/03/03 | - | - | DRY |
| NC7-56 | 01/11/03 | 18.57 | 1113.6 | |

**Table 2.5-13. Building 850 OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| NC7-56 | 04/17/03 | 19.3 | 1112.87 | |
| NC7-56 | 07/17/03 | 19.86 | 1112.31 | |
| NC7-56 | 10/03/03 | 19.62 | 1112.55 | |
| NC7-57 | 01/04/03 | - | - | DRY |
| NC7-57 | 04/10/03 | - | - | DRY |
| NC7-57 | 07/01/03 | - | - | DRY |
| NC7-57 | 10/03/03 | - | - | DRY |
| NC7-58 | 01/04/03 | 20.8 | 1085.93 | |
| NC7-58 | 04/10/03 | 22.57 | 1084.16 | |
| NC7-58 | 07/17/03 | 23.74 | 1082.99 | |
| NC7-58 | 10/03/03 | 23.7 | 1083.03 | |
| NC7-59 | 01/04/03 | 12.32 | 1103.44 | |
| NC7-59 | 04/10/03 | 12.86 | 1102.9 | |
| NC7-59 | 07/17/03 | 13.3 | 1102.46 | |
| NC7-59 | 10/03/03 | 13.14 | 1102.62 | |
| NC7-60 | 01/11/03 | 158.45 | 1169.17 | |
| NC7-60 | 04/16/03 | 158.59 | 1169.03 | |
| NC7-60 | 07/17/03 | 159.77 | 1167.85 | |
| NC7-60 | 10/07/03 | 159.04 | 1168.58 | |
| NC7-61 | 01/11/03 | 48.18 | 1231.19 | |
| NC7-61 | 02/01/03 | 48.15 | 1231.22 | |
| NC7-61 | 03/01/03 | 48.19 | 1231.18 | |
| NC7-61 | 04/12/03 | 48.22 | 1231.15 | |
| NC7-61 | 07/17/03 | 48.24 | 1231.13 | |
| NC7-61 | 10/03/03 | 48.29 | 1231.08 | |
| NC7-62 | 01/04/03 | 20.89 | 1104.22 | |
| NC7-62 | 04/17/03 | 21.8 | 1103.31 | |
| NC7-62 | 07/17/03 | 22.36 | 1102.75 | |
| NC7-62 | 10/03/03 | 22.2 | 1102.91 | |
| NC7-69 | 01/04/03 | 1.98 | 1250.48 | |
| NC7-69 | 04/14/03 | 1.97 | 1250.49 | |
| NC7-69 | 07/17/03 | 2.07 | 1250.39 | |
| NC7-69 | 10/03/03 | 2.17 | 1250.29 | |
| NC7-70 | 01/04/03 | 32.69 | 1274.73 | |
| NC7-70 | 02/01/03 | 31.85 | 1275.57 | |
| NC7-70 | 03/01/03 | 32.63 | 1274.79 | |

Table 2.5-13. Building 850 OU 2003 ground water elevations.

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| NC7-70 | 04/14/03 | 32.78 | 1274.64 | |
| NC7-70 | 07/17/03 | 33.02 | 1274.4 | |
| NC7-70 | 10/03/03 | 33.38 | 1274.04 | |
| NC7-71 | 01/04/03 | 55.82 | 1247.4 | |
| NC7-71 | 02/01/03 | 55.45 | 1247.77 | |
| NC7-71 | 03/01/03 | 55.9 | 1247.32 | |
| NC7-71 | 04/14/03 | 55.97 | 1247.25 | |
| NC7-71 | 07/17/03 | 56.13 | 1247.09 | |
| NC7-71 | 10/03/03 | 56.2 | 1247.02 | |
| NC7-72 | 01/04/03 | 30.66 | 1125.69 | |
| NC7-72 | 04/17/03 | 31.77 | 1124.58 | |
| NC7-72 | 07/17/03 | 32.33 | 1124.02 | |
| NC7-72 | 10/03/03 | 32.05 | 1124.3 | |
| NC7-73 | 01/04/03 | 26.3 | 1139.97 | |
| NC7-73 | 04/17/03 | 27.21 | 1139.06 | |
| NC7-73 | 07/17/03 | 27.58 | 1138.69 | |
| NC7-73 | 10/03/03 | 27.27 | 1139 | |
| NC7-76 | 01/04/03 | 22.62 | 1254.26 | |
| NC7-76 | 02/01/03 | 22.35 | 1254.53 | |
| NC7-76 | 03/01/03 | 22.4 | 1254.48 | |
| NC7-76 | 04/10/03 | 22.51 | 1254.37 | |
| NC7-76 | 07/11/03 | 22.92 | 1253.96 | |
| NC7-76 | 10/03/03 | 23.13 | 1253.75 | |
| W-850-05 | 01/11/03 | 27.8 | 1275.59 | |
| W-850-05 | 02/01/03 | 28.13 | 1275.26 | |
| W-850-05 | 03/01/03 | 28.46 | 1274.93 | |
| W-850-05 | 04/14/03 | 28.74 | 1274.65 | |
| W-850-05 | 07/11/03 | 28.88 | 1274.51 | |
| W-850-05 | 10/03/03 | 29.06 | 1274.33 | |
| W-865-1802 | 04/12/03 | 48.04 | 1019.01 | |
| W-865-1802 | 07/24/03 | 48.72 | 1018.33 | |
| W-865-1802 | 10/04/03 | 49.07 | 1017.98 | |
| W-865-1803 | 10/04/03 | 105.15 | 1072.84 | |
| W-PIT7-16 | 01/04/03 | 20.74 | 1250.26 | |
| W-PIT7-16 | 02/01/03 | 20.7 | 1250.3 | |
| W-PIT7-16 | 03/01/03 | 20.65 | 1250.35 | |

**Table 2.5-13. Building 850 OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-PIT7-16 | 04/01/03 | 20.7 | 1250.3 | |
| W-PIT7-16 | 07/11/03 | 20.91 | 1250.09 | |
| W-PIT7-16 | 10/03/03 | 21 | 1250 | |

**Table 2.6-1. Building 854-Source (B854-SRC) volumes of ground water and soil vapor extracted and discharged, January 1, 2003 through December 31, 2003.**

| Treatment facility | Month | Operational hours | Volume of ground water discharged (gal) | Average weekly volume of water treated (gal) |
|---|---|---|---|---|
| B854-SRC | January | 715 | 44,243 | 11,061 |
| | February | 536 | 32,952 | 8,238 |
| | March | 572 | 35,502 | 5,917 |
| | April | 694 | 44,959 | 11,240 |
| | May | 678 | 44,685 | 11,171 |
| | June | 702 | 47,717 | 9,543 |
| | July | 675 | 47,434 | 11,859 |
| | August | 335 | 22,617 | 7,539 |
| | September | 793 | 49,733 | 9,947 |
| | October | 720 | 44,705 | 11,176 |
| | November | 627 | 39,005 | 9,751 |
| | December | 838 | 51,757 | 10,351 |
| Total | | 7,885 | 505,309 | |

**Table 2.6-2. Building 854-Proximal (B854-PRX) volumes of ground water and soil vapor extracted and discharged, January 1, 2003 through December 31, 2003.**

| Treatment facility | Month | Operational hours | Volume of ground water discharged (gal) | Average weekly volume of water treated (gal) |
|---|---|---|---|---|
| B854-PRX | January | 201 | 13,267 | 4,422 |
| | February | 267 | 17,067 | 4,267 |
| | March | 406 | 25,843 | 6,461 |
| | April | 361 | 23,016 | 5,754 |
| | May | 339 | 21,056 | 5,264 |
| | June | 418 | 25,370 | 5,074 |
| | July | 405 | 23,832 | 5,958 |
| | August | 366 | 21,250 | 5,313 |
| | September | 380 | 21,389 | 4,278 |
| | October | 283 | 18,725 | 6,242 |
| | November | 235 | 15,306 | 3,827 |
| | December | 141 | 9,099 | 2,275 |
| Total | | 3,802 | 235,220 | |

**Table 2.6-3. Building 854 OU 2003 VOCs in ground water treatment system influent and effluent.**

| Location | Date | Method | TCE (µg/L) | PCE (µg/L) | Total 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) | Freon 11 (µg/L) | Freon 113 (µg/L) | Methylene chloride (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *B854-PRX* | | | | | | | | | | | | | | |
| STU02-I | 01/15/03 | E601 | 69 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 |
| STU02-I | 01/15/03 DUP | E601 | 57 D | <2.5 DIJ | <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 |
| STU02-I | 04/09/03 | E601 | 77 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 |
| STU02-I | 07/09/03 | E601 | 93 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU02-I | 10/14/03 | E601 | 86 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| BTU03-E | 01/15/03 | E601 | <0.5 | <0.5 IJS | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| BTU03-E | 02/12/03 | E601 | <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 |
| BTU03-E | 03/11/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| BTU03-E | 04/09/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| BTU03-E | 05/01/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| BTU03-E | 06/11/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| BTU03-E | 07/09/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| BTU03-E | 08/06/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| BTU03-E | 09/10/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| BTU03-E | 10/14/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| BTU03-E | 11/12/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| BTU03-E | 12/09/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| *B5854-SRC* | | | | | | | | | | | | | | |
| STU08-I | 01/15/03 | 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 |
| STU08-I | 01/15/03 DUP | E601 | 150 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 |
| STU08-I | 04/09/03 | E601 | 230 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D |
| STU08-I | 07/09/03 | E601 | 200 D | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU08-I | 10/08/03 | E601 | 200 D | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU08-E | 01/15/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU08-E | 02/12/03 | E601 | <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 |
| STU08-E | 03/11/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU08-E | 04/09/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU08-E | 05/01/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU08-E | 06/11/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU08-E | 07/09/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU08-E | 08/06/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU08-E | 09/10/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU08-E | 10/08/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU08-E | 11/12/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU08-E | 12/09/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

**Table 2.6-4. Building 854 OU 2003 nitrate and perchlorate in ground water treatment system influent and effluent.**

| Location | Date | Nitrate (as $NO_3$) (mg/L) | Perchlorate ($\mu$g/L) |
|---|---|---|---|
| *B854-PRX* | | | |
| STU02-I | 01/15/03 | 43 DL | 9.4 |
| STU02-I | 01/15/03 DUP | 49 DL | 11 |
| STU02-I | 04/09/03 | 47 DL | 10 |
| STU02-I | 07/09/03 | 47 | 10 |
| STU02-I | 10/14/03 | 49 | 11 H |
| BTU03-E | 01/15/03 | 3.2 L | <4 |
| BTU03-E | 02/12/03 | 6.8 | <4 |
| BTU03-E | 03/11/03 | 9.7 | <4 |
| BTU03-E | 04/09/03 | 25 DL | <4 |
| BTU03-E | 05/01/03 | 19 D | <4 |
| BTU03-E | 06/11/03 | 19 | <4 |
| BTU03-E | 07/09/03 | 30 | <4 |
| BTU03-E | 08/06/03 | 12 | <4 |
| BTU03-E | 09/10/03 | 11 | <4 |
| BTU03-E | 10/14/03 | 7.5 | <4 H |
| BTU03-E | 11/12/03 | 8.4 | <4 |
| BTU03-E | 12/09/03 | 13 | <4 |
| *B854-SRC* | | | |
| STU08-I | 01/15/03 | 52 DL | 5.1 |
| STU08-I | 01/15/03 DUP | 34 DL | 4.4 |
| STU08-I | 04/09/03 | 54 DL | 6.2 |
| STU08-I | 07/09/03 | 54 | 6.3 |
| STU08-I | 10/08/03 | 56 | 5.9 H |
| STU08-E | 01/15/03 | 54 D | <4 |
| STU08-E | 02/12/03 | 52 D | <4 |
| STU08-E | 03/11/03 | 53 D | <4 |
| STU08-E | 04/09/03 | 53 DL | <4 |
| STU08-E | 05/01/03 | 52 D | <4 |
| STU08-E | 06/11/03 | 46 D | <4 |
| STU08-E | 07/09/03 | 50 | <4 |
| STU08-E | 08/06/03 | 48 | <4 |
| STU08-E | 09/10/03 | 49 | <4 |
| STU08-E | 10/08/03 | 54 | <4 H |
| STU08-E | 11/12/03 | 50 | <4 |
| STU08-E | 12/09/03 | 48 | <4 |

**Table 2.6-5. Building 854 OU treatment facility sampling plans.**

| Sample location | Sample identification | Parameter | Frequency |
|---|---|---|---|
| *B854-SRC GWTS* | | | |
| Influent Port | STU08-I | VOCs | Quarterly |
| | | Perchlorate | Quarterly |
| | | Nitrate | Quarterly |
| | | pH | Quarterly |
| Effluent Port | STU08-E | VOCs | Monthly |
| | | Perchlorate | Monthly |
| | | Nitrate | Monthly |
| | | pH | Monthly |
| *B854-PRX GWTS* | | | |
| Influent Port | STU02-I | VOCs | Quarterly |
| | | Perchlorate | Quarterly |
| | | Nitrate | Quarterly |
| | | pH | Quarterly |
| Effluent Port | BTU03-E | VOCs | Monthly |
| | | Perchlorate | Monthly |
| | | Nitrate | Monthly |
| | | pH | Monthly |

**Note:**

**One duplicate and one blank (given fictitious labels) shall be taken for every 10 samples.**

**Table 2.6-6. Building 854 (OU6) 2003 ground water sampling and analysis plan.**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| SPRING10 | SPR | Qls | Q | Q | CMP | E601 | 1 | Y | |
| SPRING10 | SPR | Qls | Q | Q | CMP | E601 | 2 | Y | |
| SPRING10 | SPR | Qls | Q | Q | CMP | E601 | 3 | Y | |
| SPRING10 | SPR | Qls | Q | Q | CMP | E601 | 4 | Y | |
| SPRING10 | SPR | Qls | | A | DIS | MS:UISO | 2 | Y | |
| SPRING10 | SPR | Qls | A | A | CMP | E300.0:NO3 | 2 | Y | |
| SPRING10 | SPR | Qls | A | A | CMP | E300.0:PERC | 2 | Y | |
| SPRING11 | SPR | Qls-$Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| SPRING11 | SPR | Qls-$Tnbs_1$ | A | A | CMP | E300.0:PERC | 2 | Y | |
| SPRING11 | SPR | Qls-$Tnbs_1$ | Q | Q | CMP | E601 | 1 | Y | |
| SPRING11 | SPR | Qls-$Tnbs_1$ | Q | Q | CMP | E601 | 2 | Y | |
| SPRING11 | SPR | Qls-$Tnbs_1$ | Q | Q | CMP | E601 | 3 | Y | |
| SPRING11 | SPR | Qls-$Tnbs_1$ | Q | Q | CMP | E601 | 4 | Y | |
| SPRING11 | SPR | Qls-$Tnbs_1$ | | A | DIS | MS:UISO | 2 | N | Insufficient water. |
| SPRING11 | SPR | Qls-$Tnbs_1$ | | A | DIS | MS:UISO | 4 | N | |
| SPRING12 | SPR | Qls | | A | DIS | AS:UISO | 4 | Y | |
| SPRING12 | SPR | Qls | | A | DIS | DWMETALS | 4 | Y | |
| SPRING12 | SPR | Qls | | A | DIS | E210.2 | 4 | Y | |
| SPRING12 | SPR | Qls | | A | DIS | E601 | 4 | Y | |
| SPRING12 | SPR | Qls | | A | DIS | E8330:R+H | 4 | Y | |
| SPRING12 | SPR | Qls | | A | DIS | E900 | 4 | Y | |
| SPRING12 | SPR | Qls | | A | DIS | E906 | 4 | Y | |
| SPRING16 | SPR | Qls | | A | DIS | AS:UISO | 4 | N | Inaccessible due to road conditions. |
| SPRING16 | SPR | Qls | | A | DIS | DWMETALS | 4 | N | Inaccessible due to road conditions. |
| SPRING16 | SPR | Qls | | A | DIS | E210.2 | 4 | N | Inaccessible due to road conditions. |
| SPRING16 | SPR | Qls | | A | DIS | E601 | 4 | N | Inaccessible due to road conditions. |
| SPRING16 | SPR | Qls | | A | DIS | E8330:R+H | 4 | N | Inaccessible due to road conditions. |
| SPRING16 | SPR | Qls | | A | DIS | E900 | 4 | N | Inaccessible due to road conditions. |
| SPRING16 | SPR | Qls | | A | DIS | E906 | 4 | N | Inaccessible due to road conditions. |

**Table 2.6-6. Building 854 (OU6) 2003 ground water sampling and analysis plan. (Cont. Page 2 of 10)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| SPRING18 | SPR | Qls | | A | DIS | AS:UISO | 4 | N | Inaccessible due to road conditions. |
| SPRING18 | SPR | Qls | | A | DIS | DWMETALS | 4 | N | Inaccessible due to road conditions. |
| SPRING18 | SPR | Qls | | A | DIS | E210.2 | 4 | N | Inaccessible due to road conditions. |
| SPRING18 | SPR | Qls | | A | DIS | E601 | 4 | N | Inaccessible due to road conditions. |
| SPRING18 | SPR | Qls | | A | DIS | E8330:R+H | 4 | N | Inaccessible due to road conditions. |
| SPRING18 | SPR | Qls | | A | DIS | E900 | 4 | N | Inaccessible due to road conditions. |
| SPRING18 | SPR | Qls | | A | DIS | E906 | 4 | N | Inaccessible due to road conditions. |
| SPRING22 | SPR | Qt | | A | DIS | AS:UISO | 4 | N | Inaccessible due to road conditions. |
| SPRING22 | SPR | Qt | | A | DIS | DWMETALS | 4 | N | Inaccessible due to road conditions. |
| SPRING22 | SPR | Qt | | A | DIS | E210.2 | 4 | N | Inaccessible due to road conditions. |
| SPRING22 | SPR | Qt | | A | DIS | E300.0:PERC | 4 | N | Inaccessible due to road conditions. |
| SPRING22 | SPR | Qt | | A | DIS | E601 | 4 | N | Inaccessible due to road conditions. |
| SPRING22 | SPR | Qt | | A | DIS | E8330:R+H | 4 | N | Inaccessible due to road conditions. |
| SPRING22 | SPR | Qt | | A | DIS | E900 | 4 | N | Inaccessible due to road conditions. |
| SPRING22 | SPR | Qt | | A | DIS | E906 | 4 | N | Inaccessible due to road conditions. |
| SPRING22 | SPR | Qt | | A | DIS | GENMIN | 4 | N | Inaccessible due to road conditions. |
| SPRING23 | SPR | Qt | | A | DIS | AS:UISO | 4 | N | Inaccessible due to road conditions. |
| SPRING23 | SPR | Qt | | A | DIS | DWMETALS | 4 | N | Inaccessible due to road conditions. |
| SPRING23 | SPR | Qt | | A | DIS | E210.2 | 4 | N | Inaccessible due to road conditions. |
| SPRING23 | SPR | Qt | | A | DIS | E300.0:PERC | 4 | N | Inaccessible due to road conditions. |
| SPRING23 | SPR | Qt | | A | DIS | E601 | 4 | N | Inaccessible due to road conditions. |
| SPRING23 | SPR | Qt | | A | DIS | E8330:R+H | 4 | N | Inaccessible due to road conditions. |
| SPRING23 | SPR | Qt | | A | DIS | E900 | 4 | N | Inaccessible due to road conditions. |
| SPRING23 | SPR | Qt | | A | DIS | E906 | 4 | N | Inaccessible due to road conditions. |
| SPRING23 | SPR | Qt | | A | DIS | GENMIN | 4 | N | Inaccessible due to road conditions. |
| SPRING9 | SPR | Qls | | A | DIS | AS:UISO | 4 | N | Inaccessible due to road conditions. |
| SPRING9 | SPR | Qls | | A | DIS | DWMETALS | 4 | N | Inaccessible due to road conditions. |
| SPRING9 | SPR | Qls | | A | DIS | E210.2 | 4 | N | Inaccessible due to road conditions. |
| SPRING9 | SPR | Qls | | A | DIS | E601 | 4 | N | Inaccessible due to road conditions. |

**Table 2.6-6. Building 854 (OU6) 2003 ground water sampling and analysis plan. (Cont. Page 3 of 10)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| SPRING9 | SPR | Qls | | A | DIS | E8330:R+H | 4 | N | Inaccessible due to road conditions. |
| SPRING9 | SPR | Qls | | A | DIS | E900 | 4 | N | Inaccessible due to road conditions. |
| SPRING9 | SPR | Qls | | A | DIS | E906 | 4 | N | Inaccessible due to road conditions. |
| W-854-01 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| W-854-01 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:PERC | 2 | Y | |
| W-854-01 | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 2 | Y | |
| W-854-01 | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 4 | Y | |
| W-854-02 | EW | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| W-854-02 | EW | $Tnbs_1$ | A | A | CMP | E300.0:PERC | 2 | Y | |
| W-854-02 | EW | $Tnbs_1$ | S | S | CMP | E601 | 2 | Y | |
| W-854-02 | EW | $Tnbs_1$ | S | S | CMP | E601 | 4 | Y | |
| W-854-02 | EW | $Tnbs_1$ | | Q | DIS | TBOS | 1 | Y | |
| W-854-02 | EW | $Tnbs_1$ | | Q | DIS | TBOS | 2 | Y | |
| W-854-02 | EW | $Tnbs_1$ | | Q | DIS | TBOS | 3 | N | Not on sampling plan. |
| W-854-02 | EW | $Tnbs_1$ | | Q | DIS | TBOS | 4 | Y | |
| W-854-03 | EW | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| W-854-03 | EW | $Tnbs_1$ | A | A | CMP | E300.0:PERC | 2 | Y | |
| W-854-03 | EW | $Tnbs_1$ | S | S | CMP | E601 | 2 | Y | |
| W-854-03 | EW | $Tnbs_1$ | S | S | CMP | E601 | 4 | Y | |
| W-854-04 | MWPT | Tmss | A | A | CMP | E300.0:NO3 | 2 | Y | |
| W-854-04 | MWPT | Tmss | A | A | CMP | E300.0:PERC | 2 | Y | |
| W-854-04 | MWPT | Tmss | S | S | CMP | E601 | 2 | Y | |
| W-854-04 | MWPT | Tmss | S | S | CMP | E601 | 4 | Y | |
| W-854-05 | MWPT | Qls-$Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| W-854-05 | MWPT | Qls-$Tnbs_1$ | A | A | CMP | E300.0:PERC | 2 | Y | |
| W-854-05 | MWPT | Qls-$Tnbs_1$ | S | S | CMP | E601 | 2 | Y | |
| W-854-05 | MWPT | Qls-$Tnbs_1$ | S | S | CMP | E601 | 4 | Y | |
| W-854-06 | MWPT | $Tnsc_0$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| W-854-06 | MWPT | $Tnsc_0$ | A | A | CMP | E300.0:PERC | 2 | Y | |

**Table 2.6-6. Building 854 (OU6) 2003 ground water sampling and analysis plan. (Cont. Page 4 of 10)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-854-06 | MWPT | $Tnsc_0$ | S | S | CMP | E601 | 2 | Y | |
| W-854-06 | MWPT | $Tnsc_0$ | S | S | CMP | E601 | 4 | Y | |
| W-854-07 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| W-854-07 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:PERC | 2 | Y | |
| W-854-07 | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 2 | Y | |
| W-854-07 | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 4 | Y | |
| W-854-08 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| W-854-08 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:PERC | 2 | Y | |
| W-854-08 | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 2 | Y | |
| W-854-08 | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 4 | Y | |
| W-854-09 | MWPT | $Tnsbs_0$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| W-854-09 | MWPT | $Tnsbs_0$ | A | A | CMP | E300.0:PERC | 2 | Y | |
| W-854-09 | MWPT | $Tnsbs_0$ | S | S | CMP | E601 | 2 | Y | |
| W-854-09 | MWPT | $Tnsbs_0$ | S | S | CMP | E601 | 4 | Y | |
| W-854-10 | MWPT | $Tnsbs_0$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| W-854-10 | MWPT | $Tnsbs_0$ | A | A | CMP | E300.0:PERC | 2 | Y | |
| W-854-10 | MWPT | $Tnsbs_0$ | S | S | CMP | E601 | 2 | Y | |
| W-854-10 | MWPT | $Tnsbs_0$ | S | S | CMP | E601 | 4 | Y | |
| W-854-10 | MWPT | $Tnsbs_0$ | | Q | DIS | TBOS | 1 | Y | |
| W-854-10 | MWPT | $Tnsbs_0$ | | Q | DIS | TBOS | 2 | Y | |
| W-854-10 | MWPT | $Tnsbs_0$ | | Q | DIS | TBOS | 3 | N | Not on sampling plan. |
| W-854-10 | MWPT | $Tnsbs_0$ | | Q | DIS | TBOS | 4 | Y | |
| W-854-11 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | N | Dry. |
| W-854-11 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 4 | N | Dry. |
| W-854-11 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:PERC | 2 | N | Dry. |
| W-854-11 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:PERC | 4 | N | Dry. |
| W-854-11 | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 2 | N | Dry. |
| W-854-11 | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 4 | N | Dry. |
| W-854-12 | MWPT | Tmss | A | A | CMP | E300.0:NO3 | 2 | N | Dry. |

**Table 2.6-6. Building 854 (OU6) 2003 ground water sampling and analysis plan. (Cont. Page 5 of 10)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-854-12 | MWPT | Tmss | A | A | CMP | E300.0:NO3 | 4 | N | Insufficient water. |
| W-854-12 | MWPT | Tmss | A | A | CMP | E300.0:PERC | 2 | N | Dry. |
| W-854-12 | MWPT | Tmss | A | A | CMP | E300.0:PERC | 4 | N | Insufficient water. |
| W-854-12 | MWPT | Tmss | S | S | CMP | E601 | 2 | N | Dry. |
| W-854-12 | MWPT | Tmss | S | S | CMP | E601 | 4 | N | Insufficient water. |
| W-854-13 | MWPT | $Tnsc_0$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| W-854-13 | MWPT | $Tnsc_0$ | A | A | CMP | E300.0:PERC | 2 | Y | |
| W-854-13 | MWPT | $Tnsc_0$ | S | S | CMP | E601 | 2 | Y | |
| W-854-13 | MWPT | $Tnsc_0$ | S | S | CMP | E601 | 4 | Y | |
| W-854-13 | MWPT | $Tnsc_0$ | B | | CMP | PCBS | 4 | Y | |
| W-854-14 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | N | Dry. |
| W-854-14 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 4 | N | Dry. |
| W-854-14 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:PERC | 2 | N | Dry. |
| W-854-14 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:PERC | 4 | N | Dry. |
| W-854-14 | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 2 | N | Dry. |
| W-854-14 | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 4 | N | Dry. |
| W-854-14 | MWPT | $Tnbs_1$ | | Q | DIS | MS:UISO | 1 | Y | |
| W-854-14 | MWPT | $Tnbs_1$ | | Q | DIS | MS:UISO | 2 | N | Dry. |
| W-854-14 | MWPT | $Tnbs_1$ | | Q | DIS | MS:UISO | 3 | N | Dry. |
| W-854-14 | MWPT | $Tnbs_1$ | | Q | DIS | MS:UISO | 4 | N | Dry. |
| W-854-15 | MWPT | Qls | A | A | CMP | E300.0:NO3 | 2 | Y | |
| W-854-15 | MWPT | Qls | A | A | CMP | E300.0:PERC | 2 | Y | |
| W-854-15 | MWPT | Qls | S | S | CMP | E601 | 2 | Y | |
| W-854-15 | MWPT | Qls | S | S | CMP | E601 | 4 | Y | |
| W-854-15 | MWPT | Qls | | Q | DIS | MS:UISO | 1 | Y | |
| W-854-15 | MWPT | Qls | | Q | DIS | MS:UISO | 2 | Y | |
| W-854-15 | MWPT | Qls | | Q | DIS | MS:UISO | 3 | N | Not on sampling plan. |
| W-854-15 | MWPT | Qls | | Q | DIS | MS:UISO | 4 | Y | |
| W-854-17 | MWPT | $Tnsbs_0$-$Tnsc_0$ | A | A | CMP | E300.0:NO3 | 2 | Y | |

Table 2.6-6. Building 854 (OU6) 2003 ground water sampling and analysis plan. (Cont. Page 6 of 10)

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-854-17 | MWPT | $Tnsbs_0$-$Tnsc_0$ | A | A | CMP | E300.0:PERC | 2 | Y | |
| W-854-17 | MWPT | $Tnsbs_0$-$Tnsc_0$ | S | S | CMP | E601 | 2 | Y | |
| W-854-17 | MWPT | $Tnsbs_0$-$Tnsc_0$ | S | S | CMP | E601 | 4 | Y | |
| W-854-17 | MWPT | $Tnsbs_0$-$Tnsc_0$ | | Q | DIS | TBOS | 1 | Y | |
| W-854-17 | MWPT | $Tnsbs_0$-$Tnsc_0$ | | Q | DIS | TBOS | 2 | Y | |
| W-854-17 | MWPT | $Tnsbs_0$-$Tnsc_0$ | | Q | DIS | TBOS | 3 | N | Not on sampling plan. |
| W-854-17 | MWPT | $Tnsbs_0$-$Tnsc_0$ | | Q | DIS | TBOS | 4 | Y | |
| W-854-1701 | MWPT | $Tnsc_0$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| W-854-1701 | MWPT | $Tnsc_0$ | A | A | CMP | E300.0:PERC | 2 | Y | |
| W-854-1701 | MWPT | $Tnsc_0$ | S | S | CMP | E601 | 2 | Y | |
| W-854-1701 | MWPT | $Tnsc_0$ | S | S | CMP | E601 | 4 | Y | |
| W-854-1706 | MWPT | Qal-$Tnbs_1$ | | S | DIS | AS:UISO | 2 | N | Dry. |
| W-854-1706 | MWPT | Qal-$Tnbs_1$ | | S | DIS | DWMETALS | 2 | N | Dry. |
| W-854-1706 | MWPT | Qal-$Tnbs_1$ | | S | DIS | DWMETALS | 4 | N | Dry. |
| W-854-1706 | MWPT | Qal-$Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | N | Dry. |
| W-854-1706 | MWPT | Qal-$Tnbs_1$ | A | A | CMP | E300.0:NO3 | 4 | N | Dry. |
| W-854-1706 | MWPT | Qal-$Tnbs_1$ | A | A | CMP | E300.0:PERC | 2 | N | Dry. |
| W-854-1706 | MWPT | Qal-$Tnbs_1$ | A | A | CMP | E300.0:PERC | 4 | N | Dry. |
| W-854-1706 | MWPT | Qal-$Tnbs_1$ | S | S | CMP | E601 | 2 | N | Dry. |
| W-854-1706 | MWPT | Qal-$Tnbs_1$ | S | S | CMP | E601 | 4 | N | Dry. |
| W-854-1706 | MWPT | Qal-$Tnbs_1$ | | S | DIS | E8330:R+H | 2 | N | Dry. |
| W-854-1706 | MWPT | Qal-$Tnbs_1$ | | S | DIS | E8330:R+H | 4 | N | Dry. |
| W-854-1706 | MWPT | Qal-$Tnbs_1$ | | S | DIS | E900 | 2 | N | Dry. |
| W-854-1706 | MWPT | Qal-$Tnbs_1$ | | S | DIS | E900 | 4 | N | Dry. |
| W-854-1706 | MWPT | Qal-$Tnbs_1$ | | S | DIS | E906 | 2 | N | Dry. |
| W-854-1706 | MWPT | Qal-$Tnbs_1$ | | S | DIS | E906 | 4 | N | Dry. |
| W-854-1706 | MWPT | Qal-$Tnbs_1$ | | S | DIS | GENMIN | 2 | N | Dry. |
| W-854-1706 | MWPT | Qal-$Tnbs_1$ | | S | DIS | GENMIN | 4 | N | Dry. |
| W-854-1706 | MWPT | Qal-$Tnbs_1$ | | S | DIS | MS:UISO | 4 | N | Dry. |

**Table 2.6-6. Building 854 (OU6) 2003 ground water sampling and analysis plan. (Cont. Page 7 of 10)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-854-1707 | MWPT | $Tnsc_0$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| W-854-1707 | MWPT | $Tnsc_0$ | A | A | CMP | E300.0:PERC | 2 | Y | |
| W-854-1707 | MWPT | $Tnsc_0$ | S | S | CMP | E601 | 2 | Y | |
| W-854-1707 | MWPT | $Tnsc_0$ | S | S | CMP | E601 | 4 | Y | |
| W-854-1731 | MWPT | Tmss | A | A | CMP | E300.0:NO3 | 2 | Y | |
| W-854-1731 | MWPT | Tmss | A | A | CMP | E300.0:PERC | 2 | Y | |
| W-854-1731 | MWPT | Tmss | S | S | CMP | E601 | 2 | Y | |
| W-854-1731 | MWPT | Tmss | S | S | CMP | E601 | 4 | Y | |
| W-854-1731 | MWPT | Tmss | | S | DIS | E906 | 2 | Y | |
| W-854-1731 | MWPT | Tmss | | S | DIS | E906 | 4 | Y | |
| W-854-1822 | MWPT | $Tnbs_1$ | | A | DIS | AS:UISO | 1 | Y | |
| W-854-1822 | MWPT | $Tnbs_1$ | | A | DIS | AS:UISO | 2 | N | Sampling personnel shortage. |
| W-854-1822 | MWPT | $Tnbs_1$ | | A | DIS | DWMETALS | 1 | Y | |
| W-854-1822 | MWPT | $Tnbs_1$ | | A | DIS | DWMETALS | 2 | N | Sampling personnel shortage. |
| W-854-1822 | MWPT | $Tnbs_1$ | | A | DIS | DWMETALS | 3 | Y | |
| W-854-1822 | MWPT | $Tnbs_1$ | | A | DIS | DWMETALS | 4 | N | Not on sampling plan. |
| W-854-1822 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 1 | Y | GENMIN analyzed. |
| W-854-1822 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-854-1822 | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 3 | Y | |
| W-854-1822 | MWPT | $Tnbs_1$ | S | S | CMP | E624 | 1 | Y | |
| W-854-1822 | MWPT | $Tnbs_1$ | | A | DIS | E8330:R+H | 1 | Y | |
| W-854-1822 | MWPT | $Tnbs_1$ | | A | DIS | E900 | 1 | Y | |
| W-854-1822 | MWPT | $Tnbs_1$ | | A | DIS | E900 | 2 | N | Sampling personnel shortage. |
| W-854-1822 | MWPT | $Tnbs_1$ | | A | DIS | E900 | 3 | Y | |
| W-854-1822 | MWPT | $Tnbs_1$ | | A | DIS | E906 | 1 | Y | |
| W-854-1822 | MWPT | $Tnbs_1$ | | A | DIS | E906 | 2 | N | Sampling personnel shortage. |
| W-854-1822 | MWPT | $Tnbs_1$ | | A | DIS | E906 | 3 | Y | |
| W-854-1822 | MWPT | $Tnbs_1$ | | A | DIS | GENMIN | 1 | Y | |
| W-854-1822 | MWPT | $Tnbs_1$ | | A | DIS | GENMIN | 2 | N | Sampling personnel shortage. |

**Table 2.6-6. Building 854 (OU6) 2003 ground water sampling and analysis plan. (Cont. Page 8 of 10)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-854-1822 | MWPT | $Tnbs_1$ | | A | DIS | TBOS | 3 | Y | |
| W-854-1823 | MWPT | $Tnsbs_1$-$Tnsc_0$ | | A | DIS | AS:UISO | 3 | Y | |
| W-854-1823 | MWPT | $Tnsbs_1$-$Tnsc_0$ | A | A | CMP | E300.0:NO3 | 4 | Y | |
| W-854-1823 | MWPT | $Tnsbs_1$-$Tnsc_0$ | A | A | CMP | E300.0:PERC | 4 | Y | |
| W-854-1823 | MWPT | $Tnsbs_1$-$Tnsc_0$ | S | S | CMP | E601 | 3 | Y | |
| W-854-1823 | MWPT | $Tnsbs_1$-$Tnsc_0$ | S | S | CMP | E601 | 4 | Y | |
| W-854-1823 | MWPT | $Tnsbs_1$-$Tnsc_0$ | | A | DIS | E900 | 3 | Y | |
| W-854-1823 | MWPT | $Tnsbs_1$-$Tnsc_0$ | | A | DIS | E906 | 3 | Y | |
| W-854-1823 | MWPT | $Tnsbs_1$-$Tnsc_0$ | | A | DIS | TBOS | 3 | Y | |
| W-854-1823 | MWPT | $Tnsbs_1$-$Tnsc_0$ | | A | DIS | TBOS | 4 | Y | |
| W-854-18A | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| W-854-18A | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:PERC | 2 | Y | |
| W-854-18A | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 2 | Y | |
| W-854-18A | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 4 | Y | |
| W-854-18A | MWPT | $Tnbs_1$ | | Q | DIS | MS:UISO | 1 | Y | |
| W-854-18A | MWPT | $Tnbs_1$ | | Q | DIS | MS:UISO | 2 | Y | |
| W-854-18A | MWPT | $Tnbs_1$ | | Q | DIS | MS:UISO | 4 | Y | |
| W-854-18A | MWPT | $Tnbs_1$ | | Q | DIS | TBOS | 1 | Y | |
| W-854-18A | MWPT | $Tnbs_1$ | | Q | DIS | TBOS | 2 | Y | |
| W-854-18A | MWPT | $Tnbs_1$ | | Q | DIS | TBOS | 4 | Y | |
| W-854-19 | MWPT | Qls | | A | DIS | AS:UISO | 2 | N | Dry. |
| W-854-19 | MWPT | Qls | | A | DIS | DWMETALS | 2 | N | Dry. |
| W-854-19 | MWPT | Qls | | A | DIS | DWMETALS | 4 | N | Dry. |
| W-854-19 | MWPT | Qls | A | A | CMP | E300.0:NO3 | 2 | N | Dry. |
| W-854-19 | MWPT | Qls | A | A | CMP | E300.0:NO3 | 4 | N | Dry. |
| W-854-19 | MWPT | Qls | A | A | CMP | E300.0:PERC | 2 | N | Dry. |
| W-854-19 | MWPT | Qls | A | A | CMP | E300.0:PERC | 4 | N | Dry. |
| W-854-19 | MWPT | Qls | S | S | CMP | E601 | 2 | N | Dry. |
| W-854-19 | MWPT | Qls | S | S | CMP | E601 | 4 | N | Dry. |

**Table 2.6-6. Building 854 (OU6) 2003 ground water sampling and analysis plan. (Cont. Page 9 of 10)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-854-19 | MWPT | Qls | | A | DIS | E8330:R+H | 2 | N | Dry. |
| W-854-19 | MWPT | Qls | | A | DIS | E8330:R+H | 4 | N | Dry. |
| W-854-19 | MWPT | Qls | | A | DIS | E900 | 2 | N | Dry. |
| W-854-19 | MWPT | Qls | | A | DIS | E900 | 4 | N | Dry. |
| W-854-19 | MWPT | Qls | | A | DIS | E906 | 2 | N | Dry. |
| W-854-19 | MWPT | Qls | | A | DIS | E906 | 4 | N | Dry. |
| W-854-19 | MWPT | Qls | | A | DIS | GENMIN | 2 | N | Dry. |
| W-854-19 | MWPT | Qls | | A | DIS | GENMIN | 4 | N | Dry. |
| W-854-19 | MWPT | Qls | | A | DIS | MS:UISO | 4 | N | Dry. |
| W-854-1902 | MWPT | $Tnsbs_1$-$Tnsc_0$ | | A | DIS | AS:UISO | 3 | Y | |
| W-854-1902 | MWPT | $Tnsbs_1$-$Tnsc_0$ | A | A | CMP | E300.0:NO3 | 4 | Y | |
| W-854-1902 | MWPT | $Tnsbs_1$-$Tnsc_0$ | A | A | CMP | E300.0:PERC | 4 | Y | |
| W-854-1902 | MWPT | $Tnsbs_1$-$Tnsc_0$ | S | S | CMP | E601 | 3 | Y | |
| W-854-1902 | MWPT | $Tnsbs_1$-$Tnsc_0$ | S | S | CMP | E624 | 4 | Y | |
| W-854-1902 | MWPT | $Tnsbs_1$-$Tnsc_0$ | | A | DIS | E900 | 3 | Y | |
| W-854-1902 | MWPT | $Tnsbs_1$-$Tnsc_0$ | | A | DIS | E900 | 4 | Y | |
| W-854-1902 | MWPT | $Tnsbs_1$-$Tnsc_0$ | | A | DIS | E906 | 3 | Y | |
| W-854-1902 | MWPT | $Tnsbs_1$-$Tnsc_0$ | | A | DIS | E906 | 4 | Y | |
| W-854-1902 | MWPT | $Tnsbs_1$-$Tnsc_0$ | | A | DIS | MS:UISO | 4 | Y | |
| W-854-1902 | MWPT | $Tnsbs_1$-$Tnsc_0$ | | A | DIS | TBOS | 3 | Y | |
| W-854-1902 | MWPT | $Tnsbs_1$-$Tnsc_0$ | | A | DIS | TBOS | 4 | Y | |
| W-854-45 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| W-854-45 | MWPT | $Tnbs_1$ | A | A | CMP | E300.0:PERC | 2 | Y | |
| W-854-45 | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 2 | Y | |
| W-854-45 | MWPT | $Tnbs_1$ | S | S | CMP | E601 | 4 | Y | |
| W-854-45 | MWPT | $Tnbs_1$ | | S | DIS | MS:UISO | 2 | Y | |
| W-854-45 | MWPT | $Tnbs_1$ | | S | DIS | MS:UISO | 4 | Y | |
| W-854-F2 | MWPT | Qls-$Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | N | Dry. |
| W-854-F2 | MWPT | Qls-$Tnbs_1$ | A | A | CMP | E300.0:NO3 | 4 | N | Dry. |

**Table 2.6-6. Building 854 (OU6) 2003 ground water sampling and analysis plan. (Cont. Page 10 of 10)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-854-F2 | MWPT | Qls-Tnbs$_1$ | A | A | CMP | E300.0:PERC | 2 | N | Dry. |
| W-854-F2 | MWPT | Qls-Tnbs$_1$ | A | A | CMP | E300.0:PERC | 4 | N | Dry. |
| W-854-F2 | MWPT | Qls-Tnbs$_1$ | S | S | CMP | E601 | 2 | N | Dry. |
| W-854-F2 | MWPT | Qls-Tnbs$_1$ | S | S | CMP | E601 | 4 | 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**

**CGSA CMP/DIS =** Sampling more frequently then required.

**CGSA CMP/WGMG =** Well shared with the Operations and Regulatory Affairs Division, Water Guidance and Monitoring Group and may be sampled at a greater frequency and for additional analytes then required by the CMP. Non-CMP analytes are reported separately by ORAD.

**CGSA CMP =** Central GSA groundwater sampling and analysis plan specified in the GSA RD

**CMP DMW =** CMP detection monitor well.

**CMP/DIS =** Sampling required analyte more frequently then required.

**CMP/WGMG =** Well shared with the Operations and Regulatory Affairs Division, Water Guidance and Monitoring Group and may be sampled at a greater frequency and for additional analytes then required by the CMP. Non-CMP analytes are reported separately by ORAD.

**CMP =** Compliance Monitoring.

**DIS =** Discretionary sampling of non-required analyte.

**DMW =** Detection monitor well (non-CMP).

**ERD/WGMG =** non-CMP analyte sampled from a well shared by ERD and WGMG.

**EW =** Extraction well.

**GW =** Guard well.

**MWB =** Monitor well used for background.

**MWPT =** Monitor well used for plume tracking.

**SPR =** Spring.

**WS =** Water supply well.

**Table 2.6-7. Building 854 OU 2003 VOCs in ground and surface water.**

| Location | Date | Method | TCE (µg/L) | PCE (µg/L) | Total 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) | Freon 11 (µg/L) | Freon 113 (µg/L) | Methylene chloride (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W-865-2005 | 12/18/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 0.5 | <0.5 |
| W-854-01 | 05/21/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-854-01 | 10/24/03 | 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 |
| W-854-02 | 05/21/03 | E601 | 210 D | <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 | 05/21/03 DUP | E601 | 210 D | <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 | 05/22/03 | E601 | <0.5 | <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 | 11/12/03 | E601 | <0.5 | <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 | 05/21/03 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 |
| W-854-05 | 05/21/03 DUP | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-854-05 | 10/24/03 | 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 |
| W-854-06 | 05/10/03 | E601 | 1.9 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| W-854-06 | 11/13/03 | E601 | 2.0 L | <1 | <1 | <1 | <1 | <1 | <1 | <1 L | <1 | <1 | <1 | <1 |
| W-854-07 | 05/10/03 DUP | E601 | 35 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| W-854-07 | 11/13/03 | E601 | 35 L | <1 | <1 | <1 | <1 | <1 | <1 | <1 L | <1 | <1 | <1 | <1 |
| W-854-08 | 05/21/03 | E601 | <0.5 | <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 | 10/24/03 | 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 |
| W-854-09 | 05/16/03 | E601 | 14 | <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 | 10/24/03 | E601 | 12 L | <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 | 05/01/03 | E601 | 4.1 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| W-854-10 | 05/01/03 DUP | E601 | 4.1 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| W-854-10 | 11/12/03 | E601 | 7.1 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-854-10 | 11/12/03 DUP | 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 |
| W-854-13 | 05/16/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-854-13 | 10/24/03 | 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 |
| W-854-15 | 05/01/03 | E601 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| W-854-15 | 10/24/03 | 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 |
| W-854-17 | 05/01/03 | E601 | 6.6 L | <0.5 | 12 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| W-854-17 | 11/17/03 | E601 | 6.2 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| W-854-18A | 05/01/03 | E601 | 32 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| W-854-18A | 11/17/03 | E601 | 25 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| W-854-45 | 05/01/03 | E601 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| W-854-45 | 11/12/03 | E601 | <0.5 | <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 | 05/22/03 | E601 | <0.5 | <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 | 11/13/03 | E601 | <1 L | <1 | <1 | <1 | <1 | <1 | <1 | <1 L | <1 | <1 | <1 | <1 |
| W-854-1707 | 05/16/03 | E601 | <0.5 | <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 | 11/24/03 | E601 | <0.5 | <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 | 05/02/03 | E601 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| W-854-1731 | 11/13/03 | E601 | <1 L | <1 | <1 | <1 | <1 | <1 | <1 | <1 L | <1 | <1 | <1 | <1 |
| W-854-1822 | 03/11/03 | E624 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| W-854-1822 | 09/19/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

**Table 2.6-7. Building 854 OU 2003 VOCs in ground and surface water. (Cont. Page 2 of 2)**

| Location | Date | Method | TCE ($\mu$g/L) | PCE ($\mu$g/L) | Total 1,2-DCE ($\mu$g/L) | Carbon tetrachloride ($\mu$g/L) | Chloroform ($\mu$g/L) | 1,1-DCA ($\mu$g/L) | 1,2-DCA ($\mu$g/L) | 1,1-DCE ($\mu$g/L) | 1,1,1-TCA ($\mu$g/L) | Freon 11 ($\mu$g/L) | Freon 113 ($\mu$g/L) | Methylene chloride ($\mu$g/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W-854-1823 | 03/07/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-854-1823 | 03/20/03 | E624 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| W-854-1823 | 09/09/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-854-1823 | 11/13/03 | E601 | <1 L | <1 | <1 | <1 | <1 | <1 | <1 | <1 L | <1 | <1 | <1 | <1 |
| W-854-1902 | 03/07/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-854-1902 | 03/20/03 | E624 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| W-854-1902 | 09/09/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-854-1902 | 11/13/03 | E624 | <1 HL | <1 H | <1 H | <1 H | <1 H | <1 H | <1 H | <1 HL | <1 H | <1 H | <1 H | <1 H |
| SPRING10 | 03/26/03 | E601 | 1.4 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| SPRING10 | 03/26/03 DUP | E601 | 1.1 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| SPRING10 | 06/26/03 | E601 | <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 | 09/22/03 | E601 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| SPRING10 | 12/08/03 | E601 | <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 | 03/26/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| SPRING11 | 06/26/03 | E601 | <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 | 09/22/03 | E601 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| SPRING11 | 12/08/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| SPRING12 | 12/19/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

**Other VOCs not detected in the table above.**

| Location | Date | Method | Chloromethane ($\mu$g/L) | cis-1,2-Dichloroethene ($\mu$g/L) |
|---|---|---|---|---|
| W-854-17 | 05/01/03 | E601 | - | 12 |
| W-854-17 | 11/17/03 | E601 | - | 11 |
| W-854-1902 | 09/09/03 | E601 | 0.56 | - |

**Table 2.6-8. Building 854 OU 2003 nitrate and perchlorate in ground and surface water.**

| Location | Date | Nitrate (as $NO_3$) (mg/L) | Perchlorate ($\mu$g/L) |
|---|---|---|---|
| W-865-2005 | 12/18/03 | 34 | - |
| W-854-01 | 05/21/03 | <0.1 | <4 |
| W-854-02 | 05/21/03 | 53 D | <4 |
| W-854-02 | 05/21/03 DUP | 54 | <4 |
| W-854-04 | 05/22/03 | <0.1 | <4 |
| W-854-05 | 05/21/03 DUP | 54 | <4 |
| W-854-05 | 05/21/03 DUP | 57 | <4 |
| W-854-06 | 06/23/03 | 0.2 | 8 |
| W-854-07 | 06/23/03 | 47 D | <4 |
| W-854-07 | 06/23/03 DUP | 38 D | <4 |
| W-854-08 | 05/21/03 | 35 | <4 |
| W-854-09 | 05/16/03 | 41 D | <4 |
| W-854-10 | 05/30/03 | 16 | <4 |
| W-854-10 | 05/30/03 DUP | 16 | <4 |
| W-854-13 | 05/16/03 | 6 | <4 |
| W-854-15 | 06/10/03 | 14 | <4 |
| W-854-17 | 05/30/03 | 6.1 | <4 |
| W-854-18A | 06/18/03 | 38 D | <4 |
| W-854-45 | 06/18/03 | 36 D | <4 |
| W-854-1701 | 05/22/03 | <0.1 | <4 |
| W-854-1707 | 05/16/03 | 9 | <4 |
| W-854-1731 | 05/30/03 | 6.6 | <4 |
| W-854-1822 | 03/11/03 | - | <4 |
| W-854-1823 | 03/07/03 | 29 | 27 |
| W-854-1823 | 11/17/03 | <0.1 | 18 |
| W-854-1902 | 03/07/03 | 17 | 7.8 |
| W-854-1902 | 11/13/03 | 14 | 5 |
| SPRING10 | 06/26/03 | <0.1 | <4 |
| SPRING11 | 06/26/03 | 21 | <4 |

**Table 2.6-9. Building 854 OU 2003 TBOS in ground water.**

| Location | Date | TBOS ($\mu$g/L) |
|---|---|---|
| W-854-02 | 03/26/03 | <1 |
| W-854-02 | 05/22/03 | <1 |
| W-854-10 | 02/20/03 | <56 |
| W-854-10 | 03/26/03 | <1 |
| W-854-10 | 05/30/03 | <1 |
| W-854-10 | 05/30/03 DUP | <1 |
| W-854-10 | 11/12/03 | <1 |
| W-854-17 | 02/20/03 | <50 |
| W-854-17 | 03/26/03 | <1 |
| W-854-17 | 05/30/03 | <1 |
| W-854-17 | 11/17/03 | <1 |
| W-854-18A | 02/19/03 | <56 |
| W-854-18A | 03/26/03 | <1 |
| W-854-18A | 06/18/03 | <1 |
| W-854-18A | 11/17/03 | <1 |
| W-854-1822 | 09/19/03 | <1 |
| W-854-1823 | 03/07/03 | 1.2 |
| W-854-1823 | 09/09/03 | <2 D |
| W-854-1823 | 11/17/03 | <1 |
| W-854-1902 | 03/07/03 | 4.3 |
| W-854-1902 | 09/09/03 | <2 D |
| W-854-1902 | 11/17/03 | <1 |

**Table 2.6-10. Building 854 OU 2003 metals in ground and surface water.**

| Location | Date | Arsenic (mg/L) | Barium (mg/L) | Beryllium (mg/L) | Cadmium (mg/L) | Chromium (mg/L) | Lead (mg/L) | Mercury (mg/L) | Selenium (mg/L) | Silver (mg/L) |
|---|---|---|---|---|---|---|---|---|---|---|
| W-854-1822 | 03/11/03 | 0.008 | <0.025 | - | <0.0005 | <0.001 | <0.005 | <0.0002 L | <0.005 | <0.001 |
| W-854-1823 | 03/20/03 | 0.007 | <0.025 | - | <0.0005 | 0.029 | <0.005 | <0.0002 | 0.018 | <0.001 |
| W-854-1902 | 03/20/03 | 0.025 | <0.025 | - | <0.0005 | 0.032 | 0.007 | <0.0002 | 0.024 | <0.001 |
| SPRING12 | 12/19/03 | 0.014 | 0.031 | <0.0002 | <0.0005 | <0.001 | <0.005 | <0.0002 | 0.0083 L | <0.001 |

**Table 2.6-11. Building 854 OU 2003 high explosive compounds in ground and surface water.**

| Location | Date | HMX ($\mu$g/L) | RDX ($\mu$g/L) |
|---|---|---|---|
| W-854-07 | 09/19/03 | <10 D | <10 D |
| W-854-1822 | 03/11/03 | <1 | <1 |
| W-854-1823 | 03/20/03 | <1 | <1 |
| W-854-1902 | 03/20/03 | <1 | <1 |
| SPRING12 | 12/19/03 | <5 D | <5 D |

**Table 2.6-12. Building OU 2003 radiological constituents in ground and surface water.**

| Location | Date | Gross alpha (pCi/L) | Gross beta (pCi/L) | Thorium 232 (pCi/L) | Tritium (pCi/L) | Uranium (pCi/L) | Uranium 234/233 (pCi/L) | Uranium 234 by mass measurement (pCi/L) | Uranium 235/236 (pCi/L) | Uranium 235 by mass measurement (pCi/L) | Uranium 236 by mass measurement (pCi/L) | Uranium 238 (pCi/L) | Uranium 238 by mass measurement (pCi/L) | Uranium 235/238 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W-854-15 | 01/25/03 | - | - | 0.00021 | - | 10.9 | - | 6.13 | - | 0.215 | <0.0007 | - | 4.59 | 0.00727 |
| W-854-15 | 06/10/03 | - | - | 0.000168 | - | 20.4 | - | 11.2 | - | 0.408 | <0.0007 | - | 8.78 | 0.00724 |
| W-854-18A | 02/19/03 | - | - | 0.00075 | - | 64.1 | - | 43.9 | - | 0.903 | <0.007 | - | 19.3 | 0.00727 |
| W-854-18A | 06/18/03 | - | - | <0.0001 | - | 60.9 | - | 42.9 | - | 0.8 | <0.0007 | - | 17.1 | 0.00726 |
| W-854-45 | 06/18/03 | - | - | <0.0001 | - | 83.4 | - | 52.2 | - | 1.4 | <0.0007 | - | 29.9 | 0.00728 |
| W-854-1731 | 05/30/03 | - | - | - | <102 | - | - | - | - | - | - | - | - | - |
| W-854-1731 | 11/13/03 | - | - | - | <93.3 | - | - | - | - | - | - | - | - | - |
| W-854-1822 | 03/11/03 | <2 | 7.75 | - | <99 | - | 1.53 ± 0.210 | - | <0.041 | - | - | 0.743 ± 0.130 | - | - |
| W-854-1822 | 09/19/03 | 4.48 | 5.49 | - | <84.3 | - | 1.91 ± 0.240 | - | <0.024 E | - | - | 0.990 ± 0.140 | - | - |
| W-854-1823 | 03/20/03 | 16.4 | 11.8 | - | <102 | - | 5.86 ± 0.650 | - | 0.182 ± 0.0580 | - | - | 3.93 ± 0.460 | - | - |
| W-854-1823 | 09/09/03 | 17.2 | 11.8 | - | <88.2 | - | 7.19 ± 0.780 | - | 0.220 ± 0.0560 | - | - | 5.08 ± 0.560 | - | - |
| W-854-1902 | 03/20/03 | 2.78 | 8.49 | - | <99.9 | - | 2.11 ± 0.260 | - | <0.026 E | - | - | 1.29 ± 0.180 | - | - |
| W-854-1902 | 09/09/03 | 5.39 | 6.94 | - | <88.3 | - | 2.05 ± 0.260 | - | <0.034 E | - | - | 1.12 ± 0.160 | - | - |
| W-854-1902 | 11/17/03 | 4.21 | 7.74 | - | <96.7 | - | - | - | - | - | - | - | - | - |
| SPRING10 | 06/26/03 | - | - | 0.00317 | - | 30.8 | - | 17.2 | - | 0.604 | <0.007 | - | 13 | 0.00721 |
| SPRING12 | 12/19/03 | <2 | 8.7 | - | <85.4 | - | 1.80 ± 0.220 | - | <0.017 E | - | - | 1.55 ± 0.190 | - | - |

**Table 2.6-13. Building 854 OU 2003 general minerals in ground water.**

| Constituents of concern | W-854-1822 03/11/03 | W-854-1823 03/20/03 | W-854-1902 03/20/03 |
|---|---|---|---|
| Total Alkalinity (as $CaCO_3$) (mg/L) | 90 H | 190 H | 120 H |
| Aluminum (mg/L) | 0.4 | <0.2 | <0.2 |
| Bicarbonate Alk (as $CaCO_3$) (mg/L) | 90 H | 190 H | 120 H |
| Calcium (mg/L) | 53 | 49 | 30 |
| Carbonate Alk (as $CaCO_3$) (mg/L) | <1 H | <1 H | <1 H |
| Chloride (mg/L) | 300 D | 280 D | 140 D |
| Copper (mg/L) | <0.05 | <0.05 | <0.05 |
| Fluoride (mg/L) | 0.8 | 0.56 | 0.84 |
| Hydroxide Alk (as $CaCO_3$) (mg/L) | <1 H | <1 H | <1 H |
| Iron (mg/L) | 0.2 | <0.1 | <0.1 |
| Magnesium (mg/L) | 18 | 24 | 4.7 |
| Manganese (mg/L) | <0.03 | <0.03 | <0.03 |
| Nickel (mg/L) | <0.1 | <0.1 | <0.1 |
| Nitrate (as N) (mg/L) | 1 | 6.5 | 2.8 |
| Nitrate (as $NO_3$) (mg/L) | 4.4 | 29 | 12 |
| Nitrite (as N) (mg/L) | 0.2 | <0.1 H | <0.1 |
| pH (Units) | 8.2 | 7.8 | 8.8 |
| Ortho-Phosphate (mg/L) | 0.17 | 0.15 | 0.23 |
| Total Phosphorus (as $PO_4$) (mg/L) | 0.18 H | 0.17 H | 0.32 H |
| Potassium (mg/L) | 14 L | 16 L | 16 L |
| Sodium (mg/L) | 200 LD | 160 D | 150 D |
| Total dissolved solids (TDS) (mg/L) | 790 | 700 H | 600 H |
| Specific Conductance ($\mu$mhos/cm) | 1,300 H | 1,200 H | 980 H |
| Sulfate (mg/L) | 160 D | 28 | 120 D |
| Surfactants (mg/L) | <0.5 | <0.5 | <0.5 |
| Total Hardness (as $CaCO_3$) (mg/L) | 210 H | 220 H | 94 H |
| Zinc (mg/L) | <0.05 | <0.05 | <0.05 |

**Table 2.6-14. Building 854 OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-854-01 | 01/04/03 | 217.4 | 1117.04 | |
| W-854-01 | 02/01/03 | 217.24 | 1117.2 | |
| W-854-01 | 03/01/03 | 217.22 | 1117.22 | |
| W-854-01 | 04/10/03 | 217.3 | 1117.14 | |
| W-854-01 | 07/08/03 | 217.35 | 1117.09 | |
| W-854-01 | 10/03/03 | 217.21 | 1117.23 | |
| W-854-02 | 01/04/03 | - | - | NM |
| W-854-02 | 02/01/03 | - | - | NM |
| W-854-02 | 03/01/03 | - | - | NM |
| W-854-02 | 04/10/03 | - | - | NM/SWAT UNIT |
| W-854-02 | 07/08/03 | - | - | NM/SWAT UNIT |
| W-854-02 | 10/03/03 | - | - | NM |
| W-854-03 | 01/04/03 | 117.49 | 1121.34 | |
| W-854-03 | 02/01/03 | 117.89 | 1120.94 | |
| W-854-03 | 03/01/03 | 118.03 | 1122.51 | |
| W-854-03 | 04/10/03 | 118.12 | 1122.42 | |
| W-854-03 | 07/08/03 | 118.24 | 1122.3 | |
| W-854-03 | 10/03/03 | 117.71 | 1122.83 | |
| W-854-04 | 01/04/03 | 302.11 | 936.27 | |
| W-854-04 | 02/01/03 | 301.96 | 936.42 | |
| W-854-04 | 03/01/03 | 302.4 | 935.98 | |
| W-854-04 | 04/17/03 | 301.5 | 936.88 | |
| W-854-04 | 07/08/03 | 301.2 | 937.18 | |
| W-854-04 | 10/03/03 | 302.07 | 936.31 | |
| W-854-05 | 01/04/03 | 89.09 | 1241.25 | |
| W-854-05 | 02/01/03 | 89.11 | 1241.23 | |
| W-854-05 | 03/01/03 | 89.1 | 1241.24 | |
| W-854-05 | 04/10/03 | 89.15 | 1241.19 | |
| W-854-05 | 07/08/03 | 89.17 | 1241.17 | |
| W-854-05 | 10/03/03 | 89.45 | 1240.89 | |
| W-854-06 | 01/04/03 | 116.93 | 991.52 | |
| W-854-06 | 02/01/03 | 116.93 | 991.52 | |
| W-854-06 | 03/01/03 | 117.02 | 991.43 | |
| W-854-06 | 04/10/03 | 117.05 | 991.4 | |
| W-854-06 | 07/08/03 | 117.18 | 991.27 | |

**Table 2.6-14. Building 854 OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-854-06 | 10/03/03 | 117.31 | 991.14 | |
| W-854-07 | 01/04/03 | 116.01 | 992.85 | |
| W-854-07 | 02/01/03 | 116.2 | 992.66 | |
| W-854-07 | 03/01/03 | 116.39 | 992.47 | |
| W-854-07 | 04/10/03 | 116.32 | 992.54 | |
| W-854-07 | 07/08/03 | 116.46 | 992.4 | |
| W-854-07 | 10/03/03 | 116.5 | 992.36 | |
| W-854-08 | 01/04/03 | 118.65 | 1155.55 | |
| W-854-08 | 02/01/03 | 118.61 | 1155.59 | |
| W-854-08 | 03/01/03 | 118.63 | 1155.57 | |
| W-854-08 | 04/10/03 | 118.78 | 1155.42 | |
| W-854-08 | 07/08/03 | 118.87 | 1155.33 | |
| W-854-08 | 10/03/03 | 119.08 | 1155.12 | |
| W-854-09 | 01/04/03 | - | - | NM/NO ACCESS |
| W-854-09 | 02/01/03 | 184.58 | 1174.63 | |
| W-854-09 | 03/01/03 | 184.39 | 1174.82 | |
| W-854-09 | 04/10/03 | 185.19 | 1174.02 | |
| W-854-09 | 07/08/03 | 185.24 | 1173.97 | |
| W-854-09 | 10/03/03 | 185.79 | 1173.42 | |
| W-854-10 | 01/04/03 | 114.87 | 1211.51 | CB |
| W-854-10 | 02/01/03 | 114.9 | 1211.48 | CB |
| W-854-10 | 03/01/03 | 113.85 | 1212.53 | CB |
| W-854-10 | 04/10/03 | 113.98 | 1212.4 | CB |
| W-854-10 | 07/08/03 | 114.08 | 1212.3 | CB |
| W-854-10 | 10/03/03 | 115.04 | 1211.34 | CB |
| W-854-11 | 01/04/03 | - | - | DRY/CB |
| W-854-11 | 02/01/03 | - | - | DRY/CB |
| W-854-11 | 03/01/03 | - | - | CB/DRY |
| W-854-11 | 04/10/03 | - | - | DRY/CB |
| W-854-11 | 07/01/03 | - | - | DRY/CB |
| W-854-11 | 10/03/03 | - | - | DRY/CB |
| W-854-12 | 01/04/03 | 226.87 | 1029.92 | |
| W-854-12 | 02/01/03 | 226.89 | 1029.9 | |
| W-854-12 | 03/01/03 | 226.83 | 1029.96 | |
| W-854-12 | 04/10/03 | 226.99 | 1029.8 | |
| W-854-12 | 07/08/03 | 226.91 | 1029.88 | |

**Table 2.6-14. Building 854 OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-854-12 | 10/03/03 | 226.91 | 1029.88 | |
| W-854-13 | 01/04/03 | 101.64 | 1155.53 | |
| W-854-13 | 02/01/03 | 101.64 | 1155.53 | |
| W-854-13 | 03/01/03 | 101.61 | 1155.56 | |
| W-854-13 | 04/10/03 | 101.78 | 1155.39 | |
| W-854-13 | 07/08/03 | 101.65 | 1155.52 | |
| W-854-13 | 10/03/03 | 101.84 | 1155.33 | |
| W-854-14 | 01/04/03 | - | - | DRY/CB |
| W-854-14 | 02/01/03 | - | - | DRY/CB |
| W-854-14 | 03/01/03 | - | - | CB/DRY |
| W-854-14 | 04/10/03 | - | - | DRY/CB |
| W-854-14 | 07/01/03 | - | - | DRY/CB |
| W-854-14 | 10/03/03 | - | - | DRY/CB |
| W-854-15 | 01/04/03 | 74.93 | 1057.07 | CB |
| W-854-15 | 02/01/03 | 75.22 | 1056.78 | CB |
| W-854-15 | 03/01/03 | 74.73 | 1057.27 | CB |
| W-854-15 | 04/10/03 | 74.8 | 1057.2 | CB |
| W-854-15 | 07/08/03 | 74.95 | 1057.05 | CB |
| W-854-15 | 10/03/03 | 75.11 | 1056.89 | CB |
| W-854-17 | 01/04/03 | 143.77 | 1190.37 | |
| W-854-17 | 02/01/03 | 143.58 | 1190.56 | |
| W-854-17 | 03/01/03 | 143.45 | 1190.69 | |
| W-854-17 | 04/10/03 | 143.2 | 1190.94 | |
| W-854-17 | 07/08/03 | 143.11 | 1191.03 | |
| W-854-17 | 10/03/03 | 143.52 | 1190.62 | |
| W-854-1701 | 01/04/03 | - | - | NM/NO ACCESS |
| W-854-1701 | 02/01/03 | 242.45 | 1007.87 | |
| W-854-1701 | 03/01/03 | 242.42 | 1007.9 | |
| W-854-1701 | 04/10/03 | 242.42 | 1007.9 | |
| W-854-1701 | 07/08/03 | 242.25 | 1008.07 | |
| W-854-1701 | 10/03/03 | 242 | 1008.32 | |
| W-854-1706 | 01/04/03 | - | - | NM/NO ACCESS |
| W-854-1706 | 02/01/03 | - | - | DRY |
| W-854-1706 | 03/01/03 | - | - | DRY |
| W-854-1706 | 04/10/03 | - | - | DRY |
| W-854-1706 | 07/01/03 | - | - | DRY |

**Table 2.6-14. Building 854 OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-854-1706 | 10/03/03 | - | - | DRY |
| W-854-1707 | 01/04/03 | - | - | NM/NO ACCESS |
| W-854-1707 | 02/01/03 | 12.69 | 844.31 | |
| W-854-1707 | 03/01/03 | 13.04 | 843.96 | |
| W-854-1707 | 04/10/03 | 14.27 | 842.73 | |
| W-854-1707 | 07/08/03 | 15.95 | 841.05 | |
| W-854-1707 | 10/03/03 | 16.73 | 840.27 | |
| W-854-1731 | 01/04/03 | 74.31 | 929.18 | |
| W-854-1731 | 02/01/03 | 73.76 | 929.73 | |
| W-854-1731 | 03/01/03 | 73.82 | 929.67 | |
| W-854-1731 | 04/10/03 | 73.55 | 929.94 | |
| W-854-1731 | 07/08/03 | 72.98 | 930.51 | CB |
| W-854-1731 | 10/03/03 | 72.56 | 930.93 | CB |
| W-854-1822 | 04/10/03 | 145.76 | 1036.24 | |
| W-854-1822 | 07/08/03 | 144.36 | 1037.64 | |
| W-854-1822 | 10/03/03 | 144.79 | 1037.21 | |
| W-854-1823 | 04/10/03 | 52.2 | 1100.06 | |
| W-854-1823 | 07/08/03 | 52.43 | 1099.83 | |
| W-854-1823 | 10/03/03 | 52.84 | 1099.42 | |
| W-854-1834 | 10/03/03 | - | - | DRY |
| W-854-1835 | 10/03/03 | - | - | DRY |
| W-854-18A | 01/04/03 | 141.33 | 1194.57 | |
| W-854-18A | 02/01/03 | 141.07 | 1194.83 | |
| W-854-18A | 03/01/03 | 140.91 | 1194.99 | |
| W-854-18A | 04/10/03 | 140.78 | 1195.12 | |
| W-854-18A | 07/08/03 | 140.76 | 1195.14 | |
| W-854-18A | 10/03/03 | 140.98 | 1194.92 | |
| W-854-19 | 01/04/03 | - | - | DRY |
| W-854-19 | 02/01/03 | - | - | DRY |
| W-854-19 | 03/01/03 | - | - | DRY |
| W-854-19 | 04/10/03 | - | - | DRY |
| W-854-19 | 07/01/03 | - | - | DRY |
| W-854-19 | 10/03/03 | - | - | DRY |
| W-854-1902 | 04/10/03 | 147.31 | 1042.69 | |
| W-854-1902 | 07/08/03 | 147.09 | 1042.91 | |
| W-854-1902 | 10/03/03 | 147.3 | 1042.7 | |

**Table 2.6-14. Building 854 OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-854-45 | 01/04/03 | 95.64 | 908.36 | |
| W-854-45 | 02/01/03 | 95.27 | 908.73 | |
| W-854-45 | 03/01/03 | 95.23 | 908.77 | |
| W-854-45 | 04/10/03 | 95.16 | 908.84 | |
| W-854-45 | 07/08/03 | 94.86 | 909.14 | |
| W-854-45 | 10/03/03 | 94.52 | 909.48 | |
| W-854-F2 | 01/04/03 | - | - | DRY |
| W-854-F2 | 04/10/03 | - | - | DRY |
| W-854-F2 | 07/01/03 | - | - | DRY |
| W-854-F2 | 10/03/03 | - | - | DRY |

**Table 2.6-15. Building 854-Source (B854-SRC) mass removed, January 1, 2003 through December 31, 2003.**

| Treatment facility | Month | VOC mass removed (g) | Nitrate mass removed (g) | Perchlorate mass removed (g) |
|---|---|---|---|---|
| B854-SRC | January | 30.1 | 7,200 | 0.8 |
| | February | 22.5 | 5,400 | 0.6 |
| | March | 24.2 | 5,800 | 0.6 |
| | April | 39.1 | 9,200 | 1.1 |
| | May | 38.9 | 9,100 | 1.0 |
| | June | 41.5 | 9,800 | 1.1 |
| | July | 35.9 | 9,600 | 1.1 |
| | August | 17.1 | 4,600 | 0.5 |
| | September | 37.6 | 10,100 | 1.2 |
| | October | 33.8 | 9,400 | 1.0 |
| | November | 29.5 | 8,200 | 0.9 |
| | December | 39.2 | 10,900 | 1.2 |
| Total | | 389 | 99,300 | 15 |

**Table 2.6-16. Building 854-Proximal (B854-PRX) mass removed, January 1, 2003 through December 31, 2003.**

| Treatment facility | Month | VOC mass removed (g) | Nitrate mass removed (g) | Perchlorate mass removed (g) |
|---|---|---|---|---|
| B854-PRX | January | 3.2 | 2,100 | 0.5 |
| | February | 4.1 | 2,800 | 0.7 |
| | March | 6.2 | 4,200 | 1.0 |
| | April | 6.7 | 4,100 | 0.9 |
| | May | 6.1 | 3,700 | 0.8 |
| | June | 7.4 | 4,500 | 1.0 |
| | July | 8.4 | 4,200 | 0.9 |
| | August | 7.5 | 3,800 | 0.8 |
| | September | 7.5 | 3,800 | 0.8 |
| | October | 6.1 | 3,500 | 0.8 |
| | November | 5.0 | 2,800 | 0.6 |
| | December | 3.0 | 1,700 | 0.4 |
| Total | | 71 | 41,200 | 9.2 |

**Table 2.7-1. Building 832-Source (B832-SRC) volumes of ground water and soil vapor extracted and discharged, January 1, 2003 through December 31, 2003.**

| Treatment facility | Month | Operational hours | Volume of ground water discharged (gal) | Volume of vapor extracted (thousands of $ft^3$) | Average weekly volume of water treated (gal) |
|---|---|---|---|---|---|
| B832-SRC | January | 837 | 5,707 | 282 | 1,427 |
| | February | 696 | 4,450 | 230 | 1,113 |
| | March | 768 | 3,917 | 245 | 783 |
| | April | 720 | 3,318 | 233 | 664 |
| | May | 696 | 2,350 | 219 | 588 |
| | June | 768 | 2,445 | 184 | 489 |
| | July | 744 | 1,297 | 179 | 324 |
| | August | 600 | 822 | 144 | 206 |
| | September | 816 | 679 | 196 | 136 |
| | October | 696 | 380 | 167 | 95 |
| | November | 624 | 213 | 0 | 53 |
| | December | 840 | 182 | 0 | 36 |
| Total | | 8,805 | 25,760 | 2,079 | |

**Table 2.7-2. Building 830-Source (B830-SRC) volumes of ground water and soil vapor extracted and discharged, January 1, 2003 through December 31, 2003.**

| Treatment facility | Month | Operational hours (SVE) | Volume of ground water discharged (gal) | Volume of vapor extracted (thousands of $ft^3$) | Average weekly volume of water treated (gal) |
|---|---|---|---|---|---|
| B830-SRC | January | NA | NA | NA | NA |
| | February | 0[a] | 61 | 0[a] | NA |
| | March | 0[a] | 400 | 0[a] | 80 |
| | April | 0[a] | 624 | 0[a] | 125 |
| | May | 0[a] | 419 | 0[a] | 105 |
| | June | 0[a] | 594 | 0[a] | 119 |
| | July | 106 | 775 | 0[a] | 194 |
| | August | 217 | 25 | 0[a] | NA |
| | September | 335 | 83 | 0[a] | 41.5 |
| | October | 360 | 180 | 0[a] | 45 |
| | November | 452 | 257 | 0[a] | 64 |
| | December | 688 | 358 | 0[a] | 89 |
| Total | | 2,158 | 3,861 | 0[a] | |

[a] B830-SRC SVE system in testing phase.

**Table 2.7-3. Building 830-Proximal North (B830-PRXN) volumes of ground water and soil vapor extracted and discharged, January 1, 2003 through December 31, 2003.**

| Treatment facility | Month | Operational hours | Volume of ground water discharged (gal) | Average weekly volume of water treated (gal) |
|---|---|---|---|---|
| B830-PRX | January | 153 | 12,225 | 2,445 |
| | February | 224 | 17,579 | 4,395 |
| | March | 326 | 25,760 | 5,152 |
| | April | 147 | 12,256 | 3,064 |
| | May | 233 | 10,106 | 2,526 |
| | June | 233 | 22,562 | 4,512 |
| | July | 181 | 17,445 | 4,361 |
| | August | 188 | 18,034 | 4,509 |
| | September | 217 | 20,651 | 4,130 |
| | October | 308 | 26,979 | 6,745 |
| | November | 387 | 33,130 | 8,282 |
| | December | 328 | 27,493 | 5,499 |
| Total | | 2,925 | 244,220 | |

**Table 2.7-4. Building 830-Distal South (B830-DISS) volumes of ground water and soil vapor extracted and discharged, January 1, 2003 through December 31, 2003.**

| Treatment facility | Month | Operational hours | Volume of ground water discharged (gal) | Average weekly volume of water treated (gal) |
|---|---|---|---|---|
| B830-DISS | January | 744 | 29,800 | 7,450 |
| | February | 672 | 12,510 | 3,128 |
| | March | 744 | 30,070 | 6,014 |
| | April | 720 | 29,500 | 7,375 |
| | May | 744 | 32,560 | 8,140 |
| | June | 720 | 34,010 | 6,802 |
| | July | 744 | 33,570 | 8,393 |
| | August | 744 | 40,150 | 10,038 |
| | September | 720 | 43,180 | 8,636 |
| | October | 744 | 42,260 | 10,565 |
| | November | 720 | 53,547 | 13,387 |
| | December | 744 | 93,473 | 18,695 |
| Total | | 8,760 | 474,630 | |

**Table 2.7-5. Building 832 Canyon OU 2003 VOCs in ground water treatment system influent and effluent.**

| Location | Date | Method | TCE (µg/L) | PCE (µg/L) | Total 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) | Freon 11 (µg/L) | Freon 113 (µg/L) | Methylene chloride (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *B830-PRXN* | | | | | | | | | | | | | | |
| STU03-E | 01/14/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 O | <0.5 | <0.5 |
| STU03-E | 02/05/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU03-E | 03/11/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU03-E | 04/03/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU03-E | 05/06/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU03-E | 06/03/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU03-E | 07/08/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU03-E | 08/11/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU03-E | 09/03/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU03-E | 10/15/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU03-E | 11/11/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU03-E | 12/09/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| STU03-I | 01/14/03 | E601 | 33 D | <1 D | <1 D | <1 D | <1 D | <1 D | <1 D | <1 D | <1 D | <1 DO | <1 D | <1 D |
| STU03-I | 04/03/03 | E601 | 33 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 0.59 | <0.5 | <0.5 |
| STU03-I | 07/08/03 | E601 | 32 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 0.59 | 0.57 | <0.5 |
| STU03-I | 10/15/03 | E601 | 29 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 0.53 | <0.5 |
| *B830-SRC* | | | | | | | | | | | | | | |
| GTU05-I | 02/26/03 | E601 | 2,500 D | <25 D | <25 D | <25 D | <25 D | <25 D | <25 D | <25 D | <25 D | <25 D | <25 D | <25 D |
| GTU05-I | 02/27/03 | E601 | 2,800 D | <25 D | <25 D | <25 D | <25 D | <25 D | <25 D | <25 D | <25 D | <25 D | <25 D | <25 D |
| GTU05-I | 03/03/03 | E601 | 2,700 D | <25 D | <25 D | <25 D | <25 D | <25 D | <25 D | <25 D | <25 D | <25 DO | <25 DO | <25 D |
| GTU05-I | 03/04/03 | E601 | 2,900 D | <25 D | <25 D | <25 D | <25 D | <25 D | <25 D | <25 D | <25 D | <25 DO | <25 DO | <25 D |
| GTU05-I | 03/05/03 | E601 | 2,700 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | - | <50 D | <50 D | <50 D |
| GTU05-I | 03/11/03 | E601 | 3,200 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D |
| GTU05-I | 03/19/03 | E601 | 3,800 D | <100 D | <100 D | <100 D | <100 D | <100 D | <100 D | <100 D | <100 D | <100 D | <100 D | <100 D |
| GTU05-I | 03/26/03 | E601 | 16 O | <0.5 O | <0.5 | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 | <0.5 O |
| GTU05-I | 04/02/03 | E601 | 3,200 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D |
| GTU05-I | 07/09/03 | E601 | 4,000 D | 10 | <1 | <0.5 | 0.69 | <0.5 | 2.8 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GTU05-I | 07/30/03 | E601 | 4,100 D | 11 D | <20 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D |
| GTU05-I | 07/30/03 | E601 | 3,100 D | 12 D | <5 D | <3 D | <3 D | <3 D | <3 D | <3 D | <3 D | <3 D | <3 D | <3 D |
| GTU05-I | 10/08/03 | E601 | 2,100 D | 7.6 D | <10 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D |
| GTU05-E | 02/26/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GTU05-E | 02/27/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GTU05-E | 03/03/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 O | <0.5 O | <0.5 |
| GTU05-E | 03/04/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 O | <0.5 O | <0.5 |
| GTU05-E | 03/05/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | - | <0.5 | <0.5 | <0.5 |
| GTU05-E | 03/11/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GTU05-E | 03/19/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GTU05-E | 03/26/03 | E601 | <0.5 O | <0.5 O | <0.5 | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 | <0.5 O |
| GTU05-E | 04/02/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

Table 2.7-5. Building 832 Canyon OU 2003 VOCs in ground water treatment system influent and effluent. (Cont. Page 2 of 3)

| Location | Date | Method | TCE (µg/L) | PCE (µg/L) | Total 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) | Freon 11 (µg/L) | Freon 113 (µg/L) | Methylene chloride (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *B830-SRC (Cont.)* | | | | | | | | | | | | | | |
| GTU05-E | 05/01/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GTU05-E | 06/11/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GTU05-E | 07/09/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GTU05-E | 07/22/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GTU05-E | 07/30/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GTU05-E | 09/10/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GTU05-E | 09/18/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GTU05-E | 10/01/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GTU05-E | 10/08/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GTU05-E | 10/20/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GTU05-E | 10/21/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GTU05-E | 10/22/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GTU05-E | 11/12/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| GTU05-E | 12/09/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| *B832-SRC* | | | | | | | | | | | | | | |
| TF-832-I | 02/13/03 | E601 | 57 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TF-832-I | 03/05/03 | E601 | 56 | <0.5 | 1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TF-832-I | 06/03/03 | E601 | 55 | <0.5 | 1.4 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TF-832-I | 07/08/03 | E601 | 46 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TF-832-I | 10/02/03 | E601 | 46 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TF-832-E | 01/07/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TF-832-E | 02/13/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TF-832-E | 03/05/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TF-832-E | 04/03/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TF-832-E | 05/07/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TF-832-E | 06/03/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TF-832-E | 07/08/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TF-832-E | 08/06/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TF-832-E | 09/03/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TF-832-E | 10/02/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TF-832-E | 11/11/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TF-832-E | 12/03/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| *B830-DISS* | | | | | | | | | | | | | | |
| TF830DS-I | 01/15/03 | E601 | 85 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 |
| TF830DS-I | 04/09/03 | E601 | 110 D | <2.5 D | <2.5 D | <2.5 D | <2.5 D | <2.5 D | <2.5 D | <2.5 D | <2.5 D | <2.5 D | <2.5 D | <2.5 D |
| TF830DS-I | 07/09/03 | E601 | 93 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TF830DS-I | 10/08/03 | E601 | 90 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TF830DS-E | 01/15/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TF830DS-E | 02/20/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

**Table 2.7-5. Building 832 Canyon OU 2003 VOCs in ground water treatment system influent and effluent. (Cont. Page 3 of 3)**

| Location | Date | Method | TCE (µg/L) | PCE (µg/L) | Total 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) | Freon 11 (µg/L) | Freon 113 (µg/L) | Methylene chloride (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *B830-DISS (Cont.)* | | | | | | | | | | | | | | |
| TF830DS-E | 03/11/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TF830DS-E | 04/09/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TF830DS-E | 05/01/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TF830DS-E | 06/11/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TF830DS-E | 07/09/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TF830DS-E | 08/06/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TF830DS-E | 09/10/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TF830DS-E | 10/08/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TF830DS-E | 11/12/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| TF830DS-E | 12/09/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

**Other VOCs not detected in the table above:**

| Location | Date | Method | Methylene chloride (µg/L) | cis-1,2-Dichloroethene (µg/L) |
|---|---|---|---|---|
| GTU05-E | 03/04/03 | E601 | 0.69 F | - |
| GTU05-E | 03/05/03 | E601 | - | - |
| GTU05-E | 03/11/03 | E601 | 1.1 | - |
| GTU05-E | 03/19/03 | E601 | 2.1 | - |
| GTU05-E | 03/26/03 | E601 | 2.2 O | - |
| GTU05-E | 04/02/03 | E601 | 2.7 | - |
| GTU05-E | 05/01/03 | E601 | 1.8 | - |
| GTU05-E | 06/11/03 | E601 | 4.6 | - |
| GTU05-E | 07/09/03 | E601 | 3.8 | - |
| GTU05-E | 07/22/03 | E601 | 4.1 | - |
| GTU05-E | 07/30/03 | E601 | 3.8 | - |
| GTU05-E | 09/10/03 | E601 | 5.8 | - |
| GTU05-E | 09/18/03 | E601 | 4.3 | - |
| GTU05-E | 10/01/03 | E601 | 3.6 | - |
| TF-832-I | 02/13/03 | E601 | - | 0.96 |
| TF-832-I | 03/05/03 | E601 | - | 1 |
| TF-832-I | 06/03/03 | E601 | - | 1.4 |
| TF-832-I | 07/08/03 | E601 | - | 0.92 |
| TF-832-I | 10/02/03 | E601 | - | 0.63 |
| TF830DS-E | 01/15/03 | E601 | 0.6 | - |

**Table 2.7-6. Building 832 OU 2003 nitrate and perchlorate in ground water treatment system influence and effluent.**

| Location | Date | Nitrate (as $NO_3$) (mg/L) | Perchlorate (μg/L) |
|---|---|---|---|
| *B830-PRXN* | | | |
| STU03-E | 01/14/03 | 16 | <4 |
| STU03-E | 02/05/03 | 17 D | <3 |
| STU03-E | 03/11/03 | 16 D | <3 |
| STU03-E | 04/03/03 | 13 D | <4 |
| STU03-E | 05/06/03 | - | <4 |
| STU03-E | 06/03/03 | - | <4 |
| STU03-E | 07/08/03 | 16 | <4 |
| STU03-E | 08/11/03 | - | <4 |
| STU03-E | 09/03/03 | - | <4 |
| STU03-E | 10/15/03 | 15 D | <4 H |
| STU03-E | 11/11/03 | - | <4 |
| STU03-E | 12/09/03 | - | <4 |
| STU03-I | 01/14/03 | 18 | <4 |
| STU03-I | 04/03/03 | 16 D | <4 |
| STU03-I | 07/08/03 | 17 | <4 |
| STU03-I | 10/15/03 | 17 D | <4 H |
| GTU05-I | 02/26/03 | 100 D | 11 |
| *B830-SRC* | | | |
| GTU05-I | 02/27/03 | 100 D | 4.9 |
| GTU05-I | 03/03/03 | 100 D | <4 |
| GTU05-I | 03/04/03 | 110 D | 4.3 |
| GTU05-I | 03/05/03 | 120 D | 4.2 |
| GTU05-I | 03/11/03 | 93 D | <4 |
| GTU05-I | 03/19/03 | 120 LD | <4 |
| GTU05-I | 03/26/03 | 110 D | <4 |
| GTU05-I | 04/02/03 | 110 D | <4 |
| GTU05-I | 07/09/03 | 99 D | <4 |
| GTU05-I | 10/08/03 | 130 D | 5.6 H |
| GTU05-E | 02/26/03 | <0.5 | <4 |
| GTU05-E | 02/27/03 | <0.5 | <4 |
| GTU05-E | 03/03/03 | <0.5 | <4 |
| *B830-SRC* | | | |
| GTU05-E | 03/04/03 | <0.5 | <4 |
| GTU05-E | 03/05/03 | <0.5 | <4 |

**Table 2.7-6. Building 832 OU 2003 nitrate and perchlorate in ground water treatment system influence and effluent.**

| Location | Date | Nitrate (as $NO_3$) (mg/L) | Perchlorate ($\mu$g/L) |
|---|---|---|---|
| GTU05-E | 03/11/03 | <0.5 | <4 |
| GTU05-E | 03/19/03 | <0.5 L | <4 |
| GTU05-E | 03/26/03 | <0.5 | <4 |
| GTU05-E | 04/02/03 | <0.5 | <4 |
| GTU05-E | 05/01/03 | <0.5 | <4 |
| GTU05-E | 06/11/03 | 0.5 | <4 |
| GTU05-E | 07/09/03 | <0.44 | <4 |
| GTU05-E | 09/10/03 | <0.44 | <4 |
| GTU05-E | 10/08/03 | 95 D | <4 H |
| GTU05-E | 11/12/03 | 48 D | <4 |
| GTU05-E | 12/09/03 | 23 D | <4 |
| *B832-SRC* | | | |
| TF-832-I | 02/13/03 | 130 D | 10 |
| TF-832-I | 03/05/03 | 130 D | 10 |
| TF-832-I | 06/03/03 | 130 D | 7.2 |
| TF-832-I | 07/08/03 | 130 D | 8.4 |
| TF-832-I | 10/02/03 | 140 D | 9.2 H |
| TF-832-E | 01/07/03 | 110 D | <4 L |
| TF-832-E | 02/13/03 | 120 D | <3 |
| TF-832-E | 03/05/03 | 120 D | <3 |
| TF-832-E | 04/03/03 | 110 D | <4 |
| TF-832-E | 05/07/03 | 120 D | <4 |
| TF-832-E | 06/03/03 | 150 D | <4 |
| TF-832-E | 07/08/03 | 130 D | <4 |
| TF-832-E | 08/06/03 | 120 D | <4 |
| TF-832-E | 09/03/03 | 140 D | <4 |
| TF-832-E | 10/02/03 | 130 D | <4 H |
| TF-832-E | 11/11/03 | 100 D | <4 |
| TF-832-E | 12/03/03 | 100 D | <4 |
| *B830-DISS* | | | |
| TF830DS-I | 01/15/03 | 67 DL | <4 |
| TF830DS-I | 04/09/03 | 68 DL | 4.3 |
| TF830DS-I | 07/09/03 | 65 | 4.5 H |
| TF830DS-I | 10/08/03 | 68 D | <4 H |
| TF830DS-E | 01/15/03 | 25 DL | <4 |

**Table 2.7-6. Building 832 OU 2003 nitrate and perchlorate in ground water treatment system influence and effluent.**

| Location | Date | Nitrate (as $NO_3$) (mg/L) | Perchlorate ($\mu$g/L) |
|---|---|---|---|
| TF830DS-E | 02/20/03 | 25 D | <4 |
| TF830DS-E | 03/11/03 | 27 D | 4.7 |
| TF830DS-E | 04/09/03 | 35 DL | 5.9 |
| TF830DS-E | 05/01/03 | 43 D | 6.6 |
| TF830DS-E | 06/11/03 | 1.1 | 6.5 |
| TF830DS-E | 07/09/03 | <0.44 | <4 |
| TF830DS-E | 08/06/03 | <0.44 | <4 |
| TF830DS-E | 09/10/03 | 1.9 | <4 |
| TF830DS-E | 10/08/03 | <0.88 D | <4 H |
| TF830DS-E | 11/12/03 | 19 | <4 |
| TF830DS-E | 12/09/03 | 24 | <4 |

**Table 2.7-7. Building 832 Canyon treatment facility sampling plans.**

| Sample location | Sample identification | Parameter | Frequency |
|---|---|---|---|
| ***B832-SRC GTWS*** | | | |
| **Influent Port** | **B832-SRC-I** | **VOCs** | **Quarterly** |
| | | **Perchlorate** | **Quarterly** |
| | | **Nitrate** | **Quarterly** |
| | | **pH** | **Quarterly** |
| **Effluent Port (influent to misting system)** | **B832-SRC-E** | **VOCs** | **Monthly** |
| | | **Perchlorate** | **Monthly** |
| | | **Nitrate** | **Monthly** |
| | | **PH** | **Monthly** |
| ***B830-SRC GTWS*** | | | |
| **Influent Port** | **GTU05-I** | **VOCs** | **Quarterly** |
| | | **Perchlorate** | **Quarterly** |
| | | **Nitrate** | **Quarterly** |
| | | **PH** | **Quarterly** |
| **Effluent Port (influent to misting system)** | **GTU05-E** | **VOCs** | **Monthly** |
| | | **Perchlorate** | **Monthly** |
| | | **Nitrate** | **Monthly** |
| | | **PH** | **Monthly** |
| ***B830-PRXN GWTS*** | | | |
| **Influent Port** | **STU03-I** | **VOCs** | **Quarterly** |
| | | **Perchlorate** | **Quarterly** |
| | | **Nitrate** | **Quarterly** |
| **Effluent Port** | **STU03-E** | **VOCs** | **Monthly** |
| | | **Perchlorate** | **Monthly** |
| | | **Nitrate** | **Monthly** |
| ***B830-DISS GTWS*** | | | |
| **Influent Port** | **B830-DISS-I** | **VOCs** | **Quarterly** |
| | | **Perchlorate** | **Quarterly** |
| | | **Nitrate** | **Quarterly** |
| | | **pH** | **Quarterly** |
| **Effluent Port** | **B830-DISS-E** | **VOCs** | **Monthly** |
| | | **Perchlorate** | **Monthly** |
| | | **Nitrate** | **Monthly** |
| | | **pH** | **Monthly** |

**Table 2.7-8. Building 832 Canyon 2003 ground water sampling and analysis plan.**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| SPRING19 | SPR | Upper $Tnbs_1$ | | | | | | | See Building 833. |
| SPRING3 | SPR | Qal | A | A | CMP | E300.0:NO3 | 1 | N | Sampling personnel shortage. |
| SPRING3 | SPR | Qal Qal | A | A | CMP | E300.0:NO3 | 4 | Y | |
| SPRING3 | SPR | Qal | A | A | CMP | E300.0:PERC | 1 | N | Sampling personnel shortage. |
| SPRING3 | SPR | Qal | A | A | CMP | E300.0:PERC | 4 | Y | |
| SPRING3 | SPR | Qal | S | S | CMP | E601 | 1 | N | Sampling personnel shortage. |
| SPRING3 | SPR | Qal | S | S | CMP | E601 | 3 | Y | |
| SPRING4 | SPR | Tps | B | B | CMP | E300.0:NO3 | 2 | N | Sampling personnel shortage. |
| SPRING4 | SPR | Tps | B | B | CMP | E300.0:NO3 | 4 | Y | |
| SPRING4 | SPR | Tps | B | B | CMP | E300.0:PERC | 2 | N | Sampling personnel shortage. |
| SPRING4 | SPR | Tps | B | B | CMP | E300.0:PERC | 4 | Y | |
| SPRING4 | SPR | Tps | B | B | CMP | E601 | 2 | N | Sampling personnel shortage. |
| SPRING4 | SPR | Tps | B | B | CMP | E601 | 4 | Y | |
| SVI-830-031 | MWPT | $Tnsc_1$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| SVI-830-031 | MWPT | $Tnsc_1$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| SVI-830-031 | MWPT | $Tnsc_1$ | S | S | CMP | E601 | 1 | Y | |
| SVI-830-031 | MWPT | $Tnsc_1$ | S | S | CMP | E601 | 3 | N | Dry. |
| SVI-830-031 | MWPT | $Tnsc_1$ | S | S | CMP | E601 | 4 | N | Insufficient water. |
| SVI-830-032 | MWPT | $Tnsc_1$ | A | A | CMP | E300.0:NO3 | 1 | N | Sampling personnel shortage. |
| SVI-830-032 | MWPT | $Tnsc_1$ | A | A | CMP | E300.0:NO3 | 3 | N | Dry. |
| SVI-830-032 | MWPT | $Tnsc_1$ | A | A | CMP | E300.0:NO3 | 4 | N | Insufficient water. |
| SVI-830-032 | MWPT | $Tnsc_1$ | A | A | CMP | E300.0:PERC | 1 | N | Sampling personnel shortage. |
| SVI-830-032 | MWPT | $Tnsc_1$ | A | A | CMP | E300.0:PERC | 3 | N | Dry. |
| SVI-830-032 | MWPT | $Tnsc_1$ | A | A | CMP | E300.0:PERC | 4 | N | Insufficient water. |
| SVI-830-032 | MWPT | $Tnsc_1$ | S | S | CMP | E601 | 1 | N | Sampling personnel shortage. |
| SVI-830-032 | MWPT | $Tnsc_1$ | S | S | CMP | E601 | 3 | N | Dry. |
| SVI-830-032 | MWPT | $Tnsc_1$ | S | S | CMP | E601 | 4 | N | Insufficient water. |

**Table 2.7-8. Building 832 Canyon 2003 ground water sampling and analysis plan. (Cont. Page 2 of 21)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| SVI-830-033 | MWPT | $Tnsc_1$ | A | A | CMP | E300.0:NO3 | 1 | N | Sampling personnel shortage. |
| SVI-830-033 | MWPT | $Tnsc_1$ | A | A | CMP | E300.0:NO3 | 3 | N | Dry. |
| SVI-830-033 | MWPT | $Tnsc_1$ | A | A | CMP | E300.0:NO3 | 4 | N | Insufficient water. |
| SVI-830-033 | MWPT | $Tnsc_1$ | A | A | CMP | E300.0:PERC | 1 | N | Sampling personnel shortage. |
| SVI-830-033 | MWPT | $Tnsc_1$ | A | A | CMP | E300.0:PERC | 3 | N | Dry. |
| SVI-830-033 | MWPT | $Tnsc_1$ | A | A | CMP | E300.0:PERC | 4 | N | Insufficient water. |
| SVI-830-033 | MWPT | $Tnsc_1$ | S | S | CMP | E601 | 1 | N | Sampling personnel shortage. |
| SVI-830-033 | MWPT | $Tnsc_1$ | S | S | CMP | E601 | 3 | N | Dry. |
| SVI-830-033 | MWPT | $Tnsc_1$ | S | S | CMP | E601 | 4 | N | Insufficient water. |
| SVI-830-035 | MWPT | $Tnsc_1$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| SVI-830-035 | MWPT | $Tnsc_1$ | | A | DIS | E300.0:NO3 | 3 | Y | |
| SVI-830-035 | MWPT | $Tnsc_1$ | | A | DIS | E300.0:NO3 | 4 | N | Insufficient water.. |
| SVI-830-035 | MWPT | $Tnsc_1$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| SVI-830-035 | MWPT | $Tnsc_1$ | | A | DIS | E300.0:PERC | 3 | Y | |
| SVI-830-035 | MWPT | $Tnsc_1$ | | A | DIS | E300.0:PERC | 4 | N | Insufficient water.. |
| SVI-830-035 | MWPT | $Tnsc_1$ | S | S | CMP | E601 | 1 | Y | |
| SVI-830-035 | MWPT | $Tnsc_1$ | S | S | CMP | E601 | 3 | Y | |
| SVI-830-035 | MWPT | $Tnsc_1$ | | S | DIS | E601 | 4 | Y | |
| W-830-04A | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-830-04A | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-830-04A | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 1 | Y | |
| W-830-04A | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 3 | Y | |
| W-830-05 | MWPT | $Tnbs_2$-$Tnsc_{1c}$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-830-05 | MWPT | $Tnbs_2$-$Tnsc_{1c}$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-830-05 | MWPT | $Tnbs_2$-$Tnsc_{1c}$ | S | S | CMP | E601 | 1 | Y | |

Table 2.7-8. Building 832 Canyon 2003 ground water sampling and analysis plan. (Cont. Page 3 of 21)

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-830-05 | MWPT | $Tnbs_2$-$Tnsc_{1c}$ | S | S | CMP | E601 | 3 | Y | |
| W-830-07 | MWPT | $Tnsc_1$ | A | A | CMP | E300.0:NO3 | 1 | N | Dry. |
| W-830-07 | MWPT | $Tnsc_1$ | A | A | CMP | E300.0:NO3 | 4 | N | Dry. |
| W-830-07 | MWPT | $Tnsc_1$ | A | A | CMP | E300.0:PERC | 1 | N | Dry. |
| W-830-07 | MWPT | $Tnsc_1$ | A | A | CMP | E300.0:PERC | 4 | N | Dry. |
| W-830-07 | MWPT | $Tnsc_1$ | S | S | CMP | E601 | 1 | N | Dry. |
| W-830-07 | MWPT | $Tnsc_1$ | S | S | CMP | E601 | 3 | N | Dry. |
| W-830-09 | MWPT | Upper $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 1 | N | No access. |
| W-830-09 | MWPT | Upper $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 4 | Y | |
| W-830-09 | MWPT | Upper $Tnbs_1$ | A | A | CMP | E300.0:PERC | 1 | N | No access. |
| W-830-09 | MWPT | Upper $Tnbs_1$ | A | A | CMP | E300.0:PERC | 4 | Y | |
| W-830-09 | MWPT | Upper $Tnbs_1$ | S | S | CMP | E601 | 1 | N | No access. |
| W-830-09 | MWPT | Upper $Tnbs_1$ | S | S | CMP | E601 | 3 | Y | |
| W-830-10 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-830-10 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-830-10 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 1 | Y | |
| W-830-10 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 3 | Y | |
| W-830-11 | MWPT | $Tnsc_{1c}$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-830-11 | MWPT | $Tnsc_{1c}$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-830-11 | MWPT | $Tnsc_{1c}$ | S | S | CMP | E601 | 1 | Y | |
| W-830-11 | MWPT | $Tnsc_{1c}$ | S | S | CMP | E601 | 3 | Y | |
| W-830-12 | MWPT | Lower $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 1 | N | No access. |
| W-830-12 | MWPT | Lower $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 4 | Y | |
| W-830-12 | MWPT | Lower $Tnbs_1$ | A | A | CMP | E300.0:PERC | 1 | N | No access. |
| W-830-12 | MWPT | Lower $Tnbs_1$ | A | A | CMP | E300.0:PERC | 4 | Y | |
| W-830-12 | MWPT | Lower $Tnbs_1$ | S | S | CMP | E601 | 1 | N | No access. |
| W-830-12 | MWPT | Lower $Tnbs_1$ | S | S | CMP | E601 | 3 | Y | |

**Table 2.7-8. Building 832 Canyon 2003 ground water sampling and analysis plan. (Cont. Page 4 of 21)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-830-13 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-830-13 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-830-13 | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 1 | Y | |
| W-830-13 | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 3 | Y | |
| W-830-14 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-830-14 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-830-14 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 1 | Y | |
| W-830-14 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 3 | Y | |
| W-830-15 | MWPT | Upper $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 1 | N | CB flooded. |
| W-830-15 | MWPT | Upper $Tnbs_1$ | A | A | CMP | E300.0:PERC | 1 | N | CB flooded. |
| W-830-15 | MWPT | Upper $Tnbs_1$ | S | S | CMP | E601 | 1 | N | CB flooded. |
| W-830-15 | MWPT | Upper $Tnbs_1$ | S | S | CMP | E601 | 3 | Y | |
| W-830-16 | GW | $Tnsc_{1b}$ | S | S | CMP | E300.0:NO3 | 1 | Y | |
| W-830-16 | GW | $Tnsc_{1b}$ | S | S | CMP | E300.0:NO3 | 3 | Y | |
| W-830-16 | GW | $Tnsc_{1b}$ | S | S | CMP | E300.0:PERC | 1 | Y | |
| W-830-16 | GW | $Tnsc_{1b}$ | S | S | CMP | E300.0:PERC | 3 | Y | |
| W-830-16 | GW | $Tnsc_{1b}$ | Q | Q | CMP | E601 | 1 | Y | |
| W-830-16 | GW | $Tnsc_{1b}$ | Q | Q | CMP | E601 | 2 | Y | |
| W-830-16 | GW | $Tnsc_{1b}$ | Q | Q | CMP | E601 | 3 | Y | |
| W-830-16 | GW | $Tnsc_{1b}$ | Q | Q | CMP | E601 | 4 | Y | |
| W-830-17 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-830-17 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-830-17 | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 1 | Y | |
| W-830-17 | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 3 | Y | |
| W-830-1730 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-830-1730 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-830-1730 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 1 | Y | |
| W-830-1730 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 3 | Y | |

Table 2.7-8. Building 832 Canyon 2003 ground water sampling and analysis plan. (Cont. Page 5 of 21)

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-830-18 | MWPT | Upper $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-830-18 | MWPT | Upper $Tnbs_1$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-830-18 | MWPT | Upper $Tnbs_1$ | S | S | CMP | E601 | 1 | Y | |
| W-830-18 | MWPT | Upper $Tnbs_1$ | S | S | CMP | E601 | 3 | Y | |
| W-830-1807 | EW | Qal/$Tnsc_1$ | | Q | DIS | AS:UISO | 1 | N | Sampling personnel shortage. |
| W-830-1807 | EW | Qal/$Tnsc_1$ | | Q | DIS | AS:UISO | 2 | N | Dry. |
| W-830-1807 | EW | Qal/$Tnsc_1$ | | Q | DIS | AS:UISO | 3 | N | Dry. |
| W-830-1807 | EW | Qal/$Tnsc_1$ | | Q | DIS | AS:UISO | 4 | N | Not sampled. |
| W-830-1807 | EW | Qal/$Tnsc_1$ | | Q | DIS | DWMETALS | 1 | N | Sampling personnel shortage. |
| W-830-1807 | EW | Qal/$Tnsc_1$ | | Q | DIS | DWMETALS | 2 | N | Dry. |
| W-830-1807 | EW | Qal/$Tnsc_1$ | | Q | DIS | DWMETALS | 3 | N | Dry. |
| W-830-1807 | EW | Qal/$Tnsc_1$ | | Q | DIS | DWMETALS | 4 | N | Not sampled. |
| W-830-1807 | EW | Qal/$Tnsc_1$ | | Q | DIS | E300.0:NO3 | 1 | N | Sampling personnel shortage. |
| W-830-1807 | EW | Qal/$Tnsc_1$ | A | Q | CMP | E300.0:NO3 | 2 | Y | Sampled as GTU05-I 4/03 |
| W-830-1807 | EW | Qal/$Tnsc_1$ | | Q | DIS | E300.0:NO3 | 3 | N | Dry. |
| W-830-1807 | EW | Qal/$Tnsc_1$ | | Q | DIS | E300.0:NO3 | 4 | N | Not sampled. |
| W-830-1807 | EW | Qal/$Tnsc_1$ | | Q | DIS | E300.0:PERC | 1 | N | Sampling personnel shortage. |
| W-830-1807 | EW | Qal/$Tnsc_1$ | A | Q | CMP | E300.0:PERC | 2 | Y | Sampled as GTU05-I 4/03 |
| W-830-1807 | EW | Qal/$Tnsc_1$ | | Q | DIS | E300.0:PERC | 3 | N | Dry. |
| W-830-1807 | EW | Qal/$Tnsc_1$ | | Q | DIS | E300.0:PERC | 4 | N | Not sampled. |
| W-830-1807 | EW | Qal/$Tnsc_1$ | | Q | DIS | E601 | 1 | N | Sampling personnel shortage. |
| W-830-1807 | EW | Qal/$Tnsc_1$ | S | Q | CMP | E601 | 2 | Y | Sampled as GTU05-I 4/03 |
| W-830-1807 | EW | Qal/$Tnsc_1$ | | Q | DIS | E601 | 3 | N | Dry. |
| W-830-1807 | EW | Qal/$Tnsc_1$ | S | Q | CMP | E601 | 4 | Y | |
| W-830-1807 | EW | Qal/$Tnsc_1$ | | Q | DIS | E602 | 1 | N | Sampling personnel shortage. |
| W-830-1807 | EW | Qal/$Tnsc_1$ | | Q | DIS | E602 | 2 | N | Dry. |
| W-830-1807 | EW | Qal/$Tnsc_1$ | | Q | DIS | E602 | 3 | N | Dry. |
| W-830-1807 | EW | Qal/$Tnsc_1$ | | Q | DIS | E602 | 4 | N | Not sampled. |

**Table 2.7-8. Building 832 Canyon 2003 ground water sampling and analysis plan. (Cont. Page 6 of 21)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-830-1807 | EW | $Qal/Tnsc_1$ | | Q | DIS | E8330:R+H | 1 | N | Sampling personnel shortage. |
| W-830-1807 | EW | $Qal/Tnsc_1$ | | Q | DIS | E8330:R+H | 2 | N | Dry. |
| W-830-1807 | EW | $Qal/Tnsc_1$ | | Q | DIS | E8330:R+H | 3 | N | Dry. |
| W-830-1807 | EW | $Qal/Tnsc_1$ | | Q | DIS | E8330:R+H | 4 | N | Not sampled. |
| W-830-1807 | EW | $Qal/Tnsc_1$ | | Q | DIS | E900 | 1 | N | Sampling personnel shortage. |
| W-830-1807 | EW | $Qal/Tnsc_1$ | | Q | DIS | E900 | 2 | N | Dry. |
| W-830-1807 | EW | $Qal/Tnsc_1$ | | Q | DIS | E900 | 3 | N | Dry. |
| W-830-1807 | EW | $Qal/Tnsc_1$ | | Q | DIS | E900 | 4 | N | Not sampled. |
| W-830-1807 | EW | $Qal/Tnsc_1$ | | Q | DIS | E906 | 1 | N | Sampling personnel shortage. |
| W-830-1807 | EW | $Qal/Tnsc_1$ | | Q | DIS | E906 | 2 | N | Dry. |
| W-830-1807 | EW | $Qal/Tnsc_1$ | | Q | DIS | E906 | 3 | N | Dry. |
| W-830-1807 | EW | $Qal/Tnsc_1$ | | Q | DIS | E906 | 4 | N | Not sampled. |
| W-830-1807 | EW | $Qal/Tnsc_1$ | | Q | DIS | GENMIN | 1 | N | Sampling personnel shortage. |
| W-830-1807 | EW | $Qal/Tnsc_1$ | | Q | DIS | GENMIN | 2 | N | Dry. |
| W-830-1807 | EW | $Qal/Tnsc_1$ | | Q | DIS | GENMIN | 3 | N | Dry. |
| W-830-1807 | EW | $Qal/Tnsc_1$ | | Q | DIS | GENMIN | 4 | N | Not sampled. |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | | Q | DIS | AS:UISO | 1 | N | Sampling personnel shortage. |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | | Q | DIS | AS:UISO | 2 | N | Dry. |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | | Q | DIS | AS:UISO | 3 | N | Not sampled. |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | | Q | DIS | AS:UISO | 4 | Y | |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | | Q | DIS | DWMETALS | 1 | N | Sampling personnel shortage. |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | | Q | DIS | DWMETALS | 2 | Y | |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | | Q | DIS | DWMETALS | 3 | N | Not sampled. |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | | Q | DIS | DWMETALS | 4 | Y | |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E300.0:NO3 | 1 | N | Sampling personnel shortage. |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | A | Q | CMP | E300.0:NO3 | 2 | Y | |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E300.0:NO3 | 3 | Y | |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E300.0:NO3 | 4 | Y | |

**Table 2.7-8. Building 832 Canyon 2003 ground water sampling and analysis plan. (Cont. Page 7 of 21)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-830-1829 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E300.0:PERC | 1 | N | Sampling personnel shortage. |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | A | Q | CMP | E300.0:PERC | 2 | Y | |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E300.0:PERC | 3 | Y | |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E300.0:PERC | 4 | Y | |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E601 | 1 | N | Sampling personnel shortage. |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | S | Q | CMP | E601 | 2 | Y | |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E601 | 3 | Y | |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | S | Q | CMP | E601 | 4 | Y | |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E602 | 1 | N | Sampling personnel shortage. |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E602 | 2 | Y | |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E602 | 3 | N | Not sampled. |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E602 | 4 | Y | |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E8330:R+H | 1 | N | Sampling personnel shortage. |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E8330:R+H | 2 | N | Dry. |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E8330:R+H | 3 | N | Not sampled. |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E8330:R+H | 4 | Y | |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E900 | 1 | N | Sampling personnel shortage. |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E900 | 2 | N | Dry. |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E900 | 3 | N | Not sampled. |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E900 | 4 | Y | |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E906 | 1 | N | Sampling personnel shortage. |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E906 | 2 | Y | |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E906 | 3 | N | Not sampled. |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E906 | 4 | Y | |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | | Q | DIS | GENMIN | 1 | N | Sampling personnel shortage. |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | | Q | DIS | GENMIN | 2 | Y | |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | | Q | DIS | GENMIN | 3 | N | Not sampled. |
| W-830-1829 | MWPT | $Tnsc_{1b}$ | | Q | DIS | GENMIN | 4 | Y | |

**Table 2.7-8. Building 832 Canyon 2003 ground water sampling and analysis plan. (Cont. Page 8 of 21)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-830-1830 | MWPT | $Tnsc_{1b}$ | | Q | DIS | AS:UISO | 1 | N | Sampling personnel shortage. |
| W-830-1830 | MWPT | $Tnsc_{1b}$ | | Q | DIS | AS:UISO | 2 | N | Dry. |
| W-830-1830 | MWPT | $Tnsc_{1b}$ | | Q | DIS | AS:UISO | 3 | N | Not sampled. |
| W-830-1830 | MWPT | $Tnsc_{1b}$ | | Q | DIS | AS:UISO | 4 | Y | |
| W-830-1830 | MWPT | $Tnsc_{1b}$ | | Q | DIS | DWMETALS | 1 | N | Sampling personnel shortage. |
| W-830-1830 | MWPT | $Tnsc_{1b}$ | | Q | DIS | DWMETALS | 2 | Y | |
| W-830-1830 | MWPT | $Tnsc_{1b}$ | | Q | DIS | DWMETALS | 3 | N | Not sampled. |
| W-830-1830 | MWPT | $Tnsc_{1b}$ | | Q | DIS | DWMETALS | 4 | Y | |
| W-830-1830 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E300.0:NO3 | 1 | N | Sampling personnel shortage. |
| W-830-1830 | MWPT | $Tnsc_{1b}$ | A | Q | CMP | E300.0:NO3 | 2 | Y | |
| W-830-1830 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E300.0:NO3 | 3 | Y | |
| W-830-1830 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E300.0:NO3 | 4 | Y | |
| W-830-1830 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E300.0:PERC | 1 | N | Sampling personnel shortage. |
| W-830-1830 | MWPT | $Tnsc_{1b}$ | A | Q | CMP | E300.0:PERC | 2 | Y | |
| W-830-1830 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E300.0:PERC | 3 | Y | |
| W-830-1830 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E300.0:PERC | 4 | Y | |
| W-830-1830 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E601 | 1 | N | Sampling personnel shortage. |
| W-830-1830 | MWPT | $Tnsc_{1b}$ | S | Q | CMP | E601 | 2 | Y | |
| W-830-1830 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E601 | 3 | Y | |
| W-830-1830 | MWPT | $Tnsc_{1b}$ | S | Q | CMP | E601 | 4 | Y | |
| W-830-1830 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E602 | 1 | N | Sampling personnel shortage. |
| W-830-1830 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E602 | 2 | Y | |
| W-830-1830 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E602 | 3 | N | Not sampled. |
| W-830-1830 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E602 | 4 | Y | |
| W-830-1830 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E8330:R+H | 1 | N | Sampling personnel shortage. |
| W-830-1830 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E8330:R+H | 2 | N | Dry. |
| W-830-1830 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E8330:R+H | 3 | N | Not sampled. |
| W-830-1830 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E8330:R+H | 4 | Y | |

**Table 2.7-8. Building 832 Canyon 2003 ground water sampling and analysis plan. (Cont. Page 9 of 21)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-830-1830 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E900 | 1 | N | Sampling personnel shortage. |
| W-830-1830 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E900 | 2 | N | Dry. |
| W-830-1830 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E900 | 3 | N | Not sampled. |
| W-830-1830 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E900 | 4 | Y | |
| W-830-1830 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E906 | 1 | N | Sampling personnel shortage. |
| W-830-1830 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E906 | 2 | Y | |
| W-830-1830 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E906 | 3 | N | Not sampled. |
| W-830-1830 | MWPT | $Tnsc_{1b}$ | | Q | DIS | E906 | 4 | Y | |
| W-830-1830 | MWPT | $Tnsc_{1b}$ | | Q | DIS | GENMIN | 1 | N | Sampling personnel shortage. |
| W-830-1830 | MWPT | $Tnsc_{1b}$ | | Q | DIS | GENMIN | 2 | Y | |
| W-830-1830 | MWPT | $Tnsc_{1b}$ | | Q | DIS | GENMIN | 3 | N | Not sampled. |
| W-830-1830 | MWPT | $Tnsc_{1b}$ | | Q | DIS | GENMIN | 4 | Y | |
| W-830-1831 | GW | $Tnsc_{1b}$ | | Q | DIS | AS:UISO | 1 | N | Sampling personnel shortage. |
| W-830-1831 | GW | $Tnsc_{1b}$ | | Q | DIS | AS:UISO | 2 | N | Sampling personnel shortage. |
| W-830-1831 | GW | $Tnsc_{1b}$ | | Q | DIS | AS:UISO | 3 | N | Not sampled. |
| W-830-1831 | GW | $Tnsc_{1b}$ | | Q | DIS | AS:UISO | 4 | N | No pump. |
| W-830-1831 | GW | $Tnsc_{1b}$ | | Q | DIS | DWMETALS | 1 | N | Sampling personnel shortage. |
| W-830-1831 | GW | $Tnsc_{1b}$ | | Q | DIS | DWMETALS | 2 | N | Sampling personnel shortage. |
| W-830-1831 | GW | $Tnsc_{1b}$ | | Q | DIS | DWMETALS | 3 | N | Not sampled. |
| W-830-1831 | GW | $Tnsc_{1b}$ | | Q | DIS | DWMETALS | 4 | N | No pump. |
| W-830-1831 | GW | $Tnsc_{1b}$ | | Q | DIS | E300.0:NO3 | 1 | N | Sampling personnel shortage. |
| W-830-1831 | GW | $Tnsc_{1b}$ | | Q | DIS | E300.0:NO3 | 2 | N | Sampling personnel shortage. |
| W-830-1831 | GW | $Tnsc_{1b}$ | A | Q | CMP | E300.0:NO3 | 3 | Y | |
| W-830-1831 | GW | $Tnsc_{1b}$ | | Q | DIS | E300.0:NO3 | 4 | Y | |
| W-830-1831 | GW | $Tnsc_{1b}$ | | Q | DIS | E300.0:PERC | 1 | N | Sampling personnel shortage. |
| W-830-1831 | GW | $Tnsc_{1b}$ | | Q | DIS | E300.0:PERC | 2 | N | Sampling personnel shortage. |
| W-830-1831 | GW | $Tnsc_{1b}$ | A | Q | CMP | E300.0:PERC | 3 | Y | |
| W-830-1831 | GW | $Tnsc_{1b}$ | | Q | DIS | E300.0:PERC | 4 | Y | |

Table 2.7-8. Building 832 Canyon 2003 ground water sampling and analysis plan. (Cont. Page 10 of 21)

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-830-1831 | GW | $Tnsc_{1b}$ | | Q | DIS | E601 | 1 | N | Sampling personnel shortage. |
| W-830-1831 | GW | $Tnsc_{1b}$ | S | Q | CMP | E601 | 2 | Y | |
| W-830-1831 | GW | $Tnsc_{1b}$ | S | Q | CMP | E601 | 3 | Y | |
| W-830-1831 | GW | $Tnsc_{1b}$ | | Q | DIS | E601 | 4 | N | No pump. |
| W-830-1831 | GW | $Tnsc_{1b}$ | | Q | DIS | E602 | 1 | N | Sampling personnel shortage. |
| W-830-1831 | GW | $Tnsc_{1b}$ | | Q | DIS | E602 | 2 | Y | |
| W-830-1831 | GW | $Tnsc_{1b}$ | | Q | DIS | E602 | 3 | N | Not sampled. |
| W-830-1831 | GW | $Tnsc_{1b}$ | | Q | DIS | E602 | 4 | N | Not sampled. |
| W-830-1831 | GW | $Tnsc_{1b}$ | | Q | DIS | E8330:R+H | 1 | N | Sampling personnel shortage. |
| W-830-1831 | GW | $Tnsc_{1b}$ | | Q | DIS | E8330:R+H | 2 | N | Sampling personnel shortage. |
| W-830-1831 | GW | $Tnsc_{1b}$ | | Q | DIS | E8330:R+H | 3 | N | Not sampled. |
| W-830-1831 | GW | $Tnsc_{1b}$ | | Q | DIS | E8330:R+H | 4 | N | No pump. |
| W-830-1831 | GW | $Tnsc_{1b}$ | | Q | DIS | E900 | 1 | N | Sampling personnel shortage. |
| W-830-1831 | GW | $Tnsc_{1b}$ | | Q | DIS | E900 | 2 | N | Sampling personnel shortage. |
| W-830-1831 | GW | $Tnsc_{1b}$ | | Q | DIS | E900 | 3 | N | Not sampled. |
| W-830-1831 | GW | $Tnsc_{1b}$ | | Q | DIS | E900 | 4 | N | No pump. |
| W-830-1831 | GW | $Tnsc_{1b}$ | | Q | DIS | E906 | 1 | N | Sampling personnel shortage. |
| W-830-1831 | GW | $Tnsc_{1b}$ | | Q | DIS | E906 | 2 | N | Sampling personnel shortage. |
| W-830-1831 | GW | $Tnsc_{1b}$ | | Q | DIS | E906 | 3 | N | Not sampled. |
| W-830-1831 | GW | $Tnsc_{1b}$ | | Q | DIS | E906 | 4 | N | No pump. |
| W-830-1831 | GW | $Tnsc_{1b}$ | | Q | DIS | GENMIN | 1 | N | Sampling personnel shortage. |
| W-830-1831 | GW | $Tnsc_{1b}$ | | Q | DIS | GENMIN | 2 | N | Sampling personnel shortage. |
| W-830-1831 | GW | $Tnsc_{1b}$ | | Q | DIS | GENMIN | 3 | N | Not sampled. |
| W-830-1831 | GW | $Tnsc_{1b}$ | | Q | DIS | GENMIN | 4 | N | No pump. |
| W-830-1832 | MWPT | Upper $Tnbs_1$ | | Q | DIS | AS:UISO | 1 | N | Sampling personnel shortage. |
| W-830-1832 | MWPT | Upper $Tnbs_1$ | | Q | DIS | AS:UISO | 2 | N | Sampling personnel shortage. |
| W-830-1832 | MWPT | Upper $Tnbs_1$ | | Q | DIS | AS:UISO | 3 | Y | Not sampled. |
| W-830-1832 | MWPT | Upper $Tnbs_1$ | | Q | DIS | AS:UISO | 4 | N | No pump. |

**Table 2.7-8. Building 832 Canyon 2003 ground water sampling and analysis plan. (Cont. Page 11 of 21)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-830-1832 | MWPT | Upper $Tnbs_1$ | | Q | DIS | DWMETALS | 1 | N | Sampling personnel shortage. |
| W-830-1832 | MWPT | Upper $Tnbs_1$ | | Q | DIS | DWMETALS | 2 | N | Sampling personnel shortage. |
| W-830-1832 | MWPT | Upper $Tnbs_1$ | | Q | DIS | DWMETALS | 3 | Y | |
| W-830-1832 | MWPT | Upper $Tnbs_1$ | | Q | DIS | DWMETALS | 4 | N | No pump. |
| W-830-1832 | MWPT | Upper $Tnbs_1$ | | Q | DIS | E300.0:NO3 | 1 | N | Sampling personnel shortage. |
| W-830-1832 | MWPT | Upper $Tnbs_1$ | | Q | DIS | E300.0:NO3 | 2 | N | Sampling personnel shortage. |
| W-830-1832 | MWPT | Upper $Tnbs_1$ | A | Q | CMP | E300.0:NO3 | 3 | Y | |
| W-830-1832 | MWPT | Upper $Tnbs_1$ | | Q | DIS | E300.0:NO3 | 4 | Y | |
| W-830-1832 | MWPT | Upper $Tnbs_1$ | | Q | DIS | E300.0:PERC | 1 | N | Sampling personnel shortage. |
| W-830-1832 | MWPT | Upper $Tnbs_1$ | | Q | DIS | E300.0:PERC | 2 | N | Sampling personnel shortage. |
| W-830-1832 | MWPT | Upper $Tnbs_1$ | A | Q | CMP | E300.0:PERC | 3 | Y | |
| W-830-1832 | MWPT | Upper $Tnbs_1$ | | Q | DIS | E300.0:PERC | 4 | Y | |
| W-830-1832 | MWPT | Upper $Tnbs_1$ | | Q | DIS | E601 | 1 | N | Sampling personnel shortage. |
| W-830-1832 | MWPT | Upper $Tnbs_1$ | S | Q | CMP | E601 | 2 | Y | |
| W-830-1832 | MWPT | Upper $Tnbs_1$ | S | Q | CMP | E601 | 3 | Y | |
| W-830-1832 | MWPT | Upper $Tnbs_1$ | | Q | DIS | E601 | 4 | N | No pump. |
| W-830-1832 | MWPT | Upper $Tnbs_1$ | | Q | DIS | E602 | 1 | N | Sampling personnel shortage. |
| W-830-1832 | MWPT | Upper $Tnbs_1$ | | Q | DIS | E602 | 2 | Y | |
| W-830-1832 | MWPT | Upper $Tnbs_1$ | | Q | DIS | E602 | 3 | Y | |
| W-830-1832 | MWPT | Upper $Tnbs_1$ | | Q | DIS | E602 | 4 | N | No pump. |
| W-830-1832 | MWPT | Upper $Tnbs_1$ | | Q | DIS | E8330:R+H | 1 | N | Sampling personnel shortage. |
| W-830-1832 | MWPT | Upper $Tnbs_1$ | | Q | DIS | E8330:R+H | 2 | N | Sampling personnel shortage. |
| W-830-1832 | MWPT | Upper $Tnbs_1$ | | Q | DIS | E8330:R+H | 3 | Y | |
| W-830-1832 | MWPT | Upper $Tnbs_1$ | | Q | DIS | E8330:R+H | 4 | N | No pump. |
| W-830-1832 | MWPT | Upper $Tnbs_1$ | | Q | DIS | E900 | 1 | N | Sampling personnel shortage. |
| W-830-1832 | MWPT | Upper $Tnbs_1$ | | Q | DIS | E900 | 2 | N | Sampling personnel shortage. |
| W-830-1832 | MWPT | Upper $Tnbs_1$ | | Q | DIS | E900 | 3 | Y | |
| W-830-1832 | MWPT | Upper $Tnbs_1$ | | Q | DIS | E900 | 4 | N | No pump. |

**Table 2.7-8. Building 832 Canyon 2003 ground water sampling and analysis plan. (Cont. Page 12 of 21)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-830-1832 | MWPT | Upper $Tnbs_1$ | | Q | DIS | E906 | 1 | N | Sampling personnel shortage. |
| W-830-1832 | MWPT | Upper $Tnbs_1$ | | Q | DIS | E906 | 2 | N | Sampling personnel shortage. |
| W-830-1832 | MWPT | Upper $Tnbs_1$ | | Q | DIS | E906 | 3 | Y | |
| W-830-1832 | MWPT | Upper $Tnbs_1$ | | Q | DIS | E906 | 4 | N | No pump. |
| W-830-1832 | MWPT | Upper $Tnbs_1$ | | Q | DIS | GENMIN | 1 | N | Sampling personnel shortage. |
| W-830-1832 | MWPT | Upper $Tnbs_1$ | | Q | DIS | GENMIN | 2 | N | Sampling personnel shortage. |
| W-830-1832 | MWPT | Upper $Tnbs_1$ | | Q | DIS | GENMIN | 3 | Y | |
| W-830-1832 | MWPT | Upper $Tnbs_1$ | | Q | DIS | GENMIN | 4 | N | No pump. |
| W-830-19 | EW | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-830-19 | EW | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-830-19 | EW | $Tnsc_{1b}$ | S | S | CMP | E601 | 1 | Y | |
| W-830-19 | EW | $Tnsc_{1b}$ | S | S | CMP | E601 | 3 | N | TF Well not operating. |
| W-830-20 | GW | Upper $Tnbs_1$ | S | S | CMP | E300.0:NO3 | 1 | Y | |
| W-830-20 | GW | Upper $Tnbs_1$ | S | S | CMP | E300.0:NO3 | 3 | Y | |
| W-830-20 | GW | Upper $Tnbs_1$ | S | S | CMP | E300.0:PERC | 1 | Y | |
| W-830-20 | GW | Upper $Tnbs_1$ | S | S | CMP | E300.0:PERC | 3 | Y | |
| W-830-20 | GW | Upper $Tnbs_1$ | Q | Q | CMP | E601 | 1 | Y | |
| W-830-20 | GW | Upper $Tnbs_1$ | Q | Q | CMP | E601 | 2 | Y | |
| W-830-20 | GW | Upper $Tnbs_1$ | Q | Q | CMP | E601 | 3 | Y | |
| W-830-20 | GW | Upper $Tnbs_1$ | Q | Q | CMP | E601 | 4 | Y | |
| W-830-21 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-830-21 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-830-21 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 1 | Y | |
| W-830-21 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 3 | Y | |
| W-830-22 | MWPT | $Tnsc_{1a}$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-830-22 | MWPT | $Tnsc_{1a}$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-830-22 | MWPT | $Tnsc_{1a}$ | S | S | CMP | E601 | 1 | Y | |
| W-830-22 | MWPT | $Tnsc_{1a}$ | S | S | CMP | E601 | 3 | Y | |

Table 2.7-8. Building 832 Canyon 2003 ground water sampling and analysis plan. (Cont. Page 13 of 21)

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-830-25 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-830-25 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-830-25 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 1 | Y | |
| W-830-25 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 3 | Y | |
| W-830-26 | MWPT | Upper $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-830-26 | MWPT | Upper $Tnbs_1$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-830-26 | MWPT | Upper $Tnbs_1$ | S | S | CMP | E601 | 1 | Y | |
| W-830-26 | MWPT | Upper $Tnbs_1$ | S | S | CMP | E601 | 3 | Y | |
| W-830-27 | MWPT | $Tnsc_{1a}$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-830-27 | MWPT | $Tnsc_{1a}$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-830-27 | MWPT | $Tnsc_{1a}$ | S | S | CMP | E601 | 1 | Y | |
| W-830-27 | MWPT | $Tnsc_{1a}$ | S | S | CMP | E601 | 3 | Y | |
| W-830-28 | MWPT | Upper $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-830-28 | MWPT | Upper $Tnbs_1$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-830-28 | MWPT | Upper $Tnbs_1$ | S | S | CMP | E601 | 1 | Y | |
| W-830-28 | MWPT | Upper $Tnbs_1$ | S | S | CMP | E601 | 3 | Y | |
| W-830-29 | MWPT | Lower $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-830-29 | MWPT | Lower $Tnbs_1$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-830-29 | MWPT | Lower $Tnbs_1$ | S | S | CMP | E601 | 1 | Y | |
| W-830-29 | MWPT | Lower $Tnbs_1$ | S | S | CMP | E601 | 3 | Y | |
| W-830-30 | MWPT | Qal/$Tnsc_1$ | A | A | CMP | E300.0:NO3 | 1 | N | No Access. |
| W-830-30 | MWPT | Qal/$Tnsc_1$ | A | A | CMP | E300.0:NO3 | 4 | Y | |
| W-830-30 | MWPT | Qal/$Tnsc_1$ | A | A | CMP | E300.0:PERC | 1 | N | No Access. |
| W-830-30 | MWPT | Qal/$Tnsc_1$ | A | A | CMP | E300.0:PERC | 4 | Y | |
| W-830-30 | MWPT | Qal/$Tnsc_1$ | S | S | CMP | E601 | 1 | N | No Access. |
| W-830-30 | MWPT | Qal/$Tnsc_1$ | S | S | CMP | E601 | 3 | Y | |
| W-830-34 | MWPT | Qal/$Tnsc_1$ | A | A | CMP | E300.0:NO3 | 1 | N | No Access. |
| W-830-34 | MWPT | Qal/$Tnsc_1$ | A | A | CMP | E300.0:NO3 | 4 | Y | |

**Table 2.7-8. Building 832 Canyon 2003 ground water sampling and analysis plan. (Cont. Page 14 of 21)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-830-34 | MWPT | Qal/$Tnsc_1$ | A | A | CMP | E300.0:PERC | 1 | N | No Access. |
| W-830-34 | MWPT | Qal/$Tnsc_1$ | A | A | CMP | E300.0:PERC | 4 | Y | |
| W-830-34 | MWPT | Qal/$Tnsc_1$ | S | S | CMP | E601 | 1 | N | No Access. |
| W-830-34 | MWPT | Qal/$Tnsc_1$ | S | S | CMP | E601 | 3 | N | No Access. |
| W-830-49 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-830-49 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-830-49 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 1 | Y | |
| W-830-49 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 3 | Y | |
| W-830-50 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-830-50 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-830-50 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 1 | Y | |
| W-830-50 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 3 | Y | |
| W-830-51 | EW | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-830-51 | EW | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-830-51 | EW | $Tnsc_{1b}$ | S | S | CMP | E601 | 1 | Y | |
| W-830-51 | EW | $Tnsc_{1b}$ | S | S | CMP | E601 | 3 | Y | |
| W-830-52 | EW | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-830-52 | EW | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-830-52 | EW | $Tnsc_{1b}$ | S | S | CMP | E601 | 1 | Y | |
| W-830-52 | EW | $Tnsc_{1b}$ | S | S | CMP | E601 | 3 | Y | |
| W-830-53 | EW | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-830-53 | EW | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-830-53 | EW | $Tnsc_{1b}$ | S | S | CMP | E601 | 1 | Y | |
| W-830-53 | EW | $Tnsc_{1b}$ | S | S | CMP | E601 | 3 | Y | |
| W-830-54 | MWPT | $Tnsc_{1c}$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-830-54 | MWPT | $Tnsc_{1c}$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-830-54 | MWPT | $Tnsc_{1c}$ | S | S | CMP | E601 | 1 | Y | |
| W-830-54 | MWPT | $Tnsc_{1c}$ | S | S | CMP | E601 | 3 | Y | |

Table 2.7-8. Building 832 Canyon 2003 ground water sampling and analysis plan. (Cont. Page 15 of 21)

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-830-55 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-830-55 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-830-55 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 1 | Y | |
| W-830-55 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 3 | Y | |
| W-830-56 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-830-56 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-830-56 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 1 | Y | |
| W-830-56 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 3 | Y | |
| W-830-57 | MWPT | Upper $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-830-57 | MWPT | Upper $Tnbs_1$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-830-57 | MWPT | Upper $Tnbs_1$ | S | S | CMP | E601 | 1 | Y | |
| W-830-57 | MWPT | Upper $Tnbs_1$ | S | S | CMP | E601 | 3 | Y | |
| W-830-58 | EW | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-830-58 | EW | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-830-58 | EW | $Tnsc_{1b}$ | S | S | CMP | E601 | 1 | Y | |
| W-830-58 | EW | $Tnsc_{1b}$ | S | S | CMP | E601 | 3 | Y | |
| W-830-59 | EW | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 1 | N | Sampling personnel shortage. |
| W-830-59 | EW | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 1 | N | Sampling personnel shortage. |
| W-830-59 | EW | $Tnsc_{1b}$ | S | S | CMP | E601 | 1 | N | Sampling personnel shortage. |
| W-830-59 | EW | $Tnsc_{1b}$ | S | S | CMP | E601 | 3 | Y | |
| W-830-60 | MWPT | Upper $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-830-60 | MWPT | Upper $Tnbs_1$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-830-60 | MWPT | Upper $Tnbs_1$ | S | S | CMP | E601 | 1 | Y | |
| W-830-60 | MWPT | Upper $Tnbs_1$ | S | S | CMP | E601 | 3 | Y | |
| W-831-01 | MWB | Lower $Tnbs_1$ | B | B | CMP | E300.0:NO3 | 1 | N | Sampling personnel shortage. |
| W-831-01 | MWB | Lower $Tnbs_1$ | B | B | CMP | E300.0:NO3 | 4 | Y | |
| W-831-01 | MWB | Lower $Tnbs_1$ | B | B | CMP | E300.0:PERC | 1 | N | Sampling personnel shortage. |
| W-831-01 | MWB | Lower $Tnbs_1$ | B | B | CMP | E300.0:PERC | 4 | Y | |

**Table 2.7-8. Building 832 Canyon 2003 ground water sampling and analysis plan. (Cont. Page 16 of 21)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-831-01 | MWB | Lower $Tnbs_1$ | B | B | CMP | E601 | 1 | N | Sampling personnel shortage. |
| W-831-01 | MWB | Lower $Tnbs_1$ | B | B | CMP | E601 | 4 | Y | |
| W-832-01 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-832-01 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-832-01 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 1 | Y | |
| W-832-01 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 3 | Y | |
| W-832-05 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-832-05 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-832-05 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 1 | Y | |
| W-832-05 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 3 | Y | |
| W-832-06 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-832-06 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-832-06 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 1 | Y | |
| W-832-06 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 3 | Y | |
| W-832-09 | MWPT | Lower $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-832-09 | MWPT | Lower $Tnbs_1$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-832-09 | MWPT | Lower $Tnbs_1$ | S | S | CMP | E601 | 1 | Y | |
| W-832-09 | MWPT | Lower $Tnbs_1$ | S | S | CMP | E601 | 3 | Y | |
| W-832-10 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-832-10 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-832-10 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 1 | Y | |
| W-832-10 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 3 | Y | |
| W-832-11 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-832-11 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-832-11 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 1 | Y | |
| W-832-11 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 3 | Y | |
| W-832-12 | EW | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-832-12 | EW | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 1 | Y | |

Table 2.7-8. Building 832 Canyon 2003 ground water sampling and analysis plan. (Cont. Page 17 of 21)

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-832-12 | EW | $Tnsc_{1b}$ | S | S | CMP | E601 | 1 | Y | |
| W-832-12 | EW | $Tnsc_{1b}$ | S | S | CMP | E601 | 3 | Y | |
| W-832-13 | EW | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-832-13 | EW | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-832-13 | EW | $Tnsc_{1b}$ | S | S | CMP | E601 | 1 | Y | |
| W-832-13 | EW | $Tnsc_{1b}$ | S | S | CMP | E601 | 3 | Y | |
| W-832-14 | EW | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 1 | N | Dry. |
| W-832-14 | EW | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 4 | N | Dry. |
| W-832-14 | EW | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 1 | N | Dry. |
| W-832-14 | EW | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 4 | N | Dry. |
| W-832-14 | EW | $Tnsc_{1b}$ | S | S | CMP | E601 | 1 | N | Dry. |
| W-832-14 | EW | $Tnsc_{1b}$ | S | S | CMP | E601 | 3 | N | Dry. |
| W-832-15 | EW | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-832-15 | EW | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 1 | N | Sampling personnel shortage. |
| W-832-15 | EW | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 4 | Y | |
| W-832-15 | EW | $Tnsc_{1b}$ | S | S | CMP | E601 | 1 | Y | |
| W-832-15 | EW | $Tnsc_{1b}$ | S | S | CMP | E601 | 3 | Y | |
| W-832-15 | EW | $Tnsc_{1b}$ | B | B | CMP | E8330 | 1 | N | Sampling personnel shortage. |
| W-832-15 | EW | $Tnsc_{1b}$ | B | B | CMP | E8330 | 4 | Y | |
| W-832-16 | EW | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 1 | N | Dry. |
| W-832-16 | EW | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 4 | N | Insufficient water.. |
| W-832-16 | EW | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 1 | N | Dry. |
| W-832-16 | EW | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 4 | N | Insufficient water.. |
| W-832-16 | EW | $Tnsc_{1b}$ | S | S | CMP | E601 | 1 | N | Dry. |
| W-832-16 | EW | $Tnsc_{1b}$ | S | S | CMP | E601 | 3 | N | Dry. |
| W-832-17 | EW | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 1 | N | Dry. |
| W-832-17 | EW | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 4 | N | Insufficient water.. |
| W-832-17 | EW | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 1 | N | Dry. |

Table 2.7-8. Building 832 Canyon 2003 ground water sampling and analysis plan. (Cont. Page 18 of 21)

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-832-17 | EW | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 4 | N | Insufficient water.. |
| W-832-17 | EW | $Tnsc_{1b}$ | S | S | CMP | E601 | 1 | N | Dry. |
| W-832-17 | EW | $Tnsc_{1b}$ | S | S | CMP | E601 | 3 | N | Dry. |
| W-832-18 | EW | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-832-18 | EW | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 1 | N | Insufficient water.. |
| W-832-18 | EW | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 4 | N | Insufficient water.. |
| W-832-18 | EW | $Tnsc_{1b}$ | S | S | CMP | E601 | 1 | Y | |
| W-832-18 | EW | $Tnsc_{1b}$ | S | S | CMP | E601 | 3 | Y | |
| W-832-19 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-832-19 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 1 | N | Insufficient water.. |
| W-832-19 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 4 | N | Dry. |
| W-832-19 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 1 | Y | |
| W-832-19 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 3 | N | Dry. |
| W-832-1927 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E300.0:NO3 | 3 | Y | |
| W-832-1927 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E300.0:NO3 | 4 | Y | |
| W-832-1927 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E300.0:PERC | 3 | Y | |
| W-832-1927 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E300.0:PERC | 4 | Y | |
| W-832-1927 | MWPT | $Tnsc_{1b}$ | Q | Q | CMP | E601 | 1 | N | New well. |
| W-832-1927 | MWPT | $Tnsc_{1b}$ | Q | Q | CMP | E601 | 2 | Y | |
| W-832-1927 | MWPT | $Tnsc_{1b}$ | Q | Q | CMP | E601 | 3 | Y | |
| W-832-1927 | MWPT | $Tnsc_{1b}$ | Q | Q | CMP | E601 | 4 | Y | |
| W-832-20 | EW | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 1 | N | Dry. |
| W-832-20 | EW | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 4 | N | Insufficient water.. |
| W-832-20 | EW | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 1 | N | Dry. |
| W-832-20 | EW | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 4 | N | Insufficient water.. |
| W-832-20 | EW | $Tnsc_{1b}$ | S | S | CMP | E601 | 1 | N | Dry. |
| W-832-20 | EW | $Tnsc_{1b}$ | S | S | CMP | E601 | 3 | N | Dry. |
| W-832-21 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 1 | N | Dry. |

Table 2.7-8. Building 832 Canyon 2003 ground water sampling and analysis plan. (Cont. Page 19 of 21)

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-832-21 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 4 | N | Insufficient water.. |
| W-832-21 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 1 | N | Dry. |
| W-832-21 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 4 | N | Insufficient water.. |
| W-832-21 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 1 | N | Dry. |
| W-832-21 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 3 | N | Dry. |
| W-832-22 | EW | Upper $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 1 | N | Dry. |
| W-832-22 | EW | Upper $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 4 | N | Insufficient water.. |
| W-832-22 | EW | Upper $Tnbs_1$ | A | A | CMP | E300.0:PERC | 1 | N | Dry. |
| W-832-22 | EW | Upper $Tnbs_1$ | A | A | CMP | E300.0:PERC | 4 | N | Insufficient water.. |
| W-832-22 | EW | Upper $Tnbs_1$ | S | S | CMP | E601 | 1 | N | Dry. |
| W-832-22 | EW | Upper $Tnbs_1$ | S | S | CMP | E601 | 3 | N | Dry. |
| W-832-23 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-832-23 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-832-23 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 1 | Y | |
| W-832-23 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 3 | Y | |
| W-832-24 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-832-24 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-832-24 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 1 | Y | |
| W-832-24 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 3 | Y | |
| W-832-25 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-832-25 | MWPT | $Tnsc_{1b}$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-832-25 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 1 | Y | |
| W-832-25 | MWPT | $Tnsc_{1b}$ | S | S | CMP | E601 | 3 | Y | |
| W-832-SC1 | MWPT | Qal | A | A | CMP | E300.0:NO3 | 1 | N | Mud-no sample. |
| W-832-SC1 | MWPT | Qal | A | A | CMP | E300.0:NO3 | 4 | Y | |
| W-832-SC1 | MWPT | Qal | A | A | CMP | E300.0:PERC | 1 | N | Mud-no sample. |
| W-832-SC1 | MWPT | Qal | A | A | CMP | E300.0:PERC | 4 | Y | |
| W-832-SC1 | MWPT | Qal | S | S | CMP | E601 | 1 | N | Mud-no sample. |

**Table 2.7-8. Building 832 Canyon 2003 ground water sampling and analysis plan. (Cont. Page 20 of 21)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-832-SC1 | MWPT | Qal | S | S | CMP | E601 | 3 | Y | |
| W-832-SC2 | MWPT | Qal | A | A | CMP | E300.0:NO3 | 1 | N | Mud-no sample. |
| W-832-SC2 | MWPT | Qal | A | A | CMP | E300.0:NO3 | 4 | N | Dry. |
| W-832-SC2 | MWPT | Qal | A | A | CMP | E300.0:PERC | 1 | N | Mud-no sample. |
| W-832-SC2 | MWPT | Qal | A | A | CMP | E300.0:PERC | 4 | N | Dry. |
| W-832-SC2 | MWPT | Qal | S | S | CMP | E601 | 1 | N | Mud-no sample. |
| W-832-SC2 | MWPT | Qal | S | S | CMP | E601 | 3 | N | Dry. |
| W-832-SC3 | MWPT | Qal | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-832-SC3 | MWPT | Qal | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-832-SC3 | MWPT | Qal | S | S | CMP | E601 | 1 | Y | |
| W-832-SC3 | MWPT | Qal | S | S | CMP | E601 | 3 | Y | |
| W-832-SC4 | MWPT | Qal | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-832-SC4 | MWPT | Qal | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-832-SC4 | MWPT | Qal | S | S | CMP | E601 | 1 | Y | |
| W-832-SC4 | MWPT | Qal | S | S | CMP | E601 | 3 | Y | |
| W-870-01 | MWPT | Qal | A | A | CMP | E300.0:NO3 | 1 | N | Dry. |
| W-870-01 | MWPT | Qal | A | A | CMP | E300.0:NO3 | 4 | N | Dry. |
| W-870-01 | MWPT | Qal | A | A | CMP | E300.0:PERC | 1 | N | Dry. |
| W-870-01 | MWPT | Qal | A | A | CMP | E300.0:PERC | 4 | N | Dry. |
| W-870-01 | MWPT | Qal | S | S | CMP | E601 | 1 | N | Dry. |
| W-870-01 | MWPT | Qal | S | S | CMP | E601 | 3 | N | Dry. |
| W-870-02 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 1 | Y | |
| W-870-02 | MWPT | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 1 | Y | |
| W-870-02 | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 1 | Y | |
| W-870-02 | MWPT | $Tnbs_2$ | S | S | CMP | E601 | 3 | Y | |
| W-880-01 | GW | $Tnbs_2$ | | | | | | | See High Explosives Process Area |
| W-880-02 | GW | Qal | | | | | | | See High Explosives Process Area |
| W-880-03 | GW | $Tnsc_{1b}$ | | | | | | | See High Explosives Process Area |

**Notes and footnotes appear on following page.**

## Table 2.7-8. Building 832 Canyon (OU7) 2003 ground water sampling and analysis plan. (Cont. Page 21 of 21)

**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).**

**Building 832 Contaminants of Concern in the Vadose Zone not detected in Ground Water: HE compounds.**

**CGSA CMP/DIS = Sampling more frequently then required.**

**CGSA CMP/WGMG = Well shared with the Operations and Regulatory Affairs Division, Water Guidance and Monitoring Group and may be sampled at a greater frequency and for additional analytes then required by the CMP. Non-CMP analytes are reported separately by ORAD.**

**CGSA CMP = Central GSA groundwater sampling and analysis plan specified in the GSA RD**

**CMP DMW = CMP detection monitor well.**

**CMP/DIS = Sampling required analyte more frequently then required.**

**CMP/WGMG = Well shared with the Operations and Regulatory Affairs Division, Water Guidance and Monitoring Group and may be sampled at a greater frequency and for additional analytes then required by the CMP. Non-CMP analytes are reported separately by ORAD.**

**CMP = Compliance Monitoring Plan.**

**DIS = Discretionary sampling of non-required analyte.**

**DMW = Detection monitor well (non-CMP).**

**ERD/WGMG = Non-CMP analyte sampled from a well shared by ERD and WGMG.**

**EW = Extraction well.**

**GW = Guard well.**

**MWB = Monitor well used for background.**

**MWPT = Monitor well used for plume tracking.**

**SPR = Spring.**

**WS = Water supply well.**

**Table 2.7-9. Building 832 Canyon OU 2003 VOCs in ground and surface water.**

| Location | Date | Method | TCE (μg/L) | PCE (μg/L) | Total 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) | Freon 11 (μg/L) | Freon 113 (μg/L) | Methylene chloride (μg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W-830-04A | 03/14/03 | E601 | 4.9 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-830-04A | 08/20/03 | 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 |
| W-830-05 | 03/14/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-830-05 | 07/30/03 | E601 | <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-830-09 | 08/28/03 | E601 | <0.5 | <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 | 03/14/03 | E601 | 94 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-830-10 | 03/14/03 DUP | E601 | 91 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-830-10 | 08/25/03 | E601 | 78 DL | <1 D | <1 D | <1 D | <1 D | <1 D | <1 D | <1 D | <1 D | <1 D | <1 D | <1 D |
| W-830-11 | 03/14/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-830-11 | 07/30/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-830-12 | 08/28/03 | E601 | <0.5 | <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 | 03/21/03 | E601 | 21 O | <0.5 O | <0.5 | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 | <0.5 O |
| W-830-13 | 08/20/03 | E601 | 2 | <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 | 03/14/03 | E601 | 2.3 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-830-14 | 03/14/03 DUP | E601 | 2.2 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-830-14 | 08/20/03 | E601 | 1.6 L | <0.5 | 0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| W-830-15 | 08/20/03 | E601 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| W-830-16 | 03/19/03 | E601 | <0.5 | <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 | 04/30/03 | E601 | <0.5 LIJ | <0.5 | <0.5 | <0.5 IJ | <0.5 IJ | <0.5 | <0.5 IJ | <0.5 | <0.5 IJ | <0.5 IJ | <0.5 | <0.5 |
| W-830-16 | 09/10/03 | E601 | <0.5 | <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 | 11/06/03 | E601 | <0.5 | <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 | 03/25/03 | E601 | 0.54 O | <0.5 O | <0.5 | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 |
| W-830-17 | 09/10/03 | E601 | <0.5 | <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 | 02/21/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-830-1730 | 09/18/03 | E601 | <0.5 | <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 | 01/28/03 | E601 | 5 | <0.5 | <0.5 | <0.5 O | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 O | <0.5 | <0.5 O | <0.5 |
| W-830-18 | 01/28/03 DUP | E601 | 5.3 D | <1 D | <1 D | <1 DO | <1 D | <1 D | <1 D | <1 D | <1 DO | <1 D | <1 DO | <1 D |
| W-830-18 | 08/14/03 | E601 | 6.1 | <0.5 | 0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-830-18 | 08/14/03 DUP | E601 | 5.2 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-830-1807 | 10/08/03 | E601 | 2,600 D | 18 D | <10 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D |
| W-830-1829 | 06/30/03 | E601 | 2,400 D | <50 D | <50 D | <50 D | 120 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D |
| W-830-1829 | 06/30/03 DUP | E601 | 2,400 D | <50 D | <50 D | <50 D | 100 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D |
| W-830-1829 | 09/23/03 | E601 | 2,900 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D |
| W-830-1829 | 11/06/03 | E601 | 3,100 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 | 06/30/03 | E601 | 1,100 D | <50 D | <50 D | <50 D | 140 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D |
| W-830-1830 | 09/23/03 | E601 | 1,200 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 | 11/06/03 | E601 | 1,600 D | <25 D | <25 D | <25 D | <25 D | <25 D | <25 D | <25 D | <25 D | <25 D | <25 D | <25 D |
| W-830-1831 | 06/30/03 | E601 | <0.5 | <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 | 09/18/03 | E601 | <0.5 | <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 | 06/30/03 | 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 |

**Table 2.7-9. Building 832 Canyon OU 2003 VOCs in ground and surface water. (Cont. Page 2 of 6)**

| Location | Date | Method | TCE (μg/L) | PCE (μg/L) | Total 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) | Freon 11 (μg/L) | Freon 113 (μg/L) | Methylene chloride (μg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W-830-1832 | 07/30/03 | 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 |
| W-830-19 | 03/19/03 | E601 | 8,500 D | <250 D | <250 D | <250 D | <250 D | <250 D | <250 D | <250 D | <250 D | <250 D | <250 D | <250 D |
| W-830-19 | 03/19/03 DUP | E601 | 8,200 D | 11 | <1 | <0.5 | 1.9 | <0.5 | 2.2 | 1.7 | <0.5 | 1.2 | <0.5 | <0.5 |
| W-830-19 | 10/08/03 | E601 | 1,900 D | 5.8 D | <10 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D |
| W-830-20 | 03/14/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-830-20 | 04/24/03 | E601 | <0.5 | <0.5 O | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-830-20 | 09/08/03 | E601 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 O | <0.5 |
| W-830-20 | 10/11/03 | E601 | <0.5 | <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 | 03/14/03 | E601 | 63 | <0.5 | 5.7 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-830-21 | 08/14/03 | E601 | 69 | <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 | 03/19/03 | 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 |
| W-830-22 | 09/08/03 | E601 | 7.5 L | <0.5 | <0.5 | <0.5 | 1.6 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 O | <0.5 |
| W-830-25 | 03/24/03 | E601 | 660 D | <50 DO | <50 D | <50 DO | <50 D | <50 DO | <50 DO | <50 D | <50 DO | <50 D | <50 DO | <50 D |
| W-830-25 | 08/27/03 | E601 | 490 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D |
| W-830-26 | 03/19/03 | 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 |
| W-830-26 | 08/28/03 | E601 | 5.1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-830-27 | 03/24/03 | E601 | 880 D | <100 DO | <100 D | <100 DO | <100 D | <100 DO | <100 DO | <100 D | <100 DO | <100 D | <100 DO | <100 D |
| W-830-27 | 09/02/03 | E601 | 1,400 D | <25 D | <25 D | <25 D | <25 D | <25 D | <25 D | <25 D | <25 D | <25 D | <25 D | <25 D |
| W-830-28 | 03/24/03 | E601 | 51 DO | <1 DO | <1 D | <1 DO | <1 DO | <1 DO | <1 DO | <1 DO | <1 DO | <1 DO | <1 DO | <1 D |
| W-830-28 | 09/02/03 | E601 | 64 | <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 | 03/19/03 | E601 | <0.5 | <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 | 08/28/03 | E601 | <0.5 | <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 | 08/25/03 | E601 | 3,200 DL | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D |
| W-830-49 | 03/21/03 | E601 | - | <500 DO | <500 D | <500 DO | <500 DO | <500 DO | <500 DO | <500 DO | <500 DO | <500 DO | <500 D | <500 DO |
| W-830-49 | 08/25/03 | E601 | 10,000 DL | <250 D | <250 D | <250 D | <250 D | <250 D | <250 D | <250 D | <250 D | <250 D | <250 D | <250 D |
| W-830-50 | 03/25/03 | E601 | 28 O | <0.5 O | <0.5 | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 |
| W-830-50 | 08/25/03 | 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 |
| W-830-51 | 01/15/03 | E601 | 74 DL | <2.5 DL | <2.5 DL | <2.5 DL | <2.5 DL | <2.5 DL | - | <2.5 DL | <2.5 DL | <2.5 DL | <2.5 DL | <2.5 DL |
| W-830-51 | 04/16/03 | E601 | 100 D | <2.5 D | <2.5 D | <2.5 D | <2.5 D | <2.5 D | <2.5 D | <2.5 D | <2.5 D | <2.5 D | <2.5 D | <2.5 D |
| W-830-51 | 07/09/03 | E601 | 94 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-830-51 | 10/08/03 | E601 | 86 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-830-52 | 01/15/03 | E601 | 55 DL | <5 DIJL | <5 DL | <5 DL | <5 DL | <5 DL | - | <5 DL | <5 DL | <5 DL | <5 DL | <5 DL |
| W-830-52 | 04/16/03 | E601 | 86 D | <2.5 D | <2.5 D | <2.5 D | <2.5 D | <2.5 D | <2.5 D | <2.5 D | <2.5 DO | <2.5 D | <2.5 D | <2.5 D |
| W-830-52 | 07/09/03 | E601 | 90 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-830-52 | 10/08/03 | E601 | 84 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-830-53 | 01/15/03 | E601 | 51 DL | <2.5 DL | <2.5 DL | <2.5 DL | <2.5 DL | <2.5 DL | - | <2.5 DL | <2.5 DL | <2.5 DL | <2.5 DL | <2.5 DL |
| W-830-53 | 04/16/03 | E601 | 81 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-830-53 | 07/09/03 | E601 | 81 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-830-53 | 10/08/03 | E601 | 80 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-830-54 | 03/19/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

**Table 2.7-9. Building 832 Canyon OU 2003 VOCs in ground and surface water. (Cont. Page 3 of 6)**

| Location | Date | Method | TCE (µg/L) | PCE (µg/L) | Total 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) | Freon 11 (µg/L) | Freon 113 (µg/L) | Methylene chloride (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W-830-54 | 09/10/03 | E601 | <0.5 | <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 | 03/25/03 | E601 | 2.3 O | <0.5 O | <0.5 | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 |
| W-830-55 | 09/10/03 | 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 |
| W-830-56 | 03/14/03 | E601 | 2.1 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-830-56 | 08/25/03 | E601 | 1.9 L | <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 | 08/25/03 DUP | E601 | 1.9 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-830-58 | 03/21/03 | E601 | 350 DO | <25 DO | <25 D | <25 DO | <25 DO | <25 DO | <25 DO | <25 DO | <25 DO | <25 DO | <25 D | <25 DO |
| W-830-58 | 03/21/03 DUP | E601 | 490 DO | <12 DO | <12 D | <12 DO | <12 DO | <12 DO | <12 DO | <12 DO | <12 DO | <12 DO | <12 D | <12 DO |
| W-830-58 | 08/27/03 | E601 | 380 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 | 06/11/03 | E601 | 2,900 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D |
| W-830-59 | 10/08/03 | E601 | 1,500 D | <3 D | <5 D | <3 D | <3 D | <3 D | <3 D | <3 D | <3 D | <3 D | <3 D | <3 D |
| W-830-60 | 03/14/03 | E601 | 32 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-830-60 | 08/14/03 | E601 | 33 | <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 | 11/04/03 | E601 | <0.5 | <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 | 03/19/03 | E601 | 160 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D |
| W-832-01 | 08/25/03 | E601 | 130 DL | <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-832-05 | 03/19/03 | E601 | 4.4 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-832-05 | 09/08/03 | E601 | 53 L | <0.5 | <0.5 | <0.5 | 1.9 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 O | <0.5 |
| W-832-06 | 03/19/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-832-06 | 09/08/03 | E601 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 O | <0.5 |
| W-832-09 | 03/20/03 | E601 | <0.5 | <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 | 09/08/03 | E601 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 O | <0.5 |
| W-832-10 | 03/20/03 | E601 | 130 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D |
| W-832-10 | 03/20/03 DUP | E601 | 120 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D | <5 D |
| W-832-10 | 09/08/03 | E601 | 14 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 O | <0.5 |
| W-832-11 | 03/20/03 | E601 | 130 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-832-11 | 09/08/03 | E601 | 15 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 O | <0.5 |
| W-832-12 | 03/11/03 | E601 | - | - | - | - | - | - | - | - | - | - | - | - |
| W-832-12 | 03/31/03 | E601 | 50 | <0.5 | 1.3 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-832-12 | 07/08/03 | E601 | 55 | <0.5 | 1.2 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-832-12 | 10/02/03 | E601 | 68 | <0.5 | 1.6 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-832-12 | 10/06/03 | E601 | - | - | - | - | - | - | - | - | - | - | - | - |
| W-832-12 | 12/03/03 | E601 | - | - | - | - | - | - | - | - | - | - | - | - |
| W-832-12 | 12/10/03 | E601 | - | - | - | - | - | - | - | - | - | - | - | - |
| W-832-13 | 03/11/03 | E601 | - | - | - | - | - | - | - | - | - | - | - | - |
| W-832-13 | 03/31/03 | E601 | 68 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-832-13 | 07/08/03 | E601 | 46 | <0.5 | 1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-832-13 | 10/02/03 | E601 | 55 | <0.5 | 1.3 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-832-13 | 10/06/03 | E601 | - | - | - | - | - | - | - | - | - | - | - | - |
| W-832-13 | 12/03/03 | E601 | - | - | - | - | - | - | - | - | - | - | - | - |

**Table 2.7-9. Building 832 Canyon OU 2003 VOCs in ground and surface water. (Cont. Page 4 of 6)**

| Location | Date | Method | TCE (µg/L) | PCE (µg/L) | Total 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) | Freon 11 (µg/L) | Freon 113 (µg/L) | Methylene chloride (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W-832-13 | 12/10/03 | E601 | - | - | - | - | - | - | - | - | - | - | - | - |
| W-832-14 | 03/12/03 | E601 | - | - | - | - | - | - | - | - | - | - | - | - |
| W-832-14 | 10/06/03 | E601 | - | - | - | - | - | - | - | - | - | - | - | - |
| W-832-14 | 12/03/03 | E601 | - | - | - | - | - | - | - | - | - | - | - | - |
| W-832-14 | 12/10/03 | E601 | - | - | - | - | - | - | - | - | - | - | - | - |
| W-832-15 | 03/11/03 | E601 | - | - | - | - | - | - | - | - | - | - | - | - |
| W-832-15 | 03/31/03 | E601 | 65 | <0.5 | 1.3 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-832-15 | 07/08/03 | E601 | 42 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-832-15 | 10/02/03 | E601 | 40 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-832-15 | 10/08/03 | E601 | - | - | - | - | - | - | - | - | - | - | - | - |
| W-832-15 | 12/03/03 | E601 | - | - | - | - | - | - | - | - | - | - | - | - |
| W-832-15 | 12/10/03 | E601 | - | - | - | - | - | - | - | - | - | - | - | - |
| W-832-16 | 03/12/03 | E601 | - | - | - | - | - | - | - | - | - | - | - | - |
| W-832-16 | 10/06/03 | E601 | - | - | - | - | - | - | - | - | - | - | - | - |
| W-832-16 | 12/03/03 | E601 | - | - | - | - | - | - | - | - | - | - | - | - |
| W-832-16 | 12/11/03 | E601 | - | - | - | - | - | - | - | - | - | - | - | - |
| W-832-17 | 03/11/03 | E601 | - | - | - | - | - | - | - | - | - | - | - | - |
| W-832-17 | 10/08/03 | E601 | - | - | - | - | - | - | - | - | - | - | - | - |
| W-832-17 | 12/04/03 | E601 | - | - | - | - | - | - | - | - | - | - | - | - |
| W-832-17 | 12/11/03 | E601 | - | - | - | - | - | - | - | - | - | - | - | - |
| W-832-18 | 03/12/03 | E601 | - | - | - | - | - | - | - | - | - | - | - | - |
| W-832-18 | 03/31/03 | E601 | 480 D | <0.5 | 1.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-832-18 | 07/08/03 | E601 | 190 D | <0.5 | 2 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-832-18 | 10/02/03 | E601 | 130 D | <0.5 | 1.4 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-832-18 | 10/08/03 | E601 | - | - | - | - | - | - | - | - | - | - | - | - |
| W-832-18 | 12/04/03 | E601 | - | - | - | - | - | - | - | - | - | - | - | - |
| W-832-18 | 12/11/03 | E601 | - | - | - | - | - | - | - | - | - | - | - | - |
| W-832-19 | 03/21/03 | E601 | 9.8 O | <0.5 O | <0.5 | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 | <0.5 O |
| W-832-1927 | 03/25/03 | E601 | 7.9 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | - | <0.5 | - |
| W-832-1927 | 06/27/03 | E601 | 28 | <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 | 09/24/03 | E601 | 31 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 O | 0.51 | <0.5 | <0.5 |
| W-832-1927 | 11/06/03 | E601 | 38 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-832-20 | 03/12/03 | E601 | - | - | - | - | - | - | - | - | - | - | - | - |
| W-832-20 | 10/08/03 | E601 | - | - | - | - | - | - | - | - | - | - | - | - |
| W-832-20 | 12/04/03 | E601 | - | - | - | - | - | - | - | - | - | - | - | - |
| W-832-20 | 12/11/03 | E601 | - | - | - | - | - | - | - | - | - | - | - | - |
| W-832-22 | 03/12/03 | E601 | - | - | - | - | - | - | - | - | - | - | - | - |
| W-832-22 | 10/08/03 | E601 | - | - | - | - | - | - | - | - | - | - | - | - |
| W-832-22 | 12/04/03 | E601 | - | - | - | - | - | - | - | - | - | - | - | - |
| W-832-22 | 12/11/03 | E601 | - | - | - | - | - | - | - | - | - | - | - | - |

**Table 2.7-9. Building 832 Canyon OU 2003 VOCs in ground and surface water. (Cont. Page 5 of 6)**

| Location | Date | Method | TCE (µg/L) | PCE (µg/L) | Total 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) | Freon 11 (µg/L) | Freon 113 (µg/L) | Methylene chloride (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W-832-23 | 03/21/03 | E601 | 200 DO | <5 DO | <5 D | <5 DO | <5 DO | <5 DO | <5 DO | <5 DO | <5 DO | <5 DO | <5 D | <5 DO |
| W-832-23 | 09/08/03 | E601 | 23 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 O | <0.5 |
| W-832-24 | 03/21/03 | E601 | 58 DO | <2.5 DO | <2.5 D | <2.5 DO | <2.5 DO | <2.5 DO | <2.5 DO | <2.5 DO | <2.5 DO | <2.5 DO | <2.5 D | <2.5 DO |
| W-832-24 | 09/08/03 | E601 | 76 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 O | <0.5 |
| W-832-25 | 03/24/03 | E601 | 35 D | <2.5 DO | <2.5 D | <2.5 DO | <2.5 D | <2.5 DO | <2.5 DO | <2.5 D | <2.5 DO | <2.5 D | <2.5 DO | <2.5 D |
| W-832-25 | 03/24/03 DUP | E601 | 89 D | <2.5 DO | <2.5 D | <2.5 DO | <2.5 D | <2.5 DO | <2.5 DO | <2.5 D | <2.5 DO | <2.5 D | <2.5 DO | <2.5 D |
| W-832-25 | 08/27/03 | E601 | 94 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-832-25 | 08/27/03 DUP | E601 | 94 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-SC1 | 03/25/03 | E601 | 39 DO | <1 DO | <1 D | <1 DO | <1 DO | <1 DO | <1 DO | <1 DO | <1 DO | <1 DO | <1 DO | <1 D |
| W-832-SC1 | 09/02/03 | E601 | 77 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-832-SC1 | 09/02/03 DUP | E601 | 72 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-832-SC2 | 03/25/03 | E601 | <0.5 O | <0.5 O | <0.5 | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 |
| W-832-SC3 | 03/25/03 | E601 | 14 O | <0.5 O | <0.5 | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 |
| W-832-SC3 | 09/02/03 | E601 | 45 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-832-SC4 | 03/21/03 | E601 | 15 | <0.5 O | <0.5 | <0.5 O | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 O | <0.5 | <0.5 O | <0.5 |
| W-832-SC4 | 09/02/03 | E601 | 15 | <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 | 03/21/03 | E601 | 1.6 O | <0.5 O | <0.5 | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 | <0.5 O |
| W-870-02 | 09/24/03 | E601 | 1.8 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 O | <0.5 | <0.5 | <0.5 |
| SVI-830-031 | 02/21/03 | E601 | 1,100 D | 3.4 D | <5 D | <3 D | <3 D | <3 D | <3 D | <3 D | <3 D | <3 D | <3 D | <3 D |
| SVI-830-035 | 02/21/03 | E601 | 10,000 D | <10 D | <20 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D | <10 D |
| SVI-830-035 | 07/30/03 | E601 | 8,800 D | <120 D | <120 D | <120 D | <120 D | <120 D | <120 D | <120 D | <120 D | <120 D | <120 D | <120 D |
| SVI-830-035 | 10/30/03 | E601 | 7,400 D | <100 D | <100 D | <100 D | <100 D | <100 D | <100 D | <100 D | <100 D | <100 D | <100 DO | <100 D |
| SPRING3 | 03/25/03 | E601 | 45 O | <0.5 O | <0.5 | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 O | <0.5 |
| SPRING3 | 08/04/03 | E601 | 68 J | <0.5 | - | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 O | <0.5 |
| W-880-01 | 03/14/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-880-01 | 04/24/03 | E601 | <0.5 J | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-880-01 | 07/23/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-880-01 | 10/11/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-880-02 | 03/14/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-880-02 | 04/24/03 | E601 | 0.62 J | 0.57 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-880-02 | 07/23/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-880-02 | 10/11/03 | E601 | 0.59 | 0.53 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-880-03 | 03/14/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-880-03 | 04/24/03 | E601 | <0.5 J | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-880-03 | 07/23/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-880-03 | 10/11/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

**See the following VOCS not detected in the table above.**

Table 2.7-9. Building 834 Canyon OU 2003 VOCs in ground and surface water. (Cont. Page 6 of 6) Other VOCs not detected in the table on pages 1 through 5:

| Location | Date | Method | 1,1,2-Trichloroethane (μg/L) | Total Trihalomethanes (μg/L) | cis-1,2-Dichloroethene (μg/L) | trans-1,2-Dichloroethene (μg/L) |
|---|---|---|---|---|---|---|
| W-830-14 | W-830-13 | E601 | - | - | 0.56 | - |
| W-830-14 | W-830-13 | E601 | - | - | 0.55 | - |
| W-830-14 | W-830-14 | E601 | - | - | 0.5 | - |
| W-830-18 | W-830-1730 | E601 | - | - | 0.68 O | - |
| W-830-18 | W-830-1730 | E601 | - | - | - | - |
| W-830-18 | W-830-18 | E601 | - | - | 0.5 | - |
| W-830-18 | W-830-18 | E601 | - | - | 0.58 | - |
| W-830-19 | W-830-1832 | E601 | 1.4 | 2.2 | - | - |
| W-830-21 | W-830-20 | E601 | - | - | 1.5 | 4.2 |
| W-830-21 | W-830-20 | E601 | - | - | 1.7 | 5.5 |
| W-830-50 | W-830-49 | E601 | - | - | 0.52 O | - |
| W-832-01 | W-830-60 | E601 | - | - | 6.7 DO | - |
| W-832-01 | W-831-01 | E601 | - | - | 5.8 D | - |
| W-832-05 | W-832-01 | E601 | - | - | 1.9 O | - |
| W-832-10 | W-832-09 | E601 | - | - | 5.3 D | - |
| W-832-10 | W-832-10 | E601 | - | - | 0.53 | - |
| W-832-11 | W-832-10 | E601 | - | - | 5.4 D | - |
| W-832-11 | W-832-10 | E601 | - | - | 0.55 | - |
| W-832-12 | W-832-11 | E601 | - | - | 1.3 | - |
| W-832-12 | W-832-12 | E601 | - | - | 1.2 | - |
| W-832-12 | W-832-12 | E601 | - | - | 1.6 | - |
| W-832-13 | W-832-12 | E601 | - | - | 0.8 | - |
| W-832-13 | W-832-13 | E601 | - | - | 1 | - |
| W-832-13 | W-832-13 | E601 | - | - | 1.3 | - |
| W-832-15 | W-832-14 | E601 | - | - | 1.3 | - |
| W-832-15 | W-832-15 | E601 | - | - | 0.76 | - |
| W-832-18 | W-832-17 | E601 | 0.5 | - | 1.5 | - |
| W-832-18 | W-832-18 | E601 | - | - | 2 | - |
| W-832-18 | W-832-18 | E601 | - | - | 1.4 | - |
| W-832-SC1 | W-832-25 | E601 | - | - | 1.3 DO | 1.0 DO |
| W-832-SC1 | W-832-25 | E601 | - | - | 3 | 5.3 |
| W-832-SC1 | W-832-SC1 | E601 | - | - | 2.9 | 4.6 |
| W-832-SC3 | W-832-SC2 | E601 | - | - | 0.55 | 1.2 |
| SPRING3 | SVI-830-035 | E601 | - | - | 0.52 J | 0.93 JL |

**Table 2.7-10. Building 832 Canyon OU chloride, nitrate, perchlorate, and sulfate in ground water.**

| Location | Date | Chloride (mg/L) | Nitrate (as $NO_3$) (mg/L) | Nitrite (as N) (mg/L) | Perchlorate ($\mu$g/L) | Sulfate (mg/L) |
|---|---|---|---|---|---|---|
| W-830-04A | 03/14/03 | - | 78 | - | 5.2 | - |
| W-830-05 | 03/14/03 | - | 65 | - | <4 | - |
| W-830-09 | 10/30/03 DUP | - | <5 D | - | <4 | - |
| W-830-09 | 10/30/03 | - | <0.88 D | - | <4 | - |
| W-830-10 | 03/14/03 | - | 68 | - | <4 | - |
| W-830-10 | 03/14/03 DUP | - | 69 | - | 6.7 | - |
| W-830-11 | 03/14/03 | - | 23 | - | <4 | - |
| W-830-12 | 10/30/03 | - | <5 D | - | <4 | - |
| W-830-13 | 03/21/03 | - | 47 D | - | <4 | - |
| W-830-14 | 03/14/03 | - | <0.44 | - | <4 | - |
| W-830-14 | 03/14/03 DUP | - | <0.88 D | - | <4 | - |
| W-830-15 | 10/27/03 | - | 8.6 D | - | <4 | - |
| W-830-16 | 03/19/03 | - | 3 | - | <4 | - |
| W-830-16 | 09/10/03 | - | 3.5 | - | <4 H | - |
| W-830-17 | 03/25/03 | - | 87 D | - | <4 | - |
| W-830-1730 | 02/21/03 | - | 0.98 | - | <3 | - |
| W-830-18 | 01/28/03 | - | 0.57 | - | <4 | - |
| W-830-18 | 01/28/03 DUP | - | 0.59 | - | <4 | - |
| W-830-1829 | 06/30/03 | 470 D | 55 D | - | <4 | 82 |
| W-830-1829 | 06/30/03 DUP | 490 D | 52 D | - | <4 | <0.5 |
| W-830-1829 | 09/23/03 | - | 57 D | - | <4 H | - |
| W-830-1829 | 11/06/03 | - | 62 DL | - | <4 | - |
| W-830-1830 | 06/30/03 | 700 D | 97 D | - | 4.8 | 250 DL |
| W-830-1830 | 09/23/03 | - | 97 D | - | 5.8 H | - |
| W-830-1830 | 11/06/03 | - | 94 DL | - | 4.7 | - |
| W-830-1831 | 09/18/03 | - | 2.8 | - | <4 H | - |
| W-830-1831 | 11/06/03 | - | 3.1 L | - | <4 | - |
| W-830-1832 | 09/12/03 | - | 2.6 | - | <4 | - |
| W-830-1832 | 11/06/03 | - | 3.2 L | - | <4 | - |
| W-830-19 | 03/19/03 | - | 190 DL | - | <4 | - |
| W-830-19 | 03/19/03 DUP | - | 160 D | - | 7.3 | - |
| W-830-20 | 03/14/03 | - | <0.44 | - | <4 | - |
| W-830-20 | 09/08/03 | - | <0.88 D | - | <4 | - |
| W-830-21 | 03/14/03 | - | <0.44 | - | <4 | - |
| W-830-22 | 03/19/03 | - | 5.4 | - | <4 | - |

**Table 2.7-10. Building 832 Canyon OU chloride, nitrate, perchlorate, and sulfate in ground water.**

| Location | Date | Chloride (mg/L) | Nitrate (as $NO_3$) (mg/L) | Nitrite (as N) (mg/L) | Perchlorate ($\mu$g/L) | Sulfate (mg/L) |
|---|---|---|---|---|---|---|
| W-830-25 | 03/24/03 | - | 77 D | - | 9.4 | - |
| W-830-26 | 03/19/03 | - | 1.7 | - | <4 | - |
| W-830-27 | 03/24/03 | - | 83 D | - | 7 | - |
| W-830-28 | 03/24/03 | - | 10 | - | <4 | - |
| W-830-29 | 03/19/03 | - | <0.5 L | - | <4 | - |
| W-830-30 | 10/30/03 | - | 110 D | - | <4 | - |
| W-830-30 | 10/30/03 DUP | - | 120 D | - | <4 | - |
| W-830-34 | 10/30/03 | - | 120 D | - | <4 | - |
| W-830-49 | 03/21/03 | - | 170 D | - | <4 | - |
| W-830-50 | 03/25/03 | 300 D | 16 | - | <4 | 260 D |
| W-830-51 | 01/15/03 | - | 60 DL | - | <4 | - |
| W-830-51 | 04/16/03 | - | 56 D | - | <4 | - |
| W-830-51 | 07/09/03 | - | 64 | - | 4.6 | - |
| W-830-51 | 10/08/03 | - | 65 D | - | <4 H | - |
| W-830-52 | 01/15/03 | - | 63 DL | - | 4.6 | - |
| W-830-52 | 04/16/03 | - | 61 D | - | <4 | - |
| W-830-52 | 07/09/03 | - | 68 | - | <4 | - |
| W-830-52 | 10/08/03 | - | 70 | - | 4.3 H | - |
| W-830-53 | 01/15/03 | - | 54 DL | - | <4 | - |
| W-830-53 | 04/16/03 | - | 48 D | - | <4 | - |
| W-830-53 | 07/09/03 | - | 56 | - | <4 | - |
| W-830-53 | 10/08/03 | - | 57 | - | <4 H | - |
| W-830-54 | 03/19/03 | - | 2.2 L | - | <4 | - |
| W-830-55 | 03/25/03 | - | 5 | - | <4 | - |
| W-830-56 | 03/14/03 | - | 24 | - | <4 | - |
| W-830-58 | 03/21/03 | - | 57 D | - | 8.7 | - |
| W-830-58 | 03/21/03 DUP | - | 61 D | - | 7.5 | - |
| W-830-59 | 06/11/03 | - | 130 D | - | 5.2 | - |
| W-830-60 | 03/14/03 | - | 7.1 D | - | <4 | - |
| W-831-01 | 11/04/03 | - | <0.5 | - | <4 | - |
| W-832-01 | 03/19/03 | - | 93 DL | - | 6.4 | - |
| W-832-05 | 03/19/03 | - | 2.2 | - | <4 | - |
| W-832-06 | 03/19/03 | - | 19 DL | - | <4 | - |
| W-832-09 | 03/20/03 | - | - | <0.1 | <4 | - |
| W-832-10 | 03/20/03 | - | - | <0.1 | 8.3 | - |

**Table 2.7-10. Building 832 Canyon OU chloride, nitrate, perchlorate, and sulfate in ground water.**

| Location | Date | Chloride (mg/L) | Nitrate (as $NO_3$) (mg/L) | Nitrite (as N) (mg/L) | Perchlorate (μg/L) | Sulfate (mg/L) |
|---|---|---|---|---|---|---|
| W-832-10 | 03/20/03 DUP | - | - | <0.1 | 8.4 | - |
| W-832-11 | 03/20/03 | - | - | <0.1 | 7 | - |
| W-832-12 | 03/31/03 | - | 120 D | - | - | - |
| W-832-12 | 07/08/03 | - | 130 D | - | - | - |
| W-832-12 | 10/02/03 | - | 130 D | - | - | - |
| W-832-13 | 03/31/03 | - | 140 D | - | - | - |
| W-832-13 | 07/08/03 | - | 130 D | - | - | - |
| W-832-13 | 10/02/03 | - | 120 D | - | - | - |
| W-832-15 | 03/31/03 | - | 130 D | - | - | - |
| W-832-15 | 07/08/03 | - | 130 D | - | - | - |
| W-832-15 | 10/02/03 | - | 130 D | - | - | - |
| W-832-15 | 12/17/03 | - | - | - | 12 | - |
| W-832-18 | 03/31/03 | - | 9.8 D | - | - | - |
| W-832-18 | 07/08/03 | - | 12 D | - | - | - |
| W-832-18 | 10/02/03 | - | 36 D | - | - | - |
| W-832-19 | 03/21/03 | - | 88 D | - | <4 | - |
| W-832-1927 | 03/25/03 | - | 48 DH | - | 4.8 | - |
| W-832-1927 | 09/24/03 | - | 56 D | - | 5.2 | - |
| W-832-1927 | 11/06/03 | - | 59 DL | - | 4.2 | - |
| W-832-23 | 03/21/03 | - | 81 D | - | 13 | - |
| W-832-24 | 03/21/03 | - | 72 D | - | <8 D | - |
| W-832-25 | 03/24/03 | - | 87 D | - | 7.6 | - |
| W-832-25 | 03/24/03 DUP | - | 89 D | - | 7.3 | - |
| W-832-SC1 | 03/25/03 | - | <0.5 | - | <8 D | - |
| W-832-SC1 | 10/27/03 | - | <5 D | - | <4 | - |
| W-832-SC3 | 03/25/03 | - | 0.92 | - | <4 | - |
| W-832-SC4 | 03/21/03 | - | 51 DH | - | <4 | - |
| W-870-02 | 03/21/03 | - | 35 D | - | <4 | - |
| SVI-830-031 | 02/21/03 | - | 54 | - | <3 | - |
| SVI-830-035 | 02/21/03 | - | 110 D | - | 3.8 | - |
| SPRING3 | 03/25/03 | - | 43 D | - | <4 | - |
| SPRING3 | 10/27/03 | - | 54 D | - | <4 | - |
| W-880-01 | 03/14/03 | - | <0.44 | - | <4 | - |
| W-880-01 | 07/23/03 | - | <0.44 | - | <4 | - |
| W-880-02 | 03/14/03 | - | <0.88 D | - | <8 D | - |

**Table 2.7-10. Building 832 Canyon OU chloride, nitrate, perchlorate, and sulfate in ground water.**

| Location | Date | Chloride (mg/L) | Nitrate (as $NO_3$) (mg/L) | Nitrite (as N) (mg/L) | Perchlorate ($\mu$g/L) | Sulfate (mg/L) |
|---|---|---|---|---|---|---|
| W-880-02 | 07/23/03 | - | <0.88 D | - | <4 | - |
| W-880-03 | 03/14/03 | - | <0.44 | - | <4 | - |
| W-880-03 | 07/23/03 | - | <0.44 | - | <4 | - |
| SPRING4 | 12/17/03 | - | 90 D | - | <4 L | - |

**Table 2.7-11. Building 832 Canyon OU metals in ground water.**

| Location | Date | Arsenic (mg/L) | Barium (mg/L) | Cadmium (mg/L) | Chromium (mg/L) | Lead (mg/L) | Mercury (mg/L) | Selenium (mg/L) | Silver (mg/L) |
|---|---|---|---|---|---|---|---|---|---|
| W-830-1829 | 06/30/03 | 0.013 | 0.67 | <0.0005 | 0.023 | <0.005 | <0.0002 | <0.005 L | <0.001 |
| W-830-1829 | 06/30/03 DUP | 0.011 | 1.6 | <0.0005 | 0.019 | <0.005 | 0.00021 | <0.005 L | <0.001 |
| W-830-1829 | 11/06/03 | 0.015 | <0.1 | <0.001 | 0.007 | <0.005 | <0.0002 | 0.016 | <0.001 |
| W-830-1830 | 06/30/03 | 0.017 | 0.45 | <0.0005 | 0.015 | 0.0079 | <0.0002 | 0.016 L | <0.001 |
| W-830-1830 | 11/06/03 | 0.014 | <0.1 | <0.001 | <0.005 | <0.005 | <0.0002 | 0.033 | <0.001 |
| W-830-1832 | 09/10/03 | <0.005 | <0.1 | <0.0005 O | <0.005 | <0.005 O | <0.0002 L | <0.005 L | <0.001 LO |
| W-830-1832 | 09/10/03 DUP | 0.0046 | 0.0093 | <0.001 | <0.005 | <0.005 | - | 0.003 | <0.001 |

**Table 2.7-12. Building 832 Canyon OU general minerals in ground water.**

| Constituents of concern | W-830-1829 06/30/2003 | W-830-1829 06/30/03 DUP | W-830-1829 11/06/03 | W-830-1830 06/30/03 | W-830-1830 11/06/03 | W-830-1832 09/10/03 | W-830-19 03/19/03 | W-830-19 03/19/03 DUP | W-830-22 03/19/03 | W-830-26 03/19/03 | W-830-29 03/19/03 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Alkalinity (as $CaCO_3$) (mg/L) | 190 LH | 170 LH | 170 HDL | 160 LH | 160 HDL | 240 DH | 250 DH | 290 DH | 55 DH | 210 DH | 170 DH |
| Aluminum (mg/L) | 0.15 LH | 4.5 LH | <0.1 | <0.1 LH | <0.1 | <0.05 | <0.1 L | <0.05 | <0.1 L | <0.1 L | <0.1 L |
| Bicarbonate Alk (as $CaCO_3$) (mg/L) | 190 H | 170 H | 170 HD | 160 H | 160 HD | 240 DH | 250 DH | 290 DH | <10 DH | <10 DH | 170 DH |
| Calcium (mg/L) | 79 H | 47 H | 48 | 89 H | 68 | 18 | 52 L | 49 L | 38 L | 10 L | 41 L |
| Carbonate Alk (as $CaCO_3$) (mg/L) | <5 H | <5 H | <25 DH | <5 H | <25 DH | <25 DH | <10 DH | <10 DH | 47 DH | 130 DH | <10 DH |
| Chloride (mg/L) | - | - | 480 D | - | 820 D | 220 D | 490 D | 380 D | 410 D | 140 D | 67 D |
| Copper (mg/L) | <0.01 H | 0.016 H | <0.01 | <0.01 H | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 |
| Fluoride (mg/L) | 0.71 | <0.1 | 0.68 | 0.67 | 0.6 | 0.5 | 0.7 | 0.91 D | 0.15 | <0.1 | 0.53 |
| Hydroxide Alk (as $CaCO_3$) (mg/L) | <5 H | <5 H | <25 DH | <5 H | <25 DH | <25 DH | <10 DH | <10 DH | <10 DH | 87 DH | <10 DH |
| Iron (mg/L) | 0.30 LH | 4.2 LH | - | <0.1 LH | - | <0.1 | <0.1 | <0.05 | <0.1 | 0.2 | <0.1 |
| Magnesium (mg/L) | 70 H | 130 H | 28 | 36 H | 37 | 2.9 | 30 | 24 | 1.7 | 3.7 | 21 |
| Manganese (mg/L) | 0.031 H | 0.18 H | <0.01 | 0.048 H | 0.046 | 0.012 | <0.01 | <0.01 | <0.01 | <0.01 | 0.14 |
| Nickel (mg/L) | <0.05 H | <0.05 H | <0.05 | <0.05 H | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Nitrate (as N) (mg/L) | - | - | 17 D | - | 22 D | 0.72 | 44 D | 26 DH | 1.2 | 0.37 | <0.1 |
| Nitrate (as $NO_3$) (mg/L) | 53 D | 53 D | 74 D | 96 D | 96 D | 3.2 | - | 160 DH | - | - | - |
| Nitrate plus Nitrite (as N) (mg/L) | - | - | - | - | - | - | - | 26 DHL | - | - | - |
| Nitrite (as N) (mg/L) | - | - | <0.1 | - | 4.5 D | <0.1 | <0.1 L | <0.02 | <0.1 | <0.1 | <0.1 L |
| pH (Units) | - | - | 8 | - | 7.8 | 8.2 | 7.9 | 8.1 | 9.6 | 11 | 7.9 |
| Ortho-Phosphate (mg/L) | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 H | 0.1 | <0.1 H | <0.1 H | <0.1 H |
| Phosphate as P (mg/L) | - | - | - | - | - | - | 0.064 H | - | 0.15 H | 0.20 H | 0.076 H |
| Total Phosphorus (as P) (mg/L) | 2.9 DH | 0.47 H | 0.082 H | 2.2 DH | 0.045 H | 0.091 H | - | 0.060 H | - | - | - |
| Potassium (mg/L) | 20 H | 20 H | 21 | 23 H | 25 | 14 | 21 | 20 | 19 | 51 | 7.6 |
| Sodium (mg/L) | 340 H | 340 H | - | 410 H | - | 350 | 420 L | 470 L | 290 L | 170 L | 84 L |
| Total dissolved solids (TDS) (mg/L) | - | - | 1,400 H | - | 1,600 H | 1,200 H | - | 1,600 D | - | - | - |
| Specific Conductance ($\mu$mhos/cm) | 2,100 L | 2,200 L | 2,100 L | 2,700 L | 2,600 L | 1,700 | - | 2,000 | - | - | - |
| Sulfate (mg/L) | - | - | 230 D | - | 170 D | 410 D | 280 D | 240 D | 290 D | 65 D | 140 D |
| Surfactants (mg/L) | <0.05 O | <0.05 O | <0.05 | <0.05 O | <0.05 | <0.05 O | <0.05 | <0.5 | <0.05 | <0.05 | <0.05 |
| Total Hardness (as $CaCO_3$) (mg/L) | 480 H | 830 H | 250 H | 480 H | 330 H | 58 | 250 H | 220 | 100 H | 41 H | 190 H |
| Zinc (mg/L) | <0.05 H | 0.067 H | <0.05 | <0.05 H | 0.072 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |

**Table 2.7-13. Building 832 OU 2003 tritium in ground water.**

| Location | Date | Tritium (pCi/L) |
|---|---|---|
| W-830-1829 | 06/30/03 | <99.6 |
| W-830-1829 | 06/30/03 DUP | <110 |
| W-830-1829 | 11/06/03 | <95.2 |
| W-830-1830 | 06/30/03 | <104 |
| W-830-1830 | 11/06/03 | <97.3 |
| W-830-1832 | 09/10/03 | <88.8 |

**Table 2.7-14. Building 832 Canyon OU aromatic hydrocarbons in ground water.**

| Location | Date | Benzene (μg/L) | Chlorobenzene (μg/L) | 1,2-Dichlorobenzene (μg/L) | 1,3-Dichlorobenzene (μg/L) | 1,4-Dichlorobenzene (μg/L) | Ethylbenzene (μg/L) | Toluene (μg/L) | o-Xylene (μg/L) | m- and p-Xylene Isomers (μg/L) | Total xylene isomers (μg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| W-830-1829 | 06/30/03 | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | - | - | <50 D |
| W-830-1829 | 06/30/03 DUP | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | <50 D | - | - | <50 D |
| W-830-1829 | 11/06/03 | <40 DH | <30 DH | <30 DH | <30 DH | <30 DH | <30 DH | <30 DH | <40 DH | <40 DH | 42 HD |
| W-830-1830 | 06/30/03 | <25 D | <25 D | <25 D | <25 D | <25 D | <25 D | <25 D | - | - | <25 D |
| W-830-1830 | 11/06/03 | <20 DH | <15 DH | <15 DH | <15 DH | <15 DH | <15 DH | <15 DH | <20 DH | <20 DH | <20 DH |
| W-830-1831 | 06/30/03 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | - | - | <0.5 |
| W-830-1832 | 06/30/03 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | - | - | <0.5 |
| W-830-1832 | 07/30/03 | <0.4 | <0.3 | <0.3 | <0.3 | <0.3 | <0.3 | <0.3 | - | - | <0.4 |
| W-830-1832 | 09/10/03 | <0.4 H | <0.3 H | <0.3 H | <0.3 H | <0.3 H | <0.3 H | <0.3 H | <0.4 H | <0.4 H | <0.4 H |

**Table 2.7-15. Building 832 OU 2003 high explosive compounds in ground water.**

| Location | Date | HMX ($\mu$g/L) | RDX ($\mu$g/L) |
|---|---|---|---|
| W-830-1829 | 11/06/03 | <1.4 | <1.4 |
| W-830-1830 | 11/06/03 | 1.4 | <1.3 |
| W-830-1832 | 09/10/03 | <2.1 | <2.1 |
| W-832-15 | 12/17/03 | <5 D | - |
| W-880-01 | 03/14/03 | <5 | <5 |
| W-880-01 | 07/23/03 | <5 | <5 |
| W-880-02 | 03/14/03 | <5 | <5 |
| W-880-03 | 03/14/03 | <5 | <5 |
| W-880-03 | 07/23/03 | <5 | <5 |

**Table 2.7-16. Building 832 Canyon OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| SPRING3 | 01/14/03 | 4.44 | 552.28 | |
| SPRING3 | 02/06/03 | 4.4 | 552.32 | |
| SPRING3 | 03/10/03 | 4.55 | 552.17 | |
| SPRING3 | 04/15/03 | 4.62 | 552.1 | |
| SPRING3 | 07/01/03 | 5.61 | 551.11 | |
| SPRING3 | 10/10/03 | 4.96 | 551.76 | |
| SVI-830-031 | 01/06/03 | 20.48 | 671.85 | CB |
| SVI-830-031 | 02/05/03 | 21.71 | 670.62 | CB |
| SVI-830-031 | 03/04/03 | 22.96 | 669.37 | CB |
| SVI-830-031 | 04/05/03 | 23.77 | 668.56 | CB |
| SVI-830-031 | 07/09/03 | 24.34 | 667.99 | CB |
| SVI-830-031 | 10/01/03 | 23.66 | 668.67 | CB |
| SVI-830-032 | 01/06/03 | 31.69 | 550.71 | |
| SVI-830-032 | 02/05/03 | 32.61 | 549.79 | |
| SVI-830-032 | 03/04/03 | - | - | DRY |
| SVI-830-032 | 04/05/03 | 33.17 | 549.23 | |
| SVI-830-032 | 07/09/03 | - | - | DRY |
| SVI-830-032 | 10/01/03 | - | - | DRY |
| SVI-830-033 | 01/06/03 | 23.91 | 668.44 | |
| SVI-830-033 | 02/05/03 | 23.96 | 668.39 | |
| SVI-830-033 | 03/04/03 | 24.87 | 667.48 | |
| SVI-830-033 | 04/05/03 | 24.87 | 667.48 | |
| SVI-830-033 | 07/09/03 | 24.83 | 667.52 | |
| SVI-830-033 | 10/01/03 | 24.81 | 667.54 | |
| SVI-830-035 | 01/06/03 | 21.04 | 671.32 | |
| SVI-830-035 | 02/05/03 | 22.56 | 669.8 | |
| SVI-830-035 | 03/04/03 | 23.17 | 669.19 | |
| SVI-830-035 | 04/05/03 | 23.37 | 668.99 | |
| SVI-830-035 | 07/09/03 | 23.63 | 668.73 | |
| SVI-830-035 | 10/01/03 | 23.66 | 668.7 | |
| W-830-04A | 01/06/03 | 43.94 | 580.16 | |
| W-830-04A | 02/03/03 | 44.1 | 580 | |
| W-830-04A | 03/01/03 | 43.68 | 580.42 | |
| W-830-04A | 04/08/03 | 43.71 | 580.39 | |
| W-830-04A | 07/07/03 | 44.75 | 579.35 | |

**Table 2.7-16. Building 832 Canyon OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-830-04A | 10/02/03 | 44.65 | 579.45 | |
| W-830-05 | 01/06/03 | 24.92 | 559.45 | |
| W-830-05 | 02/03/03 | 25 | 559.37 | |
| W-830-05 | 03/01/03 | 24.96 | 559.41 | |
| W-830-05 | 04/15/03 | 24.92 | 559.45 | |
| W-830-05 | 07/07/03 | 24.96 | 559.41 | |
| W-830-05 | 10/02/03 | 24.94 | 559.43 | |
| W-830-07 | 01/11/03 | 11.5 | 623.3 | MUD |
| W-830-07 | 02/05/03 | - | - | DRY |
| W-830-07 | 03/04/03 | - | - | DRY |
| W-830-07 | 04/08/03 | - | - | DRY |
| W-830-07 | 07/01/03 | - | - | DRY |
| W-830-07 | 10/02/03 | - | - | DRY |
| W-830-09 | 01/06/03 | 100.65 | 596.45 | |
| W-830-09 | 02/05/03 | 101.59 | 595.51 | |
| W-830-09 | 03/04/03 | 101.36 | 595.74 | |
| W-830-09 | 04/05/03 | 101.6 | 595.5 | |
| W-830-09 | 07/09/03 | 100.86 | 596.24 | |
| W-830-09 | 10/01/03 | 100.88 | 596.22 | |
| W-830-10 | 01/06/03 | 16.67 | 580.03 | |
| W-830-10 | 02/03/03 | 16.82 | 579.88 | |
| W-830-10 | 03/01/03 | 16.45 | 580.25 | |
| W-830-10 | 04/15/03 | 16.4 | 580.3 | |
| W-830-10 | 07/07/03 | 17.5 | 579.2 | |
| W-830-10 | 10/02/03 | 17.37 | 579.33 | |
| W-830-11 | 01/06/03 | 33.15 | 563.04 | |
| W-830-11 | 02/03/03 | 33.7 | 562.49 | |
| W-830-11 | 03/01/03 | 33.49 | 562.7 | |
| W-830-11 | 04/15/03 | 33.75 | 562.44 | |
| W-830-11 | 07/07/03 | 35.59 | 560.6 | |
| W-830-11 | 10/02/03 | 34.62 | 561.57 | |
| W-830-12 | 01/06/03 | 103.4 | 589.22 | |
| W-830-12 | 02/05/03 | 102.83 | 589.79 | |
| W-830-12 | 03/06/03 | 102.53 | 590.09 | |
| W-830-12 | 04/05/03 | 102.08 | 590.54 | |
| W-830-12 | 07/09/03 | 102.95 | 589.67 | |

Table 2.7-16. Building 832 Canyon OU 2003 ground water elevations.

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-830-12 | 10/01/03 | 102.89 | 589.73 | |
| W-830-13 | 01/06/03 | 24.73 | 539.78 | |
| W-830-13 | 02/03/03 | 25.36 | 539.15 | |
| W-830-13 | 03/05/03 | 25.22 | 539.29 | |
| W-830-13 | 04/15/03 | 25.9 | 538.61 | |
| W-830-13 | 07/07/03 | 27.88 | 536.63 | |
| W-830-13 | 10/02/03 | 28.11 | 536.4 | |
| W-830-14 | 01/06/03 | 20.18 | 545.32 | |
| W-830-14 | 02/03/03 | 20.17 | 545.33 | |
| W-830-14 | 03/05/03 | 20.21 | 545.29 | |
| W-830-14 | 04/15/03 | 20.2 | 545.3 | |
| W-830-14 | 07/07/03 | 20.22 | 545.28 | |
| W-830-14 | 10/02/03 | 20.22 | 545.28 | |
| W-830-15 | 01/06/03 | 2.14 | 562.95 | CB |
| W-830-15 | 02/03/03 | 1.5 | 563.59 | CB |
| W-830-15 | 03/05/03 | 0.76 | 564.33 | CB |
| W-830-15 | 04/15/03 | 1 | 564.09 | CB |
| W-830-15 | 07/07/03 | 3.58 | 561.51 | CB |
| W-830-15 | 10/10/03 | 6.02 | 559.07 | CB |
| W-830-16 | 01/11/03 | 94.86 | 576.02 | |
| W-830-16 | 02/05/03 | 94.81 | 576.07 | |
| W-830-16 | 03/05/03 | 94.58 | 576.3 | |
| W-830-16 | 04/15/03 | 94.59 | 576.29 | |
| W-830-16 | 07/28/03 | 95.94 | 574.94 | |
| W-830-16 | 10/02/03 | 95.87 | 575.01 | |
| W-830-17 | 01/11/03 | 108.65 | 564.57 | |
| W-830-17 | 02/05/03 | 108.59 | 564.63 | |
| W-830-17 | 03/05/03 | 108.58 | 564.64 | |
| W-830-17 | 04/15/03 | 108.72 | 564.5 | |
| W-830-17 | 07/28/03 | 108.49 | 564.73 | |
| W-830-17 | 10/02/03 | 108.55 | 564.67 | |
| W-830-1730 | 01/13/03 | 24.74 | 522.96 | |
| W-830-1730 | 02/06/03 | 24.68 | 523.02 | |
| W-830-1730 | 03/05/03 | 24.67 | 523.03 | |
| W-830-1730 | 04/15/03 | 24.6 | 523.1 | |
| W-830-1730 | 07/07/03 | 24.65 | 523.05 | |

**Table 2.7-16. Building 832 Canyon OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-830-1730 | 10/02/03 | 24.74 | 522.96 | |
| W-830-18 | 01/06/03 | 63.08 | 591.41 | |
| W-830-18 | 02/03/03 | 63 | 591.49 | |
| W-830-18 | 03/01/03 | 63.96 | 590.53 | |
| W-830-18 | 04/08/03 | 62.69 | 591.8 | |
| W-830-18 | 07/07/03 | 62.06 | 592.43 | |
| W-830-18 | 10/02/03 | 62.03 | 592.46 | |
| W-830-1807 | 07/01/03 | - | - | DRY |
| W-830-1807 | 10/01/03 | - | - | DRY |
| W-830-1829 | 07/09/03 | 52.17 | 606.83 | |
| W-830-1829 | 10/01/03 | 52.21 | 606.79 | |
| W-830-1830 | 07/09/03 | 55.08 | 605.92 | |
| W-830-1830 | 10/01/03 | 55.05 | 605.95 | |
| W-830-19 | 01/06/03 | 39.33 | 616.51 | |
| W-830-19 | 02/05/03 | 38.81 | 617.03 | |
| W-830-19 | 03/04/03 | 38.85 | 616.99 | |
| W-830-19 | 04/07/03 | 39.18 | 616.66 | |
| W-830-19 | 07/09/03 | - | - | PE |
| W-830-19 | 10/01/03 | - | - | NM |
| W-830-20 | 01/06/03 | 13.31 | 583.65 | |
| W-830-20 | 02/03/03 | 13.05 | 583.91 | |
| W-830-20 | 03/01/03 | 12.9 | 584.06 | |
| W-830-20 | 04/15/03 | 12.67 | 584.29 | |
| W-830-20 | 07/07/03 | 12.94 | 584.02 | |
| W-830-20 | 10/02/03 | 13.28 | 583.68 | |
| W-830-21 | 01/06/03 | 66.82 | 587.12 | |
| W-830-21 | 02/03/03 | 66.75 | 587.19 | |
| W-830-21 | 03/01/03 | 66.73 | 587.21 | |
| W-830-21 | 04/08/03 | 66.62 | 587.32 | |
| W-830-21 | 07/07/03 | 66.66 | 587.28 | |
| W-830-21 | 10/02/03 | 66.78 | 587.16 | |
| W-830-22 | 01/06/03 | 48.24 | 606.78 | CB |
| W-830-22 | 02/05/03 | 47.91 | 607.11 | CB |
| W-830-22 | 03/04/03 | 47.56 | 607.46 | CB |
| W-830-22 | 04/08/03 | 47.52 | 607.5 | CB |
| W-830-22 | 07/09/03 | 47.77 | 607.25 | CB |

**Table 2.7-16. Building 832 Canyon OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-830-22 | 10/01/03 | 47.54 | 607.48 | CB |
| W-830-25 | 01/11/03 | 23.15 | 597.19 | |
| W-830-25 | 02/05/03 | 23 | 597.34 | |
| W-830-25 | 03/04/03 | 22.8 | 597.54 | |
| W-830-25 | 04/08/03 | 22.77 | 597.57 | |
| W-830-25 | 07/28/03 | 23.13 | 597.21 | |
| W-830-25 | 10/02/03 | 23.02 | 597.32 | |
| W-830-26 | 01/06/03 | 65.28 | 593.25 | |
| W-830-26 | 02/05/03 | 65.13 | 593.4 | |
| W-830-26 | 03/04/03 | 64.83 | 593.7 | |
| W-830-26 | 04/07/03 | 64.87 | 593.66 | |
| W-830-26 | 07/09/03 | 64.4 | 594.13 | |
| W-830-26 | 10/01/03 | 64.24 | 594.29 | |
| W-830-27 | 01/11/03 | 19.76 | 604.5 | |
| W-830-27 | 02/05/03 | 19.62 | 604.64 | |
| W-830-27 | 03/04/03 | 18.69 | 605.57 | |
| W-830-27 | 04/08/03 | 18.39 | 605.87 | |
| W-830-27 | 07/28/03 | 20.03 | 604.23 | |
| W-830-27 | 10/02/03 | 19.69 | 604.57 | |
| W-830-28 | 01/11/03 | 31.7 | 590.46 | |
| W-830-28 | 02/05/03 | 31.52 | 590.64 | |
| W-830-28 | 03/04/03 | 31.32 | 590.84 | |
| W-830-28 | 04/08/03 | 31.29 | 590.87 | |
| W-830-28 | 07/28/03 | 30.6 | 591.56 | |
| W-830-28 | 10/02/03 | 30.61 | 591.55 | |
| W-830-29 | 01/06/03 | 98.42 | 562.61 | CB |
| W-830-29 | 02/05/03 | 97.27 | 563.76 | CB |
| W-830-29 | 03/04/03 | 96.27 | 564.76 | CB |
| W-830-29 | 04/07/03 | 96.01 | 565.02 | CB |
| W-830-29 | 07/09/03 | 100.49 | 560.54 | CB |
| W-830-29 | 10/01/03 | 102.22 | 558.81 | CB |
| W-830-30 | 01/06/03 | 18.74 | 674.07 | |
| W-830-30 | 02/05/03 | 20.04 | 672.77 | |
| W-830-30 | 03/04/03 | 20.9 | 671.91 | |
| W-830-30 | 04/05/03 | 21.29 | 671.52 | |
| W-830-30 | 07/09/03 | 21.87 | 670.64 | |

**Table 2.7-16. Building 832 Canyon OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-830-30 | 10/01/03 | 21.31 | 671.2 | |
| W-830-34 | 01/06/03 | 18.68 | 673.97 | |
| W-830-34 | 02/05/03 | 19.71 | 672.94 | |
| W-830-34 | 03/04/03 | 20.13 | 672.52 | |
| W-830-34 | 04/05/03 | 20.53 | 672.12 | |
| W-830-34 | 07/09/03 | - | - | NM/CB EQUIP ON CB |
| W-830-34 | 10/01/03 | - | - | NM/CB |
| W-830-49 | 01/06/03 | 36.62 | 630.56 | |
| W-830-49 | 02/05/03 | 36.29 | 630.89 | |
| W-830-49 | 03/04/03 | 36.56 | 630.62 | |
| W-830-49 | 04/07/03 | 37.21 | 629.97 | |
| W-830-49 | 07/09/03 | 37.84 | 629.34 | |
| W-830-49 | 10/01/03 | 38.09 | 629.09 | |
| W-830-50 | 01/06/03 | 29.15 | 579.99 | |
| W-830-50 | 02/03/03 | 29.3 | 579.84 | |
| W-830-50 | 03/01/03 | 29 | 580.14 | |
| W-830-50 | 04/15/03 | 28.95 | 580.19 | |
| W-830-50 | 07/07/03 | 29.97 | 579.17 | |
| W-830-50 | 10/02/03 | 29.93 | 579.21 | |
| W-830-51 | 01/11/03 | - | - | FL |
| W-830-51 | 02/03/03 | - | - | FL |
| W-830-51 | 03/05/03 | - | - | FL |
| W-830-51 | 04/15/03 | - | - | FL |
| W-830-51 | 07/09/03 | - | - | FL |
| W-830-51 | 10/02/03 | - | - | FL |
| W-830-52 | 01/11/03 | - | - | FL |
| W-830-52 | 02/03/03 | - | - | FL |
| W-830-52 | 03/05/03 | - | - | FL |
| W-830-52 | 04/15/03 | - | - | FL |
| W-830-52 | 07/09/03 | - | - | FL |
| W-830-52 | 10/02/03 | - | - | FL |
| W-830-53 | 01/11/03 | - | - | FL |
| W-830-53 | 02/03/03 | - | - | FL |
| W-830-53 | 03/05/03 | - | - | FL |
| W-830-53 | 04/15/03 | - | - | FL |
| W-830-53 | 07/09/03 | - | - | FL |

**Table 2.7-16. Building 832 Canyon OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-830-53 | 10/02/03 | - | - | FL |
| W-830-54 | 01/11/03 | 52.45 | 550.57 | |
| W-830-54 | 02/05/03 | 52.47 | 550.55 | |
| W-830-54 | 03/05/03 | 52.3 | 550.72 | |
| W-830-54 | 04/15/03 | 52.5 | 550.52 | |
| W-830-54 | 07/28/03 | 54.6 | 548.42 | |
| W-830-54 | 10/02/03 | 55.21 | 547.81 | |
| W-830-55 | 01/11/03 | 86.11 | 577.93 | |
| W-830-55 | 02/05/03 | 86.18 | 577.86 | |
| W-830-55 | 03/05/03 | 85.82 | 578.22 | |
| W-830-55 | 04/15/03 | 85.87 | 578.17 | |
| W-830-55 | 07/28/03 | 87.06 | 576.98 | |
| W-830-55 | 10/02/03 | 87.1 | 576.94 | |
| W-830-56 | 01/06/03 | 31.05 | 545.77 | |
| W-830-56 | 02/03/03 | 31 | 545.82 | |
| W-830-56 | 03/01/03 | 31.1 | 545.72 | |
| W-830-56 | 04/15/03 | 31.08 | 545.74 | |
| W-830-56 | 07/07/03 | 31.09 | 545.73 | |
| W-830-56 | 10/02/03 | 31.13 | 545.69 | |
| W-830-57 | 01/11/03 | 45.67 | 594.2 | |
| W-830-57 | 02/05/03 | 47.95 | 591.92 | |
| W-830-57 | 03/04/03 | 46.56 | 593.31 | |
| W-830-57 | 04/08/03 | 47.65 | 592.22 | |
| W-830-57 | 07/28/03 | 44.58 | 595.29 | |
| W-830-57 | 10/02/03 | 44.62 | 595.25 | |
| W-830-58 | 01/11/03 | 27.45 | 605.63 | |
| W-830-58 | 02/05/03 | 23.11 | 609.97 | |
| W-830-58 | 03/04/03 | 22.85 | 610.23 | |
| W-830-58 | 04/08/03 | 22.82 | 610.26 | |
| W-830-58 | 07/28/03 | 23.7 | 609.38 | |
| W-830-58 | 10/02/03 | 23.77 | 609.31 | |
| W-830-59 | 01/06/03 | 54.52 | 611.59 | CB |
| W-830-59 | 02/05/03 | 53.05 | 613.06 | CB |
| W-830-59 | 03/04/03 | 54.17 | 611.94 | CB |
| W-830-59 | 04/05/03 | - | - | NM/CB |
| W-830-59 | 07/09/03 | - | - | NM/CB |

Table 2.7-16. Building 832 Canyon OU 2003 ground water elevations.

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-830-59 | 10/01/03 | - | - | SWAT UNIT |
| W-830-60 | 01/06/03 | 44.13 | 593.26 | |
| W-830-60 | 02/03/03 | 44 | 593.39 | |
| W-830-60 | 03/01/03 | 43.87 | 593.52 | |
| W-830-60 | 04/08/03 | 43.63 | 593.76 | |
| W-830-60 | 07/07/03 | 43.09 | 594.3 | |
| W-830-60 | 10/02/03 | 43.02 | 594.37 | |
| W-831-01 | 01/07/03 | 130.4 | 643.09 | |
| W-831-01 | 04/08/03 | 130.28 | 643.21 | |
| W-831-01 | 07/10/03 | 130.12 | 643.37 | |
| W-831-01 | 10/01/03 | 130.13 | 643.36 | |
| W-832-01 | 01/07/03 | 29.31 | 676.75 | |
| W-832-01 | 02/05/03 | 29.38 | 676.68 | |
| W-832-01 | 03/04/03 | 29.43 | 676.63 | |
| W-832-01 | 04/07/03 | 29.7 | 676.36 | |
| W-832-01 | 07/09/03 | 30.23 | 675.83 | |
| W-832-01 | 10/01/03 | 28.89 | 677.17 | |
| W-832-05 | 01/07/03 | 32.1 | 686.57 | CB |
| W-832-05 | 02/06/03 | 32.06 | 686.61 | CB |
| W-832-05 | 03/04/03 | 32 | 686.67 | CB |
| W-832-05 | 04/08/03 | 32.22 | 686.45 | CB |
| W-832-05 | 07/10/03 | 32.83 | 685.84 | CB |
| W-832-05 | 10/01/03 | 31.21 | 687.46 | CB |
| W-832-06 | 01/07/03 | 25.44 | 695.41 | |
| W-832-06 | 02/06/03 | 25.16 | 695.69 | |
| W-832-06 | 03/04/03 | 25.15 | 695.7 | |
| W-832-06 | 04/08/03 | 25.46 | 695.39 | |
| W-832-06 | 07/10/03 | 24.83 | 696.02 | |
| W-832-06 | 10/01/03 | 25.24 | 695.61 | |
| W-832-09 | 01/07/03 | 72.74 | 634.48 | |
| W-832-09 | 02/05/03 | 72.49 | 634.73 | |
| W-832-09 | 03/04/03 | 72.35 | 634.87 | |
| W-832-09 | 04/07/03 | 72.47 | 634.75 | |
| W-832-09 | 07/09/03 | 72.31 | 634.91 | |
| W-832-09 | 10/01/03 | 72.66 | 634.56 | |
| W-832-10 | 01/07/03 | 29.73 | 656.42 | |

**Table 2.7-16. Building 832 Canyon OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-832-10 | 02/05/03 | 29.28 | 656.87 | |
| W-832-10 | 03/04/03 | 29.74 | 656.41 | |
| W-832-10 | 04/07/03 | 30.2 | 655.95 | |
| W-832-10 | 07/09/03 | 30.82 | 655.33 | |
| W-832-10 | 10/09/03 | 30.85 | 655.3 | |
| W-832-11 | 01/07/03 | 29.63 | 668.66 | |
| W-832-11 | 02/05/03 | 29.81 | 668.48 | |
| W-832-11 | 03/04/03 | 29.88 | 668.41 | |
| W-832-11 | 04/07/03 | 30.08 | 668.21 | |
| W-832-11 | 07/09/03 | 30.64 | 668.01 | |
| W-832-11 | 10/09/03 | 30.18 | 668.47 | |
| W-832-12 | 01/07/03 | 24.88 | 696.59 | CB |
| W-832-12 | 02/06/03 | 24.88 | 696.59 | CB |
| W-832-12 | 03/04/03 | 25 | 696.47 | CB |
| W-832-12 | 04/08/03 | 24.91 | 696.56 | CB |
| W-832-12 | 07/10/03 | 23.48 | 697.99 | CB |
| W-832-12 | 10/03/03 | 25.1 | 696.37 | CB |
| W-832-13 | 01/07/03 | 21.79 | 700.87 | CB |
| W-832-13 | 02/06/03 | 21.1 | 701.56 | CB |
| W-832-13 | 03/04/03 | 21.86 | 700.8 | CB |
| W-832-13 | 04/08/03 | 21.88 | 700.78 | CB |
| W-832-13 | 07/10/03 | 22.26 | 700.4 | CB |
| W-832-13 | 10/01/03 | - | - | DRY/CB |
| W-832-14 | 01/07/03 | - | - | DRY |
| W-832-14 | 02/06/03 | 24.33 | 696.84 | |
| W-832-14 | 03/04/03 | 24.52 | 696.65 | CB |
| W-832-14 | 04/08/03 | 24.67 | 696.5 | |
| W-832-14 | 07/10/03 | 25.31 | 695.86 | |
| W-832-14 | 10/01/03 | 25.4 | 695.77 | |
| W-832-15 | 01/07/03 | 22.07 | 698.81 | CB |
| W-832-15 | 02/06/03 | 23.12 | 697.76 | CB |
| W-832-15 | 03/04/03 | 22.87 | 698.01 | CB |
| W-832-15 | 04/08/03 | 23.13 | 697.75 | CB |
| W-832-15 | 07/10/03 | 20.71 | 700.17 | CB |
| W-832-15 | 10/01/03 | 22.63 | 698.25 | CB |
| W-832-16 | 01/07/03 | 17.73 | 703.01 | CB |

**Table 2.7-16. Building 832 Canyon OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-832-16 | 02/06/03 | 17.72 | 703.02 | CB |
| W-832-16 | 03/04/03 | 17.51 | 703.23 | CB |
| W-832-16 | 04/08/03 | 17.65 | 703.09 | CB |
| W-832-16 | 07/10/03 | 18.5 | 702.24 | CB/MUD |
| W-832-16 | 10/03/03 | 17.9 | 702.84 | CB/MUD |
| W-832-17 | 01/07/03 | - | - | DRY/CB |
| W-832-17 | 02/06/03 | 18.45 | 703.55 | CB |
| W-832-17 | 03/04/03 | 18.55 | 703.45 | CB |
| W-832-17 | 04/08/03 | - | - | DRY/CB |
| W-832-17 | 07/01/03 | - | - | DRY/CB |
| W-832-17 | 10/09/03 | - | - | DRY/CB |
| W-832-18 | 01/07/03 | 22.42 | 698.78 | CB |
| W-832-18 | 04/08/03 | 24.51 | 696.69 | |
| W-832-18 | 07/10/03 | 24.85 | 696.35 | |
| W-832-18 | 10/01/03 | 24.39 | 696.81 | |
| W-832-19 | 01/07/03 | - | - | DRY/CB |
| W-832-19 | 02/06/03 | 23.75 | 696.27 | CB |
| W-832-19 | 03/04/03 | 23.96 | 696.06 | CB |
| W-832-19 | 04/08/03 | 24.04 | 695.98 | CB |
| W-832-19 | 07/10/03 | 24.58 | 695.44 | CB |
| W-832-19 | 10/01/03 | - | - | DRY/CB |
| W-832-20 | 01/07/03 | - | - | DRY/CB |
| W-832-20 | 02/06/03 | - | - | DRY/CB |
| W-832-20 | 03/04/03 | - | - | CB/DRY |
| W-832-20 | 04/08/03 | - | - | DRY/CB |
| W-832-20 | 07/01/03 | - | - | DRY/CB |
| W-832-20 | 10/01/03 | - | - | DRY/CB |
| W-832-21 | 01/07/03 | - | - | DRY |
| W-832-21 | 04/08/03 | - | - | DRY |
| W-832-21 | 07/01/03 | - | - | DRY |
| W-832-21 | 10/01/03 | - | - | DRY |
| W-832-22 | 01/07/03 | - | - | DRY/CB |
| W-832-22 | 04/08/03 | - | - | DRY/CB |
| W-832-22 | 07/01/03 | - | - | DRY/CB |
| W-832-22 | 10/01/03 | - | - | DRY/CB |
| W-832-23 | 01/07/03 | 31.83 | 688.31 | CB |

**Table 2.7-16. Building 832 Canyon OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-832-23 | 02/06/03 | 31.16 | 688.98 | CB |
| W-832-23 | 03/04/03 | 31.82 | 688.32 | CB |
| W-832-23 | 04/08/03 | 31.95 | 688.19 | CB |
| W-832-23 | 07/10/03 | 32.62 | 687.52 | CB |
| W-832-23 | 10/09/03 | 31.3 | 688.84 | CB |
| W-832-24 | 01/06/03 | 41.94 | 620.62 | |
| W-832-24 | 02/05/03 | 40.81 | 621.75 | |
| W-832-24 | 03/04/03 | 40.14 | 622.42 | |
| W-832-24 | 04/07/03 | 39.91 | 622.65 | |
| W-832-24 | 07/09/03 | 40.11 | 622.45 | |
| W-832-24 | 10/01/03 | 40.48 | 622.08 | |
| W-832-25 | 01/14/03 | 32.91 | 633.9 | |
| W-832-25 | 02/05/03 | 32.65 | 634.16 | |
| W-832-25 | 03/06/03 | 32.65 | 634.16 | |
| W-832-25 | 04/08/03 | 32.36 | 634.45 | |
| W-832-25 | 07/09/03 | 33.11 | 633.7 | |
| W-832-25 | 10/09/03 | 33.7 | 633.11 | |
| W-832-SC1 | 01/14/03 | - | - | NM |
| W-832-SC1 | 02/06/03 | - | - | NM |
| W-832-SC1 | 03/10/03 | 4.62 | 580.08 | |
| W-832-SC1 | 04/15/03 | 4.58 | 580.12 | |
| W-832-SC1 | 07/28/03 | 4.7 | 580 | |
| W-832-SC1 | 10/02/03 | 5.57 | 579.13 | |
| W-832-SC2 | 01/14/03 | 4.71 | 570.16 | |
| W-832-SC2 | 02/06/03 | 4.7 | 570.17 | |
| W-832-SC2 | 03/10/03 | 4.24 | 570.63 | |
| W-832-SC2 | 04/15/03 | 3.9 | 570.97 | |
| W-832-SC2 | 07/28/03 | - | - | DRY |
| W-832-SC2 | 10/02/03 | - | - | DRY |
| W-832-SC3 | 01/14/03 | 4.39 | 559.28 | |
| W-832-SC3 | 02/06/03 | 4.28 | 559.39 | |
| W-832-SC3 | 03/10/03 | 4.56 | 559.11 | |
| W-832-SC3 | 04/15/03 | 4.65 | 559.02 | |
| W-832-SC3 | 07/28/03 | - | - | DRY/MUD |
| W-832-SC3 | 10/02/03 | - | - | DRY/MUD |
| W-832-SC4 | 01/14/03 | 5.46 | 531.84 | |

**Table 2.7-16. Building 832 Canyon OU 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-832-SC4 | 02/06/03 | 5.77 | 531.53 | |
| W-832-SC4 | 03/01/03 | 5.66 | 531.64 | |
| W-832-SC4 | 04/15/03 | 6.27 | 531.03 | |
| W-832-SC4 | 07/28/03 | 7.93 | 529.37 | |
| W-832-SC4 | 10/02/03 | 7.9 | 529.4 | |
| W-870-01 | 01/06/03 | - | - | DRY |
| W-870-01 | 04/15/03 | - | - | DRY |
| W-870-01 | 07/01/03 | - | - | DRY |
| W-870-01 | 10/08/03 | - | - | DRY |
| W-870-02 | 01/15/03 | - | - | NM/EQUIPMENT |
| W-870-02 | 04/15/03 | 16.78 | 507.04 | |
| W-870-02 | 07/21/03 | 17.64 | 506.18 | |
| W-870-02 | 10/01/03 | 17.95 | 505.87 | |
| W-880-01 | 01/06/03 | 16.37 | 509.68 | |
| W-880-01 | 02/04/03 | 16.51 | 509.54 | |
| W-880-01 | 03/04/03 | 16.33 | 509.72 | |
| W-880-01 | 04/14/03 | 15.82 | 510.23 | |
| W-880-01 | 07/21/03 | 16.97 | 509.08 | |
| W-880-01 | 10/08/03 | 17.15 | 508.9 | |
| W-880-02 | 01/06/03 | 17.32 | 508.48 | |
| W-880-02 | 02/04/03 | 17.61 | 508.19 | |
| W-880-02 | 03/04/03 | 17.57 | 508.23 | |
| W-880-02 | 04/14/03 | 17.2 | 508.6 | |
| W-880-02 | 07/21/03 | 18.17 | 507.63 | |
| W-880-02 | 10/08/03 | 18.33 | 507.47 | |
| W-880-03 | 01/06/03 | 7.77 | 518.28 | |
| W-880-03 | 02/04/03 | 6.53 | 519.52 | |
| W-880-03 | 03/04/03 | 5.18 | 520.87 | |
| W-880-03 | 04/14/03 | 4.42 | 521.63 | |
| W-880-03 | 07/21/03 | 11.49 | 514.56 | |
| W-880-03 | 10/08/03 | 14.58 | 511.47 | |

**Table 2.7-17. Building 832-Source (B832-SRC) mass removed, January 1, 2003 through December 31, 2003.**

| Treatment facility | Month | GWTS VOC mass removed (g) | GWTS Nitrate mass removed (g) | GWTS Perchlorate mass removed (g) | SVE VOC mass removed (g) |
|---|---|---|---|---|---|
| B832-SRC | January | 1.3 | 2,571 | 0.2 | 30.0 |
| | February | 1.0 | 2,122 | 0.2 | 10.5 |
| | March | 0.9 | 1,853 | 0.2 | 15.0 |
| | April | 0.7 | 1,570 | 0.1 | 21.3 |
| | May | 0.5 | 1,112 | 0.1 | 20.0 |
| | June | 0.5 | 1,157 | 0.1 | 14.0 |
| | July | 0.2 | 623 | 0.0 | 10.9 |
| | August | 0.1 | 395 | 0.0 | 17.5 |
| | September | 0.1 | 326 | 0.0 | 17.9 |
| | October | 0.1 | 194 | 0.0 | 17.8 |
| | November | 0.0 | 109 | 0.0 | 0.0 |
| | December | 0.0 | 93 | 0.0 | 0.0 |
| Total | | 5.4 | 12,125 | 0.9 | 175 |

**Table 2.7-18. Building 830-Source (B830-SRC) mass removed, January 1, 2003 through December 31, 2003.**

| Treatment facility | Month | GWTS VOC mass removed (g) | GWTS Nitrate mass removed (g) | GWTS Perchlorate mass removed (g) | SVE VOC mass removed (g) |
|---|---|---|---|---|---|
| B830-SRC | January | NA | NA | NA | NA |
| | February | 1.6 | 55.3 | 0.003 | 0[a] |
| | March | 4.8 | 181.7 | 0.007 | 0[a] |
| | April | 7.5 | 259.8 | 0.000 | 0[a] |
| | May | 5.1 | 174.4 | 0.000 | 0[a] |
| | June | 8.2 | 281.4 | 0.000 | 0[a] |
| | July | 10.6 | 290.4 | 0.000 | 0[a] |
| | August | 0.3 | 9.4 | 0.000 | 0[a] |
| | September | 1.1 | 31.1 | 0.000 | 0[a] |
| | October | 1.4 | 89.3 | 0.004 | 0[a] |
| | November | 2.1 | 127.4 | 0.005 | 0[a] |
| | December | 2.9 | 177.5 | 0.008 | 0[a] |
| Total | | 45.6 | 1,678 | 0.027 | 0[a] |

[a] **B830-SRC SVE system in testing phase.**

**Table 2.7-19. Building 830-Proximal North (B830-PRXN) mass removed, January 1, 2003 through December 31, 2003.**

| Treatment facility | Month | VOC mass removed (g) | Nitrate mass removed (g) |
|---|---|---|---|
| B830-PRX | January | 1.5 | 833 |
| | February | 2.2 | 1,198 |
| | March | 3.2 | 1,755 |
| | April | 1.6 | 756 |
| | May | 1.3 | 623 |
| | June | 2.9 | 1,392 |
| | July | 2.2 | 1,123 |
| | August | 2.3 | 1,160 |
| | September | 2.6 | 1,329 |
| | October | 3.0 | 1,716 |
| | November | 3.7 | 2,107 |
| | December | 3.1 | 1,749 |
| Total | | 30 | 15,740 |

**Table 2.7-20. Building 830-Distal South (B830-DISS) mass removed, January 1, 2003 through December 31, 2003.**

| Treatment facility | Month | VOC mass removed (g) | Nitrate mass removed (g) | Perchlorate mass removed (g) |
|---|---|---|---|---|
| B830-DISS | January | 9.6 | 7,557 | 0 |
| | February | 4.0 | 3,172 | 0 |
| | March | 9.7 | 7,626 | 0 |
| | April | 12.3 | 7,593 | 0.5 |
| | May | 13.6 | 8,380 | 0.5 |
| | June | 14.2 | 8,754 | 0.6 |
| | July | 11.8 | 8,208 | 0.6 |
| | August | 14.1 | 9,817 | 0.7 |
| | September | 15.2 | 10,558 | 0.7 |
| | October | 14.4 | 10,925 | 0.0 |
| | November | 18.2 | 13,843 | 0.0 |
| | December | 31.8 | 24,164 | 0.0 |
| Total | | 169 | 120,597 | 3.6 |

**Table 2.8-1. Building 801 and Pit 8 landfill (OU8) 2003 ground water sampling and analysis plan.**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| K8-01 | MWPT | Upper $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | N | Sampling personnel shortage. |
| K8-01 | MWPT | Upper $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 3 | Y | |
| K8-01 | MWPT | Upper $Tnbs_1$ | | A | DIS | E300.0:NO3 | 4 | Y | |
| K8-01 | MWPT | Upper $Tnbs_1$ | A | A | CMP | E300.0:PERC | 2 | N | Sampling personnel shortage. |
| K8-01 | MWPT | Upper $Tnbs_1$ | A | A | CMP | E300.0:PERC | 3 | Y | |
| K8-01 | MWPT | Upper $Tnbs_1$ | | A | DIS | E300.0:PERC | 4 | Y | |
| K8-01 | MWPT | Upper $Tnbs_1$ | S | S | CMP | E601 | 2 | N | Sampling personnel shortage. |
| K8-01 | MWPT | Upper $Tnbs_1$ | S | S | CMP | E601 | 3 | Y | |
| K8-01 | MWPT | Upper $Tnbs_1$ | S | S | CMP | E601 | 4 | Y | |
| K8-01 | MWPT | Upper $Tnbs_1$ | | A | DIS | E906 | 3 | Y | |
| K8-02B | CMP DMW | $Tnsc_1$/Upper $Tnbs_1$ | A | A | CMP | CMPTRIMET | 2 | Y | |
| K8-02B | CMP DMW | $Tnsc_1$/Upper $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| K8-02B | CMP DMW | $Tnsc_1$/Upper $Tnbs_1$ | A | A | CMP | E300.0:PERC | 2 | Y | |
| K8-02B | CMP DMW | $Tnsc_1$/Upper $Tnbs_1$ | A | A | CMP | E340.2 | 2 | Y | |
| K8-02B | CMP DMW | $Tnsc_1$/Upper $Tnbs_1$ | A | A | CMP | E601 | 2 | Y | |
| K8-02B | CMP DMW | $Tnsc_1$/Upper $Tnbs_1$ | | A | DIS | E601 | 3 | Y | |
| K8-02B | CMP DMW | $Tnsc_1$/Upper $Tnbs_1$ | A | A | CMP | E8330:R+H | 2 | Y | |

**Table 2.8-1. Building 801 and Pit 8 landfill (OU8) 2003 ground water sampling and analysis plan. (Cont. Page 2 of 5)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| K8-02B | CMP DMW | $Tnsc_1$/Upper $Tnbs_1$ | Q | Q | CMP | E906 | 1 | N | Sampling personnel shortage. |
| K8-02B | CMP DMW | $Tnsc_1$/Upper $Tnbs_1$ | Q | Q | CMP | E906 | 2 | Y | |
| K8-02B | CMP DMW | $Tnsc_1$/Upper $Tnbs_1$ | Q | Q | CMP | E906 | 3 | Y | |
| K8-02B | CMP DMW | $Tnsc_1$/Upper $Tnbs_1$ | Q | Q | CMP | E906 | 4 | Y | |
| K8-02B | CMP DMW | $Tnsc_1$/Upper $Tnbs_1$ | B | B | CMP | MS:THISO | 2 | Y | Next sample required 2005. |
| K8-02B | CMP DMW | $Tnsc_1$/Upper $Tnbs_1$ | B | B | CMP | MS:UISO | 2 | Y | Next sample required 2005. |
| K8-02B | CMP DMW | $Tnsc_1$/Upper $Tnbs_1$ | A | A | CMP | T26METALS | 2 | Y | |
| K8-03B | MWPT | Upper $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| K8-03B | MWPT | Upper $Tnbs_1$ | | A | DIS | E300.0:NO3 | 3 | Y | |
| K8-03B | MWPT | Upper $Tnbs_1$ | A | A | CMP | E300.0:PERC | 2 | Y | |
| K8-03B | MWPT | Upper $Tnbs_1$ | | A | DIS | E300.0:PERC | 3 | Y | |
| K8-03B | MWPT | Upper $Tnbs_1$ | S | S | CMP | E601 | 2 | Y | |
| K8-03B | MWPT | Upper $Tnbs_1$ | | S | DIS | E601 | 3 | Y | |
| K8-03B | MWPT | Upper $Tnbs_1$ | S | S | CMP | E601 | 4 | Y | |
| K8-03B | MWPT | Upper $Tnbs_1$ | | A | DIS | E906 | 3 | Y | |
| K8-04 | CMP DMW | Upper $Tnbs_1$ | A | A | CMP | CMPTRIMET | 2 | Y | |
| K8-04 | CMP DMW | Upper $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| K8-04 | CMP DMW | Upper $Tnbs_1$ | A | A | CMP | E300.0:PERC | 2 | Y | |

**Table 2.8-1. Building 801 and Pit 8 landfill (OU8) 2003 ground water sampling and analysis plan. (Cont. Page 3 of 5)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| K8-04 | CMP DMW | Upper $Tnbs_1$ | A | A | CMP | E340.2 | 2 | Y | |
| K8-04 | CMP DMW | Upper $Tnbs_1$ | A | A | CMP | E601 | 2 | Y | |
| K8-04 | CMP DMW | Upper $Tnbs_1$ | | A | DIS | E601 | 3 | Y | |
| K8-04 | CMP DMW | Upper $Tnbs_1$ | A | A | CMP | E8330:R+H | 2 | Y | |
| K8-04 | CMP DMW | Upper $Tnbs_1$ | Q | Q | CMP | E906 | 1 | N | Sampling personnel shortage. |
| K8-04 | CMP DMW | Upper $Tnbs_1$ | Q | Q | CMP | E906 | 2 | Y | |
| K8-04 | CMP DMW | Upper $Tnbs_1$ | Q | Q | CMP | E906 | 3 | Y | |
| K8-04 | CMP DMW | Upper $Tnbs_1$ | Q | Q | CMP | E906 | 4 | Y | |
| K8-04 | CMP DMW | Upper $Tnbs_1$ | B | B | CMP | MS:THISO | 2 | Y | Next sample required 2005. |
| K8-04 | CMP DMW | Upper $Tnbs_1$ | B | B | CMP | MS:UISO | 2 | Y | Next sample required 2005. |
| K8-04 | CMP DMW | Upper $Tnbs_1$ | A | A | CMP | T26METALS | 2 | Y | |
| K8-05 | CMP DMW | $Tnbs_2$ | A | A | CMP | CMPTRIMET | 2 | N | Dry. |
| K8-05 | CMP DMW | $Tnbs_2$ | A | A | CMP | CMPTRIMET | 4 | N | Dry. |
| K8-05 | CMP DMW | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 2 | N | Dry. |
| K8-05 | CMP DMW | $Tnbs_2$ | A | A | CMP | E300.0:NO3 | 4 | N | Dry. |
| K8-05 | CMP DMW | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 2 | N | Dry. |
| K8-05 | CMP DMW | $Tnbs_2$ | A | A | CMP | E300.0:PERC | 4 | N | Dry. |
| K8-05 | CMP DMW | $Tnbs_2$ | A | A | CMP | E340.2 | 2 | N | Dry. |
| K8-05 | CMP DMW | $Tnbs_2$ | A | A | CMP | E340.2 | 4 | N | Dry. |
| K8-05 | CMP DMW | $Tnbs_2$ | A | A | CMP | E601 | 2 | N | Dry. |
| K8-05 | CMP DMW | $Tnbs_2$ | A | A | CMP | E601 | 4 | N | Dry. |
| K8-05 | CMP DMW | $Tnbs_2$ | A | A | CMP | E8330:R+H | 2 | N | Dry. |
| K8-05 | CMP DMW | $Tnbs_2$ | A | A | CMP | E8330:R+H | 4 | N | Dry. |
| K8-05 | CMP DMW | $Tnbs_2$ | Q | Q | CMP | E906 | 1 | N | Sampling personnel shortage. |
| K8-05 | CMP DMW | $Tnbs_2$ | Q | Q | CMP | E906 | 2 | N | Dry. |

**Table 2.8-1. Building 801 and Pit 8 landfill (OU8) 2003 ground water sampling and analysis plan. (Cont. Page 4 of 5)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| K8-05 | CMP DMW | $Tnbs_2$ | Q | Q | CMP | E906 | 3 | N | Dry. |
| K8-05 | CMP DMW | $Tnbs_2$ | Q | Q | CMP | E906 | 4 | N | Dry. |
| K8-05 | CMP DMW | $Tnbs_2$ | B | B | CMP | MS:THISO | 2 | N | Dry. |
| K8-05 | CMP DMW | $Tnbs_2$ | B | B | CMP | MS:THISO | 4 | N | Dry. |
| K8-05 | CMP DMW | $Tnbs_2$ | B | B | CMP | MS:UISO | 2 | N | Dry. |
| K8-05 | CMP DMW | $Tnbs_2$ | B | B | CMP | MS:UISO | 4 | N | Dry. |
| K8-05 | CMP DMW | $Tnbs_2$ | A | A | CMP | T26METALS | 2 | N | Dry. |
| K8-05 | CMP DMW | $Tnbs_2$ | A | A | CMP | T26METALS | 4 | N | Dry. |

**Notes appear on the following page.**

**Table 2.8-1. Building 801 and Pit 8 landfill (OU8) 2003 ground water sampling and analysis plan. (Cont. Page 5 of 5)**

**Notes:**

**No COCs in ground water.**

**Contaminants of Concern in the Vadose Zone not detected in Ground Water: HE Compounds and uranium.**

**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) sampled annually.**

**CMP Detection monitoring analytes: uranium and thorium isotopes by mass spectrometry (MS:UISO and MS:THISO) sampled biennially.**

**Building 801 primary COC: VOCs (E601 or E624).**

**Building 801 secondary COC: nitrate (E300.0:NO3).**

**Building 801 secondary COC: uranium (MS:UISO) .**

**CGSA CMP/DIS =** **Sampling more frequently then required.**

**CGSA CMP/WGMG =** **Well shared with the Operations and Regulatory Affairs Division, Water Guidance and Monitoring Group and may be sampled at a greater frequency and for additional analytes then required by the CMP. Non-CMP analytes are reported separately by ORAD.**

**CGSA CMP =** **Central GSA groundwater sampling and analysis plan specified in the GSA RD**

**CMP DMW =** **CMP detection monitor well.**

**CMP/DIS =** **Sampling required analyte more frequently then required.**

**CMP/WGMG =** **Well shared with the Operations and Regulatory Affairs Division, Water Guidance and Monitoring Group and may be sampled at a greater frequency and for additional analytes then required by the CMP. Non-CMP analytes are reported separately by ORAD.**

**CMP =** **Compliance Monitoring Plan.**

**DIS =** **Discretionary sampling of non-required analyte.**

**DMW =** **Detection monitor well (non-CMP).**

**ERD/WGMG =** **Non-CMP analyte sampled from a well shared by ERD and WGMG.**

**EW =** **Extraction well.**

**GW =** **Guard well.**

**MWB =** **Monitor well used for background.**

**MWPT =** **Monitor well used for plume tracking.**

**SPR =** **Spring.**

**WS =** **Water supply well.**

**Table 2.8-2. Building 801 firing table and Pit 8 landfill 2003 ground water sampling and analysis plan.**

| Location | Date | Method | TCE (µg/L) | PCE (µg/L) | Total 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) | Freon 11 (µg/L) | Freon 113 (µg/L) | Methylene chloride (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K8-01 | 08/29/03 | E601 | 2.2 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| K8-01 | 11/24/03 | E601 | 3.7 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 2.4 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K8-02B | 06/25/03 | 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 |
| K8-02B | 08/29/03 | E601 | 1.1 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |
| K8-03B | 06/27/03 | 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 |
| K8-03B | 09/12/03 | E601 | 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 | 12/05/03 | E601 | 0.62 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K8-04 | 05/15/03 | E601 | 1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | 0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K8-04 | 08/19/03 | E601 | 1.0 L | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |

**Table 2.8.3. Building 801 firing table and Pit 8 landfill 2003 tritium in ground water.**

| Location | Date | Tritium (pCi/L) |
|---|---|---|
| K8-01 | 08/29/03 | <85 |
| K8-02B | 06/25/03 | <87.5 |
| K8-02B | 08/29/03 | <85.7 |
| K8-02B | 08/29/03 DUP | 96.3 ± 166 |
| K8-02B | 11/24/03 | <88.2 |
| K8-03B | 09/12/03 | <87 |
| K8-04 | 05/15/03 | <90.3 |
| K8-04 | 08/19/03 | <87.4 |
| K8-04 | 11/24/03 | <89.4 |
| K8-04 | 11/24/03 DUP | <139 |

**Table 2.8.4. Building 801 firing table and Pit 8 landfill 2003 nitrate and perchlorate in ground water.**

| Location | Date | Nitrate (as $NO_3$) (mg/L) | Perchlorate ($\mu$g/L) |
|---|---|---|---|
| K8-01 | 08/29/03 | 53 D | <4 H |
| K8-01 | 11/24/03 | <0.1 | <4 |
| K8-02B | 06/25/03 | 39 | <4 |
| K8-03B | 06/27/03 | <0.1 | <4 |
| K8-03B | 09/12/03 | <0.1 | <4 H |
| K8-04 | 05/15/03 | <0.1 | 5 |

**Table 2.8.5. Building 801 firing table and Pit 8 landfill 2003 fluoride in ground water.**

| Location | Date | Fluoride (mg/L) |
|---|---|---|
| K8-02B | 06/25/03 | 0.78 |
| K8-04 | 05/15/03 | 10 D |

**Table 2.8.6. Building 801 firing table and Pit 8 landfill 2003 high explosive compounds in ground water.**

| Location | Date | HMX ($\mu$g/L) | RDX ($\mu$g/L) |
|---|---|---|---|
| K8-02B | 06/25/03 | <1 | <1 |
| K8-04 | 05/15/03 | <1 | <1 O |

**Table 2.8-7. Building 801 firing table and Pit 8 landfill 2003 metals in ground water.**

| Constituents of concern | K8-02B (06/25/03) | K8-04 (05/15/03) |
|---|---|---|
| Antimony (mg/L) | <0.06 | <0.06 |
| Arsenic (mg/L) | 0.02 | 0.023 |
| Barium (mg/L) | <0.01 | <0.01 |
| Beryllium (mg/L) | <0.002 D | <0.002 |
| Cadmium (mg/L) | <0.005 | <0.005 |
| Chromium (mg/L) | <0.01 | <0.01 |
| Cobalt (mg/L) | <0.025 | <0.025 |
| Copper (mg/L) | <0.01 | <0.01 |
| Lead (mg/L) | <0.003 | <0.003 |
| Lithium ($\mu$g/L) | - | 46 |
| Mercury (mg/L) | <0.0002 | <0.0002 |
| Molybdenum (mg/L) | <0.02 | <0.02 |
| Nickel (mg/L) | <0.02 | <0.02 |
| Selenium (mg/L) | <0.005 | 0.005 |
| Silver (mg/L) | <0.0005 | <0.005 |
| Thallium (mg/L) | <0.005 | <0.005 |
| Thorium ($\mu$g/L) | - | <22.4 |
| Uranium ($\mu$g/L) | - | <20.5 |
| Vanadium (mg/L) | <0.5 | <0.5 |
| Zinc (mg/L) | <0.02 | <0.02 |

**Table 2.8-8. Building 801 firing table and Pit 8 landfill 2003 uranium and thorium isotopes by mass spectrometry in ground water.**

| Location | Date | Thorium 232 (pCi/L) | Uranium (pCi/L) | Uranium 234 by mass measurement (pCi/L) | Uranium 235 by mass measurement (pCi/L) | Uranium 236 by mass measurement (pCi/L) | Uranium 238 by mass measurement (pCi/L) | Uranium 235/238 |
|---|---|---|---|---|---|---|---|---|
| K8-02B | 06/25/03 | 0.000332 ± 0.0000148 | 13.5 ± 0.275 | 8.56 ± 0.273 | 0.220 ± 0.00197 | <0.007 | 4.75 ± 0.0366 | 0.00721 ± 0.0000330 |
| K8-04 | 05/15/03 | <0.0001 E | 0.559 ± 0.0110 | <0.062 | 0.0246 ± 0.000630 | <0.0007 | 0.534 ± 0.0110 | 0.00716 ± 0.000106 |

**Table 2.8-9. Building 801 firing table and Pit 8 landfill 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| K8-01 | 01/10/03 | 129.11 | 971.33 | |
| K8-01 | 02/07/03 | 129.04 | 971.4 | |
| K8-01 | 03/01/03 | 129.17 | 971.27 | |
| K8-01 | 04/05/03 | 129.15 | 971.29 | |
| K8-01 | 07/11/03 | 129.25 | 971.19 | |
| K8-01 | 10/03/03 | 129.1 | 971.34 | |
| K8-02B | 01/10/03 | 158.7 | 969.72 | |
| K8-02B | 02/07/03 | 158.58 | 969.84 | |
| K8-02B | 03/01/03 | 158.7 | 969.72 | |
| K8-02B | 04/05/03 | 158.75 | 969.67 | |
| K8-02B | 07/11/03 | 158.72 | 969.7 | |
| K8-02B | 10/03/03 | 158.7 | 969.72 | |
| K8-03B | 01/03/03 | 103.82 | 992.77 | |
| K8-03B | 02/07/03 | 103.76 | 992.83 | |
| K8-03B | 03/01/03 | 103.71 | 992.88 | |
| K8-03B | 04/05/03 | 103.6 | 992.99 | |
| K8-03B | 07/11/03 | 103.65 | 992.94 | |
| K8-03B | 10/03/03 | 103.65 | 992.94 | |
| K8-04 | 01/10/03 | 163.7 | 969.45 | |
| K8-04 | 02/07/03 | 163.49 | 969.66 | |
| K8-04 | 03/01/03 | 163.67 | 969.48 | |
| K8-04 | 04/05/03 | 163.7 | 969.45 | |
| K8-04 | 07/11/03 | 163.7 | 969.45 | |
| K8-04 | 10/03/03 | 163.6 | 969.55 | |
| K8-05 | 01/10/03 | - | - | DRY |
| K8-05 | 02/07/03 | - | - | DRY |
| K8-05 | 03/01/03 | - | - | DRY |
| K8-05 | 04/05/03 | - | - | DRY |
| K8-05 | 07/01/03 | - | - | DRY |
| K8-05 | 10/03/03 | - | - | DRY |

**Table 2.8-10. Building 833 (OU8) 2003 ground water sampling and analysis plan.**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| SPRING19 | SPR | Upper $Tnbs_1$ | | A | DIS | AS:UISO | 4 | N | Not sampled. |
| SPRING19 | SPR | Upper $Tnbs_1$ | | A | DIS | DWMETALS | 4 | N | Not sampled. |
| SPRING19 | SPR | Upper $Tnbs_1$ | | A | DIS | E210.2 | 4 | N | Not sampled. |
| SPRING19 | SPR | Upper $Tnbs_1$ | | A | DIS | E300.0:PERC | 4 | N | Not sampled. |
| SPRING19 | SPR | Upper $Tnbs_1$ | | A | DIS | E601 | 4 | N | Not sampled. |
| SPRING19 | SPR | Upper $Tnbs_1$ | | A | DIS | E8330:R+H | 4 | N | Not sampled. |
| SPRING19 | SPR | Upper $Tnbs_1$ | | A | DIS | E900 | 4 | N | Not sampled. |
| SPRING19 | SPR | Upper $Tnbs_1$ | | A | DIS | E906 | 4 | N | Not sampled. |
| SPRING19 | SPR | Upper $Tnbs_1$ | | A | DIS | GENMIN | 4 | N | Not sampled. |
| SPRING19 | SPR | Upper $Tnbs_1$ | | A | DIS | TBOS | 4 | N | Not sampled. |
| W-833-03 | MWPT | Tps | | A | DIS | E300.0:NO3 | 1 | N | Dry. |
| W-833-03 | MWPT | Tps | | A | DIS | E300.0:PERC | 1 | N | Dry. |
| W-833-03 | MWPT | Tps | S | S | CMP | E601 | 1 | N | Dry. |
| W-833-03 | MWPT | Tps | S | S | CMP | E601 | 3 | N | Dry. |
| W-833-12 | MWPT | Qt | | A | DIS | DWMETALS | 1 | N | Dry. |
| W-833-12 | MWPT | Qt | | A | DIS | E300.0:NO3 | 1 | N | Dry. |
| W-833-12 | MWPT | Qt | | A | DIS | E300.0:PERC | 1 | N | Dry. |
| W-833-12 | MWPT | Qt | S | S | CMP | E601 | 1 | N | Dry. |
| W-833-12 | MWPT | Qt | | A | DIS | GENMIN | 1 | N | Dry. |
| W-833-12 | MWPT | Qt | S | S | CMP | E601 | 3 | N | Dry. |
| W-833-18 | MWPT | Tps | | A | DIS | DWMETALS | 1 | N | Dry. |
| W-833-18 | MWPT | Tps | | A | DIS | E300.0:NO3 | 1 | N | Dry. |
| W-833-18 | MWPT | Tps | | A | DIS | E300.0:PERC | 1 | N | Dry. |
| W-833-18 | MWPT | Tps | S | S | CMP | E601 | 1 | N | Dry. |
| W-833-18 | MWPT | Tps | | A | DIS | E8330:R+H | 1 | N | Dry. |
| W-833-18 | MWPT | Tps | | A | DIS | GENMIN | 1 | N | Dry. |
| W-833-18 | MWPT | Tps | S | S | CMP | E601 | 3 | N | Dry. |

**Table 2.8-10. Building 833 (OU8) 2003 ground water sampling and analysis plan. (Cont. Page 2 of 4)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-833-22 | MWPT | Tps | | A | DIS | DWMETALS | 1 | N | Dry. |
| W-833-22 | MWPT | Tps | | A | DIS | E300.0:NO3 | 1 | N | Dry. |
| W-833-22 | MWPT | Tps | | A | DIS | E300.0:PERC | 1 | N | Dry. |
| W-833-22 | MWPT | Tps | S | S | CMP | E601 | 1 | N | Dry. |
| W-833-22 | MWPT | Tps | | A | DIS | E8330:R+H | 1 | N | Dry. |
| W-833-22 | MWPT | Tps | | A | DIS | GENMIN | 1 | N | Dry. |
| W-833-22 | MWPT | Tps | S | S | CMP | E601 | 3 | N | Dry. |
| W-833-28 | MWPT | Tps | | A | DIS | DWMETALS | 1 | N | Dry. |
| W-833-28 | MWPT | Tps | | A | DIS | E300.0:NO3 | 1 | N | Dry. |
| W-833-28 | MWPT | Tps | | A | DIS | E300.0:PERC | 1 | N | Dry. |
| W-833-28 | MWPT | Tps | S | S | CMP | E601 | 1 | N | Dry. |
| W-833-28 | MWPT | Tps | | A | DIS | E8330:R+H | 1 | N | Dry. |
| W-833-28 | MWPT | Tps | | A | DIS | GENMIN | 1 | N | Dry. |
| W-833-28 | MWPT | Tps | S | S | CMP | E601 | 3 | N | Dry. |
| W-833-30 | MWPT | Lower $Tnbs_1$ | | A | DIS | E300.0:NO3 | 1 | Y | |
| W-833-30 | MWPT | Lower $Tnbs_1$ | | A | DIS | E300.0:PERC | 1 | Y | |
| W-833-30 | MWPT | Lower $Tnbs_1$ | S | S | CMP | E601 | 1 | Y | |
| W-833-30 | MWPT | Lower $Tnbs_1$ | S | S | CMP | E601 | 3 | Y | |
| W-833-33 | MWPT | Tps | | A | DIS | E300.0:NO3 | 1 | N | Dry. |
| W-833-33 | MWPT | Tps | | A | DIS | E300.0:PERC | 1 | N | Dry. |
| W-833-33 | MWPT | Tps | S | S | CMP | E601 | 1 | N | Dry. |
| W-833-33 | MWPT | Tps | S | S | CMP | E601 | 3 | N | Dry. |
| W-833-34 | MWPT | Tps | | A | DIS | DWMETALS | 1 | N | Dry. |
| W-833-34 | MWPT | Tps | | A | DIS | E300.0:NO3 | 1 | N | Dry. |
| W-833-34 | MWPT | Tps | | A | DIS | E300.0:PERC | 1 | N | Dry. |
| W-833-34 | MWPT | Tps | S | S | CMP | E601 | 1 | N | Dry. |
| W-833-34 | MWPT | Tps | | A | DIS | E8330:R+H | 1 | N | Dry. |

**Table 2.8-10. Building 833 (OU8) 2003 ground water sampling and analysis plan. (Cont. Page 3 of 4)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-833-34 | MWPT | Tps | | A | DIS | GENMIN | 1 | N | Dry. |
| W-833-34 | MWPT | Tps | S | S | CMP | E601 | 3 | N | Dry. |
| W-833-43 | MWPT | Tps | | A | DIS | DWMETALS | 1 | N | Dry. |
| W-833-43 | MWPT | Tps | | A | DIS | E300.0:NO3 | 1 | N | Dry. |
| W-833-43 | MWPT | Tps | | A | DIS | E300.0:PERC | 1 | N | Dry. |
| W-833-43 | MWPT | Tps | S | S | CMP | E601 | 1 | N | Dry. |
| W-833-43 | MWPT | Tps | | A | DIS | E8330:R+H | 1 | N | Dry. |
| W-833-43 | MWPT | Tps | | A | DIS | GENMIN | 1 | N | Dry. |
| W-833-43 | MWPT | Tps | S | S | CMP | E601 | 3 | N | Dry. |
| W-840-01 | MWPT | Lower $Tnbs_1$ | | A | DIS | E300.0:NO3 | 1 | N | Dry. |
| W-840-01 | MWPT | Lower $Tnbs_1$ | | A | DIS | E300.0:PERC | 1 | N | Dry. |
| W-840-01 | MWPT | Lower $Tnbs_1$ | | A | DIS | E601 | 1 | N | Dry. |
| W-840-01 | MWPT | Lower $Tnbs_1$ | | A | DIS | E601 | 3 | N | Dry. |
| W-841-01 | MWPT | Upper $Tnbs_1$ | | A | DIS | E300.0:NO3 | 1 | N | Dry. |
| W-841-01 | MWPT | Upper $Tnbs_1$ | | A | DIS | E300.0:PERC | 1 | N | Dry. |
| W-841-01 | MWPT | Upper $Tnbs_1$ | | A | DIS | E601 | 1 | N | Dry. |
| W-841-01 | MWPT | Upper $Tnbs_1$ | | A | DIS | E601 | 3 | N | Dry. |

**Notes appear on the following page.**

**Table 2.8-10. Building 833 (OU8) 2003 ground water sampling and analysis plan. (Cont. Page 4 of 4)**

**Notes:**

**Building 833 primary COC: VOCs (E601).**

| | |
|---|---|
| **CGSA CMP/DIS =** | **Sampling more frequently then required.** |
| **CGSA CMP/WGMG =** | **Well shared with the Operations and Regulatory Affairs Division, Water Guidance and Monitoring Group and may be sampled at a greater frequency and for additional analytes then required by the CMP. Non-CMP analytes are reported separately by ORAD.** |
| **CGSA CMP =** | **Central GSA groundwater sampling and analysis plan specified in the GSA RD** |
| **CMP DMW =** | **CMP detection monitor well.** |
| **CMP/DIS =** | **Sampling required analyte more frequently then required.** |
| **CMP/WGMG =** | **Well shared with the Operations and Regulatory Affairs Division, Water Guidance and Monitoring Group and may be sampled at a greater frequency and for additional analytes then required by the CMP. Non-CMP analytes are reported separately by ORAD.** |
| **CMP =** | **Compliance Monitoring Plan.** |
| **DIS =** | **Discretionary sampling of non-required analyte.** |
| **DMW =** | **Detection monitor well (non-CMP).** |
| **ERD/WGMG =** | **Non-CMP analyte sampled from a well shared by ERD and WGMG.** |
| **EW =** | **Extraction well.** |
| **GW =** | **Guard well.** |
| **MWB =** | **Monitor well used for background.** |
| **MWPT =** | **Monitor well used for plume tracking.** |
| **SPR =** | **Spring.** |
| **WS =** | **Water supply well.** |

**Table 2.8-11. Building 833 2003 VOCs in ground water.**

| Location | Date | Method | TCE (μg/L) | PCE (μg/L) | Total 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) | Freon 11 (μg/L) | Freon 113 (μg/L) | Methylene chloride (μg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **W-833-30** | 03/24/03 | E601 | <0.5 | <0.5 O | <0.5 | <0.5 O | <0.5 | <0.5 O | <0.5 O | <0.5 | <0.5 O | <0.5 | <0.5 O | <0.5 |
| **W-833-30** | 08/27/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

**Table 2.8-12. Building 833 2003 nitrate and perchlorate in ground water.**

| Location | Date | Nitrate (as $NO_3$) (mg/L) | Perchlorate (μg/L) |
|---|---|---|---|
| **W-833-30** | 03/24/03 | <0.5 | <4 |

**Table 2.8-13. Building 833 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-833-03 | 01/04/03 | - | - | DRY |
| W-833-03 | 02/06/03 | - | - | DRY |
| W-833-03 | 03/10/03 | 41.4 | 809.83 | |
| W-833-03 | 04/17/03 | 41.32 | 809.91 | |
| W-833-03 | 07/16/03 | 41.15 | 810.08 | |
| W-833-03 | 10/10/03 | 41.3 | 809.93 | |
| W-833-12 | 01/04/03 | 20.03 | 827.19 | DRY |
| W-833-12 | 02/06/03 | - | - | DRY |
| W-833-12 | 03/10/03 | - | - | DRY |
| W-833-12 | 04/17/03 | 20.38 | 826.84 | |
| W-833-12 | 07/16/03 | - | - | DRY |
| W-833-12 | 10/10/03 | - | - | DRY |
| W-833-18 | 01/04/03 | - | - | DRY |
| W-833-18 | 02/06/03 | - | - | DRY |
| W-833-18 | 03/10/03 | - | - | DRY |
| W-833-18 | 04/17/03 | - | - | DRY |
| W-833-18 | 07/01/03 | - | - | DRY |
| W-833-18 | 10/10/03 | - | - | DRY |
| W-833-22 | 01/04/03 | - | - | DRY |
| W-833-22 | 02/06/03 | - | - | DRY |
| W-833-22 | 03/10/03 | - | - | DRY |
| W-833-22 | 04/17/03 | - | - | DRY |
| W-833-22 | 07/01/03 | - | - | DRY |
| W-833-22 | 10/10/03 | - | - | DRY |
| W-833-28 | 01/04/03 | 41.65 | 814.27 | |
| W-833-28 | 02/06/03 | 41.62 | 814.3 | |
| W-833-28 | 03/10/03 | 41.62 | 814.3 | |
| W-833-28 | 04/15/03 | 41.63 | 814.29 | |
| W-833-28 | 07/01/03 | - | - | NM |
| W-833-28 | 10/10/03 | 41.69 | 814.23 | |
| W-833-30 | 01/04/03 | - | - | NM |
| W-833-30 | 02/06/03 | - | - | NM |
| W-833-30 | 03/10/03 | 286.98 | 564.68 | |
| W-833-30 | 04/17/03 | 286.1 | 565.56 | |
| W-833-30 | 07/17/03 | 288 | 563.66 | |

**Table 2.8-13. Building 833 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-833-30 | 10/10/03 | 289.9 | 561.76 | |
| W-833-33 | 01/04/03 | - | - | DRY |
| W-833-33 | 02/06/03 | - | - | DRY |
| W-833-33 | 03/10/03 | - | - | DRY |
| W-833-33 | 04/18/03 | - | - | DRY |
| W-833-33 | 07/01/03 | - | - | DRY |
| W-833-33 | 10/10/03 | - | - | DRY |
| W-833-34 | 01/04/03 | 33.64 | 815.28 | |
| W-833-34 | 02/06/03 | 33.62 | 815.3 | |
| W-833-34 | 03/10/03 | 33.72 | 815.2 | |
| W-833-34 | 04/18/03 | 33.71 | 815.21 | |
| W-833-34 | 07/29/03 | - | - | DRY |
| W-833-34 | 10/10/03 | - | - | DRY |
| W-833-43 | 01/04/03 | - | - | DRY |
| W-833-43 | 04/18/03 | - | - | DRY |
| W-833-43 | 07/01/03 | - | - | DRY |
| W-833-43 | 10/10/03 | - | - | DRY |
| W-840-01 | 01/04/03 | - | - | DRY |
| W-840-01 | 04/15/03 | - | - | DRY |
| W-840-01 | 07/01/03 | - | - | DRY |
| W-840-01 | 10/10/03 | - | - | DRY |
| W-841-01 | 01/04/03 | - | - | DRY |
| W-841-01 | 04/15/03 | - | - | DRY |
| W-841-01 | 07/01/03 | - | - | DRY |
| W-841-01 | 10/10/03 | - | - | DRY |

**Table 2.8-13. Building 833 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-833-03 | 01/04/03 | - | - | DRY |
| W-833-03 | 02/06/03 | - | - | DRY |
| W-833-03 | 03/10/03 | 41.4 | 809.83 | |
| W-833-03 | 04/17/03 | 41.32 | 809.91 | |
| W-833-03 | 07/16/03 | 41.15 | 810.08 | |
| W-833-03 | 10/10/03 | 41.3 | 809.93 | |
| W-833-12 | 01/04/03 | 20.03 | 827.19 | DRY |
| W-833-12 | 02/06/03 | - | - | DRY |
| W-833-12 | 03/10/03 | - | - | DRY |
| W-833-12 | 04/17/03 | 20.38 | 826.84 | |
| W-833-12 | 07/16/03 | - | - | DRY |
| W-833-12 | 10/10/03 | - | - | DRY |
| W-833-18 | 01/04/03 | - | - | DRY |
| W-833-18 | 02/06/03 | - | - | DRY |
| W-833-18 | 03/10/03 | - | - | DRY |
| W-833-18 | 04/17/03 | - | - | DRY |
| W-833-18 | 07/01/03 | - | - | DRY |
| W-833-18 | 10/10/03 | - | - | DRY |
| W-833-22 | 01/04/03 | - | - | DRY |
| W-833-22 | 02/06/03 | - | - | DRY |
| W-833-22 | 03/10/03 | - | - | DRY |
| W-833-22 | 04/17/03 | - | - | DRY |
| W-833-22 | 07/01/03 | - | - | DRY |
| W-833-22 | 10/10/03 | - | - | DRY |
| W-833-28 | 01/04/03 | 41.65 | 814.27 | |
| W-833-28 | 02/06/03 | 41.62 | 814.3 | |
| W-833-28 | 03/10/03 | 41.62 | 814.3 | |
| W-833-28 | 04/15/03 | 41.63 | 814.29 | |
| W-833-28 | 07/01/03 | - | - | NM |
| W-833-28 | 10/10/03 | 41.69 | 814.23 | |
| W-833-30 | 01/04/03 | - | - | NM |
| W-833-30 | 02/06/03 | - | - | NM |
| W-833-30 | 03/10/03 | 286.98 | 564.68 | |
| W-833-30 | 04/17/03 | 286.1 | 565.56 | |
| W-833-30 | 07/17/03 | 288 | 563.66 | |

**Table 2.8-13. Building 833 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-833-30 | 10/10/03 | 289.9 | 561.76 | |
| W-833-33 | 01/04/03 | - | - | DRY |
| W-833-33 | 02/06/03 | - | - | DRY |
| W-833-33 | 03/10/03 | - | - | DRY |
| W-833-33 | 04/18/03 | - | - | DRY |
| W-833-33 | 07/01/03 | - | - | DRY |
| W-833-33 | 10/10/03 | - | - | DRY |
| W-833-34 | 01/04/03 | 33.64 | 815.28 | |
| W-833-34 | 02/06/03 | 33.62 | 815.3 | |
| W-833-34 | 03/10/03 | 33.72 | 815.2 | |
| W-833-34 | 04/18/03 | 33.71 | 815.21 | |
| W-833-34 | 07/29/03 | - | - | DRY |
| W-833-34 | 10/10/03 | - | - | DRY |
| W-833-43 | 01/04/03 | - | - | DRY |
| W-833-43 | 04/18/03 | - | - | DRY |
| W-833-43 | 07/01/03 | - | - | DRY |
| W-833-43 | 10/10/03 | - | - | DRY |
| W-840-01 | 01/04/03 | - | - | DRY |
| W-840-01 | 04/15/03 | - | - | DRY |
| W-840-01 | 07/01/03 | - | - | DRY |
| W-840-01 | 10/10/03 | - | - | DRY |
| W-841-01 | 01/04/03 | - | - | DRY |
| W-841-01 | 04/15/03 | - | - | DRY |
| W-841-01 | 07/01/03 | - | - | DRY |
| W-841-01 | 10/10/03 | - | - | DRY |

**Table 2.8-14. Building 845 firing table and Pit 9 landfill 2003 ground water sampling and analysis plan.**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| K9-01 | CMP DMW | Tmss | Q | Q | CMP | E906 | 1 | Y | |
| K9-01 | CMP DMW | Tmss | A | A | CMP | CMPTRIMET | 2 | Y | |
| K9-01 | CMP DMW | Tmss | A | A | CMP | E300.0:NO3 | 2 | Y | |
| K9-01 | CMP DMW | Tmss | A | A | CMP | E300.0:PERC | 2 | Y | |
| K9-01 | CMP DMW | Tmss | A | A | CMP | E340.2 | 2 | Y | |
| K9-01 | CMP DMW | Tmss | A | A | CMP | E601 | 2 | Y | |
| K9-01 | CMP DMW | Tmss | A | A | CMP | E8330 | 2 | Y | |
| K9-01 | CMP DMW | Tmss | Q | Q | CMP | E906 | 2 | Y | |
| K9-01 | CMP DMW | Tmss | B | B | CMP | MS:THISO | 2 | Y | Next sample required 2005. |
| K9-01 | CMP DMW | Tmss | B | B | CMP | MS:UISO | 2 | Y | Next sample required 2005. |
| K9-01 | CMP DMW | Tmss | A | A | CMP | T26METALS | 2 | Y | |
| K9-01 | CMP DMW | Tmss | Q | Q | CMP | E906 | 3 | Y | |
| K9-01 | CMP DMW | Tmss | Q | Q | CMP | E906 | 4 | Y | |
| K9-02 | CMP DMW | Tmss | Q | Q | CMP | E906 | 1 | Y | |
| K9-02 | CMP DMW | Tmss | A | A | CMP | CMPTRIMET | 2 | Y | |
| K9-02 | CMP DMW | Tmss | A | A | CMP | E300.0:NO3 | 2 | Y | |
| K9-02 | CMP DMW | Tmss | A | A | CMP | E300.0:PERC | 2 | Y | |
| K9-02 | CMP DMW | Tmss | A | A | CMP | E340.2 | 2 | Y | |
| K9-02 | CMP DMW | Tmss | A | A | CMP | E601 | 2 | Y | |
| K9-02 | CMP DMW | Tmss | A | A | CMP | E8330 | 2 | Y | |
| K9-02 | CMP DMW | Tmss | Q | Q | CMP | E906 | 2 | Y | |
| K9-02 | CMP DMW | Tmss | B | B | CMP | MS:THISO | 2 | Y | Next sample required 2005. |
| K9-02 | CMP DMW | Tmss | B | B | CMP | MS:UISO | 2 | Y | Next sample required 2005. |
| K9-02 | CMP DMW | Tmss | A | A | CMP | T26METALS | 2 | Y | |
| K9-02 | CMP DMW | Tmss | Q | Q | CMP | E906 | 3 | Y | |
| K9-02 | CMP DMW | Tmss | Q | Q | CMP | E906 | 4 | Y | |
| K9-03 | CMP DMW | Tmss | Q | Q | CMP | E906 | 1 | Y | |
| K9-03 | CMP DMW | Tmss | A | A | CMP | CMPTRIMET | 2 | Y | |

**Table 2.8-14. Building 845 firing table and Pit 9 landfill 2003 ground water sampling and analysis plan. (Cont. Page 2 of 3)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| K9-03 | CMP DMW | Tmss | A | A | CMP | E300.0:NO3 | 2 | Y | |
| K9-03 | CMP DMW | Tmss | A | A | CMP | E300.0:PERC | 2 | Y | |
| K9-03 | CMP DMW | Tmss | A | A | CMP | E340.2 | 2 | Y | |
| K9-03 | CMP DMW | Tmss | A | A | CMP | E601 | 2 | Y | |
| K9-03 | CMP DMW | Tmss | A | A | CMP | E8330 | 2 | Y | |
| K9-03 | CMP DMW | Tmss | Q | Q | CMP | E906 | 2 | Y | |
| K9-03 | CMP DMW | Tmss | B | B | CMP | MS:THISO | 2 | Y | Next sample required 2005. |
| K9-03 | CMP DMW | Tmss | B | B | CMP | MS:UISO | 2 | Y | Next sample required 2005. |
| K9-03 | CMP DMW | Tmss | A | A | CMP | T26METALS | 2 | Y | |
| K9-03 | CMP DMW | Tmss | Q | Q | CMP | E906 | 3 | Y | |
| K9-03 | CMP DMW | Tmss | Q | Q | CMP | E906 | 4 | Y | |
| K9-04 | CMP DMW | Tmss | Q | Q | CMP | E906 | 1 | Y | |
| K9-04 | CMP DMW | Tmss | A | A | CMP | CMPTRIMET | 2 | Y | |
| K9-04 | CMP DMW | Tmss | A | A | CMP | E300.0:NO3 | 2 | Y | |
| K9-04 | CMP DMW | Tmss | A | A | CMP | E300.0:PERC | 2 | Y | |
| K9-04 | CMP DMW | Tmss | A | A | CMP | E340.2 | 2 | Y | |
| K9-04 | CMP DMW | Tmss | A | A | CMP | E601 | 2 | Y | |
| K9-04 | CMP DMW | Tmss | A | A | CMP | E8330 | 2 | Y | |
| K9-04 | CMP DMW | Tmss | Q | Q | CMP | E906 | 2 | Y | |
| K9-04 | CMP DMW | Tmss | B | B | CMP | MS:THISO | 2 | Y | Next sample required 2005. |
| K9-04 | CMP DMW | Tmss | B | B | CMP | MS:UISO | 2 | Y | Next sample required 2005. |
| K9-04 | CMP DMW | Tmss | A | A | CMP | T26METALS | 2 | Y | |
| K9-04 | CMP DMW | Tmss | Q | Q | CMP | E906 | 3 | Y | |
| K9-04 | CMP DMW | Tmss | Q | Q | CMP | E906 | 4 | Y | |

**Notes appear on the following page.**

**Table 2.8-14. Building 845 firing table and Pit 9 landfill 2003 ground water sampling and analysis plan. (Cont. Page 3 of 3)**

**Notes:**

**No COCs in ground water.**

**Contaminants of Concern in the Vadose Zone not detected in Ground Water: HE Compounds and uranium.**

**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) sampled annually.**

**CMP Detection monitoring analytes: uranium and thorium isotopes by mass spectrometry (MS:UISO and MS:THISO) sampled biennially.**

**CGSA CMP/DIS =** **Sampling more frequently then required.**

**CGSA CMP/WGMG =** **Well shared with the Operations and Regulatory Affairs Division, Water Guidance and Monitoring Group and may be sampled at a greater frequency and for additional analytes then required by the CMP. Non-CMP analytes are reported separately by ORAD.**

**CGSA CMP =** **Central GSA groundwater sampling and analysis plan specified in the GSA RD**

**CMP DMW =** **CMP detection monitor well.**

**CMP/DIS =** **Sampling required analyte more frequently then required.**

**CMP/WGMG =** **Well shared with the Operations and Regulatory Affairs Division, Water Guidance and Monitoring Group and may be sampled at a greater frequency and for additional analytes then required by the CMP. Non-CMP analytes are reported separately by ORAD.**

**CMP =** **Compliance Monitoring Plan.**

**DIS =** **Discretionary sampling of non-required analyte.**

**DMW =** **Detection monitor well (non-CMP).**

**ERD/WGMG =** **Non-CMP analyte sampled from a well shared by ERD and WGMG.**

**EW =** **Extraction well.**

**GW =** **Guard well.**

**MWB =** **Monitor well used for background.**

**MWPT =** **Monitor well used for plume tracking.**

**SPR =** **Spring.**

**WS =** **Water supply well.**

**Table 2.8-15. Building 8845 firing table and Pit 9 landfill 2003 VOCs in ground water.**

| Location | Date | Method | TCE (µg/L) | PCE (µg/L) | Total 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) | Freon 11 (µg/L) | Freon 113 (µg/L) | Methylene chloride (µg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K9-01 | 5/29/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K9-02 | 5/29/03 | E601 | <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 | 5/30/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K9-04 | 5/29/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

**Table 2.8-16. Building 845 firing table and Pit 9 landfill 2003 VOCs in ground water.**

| Location | Date | Tritium (pCi/L) |
|---|---|---|
| K9-01 | 02/01/03 | <95.7 |
| K9-01 | 05/29/03 | <95.8 |
| K9-01 | 09/23/03 | <84.8 |
| K9-01 | 12/02/03 | <91.6 |
| K9-02 | 02/01/03 | <99.8 |
| K9-02 | 05/29/03 | <94.4 |
| K9-02 | 09/23/03 | <84.8 |
| K9-02 | 12/02/03 | 115 ± 58.0 |
| K9-02 | 12/02/03 DUP | <139 |
| K9-03 | 02/01/03 | <94.1 |
| K9-03 | 05/30/03 | <96.1 |
| K9-03 | 09/23/03 | <82.8 |
| K9-03 | 12/02/03 | <92.4 |
| K9-04 | 02/01/03 | <95.3 |
| K9-04 | 05/29/03 | <95.2 |
| K9-04 | 09/23/03 | <83 E |
| K9-04 | 12/02/03 | <91.8 |

**Table 2.8-17. Building 845 firing table and Pit 9 landfill 2003 nitrate and perchlorate in ground water.**

| Location | Date | Nitrate (as $NO_3$) (mg/L) | Perchlorate ($\mu$g/L) |
|---|---|---|---|
| K9-01 | 05/29/03 | <0.1 | <4 |
| K9-02 | 05/29/03 | <0.1 | <4 |
| K9-03 | 05/30/03 | <0.1 | <4 |
| K9-04 | 05/29/03 | <0.1 | <4 |

**Table 2.8-18. Building 845 firing table and Pit 9 landfill 2003 fluoride in ground water.**

| Location | Date | Fluoride (mg/L) |
|---|---|---|
| K9-01 | 05/29/03 | 0.31 |
| K9-02 | 05/29/03 | 0.49 |
| K9-03 | 05/30/03 | 0.4 |
| K9-04 | 05/29/03 | 0.5 |

**Table 2.8-19. Building 845 firing table and Pit 9 landfill 2003 high explosive compounds in ground water.**

| Location | Date | HMX ($\mu$g/L) | RDX ($\mu$g/L) |
|---|---|---|---|
| K9-01 | 05/29/03 | <1 | <1 |
| K9-02 | 05/29/03 | <1 | <1 |
| K9-03 | 05/30/03 | <1 | <1 |
| K9-04 | 05/29/03 | <1 | <1 |

**Table 2.8-20. Building 845 firing table and Pit 9 landfill 2003 metals in ground water.**

| Constituents of concern | K9-01 05/29/03 | K9-02 05/29/03 | K9-03 05/30/03 | K9-04 05/29/03 |
|---|---|---|---|---|
| Antimony (mg/L) | <0.06 | <0.06 | <0.06 | <0.06 |
| Arsenic (mg/L) | <0.005 | 0.027 | 0.009 | <0.005 |
| Barium (mg/L) | 0.01 | 0.02 | 0.01 | 0.01 |
| Beryllium (mg/L) | <0.002 | <0.002 | <0.002 | <0.002 |
| Cadmium (mg/L) | <0.005 | <0.005 | <0.005 | <0.005 |
| Chromium (mg/L) | <0.01 | <0.01 | <0.01 | <0.01 |
| Cobalt (mg/L) | <0.025 | <0.025 | <0.025 | <0.025 |
| Copper (mg/L) | <0.01 | <0.01 | <0.01 | <0.01 |
| Lead (mg/L) | <0.003 | <0.003 | <0.003 | <0.003 |
| Lithium ($\mu$g/L) | 100 F | 97 F | 120 F | 97 F |
| 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) | <0.02 | <0.02 | <0.02 | <0.02 |
| Selenium (mg/L) | <0.005 | <0.005 | <0.005 | <0.005 |
| Silver (mg/L) | <0.005 | <0.005 | <0.005 | <0.005 |
| Thallium (mg/L) | <0.005 | <0.005 | <0.005 | <0.005 |
| Thorium ($\mu$g/L) | <22.4 | <22.4 | <22.4 | <22.4 |
| Uranium ($\mu$g/L) | <20.5 | <20.5 | <20.5 | <20.5 |
| Vanadium (mg/L) | <0.5 | <0.5 | <0.5 | <0.5 |
| Zinc (mg/L) | 0.06 | <0.02 | <0.02 | <0.02 |

**Table 2.8-21. Building 845 firing table and Pit 9 landfill 2003 metals in ground water.**

| Location | Date | Thorium 232 (pCi/L) | Uranium (pCi/L) | Uranium 234 by mass measurement (pCi/L) | Uranium 235 by mass measurement (pCi/L) | Uranium 236 by mass measurement (pCi/L) | Uranium 238 by mass measurement (pCi/L) | Uranium 235/238 |
|---|---|---|---|---|---|---|---|---|
| K9-01 | 05/29/03 | <0.0001 E | <0.0627 E | <0.062 | 0.00104 ± 0.0000300 | <0.0007 | 0.0232 ± 0.000300 | 0.00697 ± 0.000200 |
| K9-02 | 05/29/03 | <0.0001 E | <0.0627 E | <0.062 | 0.00251 ± 0.0000700 | <0.0007 | 0.0541 ± 0.000970 | 0.00720 ± 0.000139 |
| K9-03 | 05/30/03 | <0.0001 E | 0.487 ± 0.0600 | 0.370 ± 0.0600 | 0.00526 ± 0.0000900 | <0.0007 | 0.112 ± 0.00150 | 0.00730 ± 0.0000790 |
| K9-04 | 05/29/03 | <0.0001 E | 0.261 ± 0.0400 | 0.200 ± 0.0400 | 0.00266 ± 0.0000700 | <0.0007 | 0.0587 ± 0.00110 | 0.00703 ± 0.000140 |

**Table 2.8-22. Building 845 firing table and Pit 9 landfill 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL |
|---|---|---|---|
| K9-01 | 01/10/03 | 78.2 | 997.31 |
| K9-01 | 04/18/03 | 78.18 | 997.33 |
| K9-01 | 07/11/03 | 78.2 | 997.31 |
| K9-01 | 10/07/03 | 78.03 | 997.48 |
| K9-02 | 01/10/03 | 128.85 | 1006.54 |
| K9-02 | 04/18/03 | 128.95 | 1006.44 |
| K9-02 | 07/11/03 | 128.87 | 1006.52 |
| K9-02 | 10/07/03 | 128.61 | 1006.78 |
| K9-03 | 01/10/03 | 119.42 | 997.66 |
| K9-03 | 04/18/03 | 119.54 | 997.54 |
| K9-03 | 07/11/03 | 119.5 | 997.58 |
| K9-03 | 10/07/03 | 119.6 | 997.48 |
| K9-04 | 01/10/03 | 89.9 | 994.72 |
| K9-04 | 04/18/03 | 89.92 | 994.7 |
| K9-04 | 07/11/03 | 95 | 989.62 |
| K9-04 | 10/07/03 | 89.47 | 995.15 |

**Table 2.8-23. Building 851 2003 ground water sampling and analysis plan.**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-851-05 | MWPT | Tmss | | A | DIS | AS:UISO | 2 | Y | |
| W-851-05 | MWPT | Tmss | | A | DIS | DWMETALS | 2 | Y | |
| W-851-05 | MWPT | Tmss | | A | DIS | E200.7:Be | 2 | Y | |
| W-851-05 | MWPT | Tmss | | S | DIS | E200.7:SiO2 | 2 | Y | |
| W-851-05 | MWPT | Tmss | | S | DIS | E200.7:SiO2 | 3 | Y | |
| W-851-05 | MWPT | Tmss | | S | DIS | E300.0:PERC | 2 | Y | |
| W-851-05 | MWPT | Tmss | | S | DIS | E300.0:PERC | 3 | Y | |
| W-851-05 | MWPT | Tmss | B | B | CMP | E601 | 2 | Y | Next sample required 2005. |
| W-851-05 | MWPT | Tmss | | S | DIS | E8330:R+H | 2 | Y | |
| W-851-05 | MWPT | Tmss | | S | DIS | E8330:R+H | 3 | Y | |
| W-851-05 | MWPT | Tmss | A | A | CMP | E906 | 2 | Y | |
| W-851-05 | MWPT | Tmss | | S | DIS | GENMIN | 2 | Y | |
| W-851-05 | MWPT | Tmss | | S | DIS | GENMIN | 3 | Y | |
| W-851-05 | MWPT | Tmss | S | S | CMP | MS:UISO | 2 | Y | |
| W-851-05 | MWPT | Tmss | | S | DIS | MS:UISO | 3 | Y | |
| W-851-05 | MWPT | Tmss | S | S | CMP | MS:UISO | 4 | Y | |
| W-851-06 | MWPT | Tmss | | A | DIS | AS:UISO | 2 | Y | |
| W-851-06 | MWPT | Tmss | | A | DIS | DWMETALS | 2 | Y | |
| W-851-06 | MWPT | Tmss | | A | DIS | E200.7:Be | 2 | Y | |
| W-851-06 | MWPT | Tmss | | S | DIS | E200.7:SiO2 | 2 | Y | |
| W-851-06 | MWPT | Tmss | | S | DIS | E200.7:SiO2 | 3 | Y | |
| W-851-06 | MWPT | Tmss | | S | DIS | E300.0:PERC | 2 | Y | |
| W-851-06 | MWPT | Tmss | | S | DIS | E300.0:PERC | 3 | Y | |
| W-851-06 | MWPT | Tmss | | S | DIS | E601 | 2 | Y | |
| W-851-06 | MWPT | Tmss | | S | DIS | E601 | 3 | Y | |
| W-851-06 | MWPT | Tmss | | S | DIS | E8330:R+H | 2 | Y | |
| W-851-06 | MWPT | Tmss | | S | DIS | E8330:R+H | 3 | Y | |
| W-851-06 | MWPT | Tmss | A | A | CMP | E906 | 2 | Y | |
| W-851-06 | MWPT | Tmss | | S | DIS | GENMIN | 2 | Y | |
| W-851-06 | MWPT | Tmss | | S | DIS | GENMIN | 3 | Y | |
| W-851-06 | MWPT | Tmss | S | S | CMP | MS:UISO | 2 | Y | |

**Table 2.8-23. Building 851 2003 ground water sampling and analysis plan. (Cont. Page 2 of 3)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-851-06 | MWPT | Tmss | | S | DIS | MS:UISO | 3 | Y | |
| W-851-06 | MWPT | Tmss | S | S | CMP | MS:UISO | 4 | Y | |
| W-851-07 | MWPT | Tmss | | A | DIS | AS:UISO | 2 | Y | |
| W-851-07 | MWPT | Tmss | | A | DIS | DWMETALS | 2 | Y | |
| W-851-07 | MWPT | Tmss | | A | DIS | E200.7:Be | 2 | Y | |
| W-851-07 | MWPT | Tmss | | S | DIS | E200.7:SiO2 | 2 | Y | |
| W-851-07 | MWPT | Tmss | | S | DIS | E200.7:SiO2 | 3 | Y | |
| W-851-07 | MWPT | Tmss | | A | DIS | E300.0:PERC | 2 | Y | |
| W-851-07 | MWPT | Tmss | | S | DIS | E601 | 2 | Y | |
| W-851-07 | MWPT | Tmss | | S | DIS | E601 | 3 | Y | |
| W-851-07 | MWPT | Tmss | | S | DIS | E8330:R+H | 2 | Y | |
| W-851-07 | MWPT | Tmss | | S | DIS | E8330:R+H | 3 | Y | |
| W-851-07 | MWPT | Tmss | A | A | CMP | E906 | 2 | Y | |
| W-851-07 | MWPT | Tmss | | S | DIS | GENMIN | 2 | Y | |
| W-851-07 | MWPT | Tmss | | S | DIS | GENMIN | 3 | Y | |
| W-851-07 | MWPT | Tmss | S | S | CMP | MS:UISO | 2 | Y | |
| W-851-07 | MWPT | Tmss | | S | DIS | MS:UISO | 3 | Y | |
| W-851-07 | MWPT | Tmss | S | S | CMP | MS:UISO | 4 | Y | |
| W-851-08 | MWPT | Tmss | | A | DIS | DWMETALS | 2 | Y | |
| W-851-08 | MWPT | Tmss | | A | DIS | E200.7:Be | 2 | Y | |
| W-851-08 | MWPT | Tmss | | S | DIS | E200.7:SiO2 | 2 | Y | |
| W-851-08 | MWPT | Tmss | | S | DIS | E200.7:SiO2 | 3 | Y | |
| W-851-08 | MWPT | Tmss | | S | DIS | E300.0:PERC | 2 | Y | |
| W-851-08 | MWPT | Tmss | | S | DIS | E300.0:PERC | 3 | Y | |
| W-851-08 | MWPT | Tmss | | S | DIS | E601 | 2 | Y | |
| W-851-08 | MWPT | Tmss | | S | DIS | E601 | 3 | Y | |
| W-851-08 | MWPT | Tmss | | S | DIS | E8330:R+H | 2 | Y | |
| W-851-08 | MWPT | Tmss | | S | DIS | E8330:R+H | 3 | Y | |
| W-851-08 | MWPT | Tmss | A | A | CMP | E906 | 2 | Y | |
| W-851-08 | MWPT | Tmss | | S | DIS | GENMIN | 2 | Y | |
| W-851-08 | MWPT | Tmss | | S | DIS | GENMIN | 3 | Y | |

**Table 2.8-23. Building 851 2003 ground water sampling and analysis plan. (Cont. Page 3 of 3)**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| W-851-08 | MWPT | Tmss | S | S | CMP | MS:UISO | 2 | Y | |
| W-851-08 | MWPT | Tmss | | S | DIS | MS:UISO | 3 | Y | |
| W-851-08 | MWPT | Tmss | S | S | CMP | MS:UISO | 4 | Y | |

**Notes:**

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

**Building 851 secondary COC: tritium (E906).**

**Contaminants of Concern in the Vadose Zone not detected in Ground Water: VOCs.**

**CGSA CMP/DIS =** Sampling more frequently then required.

**CGSA CMP/WGMG =** Well shared with the Operations and Regulatory Affairs Division, Water Guidance and Monitoring Group and may be sampled at a greater frequency and for additional analytes then required by the CMP. Non-CMP analytes are reported separately by ORAD.

**CGSA CMP =** Central GSA groundwater sampling and analysis plan specified in the GSA RD

**CMP DMW =** CMP detection monitor well.

**CMP/DIS =** Sampling required analyte more frequently then required.

**CMP/WGMG =** Well shared with the Operations and Regulatory Affairs Division, Water Guidance and Monitoring Group and may be sampled at a greater frequency and for additional analytes then required by the CMP. Non-CMP analytes are reported separately by ORAD.

**CMP =** Compliance Monitoring Plan.

**DIS =** Discretionary sampling of non-required analyte.

**DMW =** Detection monitor well (non-CMP).

**ERD/WGMG =** Non-CMP analyte sampled from a well shared by ERD and WGMG.

**EW =** Extraction well.

**GW =** Guard well.

**MWB =** Monitor well used for background.

**MWPT =** Monitor well used for plume tracking.

**SPR =** Spring.

**WS =** Water supply well.

**Table 2.8-24. Building 851 firing table 2003 VOCs in ground water.**

| Location | Date | Method | TCE (μg/L) | PCE (μg/L) | Total 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) | Freon 11 (μg/L) | Freon 113 (μg/L) | Methylene chloride (μg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W-851-05 | 06/13/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-851-05 | 09/19/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-851-05 | 09/19/03 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 |
| W-851-06 | 06/13/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-851-06 | 09/19/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-851-07 | 06/17/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-851-07 | 09/19/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-851-08 | 05/19/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| W-851-08 | 08/21/03 | E601 | LL | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 L | <0.5 | <0.5 | <0.5 | <0.5 |

**Table 2.8-25. Building 851 firing table 2003 tritium in ground water.**

| Location | Date | Tritium (pCi/L) |
|---|---|---|
| W-851-05 | 06/13/03 | <88.3 |
| W-851-06 | 05/23/03 | <103 |
| W-851-07 | 06/17/03 | <85.5 |
| W-851-08 | 05/19/03 | 270 ± 67.0 |

**Table 2.8-26. Building 851 firing table 2003 perchlorate in ground water.**

| Location | Date | Perchlorate ($\mu$g/L) |
|---|---|---|
| W-851-05 | 06/13/03 | <4 |
| W-851-05 | 09/19/03 | <4 H |
| W-851-05 | 09/19/03 DUP | <4 |
| W-851-06 | 06/13/03 | <4 |
| W-851-06 | 09/19/03 | <4 H |
| W-851-07 | 06/17/03 | <4 |
| W-851-07 | 09/19/03 | <4 H |
| W-851-08 | 05/19/03 | <4 |
| W-851-08 | 08/21/03 | <4 HL |

**Table 2.8-27. Building 851 firing table 2003 high explosive compounds in ground water**

| Location | Date | HMX ($\mu$g/L) | RDX ($\mu$g/L) |
|---|---|---|---|
| W-851-05 | 06/13/03 | <1 | <1 |
| W-851-05 | 09/19/03 | <5 | <5 |
| W-851-06 | 06/13/03 | <1 | <1 |
| W-851-06 | 09/19/03 | <5 | <5 |
| W-851-07 | 06/17/03 | <1 | <1 |
| W-851-08 | 05/19/03 | <1 | <1 LO |
| W-851-08 | 08/21/03 | <1 L | <1 L |

**Table 2.8-28. Building 851 firing table 2003 uranium and thorium isotopes in ground water.**

| Location | Date | Thorium 232 (pCi/L) | Uranium (pCi/L) | Uranium 234 by mass measurement (pCi/L) | Uranium 235 by mass measurement (pCi/L) | Uranium 236 by mass measurement (pCi/L) | Uranium 238 by mass measurement (pCi/L) | Uranium 235/238 |
|---|---|---|---|---|---|---|---|---|
| W-851-05 | 06/13/03 | 0.000111 ± 0.000320 | <0.0627 E | <0.062 | <0.000022 | <0.0007 | 0.00852 ± 0.000320 | <0.008961 |
| W-851-05 | 09/19/03 | 0.000150 ± 0.00000250 | 0.0753 ± 0.0140 | 0.0640 ± 0.0140 | 0.000430 ± 0.0000200 | <0.007 | 0.0109 ± 0.000155 | 0.00614 ± 0.000240 |
| W-851-05 | 09/19/03 DUP | <0.0001 | 0.115 ± 0.00306 | <0.062 | 0.00123 ± 0.0000100 | <0.007 | 0.0787 ± 0.000618 | 0.00243 ± 0.0000220 |
| W-851-05 | 12/05/03 | <0.0001 | <0.0627 | <0.087 | 0.000536 ± 0.00000800 | <0.00019 | 0.0118 ± 0.0000360 | 0.00704 ± 0.000107 |
| W-851-06 | 05/23/03 | 0.000101 ± 0.00000310 | 0.0905 ± 0.00300 | <0.062 | 0.00347 ± 0.000160 | <0.0007 | 0.0870 ± 0.00300 | 0.00620 ± 0.000183 |
| W-851-06 | 09/19/03 | <0.0001 | 0.292 ± 0.0250 | 0.218 ± 0.0250 | 0.00286 ± 0.0000600 | <0.007 | 0.0713 ± 0.00110 | 0.00624 ± 0.0000800 |
| W-851-06 | 12/04/03 | <0.0001 | 0.282 ± 0.00769 | 0.199 ± 0.00800 | 0.00301 ± 0.0000190 | 0.000100 ± 0.0000100 | 0.0801 ± 0.0000120 | 0.00585 ± 0.0000360 |
| W-851-06 | 12/04/03 DUP | <0.0001 | 0.0792 ± 0.0000480 | <0.319 | 0.00297 ± 0.0000400 | <0.00072 | 0.0763 ± 0.0000270 | 0.00606 ± 0.0000810 |
| W-851-07 | 06/17/03 | <0.0001 E | 0.0644 ± 0.00140 | <0.062 | 0.00284 ± 0.000110 | <0.0007 | 0.0616 ± 0.00140 | 0.00717 ± 0.000219 |
| W-851-07 | 06/17/03 | <0.0001 E | 0.0644 ± 0.00140 | <0.062 | 0.00284 ± 0.000110 | <0.0007 | 0.0616 ± 0.00140 | 0.00717 ± 0.000219 |
| W-851-07 | 09/19/03 | <0.0001 | 0.258 ± 0.0320 | 0.204 ± 0.0320 | 0.00242 ± 0.000100 | <0.007 | 0.0513 ± 0.00141 | 0.00734 ± 0.000216 |
| W-851-07 | 11/24/03 | <0.0001 | <0.0627 | <0.062 | 0.00238 ± 0.0000800 | <0.007 | 0.0518 ± 0.00109 | 0.00713 ± 0.000193 |
| W-851-08 | 05/19/03 | 0.00521 ± 0.000110 | 0.105 ± 0.00300 | <0.062 | 0.00340 ± 0.000150 | <0.0007 | 0.102 ± 0.00300 | 0.00520 ± 0.000176 |
| W-851-08 | 08/28/03 | 0.000552 ± 0.0000148 | 0.168 ± 0.00414 | <0.062 | 0.00573 ± 0.000230 | <0.007 | 0.162 ± 0.00413 | 0.00550 ± 0.000174 |
| W-851-08 | 11/24/03 | <0.0001 | 0.381 ± 0.0971 | 0.245 ± 0.0970 | 0.00495 ± 0.000170 | <0.007 | 0.131 ± 0.00336 | 0.00589 ± 0.000128 |

**Note:**

**Above analyses performed by mass spectrometry.**

## Uranium isotopes in ground water by alpha spectrometry.

| Location | Date | Urnnium 234 and Uranium 233 (pCi/L) | Uranium 235 and Uranium 236 (pCi/L) | Uranium 238 (pCi/L) |
|---|---|---|---|---|
| W-851-07 | 06/17/03 | 0.151 ± 0.0400 | <0.019 | <0.016 E |

**Table 2.8-29. Building 851 firing table 2003 metals and silica in ground water.**

| Location | Date | Arsenic (mg/L) | Barium (mg/L) | Beryllium (mg/L) | Cadmium (mg/L) | Chromium (mg/L) | Copper (mg/L) | Lead (mg/L) | Mercury (mg/L) | Selenium (mg/L) | Silica (as $SiO_2$) (mg/L) | Silver (mg/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| W-851-05 | 06/13/03 | <0.002 | <0.025 | <0.001 | <0.0005 | <0.001 | - | <0.005 | <0.0002 | <0.005 | 39 | <0.001 |
| W-851-05 | 09/19/03 | - | - | - | - | - | - | - | - | - | 37 | - |
| W-851-05 | 09/19/03 DUP | - | - | - | - | - | <0.01 | - | - | - | 39 L | - |
| W-851-06 | 06/13/03 | <0.002 | <0.025 | <0.001 | <0.0005 | <0.001 | - | <0.005 | <0.0002 | <0.005 | 34 | <0.001 |
| W-851-06 | 09/19/03 | - | - | - | - | - | - | - | - | - | 37 | - |
| W-851-07 | 06/17/03 | <0.002 | <0.025 | <0.001 | <0.0005 | <0.001 | - | <0.005 | <0.0002 | <0.005 | 42 | <0.001 |
| W-851-07 | 09/19/03 | - | - | - | - | - | - | - | - | - | 41 | - |
| W-851-08 | 05/19/03 | <0.002 | <0.025 | <0.001 | <0.0005 | <0.001 | - | <0.005 | <0.0002 | <0.005 | 31 | <0.001 |
| W-851-08 | 08/21/03 | - | - | - | - | - | - | - | - | - | 31 | - |

**Table 2.8-30. Building 851 firing table 2003 general minerals in ground water.**

| Constituents of concern | W-851-05 06/13/03 | W-851-05 09/19/03 | W-851-05 09/19/03 DUP | W-851-06 06/13/03 | W-851-06 09/19/03 | W-851-07 06/17/03 | W-851-07 09/19/03 | W-851-08 05/19/03 | W-851-08 08/21/03 |
|---|---|---|---|---|---|---|---|---|---|
| Total Alkalinity (as $CaCO_3$) (mg/L) | 160 H | 120 DH | 160 H | 140 H | 130 H | 170 H | 130 H | 160 H | 150 H |
| Aluminum (mg/L) | <0.2 H | <0.05 H | <0.05 L | <0.2 H | <0.05 H | <0.2 H | <0.05 H | <0.2 | <0.2 H |
| Bicarbonate Alk (as $CaCO_3$) (mg/L) | 160 H | 120 DH | 160 H | 140 H | 130 H | 170 H | 130 H | 160 H | 150 H |
| Calcium (mg/L) | 380 DH | 360 HL | 380 D | 380 DH | 370 HL | 440 DH | 430 HL | 280 D | 270 DH |
| Carbonate Alk (as $CaCO_3$) (mg/L) | <1 H | <5 DH | <5 H | <1 H | <2.5 H | <1 H | <2.5 H | <1 H | <1 H |
| Chloride (mg/L) | 74 DH | 54 DH | 86 D | 120 DH | 71 DH | 97 DH | 75 DH | 140 D | 140 DH |
| Copper (mg/L) | <0.05 H | <0.01 H | - | <0.05 H | <0.01 H | <0.05 H | <0.01 H | <0.05 | <0.05 H |
| Fluoride (mg/L) | 0.59 H | 0.46 DH | 0.49 H | 0.55 H | 0.53 DH | 1.0 H | 0.63 DH | 0.4 | 0.67 H |
| Hydroxide Alk (as $CaCO_3$) (mg/L) | <1 H | <5 DH | <5 H | <1 H | <2.5 H | <1 H | <2.5 H | <1 H | <1 H |
| Iron (mg/L) | <0.1 H | <0.05 H | 0.48 | <0.1 H | <0.05 H | 0.40 HL | <0.05 H | <0.1 | <0.1 H |
| Magnesium (mg/L) | 130 DH | 130 HL | 130 | 120 DH | 140 HL | 160 H | 160 HL | 89 | 83 H |
| Manganese (mg/L) | 0.87 H | 0.85 HL | 0.87 | 0.45 H | 0.61 HL | 2.2 H | 2.4 HL | 0.35 | 0.23 H |
| Nickel (mg/L) | <0.1 H | <0.05 H | <0.05 | <0.1 H | <0.05 H | <0.1 H | <0.05 H | <0.1 | <0.1 H |
| Nitrate (as N) (mg/L) | <0.1 H | <0.1 H | 0.11 H | 4.0 DH | 0.34 H | <0.1 H | <0.1 H | <0.1 | 7.0 DH |
| Nitrate (as $NO_3$) (mg/L) | <0.1 H | <0.4 H | 0.50 H | 17 DH | 1.5 H | <0.1 H | <0.4 H | <0.1 | 33 DH |
| Nitrate plus Nitrite (as N) (mg/L) | - | <0.1 H | - | - | 0.34 H | - | <0.1 H | - | - |
| Nitrite (as N) (mg/L) | <0.1 H | <0.02 | <0.1 H | 0.10 H | <0.02 | <0.1 H | <0.02 | <0.1 | <0.1 H |
| pH (Units) | 7.4 H | 7.5 H | 7.2 | 8.3 H | 8.0 H | 7.5 H | 7.6 H | 7.3 | 7.5 H |
| Ortho-Phosphate (mg/L) | 0.020 H | 0.31 | <0.1 H | <0.02 H | 0.3 | 0.070 H | 0.27 | 0.03 | 0.020 H |
| Total Phosphorus (as P) (mg/L) | - | <0.05 H | 0.020 H | - | <0.05 H | - | 0.090 H | - | - |
| Total Phosphorus (as $PO_4$) (mg/L) | <0.05 H | - | - | <0.05 H | - | 0.070 H | - | 0.070 H | 0.050 H |
| Potassium (mg/L) | 23 H | 12 H | 13 | 23 H | 13 H | 28 HL | 16 H | 23 L | 22 LH |
| Sodium (mg/L) | 340 DH | 370 HL | 340 | 330 DH | 360 HL | 320 H | 350 HL | 270 D | 240 DLH |
| Total dissolved solids (TDS) (mg/L) | 3,200 H | 3,100 DH | 3,000 H | 3,000 H | 3,300 DH | 3,600 H | 3,500 DH | 2,400 | 2,300 H |
| Specific Conductance ($\mu$mhos/cm) | 3,400 H | 3,500 H | 3,300 L | 3,300 H | 3,700 H | 3,700 H | 3,700 H | 2,700 H | 2,700 H |
| Sulfate (mg/L) | 1,500 DH | 1,900 DH | 2,900 DLH | 1,400 DH | 1,900 DH | 1,700 DHL | 2,100 DH | 1,200 DH | 1,300 HD |
| Surfactants (mg/L) | <0.5 H | <0.5 | <0.05 | <0.5 H | <0.5 | <0.5 H | <0.5 | <0.5 | <0.5 H |
| Total Hardness (as $CaCO_3$) (mg/L) | 1,500 H | 1,400 H | 1,500 H | 1,400 H | 1,500 H | 1,600 H | 1,700 H | 1,100 H | 1,000 H |
| Zinc (mg/L) | <0.05 H | <0.05 H | <0.05 | <0.05 H | <0.05 H | <0.05 HL | <0.05 H | <0.05 | <0.05 H |

**Table 2.8-31. Building 851 firing table 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL | Notes |
|---|---|---|---|---|
| W-851-05 | 01/03/03 | 141.98 | 1129.81 | |
| W-851-05 | 02/07/03 | 141.81 | 1129.98 | |
| W-851-05 | 03/01/03 | 141.84 | 1129.95 | |
| W-851-05 | 04/05/03 | 141.79 | 1130 | |
| W-851-05 | 07/11/03 | 141.68 | 1130.11 | |
| W-851-05 | 10/08/03 | 141.44 | 1130.35 | |
| W-851-06 | 01/03/03 | 135.28 | 1130.22 | |
| W-851-06 | 02/01/03 | 135.15 | 1130.35 | |
| W-851-06 | 03/01/03 | 135 | 1130.5 | |
| W-851-06 | 04/05/03 | 135.1 | 1130.4 | |
| W-851-06 | 07/11/03 | 134.97 | 1130.53 | |
| W-851-06 | 10/08/03 | 135.17 | 1130.33 | |
| W-851-07 | 01/10/03 | 141.39 | 1130.2 | |
| W-851-07 | 02/01/03 | 141.63 | 1129.96 | |
| W-851-07 | 03/01/03 | 141.37 | 1130.22 | |
| W-851-07 | 04/05/03 | 141.47 | 1130.12 | |
| W-851-07 | 07/11/03 | 141.36 | 1130.23 | |
| W-851-07 | 10/08/03 | 147.48 | 1124.11 | |
| W-851-08 | 01/10/03 | 183.19 | 1089.13 | |
| W-851-08 | 02/01/03 | 183.2 | 1089.12 | |
| W-851-08 | 03/01/03 | 183.27 | 1089.05 | |
| W-851-08 | 04/05/03 | 183.34 | 1088.98 | |
| W-851-08 | 07/11/03 | 183.26 | 1089.06 | |
| W-851-08 | 10/11/03 | - | - | NM |

**Table 3.1-1. Pit 2 landfill 2003 VOCs in ground water.**

| Location | Date | Method | TCE ($\mu$g/L) | PCE ($\mu$g/L) | Total 1,2-DCE ($\mu$g/L) | Carbon tetrachloride ($\mu$g/L) | Chloroform ($\mu$g/L) | 1,1-DCA ($\mu$g/L) | 1,2-DCA ($\mu$g/L) | 1,1-DCE ($\mu$g/L) | 1,1,1-TCA ($\mu$g/L) | Freon 11 ($\mu$g/L) | Freon 113 ($\mu$g/L) | Methylene chloride ($\mu$g/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K2-01C | 06/05/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| K2-01C | 12/02/03 | E601 | <0.5 | <0.5 | <1 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |
| NC2-08 | 05/30/03 | E601 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 |

**Table 3.1-2. Pit 2 landfill 2003 tritium in ground water.**

| Location | Date | Tritium (pCi/L) |
|---|---|---|
| K2-01C | 02/01/03 | 1,970 ± 220 |
| K2-01C | 06/05/03 | 8,580 ± 870 |
| K2-01C | 09/04/03 | 10,200 ± 1,000 |
| K2-01C | 12/02/03 | 7,260 ± 740 |
| NC2-08 | 0/25/03 | 12,000 ± 1,200 |
| NC2-08 | 04/19/03 | 10,400 ± 1,100 |
| NC2-08 | 09/08/03 | 10,200 ± 1,000 |
| NC2-08 | 10/11/03 | 10,200 ± 1,000 |

**Table 3.1-3. Pit 2 landfill 2003 nitrate and perchlorate in ground water.**

| Location | Date | Nitrate (as $NO_3$) (mg/L) | Perchlorate ($\mu$g/L) |
|---|---|---|---|
| K2-01C | 06/05/03 | 35 D | 4 |
| K2-01C | 12/02/03 | 25 | 5.3 |
| NC2-08 | 05/30/03 | 44 D | 6 |

**Table 3.1-4. Pit 2 landfill 2003 fluoride in ground water.**

| Location | Date | Fluoride (mg/L) |
|---|---|---|
| K2-01C | 06/05/03 | 0.72 D |
| NC2-08 | 05/30/03 | 0.58 |

**Table 3.1-5. Pit 2 landfill 2003 high explosive compounds in ground water.**

| Location | Date | HMX ($\mu$g/L) | RDX ($\mu$g/L) |
|---|---|---|---|
| K2-01C | 06/05/03 | <1 | <1 |
| K2-01C | 12/02/03 | <5 | <5 |
| NC2-08 | 05/30/03 | <1 | <1 |

**Table 3.1-6. Pit 2 landfill 2003 metals in ground water.**

| Constituents of concern | K2-01C<br>06/05/03 | NC2-08<br>05/30/03 |
|---|---|---|
| Antimony (mg/L) | <0.06 | <0.06 |
| Arsenic (mg/L) | 0.008 | 0.015 |
| Barium (mg/L) | 0.04 | 0.03 |
| Beryllium (mg/L) | <0.002 | <0.002 |
| Cadmium (mg/L) | <0.005 | <0.005 |
| Chromium (mg/L) | <0.01 | 0.08 |
| Cobalt (mg/L) | <0.025 | <0.025 |
| Copper (mg/L) | 0.11 | 0.01 |
| Lead (mg/L) | 0.016 B | 0.014 |
| Lithium ($\mu$g/L) | 20 | 26 T |
| Mercury (mg/L) | <0.0002 | <0.0002 |
| Molybdenum (mg/L) | <0.02 | <0.02 |
| Nickel (mg/L) | <0.02 | <0.02 |
| Selenium (mg/L) | <0.005 | <0.005 |
| Silver (mg/L) | <0.005 | <0.005 |
| Thallium (mg/L) | <0.005 | <0.005 |
| Thorium ($\mu$g/L) | <22.4 | <22.4 |
| Uranium ($\mu$g/L) | <20.5 | <20.5 |
| Vanadium (mg/L) | <0.5 | <0.5 |
| Zinc (mg/L) | 0.12 | <0.02 |

**Table 3.1-7. Pit 2 landfill 2003 uranium and thorium isotopes by mass spectrometry in ground water.**

| Location | Date | Thorium 232 (pCi/L) | Uranium (pCi/L) | Uranium 234 by mass measurement (pCi/L) | Uranium 235 by mass measurement (pCi/L) | Uranium 236 by mass measurement (pCi/L) | Uranium 238 by mass measurement (pCi/L) | Uranium 235/238 |
|---|---|---|---|---|---|---|---|---|
| K2-01C | 12/2/03 | <0.0001 | 9.75 ± 0.741 | 5.61 ± 0.740 | 0.159 ± 0.00162 | <0.007 | 3.98 ± 0.0297 | 0.00623 ± 0.0000430 |
| NC2-08 | 10/11/03 | <0.0001 | 3.13 ± 0.0884 | 1.96 ± 0.0870 | 0.0521 ± 0.000770 | <0.007 | 1.12 ± 0.0154 | 0.00722 ± 0.0000420 |

**Table 3.1-8. Pit 2 landfill 2003 ground water elevations.**

| Well | Date | Depth to water ft. | Water elevation ft. MSL |
|---|---|---|---|
| K2-01C | 01/10/03 | 55.3 | 995.33 |
| K2-01C | 04/17/03 | 55.61 | 995.02 |
| K2-01C | 07/11/03 | 56.38 | 994.25 |
| K2-01C | 10/04/03 | 57.5 | 993.13 |
| NC2-08 | 01/10/03 | 51.95 | 997.42 |
| NC2-08 | 04/05/03 | 52.05 | 997.32 |
| NC2-08 | 07/02/03 | 52.88 | 996.49 |
| NC2-08 | 10/04/03 | 53.66 | 995.71 |

**Table 3.1-9. Pit 2 landfill 2003 ground water sampling and analysis plan.**

| Sampling location | Location type | Completion interval | Sampling frequency required | Sampling frequency planned | Sampling type | Requested analysis | Sampling quarter | Sampled Y/N | Comment |
|---|---|---|---|---|---|---|---|---|---|
| K2-01C | CMP DMW | $Tnbs_1$ | A | A | CMP/WGMG | CMPTRIMET | 2 | Y | |
| K2-01C | CMP DMW | $Tnbs_1$ | A | S | CMP/WGMG | E300.0:NO3 | 2 | Y | |
| K2-01C | CMP DMW | $Tnbs_1$ | | S | ERD/WGMG | E300.0:NO3 | 4 | Y | |
| K2-01C | CMP DMW | $Tnbs_1$ | A | S | CMP/WGMG | E300.0:PERC | 2 | Y | |
| K2-01C | CMP DMW | $Tnbs_1$ | | S | ERD/WGMG | E300.0:PERC | 4 | Y | |
| K2-01C | CMP DMW | $Tnbs_1$ | A | A | CMP/WGMG | E340.2 | 2 | Y | |
| K2-01C | CMP DMW | $Tnbs_1$ | A | S | CMP/WGMG | E601 | 2 | Y | |
| K2-01C | CMP DMW | $Tnbs_1$ | | S | ERD/WGMG | E601 | 4 | Y | |
| K2-01C | CMP DMW | $Tnbs_1$ | A | S | CMP/WGMG | E8330:R+H | 2 | Y | |
| K2-01C | CMP DMW | $Tnbs_1$ | | S | ERD/WGMG | E8330:R+H | 4 | Y | |
| K2-01C | CMP DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 1 | Y | |
| K2-01C | CMP DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 2 | Y | |
| K2-01C | CMP DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 3 | Y | |
| K2-01C | CMP DMW | $Tnbs_1$ | Q | Q | CMP/WGMG | E906 | 4 | Y | |
| K2-01C | CMP DMW | $Tnbs_1$ | B | B | CMP/WGMG | MS:THISO | 4 | Y | |
| K2-01C | CMP DMW | $Tnbs_1$ | B | B | CMP/WGMG | MS:UISO | 4 | Y | |
| K2-01C | CMP DMW | $Tnbs_1$ | A | A | CMP/WGMG | T26METALS | 2 | Y | |
| NC2-08 | CMP DMW | $Tnbs_1$ | A | A | CMP | CMPTRIMET | 2 | Y | |
| NC2-08 | CMP DMW | $Tnbs_1$ | A | A | CMP | E300.0:NO3 | 2 | Y | |
| NC2-08 | CMP DMW | $Tnbs_1$ | A | A | CMP | E300.0:PERC | 2 | Y | |
| NC2-08 | CMP DMW | $Tnbs_1$ | A | A | CMP | E340.2 | 2 | Y | |
| NC2-08 | CMP DMW | $Tnbs_1$ | A | A | CMP | E601 | 2 | Y | |
| NC2-08 | CMP DMW | $Tnbs_1$ | A | A | CMP | E8330:R+H | 2 | Y | |
| NC2-08 | CMP DMW | $Tnbs_1$ | Q | Q | CMP | E906 | 1 | Y | |
| NC2-08 | CMP DMW | $Tnbs_1$ | Q | Q | CMP | E906 | 2 | Y | |
| NC2-08 | CMP DMW | $Tnbs_1$ | Q | Q | CMP | E906 | 3 | Y | |
| NC2-08 | CMP DMW | $Tnbs_1$ | Q | Q | CMP | E906 | 4 | Y | |
| NC2-08 | CMP DMW | $Tnbs_1$ | B | B | CMP | MS:THISO | 4 | Y | |
| NC2-08 | CMP DMW | $Tnbs_1$ | B | B | CMP | MS:UISO | 4 | Y | |
| NC2-08 | CMP DMW | $Tnbs_1$ | A | A | CMP | T26METALS | 2 | Y | |

**Notes and footnotes appear on following page.**

## Table 3.1-9. Pit 2 landfill 2003 ground water sampling and analysis plan. (Cont. Page 2 of 2)

**Notes:**

**No COCs in ground water at Pit 2.**

**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) sampled annually.**

**CMP Detection monitoring analytes: uranium and thorium isotopes by mass spectrometry (MS:UISO and MS:THISO) sampled biennially.**

**CGSA CMP/DIS =** **Sampling more frequently then required.**

**CGSA CMP/WGMG =** **Well shared with the Operations and Regulatory Affairs Division, Water Guidance and Monitoring Group and may be sampled at a greater frequency and for additional analytes then required by the CMP. Non-CMP analytes are reported separately by ORAD.**

**CGSA CMP =** **Central GSA groundwater sampling and analysis plan specified in the GSA RD**

**CMP DMW =** **CMP detection monitor well.**

**CMP/DIS =** **Sampling required analyte more frequently then required.**

**CMP/WGMG =** **Well shared with the Operations and Regulatory Affairs Division, Water Guidance and Monitoring Group and may be sampled at a greater frequency and for additional analytes then required by the CMP. Non-CMP analytes are reported separately by ORAD.**

**CMP =** **Compliance Monitoring.**

**DIS =** **Discretionary sampling of non-required analyte.**

**DMW =** **Detection monitor well (non-CMP).**

**ERD/WGMG =** **non-CMP analyte sampled from a well shared by ERD and WGMG.**

**EW =** **Extraction well.**

**GW =** **Guard well.**

**MWB =** **Monitor well used for background.**

**MWPT =** **Monitor well used for plume tracking.**

**SPR =** **Spring.**

**WS =** **Water supply well.**

**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 | $8 \times 10^{-3}$ | 4.3 | Based on TCE concentration of 22,000 $\mu$g/L (3-Sep-2003) in well W-834-D15 |
| | Indoor – JEM | PCE | $5 \times 10^{-7}$ | NA | Based on PCE concentration of 31 $\mu$g/L (16-Jun-2003) in well W-834-D15 |
| **Cumulative risk and hazard index** | | | **$8 \times 10^{-3}$** | **4.3** | **Institutional controls in place, building only used for storage.** |
| Building 854A | Indoor – JEM | Total VOCs | $1 \times 10^{-6}$ | $7 \times 10^{-4}$ | Based on Total VOCs (all TCE) concentration of 7.2 $\mu$g/L (12-Nov-2003) in well W-854-10 |
| **Cumulative risk and hazard index** | | | **$1 \times 10^{-6}$** | **$7 \times 10^{-4}$** | **Institutional controls in place.** |
| Building 854F | Indoor – JEM | Chloroform | $1 \times 10^{-8}$ | NA | Based on Chloroform detection limit of 0.5 $\mu$g/L (21-May-2003) in well W-854-02 |
| | Indoor – JEM | TCE | $6 \times 10^{-5}$ | 0.03 | Based on TCE concentration of 210 $\mu$g/L (21-May-2003) in well W-854-02 |
| | Indoor – JEM | Other VOCs | NC | NC | The only detection is TCE |
| **Cumulative risk and hazard index** | | | **$6 \times 10^{-5}$** | **0.03** | **Institutional controls in place.** |
| Building 830 | Indoor – JEM | Vinyl Chloride | $2 \times 10^{-6}$ | 0.005 | Based on Vinyl Chloride detection limit of 50 $\mu$g/L (25-Aug-2003) in well W-830-30 |
| | Indoor – JEM | TCE | $5 \times 10^{-4}$ | 0.26 | Based on TCE concentration of 3,200 $\mu$g/L (25-Aug-2003) in well W-830-30 |
| **Cumulative risk and hazard index** | | | **$5 \times 10^{-4}$** | **0.27** | **Institutional controls in place.** |
| Building 832F | Indoor – JEM | Dichloropropane | $4 \times 10^{-9}$ | 0.0001 | Based on 1,2-Dichlorpropane detection limit of 0.5 $\mu$g/L (2-Oct-2003) in well W-832-18 |
| **Cumulative risk and hazard index** | | | **$4 \times 10^{-9}$** | **0.0001** | **Inhalation risk or hazard did not exist in year 2003.** |
| Building 833 | Indoor – JEM | TCE | $2 \times 10^{-6}$ | 0.001 | Based on TCE concentration of 20 $\mu$g/L (20-Jun-2000) in well W-833-03. Contaminated wells in this area have been dry since 2000. |
| | Indoor – JEM | Chloroform | $6 \times 10^{-9}$ | NA | Based on Chloroform detection limit of 0.5 $\mu$g/L (20-Jun-2000) in well W-833-03. Contaminated wells in this area have been dry since 2000. |
| **Cumulative risk and hazard index** | | | **$2 \times 10^{-6}$** | **0.001** | **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.** |

**Table 4.1-1. Summary of inhalation risks and hazards resulting from transport of contaminant vapors to indoor and outdoor ambient air. (Cont. Page 2 of 2)**

| Area | Pathway and model | Contaminant | Incremental risk | Hazard quotient | Comment |
|---|---|---|---|---|---|
| Building 834D | Outdoor – JURY | TCE | $6 \times 10^{-14}$ | $5 \times 10^{-11}$ | Based on TCE concentration of 22,000 $\mu$g/L (3-Sep-2003) in well W-834-D15 |
| | Outdoor – JURY | PCE | $3 \times 10^{-18}$ | NA | Based on PCE concentration of 31 $\mu$g/L (3-Sep-2003) in well W-834-D15 |
| **Cumulative risk and hazard index** | | | $\mathbf{6 \times 10^{-14}}$ | $\mathbf{5 \times 10^{-1}}$ | **Inhalation risk or hazard did not exist in year 2003.** |
| Building 815 | Outdoor – JURY | TCE | $2 \times 10^{-18}$ | $2 \times 10^{-15}$ | Based on TCE concentration of 6.3 $\mu$g/L (13-Feb-2003) in well W-815-02 |
| | Outdoor – JURY | PCE | $4 \times 10^{-21}$ | NA | Based on PCE detection limit of 0.5 $\mu$g/L (13-Feb-2003) in well W-815-02 |
| **Cumulative risk and hazard index** | | | $\mathbf{2 \times 10^{-18}}$ | $\mathbf{2 \times 10^{-15}}$ | **Inhalation risk or hazard did not exist in year 2003.** |
| Building 854F | Outdoor – JURY | Chloroform | $4 \times 10^{-20}$ | NA | Based on Chloroform detection limit of 0.5 $\mu$g/L (21-May-2003) in well W-854-02 |
| | Outdoor – JURY | 1,2-DCA | NA | $2 \times 10^{-15}$ | Based on 1,2-DCA detection limit of 0.5 $\mu$g/L (21-May-2003) in well W-854-02 |
| **Cumulative risk and hazard index** | | | $\mathbf{4 \times 10^{-20}}$ | $\mathbf{2 \times 10^{-15}}$ | **Inhalation risk or hazard did not exist in year 2003.** |
| Building 830 | Outdoor – JURY | Chloroform | $2 \times 10^{-18}$ | NA | Based on Chloroform detection limit of 50 $\mu$g/L (25-Aug-2003) in well W-830-30 |
| | Outdoor – JURY | 1,2-DCA | NA | $1 \times 10^{-13}$ | Based on 1,2-DCA detection limit of 50 $\mu$g/L (25-Aug-2003) in well W-830-30 |
| | Outdoor – JURY | Vinyl Chloride | $4 \times 10^{-18}$ | $1 \times 10^{-13}$ | Based on Vinyl Chloride detection limit of 50 $\mu$g/L (25-Aug-2003) in well W-830-30 |
| **Cumulative risk and hazard index** | | | $\mathbf{6 \times 10^{-18}}$ | $\mathbf{2 \times 10^{-13}}$ | **Inhalation risk or hazard did not exist in year 2003.** |

Notes:

JEM = Johnson-Ettinger Model for indoor air pathway (EQM for USEPA, 2003).

JURY = Infinite source term Jury Model for outdoor air pathway (Jury et. al., 1983).

NC = Not calculated.

NA = Applicable, Unit Risk Factor (URF) or Reference Concentration (RfC) does not exist for this chemical.

Methodology:

A representative soil column was developed combining the borehole geology information from wells and boreholes that are within a 100 ft radius of a given building or site. The resulting soil column was simplified into three strata to input into the JEM 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 concentration in any nearby well was selected as the source concentration. If the VOC of interest was not detected in any of the nearby wells, then the highest detection limit was used as the source concentration. For the JEM model site-specific building dimensions were used. Default values were used for all other building related parameters. For the JURY model a 100 square feet area with 6 feet height was used as the outdoor ambient air mixing zone. A conservative air exchange rate of 1 volume per hour was used for the outdoor mixing zone. Using the average wind velocity at Site 300 would result in much higher air exchange rates.

**Table 4.1-2. PCB concentrations in Building 850 OU surface soil collected during 2003.**

| Location | Date | Depth (ft) | PCB 1016 (mg/kg) | PCB 1221 (mg/kg) | PCB 1232 (mg/kg) | PCB 1242 (mg/kg) | PCB 1248 (mg/kg) | PCB 1254 (mg/kg) | PCB 1260 (mg/kg) | PCB 1268 (mg/kg) |
|---|---|---|---|---|---|---|---|---|---|---|
| 3SS-850-204 | 10/24/03 | 0 | <0.02 IL | <0.08 IL | <0.02 IL | <0.02 LI | <0.02 IL | 0.057 JIL | <0.02 IL | <0.02 IL |
| 3SS-850-205 | 10/24/03 | 0 | <1 ILD | <4 ILD | <1 ILD | <1 ILD | <1 ILD | 3.7 JILD | <1 IDL | <1 ILD |
| 3SS-850-206 | 10/24/03 | 0 | <20 ILD | <80 ILD | <20 ILD | <20 ILD | <20 ILD | 130 JILD | <20 IDL | <20 ILD |
| 3SS-850-207 | 10/24/03 | 0 | <0.2 ILD | <0.8 ILD | <0.2 ILD | <0.2 ILD | <0.2 ILD | 1.5 JILD | <0.2 IDL | <0.2 ILD |
| 3SS-850-208 | 10/24/03 | 0 | <0.8 ILD | <3.2 ILD | <0.8 ILD | <0.8 ILD | <0.8 ILD | 3.9 JILD | <0.8 ILD | <0.8 ILD |
| 3SS-850-209 | 10/24/03 | 0 | <0.1 ILD | <0.4 ILD | <0.1 ILD | <0.1 ILD | <0.1 ILD | 0.62 JILD | <0.1 ILD | <0.1 ILD |
| 3SS-850-209 | 10/24/03 | 1 | <0.1 ILD | <0.4 ILD | <0.1 ILD | <0.1 ILD | <0.1 ILD | 0.64 JILD | <0.1 IDL | <0.1 ILD |
| 3SS-850-210 | 10/24/03 | 0 | <1 ILD | <4 ILD | <1 ILD | <1 ILD | <1 ILD | 5.4 JILD | <1 IDL | <1 ILD |
| 3SS-850-211 | 10/24/03 | 0 | <4 ILD | <16 ILD | <4 ILD | <4 ILD | <4 ILD | 18 JILD | <4 IDL | <4 ILD |
| 3SS-850-212 | 10/24/03 | 0 | <20 ILD | <80 ILD | <20 ILD | <20 ILD | <20 ILD | 110 JILD | <20 IDL | <20 ILD |
| 3SS-850-213 | 10/24/03 | 0 | <0.02 IL | <0.08 IL | <0.02 IL | <0.02 IL | <0.02 IL | 0.12 JIL | <0.02 IL | <0.02 IL |
| 3SS-850-214 | 10/27/03 | 0 | <0.004 D | <0.004 D | <0.004 D | <0.004 D | <0.004 D | 0.91 D | 0.24 D | - |
| 3SS-850-215 | 10/27/03 | 0 | <0.8 DIJ | <0.8 DIJ | <0.8 DIJ | <0.8 DIJ | <0.8 DIJ | 7.0 DIJ | 0.70 DIJ | - |
| 3SS-850-216 | 10/27/03 | 0 | <4 DIJ | <4 DIJ | <4 DIJ | <4 DIJ | <4 DIJ | 68 DIJ | 4.0 DIJ | - |
| 3SS-850-217 | 10/24/03 | 0 | <0.2 ILD | <0.8 ILD | <0.2 ILD | <0.2 ILD | <0.2 ILD | 3.0 JILD | <0.2 IDL | <0.2 ILD |
| 3SS-850-218 | 10/24/03 | 0 | <0.1 ILD | <0.4 ILD | <0.1 ILD | <0.1 ILD | <0.1 ILD | 0.74 JILD | <0.1 IDL | <0.1 ILD |
| 3SS-850-219 | 10/24/03 | 0 | <0.2 ILD | <0.8 ILD | <0.2 ILD | <0.2 ILD | <0.2 ILD | 4.0 JILD | <0.2 IDL | <0.2 ILD |
| 3SS-850-220 | 10/24/03 | 0 | <1 ILD | <4 ILD | <1 ILD | <1 ILD | <1 ILD | 11 JILD | <1 IDL | <1 ILD |
| 3SS-850-220 | 10/24/03 | 1 | <4 ILD | <16 ILD | <4 ILD | <4 ILD | <4 ILD | 17 JILD | <4 IDL | <4 ILD |
| 3SS-850-221 | 10/24/03 | 0 | <0.2 ILD | <0.8 ILD | <0.2 ILD | <0.2 ILD | <0.2 ILD | 1.2 JILD | <0.2 IDL | <0.2 ILD |
| 3SS-850-222 | 10/27/03 | 0 | <0.08 D | <0.08 D | <0.08 D | <0.08 D | <0.08 D | 0.36 D | 0.035 D | - |
| 3SS-850-223 | 10/27/03 | 0 | <0.2 DIJ | <0.2 DIJ | <0.2 DIJ | <0.2 DIJ | <0.2 DIJ | 2.0 DIJ | 0.12 DIJ | - |
| 3SS-850-224 | 10/27/03 | 0 | <0.04 D | <0.04 D | <0.04 D | <0.04 D | <0.04 D | 0.21 D | 0.053 D | - |
| 3SS-850-224 | 10/27/03 | 1 | <0.02 D | <0.02 D | <0.02 D | <0.02 D | <0.02 D | 0.18 D | 0.035 D | - |
| 3SS-850-225 | 10/27/03 | 0 | <0.008 D | <0.008 D | <0.008 D | <0.008 D | <0.008 D | 0.033 D | <0.008 D | - |
| 3SS-850-226 | 10/27/03 | 0 | <0.008 D | <0.008 D | <0.008 D | <0.008 D | <0.008 D | 0.040 D | <0.008 D | - |
| 3SS-850-227 | 10/27/03 | 0 | <0.08 D | <0.08 D | <0.08 D | <0.08 D | <0.08 D | 0.46 D | 0.10 D | - |
| 3SS-850-228 | 10/27/03 | 0 | <0.2 DIJ | <0.2 DIJ | <0.2 DIJ | <0.2 DIJ | <0.2 DIJ | 2.0 DIJ | 0.48 DIJ | - |
| 3SS-850-229 | 10/27/03 | 0 | <0.2 DIJ | <0.2 DIJ | <0.2 DIJ | <0.2 DIJ | <0.2 DIJ | 2.0 DIJ | 0.40 DIJ | - |
| 3SS-850-229 | 10/27/03 | 1 | <0.08 D | <0.08 D | <0.08 D | <0.08 D | <0.08 D | 1.0 D | 0.20 D | - |
| 3SS-850-230 | 10/27/03 | 0 | <0.4 DIJ | <0.4 DIJ | <0.4 DIJ | <0.4 DIJ | <0.4 DIJ | 3.0 DIJ | 0.67 DIJ | - |
| 3SS-850-231 | 10/27/03 | 0 | <0.04 D | <0.04 D | <0.04 D | <0.04 D | <0.04 D | 0.45 D | 0.045 D | - |

**Table 4.1-2. PCB concentrations in Building 850 OU surface soil collected during 2003.**

| Location | Date | Depth (ft) | PCB 1016 (mg/kg) | PCB 1221 (mg/kg) | PCB 1232 (mg/kg) | PCB 1242 (mg/kg) | PCB 1248 (mg/kg) | PCB 1254 (mg/kg) | PCB 1260 (mg/kg) | PCB 1268 (mg/kg) |
|---|---|---|---|---|---|---|---|---|---|---|
| 3SS-850-232 | 10/24/03 | 0 | <0.2 ILD | <0.8 ILD | <0.2 ILD | <0.2 ILD | <0.2 ILD | 6.7 JILD | <0.2 ILDL | <0.2 ILD |
| 3SS-850-233 | 10/27/03 | 0 | <0.08 D | <0.08 D | <0.08 D | <0.08 D | <0.08 D | 0.99 D | 0.15 D | - |
| 3SS-850-234 | 10/27/03 | 0 | <0.04 D | <0.04 D | <0.04 D | <0.04 D | <0.04 D | 0.50 D | 0.060 D | - |

**Table 4.1-3. PCB concentrations in B854 OU surface soil as determined by EPA Method 8082.**

| Location | Sample depth | Sampled date | Result | Reporting limit | Analyte |
|---|---|---|---|---|---|
| 3SS-854-103 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1016 |
| 3SS-854-103 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1221 |
| 3SS-854-103 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1232 |
| 3SS-854-103 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1242 |
| 3SS-854-103 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1248 |
| 3SS-854-103 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1254 |
| 3SS-854-103 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1260 |
| | | | | | |
| 3SS-854-112 | 0 | 29-Jan-03 | <0.35 | 0.35 | PCB 1016 |
| 3SS-854-112 | 0 | 29-Jan-03 | <0.35 | 0.35 | PCB 1221 |
| 3SS-854-112 | 0 | 29-Jan-03 | <0.35 | 0.35 | PCB 1232 |
| 3SS-854-112 | 0 | 29-Jan-03 | <0.35 | 0.35 | PCB 1242 |
| 3SS-854-112 | 0 | 29-Jan-03 | 3.6 | 0.35 | PCB 1248 |
| 3SS-854-112 | 0 | 29-Jan-03 | 4.7 | 0.35 | PCB 1254 |
| 3SS-854-112 | 0 | 29-Jan-03 | <0.35 | 0.35 | PCB 1260 |
| | | | | | |
| 3SS-854-113 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1016 |
| 3SS-854-113 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1221 |
| 3SS-854-113 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1232 |
| 3SS-854-113 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1242 |
| 3SS-854-113 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1248 |
| 3SS-854-113 | 0 | 29-Jan-03 | 0.023 | 0.007 | PCB 1254 |
| 3SS-854-113 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1260 |
| | | | | | |
| 3SS-854-114 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1016 |
| 3SS-854-114 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1221 |
| 3SS-854-114 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1232 |
| 3SS-854-114 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1242 |
| 3SS-854-114 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1248 |
| 3SS-854-114 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1254 |
| 3SS-854-114 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1260 |
| | | | | | |
| 3SS-854-115 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1016 |
| 3SS-854-115 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1221 |
| 3SS-854-115 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1232 |

**Table 4.1-3. PCB sample results in mg/kg as determined by EPA Method 8082. (Cont. Page 2 of 8)**

| Location | Sample depth | Sampled date | Result | Reporting limit | Analyte |
|---|---|---|---|---|---|
| 3SS-854-115 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1242 |
| 3SS-854-115 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1248 |
| 3SS-854-115 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1254 |
| 3SS-854-115 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1260 |
| | | | | | |
| 3SS-854-121 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1016 |
| 3SS-854-121 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1221 |
| 3SS-854-121 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1232 |
| 3SS-854-121 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1242 |
| 3SS-854-121 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1248 |
| 3SS-854-121 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1254 |
| 3SS-854-121 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1260 |
| | | | | | |
| 3SS-854-123 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1016 |
| 3SS-854-123 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1221 |
| 3SS-854-123 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1232 |
| 3SS-854-123 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1242 |
| 3SS-854-123 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1248 |
| 3SS-854-123 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1254 |
| 3SS-854-123 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1260 |
| | | | | | |
| 3SS-854-124 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1016 |
| 3SS-854-124 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1221 |
| 3SS-854-124 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1232 |
| 3SS-854-124 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1242 |
| 3SS-854-124 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1248 |
| 3SS-854-124 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1254 |
| 3SS-854-124 | 0 | 29-Jan-03 | <0.007 | 0.007 | PCB 1260 |
| | | | | | |
| 3SS-854-112 | 0.5 | 23-Apr-03 | <0.1 | 0.1 | PCB 1016 |
| 3SS-854-112 | 0.5 | 23-Apr-03 | <0.1 | 0.1 | PCB 1221 |
| 3SS-854-112 | 0.5 | 23-Apr-03 | <0.1 | 0.1 | PCB 1232 |
| 3SS-854-112 | 0.5 | 23-Apr-03 | <0.1 | 0.1 | PCB 1242 |
| 3SS-854-112 | 0.5 | 23-Apr-03 | 0.9 | 0.1 | PCB 1248 |
| 3SS-854-112 | 0.5 | 23-Apr-03 | <0.1 | 0.1 | PCB 1254 |
| 3SS-854-112 | 0.5 | 23-Apr-03 | <0.1 | 0.1 | PCB 1260 |

**Table 4.1-3. PCB sample results in mg/kg as determined by EPA Method 8082. (Cont. Page 3 of 8)**

| Location | Sample depth | Sampled date | Result | Reporting limit | Analyte |
|---|---|---|---|---|---|
| 3SS-854-112 | 1 | 23-Apr-03 | <0.1 | 0.1 | PCB 1016 |
| 3SS-854-112 | 1 | 23-Apr-03 | <0.1 | 0.1 | PCB 1221 |
| 3SS-854-112 | 1 | 23-Apr-03 | <0.1 | 0.1 | PCB 1232 |
| 3SS-854-112 | 1 | 23-Apr-03 | <0.1 | 0.1 | PCB 1242 |
| 3SS-854-112 | 1 | 23-Apr-03 | 0.4 | 0.1 | PCB 1248 |
| 3SS-854-112 | 1 | 23-Apr-03 | <0.1 | 0.1 | PCB 1254 |
| 3SS-854-112 | 1 | 23-Apr-03 | <0.1 | 0.1 | PCB 1260 |
| 3SS-854-112 | 1.5 | 23-Apr-03 | <0.1 | 0.1 | PCB 1016 |
| 3SS-854-112 | 1.5 | 23-Apr-03 | <0.1 | 0.1 | PCB 1221 |
| 3SS-854-112 | 1.5 | 23-Apr-03 | <0.1 | 0.1 | PCB 1232 |
| 3SS-854-112 | 1.5 | 23-Apr-03 | <0.1 | 0.1 | PCB 1242 |
| 3SS-854-112 | 1.5 | 23-Apr-03 | 0.2 | 0.1 | PCB 1248 |
| 3SS-854-112 | 1.5 | 23-Apr-03 | <0.1 | 0.1 | PCB 1254 |
| 3SS-854-112 | 1.5 | 23-Apr-03 | <0.1 | 0.1 | PCB 1260 |
| 3SS-854-112 | 2 | 23-Apr-03 | <0.1 | 0.1 | PCB 1016 |
| 3SS-854-112 | 2 | 23-Apr-03 | <0.1 | 0.1 | PCB 1221 |
| 3SS-854-112 | 2 | 23-Apr-03 | <0.1 | 0.1 | PCB 1232 |
| 3SS-854-112 | 2 | 23-Apr-03 | <0.1 | 0.1 | PCB 1242 |
| 3SS-854-112 | 2 | 23-Apr-03 | 0.2 | 0.1 | PCB 1248 |
| 3SS-854-112 | 2 | 23-Apr-03 | <0.1 | 0.1 | PCB 1254 |
| 3SS-854-112 | 2 | 23-Apr-03 | <0.1 | 0.1 | PCB 1260 |
| 3SS-854-112 | 2.5 | 23-Apr-03 | <0.1 | 0.1 | PCB 1016 |
| 3SS-854-112 | 2.5 | 23-Apr-03 | <0.1 | 0.1 | PCB 1221 |
| 3SS-854-112 | 2.5 | 23-Apr-03 | <0.1 | 0.1 | PCB 1232 |
| 3SS-854-112 | 2.5 | 23-Apr-03 | <0.1 | 0.1 | PCB 1242 |
| 3SS-854-112 | 2.5 | 23-Apr-03 | 0.5 | 0.1 | PCB 1248 |
| 3SS-854-112 | 2.5 | 23-Apr-03 | <0.1 | 0.1 | PCB 1254 |
| 3SS-854-112 | 2.5 | 23-Apr-03 | <0.1 | 0.1 | PCB 1260 |
| 3SS-854-112 | 3 | 23-Apr-03 | <0.1 | 0.1 | PCB 1016 |
| 3SS-854-112 | 3 | 23-Apr-03 | <0.1 | 0.1 | PCB 1221 |
| 3SS-854-112 | 3 | 23-Apr-03 | <0.1 | 0.1 | PCB 1232 |

**Table 4.1-3. PCB sample results in mg/kg as determined by EPA Method 8082. (Cont. Page 4 of 8)**

| Location | Sample depth | Sampled date | Result | Reporting limit | Analyte |
|---|---|---|---|---|---|
| 3SS-854-112 | 3 | 23-Apr-03 | <0.1 | 0.1 | PCB 1242 |
| 3SS-854-112 | 3 | 23-Apr-03 | 0.3 | 0.1 | PCB 1248 |
| 3SS-854-112 | 3 | 23-Apr-03 | <0.1 | 0.1 | PCB 1254 |
| 3SS-854-112 | 3 | 23-Apr-03 | <0.1 | 0.1 | PCB 1260 |
| | | | | | |
| 3SS-854-200 | 0 | 23-Apr-03 | <0.1 | 0.1 | PCB 1016 |
| 3SS-854-200 | 0 | 23-Apr-03 | <0.1 | 0.1 | PCB 1221 |
| 3SS-854-200 | 0 | 23-Apr-03 | <0.1 | 0.1 | PCB 1232 |
| 3SS-854-200 | 0 | 23-Apr-03 | <0.1 | 0.1 | PCB 1242 |
| 3SS-854-200 | 0 | 23-Apr-03 | 10 | 0.1 | PCB 1248 |
| 3SS-854-200 | 0 | 23-Apr-03 | <0.1 | 0.1 | PCB 1254 |
| 3SS-854-200 | 0 | 23-Apr-03 | <0.1 | 0.1 | PCB 1260 |
| | | | | | |
| 3SS-854-200 | 0.5 | 23-Apr-03 | <0.1 | 0.1 | PCB 1016 |
| 3SS-854-200 | 0.5 | 23-Apr-03 | <0.1 | 0.1 | PCB 1221 |
| 3SS-854-200 | 0.5 | 23-Apr-03 | <0.1 | 0.1 | PCB 1232 |
| 3SS-854-200 | 0.5 | 23-Apr-03 | <0.1 | 0.1 | PCB 1242 |
| 3SS-854-200 | 0.5 | 23-Apr-03 | 59 | 0.1 | PCB 1248 |
| 3SS-854-200 | 0.5 | 23-Apr-03 | <0.1 | 0.1 | PCB 1254 |
| 3SS-854-200 | 0.5 | 23-Apr-03 | <0.1 | 0.1 | PCB 1260 |
| | | | | | |
| 3SS-854-200 | 1 | 23-Apr-03 | <0.1 | 0.1 | PCB 1016 |
| 3SS-854-200 | 1 | 23-Apr-03 | <0.1 | 0.1 | PCB 1221 |
| 3SS-854-200 | 1 | 23-Apr-03 | <0.1 | 0.1 | PCB 1232 |
| 3SS-854-200 | 1 | 23-Apr-03 | <0.1 | 0.1 | PCB 1242 |
| 3SS-854-200 | 1 | 23-Apr-03 | 26 | 0.1 | PCB 1248 |
| 3SS-854-200 | 1 | 23-Apr-03 | <0.1 | 0.1 | PCB 1254 |
| 3SS-854-200 | 1 | 23-Apr-03 | <0.1 | 0.1 | PCB 1260 |
| | | | | | |
| 3SS-854-200 | 1.5 | 23-Apr-03 | <0.1 | 0.1 | PCB 1016 |
| 3SS-854-200 | 1.5 | 23-Apr-03 | <0.1 | 0.1 | PCB 1221 |
| 3SS-854-200 | 1.5 | 23-Apr-03 | <0.1 | 0.1 | PCB 1232 |
| 3SS-854-200 | 1.5 | 23-Apr-03 | <0.1 | 0.1 | PCB 1242 |
| 3SS-854-200 | 1.5 | 23-Apr-03 | 62 | 0.1 | PCB 1248 |
| 3SS-854-200 | 1.5 | 23-Apr-03 | <0.1 | 0.1 | PCB 1254 |
| 3SS-854-200 | 1.5 | 23-Apr-03 | <0.1 | 0.1 | PCB 1260 |

**Table 4.1-3. PCB sample results in mg/kg as determined by EPA Method 8082. (Cont. Page 5 of 8)**

| Location | Sample depth | Sampled date | Result | Reporting limit | Analyte |
|---|---|---|---|---|---|
| 3SS-854-200 | 2 | 23-Apr-03 | <0.1 | 0.1 | PCB 1016 |
| 3SS-854-200 | 2 | 23-Apr-03 | <0.1 | 0.1 | PCB 1221 |
| 3SS-854-200 | 2 | 23-Apr-03 | <0.1 | 0.1 | PCB 1232 |
| 3SS-854-200 | 2 | 23-Apr-03 | <0.1 | 0.1 | PCB 1242 |
| 3SS-854-200 | 2 | 23-Apr-03 | 22 | 0.1 | PCB 1248 |
| 3SS-854-200 | 2 | 23-Apr-03 | <0.1 | 0.1 | PCB 1254 |
| 3SS-854-200 | 2 | 23-Apr-03 | <0.1 | 0.1 | PCB 1260 |
| 3SS-854-200 | 2.5 | 23-Apr-03 | <0.1 | 0.1 | PCB 1016 |
| 3SS-854-200 | 2.5 | 23-Apr-03 | <0.1 | 0.1 | PCB 1221 |
| 3SS-854-200 | 2.5 | 23-Apr-03 | <0.1 | 0.1 | PCB 1232 |
| 3SS-854-200 | 2.5 | 23-Apr-03 | <0.1 | 0.1 | PCB 1242 |
| 3SS-854-200 | 2.5 | 23-Apr-03 | 21 | 0.1 | PCB 1248 |
| 3SS-854-200 | 2.5 | 23-Apr-03 | <0.1 | 0.1 | PCB 1254 |
| 3SS-854-200 | 2.5 | 23-Apr-03 | <0.1 | 0.1 | PCB 1260 |
| B-854-112 | 3.5 | 10-Sep-03 | <1 | 1 | PCB 1016 |
| B-854-112 | 3.5 | 10-Sep-03 | <1 | 1 | PCB 1221 |
| B-854-112 | 3.5 | 10-Sep-03 | <1 | 1 | PCB 1232 |
| B-854-112 | 3.5 | 10-Sep-03 | <1 | 1 | PCB 1242 |
| B-854-112 | 3.5 | 10-Sep-03 | <1 | 1 | PCB 1248 |
| B-854-112 | 3.5 | 10-Sep-03 | <1 | 1 | PCB 1254 |
| B-854-112 | 3.5 | 10-Sep-03 | <1 | 1 | PCB 1260 |
| B-854-112 | 4 | 10-Sep-03 | <1 | 1 | PCB 1016 |
| B-854-112 | 4 | 10-Sep-03 | <1 | 1 | PCB 1221 |
| B-854-112 | 4 | 10-Sep-03 | <1 | 1 | PCB 1232 |
| B-854-112 | 4 | 10-Sep-03 | <1 | 1 | PCB 1242 |
| B-854-112 | 4 | 10-Sep-03 | <1 | 1 | PCB 1248 |
| B-854-112 | 4 | 10-Sep-03 | <1 | 1 | PCB 1254 |
| B-854-112 | 4 | 10-Sep-03 | <1 | 1 | PCB 1260 |
| B-854-112 | 4.5 | 10-Sep-03 | <1 | 1 | PCB 1016 |
| B-854-112 | 4.5 | 10-Sep-03 | <1 | 1 | PCB 1221 |
| B-854-112 | 4.5 | 10-Sep-03 | <1 | 1 | PCB 1232 |

**Table 4.1-3. PCB sample results in mg/kg as determined by EPA Method 8082. (Cont. Page 6 of 8)**

| Location | Sample depth | Sampled date | Result | Reporting limit | Analyte |
|---|---|---|---|---|---|
| B-854-112 | 4.5 | 10-Sep-03 | <1 | 1 | PCB 1242 |
| B-854-112 | 4.5 | 10-Sep-03 | <1 | 1 | PCB 1248 |
| B-854-112 | 4.5 | 10-Sep-03 | <1 | 1 | PCB 1254 |
| B-854-112 | 4.5 | 10-Sep-03 | <1 | 1 | PCB 1260 |
| | | | | | |
| B-854-112 | 5 | 10-Sep-03 | <1 | 1 | PCB 1016 |
| B-854-112 | 5 | 10-Sep-03 | <1 | 1 | PCB 1221 |
| B-854-112 | 5 | 10-Sep-03 | <1 | 1 | PCB 1232 |
| B-854-112 | 5 | 10-Sep-03 | <1 | 1 | PCB 1242 |
| B-854-112 | 5 | 10-Sep-03 | <1 | 1 | PCB 1248 |
| B-854-112 | 5 | 10-Sep-03 | <1 | 1 | PCB 1254 |
| B-854-112 | 5 | 10-Sep-03 | <1 | 1 | PCB 1260 |
| | | | | | |
| B-854-112 | 5.5 | 10-Sep-03 | <1 | 1 | PCB 1016 |
| B-854-112 | 5.5 | 10-Sep-03 | <1 | 1 | PCB 1221 |
| B-854-112 | 5.5 | 10-Sep-03 | <1 | 1 | PCB 1232 |
| B-854-112 | 5.5 | 10-Sep-03 | <1 | 1 | PCB 1242 |
| B-854-112 | 5.5 | 10-Sep-03 | <1 | 1 | PCB 1248 |
| B-854-112 | 5.5 | 10-Sep-03 | <1 | 1 | PCB 1254 |
| B-854-112 | 5.5 | 10-Sep-03 | <1 | 1 | PCB 1260 |
| | | | | | |
| B-854-112 | 6 | 10-Sep-03 | <1 | 1 | PCB 1016 |
| B-854-112 | 6 | 10-Sep-03 | <1 | 1 | PCB 1221 |
| B-854-112 | 6 | 10-Sep-03 | <1 | 1 | PCB 1232 |
| B-854-112 | 6 | 10-Sep-03 | <1 | 1 | PCB 1242 |
| B-854-112 | 6 | 10-Sep-03 | <1 | 1 | PCB 1248 |
| B-854-112 | 6 | 10-Sep-03 | <1 | 1 | PCB 1254 |
| B-854-112 | 6 | 10-Sep-03 | <1 | 1 | PCB 1260 |
| | | | | | |
| B-854-200 | 3 | 10-Sep-03 | <10 | 10 | PCB 1016 |
| B-854-200 | 3 | 10-Sep-03 | <10 | 10 | PCB 1221 |
| B-854-200 | 3 | 10-Sep-03 | <10 | 10 | PCB 1232 |
| B-854-200 | 3 | 10-Sep-03 | <10 | 10 | PCB 1242 |
| B-854-200 | 3 | 10-Sep-03 | 46.2 | 10 | PCB 1248 |
| B-854-200 | 3 | 10-Sep-03 | <10 | 10 | PCB 1254 |
| B-854-200 | 3 | 10-Sep-03 | <10 | 10 | PCB 1260 |

**Table 4.1-3. PCB sample results in mg/kg as determined by EPA Method 8082. (Cont. Page 7 of 8)**

| Location | Sample depth | Sampled date | Result | Reporting limit | Analyte |
|---|---|---|---|---|---|
| B-854-200 | 3.5 | 10-Sep-03 | <1 | 1 | PCB 1016 |
| B-854-200 | 3.5 | 10-Sep-03 | <1 | 1 | PCB 1221 |
| B-854-200 | 3.5 | 10-Sep-03 | <1 | 1 | PCB 1232 |
| B-854-200 | 3.5 | 10-Sep-03 | <1 | 1 | PCB 1242 |
| B-854-200 | 3.5 | 10-Sep-03 | 52 | 1 | PCB 1248 |
| B-854-200 | 3.5 | 10-Sep-03 | <1 | 1 | PCB 1254 |
| B-854-200 | 3.5 | 10-Sep-03 | <1 | 1 | PCB 1260 |
| B-854-200 | 4 | 10-Sep-03 | <1 | 1 | PCB 1016 |
| B-854-200 | 4 | 10-Sep-03 | <1 | 1 | PCB 1221 |
| B-854-200 | 4 | 10-Sep-03 | <1 | 1 | PCB 1232 |
| B-854-200 | 4 | 10-Sep-03 | <1 | 1 | PCB 1242 |
| B-854-200 | 4 | 10-Sep-03 | 26 | 1 | PCB 1248 |
| B-854-200 | 4 | 10-Sep-03 | <1 | 1 | PCB 1254 |
| B-854-200 | 4 | 10-Sep-03 | <1 | 1 | PCB 1260 |
| B-854-200 | 4.5 | 10-Sep-03 | <1 | 1 | PCB 1016 |
| B-854-200 | 4.5 | 10-Sep-03 | <1 | 1 | PCB 1221 |
| B-854-200 | 4.5 | 10-Sep-03 | <1 | 1 | PCB 1232 |
| B-854-200 | 4.5 | 10-Sep-03 | <1 | 1 | PCB 1242 |
| B-854-200 | 4.5 | 10-Sep-03 | 17.9 | 1 | PCB 1248 |
| B-854-200 | 4.5 | 10-Sep-03 | <1 | 1 | PCB 1254 |
| B-854-200 | 4.5 | 10-Sep-03 | <1 | 1 | PCB 1260 |
| B-854-200 | 5 | 10-Sep-03 | <1 | 1 | PCB 1016 |
| B-854-200 | 5 | 10-Sep-03 | <1 | 1 | PCB 1221 |
| B-854-200 | 5 | 10-Sep-03 | <1 | 1 | PCB 1232 |
| B-854-200 | 5 | 10-Sep-03 | <1 | 1 | PCB 1242 |
| B-854-200 | 5 | 10-Sep-03 | 20.3 | 1 | PCB 1248 |
| B-854-200 | 5 | 10-Sep-03 | <1 | 1 | PCB 1254 |
| B-854-200 | 5 | 10-Sep-03 | <1 | 1 | PCB 1260 |
| B-854-200 | 5.5 | 10-Sep-03 | <1 | 1 | PCB 1016 |
| B-854-200 | 5.5 | 10-Sep-03 | <1 | 1 | PCB 1221 |
| B-854-200 | 5.5 | 10-Sep-03 | <1 | 1 | PCB 1232 |

**Table 4.1-3. PCB sample results in mg/kg as determined by EPA Method 8082. (Cont. Page 8 of 8)**

| Location | Sample depth | Sampled date | Result | Reporting limit | Analyte |
|---|---|---|---|---|---|
| B-854-200 | 5.5 | 10-Sep-03 | <1 | 1 | PCB 1242 |
| B-854-200 | 5.5 | 10-Sep-03 | 41.3 | 1 | PCB 1248 |
| B-854-200 | 5.5 | 10-Sep-03 | <1 | 1 | PCB 1254 |
| B-854-200 | 5.5 | 10-Sep-03 | <1 | 1 | PCB 1260 |
| | | | | | |
| B-854-200 | 6 | 10-Sep-03 | <1 | 1 | PCB 1016 |
| B-854-200 | 6 | 10-Sep-03 | <1 | 1 | PCB 1221 |
| B-854-200 | 6 | 10-Sep-03 | <1 | 1 | PCB 1232 |
| B-854-200 | 6 | 10-Sep-03 | <1 | 1 | PCB 1242 |
| B-854-200 | 6 | 10-Sep-03 | 33.4 | 1 | PCB 1248 |
| B-854-200 | 6 | 10-Sep-03 | <1 | 1 | PCB 1254 |
| B-854-200 | 6 | 10-Sep-03 | <1 | 1 | PCB 1260 |

**Table 4.1-4. Results of the 2003 ambient air sampling at Spring 3.**

| | TCE $\mu g/m^3$ | | PCE $\mu g/m^3$ | |
|---|---|---|---|---|
| | **Result** | **PRG** | **Result** | **PRG** |
| **July 24, 2003** | | | | |
| **3AA-SPRING3-001** | **<0.22** | **0.017** | **<0.28** | **0.67** |
| **3AA-SPRING3-002** | **0.57** | **0.017** | **1.3** | **0.67** |
| **October 13, 2003** | | | | |
| **3AA-SPRING3-001** | **<0.18** | **0.017** | **<0.23** | **0.67** |
| **3AA-SPRING3-002** | **0.42** | **0.017** | **0.44** | **0.67** |

**Note:**

**PRG = Preliminary Remediation Goal.**

**Table 4.1-5. Ambient air sampling parameters at Spring 3.**

| | | On | | | | | Off | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Wind | | | | | Wind | | |
| Sample ID | Water/Green Vegetation? | Time (PST) | Vacuum (Hg) | Speed (m/s) | Direction (Degrees) | Temp (C) | Time | Vacuum (Hg) | Speed (m/s) | Direction (Degrees) | Temp (C) |
| **July 24, 2003** | | | | | | | | | | | |
| 3AA-SPRING3-001 | Green veg/no water | 0633 | -29 | 0.5 | 162 | 28.0 | 1436 | -10.5 | 7.3 | 269 | 33.8 |
| 3AA-SPRING3-002 | Green veg/no water | 0633 | -29 | 0.5 | 162 | 28.0 | 1442 | -11.0 | 7.3 | 269 | 33.8 |
| **October 13, 2003** | | | | | | | | | | | |
| 3AA-SPRING3-001 | Green veg/no water | 0700 | -29 | 7.1 | 342 | 16.9 | 1520 | -7 | 3.0 | 348 | 24.7 |
| 3AA-SPRING3-002 | Green veg/no water | 0700 | -30 | 7.1 | 342 | 16.9 | 1521 | -1 | 3.0 | 348 | 24.7 |

**Note:**

**All meterological data obtained from the 10 m Site 300 meterological tower. All times in Pacific Standard Time.**

**Table 4.2-1. Results of important species surveys in fall 2003 at Building 850, Building 834 and Pit 6.**

| Survey area | Date start time | Temperature weather | Results |
|---|---|---|---|
| **Building 850** | **20 Nov. 2003**<br>**1130** | **60° F**<br>**Sunny with scattered clouds** | • **A group of badger dens were observed east of building 850 near the W8 spring and in the area west of the shot table (both within the survey area).**<br>• **A burrowing owl was observed in a burrow west of the B850 shot table (within the survey area).**<br>• **Coyote scat was observed near B850.**<br>• **The ground squirrel colony surrounding B850 was active, and many squirrels were observed.** |
| **Building 834** | **20 Nov. 2003**<br>**1030** | **60° F**<br>**Partly cloudy** | • **Ground squirrel burrows were scattered throughout the survey area.**<br>• **A recently active badger den was observed near the eastern fence line.**<br>• **A kangaroo rat burrow was observed near the eastern fence line.** |
| **Pit 6** | **11 Nov. 2003**<br>**1115** | **58° F**<br>**Overcast** | • **Loggerhead shrike observed on rifle range.**<br>• **Many ground squirrel burrows observed. on south facing slope near Corral Hollow Rd.** |
| | **13 Nov. 2003**<br>**1500** | **67° F**<br>**Overcast** | • **Owl pellet observed near pit.**<br>• **Rabbit, coyote, and pig feces observed south of pit.**<br>• **Flocks of white crowned sparrows, meadow larks, and brewer's blackbirds observed.**<br>• **No special status species were observed.** |

**Table 4.2-2. Burrow air sampling parameters.**

| | On | | | | | Off | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Wind | | | | | Wind | | |
| Sample ID | Time (PST) | Vacuum (Hg) | Speed (m/s) | Direction (degrees) | Temp (C) | Time | Vacuum (Hg) | Speed (m/s) | Direction (degrees) | Temp (C) |
| **4-Sep-03** | | | | | | | | | | |
| *Pit 6* | | | | | | | | | | |
| Ambient (9) | 7:27 | 28.5 | 4.6 | 274 | 28.4 | 15:30 | 6.0 | 4.0 | 280 | 30.4 |
| 9 | 7:27 | 28.5 | 4.6 | 274 | 28.4 | 15:30 | 6.0 | 4.0 | 280 | 30.4 |
| 9 co-located | 7:27 | 29.5 | 4.6 | 274 | 28.4 | 15:30 | 6.6 | 4.0 | 280 | 30.4 |
| 10 | 7:31 | 28.5 | 4.6 | 274 | 28.4 | 15:48 | 6.6 | 3.1 | 287 | 30.4 |
| 11 | 7:34 | 29.3 | 4.6 | 274 | 28.4 | 15:40 | 6.4 | 3.1 | 287 | 30.4 |
| *Building 834* | | | | | | | | | | |
| Ambient (5) | 6:37 | 30.0 | 2.1 | 308 | 26.1 | 14:44 | 6.6 | 5.5 | 308 | 30.7 |
| 5 | 6:38 | 27.5 | 2.1 | 308 | 26.1 | 14:44 | 6.8 | 5.5 | 308 | 30.7 |
| 5 co-located | 6:36 | 29.5 | 2.1 | 308 | 26.1 | 14:44 | 7.0 | 5.5 | 308 | 30.7 |
| 6 | 6:34 | 29.7 | 2.1 | 308 | 26.1 | 14:36 | 7.0 | 5.3 | 308 | 30.7 |
| 7 | 6:40 | 28.4 | 2.1 | 308 | 26.1 | 15:00 | 7.0 | 5.3 | 315 | 30.7 |
| **19-Dec-03** | | | | | | | | | | |
| *Pit 6* | | | | | | | | | | |
| Ambient (21) | 7:16 | 29.1 | 1.2 | 300 | 8.85 | 14:44 | 7.8 | 4.0 | 319 | 7.44 |
| 21 | 7:16 | 28.9 | 1.2 | 300 | 8.85 | 14:44 | 8.0 | 4.0 | 319 | 7.44 |
| 21 co-located | 7:16 | 29.0 | 1.2 | 300 | 8.85 | 14:44 | 8.1 | 4.0 | 319 | 7.44 |
| 22 | 7:11 | 29.0 | 1.2 | 300 | 8.85 | 14:38 | 8.5 | 4.0 | 319 | 7.44 |
| 23 | 7:08 | 28.9 | 1.2 | 300 | 8.85 | 14:35 | 8.4 | 4.0 | 319 | 7.44 |
| *Building 834* | | | | | | | | | | |
| Ambient (25) | 7:38 | 26.5 | 1.3 | 345 | 9.89 | 15:38 | 6.6 | 3.4 | 323 | 9.29 |
| 24 | 7:41 | 29.5 | 1.3 | 345 | 9.89 | 15:43 | 6.5 | 3.4 | 323 | 9.29 |
| 25 | 7:38 | 29.2 | 1.3 | 345 | 9.89 | 15:38 | 6.5 | 3.4 | 323 | 9.29 |
| 26 | 7:44 | 25.6 | 1.3 | 345 | 9.89 | 15:48 | 6.6 | 3.4 | 323 | 9.29 |

[a] Ambient air samples were obtained adjacent to the location number in parenthesis

All meteorological data obtained from the 10 m Site 300 meteorological tower. All times are in Pacific Standard Time.

**Table 4.2-3. Burrow air sampling results.**

| | | $\mu g/m^3$ | | |
|---|---|---|---|---|
| **Sample ID[a]** | **cis-1,2-DCE** | **TCE** | **PCE** | **trans-1,2-DCE** |
| **Pit 6** | | | | |
| **4-Sep-03** | | | | |
| **Ambient (9)[b]** | <0.15 | <0.20 | <0.25 | <0.74 |
| **9** | <0.15 | <0.20 | <0.25 | <0.74 |
| **9 co-located** | <0.15 | <0.20 | <0.25 | <0.74 |
| **10** | <0.15 | <0.20 | 0.34 | <0.74 |
| **11** | <0.15 | <0.20 | <0.25 | <0.74 |
| **19-Dec-03** | | | | |
| **Ambient (21)[b]** | <0.14 | 0.63 | <0.24 | <0.70 |
| **21** | <0.14 | 0.55 | 3.8 | <0.69 |
| **21 co-located** | <0.14 | 0.50 | 8.1 | <0.69 |
| **22** | <0.14 | 0.71 | 81.0 | <0.70 |
| **23** | <0.14 | <0.19 | <0.24 | <0.70 |
| | | | | |
| **Building 834** | | | | |
| **4-Sep-03** | | | | |
| **Ambient (5)[b]** | <0.15 | <0.21 | <0.26 | <0.77 |
| **5** | <0.15 | <0.20 | <0.26 | <0.75 |
| **5 co-located** | <0.15 | <0.21 | 0.29 | <0.77 |
| **6** | <0.15 | <0.21 | <0.26 | <0.77 |
| **7** | <0.15 | <0.20 | <0.26 | <0.75 |
| **19-Dec-03** | | | | |
| **Ambient (25)[b]** | <0.14 | <0.18 | <0.23 | <0.68 |
| **24** | <0.14 | 0.27 | 0.61 | <0.68 |
| **25** | <0.14 | 4.2 | 0.33 | <0.68 |
| **26** | <0.14 | 0.19 | <0.23 | <0.68 |

[a] **Full sample identifiers, as reported in analytical laboratory reports, are described in experiment 3x-068, maintained by the Environmental Restoration Division's Information Systems Management Group.**

[b] **Ambient air samples were obtained adjacent to the location number in parenthesis.**

**Table 4.2-4. Cadmium surface soil sampling results at Building 834.**

| | Date | Micro-location | Result (mg/kg) |
|---|---|---|---|
| 3SS-B834-01 | Oct 10, 2003 | surface | 0.10 |
| 3SS-B834-01B | Oct 10, 2003 | burrow | 0.10 |
| 3SS-B834-02 | Oct 10, 2003 | surface | 0.20 |
| 3SS-B834-03 | Oct 10, 2003 | surface | 0.10 |
| 3SS-B834-03B | Oct 10, 2003 | burrow | 0.09 |
| 3SS-B834-04 | Oct 10, 2003 | surface | 0.10 |
| 3SS-B834-04B | Oct 10, 2003 | burrow | 0.10 |
| 3SS-B834-05 | Oct 10, 2003 | surface | 0.20 |
| 3SS-B834-06 | Oct 10, 2003 | surface | 0.08 |
| 3SS-B834-07 | Oct 10, 2003 | surface | 0.10 |
| 3SS-B834-08 | Oct 10, 2003 | surface | 0.10 |
| 3SS-B834-09 | Oct 10, 2003 | surface | 0.32 |
| 3SS-B834-10 | Oct 10, 2003 | surface | 0.10 |
| 3SS-B834-11 | Oct 10, 2003 | surface | 0.09 |
| 3SS-B834-12 | Oct 10, 2003 | surface | 0.09 |
| 3SS-B834-13 | Oct 10, 2003 | surface | 0.10 |
| 3SS-B834-14 | Oct 10, 2003 | surface | 0.10 |
| 3SS-B834-15 | Oct 10, 2003 | surface | 0.06 |
| 3SS-B834-16 | Oct 10, 2003 | surface | 0.08 |
| 3SS-B834-17 | Oct 10, 2003 | surface | 0.09 |
| 3SS-B834-18 | Oct 10, 2003 | surface | 0.10 |
| 3SS-B834-19 | Oct 10, 2003 | surface | 0.10 |
| 3SS-B834-19[a] | Oct 10, 2003 | surface | 0.10 |
| 3SS-B834-20 | Oct 10, 2003 | surface | 0.20 |
| 3SS-B834-21 | Oct 10, 2003 | surface | 0.10 |
| 3SS-B834-22 | Oct 10, 2003 | surface | 0.10 |
| 3SS-B834-22[a] | Oct 10, 2003 | surface | 0.10 |
| 3SS-B834-23 | Oct 10, 2003 | surface | 0.10 |
| 3SS-B834-23[a] | Oct 10, 2003 | surface | 0.10 |
| 3SS-B834-24 | Oct 10, 2003 | surface | 0.10 |
| Average | | | 0.11 |
| Standard deviation | | | 0.05 |
| Site 300 Background | | | 1.9 |

[a] Co-located sample.

# Appendix A

# Results of Influent and Effluent pH Monitoring

**Appendix A. Results of influent and effluent pH monitoring, July through December 2003.**

| Sample location | Sample date | Influent pH Result | Effluent pH Result |
|---|---|---|---|
| *Central GSA* | | | |
| **CGSA GWTS** | **7/8/03** | **6.5** | **7.5** |
| **CGSA GWTS** | **8/11/03** | **NM** | **7.2** |
| **CGSA GWTS** | **9/3/03** | **NM** | **7** |
| **CGSA GWTS** | **10/2/03** | **7** | **7** |
| **CGSA GWTS** | **11/11/03** | **NM** | **7.3** |
| **CGSA GWTS** | **12/3/03** | **NM** | **7** |
| *Building 834 OU* | | | |
| **B834 GWTS** | **NM** | **NM** | **NM** |
| *HEPA OU* | | | |
| **B815-SRC GWTS** | **07/15/03** | **7** | **7** |
| **B815-SRC GWTS** | **08/13/03** | **7** | **7** |
| **B815-SRC GWTS** | **09/11/03** | **7** | **7** |
| **B815-SRC GWTS** | **10/08/03** | **7** | **7** |
| **B815-SRC GWTS** | **11/12/03** | **7** | **7** |
| **B815-SRC GWTS** | **12/08/03** | **7** | **7** |
| **B815-PRXN GWTS** | **07/15/03** | **7** | **7** |
| **B815-PRXN GWTS** | **08/13/03** | **7** | **7** |
| **B815-PRXN GWTS** | **09/11/03** | **7** | **7** |
| **B815-PRXN GWTS** | **10/08/03** | **7** | **7** |
| **B815-PRXN GWTS** | **11/11/03** | **7** | **7** |
| **B815-PRXN GWTS** | **12/08/03** | **7** | **7** |
| **B815-DSB GWTS** | **07/09/03** | **7** | **7** |
| **B815-DSB GWTS** | **08/11/03** | **7** | **7** |
| **B815-DSB GWTS** | **09/03/03** | **7** | **7** |
| **B815-DSB GWTS** | **10/08/03** | **7** | **7** |
| **B815-DSB GWTS** | **11/11/03** | **7** | **7** |
| **B815-DSB GWTS** | **12/09/03** | **7** | **7** |
| **B817-SRC GWTS** | **09/22/03** | **7** | **9** |

**Appendix A. Results of influent and effluent pH monitoring.**

| Sample location | Sample date | Influent pH Result | Effluent pH Result |
|---|---|---|---|
| **B817-SRC GWTS** | **10/11/03** | **7.5** | **7** |
| **B817-SRC GWTS** | **11/12/03** | **NA** | **7.5** |
| **B817-SRC GWTS** | **12/09/03** | **NA** | **7.5** |
| ***Building 854 OU*** | | | |
| **B854-SRC GWTS** | **07/9/03** | **7** | **7** |
| **B854-SRC GWTS** | **08/6/03** | **NM** | **7** |
| **B854-SRC GWTS** | **09/10/03** | **NM** | **7** |
| **B854-SRC GWTS** | **10/8/03** | **7** | **7** |
| **B854-SRC GWTS** | **11/12/03** | **NM** | **7** |
| **B854-SRC GWTS** | **12/9/03** | **NM** | **7** |
| **B854-PRX GWTS** | **07/9/03** | **7** | **7** |
| **B854-PRX GWTS** | **08/6/03** | **NM** | **7** |
| **B854-PRX GWTS** | **09/10/03** | **NM** | **7** |
| **B854-PRX GWTS** | **10/14/03** | **7** | **7** |
| **B854-PRX GWTS** | **11/12/03** | **NM** | **7** |
| **B854-PRX GWTS** | **12/9/03** | **NM** | **7** |
| ***832 Canyon OU*** | | | |
| **B832-SRC GWTS** | **07/08/03** | **7** | **7** |
| **B832-SRC GWTS** | **08/06/03** | **NA** | **7** |
| **B832-SRC GWTS** | **09/03/03** | **NA** | **7** |
| **B832-SRC GWTS** | **10/02/03** | **7** | **7** |
| **B832-SRC GWTS** | **11/11/03** | **NA** | **6.5** |
| **B832-SRC GWTS** | **12/03/03** | **NA** | **7** |
| **B830-SRC GWTS** | **07/09/03** | **7** | **7** |
| **B830-SRC GWTS** | **08/13/03** | **NA** | **NA** |
| **B830-SRC GWTS** | **09/10/03** | **NA** | **7** |
| **B830-SRC GWTS** | **10/08/03** | **7** | **7** |
| **B830-SRC GWTS** | **11/12/03** | **NA** | **7** |
| **B830-SRC GWTS** | **12/09/03** | **NA** | **7** |
| **B830-PRX GWTS** | **07/08/03** | **7** | **7** |

**Appendix A. Results of influent and effluent pH monitoring.**

| Sample location | Sample date | Influent pH Result | Effluent pH Result |
|---|---|---|---|
| B830-PRX GWTS | 08/18/03 | NA | 7 |
| B830-PRX GWTS | 09/03/03 | NA | 7 |
| B830-PRX GWTS | 10/15/03 | 7 | 7 |
| B830-PRX GWTS | 11/11/03 | NA | 7 |
| B830-PRX GWTS | 12/09/03 | NA | 7 |
| B830-DISS GWTS | 07/09/03 | 7 | 7 |
| B830-DISS GWTS | 08/11/03 | NA | 7 |
| B830-DISS GWTS | 09/03/03 | NA | 7 |
| B830-DISS GWTS | 10/08/03 | 7 | 7 |
| B830-DISS GWTS | 11/11/03 | NA | 7 |
| B830-DISS GWTS | 12/09/03 | NA | 7 |

**Notes:**

B815 = Building 815.
B817 = Building 817.
B830 = Building 830.
B832 = Building 832.
B834 = Building 834.
B854 = Building 854.
CGSA = Central General Services Area.
DISS = Distal south.
DSB = Distal site boundary.
GWTS = Ground water treatment system.
NA = Not applicable.
NM = Not measured.
OU = Operable unit.
pH = A measure of the acidity or alkalinity of an aqueous solution.
SRC = Source.