FINAL

REMEDIAL ACTION REPORT FOR OPERABLE UNIT 2

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
JET PROPULSION LABORATORY
PASADENA, CALIFORNIA

EPA ID# CA9800013030

PREPARED FOR:

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ACRONYMS AND ABBREVIATIONS

bgs	below ground surface
Cal/EPA	State of California Environmental Protection Agency
Caltech	California Institute of Technology
CCl_4	carbon tetrachloride
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
cfm	cubic feet per minute
1,1-DCE	1,1-dichloroethene
DTSC	Department of Toxic Substances Control
FID	flame ionization detector
FWEC	Foster Wheeler Environmental Corporation
GAC	granular activated carbon
GC	gas chromatograph
JPL	Jet Propulsion Laboratory
MCL	maximum contaminant level
NASA	National Aeronautics and Space Administration
NPL	National Priorities List
OU	Operable Unit
QA/QC	quality assurance/quality control
PCE	tetrachloroethene
ppmv	parts per million by volume
PVC	polyvinyl chloride
RCRA	Resource Conservation and Recovery Act
RD/RA	Remedial Design/Remedial Action
RI	Remedial Investigation
ROD	Record of Decision
ROI	radius of influence
RWQCB	Regional Water Quality Control Board
SARA	Superfund Amendments and Reauthorization Act
SCAQMD	South Coast Air Quality Management District
SVE	soil vapor extraction
TCE	trichloroethylene

U.S. EPA	United States Environmental Protection Agency
VE	vapor extraction
VOC	volatile organic compounds
VSL	vapor screening levels

EXECUTIVE SUMMARY

This report describes the remedial activities taken by the National Aeronautics and Space Administration (NASA) for Operable Unit 2 (OU-2) at the Jet Propulsion Laboratory (JPL) as part of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) program. This Remedial Action Report documents the completion of the OU-2 cleanup activities (i.e., soil vapor extraction (SVE) and soil vapor monitoring) at the JPL site. The cleanup goals for OU-2 have been achieved and this report will be used to support the Final Closeout Report for the JPL site.

During the 1940s and 1950s, various chemicals, including volatile organic compounds (VOCs), were used at the JPL facility and disposed of in subsurface seepage pits. This disposal practice led to VOCs in soil and soil vapor at levels requiring cleanup. Remedial Investigation (RI) activities between 1994 and 1998 revealed four VOCs that were frequently detected in soil vapor samples at elevated concentrations: carbon tetrachloride (CCl_4), 1,1,2-trichloro-1,2,2-trifluoroethane (Freon™113), trichloroethylene (TCE), and 1,1-dichloroethene (1,1-DCE). The VOCs were located in soils within the JPL fence line (referred to as the vadose zone), and were detected at depths extending to the groundwater table.

Based on these findings and a review of possible technologies, pilot testing of SVE was initiated in 1998 to remove VOCs from the vadose zone. The pilot test was successful and NASA proposed to proceed with this alternative to address the removal of VOCs in soils. Following public comment, a Record of Decision (ROD) was finalized for OU-2 in September 2002, identifying SVE as the selected remedial alternative. The selected remedy for OU-2 provided cleanup of the vadose zone soil to prevent the migration of VOCs from soil to groundwater and to be protective of the beneficial uses of groundwater. JPL is located within the Raymond Basin Watershed, which is a current source of drinking water.

The SVE system consisted of four vapor extraction wells located within the JPL fence line and a mobile treatment unit. A trailer-mounted SVE unit was operated at each well location on a rotating basis, and the extracted vapor was treated using granular activated carbon (GAC) prior to being discharged to the atmosphere in accordance with state air quality requirements. The soil cleanup remedy also included a soil vapor monitoring program which was used to evaluate SVE system effectiveness and remedial progress.

The SVE system was operated from April 1998 (beginning as a pilot test) through September 2005. VOC mass removal rates by the SVE system and VOC concentrations in soil vapor have decreased dramatically over the past eight years. The SVE system removed a total of approximately 260 lb of VOCs from the vadose zone soil. Importantly, all of the performance objectives established in the ROD for the SVE system have been achieved. As such, continued operation of the system is no longer effective. Residual, low level VOCs that remain in soil and soil vapor can be most effectively managed through the groundwater response actions in OU-1 and OU-3. This Remedial Action Report documents the achievement of the system cleanup objectives and completion of SVE system operation and soil vapor monitoring activities at JPL.

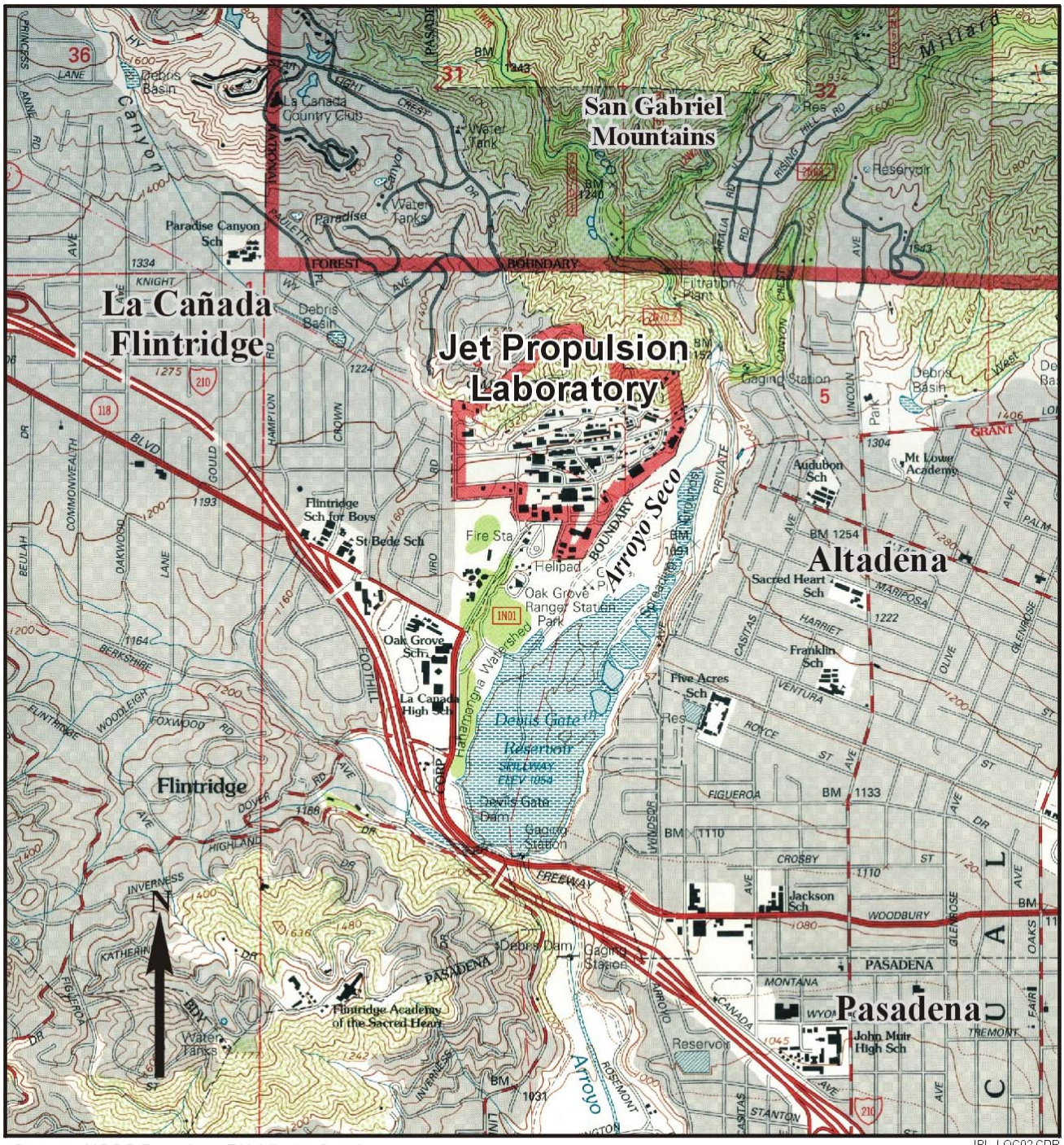
1.0: SITE NAME, LOCATION, AND DESCRIPTION

SITE NAME:	Jet Propulsion Laboratory (JPL)
EPA ID NUMBER:	CA9800013030; Federal Facility Agreement Docket Number 1998-27
LOCATION:	4800 Oak Grove, Pasadena, California
SITE TYPE:	Federal facility; Government-owned, Contractor-operated
LEAD AGENCY:	National Aeronautics and Space Administration (NASA)
SUPPORTING AGENCIES:	U.S. Environmental Protection Agency (U.S. EPA), Region 9; State of California Environmental Protection Agency (Cal/EPA), Department of Toxic Substances Control (DTSC); and California Regional Water Quality Control Board (RWQCB), Los Angeles Region
OPERABLE UNIT:	Operable Unit 2 (OU-2), Vadose Zone Soils

NASA is the lead federal agency for selecting, implementing, and funding remedial activities at JPL, while U.S. EPA, DTSC, and RWQCB provide oversight and technical assistance.

The JPL is a Federally-funded Research and Development Center in Pasadena, California, currently operated under contract by the California Institute of Technology (Caltech) for NASA. JPL's primary activities include the robotic exploration of the solar system and the design and operation of the Global Deep Space Tracking Network.

Located in Los Angeles County, JPL adjoins the incorporated cities of La Cañada Flintridge and Pasadena, and is bordered on the east by the unincorporated community of Altadena. A NASA-owned facility, JPL encompasses approximately 176 acres of land and more than 150 buildings and other structures. Of the JPL facility's 176 acres, approximately 156 acres are federally-owned. The remaining land is leased for parking from the City of Pasadena and the Flintridge Riding Club. Development at JPL is primarily located on the southern half, in two regions − an early-developed northeastern area and a later-developed southwestern area. Figure 1-1 is a map showing the JPL facility and surrounding areas.



Source: USGS Pasadena 7½-Minute Quad, 1995.
Note: (1) Devil's Gate Reservoir is dry most of the year.

Figure 1-1. Map of JPL and the Surrounding Area

This report was prepared by NASA to document the remedial activities that have occurred for OU-2 at the JPL. The NASA-JPL site is on the U.S. EPA's National Priorities List (NPL) and subject to the provisions of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended by the Superfund Amendments and Reauthorization Act (SARA). This Remedial Action Report documents the completion of the OU-2 cleanup activities (i.e., soil vapor extraction (SVE) and soil vapor monitoring) at the JPL site. The cleanup goals for OU-2 have been achieved and this report will be used to support the Final Closeout Report for the JPL site.

During historic operations at JPL, various chemicals (including chlorinated solvents, solid rocket fuel propellants, cooling tower chemicals, sulfuric acid, Freon™, and mercury) and other materials were used at the JPL facility. During the 1940s and 1950s, JPL maintained subsurface seepage pits for the disposal of sanitary wastes and laboratory chemical wastes collected from drains and sinks within the buildings. The Remedial Investigation (RI) for OU-2 identified 40 seepage pits, five waste pits, and four discharge points at the facility that were used during historic operations (Foster Wheeler Environmental Corporation [FWEC], 1999). Some of the seepage pits received volatile organic compounds (VOCs) and other waste materials currently found in vadose zone soil and soil vapor beneath JPL. In the late 1950s and early 1960s, a sanitary sewer system was installed at JPL to handle sewage and wastewater, and the use of seepage pits for sanitary and chemical waste disposal was discontinued. Today, laboratory chemical wastes are either recycled or sent off-facility for treatment and disposal at regulated, Resource Conservation and Recovery Act (RCRA)-permitted hazardous waste facilities.

In 1980, the analyses of groundwater revealed the presence of VOCs in City of Pasadena water-supply wells located southeast of JPL in the Arroyo Seco. At about the same time, VOCs were detected in two water-supply wells used by the Lincoln Avenue Water Company, located east of the Arroyo Seco (FWEC, 1999). As a result, NASA initiated an investigation to evaluate VOCs originating from the JPL facility.

In 1988, a Preliminary Assessment/Site Inspection was completed at JPL, which indicated that further site characterization was warranted (Ebasco, 1988). Subsequent site investigations were conducted at JPL (Ebasco, 1990a and 1990b) and VOCs were detected in on-facility groundwater at levels above drinking water standards. In 1992, JPL was placed on the NPL of sites subject to regulation under CERCLA (47180-47187 *Federal Register*, Vol. 57, No. 199 [1992]).

Potential vadose zone source areas were investigated during the OU-2 RI, which was conducted from 1994 to 1998 (FWEC, 1999). During the RI and periodic soil vapor monitoring, four VOCs were frequently detected in soil vapor samples at elevated concentrations. These four VOCs were carbon tetrachloride (CCl_4), 1,1,2-trichloro-1,2,2-trifluoroethane (Freon™113), trichloroethylene (TCE), and 1,1-dichloroethene (1,1-DCE). The VOCs were generally located beneath the north-central portion of the site, and were detected at depths extending to the water table. As a result of the RI, SVE pilot testing was initiated in 1998 to remove VOCs from the vadose zone. Based on the successful pilot test, the decision was made to move forward with SVE for OU-2 cleanup. Following issuance of a Proposed Plan (NASA, 2001) in April 2001 and public meetings to discuss the plan in May and June 2001, a Record of Decision (ROD) was

finalized for OU-2 in September 2002, which identified SVE as the selected remedial alternative. This report documents the remedial activities that have occurred for OU-2.

2.0: OPERABLE UNIT BACKGROUND

2.1 Summary of OU-2 ROD

The remedy described in the OU-2 ROD included treatment of VOCs in vadose zone soil using SVE with off-gas treatment. As described in the *Remedial Design/Remedial Action Workplan* (Geofon, 2002b), the SVE system consisted of four vapor extraction wells (VE-01 through VE-04) and a mobile treatment unit. A trailer-mounted SVE unit was operated at each well location on a rotating basis, and the extracted vapor was treated using granular activated carbon (GAC) prior to being discharged into the atmosphere. The selected remedy described in the OU-2 ROD also included a soil vapor monitoring program which was used to evaluate SVE system effectiveness and remedial progress.

The selected remedy for OU-2 considered the soil-to-groundwater migration pathway and provided for cleanup of the vadose zone to be protective of beneficial uses of groundwater. JPL is located within the Raymond Basin Watershed, which is a current source of drinking water. Performance objectives were identified in the ROD and include the following (all three objectives are to be evaluated in determining completion of SVE):

- Reduction of overall VOC concentrations at the vapor monitoring points and extraction wells compared to baseline levels. This includes fate and transport modeling to evaluate leaching to groundwater (using RWQCB guidance [RWQCB, 1996] and/or VLEACH^{TM}) and groundwater mixing.

- Asymptotic mass removal achieved after temporary shutdown periods and appropriate optimization of the SVE system. Asymptotic conditions will have been reached at a given SVE well when the upper limb of the cumulative mass removal curve is substantially linear and the slope of the curve approaches zero. In addition, rebound of chemical concentrations will be evaluated during the temporary shutdown periods.

- Operate only as long as cost-effective. The SVE system will no longer be cost-effective when operating costs per unit of VOC mass removed from the vadose zone indicate that the additional cost of continuing to operate the SVE system is not warranted and/or when shutdown of the SVE system is not anticipated to significantly increase the cost of the groundwater remedy or significantly prolong the time to achieve groundwater cleanup.

2.2 Summary of the Remedial Design

During the OU-2 RI, a total of 40 nested soil vapor monitoring wells (Nos. 1 through 18, 19A, 20, 20A, 21, 22, 23B, and 24 through 39) were installed and sampled. Soil vapor monitoring wells were installed in potential chemical source locations, and in other areas within the JPL fence line to delineate detections of VOC concentrations (FWEC, 1999). The first vapor extraction well (VE-01) was installed at the approximate center of the area with the highest VOC concentrations in order to perform an SVE pilot test (FWEC, 2000). Based on the results of the

pilot test and the periodic soil vapor monitoring program, data suggested that a significant reduction of VOCs was achieved within the radius of influence (ROI) of extraction well VE-01; however, VOCs were also detected in areas outside of the ROI for VE-01. In order to remove VOCs from the soil in these areas, three new soil vapor extraction wells (VE-02, VE-03, and VE-04) were installed. These locations were selected based on the levels of CCl_4 and TCE which remained above the conservative soil vapor screening levels (VSLs) developed for OU-2 (Geofon, 2002c). The location of each soil vapor monitoring and extraction well is shown in Figure 2-1.

Each vapor extraction well consists of two to four discrete screened intervals (based on the depth to groundwater) with a bentonite seal between screens. The provisions of multiple discrete screened intervals allows for minimization of vacuum losses within the well. If the entire depth requiring extraction from each well were to be addressed with a single screen, vacuum losses in the well itself may have allowed the bulk of the flow to come from only the shallower portions of the screen. This was avoided by using the multiple screened intervals; the depths of the screens and separation between them were selected to maximize the flow toward the extraction well (Geofon, 2002c). Each casing is constructed of 2-inch diameter Schedule 80 polyvinyl chloride (PVC), and screened sections are 0.020-inch slots. Screened intervals for each extraction well are summarized in Table 2-1.

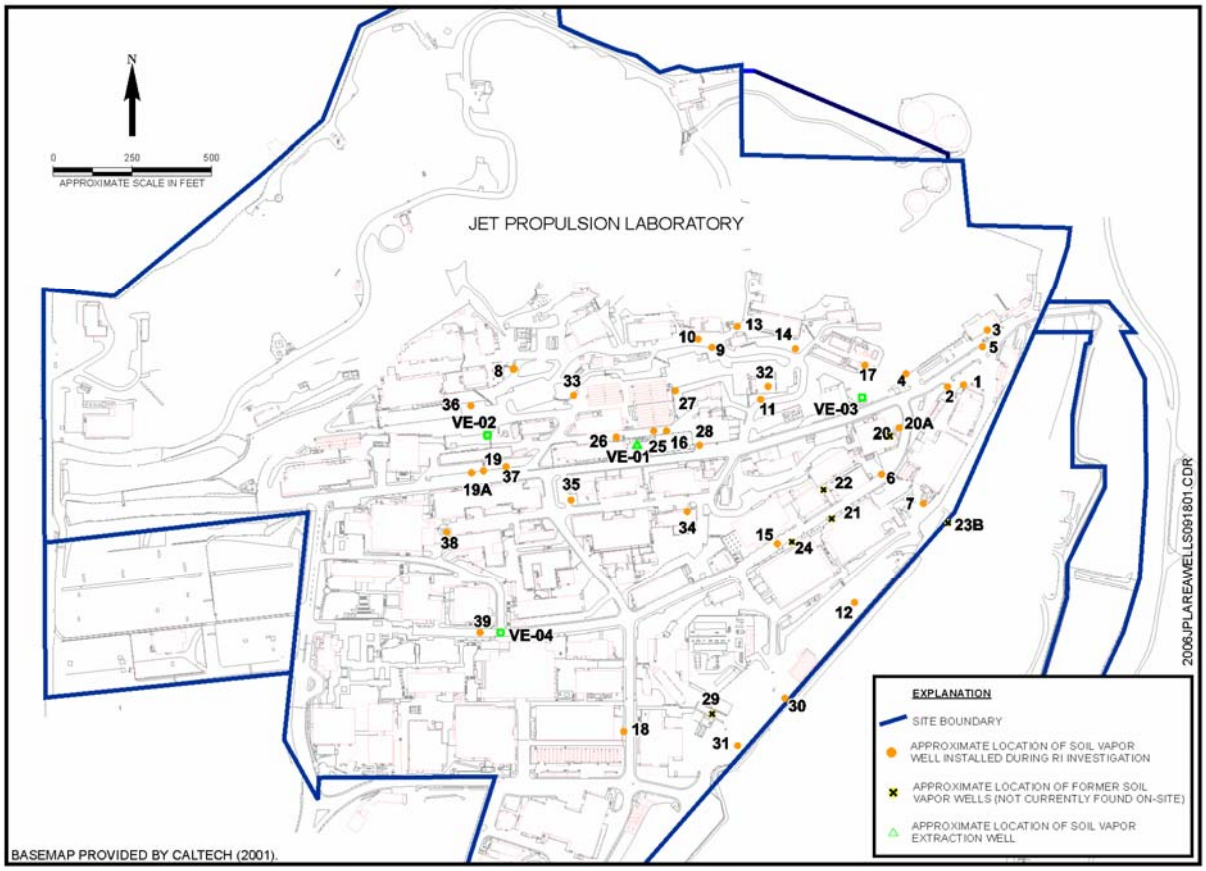


Figure 2-1. Soil Vapor Monitoring and Extraction Well Locations

Table 2-1. Summary of Vapor Extraction Well Screened Intervals

Extraction Well	First Screened Interval (ft bgs)	Second Screened Interval (ft bgs)	Third Screened Interval (ft bgs)	Fourth Screened Interval (ft bgs)
VE-01	44 to 84	94 to 134	145 to 185	NA
VE-02	20 to 75	88 to 98; 108 to 143	155 to 210	224 to 279[(a)]
VE-03	25 to 85	99 to 159	NA	NA
VE-04	12 to 62	76 to 126	140 to 195	NA

(a) The fourth screened interval in VE-02 collapsed following construction and is not usable.

The SVE system operates at one extraction well at a time, and consists of the following equipment:

- A skid-mounted extraction vacuum blower (with a 20-horsepower motor)
- A moisture separator (50-gallon knockout tank with sight glass, level switch, and safety interlock to shut down blower for high water level)
- Four GAC vessels (each containing 2,000 lbs of vapor phase GAC) in a series-parallel arrangement; and
- A dilution air valve and recirculation air valve to regulate vacuum and flow.

Other accessories include a flowmeter for measuring flow, magnehelic gauges and U-tube manometers to measure vacuum and vacuum responses, a field flame ionization detector (FID), and vapor sampling equipment.

VOCs are removed from the soil by the vacuum blower and then passed through the moisture separator, inline filter, and air mixing valve before entering the GAC vessels for treatment. The treated vapor is discharged to the atmosphere in accordance with the substantive requirements of the South Coast Air Quality Management District (SCAQMD). The maximum flowrate of extracted soil vapor and ambient air combined is 500 cubic feet per minute (cfm). A schematic diagram of the SVE system is shown in Figure 2-2.

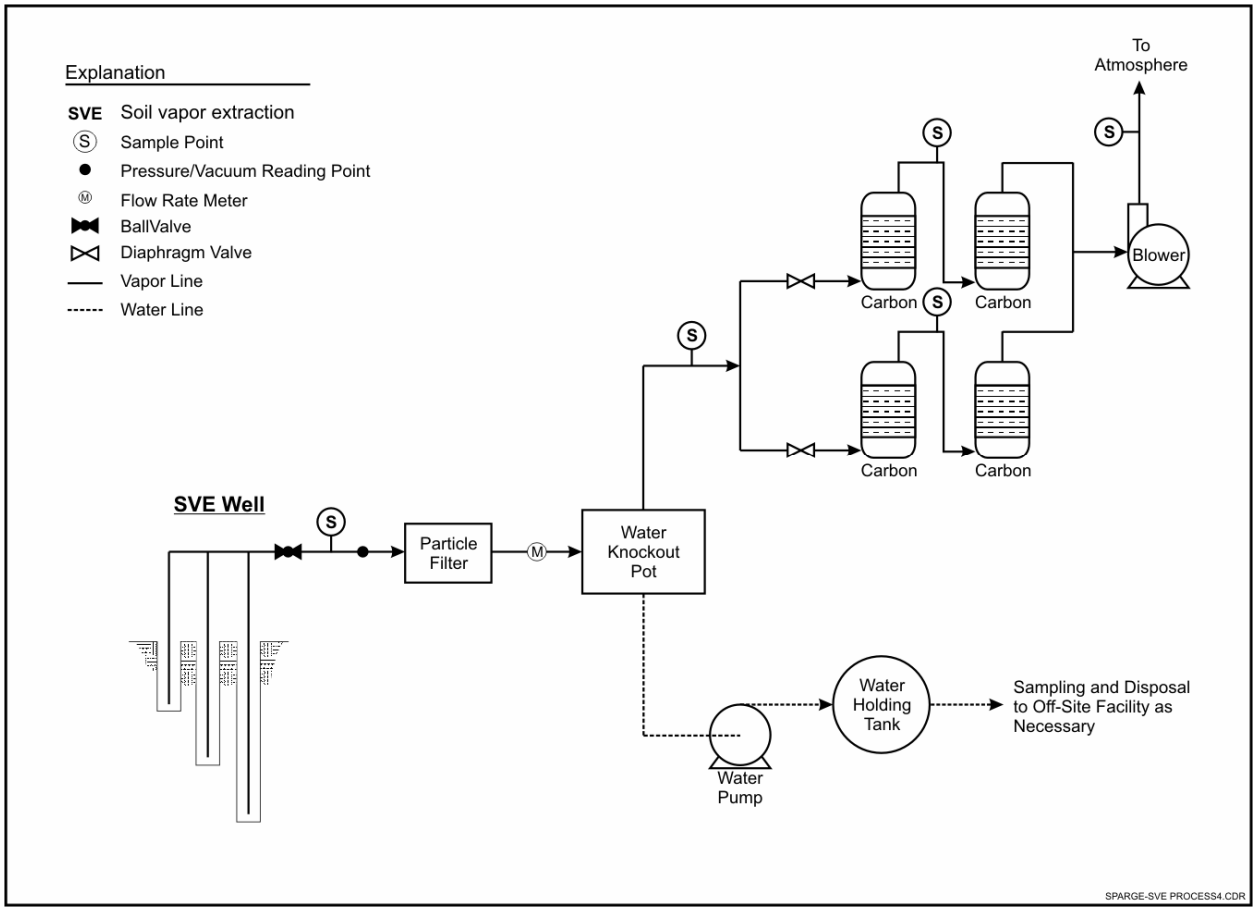


Figure 2-2. SVE Process Flow Diagram

3.0: CONSTRUCTION ACTIVITIES

3.1 Construction of the SVE System

Construction activities associated with the OU-2 SVE system included well installation, connection of electrical service, site access, and construction of the SVE trailer. Construction of the OU-2 SVE system began in 1998 with the construction of SVE well VE-01. Following completion of the SVE pilot test study and finalization of the ROD, three additional SVE wells, VE-02, VE-03, and VE-04, were installed during 2002, as discussed in Section 2.2. Electrical service and site access were established at each well location to facilitate the operation of the trailer-mounted SVE unit which is described in Section 2.2.

3.2 SVE Operational Summary

An SVE pilot study was initiated at VE-01 in April 1998 and conducted through June 1998. Based on the initial results, the pilot study was continued with operation of the SVE system from November 1998 to September 1999, from April 2000 to August 2000, and from January 2001 to May 2001. The SVE system was then re-started at extraction well VE-01 in December 2001 and operation continued through June 2002 as part of an extended pilot study. Following finalization of the ROD (NASA, 2002), the SVE system began operating on a rotation program (i.e., treatment at different wells in series using a rotating approach with mobile equipment). The SVE system was operated at each of the four wells for approximately six months per well. Results of the first operating cycle indicated that the greatest VOC mass extraction rates were achieved at extraction well VE-01. In addition, results of the periodic monitoring program indicated that soil vapor VOC concentrations at some wells in the vicinity of VE-03 remained above the VSLs and RWQCB screening criteria (RWQCB, 1996; NASA, 2005a). Therefore, a second operating period was conducted at wells VE-01 and VE-03 prior to system shutdown in September 2005.

Since startup of the SVE system, including the pilot test, a total of approximately 260 lb of VOCs have been removed from the vadose zone soil. Since December 2001, the SVE system has operated effectively, achieving greater than 95% runtime efficiency, design flowrates, and effective ROI. Table 3-1 summarizes key operational parameters at each well and the following subsections describe operation at each well. Figure 3-1 is a graph showing cumulative VOC mass removal, demonstrating that VOC mass removal rates have decreased significantly since startup.

3.2.1 Vapor Extraction Well VE-01

After the pilot test, the SVE system was operated at VE-01 from December 18, 2001, through June 30, 2002, and from December 14, 2004, through May 2, 2005. During the first three weeks of the first operating period, vapor was extracted from each screened interval separately for a period of one week to measure VOC concentrations at the individual intervals. Screened intervals VE-01-B and VE-01-C were then operated from January 4 through January 20, 2002. Screened interval VE-01-A was not operated during this time due to the presence of relatively large quantities of water in the influent. On January 21, 2002, screened interval VE-01-A was

brought back online at a reduced vacuum and the SVE system operated with all three screened intervals until the system ceased operation at the end of June 2002 (Geofon, 2002a).

Table 3-1. Summary of Key Operational Parameters

Extraction Well	Start Date	End Date	Runtime	Flowrate/ Vacuum (cfm/in. water)	Influent VOC Concentrations (ppmv)	Effective Radius of Influence (ft)
VE-01	January 8, 2001	May 24, 2001	95%	300/70	0.47 to 2.13	350
	December 18, 2001	June 30, 2002	99%	450/50	0.48 to 1.14	350
VE-02	April 20, 2004	October 21, 2004	99%	340/50	1.139 to 3.169	350
VE-03	October 30, 2002	April 30, 2003	95%	370/60	0.072 to 1.806	400
VE-04	May 28, 2003	December 4, 2003	95%	300/50	0.486 to 3.243	450

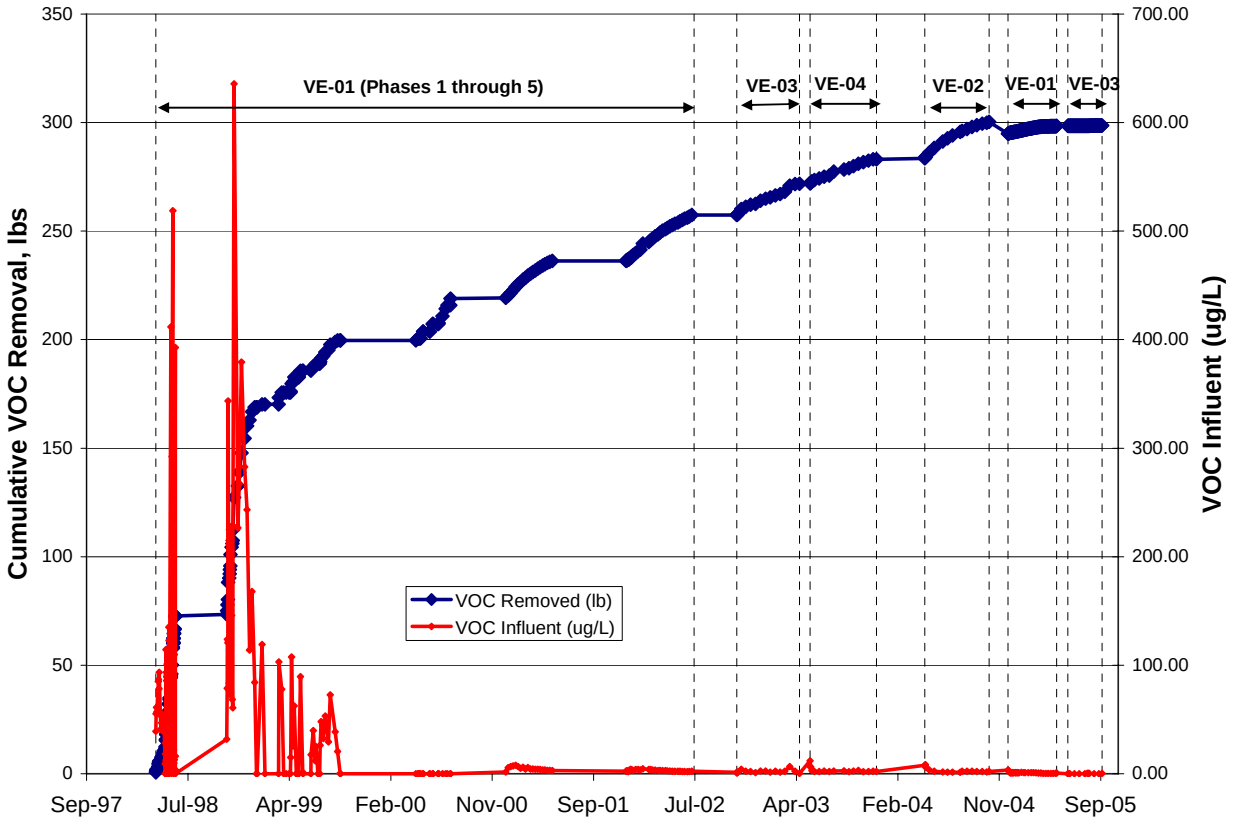


Figure 3-1. Cumulative VOC Mass Removal and Influent VOC Concentrations

The SVE system at VE-01 was restarted on December 14, 2004, and operated with three screened intervals (VE-01-A, VE-01-B, and VE-01-C) through March 23, 2005. During these first 15 weeks of operation, vapor sampling results indicated that extracted VOC concentrations were highest from Screen VE-01-A; therefore, to maximize VOC mass removal from this extraction well (NASA, 2005b), screens VE-01-B and VE-01-C were shut down on March 24, 2005, and screen VE-01-A continued operating for the final six weeks until May 2, 2005.

The SVE system yielded an average runtime of approximately 95% during each of the two operating periods. The flowrate averaged approximately 300 cfm (first period) and 350 cfm (second period), as measured by the flowmeter at an average applied wellhead vacuum of 70 inches of water.

During the operation of VE-01, laboratory analytical results indicated that the SVE system influent VOC concentrations ranged from 0.52 to 1.22 parts per million by volume (ppmv) during the first operating period, and from 0.17 to 1.17 ppmv during the second operating period. During the first operating period, the influent VOC concentrations increased the first eight weeks, then decreased gradually from the ninth week onward (Geofon, 2002a) (see Figure 3-1). During the second operating period, the VOC concentrations gradually decreased over time from the first week through week 21 when the system was turned off at VE-01 (NASA, 2005b).

The effective ROI estimates the extent to which the SVE system influences reduction in VOC concentrations in the vadose zone around a particular vapor extraction well. The effective ROI was calculated using measurements collected during operation of VE-01. The effective ROI is defined as the distance from the test well where the vacuum in the soil is equal to 5% of the wellhead vacuum. The average vacuum applied to VE-01 was 70 inches of water; therefore, the effective ROI is the distance from the well at which the vacuum in the soil was 3.5 inches of water. The effective ROI for VE-01 was estimated to be 350 to 400 ft during each operating period (Geofon, 2002a; NASA, 2005b).

3.2.2 Vapor Extraction Well VE-02

The SVE system at VE-02 was started on April 20, 2004, for continuous operation. Because the screened interval VE-02-D casing collapsed and was not usable, the SVE system was operated with screened intervals VE-02-A, VE-02-B, and VE-02-C from April 30, 2004, to October 21, 2004. Since VE-02 was started in April, the SVE system yielded an average runtime of approximately 97%. The flowrate averaged approximately 350 cfm, as measured by the flowmeter at an average applied wellhead vacuum of 50 inches of water (Geofon, 2004a).

Laboratory analytical results indicated that the SVE system influent VOC concentrations ranged from 0.861 to 3.169 ppmv in response to different applied well vacuums to VE-02. The influent total VOC concentrations remained steady following startup of the SVE system at VE-02 for the first two weeks, and then began to decrease gradually from the third week onward (Geofon 2004a) (see Figure 3-1).

The effective ROI was calculated using measurements collected during operation of VE-02. The average vacuum applied to the test well was 50 inches of water; therefore, the effective ROI is

the distance from the well at which the vacuum in the soil was 2.5 inches of water. The effective ROI was estimated to be 350 feet (Geofon, 2004a).

3.2.3 Vapor Extraction Well VE-03

The SVE system was started at VE-03 on October 30, 2002, for continuous operation. The SVE system operated with two screened intervals (VE-03-A and VE-03-B) at extraction well VE-03 through April 30, 2003. The system was shut down from January 10 through January 20, 2003, for replacement of carbon in the GAC vessels, installation of a new flowmeter, and blower overhauling. Normal operation of the SVE system began on January 21, 2003, without further shutdowns. After VE-03 was restarted, the SVE system yielded an average runtime of approximately 95%. The flowrate averaged approximately 370 cfm, as measured by the flowmeter at an average applied wellhead vacuum of 60 inches of water (Geofon, 2003).

In accordance with recommendations from the *SVE Progress Report and Optimization Evaluation* report (NASA 2005a), the SVE system was operated for a second cycle at VE-03 from June 3, 2005, through September 9, 2005. The SVE system operated with two screened intervals (VE-03-A and VE-03-B) at VE-03 through June 17, 2005, at which time the deeper screened interval was shut down. On June 18, 2005, the system operated with only VE-03-A to maximize VOC mass removal from this shallower screened interval. On July 29, 2005, the shallower screened interval was shut down, and the system then operated with only VE-03-B to maximize VOC mass removal from the deeper screened interval. No system shutdown periods were encountered during this operating cycle at VE-03. The flowrate averaged approximately 330 cfm, as measured by the flowmeter at an average applied wellhead vacuum of 80 inches of water (NASA, 2006a).

During the operation of VE-03, laboratory analytical results indicated that the SVE system influent VOC concentrations ranged from 0.072 to 1.806 ppmv in response to different applied well vacuums during the first operating cycle. The influent total VOC concentrations initially increased slightly following startup of the SVE system at VE-03 for the first five days, and then began to decrease gradually from the second week onward (Geofon, 2003). During the second operating period, SVE system influent VOC concentrations ranged from 0.154 to 15.94 ppmv. Higher concentrations were observed in the soil vapor extracted from VE-03-B compared to VE-03-A (NASA, 2006a).

The effective ROI was calculated using measurements collected during operation of VE-03. The average vacuum applied to the test well was 60 inches of water during the first operating cycle and 80 inches of water during the second operating cycle; therefore, the effective ROI is the distance from the well at which the vacuum in the soil was 3.0 inches of water and 4.0 inches of water, respectively. The effective ROI was estimated to be 400 feet during the first operating cycle and 500 ft during the second operating cycle (Geofon, 2003; NASA, 2006a).

3.2.4 Vapor Extraction Well VE-04

The SVE system was started at VE-04 on May 28, 2003, for continuous operation. The SVE system operated with all three screened intervals (VE-04-A, VE-04-B, and VE-04-C) at extraction well VE-04 through December 4, 2003. The system was shut down from August 18 through August 31, 2003, during the fifteenth periodic soil vapor monitoring event. After

completion of soil vapor monitoring activities, normal operation of the SVE system began on September 1, 2003, without further shutdowns. Since VE-04 was restarted, the SVE system yielded an average runtime of approximately 95%. The flowrate averaged approximately 300 cfm, as measured by the flowmeter at an average applied wellhead vacuum of 50 inches of water (Geofon, 2004b).

During the operation of VE-04, laboratory analytical results indicated that the SVE system influent VOC concentrations ranged from 0.486 to 3.243 ppmv in response to different applied well vacuums. A gradual decrease of influent total VOC concentrations was noted from the second day onward following SVE operation at VE-04 (Geofon, 2004b) (see Figure 3-1).

The effective ROI was calculated using measurements collected during operation of VE-04. The average vacuum applied to the test well was 50 inches of water; therefore, the effective ROI is the distance from the well at which the vacuum in the soil was 2.5 inches of water. The effective ROI was estimated to be 450 feet (Geofon, 2004b).

3.2.5 Performance Monitoring

SVE system influent and effluent (stack) vapor samples were collected in accordance with SCAQMD requirements. All samples were analyzed for VOCs using a FID calibrated to hexane. In addition, the SVE system influent, effluent, and individual screened interval vapor samples were collected for laboratory analyses once every week during operation of VE-01, and once every two weeks during operation of VE-02, VE-03, and VE-04. All emission rates were within the requirements of the SCAQMD (Geofon 2001, 2002a, 2003, 2004a and 2004b; NASA, 2005b and 2006a).

4.0: CHRONOLOGY OF EVENTS

The following tabular summary lists the major events for OU-2 and associated dates for those events.

Table 4-1. Chronology of Events

Date	Event
April 1998 through June 2002	SVE pilot test conducted.
September 23, 2002	ROD for OU-2 signed.
December 12, 2002	Remedial Design/Remedial Action Work Plan completed.
February 2002 through October 2002	Construction of additional SVE wells.
October 2002	Full-scale operation of SVE system begins.
February 2005	SVE Performance Evaluation and Optimization Report completed.
September 2005	Operation of SVE system completed.
May 2006	Final soil vapor sampling conducted.
October 2006	Completion of Remedial Action Report for OU-2.

5.0: PERFORMANCE STANDARDS AND QUALITY CONTROL

5.1 Performance Standards

The remedial approach (see Figure 5-1) documented in the ROD (NASA, 2002) consisted of SVE operation, performance monitoring, optimization, and a strategy for determining when the system would be shut off (i.e., the point at which SVE operation would cease following evaluation of rebound).

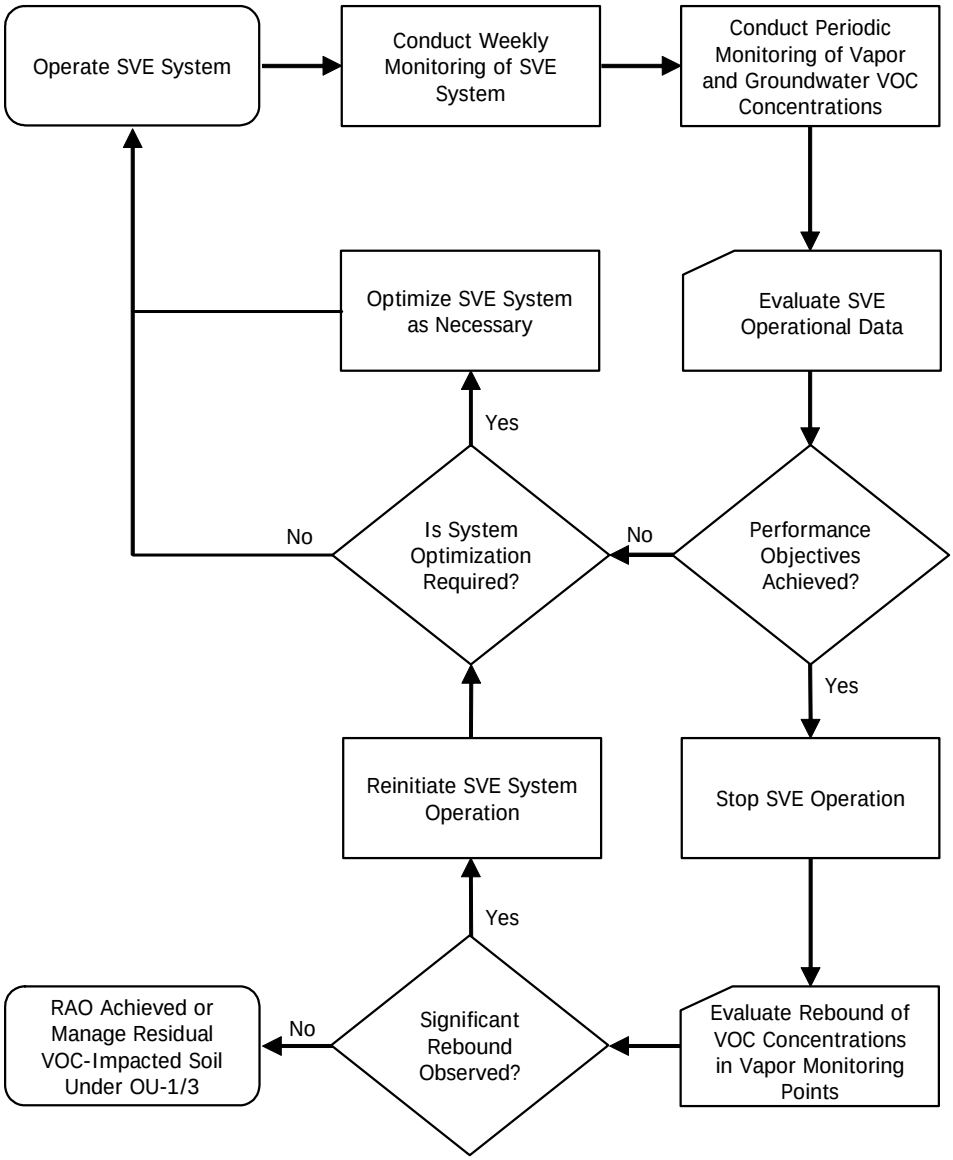


Figure 5-1. Remedial Approach Flowchart

As part of the remedial approach, the SVE system was operated and optimized until the performance objectives were achieved. As stated previously, the performance objectives include the following:

- Reduction of overall VOC concentrations at the vapor monitoring points and extraction wells compared to baseline levels. This includes fate and transport modeling to evaluate leaching to groundwater (using RWQCB guidance [RWQCB, 1996] and/or VLEACH^{TM}) and groundwater mixing.

- Asymptotic mass removal achieved after temporary shutdown periods and appropriate optimization of the SVE system. Asymptotic conditions will have been reached at a given SVE well when the upper limb of the cumulative mass removal curve is substantially linear and the slope of the curve approaches zero. In addition, rebound of chemical concentrations will be evaluated during the temporary shutdown periods. A general asymptotic decreasing trend in rebound of chemical concentrations in the soil vapor monitoring points will be demonstrated.

- Operate only as long as cost-effective. The SVE system will no longer be cost-effective when operating costs per unit of VOC mass removed from the vadose zone indicate that the additional cost of continuing to operate the SVE system is not warranted and/or when shutdown of the SVE system is not anticipated to significantly increase the cost of the groundwater remedy or significantly prolong the time to achieve groundwater cleanup.

Each performance objective is evaluated in the following subsections.

5.1.1 VOC Concentration Reduction

The first remedial performance objective for the SVE system is reduction of overall VOC concentrations to levels protective of chemical leaching to groundwater. As part of the Performance and Optimization Study (NASA, 2005a), the remaining chemicals of interest at the facility were identified by comparing data from the prior one year of soil vapor monitoring (August 2003 to November 2004) to the soil VSLs calculated from the *Interim Site Assessment and Cleanup Guidebook* (RWQCB, 1996). Based on this evaluation, CCl_4 and TCE were identified as the primary chemicals of interest.

VOC concentrations detected during the rebound monitoring event conducted in May 2006 were again compared against the VSLs to determine if any elevated concentrations remain at the site. During the rebound monitoring event, VOCs including CCl_4, TCE, chloroform, and Freon™113 were detected in eight of the 95 sample locations. Of these detections, VOC concentrations exceeded the VSLs at four locations (see Table 5-1). While some exceedances of the VSLs were identified, these exceedances are associated with relatively low concentrations (less than 10 times the VSL). Site specific modeling was then performed to evaluate concentrations exceeding these screening levels.

Table 5-1. Comparison of Detected VOC Concentrations to VSLs, May 2006

Soil Vapor Well Number	Depth (Ft bgs)	Date	Concentration (µg/L)	VSL (µg/L)	C/VSL
Carbon Tetrachloride					
3	29	05/09/06	1.1	0.19	5.82
3	40	05/09/06	1	0.10	10.38
Trichloroethylene					
4	20	05/09/06	24	9.52	2.52
39	100	05/11/06	3.9	4.80	0.81
39	100 (dup)	05/11/06	3.5	4.80	0.73
Chloroform					
27	20	05/10/06	30	116.00	0.26
27	20 (dup)	05/10/06	30	116.00	0.26
27	35	05/10/06	140	116.00	1.21
27	120	05/10/06	1.3	96.80	0.01
Freon 113					
39	100	05/11/06	3.2	7,489	0.00
39	100 (dup)	05/11/06	3.1	7,489	0.00

C/VSL = Concentration/Vapor Screening Level
Highlighted cells = concentration exceeds VSL
Dup = Duplicate sample

Site-specific modeling provides an alternate method for predicting the potential for VOC mass remaining in the vadose zone to migrate to the groundwater. The VLEACH™ model was used to further evaluate areas near the three soil vapor wells with concentrations above the VSLs (CCl_4 at SVW-3, TCE at SVW-4, and chloroform at SVW-27). The model estimates the impact from the mobilization and migration of sorbed organic chemicals located in the vadose zone on the underlying groundwater resource. It is important to note that the model does not incorporate groundwater mixing, but rather estimates the leachate concentration right before it comes into contact with groundwater. Resulting concentrations in groundwater would be much lower due to mixing of the leachate and groundwater.

A VLEACH™ model was set up using site-specific hydrogeology and the CCl_4, TCE, and chloroform soil vapor data from May 2006. The three VOC source areas are shown on Figures 5-2 through 5-4. Results of the VLEACH™ model simulations are shown in Figures 5-5 through 5-7. The VLEACH™ model indicates that CCl_4 concentrations near SVW-3 would not result in groundwater concentrations exceeding the California maximum contaminant level (MCL) of 0.5 µg/L. No specific MCL has been established for chloroform; however, U.S. EPA regulates disinfection byproducts as total trihalomethanes with an MCL of 80 µg/L. Results of the VLEACH™ modeling indicate that the maximum concentration of TCE and chloroform in the leachate (just prior to contact with groundwater) would exceed the MCLs of 5 µg/L and 80 µg/L, respectively.

However, as shown in Figures 5-5 and 5-6, the leachate concentrations of TCE and chloroform are estimated to fall below the MCLs within 5 years without additional treatment. Mixing with groundwater is not considered in the VLEACH™ simulations, which would result in lower

concentrations in groundwater. In addition, removal rates of these chemicals by the SVE system have decreased to a point where the SVE system is no longer effective (see Sections 5.1.2 and 5.1.3). Therefore, consistent with the remedial approach documented in the OU-2 ROD (NASA, 2002), the remaining VOC mass in the vicinity of SVW-27 can be most effectively managed under OU-1 (NASA, 2005c), the source area groundwater remedy, which includes a groundwater extraction, treatment, and reinjection system that is projected to be operational for at least 10 years. In addition, based on the capture zones of Lincoln Avenue Water Company and City of Pasadena Monk Hill Subarea wells, the remaining VOC mass in the vicinity of SVW-3 and SVW-4 can be most effectively managed under OU-3 (NASA, 2006b).

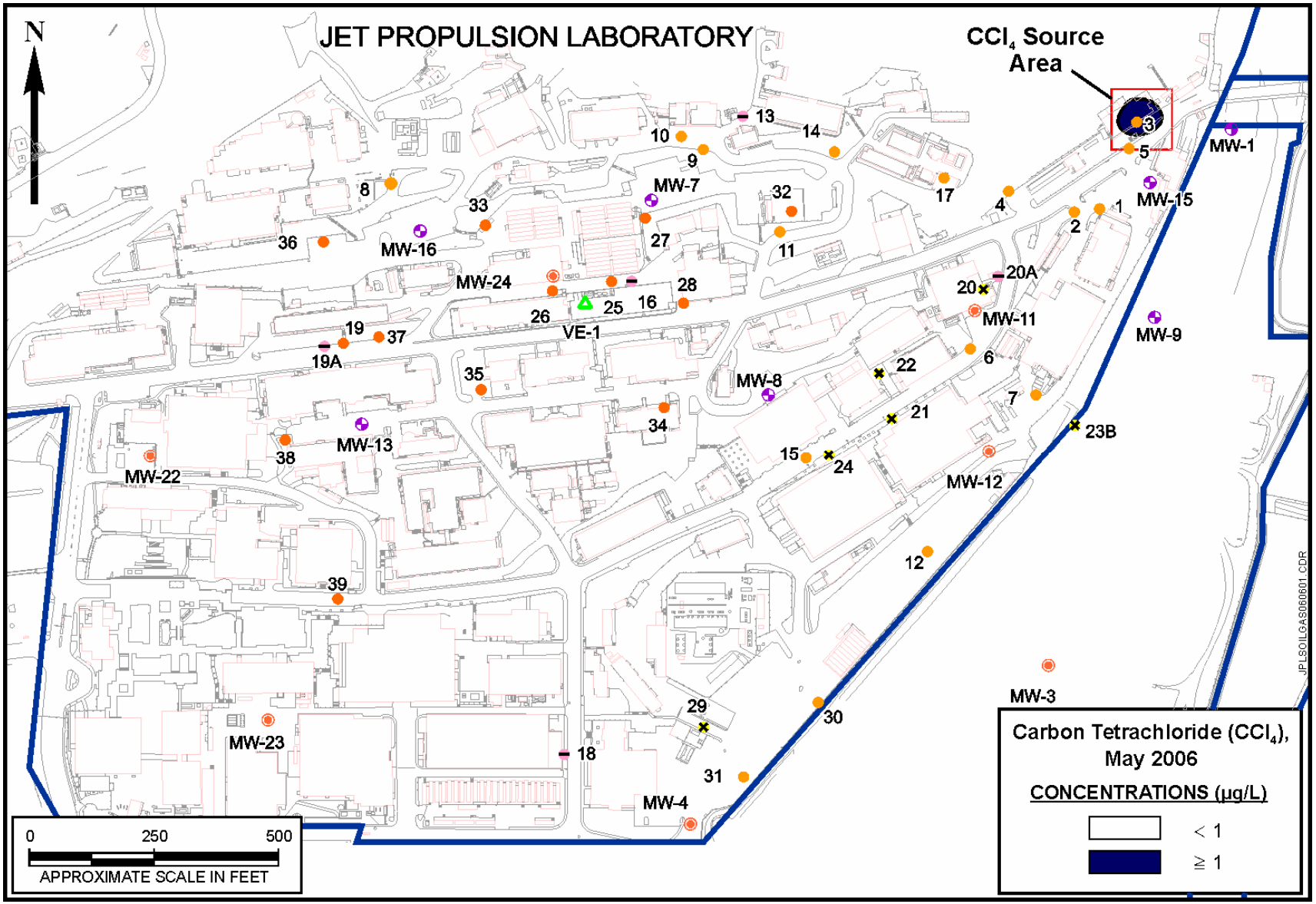


Figure 5-2. VLEACH™ Modeling Source Area – CCl_4

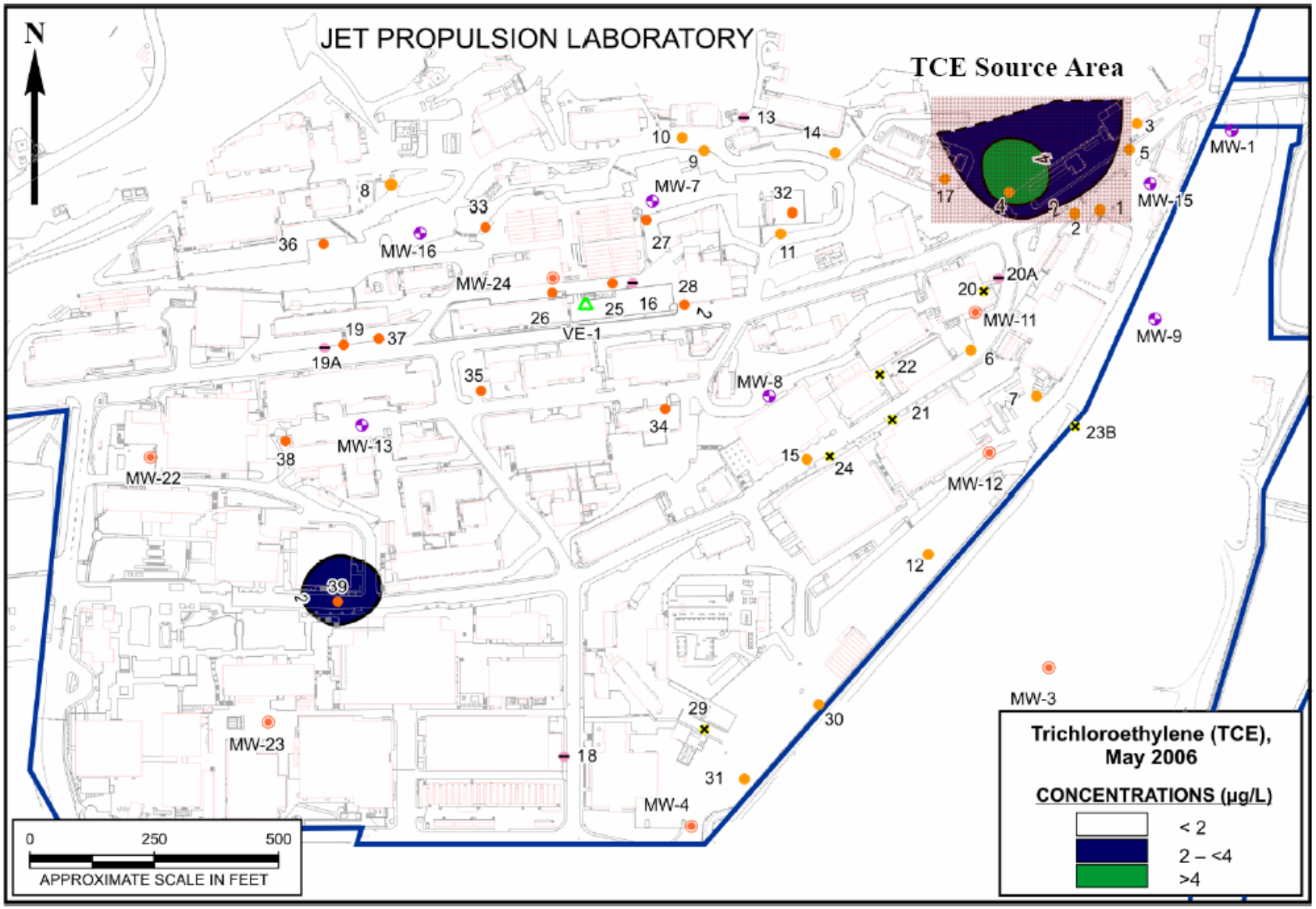


Figure 5-3. VLEACH™ Modeling Source Area – TCE

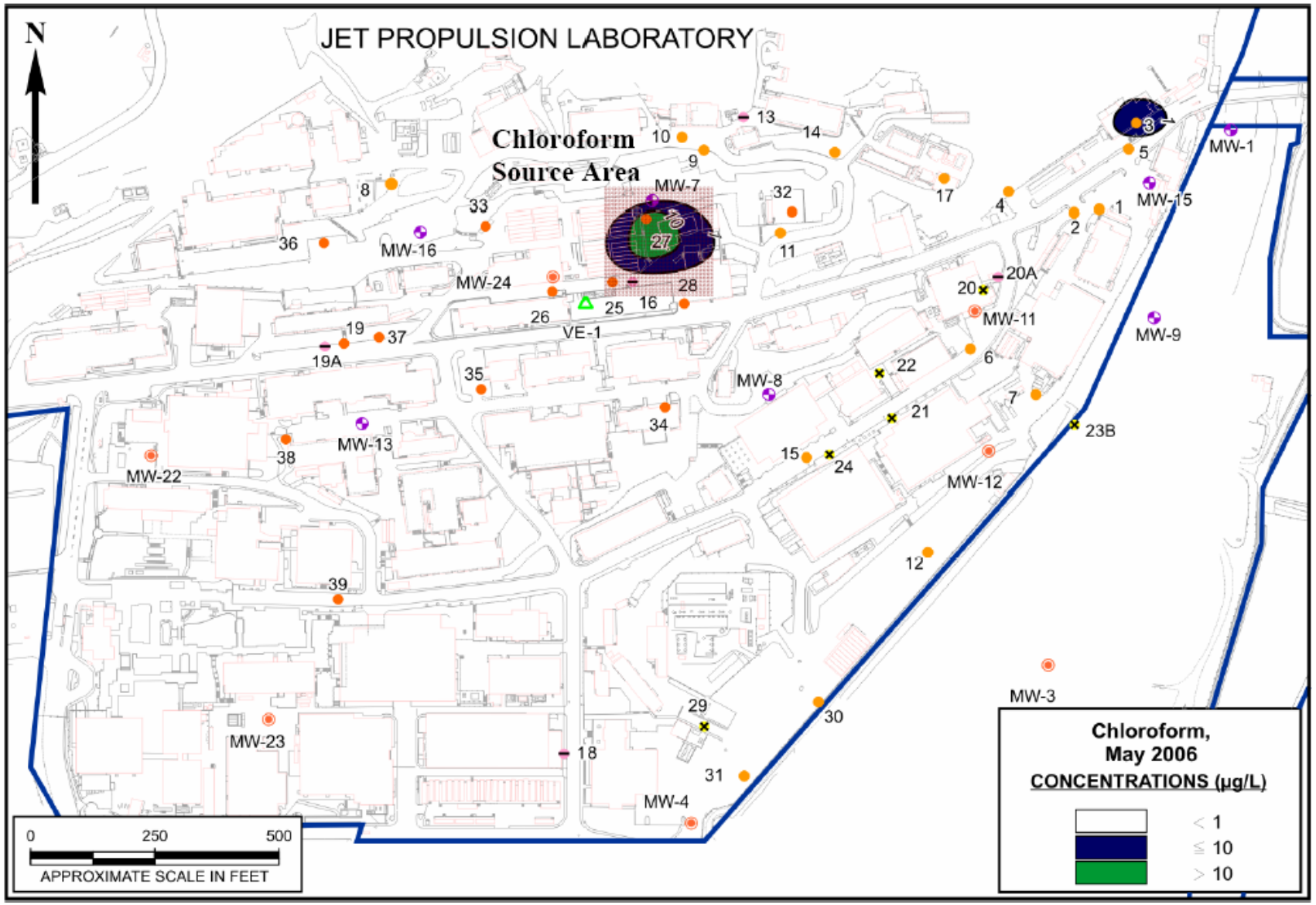


Figure 5-4. VLEACH™ Modeling Source Area – Chloroform

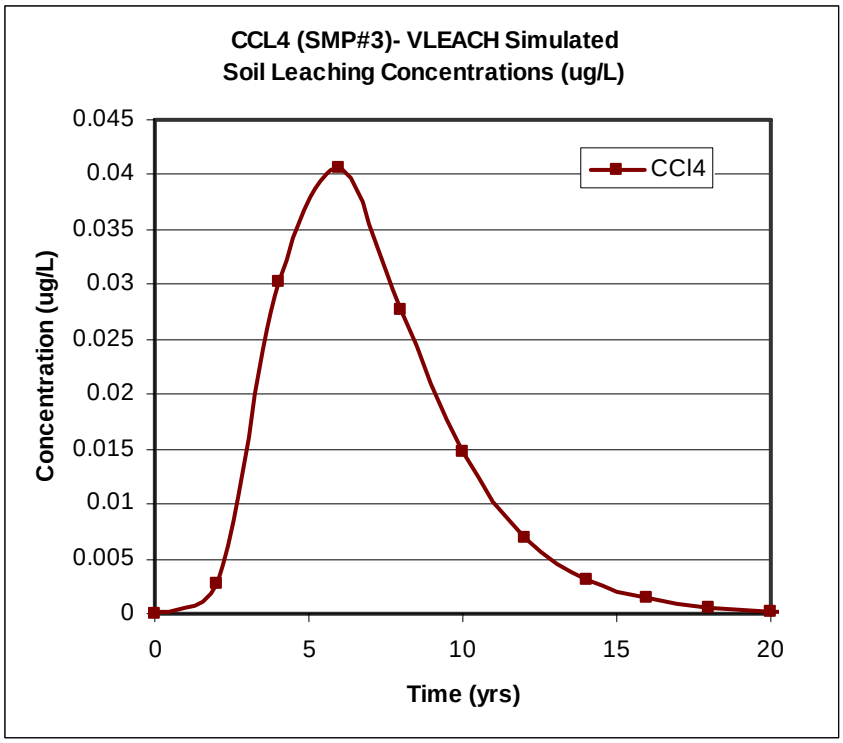


Figure 5-5. VLEACH™ Modeling Results – CCl_4

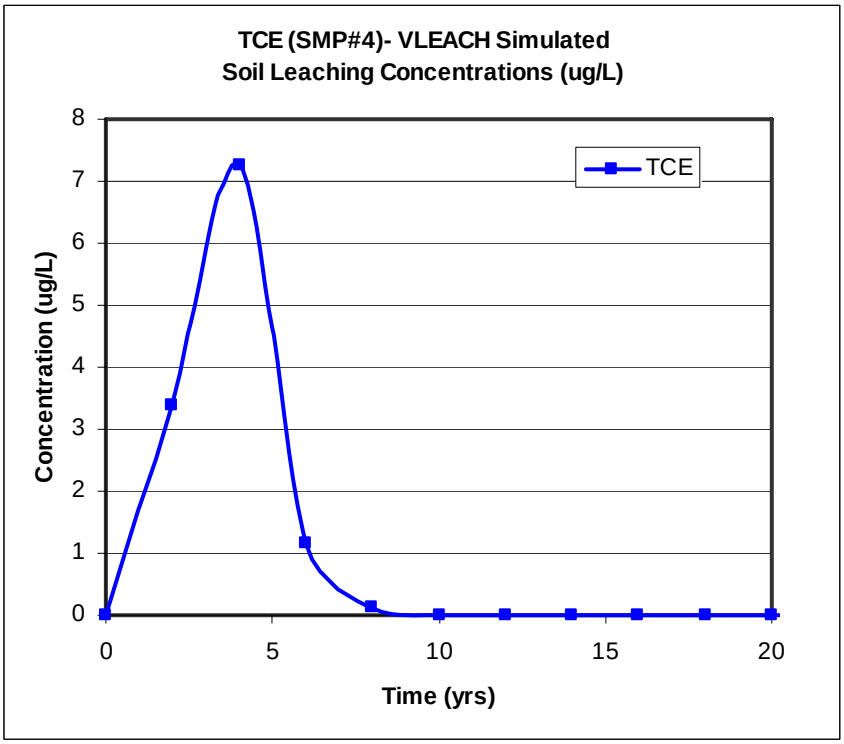


Figure 5-6. VLEACH™ Modeling Results – TCE

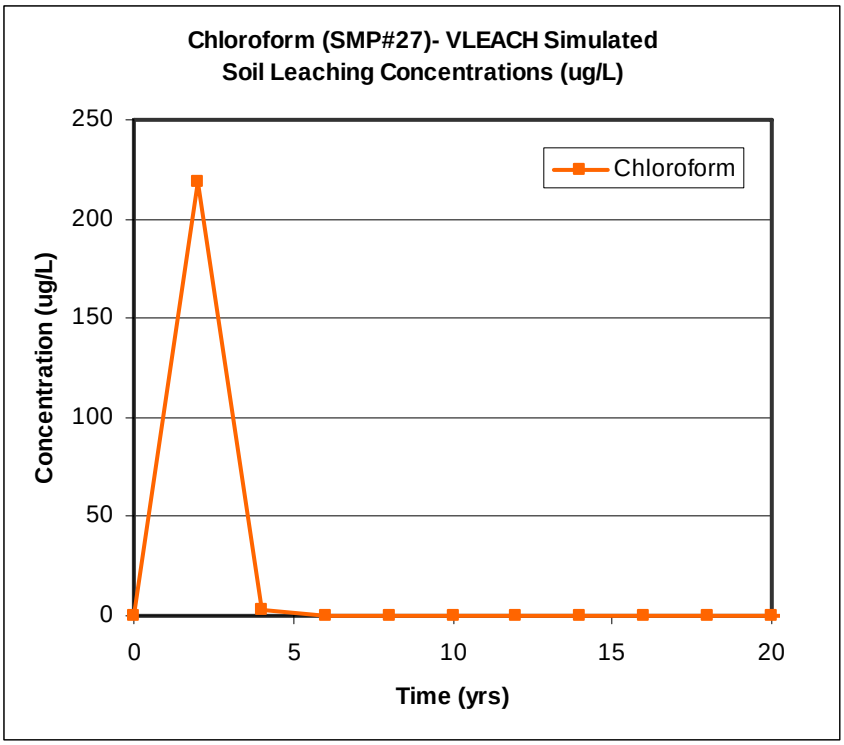


Figure 5-7. VLEACH™ Modeling Results – Chloroform

The remaining VOC concentrations at SVW-3 and SVW-4 were further evaluated to determine if there were any statistically significant trends in the data from these locations. Low levels of CCl_4 and TCE remain above RWQCB screening criteria (i.e., VSLs) in these soil vapor wells located within the ROI of VE-03. SVW-17 is the only other well within the ROI of VE-03 where VOCs have historically been detected. While the concentrations at SVW-17 have never exceeded the relevant VSLs, data from this well were also evaluated for any statistically significant trends. The data analyzed included $CC1_4$ (well 3), TCE (well 4), benzene (well 17), ethylbenzene (well 17), tetrachloroethene (PCE) (well 17), toluene (well 17), and xylenes (well 17). To enable the data evaluation, a value of 0.5 ppm (one-half the detection limit) was assigned to all non-detect results.

Statistical temporal trend analysis is a common method used to assess changes in groundwater contaminant concentrations over time. In this setting, two methods have been applied. The first method was proposed by Buscheck and Alcantar (1995), who fit the regression model

$$\ln C = \alpha - \lambda t$$

to the data from each well and determined whether λ was statistically significantly different than zero. If λ is greater than zero, the data exhibit a decreasing trend over time; if λ is less than zero, the data exhibit an increasing trend over time. If λ does not differ from zero, no trend has been detected. The second method is a nonparametric alternative to Buscheck and Alcantar. Mann-Kendall regression (Kendall, 1938) is used to determine whether there is a trend in the data, and Sen's method (Sen, 1968) is used to estimate the trend.

For the statistical analysis, the sample collection dates were converted to year and fraction of year (e.g., 2001.123). This, along with the form of the statistical model, results in the parameter λ for Buscheck and Alcantar's method representing the first-order decay rate for the chemical. SAS® statistical analysis software was used to perform the data analysis. The nonparametric method gives the same results with regard to the significance of trends whether the raw concentrations or logarithmic transformations are used. For consistency, the Sen trend estimates were also obtained using log-transformed concentrations. These trend estimates represent the average annual change in the natural logarithms of concentration.

Table 5-2 contains the results of the Buscheck-Alcantar and Mann-Kendall regression analyses. These results indicate that only toluene in Well 17-36 exhibits a statistically significant trend. In this case, the trend is decreasing over time (as indicated by a positive trend estimate). For the remainder of the wells and chemicals, the trends are not statistically significant. This is not unexpected given the poor rate of mass extraction observed from VE-03. The SVE system has operated at VE-03 for two cycles, and minimal mass removal was observed during each period. Further operation of VE-03 is not recommended given the minimal VOC mass remaining at SVW-3 and SVW-4. As discussed above, the nominal remaining VOC mass at these wells can reasonably be addressed as part of the groundwater response actions.

Table 5-2. Regression Results for Three Wells

Well	Chemical	Buscheck-Alcantar		Mann-Kendall-Sen	
		p-value	Trend Est.	p-value	Trend Est.
3-29	CC14	0.195	0.480	0.484	0.516
3-40	CC14	0.502	-0.081	0.612	-0.051
4-20	TCE	0.383	-0.089	0.312	-0.126
17-36	Benzene	0.300	0.492	0.931	-0.076
17-36	Ethylbenzene	0.555	-0.181	0.380	-0.228
17-36	PCE	0.489	0.277	0.432	0.518
17-36	Toluene	0.0002	0.733	0.003	0.737
17-36	Xylenes	0.722	0.122	0.186	-0.306

Table 5-3 presents the CCl_4 and TCE mass prior to operation of the SVE system and at several times throughout the SVE system operational period, including the rebound monitoring event conducted in May 2006. The mass estimates were calculated using a three-dimensional computer modeling software package, EarthVision™ Volumetrics program. These data indicate that the system has worked effectively given that the overall extent of soil vapor impacts has significantly decreased since operation of the SVE system began.

5.1.2 Asymptotic Mass Removal

The second remedial performance objective for the SVE system is to achieve asymptotic mass removal after appropriate optimization of the system and temporary shutdown periods. Asymptotic conditions are reached at a given SVE well when the upper limb of the cumulative mass removal curve is substantially linear and the slope of the curve approaches zero.

Table 5-3. Summary of VOC Mass Estimated in Vadose Zone

Date	CCl_4 (lb)	TCE (lb)
1996-1998 (before SVE operation)	661.1	76.4
July 2001	10.2	38.4
May 2002	8.8	31.2
August 2003 – July 2004	13.1	35.4
October/November 2004	8.1	38.2
February 2004	8.1	32.7
April 2004	NA	31.7
July 2004	8.0	30.1
October/November 2005	8.0	29.7
May 2006	8.0	36.3

NA – CCl_4 not detected at any monitoring location; therefore, a mass estimate was not calculated.

Figure 5-8 presents the daily mass removal rates for the SVE system. Daily mass removal rates of CCl_4 and TCE were significantly higher during the first operational period at V-01 (maximum of 14 lb per day) compared to the other vapor extraction points which removed less than 0.3 lb per day. Average daily mass extraction rates for the first operating cycle at extraction wells VE-01 through VE-04 were 0.83, 0.10, 0.01, and 0.04 lb per day, respectively. During the second operating cycle, the average mass extraction rates at VE-01 and VE-03 were 0.03 and 0.002 lb per day, respectively (Note: VE-02 and VE-04 were not operated during the second operating cycle). Figures 5-9 and 5-10 present the cumulative CCl_4 and TCE mass recovered by the SVE system over time. The SVE system removed approximately 230 lb of CCl_4 and 30 lb of TCE since the pilot test began in April 1998. These figures indicate that asymptotic mass removal has been achieved.

With the exception of VE-04, the daily mass removal rates were highest at each well during the first few weeks of operation, and gradually declined for the remaining operational period. In addition, the average mass extraction rates for the second operating cycle at VE-01 and VE-03 were an order of magnitude less than that observed during the first operating cycle at each of these wells. The VOCs detected above screening levels (discussed in Section 5.1.1) were identified in soil vapor monitoring wells located within the treatment zones of VE-01 (chloroform) and VE-03 (TCE). These data also suggest that system operation has achieved asymptotic mass removal, continued operation is not effective, and residual levels of VOCs in soil near SVW-3, -4, and -27 can be most effectively managed as part of the groundwater response actions.

5.1.3 Cost-Effectiveness

The third and final remedial objective for the SVE system is to operate only as long as cost-effective. The SVE system will no longer be cost-effective when operating costs per unit of VOC mass removed from the vadose zone indicate that the additional cost of continuing to operate the SVE system is not anticipated to significantly increase the cost of the groundwater remedy or significantly prolong the time to achieve groundwater cleanup. That is, it would be more cost effective to cleanup the chemicals as part of the groundwater response actions.

Figure 5-11 presents the approximate cumulative costs versus cumulative mass recovered for the SVE system. This plot illustrates (by its increasing vertical slope) that operation of the system is becoming increasingly more costly. The increasing vertical slope of the cumulative costs coincides with the cumulative mass removal curve becoming more asymptotic over time (see Figures 5-9 and 5-10).

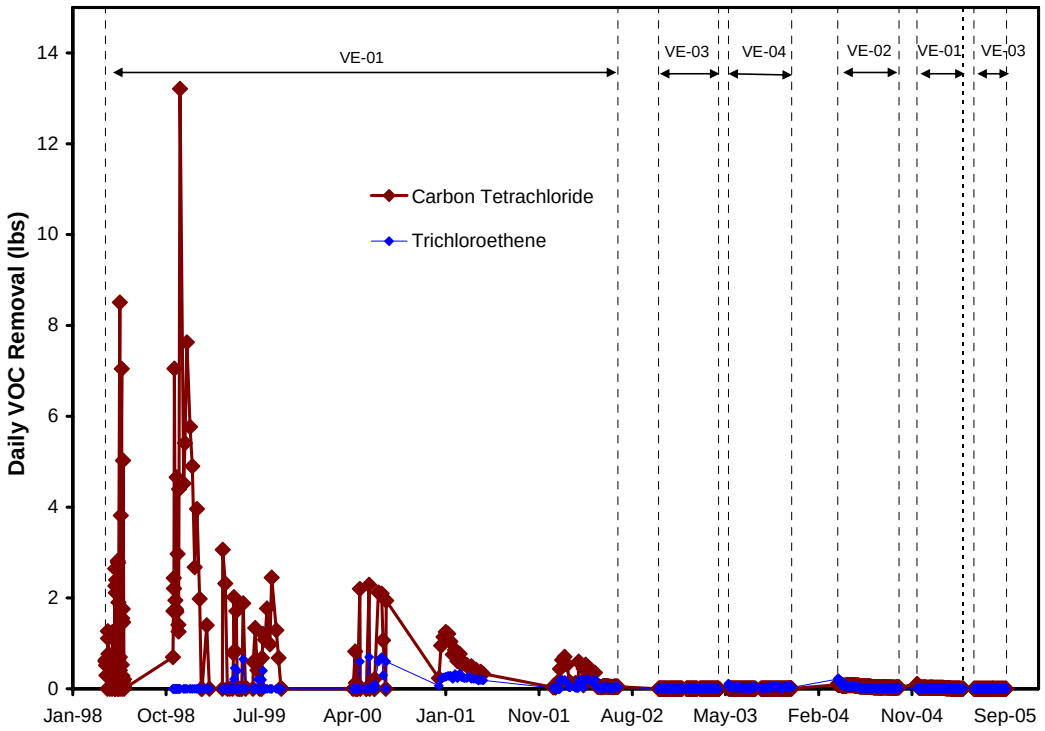


Figure 5-8. Daily Mass Removal Rates for the SVE System

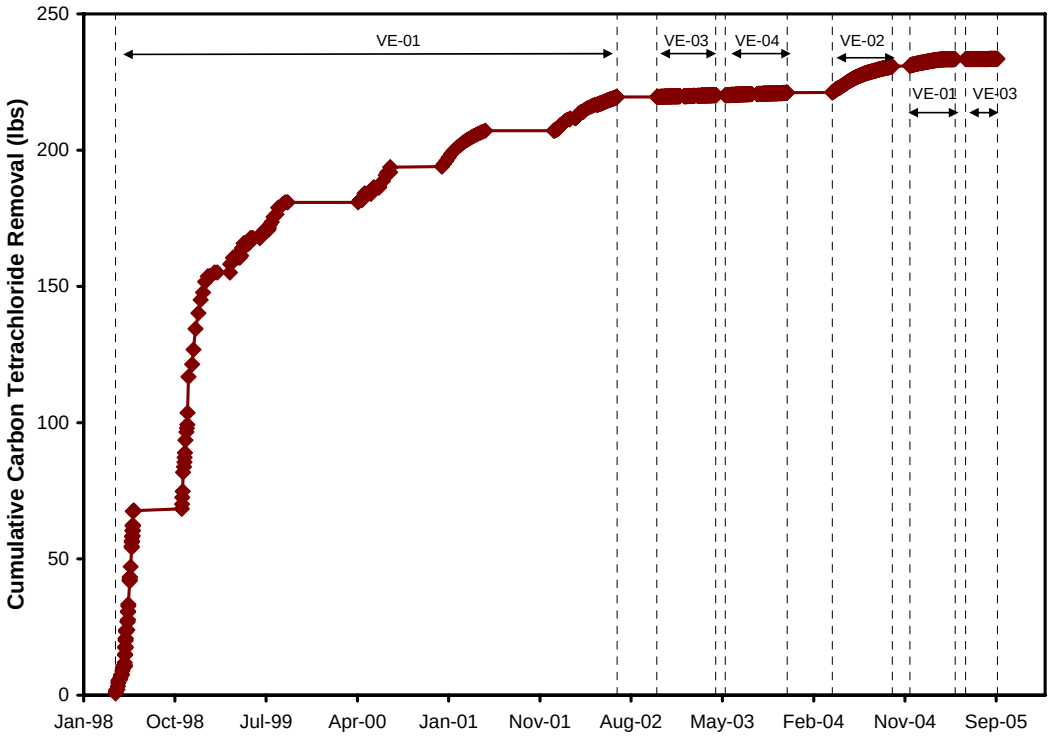


Figure 5-9. Cumulative Carbon Tetrachloride Mass Removal

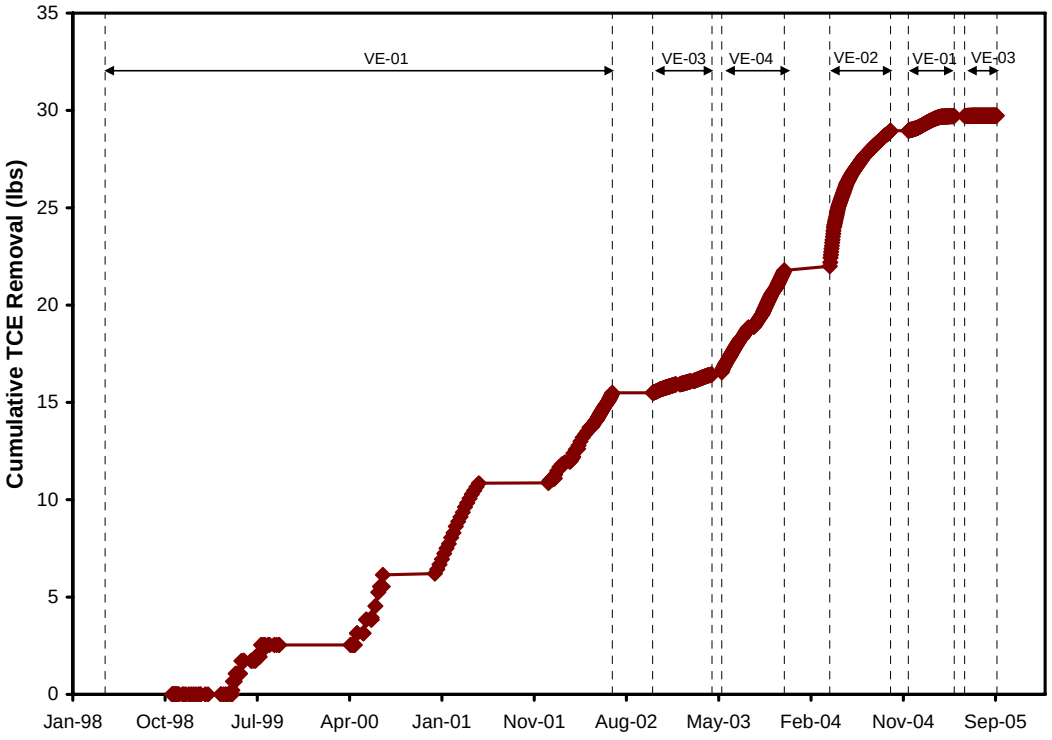


Figure 5-10. Cumulative Trichloroethylene Mass Removal

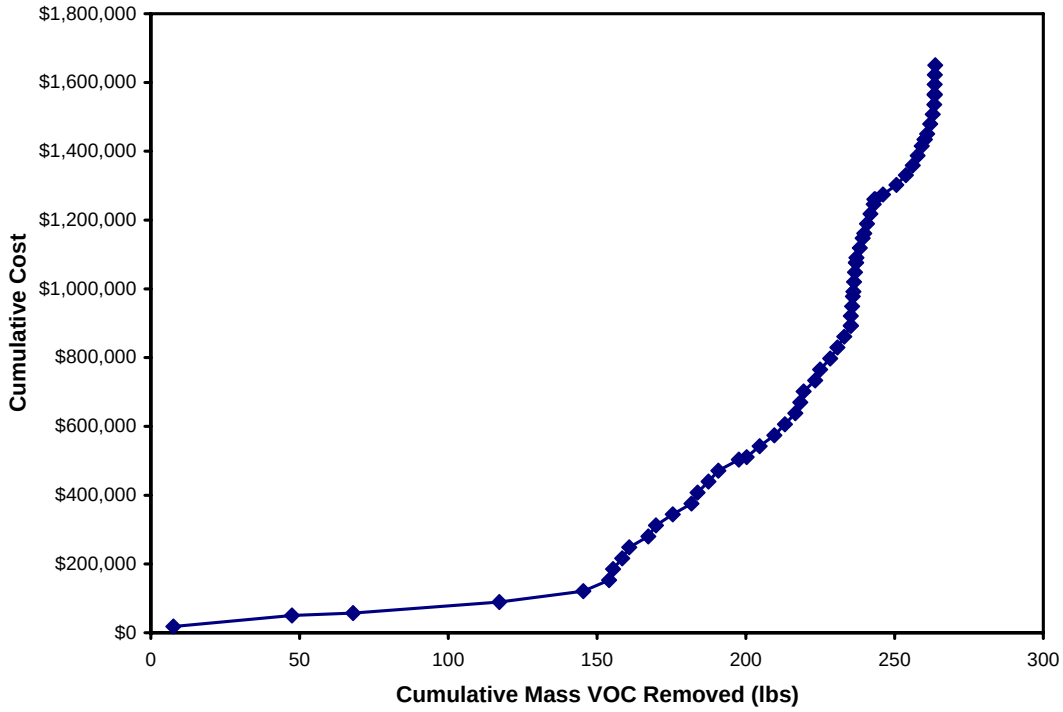


Figure 5-11. Cumulative Cost vs. Cumulative Mass of VOCs Removed

Figure 5-12 presents the cost per pound of VOC mass (sum of CCl_4 and TCE) removed by the SVE system. This plot indicates that VE-03 was the least cost-effective extraction well to operate during each of the two operating cycles at these wells. VE-01 was the most cost-effective well to operate during the first operating cycle; however, operating the SVE system at VE-01 during the second cycle was much less cost effective. The average cost per pound of VOC mass removed by the SVE system during the first operating cycle at each well was approximately $10,000/lb at VE-01, $12,000/lb at VE-02, $100,000/lb at VE-03, and $37,000 at VE-04. The average cost per pound of VOC mass removed increased to $86,000/lb at VE-01 and $600,000/lb at VE-03 during the second operating cycles. Again, the VOC detections discussed in Section 5.1.1 were identified in soil vapor monitoring wells (SVW-3, SVW-4, and SVW-27) located within the treatment zones of VE-01 (chloroform) and VE-03 (TCE). Therefore, the system is no longer effective in reducing concentrations of VOCs and residual levels are most effectively managed as part of the groundwater response actions.

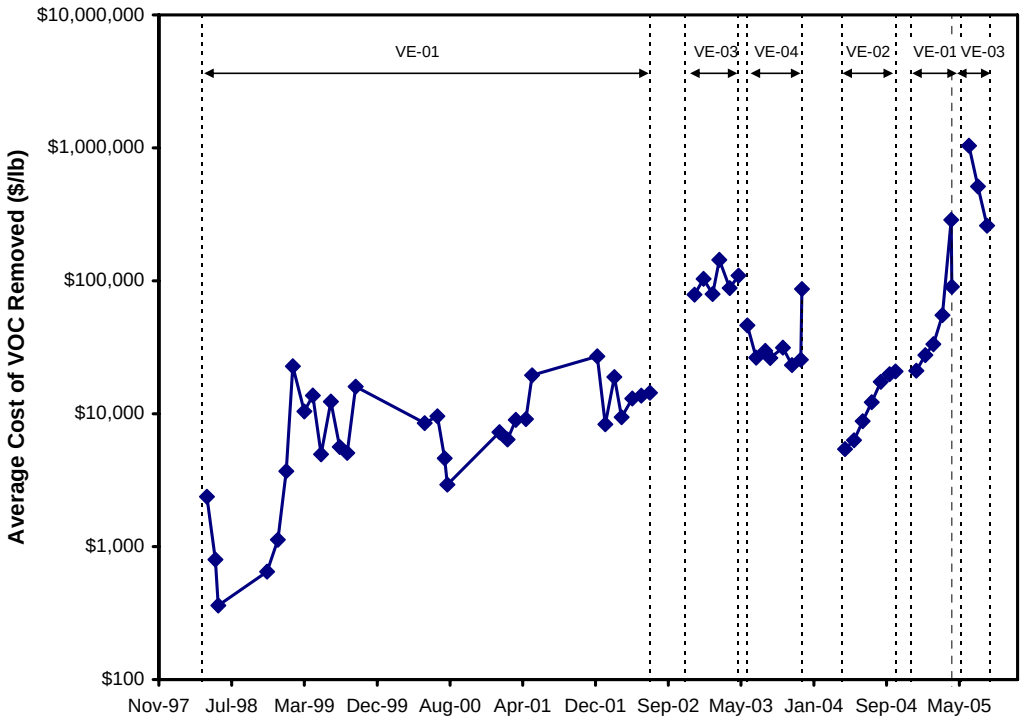


Figure 5-12. Operational Cost per Pound of VOC Removed

Alternatively, a groundwater treatment system is currently being operated to address VOC and perchlorate in the on-facility groundwater source area. The cost for treating VOC contamination with the GAC vessels in this system is estimated at approximately $15,000 to $20,000/lb.

5.2 Quality Assurance and Quality Control

This section briefly summarizes the quality assurance and quality control (QA/QC) procedures followed during each of the periodic soil vapor sampling events. Analytical data reports for all soil vapor samples were sent to Laboratory Data Consultants, located in Carlsbad, California, for independent data evaluation. All data were usable as qualified. A summary table of the validated data is presented in Appendix A.

All sample analyses were performed using an external, three-point standard calibration method. For most target analytes, both detectors on the gas chromatograph (GC) were calibrated over a range equivalent of 5.0 to 200.0 µg/L of analyte in soil vapor. Analytical system performance was verified at the beginning of each analytical day with an "opening standard" and a "closing standard" after the last environmental sample analysis for the day. A "continuing standard" was analyzed after the tenth environmental sample run that day. If 10 or fewer samples were analyzed during the day, the closing standard was substituted for the continuing standard.

During each analytical day, the environmental sample analyses were bracketed by check standards, which verified acceptable system performance for the analytes listed in the daily

calibration data summary tables. The acceptable percent difference of calibration factors in continuing standard mixtures was 25%. If the percent difference was greater than this acceptable value, then the analytical result, or the detection limit for non-detect results, was qualified with a J flag indicating that the value or detection limit was an estimated value.

Field blanks of ambient air from inside the field laboratory trailer were analyzed immediately after the opening verification standard and were clean in all cases. No matrix spikes or laboratory replicates were required.

Surrogate compounds (dibromofluoromethane, 1,2-dichloroethane-d4, toluene-d8, and 4-bromofluorobenzene) were injected into the GC along with the environmental samples as a QA/QC check on recovery limits. In accordance with RWQCB (1997) protocols, surrogate recoveries were checked to ensure that all recoveries were within the acceptable range of 75 to 125%.

No sample analysis data obtained during the sampling events were rejected as unusable. Overall, the assessment of soil vapor and corresponding control sample data indicate that data quality objectives were achieved in terms of precision, accuracy, representativeness, comparability, and completeness for all analytes sampled.

6.0: FINAL INSPECTIONS AND CERTIFICATIONS

SVE system construction was completed in April 1998 in accordance with the approved Remedial Design/Remedial Action (RD/RA) Work Plan (Geofon, 2002b). As discussed in Section 3, SVE system operation was cycled using one extraction well at a time starting with the pilot test at VE-01. Several phases of the pilot test were conducted at VE-01 during the time periods of April 1998 through June 1998, November 1998 through September 1999, April 2000 through August 2000, January 2001 through May 2001, and December 2001 through June 2002. Operation of the SVE system was continued at VE-03 from October 2002 through April 2003, at VE-04 from May 2003 through December 2003, and at VE-02 from April 2004 through October 2004. Following completion of the SVE System Progress Report and Optimization Evaluation (NASA, 2005a), the system was restarted at extraction well VE-01 from December 2004 through March 2005, and at VE-03 from June 2005 through September 2005.

During system operation, daily inspections were conducted to monitor operating parameters including system vacuum measurements, flowrates, and FID influent and effluent measurements. In addition, vacuum measurements from soil vapor monitoring wells were recorded weekly to confirm effectiveness of the SVE system operation. The average run time of the SVE system over the entire operating period was approximately 95%. Results of the daily inspections and a summary of system operating data were presented in progress reports prepared periodically throughout the project duration.

All work at the site was completed in accordance with the approved health and safety plan. No health and safety violations or accidents were reported throughout the duration of the project.

7.0: OPERATION AND MAINTENANCE ACTIVITIES

Operation and maintenance activities associated with OU-2 were completed with the final soil vapor rebound monitoring event. No post-construction operation and maintenance activities will be required for the on-facility vadose zone soil as part of OU-2. Residual VOC mass remaining in the soil will be best managed as part of the on- and off-facility groundwater remedies under OU-1 and OU-3, respectively. Currently there is a quarterly groundwater monitoring program in place and a source area groundwater treatment system is installed and operating (NASA, 2005c). One OU-3 groundwater treatment system at Lincoln Avenue Water Company is installed and operating, and the other, the City of Pasadena system, is in the planning stages (NASA, 2006b).

8.0: SUMMARY OF PROJECT COSTS

A summary of costs associated with implementation of SVE for OU-2 is provided below in Table 8-1. The difference in actual cost versus the projected cost from the ROD is attributable to the shorter than anticipated cost to completion, eight years instead of 30 years. As discussed in Section 5.1.3, the average cost per pound of VOC mass removed by the SVE system during the first operating cycle at each well was approximately $10,000/lb at VE-01, $12,000/lb at VE-02, $100,000/lb at VE-03, and $37,000 at VE-04. The average cost per pound of VOC mass removed increased to $86,000/lb at VE-01 and $600,000/lb at VE-03 during the second operating cycles.

Table 8-1. Summary of SVE Costs

Cost Item	ROD Estimate (2002 $)	ROD Estimate[1] (2006 $)	Actual Cost (2006 $)
Capital Cost	$874,200	$978,800	$197,797
Total O&M Cost[2]	$2,861,100	$3,203,600	$1,650,700
Total Project Cost[3]	$3,735,300	$4,182,400	$1,848,497
Difference between total project cost and total ROD cost estimate			-$2,333,903

(1) ROD costs were adjusted from 2002 to 2006 dollars using 11.97% escalation.
(2) Total SVE system operation and maintenance cost not including quarterly soil vapor monitoring.
(3) Total project cost presented in the ROD is the present worth cost assuming operation of the SVE system for 30 years.

9.0: OBSERVATIONS AND LESSONS LEARNED

Observations and lessons learned during operation of the SVE system are discussed below.

- Implementation of a pilot test was important to demonstrate the feasibility of the technology for use at this site, and also to determine key parameters for design of the full scale system.

- The use of mobile SVE equipment rather than a fixed system and cycling operation of the extraction wells helped to more effectively operate the system while minimizing cost.

- The development of performance-based objectives rather than chemical-specific cleanup goals helped to focus operation of the SVE system based on the primary remedial action objective − to minimize leaching of elevated VOC concentrations in soil to the underlying groundwater aquifer. After one full cycle of operation, contaminant mass estimates from discrete depth sampling and VLEACH^{TM} modeling were used to identify the remaining areas of soil vapor contamination that could potentially impact groundwater. Operation of the SVE system was optimized by targeting these remaining areas of concern.

10.0: OPERABLE UNIT CONTACT INFORMATION

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11.0: REFERENCES

Buscheck, T.E. and C.M. Alcantar. 1995. "Regression Techniques and Analytical Solutions to Demonstrate Intrinsic Bioremediation." In R.E. Hinchee, J.T. Wilson, and D.C. Downey (Eds.), *Intrinsic Bioremediation*, pp. 109-116. Battelle Press, Columbus, OH.

California Regional Water Quality Control Board (RWQCB), Los Angeles Region. 1996. *Interim Site Assessment & Cleanup Guidebook*. May.

California Regional Water Quality Control Board (RWQCB), Los Angeles Region. 1997. *Interim Guidance for Active Soil Gas Investigation*. February 25.

Ebasco. 1988. *Preliminary Assessment/Site Inspection Report for NASA-Jet Propulsion Laboratory, Pasadena, California*. April 11.

Ebasco. 1990a. *Expanded Site Inspection Report for NASA-Jet Propulsion Laboratory, Pasadena, California*. May.

Ebasco. 1990b. *Supplemental Information to the Expanded Site Inspection Report for NASA-Jet Propulsion Laboratory, Pasadena, California*. November.

Foster Wheeler Environmental Corporation. 1999. *Final Remedial Investigation Report for Operable Unit 2: Potential On-Site Contaminant Source Areas*. National Aeronautics and Space Administration, Jet Propulsion Laboratory, Pasadena, CA. November.

Foster Wheeler Environmental Corporation. 2000. *Final Feasibility Study Report for Operable Unit 2: Potential On-Site Contaminant Source Areas*. National Aeronautics and Space Administration, Jet Propulsion Laboratory, Pasadena, CA. July.

Geofon, Inc. 2001. *Summary Report: Soil Vapor Extraction Pilot Test (January 8 to May 24, 2001), Operable Unit 2*. National Aeronautics and Space Administration, Jet Propulsion Laboratory, CA. November 15.

Geofon, Inc. 2002a. *Summary Report: Soil Vapor Extraction Pilot Test at Operable Unit 2 (December 18, 2001 to June 30, 2002)*. National Aeronautics and Space Administration, Jet Propulsion Laboratory, CA. October 1.

Geofon, Inc. 2002b. *Draft Final Remedial Design/Remedial Action Workplan for Operable Unit 2*. National Aeronautics and Space Administration, Jet Propulsion Laboratory, Pasadena, California. December 12.

Geofon, Inc. 2002c. *Expanded Soil Vapor Extraction Pilot Test at Operable Unit 2, National Aeronautics and Space Administration, Jet Propulsion Laboratory, Pasadena, California*. May 10.

Geofon, Inc. 2003. *Summary Report: Soil Vapor Extraction Pilot Test at Extraction Well VE-03, Operable Unit 2 (October 30, 2002 to April 30, 2003)*. National Aeronautics and Space Administration, Jet Propulsion Laboratory, CA. August 26.

Geofon, Inc. 2004a. Monthly Progress Report (October 2004), Soil Vapor Extraction Pilot Test at Extraction Well VE-02, Operable Unit 2. National Aeronautics and Space Administration, Jet Propulsion Laboratory, CA. November 22.

Geofon, Inc. 2004b. *Summary Report: Soil Vapor Extraction Pilot Test at Extraction Well VE-04, Operable Unit 2 (May 28 to December 4, 2003), Operable Unit 2*. National Aeronautics and Space Administration, Jet Propulsion Laboratory, CA. November 15.

Kendall, M.G. 1938. "A New Measure of Rank Correlation." *Biometrika* 30: 81-93.

National Aeronautics and Space Administration (NASA). 2001. *Proposed Plan to Cleanup Soils at the National Aeronautics and Space Administration, Jet Propulsion Laboratory, Pasadena, CA*. April.

National Aeronautics and Space Administration (NASA). 2002. *Final Record of Decision and Remedial Action Plan for Operable Unit 2*. National Aeronautics and Space Administration, Jet Propulsion Laboratory, Pasadena, CA. September.

National Aeronautics and Space Administration (NASA). 2005a. *SVE Progress Report and Optimization Evaluation.* National Aeronautics and Space Administration, Jet Propulsion Laboratory, Pasadena, CA. February.

National Aeronautics and Space Administration (NASA). 2005b. *Technical Memorandum, Operations Summary: January 2005 through June 2005*. National Aeronautics and Space Administration, Jet Propulsion Laboratory, Pasadena, CA. July.

National Aeronautics and Space Administration (NASA). 2005c. *Proposed Plan for Source Area Groundwater Cleanup at the NASA Jet Propulsion Laboratory, Pasadena, CA.* National Aeronautics and Space Administration, Jet Propulsion Laboratory, Pasadena, CA. November.

National Aeronautics and Space Administration (NASA). 2006a. *Technical Memorandum, Operations Summary: July 2005 through December 2005*. National Aeronautics and Space Administration, Jet Propulsion Laboratory, Pasadena, CA. January.

National Aeronautics and Space Administration (NASA). 2006b. *Proposed Plan To Fund Construction and Operation of Treatment Systems for Groundwater from Drinking Water Wells Located Near the National Aeronautics and Space Administration, Jet Propulsion Laboratory, Pasadena, California*. National Aeronautics and Space Administration, Jet Propulsion Laboratory, Pasadena, CA. April.

Sen, P.K. 1968. "Estimates of the Regression Coefficient Based on Kendall's Tau." *J. American Statistical Association*, *63*: 1379-1389.

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
1	10	07/19/2001	NS	P	P	P	P	P
1	10	11/15/2001	NS	P	P	P	P	P
1	10	02/12/2002	NS	P	P	P	P	P
1	10	09/06/2002	NS	P	P	P	P	P
1	10	08/19/2003	NS	P	P	P	P	P
1	10	10/26/2004	SVW1-VPA-016	ND	ND	ND	ND	ND
1	10	10/18/2005	SVW1-VPA-024	ND	ND	ND	ND	ND
1	10	05/09/2006	SVW1-VPA-024	ND	ND	ND	ND	ND
1	21	07/19/2001	SVW1-VPB-088	ND	ND	ND	ND	ND
1	21	11/15/2001	SVW1-VPB-15	ND	ND	ND	ND	ND
1	21	02/12/2002	SVW1-VPB-17	ND	ND	ND	ND	ND
			SVW1-VPB-18 (Dup)	ND	ND	ND	ND	ND
1	21	09/06/2002	SVW1-VPB-17	ND	ND	ND	ND	ND
			SVW1-VPB-18 (Dup)	ND	ND	ND	ND	ND
1	21	08/19/2003	SVW1-VPB-015	ND	ND	ND	ND	ND
1	21	10/26/2004	SVW1-VPB-017	ND	ND	ND	ND	ND
1	21	10/18/2005	SVW1-VPB-025	ND	ND	ND	ND	ND
1	21	05/09/2006	SVW1-VPB-025	ND	ND	ND	ND	ND
1	33	07/19/2001	SVW1-VPC-089	ND	ND	ND	ND	ND
			SVW1-VPC-090 (Dup)	ND	ND	ND	ND	ND
1	33	11/15/1991	SVW1-VPC-16	ND	ND	ND	ND	ND
1	33	02/12/2002	SVW1-VPC-19	ND	ND	ND	ND	ND
1	33	09/06/2002	SVW1-VPC-19	ND	ND	ND	ND	ND
1	33	08/19/2003	SVW1-VPC-016	ND	ND	ND	ND	ND
1	33	10/26/2004	SVW1-VPC-018	ND	ND	ND	ND	ND
1	33	10/18/2005	SVW1-VPC-026	ND	ND	ND	ND	ND
1	33	05/09/2006	SVW1-VPC-026	ND	ND	ND	ND	ND
2	10	07/20/2001	SVW2-VPA-097	ND	ND	**1.3**	ND	ND
2	10	11/15/2001	SVW2-VPA-17	ND	ND	ND	ND	ND
			SVW-VPA-18 (Dup)	ND	ND	ND	ND	ND
2	10	02/12/2002	SVW2-VPA-20	ND	ND	ND	ND	ND
2	10	09/06/2002	SVW2-VPA-20	ND	ND	ND	ND	ND
2	10	08/19/2003	SVW2-VPA-017	ND	ND	ND	ND	ND
2	10	10/26/2004	SVW2-VPA-019	ND	ND	ND	ND	ND
2	10	02/03/2005	SVW2-VPA-003	ND	ND	ND	ND	ND
2	10	04/19/2005	SVW2-VPA-012	ND	ND	ND	ND	ND
2	10	10/18/2005	SVW2-VPA-023	ND	ND	ND	ND	ND
2	10	05/09/2006	SVW2-VPA-023	ND	ND	ND	ND	ND
2	22	07/20/2001	NS	P	P	P	P	P
2	22	11/15/2001	NS	P	P	P	P	P
2	22	02/12/2002	NS	P	P	P	P	P
2	22	09/06/2002	NS	P	P	P	P	P
2	22	08/19/2003	NS	P	P	P	P	P
2	22	10/26/2004	NS	P	P	P	P	P
2	22	10/18/2005	NS	P	P	P	P	P
2	22	05/09/2006	NS	P	P	P	P	P

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
2	37	07/20/2001	SVW2-VPC-098	ND	ND	ND	ND	ND
2	37	11/15/2001	SVW2-VPC-19	ND	ND	ND	ND	ND
2	37	02/12/2002	NS	P	P	P	P	P
2	37	09/06/2002	NS	P	P	P	P	P
2	37	08/19/2003	NS	P	P	P	P	P
2	37	10/26/2004	NS	P	P	P	P	P
2	37	10/18/2005	NS	P	P	P	P	P
2	37	05/09/2006	NS	P	P	P	P	P
3	16	07/20/2001	NS	P	P	P	P	P
3	16	11/15/2001	NS	P	P	P	P	P
3	16	02/12/2002	NS	P	P	P	P	P
3	16	09/06/2002	NS	P	P	P	P	P
3	16	08/19/2003	NS	P	P	P	P	P
3	16	10/26/2004	NS	P	P	P	P	P
3	16	10/18/2005	NS	P	P	P	P	P
3	16	05/09/2006	NS	P	P	P	P	P
3	29	07/20/2001	NS	P	P	P	P	P
3	29	11/15/2001	NS	P	P	P	P	P
3	29	02/12/2002	NS	P	P	P	P	P
3	29	09/06/2002	NS	P	P	P	P	P
3	29	08/19/2003	SVW3-VPB-018	**2.9**	ND	ND	ND	ND
3	29	10/26/2004	SVW3-VPB-020	ND	ND	ND	ND	ND
3	29	10/26/2004	SVW3-VPB-021 (Dup)	ND	ND	ND	ND	ND
3	29	07/12/2005	SVW3-VPB-003	**1.3**	ND	ND	ND	ND
3	29	10/18/2005	SVW3-VPB-017	**1.0**	ND	ND	ND	ND
3	29	05/09/2006	SVW3-VPB-020	ND	ND	ND	ND	ND
			SVW3-VPB-021 (Dup)	**1.1**	ND	ND	ND	ND
3	40	07/20/2001	SVW3-VPC-092	**1.1 J**	ND	ND	ND	ND
3	40	11/15/2001	SVW3-VPC-20	ND	ND	ND	ND	ND
3	40	02/12/2002	SVW3-VPC-21	**1.0**	ND	ND	ND	ND
3	40	09/06/2002	SVW3-VPC-21	ND	ND	ND	ND	ND
3	40	08/19/2003	SVW3-VPC-019	**2.9**	ND	ND	ND	ND
3	40	10/26/2004	SVW3-VPC-022	ND	ND	ND	ND	ND
3	40	07/12/2005	SVW3-VPC-004	**1.3**	ND	ND	ND	ND
3	40	10/18/2005	SVW3-VPC-018	**1.4**	ND	ND	ND	ND
3	40	05/09/2006	SVW3-VPC-022	**1.0**	ND	ND	ND	ND
3	47	07/20/2001	SVW3-VPD-093	ND	ND	ND	ND	ND
3	47	11/15/2001	SVW3-VPD-21	ND	ND	ND	ND	ND
3	47	02/12/2002	SVW3-VPD-22	ND	ND	ND	ND	ND
3	47	09/06/2002	SVW3-VPD-22	ND	ND	ND	ND	ND
3	47	08/19/2003	NS	P	P	P	P	P
3	47	10/26/2004	NS	P	P	P	P	P
3	47	10/18/2005	NS	P	P	P	P	P
3	47	05/09/2006	NS	P	P	P	P	P

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
4	11	07/20/2001	NS	P	P	P	P	P
4	11	11/15/2001	NS	P	P	P	P	P
4	11	02/12/2002	NS	P	P	P	P	P
4	11	05/14/2002	NS	P	P	P	P	P
4	11	09/06/2002	NS	P	P	P	P	P
4	11	11/26/2002	NS	P	P	P	P	P
4	11	02/24/2003	NS	P	P	P	P	P
4	11	05/21/2003	NS	P	P	P	P	P
4	11	08/19/2003	NS	P	P	P	P	P
4	11	07/14/2004	NS	P	P	P	P	P
4	11	10/18/2005	NS	P	P	P	P	P
4	11	05/09/2006	SVW4-VPA-018	ND	ND	ND	ND	ND
4	20	07/20/2001	SVW4-VPB-094	ND	ND	**20.0**	ND	ND
4	20	11/05/2001	SVW4-VPB-22	ND	ND	**16.0**	ND	ND
4	20	02/12/2002	SVW4-VPB-23	ND	ND	**8.9**	ND	ND
			SVW4-VPB-24 (Dup)	ND	ND	**6.9**	ND	ND
4	20	05/14/2002	SVW4-VPB-08	ND	ND	**11.0**	ND	ND
4	20	09/06/2002	SVW4-VPB-23	ND	ND	**24.0**	ND	ND
			SVW4-VPB-24 (Dup)	ND	ND	**14.0**	ND	ND
4	20	11/26/2002	SVW4-VPB-07	ND	ND	**13.0**	ND	**1.0 (Toluene)**
4	20	02/24/2003	SVW4-VPB-004	ND	ND	**4.5**	ND	ND
4	20	05/21/2003	SVW4-VPB-008	ND	ND	**5.1**	ND	ND
4	20	08/19/2003	SVW4-VPB-022	ND	ND	**26.0**	ND	ND
			SVW4-VPB-023 (Dup)	ND	ND	**28.0**	ND	ND
4	20	02/02/2004	SVW4-VPB-008	ND	ND	**21.0**	ND	ND
4	20	04/06/2004	SVW4-VPB-005	ND	ND	**24.0**	ND	ND
4	20	07/14/2004	SVW4-VPB-003	ND	ND	**33.0**	ND	ND
4	20	10/26/2004	SVW4-VPB-025	ND	ND	**35.0**	ND	ND
4	20	02/03/2005	SVW4-VPB-004	ND	ND	**19**	ND	ND
4	20	04/19/2005	SVW4-VPB-013	ND	ND	**18**	ND	ND
4	20	07/12/2005	SVW4-VPB-002	ND	ND	**11.0**	ND	ND
4	20	10/18/2005	SVW4-VPB-022	ND	ND	**9.5**	ND	ND
4	20	05/09/2006	SVW4-VPB-019	ND	ND	**24.0**	ND	ND
4	35	07/20/2001	NS	P	P	P	P	P
4	35	11/15/2001	NS	P	P	P	P	P
4	35	02/12/2002	NS	P	P	P	P	P
4	35	05/14/2002	NS	P	P	P	P	P
4	35	09/06/2002	NS	P	P	P	P	P
4	35	11/26/2002	NS	P	P	P	P	P
4	35	02/24/2003	NS	P	P	P	P	P
4	35	05/21/2003	NS	P	P	P	P	P
4	35	08/19/2003	NS	P	P	P	P	P
4	35	07/14/2004	NS	P	P	P	P	P
4	35	10/18/2005	NS	P	P	P	P	P
4	35	05/09/2006	NS	P	P	P	P	P

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
4	56	07/20/2001	SVW4-VPD-095	ND	ND	**1.5**	ND	ND
			SVW4-VPD-096 (Dup)	ND	ND	**1.7**	ND	ND
4	56	11/15/2001	SVW4-VPD-23	ND	ND	**4.6**	ND	ND
			SVW4-VPD-24 (Dup)	ND	ND	**2.8**	ND	ND
4	56	02/12/2002	SVW4-VPD-25	ND	ND	**1.2**	ND	ND
4	56	05/14/2002	SVW4-VPD-09	ND	ND	ND	ND	ND
4	56	09/06/2002	SVW4-VPD-25	ND	ND	**2.3**	ND	ND
4	56	11/26/2002	SVW4-VPD-08	ND	ND	**1.4**	ND	ND
4	56	02/24/2003	SVW4-VPD-005	ND	ND	ND	ND	ND
4	56	05/21/2003	SVW4-VPD-009	ND	ND	ND	ND	ND
4	56	05/21/2003	SVW4-VPD-010 DUP	ND	ND	ND	ND	ND
4	56	08/19/2003	SVW4-VPD-024	ND	ND	**2.5**	ND	ND
4	56	02/02/2004	SVW4-VPD-009	ND	ND	**14.0**	ND	ND
4	56	02/02/2004	SVW4-VPD-010 DUP	ND	ND	**12.0**	ND	ND
4	56	04/06/2004	SVW4-VPD-006	ND	ND	**14.0**	ND	ND
4	56	07/14/2004	SVW4-VPD-004	ND	ND	**6.9**	ND	ND
4	56	10/26/2004	NS	P	P	P	P	P
4	56	10/18/2005	NS	P	P	P	P	P
4	56	05/09/2006	NS	P	P	P	P	P
5	5	07/20/2001	NS	P	P	P	P	P
5	5	11/15/2001	NS	P	P	P	P	P
5	5	02/12/2002	NS	P	P	P	P	P
5	5	09/06/2002	NS	P	P	P	P	P
5	5	08/19/2003	NS	P	P	P	P	P
5	5	10/26/2004	NS	P	P	P	P	P
5	5	10/18/2005	NS	P	P	P	P	P
5	5	05/09/2006	NS	P	P	P	P	P
5	9	07/20/2001	SVW-VPB-091	ND	ND	ND	ND	ND
5	9	11/15/2001	SVW-VPB-14	ND	ND	ND	ND	ND
5	9	02/12/2002	SVW-VPB-14	ND	ND	ND	ND	ND
5	9	09/06/2002	SVW5-VPB-14	ND	ND	ND	ND	ND
5	9	08/19/2003	SVW5-VPB-014	**1.7**	ND	ND	ND	ND
5	9	10/26/2004	SVW5-VPB-015	ND	ND	ND	ND	ND
5	9	07/12/2005	SVW5-VPB-001	ND	ND	ND	ND	ND
5	9	10/18/2005	SVW5-VPB-014	ND	ND	ND	ND	ND
5	9	05/09/2006	SVW5-VPB-014	ND	ND	ND	ND	ND
6	20	07/24/2001	NS	P	P	P	P	P
6	20	11/21/2001	NS	P	P	P	P	P
6	20	02/20/2002	NS	P	P	P	P	P
6	20	09/18/2002	NS	P	P	P	P	P
6	20	08/29/2003	NS	P	P	P	P	P
6	20	11/03/2004	NS	P	P	P	P	P
6	20	10/18/2005	NS	P	P	P	P	P
6	20	05/09/2006	NS	P	P	P	P	P

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
6	40	07/24/2001	SVW6-VPB-118	ND	ND	ND	ND	ND
6	40	11/21/2001	SVW6-VPB-59	ND	ND	ND	ND	ND
			SVW6-VPB-60 (Dup)	ND	ND	ND	ND	ND
6	40	02/20/2002	SVW6-VPB-88	ND	ND	ND	ND	ND
6	40	09/18/2002	SVW6-VPB-115	ND	ND	ND	ND	ND
6	40	08/29/2003	SVW6-VPB-103	ND	ND	ND	ND	ND
			SVW6-VPB-104 (Dup)	ND	ND	ND	ND	ND
6	40	11/03/2004	SVW6-VPB-094	ND	ND	ND	ND	ND
6	40	10/18/2005	NS	P	P	P	P	P
6	40	05/09/2006	SVW6-VPB-015	ND	ND	ND	ND	ND
6	60	07/24/2001	SVW6-VPC-119	ND	ND	ND	ND	ND
			SVW6-VPC-120 (Dup)	ND	ND	ND	ND	ND
6	60	11/21/2001	SVW6-VPC-61	ND	ND	ND	ND	ND
6	60	02/20/2002	NS	P	P	P	P	P
6	60	09/18/2002	NS	P	P	P	P	P
6	60	08/29/2003	NS	P	P	P	P	P
6	60	11/03/2004	NS	P	P	P	P	P
6	60	10/18/2005	NS	P	P	P	P	P
6	60	05/09/2006	NS	P	P	P	P	P
6	77	07/24/2001	SVW6-VPD-121	ND	ND	ND	ND	ND
6	77	11/21/2001	SVW6-VPD-62	ND	ND	ND	ND	ND
6	77	02/20/2002	SVW6-VPD-89	ND	ND	ND	ND	ND
			SVW6-VPD-90 (Dup)	ND	ND	ND	ND	ND
6	77	09/18/2002	SVW6-VPD-116	ND	ND	ND	ND	ND
6	77	08/29/2003	SVW6-VPD-105	ND	ND	ND	ND	ND
6	77	11/03/2004	SVW6-VPD-095	ND	ND	ND	ND	ND
6	77	10/18/2005	SVW6-VPD-015	ND	ND	ND	ND	ND
6	77	05/09/2006	SVW6-VPD-016	ND	ND	ND	ND	ND
6	96	07/24/2001	SVW6-VPE-122	ND	ND	ND	ND	ND
6	96	11/21/2001	SVW6-VPE-63	ND	ND	ND	ND	ND
6	96	02/20/2002	SVW6-VPE-91	ND	ND	ND	ND	ND
6	96	09/18/2002	SVW6-VPE-117	ND	ND	ND	ND	ND
6	96	08/29/2003	NS	P	P	P	P	P
6	96	11/03/2004	SVW6-VPE-096	ND	ND	ND	ND	ND
6	96	10/18/2005	SVW6-VPE-016	ND	ND	ND	ND	ND
6	96	05/09/2006	SVW6-VPE-017	ND	ND	ND	ND	ND
7	20	07/19/2001	SVW7-VPA-086	ND	ND	ND	ND	ND
7	20	11/15/2001	SVW7-VPA-25	ND	ND	ND	ND	ND
7	20	02/12/2002	SVW7-VPA-15	ND	ND	ND	ND	ND
7	20	09/06/2002	SVW7-VPA-15	ND	ND	ND	ND	ND
7	20	08/19/2003	SVW7-VPA-020	ND	ND	ND	ND	ND
7	20	10/26/2004	SVW7-VPA-023	ND	ND	ND	ND	ND
7	20	10/18/2005	SVW7-VPA-019	ND	ND	ND	ND	ND
7	20	05/09/2006	SVW7-VPA-027	ND	ND	ND	ND	ND

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
7	35	07/19/2001	SVW7-VPB-087	ND	ND	ND	ND	ND
7	35	11/15/2001	SVW7-VPB-26	ND	ND	ND	ND	ND
7	35	02/12/2002	SVW7-VPB-16	ND	ND	ND	ND	ND
7	35	09/06/2002	SVW7-VPB-16	ND	ND	ND	ND	ND
7	35	08/19/2003	SVW7-VPB-021	ND	ND	ND	ND	ND
7	35	10/26/2004	SVW7-VPB-024	ND	ND	ND	ND	ND
7	35	10/18/2005	SVW7-VPB-020	ND	ND	ND	ND	ND
			SVW7-VPB-021 (Dup)	ND	ND	ND	ND	ND
7	35	05/09/2006	SVW7-VPB-028	ND	ND	ND	ND	ND
8	20	07/23/2001	NS	P	P	P	P	P
8	20	11/20/2001	NS	P	P	P	P	P
8	20	02/15/2002	NS	P	P	P	P	P
8	20	09/10/2002	NS	P	P	P	P	P
8	20	08/20/2003	NS	P	P	P	P	P
8	20	10/26/2004	NS	P	P	P	P	P
8	20	10/18/2005	NS	P	P	P	P	P
8	20	05/15/2006	NS	P	P	P	P	P
8	30	07/23/2001	NS	P	P	P	P	P
8	30	11/20/2001	NS	P	P	P	P	P
8	30	02/15/2002	NS	P	P	P	P	P
8	30	09/10/2002	NS	P	P	P	P	P
8	30	08/20/2003	NS	P	P	P	P	P
8	30	10/26/2004	NS	P	P	P	P	P
8	30	10/18/2005	NS	P	P	P	P	P
8	30	05/15/2006	NS	P	P	P	P	P
8	50	07/23/2001	SVW8-VPC-110	ND	ND	ND	ND	ND
8	50	11/20/2001	SVW8-VPC-46	ND	ND	ND	ND	ND
8	50	02/15/2002	SVW8-VPC-67	ND	ND	ND	ND	ND
8	50	09/10/2002	SVW8-VPC-49	ND	ND	ND	ND	ND
8	50	08/20/2003	SVW8-VPC-035	ND	ND	ND	ND	ND
8	50	10/26/2004	SVW8-VPC-026	ND	ND	ND	ND	ND
8	50	10/18/2005	NS	P	P	P	P	P
8	50	05/15/2006	SVW8-VPC-084	ND	ND	ND	ND	ND
8	70	07/23/2001	SVW8-VPD-111	ND	ND	ND	ND	ND
8	70	11/20/2001	SVW8-VPD-47	ND	ND	ND	ND	ND
			SVW8-VPD-48 (Dup)	ND	ND	ND	ND	ND
8	70	02/15/2002	SVW8-VPD-68	ND	ND	ND	ND	ND
8	70	09/10/2002	SVW8-VPD-50	ND	ND	ND	ND	ND
8	70	08/20/2003	SVW8-VPD-036	ND	ND	ND	ND	ND
8	70	10/26/2004	SVW8-VPD-027	ND	ND	ND	ND	ND
8	70	10/18/2005	NS	P	P	P	P	P
8	70	05/15/2006	SVW8-VPD-085	ND	ND	ND	ND	ND

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
8	90	07/23/2001	SVW8-VPE-112	ND	ND	ND	ND	ND
8	90	11/20/2001	SVW8-VPE-49	ND	ND	ND	ND	ND
8	90	02/15/2002	SVW8-VPE-69	ND	ND	ND	ND	ND
8	90	09/10/2002	SVW8-VPE-51	ND	ND	ND	ND	ND
8	90	08/20/2003	SVW8-VPE-037	ND	ND	ND	ND	ND
8	90	10/26/2004	SVW8-VPE-028	ND	ND	ND	ND	ND
8	90	10/18/2005	NS	P	P	P	P	P
8	90	05/15/2006	SVW8-VPE-086	ND	ND	ND	ND	ND
			SVW8-VPE-087 (Dup)	ND	ND	ND	ND	ND
9	20	07/23/2001	SVW9-VPA-104	ND	**9.3 J**	ND	ND	ND
9	20	11/19/2001	SVW-VPA-34	ND	**2.5**	ND	ND	ND
9	20	02/13/2002	SVW-VPA-27	ND	**1.3**	ND	ND	ND
9	20	09/10/2002	SVW9-VPA-40	ND	ND	ND	ND	ND
9	20	08/21/2003	SVW9-VPA-050	ND	**1.0**	ND	ND	ND
9	20	10/27/2004	SVW9-VPA-031	ND	ND	ND	ND	ND
			SVW9-VPA-032 (Dup)	ND	ND	ND	ND	ND
9	20	04/19/2005	SVW9-VPA-001	ND	ND	ND	ND	ND
9	20	10/20/2005	SVW9-VPA-041	ND	ND	ND	ND	ND
9	20	05/16/2006	SVW9-VPA-091	ND	ND	ND	ND	ND
9	35	07/23/2001	SVW9-VPB-105	ND	**8.1 J**	ND	ND	ND
9	35	11/19/2001	SVW9-VPB-35	ND	**3.1**	ND	ND	ND
			SVW9-VPB-35 (Dup)	ND	**2.6**	ND	ND	ND
9	35	02/13/2002	SVW9-VPB-28	ND	**1.6**	ND	ND	ND
9	35	09/10/2002	SVW9-VPB-41	ND	ND	ND	ND	ND
			SVW9-VPB-42 (Dup)	ND	ND	ND	ND	ND
9	35	08/21/2003	SVW9-VPB-051	ND	**1.3**	ND	ND	ND
9	35	10/27/2004	SVW9-VPB-033	ND	ND	ND	ND	ND
9	35	04/19/2005	SVW9-VPB-002	ND	ND	ND	ND	ND
9	35	10/20/2005	SVW9-VPB-042	ND	ND	ND	ND	ND
			SVW9-VPB-043 (Dup)	ND	ND	ND	ND	ND
9	35	05/16/2006	SVW9-VPB-092					
9	50	07/23/2001	SVW9-VPC-106	ND	**7.8 J**	ND	ND	ND
9	50	11/19/2001	SVW9-VPC-37	ND	**3.1**	ND	ND	ND
9	50	02/13/2002	SVW9-VPC-29	ND	**1.1**	ND	ND	ND
			SVW9-VPC-30 (Dup)	ND	**1.3**	ND	ND	ND
9	50	09/10/2002	SVW9-VPC-43	ND	ND	ND	ND	ND
9	50	08/21/2003	SVW9-VPC-052	ND	**1.1**	ND	ND	ND
9	50	10/27/2004	SVW9-VPC-034	ND	ND	ND	ND	ND
9	50	04/19/2005	SVW9-VPC-003	ND	ND	ND	ND	ND
9	50	10/20/2005	SVW9-VPC-044	ND	ND	ND	ND	ND
9	50	05/16/2006	SVW9-VPC-093	ND	ND	ND	ND	ND
9	70	07/23/2001	SVW9-VPD-107	ND	**7.6 J**	ND	ND	ND
			SVW9-VPD-108 (Dup)	ND	**8.1 J**	ND	ND	ND
9	70	11/19/2001	SVW9-VPD-38	ND	**2.5**	ND	ND	ND
9	70	02/13/2002	SVW9-VPD-31	ND	**1.2**	ND	ND	ND
9	70	09/10/2002	SVW9-VPD-44	ND	ND	ND	ND	**1.5 (Toluene)**
9	70	08/21/2003	SVW9-VPD-053	ND	ND	ND	ND	ND
9	70	10/27/2004	SVW9-VPD-035	ND	ND	ND	ND	ND
9	70	04/19/2005	SVW9-VPD-004	ND	ND	ND	ND	ND

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
9	70	10/20/2005	SVW9-VPD-045	ND	ND	ND	ND	ND
9	70	05/16/2006	SVW9-VPD-094	ND	ND	ND	ND	ND

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
9	87	11/19/2001	SVW9-VPE-39	ND	**2.5**	ND	ND	ND
9	87	02/13/2002	SVW9-VPE-32	ND	**1.2**	ND	ND	ND
9	87	09/10/2002	SVW9-VPE-45	ND	ND	ND	ND	ND
9	87	08/21/2003	SVW9-VPE-054	ND	ND	ND	ND	ND
9	87	10/27/2004	SVW9-VPE-036	ND	ND	ND	ND	ND
9	87	04/19/2005	SVW9-VPE-005	ND	ND	ND	ND	ND
9	87	10/20/2005	SVW9-VPE-046	ND	ND	ND	ND	ND
9	87	05/16/2006	SVW9-VPE-095	ND	ND	ND	ND	ND
10	20	07/23/2001	NS	P	P	P	P	P
10	20	11/20/2001	NS	P	P	P	P	P
10	20	02/13/2002	NS	P	P	P	P	P
10	20	09/10/2002	NS	P	P	P	P	P
10	20	08/21/2003	NS	P	P	P	P	P
10	20	10/27/2004	NS	P	P	P	P	P
10	20	10/20/2005	NS	P	P	P	P	P
10	20	05/16/2006	NS	P	P	P	P	P
10	35	07/23/2001	SVW10-VPB-101	ND	**1.6 J**	ND	ND	ND
			SVW10-VPB-102 (Dup)	ND	**1.6 J**	ND	ND	ND
10	35	11/20/2001	SVW10-VPB-50	ND	**1.3**	ND	ND	ND
10	35	02/13/2002	SVW10-VPB-33	ND	**1.4**	ND	ND	ND
10	35	09/10/2002	SVW10-VPB-46	ND	ND	ND	ND	ND
10	35	08/21/2003	SVW10-VPB-039	ND	**4.1**	ND	ND	ND
10	35	10/27/2004	SVW10-VPB-037	ND	**3.9**	ND	ND	ND
10	35	02/03/2005	SVW10-VPB-006	ND	**3.2**	ND	ND	ND
10	35	04/19/2005	SVW10-VPB-006	ND	ND	ND	ND	ND
10	35	10/20/2005	SVW10-VPB-047	ND	**2.2**	ND	ND	ND
10	35	05/16/2006	NS	P	P	P	P	P
10	50	07/23/2001	NS	P	P	P	P	P
10	50	11/20/2001	NS	P	P	P	P	P
10	50	02/13/2002	NS	P	P	P	P	P
10	50	09/10/2002	NS	P	P	P	P	P
10	50	08/21/2003	NS	P	P	P	P	P
10	50	10/27/2004	NS	P	P	P	P	P
10	50	10/20/2005	NS	P	P	P	P	P
10	50	05/16/2006	NS	P	P	P	P	P
10	69	07/23/2001	SVW10-VPD-103	ND	ND	ND	ND	ND
10	69	11/20/2001	SVW10-VPD-51	ND	ND	ND	ND	ND
10	69	02/13/2002	SVW10-VPD-34	ND	**1.1**	ND	ND	ND
10	69	09/10/2002	SVW10-VPD-47	ND	ND	ND	ND	ND
			SVW10-VPD-48 (Dup)	ND	ND	ND	ND	ND
10	69	08/21/2003	SVW10-VPD-040	ND	**4.8**	ND	ND	ND
10	69	10/27/2004	SVW10-VPD-038	ND	**3.9**	ND	ND	ND
10	69	10/20/2005	SVW10-VPD-048	ND	ND	ND	ND	ND
10	69	05/16/2006	NS	P	P	P	P	P

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
11	20	07/23/2001	SVW11-VPA-123	ND	ND	ND	ND	ND
11	20	11/19/2001	SVW11-VPA-27	ND	ND	ND	ND	ND
11	20	02/13/2002	SVW11-VPA-37	ND	ND	ND	ND	ND
11	20	09/09/2002	SVW11-VPA-26	ND	ND	ND	ND	ND
11	20	08/20/2003	SVW11-VPA-025	ND	ND	ND	ND	ND
11	20	11/27/2004	SVW11-VPA-029	ND	ND	ND	ND	ND
11	20	10/20/2005	NS	P	P	P	P	P
11	20	05/16/2006	NS	P	P	P	P	P
11	40	07/23/2001	NS	P	P	P	P	P
11	40	11/19/2001	NS	P	P	P	P	P
11	40	02/13/2002	NS	P	P	P	P	P
11	40	09/09/2002	NS	P	P	P	P	P
11	40	08/20/2003	NS	P	P	P	P	P
11	40	11/27/2004	SVW11-VPB-030	ND	ND	ND	ND	ND
11	40	10/20/2005	SVW11-VPB-040	ND	ND	ND	ND	ND
11	40	05/16/2006	SVW11-VPB-088	ND	ND	ND	ND	ND
11	60	07/23/2001	NS	P	P	P	P	P
11	60	11/19/2001	NS	P	P	P	P	P
11	60	02/13/2002	NS	P	P	P	P	P
11	60	09/09/2002	NS	P	P	P	P	P
11	60	08/20/2003	NS	P	P	P	P	P
11	60	11/27/2004	NS	P	P	P	P	P
11	60	10/20/2005	NS	P	P	P	P	P
11	60	05/16/2006	NS	P	P	P	P	P
11	80	07/23/2001	NS	P	P	P	P	P
11	80	11/19/2001	NS	P	P	P	P	P
11	80	02/13/2002	NS	P	P	P	P	P
11	80	09/09/2002	NS	P	P	P	P	P
11	80	08/20/2003	NS	P	P	P	P	P
11	80	11/27/2004	NS	P	P	P	P	P
11	80	10/20/2005	NS	P	P	P	P	P
11	80	05/16/2006	NS	P	P	P	P	P
11	96	07/23/2001	SVW11-VPE-124	ND	ND	ND	ND	ND
11	96	11/19/2001	SVW11-VPE-28	ND	ND	ND	ND	ND
11	96	02/13/2002	SVW11-VPE-38	ND	ND	ND	ND	ND
11	96	09/09/2002	SVW11-VPE-27	ND	ND	ND	ND	ND
11	96	08/20/2003	SVW11-VPE-27	ND	ND	ND	ND	ND
11	96	11/27/2004	NS	P	P	P	P	P
11	96	10/20/2005	NS	P	P	P	P	P
11	96	05/16/2006	NS	P	P	P	P	P
12	20	07/19/2001	NS	P	P	P	P	P
12	20	11/14/2001	NS	P	P	P	P	P
12	20	02/11/2002	NS	P	P	P	P	P
12	20	09/04/2002	NS	P	P	P	P	P
12	20	08/18/2003	SVW12-VPA-001	ND	ND	ND	ND	ND
12	20	10/25/2004	SVW12-VPA-012	ND	ND	ND	ND	ND
12	20	10/17/2005	NS	P	P	P	P	P
12	20	05/08/2006	NS	P	P	P	P	P

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
12	40	07/19/2001	NS	P	P	P	P	P
12	40	11/14/2001	NS	P	P	P	P	P
12	40	02/11/2002	NS	P	P	P	P	P
12	40	09/04/2002	NS	P	P	P	P	P
12	40	08/18/2003	NS	P	P	P	P	P
12	40	10/25/2004	SVW12-VPB-013	ND	ND	ND	ND	ND
12	40	10/17/2005	SVW12-VPB-012	ND	ND	ND	ND	ND
12	40	05/08/2006	SVW12-VPB-012	ND	ND	ND	ND	ND
12	60	07/19/2001	SVW12-VPC-083	ND	ND	ND	ND	ND
			SVW12-VPC-084 (Dup)	ND	ND	ND	ND	ND
12	60	11/14/2001	SVW12-VPC-11	ND	ND	ND	ND	ND
			SVW12-VPC-12 (Dup)	ND	ND	ND	ND	ND
12	60	02/11/2002	SVW12-VPC-11	ND	ND	ND	ND	ND
			SVW12-VPC-12 (Dup)	ND	ND	ND	ND	ND
12	60	09/04/2002	SVW12-VPC-11	ND	ND	ND	ND	ND
			SVW12-VPC-12 (Dup)	ND	ND	ND	ND	ND
12	60	08/18/2003	SVW12-VPC-002	ND	ND	ND	ND	ND
12	60	10/25/2004	SVW12-VPC-014	ND	ND	ND	ND	ND
12	60	10/17/2005	SVW12-VPC-013	ND	ND	ND	ND	ND
12	60	05/08/2006	SVW12-VPC-013	ND	ND	ND	ND	ND
12	76	07/19/2001	SVW12-VPD-085	ND	ND	ND	ND	ND
12	76	11/14/2001	SVW12-VPD-13	ND	ND	ND	ND	ND
12	76	02/11/2002	SVW12-VPD-13	ND	ND	ND	ND	ND
12	76	09/04/2002	SVW12-VPD-13	ND	ND	ND	ND	ND
12	76	08/18/2003	NS	P	P	P	P	P
12	76	10/25/2004	NS	P	P	P	P	P
12	76	10/17/2005	NS	P	P	P	P	P
12	76	05/08/2006	NS	P	P	P	P	P
13	10	07/20/2001	NS	P	P	P	P	P
13	10	11/20/2001	NS	P	P	P	P	P
13	10	02/13/2002	NS	P	P	P	P	P
13	10	09/10/2002	NS	P	P	P	P	P
13	10	08/20/2003	NS	P	P	P	P	P
13	10	10/27/2004	NS	P	P	P	P	P
13	10	10/17/2005	NS	P	P	P	P	P
13	10	05/08/2006	NS	P	P	P	P	P
13	20	07/20/2001	NS	P	P	P	P	P
13	20	11/20/2001	NS	P	P	P	P	P
13	20	02/13/2002	NS	P	P	P	P	P
13	20	09/10/2002	SVW13-VPB-39	ND	ND	ND	ND	ND
13	20	08/20/2003	SVW13-VPB-038	ND	ND	ND	ND	ND
13	20	10/27/2004	NS	P	P	P	P	P
13	20	10/17/2005	NS	P	P	P	P	P
13	20	05/08/2006	NS	P	P	P	P	P

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
13	30	07/20/2001	NS	P	P	P	P	P
13	30	11/20/2001	NS	P	P	P	P	P
13	30	02/13/2002	NS	P	P	P	P	P
13	30	09/10/2002	NS	P	P	P	P	P
13	30	08/20/2003	NS	P	P	P	P	P
13	30	10/27/2004	NS	P	P	P	P	P
13	30	10/17/2005	NS	P	P	P	P	P
13	30	05/08/2006	NS	P	P	P	P	P
13	40	07/20/2001	NS	P	P	P	P	P
13	40	11/20/2001	NS	P	P	P	P	P
13	40	02/13/2002	NS	P	P	P	P	P
13	40	09/10/2002	NS	P	P	P	P	P
13	40	08/20/2003	NS	P	P	P	P	P
13	40	10/27/2004	NS	P	P	P	P	P
13	40	10/17/2005	NS	P	P	P	P	P
13	40	05/08/2006	NS	P	P	P	P	P
14	5	07/20/2001	NS	P	P	P	P	P
14	5	11/19/2001	SVW14-VPA-31	ND	ND	ND	ND	ND
14	5	02/13/2002	SVW14-VPA-39	ND	ND	ND	ND	ND
14	5	09/09/2002	SVW14-VPA-37	ND	ND	ND	ND	ND
14	5	08/20/2003	SVW14-VPA-031	ND	ND	ND	ND	ND
14	5	10/27/2004	SVW14-VPA-039	ND	ND	ND	ND	ND
14	5	10/17/2005	NS	P	P	P	P	P
14	5	05/16/2006	SVW14-VPA-096	ND	ND	ND	ND	ND
			SVW14-VPA-097 (Dup)	ND	ND	ND	ND	ND
14	10	07/20/2001	SVW14-VPB-099	ND	ND	ND	ND	ND
14	10	11/19/2001	SVW14-VPB-32	ND	ND	ND	ND	ND
14	10	02/13/2002	SVW14-VPB-40	ND	ND	ND	ND	ND
14	10	09/09/2002	SVW14-VPB-38	ND	ND	ND	ND	**1.1 (Benzene) / 1.1 (Toluene)**
14	10	08/20/2003	SVW14-VPB-032	ND	ND	ND	ND	ND
14	10	10/27/2004	SVW14-VPB-040	ND	ND	ND	ND	ND
14	10	10/17/2005	NS	P	P	P	P	P
14	10	05/16/2006	SVW14-VPB-098	ND	ND	ND	ND	ND
14	13	07/20/2001	NS	P	P	P	P	P
14	13	11/19/2001	NS	P	P	P	P	P
14	13	02/13/2002	NS	P	P	P	P	P
14	13	09/09/2002	NS	P	P	P	P	P
14	13	08/20/2003	NS	P	P	P	P	P
14	13	10/27/2004	NS	P	P	P	P	P
14	13	10/17/2005	NS	P	P	P	P	P
14	13	05/16/2006	NS	P	P	P	P	P
15	20	07/24/2001	NS	P	P	P	P	P
15	20	11/21/2001	NS	P	P	P	P	P
15	20	02/20/2002	NS	P	P	P	P	P
15	20	09/18/2002	NS	P	P	P	P	P
15	20	08/29/2003	NS	P	P	P	P	P
15	20	11/03/2004	NS	P	P	P	P	P

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
15	20	10/26/2005	NS	P	P	P	P	P
15	20	05/11/2006	NS	P	P	P	P	P

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
15	40	07/24/2001	SVW15-VPB-113	ND	ND	ND	ND	ND
			SVW15-VPB-113 (Dup)	ND	ND	ND	ND	ND
15	40	11/21/2001	SVW15-VPB-55	ND	ND	ND	ND	ND
15	40	02/20/2002	SVW15-VPB-83	ND	ND	ND	ND	ND
			SVW15-VPB-84 (Dup)	ND	ND	ND	ND	ND
15	40	09/18/2002	SVW15-VPB-110	ND	ND	ND	ND	ND
15	40	08/29/2003	SVW15-VPB-099	ND	ND	ND	ND	ND
15	40	11/03/2004	SVW15-VPB-097	ND	ND	ND	ND	ND
15	40	10/26/2005	SVW15-VPB-097	ND	ND	ND	ND	ND
			SVW15-VPB-098 (Dup)	ND	ND	ND	ND	ND
15	40	05/01/2006	SVW15-VPB-046	ND	ND	ND	ND	ND
15	60	07/24/2001	SVW15-VPC-115	ND	ND	ND	ND	ND
15	60	11/21/2001	SVW15-VPC-56	ND	ND	ND	ND	ND
15	60	02/20/2002	SVW15-VPC-85	ND	ND	ND	ND	ND
15	60	09/18/2002	SVW15-VPC-111	ND	ND	ND	ND	ND
15	60	08/29/2003	SVW15-VPC-100	ND	ND	ND	ND	ND
15	60	11/03/2004	SVW15-VPC-098	ND	ND	ND	ND	ND
15	60	11/03/2004	SVW15-VPC-099 (Dup)	ND	ND	ND	ND	ND
15	60	10/26/2005	SVW15-VPC-099	ND	ND	ND	ND	ND
15	60	05/11/2006	SVW15-VPC-047	ND	ND	ND	ND	ND
15	75	07/24/2001	SVW15-VPD-116	ND	ND	ND	ND	ND
15	75	11/21/2001	SVW15-VPD-57	ND	ND	ND	ND	ND
15	75	02/20/2002	SVW15-VPD-86	ND	ND	ND	ND	ND
15	75	09/18/2002	SVW15-VPD-112	ND	ND	ND	ND	ND
15	75	08/29/2003	SVW15-VPD-101	ND	ND	ND	ND	ND
15	75	11/03/2004	SVW15-VPD-100	ND	ND	ND	ND	ND
15	75	10/26/2005	SVW15-VPD-100	ND	ND	ND	ND	ND
15	75	05/11/2006	SVW15-VPD-048	ND	ND	ND	ND	ND
15	90	07/24/2001	SVW15-VPE-117	ND	ND	ND	ND	ND
15	90	11/21/2001	SVW15-VPE-58	ND	ND	ND	ND	ND
15	90	02/20/2002	SVW15-VPE-87	ND	ND	ND	ND	ND
15	90	09/18/2002	SVW15-VPE-113	ND	ND	ND	ND	ND
			SVW15-VPE-114 (Dup)	ND	ND	ND	ND	ND
15	90	08/29/2003	SVW15-VPE-102	ND	ND	ND	ND	ND
15	90	11/03/2004	SVW15-VPE-101	ND	ND	ND	ND	ND
15	90	10/26/2005	SVW15-VPE-101	ND	ND	ND	ND	ND
15	90	05/11/2006	SVW15-VPE-049	ND	ND	ND	ND	ND
16	20	07/24/2001	NS	P	P	P	P	P
16	20	11/20/2001	NS	P	P	P	P	P
16	20	02/15/2002	NS	P	P	P	P	P
16	20	09/09/2002	NS	P	P	P	P	P
16	20	08/25/2003	NS	P	P	P	P	P
16	20	11/01/2004	NS	P	P	P	P	P
16	20	10/26/2005	NS	P	P	P	P	P
16	20	05/11/2006	NS	P	P	P	P	P

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
16	40	07/24/2001	NS	P	P	P	P	P
16	40	11/20/2001	NS	P	P	P	P	P
16	40	02/15/2002	NS	P	P	P	P	P
16	40	09/09/2002	NS	P	P	P	P	P
16	40	08/25/2003	NS	P	P	P	P	P
16	40	11/01/2004	NS	P	P	P	P	P
16	40	10/26/2005	NS	P	P	P	P	P
16	40	05/11/2006	NS	P	P	P	P	P
16	60	07/24/2001	NS	P	P	P	P	P
16	60	11/20/2001	NS	P	P	P	P	P
16	60	02/15/2002	NS	P	P	P	P	P
16	60	09/09/2002	NS	P	P	P	P	P
16	60	08/25/2003	NS	P	P	P	P	P
16	60	11/01/2004	NS	P	P	P	P	P
16	60	10/26/2005	NS	P	P	P	P	P
16	60	05/11/2006	NS	P	P	P	P	P
16	80	07/24/2001	NS	P	P	P	P	P
16	80	11/20/2001	NS	P	P	P	P	P
16	80	02/15/2002	NS	P	P	P	P	P
16	80	09/09/2002	NS	P	P	P	P	P
16	80	08/25/2003	NS	P	P	P	P	P
16	80	11/01/2004	NS	P	P	P	P	P
16	80	10/26/2005	NS	P	P	P	P	P
16	80	05/11/2006	NS	P	P	P	P	P
16	95	07/24/2001	NS	P	P	P	P	P
16	95	11/20/2001	NS	P	P	P	P	P
16	95	02/15/2002	NS	P	P	P	P	P
16	95	09/09/2002	NS	P	P	P	P	P
16	95	08/25/2003	NS	P	P	P	P	P
16	95	11/01/2004	NS	P	P	P	P	P
16	95	10/26/2005	NS	P	P	P	P	P
16	95	05/11/2006	NS	P	P	P	P	P
17	12	07/20/2001	NS	P	P	P	P	P
17	12	11/19/2001	NS	P	P	P	P	P
17	12	02/12/2002	NS	P	P	P	P	P
17	12	05/14/2002	NS	P	P	P	P	P
17	12	09/10/2002	NS	P	P	P	P	P
17	12	08/20/2003	NS	P	P	P	P	P
17	12	10/27/2004	NS	P	P	P	P	P
17	12	10/26/2005	NS	P	P	P	P	P
17	12	05/16/2006	NS	P	P	P	P	P

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
17	24	07/20/2001	NS	P	P	P	P	P
17	24	11/19/2001	NS	P	P	P	P	P
17	24	02/12/2002	NS	P	P	P	P	P
17	24	05/14/2002	NS	P	P	P	P	P
17	24	09/10/2002	NS	P	P	P	P	P
17	24	08/20/2003	NS	P	P	P	P	P
17	24	10/27/2004	NS	P	P	P	P	P
17	24	02/03/2005	SVW17-VPB-005	ND	ND	ND	ND	ND
17	24	04/19/2005	SVW17-VPB-007	ND	ND	ND	ND	**9.1 (Toluene)**
17	24	07/12/2005	SVW17-VPB-014	ND	ND	ND	ND	ND
17	24	07/12/2005	SVW17-VPB-015 Dup	ND	ND	ND	ND	ND
17	24	10/26/2005	NS	P	P	P	P	P
17	24	05/16/2006	SVW17-VPB-099	ND	ND	ND	ND	ND
17	36	07/20/2001	SVW17-VPC-100	**2.6 J**	ND	ND	ND	**7.1 (PCE) / 62 (Benzene)** **2.3 (Ethylbenzene)** **4.2 (Toluene) / 2.8 (Xylenes)**
17	36	11/19/2001	SVW17-VPC-33	ND	ND	**1.2**	ND	**2.9 (PCE) / 67 (Benzene)** **1.7 (Ethylbenzene)** **3.6 (Toluene) / 7.8 (Xylenes)**
17	36	02/12/2002	SVW17-VPC-26	ND	ND	ND	ND	**1.6 (PCE) / 51 (Benzene)** **2.3 (Toluene) / 3.7 (Xylenes)**
17	36	05/14/2002	SVW17-VPC-10	ND	ND	**1.1**	ND	**2.4 (PCE) / 57 (Benzene)** **1.5 (Ethylbenzene)** **3.1 (Toluene) / 6.5 (Xylenes)**
17	36	09/10/2002	SVW17-VPC-52	ND	ND	ND	ND	**55.0 (Benzene) / 3.8 (Toluene)** **1.6 (Ethylbenzene)** **7.2 (Xylenes)**
17	36	02/24/2003	SVW17-VPC-006	ND	ND	**3.3**	ND	**140 (Benzene), 1.2 (Toluene)** **1.9 (Ethylbenzene), 1,1-DCA (1.8)** **7.4 (Xylenes), 4.5 (PCE)** **15 (1,2-DCA)**
17	36	08/20/2003	SVW17-VPC-033	ND	ND	**2.5**	ND	**110 (Benzene), 1.5 (Toluene)** **3.3 (Ethylbenzene), 1,1-DCA (1.2)** **12.0 (Xylenes), 7.1 (PCE)** **11 (1,2-DCA), 1.4 (1,1,2-TCA)**
17	36	08/20/2003	SVW17-VPC-034 (Dup)	ND	ND	**2.1**	ND	**90 (Benzene), 1.2 (Toluene)** **2.6 (Ethylbenzene), 1,1-DCA (1.2)** **9.2 (Xylenes), 6.4 (PCE)** **8.7 (1,2-DCA), 1.0 (1,1,2-TCA)**
17	36	04/06/2004	SVW17-VPC-004	**5.9**	ND	**1.9**	ND	**7.8 (1,2-DCA), 76 (Benzene),** **2.9 (Ethylbenzene), 11 (Xylenes)**
17	36	07/14/2004	SVW17-VPC-005	ND	ND	ND	ND	**1.2 (Benzene)**
17	36	10/27/2004	NS	P	P	P	P	P
17	36	10/26/2005	NS	P	P	P	P	P
17	36	05/16/2006	NS	P	P	P	P	P
18	20	09/12/2002	NS	P	P	P	P	P
18	20	08/18/2003	NS	P	P	P	P	P
18	20	11/01/2004	NS	P	P	P	P	P
18	20	10/26/2005	NS	P	P	P	P	P

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
18	20	05/12/2006	NS	P	P	P	P	P
18	40	07/20/2001	NS	P	P	P	P	P
18	40	02/11/2002	NS	P	P	P	P	P

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
18	40	09/12/2002	NS	P	P	P	P	P
18	40	11/01/2004	NS	P	P	P	P	P
18	40	10/26/2005	NS	P	P	P	P	P
18	40	05/12/2006	NS	P	P	P	P	P
18	55	07/20/2001	NS	P	P	P	P	P
18	55	02/11/2002	NS	P	P	P	P	P
18	55	09/12/2002	NS	P	P	P	P	P
18	55	08/18/2003	NS	P	P	P	P	P
18	55	11/01/2004	NS	P	P	P	P	P
18	55	10/26/2005	NS	P	P	P	P	P
18	55	05/12/2006	NS	P	P	P	P	P
18	70	07/20/2001	NS	P	P	P	P	P
18	70	02/11/2002	NS	P	P	P	P	P
18	70	09/12/2002	NS	P	P	P	P	P
18	70	08/18/2003	NS	P	P	P	P	P
18	70	11/01/2004	NS	P	P	P	P	P
18	70	10/26/2005	NS	P	P	P	P	P
18	70	05/12/2006	NS	P	P	P	P	P
18	85	07/20/2001	NS	P	P	P	P	P
18	85	02/11/2002	NS	P	P	P	P	P
18	85	09/12/2002	NS	P	P	P	P	P
18	85	08/18/2003	NS	P	P	P	P	P
18	85	11/01/2004	NS	P	P	P	P	P
18	85	10/26/2005	NS	P	P	P	P	P
18	85	05/12/2006	NS	P	P	P	P	P
19A	20	07/20/2001	NS	P	P	P	P	P
19A	20	09/06/2002	NS	P	P	P	P	P
19A	20	08/26/2003	NS	P	P	P	P	P
19A	20	11/02/2004	NS	P	P	P	P	P
19A	20	10/25/2005	NS	P	P	P	P	P
19A	20	05/12/2006	NS	P	P	P	P	P
19A	40	07/20/2001	NS	P	P	P	P	P
19A	40	09/06/2002	NS	P	P	P	P	P
19A	40	08/26/2003	NS	P	P	P	P	P
19A	40	11/02/2004	NS	P	P	P	P	P
19A	40	10/25/2005	NS	P	P	P	P	P
19A	40	05/12/2006	NS	P	P	P	P	P
19A	60	07/20/2001	NS	P	P	P	P	P
19A	60	09/06/2002	NS	P	P	P	P	P
19A	60	08/26/2003	NS	P	P	P	P	P
19A	60	11/02/2004	SVW19-VPC-081	ND	ND	ND	ND	ND
19A	60	10/25/2005	SVW19-VPC-088	ND	ND	ND	ND	ND
			SVW19-VPC-089 (Dup)	ND	ND	ND	ND	ND
19A	60	05/12/2006	SVW19-VPC-060	ND	ND	ND	ND	ND
19A	80	07/20/2001	NS	P	P	P	P	P
19A	80	09/06/2002	NS	P	P	P	P	P
19A	80	08/26/2003	NS	P	P	P	P	P

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
19A	80	11/02/2004	NS	P	P	P	P	P
19A	80	10/25/2005	NS	P	P	P	P	P

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(Concentrations in µg/L - Vapor)

Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
19A	80	05/12/2006	NS	P	P	P	P	P
19A	96	07/20/2001	NS	P	P	P	P	P
19A	96	09/06/2002	NS	P	P	P	P	P
19A	96	08/26/2003	NS	P	P	P	P	P
19A	96	11/02/2004	NS	P	P	P	P	P
19A	96	10/25/2005	NS	P	P	P	P	P
19A	96	05/12/2006	NS	P	P	P	P	P
20A	20	07/20/2001	NS	P	P	P	P	P
20A	20	09/09/2002	NS	P	P	P	P	P
20A	20	08/29/2003	NS	P	P	P	P	P
20A	20	11/01/2004	NS	P	P	P	P	P
20A	20	10/25/2005	NS	P	P	P	P	P
20A	20	05/12/2006	NS	P	P	P	P	P
20A	30	07/20/2001	NS	P	P	P	P	P
20A	30	09/09/2002	NS	P	P	P	P	P
20A	30	08/29/2003	NS	P	P	P	P	P
20A	30	11/01/2004	NS	P	P	P	P	P
20A	30	10/25/2005	NS	P	P	P	P	P
20A	30	05/12/2006	NS	P	P	P	P	P
20A	47	07/20/2001	NS	P	P	P	P	P
20A	47	09/09/2002	NS	P	P	P	P	P
20A	47	08/29/2003	NS	P	P	P	P	P
20A	47	11/01/2004	NS	P	P	P	P	P
20A	47	10/25/2005	NS	P	P	P	P	P
20A	47	05/12/2006	NS	P	P	P	P	P
20A	60	07/20/2001	NS	P	P	P	P	P
20A	60	09/09/2002	NS	P	P	P	P	P
20A	60	08/29/2003	NS	P	P	P	P	P
20A	60	11/01/2004	NS	P	P	P	P	P
20A	60	10/25/2005	NS	P	P	P	P	P
20A	60	05/12/2006	NS	P	P	P	P	P
25	20	10/19/1998	VPSV-523	ND	ND	ND	ND	ND
25	20	03/08/1999	VPSV-641	ND	ND	ND	ND	ND
25	20	10/04/1999	VPSV-749	ND	ND	ND	ND	ND
25	20	01/17/2000	VPSV-918	ND	ND	ND	ND	ND
25	20	06/20/2000	VPSV-1018	ND	ND	ND	ND	ND
25	20	12/18/2000	VPA-001	ND	ND	ND	ND	ND
25	20	07/11/2001	SVW25-VPA-005	ND	ND	ND	ND	ND
			SVW25-VPA-006 (Dup)	ND	ND	ND	ND	ND
25	20	09/12/2002	SVW25-VPA-75	ND	ND	ND	ND	ND
25	20	08/22/2003	SVW25-VPA-064	ND	ND	ND	ND	ND
25	20	11/01/2004	SVW25-VPA-077	ND	ND	ND	ND	ND
25	20	10/24/2005	SVW25-VPA-073	ND	ND	ND	ND	ND
25	20	05/16/2006	SVW25-VPA-089	ND	ND	ND	ND	ND

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
25	40	10/19/1998	VPSV-524	ND	ND	ND	ND	ND
25	40	03/08/1999	VPSV-642	ND	ND	ND	ND	ND
25	40	10/04/1999	VPSV-750	ND	ND	ND	ND	ND
25	40	01/17/2000	VPSV-919	ND	ND	ND	ND	ND
25	40	06/20/2000	VPSV-1019	ND	ND	ND	ND	ND
25	40	12/18/2000	VPB-002	ND	ND	ND	ND	ND
25	40	07/11/2001	SVW25-VPB-007	ND	ND	ND	ND	ND
25	40	09/12/2002	SVW25-VPB-76	ND	ND	ND	ND	ND
25	40	08/22/2003	SVW25-VPB-065	ND	ND	ND	ND	ND
25	40	11/02/2004	SVW25-VPB-078	ND	ND	ND	ND	ND
25	40	10/24/2005	SVW25-VPB-074	ND	ND	ND	ND	ND
			SVW25-VPB-075 (Dup)	ND	ND	ND	ND	ND
25	40	05/16/2006	SVW25-VPB-090	ND	ND	ND	ND	ND
25	60	10/19/1998	NS	P	P	P	P	P
25	60	03/08/1999	NS	P	P	P	P	P
25	60	10/04/1999	NS	P	P	P	P	P
25	60	01/17/2000	NS	P	P	P	P	P
25	60	06/20/2000	NS	P	P	P	P	P
25	60	12/18/2000	NS	P	P	P	P	P
25	60	07/11/2001	NS	P	P	P	P	P
25	60	09/12/2002	NS	P	P	P	P	P
25	60	08/22/2003	NS	P	P	P	P	P
25	60	11/02/2004	NS	P	P	P	P	P
25	60	10/24/2005	NS	P	P	P	P	P
25	60	05/16/2006	NS	P	P	P	P	P
25	85	10/19/1998	VPSV-525	**83.0**	ND	ND	ND	ND
25	85	03/08/1999	VPSV-643	**14.0**	ND	ND	ND	ND
25	85	10/04/1999	NS	P	P	P	P	P
25	85	01/17/2000	NS	P	P	P	P	P
25	85	06/20/2000	NS	P	P	P	P	P
25	85	12/18/2000	NS	P	P	P	P	P
25	85	07/11/2001	NS	P	P	P	P	P
25	85	09/12/2002	NS	P	P	P	P	P
25	85	08/22/2003	NS	P	P	P	P	P
25	85	11/02/2004	NS	P	P	P	P	P
25	85	10/24/2005	SVW25-VPD-076	ND	ND	ND	ND	ND
25	85	05/16/2006	NS	ND	ND	ND	ND	ND
25	100	10/19/1998	NS	P	P	P	P	P
25	100	03/08/1999	NS	P	P	P	P	P
25	100	10/04/1999	VPSV-751	ND	ND	ND	ND	ND
25	100	01/17/2000	NS	P	P	P	P	P
25	100	06/20/2000	NS	P	P	P	P	P
25	100	12/18/2000	NS	P	P	P	P	P
25	100	07/11/2001	NS	P	P	P	P	P
25	100	09/12/2002	NS	P	P	P	P	P
25	100	08/22/2003	NS	P	P	P	P	P
25	100	11/02/2004	NS	P	P	P	P	P

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
25	100	10/24/2005	NS	P	P	P	P	P
25	100	05/16/2006	NS	P	P	P	P	P

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
25	120	10/19/1998	VPSV-526	**119.0**	ND	ND	ND	ND
25	120	03/08/1999	VPSV-644	ND	ND	ND	ND	ND
25	120	10/04/1999	VPSV-752	ND	ND	ND	ND	ND
25	120	01/17/2000	NS	P	P	P	P	P
25	120	06/20/2000	NS	P	P	P	P	P
25	120	12/18/2000	NS	P	P	P	P	P
25	120	07/11/2001	NS	P	P	P	P	P
25	120	09/12/2002	NS	P	P	P	P	P
25	120	08/22/2003	NS	P	P	P	P	P
25	120	11/02/2004	NS	P	P	P	P	P
25	120	10/24/2005	NS	P	P	P	P	P
25	120	05/16/2006	NS	P	P	P	P	P
25	145	10/19/1998	VPSV-527	**286 J**	**152 J**	ND	ND	ND
			VPSV-528 (Dup)	**285.0**	**147.0**	ND	ND	ND
25	145	03/08/1999	VPSV-645	**4.1**	ND	**5.5**	ND	ND
			VPSV-646 (Dup)	**3.9**	ND	**5.6**	ND	ND
25	145	10/04/1999	VPSV-753	ND	ND	ND	ND	ND
			VPSV-754 (Dup)	ND	ND	ND	ND	ND
25	145	01/17/2000	VPSV-920	**1.0**	ND	ND	ND	ND
25	145	06/20/2000	VPSV-1020	**1.1**	ND	ND	ND	ND
25	145	12/18/2000	NS	P	P	P	P	P
25	145	07/11/2001	NS	P	P	P	P	P
25	145	09/12/2002	NS	P	P	P	P	P
25	145	08/22/2003	NS	P	P	P	P	P
25	145	11/02/2004	NS	P	P	P	P	P
25	145	10/24/2005	NS	P	P	P	P	P
25	145	05/16/2006	NS	P	P	P	P	P
25	165	10/19/1998	VPSV-529	**217 J**	**233 J**	ND	ND	ND
25	165	03/08/1999	NS	W	W	W	W	W
25	165	10/04/1999	NS	P	P	P	P	P
25	165	01/17/2000	NS	P	P	P	P	P
25	165	06/20/2000	NS	P	P	P	P	P
25	165	12/18/2000	NS	P	P	P	P	P
25	165	07/11/2001	NS	P	P	P	P	P
25	165	09/12/2002	NS	P	P	P	P	P
25	165	08/22/2003	NS	P	P	P	P	P
25	165	11/02/2004	NS	P	P	P	P	P
25	165	10/24/2005	NS	P	P	P	P	P
25	165	05/16/2006	NS	P	P	P	P	P

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(Concentrations in µg/L - Vapor)

Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
25	180	10/19/1998	VPSV-530	**118.0**	**133.0**	ND	ND	ND
25	180	03/08/1999	VPSV-647	ND	ND	**1.1**	ND	ND
25	180	10/04/1999	VPSV-755	ND	**2.2**	ND	ND	ND
25	180	01/17/2000	VPSV-921	**1.0**	**1.5**	ND	ND	ND
25	180	06/20/2000	VPSV-1021	**1.3**	ND	ND	ND	ND
25	180	12/18/2000	VPI-003	ND	ND	ND	ND	ND
25	180	07/11/2001	SVW25-VPI-008	ND	ND	ND	ND	ND
25	180	09/12/2002	SVW25-VPI-77	ND	ND	ND	ND	ND
			SVW25-VPI-78 (Dup)	ND	ND	ND	ND	ND
25	180	08/22/2003	SVW25-VPI-066	**1.4**	ND	**1.1**	ND	ND
25	180	11/02/2004	SVW25-VPI-079	ND	ND	ND	ND	ND
25	180	07/12/2005	SVW25-VPI-007	ND	ND	ND	ND	ND
25	180	07/12/2005	SVW25-VPI-008 Dup	ND	ND	ND	ND	ND
25	180	10/24/2005	NS	P	P	P	P	P
25	180	05/16/2006	NS	P	P	P	P	P
25	190	10/19/1998	VPSV-531	**124.0**	**71.0**	**1.6**	ND	ND
25	190	03/08/1999	VPSV-648	ND	ND	ND	ND	ND
25	190	10/04/1999	VPSV-756	ND	ND	ND	ND	ND
25	190	01/17/2000	VPSV-922	**1.2**	ND	ND	ND	ND
			VPSV-923 (Dup)	**1.1**	ND	ND	ND	ND
25	190	06/20/2000	VPSV-1022	ND	ND	ND	ND	ND
			VPSV-1023 (Dup)	ND	ND	ND	ND	ND
25	190	12/18/2000	VPJ-004	ND	ND	ND	ND	ND
25	190	07/11/2001	SVW25-VPJ-009	ND	ND	ND	ND	ND
25	190	09/12/2002	SVW25-VPJ-79	ND	ND	ND	ND	ND
25	190	08/22/2003	SVW25-VPJ-067	ND	ND	ND	ND	ND
25	190	11/02/2004	SVW25-VPJ-080	ND	ND	ND	ND	ND
25	190	10/24/2005	NS	P	P	P	P	P
25	190	05/16/2006	NS	P	P	P	P	P
26	20	10/19/1998	NS	P	P	P	P	P
26	20	03/08/1999	NS	P	P	P	P	P
26	20	10/04/1999	NS	P	P	P	P	P
26	20	01/17/2000	NS	P	P	P	P	P
26	20	06/20/2000	NS	P	P	P	P	P
26	20	12/18/2000	NS	P	P	P	P	P
26	20	07/11/2001	NS	P	P	P	P	P
26	20	02/14/2002	NS	P	P	P	P	P
26	20	09/01/2002	NS	P	P	P	P	P
26	20	02/27/2003	NS	P	P	P	P	P
26	20	08/22/2003	NS	P	P	P	P	P
26	20	11/01/2004	NS	P	P	P	P	P
26	20	10/24/2005	NS	P	P	P	P	P
26	20	05/15/2006	NS	P	P	P	P	P

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
26	35	10/19/1998	VPSV-532	ND	ND	ND	ND	ND
26	35	03/08/1999	VPSV-649	ND	ND	ND	ND	ND
26	35	10/04/1999	VPSV-757	**10.0**	ND	**1.5**	ND	ND
26	35	01/17/2000	VPSV-924	ND	ND	ND	ND	ND
26	35	06/20/2000	VPSV-1024	ND	ND	ND	ND	ND
26	35	12/18/2000	VPB-005	ND	ND	ND	ND	ND
			VPB-006 (Dup)	ND	ND	ND	ND	ND
26	35	07/11/2001	NS	P	P	P	P	P
26	35	02/14/2002	NS	P	P	P	P	P
26	35	09/11/2002	NS	P	P	P	P	P
26	35	02/27/2003	NS	P	P	P	P	P
26	35	08/22/2003	NS	P	P	P	P	P
26	35	11/01/2004	NS	P	P	P	P	P
26	35	10/24/2005	NS	P	P	P	P	P
26	35	05/15/2006	NS	P	P	P	P	P
26	55	10/19/1998	VPSV-533	ND	ND	ND	**3.9**	ND
			VPSV-534 (Dup)	ND	ND	ND	**4.2**	ND
26	55	03/08/1999	NS	P	P	P	P	P
26	55	10/04/1999	NS	P	P	P	P	P
26	55	01/17/2000	NS	P	P	P	P	P
26	55	06/20/2000	NS	P	P	P	P	P
26	55	12/18/2000	NS	P	P	P	P	P
26	55	07/11/2001	NS	P	P	P	P	P
26	55	02/14/2001	NS	P	P	P	P	P
26	55	09/11/2002	NS	P	P	P	P	P
26	55	02/27/2003	NS	P	P	P	P	P
26	55	08/22/2003	NS	P	P	P	P	P
26	55	11/01/2004	NS	P	P	P	P	P
26	55	10/24/2005	NS	P	P	P	P	P
26	55	05/15/2006	NS	P	P	P	P	P
26	80	10/19/1998	VPSV-535	**74.0**	ND	**4.4**	**6.7**	ND
26	80	03/08/1999	NS	W	W	W	W	W
26	80	10/04/1999	NS	P	P	P	P	P
26	80	01/17/2000	NS	P	P	P	P	P
26	80	06/20/2000	NS	P	P	P	P	P
26	80	12/18/2000	NS	P	P	P	P	P
26	80	07/11/2001	NS	P	P	P	P	P
26	80	02/14/2002	NS	P	P	P	P	P
26	80	09/11/2002	NS	P	P	P	P	P
26	80	02/27/2003	NS	P	P	P	P	P
26	80	08/22/2003	NS	P	P	P	P	P
26	80	11/01/2004	NS	P	P	P	P	P
26	80	10/24/2005	NS	P	P	P	P	P
26	80	05/15/2006	NS	P	P	P	P	P

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(Concentrations in µg/L - Vapor)

Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
26	100	10/19/1998	NS	P	P	P	P	P
26	100	03/08/1999	NS	P	P	P	P	P
26	100	10/04/1999	NS	P	P	P	P	P
26	100	01/17/2000	NS	P	P	P	P	P
26	100	06/20/2000	NS	P	P	P	P	P
26	100	12/18/2000	NS	P	P	P	P	P
26	100	07/11/2001	NS	P	P	P	P	P
26	100	02/14/2002	NS	P	P	P	P	P
26	100	09/11/2002	NS	P	P	P	P	P
26	100	02/27/2003	NS	P	P	P	P	P
26	100	08/22/2003	NS	P	P	P	P	P
26	100	11/01/2004	NS	P	P	P	P	P
26	100	10/24/2005	NS	P	P	P	P	P
26	100	05/15/2006	NS	P	P	P	P	P
26	115	10/19/1998	VPSV-536	**153 J**	ND	**1.2**	**3.0**	ND
26	115	03/08/1999	VPSV-650	**50.0**	ND	ND	ND	ND
26	115	10/04/1999	VPSV-758	**1.7**	ND	ND	ND	ND
26	115	01/17/2000	VPSV-925	**6.9**	ND	ND	ND	ND
26	115	06/20/2000	VPSV-1025	**12.0**	ND	**1.2**	ND	ND
26	115	12/18/2000	VPF-007	**1.3**	ND	ND	ND	ND
26	115	07/11/2001	SVW26-VPF-001	ND	ND	ND	ND	ND
26	115	02/14/2002	SVW26-VPF-52	**2.5**	ND	ND	**1.3**	ND
26	115	09/11/2002	SVW26-VPF-65	ND	ND	ND	ND	ND
			SVW26-VPF-66 (Dup)	ND	ND	ND	ND	ND
26	115	02/27/2003	SVW26-VPF-033	**1.3**	ND	ND	ND	ND
26	115	08/22/2003	SVW26-VPF-061	ND	ND	ND	ND	**1.1 (Freon 12)**
26	115	04/09/2004	SVW26-VPF-033	ND	ND	ND	ND	ND
26	115	11/01/2004	SVW26-VPF-073	**3.4**	ND	ND	ND	ND
26	115	04/19/2005	SVW26-VPF-008	ND	ND	ND	ND	ND
26	115	10/24/2005	SVW26-VPF-009	ND	ND	ND	ND	ND
26	115	05/15/2006	NS	P	P	P	P	P
26	140	10/19/1998	VPSV-537	**167 J**	**7.9**	ND	**1.6**	ND
26	140	03/08/1999	VPSV-651	**2.5**	ND	ND	ND	ND
			VPSV-652 (Dup)	**2.7**	ND	ND	ND	ND
26	140	10/04/1999	VPSV-759	**5.4**	ND	**1.9**	ND	ND
26	140	01/17/2000	VPSV-926	**11.0**	**1.2**	**1.7**	**1.1**	**1.5 (Chloroform)**
26	140	06/20/2000	VPSV-1026	**11.0**	**2.2**	**1.6**	ND	**1.2 (Chloroform)**
26	140	12/18/2000	VPG-008	**4.0**	ND	**1.1**	ND	ND
26	140	07/11/2001	SVW26-VPG-002	ND	ND	ND	ND	ND
26	140	02/14/2002	SVW26-VPG-53	ND	ND	ND	ND	ND
			SVW26-VPG-54 (Dup)	ND	ND	ND	ND	ND
26	140	09/11/2002	SVW26-VPG-67	ND	ND	ND	ND	ND
26	140	02/27/2003	SVW26-VPG-67	**1.7**	ND	**1.2**	ND	**1.2 (Chloroform)**
26	140	08/22/2003	SVW26-VPG-062	**2.2**	ND	ND	ND	**1.2 (Chloroform)**
26	140	04/09/2004	SVW26-VPG-034	ND	ND	ND	ND	ND
26	140	11/01/2004	SVW26-VPG-074	ND	ND	ND	ND	ND
26	140	04/19/2005	SVW26-VPG-009	ND	ND	ND	ND	ND
			SVW26-VPG-010 (Dup)	ND	ND	ND	ND	ND

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
26	140	10/24/2005	NS	P	P	P	P	P
26	140	05/15/2006	SVW0VPG-082	ND	ND	ND	ND	ND

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(Concentrations in µg/L - Vapor)

Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
26	160	10/20/1998	VPSV-538	**81.0**	ND	ND	ND	ND
26	160	03/08/1999	VPSV-653	**2.8**	ND	ND	ND	ND
26	160	10/05/1999	VPSV-761	**5.0**	**2.2**	**1.8**	ND	ND
26	160	01/17/2000	VPSV-927	**11.0**	**2.9**	**1.8**	**1.3**	**1.3 (Chloroform)**
26	160	06/20/2000	VPSV-1027	**12.0**	ND	**1.4**	ND	ND
26	160	12/18/2000	VPH-009	**5.8**	ND	**1.6**	ND	ND
26	160	07/11/2001	SVW26-VPH-003	ND	ND	ND	ND	ND
26	160	02/14/2002	SVW26-VPH-55	ND	ND	ND	ND	ND
26	160	09/11/2002	SVW26-VPH-68	ND	ND	ND	ND	**1.1 (Benzene)**
26	160	02/27/2003	SVW26-VPH-035	**1.0**	ND	ND	ND	ND
26	160	08/22/2003	SVW26-VPH-063	**1.6**	ND	ND	ND	**1.0 (Chloroform)**
26	160	04/09/2004	SVW26-VPH-035	ND	ND	ND	ND	ND
26	160	11/01/2004	SVW26-VPH-075	ND	ND	ND	ND	ND
26	160	11/01/2004	SVW26-VPH-076 (Dup)	ND	ND	ND	ND	ND
26	160	04/19/2005	SVW26-VPH-011	ND	ND	ND	ND	ND
26	160	10/24/2005	NS	P	P	P	P	P
26	160	05/15/2006	SVW26-VPH-083	ND	ND	ND	ND	ND
26	180	10/20/1998	VPSV-539	**72.0**	ND	ND	ND	ND
26	180	03/09/1999	VPSV-654	ND	ND	**2.6**	ND	ND
26	180	10/05/1999	VPSV-762	**2.9**	**3.0**	**6.5**	ND	ND
26	180	01/17/2000	VPSV-928	**5.4**	**3.5**	**5.7**	ND	ND
			VPSV-929 (Dup)	**4.9**	**3.6**	**5.5**	ND	ND
26	180	06/20/2000	VPSV-1028	**6.1**	**3.0**	**3.6**	ND	ND
			VPSV-1028 (Dup)	**5.0**	**2.8**	**3.1**	ND	ND
26	180	12/18/2000	VPI-010	**2.5**	ND	**3.3**	ND	ND
26	180	07/11/2001	SVW26-VPI-004	ND	ND	**1.1**	ND	ND
26	180	02/14/2002	NS	P	P	P	P	P
26	180	09/11/2002	NS	P	P	P	P	P
26	180	02/27/2003	NS	P	P	P	P	P
26	180	08/22/2003	NS	P	P	P	P	P
26	180	11/01/2004	NS	P	P	P	P	P
26	180	10/24/2005	NS	P	P	P	P	P
26	180	05/15/2006	NS	P	P	P	P	P
26	195	10/20/1998	VPSV-540	**83.0**	ND	**1.4**	ND	ND
			VPSV-541 (Dup)	**95.0**	ND	**1.3**	ND	ND
26	195	03/09/1999	VPSV-655	ND	ND	**1.7**	ND	ND
26	195	10/05/1999	NS	P	P	P	P	P
26	195	01/17/2000	NS	P	P	P	P	P
26	195	06/20/2000	NS	P	P	P	P	P
26	195	12/18/2000	NS	P	P	P	P	P
26	195	07/11/2001	NS	P	P	P	P	P
26	195	02/14/2002	NS	P	P	P	P	P
26	195	09/11/2002	NS	P	P	P	P	P
26	195	02/27/2003	NS	P	P	P	P	P
26	195	08/22/2003	NS	P	P	P	P	P
26	195	11/01/2004	NS	P	P	P	P	P
26	195	10/24/2005	NS	P	P	P	P	P
26	195	05/15/2006	NS	P	P	P	P	P

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
27	20	10/20/1998	VPSV-542	ND	ND	ND	ND	ND
27	20	03/09/1999	VPSV-656	ND	ND	ND	ND	ND
27	20	10/05/1999	VPSV-763	ND	ND	ND	ND	ND
27	20	06/21/2000	VPSV-1030	ND	ND	ND	ND	ND
27	20	01/18/2000	VPSV-930	ND	ND	ND	ND	ND
27	20	12/19/2000	VPA-011	ND	ND	ND	ND	ND
			VPA-012 (Dup)	ND	ND	ND	ND	ND
27	20	07/11/2001	SVW27-VPA-010	ND	ND	ND	ND	ND
27	20	02/14/2002	SVW27-VPA-41	ND	ND	ND	ND	ND
			SVW27-VPA-42 (Dup)	ND	ND	ND	ND	ND
27	20	09/17/2002	SVW27-VPA-99	ND	ND	ND	ND	ND
27	20	02/25/2003	SVW27-VPA-010	ND	ND	ND	ND	ND
27	20	08/25/2003	SVW27-VPA-074	ND	ND	ND	ND	ND
27	20	04/07/2004	SVW27-VPA-014	ND	ND	ND	ND	ND
27	20	10/29/2004	SVW27-VPA-059	ND	ND	ND	ND	ND
27	20	04/20/2005	SVW27-VPA-014	ND	ND	ND	ND	**92 (Chloroform)**
27	20	10/19/2005	SVW27-VPA-031	ND	ND	ND	ND	**43 (Chloroform)**
			SVW27-VPA-032 (Dup)	ND	ND	ND	ND	**45 (Chloroform)**
27	20	05/10/2006	SVW27-VPA-031	ND	ND	ND	ND	**30 (Chloroform)**
			SVW27-VPA-032 (Dup)	ND	ND	ND	ND	**30 (Chloroform)**
27	35	10/20/1998	NS	W	W	W	W	W
27	35	03/09/1999	NS	W	W	W	W	W
27	35	10/05/1999	NS	W	W	W	W	W
27	35	01/18/2000	VPSV-931	ND	ND	ND	ND	ND
27	35	06/21/2000	VPSV-1031	ND	ND	ND	ND	ND
27	35	12/19/2000	VPB-013	ND	ND	ND	ND	ND
27	35	07/11/2001	SVW27-VPB-011	ND	ND	ND	ND	ND
			SVW27-VPB-011 (Dup)	ND	ND	ND	ND	ND
27	35	02/14/2002	SVW27-VPB-43	ND	ND	ND	ND	ND
27	35	09/17/2002	SVW27-VPB-100	ND	ND	ND	ND	ND
27	35	02/25/2003	SVW27-VPB-011	ND	ND	ND	ND	ND
27	35	08/25/2003	SVW27-VPB-075	ND	ND	ND	ND	ND
27	35	04/07/2004	SVW27-VPB-015	ND	ND	ND	ND	ND
27	35	10/29/2004	SVW27-VPB-060	ND	ND	ND	ND	ND
27	35	04/20/2005	SVW27-VPB-015	ND	ND	ND	ND	**81 (Chloroform)**
27	35	10/19/2005	SVW27-VPB-033	ND	ND	ND	ND	**59 (Chloroform)**
27	35	05/10/2006	SVW27-VPB-033	ND	ND	ND	ND	**140 (Chloroform)**

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(Concentrations in µg/L - Vapor)

Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
27	60	10/20/1998	VPSV-543	ND	**49.0**	ND	ND	ND
27	60	03/09/1999	VPSV-657	ND	**5.1**	ND	ND	ND
			VPSV-658 (Dup)	ND	**5.4**	ND	ND	ND
27	60	10/05/1999	VPSV-764	ND	**2.5**	ND	ND	ND
27	60	01/18/2000	VPSV-932	ND	**3.4**	ND	ND	ND
27	60	06/21/2000	VPSV-1032	ND	**1.2**	ND	ND	ND
27	60	12/19/2000	VPC-014	ND	ND	ND	ND	ND
27	60	07/12/2001	SVW27-VPC-013	ND	ND	ND	ND	ND
27	60	02/14/2002	SVW27-VPC-44	ND	ND	ND	ND	ND
27	60	09/17/2002	SVW27-VPC-101	ND	ND	ND	ND	ND
			SVW27-VPC-102 (Dup)	ND	ND	ND	ND	ND
27	60	02/25/2003	SVW27-VPC-012	ND	ND	ND	ND	ND
27	60	08/25/2003	SVW27-VPC-076	ND	ND	ND	ND	ND
27	60	04/07/2004	SVW27-VPC-016	ND	ND	ND	ND	ND
27	60	10/29/2004	SVW27-VPC-061	ND	ND	ND	ND	ND
27	60	04/20/2005	SVW27-VPC-016	ND	ND	ND	ND	ND
27	60	10/19/2005	SVW27-VPC-034	ND	ND	ND	ND	**4.0 (Chloroform)**
27	60	05/10/2006	SVW27-VPC-034	ND	ND	ND	ND	ND
27	85	10/20/1998	VPSV-544	**7.4**	**61.0**	ND	ND	ND
27	85	03/09/1999	VPSV-659	ND	ND	ND	ND	ND
27	85	10/05/1999	VPSV-765	ND	ND	ND	ND	ND
			VPSV-766 (Dup)	ND	ND	ND	ND	ND
27	85	01/18/2000	VPSV-933	**3.0**	**2.6**	ND	ND	ND
27	85	06/21/2000	VPSV-1033	ND	ND	ND	ND	ND
27	85	12/19/2000	VPD-015	ND	ND	ND	ND	ND
27	85	07/12/2001	SVW27-VPD-014	ND	ND	ND	ND	ND
27	85	02/14/2002	SVW27-VPD-45	ND	ND	ND	ND	ND
27	85	09/17/2002	SVW27-VPD-103	ND	ND	ND	ND	ND
27	85	02/25/2003	SVW27-VPD-013	ND	ND	ND	ND	ND
27	85	08/25/2003	SVW27-VPD-077	ND	ND	ND	ND	ND
27	85	04/07/2004	SVW27-VPD-017	ND	ND	ND	ND	ND
27	85	10/29/2004	SVW27-VPD-062	ND	ND	ND	ND	ND
27	85	04/20/2005	SVW27-VPD-017	ND	ND	ND	ND	ND
27	85	10/19/2005	SVW27-VPD-035	ND	ND	ND	ND	ND
27	85	05/10/2006	SVW27-VPD-035	ND	ND	ND	ND	ND

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(Concentrations in μg/L - Vapor)

Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
27	100	10/20/1998	VPSV-545	**193 J**	**188 J**	ND	ND	ND
			VPSV-546 (Dup)	**203.0**	**169.0**	ND	ND	ND
27	100	03/09/1999	VPSV-660	**11.0**	ND	ND	ND	ND
27	100	10/05/1999	VPSV-767	**5.2**	ND	ND	ND	ND
27	100	01/18/2000	VPSV-934	**13.0**	**1.4**	ND	ND	ND
			VPSV-935 (Dup)	**15.0**	**1.7**	ND	ND	ND
27	100	06/21/2000	VPSV-1034	**5.6**	ND	ND	ND	ND
			VPSV-1035 (Dup)	**6.5**	ND	ND	ND	ND
27	100	12/19/2000	VPE-016	**3.8**	ND	ND	ND	ND
27	100	07/12/2001	SVW27-VPE-015	ND	ND	ND	ND	ND
27	100	02/14/2002	SVW27-VPE-46	ND	ND	ND	ND	ND
27	100	09/17/2002	SVW27-VPE-104	ND	ND	ND	ND	ND
27	100	02/25/2003	SVW27-VPE-014	ND	ND	ND	ND	ND
27	100	08/25/2003	SVW27-VPE-078	ND	ND	ND	ND	ND
27	100	04/07/2004	SVW27-VPE-018	ND	ND	ND	ND	ND
27	100	10/29/2004	SVW27-VPE-063	ND	ND	ND	ND	ND
27	100	04/20/2005	SVW27-VPE-018	ND	ND	ND	ND	ND
27	100	10/19/2005	NS	P	P	P	P	P
27	100	05/10/2006	NS	P	P	P	P	P
27	120	10/20/1998	VPSV-547	**110.0**	**215.0**	ND	ND	ND
27	120	03/09/1999	VPSV-661	ND	ND	ND	ND	ND
27	120	10/05/1999	VPSV-768	**1.3**	ND	ND	ND	ND
27	120	01/18/2000	VPSV-936	**1.6**	ND	ND	ND	ND
27	120	06/21/2000	VPSV-1036	ND	ND	ND	ND	ND
27	120	12/19/2000	VPF-017	ND	ND	ND	ND	ND
			VPF-018 (Dup)	ND	ND	ND	ND	ND
27	120	07/12/2001	SVW27-VPF-016	ND	ND	ND	ND	ND
27	120	02/14/2002	SVW27-VPF-47	ND	ND	ND	ND	ND
			SVW27-VPF-48 (Dup)	ND	ND	ND	ND	ND
27	120	09/17/2002	SVW27-VPF-105	ND	ND	ND	ND	ND
27	120	02/25/2003	SVW27-VPF-015	ND	ND	ND	ND	ND
27	120	08/25/2003	SVW27-VPF-079	ND	ND	ND	ND	ND
27	120	04/07/2004	SVW27-VPF-019	ND	ND	ND	ND	ND
27	120	10/29/2004	SVW27-VPF-064	ND	ND	ND	ND	ND
27	120	10/29/2004	SVW27-VPF-065 (Dup)	ND	ND	ND	ND	ND
27	120	04/20/2005	SVW27-VPF-019	ND	ND	ND	ND	ND
27	120	04/20/2005	SVW27-VPF-020 Dup	ND	ND	ND	ND	ND
27	120	10/19/005	SVW27-VPF-036	ND	ND	ND	ND	ND
27	120	05/10/2006	SVW27-VPF-036	ND	ND	ND	ND	**1.3 (Chloroform)**

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
27	140	10/20/1998	VPSV-548	**161.0**	**268.0**	**1.2**	ND	ND
27	140	03/09/1999	VPSV-662	**60.0**	**19.0**	ND	ND	ND
27	140	10/05/1999	VPSV-769	**6.2**	**1.2**	ND	ND	ND
27	140	01/18/2000	VPSV-937	**10.0**	**2.1**	ND	ND	ND
27	140	06/21/2000	VPSV-1037	**11.0**	**1.1**	ND	ND	ND
27	140	12/19/2000	VPG-019	**2.6**	ND	ND	ND	ND
27	140	07/12/2001	SVW27-VPG-017	ND	ND	ND	ND	ND
			SVW27-VPG-017 (Dup)	ND	ND	ND	ND	ND
27	140	02/14/2002	SVW27-VPG-49	ND	ND	ND	ND	ND
27	140	09/17/2002	SVW27-VPG-106	ND	ND	ND	ND	ND
27	140	02/25/2003	SVW27-VPG-016	**18.0**	**3.1**	ND	**2.6**	**1.7 (PCE)**
27	140	08/25/2003	SVW27-VPG-080	**2.3**	ND	ND	ND	ND
			SVW27-VPG-081 (Dup)	**2.2**	ND	ND	ND	ND
27	140	04/07/2004	SVW27-VPG-020	ND	ND	ND	ND	ND
27	140	10/29/2004	SVW27-VPG-066	ND	ND	ND	ND	ND
27	140	04/20/2005	SVW27-VPG-021	ND	ND	ND	ND	ND
27	140	10/19/2005	SVW27-VPG-037	ND	ND	ND	ND	ND
27	140	05/10/2006	NS	P	P	P	P	P
27	160	10/20/1998	VPSV-549	**189.0**	**212.0**	ND	ND	ND
27	160	03/09/1999	VPSV-663	ND	ND	ND	ND	ND
			VPSV-644 (Dup)	ND	ND	ND	ND	ND
27	160	10/05/1999	VPSV-770	ND	ND	ND	ND	ND
27	160	01/18/2000	VPSV-938	**2.5**	ND	ND	ND	ND
27	160	06/21/2000	VPSV-1038	**1.9**	ND	ND	ND	ND
27	160	12/19/2000	VPH-020	ND	ND	ND	ND	ND
27	160	07/12/2001	NS	P	P	P	P	P
27	160	02/14/2002	NS	P	P	P	P	P
27	160	09/17/2002	NS	P	P	P	P	P
27	160	02/25/2003	NS	P	P	P	P	P
27	160	08/25/2003	NS	P	P	P	P	P
27	160	10/29/2004	NS	P	P	P	P	P
27	160	10/19/2005	NS	P	P	P	P	P
27	160	05/10/2006	NS	P	P	P	P	P

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
27	180	10/20/1998	VPSV-550	**155.0**	**265.0**	ND	ND	ND
27	180	03/09/1999	NS	P	P	P	P	P
27	180	10/05/1999	VPSV-771	**12.0**	**2.1**	**4.0**	ND	ND
			VPSV-772 (Dup)	**12.0**	**1.9**	**4.5**	ND	ND
27	180	01/18/2000	VPSV-939	**27.0**	**2.8**	**2.6**	ND	ND
27	180	06/21/2000	VPSV-1039	**13.0**	**1.4**	**2.5**	ND	ND
27	180	12/19/2000	VPI-021	**8.0**	ND	**1.4**	ND	ND
27	180	07/12/2001	SVW27-VPI-019	ND	ND	ND	ND	ND
27	180	02/14/2002	SVW27-VPI-50	ND	ND	ND	ND	ND
27	180	09/17/2002	SVW27-VPI-107	ND	ND	ND	ND	ND
			SVW27-VPI-108 (Dup)	ND	ND	ND	ND	ND
27	180	02/25/2003	SVW27-VPI-017	**2.1**	ND	**1.8**	ND	**1.0 (Chloroform)**
27	180	08/25/2003	SVW27-VPI-082	**2.7**	ND	ND	ND	**1.1 (Chloroform)**
27	180	04/07/2004	SVW27-VPI-021	ND	ND	ND	ND	ND
27	180	04/07/2004	SVW27-VPI-022(Dup)	ND	ND	ND	ND	ND
27	180	10/29/2004	SVW27-VPI-067	ND	ND	ND	ND	ND
27	180	04/20/2005	SVW27-VPI-022	ND	ND	ND	ND	ND
27	180	07/12/2005	SVW27-VPI-011	ND	ND	ND	ND	ND
27	180	10/19/2005	SVW27-VPI-038	**1.3**	ND	ND	ND	ND
27	180	05/10/2006	NS	P	P	P	P	P
27	205	10/20/1998	VPSV-551	**413 J**	**133.0**	ND	ND	ND
			VPSV-552 (Dup)	**446.0**	**130.0**	ND	ND	ND
27	205	03/09/1999	VPSV-665	**9.5**	ND	**2.1**	ND	ND
27	205	10/05/1999	VPSV-773	**4.8**	**2.2**	ND	ND	ND
27	205	01/18/2000	VPSV-940	**11.0**	**5.4**	**2.9**	ND	**1.2 (Freon 11)**
			VPSV-941 (Dup)	**9.2**	**5.3**	**2.2**	ND	**1.2 (Freon 11)**
27	205	06/21/2000	VPSV-1040	**10.0**	**1.9**	**3.8**	ND	ND
			VPSV-1041 (Dup)	**12.0**	**2.3**	**3.6**	ND	ND
27	205	12/19/2000	VPJ-022	**2.1**	ND	**2.1**	ND	ND
27	205	07/12/2001	SVW27-VPJ-020	ND	ND	ND	ND	ND
27	205	02/14/2002	SVW27-VPJ-51	ND	ND	ND	ND	ND
27	205	09/17/2002	SVW27-VPJ-109	ND	ND	ND	ND	ND
27	205	02/25/2003	NS	P	P	P	P	P
27	205	08/25/2003	NS	P	P	P	P	P
27	205	04/20/2005	SVW27-VPJ-023	ND	ND	ND	ND	ND
27	205	10/19/2005	SVW27-VPJ-039	ND	ND	ND	ND	ND
27	205	05/10/2006	NS	P	P	P	P	P

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
28	20	10/21/1998	VPSV-565	ND	ND	ND	ND	ND
28	20	03/11/1999	VPSV-675	ND	ND	ND	ND	ND
			VPSV-676 (Dup)	ND	ND	ND	ND	ND
28	20	10/06/1999	VPSV-783	ND	ND	ND	ND	ND
			VPSV-784 (Dup)	ND	ND	ND	ND	ND
28	20	01/18/2000	VPSV-942	ND	ND	ND	ND	ND
28	20	06/21/2000	VPSV-1042	ND	ND	ND	ND	ND
28	20	12/19/2000	VPA-023	ND	ND	ND	ND	ND
			VPA-024 (Dup)	ND	ND	ND	ND	ND
28	20	07/12/2001	SVW28-VPA-021	ND	ND	ND	ND	ND
28	20	09/12/2002	SVW28-VPA-71	ND	ND	ND	ND	ND
			SVW28-VPA-72 (Dup)	ND	ND	ND	ND	ND
28	20	08/22/2003	SVW28-VPA-057	ND	ND	**3.1**	ND	ND
28	20	11/01/2004	SVW28-VPA-070	ND	ND	ND	ND	ND
28	20	10/24/2005	SVW28-VPA-069	ND	ND	ND	ND	ND
28	20	05/15/2006	SVW28-VPA-079	ND	ND	ND	ND	ND
28	45	10/21/1998	VPSV-566	ND	ND	ND	ND	ND
28	45	03/11/1999	NS	P	P	P	P	P
28	45	10/06/1999	NS	P	P	P	P	P
28	45	01/18/2000	NS	P	P	P	P	P
28	45	06/21/2000	NS	P	P	P	P	P
28	45	12/19/2000	NS	P	P	P	P	P
28	45	07/12/2001	NS	P	P	P	P	P
28	45	09/12/2002	NS	P	P	P	P	P
28	45	08/22/2003	NS	P	P	P	P	P
28	45	11/01/2004	NS	P	P	P	P	P
28	45	10/24/2005	NS	P	P	P	P	P
28	45	05/15/2006	NS	P	P	P	P	P
28	65	10/21/1998	NS	P	P	P	P	P
28	65	03/11/1999	NS	P	P	P	P	P
28	65	10/06/1999	NS	P	P	P	P	P
28	65	01/18/2000	NS	P	P	P	P	P
28	65	06/21/2000	NS	P	P	P	P	P
28	65	12/19/2000	NS	P	P	P	P	P
28	65	07/12/2001	NS	P	P	P	P	P
28	65	09/12/2002	NS	P	P	P	P	P
28	65	08/22/2003	NS	P	P	P	P	P
28	65	11/01/2004	NS	P	P	P	P	P
28	65	10/24/2005	SVW28-VPC-070	ND	ND	ND	ND	ND
28	65	05/15/2006	NS	P	P	P	P	P

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
28	80	10/21/1998	VPSV-567	**22.0**	ND	ND	ND	ND
28	80	03/11/1999	VPSV-677	ND	ND	ND	ND	ND
28	80	10/06/1999	VPSV-785	ND	ND	ND	ND	ND
28	80	01/18/2000	VPSV-943	ND	ND	ND	ND	ND
28	80	06/21/2000	VPSV-1043	ND	ND	ND	ND	ND
28	80	12/19/2000	VPD-025	ND	ND	ND	ND	ND
28	80	07/12/2001	SVW28-VPD-022	ND	ND	ND	ND	ND
28	80	09/12/2002	SVW28-VPD-73	ND	ND	ND	ND	ND
28	80	08/22/2003	SVW28-VPD-058	ND	ND	ND	ND	ND
			SVW28-VPD-059 (Dup)	ND	ND	ND	ND	ND
28	80	11/01/2004	SVW28-VPD-071	ND	ND	ND	ND	ND
28	80	10/24/2005	SVW28-VPD-071	ND	ND	ND	ND	ND
28	80	05/15/2006	SVW28-VPD-080	ND	ND	ND	ND	ND
28	105	10/21/1998	VPSV-568	**210 J**	**127.0**	ND	ND	ND
28	105	03/11/1999	VPSV-678	ND	ND	ND	ND	ND
28	105	10/06/1999	VPSV-786	ND	ND	ND	ND	ND
28	105	01/18/2000	VPSV-944	**1.1**	ND	ND	ND	ND
28	105	06/21/2000	VPSV-1044	**1.5**	ND	ND	ND	ND
28	105	12/19/2000	VPE-026	ND	ND	ND	ND	ND
28	105	07/12/2001	SVW28-VPE-023	ND	ND	ND	ND	ND
			SVW28-VPE-023 (Dup)	ND	ND	ND	ND	ND
28	105	09/12/2002	SVW28-VPE-74	ND	ND	ND	ND	ND
28	105	08/22/2003	SVW28-VPE-060	ND	ND	ND	ND	ND
28	105	11/01/2004	SVW28-VPE-072	ND	ND	ND	ND	ND
28	105	10/24/2005	SVW28-VPE-072	ND	ND	ND	ND	ND
28	105	05/15/2006	SVW28-VPE-081	ND	ND	ND	ND	ND
28	120	10/21/1998	VPSV-569	**438 J**	**429 J**	ND	ND	ND
			VPSV-570 (Dup)	**451 J**	**403 J**	ND	ND	ND
28	120	03/11/1999	NS	P	P	P	P	P
28	120	10/06/1999	NS	P	P	P	P	P
28	120	01/18/2000	NS	P	P	P	P	P
28	120	06/21/2000	NS	P	P	P	P	P
28	120	12/19/2000	NS	P	P	P	P	P
28	120	07/12/2001	NS	P	P	P	P	P
28	120	09/12/2002	NS	P	P	P	P	P
28	120	09/12/2002	NS	P	P	P	P	P
28	120	11/01/2004	NS	P	P	P	P	P
28	120	10/24/2005	NS	P	P	P	P	P
28	120	05/15/2006	NS	P	P	P	P	P

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
28	140	10/21/1998	NS	P	P	P	P	P
28	140	03/11/1999	NS	P	P	P	P	P
28	140	10/06/1999	NS	P	P	P	P	P
28	140	01/18/2000	NS	P	P	P	P	P
28	140	06/21/2000	NS	P	P	P	P	P
28	140	12/19/2000	NS	P	P	P	P	P
28	140	07/12/2001	NS	P	P	P	P	P
28	140	09/12/2002	NS	P	P	P	P	P
28	140	09/12/2002	NS	P	P	P	P	P
28	140	11/01/2004	NS	P	P	P	P	P
28	140	10/24/2005	NS	P	P	P	P	P
28	140	05/15/2006	NS	P	P	P	P	P
28	160	10/21/1998	NS	P	P	P	P	P
28	160	03/11/1999	NS	P	P	P	P	P
28	160	10/06/1999	NS	P	P	P	P	P
28	160	01/18/2000	NS	P	P	P	P	P
28	160	06/21/2000	NS	P	P	P	P	P
28	160	12/19/2000	NS	P	P	P	P	P
28	160	07/12/2001	NS	P	P	P	P	P
28	160	09/12/2002	NS	P	P	P	P	P
28	160	09/12/2002	NS	P	P	P	P	P
28	160	11/01/2004	NS	P	P	P	P	P
28	160	10/24/2005	NS	P	P	P	P	P
28	160	05/15/2006	NS	P	P	P	P	P
30	17	07/19/2001	SVW30-VPA-077	ND	ND	ND	ND	ND
			SVW30-VPA-078 (Dup)	ND	ND	ND	ND	ND
30	17	11/14/2001	SVW30-VPA-01	ND	ND	ND	ND	ND
30	17	02/11/2001	SVW30-VPA-01	ND	ND	ND	ND	ND
30	17	09/04/2002	SVW30-VPA-01	ND	ND	ND	ND	ND
30	17	08/18/2003	SVW30-VPA-008	ND	ND	ND	ND	ND
30	17	10/25/2004	SVW30-VPA-006	ND	ND	ND	ND	ND
30	17	10/17/2005	SVW30-VPA-006	ND	ND	ND	ND	ND
30	17	05/08/2006	SVW30-VPA-006	ND	ND	ND	ND	ND
30	30	07/19/2001	SVW30-VPB-079	ND	ND	ND	ND	ND
30	30	11/14/2001	SVW30-VPB-02	ND	ND	ND	ND	ND
30	30	02/11/2002	SVW30-VPB-02	ND	ND	ND	ND	ND
30	30	09/04/2002	SVW30-VPB-02	ND	ND	ND	ND	ND
30	30	08/18/2003	SVW30-VPB-009	ND	ND	ND	ND	ND
			SVW30-VPB-010 (Dup)	ND	ND	ND	ND	ND
30	30	10/25/2004	SVW30-VPB-007	ND	ND	ND	ND	ND
30	30	10/17/2005	SVW30-VPB-007	ND	ND	ND	ND	ND
30	30	05/08/2006	SVW30-VPB-007	ND	ND	ND	ND	ND
30	40	07/19/2001	SVW30-VPC-080	ND	ND	ND	ND	ND
30	40	11/14/2001	SVW30-VPC-03	ND	ND	ND	ND	ND
30	40	02/11/2002	SVW30-VPC-03	ND	ND	ND	ND	ND
30	40	09/04/2002	SVW30-VPC-03	ND	ND	ND	ND	ND
30	40	08/18/2003	SVW30-VPC-011	ND	ND	ND	ND	ND

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
30	40	10/25/2004	SVW30-VPC-008	ND	ND	ND	ND	ND
30	40	10/17/2005	SVW30-VPC-008	ND	ND	ND	ND	ND
30	40	05/08/2006	SVW30-VPC-008	ND	ND	ND	ND	ND

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
30	50	07/19/2001	SVW30-VPD-081	ND	ND	ND	ND	ND
30	50	11/14/2001	SVW30-VPD-04	ND	ND	ND	ND	ND
30	50	02/11/2002	SVW30-VPD-04	ND	ND	ND	ND	ND
30	50	09/04/2002	SVW30-VPD-04	ND	ND	ND	ND	ND
30	50	08/18/2003	SVW30-VPD-012	ND	ND	ND	ND	ND
30	50	10/25/2004	SVW30-VPD-009	ND	ND	ND	ND	ND
30	50	10/25/2004	SVW30-VPD-010 (Dup)	ND	ND	ND	ND	ND
30	50	10/17/2005	SVW30-VPD-009	ND	ND	ND	ND	ND
30	50	10/17/2005	SVW30-VPD-010 (Dup)	ND	ND	ND	ND	ND
30	50	05/08/2006	SVW30-VPD-009	ND	ND	ND	ND	ND
			SVW30-VPD-010 (Dup)	ND	ND	ND	ND	ND
30	65	07/19/2001	SVW30-VPE-082	ND	ND	ND	ND	ND
30	65	11/14/2001	SVW30-VPE-05	ND	ND	ND	ND	ND
			SVW30-VPE-06 (Dup)	ND	ND	ND	ND	ND
30	65	02/11/2002	SVW30-VPE-05	ND	ND	ND	ND	ND
			SVW30-VPE-06 (Dup)	ND	ND	ND	ND	ND
30	65	09/04/2002	SVW30-VPE-05	ND	ND	ND	ND	ND
			SVW30-VPE-06 (Dup)	ND	ND	ND	ND	ND
30	65	08/18/2003	SVW30-VPE-013	ND	ND	ND	ND	ND
30	65	10/25/2004	SVW30-VPE-011	ND	ND	ND	ND	ND
30	65	10/17/2005	SVW30-VPE-011	ND	ND	ND	ND	ND
30	65	05/08/2006	SVW30-VPE-011	ND	ND	ND	ND	ND
31	20	07/18/2001	SVW31-VPA-071	ND	ND	ND	ND	ND
			SVW31-VPA-072 (Dup)	ND	ND	ND	ND	ND
31	20	11/14/2001	SVW31-VPA-07	ND	ND	ND	ND	ND
31	20	02/11/2002	SVW31-VPA-07	ND	ND	ND	ND	ND
31	20	09/04/2002	SVW31-VPA-07	ND	ND	ND	ND	ND
31	20	08/18/2003	SVW31-VPA-003	ND	ND	ND	ND	ND
31	20	10/25/2004	SVW31-VPA-001	ND	ND	ND	ND	ND
31	20	10/17/2005	SVW31-VPA-001	ND	ND	ND	ND	ND
31	20	05/08/2006	SVW31-VPA-001	ND	ND	ND	ND	ND
31	35	07/18/2001	SVW31-VPB-073	ND	ND	ND	ND	ND
31	35	11/14/2001	SVW31-VPB-08	ND	ND	ND	ND	ND
31	35	02/11/2002	SVW31-VPB-08	ND	ND	ND	ND	ND
31	35	09/04/2002	SVW31-VPB-08	ND	ND	ND	ND	ND
31	35	08/18/2003	SVW31-VPB-004	ND	ND	ND	ND	ND
31	35	10/25/2004	SVW31-VPB-002	ND	ND	ND	ND	ND
31	35	10/17/2005	SVW31-VPB-002	ND	ND	ND	ND	ND
31	35	05/08/2006	SVW31-VPB-002	ND	ND	ND	ND	ND
31	45	07/18/2001	SVW31-VPC-074	ND	ND	ND	ND	ND
31	45	02/11/2002	NS	P	P	P	P	P
31	45	09/04/2002	NS	P	P	P	P	P
31	45	08/18/2003	SVW31-VPC-005	ND	ND	ND	ND	ND
31	45	10/25/2004	SVW31-VPC-003	ND	ND	ND	ND	ND
31	45	10/17/2005	SVW31-VPC-003	ND	ND	ND	ND	ND
31	45	05/08/2006	SVW31-VPC-003	ND	ND	ND	ND	ND

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
31	55	07/18/2001	SVW31-VPD-075	ND	ND	ND	ND	ND
31	55	11/14/2001	SVW31-VPD-09	ND	ND	ND	ND	ND
31	55	02/11/2002	SVW31-VPD-09	ND	ND	ND	ND	ND
31	55	09/04/2002	SVW31-VPD-09	ND	ND	ND	ND	ND
31	55	08/18/2003	SVW31-VPD-006	ND	ND	ND	ND	ND
31	55	10/25/2004	SVW31-VPD-004	ND	ND	ND	ND	ND
31	55	10/17/2005	SVW31-VPD-004	ND	ND	ND	ND	ND
31	55	05/08/2006	SVW31-VPD-004	ND	ND	ND	ND	ND
31	65	07/18/2001	SVW31-VPE-076	ND	ND	ND	ND	ND
31	65	11/14/2001	SVW31-VPE-10	ND	ND	ND	ND	ND
31	65	02/11/2002	SVW31-VPE-10	ND	ND	ND	ND	ND
31	65	09/04/2002	SVW31-VPE-10	ND	ND	ND	ND	ND
31	65	08/18/2003	SVW31-VPE-007	ND	ND	ND	ND	ND
31	65	10/25/2004	SVW31-VPE-005	ND	ND	ND	ND	ND
31	65	10/17/2005	SVW31-VPE-005	ND	ND	ND	ND	ND
31	65	05/08/2006	SVW31-VPE-005	ND	ND	ND	ND	ND
32	25	10/26/1998	VPSV-597	ND	ND	ND	ND	ND
32	25	03/16/1999	VPSV-711	ND	ND	ND	ND	ND
32	25	10/09/1999	VPSV-812	ND	ND	ND	ND	ND
32	25	01/21/2000	VPSV-984	ND	ND	ND	ND	ND
32	25	06/23/2000	VPSV-1070	ND	ND	ND	ND	ND
32	25	12/21/2000	NS	P	P	P	P	P
32	25	07/17/2001	NS	P	P	P	P	P
32	25	09/09/2002	NS	P	P	P	P	P
32	25	02/24/2003	NS	P	P	P	P	P
32	25	08/20/2003	NS	P	P	P	P	P
32	25	10/28/2004	NS	P	P	P	P	P
32	25	10/19/2005	SVW32-VPA-027	ND	ND	ND	ND	ND
32	25	05/10/2006	SVW32-VPA-029	ND	ND	ND	ND	ND
32	40	10/26/1998	VPSV-598	ND	ND	ND	ND	ND
32	40	03/16/1999	VPSV-712	ND	ND	ND	ND	ND
			VPSV-713 (Dup)	ND	ND	ND	ND	ND
32	40	10/09/1999	VPSV-813	ND	ND	ND	ND	ND
			VPSV-814 (Dup)	ND	ND	ND	ND	ND
32	40	01/21/2000	VPSV-985	ND	ND	ND	ND	ND
32	40	06/23/2000	VPSV-1071	ND	ND	ND	ND	ND
			VPSV-1072 (Dup)	ND	ND	ND	ND	ND
32	40	12/22/2000	VPB-047	ND	ND	ND	ND	ND
			VPB-048 (Dup)	ND	ND	ND	ND	ND
32	40	07/17/2001	SVW32-VPB-056	ND	ND	ND	ND	ND
32	40	09/09/2002	SVW32-VPB-28	ND	ND	ND	ND	ND
32	40	02/24/2003	NS	NS	NS	NS	NS	NS
32	40	08/20/2003	SVW32-VPB-026	ND	ND	ND	ND	ND
32	40	10/28/2004	SVW32-VPB-056	ND	ND	ND	ND	ND
32	40	10/19/2005	SVW32-VPB-028	ND	ND	ND	ND	ND
32	40	05/10/2006	SVW32-VPB-030	ND	ND	ND	ND	ND

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
32	55	10/26/1998	VPSV-599	ND	ND	ND	ND	ND
			VPSV-600 (Dup)	ND	ND	ND	ND	ND
32	55	03/16/1999	VPSV-714	ND	ND	ND	ND	ND
32	55	10/09/1999	VPSV-815	ND	ND	ND	ND	ND
32	55	01/21/2000	VPSV-986	ND	ND	ND	ND	ND
32	55	06/23/2000	VPSV-1073	ND	ND	ND	ND	ND
32	55	12/22/2000	VPC-049	ND	ND	ND	ND	ND
32	55	07/17/2001	SVW32-VPC-057	ND	ND	ND	ND	ND
32	55	09/09/2002	SVW32-VPC-29	ND	ND	ND	ND	ND
			SVW32-VPC-30 (Dup)	ND	ND	ND	ND	ND
32	55	02/24/2003	NS	NS	NS	NS	NS	NS
32	55	08/20/2003	NS	P	P	P	P	P
32	55	10/28/2004	NS	P	P	P	P	P
32	55	10/19/2005	NS	P	P	P	P	P
32	55	05/10/2006	NS	P	P	P	P	P
32	70	10/26/1998	VPSV-601	ND	ND	ND	ND	ND
32	70	03/16/1999	VPSV-715	ND	ND	ND	ND	ND
32	70	10/09/1999	VPSV-816	ND	**3.9**	ND	ND	ND
32	70	01/21/2000	VPSV-987	ND	**2.7**	ND	ND	ND
32	70	06/23/2000	VPSV-1074	ND	**1.7**	ND	ND	ND
32	70	12/22/2000	VPD-050	ND	ND	ND	ND	ND

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
32	70	07/17/2001	SVW32-VPD-058	ND	ND	ND	ND	ND
32	70	09/09/2002	SVW32-VPD-31	ND	ND	ND	ND	ND
32	70	02/24/2003	NS	NS	NS	NS	NS	NS
32	70	08/20/2003	SVW32-VPD-027	ND	ND	ND	ND	ND
32	70	10/28/2004	NS	P	P	P	P	P
32	70	10/19/2005	NS	P	P	P	P	P
32	70	05/10/2006	NS	P	P	P	P	P
32	90	10/26/1998	VPSV-602	ND	ND	ND	ND	ND
32	90	03/16/1999	VPSV-716	ND	ND	ND	ND	ND
32	90	10/09/1999	VPSV-817	ND	ND	ND	ND	ND
32	90	01/21/2000	VPSV-988	ND	ND	ND	ND	ND
			VPSV-989 (Dup)	ND	ND	ND	ND	ND
32	90	06/24/2000	VPSV-1075	ND	ND	ND	ND	ND
32	90	12/22/2000	VPE-051	ND	ND	ND	ND	ND
32	90	07/17/2001	SVW32-VPE-059	ND	ND	ND	ND	ND
			SVW32-VPE-060 (Dup)	ND	ND	ND	ND	ND
32	90	09/09/2002	SVW32-VPE-32	ND	ND	ND	ND	ND
32	90	02/24/2003	NS	NS	NS	NS	NS	NS
32	90	08/20/2003	SVW32-VPE-028	ND	ND	ND	ND	ND
32	90	10/28/2004	NS	P	P	P	P	P
32	90	10/19/2005	NS	P	P	P	P	P
32	90	05/10/2006	NS	P	P	P	P	P
32	115	10/26/1998	NS	P	P	P	P	P
32	115	03/16/1999	NS	P	P	P	P	P
32	115	10/09/1999	NS	P	P	P	P	P
32	115	01/21/2000	NS	P	P	P	P	P
32	115	06/24/2000	NS	P	P	P	P	P
32	115	12/22/2000	NS	P	P	P	P	P
32	115	07/17/2001	NS	P	P	P	P	P
32	115	05/14/2002	NS	P	P	P	P	P
32	115	09/09/2002	NS	P	P	P	P	P
32	115	02/24/2003	NS	P	P	P	P	P
32	115	08/20/2003	NS	P	P	P	P	P
32	115	10/28/2004	NS	P	P	P	P	P
32	115	10/19/2005	NS	P	P	P	P	P
32	115	05/10/2006	NS	P	P	P	P	P
32	135	10/26/1998	VPSV-603	ND	ND	ND	ND	ND
32	135	03/16/1999	NS	P	P	P	P	P
32	135	10/09/1999	NS	P	P	P	P	P
32	135	01/21/2000	NS	P	P	P	P	P
32	135	06/24/2000	NS	P	P	P	P	P
32	135	12/22/2000	NS	P	P	P	P	P
32	135	07/17/2001	NS	P	P	P	P	P
32	135	09/09/2002	NS	P	P	P	P	P
32	135	02/24/2003	NS	P	P	P	P	P
32	135	08/20/2003	NS	P	P	P	P	P
32	135	10/28/2004	NS	P	P	P	P	P

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
32	135	10/19/2005	NS	P	P	P	P	P
32	135	05/10/2006	NS	P	P	P	P	P

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
32	155	10/26/1998	VPSV-604	**14.0**	**193J**	ND	ND	ND
32	155	03/16/1999	VPSV-717	**6.8**	**259.0**	ND	ND	ND
			VPSV-718 (Dup)	**7.5**	**257.0**	ND	ND	ND
32	155	10/09/1999	VPSV-818	**28.0**	**78.0**	ND	ND	ND
32	155	01/21/2000	VPSV-990	**22.0**	**51.0**	ND	ND	ND
32	155	06/24/2000	VPSV-1076	**29.0**	**72.0**	ND	ND	ND
32	155	12/22/2000	VPH-052	**14.0**	**17.0**	ND	ND	ND
32	155	07/17/2001	SVW32-VPH-061	**3.3**	**6.4 J**	ND	ND	ND
32	155	11/19/2001	SVW32-VPH-29	**3.6**	**4.1**	ND	ND	ND
			SVW32-VPH-30 (Dup)	**3.1**	**3.8**	ND	ND	ND
32	155	02/13/2002	SVW32-VPH-35	**3.9**	**8.1**	ND	ND	ND
			SVW32-VPH-36 (Dup)	**2.1**	**6.2**	ND	ND	ND
32	155	05/14/2002	SVW32-VPH-11	ND	ND	ND	ND	ND
			SVW32-VPH-12 (Dup)	ND	ND	ND	ND	ND
32	155	09/09/2002	SVW32-VPH-33	ND	ND	ND	ND	ND
32	155	11/26/2002	SVW32-VPH-09	ND	**1.1**	ND	ND	ND
			SVW32-VPH-10 (Dup)	ND	ND	ND	ND	**1.1 (Toluene)**
32	155	02/24/2003	SVW32-VPH-007	ND	ND	ND	ND	ND
32	155	05/21/2003	SVW32-VPH-007	ND	ND	ND	ND	ND
32	155	08/20/2003	NS	P	P	P	P	P
32	155	02/02/2004	SVW32-VPH-007	ND	ND	ND	ND	ND
32	155	10/28/2004	NS	P	P	P	P	P
32	155	02/03/2005	SVW32-VPH-011	ND	ND	ND	ND	ND
32	155	04/20/2005	SVW32-VPA-024	ND	ND	ND	ND	ND
32	155	10/19/2005	NS	P	P	P	P	P
32	155	05/10/2006	NS	P	P	P	P	P
32	180	10/26/1998	VPSV-605	**110.0**	**144.0**	**4.9**	ND	ND
			VPSV-606 (Dup)	**125.0**	**138.0**	**6.4**	ND	ND
32	180	03/16/1999	VPSV-719	ND	ND	**2.1**	ND	ND
32	180	10/09/1999	VPSV-819	**1.6**	ND	ND	ND	ND
			VPSV-820 (Dup)	**1.7**	ND	ND	ND	ND
32	180	01/21/2000	VPSV-991	**1.6**	ND	**1.0**	ND	ND
32	180	06/24/2000	VPSV-1077	**2.3**	ND	ND	ND	ND
			VPSV-1078 (Dup)	**2.1**	ND	ND	ND	ND
32	180	12/22/2000	VPI-053	ND	ND	ND	ND	ND
			VPI-054 (Dup)	ND	ND	ND	ND	ND
32	180	07/17/2001	SVW32-VPI-062	ND	ND	ND	ND	ND
32	180	09/09/2002	SVW32-VPI-34	ND	ND	ND	ND	**1.2 (Benzene)**
32	180	02/24/2003	NS	NS	NS	NS	NS	NS
32	180	08/20/2003	SVW32-VPI-029	**3.3**	ND	ND	ND	ND
32	180	10/28/2004	SVW32-VPI-057	ND	ND	ND	ND	ND
32	180	07/12/2005	SVW32-VPI-012	ND	ND	ND	ND	ND
32	180	10/19/2005	SVW32-VPI-029	ND	ND	ND	ND	ND
32	180	05/10/2006	NS	P	P	P	P	P

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
32	195	10/26/1998	VPSV-607	**88.0**	**193 J**	**3.2**	ND	ND
32	195	03/16/1999	VPSV-720	**3.5**	ND	**8.8**	ND	ND
32	195	10/09/1999	VPSV-821	ND	ND	ND	ND	**1.5 (Chloroform)**
32	195	01/21/2000	VPSV-992	ND	ND	ND	ND	ND
32	195	06/24/2000	VPSV-1079	**1.1**	ND	**1.2**	ND	ND
32	195	12/22/2000	VPJ-055	ND	ND	ND	ND	ND
32	195	07/17/2001	SVW32-VPJ-063	ND	ND	ND	ND	ND
32	195	09/09/2002	SVW32-VPJ-35	ND	ND	ND	ND	**1.9 (Benzene) / 2.3 (Toluene)**
			SVW32-VPJ-36 (Dup)	ND	ND	ND	ND	**1.1 (Benzene)**
32	195	02/24/2003	NS	NS	NS	NS	NS	NS
32	195	08/20/2003	SVW32-VPJ-030	**2.3**	ND	ND	ND	ND
32	195	10/29/2004	SVW32-VPJ-058	ND	ND	ND	ND	ND
32	195	07/12/2005	SVW32-VPJ-013	ND	ND	ND	ND	ND
32	195	10/19/2005	SVW32-VPJ-030	ND	ND	ND	ND	ND
32	195	05/10/2006	NS	P	P	P	P	P
33	20	10/21/1998	VPSV-553	ND	ND	ND	ND	ND
33	20	03/11/1999	VPSV-666	ND	ND	ND	ND	ND
33	20	10/06/1999	VPSV-774	ND	**2.3**	ND	ND	ND
33	20	01/19/2000	VPSV-945	ND	**4.2**	ND	ND	ND
33	20	06/22/2000	VPSV-1045	ND	**4.9**	ND	ND	ND
33	20	12/20/2000	VPA-027	ND	**3.7**	ND	ND	ND
33	20	07/13/2001	SVW33-VPA-032	ND	**2.9 J**	ND	ND	ND
33	20	09/11/2002	SVW33-VPA-58	ND	ND	ND	ND	ND
33	20	02/24/2003	NS	NS	NS	NS	NS	NS
33	20	08/21/2003	SVW33-VPA-041	ND	ND	ND	ND	ND
33	20	10/28/2004	SVW33-VPA-041	ND	ND	ND	ND	ND
33	20	10/21/2005	SVW33-VPA-055	ND	ND	ND	ND	ND
33	20	05/10/2006	SVW33-VPA-037	ND	ND	ND	ND	ND
33	40	10/21/1998	VPSV-554	**12.0**	**87.0**	**6.3**	**25.0**	ND
33	40	03/11/1999	VPSV-667	**7.1**	**102.0**	**5.4**	**21.0**	ND
33	40	10/06/1999	VPSV-775	**3.7**	**67.0**	**8.9**	**47.0**	ND
33	40	01/19/2000	VPSV-946	**6.1**	**86.0**	**7.7**	**38.0**	**1.0 (1,1,1-TCA)**
			VPSV-947 (Dup)	**6.0**	**92.0**	**6.6**	**39.0**	**1.1 (1,1,1-TCA)**
33	40	06/22/2000	VPSV-1046	**6.5**	**120.0**	**5.5**	**31.0**	**1.6 (1,1,1-TCA)**
			VPSV-1047 (Dup)	**7.5**	**130.0**	**4.9**	**30.0**	**1.5 (1,1,1-TCA)**
33	40	12/20/2000	NS	P	P	P	P	P
33	40	07/13/2001	NS	P	P	P	P	P
33	40	09/11/2002	NS	P	P	P	P	P
33	40	02/24/2003	NS	P	P	P	P	P
33	40	08/21/2003	SVW33-VPB-042	ND	ND	ND	ND	ND
33	40	10/28/2004	SVW33-VPB-042	ND	ND	ND	ND	ND
33	40	10/28/2004	SVW33-VPB-043 (Dup)	ND	ND	ND	ND	ND
33	40	10/21/2005	SVW33-VPB-056	ND	ND	ND	ND	ND
33	40	05/10/2006	SVW33-VPB-038	ND	ND	ND	ND	ND

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
33	60	10/21/1998	VPSV-555	**89.0**	**1.3**	**4.3**	**12.0**	ND
33	60	03/11/1999	VPSV-668	**11.0**	ND	**2.5**	**8.8**	ND
33	60	10/06/1999	VPSV-776	**6.6**	**2.4**	**1.7**	**4.8**	ND
33	60	01/19/2000	VPSV-948	**14.0**	**4.1**	**2.1**	**5.9**	ND
33	60	06/22/2000	NS	P	P	P	P	P
33	60	12/20/2000	NS	P	P	P	P	P
33	60	07/13/2001	NS	P	P	P	P	P
33	60	09/11/2002	NS	P	P	P	P	P
33	60	02/24/2003	NS	P	P	P	P	P
33	60	08/21/2003	SVW33-VPC-043	ND	ND	ND	ND	ND
33	60	10/28/2004	SVW33-VPC-044	ND	ND	ND	ND	ND
33	60	10/21/2005	SVW33-VPC-057	ND	ND	ND	ND	ND
33	60	05/10/2006	SVW33-VPC-039	ND	ND	ND	ND	ND
33	85	10/21/1998	VPSV-556	**140.0**	ND	**2.8**	**8.3**	ND
33	85	03/11/1999	VPSV-669	**44.0**	ND	**1.5**	**5.6**	ND
			VPSV-670 (Dup)	**40.0**	ND	**1.1**	**5.1**	ND
33	85	10/06/1999	VPSV-777	**19.0**	**4.5**	ND	**3.3**	ND
			VPSV-778 (Dup)	**22.0**	**4.7**	ND	**3.3**	ND
33	85	01/19/2000	VPSV-949	**33.0**	**7.0**	ND	**4.7**	ND
33	85	06/22/2000	VPSV-1048	**44.0**	**6.2**	ND	**2.5**	ND
33	85	12/20/2000	VPD-028	**18.0**	**3.1**	**1.0**	**4.0**	ND
33	85	07/13/2001	SVW33-VPD-033	**5.1**	**1.6 J**	**1.5**	ND	ND
33	85	11/20/2001	SVW33-VPD-40	**3.4**	**1.0**	ND	**1.9**	ND
33	85	02/20/2002	SVW33-VPD-92	**4.2**	ND	ND	**1.8**	ND
33	85	05/14/2002	SVW33-VPD-04	**1.5**	ND	ND	ND	ND
33	85	09/11/2002	SVW33-VPD-59	ND	ND	ND	ND	ND
			SVW33-VPD-60 (Dup)	ND	ND	ND	ND	ND
33	85	11/26/2002	SVW33-VPD-02	ND	ND	ND	ND	**1.1 (Toluene)**
33	85	02/24/2003	SVW33-VPD-001	ND	ND	ND	ND	ND
33	85	05/21/2003	SVW33-VPD-004	ND	ND	ND	ND	ND
33	85	08/21/2003	SVW33-VPD-044	ND	ND	ND	ND	ND
33	85	02/02/2004	SVW33-VPD-004	ND	ND	ND	ND	ND
33	85	04/06/2004	SVW33-VPD-001	ND	ND	ND	ND	ND
33	85	07/14/2004	SVW33-VPD-006	ND	ND	ND	ND	ND
33	85	10/28/2004	SVW33-VPD-045	ND	ND	ND	ND	ND
33	85	02/03/2005	SVW33-VPD-007	ND	ND	ND	ND	ND
33	85	04/20/2005	SVW33-VPD-025	ND	ND	ND	ND	ND
33	85	10/21/2005	SVW33-VPD-058	ND	ND	ND	ND	ND
33	85	05/10/2006	SVW33-VPD-040	ND	ND	ND	ND	ND

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
33	105	10/21/1998	VPSV-557	**191 J**	ND	**2.4**	**6.8**	ND
			VPSV-558 (Dup)	**204.0**	ND	**2.5**	**7.4**	ND
33	105	03/11/1999	VPSV-671	**32.0**	ND	ND	ND	ND
33	105	10/06/1999	VPSV-779	**38.0**	**13.0**	ND	**4.4**	ND
33	105	01/19/2000	VPSV-950	**69.0**	**18.0**	ND	**4.3**	ND
33	105	06/22/2000	VPSV-1049	**100.0**	**19.0**	ND	**3.3**	ND
33	105	12/20/2000	VPE-029	**27.0**	**7.0**	ND	**3.0**	ND
			VPE-030 (Dup)	**24.0**	**6.5**	ND	**3.0**	ND
33	105	07/13/2001	SVW33-VPE-034	**13.0**	**1.9 J**	ND	**1.2**	ND
33	105	11/20/2001	SVW33-VPE-41	**8.1**	**1.7**	ND	**1.9**	ND
			SVW33-VPE-42 (Dup)	**5.8**	**1.2**	ND	**1.7**	ND
33	105	02/20/2002	SVW33-VPE-93	**7.0**	**1.7**	ND	**2.0**	ND
33	105	05/14/2002	SVW33-VPE-05	**7.4**	**1.3**	ND	**1.7**	ND
33	105	09/11/2002	SVW33-VPE-61	**3.2**	ND	ND	ND	ND
33	105	11/26/2002	SVW33-VPE-03	**17.0**	**3.5**	ND	**2.4**	**1.2 (Tolulene)**
33	105	02/24/2003	SVW33-VPE-002	**17.0**	**3.0**	ND	**2.1**	ND
33	105	05/21/2003	SVW33-VPE-005	**16.0**	**2.3**	ND	**2.0**	ND
33	105	08/21/2003	SVW33-VPE-045	**7.0**	**1.5**	ND	ND	ND
33	105	02/02/2004	SVW33-VPE-005	**2.0**	**1.0**	ND	ND	ND
33	105	04/06/2004	SVW33-VPE-002	ND	ND	ND	**1.0**	ND
33	105	07/14/2004	SVW33-VPE-007	ND	ND	ND	ND	ND
33	105	10/28/2004	SVW33-VPE-046	ND	ND	ND	ND	ND
33	105	02/03/2005	SVW33-VPE-008	ND	ND	ND	ND	ND
33	105	04/20/2005	SVW33-VPE-026	ND	ND	ND	ND	ND
33	105	07/12/2005	SVW33-VPE-009	ND	ND	ND	ND	ND
33	105	10/21/2005	SVW33-VPE-059	ND	ND	ND	ND	ND
33	105	05/10/2006	SVW33-VPE-041	ND	ND	ND	ND	ND
33	120	10/21/1998	VPSV-559	**141.0**	ND	**2.2**	**6.4**	ND
33	120	03/11/1999	VPSV-672	**57.0**	ND	ND	**3.7**	ND
33	120	10/06/1999	VPSV-780	**64.0**	**17.0**	**1.1**	**4.1**	ND
33	120	01/19/2000	VPSV-951	**101.0**	**17.0**	ND	**6.5**	ND
33	120	06/22/2000	VPSV-1050	**91.0**	**12.0**	ND	**3.6**	ND
33	120	12/20/2000	VPF-031	**26.0**	**3.5**	ND	**2.5**	ND
33	120	07/13/2001	SVW33-VPF-035	**6.2**	**1.1 J**	ND	ND	ND
			SVW33-VPF-036 (Dup)	**6.3**	ND	**1.3**	ND	ND
33	120	11/20/2001	SVW33-VPF-43	**6.9**	ND	ND	**1.2**	ND
33	120	02/20/2002	SVW33-VPF-94	**3.1**	ND	ND	**1.4**	ND
33	120	05/14/2002	SVW33-VPF-07	**2.9**	ND	ND	ND	ND
33	120	09/11/2002	SVW33-VPF-62	**1.1**	ND	ND	ND	ND
33	120	11/26/2002	SVW33-VPF-04	**18.0**	**2.2**	ND	**1.9**	**1.1 (Toluene)**
33	120	02/24/2003	SVW33-VPF-003	**19.0**	**1.4**	ND	**2.0**	ND
33	120	05/21/2003	SVW33-VPF-006	**22.0**	ND	ND	**3.1**	**1.3 (1,1,1-TCA)**
33	120	08/21/2003	SVW33-VPF-046	ND	ND	ND	**1.4**	ND
33	120	02/02/2004	SVW33-VPF-006	ND	ND	ND	**2.6**	ND
33	120	04/06/2004	SVW33-VPF-003	ND	ND	ND	ND	ND
33	120	07/14/2004	SVW33-VPF-008	ND	ND	ND	ND	ND
33	120	10/28/2004	SVW33-VPF-047	ND	ND	ND	**1.8**	ND

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
33	120	02/03/2005	SVW33-VPF-009	**2.2**	ND	ND	**1.2**	ND
33	120	02/03/2005	SVW33-VPF-010 Dup	**2.4**	ND	ND	**1.3**	ND

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
33	120	04/20/2005	SVW33-VPF-027	ND	ND	ND	ND	ND
33	120	10/21/2005	SVW33-VPF-060	ND	ND	ND	**1.8**	ND
33	120	05/10/2006	SVW33-VPF-042	ND	ND	ND	ND	ND
			SVW33-VPF-043 (Dup)	ND	ND	ND	ND	ND
33	140	10/21/1998	VPSV-560	**179 J**	ND	ND	**7.9**	ND
33	140	03/11/1999	VPSV-673	ND	ND	ND	ND	ND
33	140	10/06/1999	VPSV-781	**8.6**	**3.3**	ND	ND	**2.9 (Chloroform)**
33	140	01/19/2000	VPSV-952	**19.0**	**6.7**	ND	**1.5**	**5.6 (Chloroform)**
			VPSV-953 (Dup)	**17.0**	**6.5**	ND	**1.3**	**5.4 (Chloroform)**
33	140	06/22/2000	VPSV-1051	**15.0**	**2.0**	ND	**1.8**	**2.2 (Chloroform)**
33	140	12/20/2000	VPG-032	**13.0**	**3.1**	ND	**1.5**	**1.2 (Chloroform)**
33	140	07/13/2001	SVW33-VPG-037	**3.2**	ND	ND	ND	**1.0 (Chloroform)**
33	140	09/11/2002	SVW33-VPG-63	ND	ND	ND	ND	ND
33	140	02/24/2003	NS	NS	NS	NS	NS	NS
33	140	08/21/2003	SVW33-VPG-047	**11.0**	**2.4**	**1.7**	**2.0**	**4.4 (Chloroform)**
			SVW33-VPG-048 (Dup)	**8.8**	**2.5**	**1.5**	**2.5**	**2.5 (Chloroform)**
33	140	10/28/2004	SVW33-VPG-048	ND	ND	ND	ND	ND
33	140	07/12/2005	SVW33-VPG-010	ND	ND	ND	ND	ND
33	140	10/21/2005	SVW33-VPG-061	ND	ND	ND	ND	ND
33	140	05/10/2006	SVW33-VPG-044	ND	ND	ND	ND	ND
33	160	10/21/1998	VPSV-561	**94**	ND	ND	**8.6**	ND
33	160	03/11/1999	NS	W	W	W	W	W
33	160	10/06/1999	NS	P	P	P	P	P
33	160	01/19/2000	NS	P	P	P	P	P
33	160	06/22/2000	NS	P	P	P	P	P
33	160	12/20/2000	NS	P	P	P	P	P
33	160	07/13/2001	NS	P	P	P	P	P
33	160	09/11/2002	NS	P	P	P	P	P
33	160	02/24/2003	NS	P	P	P	P	P
33	160	08/21/2003	NS	P	P	P	P	P
33	160	10/28/2004	NS	P	P	P	P	P
33	160	10/21/2005	NS	P	P	P	P	P
33	160	05/10/2006	NS	P	P	P	P	P
33	180	10/21/1998	VPSV-562	**67.0**	ND	ND	**6.8**	ND
33	180	03/11/1999	NS	W	W	W	W	W
33	180	10/06/1999	NS	P	P	P	P	P
33	180	01/19/2000	NS	P	P	P	P	P
33	180	06/22/2000	NS	P	P	P	P	P
33	180	12/20/2000	NS	P	P	P	P	P
33	180	07/13/2001	NS	P	P	P	P	P
33	180	09/11/2002	NS	P	P	P	P	P
33	180	02/24/2003	NS	P	P	P	P	P
33	180	08/21/2003	NS	P	P	P	P	P
33	180	10/28/2004	NS	P	P	P	P	P
33	180	10/21/2005	NS	P	P	P	P	P
33	180	05/10/2006	NS	P	P	P	P	P

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
33	200	10/21/1998	VPSV-563	**78.0**	ND	**1.3**	**5.9**	ND
			VPSV-564 (Dup)	**77.0**	ND	**1.1**	**5.8**	ND
33	200	03/11/1999	VPSV-674	**1.3**	ND	ND	ND	ND
33	200	10/06/1999	VPSV-782	ND	ND	ND	ND	ND
33	200	01/19/2000	VPSV-954	**1.8**	ND	ND	ND	ND
33	200	06/22/2000	VPSV-1052	**2.0**	ND	ND	ND	ND
33	200	12/20/2000	VPJ-033	ND	ND	ND	ND	ND
33	200	07/13/2001	SVW33-VPJ-038	ND	ND	ND	ND	ND
33	200	09/11/2002	SVW33-VPJ-64	ND	ND	ND	ND	ND
33	200	02/24/2003	NS	NS	NS	NS	NS	NS
33	200	08/21/2003	SVW33-VPJ-049	ND	ND	ND	ND	ND
33	200	10/28/2004	SVW33-VPJ-049	ND	ND	ND	ND	ND
33	200	10/20/2005	SVW33-VPJ-062	ND	ND	ND	ND	ND
33	200	05/10/2006	SVW33-VPJ-045	ND	ND	ND	ND	ND
34	20	10/22/1998	VPSV-583	ND	ND	ND	ND	ND
34	20	03/12/1999	VPSV-691	ND	ND	ND	ND	ND
34	20	10/07/1999	VPSV-799	ND	ND	ND	ND	ND
34	20	01/20/2000	VPSV-969	ND	ND	ND	ND	ND
34	20	06/23/2000	VPSV-1064	ND	ND	ND	ND	ND
34	20	12/21/2000	VPA-040	ND	ND	ND	ND	ND
34	20	07/16/2001	NS	P	P	P	P	P
34	20	09/16/2002	NS	P	P	P	P	P
34	20	08/28/2003	NS	P	P	P	P	P
34	20	11/02/2004	NS	P	P	P	P	P
34	20	10/25/2005	NS	P	P	P	P	P
34	20	05/11/2006	NS	P	P	P	P	P
34	35	10/22/1998	VPSV-584	ND	ND	ND	ND	ND
34	35	03/12/1999	VPSV-692	ND	ND	ND	ND	ND
34	35	10/07/1999	VPSV-800	ND	ND	ND	ND	ND
34	35	01/20/2000	VPSV-970	**4.7**	ND	ND	ND	ND
			VPSV-971 (Dup)	**45.0**	ND	ND	ND	ND
34	35	06/23/2000	VPSV-1065	ND	ND	ND	ND	ND
			VPSV-1066 (Dup)	ND	ND	ND	ND	ND
34	35	12/21/2000	VPB-041	**5.9**	ND	ND	ND	ND
			VPB-042 (Dup)	**5.9**	ND	ND	ND	ND
34	35	07/16/2001	NS	P	P	P	P	P
34	35	09/16/2002	NS	P	P	P	P	P
34	35	08/28/2003	NS	P	P	P	P	P
34	35	11/02/2004	NS	P	P	P	P	P
34	35	10/25/2005	NS	P	P	P	P	P
34	35	05/11/2006	NS	P	P	P	P	P

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
34	50	10/22/1998	VPSV-585	ND	ND	ND	ND	ND
34	50	03/12/1999	VPSV-693	ND	ND	ND	ND	ND
			VPSV-694 (Dup)	ND	ND	ND	ND	ND
34	50	10/05/1999	NS	W	W	W	W	W
34	50	01/20/2000	NS	P	P	P	P	P
34	50	06/23/2000	NS	P	P	P	P	P
34	50	12/21/2000	NS	P	P	P	P	P
34	50	07/16/2001	NS	P	P	P	P	P
34	50	09/16/2002	NS	P	P	P	P	P
34	50	08/28/2003	NS	P	P	P	P	P
34	50	11/02/2004	NS	P	P	P	P	P
34	50	10/25/2005	NS	P	P	P	P	P
34	50	05/11/2006	NS	P	P	P	P	P
34	65	10/22/1998	VPSV-586	**4.5**	ND	ND	ND	ND
34	65	03/15/1999	VPSV-695	ND	ND	ND	ND	ND
34	65	10/08/1999	VPSV-801	ND	ND	ND	ND	ND
			VPSV-802 (Dup)	ND	ND	ND	ND	ND
34	65	01/20/2000	VPSV-972	ND	ND	ND	ND	ND
34	65	06/23/2000	VPSV-1067	ND	ND	ND	ND	ND
34	65	12/21/2000	VPD-043	ND	ND	ND	ND	ND
34	65	07/16/2001	SVW-VPD-039	ND	ND	ND	ND	ND
34	65	09/16/2002	NS	P	P	P	P	P
34	65	08/28/2003	NS	P	P	P	P	P
34	65	11/02/2004	NS	P	P	P	P	P
34	65	10/25/2005	SVW34-VPD-094	ND	ND	ND	ND	ND
34	65	05/11/2006	NS	P	P	P	P	P
34	80	10/22/1998	VPSV-587	**6.1**	ND	ND	ND	ND
			VPSV-588 (Dup)	**6.0**	ND	ND	ND	ND
34	80	03/15/1999	VPSV-696	ND	ND	ND	ND	ND
34	80	10/08/1999	VPSV-803	ND	ND	ND	ND	ND
34	80	01/20/2000	VPSV-973	ND	ND	ND	ND	ND
34	80	06/23/2000	NS	P	P	P	P	P
34	80	12/21/2000	NS	P	P	P	P	P
34	80	07/16/2001	NS	P	P	P	P	P
34	80	09/16/2002	SVW34-VPE-89	ND	ND	ND	ND	ND

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
34	80	09/16/2002	SVW34-VPE-90 (Dup)	ND	ND	ND	ND	ND
34	80	08/28/2003	SVW34-VPE-092	ND	ND	ND	ND	ND
			SVW34-VPE-093 (Dup)	ND	ND	ND	ND	ND
34	80	11/02/2004	SVW34-VPE-089	ND	ND	ND	ND	ND
34	80	10/25/2005	SVW34-VPE-095	ND	ND	ND	ND	ND
34	80	05/11/2006	SVW34-VPE-058	ND	ND	ND	ND	ND
34	95	10/22/1998	VPSV-589	**28.0**	ND	ND	ND	ND
34	95	03/15/1999	VPSV-697	ND	ND	ND	ND	ND
34	95	10/08/1999	VPSV-804	ND	ND	ND	ND	ND
34	95	01/20/2000	VPSV-974	ND	ND	ND	ND	ND
34	95	06/23/2000	VPSV-1068	ND	ND	ND	ND	ND
34	95	12/21/2000	VPF-044	ND	ND	ND	ND	ND
34	95	07/16/2001	SVW34-VPF-040	ND	ND	ND	ND	ND
34	95	09/16/2002	SVW34-VPF-91	ND	ND	ND	ND	ND
34	95	08/28/2003	SVW34-VPF-094	ND	ND	ND	ND	ND
34	95	11/02/2004	SVW34-VPF-090	ND	ND	ND	ND	ND
34	95	10/25/2005	SVW34-VPF-096	ND	ND	ND	ND	ND
34	95	05/11/2006	SVW34-VPF-059	ND	ND	ND	ND	ND
34	108	10/23/1998	VPSV-590	**157 J**	**62.0**	ND	ND	ND
34	108	03/15/1999	VPSV-698	**43.0**	ND	ND	ND	ND
34	108	10/08/1999	VPSV-805	**8.2**	ND	ND	ND	ND
34	108	01/20/2000	VPSV-975	**14.0**	ND	ND	ND	ND
34	108	06/23/2000	NS	P	P	P	P	P
34	108	12/21/2000	VPG-045	ND	ND	ND	ND	ND
34	108	07/16/2001	NS	P	P	P	P	P
34	108	09/16/2002	NS	P	P	P	P	P
34	108	08/28/2003	NS	P	P	P	P	P
34	108	11/02/2004	NS	P	P	P	P	P
34	108	10/25/2005	NS	P	P	P	P	P
34	108	05/11/2006	NS	P	P	P	P	P
34	118	10/23/1998	VPSV-591	**154 J**	**82.0**	ND	ND	ND
34	118	03/15/1999	VPSV-699	**111.0**	ND	ND	ND	ND
			VPSV-700 (Dup)	**116.0**	ND	ND	ND	ND
34	118	10/08/1999	VPSV-806	**52.0**	**2.5**	ND	**1.3**	**5.1 (Chloroform)**
34	118	01/20/2000	VPSV-976	**53.0**	**4.4**	ND	**1.5**	**4.0 (Chloroform)**
			VPSV-977 (Dup)	**48.0**	**4.2**	ND	**1.5**	**3.3 (Chloroform)**
34	118	06/23/2000	VPSV-1069	**39.0**	**1.5**	ND	ND	**3.1 (Chloroform)**
34	118	12/21/2000	VPH-046	**26.0**	**1.4**	ND	ND	**2.4 (Chloroform)**
34	118	07/16/2001	SVW34-VPH-041	**1.9**	ND	ND	ND	ND
			SVW34-VPH-042 (Dup)	**1.5**	ND	ND	ND	ND
34	118	11/21/2001	SVW34-VPH-53	**1.5**	ND	ND	ND	ND
			SVW34-VPH-54 (Dup)	**1.7**	ND	ND	ND	ND
34	118	02/15/2002	NS	P	P	P	P	P
34	118	09/16/2002	NS	P	P	P	P	P
34	118	11/26/2002	NS	P	P	P	P	P
34	118	02/26/2003	NS	P	P	P	P	P

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
34	118	08/28/2003	NS	P	P	P	P	P
34	118	02/02/2004	NS	P	P	P	P	P

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
34	118	11/02/2004	NS	P	P	P	P	P
34	118	10/25/2005	NS	P	P	P	P	P
34	118	05/11/2006	NS	P	P	P	P	P
35	20	10/22/1998	VPSV-571	ND	ND	ND	ND	ND
35	20	03/12/1999	VPSV-679	ND	ND	ND	ND	ND
35	20	10/07/1999	VPSV-787	ND	ND	ND	ND	ND
35	20	01/20/2000	VPSV-960	ND	ND	ND	ND	ND
35	20	06/23/2000	VPSV-1058	ND	ND	ND	ND	ND
35	20	12/21/2000	VPA-038	ND	ND	ND	ND	ND
35	20	07/13/2001	NS	P	P	P	P	P
35	20	02/19/2002	NS	P	P	P	P	P
35	20	09/12/2002	NS	P	P	P	P	P
35	20	02/27/2003	NS	P	P	P	P	P
35	20	08/22/2003	NS	P	P	P	P	P
35	20	11/01/2004	NS	P	P	P	P	P
35	20	10/24/2005	SVW35-VPA-077	ND	ND	ND	ND	ND
35	20	05/15/2006	SVW35-VPA-073	ND	ND	ND	ND	ND
35	35	10/22/1998	VPSV-572	ND	ND	ND	ND	ND
35	35	03/12/1999	VPSV-680	ND	ND	ND	ND	ND
35	35	10/07/1999	VPSV-788	ND	ND	ND	ND	ND
35	35	01/20/2000	VPSV-961	ND	ND	ND	ND	ND
35	35	06/23/2000	NS	P	P	P	P	P
35	35	12/21/2000	NS	P	P	P	P	P
35	35	07/13/2001	NS	P	P	P	P	P
35	35	02/19/2002	NS	P	P	P	P	P
35	35	09/12/2002	NS	P	P	P	P	P
35	35	02/27/2003	NS	P	P	P	P	P
35	35	08/22/2003	NS	P	P	P	P	P
35	35	11/01/2004	SVW35-VPB-068	ND	ND	ND	ND	ND
35	35	04/21/2005	SVW35-VPB-037	ND	ND	ND	ND	ND
35	35	10/24/2005	SVW35-VPB-078	ND	ND	ND	ND	ND
35	35	05/15/2006	SVW35-VPB-074	ND	ND	ND	ND	ND
35	50	10/22/1998	VPSV-573	ND	ND	ND	ND	ND
35	50	03/12/1999	VPSV-681	ND	ND	ND	ND	ND
			VPSV-682 (Dup)	ND	ND	ND	ND	ND
35	50	10/07/1999	VPSV-789	ND	ND	ND	ND	ND
			VPSV-791 (Dup)	ND	ND	ND	ND	ND
35	50	01/20/2000	NS	P	P	P	P	P
35	50	06/23/2000	NS	P	P	P	P	P
35	50	12/21/2000	NS	P	P	P	P	P
35	50	07/13/2001	NS	P	P	P	P	P
35	50	02/19/2002	NS	P	P	P	P	P
35	50	09/12/2002	NS	P	P	P	P	P
35	50	02/27/2003	NS	P	P	P	P	P
35	50	08/22/2003	NS	P	P	P	P	P
35	50	11/01/2004	NS	P	P	P	P	P

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(Concentrations in μg/L - Vapor)

Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
35	50	10/24/2005	NS	P	P	P	P	P
35	50	05/15/2006	SVW35-VPC-075	ND	ND	ND	ND	ND
			SVW35-VPC-076 (Dup)	ND	ND	ND	ND	ND
35	60	10/22/1998	VPSV-574	ND	ND	ND	ND	ND
35	60	03/12/1999	VPSV-683	ND	ND	ND	ND	ND
35	60	10/07/1999	VPSV-790	ND	ND	ND	ND	ND
35	60	01/20/2000	VPSV-962	ND	ND	ND	ND	ND
35	60	06/23/2000	VPSV-1059	ND	ND	ND	ND	ND
			VPSV-1060 (Dup)	ND	ND	ND	ND	ND
35	60	12/21/2000	VPD-039	ND	ND	ND	ND	ND
35	60	07/13/2001	SVW35-VPD-025	ND	ND	ND	ND	ND
35	60	02/19/2002	NS	P	P	P	P	P
35	60	09/12/2002	NS	P	P	P	P	P
35	60	02/27/2003	NS	P	P	P	P	P
35	60	08/22/2003	NS	P	P	P	P	P
35	60	11/01/2004	NS	P	P	P	P	P
35	60	10/24/2005	NS	P	P	P	P	P
35	60	05/15/2006	NS	P	P	P	P	P
35	80	10/22/1998	VPSV-575	**18.0**	**36.0**	ND	ND	ND
			VPSV-576 (Dup)	**20.0**	**37.0**	ND	ND	ND
35	80	03/12/1999	VPSV-684	ND	ND	ND	ND	ND
35	80	10/07/1999	VPSV-792	ND	ND	ND	ND	ND
35	80	01/20/2000	VPSV-963	ND	ND	ND	ND	ND
35	80	06/23/2000	VPSV-1061	ND	ND	ND	ND	ND
35	80	12/21/2000	NS	P	P	P	P	P
35	80	07/13/2001	SVW35-VPE-026	ND	ND	ND	ND	ND
35	80	02/19/2002	SVW35-VPE-81	ND	ND	ND	ND	ND
35	80	09/12/2002	SVW35-VPE-69	ND	ND	ND	ND	ND
35	80	02/27/2003	SVW35-VPE-029	ND	ND	ND	ND	ND
35	80	08/22/2003	SVW35-VPE-055	ND	ND	ND	ND	ND
35	80	04/08/2004	SVW35-VPE-023	ND	ND	ND	ND	ND
35	80	11/01/2004	SVW35-VPE-069	ND	ND	ND	ND	ND
35	80	04/21/2005	SVW35-VPE-038	ND	ND	ND	ND	ND
35	80	10/24/2005	SVW35-VPE-079	ND	ND	ND	ND	ND
35	80	05/15/2006	SVW35-VPE-077	ND	ND	ND	ND	ND
35	95	10/22/1998	VPSV-577	**45.0**	**48.0**	ND	ND	ND
35	95	03/12/1999	VPSV-685	**6.2**	**4.9**	ND	ND	ND
35	95	10/07/1999	VPSV-793	**1.6**	ND	ND	ND	ND
35	95	01/20/2000	VPSV-964	**1.3**	ND	ND	ND	ND
			VPSV-965 (Dup)	**1.5**	ND	ND	ND	ND
35	95	06/23/2000	NS	P	P	P	P	P
35	95	12/21/2000	NS	P	P	P	P	P
35	95	07/13/2001	NS	P	P	P	P	P
35	95	02/19/2002	NS	P	P	P	P	P
35	95	09/12/2002	NS	P	P	P	P	P
35	95	02/27/2003	NS	P	P	P	P	P

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(Concentrations in μg/L - Vapor)

Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
35	95	08/22/2003	NS	P	P	P	P	P
35	95	11/01/2004	NS	P	P	P	P	P

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(Concentrations in µg/L - Vapor)

Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
35	95	10/24/2005	NS	P	P	P	P	P
35	95	05/15/2006	NS	P	P	P	P	P
35	110	10/22/1998	VPSV-578	**65.0**	**47.0**	ND	ND	ND
35	110	03/12/1999	VPSV-686	**1.5**	ND	ND	ND	ND
35	110	10/07/1999	VPSV-794	ND	ND	ND	ND	ND
35	110	01/20/2000	VPSV-966	ND	ND	ND	ND	ND
35	110	06/23/2000	NS	P	P	P	P	P
35	110	12/21/2000	NS	P	P	P	P	P
35	110	07/13/2001	NS	P	P	P	P	P
35	110	02/19/2002	NS	P	P	P	P	P
35	110	09/12/2002	NS	P	P	P	P	P
35	110	02/27/2003	NS	P	P	P	P	P
35	110	08/22/2003	NS	P	P	P	P	P
35	110	11/01/2004	NS	P	P	P	P	P
35	110	10/24/2005	NS	P	P	P	P	P
35	110	05/15/2006	NS	P	P	P	P	P
35	125	10/22/1998	VPSV-579	**74.0**	**54.0**	ND	ND	ND
35	125	03/12/1999	VPSV-687	**1.8**	ND	ND	ND	ND
			VPSV-688 (Dup)	**1.5**	ND	ND	ND	ND
35	125	10/07/1999	VPSV-795	ND	**1.5**	ND	ND	ND
			VPSV-796 (Dup)	ND	**1.5**	ND	ND	ND
35	125	01/20/2000	VPSV-967	ND	**1.4**	ND	ND	ND
35	125	06/23/2000	VPSV-1062	ND	ND	ND	ND	ND
35	125	12/21/2000	NS	P	P	P	P	P
35	125	07/13/2001	NS	P	P	P	P	P
35	125	02/19/2002	NS	P	P	P	P	P
35	125	09/12/2002	NS	P	P	P	P	P
35	125	02/27/2003	NS	P	P	P	P	P
35	125	08/22/2003	NS	P	P	P	P	P
35	125	11/01/2004	NS	P	P	P	P	P
35	125	10/24/2005	NS	P	P	P	P	P
35	125	05/15/2006	NS	P	P	P	P	P
35	140	10/22/1998	VPSV-580	**125.0**	**64.0**	ND	ND	ND
35	140	03/12/1999	VPSV-689	**17.0**	**4.2**	ND	ND	ND
35	140	10/07/1999	VPSV-797	**13.0**	**19.0**	ND	ND	ND
35	140	01/20/2000	VPSV-968	**8.5**	**15.0**	**2.4**	ND	ND
35	140	06/23/2000	VPSV-1063	**6.0**	**7.7**	**2.4**	ND	ND
35	140	12/21/2000	NS	P	P	P	P	P
35	140	07/13/2001	SVW35-VPI-027	ND	**5.4 J**	ND	ND	ND
35	140	02/19/2002	SVW35-VPI-82	ND	**1.7**	ND	ND	ND
35	140	09/12/2002	SVW35-VPI-70	ND	ND	ND	ND	ND
35	140	02/27/2003	SVW35-VPI-030	ND	**3.9**	ND	ND	ND
35	140	08/22/2003	SVW35-VPI-056	ND	**2.1**	ND	ND	ND
35	140	04/08/2004	SVW35-VPI-024	ND	**1.2**	ND	ND	ND
35	140	11/01/2004	NS	P	P	P	P	P
35	140	10/24/2005	NS	P	P	P	P	P

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(Concentrations in μg/L - Vapor)

Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
35	140	05/15/2006	NS	P	P	P	P	P

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(Concentrations in μg/L - Vapor)

Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
35	155	10/22/1998	VPSV-581	**59.0**	**61.0**	**2.4**	ND	ND
			VPSV-582 (Dup)	**63.0**	**68.0**	**2.8**	ND	ND
35	155	03/12/1999	VPSV-690	**3.2**	ND	**7.7**	ND	ND
35	155	10/07/1999	VPSV-798	**13.0**	**17.0**	**9.0**	ND	ND
35	155	01/20/2000	NS	P	P	P	P	P
35	155	06/23/2000	NS	P	P	P	P	P
35	155	12/21/2000	NS	P	P	P	P	P
35	155	07/13/2001	NS	P	P	P	P	P
35	155	02/19/2002	NS	P	P	P	P	P
35	155	09/12/2002	NS	P	P	P	P	P
35	155	02/27/2003	NS	P	P	P	P	P
35	155	08/22/2003	NS	P	P	P	P	P
35	155	11/01/2004	NS	P	P	P	P	P
35	155	10/24/2005	SVW35-VPJ-080	ND	ND	ND	ND	ND
35	155	05/15/2006	SVW35-VPJ-078	ND	ND	ND	ND	ND
36	20	10/23/1998	NS	P	P	P	P	P
36	20	03/17/1999	NS	P	P	P	P	P
36	20	10/08/1999	NS	P	P	P	P	P
36	20	01/19/2000	NS	P	P	P	P	P
36	20	06/22/2000	NS	P	P	P	P	P
36	20	12/20/2000	NS	P	P	P	P	P
36	20	07/13/2001	NS	P	P	P	P	P
36	20	02/15/2002	NS	P	P	P	P	P
36	20	05/14/2002	NS	P	P	P	P	P
36	20	09/11/2002	NS	P	P	P	P	P
36	20	02/27/2003	NS	P	P	P	P	P
36	20	08/25/2003	SW36-VPA-068	ND	ND	ND	ND	ND
36	20	04/09/2004	SW36-VPA-036	ND	ND	ND	ND	ND
36	20	10/28/2004	SVW36-VPA-050	ND	ND	ND	ND	ND
36	20	04/21/2005	SVW36-VPA-028	ND	ND	ND	ND	ND
36	20	10/21/2005	SVW36-VPA-063	ND	ND	ND	ND	ND
36	20	10/21/2005	SVW36-VPA-064(DUP)	ND	ND	ND	ND	ND
36	20	05/16/2006	SVW36-VPA-100	ND	ND	ND	ND	ND
36	35	10/23/1998	VPSV-592	**9.2**	ND	ND	ND	ND
36	35	03/17/1999	VPSV-733	**149.0**	ND	**18.0**	ND	**37.0 (1,1,1-TCA)**
36	35	10/08/1999	VPSV-807	**48.0**	ND	**27.0**	**2.0**	**2.6 (Chloroform)**
36	35	01/19/2000	VPSV-955	**89.0**	**1.2**	**23.0**	**3.3**	**2.8 (Chloroform)**
								55.0 (1,1,1-TCA)
36	35	06/22/2000	VPSV-1053	**76.0**	ND	**21.0**	**4.6**	**1.5 (Chloroform)**
								34.0 (1,1,1-TCA)
36	35	12/20/2000	VPB-034	**9.9**	ND	**4.5**	ND	**3.8 (1,1,1-TCA)**
36	35	07/13/2001	SVW36-VPB-028	**18.0**	ND	**12.0**	**1.0**	**12.0 (1,1,1-TCA)**
36	35	11/20/2001	SVW36-VPB-44	**2.0**	ND	**2.0**	ND	ND
36	35	02/15/2002	SVW36-VPB-63	**1.4**	ND	**2.5**	ND	ND
36	35	05/14/2002	SVW36-VPB-02	**1.5**	ND	**2.2**	ND	ND
36	35	09/11/2002	SVW36-VPB-53	ND	ND	ND	ND	ND

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
36	35	11/26/2002	SVW36-VPB-54 (Dup)	ND	ND	ND	ND	ND
36	35	11/26/2002	SVW36-VPB-05	**5.8**	ND	**9.1**	ND	**1.1 (Chloroform)** **4.8 (1,1,1-TCA) / 1.4 (Toluene)**

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
36	35	02/27/2003	SVW36-VPB-031	**2.7**	ND	**12.0**	ND	**1.2 (Chloroform), 2.7 (1,1,1-TCA)**
36	35	05/21/2003	SVW36-VPB-002	ND	ND	ND	ND	ND
36	35	08/25/2003	SVW36-VPB-069	ND	ND	ND	ND	ND
			SVW36-VPB-070 (Dup)	ND	ND	**1.0**	ND	ND
36	35	02/02/2004	SVW36-VPB-002	ND	ND	ND	ND	ND
36	35	04/09/2004	SVW36-VPB-037	ND	ND	ND	ND	ND
36	35	07/14/2004	SVW36-VPB-009	ND	ND	ND	ND	ND
36	35	07/14/2004	SVW36-VPB-010 (Dup)	ND	ND	ND	ND	ND
36	35	10/28/2004	SVW36-VPB-051	ND	ND	ND	ND	ND
36	35	02/03/2005	SVW36-VPB-012	ND	ND	ND	ND	ND
36	35	04/21/2005	SVW36-VPB-029	ND	ND	ND	ND	ND
36	35	10/21/2005	SVW36-VPB-065	ND	ND	ND	ND	ND
36	35	05/16/2006	SVW36-VPB-101	ND	ND	ND	ND	ND
36	55	10/23/1998	VPSV-593	**17.0**	ND	ND	ND	**1.1 (Chloroform)**
			VPSV-594 (Dup)	**16.0**	ND	ND	ND	**1.1 (Chloroform)**
36	55	03/17/1999	VPSV-734	**191 J**	ND	**2.9**	ND	**11.0 (1,1,1-TCA)**
36	55	10/08/1999	VPSV-809	**153.0**	**1.3**	**61.0**	**9.2**	**1.1 (Chloroform)**
								98.0 (1,1,1-TCA)
36	55	01/19/2000	VPSV-956	**178.0**	**2.3**	**44.0**	**7.0**	**2.3 (Chloroform)**
								106.0 (1,1,1-TCA)
36	55	06/22/2000	VPSV-1054	**110.0**	**1.5**	**26.0**	**6.4**	**1.7 (Chloroform)**
								60.0 (1,1,1-TCA)
			VPSV-1055 (Dup)	**140.0**	**1.8**	**36.0**	**7.2**	**2.1 (Chloroform)**
								71.0 (1,1,1-TCA)
36	55	12/21/2000	VPC-035	**61.0**	**1.0**	**28.0**	**8.2**	**1.7 (Chloroform)**
								29.0 (1,1,1-TCA)
			VPC-036 (Dup)	**67.0**	**1.0**	**31.0**	**7.5**	**1.8 (Chloroform)**
								30.0 (1,1,1-TCA)
36	55	07/13/2001	SVW36-VPB-029	**36.0**	ND	**26.0**	**3.0**	**1.0 (Chloroform)**
								27.0 (1,1,1-TCA)
			SVW36-VPB-030 (Dup)	**28.0**	ND	**22.0**	**2.5**	**26.0 (1,1,1-TCA)**
36	55	11/20/2001	SVW36-VPC-45	**11.0**	ND	**11.0**	**2.1**	**6.9 (1,1,1-TCA)**
36	55	02/15/2002	SVW36-VPC-64	**7.3**	ND	**7.6**	**1.4**	**4.3 (1,1,1-TCA)**
36	55	05/14/2002	SVW36-VPC-03	ND	ND	ND	ND	ND
36	55	09/11/2002	SVW36-VPC-55	ND	ND	ND	ND	ND
36	55	11/26/2002	SVW36-VPC-06	**4.1**	ND	**8.0**	ND	**3.5 (1,1,1-TCA)**
								1.3 (Toluene)
36	55	02/27/2003	SVW36-VPC-032	**2.4**	ND	**11.0**	ND	**1.2 (Chloroform), 2.5 (1,1,1-TCA)**
36	55	05/21/2003	SVW36-VPC-003	ND	ND	ND	ND	ND
36	55	08/25/2003	SVW36-VPC-071	ND	ND	ND	ND	ND
36	55	02/02/2004	SVW36-VPC-003	ND	ND	ND	ND	ND
36	55	04/09/2004	SVW36-VPC-038	ND	ND	ND	ND	ND
36	55	07/14/2004	SVW36-VPC-011	ND	ND	ND	ND	ND
36	55	10/28/2004	SVW36-VPC-052	ND	ND	ND	ND	ND
36	55	02/03/2005	SVW36-VPC-013	ND	ND	ND	ND	ND
36	55	02/03/2005	SVW36-VPC-014 Dup	ND	ND	ND	ND	ND
36	55	04/21/2005	SVW36-VPC-030	ND	ND	ND	ND	ND
36	55	04/21/2005	SVW36-VPC-031 Dup	ND	ND	ND	ND	ND
36	55	10/21/2005	SVW36-VPC-066	ND	ND	ND	ND	ND

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(Concentrations in μg/L - Vapor)

Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
36	55	05/16/2006	SVW36-VPC-102	ND	ND	ND	ND	ND

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(Concentrations in μg/L - Vapor)

Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
36	75	10/23/1998	VPSV-595	**22.0**	**31.0**	ND	ND	**3.8 (Chloroform)**
36	75	03/17/1999	VPSV-735	**4.7**	ND	ND	ND	**1.0 (Chloroform)**
			VPSV-736 (Dup)	**4.6**	ND	ND	ND	**1.2 (Chloroform)**
36	75	10/08/1999	VPSV-810	**30.0**	**3.9**	**2.2**	**2.3**	**12.0 (Chloroform)**
								1.2 (Freon 11)
36	75	01/19/2000	VPSV-957	**66.0**	**4.6**	**5.0**	**3.8**	**11.0 (Chloroform)**
								26.0 (1,1,1-TCA)
								1.3 (Freon 11)
36	75	06/22/2000	VPSV-1056	**71.0**	**4.1**	**8.5**	**3.7**	**9.4 (Chloroform)**
								27.0 (1,1,1-TCA)
36	75	12/20/2000	NS	P	P	P	P	P
36	75	07/13/2001	NS	P	P	P	P	P
36	75	02/15/2002	NS	P	P	P	P	P
36	75	09/11/2002	SVW36-VPD-56	ND	ND	ND	ND	ND
36	75	02/27/2003	NS	NS	NS	NS	NS	NS
36	75	08/25/2003	SVW36-VPD-072	ND	ND	ND	ND	ND
36	75	04/09/2004	SVW36-VPD-039	ND	ND	ND	ND	ND
36	75	10/28/2004	SVW36-VPD-053	ND	ND	ND	ND	ND
36	75	10/28/2004	SVW36-VPD-054 (Dup)	ND	ND	ND	ND	ND
36	75	04/21/2005	SVW36-VPD-032	ND	ND	ND	ND	ND
36	75	10/21/2005	SVW36-VPD-067	ND	ND	ND	ND	ND
36	75	05/16/2006	SVW36-VPD-103	ND	ND	ND	ND	ND
36	92	10/23/1998	VPSV-596	**20.0**	**29.0**	ND	ND	**4.0 (Chloroform)**
36	92	03/17/1999	VPSV-737	**11.0**	ND	ND	ND	**2.1 (Chloroform)**
36	92	10/08/1999	VPSV-811	**20.0**	**5.8**	**1.4**	**2.6**	**15.0 (Chloroform)**
								1.3 (1,1,1-TCA)
36	92	01/19/2000	VPSV-958	**24.0**	**8.1**	ND	**2.4**	**14.0 (Chloroform)**
								2.0 (1,1,1-TCA)
			VPSV-959 (Dup)	**23.0**	**8.2**	ND	**2.6**	**16.0 (Chloroform)**
								1.7 (1,1,1-TCA)
36	92	06/22/2000	VPSV-1057	ND	ND	ND	ND	ND
36	92	12/21/2000	VPE-037	ND	ND	ND	ND	ND
36	92	07/13/2001	SVW36-VPE-031	ND	ND	ND	ND	ND
36	92	02/15/2002	SVW36-VPE-65	ND	ND	ND	ND	ND
			SVW36-VPE-66 (Dup)	ND	ND	ND	ND	ND
36	92	09/11/2002	SVW36-VPE-57	ND	ND	ND	ND	ND
36	92	02/27/2003	NS	NS	NS	NS	NS	NS
36	92	08/25/2003	SVW36-VPE-073	ND	ND	ND	ND	ND
36	92	04/09/2004	SVW36-VPE-040	ND	ND	ND	ND	ND
36	92	04/09/2004	SVW36-VPE-041(Dup)	ND	ND	ND	ND	ND
36	92	10/28/2004	SVW36-VPE-055	ND	ND	ND	ND	ND
36	92	04/21/2005	SVW36-VPE-033	ND	ND	ND	ND	ND
36	92	10/21/2005	SVW36-VPE-068	ND	ND	ND	ND	ND
36	92	05/16/2006	SVW36-VPE-104	ND	ND	ND	ND	ND
			SVW36-VPE-105 (Dup)	ND	ND	ND	ND	ND

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
37	25	10/26/1998	VPSV-608	ND	ND	ND	ND	ND
37	25	03/16/1999	VPSV-721	ND	ND	ND	ND	ND
37	25	10/09/1999	VPSV-822	ND	ND	ND	ND	ND
37	25	01/21/2000	VPSV-978	ND	ND	ND	ND	ND
37	25	06/25/2000	VPSV-1089	ND	ND	ND	ND	ND
			VPSV-1090 (Dup)	ND	ND	ND	ND	ND
37	25	12/28/2000	VPA-071	ND	ND	ND	ND	ND
37	25	07/18/2001	SVW37-VPA-064	ND	ND	ND	ND	ND
37	25	02/15/2002	SVW37-VPA-56	ND	ND	ND	ND	ND
37	25	09/13/2002	NS	P	P	P	P	P
37	25	08/27/2003	NS	P	P	P	P	P
37	25	11/02/2004	NS	P	P	P	P	P
37	25	10/25/2005	NS	P	P	P	P	P
37	25	05/12/2006	NS	P	P	P	P	P
37	40	10/26/1998	VPSV-609	**24.0**	ND	**1.2**	ND	ND
37	40	03/16/1999	VPSV-722	**4.3**	ND	**1.7**	ND	ND
37	40	10/09/1999	VPSV-823	**2.1**	ND	ND	ND	ND
37	40	01/21/2000	VPSV-979	**2.8**	**1.1**	ND	ND	ND
37	40	06/25/2000	VPSV-1091	**2.3**	ND	ND	ND	ND
37	40	12/28/2000	VPB-073	**1.4**	ND	ND	ND	ND
37	40	07/18/2001	NS	P	P	P	P	P
37	40	02/15/2002	NS	P	P	P	P	P
37	40	09/13/2002	SVW37-VPB-83	ND	ND	ND	ND	ND
			SVW37-VPB-84 (Dup)	ND	ND	ND	ND	ND
37	40	08/27/2003	SVW37-VPB-086	ND	ND	ND	ND	ND
37	40	04/06/2004	SVW37-VPB-007	ND	ND	ND	ND	ND
37	40	11/02/2004	SVW37-VPB-082	ND	ND	ND	ND	ND
37	40	04/22/2005	SVW37-VPB-046	ND	ND	ND	ND	ND
37	40	10/25/2005	SVW37-VPB-081	ND	ND	ND	ND	ND
37	40	05/12/2006	SVW37-VPB-067	ND	ND	ND	ND	ND
37	60	10/26/1998	VPSV-610	**43.0**	ND	ND	ND	ND
37	60	03/16/1999	VPSV-723	**4.0**	ND	ND	ND	ND
			VPSV-724 (Dup)	**3.8**	ND	ND	ND	ND
37	60	10/09/1999	VPSV-824	ND	ND	ND	ND	ND
37	60	01/21/2000	VPSV-980	ND	ND	ND	ND	ND
37	60	06/25/2000	VPSV-1092	**1.9**	ND	ND	ND	ND
37	60	12/28/2000	VPC-074	ND	ND	ND	ND	ND
37	60	07/18/2001	NS	P	P	P	P	P
37	60	02/15/2002	NS	P	P	P	P	P
37	60	09/13/2002	NS	P	P	P	P	P
37	60	08/27/2003	NS	P	P	P	P	P
37	60	11/02/2004	NS	P	P	P	P	P
37	60	10/25/2005	NS	P	P	P	P	P
37	60	05/12/2006	NS	P	P	P	P	P

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
37	80	10/26/1998	VPSV-611	**64.0**	**51.0**	**2.3**	ND	ND
			VPSV-612 (Dup)	**60.0**	**48.0**	**2.4**	ND	ND
37	80	03/17/1999	VPSV-725	**1.1**	ND	**1.6**	ND	ND
37	80	10/09/1999	VPSV-825	**1.6**	ND	ND	ND	ND
			VPSV-826 (Dup)	**1.9**	ND	ND	ND	ND
37	80	01/21/2000	VPSV-981	**1.9**	ND	ND	ND	ND
37	80	06/25/2000	VPSV-1093	**3.1**	ND	ND	ND	ND
37	80	12/28/2000	VPC-075	ND	ND	ND	ND	ND
37	80	07/18/2001	SVW37-VPD-065	ND	ND	ND	ND	ND
			SVW37-VPD-066 (Dup)	ND	ND	ND	ND	ND
37	80	02/15/2002	SVW37-VPD-57	ND	ND	ND	ND	ND
37	80	09/13/2002	NS	P	P	P	P	P
37	80	08/27/2003	NS	P	P	P	P	P
37	80	04/06/2004	SVW37-VPD-008	ND	ND	ND	ND	ND
37	80	11/02/2004	SVW37-VPD-083	ND	ND	ND	ND	ND
37	80	04/22/2005	SVW37-VPD-047	ND	ND	ND	ND	ND
37	80	10/25/2005	SVW37-VPD-082	ND	ND	ND	ND	ND
37	80	05/12/2006	SVW37-VPD-068	ND	ND	ND	ND	ND
37	100	10/26/1998	VPSV-613	**62.0**	**57.0**	**3.5**	ND	ND
37	100	03/17/1999	VPSV-726	**10.0**	**10.0**	**5.1**	ND	ND
37	100	10/09/1999	VPSV-827	**12.0**	**1.8**	**3.1**	ND	**1.6 (Chloroform)**
37	100	01/21/2000	VPSV-982	**15.0**	**3.0**	**3.4**	**1.2**	**1.7 (Chloroform)**
			VPSV-983 (Dup)	**13.0**	**3.1**	**2.6**	**1.3**	**1.5 (Chloroform)**
37	100	06/25/2000	VPSV-1094	**12.0**	**4.1**	**1.8**	**1.5**	ND
37	100	12/28/2000	VPE-076	**5.9**	**1.1**	**1.7**	ND	ND
37	100	07/18/2001	SVW37-VPE-067	ND	ND	**1.4**	ND	ND
37	100	02/15/2002	SVW37-VPE-58	ND	ND	ND	ND	ND
37	100	09/13/2002	SVW37-VPE-85	ND	ND	ND	ND	ND
37	100	08/27/2003	SVW37-VPE-087	ND	ND	ND	ND	ND
37	100	04/06/2004	SVW37-VPE-009	ND	ND	ND	ND	ND
37	100	04/06/2004	SVW37-VPE-010(Dup)	ND	ND	ND	ND	ND
37	100	11/02/2004	SVW37-VPE-084	ND	ND	ND	ND	ND
37	100	04/22/2005	SVW37-VPE-048	ND	ND	ND	ND	ND
37	100	10/25/2005	SVW37-VPE-083	ND	ND	ND	ND	ND
37	100	05/12/2006	SVW37-VPE-069	ND	ND	ND	ND	ND
37	120	10/27/1998	VPSV-614	**32.0**	ND	**6.1**	ND	ND
37	120	03/17/1999	VPSV-727	**1.9**	ND	**2.6**	ND	ND
37	120	10/09/1999	VPSV-828	**19.0**	**12.0**	**4.0**	**2.6**	**3.6 (Chloroform)**
								1.6 (Freon 11)
37	120	01/22/2000	VPSV-993	**8.8**	**3.7**	**3.8**	**1.7**	**1.9 (Chloroform)**
37	120	06/25/2000	NS	P	P	P	P	P
37	120	12/28/2000	NS	P	P	P	P	P
37	120	07/18/2001	NS	P	P	P	P	P
37	120	02/15/2002	NS	P	P	P	P	P
37	120	09/13/2002	NS	P	P	P	P	P
37	120	08/27/2003	NS	P	P	P	P	P

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
37	120	11/02/2004	NS	P	P	P	P	P
37	120	10/25/2005	NS	P	P	P	P	P
37	120	05/12/2006	NS	P	P	P	P	P

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
37	140	10/27/1998	VPSV-615	**30.0**	**37.0**	**4.5**	ND	ND
37	140	03/17/1999	VPSV-728	**3.0**	ND	**1.8**	ND	ND
37	140	10/10/1999	VPSV-829	**3.0**	**1.8**	ND	**1.7**	ND
37	140	01/22/2000	VPSV-994	**4.1**	**2.6**	ND	**1.4**	ND
			VPSV-995 (Dup)	**4.3**	**2.5**	ND	**1.2**	ND
37	140	06/25/2000	NS	P	P	P	P	P
37	140	12/28/2000	NS	P	P	P	P	P
37	140	07/18/2001	NS	P	P	P	P	P
37	140	02/15/2002	NS	P	P	P	P	P
37	140	09/13/2002	NS	P	P	P	P	P
37	140	08/27/2003	NS	P	P	P	P	P
37	140	11/02/2004	NS	P	P	P	P	P
37	140	10/25/2005	SVW37-VPG-084	ND	ND	ND	ND	ND
37	140	05/12/2006	NS	P	P	P	P	P
37	155	10/27/1998	VPSV-616	**26.0**	**47.0**	**2.3**	ND	ND
37	155	03/17/1999	VPSV-729	**4.4**	ND	**1.4**	ND	ND
			VPSV-730 (Dup)	**4.5**	ND	**1.8**	ND	ND
37	155	10/10/1999	VPSV-830	**6.0**	**1.5**	**1.6**	ND	ND
37	155	01/22/2000	VPSV-996	**5.8**	**2.2**	ND	**1.3**	**1.1 (Freon 11)**
37	155	06/25/2000	VPSV-1095	**5.9**	**1.7**	**1.2**	**1.4**	ND
			VPSV-1096 (Dup)	**5.8**	**1.7**	**1.1**	**1.4**	ND
37	155	12/28/2000	VPH-077	**3.5**	**1.5**	ND	ND	ND
37	155	07/18/2001	SVW37-VPH-068	ND	ND	ND	ND	ND
37	155	02/15/2002	SVW37-VPH-59	ND	ND	ND	ND	ND
			SVW37-VPH-60 (Dup)	ND	ND	ND	ND	ND
37	155	09/13/2002	SVW37-VPH-86	ND	ND	ND	ND	ND
37	155	08/27/2003	SVW37-VPH-088	ND	ND	ND	ND	**1.1 (Chloroform), 1.8 (Freon 11)**
			SVW37-VPH-089 (Dup)	ND	ND	ND	ND	**1.6 (Freon 11)**
37	155	04/07/2004	SVW37-VPH-011	ND	ND	ND	ND	**ND**
37	155	11/02/2004	SVW37-VPH-085	ND	ND	ND	ND	ND
37	155	04/22/2005	SVW37-VPH-049	ND	ND	ND	ND	ND
37	155	04/22/2005	SVW37-VPH-050 Dup	ND	ND	ND	ND	ND
37	155	10/25/2005	SVW37-VPH-085	ND	ND	ND	ND	ND
37	155	05/12/2006	SVW37-VPH-070	ND	ND	ND	ND	ND
37	170	10/27/1998	VPSV-617	**23.0**	**38.0**	**3.0**	ND	ND
37	170	03/17/1999	VPSV-731	**5.8**	**5.4**	**1.4**	ND	ND
37	170	10/10/1999	VPSV-831	**6.5**	**2.0**	**2.3**	**1.9**	**1.1 (Freon 11)**
			VPSV-832 (Dup)	**6.4**	**2.1**	**1.9**	**2.4**	**1.1 (Freon 11)**
37	170	01/22/2000	VPSV-997	**6.0**	**2.3**	**1.3**	**1.6**	**1.1 (Freon 11)**
37	170	06/25/2000	VPSV-1097	**6.1**	**2.7**	**1.6**	**1.5**	ND
37	170	12/28/2000	VPI-079	**4.1**	**2.0**	**1.4**	ND	ND
37	170	07/18/2001	SVW37-VPI-069	ND	ND	ND	ND	ND
37	170	02/15/2002	SVW37-VPI-61	ND	ND	ND	ND	ND
37	170	09/13/2002	SVW37-VPI-87	ND	ND	ND	ND	ND
37	170	08/27/2003	SVW37-VPI-090	ND	ND	ND	ND	ND
37	170	04/07/2004	SWV37-VPI-012	ND	ND	ND	ND	ND

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
37	170	11/02/2004	SVW37-VPI-086	ND	ND	ND	ND	ND
37	170	11/02/2004	SVW37-VPI-087 (Dup)	ND	ND	ND	ND	ND
37	170	04/22/2005	SVW37-VPI-051	ND	ND	ND	ND	ND

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(Concentrations in μg/L - Vapor)

Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
37	170	10/25/2005	SVW37-VPI-086	ND	ND	ND	ND	ND
37	170	05/12/2006	SVW37-VPI-071	ND	ND	ND	ND	ND
37	185	10/27/1998	VPSV-618	**12.0**	**6.5**	**2.2**	ND	ND
			VPSV-619 (Dup)	**12.0**	**6.8**	**1.7**	ND	ND
37	185	03/17/1999	VPSV-732	**9.3**	**18.0**	**3.5**	ND	ND
37	185	10/10/1999	VPSV-833	**7.4**	**2.8**	**4.4**	**1.8**	ND
37	185	01/22/2000	VPSV-998	**11.0**	**5.2**	**3.4**	**1.9**	**1.1 (Freon 11)**
37	185	06/25/2000	VPSV-1098	**9.7**	**6.6**	**3.6**	**1.6**	ND
37	185	12/28/2000	VPJ-080	**3.7**	**3.9**	**2.2**	ND	ND
37	185	07/18/2001	SVW37-VPJ-070	ND	ND	**1.6**	ND	ND
37	185	11/21/2001	SVW37-VPJ-52	ND	ND	ND	ND	ND
37	185	02/15/2002	SVW37-VPJ-62	ND	ND	**2.0**	ND	ND
37	185	09/13/2002	SVW37-VPJ-88	ND	ND	ND	ND	ND
37	185	11/26/2002	SVW37-VPJ-01	ND	**1.4**	ND	ND	ND
37	185	02/25/2003	SVW37-VPJ-009	ND	ND	**1.2**	ND	ND
37	185	05/21/2003	SVW37-VPJ-001	ND	ND	ND	ND	ND
37	185	08/27/2003	SVW37-VPJ-091	ND	ND	ND	ND	ND
37	185	02/02/2004	SVW37-VPJ-001	ND	ND	ND	ND	ND
37	185	04/07/2004	SVW37-VPJ-013	ND	ND	ND	ND	ND
37	185	07/14/2004	SVW37-VPJ-002	ND	ND	ND	ND	ND
37	185	11/02/2004	SVW37-VPJ-088	ND	ND	ND	ND	ND
37	185	02/03/2005	SVW37-VPJ-002	ND	ND	ND	ND	ND
37	185	04/22/2005	SVW37-VPJ-052	ND	ND	ND	ND	ND
37	185	10/25/2005	SVW37-VPJ-087	ND	ND	ND	ND	ND
37	185	05/12/2006	SVW37-VPJ-072	ND	ND	ND	ND	ND
38	25	03/18/1999	VPSV-738	ND	ND	ND	ND	ND
38	25	10/10/1999	VPSV-834	ND	ND	ND	ND	ND
38	25	01/22/2000	VPSV-999	ND	ND	ND	ND	ND
38	25	06/24/2000	VPSV-1080	ND	ND	ND	ND	ND
38	25	12/28/2000	VPA-063	ND	ND	ND	ND	ND
38	25	07/16/2001	SVW38-VPA-043	ND	ND	ND	ND	ND
38	25	02/19/2002	NS	P	P	P	P	P
38	25	09/13/2002	NS	P	P	P	P	P
38	25	02/26/2003	NS	P	P	P	P	P
38	25	08/27/2003	NS	P	P	P	P	P
38	25	11/02/2004	NS	P	P	P	P	P
38	25	10/25/2005	SVW38-VPA-090	ND	ND	ND	ND	ND
38	25	05/12/2006	SVW38-VPA-061	ND	ND	ND	ND	ND
38	45	10/27/1998	VPSV-621	**5.6**	ND	ND	ND	ND
38	45	03/18/1999	VPSV-739	ND	ND	ND	ND	ND
38	45	10/10/1999	VPSV-835	ND	ND	ND	ND	ND
38	45	01/22/2000	VPSV-1000	ND	ND	ND	ND	ND
			VPSV-1001 (Dup)	ND	ND	ND	ND	ND
38	45	06/24/2000	VPSV-1081	ND	ND	ND	ND	ND
38	45	12/28/2000	VPB-064	ND	ND	ND	ND	ND
38	45	07/16/2001	SVW38-VPB-044	ND	ND	ND	ND	ND

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(Concentrations in μg/L - Vapor)

Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
38	45	02/19/2002	NS	P	P	P	P	P
38	45	09/13/2002	NS	P	P	P	P	P
38	45	02/26/2003	NS	P	P	P	P	P

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(Concentrations in µg/L - Vapor)

Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
38	45	08/27/2003	NS	P	P	P	P	P
38	45	11/02/2004	NS	P	P	P	P	P
38	45	10/25/2005	NS	P	P	P	P	P
38	45	05/12/2005	NS	P	P	P	P	P
38	65	10/27/1998	VPSV-622	**15.0**	**57.0**	**2.2**	ND	ND
38	65	03/18/1999	VPSV-740	ND	ND	ND	ND	ND
38	65	10/10/1999	VPSV-836	ND	ND	ND	ND	ND
38	65	01/22/2000	VPSV-1002	ND	ND	ND	ND	ND
38	65	06/24/2000	VPSV-1082	ND	ND	ND	ND	ND
38	65	12/28/2000	VPC-065	ND	ND	ND	ND	ND
			VPC-066 (Dup)	ND	ND	ND	ND	ND
38	65	07/16/2001	NS	P	P	P	P	P
38	65	02/19/2002	NS	P	P	P	P	P
38	65	09/13/2002	NS	P	P	P	P	P
38	65	02/26/2003	NS	P	P	P	P	P
38	65	08/27/2003	NS	P	P	P	P	P
38	65	11/02/2004	NS	P	P	P	P	P
38	65	10/25/2005	NS	P	P	P	P	P
38	65	05/12/2005	SVW38-VPC-062	ND	ND	ND	ND	ND
38	80	10/27/1998	VPSV-623	**11.0**	**74.0**	**1.6**	ND	ND
			VPSV-624 (Dup)	**15.0**	**56.0**	**2.1**	ND	ND
38	80	03/18/1999	VPSV-741	ND	ND	**1.4**	ND	ND
			VPSV-742 (Dup)	ND	ND	**1.3**	ND	ND
38	80	10/10/1999	VPSV-837	ND	ND	ND	ND	ND
			VPSV-838 (Dup)	ND	ND	ND	ND	ND
38	80	01/22/2000	VPSV-1003	ND	ND	ND	ND	ND
38	80	06/24/2000	VPSV-1083	**1.0**	ND	ND	ND	ND
			VPSV-1084 (Dup)	**1.0**	ND	ND	ND	ND
38	80	12/28/2000	VPD-067	ND	ND	ND	ND	ND
38	80	07/16/2001	SVW38-VPD-045	ND	ND	ND	ND	ND
38	80	02/19/2002	NS	P	P	P	P	P
38	80	09/13/2002	NS	P	P	P	P	P
38	80	02/26/2003	NS	P	P	P	P	P
38	80	08/27/2003	SVW38-VPD-083	ND	ND	ND	ND	ND
38	80	04/08/2004	SVW38-VPD-025	ND	ND	ND	ND	ND
38	80	11/02/2004	SVW38-VPD-091	ND	ND	ND	ND	ND
38	80	04/21/2005	SVW38-VPD-034	ND	ND	ND	ND	ND
38	80	10/25/2005	SVW38-VPD-091	ND	ND	ND	ND	ND
38	80	05/12/2006	SVW38-VPD-063	ND	ND	ND	ND	ND
38	95	10/27/1998	NS	W	W	W	W	W
38	95	03/18/1999	NS	W	W	W	W	W
38	95	10/10/1999	NS	W	W	W	W	W
38	95	01/22/2000	NS	P	P	P	P	P
38	95	06/24/2000	NS	W	W	W	W	W
38	95	12/28/2000	NS	P	P	P	P	P
38	95	07/16/2001	NS	P	P	P	P	P
38	95	02/19/2002	SVW38-VPE-77	ND	ND	ND	ND	ND

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(Concentrations in μg/L - Vapor)

Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
38	95	02/19/2002	SVW38-VPE-78 (Dup)	ND	ND	ND	ND	ND
38	95	09/13/2002	SVW38-VPE-80	ND	ND	ND	ND	ND
38	95	02/26/2003	SVW38-VPE-019	ND	ND	ND	ND	ND

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(Concentrations in µg/L - Vapor)

Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
38	95	08/27/2003	NS	P	P	P	P	P
38	95	11/02/2004	NS	P	P	P	P	P
38	95	10/25/2005	NS	P	P	P	P	P
38	95	05/12/2006	NS	P	P	P	P	P
38	110	10/27/1998	VPSV-625	**13.0**	**43.0**	**1.4**	ND	ND
38	110	03/18/1999	VPSV-743	ND	ND	ND	ND	ND
38	110	10/10/1999	VPSV-839	**9.3**	**5.8**	**1.7**	ND	**1.7 (Chloroform)** **1.2 (Freon 11)**
38	110	01/22/2000	VPSV-1004	**8.8**	**6.0**	**1.5**	ND	**1.7 (Chloroform)**
38	110	06/24/2000	VPSV-1085	**7.8**	**3.6**	**1.6**	ND	**1.5 (Freon 11)**
38	110	12/28/2000	VPF-068	**3.0**	**1.5**	**1.2**	ND	ND
38	110	07/16/2001	SVW38-VPF-046	ND	ND	ND	ND	ND
38	110	02/19/2002	SVW38-VPF-79	ND	ND	ND	ND	ND
38	110	09/13/2002	SVW38-VPF-81	ND	ND	ND	ND	ND
38	110	02/26/2003	SVW38-VPF-020	ND	**1.1**	ND	ND	ND
38	110	08/27/2003	SVW38-VPF-084	ND	ND	ND	ND	ND
38	110	04/08/2004	SVW38-VPF-026	ND	ND	ND	ND	ND
38	110	11/02/2004	SVW38-VPF-092	ND	ND	ND	ND	ND
38	110	04/21/2005	SVW38-VPF-035	ND	ND	ND	ND	ND
38	110	10/25/2005	SVW38-VPF-092	ND	ND	ND	ND	ND
38	110	05/12/2006	SVW38-VPF-064	ND	ND	ND	ND	ND
			SVW38-VPF-065 (Dup)	ND	ND	ND	ND	ND
38	125	10/27/1998	VPSV-626	**18.0**	**81.0**	**1.8**	ND	ND
38	125	03/18/1999	VPSV-744	**2.9**	ND	ND	ND	ND
38	125	10/10/1999	VPSV-840	**3.2**	**3.6**	ND	ND	ND
38	125	01/22/2000	VPSV-1005	**4.5**	**4.6**	ND	ND	ND
38	125	06/24/2000	VPSV-1086	**3.8**	**3.1**	ND	ND	ND
38	125	12/28/2000	VPG-069	**2.3**	**1.4**	**1.0**	ND	ND
38	125	07/16/2001	NS	P	P	P	P	P
38	125	02/19/2002	NS	P	P	P	P	P
38	125	09/13/2002	NS	P	P	P	P	P
38	125	02/26/2003	NS	P	P	P	P	P
38	125	08/27/2003	NS	P	P	P	P	P
38	125	11/02/2004	NS	P	P	P	P	P
38	125	10/25/2005	NS	P	P	P	P	P
38	125	05/12/2006	NS	P	P	P	P	P
38	140	10/27/1998	VPSV-627	**18.0**	**67.0**	**1.9**	ND	ND
38	140	03/18/1999	VPSV-745	**8.6**	**4.5**	**1.9**	ND	ND
38	140	10/10/1999	VPSV-841	**6.6**	**3.4**	ND	ND	**1.9 (Chloroform)** **1.6 (Freon 11)**
38	140	01/22/2000	NS	P	P	P	P	P
38	140	06/24/2000	NS	P	P	P	P	P
38	140	12/27/2000	NS	P	P	P	P	P
38	140	07/16/2001	NS	P	P	P	P	P
38	140	02/19/2002	NS	P	P	P	P	P
38	140	09/13/2002	NS	P	P	P	P	P

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
38	140	02/26/2003	NS	P	P	P	P	P
38	140	08/27/2003	NS	P	P	P	P	P
38	140	11/02/2004	NS	P	P	P	P	P

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(Concentrations in μg/L - Vapor)

Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
38	140	10/25/2005	NS	P	P	P	P	P
38	140	05/12/2006	NS	P	P	P	P	P
38	155	10/27/1998	VPSV-628	**17.0**	**75.0**	**1.8**	ND	ND
38	155	03/18/1999	VPSV-746	**4.9**	**5.0**	**2.0**	ND	ND
38	155	10/10/1999	VPSV-842	**6.7**	**3.6**	**1.2**	**1.8**	**1.1 (Chloroform)**
38	155	01/22/2000	VPSV-1006	**6.6**	**4.0**	**1.0**	**1.3**	**1.3 (Chloroform)**
								1.5 (Freon 11)
			VPSV-1007 (Dup)	**6.6**	**4.1**	**1.0**	**1.3**	**1.5 (Chloroform)**
								1.5 (Freon 11)
38	155	06/24/2000	VPSV-1087	**7.4**	**6.8**	**1.2**	ND	**1.8 (Chloroform)**
38	155	12/28/2000	NS	P	P	P	P	P
38	155	07/16/2001	NS	P	P	P	P	P
38	155	02/19/2002	NS	P	P	P	P	P
38	155	09/13/2002	NS	P	P	P	P	P
38	155	02/26/2003	NS	P	P	P	P	P
38	155	08/27/2003	NS	P	P	P	P	P
38	155	11/02/2004	NS	P	P	P	P	P
38	155	10/25/2005	NS	P	P	P	P	P
38	155	05/12/2006	NS	P	P	P	P	P
38	170	10/27/1998	VPSV-629	**22.0**	**103.0**	**3.0**	ND	ND
			VPSV-630 (Dup)	**24.0**	**112.0**	**3.4**	ND	ND
38	170	03/18/1999	VPSV-747	**12.0**	**24.0**	**4.4**	ND	ND
			VPSV-748 (Dup)	**11.0**	**24.0**	**4.4**	ND	ND
38	170	10/10/1999	VPSV-843	**8.1**	**4.9**	**3.9**	**1.4**	**1.1 (Freon 11)**
			VPSV-844 (Dup)	**5.6**	**3.5**	**2.9**	**1.3**	**1.1 (Freon 11)**
38	170	01/22/2000	VPSV-1008	**6.7**	**6.3**	**3.2**	**1.4**	**1.0 (Freon 11)**
38	170	06/24/2000	VPSV-1088	**6.5**	**11.0**	**2.3**	ND	ND
38	170	12/27/2000	VPJ-070	**4.6**	**5.9**	**2.2**	ND	ND
38	170	07/16/2001	SVW38-VPJ-047	ND	ND	ND	ND	ND
			SVW38-VPJ-048 (Dup)	ND	ND	ND	ND	ND
38	170	02/19/2002	SVW38-VPJ-80	ND	ND	ND	ND	ND
38	170	09/13/2002	SVW38-VPJ-82	ND	ND	ND	ND	ND
38	170	02/26/2003	SVW38-VPJ-021	ND	**1.2**	**1.3**	ND	**1.1 (Freon 11)**
38	170	08/27/2003	SVW38-VPJ-085	ND	ND	ND	ND	**1.8 (Freon 11)**
38	170	04/08/2004	SVW38-VPJ-027	ND	ND	ND	ND	ND
38	170	11/02/2004	SVW38-VPJ-093	ND	**1.5**	**1.4**	ND	**1.9 (Toluene)**
38	170	04/21/2005	SVW38-VPJ-036	ND	ND	ND	ND	ND
38	170	10/25/2005	SVW38-VPJ-093	ND	ND	ND	ND	ND
38	170	05/12/2006	SVW38-VPJ-066	ND	ND	ND	ND	ND
39	20	10/28/1998	VPSV-631	ND	ND	ND	ND	ND
39	20	03/15/1999	VPSV-701	ND	ND	ND	ND	ND
39	20	10/11/1999	VPSV-845	ND	ND	ND	ND	ND
39	20	01/23/2000	VPSV-1009	ND	ND	ND	ND	ND
39	20	06/25/2000	VPSV-1099	ND	ND	ND	ND	ND
39	20	12/22/2000	VPA-056	ND	ND	ND	ND	ND
39	20	07/16/2001	SVW39-VPA-049	ND	ND	ND	ND	ND

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(Concentrations in µg/L - Vapor)

Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
39	20	02/19/2002	SVW39-VPA-70	ND	ND	ND	ND	ND
39	20	09/16/2002	SVW39-VPA-92	ND	ND	ND	ND	ND

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(Concentrations in µg/L - Vapor)

Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
39	20	02/26/2003	SVW39-VPA-022	ND	ND	ND	ND	ND
39	20	08/28/2003	SVW39-VPA-095	ND	ND	ND	ND	ND
39	20	11/03/2004	NS	P	P	P	P	P
39	20	04/22/2005	SVW39-VPA-039	ND	ND	ND	ND	ND
39	20	10/26/2005	SVW39-VPA-102	ND	ND	ND	ND	ND
39	20	05/11/2006	SVW39-VPA-050	ND	ND	ND	ND	ND
39	35	10/28/1998	VPSV-632	ND	ND	ND	ND	ND
39	35	03/15/1999	VPSV-702	ND	ND	ND	ND	ND
39	35	10/11/1999	VPSV-846	ND	ND	ND	ND	ND
39	35	01/23/2000	VPSV-1010	ND	ND	ND	ND	ND
39	35	06/25/2000	VPSV-1100	ND	ND	ND	ND	ND
39	35	12/22/2000	NS	P	P	P	P	P
39	35	07/16/2001	NS	P	P	P	P	P
39	35	02/19/2002	NS	P	P	P	P	P
39	35	09/16/2002	NS	P	P	P	P	P
39	35	02/26/2003	NS	P	P	P	P	P
39	35	08/28/2003	NS	P	P	P	P	P
39	35	11/03/2004	NS	P	P	P	P	P
39	35	10/26/2005	NS	P	P	P	P	P
39	35	05/11/2006	NS	P	P	P	P	P
39	50	10/28/1998	VPSV-633	ND	ND	ND	ND	ND
39	50	03/15/1999	VPSV-703	ND	ND	ND	ND	ND
39	50	10/11/1999	VPSV-847	ND	ND	ND	ND	ND
39	50	01/23/2000	VPSV-1011	ND	ND	ND	ND	ND
39	50	06/25/2000	VPSV-1101	ND	ND	ND	ND	ND
			VPSV-1102 (Dup)	ND	ND	ND	ND	ND
39	50	12/22/2000	VPC-057	ND	ND	ND	ND	ND
39	50	07/16/2001	SVW39-VPC-050	ND	ND	ND	ND	ND
39	50	02/19/2002	SVW39-VPC-71	ND	ND	ND	ND	ND
			SVW39-VPC-72 (Dup)	ND	ND	ND	ND	ND
39	50	09/16/2002	SVW39-VPC-93	ND	ND	ND	ND	ND
39	50	02/26/2003	SVW39-VPC-023	ND	ND	ND	ND	ND
39	50	08/28/2003	NS	P	P	P	P	P
39	50	11/03/2004	NS	P	P	P	P	P
39	50	04/22/2005	SVW39-VPC-040	ND	ND	ND	ND	ND
39	50	04/22/2005	SVW39-VPC-041 Dup	ND	ND	ND	ND	ND
39	50	10/26/2005	NS	P	P	P	P	P
39	50	05/11/2006	SVW39-VPC-051	ND	ND	ND	ND	ND
39	70	10/28/1998	VPSV-634	ND	ND	ND	ND	ND
39	70	03/15/1999	VPSV-704	ND	ND	ND	ND	ND
39	70	10/11/1999	VPSV-848	ND	ND	ND	ND	ND
39	70	01/23/2000	VPSV-1012	ND	ND	ND	ND	ND
			VPSV-1013 (Dup)	ND	ND	ND	ND	ND
39	70	06/25/2000	VPSV-1103	ND	ND	ND	ND	ND
39	70	12/22/2000	VPD-058	ND	ND	ND	ND	ND
39	70	07/17/2001	SVW39-VPD-051	ND	ND	ND	ND	ND

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(Concentrations in μg/L - Vapor)

Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
39	70	02/19/2002	SVW39-VPD-73	ND	ND	ND	ND	ND
39	70	09/16/2002	SVW39-VPD-94	ND	ND	ND	ND	ND
39	70	02/26/2003	SVW39VPD-024	ND	ND	ND	ND	ND

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(Concentrations in μg/L - Vapor)

Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
39	70	08/28/2003	NS	P	P	P	P	P
39	70	11/03/2004	NS	P	P	P	P	P
39	70	10/26/2005	NS	P	P	P	P	P
39	70	05/11/2006	NS	P	P	P	P	P
39	85	10/28/1998	VPSV-635	**3.7**	**66.0**	**1.5**	ND	ND
			VPSV-636 (Dup)	**3.9**	**78.0**	**1.6**	ND	ND
39	85	03/15/1999	VPSV-705	ND	**38.0**	ND	ND	ND
			VPSV-706 (Dup)	ND	**39.0**	ND	ND	ND
39	85	10/11/1999	VPSV-849	**6.3**	**48.0**	**1.4**	ND	ND
			VPSV-850 (Dup)	**7.7**	**47.0**	**2.5**	ND	ND
39	85	01/23/2000	VPSV-1014	**5.8**	**44.0**	**1.7**	ND	ND
39	85	06/25/2000	VPSV-1104	**2.8**	**29.0**	**1.5**	ND	ND
39	85	12/22/2000	VPE-059	**2.4**	**17.0**	**1.3**	ND	ND
			VPE-060 (Dup)	**21.0**	**16.0**	**13.0**	ND	ND
39	85	07/17/2001	SVW39-VPE-052	ND	**11 J**	ND	ND	ND
39	85	02/19/2002	SVW39-VPE-74	ND	**8.1**	ND	ND	ND
39	85	09/16/2002	SVW39-VPE-95	ND	**2.2**	ND	ND	ND
			SVW39-VPE-96 (Dup)	ND	**2.4**	ND	ND	ND
39	85	02/26/2003	SVW39-VPE-025	**1.3**	**11.0**	**1.4**	ND	ND
39	85	08/28/2003	SVW39-VPE-096	**1.6**	**26.0**	**2.8**	ND	ND
39	85	04/08/2004	SVW39-VPE-028	ND	**8.1**	**1.1**	ND	ND
39	85	11/03/2004	NS	P	P	P	P	P
39	85	04/22/2005	SVW39-VPE-042	ND	ND	ND	ND	ND
39	85	10/26/2005	SVW39-VPE-103	ND	ND	ND	ND	ND
39	85	05/11/2006	SVW39-VPE-052	ND	ND	ND	ND	ND
39	100	03/15/1999	VPSV-707	**1.2**	**73.0**	**1.4**	ND	ND
39	100	10/11/1999	VPSV-851	**9.0**	**46.0**	**3.3**	ND	ND
39	100	01/23/2000	VPSV-1015	**7.6**	**51.0**	**2.3**	ND	ND
39	100	06/26/2000	VPSV-1105	**5.0**	**32.0**	**2.1**	ND	ND
39	100	12/22/2000	VPF-061	**5.0**	**21.0**	**2.3**	ND	ND
39	100	07/17/2001	SVW39-VPF-053	ND	**11 J**	**2.0**	ND	ND
			SVW39-VPF-054 (Dup)	ND	**11 J**	**1.0**	ND	ND
39	100	02/19/2002	SVW39-VPF-75	ND	**9.5**	**1.3**	ND	ND
39	100	09/16/2002	SVW39-VPF-97	ND	**3.6**	**1.7**	ND	ND
39	100	02/26/2003	SVW39-VPF-026	**2.2**	**13.0**	**4.9**	ND	ND
39	100	08/28/2003	SVW39-VPF-097	**2.1**	**25.0**	**5.2**	ND	ND
39	100	04/08/2004	SVW39-VPF-029	**2.3**	**9.2**	**4.4**	ND	ND
39	100	11/03/2004	SVW39-VPF-102	ND	ND	**4.4**	ND	ND
39	100	04/22/2005	SVW39-VPF-043	ND	**3.3**	**3.7**	ND	ND
39	100	07/12/2005	SVW39-VPF-005	ND	**2.5**	**2.5**	ND	ND
39	100	10/26/2005	SVW39-VPF-104	ND	ND	**1.9**	ND	ND
39	100	05/11/2006	SVW39-VPF-053	ND	**3.2**	**3.9**	ND	ND
			SVW39-VPF-054 (Dup)	ND	**3.1**	**3.5**	ND	ND
39	110	10/28/1998	VPSV-638	**9.8**	**67.0**	**4.7**	ND	ND
39	110	03/15/1999	VPSV-708	**1.8**	**37.0**	**3.4**	ND	ND
39	110	10/11/1999	VPSV-852	**12.0**	**55.0**	**3.2**	ND	ND
39	110	01/23/2000	VPSV-1016	**11.0**	**52.0**	**2.8**	ND	ND

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Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
39	110	06/26/2000	NS	W	W	W	W	W
39	110	12/22/2000	NS	P	P	P	P	P
39	110	07/17/2001	NS	P	P	P	P	P

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(Concentrations in µg/L - Vapor)

Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
39	110	02/19/2002	NS	P	P	P	P	P
39	110	09/16/2002	NS	P	P	P	P	P
39	110	02/26/2003	NS	P	P	P	P	P
39	110	08/28/2003	NS	P	P	P	P	P
39	110	04/08/2004	ND	ND	ND	ND	ND	ND
39	110	11/03/2004	NS	P	P	P	P	P
39	110	04/22/2005	SVW39-VPG-044	ND	ND	ND	ND	ND
39	110	10/26/2005	SVW39-VPG-105	ND	ND	ND	ND	ND
39	110	05/11/2006	SVW39-VPG-055	ND	ND	ND	ND	ND
39	120	10/28/1998	VPSV-639	**6.5**	**50.0**	**10.0**	ND	ND
39	120	03/15/1999	VPSV-709	ND	**7.0**	**15.0**	ND	ND
39	120	10/11/1999	VPSV-853	**4.9**	**16.0**	**17.0**	ND	ND
39	120	01/23/2000	NS	P	P	P	P	P
39	120	06/26/2000	NS	P	P	P	P	P
39	120	12/22/2000	NS	P	P	P	P	P
39	120	07/17/2001	NS	P	P	P	P	P
39	120	02/19/2002	NS	P	P	P	P	P
39	120	09/16/2002	NS	P	P	P	P	P
39	120	02/26/2003	NS	P	P	P	P	P
39	120	08/28/2003	NS	P	P	P	P	P
39	120	11/03/2004	NS	P	P	P	P	P
39	120	10/26/2005	NS	P	P	P	P	P
39	120	05/11/2006	SVW39-VPH-056	ND	ND	ND	ND	ND
39	130	10/28/1998	VPSV-640	**6.2**	**50.0**	**15.0**	ND	ND
39	130	03/15/1999	VPSV-710	ND	**5.2**	**12.0**	ND	ND
39	130	10/11/1999	VPSV-854	**2.0**	**9.0**	**15.0**	ND	ND
39	130	01/23/2000	VPSV-1017	**1.5**	**7.9**	**10.0**	ND	ND
39	130	06/26/2000	VPSV-1106	**1.2**	**3.0**	**14.0**	ND	ND
39	130	12/22/2000	VPI-062	**2.4**	**2.1**	**5.2**	ND	ND
39	130	07/17/2001	SVW39-VPI-055	ND	**2.4 J**	**7.9**	ND	ND
39	130	02/19/2002	SVW39-VPI-76	ND	ND	**5.1**	ND	ND
39	130	09/16/2002	SVW39-VPI-98	ND	ND	**5.0**	ND	ND
39	130	02/26/2003	SVW39-VPI-027	**1.0**	**2.6**	**17.0**	ND	ND
39	130	08/28/2003	SVW39-VPI-098	ND	**1.7**	**8.2**	ND	ND
39	130	04/08/2004	SVW39-VPI-031	ND	ND	ND	ND	ND
39	130	04/08/2004	SVW39-VPI-032(Dup)	ND	ND	ND	ND	ND
39	130	07/14/2004	SVW39-VPI-001	ND	ND	ND	ND	ND
39	130	11/03/2004	SVW39-VPI-103	ND	ND	**1.4**	ND	ND
39	130	02/03/2005	SVW39-VPI-001	ND	ND	ND	ND	ND
39	130	04/22/2005	SVW39-VPI-045	ND	ND	ND	ND	ND
39	130	07/12/2005	SVW39-VPI-006	ND	ND	ND	ND	ND
39	130	10/26/2005	SVW39-VPI-106	ND	ND	ND	ND	ND
39	130	05/11/2006	SVW39-VPI-057	ND	ND	ND	ND	ND

Notes:

bgs = Below Ground Surface

Dup = Duplicate Sample

Ft = Feet

ND = Not Detected

P = Sampling Port is Plugged; Can Not Purge or Blow

W = Sampling Port is Inundated with Water

APPENDIX A
SUMMARY OF SOIL VAPOR RESULTS
ALL PERIODIC SAMPLING EVENTS COMPLETED TO DATE
(Concentrations in μg/L - Vapor)

Soil Vapor Well Number	Depth (Ft bgs)	Date	Sample Number	CCl_4	Freon 113	TCE	1,1-DCE	Other Compounds
J = Estimated Concentration; the Result Exceeds Calibration Range				NS = Not Sampled				

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

January 3, 2007

Mr. Steve Slaten
Jet Propulsion Laboratory
NASA Management Office, 180-801
4800 Oak Grove Drive
Pasadena, CA 91109

Re: EPA concurrence on the Remedial Action Report for OU2 at NASA Jet Propulsion Laboratory.

Dear Steve,

EPA concurs with the conclusions of the Remedial Action Report for OU2. The report provides a good summary of the source and extent of the VOC contamination in the vadose zone, and the operation of the soil vapor extraction system to reduce the contamination to acceptable levels. We have no comments on the document.

Please call me at (415) 972-3028 if you would like to discuss any issues concerning this report.

Sincerely,

Mark Ripperda
Remedial Project Manager