# LEHR/SCDS
## ENVIRONMENTAL RESTORATION

## DRAFT 2005 COMPREHENSIVE ANNUAL WATER MONITORING REPORT

**University of California, Davis**

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# LIST OF ACRONYMS AND ABBREVIATIONS

| | |
|---|---|
| 1,1-DCA | 1,1-dichloroethane |
| 1,1-DCE | 1,1-dichloroethene |
| 1,2-DCA | 1,2-dichloeoethane |
| 1,2-DCP | 1,2-dichloropropane |
| 1,1,2-TCA | 1,1,2-trichloroethane |
| Annual Report | 2005 Comprehensive Annual Water Monitoring Report |
| AOC | Administrative Order on Consent |
| bgs | below ground surface |
| COC | constituent of concern |
| CPT | cone penetrometer test |
| CRDL | contract-required detection limit |
| CWTP | UC Davis Campus Wastewater Treatment Plant |
| CVRWQCB | Central Valley Regional Water Quality Control Board |
| DDC | density-driven convection |
| DOE | United States Department of Energy |
| DQO | data quality objective |
| DWR | California Department of Water Resources |
| FS | feasibility study |
| FSP | Field Sampling Plan |
| ft/s | feet per second |
| gpm | gallons per minute |
| HSU | hydrostratigraphic unit |
| IRA | Interim Removal Action |
| K | hydraulic conductivity |
| LEHR/SCDS | Laboratory for Energy-related Health Research/South Campus Disposal Site |
| LCS | laboratory control sample |
| LF-1 | landfill No. 1 stormwater runoff monitoring point |
| LF-3 | landfill No. 3 stormwater runoff monitoring point |
| LS-1 | lift station No. 1 stormwater runoff monitoring point |
| LTPS | Land Treatment Pilot Study |
| LTPS Work Plan | Land Treatment Pilot Study Work Plan |
| MEK | methyl ethyl ketone |
| mg/L | milligrams per liter |
| msl | mean sea level |
| PARCC | precision, accuracy, representativeness, completeness, and comparability |
| PCB | polychlorinated biphenyl |
| PCD | Putah Creek downstream sampling location |
| PCE | tetrachloroethylene |
| pCi/L | picoCuries per liter |
| PCU | Putah Creek upstream sampling location |
| QA/QC | quality assurance/quality control |
| QAPP | Quality Assurance Project Plan |

## LIST OF ACRONYMS AND ABBREVIATIONS (continued)

| | |
|---|---|
| QC | quality control |
| RI | remedial investigation |
| RI/FS | Remedial Investigation/Feasibility Study |
| RPM | remedial project manager |
| SOW | Statement of Work for Removal Actions and Mitigation/Repair |
| STPO | UC Davis sewage treatment plant outfall sampling location |
| TCE | trichloroethylene |
| TDS | total dissolved solids |
| TEM | transient electromagnetic |
| TOC | total organic carbon |
| TP | temporary wells |
| TSS | total suspended solids |
| UC Davis | University of California, Davis |
| USEPA | United States Environmental Protection Agency |
| UCL | upper confidence limit |
| VOC | volatile organic compound |
| WDR | Waste Discharge Requirement |
| μg/L | micrograms per liter |

# SECTION 0
# EXECUTIVE SUMMARY

This report presents the results of the 2005 comprehensive water monitoring programs conducted at the former Laboratory for Energy-related Health Research facility and South Campus Disposal Site (LEHR/SCDS) (Site). The Site is located at the University of California, Davis (UC Davis) campus.

Water monitoring programs discussed in this report include:

- Monitoring for the density-driven convection (DDC) expanded pilot system test;
- Continued monitoring for the Remedial Investigation/Feasibility Study (RI/FS) that includes stormwater runoff, surface water monitoring, and site-wide groundwater monitoring for the groundwater interim removal action (IRA) wells; and
- IRA influent, effluent, and soil monitoring to assess the Land Treatment Pilot Study (LTPS).

## 0.1. Expanded DDC Pilot Test Program

The Expanded DDC Pilot Test is an in-situ groundwater treatment system that utilizes convection cells to treat volatile organic compounds (VOCs; primarily chloroform) in shallow groundwater. The DDC system is also intended to prevent the downward migration of VOCs (primarily chloroform) from the vadose zone and uppermost groundwater (hydrostratigraphic unit [HSU], HSU-1) to the underlying more permeable groundwater (hydrostratigraphic unit, HSU-2). Currently, there are six DDC treatment wells (DDC-1 through DDC-6) installed in HSU-1 near the VOC source. The DDC system is evaluated by monitoring five nested piezometers (temporary wells [TP] TP-1A, TP-1B, and TP-1C through TP-5A, TP-5B, and TP-5C) and five monitoring wells (UCD1-012, UCD1-049, UCD1-050, UCD1-051, and UCD2-048). DDC system monitoring currently consists of quarterly sampling. Four quarterly sampling rounds were conducted during 2005.

## 0.2. RI/FS Monitoring Program

The current groundwater, stormwater, and surface water monitoring program for the Site was developed in the 2002 Comprehensive Annual Water Monitoring Report (Brown & Caldwell, 2003) and later approved by the Remedial Project Managers in 2003 and implemented since 2004. For groundwater monitoring, five HSUs have been defined in Site groundwater based on drilling and geophysical surveys completed since 1987. In descending order, the units are HSU-1, HSU-2, HSU-3, HSU-4, and an unnamed aquitard. For the purposes of this report, the unsaturated material (vadose zone) from the surface to first encountered groundwater is included in HSU-1. Of the 46 wells used in this program, 22 are completed within HSU-1, 19 are completed within HSU-2, and five are completed within HSU-4.

The stormwater and surface water monitoring programs are designed to monitor stormwater quality from three monitoring locations (landfill No. 1 [LF-1], landfill No. 3 [LF-3], and lift station No. 1 [LS-1]) and three surface water monitoring locations along the South Fork of Putah Creek (Putah Creek downstream sampling location [PCD], UC Davis sewage treatment plant outfall sampling location [STPO], and Putah Creek upstream sampling location [PCU]). During 2005, stormwater and surface water was sampled in January and December. Stormwater at LS-1 (monitored and sampled by the United Stated Department of Energy [DOE]) was sampled in March 2005 and December 2005.

## 0.3. IRA Influent/Effluent Monitoring Program

The groundwater IRA was designed to minimize offsite migration of VOCs, primarily chloroform, in HSU-2 groundwater by conventional extraction and treatment (air stripping for VOCs) followed by effluent discharge to the UC Davis Campus Wastewater Treatment Plant (CWTP) or the LTPS. IRA influent and effluent samples are monitored monthly to assess IRA operational efficiency and effluent discharge requirements.

## 0.4. Data Validation

Based on requests to produce the routine monitoring data in a timelier manner, the data validation process was streamlined for groundwater samples. The data validation process for these reports outlined in the Quality Assurance Project Plan (QAPP) was modified to a more streamlined data verification process as outlined in the 2003 Comprehensive Annual Water Monitoring Report (Brown and Caldwell, 2005).

The results of this data verification conducted during 2005 indicated that the data are valid for their intended purpose.

## 0.5. Assessment of Water Monitoring Programs and Recommendations

Based on the findings of the data collected between 1999 to 2005, UC Davis is recommending modifying the monitoring schedule for DDC and LTPS wells. Currently, all DDC and LTPS wells are monitored on a quarterly basis. Based on the body of data collected for the Expanded DDC pilot test (initiated in 2002) and the LTPS (initiated in 2003), it is appropriate to proceed on evaluating these technologies in the Feasibility Study (FS). No additional data is necessary. Both DDC and LTPS have been operating successfully for the past three years. As a result, UC Davis recommends that these wells are monitored on a semi-annual basis.

Another recommendation is to abandon several monitoring wells that have been replaced and are no longer used to monitor groundwater quality samples. These wells include: UCD1-003, UCD1-005, UCD1-006, UCD2-007, UCD1-008, and UCD1-009. The schedule for abandoning these wells is not critical, but should be completed during remedial action.

### 0.5.1. Expanded DDC Pilot Test Program

The expanded DDC pilot test system operated approximately 59 percent of the time during 2005 and removed approximately 28 pounds of chloroform. Since October 2003, chloroform concentrations in the HSU-2 monitoring well, UCD2-48, continues to be less than 5 micrograms per liter (µg/L). These results indicate that the DDC system is effective in minimizing the mass transfer

of chloroform in the source area from HSU-1 to HSU-2 while removing mass. Based on the information presented in this 2005 Comprehensive Annual Water Monitoring Report, UC Davis recommends changing to the DDC System Monitoring Program by:

- Eliminating sampling at TP 1-A, B, and C through TP-5-A, B, and C because sufficient data has been collected from these wells for assessment of the DDC technology. The purpose for which these wells were installed has been achieved.

- Changing the sampling frequency for the DDC wells from quarterly to semi-annual sampling. Sample collection is recommended during the spring and fall quarters.

### 0.5.2. RI/FS Monitoring Program

Consistent with previous data, the primary VOC detected in groundwater samples during 2005 was chloroform. Chloroform was detected in 23 of the 46 wells monitored ranging in concentration from 0.553 µg/L (UCD1-025 in October 2005) to 1,630 µg/L (in DDC well UCD1-51 in August 2005). In addition to chloroform, twelve other VOCs were reported at low concentrations in the chloroform source area.

Given the increased number of wells in the expanded DDC pilot study area and the monitoring wells installed for the groundwater IRA system, UC Davis has sufficient understanding of groundwater conditions at the Site for assessment of applicable remedial actions for UC Davis areas in the FS. Based on the data presented in this 2005 Annual Comprehensive Annual Water Monitoring Report, semi-annual monitoring for all groundwater wells is recommended.

Results from the stormwater and surface water sampling in 2005 were within historical values. Based on the data presented in this 2005 Annual Comprehensive Annual water Monitoring Report, no changes to the stormwater and surface water sampling program is recommended for 2006.

### 0.5.3. IRA Influent/Effluent Monitoring Program

**IRA Treatment System**. In 2005, the groundwater IRA operated approximately 59 percent of the year from May to December removing approximately 7 pounds of chloroform. Maintenance

problems with the air stripper resulted in detections of VOCs in the effluent from April to August. Because the IRA effluent was sent to the CWTP, low levels of VOCs were treated and removed by the CWTP. The groundwater IRA air stripper was repaired in mid-August 2005 and IRA effluent analyses reported non-detectable levels of chloroform from September 2005 through December 2005. No other constituents were present above effluent discharge standards for irrigation with LTPS in 2005. Based on these results, no changes to the IRA influent/effluent monitoring program are recommended.

**LTPS**. Based on a comprehensive evaluation of metals content in IRA effluent applied to the LTPS from 2003 to 2005, combined with soil sample evaluations from 2003 to 2005 (compared to baseline samples collected in 2000), UC Davis recommends that no additional soil monitoring on the LTPS is needed and there is sufficient data to evaluate the technology in the FS.

## 0.6. Reporting

Current reporting for the monitoring program includes quarterly and annual reports. Based on the recommendations provided above, all groundwater, surface water, and stormwater samples are collected semi-annually; therefore, UC Davis recommends one semi-annual monitoring report in place of three quarterly reports. UC Davis proposes that the 2006 Comprehensive Annual Water Monitoring Report include a detailed assessment of each monitoring program and will include a summary of changes to the programs and recommendations for future monitoring. This report including 2006 results will be submitted to the United Stated Environmental Protection Agency (USEPA) by May 1, 2007.

## 0.7. Site Information Sources

For more information about the Site restoration program, you may contact:

| | |
|---|---|
| Jim Aborn - UC Davis | (530) 752-8589 |
| Christine Judal – UC Davis | (530) 752-9591 |
| Vijay Kothari – DOE LM Project Manager | (304) 285-4579 |

Documents relating to the Site investigation and restoration may be found at the following locations:

| | |
|---|---|
| Yolo County Public Library, Davis Branch<br>Reference Desk<br>Davis, California<br>(530) 756-2332 | UC Davis<br>Shields Library<br>(530) 752-6561 |

Additional information is also available on the Internet at: http://ehs.ucdavis.edu/enviro/lehr.html

# SECTION 1
# INTRODUCTION

This report presents the results for the 2005 water monitoring programs conducted at the former Laboratory for Energy-related Health Research facility and South Campus Disposal Site (LEHR/SCDS) (Site). The Site is located at the University of California, Davis (UC Davis) campus (Figure 1). Water monitoring has been conducted at the Site under various programs as described in previous water monitoring reports that have been prepared since 1993. The most recent programs are described in the 2002 Comprehensive Annual Water Monitoring Report (Brown and Caldwell, 2003), and include monitoring of the following components.

- A groundwater treatment system installed as an Interim Removal Action (IRA) at the Site in March 1998 to minimize the offsite migration of volatile organic compounds (VOCs), primarily chloroform. Monitoring for this program followed the requirements listed in the Waste Discharge Requirements (WDRs) (Central Valley California Regional Water Quality Control Board [CVRWQCB], 1997) and later in the Addendum to Statement of Work for Removal Actions and Mitigation/Repair (SOW), by the United States Environmental Protection Agency (USEPA, 2000).

- An overall water monitoring program conducted in support of the Remedial Investigation/Feasibility Study (RI/FS) for the Site that included the requirements issued in the USEPA's Administrative Order on Consent (AOC) No. 99-16 (USEPA, 1999). This monitoring program was largely based on the Water Monitoring Plan (Pacific Northwest Laboratory, 1994), developed for the United States Department of Energy (DOE).

- A second in-situ groundwater treatment system targeting VOCs in shallow groundwater near the VOC source was proposed (URS, 2002) approved by the remedial project managers (RPMs) and later expanded (Brown and Caldwell, 2002). This in-situ treatment system utilizes density-driven convection (DDC) wells to treat VOCs in groundwater and to prevent the downward migration of chloroform from hydrostratigraphic unit (HSU)-1 to the underlying more permeable HSU-2.

A monitoring program focused on documenting the performance of the DDC system was also developed.

This 2005 Comprehensive Annual Water Monitoring Report (Annual Report) is intended to meet the requirements of the monitoring programs outlined in the 2002 Comprehensive Annual Water Monitoring Report (Brown and Caldwell, 2003). The sampling programs are also intended to meet the requirements of the monitoring programs outlined in the AOC No. 99-16.

With the exception of the data validation process discussed in Section 4.1, sampling and analytical procedures for all elements were performed in accordance with the Final Revised Field Sampling Plan (FSP) (Dames & Moore, 1998a) and the Final Revised Quality Assurance Project Plan (QAPP) (Dames & Moore, 1998b).

## 1.1. Project Overview

The Site is located in Solano County, California, approximately 1.5 miles south of the main UC Davis campus and the City of Davis (Figure 1). The Site encompasses approximately 15 acres and is bounded by UC Davis research and agricultural facilities, private farmland, and the South Fork of Putah Creek. The Site includes active research facilities and offices. It also includes former landfills, subsurface disposal areas, and waste treatment systems, which are the focus of the LEHR/SCDS investigative and remediation programs.

Responsibility for investigation and remediation of the Site is divided between the DOE and UC Davis by investigation area (Figure 2). As documented in the June 1997 Memorandum of Agreement, UC Davis has taken the lead role in groundwater investigation and remediation. UC Davis operates and monitors the groundwater IRA treatment system, which began full-scale operation on May 11, 1998. UC Davis is also responsible for the quarterly groundwater monitoring. UC Davis performs seasonal stormwater and surface water monitoring for UC Davis areas. DOE is responsible for monitoring stormwater discharges from its areas of the Site. As discussed in the SOW, there are six primary groundwater constituents of concern (COCs) for the Site: VOCs (primarily chloroform), total chromium, nitrate as nitrogen, total dissolved solids (TDS), and the radionuclides tritium and carbon-14.

## 1.2. Purpose and Objectives

The purpose of this 2005 Annual Report is to present a detailed assessment of the monitoring programs identified previously, including a summary of changes to the programs, if any. The goals for monitoring of each of these programs were outlined in the 2003 Comprehensive Annual Water Monitoring Report (Brown and Caldwell, 2005). The specific objective of groundwater monitoring for the RI/FS is to assess if unexpected changes in groundwater occurred that warrant changes to the program. The objective of the IRA groundwater treatment system is to minimize the offsite migration of VOCs, primarily chloroform and to monitor effluent discharge. When the IRA discharges treated water to the LTPS for irrigation, the LTPS is monitored to assess potential impacts from using IRA effluent as irrigation water to the underlying soil and shallow groundwater system, as identified in AOC No. 99-16.

The monitoring system developed for the combined RI/FS and IRA Water Monitoring Programs was designed to answer the questions below.

- Is the IRA system continuing to minimize the offsite migration of VOCs?
- Does IRA effluent comply with discharge requirements identified in the SOW?
- Have unexpected changes in Site groundwater, stormwater or surface water occurred that warrant changes to the Site monitoring program?
- Is the expanded DDC pilot system continuing to remove VOC mass?
- What is the impact of the Expanded DDC system on transfer of VOCs from shallow groundwater to deeper units?

An additional question was added to assess preparation for the FS:

- Has sufficient data been collected from pilot studies (expanded DDC system and LTPS) and the IRA to assess effectiveness of these technologies in the feasibility study?

## 1.3. Organization of Report

This report is organized as indicated as follows:

- Section 0 of this report is the Executive Summary.
- Section 1 is the introduction, including a project overview and descriptions of the purposes and approach to the 2005 Annual Report.
- Section 2 presents the hydrogeological setting of the Site.
- Section 3 provides a discussion of treatment systems and water monitoring programs conducted during 2005.
- Section 4 contains presents the data collected during 2005.
- Section 5 includes a discussion of the results and assessment of the monitoring programs.
- Section 6 provides recommendations for 2006.
- Section 7 includes references.

# SECTION 2
# HYDROGEOLOGY

The hydrogeology in the vicinity of the Site was updated in the 2002 Comprehensive Annual Water Monitoring Report (Brown and Caldwell, 2003) and included information from recently completed monitoring activities as well as previous Site data. This section summarizes the hydrogeology at the Site as presented in the 2004 Comprehensive Annual Water Monitoring Report (Brown and Caldwell, 2005). Gradient and groundwater flow conditions from 2005 are discussed in Section 4.4.

## 2.1. Regional Setting

The Site and surrounding area are located on the geomorphic unit termed "low-alluvial plains and fans" (California Department of Water Resources (DWR), 1978), specifically the Putah Plain. This surface represents distal portions of alluvial fan deposits associated with Putah Creek that are referred to as the Putah Creek Fan (Mann, 1992). Sediments that form these alluvial fan deposits consist primarily of silts and clays with coarse-grained sediments occurring locally. The Putah Creek Fan was formed by a creek that changed course many times throughout this area. The sands and gravels were deposited during high velocity flows at times of floods. Outside the ribbon-like strips of coarse channel deposits, lower velocity waters deposited silts and clays. The age of these deposits range from late Pleistocene to recent. The thickness of the alluvial fan deposits is reported to be between 140 feet (Mann, 1992) and 180 feet (DWR, 1978).

Underlying the Putah Creek Fan is the Plio-Pleistocene Tehama Formation that was eroded prior to the deposition of the overlying alluvial material (Mann, 1992). The Tehama Formation consists of fine-grained sands and silts with discontinuous lenses of coarse sand and gravels. This unit is thought to be coeval with the Laguna Formation located on the east-side of the Sacramento Valley.

## 2.2. Site Stratigraphy

The subsurface stratigraphy for the Site is described from the geologic well logs, cone penetrometer test (CPT) logs, and the transient electromagnetic (TEM) survey performed at the Site in 1995

(Dames & Moore, 1995). Copies of the geologic boring and CPT logs have been presented in several reports, most of which are in the Phase II Site Characterization Report (Dames & Moore, 1993). The maximum depth penetrated during the drilling of soil borings is 265 feet below mean sea level (msl) (310 feet below ground surface [bgs]) in the soil boring drilled for monitoring well UCD4-033. The maximum depth resolved during the TEM survey was approximately 350 feet below msl at several sounding points.

Figure 3 represents a hydrostratigraphic cross-section constructed using the geologic well logs and TEM sounding points. A summary of the stratigraphy is presented in the following paragraphs.

Both the Putah Creek Fan and Tehama Formations were observed within soil borings and the TEM points completed at the Site. Table 1 summarizes the thickness of these units (as well as designated hydrostratigraphic units, see Section 2.3) as observed during drilling and completion of the TEM survey. The surface unit identified at all soil boring and TEM points is the Putah Creek Fan. Thirteen soil borings and 35 TEM points fully penetrated this unit. At these locations, the Putah Creek Fan ranges in thickness from 67 feet (TEM-17) to 205 feet (TEM-29) and is composed of two units:

- an upper unit consisting of interbedded silts, clays, fine sands, and some coarse sand and gravel deposits; and,
- a lower unit consisting predominantly of coarse sands and gravels.

Where fully penetrated, the upper unit ranged in thickness from 47 feet (TEM-17) to 124 feet (TEM-29) and the lower unit ranged in thickness from 20 feet (UCD4-47, TEM-14, TEM-17) to 81 feet (TEM-29).

Directly underlying the Putah Creek Fan is the Tehama Formation. As shown on the hydrostratigraphic cross section (Figure 3), the depth to the contact between these two formations varies across the site (see Table 1) consistent with the erosion of the Tehama formation from stream channels during the depositional period of the Putah Creek Fan.

The Tehama Formation was only partially penetrated by 13 soil borings and 35 TEM points. Depth of penetration ranged from 0.5 feet (UCD2-40) to 279 feet (TEM-17). The maximum thickness penetrated during drilling of soil borings was 196 feet (310 bgs) for the soil boring completed at UCD4-33. Three units were recognized within the Tehama Formation:

- an upper unit consisting of clays and silts with some small lenses of sand and gravel;
- an intermediate unit consisting of sands and gravel with silt and clay; and
- a lower unit consisting of clay and silt.

Where fully penetrated, the upper unit ranges in thickness from 47 feet (TEM-21) to 236 feet (TEM-17) and the intermediate unit ranges in thickness from 27 feet (UCD4-41) to 106 feet (TEM-18). Of the five soil borings that penetrated these two units, the upper unit ranges in thickness from 119 feet (UCD4-44) to 147 feet (UCD4-41) and the intermediate unit ranges in thickness from 27 feet (UCD4-41) to greater than 52 feet (UCD4-33). The lower unit has only been partially penetrated ranging in depth from 5 feet (UCD4-47) to 49 feet (TEM-25).

## 2.3. Site Hydrogeology

Five hydrostratigraphic units have been defined at the Site based on drilling and geophysical surveys completed since 1987. In descending order, the units are HSU-1, HSU-2, HSU-3, HSU-4, and an unnamed aquitard. For the purposes of this report, the unsaturated material (vadose zone) from the surface to first encountered groundwater is included in HSU-1.

HSU-1 and HSU-2 form the upper and lower units, respectively, of the Putah Creek Fan and HSU-3, HSU-4, and the unnamed aquitard form the upper, intermediate, and lower units, respectively, of the Tehama Formation (Figure 3). Sub-units within each of these units were distinguished based on relative permeabilities. These sub-units, from lower to higher permeabilities, are as follows:

- clayey silts to silty clays;
- silt with some sand and clay;
- fine grained silty sand;
- fine to coarse grained sand; and
- coarse grained sandy gravel.

HSU-2 and HSU-4 are composed of the coarser gravel deposits and represent aquifers that are used as a source of water in the vicinity of the LEHR site. As reported by Mann, the lower unit of the Putah Creek Fan (HSU-2) is very permeable whereby wells completed in this unit have high specific capacities (Mann, 1992). The average hydraulic conductivity (K) value calculated for this unit from the constant rate pumping test conducted prior to startup of the IRA (Dames & Moore, 1997b) is $1.2 \times 10^{2}$ feet per second (ft/s), consistent with a coarse sand to gravel unit. Mann (1992) also reported that wells in the area completed within the gravel unit of the Tehama Formation (HSU-4) have lower specific capacities than those completed within HSU-2.

In contrast with the HSU-2 and HSU-4 coarse material, HSU-1, HSU-3, and the unnamed aquitard are composed predominantly of fined grained silts and clays. Several wells have been completed within HSU-1, all of which indicate low permeabilities as demonstrated by low flow rates during purging. The results of a constant rate pumping test within this unit (Dames & Moore, 1999a) calculated a K value between $3.25 \times 10^{-5}$ ft/s to $3.81 \times 10^{-5}$ ft/s. These K values are consistent with a silt to sandy silt unit. Using these K values, the average gradient value for HSU-1 (0.006 feet/feet) and assuming an effective porosity of 0.25, the average seepage velocity for HSU-1 ranges from 0.078 feet per day (28 feet per year) to 0.091 feet per day (33 feet per year).

HSU-3 directly underlies HSU-2 and represents a thick sequence of silts and clays within the Tehama Formation separating the HSU-2 aquifer from the HSU-4 aquifer. Samples of these materials collected during the drilling of soil borings at the Site indicated that the moisture content of these materials was lower than the plastic limit. This condition supports a very low permeability of this unit and strongly suggests that HSU-2 and HSU-4 are not hydraulically connected. It is also important to emphasize that the contact between HSU-2 and HSU-3 is an erosional contact between the Putah Creek Fan and Tehama Formation. As such, the gravel unit of HSU-2 does not interfinger with units of the underlying HSU-3 material that, if present, could create potential migration pathways. Although HSU-3 does contain small zones of sand and gravel, as shown on Figure 3, these materials are highly localized and discontinuous. A more detailed discussion of vertical gradients and the lack of hydraulic connection between HSU-2 and HSU-4 is presented in Section 4.4.2. The clays and silt of the unnamed aquitard below HSU-4 are similar in appearance to those in HSU-3.

# SECTION 3
# 2005 WATER MONITORING PROGRAMS

This section describes monitoring activities conducted during 2005. The current water monitoring program is presented in Table 2. Table 3 lists the analytical parameters and associated methods used for all groundwater monitoring. Results of the 2005 monitoring programs are discussed in Section 4.0.

All water and soil samples are shipped by overnight delivery to General Engineering Laboratories in Charleston, South Carolina. Immediately upon receipt of the sample shipment, the laboratory documented the condition of the sample containers on the chain-of-custody forms and acknowledged receipt by faxing a copy of the chain-of-custody form to the task manager. Surface water and stormwater bioassay samples are analyzed by Block Environmental Services.

In the 2001 Annual Groundwater Treatment System and Water Monitoring Report (URS, 2002), UC Davis recommended several changes to the overall water monitoring program which were approved by the USEPA during the July 2002 RPM meeting. The overall water monitoring program was subdivided into three programs that continued to monitor:

- the expanded DDC pilot test program;
- the Site-wide groundwater program, including monitoring wells installed for the RI/FS and groundwater IRA; and
- the LTPS, which includes monitoring the IRA influent, IRA effluent, soil from the land application of treated IRA effluent or selected RI/FS groundwater wells nearby the injection of treated IRA effluent.

Minor changes were recommended to this program in the 2002 Comprehensive Annual Water Monitoring Report (Brown and Caldwell, 2003). These changes were approved by the USEPA during the October 2003 RPM meetings following the fourth quarter sampling round. The modified monitoring program was initiated during the first quarter 2004 sampling round. The changes are described below:

- To further assess the reduction of chloroform mass within hydrostratigraphic unit 2 (HSU-2; see Section 2 for discussion of HSUs) reaching the area of the IRA extraction system, sampling of VOCs in monitoring well UCD2-029 was changed from semi-annual monitoring to quarterly monitoring.

- As requested by the CVRWQCB, monitoring wells UCD1-001, UCD1-004, UCD1-010, UCD1-012, UCD1-013, UCD1-018, UCD1-019, UCD1-020, UCD1-022, UCD1-023, UCD1-024, and UCD1-025 were sampled for six Site COCs (VOCs [primarily chloroform], total chromium, nitrate as nitrogen, TDS, and the radionuclides tritium and carbon-14) for one year to establish present water quality conditions and seasonal variations in HSU-1 prior to initiating the Feasibility Study (FS).

- The data validation process for groundwater and surface water/stormwater samples collected on an on-going basis was modified to a more streamlined data verification process (see Section 4 for detailed discussion of change).

## 3.1. Expanded DDC Pilot Test Program

A detailed discussion of the initial proposed monitoring program for the expanded phase of the DDC pilot test is presented in the approved Work Plan (Brown and Caldwell, 2002). For 2005, this monitoring program was continued on a quarterly basis. The continued monitoring of this system in 2005 was conducted to further assess the following:

- the extent of the circulation cell developed by each well individually and in combination;
- how the system affects the migration of chloroform from HSU-1 to the underlying more permeable HSU-2; and
- the effectiveness of the system in removing chloroform from HSU-1.

Prior to construction of the expanded system, the DDC pilot test system consisted of one DDC well treating HSU-1 groundwater in three zones (DDC-1A, B, and C), five nested piezometers monitoring the operation and maintenance of the DDC wells (TP-1A, B, and C through TP-5A, B,

and C) and existing HSU-1 monitoring well UCD1-12. The expanded system was installed between August 2002 and December 2002. The expanded system included five new DDC wells treating HSU-1 groundwater for three zones each (DDC-2A, B, and C through DDC-6A, B, and C), three new HSU-1 monitoring wells (UCD1-49 through UCD1-51) and one new HSU-2 well (UCD2-48). Table 4 presents well construction details and Figure 4 shows the location of the monitoring points for the expanded DDC pilot test system.

The expanded system began operation on December 5, 2002, and is currently being monitored quarterly. Samples were collected from the DDC wells, UCD1-12, UCD2-48, UCD1-49, UCD1-50 and UCD1-51 and each of the piezometers, TP-1 through TP-5 (A-zone piezometers were dry and not sampled) and submitted for analyses of VOCs. To assess the soil vapor extraction potential of the DDC system, air samples are collected quarterly from the combined air flow of all six nested DDC wells and submitted to Air Toxics Laboratory of Rancho Cordova, California, for analysis of VOCs.

In 2005, the expanded DDC pilot test system operated approximately 59 percent of the time. Extended periods of system shutdowns occurred in June, August, September, and October due to acid drip system malfunctioning and the air compressor overheating. At other times during the year, temporary shutdowns of the system occurred to conduct maintenance of the system such as refitting air lines and regular maintenance of the air compressor.

## 3.2. RI/FS Monitoring Program

In 2005, RI/FS water monitoring activities focused on groundwater, stormwater, and surface water monitoring and groundwater monitoring associated with the IRA operation. A summary of the water monitoring programs for groundwater, stormwater runoff and surface water are summarized in Table 2. Monitoring for all of these media is described below.

### 3.2.1. RI/FS Groundwater Monitoring

Of the 46 wells used in this program, 22 are completed within HSU-1, 19 are completed within HSU-2, and five are completed within HSU-4. Groundwater levels are collected quarterly from 54 wells at the Site including the IRA extraction well EW2-1 and injection well IW2-1. Groundwater elevations are used to calculate gradients and estimate groundwater flow conditions. Table 4 presents monitoring well construction details and Figure 4 illustrates the well locations.

### 3.2.2. Stormwater Monitoring

The 2005 stormwater monitoring program consisted of three monitoring locations designated LF-1, LF-3, and LS-1. Stormwater samples are collected twice yearly: one sample is collected early in the rainy season (October through December) and the second sample is collected later, usually January through April. Locations LF-1 and LF-3 monitor stormwater discharges from UC Davis areas and are sampled by UC Davis, while the LS-1 location is sampled by DOE. Figures 4 and 5 shows the locations of these sampling points and Table 2 presents the specific analytes tested from each location.

The three sampling locations represent different portions of the Site and drain areas of varying sizes and surface conditions. For example, most of the area that drains to LS-1 is paved with asphalt, while LF-1 and LF-3 represent dirt areas. Thus, a discharge can occur at each area at different times in the rainy season or during different storm events. A discussion of stormwater sampling for 2005 is provided below.

Prior to 2001, stormwater samples were filtered prior to laboratory analysis. In 2005, raw, unfiltered stormwater samples were collected to assess potential water quality impact of suspended solids on stormwater samples.

- In 2005, UC Davis observed conditions at LF-1 and LF-3 on at least 17 different days during storm events. On January 11, 2005 and December 28, 2005 samples were collected from location LF-1; however, there was no discharge from LF-3 on January 11, 2005.

- The discharge location at LF-3 drains a much smaller area than LF-1 and observations over time have shown that under most storm conditions, rainfall in this area tends to pond and infiltrate into the soil rather than produce a discharge.

- DOE collected samples at LS-1 on March 22, 2005 and December 1, 2005.

### 3.2.3. Surface Water Monitoring

The 2005 surface water monitoring program consisted of collecting samples from three locations along the South Fork of Putah Creek which flows west to east just south of the Site. These locations are shown on Figures 4 and 5 and are designated Putah Creek upstream sampling location (PCU), Putah Creek downstream sampling location (PCD), and UC Davis sewage treatment plant outfall sampling location (STPO). In 1998, the surface water monitoring program was changed to semi-annual to coordinate monitoring for both stormwater and surface water since the only way the Site could affect surface water is through discharge of stormwater.

The current program is intended to assess surface water quality and potential impacts upstream and downstream from Site stormwater. On days when stormwater runoff is occurring, stormwater is collected first and surface water samples are collected soon after, or the next day if stormwater was collected late in the day. Table 2 presents the specific analytes tested for each surface water location.

Prior to 2001, surface water samples were filtered prior to laboratory analysis. In 2005, raw, unfiltered surface water samples were collected to assess potential water quality impact of suspended solids in both upstream surface water and from Site stormwater runoff.

## 3.3. IRA Influent/Effluent Monitoring Program

As outlined in the 2003 Comprehensive Annual Water Monitoring Report (Brown and Caldwell, 2005), the IRA monitoring program for 2005 consisted of assessing treatment system operations, IRA performance, compliance with discharge standards and evaluating potential impacts on LTPS

soil and groundwater. A description of the 2005 IRA monitoring programs is provided in the following sections.

### 3.3.1. IRA Monitoring

The IRA treatment system monitoring program is designed to confirm that extracted groundwater is treated to remove VOCs and that effluent meets discharge standards for injection into HSU-2 groundwater and discharge standards. Injection into HSU-2 was discontinued in 2005 due to unsuccessful attempts to rehabilitate injection well IW2-1. In May 2005, the IRA effluent was diverted to the UC Davis Campus Wastewater Treatment Plant (CWTP).

During 2005, IRA treatment plant influent and effluent was sampled monthly, when operating. Effluent discharge standards and monitoring parameters are listed in Table 5, and include VOCs, TDS, radionuclides (tritium and carbon-14), metals and general chemical parameters (i.e., nitrate as nitrogen, TDS).

### 3.3.2. LTPS Monitoring

LTPS monitoring documents the volume and quality of treated IRA effluent used on the LTPS. LTPS monitoring also provides an assessment of soil and groundwater conditions within and beneath the LTPS surface. The purpose of LTPS monitoring is to evaluate if IRA effluent is being managed effectively and used beneficially for pasture irrigation without deleterious affects on soil or groundwater beneath the LTPS.

The volume of the water is recorded by automatic totalizing flow meters that are recorded every two weeks. IRA influent and effluent samples are collected monthly and analyzed for all regulated organic, inorganic and radionuclide constituents. In addition to effluent monitoring, composite soil samples are collected at 1, 3, and 5 feet bgs then tested for metals and other nutrient parameters. Selected groundwater wells upgradient and within the LTPS area for Site constituents.

# SECTION 4
# RESULTS

This section presents the analytical results of sampling and operational data collected for the 2005 water monitoring programs discussed in Section 3.0. Complete tables of the analytical data collected during 2005 are provided in Appendix A through Appendix F. For ease of review for the specific treatment systems, Appendix A contains groundwater and soil vapor data from the DDC monitoring program, Appendix B includes operation logs for the IRA treatment plant, Appendix C contains the analytical results for the IRA treatment system influent and effluent monitoring, and Appendix D presents the analytical results for the LTPS soil and groundwater monitoring program. Surface water and stormwater data can be found in Appendix E. The combined groundwater data from all of the programs, including the DDC system and the LTPS system, is included in Appendix F. The analytical laboratory reports are maintained in the UC Davis project files.

## 4.1. Data Quality Assessment

This section describes the process and the results of a data quality assessment performed for all the data collected in 2005.

The quality assurance/quality control (QA/QC) procedures conducted by the analytical laboratory for sample analysis are discussed in the QAPP (Dames & Moore, 1998b). The laboratory is required to submit laboratory reports in both electronic and hardcopy formats. The electronic format is consistent with the project's electronic data deliverable format. The electronic data is then loaded into a Microsoft SQL Server database. Database verification reports are generated and compared to the laboratory hardcopy reports to confirm that results in the database match the laboratory hardcopy report.

### 4.1.1. Quality Assurance Objectives

Quality assurance objectives are the broad goals for data collection and review. The following quality assurance objectives are described below: precision, accuracy, representativeness, completeness, and comparability (PARCC).

- **Precision (P)**: Precision is defined as the degree of reproducibility of the measurements under a given set of conditions. Precision is documented on the basis of replicate/duplicate analyses: usually laboratory duplicate, laboratory control sample duplicates or matrix spike duplicates.

- **Accuracy (A):** Accuracy is defined as the bias in a measurement system. Accuracy is documented on the basis of recovery of surrogates, laboratory control samples, and matrix spikes.

- **Representativeness (R):** Representativeness is defined as the degree to which data represent a characteristic of a set of samples. The representativeness of the analytical data is a function of the procedures and carefulness used in procuring and processing the samples. The representativeness can be documented by the relative percent difference between separately procured, but otherwise identical sample aliquots.

- **Completeness (C):** The completeness objective for an analysis is to provide sufficient data of the acceptable quality such that the goals of the analytical project can be achieved. The overall project completeness is expressed as the percentage of planned data that is usable for its intended purpose.

- **Comparability (C):** The comparability objective is to provide analytical data for which the accuracy, precision, representativeness, completeness and detection limit are similar to these quality indicators for data generated by other laboratories for similar samples. The comparability objectives is documented by inter-laboratory studies carried out by regulatory agencies or carried out for specific projects or contracts; and by comparison of periodically generated statements of accuracy, precision and detection limits with those of other laboratories.

These PARCC data quality objectives were evaluated during the data review process. The process of data review also included a completeness check to ensure that all data has been properly loaded into the database that will be used for report generation. Data that failed to meet the data quality assurance objectives for the project have been qualified as to usability and potential low or high bias during the review process. Data was reviewed against the project specific limits provided in the QAPP. Data review followed the basic guidance provided in the National Functional Guidelines for Data Review (http://www.epa.gov/superfund/programs/clp/guidance.htm) unless the QAPP or other project specific document specified otherwise.

### 4.1.2. Field Quality Control Samples

Quality control samples collected during the year included trip blanks, equipment blanks and field duplicates. These samples were only collected during water sampling events.

- **Trip Blanks:** Trip blanks are used to evaluate representativeness by identifying any volatile organic compounds that may have been introduced to the samples during shipment, handling, or storage on site and at the laboratory. The trip blanks are laboratory certified clean water samples that are shipped to the field and then shipped back to the laboratory, and are never opened in the field. In 2005, there were 36 trip blanks collected for the 259 regular water samples, which is about 14 percent.

- **Equipment Blanks:** Equipment blanks are used to evaluate representativeness by identifying any potential contamination from field procedures or insufficient decontamination. Equipment blanks were prepared in the field (after decontamination of sampling equipment was complete) by collecting the final rinse water. There were four equipment blanks collected throughout the year.

- **Field Duplicates:** Field duplicates are two samples collected at the same time from the same location, and which are submitted to the laboratory as separate samples (i.e., "blind" duplicates). Field duplicate samples can be used to assess the heterogeneity of compounds within the sample matrix and the consistency of the overall sampling effort, including collection, shipping, and analysis; the purpose of submitting them "blind" is to assess the consistency or precision of the

laboratory's analytical system. Field duplicate samples were analyzed for the same parameters as the corresponding primary sample. For the 259 regular water samples, 30 field duplicates were collected, which is about 12 percent.

### 4.1.3. Data Review Procedures

As part of the presentation of analytical results, it is important to inform the data users of any results that failed to meet the project's Data Quality Objectives (DQOs). Laboratory data for this project was assessed through internal verification. Laboratory results that met all the DQOs have been accepted without qualification. Results associated with quality control (QC) parameters that did not meet objectives have been qualified as estimated (J flagged) or rejected as unusable for any purpose (R flagged). Data qualified as estimated is considered usable for its intended purpose. However, the data user should be aware that the reported result may not be accurate or precise. Internal data verification was based on the same QA/QC parameters as data validation, except that raw data record reviews and recalculation of results from the raw data were not performed during verification. Verification was performed internally on the total amount of data produced. The components of data verification are presented in Table 6.

During the evaluation of the data, qualifiers were assigned, if necessary. The valid data qualifiers that were added to the data when necessary are defined below.

- **U** – Analyte not detected at the detection limit concentration.
- **J** – Reported value is an estimated concentration.
- **UJ** – Analyte not detected at an estimated detection limit concentration.
- **R** – This data was rejected and was not used for any purposes.
- **UR** – The analyte was not detected. The detection limit is unreliable and may be representative of a false negative. This data was rejected and is not usable for any purpose.

## 4.2. Data Quality Summary and Analytical Completeness

Individual analytical results were qualified during the data verification procedures. The percentage of results that are qualified as estimated or rejected due to QC deficiencies is an indication of the overall data quality for a given analytical method.

**Water Samples.** The following issues described below affected the general quality of the water data.

- **Holding Time Violations:** 743 anion and VOC results were qualified as estimated, due to exceeded holding times.

- **Low Surrogate Recovery:** 124 pesticide and VOC results were qualified as estimated with a low bias, due to low surrogate recoveries.

- **Field Blank Contamination:** 101 VOC results were qualified as not detected with an estimated detection limit, due to the presence of these analytes in associated trip or equipment blanks.

- **Method Blank Contamination:** 72 results (mostly metals) were qualified as not detected with an estimated detection limit, due to the presence of these compounds in associated method blanks.

- **Other Issues:** There was one TDS result (141 milligrams per liter (mg/L) on 8/11/2005) for location TP-2B that was rejected. This result was way below expected levels (normally between 1,000 mg/L to 2,000 mg/L), which suggests that the sample could have been switched. The electrical conductivity value of 2,300 micromhos per centimeter measured from the same water sample is comparable with historical TDS values. The lab confirmed the low TDS value. So based on previous TDS results for this well supported by the electrical conductivity measurement collected from the 8/11/2005 sample, the 8/11/2005 TDS value was rejected.

Table 7 provides a summary of the number of results that were qualified by method. Overall, the water data is of good quality. Only one result was rejected, and only about 8 percent of the data is qualified as estimated.

**Soil Samples**

The following issues described below affected the general quality of the soil data.

- **Low Matrix Spike Recovery:** A total of seven records were qualified as estimated with a low bias, due to low matrix spike recoveries.

Table 8 provides a summary of the number of results that were qualified by method.

Overall, the soil data is of good quality. None of the data were rejected, and only about 2 percent of the data is qualified as estimated.

**Air Samples**

The following issues described below affected the general quality of the air data.

- **Low Laboratory Control Sample (LCS) Recovery:** 6 results were qualified as estimated with a low bias due to low LCS recoveries.

- **Lab Replicate Precision:** 2 results were qualified as estimated, due to lab replicate precision outside the limits.

Table 9 provides a summary of the number of results that were qualified by method.

Overall, the air data is of good quality. None of the data were rejected, and only about 6 percent of the data is qualified as estimated.

The results of this verification indicate that the data are valid for their intended purpose.

## 4.3. Expanded DDC Pilot Test Program Operations and Results

During 2005, four quarterly groundwater monitoring events were conducted to assess the performance of the expanded DDC pilot test program in January, April, August, and October 2005. A summary of the chloroform results collected for each of the sampling rounds is presented in Table 10. Complete analytical results for the DDC system are included in Appendix C.

### 4.3.1. DDC Operations

The DDC operations summaries for 2005 are presented in Tables 11 and 12. The expanded DDC pilot test system operated approximately 59 percent of the time during 2005 (Table 11). Operations monitoring for the DDC system consisted of air monitoring from all operating DDC wells, water levels collected from the piezometers attached to each DDC well, and VOC testing conducted for water samples collected from each of the operating DDC wells. Appendix A presents the VOC analytical results for samples collected from the DDC piezometers.

An estimate of the chloroform mass removed is calculated by using chloroform concentrations and water level measurements from the DDC C-zone piezometers both during operation and when the system is shut down. As discussed in the System Summary Report (Brown and Caldwell, 2005), the DDC well is in effect an air-lift recirculating well whereby water from the lower screen (C zone) is extracted and injected into the upper screen (A zone or B zone). Therefore, the difference in the C zone water level when the DDC well is off versus when it is operating represents the drawdown during pumping. This value combined with the difference in chloroform concentrations between the B zone and C zone piezometers and the specific capacity (units of gallons per minute [gpm] per foot of drawdown) for HSU-1 obtained during a pumping test on UCD1-12 (Dames & Moore, 1999b) can be used to estimate the chloroform mass removed. The calculations for this mass removal for 2005 are presented in Table 11. An estimated 28.1 pounds of chloroform were removed (Table 11).

### 4.3.2. DDC Monitoring Results

The effectiveness of the DDC system in reducing groundwater VOC concentrations is monitored by sampling the five nested piezometers, TP-1 through TP-5, HSU-1 wells UCD1-12 and UCD1-49 through UCD1-51, and HSU-2 well UCD2-48. Groundwater samples were submitted for analysis of VOCs. Table 12 presents the sampling results of detected VOCs from the DDC system monitoring during 2005. Chloroform was reported in all samples collected from the DDC monitoring system ranging from 0.767 micrograms per liter (µg/L) (UCD2-48 in June 2005) to 1,690 µg/L (TP-3C in January 2005). A total of 11 other VOCs were also detected at lower levels, including 1,1,2-trichloroethane (1,1,2-TCA), 1,1-dichloroethane (1,1-DCA), 1,1-dichloroethene (1,1-DCE), 1,2-dichloeoethane (1,2-DCA), 1,2-dichloropropane (1,2-DCP), acetone, chloromethane, methyl ethyl ketone (MEK), methylene chloride, tetrachloroethylene (PCE), and trichloroethylene (TCE). Complete analytical results for the DDC system are included in Appendix A.

## 4.4. IRA Influent/Effluent Monitoring Results

Data collected for the groundwater IRA system includes 2005 operation data, IRA influent and effluent water quality monitoring results, and LTPS soil monitoring results. Each of these data sets is described below.

### 4.4.1. Groundwater IRA Operations

The IRA Operations Summary for 2005 is presented in Table 13 and detailed operations logs are provided in Appendix B. The influent and effluent monitoring results are presented in Appendix C and Figure C-1 shows influent and effluent sampling locations. A summary of the monthly 2005 IRA extraction rate and effluent chloroform concentrations are presented in Table 13.

In 2005, the IRA operated approximately 59 percent of the time, removing approximately 7 pounds of chloroform, using both discharge to the CWTP and irrigation through the LTPS. The IRA was shutdown most of January 2005 and all of February 2005 through April 2005 due to a reduced injection capacity of IW2-01. Unsuccessful attempts were performed in late 2004 to unclog the well screen and restore the injection well capacity.

A high influent tank level caused a shutdown of the IRA system in November 2005. Groundwater from the extraction well is stored in the influent tank prior to being treated by the tray air stripper. Precipitated minerals can build up within the tray air stripper, clogging the air holes in the trays. This clogging results in reducing the flow rate through the tray air stripper, causing the water level in the influent tank to rise and trigger the high tank level alarm.

Other IRA system shutdowns that occurred during 2005 were caused by power failures, repair of intake screen, high air stripper sump level, and routine maintenance.

### 4.4.2. Groundwater IRA Influent/Effluent Monitoring

During 2005, monthly influent and effluent samples were collected while the IRA system was in operation (May through December, with the exception of November). Collection of the November 2005 sample was missed during a transition in collection staff from UC Davis to Brown and Caldwell. The complete analytical results of influent and effluent water quality monitoring are presented in Appendix C.

**IRA Effluent Compliance with Discharge Standards for Irrigation.** All IRA influent and effluent analytical monitoring data for 2005 are presented in Appendix C. Effluent met discharge standards for land treatment during 2005 with the following exceptions (also summarized in Table 13).

- **Acetone and MEK**– Acetone and MEK were reported in the IRA effluent samples collected in September 2005 at concentrations of 5.22 μg/L and 1.13 μg/L, respectively. Both of these compounds were also reported in the July 2005 and August 2005 influent samples but not in September 2005. The air stripper removes these volatile compounds so the absence of these volatile compounds in the July 2005 effluent is understandable. However, the presence of these compounds in the effluent in August and September, especially when influent in September did not report these compounds, makes the presence of acetone and MEK suspect.

- **Chloroform**– Chloroform was reported at 1.8 μg/L to 2.8 μg/L in effluent samples for May 2005 through August 2005, above the LTPS effluent discharge standard of <0.5 ug/L. These detections of chloroform are the result of an air stripper reservoir that ran dry during the extended shutdown period and was not detected until early August, after the August effluent sample was collected. After the air stripper was adjusted, September 2005 IRA effluent samples did not report any detectable chloroform.

### 4.4.3. LTPS Operations

As illustrated in Table 13, the monthly irrigation volume varied from 29,830 gallons to 611,158 gallons per month from May 2005 to December 2005, with the maximum irrigation rate taking place in July 2005. This application rate is equivalent to approximately 1 to 1.8 inches per acre per week from May 2005 to September 2005, consistent with previous year's irrigation rates.

### 4.4.4. LTPS Soil Analytical Results

To assess any potential deleterious affects of IRA effluent on LTPS soil quality, UC Davis has implemented a soil monitoring program for the LTPS since 2000. As described in more detail in the Land Treatment Pilot Study Work Plan (LTPS Work Plan) (Montgomery Watson, 2000), UC Davis sampled and analyzed a comprehensive list of analytes in soil prior to and following application of treated IRA effluent irrigation water. The baseline soil data was collected in 2000 and the same soil sample locations were resampled following startup of the LTPS in 2003, with samples collected in late 2003, 2004 and 2005.

**2005 LTPS Soils Results.** In December 2005, six composite soil samples were collected from the same LTPS baseline locations sampled prior to irrigation in October 2000. These samples were collected to evaluate the effect of the discharged IRA groundwater on LTPS soil quality. As proposed in the LTPS Work Plan (Montgomery Watson, 2000), composite soil samples were collected from 1 feet bgs, 3 feet bgs and 5 feet bgs at the locations shown on Figure 6 with hand auger equipment. No sample was obtained from SBL-300 at 5 feet bgs, because a buried concrete water line was encountered at approximately 4 feet bgs. All LTPS soil samples were analyzed for

metals, pH, salts, and total organic carbon (TOC). The average analytical results for these soil samples are summarized in Table 14, with the complete data for all samples provided in Appendix D.

Table 14 presents the results of statistical tests between the 2005 results compared to the baseline data collected in October 2000, prior to LTPS irrigation. Table 14 also presents the average, the upper 95 percent confidence limit (UCL) concentrations in addition to parametric ("t-test") and non-parametric ("sign test") statistical comparisons between the 2005 and the 2000 data. The purpose of statistical comparisons is to evaluate significant changes in LTPS soil metals, salts and organic analytes resulting from IRA effluent used as irrigation water between 2000 and 2005.

There were no statistically significant changes in 2005 for arsenic, cadmium, chromium, or selenium at 1, 3 or 5 feet bgs contrary to previous years (Table 14). Metals that had shown no increase in 2003 – 2004 samples did indicate a slight but significant increased concentration in 2005 results at one or more sampling intervals. These metals included barium, copper, nickel (which decreased in 2004) and lead. Zinc, a common constituent of fertilizer, showed statistically higher concentrations in soil during 2005 compared to baseline concentrations measured in 2000. Concentrations of mercury showed statistically significant decreases in concentration for one or more soil sampling depths.

As expected, fertilizer constituents, ammonium, total nitrogen, sulfate and zinc, showed a statistical increase in 2005 compared to baseline 2000 samples. Animal waste or fertilizer application to the pastures could easily explain these slight, but statistically significant increases. TOC also increased slightly at 5 feet bgs and pH decreased slightly at 5 feet bgs. Nitrate and chloride concentrations in soils declined in 2005 compared to baseline levels because application of irrigation water encourage plant uptake of these ions.

**Summary of LTPS Soil Results - 2000 to 2005.** Table 15 presents a summary of previous statistical comparisons between the baseline 2000 soil data and 2003, 2004 and 2005 soil analytical data. The soil metals data compared to baseline show no consistent concentration trend (neither increase nor decrease) over time, with the exception of zinc, which is a plant and animal nutrient that may be increasing because of its trace concentrations in fertilizer or animal waste.

In any given year, soil metals analyses may show slight but statistically significant trends for either parametric or non-parametric statistical test due to natural heterogeneity inherent in metal concentrations in soils. For example, barium concentration declined statistically in 2003, were unchanged in 2004, and were statistically higher in 2005, despite a decline in the average and 95 percent UCL in 2005 (5 feet bgs) compared to 2000 baseline data. This is only possible because the baseline 2000 barium data was more variable than the 2005 data.

Increases or decreases in LTPS soil constituent concentrations may be due to analytical bias, spatial variability or uptake by pasture grasses. Appendix C presents the analytical results of the IRA effluent. These effluent data show that IRA effluent applied as irrigation to the 2.5 acre IRA constitutes a very small mass of any constituent compared to the mass of soil in the upper foot of the 2.5 acre LTPS.

To assess the effect of metals loading onto the LTPS soils from effluent, the mass of each metal applied as irrigation water from 2003, 2004 and 2005 was compared to soil concentrations present in the upper 1 foot of soil prior to effluent application in 2000. Based on this analysis, effluent loading of all metals except for barium and selenium was less than 1 percent of the total concentration present in baseline 2000 data prior to effluent application. Barium (effluent loading from 2003-2005 was approximately 3 percent of baseline soil concentration) and selenium (just over 1 percent of baseline soil content) in IRA effluent are not elevated when compared to background groundwater concentrations, therefore irrigation with any groundwater source would have the same affect on LTPS soil.

### 4.4.5. LTPS Groundwater Monitoring Beneath the LTPS

Table 16 summarizes HSU-1 groundwater data collected from HSU-1 wells beneath the LTPS and analyzed for metals and inorganic salts. Complete analytical results are presented in Appendix E. Table 16 presents concentrations in HSU-1 for LTPS wells UCD1-25, UCD1-28 and the multiple-screen wells UCD2-27Z1, UCD2-27Z2 and UCD2-27Z3. Table 16 also provides concentrations for site background wells UCD1-18 and the closest HSU-1 well upgradient of the LTPS, UCD1-11.

The groundwater data presented in Table 16 indicate that metal concentrations remained within historical ranges in 2005. Salt (nitrate as nitrogen, sulfate and chloride, TDS) concentrations in wells beneath the LTPS have stabilized or decreased in concentration since irrigation of the LTPS began in 2003 (Table 16).

LTPS groundwater results in Appendix D combined with LTPS soil data in Table 14, Table 15 and effluent data presented in Appendix C support the conclusion that IRA effluent has had little if any deleterious effects on LTPS soil or groundwater quality between 2000 and 2005.

## 4.5. RI/FS Groundwater Elevation Results

Groundwater elevations were measured monthly for HSU-1 wells, HSU-2 wells, HSU-4 wells, extraction well EW2-1, and injection well IW2-1 until July 2005 than reverted to a quarterly schedule. Groundwater elevations for 2005 are presented in Table 17, and quarterly groundwater elevation graphs and contour maps are presented on Figures 7 through 10. In general, groundwater elevations and trends were consistent with historical data.

### 4.5.1. Horizontal Groundwater Flow and Gradients

Horizontal groundwater gradients during 2005 ranged from 0.0006 feet/foot to 0.01 feet/foot for HSU-1, 0.0005 feet/foot to 0.01 feet/foot for HSU-2, and 0.0004 feet/foot to 0.001 feet/foot for HSU-4 (Table 18). Gradients were generally steeper during the spring and the flattest during the fall for all three HSUs. Groundwater flow in HSU-1 was generally to the northeast in the winter through summer, changing to the east in fall. Groundwater flow in HSU-2 was predominately to the northeast in all four quarters. Groundwater flow in HSU-4 was to the northeast in winter through summer, changing to the east in the fall. These changes are consistent with historical data.

### 4.5.2. Vertical Groundwater Gradients

Vertical groundwater gradients were evaluated using data from well pairs between HSU-1/HSU-2 and HSU-2/HSU-4. Vertical groundwater gradients for 2005 based on well pairs between

HSU-1/HSU-2 and HSU-2/HSU-4 are shown in Table 19. The gradient between HSU-1 and HSU-2 ranged between a downward gradient of 0.1599 feet/foot and an upward gradient of 0.0177 feet/foot. The gradient between HSU-2 and HSU-4 were all downward with a range of 0.0027 feet/foot 0.0932 feet/foot. Upward vertical gradients between HSU-1 and HSU-2 were most prevalent in February 2005 and October 2005.

Figure 7 illustrates that changes in water levels during the pumping season (i.e., May through August) were distinctly greater between HSU-2 and HSU-4 than between HSU-1 and HSU-2. This pattern has been seen every year since HSU-4 well pairs were installed in 1997. This distinct difference in response to pumping changes between the two HSUs, combined with the hydrogeologic interpretation presented in Section 2.3, suggests that HSU-2 and HSU-4 are not hydraulically connected. As an example, on April 26, 2005, the difference in water levels between HSU-1 and HSU-2 wells UCD1-13 and UCD2-14 was 3.63 feet (downward gradient of 0.1599 feet/foot), and the water level difference between HSU-2 and HSU-4 wells UCD2-29 and UCD4-44 was approximately 5.25 feet (downward gradient of 0.0311 feet/foot).

## 4.6. RI/FS and Expanded DDC Pilot Test Groundwater Monitoring Results

This section presents a summary of analytical results of the six primary COCs for groundwater samples collected for the RI/FS and IRA. Stormwater and surface water samples collected as part of this RI/FS monitoring program are discussed in Section 4.6 and Section 4.7, respectively. However, the groundwater samples collected from the DDC wells are included in the discussion for this section. Groundwater analytical data for the Site during 2005 are presented in Appendix F. The lateral distribution of the six primary COCs for 2005 in HSU-1 and HSU-2 are shown in Figures 11 through 22. Selected time versus concentration graphs for HSU-1 and HSU-2 are presented in Figures 23 through 28, and Figure 29 includes concentration versus time graphs for HSU-4.

### 4.6.1. Volatile Organic Compounds

The primary VOC detected in groundwater samples during 2005, and previous monitoring results, is chloroform. Chloroform was detected above the contract-required detection limit (CRDL) in 23 of

the 46 wells monitored from the RI/FS and IRA groundwater monitoring programs ranging in concentration from 0.553 μg/L (UCD1-25 in February 2005) to 1,690 μg/L (TP-3C in January 2005, part of DDC system monitoring program). In addition to chloroform, twelve other VOCs were reported at concentrations above the CRDL during 2005: acetone, 1,1-DCA, 1,2-DCA, 1,1-DCE, 1,2-DCP, PCE, 1,1,2-TCA, TCE, chloromethane, methlyene chloride, bromomethane, MEK. It should be noted that the highest chloroform concentrations were detected in the DDC wells as part of the DDC monitoring system as discussed in Section 4.2.

Acetone detections both inside and outside the chloroform source area continue to occur sporadically in all HSU's. Because acetone is a common laboratory artifact that has been confirmed in 2005 trip and laboratory method blanks, these sporadic detections are considered to be highly suspect.

A summary of VOC results within each of the HSUs is presented in the following paragraphs.

**HSU-1.** During the RI/FS and IRA 2005 groundwater monitoring programs, thirteen VOCs were reported above the CRDL in groundwater samples collected from HSU-1 wells: acetone, chloroform, bromomethane, MEK, methylene chloride, chloromethane, PCE, TCE, 1,1,2-TCA, 1,1-DCA, 1,1-DCE, 1,2-DCA, and 1,2-DCP. Chloroform was detected above the CRDL in 14 of the 26 HSU-1 wells (including the TP wells); TP-1 through TP-5, UCD1-11, UCD1-12, UCD1-21, UCD1-24, UCD1-25, UCD1-49, UCD1-50, UCD1-51, and UCD1-52 with concentrations ranging from 0.553 μg/L (UCD1-25 on February 10, 2005) to 1,690 μg/L (TP-3C on January 21, 2005). Chloroform isoconcentration contours in HSU-1 for May 2005 are presented on Figure 11.

The other 12 VOCs were detected in 10 HSU-1 wells (includes TP wells) at concentrations ranging between 0.506 μg/L (TP-5C: TCE on January 20, 2005) to 41.4 μg/L (TP-2C: acetone on August 11, 2005).

**HSU-2.** During the RI/FS and IRA 2005 groundwater monitoring programs, seven VOCs were reported above the CRDL in groundwater samples collected from HSU-2 wells: acetone, chloroform, 1,1-DCA, 1,1-DCE, 1,2-DCA, 1,2-DCP, and methylene chloride. Chloroform was detected above the CRDL in 11 of the nineteen HSU-2 wells: UCD2-7, UCD2-14, UCD2-26,

UCD2-29, UCD2-30, UCD2-31, UCD2-32, UCD2-39, UCD2-40, UCD2-45, and UCD2-48 at concentrations ranging from 0.763 µg/L (UCD2-39 on May 25, 2005) to 189 µg/L (UCD2-29 on August 9, 2005). Chloroform isoconcentration contours in HSU-2 for 2005 are presented on Figures 17a and 17b.

The other six VOCs were detected in five HSU-2 wells at concentrations between 0.512 µg/L (UCD2-30: 1,2-DCA on June 21, 2005) to 10.1 µg/L (UCD2-7: acetone on May 25, 2005).

**HSU-4.** During the RI/FS and IRA 2005 groundwater monitoring programs, chloroform is the only VOC reported above the CRDL in groundwater samples collected from the HSU-4 wells. Chloroform was detected above the CRDL in three of the five HSU-4 wells: UCD4-42, UCD4-43, and UCD4-47 at concentrations ranging from 2.16 µg/L (UCD4-42 on May 30, 2005) to 5 µg/L (UCD4-47 on October 21, 2005). Figure 29 illustrates select HSU-4 wells chloroform concentrations over time and that recent concentrations are within historical values.

### 4.6.2. Chromium, Nitrate as Nitrogen, and Total Dissolved Solids

Figures 12 through 14 and 18 through 20 show isoconcentrations for chromium, nitrate as nitrogen, and TDS. Figures 24 through 26 and Figure 29 show graphs of these constituent concentrations over time in selected wells. As seen on these figures and in Appendix F, the 2005 results for these constituents are consistent with previous results, with the exception of three HSU-1 wells (UCD1-12, UCD1-50, and UCD1-51), which show an increase in nitrate as nitrogen during the October 2004 sample event.

As requested by the USEPA, TP-2 and TP-5 were analyzed quarterly for the six Site COCs during 2005. Chromium concentrations in the lower screened zones (C zone) are consistently higher than the upper screened zone (B zone) within HSU-1. Otherwise, there were no significant differences in concentrations between the upper and lower zones of TP-2 or TP-5 as discussed below.

- Nitrate as nitrogen concentrations in the B-zone ranged between an estimated value of 55.9 µg/L (TP-2B on January 20, 2005) to an estimated value of 77 µg/L (TP-5B on

October 20, 2005) while the C-zone ranged between 72.6 μg/L (TP-5C on August 11, 2005) to an estimated value of 83.9 μg/L (TP-5C on April 28, 2005).

- TDS concentrations in the B-zone ranged between 1,340 μg/L (TP-5B on April 28, 2005) to 1,510 μg/L (TP-2B on April 28, 2005) while the C-zone ranged between 1,420 μg/L (TP-2C on October 19, 2005) to 1,720 μg/L (TP-2C on January 20, 2005).

### 4.6.3. Carbon-14 and Tritium

Carbon-14 and tritium have been detected during historical monitoring activities on Site. In 1999, the Waste Burial Hole Removal Action removed waste buried on the Site that was indicated to be the source of carbon-14 and tritium found in groundwater. At the end of 2001, results for radiological constituents in the HSU-2 (UCD2-14) well downgradient of this source area indicated decreased concentrations. Overall, carbon-14 and tritium concentrations have continued to decrease through 2005.

**Carbon-14.** Although the distribution of carbon-14 on the Site is similar to that of tritium (particularly in HSU-1), the concentrations of carbon-14 have historically been significantly lower than concentrations of tritium.

**HSU-1.** Carbon-14 was detected in five of the 23 HSU-1 wells (including TP-2 and TP-5) sampled during 2005. These detections are consistent with results from 2005, and ranged from 23.5 +/- 9.95 picoCuries per liter (pCi/L) in TP-5B (August 11, 2005) to 687 +/- 20 pCi/L in UCD1-13 (May 23, 2005). See Figure 15 for carbon-14 isoconcentration contours in HSU-1 in May 2005 and Figure 27 for graphs of carbon-14 concentrations over time in selected wells.

**HSU-2.** When groundwater monitoring began in 1990, carbon-14 had been consistently detected in UCD2-14 (near the Waste Burial Holes), at concentrations averaging 500 pCi/L. Over the past 3 years, carbon-14 concentrations are averaging 200 pCi/L. During 2005, detections of carbon-14 in this well ranged from 102 +/- 10.6 pCi/L in October 2005 to 218 +/- 14 pCi/L in May 2005. See Figures 21a and 21b for carbon-14 isoconcentration contours in HSU-2 during 2005.

**HSU-4.** In 2005, carbon-14 was not detected in HSU-4 wells at concentrations above the CRDL Selected HSU-4 wells illustrate these results on Figure 29.

**Tritium.** As in previous years, consistent detections of tritium have been reported in only two wells, UCD1-13 and UCD2-14, while low sporadic results have been historically reported in other Site wells.

**HSU-1.** Of the 23 HSU-1 wells (includes TP-2 and TP-5) monitored in 2005, tritium was only detected above the CRDL in UCD1-13 and one questionable result in UCD1-27Z1.

Tritium concentrations have decreased in UCD1-13 from levels near 30,000 pCi/L in 1992 to levels consistently below 8,000 pCi/L during the past two years (since mid-2003). In 2005, the highest result for this well was 6690 +/- 373 pCi/L. See Figure 16 for tritium isoconcentration contours in HSU-1 for May 2005, and Figure 28 for graphs of tritium over time in selected wells.

Tritium has not been previously detected above the CRDL in UCD1-27Z1. However, in January 2005, a questionable detection of 2880 +/- 254 pCi/L was reported. UCD1/2-27 is uniquely constructed with seven monitoring zones. UCD1/2-27 is uniquely constructed with seven monitoring zones, three of which are in HSU-1. Each zone is just 8 feet deeper than the previous zone. Zone 1, where this detection of tritium is reported, is the shallowest zone, and is screened between 53-55 feet bgs. Since tritium was not detected in other samples collected at the same time in Zone 2 (63-65 feet bgs) and Zone 3 (73-75 feet bgs), the result is questionable, although we will closely monitor future results in this well. Results for May 2005 indicated no tritium detections in this well. Since construction in 1995, the three HSU-1 zones have been monitored 53 times, with only one previous detection of 320 pCi/L tritium (in zone 3), February 1997.

**HSU-2.** Of the nineteen HSU-2 wells monitored in 2005, tritium was only detected above the CDRL in UCD2-14. UCD2-14 had a reported concentration of 1280 +/- 206 in May 2005 and a concentration of 396 +/- 173 pCi/L in October 2005. See Figures 22a and 22b for tritium isoconcentration contours in HSU-2 during 2005. Figure 28 shows a graph of tritium concentrations over time in UCD2-14, and reported results are averaging around 1,000 pCi/L since 2003.

**HSU-4.** In 2005, tritium was not detected in HSU-4 wells at concentrations above the CRDL. Selected HSU-4 wells illustrate these results on Figure 29.

## 4.7. Stormwater Monitoring Results

**Landfill Areas.** Stormwater samples were collected from location LF-1 on January 11, 2005 and December 28, 2005. As discussed in Section 3.2.2, both LF-1 and LF-3 stormwater sampling locations were observed during numerous storms throughout the rainy season. On December 28, 2005, a trickle discharge was noted at LF-3. Field parameters and VOCs were collected, but there was no water available for the remaining analytes. No VOCs were detected in this sample. LF-1 samples were analyzed for field parameters, acute aquatic toxicity, metals, nitrate as nitrogen, oil and grease, pesticides and polychlorinated biphenyls (PCBs), radionuclides, TDS, TOC, total suspended solids (TSS), and VOCs. Of the compounds analyzed, LF-1 had detections above the CRDL for acetone, metals, nitrate as nitrogen, TOC and TDS as shown in Appendix E. All of the compounds were within the historical ranges.

Aquatic toxicity was monitored for pimephales species in LF-1 samples collected in January 2005 and December 2005 with no toxicity found in either sample.

The watershed area that feeds into the LF-3 sample location is relatively small and contains a large amount of unpaved soil surface, whereby rain falling on this area appears to infiltrate and only rarely produces sufficient runoff to cause discharge.

**Lift Station.** Stormwater sample location LS-1 was sampled by the DOE contractor on March 22, 2005 and December 1, 2005. LS-1 samples were analyzed for acute aquatic toxicity, metals, nitrate as nitrogen, pesticides and PCBs, radionuclides, TOC, TSS, and VOCs.

At this location, acetone, metals, nitrate as nitrogen, TDS, and oil and grease were reported above their respective CRDLs (Appendix E). With the exception of TDS and radium-226, all other detected constituents were within historical ranges. At LS-1, TDS was reported at 70 mg/L and 148 mg/L in March 2005. The concentration of 148 mg/L is the highest concentration recorded at LS-1. In the December 2005 sample, radium-226 was reported at 1.88 +/- 0.635 pCi/L slightly

above the CRDL of 1 pCi/L. The duplicated sample collected on the same day did not report radium-226 above the CRDL. Since 1998, when this location was first sampled, this is the first occurrence of radium-228 in the sample. Since the duplicate did not indicate the presence of radium-226 and there is an uncertainty of +/- 0.635 pCi/L in the analysis, it is presumed that the presence of radium-228 in the sample is suspect.

A sample and duplicate for acute aquatic toxicity were collected in LS-1 on March 22, 2005. It was noted that the lift station pump was not functioning at this time, and it was not known how long the water had been in the sump before collection. These samples indicated toxicity, with pimephales survival of 35 percent and 70 percent. As required by the Field Sampling Plan (when toxicity is indicated), a second set of samples was collected from this location during a storm on April 8, 2005. No toxicity was indicated in either the sample or the duplicate collected on April 8. On December 1, 2005, a sample and duplicate were also collected from LS-1. No acute toxicity was indicated (in comparison to control samples) for the December samples.

## 4.8. Surface Water Monitoring Results

Surface water samples were collected from three locations (PCU, PCD, and STPO) during 2005 during the two storm events at which run off from the Site was sampled. Each surface water sample location was sampled for field parameters, metals, nitrate as nitrogen, chronic aquatic toxicity (PCU and PCD only), pesticides and PCBs, radionuclides, TDS, and VOCs. All monitoring results for surface water samples are presented in Appendix E.

No VOCs, radionuclides, pesticides, or PCBs were detected in 2005 surface water samples. Only nitrate as nitrogen, metals, and TDS were reported above the CRDLs. Nitrate as nitrogen was reported at concentrations ranging from 0.457 mg/L at PCU (January 12, 2005) to 9.34 mg/L at STPO (January 12, 2005). TDS was reported at concentrations ranging from 191 mg/L at PCD (January 12, 2005) to 710 mg/L at STPO (January 12, 2005). The metals reported were arsenic, barium, boron, total chromium, copper, iron, lead, manganese, molybdenum, nickel, vanadium, and zinc. Both total chromium concentrations (23.4 μg/L at PCU and 27.8 μg/L at PCD) were the highest concentrations recorded at these locations. Field observations during sampling indicate high

flows in PCU and PCD. However, there were no significant differences between the PCU and the PCD metals concentrations during the same field event.

Carbon disulfide was reported in STPO just above its respective CRDLs. Total chromium was not detected above the CRDL during either sampling event at STPO. Results for TDS and nitrate as nitrogen were within historical average.

Aquatic toxicity results for all surface water locations monitored (PCD and PCU) did not demonstrate any toxicity during 2005.

# SECTION 5
# ASSESSMENT OF MONITORING PROGRAMS

As discussed in Section 1, specific goals and objectives have been established for the various water monitoring programs conducted at the Site. The primary objective of this section is to assess the results obtained from each of these programs with respect to meeting these objectives.

## 5.1. Expanded DDC Pilot Test Program Performance

The objective for the continued monitoring of the Expanded DDC system for 2005 was to further assess the following items described below.

- The limits of the circulation cell developed by the DDC system.
- The mass removal of chloroform from HSU-1.
- The system's effect on the mass transfer of chloroform from HSU-1 to the underlying more permeable HSU-2.

Startup of the expanded DDC pilot test system began on December 5, 2002. The DDC system was monitored quarterly during 2005 and results were discussed in Section 3.1.

### 5.1.1. Extent of Circulation Cell

As discussed in DDC System Summary Report (Brown and Caldwell, 2005), based on the observance of water level changes versus chloroform concentration changes in wells monitored for the expanded DDC system, the circulation cells developed by the DDC wells extend at least 30 feet in the areas of monitoring wells UCD1-49 and UCD1-50. As shown on Figure 30, this effect continued to be observed during 2005, whereby chloroform concentrations reported for these wells continue to be lower than concentrations reported during baseline sampling conducted before startup of the expanded DDC system. In addition, 2005 reported chloroform concentrations for UCD1-51 also show a decreasing trend suggesting the effects of the DDC system are beginning to extend to this area.

### 5.1.2. Chloroform Mass Removal

During 2005, the expanded DDC pilot test system removed approximately 28 pounds from the HSU-1 system (see Section 4.2.1 and Table 11). As reported during 2003 (Brown and Caldwell, 2005), the largest amount of the chloroform mass was removed (approximately 83 pounds) from the initial DDC well (DDC-1) located in the center of the expanded system. However, during 2005, a significant mass was also removed from DDC-5 (approximately 13 pounds) located in the northeast portion of the system. A detailed analysis of the overall effects of the chloroform mass removal from this system will be included as part of the Feasibility Study for assessing remedial alternatives for the groundwater operable unit.

### 5.1.3. Mass Transfer of Chloroform from HSU-1 to HSU-2

2005 chloroform concentrations in the HSU-2 monitoring well, UCD2-48, were below 5 μg/L. These results indicate that the DDC system is still effectively minimizing the mass transfer of chloroform in the source area from HSU-1 to HSU-2.

## 5.2. RI/FS Water Monitoring Program Performance

Three objectives for the combined RI/FS and IRA Groundwater Monitoring programs were listed in the 2001 Annual Groundwater Treatment System and Water Monitoring Report (URS, 2002) as summarized in Section 1.0. Two of these objectives are associated with performance of the IRA and are discussed in Section 5.3. The objective of the RI/FS and IRA Groundwater Monitoring are to answer the following question: Have unexpected changes in Site groundwater, surface water, or stormwater occurred that warrant changes to the program?

The monitoring programs designed to accomplish this objective during 2005 are described in Section 3.2. This section presents an assessment of the groundwater, stormwater, and surface water monitoring programs in meeting this objective.

### 5.2.1. Groundwater Monitoring

The results of the 2005 groundwater monitoring program are discussed in Section 4.5. As shown in this section and illustrated on the isoconcentration maps, the spatial distribution of the six COCs have remained stable during the past year. Based on this stability, no unexpected changes occurred during 2005 that would warrant changes to the groundwater monitoring program for 2006.

### 5.2.2. Stormwater Monitoring

The results of the 2005 stormwater monitoring program are discussed in Section 4.6. The Site COCs do not apply to stormwater. The detections were between the historical average and the historical maximum. Based on these results, no unexpected changes occurred during 2005 that would warrant changes to the stormwater monitoring program for 2006.

### 5.2.3. Surface Water Monitoring

The results of the 2005 surface water monitoring program are discussed in Section 4.7. The Site COCs do not apply to surface water. The detections for TDS and nitrate as nitrogen were between the historical average and the historical maximum and the reported metal detections for the upstream sample, PCU, were similar to those reported for the downstream sample, PCD.

Based on these results, no unexpected changes occurred during 2005 that would warrant changes to the surface water monitoring program for 2006.

## 5.3. IRA Influent/Effluent Monitoring Program Performance

This section discusses the performance of the groundwater IRA and LTPS systems. This section also provides technical assessment of the efficiency of the groundwater IRA in meeting original design objectives.

### 5.3.1. Background – Groundwater IRA/LTPS

The groundwater IRA system was originally designed as an interim action prior to development of final remedial actions for Site groundwater. As discussed in the original design documents (Dames & Moore, 1997a), the groundwater IRA system was designed to treat VOCs, primarily chloroform. The original design of the groundwater IRA system was to minimize off-site migration of chloroform in HSU-2, by extracting and treating impacted groundwater prior to injection upgradient of the extraction well. Since there were continued problems with insufficient injection well capacity, injection of treated groundwater was suspended in 2005 with the effluent from the IRA system diverted into the CWTP in mid May 2005.

The groundwater IRA system has been operating nearly eight years, since May 1998. Since the startup of the IRA, approximately 105 pounds of chloroform in HSU-2 have been treated and prevented from migrating off-site (Table 20). Also since 2000, VOC source treatment in HSU-1 (DDC Pilot Study) has been implemented and recently expanded in late 2002. Historical chloroform concentrations in HSU-2 for selected HSU-2 monitoring wells have been plotted on Figure 31. Monthly groundwater extraction rates have also been included on these plots to help visualize the effect of groundwater extraction on chloroform concentrations. The five month shutdown of the IRA in 2005 is reflected in frequent chloroform detections in UCD2-30 in the first half of 2005, with chloroform concentrations declining in the last half of 2005. Chloroform concentrations appear to be stable in all downgradient and off-site wells UCD2-40, UCD 2-32, UCD 2-45 and UCD 2-46. As shown by chloroform concentrations in off-site wells, downgradient wells UCD2-45 and UCD2-46 are at or near non-detectable levels of chloroform in 2005.

**Groundwater IRA Performance in 2005**

The performance of the groundwater IRA may be evaluated in several ways including:

1. Percentage of the time the IRA system was operating;
2. Chloroform mass removal;
3. Containment of off-site VOC migration in HSU-2; and
4. Attainment of effluent discharge standards.

In regards to items 1 and 2 cited above, the IRA did not operate at its full potential in 2005 (59 percent uptime) due to extended periods of system shutdowns during the first four months of the year. Otherwise, the remainder of the year, the IRA system operated at nearly 90 percent of the time. The average groundwater extraction rate of the IRA system, while operating in 2005, was approximately 51 gpm (the overall extraction rate was approximately 34 gpm). This extraction rate was similar to the 2004 extraction rate, resulting in the removal of 9.5 pounds of chloroform, but the amount of mass removed was approximately 7 pounds in 2005. The difference in the amount of chloroform removed this year from recent years past is due to the extended period that the system was shutdown (Table 20).

Attainment of effluent discharge standards (item 3) and reduction of off-site migration (item 4) are linked. During 1998 to 2000, when the IRA extraction rate was 120 gpm to 180 gpm, off-site migration of chloroform was virtually eliminated, but the downward migration of salts increased. When extraction rates were reduced in 2002, effluent nitrate as nitrogen and TDS concentrations had declined to discharge standards or frequently lower, while chloroform capture rates were effectively maintained.

A capture zone analysis for the IRA was performed in 2004 (Brown & Caldwell, 2005). This analysis demonstrated that the chloroform plume in HSU-2 can be controlled by varying the monthly extraction rate from 40 to 90 gpm. As extraction rate declined for various reasons from the period from 2002 to 2005, control of the HSU-2 chloroform plume has been maintained and effluent nitrate-nitrogen and TDS concentrations have significantly declined from 1998 to 2000 levels.

### 5.3.2. LTPS Operations

A total of 2.6 million gallons or 15 percent of the groundwater treated by the IRA in 2005 was re-used for LTPS irrigation. The use of treated IRA effluent as irrigation water is limited by the small area (2.6 acres of pasture) currently included in the LTPS. If the land treatment option is accepted and expanded, approximately 24 to 30 acres would be required to utilize all IRA effluent for pasture production during the irrigation season, April to October.

Based on the LTPS effluent standards, the LTPS soil monitoring program and the LTPS groundwater evaluation described above in Section 4, no adverse effects have been observed reusing extracted HSU-2 groundwater after treatment for VOCs in the LTPS. The LTPS has been operating successfully for nearly four years and this discharge alternative should be considered in the upcoming UC Davis FS.

# SECTION 6
# RECOMMENDATIONS

As stated in Section 1, the purpose of this 2005 Comprehensive Annual Water Monitoring Report is to present a detailed assessment of the three monitoring programs, including a summary of any recommended changes to the programs. This section presents a summary of the recommended changes for the water monitoring and treatment monitoring programs currently being conducted at the Site.

## 6.1. Site Monitoring Programs

Older wells UCD1-003, UCD1-005, UCD1-006, UCD1-007, UCD1-008, and UCD1-009 are not being monitored because groundwater elevations have dropped causing them to be consistently dry. Other wells were installed to replace them. Therefore, UC Davis is recommending abandoning these wells since they are no longer necessary for monitoring.

Based on the information presented in this 2005 Comprehensive Annual Water Monitoring Report, UC Davis also recommends consolidating the groundwater monitoring for DDC, RI/FS, IRA and LTPS wells onto a semi annual monitoring and reporting schedule. In addition to these changes, UC Davis proposes to:

- Eliminate VOC sampling at temporary wells (TP) 1-A,B, and C through TP-5-A,B, and C because sufficient data has been collected from these wells to assess the DDC technology in the feasibility study; and

- Eliminate the annual LTPS soil monitoring program, because the amount of salts and metals from added effluent are insignificant and the soils data has not shown any important reduction in LTPS soil quality.

There are no other changes recommended for the monitoring programs in 2006. The proposed programs for 2006 are combined in Table 21 and include continued monitoring for the following:

1. the expanded DDC pilot test system;
2. the combined RI/FS and IRA Groundwater Monitoring Program; and
3. the IRA Influent/Effluent Monitoring Program.

Because all sampling would be conducted on a semi-annual schedule, UC Davis recommends changing the reporting from three quarterly reports to one semi-annual report and one annual report. A summary of the content of the two reports to be issued for 2006 is presented below.

**Semi-Annual Report:** One semi-annual report will include updates for all of the programs described in this Report. These updates will include an assessment of the progress of each system, summary of unexpected changes, and additional data collected, if any, that was not included in the program descriptions. Monthly data collected during the quarter will also be included in this report.

**Annual Report:** An annual report will present the detailed assessment of each monitoring program and will include a summary of changes to the programs and recommendations for future monitoring. The assessments will include detailed analysis of historical monitoring, including graphical and statistical analysis. The 2006 Comprehensive Annual Water Monitoring Report will be submitted to the USEPA by May 1, 2007.

## 6.2. IRA Operations

Based on the HSU-2 capture zone analysis performed in 2005, as discussed in Section 5 of this report, the IRA extraction rates are efficiently minimizing or preventing off-site migration of chloroform. A detailed analysis of long-term extraction rates will be presented in the UC Davis FS.

# SECTION 7

# REFERENCES


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# TABLES

**Table 1**
**Formation Thickness, Soil Borings, and TEM Points**
**2005 Comprehensive Annual Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| Boring/TEM I.D. | Total Depth (feet bgs) | Formation Thickness | | | | |
|---|---|---|---|---|---|---|
| | | Putah Creek Fan | | Tehama Formation | | |
| | | HSU-1 | HSU-2 | HSU-3 | HSU-4 | Unnamed Aquitard |
| UCD1-1 | 56.5 | 56.5+ | - | - | - | - |
| UCD1-2 | 60 | 60.0+ | - | - | - | - |
| UCD1-3 | 61.5 | 61.5+ | - | - | - | - |
| UCD1-4 | 56.5 | 56.5+ | - | - | - | - |
| UCD1-5 | 48.5 | 48.5+ | - | - | - | - |
| UCD1-6 | 52.5 | 52.5+ | - | - | - | - |
| UCD2-7 | 90 | 78 | 12.0+ | - | - | - |
| UCD1-8 | 56 | 56.0+ | - | - | - | - |
| UCD1-9 | 51.5 | 51.5+ | - | - | - | - |
| UCD1-10 | 70 | 70.0+ | - | - | - | - |
| UCD1-11 | 66.5 | 66.5+ | - | - | - | - |
| UCD1-12 | 66.5 | 66.5+ | - | - | - | - |
| UCD1-13 | 66.5 | 66.5+ | - | - | - | - |
| UCD2-14 | 86 | 80 | 6.0+ | - | - | - |
| UCD2-15 | 120.5 | 85 | 33 | 2.5+ | - | - |
| UCD2-16 | 122 | 88 | 31 | 3.0+ | - | - |
| UCD2-17 | 143 | 84.5 | 53 | 5.5+ | - | - |
| UCD1-18 | 70 | 70.0+ | - | - | - | - |
| UCD1-19 | 74.5 | 74.5+ | - | - | - | - |
| UCD1-20 | 71.5 | 71.5+ | - | - | - | - |
| UCD1-21 | 73.5 | 73.5+ | - | - | - | - |
| UCD1-22 | 71.5 | 71.5+ | - | - | - | - |
| UCD1-23 | 76.5 | 76.5+ | - | - | - | - |
| UCD1-24 | 71.5 | 71.5+ | - | - | - | - |
| UCD1-25 | 75 | 75.0+ | - | - | - | - |
| UCD2-26 | 102 | 88 | 14.0+ | - | - | - |
| UCD2-27 | 136 | 81.5 | 44.5 | 10.0+ | - | - |
| UCD1-28 | 70 | 70.0+ | - | - | - | - |
| UCD2-29 | 96 | 75 | 21.0+ | - | - | - |
| UCD2-30 | 110 | 75 | 35.0+ | - | - | - |
| UCD2-31 | 110 | 75 | 35.0+ | - | - | - |
| UCD2-32 | 105 | 81.5 | 23.5+ | - | - | - |
| UCD4-33 | 310 | 86.5 | 27.5 | 144 | 52.0+ | - |
| UCD1-34 | 80 | 76 | 4.0+ | - | - | - |
| UCD2-35 | 130 | 76 | 54.0+ | - | - | - |
| UCD2-36 | 105 | 80 | 25.0+ | - | - | - |
| UCD2-37 | 123.5 | 85.5 | 33 | 5.0+ | - | - |
| UCD2-38 | 119 | 89.5 | 29.5+ | - | - | - |
| UCD2-39 | 112 | 86 | 26.0+ | - | - | - |
| UCD2-40 | 108.5 | 81.5 | 26.5 | 0.5+ | - | - |
| UCD4-41 | 295 | 81.5 | 26.5 | 147 | 27 | 13.0+ |
| UCD4-43 | 295 | 81 | 44 | 125 | 30 | 15.0+ |
| UCD4-44 | 295 | 80 | 51 | 119 | 30 | 15.0+ |
| UCD2-45 | 116 | 94 | 25.0+ | - | - | - |
| UCD2-46 | 105 | 85 | 20.0+ | - | - | - |
| UCD4-47 | 295 | 95 | 20 | 139 | 36 | 5.0+ |
| UCD2-48 | 100 | 85 | 15 | - | - | - |
| UCD1-49 | 71.5 | 71.5+ | - | - | - | - |

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| Boring/TEM I.D. | Total Depth (feet bgs) | Formation Thickness | | | | |
|---|---|---|---|---|---|---|
| | | Putah Creek Fan | | Tehama Formation | | |
| | | HSU-1 | HSU-2 | HSU-3 | HSU-4 | Unnamed Aquitard |
| UCD1-50 | 71.5 | 71.5+ | - | - | - | - |
| UCD1-51 | 71.5 | 71.5+ | - | - | - | - |
| UCD1-52 | 70 | 70+ | - | - | - | - |
| UCD1-53 | 70 | 70+ | - | - | - | - |
| UCD1-54 | 73 | 73+ | - | - | - | - |
| EW2-1 | 125.5 | 77 | 37 | 11.5+ | - | - |
| IW2-1 | 126.5 | 87.5 | 32.5 | 6.5+ | - | - |
| TEM-1 | 339 | 64 | 40 | 204 | 31+ | - |
| TEM-2 | 299 | 74 | 66 | 126 | 33+ | - |
| TEM-3 | 314 | 74 | 50 | 144 | 46+ | - |
| TEM-4 | 325 | 72 | 39 | 166 | 48+ | - |
| TEM-5 | 325 | 67 | 37 | 174 | 47+ | - |
| TEM-6 | 330 | 64 | 38 | 185 | 43+ | - |
| TEM-7 | 330 | 69 | 37 | 187 | 37+ | - |
| TEM-8 | 329 | 69 | 34 | 189 | 37+ | - |
| TEM-9 | 324 | 69 | 41 | 180 | 34+ | - |
| TEM-10 | 325 | 69 | 55 | 157 | 44+ | - |
| TEM-11 | 340 | 61 | 45 | 188 | 46+ | - |
| TEM-12 | 327 | 70 | 25 | 197 | 35+ | - |
| TEM-13 | 329 | 65 | 17 | 207 | 40+ | - |
| TEM-14 | 335 | 57 | 20 | 220 | 38+ | - |
| TEM-15 | 347 | 57 | 25 | 227 | 38+ | - |
| TEM-16 | 349 | 55 | 23 | 229 | 42+ | - |
| TEM-17 | 346 | 47 | 20 | 236 | 43+ | - |
| TEM-18 | 345 | 84 | 25 | 91 | 106 | 39+ |
| TEM-19 | 340 | 76 | 43 | 100 | 88 | 33+ |
| TEM-20 | 320 | 75 | 42 | 73 | 92 | 38+ |
| TEM-21 | 297 | 77 | 58 | 47 | 73 | 42+ |
| TEM-22 | 286 | 73 | 55 | 54 | 63 | 41+ |
| TEM-23 | 297 | 76 | 50 | 56 | 79 | 36+ |
| TEM-24 | 296 | 76 | 53 | 53 | 77 | 37+ |
| TEM-25 | 321 | 83 | 53 | 50 | 86 | 49+ |
| TEM-26 | 311 | 79 | 50 | 53 | 83 | 46+ |
| TEM-27 | 297 | 74 | 43 | 53 | 79 | 48+ |
| TEM-28 | 256 | 69 | 52 | 61 | 53 | 21+ |
| TEM-29 | 350 | 124 | 81 | 73 | 72+ | - |
| TEM-30 | 231 | 110 | 78 | 43+ | - | - |
| TEM-31 | 287 | 115 | 74 | 98+ | - | - |
| TEM-33 | 143 | 99 | 44+ | - | - | - |
| TEM-34 | 208 | 107 | 61 | 40+ | - | - |
| TEM-35 | 208 | 93 | 69 | 46+ | - | - |
| TEM-36 | 208 | 94 | 67 | 47+ | - | - |
| TEM-37 | 148 | 112 | 36+ | - | - | - |
| TEM-38 | 273 | 96 | 43 | 99 | 35+ | - |

Note:
bgs = below ground surface

Table 2
2005 Combined IRA Groundwater Treatment System, RI Groundwater, Surface Water, and Stormwater Monitoring
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Davis, California

| | | | | | Radiological Analytes | | | Chemical Analytes | | | | | | | | | | | | | Bioassay | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HSU | Program | Wells | Number of Wells | Groundwater Level Measurements | Tritium | C-14 | Other rads | PAHs | VOC | Pesticides & PCBs | Metals | TOC | Nitrates (as N) | Total Chromium | TDS | Alkalinity | TSS | Oil and Grease | Anions (chloride, sulfate) | Cations (Ca, Mg, Na, K) | Acute Aquatic Toxicity | Chronic Aquatic Toxicity |
| HSU-1 | RI/FS, IRA | UCD1-001 | 1 | Q | Sp | Sp | | | Sp | | | | Sp | Sp | Sp | Sp | | | | | | |
| | RI/FS, IRA | UCD1-003 | 1 | Q | | | | | | | | | | | | | | | | | | |
| | RI/FS, IRA | UCD1-004 | 1 | Q | Sp | Sp | | | Sp | | | | Sp | Sp | Sp | | | | | | | |
| | RI/FS, IRA | UCD1-005 | 1 | Q | | | | | | | | | | | | | | | | | | |
| | RI/FS, IRA | UCD1-006 | 1 | Q | | | | | | | | | | | | | | | | | | |
| | RI/FS, IRA | UCD1-008 | 1 | Q | | | | | | | | | | | | | | | | | | |
| | RI/FS, IRA | UCD1-009 | 1 | Q | | | | | | | | | | | | | | | | | | |
| | RI/FS, IRA | UCD1-010 | 1 | Q | Sp | Sp | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA, LTPS | UCD1-011 | 1 | Q | Q | Q | | | Q | | Q | Q | Q | Q | Q | Q | | | Q | Q | | |
| | RI/FS, IRA, DDC | UCD1-012 | 1 | Q | S | S | | | Q | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD1-013 | 1 | Q | Sp | Sp | | | Sp | | | | Sp | Sp | Sp | | | | | | | |
| | RI/FS, IRA, LTPS | UCD1-018 | 1 | Q | Q | Q | | | Q | | Q | Q | Q | Q | Q | Q | | | Q | Q | | |
| | RI/FS, IRA | UCD1-019 | 1 | Q | Sp | Sp | | | Sp | | | | Sp | Sp | Sp | Sp | | | | | | |
| | RI/FS, IRA | UCD1-020 | 1 | Q | Sp | Sp | | | Sp | | | | Sp | Sp | Sp | | | | | | | |
| | RI/FS, IRA | UCD1-021 | 1 | Q | Sp | Sp | | | Sp | | | | Sp | Sp | Sp | | | | | | | |
| | RI/FS, IRA | UCD1-022 | 1 | Q | Sp | Sp | | | Sp | | | | Sp | Sp | Sp | | | | | | | |
| | RI/FS, IRA | UCD1-023 | 1 | Q | Sp | Sp | | | Sp | | | | Sp | Sp | Sp | | | | | | | |
| | RI/FS, IRA | UCD1-024 | 1 | Q | Sp | Sp | | | Sp | | | | Sp | Sp | Sp | | | | | | | |
| | RI/FS, IRA, LTPS | UCD1-025 | 1 | Q | Q | Q | | | Q | | Q | Q | Q | Q | Q | Q | | | Q | Q | | |
| | RI/FS, IRA, LTPS | UCD1-027Z1 | 1 | | Q | Q | | | Q | | Q | W Su F | Q | Q | W Sp Su | W Sp Su | | | W Sp Su | W Sp | | |
| | | UCD1-027Z2 | | | Q | Q | | | Q | | Q | W Su F | Q | Q | W Sp Su | W Sp Su | | | W Sp Su | W Sp | | |
| | | UCD1-027Z3 | | | Q | Q | | | Q | | Q | W Su F | Q | Q | Q | Q | | | Q | W Sp | | |
| | RI/FS, IRA, LTPS | UCD1-028 | 1 | Q | Q | Q | | | Q | | Q | Q | Q | Q | Q | W Sp Su | | | W Sp Su | W Sp | | |
| | RI/FS, IRA | UCD1-034 | 1 | Q | | | | | | | | | | | | | | | | | | |
| | RI/FS, IRA, DDC | UCD1-049 | 1 | Q | F | F | | | W Su2 F | | | | Su F | | F | | | | | | | |
| | RI/FS, IRA, DDC | UCD1-050 | 1 | Q | F | F | | | W Su2 F | | | | Su F | | F | | | | | | | |
| | RI/FS, IRA, DDC | UCD1-051 | 1 | Q | F | F | | | W Su2 F | | | | Su F | | F | | | | | | | |
| | RI/FS, IRA | UCD1-052 | 1 | Q | Q | Q | W Sp | W Sp | Q | W Sp | W Sp Su | W Sp Su | Q | Q | Q | W Sp Su | | | W Sp Su | W Sp | | |
| | RI/FS, IRA | UCD1-053 | 1 | Q | Q | Q | W Sp | W Sp | Q | W Sp | W Sp Su | W Sp Su | Q | Q | Q | W Sp Su | | | W Sp Su | W Sp | | |
| | RI/FS, IRA | UCD1-054 | 1 | Q | | | | | | | | | | | | | | | | | | |
| | RI/FS, IRA, DDC | TP-1-A | 1 | Q | | | | | -- | | | | | | | | | | | | | |
| | | TP-1-B | | Q | | | | | Q | | | | | | | | | | | | | |
| | | TP-1-C | | Q | | | | | Q | | | | | | | | | | | | | |
| | RI/FS, IRA, DDC | TP-2-A | 1 | Q | -- | -- | | | -- | | | | -- | -- | -- | | | | | | | |
| | | TP-2-B | | Q | Q | Q | | | Q | | | | Q | Q | Q | | | | | | | |
| | | TP-2-C | | Q | Q | Q | | | Q | | | | Q | Q | Q | | | | | | | |
| | RI/FS, IRA, DDC | TP-3-A | 1 | Q | | | | | -- | | | | | | | | | | | | | |
| | | TP-3-B | | Q | | | | | Q | | | | | | | | | | | | | |
| | | TP-3-C | | Q | | | | | Q | | | | | | | | | | | | | |
| | RI/FS, IRA, DDC | TP-4-A | 1 | Q | | | | | -- | | | | | | | | | | | | | |
| | | TP-4-B | | Q | | | | | Q | | | | | | | | | | | | | |
| | | TP-4-C | | Q | | | | | Q | | | | | | | | | | | | | |

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| | | | | | Radiological Analytes | | | Chemical Analytes | | | | | | | | | | | | | Bioassay | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HSU | Program | Wells | Number of Wells | Groundwater Level Measurements | Tritium | C-14 | Other rads | PAHs | VOC | Pesticides & PCBs | Metals | TOC | Nitrates (as N) | Total Chromium | TDS | Alkalinity | TSS | Oil and Grease | Anions (chloride, sulfate) | Cations (Ca, Mg, Na, K) | Acute Aquatic Toxicity | Chronic Aquatic Toxicity |
| | RI/FS, IRA, DDC | TP-5-A | 1 | Q | -- | -- | | | -- | | | | -- | -- | -- | | | | | | | |
| | | TP-5-B | | Q | Q | Q | | | Q | | | | Q | Q | Q | | | | | | | |
| | | TP-5-C | | Q | Q | Q | | | Q | | | | Q | Q | Q | | | | | | | |
| | DDC | DDC-1-A | 1 | Q | | | | | W | | | | | | | | | | | | | |
| | | DDC-1-B | | Q | | | | | Q | | | | | | | | | | | | | |
| | | DDC-1-C | | Q | | | | | Q | | | | | | | | | | | | | |
| | DDC | DDC-2-A | 1 | Q | | | | | W Sp | | | | | | | | | | | | | |
| | | DDC-2-B | | Q | | | | | Q | | | | | | | | | | | | | |
| | | DDC-2-C | | Q | | | | | Q | | | | | | | | | | | | | |
| | DDC | DDC-3-A | 1 | Q | | | | | F | | | | | | | | | | | | | |
| | | DDC-3-B | | Q | | | | | Q | | | | | | | | | | | | | |
| | | DDC-3-C | | Q | | | | | Q | | | | | | | | | | | | | |
| | DDC | DDC-4-A | 1 | Q | | | | | W | | | | | | | | | | | | | |
| | | DDC-4-B | | Q | | | | | Q | | | | | | | | | | | | | |
| | | DDC-4-C | | Q | | | | | Q | | | | | | | | | | | | | |
| | DDC | DDC-5-A | 1 | Q | | | | | W Sp | | | | | | | | | | | | | |
| | | DDC-5-B | | Q | | | | | Q | | | | | | | | | | | | | |
| | | DDC-5-C | | Q | | | | | Q | | | | | | | | | | | | | |
| | DDC | DDC-6-A | 1 | Q | | | | | W Sp F | | | | | | | | | | | | | |
| | | DDC-6-B | | Q | | | | | Q | | | | | | | | | | | | | |
| | | DDC-6-C | | Q | | | | | Q | | | | | | | | | | | | | |
| HSU-2 | RI/FS, IRA | UCD2-007 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD2-014 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD2-015 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD2-016 | 1 | Q | S | S | | | S | | | | S | S | S | Sp | | | | | | |
| | RI/FS, IRA | UCD2-017 | 1 | Q | S | S | | | S | | | | S | S | S | Sp | | | | | | |
| | RI/FS, IRA | UCD2-026 | 1 | Q | S | S | | | S | | | | S | S | S | Sp | | | | | | |
| | RI/FS, IRA | UCD2-029 | 1 | Q | S | S | | | Q | | | | S | S | S | Sp | | | | | | |
| | RI/FS, IRA | UCD2-030 | 1 | Q | S | S | | | (4) | | | | S | S | S | Sp | | | | | | |
| | RI/FS, IRA | UCD2-031 | 1 | Q | S | S | | | S | | | | S | S | S | Sp | | | | | | |
| | RI/FS, IRA | UCD2-032 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD2-035 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD2-036 | 1 | Q | S | S | | | S | | | | S | S | S | Sp | | | | | | |
| | RI/FS, IRA | UCD2-037 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD2-038 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD2-039 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD2-040 | 1 | Q | S | S | | | Q | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD2-045 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD2-046 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA, DDC | UCD2-048 | 1 | Q | F | F | | | W Su2 F | | | | Su F | Su F | Su F | | | | | | | |
| HSU-4 | RI/FS, IRA | UCD4-041 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD4-042 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD4-043 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD4-044 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD4-047 | 1 | Q | Su F | Su F | | | Su F | | | | S | Su F | S | | | | | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HSU | Program | Wells | Number of Wells | Groundwater Level Measurements | Tritium | C-14 | Other rads | PAHs | VOC | Pesticides & PCBs | Metals | TOC | Nitrates (as N) | Total Chromium | TDS | Alkalinity | TSS | Oil and Grease | Anions (chloride, sulfate) | Cations (Ca, Mg, Na, K) | Acute Aquatic Toxicity | Chronic Aquatic Toxicity |
| | Stormwater | LF-1 | NA | | WF | WF | WF | | WF | WF | WF | WF | WF | WF | WF | | WF | WF | | | WF | |
| | | LF-3 | NA | | | | | | F | | | | | | | | | | | | | |
| | | LS-1 | NA | | WF | WF | WF | | WF | WF | WF | WF | WF | WF | WF | | WF | WF | | | W Sp F | |
| | Surface water | STPO | NA | | WF | WF | WF | | WF | WF | WF | | WF | WF | WF | | | | | | | |
| | | PCU | NA | | WF | WF | WF | | WF | WF | WF | | WF | WF | WF | | | | | | | WF |
| | | PCD | NA | | WF | WF | WF | | WF | WF | WF | | WF | WF | WF | | | | | | | WF |
| | Treatment System | Influent | NA | (EW2-01) Q | (1) | (1) | | | (1) | | | (2) | | | | | | | | | | |
| | | Effluent | NA | (IW2-01) Q | | | | | (1) | | (1) | | (1) | (3) | (1) | (1) | | | (1) | (3) | | |
| | | | *63 wells* | | | | | | | | | | | | | | | | | | | |

Notes:
W = sampled in the winter quarter (January - March)
Sp = sampled in the spring quarter (April - June)
Su = sampled in the summer quarter (July - September)
F = sampled in the fall quarter (October - December)
S = sampled semi-annually in the spring and fall quarters
M = measured monthly
Q = sampled quarterly
Su2 = sampled twice in the summer quarter

(1) - sampled in May through October and December
(2) - sampled in June through October and December
(3) - sampled in May through August and December
(4) - sampled in January, February, April through October

**Table 3**
**Analytical Parameters and Methods**
**2005 Comprehensive Annual Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| SAMPLE PARAMETERS | | |
|---|---|---|
| Constituent | Units | Method(s) |
| Field Parameters | | |
| **Field** | | |
| pH | pH units | Field, SOP |
| EC | µmhos/cm | Field, SOP |
| Eh | Mvolts | Field, SOP |
| Temperature | °C | Field, SOP |
| Turbidity | ntu | Field, SOP |
| Laboratory Parameters | | |
| **Organic** | | |
| Volatile Organic Compounds | µg/L | EPA SW8260B |
| Semivolatile Organic Compounds | µg/L | EPA SW8260B |
| Organochlorine Pesticides/PCBs | µg/L | EPA SW8081A/8082 |
| **Radiologic** | | |
| Gross Alpha | pCi/L | EPA 9310 |
| Gross Beta | pCi/L | EPA 9310 |
| Titanium | pCi/L | EPA 906.0 (M) |
| Carbon-14 | pCi/L | EPA-R4-73-014 |
| Strontium –90 | pCi/L | EPA 905.0 (M) |
| Radium-226 | pCi/L | EPA 903.1 (M) |
| Americium-241 | pCi/L | EPA 907.0 (M) |
| Plutonium-241 | pCi/L | EPA 907.0 (M) |
| Th-234 | pCi/L | EPA 901.1 (M) |
| Pb-214 | pCi/L | EPA 901.1 (M) |
| Bi-214 | pCi/L | EPA 901.1 (M) |
| Pb-210 | pCi/L | EPA 901.1 (M) |
| U-235 | pCi/L | EPA 901.1 (M) |
| U-238 | pCi/L | EPA 901.1 (M) |
| Na-22 | pCi/L | EPA 901.1 (M) |
| Ac-228 | pCi/L | EPA 901.1 (M) |
| Pb-212 | pCi/L | EPA 901.1 (M) |
| Bi-212 | pCi/L | EPA 901.1 (M) |
| Tl-208 | pCi/L | EPA 901.1 (M) |
| K-40 | pCi/L | EPA 901.1 (M) |
| Co-60 | pCi/L | EPA 901.1 (M) |
| Cs-137 | pCi/L | EPA 901.1 (M) |
| **Metals** | | |
| Hexavalent Chromium | | EPA SW7196 |
| Total Chromium | µg/L | EPA SW6010B/EPA SW 6020 |
| Anitmony | µg/L | EPA SW6020 |
| Arsenic | µg/L | EPA SW6020 |
| Barium | µg/L | EPA SW6020 |
| Beryllium | µg/L | EPA SW6020 |
| Cadmium | µg/L | EPA SW6020 |
| Cobalt | µg/L | EPA SW6020 |
| Copper | µg/L | EPA SW6020 |
| Iron | µg/L | EPA SW6020 |
| Lead | µg/L | EPA SW6020 |
| Mercury | µg/L | EPA SW747OA |
| Molybdenum | µg/L | EPA SW6020 |
| Nickel | µg/L | EPA SW6020 |
| Selenium | µg/L | EPA SW6020 |
| Silver | µg/L | EPA SW6020 |
| Thallium | µg/L | EPA SW6020 |
| Vanadium | µg/L | EPA SW6020 |
| Zinc | µg/L | EPA SW6020 |

**Table 3**
**Analytical Parameters and Methods**
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**LEHR/SCDS Environmental Restoration**
**Davis, California**

| SAMPLE PARAMETERS | | |
|---|---|---|
| Constituent | Units | Method(s) |
| **General Chemicals** | | |
| Alkalinity | mg/L | EPA 310.1 |
| Sodium | mg/L | EPA 6010B |
| Potassium | mg/L | EPA 6010B |
| Calcium | mg/L | EPA 6010B |
| Magnesium | mg/L | EPA 6010B |
| Chloride | mg/L | EPA 300.0 |
| Sulfate | mg/L | EPA 300.0 |
| Phosphorus, dissolved | mg/L | EPA 365A |
| Nitrate (as Nitrogen) | mg/L | EPA 300.0 |
| Total Dissolved Solids | mg/L | EPA 160.1 |
| Total Suspended Solids | mg/L | EPA 415.2 |
| Total Organic Carbon | mg/L | EPA 9060M |
| Hardness | mg/L | EPA 130.2 |
| Oil and Grease | mg/L | EPA 9070 |
| Acute Aquatic Toxicity | % | EPA/600/4-90-027F |
| Chronic Aquatic Toxicity | % | EPA 600/4-91/002 |

Notes:
µmhos/cm = micromhos per centimeter
Mvolts = millivolts
°C = degrees Celsius
ntu = nephelometric turbity unit
µg/L = micrograms per liter
pci/L = picocuries per liter
mg/L = milligrams per liter

# Table 4
## Summary of Well Construction Details
## 2005 Comprehensive Annual Water Monitoring Report
## LEHR/SCDS Environmental Restoration
## Davis, California

| Wells | Date Installed | Total Boring Depth (ft bgs) | PVC Well Diameter (inches) | Screen Interval (ft bgs) | Filter Pack (ft bgs) | Bentonite (ft bgs) | Cement (ft bgs) | Measuring Point Elevation (ft msl) | Elevation Ground Surface (ft msl) |
|---|---|---|---|---|---|---|---|---|---|
| Groundwater Monitoring Wells | | | | | | | | | |
| UCD1-001 | 10/09/87 | 56.5 | 2 | 46.5-56.5 | 41-56.5 | 38-41 | 0-38 | 50.05 | 47.9 |
| UCD1-002 | Abandoned | | | | | | | | |
| UCD1-003 | 10/23/87 | 51.5 | 2 | 39-49 | 34-51.5 | a | 0-34 | 50.05 | 48.2 |
| UCD1-004 | 10/14/87 | 56.5 | 2 | 45-55 | 40-56.5 | 37-40a | 0-37 | 51.69 | 49.4 |
| UCD1-005 | 10/22/87 | 48.5 | 2 | 38-48 | 33-48 | a | 0-33 | 48.44 | 48.4 |
| UCD1-006 | 10/21/87 | 52.5 | 2 | 40-50 | 35-50 | a | 0-35 | 50.94 | 49.0 |
| UCD2-007 | 11/05/87 | 90 | 2 | 80-90 | 75-90 | a | 0-75 | 51.65 | 49.3 |
| UCD1-008 | 11/03/87 | 56 | 2 | 43.5-53.5 | 39-53.5 | a | 0-39 | 51.51 | 49.2 |
| UCD1-009 | 11/04/87 | 51.5 | 2 | 40-50 | 35-50 | a | 0-35 | 51.38 | 49.0 |
| UCD1-010 | 10/11/89 | 70 | 4 | 54-69 | 52-70 | 49-52 | 0-49 | 49.87 | 47.4 |
| UCD1-011 | 10/17/89 | 66.5 | 4 | 50-65 | 47-66.5 | 44-47 | 0-44 | 50.67 | 47.6 |
| UCD1-012 | 10/19/89 | 65 | 4 | 49.5-64.5 | 47-65 | 44-47 | 0-44 | 51.76 | 48.8 |
| UCD1-013 | 10/26/89 | 65 | 4 | 50-65 | 47-65 | 44.5-47 | 0-44.5 | 52.19 | 49.2 |
| UCD2-014 | 11/15/89 | 86 | 4 | 75-85 | 69-86 | 64-69 | 0-64 | 51.72 | 49.0 |
| UCD2-015 | 03/28/90 | 120.5 | 4b | 91-116 | 86-120.5 | 65-86 | 0-65 | 51.49 | 49.4 |
| UCD2-016 | 04/04/90 | 122 | 4b | 92-117 | 86-122 | 71-86 | 0-71 | 49.95 | 48.2 |
| UCD2-017 | 04/10/90 | 143 | 4b | 88-113 | 81-113 | 78-81 | 0-78 | 51.83 | 49.6 |
| UCD1-018 | 10/04/90 | 70 | 4b | 54-69 | 51-70 | 48-51 | 0-48 | 48.56 | 46.7 |
| UCD1-019 | 10/01/90 | 74.5 | 4b | 56.5-71.5 | 53.5-72.5 | 50.5-53.5 | 0-50.5 | 51.33 | 49.3 |
| UCD1-020 | 10/09/90 | 73.5 | 4b | 57-72 | 54-73.5 | 51-54 | 0-51 | 49.78 | 48.0 |
| UCD1-021 | 10/11/90 | 73.5 | 4b | 57-72 | 54-73.5 | 51-54 | 0-51 | 48.77 | 48.7 |
| UCD1-022 | 10/25/90 | 73 | 4b | 57-72 | 54-73 | 51-54 | 0-51 | 49.07 | 49.0 |
| UCD1-023 | 10/17/90 | 76.5 | 4b | 56.5-71.5 | 53.5-73 | 50.5-53.5 | 0-50.5 | 49.39 | 49.2 |
| UCD1-024 | 10/22/90 | 73 | 4b | 57-72 | 54-73 | 51-54 | 0-51 | 48.91 | 48.8 |
| UCD1-025 | 10/06/95 | 75 | 4c | 60-75 | 56.9-75 | 52-56.9 | 0-52 | 47.38 | - |
| UCD2-026 | 10/06/95 | 102 | 4c | 87-102 | 54-102 | 79-84 | 0-79 | 48.79 | - |
| UCD2-027Z1 | 10/06/95 | 136 | 5c | 53-55 | 51.5-57.5 | 49-51.5 | 0-49 | 47.52 | - |
| UCD2-027Z2 | 10/06/95 | 136 | 5c | 63-65 | 61.5-66.5 | 57.5-61.5 | 0-49 | 47.52 | - |
| UCD2-027Z3 | 10/06/95 | 136 | 5c | 73-75 | 71.5-76.5 | 66.5-71.5 | 0-49 | 47.52 | - |
| UCD2-027Z4 | 10/06/95 | 136 | 5c | 86-88 | 84.9-90 | 76.5-84.9 | 0-49 | 47.52 | - |
| UCD2-027Z5 | 10/06/95 | 136 | 5c | 96-98 | 94.5-100 | 90-94.5 | 0-49 | 47.52 | - |
| UCD2-027Z6 | 10/06/95 | 136 | 5c | 106-108 | 104.5-109.5 | 100-104.5 | 0-49 | 47.52 | - |
| UCD2-027Z7 | 10/06/95 | 136 | 5c | 116-118 | 114.5-119 | 109.5-114.5 | 0-49 | 47.52 | - |

# Table 4
## Summary of Well Construction Details
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| Wells | Date Installed | Total Boring Depth (ft bgs) | PVC Well Diameter (inches) | Screen Interval (ft bgs) | Filter Pack (ft bgs) | Bentonite (ft bgs) | Cement (ft bgs) | Measuring Point Elevation (ft msl) | Elevation Ground Surface (ft msl) |
|---|---|---|---|---|---|---|---|---|---|
| UCD1-028 | 09/05/96 | 70 | 2b | 53-68 | 51-70 | 47-51 | 0-47 | 47.48 | 48.1 |
| UCD2-029 | 09/04/96 | 97 | 2b | 80-95 | 76.7-97 | 72-76.7 | 0-72 | 47.58 | 48.1 |
| UCD2-030 | 09/10/96 | 110 | 2b | 95-110 | 91-110 | 89.5-91 | 0-89.5 | 47.20 | 47.6 |
| UCD2-031 | 09/11/96 | 110 | 2b | 94-109 | 91-110 | 87-91 | 0-87 | 47.21 | 47.5 |
| UCD2-032 | 04/03/97 | 105 | 2b | 83-103 | 81-105 | 77-81 | 0-77 | 45.41 | 45.1 |
| UCD4-033 | Abandoned in May 1997 and replaced by UCD4-42 | | | | | | | | |
| UCD1-034 | 10/06/95 | 80 | 4c | 61-76 | 57-76 | 50-57 | 0-50 | 55.70 | - |
| UCD2-035 | 10/06/95 | 130 | 4c | 107-122 | 103-122 | 98-103 | 0-98 | 55.71 | - |
| UCD2-036 | 11/06/97 | 105 | 2b | 82-102 | 79-105 | 73-79 | 0-73 | 48.31 | - |
| UCD2-037 | 10/20/97 | 118.5 | 2b | 94-114 | 91-118.5 | 85-91 | 0-85 | 49.63 | - |
| UCD2-038 | 10/23/97 | 119 | 2b | 95-115 | 89-95 | 83-89 | 0-83 | 57.20 | - |
| UCD2-039 | 10/30/97 | 112 | 2b | 87-107 | 84-112 | 80.5-84 | 0-81.5 | 49.63 | 47.4 |
| UCD2-040 | 11/07/97 | 108.5 | 2b | 86-106 | 83-108.5 | 78-83 | 0-78 | 46.49 | 46.5 |
| UCD4-041 | 10/10/97 | 295 | 4b | 257-277 | 253-280 | 248.5-253 | 0-248.5 | 46.60 | 47.0 |
| UCD4-042 | 11/03/97 | 272 | 4b | 248.5-268.5 | 245-269 | 240-245 | 0-246 | 47.22 | 47.0 |
| UCD4-043 | 10/02/97 | 295 | 4b | 248-268 | 242.5-274 | 233-242.5 | 0-237 | 45.06 | 44.5 |
| UCD4-044 | 04/07/99 | 295 | 4b | 246.5-266.5 | 242-273 | 237-242 | 0-237 | 47.43 | - |
| UCD2-045 | 11/30/99 | 114 | 2b | 93-113 | 89.5-113.5 | 84.5-89.5 | 0-84.5 | 46.33 | 45.0 |
| UCD2-046 | 05/05/00 | 106 | 2b | 84.5-104.5 | 81.75-106 | 79-81.75 | 0-79 | 44.79 | 51.5 |
| UCD4-047 | 05/20/00 | 299 | 4b | 266-286 | 263.5-288.9 | 257-263 | 0-257 | 47.04 | 45.0 |
| UCD2-048 | 08/28/02 | 104 | 4b | 90-100 | 88.3-104 | 84-88.3 | 0-84 | 51.21 | - |
| UCD1-049 | 08/14/02 | 69.5 | 4b | 49.5-69.5 | 47-69.5 | 43-47 | 0-43 | 51.16 | - |
| UCD1-050 | 08/13/02 | 69.5 | 4b | 49.5-69.5 | 47.5-69.5 | 43.5-47.5 | 0-43.5 | 52.08 | - |
| UCD1-051 | 08/12/02 | 70 | 4b | 49.7-69.7 | 48-70 | 44-48 | 0-44 | 51.62 | - |
| UCD1-052 | 02/12/04 | 70 | 2 | 53.5 - 68.5 | 51 - 70 | 50 - 51 | 0 - 50 | 47.46 | - |
| UCD1-053 | 02/13/04 | 70 | 2 | 52.5 - 67.5 | 48 - 70 | 45 - 48 | 0 - 48 | 47.49 | - |
| UCD1-054 | 02/06/04 | 73 | 2 | 58 - 73 | 56 - 73 | 54 - 56 | 0 - 56 | - | - |

**Table 4**
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| Wells | Date Installed | Total Boring Depth (ft bgs) | PVC Well Diameter (inches) | Screen Interval (ft bgs) | Filter Pack (ft bgs) | Bentonite (ft bgs) | Cement (ft bgs) | Measuring Point Elevation (ft msl) | Elevation Ground Surface (ft msl) |
|---|---|---|---|---|---|---|---|---|---|
| DDC Treatment System | | | | | | | | | |
| DDC-1 | 10/27/00 | 86 | 4b | 20-35<br>40-55<br>65-80 | 19-35.5<br>40-55.7<br>60-80.5 | 17-19<br>35.7-40<br>80.5-85 | 0.5-17 | 52.82 | - |
| DDC-1A | 10/27/00 | 86 | 1.25b | 32.5-35 | 19-35.5 | 17-19 | 0.5-17 | 51.42 | - |
| DDC-1B | 10/27/00 | 86 | 1.25b | 50-52.5 | 40-55.7 | 35.7-40 | 0.5-17 | 51.32 | - |
| DDC-1C | 10/27/00 | 86 | 1.25b | 70-75 | 60-80.5 | 80.5-85 | 0.5-17 | 51.42 | - |
| DDC-2 | 09/16/02 | 80 | 4b | 19.7-34.7<br>39.7-54.7<br>64.7-79.7 | 16-36<br>38-56.5<br>62.3-80 | 14.3-16<br>36-38<br>56.5-62.3 | 0-14.3 | 51.34 | - |
| DDC-2A | 09/16/02 | 80 | 1.25b | 30-35 | 16-36 | 14.3-16 | 0-14.3 | 51.50 | - |
| DDC-2B | 09/16/02 | 80 | 1.25b | 50-55 | 38-56.5 | 36-38 | 0-14.3 | 51.52 | - |
| DDC-2C | 09/16/02 | 80 | 1.25b | 65-70 | 62.3-80 | 56.5-62.3 | 0-14.3 | 51.47 | - |
| DDC-3 | 09/18/02 | 80 | 4b | 19-34<br>39-54<br>64-69.7 | 16-35<br>37-56.7<br>62-80 | 14.3-16<br>35-37<br>56.7-62 | 0-14.3 | 52.53 | - |
| DDC-3A | 09/18/02 | 80 | 1.25b | 28-34 | 16-35 | 14.3-16 | 0-14.3 | 51.75 | - |
| DDC-3B | 09/18/02 | 80 | 1.25b | 49-54 | 37-56.7 | 35-37 | 0-14.3 | 51.68 | - |
| DDC-3C | 09/18/02 | 80 | 1.25b | 64-79.7 | 62-80 | 56.7-62 | 0-14.3 | 51.74 | - |
| DDC-4 | 09/19/02 | 80 | 4b | 19.5-34.5<br>39.5-54.5<br>64.5-79.5 | 16-35.5<br>37-56.5<br>62-80 | 14.3-16<br>35.5-37<br>56.5-62 | 0-14.3 | 50.86 | - |
| DDC-4A | 09/19/02 | 80 | 1.25b | 29.5-34.5 | 16-35.5 | 14.3-16 | 0-14.3 | 51.22 | - |
| DDC-4B | 09/19/02 | 80 | 1.25b | 49.5-54.5 | 37-56.5 | 35.5-37 | 0-14.3 | 51.23 | - |
| DDC-4C | 09/19/02 | 80 | 1.25b | 64.5-69.5 | 62-80 | 56.5-62 | 0-14.3 | 51.84 | - |
| DDC-5 | 09/20/02 | 80 | 4b | 18.5-33.5<br>38.5-53.5<br>63.5-78.5 | 16-34.5<br>36.5-55.7<br>61-80 | 14-16<br>34.5-36.5<br>55.7-61 | 0-14 | 51.18 | - |
| DDC-5A | 09/20/02 | 80 | 1.25b | 28.5-33.5 | 16-34.5 | 14-16 | 0-14 | 51.02 | - |
| DDC-5B | 09/20/02 | 80 | 1.25b | 48.5-53.5 | 36.5-55.7 | 34.5-36.5 | 0-14 | 51.04 | - |
| DDC-5C | 09/20/02 | 80 | 1.25b | 73.5-78.5 | 61-80 | 55.7-61 | 0-14 | 51.01 | - |
| DDC-6 | 09/13/02 | 80.3 | 4b | 20-35<br>40-55<br>65-80 | 16-36<br>38-56.5<br>62-80.3 | 14.3-16<br>36-38<br>56.5-62 | 0-14.3 | 51.37 | - |
| DDC-6A | 09/13/02 | 80.3 | 1.25b | 30-35 | 16-36 | 14.3-16 | 0-14.3 | 51.56 | - |
| DDC-6B | 09/13/02 | 80.3 | 1.25b | 50-55 | 38-56.5 | 36-38 | 0-14.3 | 51.58 | - |
| DDC-6C | 09/13/02 | 80.3 | 1.25b | 65-70 | 62-80.3 | 56.5-62 | 0-14.3 | 51.51 | - |

**Table 4**
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| Wells | Date Installed | Total Boring Depth (ft bgs) | PVC Well Diameter (inches) | Screen Interval (ft bgs) | Filter Pack (ft bgs) | Bentonite (ft bgs) | Cement (ft bgs) | Measuring Point Elevation (ft msl) | Elevation Ground Surface (ft msl) |
|---|---|---|---|---|---|---|---|---|---|
| Piezometers | | | | | | | | | |
| TP-1A | 11/04/00 | 80 | 2 | 30-35 | 17-35.5 | 14-17 | 0.5-14 | 49.65 | - |
| TP-1B | 11/04/00 | 80 | 2 | 47-52 | 45-55 | 35.7-45 | 0.5-14 | 49.90 | - |
| TP-1C | 11/04/00 | 80 | 2 | 70-75 | 60-80.5 | 55-60 | 0.5-14 | 49.81 | - |
| TP-2A | 10/31/00 | 79 | 2 | 28-33 | 14-33 | 12-14 | 0.5-12 | 51.43 | - |
| TP-2B | 10/31/00 | 79 | 2 | 47.5-52.5 | 45-55 | 33-45 | 0.5-12 | 51.15 | - |
| TP-2C | 10/31/00 | 79 | 2 | 70-75 | 60-79 | 55-60 | 0.5-12 | 51.10 | - |
| TP-3A | 11/03/00 | 80.5 | 2 | 30-35 | 20-33.5 | 15-20 | 0.5-15 | 51.05 | - |
| TP-3B | 11/03/00 | 80.5 | 2 | 47.5-52.5 | 45-55 | 35.5-45 | 0.5-15 | 51.10 | - |
| TP-3C | 11/03/00 | 80.5 | 2 | 70-75 | 60-80.5 | 55-60 | 0.5-15 | 51.08 | - |
| TP-4A | 11/02/00 | 80.5 | 2 | 30-35 | 19-35 | 12-19 | 0.5-17 | 51.07 | - |
| TP-4B | 11/02/00 | 80.5 | 2 | 47.5-52.5 | 45-55 | 35-45 | 0.5-17 | 51.06 | - |
| TP-4C | 11/02/00 | 80.5 | 2 | 70-75 | 60-80.5 | 55-60 | 0.5-17 | 51.17 | - |
| TP-5A | 10/26/00 | 80 | 2 | 30-35 | 20-35.5 | 15-20 | 0.5-15 | 51.93 | - |
| TP-5B | 10/26/00 | 80 | 2 | 47.5-52.5 | 45-55.3 | 35.5-45 | 0.5-15 | 51.87 | - |
| TP-5C | 10/26/00 | 80 | 2 | 74.5-79.5 | 60-80 | 55.25-60 | 0.5-15 | 51.79 | - |
| IRA Treatment System | | | | | | | | | |
| EW2-1 | 09/20/96 | 125.65 | 8b | 79.4-119.4 | 74.4-125.65 | 68.4-74.4 | 0-68.4 | 49.17 | 47.3 |
| IW2-1 | 10/17/97 | 126.5 | 10b | 84.5-119.5 | 80-126.5 | 75-80 | 0-75 | 49.39 | - |

Notes:

[a] well constructed with #60 sand seal and no bentonite

[b] stainless steel, wire-wrap screen

[c] stainless steel, blank casing, and wire wrap screen

EW = extraction well

ft bgs = feet below ground surface

ft msl = feet mean sea level datum

IW = injection well

## Table 5
## IRA LTPS Effluent Discharge Standards for Irrigation
## 2005 Comprehensive Annual Water Monitoring Report
## LEHR/SCDS Environmental Restoration
## Davis, CA

| Effluent Discharge Standards for Irrigation | | |
|---|---|---|
| Analyte | Units | Standard |
| Arsenic | µg/L | 10 |
| Barium | µg/L | 490 |
| Boron | µg/L | 791 |
| Cadmium | µg/L | 1 |
| Carbon-14 | pCi/L | 50 |
| Chloride | mg/L | 106 |
| Chloroform | µg/L | 0.5 |
| Chromium (total) | µg/L | 44.6 |
| Lead | µg/L | 2 |
| Manganese | µg/L | 50 |
| Mercury | µg/L | 1.2 |
| Nickel | µg/L | 100 |
| $NO_3$-N | mg/L | 27.4 |
| $SO_4$-S | mg/L | 250 |
| Tritium | pCi/L | 300 |
| Zinc | µg/L | 2,000 |

Notes:
µg/L = micrograms per liter
pCi/L = picocuries per liter
mg/L – milligrams per liter

**Table 6**
**Data Verification Requirements**
**2005 Comprehensive Annual Water Monitoring Report**
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| Review Item | Checked During Data Verification |
|---|---|
| Case Narrative | X |
| Chain-of-Custody Documentation | X |
| Summary of Results | X |
| Holding Times | X |
| Method Blank Analysis Results | X |
| Field/Trip Blank Analysis Results | X |
| Surrogate Standard %R | X |
| Laboratory Control Samples - %R | X |
| Matrix Spike – %R | X |
| LCS/LCS Duplicate - RPD | X |
| MS/MS Duplicate - RPD | X |
| Laboratory Replicate - RPD | X |
| Field Duplicate - RPD | X |

Note:
%R = percent recoveries
RPD = relative percent difference

## Table 7
## Analytical Completeness by Method for Water Samples
## 2005 Comprehensive Annual Water Monitoring Report
## LEHR/SCDS Environmental Restoration
## Davis, CA

| | | | | Number of results | | | | Completeness | |
|---|---|---|---|---|---|---|---|---|---|
| Method | Parameter | Samples Analyzed (N+FD) | Analytes per sample | Total | Rejected | Estimated due to QC deficiencies | Estimated due to >MDL but <PQL | Percent usable | Percent quantitative* |
| E160.1 | Total Dissolved Solids | 138+17 | 1 | 155 | 1 | 2 | 0 | 99% | 99% |
| E160.2 | Total Suspended Solids | 4+2 | 1 | 6 | 0 | 2 | 0 | 100% | 67% |
| E1630 | Mercury | 1+1 | 1 | 2 | 0 | 0 | 0 | 100% | 100% |
| E1631E | Mercury | 1+1 | 1 | 2 | 0 | 0 | 0 | 100% | 100% |
| E300 | Anions | 144+17 | 1-3 | 251 | 0 | 56 | 0 | 100% | 78% |
| E310.1 | Alkalinity | 48+6 | 1 | 54 | 0 | 0 | 0 | 100% | 100% |
| E413.1 | Oil and Grease | 2+2 | 1 | 4 | 0 | 0 | 2 | 100% | 100% |
| E415.1 | Total Organic Carbon | 44+6 | 1 | 50 | 0 | 3 | 2 | 100% | 94% |
| E600.4 | Aquatic Toxicity | 10+2 | 1-5 | 32 | 0 | 0 | 0 | 100% | 100% |
| E900 | Gross Alpha and Beta | 4 | 2 | 8 | 0 | 0 | 0 | 100% | 100% |
| E901.1 | Radionclides | 4 | 14 | 56 | 0 | 0 | 0 | 100% | 100% |
| E903.1 | Radium-226 | 15+3 | 1 | 18 | 0 | 5 | 1 | 100% | 72% |
| E905.0 | Strontium | 14+3 | 1 | 17 | 0 | 0 | 0 | 100% | 100% |
| E906.0 | Tritium | 131+17 | 1 | 148 | 0 | 0 | 0 | 100% | 100% |
| EERF C | Carbon-14 | 131+17 | 1 | 148 | 0 | 0 | 0 | 100% | 100% |
| HASL 300 | | 4 | 2 | 8 | 0 | 0 | 0 | 100% | 100% |
| OLM4.2CLPE | Pesticides/PCBs | 1+1 | 28 | 56 | 0 | 0 | 0 | 100% | 100% |
| OLM4.2CLPV | Volatile Organics | 2+2 | 18 | 192 | 0 | 14 | 7 | 100% | 93% |
| SW6010B | Metals by ICP/AES | 133+17 | 1-18 | 318 | 0 | 13 | 52 | 100% | 96% |
| SW6020 | Metals by ICP/MS | 47+5 | 18 | 936 | 0 | 62 | 269 | 100% | 93% |
| SW7470A | Mercury | 49+7 | 1 | 56 | 0 | 2 | 2 | 100% | 96% |
| SW8081 | Pesticides | 13+2 | 28 | 418 | 0 | 88 | 14 | 100% | 79% |
| SW8260B | Volatile Organics | 247+28 | 40 | 10,999 | 0 | 885 | 215 | 100% | 92% |
| SW8270C | Semivolatile Organics | 4 | 64 | 256 | 0 | 2 | 2 | 100% | 99% |
| SW9070 | Oil and Grease | 2 | 1 | 2 | 0 | 0 | 1 | 100% | 100% |

Notes:
*Estimations due solely to results <PQL do not affect the calculated completeness.
Calculations do not include any required field or laboratory QC samples, except field duplicates.
FD = field duplicate samples
N = normal environmental samples

## Table 8
## Analytical Completeness by Method for Soil Samples
## 2005 Comprehensive Annual Water Monitoring Report
## LEHR/SCDS Environmental Restoration
## Davis, CA

| | | | | Number of results | | | | Completeness | |
|---|---|---|---|---|---|---|---|---|---|
| Method | Parameter | Samples Analyzed (N) | Analytes per sample | Total | Rejected | Estimated due to QC deficiencies | Estimated due to >MDL but <PQL | Percent usable | Percent quantitative* |
| E300 | Anions | 17 | 4 | 68 | 0 | 4 | 14 | 100% | 94% |
| E350.1 | Ammonia | 17 | 1 | 17 | 0 | 0 | 0 | 100% | 100% |
| E351.2 | Total Kjeldahl Nitrogen | 17 | 1 | 17 | 0 | 0 | 0 | 100% | 100% |
| E415.1 | Total Organic Carbon | 17 | 1 | 17 | 0 | 0 | 0 | 100% | 100% |
| SW6010B | Metals by ICP/AES | 17 | 16 | 272 | 0 | 2 | 54 | 100% | 99% |
| SW7471A | Mercury | 17 | 1 | 17 | 0 | 1 | 0 | 100% | 94% |
| SW9045C | pH | 17 | 1 | 17 | 0 | 0 | 0 | 100% | 100% |

Note:
*Estimations due solely to results <PQL do not affect the calculated completeness
Calculations do not include any required field or laboratory QC samples, except field duplicates.
N = normal environmental samples

# Table 9
## Analytical Completeness by Method for Air Samples
## 2005 Comprehensive Annual Water Monitoring Report
## LEHR/SCDS Environmental Restoration
## Davis, CA

| | | | | Number of results | | | | Completeness | |
|---|---|---|---|---|---|---|---|---|---|
| Method | Parameter | Samples Analyzed (N+FD) | Analytes per sample | Total | Rejected | Estimated due to QC deficiencies | Estimated due to >MDL but <PQL | Percent usable | Percent quantitative* |
| TO15 | Volatile Organics | 2 | 55 | 110 | 0 | 7 | 0 | 100% | 94% |

Note:
*Estimations due solely to results <PQL do not affect the calculated completeness.
Calculations do not include any required field or laboratory QC samples, except field duplicates.
FD = field duplicate samples
N = normal environmental samples

Table 10
DDC Pilot Test System - Chloroform Results
2005 Comprehensive Annual Water Monitoring Report
LEHR/SCDS Environmental Restoration
Davis, California

| Location | Sample ID | Date | ug/L |
|---|---|---|---|
| DDC-1A | GWDC0065 | 1/20/2005 | 41.9 |
| DDC-1B | GWDC0066 | 1/20/2005 | 49.7 |
| | GWDC0067 | 1/20/2005 | 48.1 |
| | GWDC0087 | 4/27/2005 | 66.9 |
| | GWDC0107 | 8/10/2005 | 28.1 |
| | GWDC0127 | 10/18/2005 | 3560 |
| DDC-1C | GWDC0068 | 1/20/2005 | 4580 |
| | GWDC0088 | 4/27/2005 | 5350 |
| | GWDC0108 | 8/10/2005 | 5320 |
| | GWDC0128 | 10/18/2005 | 4600 |
| | GWDC0129 | 10/18/2005 | 3860 |
| DDC-2A | GWDC0069 | 1/19/2005 | 24.2 |
| | GWDC0089 | 4/27/2005 | 40.2 |
| DDC-2B | GWDC0070 | 1/19/2005 | 42.1 |
| | GWDC0071 | 1/19/2005 | 38.2 |
| | GWDC0090 | 4/27/2005 | 50.4 |
| | GWDC0110 | 8/10/2005 | 50.4 |
| | GWDC0131 | 10/18/2005 | 47.8 |
| DDC-2C | GWDC0072 | 1/19/2005 | 152 |
| | GWDC0091 | 4/27/2005 | 89.6 |
| | GWDC0111 | 8/10/2005 | 63.5 |
| | GWDC0112 | 8/10/2005 | 61.6 |
| | GWDC0132 | 10/18/2005 | 141 |
| DDC-3A | GWDC0133 | 10/18/2005 | 34.4 |
| DDC-3B | GWDC0074 | 1/20/2005 | 204 |
| | GWDC0093 | 4/27/2005 | 139 |
| | GWDC0094 | 4/27/2005 | 140 |
| | GWDC0114 | 8/10/2005 | 39.6 |
| | GWDC0134 | 10/18/2005 | 29.4 |
| DDC-3C | GWDC0075 | 1/20/2005 | 184 |
| | GWDC0095 | 4/27/2005 | 176 |
| | GWDC0115 | 8/10/2005 | 222 |
| | GWDC0135 | 10/18/2005 | 57 |
| DDC-4A | GWDC0076 | 1/19/2005 | 87.2 |
| DDC-4B | GWDC0077 | 1/19/2005 | 93 |
| | GWDC0097 | 4/27/2005 | 177 |
| | GWDC0117 | 8/10/2005 | 91.1 |
| | GWDC0137 | 10/18/2005 | 34.2 |
| | GWDC0138 | 10/18/2005 | 192 |
| DDC-4C | GWDC0078 | 1/19/2005 | 164 |
| | GWDC0098 | 4/27/2005 | 253 |
| | GWDC0118 | 8/10/2005 | 407 |
| | GWDC0139 | 10/18/2005 | 296 |
| DDC-5A | GWDC0079 | 1/19/2005 | 1.48 |
| | GWDC0099 | 4/27/2005 | 5.35 |
| DDC-5B | GWDC0080 | 1/19/2005 | 1.62 |

**Table 10**
**DDC Pilot Test System - Chloroform Results**
**2005 Comprehensive Annual Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| Location | Sample ID | Date | ug/L |
|---|---|---|---|
| | GWDC0100 | 4/27/2005 | 6.17 |
| | GWDC0120 | 8/10/2005 | 7.85 |
| | GWDC0121 | 8/10/2005 | 8.82 |
| | GWDC0141 | 10/18/2005 | 2.93 |
| DDC-5C | GWDC0081 | 1/19/2005 | 748 |
| | GWDC0101 | 4/27/2005 | 1020 |
| | GWDC0122 | 8/10/2005 | 2900 |
| | GWDC0142 | 10/18/2005 | 2310 |
| DDC-6A | GWDC0082 | 1/19/2005 | 20.9 |
| | GWDC0102 | 4/27/2005 | 28.5 |
| | GWDC0143 | 10/18/2005 | 15.7 |
| DDC-6B | GWDC0083 | 1/19/2005 | 25.1 |
| | GWDC0103 | 4/27/2005 | 29.9 |
| | GWDC0104 | 4/27/2005 | 32.7 |
| | GWDC0124 | 8/10/2005 | 9.97 |
| | GWDC0144 | 10/18/2005 | 19.1 |
| DDC-6C | GWDC0084 | 1/19/2005 | 56.9 |
| | GWDC0105 | 4/27/2005 | 43.9 |
| | GWDC0125 | 8/10/2005 | 22.9 |
| | GWDC0145 | 10/18/2005 | 32.8 |

Note:
µg/L - microgram per liter

**Table 11**
**2005 Estimated Chloroform Mass Removal**
**Expanded DDC Pilot Test**
**2005 Comprehensive Annual Water Monitoring Report**
**LEHR/SCDS Environmental Restoration, Davis, CA**

| Date | DDC Well | C-Well Chloroform Concentration (µg/L) | B-Well Chloroform Concentration (µg/L) | Chloroform Concentration Removed (µg/L) | Number of Days Operating[1] | Volume of Water Pumped Between Zones (liters) | Mass of Chloform Removed (µg) | Mass of Chloform Removed (lbs) |
|---|---|---|---|---|---|---|---|---|
| 1/20/2005 | DDC-1 | 4580 | 49.7 | 4530.3 | 62 | - | - | 0.00 |
| 4/27/2005 | | 5350 | 66.9 | 5283.1 | 50 | 886,194 | 4,681,852,377 | 10.32 |
| 8/10/2005 | | 5320 | 28.1 | 5291.9 | 40 | - | - | 0.00 |
| 10/18/2005 | | 4600 | 3560 | 1040.0 | 58 | 1,897,629 | 1,973,534,609 | 4.35 |
| | | | | | | | Total DDC-1: | 14.67 |
| 1/19/2005 | DDC-2 | 152 | 42.1 | 109.9 | 62 | - | - | 0.00 |
| 4/27/2005 | | 89.6 | 50.4 | 39.2 | 50 | - | - | 0.00 |
| 8/10/2005 | | 63.5 | 50.4 | 13.1 | 40 | - | - | 0.00 |
| 10/18/2005 | | 141 | 47.8 | 93.2 | 58 | 35,023 | 3,264,177 | 0.01 |
| | | | | | | | Total DDC-2: | 0.01 |
| 1/20/2005 | DDC-3 | 184 | 204 | 0.0 | 62 | 40,496 | - | 0.00 |
| 4/27/2005 | | 176 | 140 | 36.0 | 50 | - | - | 0.00 |
| 8/10/2005 | | 222 | 39.6 | 182.4 | 40 | - | - | 0.00 |
| 10/18/2005 | | 57 | 29.4 | 27.6 | 58 | 1,235,369 | 34,096,198 | 0.08 |
| | | | | | | | Total DDC-3: | 0.08 |
| 1/19/2005 | DDC-4 | 164 | 93 | 71.0 | 62 | - | - | 0.00 |
| 4/27/2005 | | 253 | 177 | 76.0 | 50 | 687,752 | 52,269,145 | 0.00 |
| 8/10/2005 | | 407 | 91.1 | 315.9 | 40 | - | - | 0.00 |
| 10/18/2005 | | 296 | 192 | 104.0 | 58 | 1,057,069 | 109,935,149 | 0.24 |
| | | | | | | | Total DDC-4: | 0.24 |
| 1/19/2005 | DDC-5 | 748 | 1.62 | 746.4 | 62 | 2,338,671 | 1,745,537,454 | 3.85 |
| 4/27/2005 | | 1020 | 6.17 | 1013.8 | 50 | 916,096 | 928,766,032 | 2.05 |
| 8/10/2005 | | 2900 | 8.82 | 2891.2 | 40 | - | - | 0.00 |
| 10/18/2005 | | 2310 | 2.93 | 2307.1 | 58 | 1,365,911 | 3,151,252,563 | 6.95 |
| | | | | | | | Total DDC-5: | 12.84 |
| 1/19/2005 | DDC-6 | 56.9 | 25.1 | 31.8 | 62 | 2,291,425 | 72,867,327 | 0.16 |
| 4/27/2005 | | 43.9 | 32.7 | 11.2 | 50 | 1,565,791 | 17,536,858 | 0.04 |
| 8/10/2005 | | 22.9 | 9.97 | 12.9 | 40 | - | - | 0.00 |
| 10/18/2005 | | 32.8 | 19.1 | 13.7 | 58 | 1,270,393 | 17,404,382 | 0.04 |
| | | | | *%DDC Uptime for 20* | *59%* | | Total DDC-6 | 0.24 |
| | | | | | | | **Total Mass Removed in the Expanded Phase DDC System:** | **28.1** |

Notes:

[1]Days operating reflects number of days that the system was running during the quarter in which the sample was taken.

µg/L = microgrmas per liter

lbs = pounds

Table 12
VOCs in Groundwater in 2005
Expanded DDC Pilot Test
2005 Comprehensive Annual Water Monitoring Report
LEHR/SCDS Environmental Restoration
Davis, CA

| | | | 1,1,2-Trichloroethane | 1,1-Dichloroethane | 1,1-Dichloroethene | 1,2-Dichloroethane | 1,2-Dichloropropane | Acetone | Chloroform | Methyl Ethyl Ketone (2-Butanone) | Tetrachloroethylene (PCE) | Toluene | Trichloroethylene (TCE) | Xylenes, Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | CRDL | 1 | 0.5 | 0.5 | 0.5 | 0.5 | 5 | 0.5 | 1 | 0.5 | 0.5 | 0.5 | 1 |
| Location | Sample ID | Date | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L |
| TP-1B | GWTP0074 | 1/19/2005 | **1.21** | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 5.48 UJ | < 21.2 UJ | < 4.96 UJ | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| | GWTP0091 | 4/28/2005 | < 0.104 | < 0.101 | < 0.1 UJ | < 0.1 | < 0.103 | < 0.37 UJ | **22.7** | < 0.438 | < 0.1 | < 0.056 UJ | < 0.2 | < 0.175 |
| | GWTP0107 | 8/11/2005 | 0.608 J | < 0.101 | < 0.1 | < 0.531 UJ | < 0.103 | < 0.37 | **13.1** | < 0.438 | < 0.1 | < 0.056 | < 0.2 | < 0.175 |
| | GWTP0124 | 10/18/2005 | < 0.104 | < 0.101 | < 0.1 | < 0.1 | < 0.103 | < 0.37 | **5.81 J** | < 0.438 | < 0.1 | < 0.056 | < 0.2 | < 0.175 |
| | GWTP0125 | 10/18/2005 | < 0.104 | < 0.101 | < 0.1 | < 0.1 | < 0.103 | < 0.37 | **2.53 J** | < 0.438 | < 0.1 | < 0.056 | < 0.2 | < 0.175 |
| TP-1C | GWTP0075 | 1/19/2005 | **3.23** | **1.64** | **0.841** | **1.19** | < 0.25 | **159** | **365** | **208** | < 0.25 | **0.578** | < 0.25 | 0.475 J |
| | GWTP0092 | 4/28/2005 | < 0.104 | 0.414 J | < 0.1 UJ | 0.374 J | < 0.103 | < 0.37 UJ | **93.7** | < 0.438 | < 0.1 | < 0.056 UJ | < 0.2 | < 0.175 |
| | GWTP0108 | 8/11/2005 | **2.13** | **0.746** | < 0.355 UJ | < 0.852 UJ | < 0.103 | 0.776 J | **217** | < 0.438 | < 0.1 | < 0.056 | **1.54** | < 0.175 |
| | GWTP0109 | 8/11/2005 | **2.36** | **0.783** | < 0.507 UJ | < 0.886 UJ | < 0.103 | 0.748 J | **253** | < 0.438 | < 0.1 | < 0.056 | < 0.2 | < 0.175 |
| | GWTP0126 | 10/18/2005 | **2.94 J** | **0.893 J** | < 0.1 UJ | **0.672 J** | < 0.103 UJ | 1.36 J | **430** | < 0.438 UJ | < 0.1 UJ | < 0.056 UJ | < 0.2 UJ | < 0.175 UJ |
| TP-2B | GWTP0077 | 1/20/2005 | < 0.25 | 0.45 J | < 0.25 | < 0.25 | < 0.25 | < 0.25 | **32.6** | < 0.27 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| | GWTP0095 | 4/28/2005 | < 0.104 | 0.342 J | < 0.1 UJ | < 0.1 | < 0.103 | < 0.37 UJ | **54.7** | < 0.438 | < 0.1 | < 0.056 UJ | < 0.2 | < 0.175 |
| | GWTP0111 | 8/11/2005 | 0.499 J | < 0.101 | < 0.1 | < 0.426 UJ | < 0.103 | < 0.37 | **24.4** | < 0.438 | < 0.1 | < 0.056 | < 0.2 | < 0.175 |
| | GWTP0128 | 10/19/2005 | 0.682 J | 0.265 J | < 0.1 | < 0.1 | < 0.103 | < 0.37 | **29.7** | < 0.438 | < 0.1 | < 0.056 | < 0.2 | < 0.175 |
| TP-2C | GWTP0078 | 1/20/2005 | **4.9** | **3.07** | **2.15** | **2.22** | < 0.25 | 4.45 J | **827** | **15.2** | 0.266 J | < 0.25 | 0.431 J | < 0.25 |
| | GWTP0096 | 4/28/2005 | < 0.104 | **1.08** | < 0.827 UJ | **1.07** | < 0.103 | < 0.37 UJ | **273** | < 0.438 | < 0.1 | < 0.056 UJ | < 0.2 | < 0.175 |
| | GWTP0112 | 8/11/2005 | **2.02** | **0.945** | < 0.534 UJ | < 0.972 UJ | < 0.103 | **41.4** | **270** | **1.05** | < 0.1 | < 0.056 | < 0.2 | < 0.175 |
| | GWTP0129 | 10/19/2005 | **2.6** | **1.08** | **0.689** | **0.837** | < 0.103 | < 0.37 | **287 J** | < 0.438 | < 0.1 | < 0.056 | < 0.2 | < 0.175 |
| TP-3B | GWTP0080 | 1/21/2005 | **1.73** | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 20.9 UJ | < 28.1 UJ | < 0.27 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| | GWTP0098 | 4/28/2005 | **1.2** | < 0.101 | < 0.1 | < 0.1 | < 0.103 | 0.441 J | **28.2** | < 0.438 | < 0.1 | < 0.056 | < 0.2 | < 0.175 |
| | GWTP0114 | 8/11/2005 | **5.31** | **2.5** | **2.47** | < 1.05 UJ | < 0.103 | < 0.37 | **1060** | < 0.438 | < 0.1 | < 0.056 | 0.378 J | < 0.175 |
| | GWTP0115 | 8/11/2005 | **4.86** | **1.94** | **1.87** | < 1.26 UJ | < 0.103 | < 0.37 | **988** | < 0.438 | < 0.1 | < 0.056 | 0.343 J | < 0.175 |
| | GWTP0131 | 10/19/2005 | 0.982 J | 0.269 J | < 0.1 | 0.432 J | < 0.103 | < 0.37 | **36.5** | < 0.438 | < 0.1 | < 0.056 | < 0.2 | < 0.175 |
| TP-3C | GWTP0081 | 1/21/2005 | **11.5** | **4.06** | **4.07** | **1.55** | < 0.25 | < 0.411 UJ | **1690** | < 5.36 UJ | 0.297 J | < 0.25 | **0.897** | < 0.25 |
| | GWTP0099 | 4/28/2005 | **6.12** | **2.85** | **2.82** | **1.21** | < 0.103 | 1.8 J | **1400** | < 0.438 | < 0.1 | < 0.056 | 0.446 J | < 0.175 |
| | GWTP0116 | 8/11/2005 | **4.47** | **2.05** | **2.06** | < 1.02 UJ | < 0.103 | < 0.37 | **871** | < 0.438 | < 0.1 | < 0.056 | 0.318 J | < 0.175 |
| | GWTP0132 | 10/19/2005 | **7.36** | **2.4** | **2.78** | **0.925** | < 0.103 | < 0.37 | **1320 J** | < 0.438 | < 0.1 | < 0.056 | 0.483 J | < 0.175 |
| TP-4B | GWTP0083 | 1/19/2005 | **1.2** | < 0.25 | < 0.25 | 0.269 J | < 0.25 | < 0.25 | **35.8** | < 0.27 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| | GWTP0084 | 1/19/2005 | **1.18** | < 0.25 | < 0.25 | 0.263 J | < 0.25 | < 0.25 | **34.7** | < 0.27 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| | GWTP0101 | 4/28/2005 | 0.978 J | < 0.101 | < 0.1 | < 0.1 | < 0.103 | < 0.37 | **26.8** | < 0.438 | < 0.1 | < 0.056 | < 0.2 | < 0.175 |
| | GWTP0118 | 8/12/2005 | **1.1** | < 0.101 | < 0.1 | < 0.1 | < 0.103 | < 0.37 | **70.4** | < 0.438 | < 0.1 | < 0.056 | < 0.2 | < 0.175 |
| | GWTP0134 | 10/19/2005 | **1.05** | 0.343 J | < 0.1 | 0.272 J | < 0.103 | < 0.37 | **52.7** | < 0.438 | < 0.1 | < 0.056 | < 0.2 | < 0.175 |
| TP-4C | GWTP0085 | 1/19/2005 | **3.72** | **9.12** | **3.2** | **3.19** | 0.315 J | < 13.9 UJ | **545** | **16.1** | **0.81** | < 0.25 | **0.974** | < 0.25 |
| | GWTP0102 | 4/28/2005 | < 0.104 | < 0.101 | < 0.1 | < 0.1 | < 0.103 | < 0.37 | **10.3** | < 0.438 | < 0.1 | 0.364 J | < 0.2 | < 0.175 |
| | GWTP0119 | 8/12/2005 | **1.6** | **5.49** | **2.19** | < 1.78 UJ | 0.179 J | 1.28 J | **404** | < 0.438 | **0.661** | < 0.056 | **0.633** | < 0.175 |
| | GWTP0135 | 10/19/2005 | **4.02** | **12.1** | **3.64** | **3.35** | 0.46 J | < 0.37 | **769 J** | < 0.438 | **1.12** | < 0.056 | **1.09** | < 0.175 |
| TP-5B | GWTP0087 | 1/20/2005 | **1.55** | < 0.25 | < 0.25 | < 0.25 | < 0.25 | 0.913 J | **37.4** | < 0.27 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| | GWTP0088 | 1/20/2005 | **1.48** | < 0.25 | < 0.25 | < 0.25 | < 0.25 | 0.414 J | **38.1** | < 0.27 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| | GWTP0104 | 4/28/2005 | < 0.104 | < 0.101 | < 0.1 UJ | < 0.1 | < 0.103 | < 0.734 UJ | **36.2** | < 0.438 | < 0.1 | < 0.056 UJ | < 0.2 | < 0.175 |
| | GWTP0121 | 8/11/2005 | 0.675 J | < 0.101 | < 0.1 | < 0.608 UJ | < 0.103 | < 0.37 | **23.3 J** | < 0.438 | < 0.1 | < 0.056 | < 0.2 | < 0.175 |
| | GWTP0137 | 10/20/2005 | 0.532 J | 0.287 J | < 0.1 | **0.536** | < 0.103 | < 0.37 | < 24.4 UJ | < 0.438 | < 0.1 | < 0.056 | < 0.2 | < 0.175 |

Table 12
VOCs in Groundwater in 2005
Expanded DDC Pilot Test
2005 Comprehensive Annual Water Monitoring Report
LEHR/SCDS Environmental Restoration
Davis, CA

| | | | 1,1,2-Trichloroethane | 1,1-Dichloroethane | 1,1-Dichloroethene | 1,2-Dichloroethane | 1,2-Dichloropropane | Acetone | Chloroform | Methyl Ethyl Ketone (2-Butanone) | Tetrachloroethylene (PCE) | Toluene | Trichloroethylene (TCE) | Xylenes, Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | CRDL | 1 | 0.5 | 0.5 | 0.5 | 0.5 | 5 | 0.5 | 1 | 0.5 | 0.5 | 0.5 | 1 |
| Location | Sample ID | Date | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L |
| TP-5C | GWTP0089 | 1/20/2005 | **5.7** | **3.58** | **2.07** | **1.31** | < 0.25 | 0.47 J | **730** | 0.563 J | 0.325 J | < 0.25 | **0.506** | < 0.25 |
| | GWTP0105 | 4/28/2005 | < 0.104 | **1.2** | < 0.662 UJ | **0.617** | < 0.103 | < 0.416 UJ | **284** | < 0.438 | < 0.1 | < 0.056 UJ | < 0.2 | < 0.175 |
| | GWTP0122 | 8/11/2005 | **1.82** | **0.571** | < 0.346 UJ | < 0.6 UJ | < 0.103 | 1.85 J | **402** | 0.463 J | < 0.1 | < 0.056 | < 0.2 | < 0.175 |
| | GWTP0138 | 10/20/2005 | **4.84** | **1.56** | **0.929** | **0.71** | < 0.103 | < 0.37 | **506** | < 0.438 | < 0.1 | < 0.056 | 0.279 J | < 0.175 |
| | GWTP0139 | 10/20/2005 | **5.4** | **1.66** | **1.02** | **0.817** | < 0.103 | < 0.37 | **513** | < 0.438 | < 0.1 | < 0.056 | 0.342 J | < 0.175 |
| UCD1-012 | GWGW1847 | 2/10/2005 | < 0.25 | < 0.25 | < 0.25 | 0.252 J | < 0.25 | < 0.25 | **55** | < 0.27 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| | GWGW1870 | 5/25/2005 | **1.37** | 0.299 J | < 0.1 | 0.387 J | < 0.103 | < 0.37 | **55.7** | < 0.438 | < 0.1 | < 0.056 | < 0.2 | < 0.175 |
| | GWGW1871 | 5/25/2005 | **1.19** | 0.234 J | < 0.1 | 0.325 J | < 0.103 | < 0.37 | **50.2** | < 0.438 | < 0.1 | < 0.056 | < 0.2 | < 0.175 |
| | GWGW1921 | 8/9/2005 | **1.19** | 0.283 J | < 0.1 | 0.285 J | < 0.103 | < 0.37 | **83.7** | < 0.438 | < 0.1 | < 0.056 | < 0.2 | < 0.175 |
| | GWGW1942 | 10/19/2005 | **1.24** | < 0.101 | < 0.1 | 0.269 J | < 0.103 | < 0.37 | **56.1** | < 0.438 | < 0.1 | < 0.056 | < 0.2 | < 0.175 |
| UCD1-049 | GWGW1855 | 1/25/2005 | **2.39** | 0.274 J | < 1.87 UJ | < 0.25 | < 0.25 | < 0.25 | **242** | < 0.27 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| | GWGW1885 | 6/7/2005 | **3.46** | **0.795 J** | **2.17** | 0.238 J | < 0.103 | 3.45 J | **785 J** | < 0.438 | < 0.1 | < 0.056 | < 0.2 | < 0.175 |
| | GWGW1930 | 8/9/2005 | **3.5** | 0.178 J | **1.05** | < 0.1 | < 0.103 | < 0.37 | **229** | < 0.438 | < 0.1 | < 0.056 | < 0.2 | < 0.175 |
| | GWGW1949 | 10/19/2005 | **3.36** | < 0.101 | **0.512** | < 0.1 | < 0.103 | < 0.37 | **171 J** | < 0.438 | < 0.1 | < 0.056 | < 0.2 | < 0.175 |
| UCD1-050 | GWGW1856 | 1/25/2005 | **7.82** | **1.32** | < 3.32 UJ | 0.296 J | < 0.25 | < 0.25 | **1150** | < 0.27 | < 0.25 | < 0.25 | **0.559** | < 0.25 |
| | GWGW1887 | 6/7/2005 | **22.8** | **2.48 J** | **3.72** | < 0.1 | < 0.103 | 2.63 J | **146 J** | < 0.438 | 0.309 J | < 0.056 | **1.7** | < 0.175 |
| | GWGW1931 | 8/9/2005 | **11.4** | **1.03** | **2.28** | 0.211 J | < 0.103 | < 0.37 | **965** | < 0.438 | < 0.1 | < 0.056 | **0.811** | < 0.175 |
| | GWGW1950 | 10/19/2005 | **19.3** | **1.32** | **2.42** | 0.265 J | < 0.103 | < 0.37 | **1040 J** | < 0.438 | < 0.1 | < 0.056 | **1.23** | < 0.175 |
| | GWGW1951 | 10/19/2005 | **18.1** | **1.21** | **2.42** | < 0.1 | < 0.103 | < 0.37 | **955 J** | < 0.438 | 0.197 J | < 0.056 | **1.08** | < 0.175 |
| UCD1-051 | GWGW1857 | 1/25/2005 | **3.84** | **22.7** | **7.04** | **15** | **0.728** | < 0.25 | **1540** | < 0.27 | **2.35** | < 0.25 | **0.901** | < 0.25 |
| | GWGW1888 | 6/7/2005 | **2.31** | **14.3 J** | **4.45** | **9.85** | **0.56** | **5.27** | **910 J** | < 0.438 | **1.85** | < 0.056 | **0.575** | < 0.175 |
| | GWGW1932 | 8/9/2005 | **3.12** | **20.6** | **6.02** | **11.9** | **0.626** | < 0.37 | **1630** | < 0.438 | **2.26** | < 0.056 | **0.828** | < 0.175 |
| | GWGW1952 | 10/19/2005 | **4.43** | **23.1** | **6.66** | **11.3** | **0.765** | < 0.37 | **1520 J** | < 0.438 | **2.44** | < 0.056 | **1.06** | < 0.175 |
| UCD2-048 | GWGW1860 | 1/25/2005 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | **3.08** | < 0.27 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| | GWGW1910 | 6/7/2005 | < 0.104 | < 0.101 | < 0.1 | < 0.1 | < 0.103 | 3.17 J | **0.767** | < 0.438 | < 0.1 | < 0.056 | < 0.2 | < 0.175 |
| | GWGW1938 | 8/9/2005 | < 0.104 | < 0.101 | < 0.1 | < 0.1 | < 0.103 | < 0.37 | **1.43** | < 0.438 | < 0.1 | < 0.056 | < 0.2 | < 0.175 |
| | GWGW1975 | 10/19/2005 | < 0.104 | < 0.101 | < 0.1 | < 0.1 | < 0.103 | < 0.37 | **3.14** | < 0.438 | < 0.1 | < 0.056 | < 0.2 | < 0.175 |
| | GWGW1976 | 10/19/2005 | < 0.104 | < 0.101 | < 0.1 | < 0.1 | < 0.103 | < 0.37 | **4.05** | < 0.438 | < 0.1 | < 0.056 | < 0.2 | < 0.175 |

Notes:
Results in **BOLD** indicate detections above the CRDL.
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
µg/L = micrograms per liter

**Table 13**
**2005 IRA Operations Summary**
**2005 Comprehensive Annual Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, CA**

| Month | %IRA Uptime | Groundwater Extracted (gallons) | Effective Monthly Extraction Rate (gpm)[1] | Recommended Monthly Extraction Rate (gpm)[2] | Chloroform Removed (pounds) | LTPS Irrigation Flow (gal) | Exceedances of Effluent Discharge Limits for Irrigaton |
|---|---|---|---|---|---|---|---|
| Jan | 0% | 1,050 | 0 | 40 | 0.00 | 583 | No sampled collected, system down. |
| Feb | 0% | 0 | 0 | 40 | 0.00 | 0 | No sampled collected, system down. |
| Mar | 0% | 0 | 0 | 40 | 0.00 | 0 | No sampled collected, system down. |
| Apr | 0% | 0 | 0 | 80 | 0.00 | 0 | No sampled collected, system down. |
| May | 60% | 1,602,719 | 36 | 45 | 0.50 | 287,225 | chloroform (1.81 µg/L) |
| Jun | 100% | 2,368,549 | 53 | 90 | 0.83 | 285,228 | chloroform (2.13 µg/L) |
| Jul | 100% | 2,779,372 | 62 | 60 | 0.97 | 611,158 | chloroform (2.41 µg/L) |
| Aug | 100% | 2,727,404 | 61 | 60 | 1.43 | 453,609 | chloroform (2.81 µg/L) |
| Sep | 98% | 2,392,174 | 54 | 60 | 0.99 | 505,891 | acetone (5.22 µg/L), methyl ethyl ketone (1.13 µg/L) |
| Oct | 100% | 3,157,138 | 71 | 50 | 1.23 | 424,074 | None |
| Nov | 86% | 1,437,031 | 32 | 45 | 0.50 | 42,938 | No sampled collected |
| Dec | 79% | 1,720,866 | 39 | 40 | 0.52 | 29,830 | None |
| 2005 | 59% | 18,186,303 | 34 | 54 | 6.96 | 2,640,536 | |

Notes:

1. Includes IRA system downtime (Effective Extraction Rate = Monthly Volume Extracted / Number of Minutes per Month).
2. The recommended extraction rate is based on the capture zone analysis completed in the Characterization of Chloroform in Groundwater/IRA Capture Zone Analysis (Geomatrix, 2004) and is the calculated rate required to maintain capture of the chloroform plume based on the average monthly gradient.

gal = gallons

gpm = gallons per minute

lbs = pounds

µg/L = micrograms per liter

**Table 14**
**Summary of LTPS Soils Analytical Results**
**2005 Comprehensive Annual Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, CA**

| Analyte | Depth (ft bgs) | Average Concentration (mg/kg) | | | | 95% Upper Confidence Limits (mg/kg) | | | | Significant Increase? | | Significant Decrease? | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Oct 2000 | Nov 2003 | Dec 2004 | Dec 2005 | Oct 2000 | Nov 2003 | Dec 2004 | Dec 2005 | t-Test[1] | Sign Test [2] | t-Test[1] | Sign Test [2] |
| Arsenic | 1 | 7.1 | 7.3 | 7.4 | 8.0 | 11.0 | 8.6 | 9.6 | 12.2 | no | no | no | no |
| | 3 | 6.9 | 6.6 | 7.6 | 6.5 | 8.9 | 8.7 | 9.6 | 10.5 | no | no | no | no |
| | 5 | 6.7 | 6.6 | 7.2 | 6.5 | 9.1 | 7.4 | 8.3 | 8.8 | no | no | no | no |
| Barium | 1 | 173.0 | 172.2 | 165.3 | 200.0 | 245.0 | 211.3 | 196.4 | 272.3 | no | **Yes** | no | no |
| | 3 | 172.5 | 139.8 | 157.8 | 170.5 | 258.2 | 209.8 | 287.0 | 229.6 | no | no | no | no |
| | 5 | 154.3 | 145.7 | 151.5 | 163.2 | 309.1 | 204.5 | 228.0 | 188.9 | no | **Yes** | no | no |
| Cadmium | 1 | NC | 0.1 | 1.2 | NC | NC | 0.2 | 1.3 | NC | no | no | no | no |
| | 3 | NC | 0.1 | 1.1 | NC | NC | 0.1 | 1.6 | NC | no | no | no | no |
| | 5 | NC | 0.1 | 1.1 | NC | NC | 0.2 | 1.4 | NC | no | no | no | no |
| Chloride | 1 | 74.9 | 8.5 | 13.5 | 12.7 | 105.7 | 20.9 | 48.1 | 34.9 | no | no | **Yes** | **Yes** |
| | 3 | 75.3 | 4.2 | 11.4 | 7.9 | 97.2 | 13.6 | 35.2 | 14.8 | no | no | **Yes** | **Yes** |
| | 5 | 76.8 | 3.2 | 5.9 | 8.0 | 105.5 | 7.8 | 16.0 | 24.6 | no | no | **Yes** | **Yes** |
| Chromium | 1 | 157.5 | 147.3 | 125.8 | 148.5 | 207.3 | 222.8 | 192.2 | 185.7 | no | no | no | no |
| | 3 | 151.3 | 172.8 | 140.0 | 166.3 | 271.0 | 282.4 | 218.2 | 221.2 | no | no | no | no |
| | 5 | 166.8 | 154.2 | 138.5 | 169.8 | 305.4 | 221.2 | 203.5 | 244.3 | no | no | no | no |
| Copper | 1 | 34.3 | 38.4 | 36.7 | 42.4 | 55.5 | 47.3 | 73.2 | 61.9 | no | **Yes** | no | no |
| | 3 | 32.4 | 30.0 | 33.6 | 34.3 | 52.1 | 45.8 | 60.5 | 51.5 | no | no | no | no |
| | 5 | 29.5 | 31.4 | 33.6 | 31.8 | 59.4 | 46.4 | 67.0 | 40.9 | **Yes** | **Yes** | no | no |
| Lead | 1 | 7.7 | 8.0 | 7.4 | 8.8 | 17.1 | 15.4 | 9.5 | 13.2 | no | no | no | no |
| | 3 | 5.9 | 6.6 | 8.6 | 6.9 | 8.9 | 13.2 | 27.5 | 9.2 | **Yes** | **Yes** | no | no |
| | 5 | 7.4 | 8.9 | 7.2 | 7.3 | 21.9 | 35.7 | 17.6 | 14.3 | **Yes** | no | no | no |
| Mercury | 1 | 1.5 | 1.2 | 1.2 | 1.4 | 3.8 | 4.8 | 4.3 | 4.6 | no | no | no | no |
| | 3 | 1.6 | 1.0 | 0.8 | 1.1 | 4.5 | 3.9 | 2.5 | 3.8 | no | no | no | **Yes** |
| | 5 | 1.2 | 1.4 | 1.6 | 1.1 | 2.2 | 3.5 | 6.2 | 2.3 | no | no | no | no |
| Nickel | 1 | 275.7 | 278.8 | 233.8 | 287.3 | 335.0 | 384.5 | 330.6 | 352.0 | no | **Yes** | no | no |
| | 3 | 253.2 | 261.7 | 225.2 | 290.3 | 412.8 | 370.0 | 330.7 | 336.6 | **Yes** | **Yes** | no | no |
| | 5 | 267.7 | 274.7 | 238.5 | 294.4 | 454.4 | 366.2 | 294.7 | 392.5 | no | no | no | no |
| Nitrate-N | 1 | 7.6 | 0.7 | 2.8 | 7.3 | 23.9 | 2.0 | 9.6 | 60.9 | no | no | no | **Yes** |
| | 3 | 5.5 | 3.0 | 1.8 | 0.9 | 14.6 | 12.8 | 5.7 | 1.9 | no | no | **Yes** | **Yes** |
| | 5 | 9.6 | 6.6 | 7.6 | 0.7 | 36.8 | 40.3 | 67.5 | 2.0 | no | no | **Yes** | **Yes** |
| Ammonia-N | 1 | 10.9 | 8.7 | 17.3 | 16.2 | 33.0 | 31.5 | 46.4 | 32.6 | **Yes** | **Yes** | no | no |
| | 3 | 9.6 | 3.1 | 9.3 | 9.0 | 41.5 | 12.0 | 33.7 | 18.5 | no | **Yes** | no | no |
| | 5 | 5.9 | 3.2 | 8.1 | 7.4 | 10.4 | 11.6 | 36.0 | 14.8 | no | no | no | no |

**Table 14**
**Summary of LTPS Soils Analytical Results**
**2005 Comprehensive Annual Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, CA**

| Analyte | Depth (ft bgs) | Average Concentration (mg/kg) | | | | 95% Upper Confidence Limits (mg/kg) | | | | Significant Increase? | | Significant Decrease? | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Oct 2000 | Nov 2003 | Dec 2004 | Dec 2005 | Oct 2000 | Nov 2003 | Dec 2004 | Dec 2005 | t-Test(1) | Sign Test (2) | t-Test(1) | Sign Test (2) |
| Total-N | 1 | 476.3 | 543.3 | 802.8 | 696.7 | 1038.7 | 886.6 | 2008.3 | 1554.7 | no | no | no | no |
| | 3 | 379.7 | 325.7 | 428.5 | 357.0 | 1569.4 | 720.5 | 1530.5 | 728.5 | no | no | no | no |
| | 5 | 224.7 | 313.7 | 383.7 | 290.2 | 417.1 | 709.3 | 1675.5 | 440.4 | **Yes** | **Yes** | no | no |
| Phosphate | 1 | 6.2 | 3.7 | 4.2 | 3.6 | 15.0 | 13.1 | NC | 15.1 | no | no | no | no |
| | 3 | NC | NC | 2.4 | 0.4 | NC | NC | 3.6 | 1.2 | no | no | no | no |
| | 5 | NC | NC | 3.5 | 0.3 | NC | NC | NC | NC | no | no | no | no |
| pH | 1 | 7.8 | 8.0 | 7.9 | 7.8 | 8.3 | 8.5 | 8.8 | 8.1 | no | no | no | no |
| | 3 | 7.9 | 8.2 | 8.1 | 7.8 | 8.7 | 8.7 | 8.6 | 8.3 | no | no | no | no |
| | 5 | 8.3 | 8.6 | 8.2 | 8.0 | 9.5 | 9.4 | 8.9 | 8.6 | no | no | **Yes** | no |
| Selenium | 1 | 2.1 | NC | 1.2 | NC | 2.9 | NC | 3.2 | NC | no | no | no | no |
| | 3 | 2.2 | NC | 1.4 | NC | 2.9 | NC | 3.2 | NC | no | no | no | no |
| | 5 | 2.4 | NC | 1.2 | NC | 3.5 | NC | 2.3 | NC | no | no | no | no |
| Sulfate | 1 | 12.9 | 24.7 | 34.6 | 24.4 | 52.5 | 31.6 | 113.8 | 69.4 | no | **Yes** | no | no |
| | 3 | 12.3 | 15.4 | 21.9 | 17.0 | 22.3 | 52.3 | 61.5 | 37.9 | **Yes** | no | no | no |
| | 5 | 13.4 | 16.6 | 22.3 | 20.5 | 46.6 | 33.3 | 57.9 | 34.0 | no | no | no | no |
| Zinc | 1 | 64.4 | 72.4 | 62.2 | 80.4 | 88.4 | 88.0 | 77.5 | 114.8 | **Yes** | **Yes** | no | no |
| | 3 | 61.6 | 61.0 | 61.3 | 68.1 | 89.3 | 92.6 | 120.7 | 921.8 | **Yes** | **Yes** | no | no |
| | 5 | 57.2 | 66.0 | 59.5 | 65.4 | 104.0 | 116.9 | 111.8 | 77.8 | **Yes** | **Yes** | no | no |
| TOC | 1 | 6,126.7 | 5,526.7 | 7,626.7 | 6,760.0 | 20,930.9 | 14,471.5 | 20,038.5 | 16,295.7 | no | no | no | no |
| | 3 | 3,258.3 | 2,393.3 | 3,366.7 | 3,443.3 | 12,710.1 | 6,569.3 | 14,020.5 | 8,856.1 | no | no | no | no |
| | 5 | 2,275.0 | 2,680.0 | 4,095.0 | 2,680.0 | 7,720.5 | 8,408.1 | 16,642.8 | 4,760.4 | **Yes** | no | no | no |

Notes:

(1) "student's t" test - a parametric statitistical test, assuming a normal data distribution (Gilbert, 1987).

(2) "Sign Test" a non parametric test for using paired data with small sample sizes (Gilbert, 1987).

(3) Tested using alpha = 0.05.

NC = Not calculated non-detectable values.

ft bgs = feet below ground surface

mg/kg = milligrams per kilogram

**Table 15**
**Summary of LTPS Soils Analytical Results - 2000 to 2005**
**2005 Comprehensive Annual Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, CA**

| Analyte | Depth (ft bgs) | Average Concentration (mg/kg) Oct 2000 | Nov 2003 | Dec 2004 | Dec 2005 | Total applied as effluent 2003-2005 (1) (lbs) | Statistically[2] Significant Change? Nov 2003 | Dec 2004 | Dec 2005 |
|---|---|---|---|---|---|---|---|---|---|
| **Arsenic** | 1 | 7.1 | 7.3 | 7.4 | 8.0 | | no | no | no |
| | 3 | 6.9 | 6.6 | 7.6 | 6.5 | | no | ↗ | no |
| | 5 | 6.7 | 6.6 | 7.2 | 6.5 | 0.06 | no | no | no |
| **Barium** | 1 | 173.0 | 172.2 | 165.3 | 200.0 | | no | no | ↗ |
| | 3 | 172.5 | 139.8 | 157.8 | 170.5 | | ↘ | no | no |
| | 5 | 154.3 | 145.7 | 151.5 | 163.2 | 10.5 | no | no | ↗ |
| **Cadmium** | 1 | NC | 0.1 | 1.2 | NC | | no | ↗ | no |
| | 3 | NC | 0.1 | 1.1 | NC | | no | ↗ | no |
| | 5 | NC | 0.1 | 1.1 | NC | 0.0009 | no | ↗ | no |
| **Chloride** | 1 | 74.9 | 8.5 | 13.5 | 12.7 | | ↘ | ↘ | ↘ |
| | 3 | 75.3 | 4.2 | 11.4 | 7.9 | | ↘ | ↘ | ↘ |
| | 5 | 76.8 | 3.2 | 5.9 | 8.0 | NC | ↘ | ↘ | ↘ |
| **Chromium** | 1 | 157.5 | 147.3 | 125.8 | 148.5 | | no | ↗ | no |
| | 3 | 151.3 | 172.8 | 140.0 | 166.3 | | no | no | no |
| | 5 | 166.8 | 154.2 | 138.5 | 169.8 | 1.4 | no | ↗ | no |
| **Copper** | 1 | 34.3 | 38.4 | 36.7 | 42.4 | | no | no | ↗ |
| | 3 | 32.4 | 30.0 | 33.6 | 34.3 | | no | no | no |
| | 5 | 29.5 | 31.4 | 33.6 | 31.8 | 0.14 | no | no | ↗ |
| **Lead** | 1 | 7.7 | 8.0 | 7.4 | 8.8 | | no | no | no |
| | 3 | 5.9 | 6.6 | 8.6 | 6.9 | | no | no | ↗ |
| | 5 | 7.4 | 8.9 | 7.2 | 7.3 | 0.015 | no | no | ↗ |
| **Mercury** | 1 | 1.5 | 1.2 | 1.2 | 1.4 | | no | no | no |
| | 3 | 1.6 | 1.0 | 0.8 | 1.1 | | no | ↘ | ↘ |
| | 5 | 1.2 | 1.4 | 1.6 | 1.1 | 0.002 | no | no | no |
| **Nickel** | 1 | 275.7 | 278.8 | 233.8 | 287.3 | | no | ↘ | ↗ |
| | 3 | 253.2 | 261.7 | 225.2 | 290.3 | | no | ↘ | ↗ |
| | 5 | 267.7 | 274.7 | 238.5 | 294.4 | 0.109 | no | no | no |
| **Nitrate-N** | 1 | 7.6 | 0.7 | 2.8 | 7.3 | | ↘ | ↘ | ↘ |
| | 3 | 5.5 | 3.0 | 1.8 | 0.9 | | ↘ | ↘ | ↘ |
| | 5 | 9.6 | 6.6 | 7.6 | 0.7 | NC | ↘ | no | ↘ |
| **Ammonia-N** | 1 | 10.9 | 8.7 | 17.3 | 16.2 | | no | no | ↗ |
| | 3 | 9.6 | 3.1 | 9.3 | 9.0 | | no | no | ↗ |
| | 5 | 5.9 | 3.2 | 8.1 | 7.4 | NC | no | no | no |
| **Total-N** | 1 | 476.3 | 543.3 | 802.8 | 696.7 | | no | ↗ | no |
| | 3 | 379.7 | 325.7 | 428.5 | 357.0 | | no | no | no |
| | 5 | 224.7 | 313.7 | 383.7 | 290.2 | NC | ↗ | ↘ | ↗ |
| **Phosphate** | 1 | 6.2 | 3.7 | 4.2 | 3.6 | | no | no | no |
| | 3 | NC | NC | 2.4 | 0.4 | | no | ↗ | no |
| | 5 | NC | NC | 3.5 | 0.3 | NC | no | ↘ | no |
| **pH** | 1 | 7.8 | 8.0 | 7.9 | 7.8 | | ↗ | no | no |
| | 3 | 7.9 | 8.2 | 8.1 | 7.8 | | ↗ | ↗ | no |
| | 5 | 8.3 | 8.6 | 8.2 | 8.0 | NC | ↗ | no | no |
| **Selenium** | 1 | 2.1 | NC | 1.2 | NC | | no | no | no |
| | 3 | 2.2 | NC | 1.4 | NC | | no | no | no |
| | 5 | 2.4 | NC | 1.2 | NC | 0.096 | no | no | no |
| **Sulfate** | 1 | 12.9 | 24.7 | 34.6 | 24.4 | | ↗ | ↗ | ↗ |
| | 3 | 12.3 | 15.4 | 21.9 | 17.0 | | no | no | ↗ |
| | 5 | 13.4 | 16.6 | 22.3 | 20.5 | NC | no | ↗ | no |
| **Zinc** | 1 | 64.4 | 72.4 | 62.2 | 80.4 | | ↗ | no | ↗ |
| | 3 | 61.6 | 61.0 | 61.3 | 68.1 | | no | no | ↗ |
| | 5 | 57.2 | 66.0 | 59.5 | 65.4 | NC | ↗ | ↗ | ↗ |
| **TOC** | 1 | 6,126.7 | 5,526.7 | 7,626.7 | 6,760.0 | | no | no | no |
| | 3 | 3,258.3 | 2,393.3 | 3,366.7 | 3,443.3 | | no | no | no |
| | 5 | 2,275.0 | 2,680.0 | 4,095.0 | 2,680.0 | NC | no | ↗ | ↗ |

Notes:

(1) mass calculated based on measured volume and quality of irrigation water applied to 2.6 acre LTPS, 2003 to 2005

(2) Statistical testing includes "student's t" test - a parametric statistical test, assuming a normal data distribution (alpha = 0.05) and "Sign Test" a non parametric test (alpha = 0.05) for data with small sample sizes (Gilbert, 1987).

o - indicates statistically significant increased concentration compared to 2000 baseline.

n - indicates statistically significant decreased concentration compared to 2000 baseline.

NC - Not calculated, present in animal waste or fertilizer.

**Table 16**
**2005 LTPS HSU-1 Groundwater Analytical Results**
**2005 Comprehensive Annual Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, CA**

| Analyte | Well | Units | Baseline Concentration (including all available data prior to 2003) [3] | | 2005 Data | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Low | High | Q1 | Q2 | Q3 | Q4 |
| **Arsenic** | UCD1-18[1] | ug/L | 1.1 | 8.11 | 1.18 | 2.12 | 2.16 | <3.35 |
| | UCD1-11[2] | ug/L | 1.38 | 7.85 | <1 | 2.94 | 4.38 | <3.45 |
| | UCD1-25 | ug/L | <0.117 | 5.1 | <1 | 2.95 | <1.5 | <3.27 |
| | UCD1-28 | ug/L | <0.117 | 7.7 | <1 | 5.4 | 1.82 | 3.22 |
| | UCD1-27Z1 | ug/L | 1.11 | 8.6 | <3.27 | NS | <2.91 | NS |
| | UCD1-27Z2 | ug/L | <0.818 | 8.4 | <3.91 | NS | <1.77 | NS |
| | UCD1-27Z3 | ug/L | <0.818 | 5 | <4.51 | NS | <2.6 | <1.5 |
| **Barium** | UCD1-18[1] | ug/L | 50 | 226 | 159 | 129 | 130 | 127 |
| | UCD1-11[2] | ug/L | 120 | 369 | 333 | 308 | 318 | 312 |
| | UCD1-25 | ug/L | 124 | 346 | 294 | 266 | 282 | 260 |
| | UCD1-28 | ug/L | 202 | 329 | 323 | 332 | 321 | 306 |
| | UCD1-27Z1 | ug/L | 188 | 240 | 167 | NS | 149 | NS |
| | UCD1-27Z2 | ug/L | 194 | 228 | **290** | NS | **264** | NS |
| | UCD1-27Z3 | ug/L | 152 | 190 | **220** | NS | **193** | **323** |
| **Cadmium** | UCD1-18[1] | ug/L | <0.014 | <1 | <0.042 | <0.1 | <0.1 | <0.1 |
| | UCD1-11[2] | ug/L | <0.014 | <1 | 0.136 | <0.1 | <0.1 | <0.1 |
| | UCD1-25 | ug/L | <0.014 | <1 | 0.079 | **0.12** | <0.1 | <0.1 |
| | UCD1-28 | ug/L | <0.014 | <1 | <0.04 | <0.1 | <0.1 | <0.1 |
| | UCD1-27Z1 | ug/L | 0.335 | 0.34 | <0.093 | NS | **0.262** | NS |
| | UCD1-27Z2 | ug/L | 0.026 | 0.03 | <0.08 | NS | **0.1** | NS |
| | UCD1-27Z3 | ug/L | <0.022 | <5 | <0.04 | NS | <0.1 | <0.1 |
| **Chloride** | UCD1-18[1] | mg/L | 17 | 44 | 23.1 | 14.2 | 13.3 | 13.4 |
| | UCD1-11[2] | mg/L | 36 | 92 | 42.7 | 42.8 | 44.4 | 48.2 |
| | UCD1-25 | mg/L | 24 | 65 | 33.4 | 28 | 33.7 | 33.7 |
| | UCD1-28 | mg/L | 23.5 | 58.9 | 41.4 | 38.8 | 47.2 | NS |
| | UCD1-27Z1 | mg/L | 62.5 | 62.5 | *23.1* | NS | *23.1* | NS |
| | UCD1-27Z2 | mg/L | 34.2 | 34.2 | **39** | NS | **40** | NS |
| | UCD1-27Z3 | mg/L | 23.7 | 32 | 29.7 | NS | 27.3 | **38.2** |
| **Chromium** | UCD1-18[1] | ug/L | 13 | 50 | 14.5 | 8.43 | 8.01 | 7.17 |
| | UCD1-11[2] | ug/L | 152 | 450 | 147 | 150 | 151 | 144 |
| | UCD1-25 | ug/L | 248 | 392 | 187 | 148 | 150 | NS |
| | UCD1-28 | ug/L | 454 | 613 | 526 | 530 | 524 | 491 |
| | UCD1-27Z1 | ug/L | <0.082 | 3.8 | <2.23 | NS | 0.262 | NS |
| | UCD1-27Z2 | ug/L | <0.082 | 4.7 | <2.36 | NS | <1 | <1 |
| | UCD1-27Z3 | ug/L | <0.082 | 5.1 | <1.4 | NS | <1 | <1 |
| **Copper** | UCD1-18[1] | ug/L | <0.033 | 1.7 | 1.25 | 0.664 | 0.928 | 0.829 |
| | UCD1-11[2] | ug/L | 0.885 | 10 | 0.992 | 0.853 | 0.815 | 1.03 |
| | UCD1-25 | ug/L | <0.039 | 4.7 | 1.24 | 1 | 1.22 | 1.17 |
| | UCD1-28 | ug/L | 0.75 | 13.7 | 1.27 | 0.74 | 1.19 | <2.63 |
| | UCD1-27Z1 | ug/L | <0.026 | <1.91 | 1.08 | NS | 0.838 | NS |
| | UCD1-27Z2 | ug/L | <0.026 | <1.77 | 0.778 | NS | 0.529 | NS |
| | UCD1-27Z3 | ug/L | <0.026 | <1.69 | <0.69 | NS | 0.431 | <0.471 |

**Table 16**
**2005 LTPS HSU-1 Groundwater Analytical Results**
**2005 Comprehensive Annual Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, CA**

| Analyte | Well | Units | Baseline Concentration (including all available data prior to 2003) [3] | | 2005 Data | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Low | High | Q1 | Q2 | Q3 | Q4 |
| **Lead** | UCD1-18[1] | ug/L | <0.008 | 1.3 | <0.05 | <0.5 | <0.5 | <0.5 |
| | UCD1-11[2] | ug/L | <0.008 | 7.4 | <0.05 | <0.5 | <0.5 | <0.5 |
| | UCD1-25 | ug/L | <0.008 | 2.4 | <0.05 | <0.5 | <0.5 | <0.5 |
| | UCD1-28 | ug/L | <0.01 | 0.24 | <0.05 | <0.5 | <0.5 | <0.5 |
| | UCD1-27Z1 | ug/L | <0.002 | 0.125 | 0.36 | NS | <0.5 | NS |
| | UCD1-27Z2 | ug/L | <0.002 | 0.076 | 0.354 | NS | <0.5 | NS |
| | UCD1-27Z3 | ug/L | <0.002 | 0.185 | 0.359 | NS | <0.5 | <0.5 |
| **Mercury** | UCD1-18[1] | ug/L | <0.039 | 0.38 | <0.0472 | <0.05 | <0.05 | <0.05 |
| | UCD1-11[2] | ug/L | <0.039 | 0.44 | <0.0472 | <0.05 | <0.05 | <0.05 |
| | UCD1-25 | ug/L | <0.039 | <0.2 | <0.0472 | <0.05 | <0.05 | <0.05 |
| | UCD1-28 | ug/L | <0.039 | <0.2 | <0.0472 | <0.05 | <0.05 | <0.05 |
| | UCD1-27Z1 | ug/L | <0.039 | <0.2 | <0.0472 | NS | <0.05 | <0.05 |
| | UCD1-27Z2 | ug/L | <0.039 | <0.2 | <0.0472 | NS | <0.05 | NS |
| | UCD1-27Z3 | ug/L | <0.039 | <0.2 | <0.0472 | NS | <0.05 | <0.05 |
| **Nickel** | UCD1-18[1] | ug/L | 2.57 | 96 | 9.95 | 3.85 | 4.19 | 3.52 |
| | UCD1-11[2] | ug/L | 0.692 | 40 | 1.88 | 1.99 | 2.11 | 1.78 |
| | UCD1-25 | ug/L | 3.9 | 233 | 71.2 | 50 | 42.5 | 43.4 |
| | UCD1-28 | ug/L | 1.6 | 27.5 | 2.53 | 1.9 | 2.45 | <3.1 |
| | UCD1-27Z1 | ug/L | 32.5 | 1710 | 696 | NS | 1130 | NS |
| | UCD1-27Z2 | ug/L | 11.6 | 1170 | 823 | NS | 891 | NS |
| | UCD1-27Z3 | ug/L | 6.9 | 410 | 230 | 205 | NS | 254 |
| **Nitrate-N** | UCD1-18[1] | mg/L | 2 | 27 | 8.97 | 2.38 | 2.93 | 2.85 |
| | UCD1-11[2] | mg/L | 5 | 30 | **30.1** | 28.5 | 30 | **33** |
| | UCD1-25 | mg/L | 11 | 32.7 | 23.4 | 18 | 24.2 | 24.4 |
| | UCD1-28 | mg/L | 5.4 | 63.9 | 56.7 | 53 | **67.2** | 62.2 |
| | UCD1-27Z1 | mg/L | <0.1 | 7.6 | 2.14 | NS | 1.56 | 0.318 |
| | UCD1-27Z2 | mg/L | <0.1 | 2.8 | 15.3 | NS | 19.7 | 17.2 |
| | UCD1-27Z3 | mg/L | <0.1 | 4 | **4.2** | NS | 5.32 | 5.46 |
| **pH** | UCD1-18[1] | SU | 7.11 | 7.89 | 7.51 | 6.92 | 7.32 | 7.36 |
| | UCD1-11[2] | SU | 6.95 | 7.85 | 7.51 | 6.92 | 7.32 | 7.24 |
| | UCD1-25 | SU | 6.84 | 7.95 | 6.93 | 6.77 | 7.48 | 7.06 |
| | UCD1-28 | SU | 6.9 | 7.59 | 7.19 | 6.90 | 7.13 | 7.03 |
| | UCD1-27Z1 | SU | 6.63 | 7.9 | 6.52 | 6.31 | 7.65 | 6.9 |
| | UCD1-27Z2 | SU | 6.76 | 7.3 | 6.27 | 6.70 | 7.16 | 6.69 |
| | UCD1-27Z3 | SU | 6.68 | 7.6 | 6.54 | 6.73 | 7.23 | NM |
| **Selenium** | UCD1-18[1] | ug/L | <0.431 | 5.6 | <3.56 | <2.5 | <2.5 | <2.5 |
| | UCD1-11[2] | ug/L | 3.7 | 31 | 9.47 | 9.58 | 8.87 | 7.8 |
| | UCD1-25 | ug/L | 5.5 | 9.5 | <3.38 | 3.5 | 2.77 | <2.5 |
| | UCD1-28 | ug/L | 8 | 15.9 | 14.4 | 19 | 14.3 | 12.7 |
| | UCD1-27Z1 | ug/L | <0.49 | 4.15 | <4.54 | NS | <2.5 | NS |
| | UCD1-27Z2 | ug/L | <0.49 | 1.63 | 2.09 | NS | <2.5 | NS |
| | UCD1-27Z3 | ug/L | <0.49 | 1.48 | <1.56 | NS | <2.5 | <2.5 |

**Table 16**
**2005 LTPS HSU-1 Groundwater Analytical Results**
**2005 Comprehensive Annual Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, CA**

| Analyte | Well | Units | Baseline Concentration (including all available data prior to 2003) [3] | | 2005 Data | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Low | High | Q1 | Q2 | Q3 | Q4 |
| **Sulfate** | UCD1-18[1] | mg/L | 32 | 50 | 38.4 | 36.6 | 34.3 | 34.8 |
| | UCD1-11[2] | mg/L | 39 | 232 | 34.6 | 32.9 | 35.9 | 36.1 |
| | UCD1-25 | mg/L | 37 | 72.2 | 34.1 | 27 | 29.4 | 30.4 |
| | UCD1-28 | mg/L | 37.5 | 42.4 | 36.5 | 42 | 41.2 | NS |
| | UCD1-27Z1 | mg/L | 115 | 115 | 34.5 | NS | 30.1 | NS |
| | UCD1-27Z2 | mg/L | 36.7 | 36.7 | 37.7 | NS | 39.7 | NS |
| | UCD1-27Z3 | mg/L | 19 | 40.1 | 39.8 | NS | 44.1 | 46.1 |
| **Zinc** | UCD1-18[1] | ug/L | <0.059 | 30 | 2.33 | <2 | <2 | <2 |
| | UCD1-11[2] | ug/L | 1.62 | 30 | 3.12 | <2 | <3.28 | <2 |
| | UCD1-25 | ug/L | <0.142 | 65.7 | 4.32 | 6 | 4.91 | 5.59 |
| | UCD1-28 | ug/L | <0.142 | 58.4 | 1.49 | <2 | <2 | 3.06 |
| | UCD1-27Z1 | ug/L | 559 | 740 | 305 | NS | 259 | NS |
| | UCD1-27Z2 | ug/L | 218 | 286 | 289 | NS | 265 | NS |
| | UCD1-27Z3 | ug/L | 5.4 | 97.1 | 139 | NS | 127 | 127 |
| **Total Organic Carbon (TOC)** | UCD1-18[1] | mg/L | <.5 | 5.2 | 2.47 | 1.63 | 1.21 | 1.44 |
| | UCD1-11[2] | mg/L | <.5 | 2 | 2.47 | 3.34 | 1.38 | 1.7 |
| | UCD1-25 | mg/L | 0.66 | 1.3 | 3.21 | 3.4 | 2.13 | 2.43 |
| | UCD1-28 | mg/L | 0.33 | 22.1 | 2.47 | 3.7 | 1.76 | 2.07 |
| | UCD1-27Z1 | mg/L | 7.59 | 7.59 | 8.68 | NS | NS | 7.01 |
| | UCD1-27Z2 | mg/L | 4.09 | 4.09 | 5.78 | NS | NS | 3.23 |
| | UCD1-27Z3 | mg/L | 7 | 10 | 7.13 | NS | NS | 5.36 |
| **Total Dissolved Solids (TDS)** | UCD1-18[1] | mg/L | 428 | 2450 | 851 | 291 | 435 | 417 |
| | UCD1-11[2] | mg/L | 77 | 9190 | 672 | 835 | 797 | 823 |
| | UCD1-25 | mg/L | 390 | 910 | 793 | 863 | 778 | 774 |
| | UCD1-28 | mg/L | 988 | 1230 | 1140 | 1140 | 1180 | 1150 |
| | UCD1-27Z1 | mg/L | 882 | 940 | 631 | NS | 623 | NS |
| | UCD1-27Z2 | mg/L | 460 | 655 | 759 | NS | 749 | NS |
| | UCD1-27Z3 | mg/L | 370 | 680 | 637 | NS | 610 | 601 |

Notes:
(1) Background HSU-1 groundwater monitoring well, see Figure 4 for location.
(2) Upgradient of LTPS, see Figure 4 for location.
(3) Baseline data includes all groundwater data collected prior to operation of LTPS.
NM = not measured
NS = not sampled
SU = Standard pH units
µg/L = micrograms per liter
mg/L = milligrmas per liter

**Table 17**
**2005 Groundwater Elevation Data**
**2005 Comprehensive Annual Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| HSU | Well | 1/14/05 | 1/25/05 | 2/4/05 | 3/11/05 | 4/26/05 | 5/25/05 | 6/7/05 | 7/15/05 | 10/11/05 | 10/13/05 | 10/24/05 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HSU-1 | UCD1-001 | 11.36 | NM | 12.39 | 14.74 | 14.79 | 11.56 | 8.74 | 4.14 | NM | 2.69 | NM |
| | UCD1-003 | 11.52 | NM | 12.30 | 14.85 | 15.62 | 11.30 | 9.08 | 3.88 | NM | 2.08 | NM |
| | UCD1-004 | 12.45 | NM | 12.74 | 15.19 | 17.59 | 13.84 | 10.92 | NM | NM | 2.42 | NM |
| | UCD1-005 | 11.28 | NM | 11.99 | 14.64 | 15.29 | 11.21 | 8.99 | 3.96 | NM | 2.25 | NM |
| | UCD1-006 | 11.63 | NM | 12.44 | 13.87 | 15.94 | 13.79 | 9.40 | 4.41 | NM | 2.48 | NM |
| | UCD1-008 | 10.97 | NM | 11.92 | 14.30 | 17.05 | 11.90 | 9.42 | 3.81 | 2.21 | NM | NM |
| | UCD1-009 | 11.03 | NM | 11.97 | 14.27 | 15.52 | 10.82 | 8.46 | 3.61 | DRY | NM | NM |
| | UCD1-010 | 10.69 | NM | 11.44 | NM | 13.19 | 9.49 | 7.29 | 3.04 | 1.38 | NM | NM |
| | UCD1-011 | 10.55 | NM | 11.74 | NM | NM | NM | NM | NM | NM | 1.90 | NM |
| | UCD1-012 | 10.86 | NM | 11.84 | 14.21 | 15.87 | 10.80 | 8.54 | 3.73 | NM | 1.69 | NM |
| | UCD1-013 | 10.94 | NM | 11.84 | 14.24 | 16.92 | 12.04 | 9.42 | 3.65 | 1.69 | NM | NM |
| | UCD1-018 | 12.76 | NM | 12.89 | 15.51 | 17.59 | 14.06 | 11.76 | 6.56 | 3.50 | NM | NM |
| | UCD1-019 | 10.74 | NM | 12.00 | 14.27 | 14.50 | 10.10 | 8.15 | 3.15 | NM | 1.85 | NM |
| | UCD1-020 | 11.50 | NM | 12.36 | 14.71 | 15.57 | 11.31 | 9.07 | 2.83 | NM | 2.10 | NM |
| | UCD1-021 | 11.27 | NM | 12.04 | 14.54 | 15.42 | 11.25 | 8.92 | 3.92 | NM | 2.21 | NM |
| | UCD1-022 | 11.60 | NM | 12.49 | 14.74 | 15.89 | 11.39 | 9.31 | 4.34 | NM | 2.51 | NM |
| | UCD1-023 | 12.14 | NM | 12.79 | 15.04 | 17.27 | 13.16 | 10.42 | 4.89 | NM | 2.30 | NM |
| | UCD1-024 | NM | NM | NM | NM | NM | NM | NM | NM | NM | 2.23 | NM |
| | UCD1-025 | 10.38 | NM | NM | NM | 13.20 | 9.65 | 7.14 | 2.20 | 1.39 | NM | NM |
| | UCD1-027Z1 | NM | NM | NM | NM | NM | NM | NM | NM | NM | NM | NM |
| | UCD1-027Z2 | NM | NM | NM | NM | NM | NM | NM | NM | NM | NM | NM |
| | UCD1-027Z3 | NM | NM | NM | NM | NM | NM | NM | NM | NM | NM | NM |
| | UCD1-028 | 10.54 | NM | 10.58 | 14.13 | 12.35 | 9.03 | 6.73 | 1.88 | NM | 1.64 | NM |
| | UCD1-034 | 12.49 | NM | 12.82 | 15.10 | 17.40 | 14.95 | 10.40 | 4.90 | 2.28 | NM | NM |
| | UCD1-049 | 10.87 | 11.31 | 11.74 | 14.14 | 15.58 | 9.76 | 8.26 | 3.69 | NM | 1.53 | NM |
| | UCD1-050 | 10.91 | 11.36 | 11.72 | 14.22 | 15.67 | 11.77 | 8.89 | 3.57 | NM | 1.50 | NM |
| | UCD1-051 | 10.76 | 11.30 | 11.76 | 14.13 | 15.83 | 10.76 | 8.43 | 3.31 | NM | 1.51 | NM |
| | UCD1-052 | 10.61 | NM | 11.86 | 13.96 | 12.51 | 9.29 | 6.89 | 2.01 | NM | 1.71 | NM |
| | UCD1-053 | 10.40 | NM | 11.84 | 14.04 | 12.29 | 10.53 | 6.76 | 2.12 | NM | 1.64 | NM |
| | UCD1-054 | NA | NA | NA | NA | NA | NA | NA | NM | NM | -7.46 | NM |
| HSU-2 | UCD2-007 | 11.02 | NM | 12.18 | 14.51 | 13.43 | 10.28 | 7.72 | 2.68 | NM | 2.57 | NM |
| | UCD2-014 | 10.77 | NM | 11.97 | 14.09 | 13.29 | 10.52 | 7.47 | 2.36 | 2.13 | NM | NM |
| | UCD2-015 | 11.19 | NM | 12.31 | 14.68 | 14.03 | 11.23 | 8.27 | NM | 2.93 | NM | NM |
| | UCD2-016 | 11.10 | NM | 12.24 | 14.54 | 13.83 | 10.65 | 7.97 | 3.68 | NM | 2.82 | NM |
| | UCD2-017 | 11.47 | NM | 12.56 | 14.96 | 14.71 | 11.76 | 8.86 | 4.61 | 3.20 | NM | NM |
| | UCD2-026 | 10.58 | NM | NM | NM | 12.19 | 9.44 | 6.69 | 2.04 | 1.68 | NM | NM |
| | UCD2-029 | 10.53 | NM | 11.91 | 14.21 | 12.10 | 9.26 | 6.62 | 1.76 | NM | 1.81 | NM |
| | UCD2-030 | 10.49 | NM | 11.84 | 14.19 | 11.85 | 9.24 | 6.42 | 1.70 | NM | 1.79 | NM |
| | UCD2-031 | 10.51 | NM | 11.86 | 14.11 | 11.89 | 9.11 | 6.51 | NM | NM | 1.76 | NM |
| | UCD2-032 | 9.98 | NM | 11.23 | 13.48 | 10.28 | 7.13 | 4.26 | 0.53 | NM | 1.10 | NM |
| | UCD2-035 | 10.81 | NM | 12.09 | 14.21 | 13.36 | 10.53 | 7.75 | 3.21 | 2.24 | NM | NM |
| | UCD2-036 | 5.07 | NM | 12.21 | 11.43 | 13.36 | 10.51 | 7.71 | 3.34 | NM | 2.63 | NM |
| | UCD2-037 | NM | NM | NM | 14.58 | 14.03 | 10.98 | 8.35 | 4.18 | 2.88 | NM | NM |
| | UCD2-038 | 9.21* | NM | 12.38 | 14.60 | 14.25 | 11.35 | 8.30 | 4.10 | 2.81 | NM | NM |
| | UCD2-039 | 10.59 | NM | 11.88 | NM | NM | NM | NM | NM | NM | 2.08 | NM |
| | UCD2-040 | 10.42 | NM | 11.79 | 13.84 | 11.26 | 8.84 | 6.26 | 1.24 | NM | 1.63 | NM |
| | UCD2-045 | 10.14 | NM | 11.39 | 13.74 | 9.24 | 7.84 | 5.19 | 0.04 | NM | 1.24 | NM |
| | UCD2-046 | 9.18 | NM | 10.68 | 13.03 | -0.87 | NM | 1.77 | -2.55 | -0.27 | NM | NM |
| | UCD2-048 | 10.63 | 11.51 | 11.81 | 14.16 | 12.91 | 9.96 | 7.74 | 2.18 | NM | 1.97 | NM |
| UCD-4 | UCD4-041 | 9.28 | NM | 10.80 | 13.10 | 6.15 | 1.40 | -8.71 | -14.52 | NM | -1.10 | NM |
| | UCD4-042 | 9.14 | NM | 10.64 | 13.04 | 5.74 | 1.14 | -8.94 | -14.72 | NM | -1.46 | NM |
| | UCD4-043 | 8.96 | NM | 10.55 | 13.00 | 4.55 | 0.55 | -9.69 | -16.45 | NM | NM | -0.86 |
| | UCD4-044 | 9.44 | NM | 10.95 | 13.20 | 6.85 | 2.10 | -8.41 | -12.85 | NM | -0.46 | NM |
| | UCD4-047 | 8.58 | NM | 10.18 | 12.63 | NM | -1.97 | -12.58 | -20.14 | -3.07 | NM | NM |
| IRA System | EW2-01 | 10.40 | NM | 11.62 | 13.77 | 11.51 | 8.84 | 5.95 | 1.31 | NM | NM | NM |
| | IW2-01 | 11.28 | NM | 12.45 | 14.19 | 14.29 | 11.40 | 8.45 | 3.81 | NM | NM | NM |

Notes:
All data shown is in feet mean sea level (ft msl)
NA = Not Available - well not yet installed
NM = Not Measured
* Data point erroneous based on historical levels for this well at this time of year.

**Table 18**
**2005 Groundwater Flow and Gradients**
**2005 Comprehensive Annaul Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | Range of general flow directions | Range of horizontal gradients (feet/feet) |
|---|---|---|
| HSU-1 | | |
| 1/14/05 | north to northeast | 0.002 to 0.003 |
| 5/25/05 | north to northeast | 0.004 to 0.01 |
| 7/15/05 | northeast | 0.002 to 0.004 |
| 11/13 October 2005 | east to northeast | 0.0006 to 0.002 |
| HSU-2 | | |
| 1/14/05 | south to northeast | 0.0003 to 0.01 |
| 5/25/05 | northeast | 0.0008 to 0.002 |
| 7/15/05 | northeast | 0.001 to 0.003 |
| 11/13 October 2005 | east to northeast | 0.0005 to 0.0008 |
| HSU-4 | | |
| 1/14/05 | east-northeast | 0.0004 |
| 5/25/05 | northeast | 0.001 to 0.003 |
| 7/15/05 | northeast | 0.003 to 0.004 |
| 11/13 October 2005 | east | 0.001 to 0.002 |

**Table 19**
**Vertical Gradient between Select HSU-1/HSU-2 and HSU-2/HSU-4 Wells**
**2005 Comprehensive Annual Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| Date Measured | UCD1-021 and UCD2-007 | UCD1-028 and UCD2-029 | UCD1-013 and UCD2-014 | UCD1-051 and UCD2-048 | UCD2-029 and UCD4-044 | UCD2-040 and UCD4-041 | UCD2-032 and UCD4-042 |
|---|---|---|---|---|---|---|---|
| 1/14/05 | 0.0112 | 0.0004 | 0.0075 | 0.0050 | 0.0064 | 0.0067 | 0.0051 |
| 2/4/05 | -0.0063 | -0.0493 | -0.0057 | -0.0019 | 0.0057 | 0.0058 | 0.0036 |
| 3/11/05 | 0.0013 | -0.0030 | 0.0066 | -0.0012 | 0.0060 | 0.0043 | 0.0027 |
| 4/26/05 | 0.0888 | 0.0093 | 0.1599 | 0.1123 | 0.0311 | 0.0300 | 0.0278 |
| 5/25/05 | 0.0433 | -0.0085 | 0.0670 | 0.0308 | 0.0424 | 0.0436 | 0.0366 |
| 6/7/05 | 0.0536 | 0.0041 | 0.0859 | 0.0265 | 0.0889 | 0.0878 | 0.0807 |
| 7/15/05 | 0.0554 | 0.0044 | 0.0568 | 0.0435 | 0.0864 | 0.0924 | 0.0932 |
| 10/11/05 | -0.0161 | -0.0063 | -0.0194 | -0.0177 | 0.0134 | 0.0160 | 0.0156 |
| Difference of Screens (feet) | 22.4 | 27 | 22.7 | 35.3 | 169 | 170.5 | 163.58 |

Notes:

Vertical Gradient = feet/foot

Water levels for all wells were not measured due to staffing issues during August, November, and December.

A negative value denotes an upward gradient..

**Table 20**
**IRA Chloroform Mass Removal**
**2005 Comprehensive Annual Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, CA**

| Month | Average Chloroform Concentration (µg/L) | Average Chloroform Concentration (kg/L) | Volume of Extracted Groundwater (gal) | Volume of Extracted Groundwater (L) | Mass of Chloroform Removed* (kg) | Mass of Chloroform Removed* (lbs) |
|---|---|---|---|---|---|---|
| Apr-98 | 29.9 | 2.99E-08 | 375,250 | 1,420,321 | 0.04 | 0.09 |
| May-98 | 35.2 | 3.52E-08 | 1,531,590 | 5,797,068 | 0.20 | 0.45 |
| Jun-98 | 37.3 | 3.73E-08 | 3,865,155 | 14,629,612 | 0.55 | 1.20 |
| Jul-98 | 68.0 | 6.80E-08 | 5,968,366 | 22,590,265 | 1.54 | 3.39 |
| Aug-98 | 80.0 | 8.00E-08 | 7,564,438 | 28,631,398 | 2.29 | 5.05 |
| Sep-98 | 52.0 | 5.20E-08 | 8,221,465 | 31,118,245 | 1.62 | 3.57 |
| Oct-98 | 58.0 | 5.80E-08 | 4,261,762 | 16,130,769 | 0.94 | 2.06 |
| Nov-98 | 34.0 | 3.40E-08 | 4,786,293 | 18,116,119 | 0.62 | 1.36 |
| Dec-98 | 25.3 | 2.53E-08 | 5,397,711 | 20,430,336 | 0.52 | 1.14 |
| **1998** | *46.6* | | **41,972,030** | **158,864,134** | **8.31** | **18.31** |
| Jan-99 | 23.1 | 2.31E-08 | 4,942,820 | 18,708,574 | 0.43 | 0.95 |
| Feb-99 | 19.7 | 1.97E-08 | 4,838,400 | 18,313,344 | 0.36 | 0.80 |
| Mar-99 | 14.5 | 1.45E-08 | 4,645,800 | 17,584,353 | 0.25 | 0.56 |
| Apr-99 | 15.1 | 1.51E-08 | 5,010,000 | 18,962,850 | 0.29 | 0.63 |
| May-99 | 23.6 | 2.36E-08 | 5,683,950 | 21,513,751 | 0.51 | 1.12 |
| Jun-99 | 59.5 | 5.95E-08 | 6,480,000 | 24,526,800 | 1.46 | 3.22 |
| Jul-99 | 106 | 1.06E-07 | 7,073,410 | 26,772,857 | 2.84 | 6.26 |
| Aug-99 | 61.7 | 6.17E-08 | 7,588,800 | 28,723,608 | 1.77 | 3.91 |
| Sep-99 | 44.1 | 4.41E-08 | 4,976,641 | 18,836,586 | 0.83 | 1.83 |
| Oct-99 | 35.6 | 3.56E-08 | 6,453,540 | 24,426,649 | 0.87 | 1.92 |
| Nov-99 | 2.8 | 2.80E-09 | 7,252,200 | 27,449,577 | 0.08 | 0.17 |
| Dec-99 | 20.1 | 2.01E-08 | 5,730,825 | 21,691,173 | 0.44 | 0.96 |
| **1999** | *35.5* | | **70,676,386** | **267,510,121** | **10.12** | **22.32** |
| Jan-00 | 23.4 | 2.34E-08 | 5,200,800 | 19,685,028 | 0.46 | 1.02 |
| Feb-00 | 23.8 | 2.38E-08 | 4,176,000 | 15,806,160 | 0.38 | 0.83 |
| Mar-00 | 23.2 | 2.32E-08 | 2,394,000 | 9,061,290 | 0.21 | 0.46 |
| Apr-00 | 29.2 | 2.92E-08 | 4,314,000 | 16,328,490 | 0.48 | 1.05 |
| May-00 | 47.4 | 4.74E-08 | 4,741,200 | 17,945,442 | 0.85 | 1.88 |
| Jun-00 | 67.5 | 6.75E-08 | 6,448,200 | 24,406,437 | 1.65 | 3.63 |
| Jul-00 | 82.2 | 8.22E-08 | 7,197,300 | 27,241,781 | 2.24 | 4.94 |
| Aug-00 | 70.9 | 7.09E-08 | 7,029,000 | 26,604,765 | 1.89 | 4.16 |
| Sep-00 | 54.1 | 5.41E-08 | 5,406,000 | 20,461,710 | 1.11 | 2.44 |
| Oct-00 | 53.7 | 5.37E-08 | 6,095,010 | 23,069,613 | 1.24 | 2.73 |
| Nov-00 | 52.4 | 5.24E-08 | 2,226,850 | 8,428,627 | 0.44 | 0.97 |
| Dec-00 | 38.4 | 3.84E-08 | 1,602,900 | 6,066,977 | 0.23 | 0.51 |
| **2000** | *47.2* | | **56,831,260** | **215,106,319** | **11.17** | **24.62** |
| Jan-01 | 50.2** | 5.02E-08 | 449,313 | 1,700,650 | 0.09 | 0.19 |
| Feb-01 | 50.2** | 5.02E-08 | 162,940 | 616,728 | 0.03 | 0.07 |
| Mar-01 | 50.2** | 5.02E-08 | 62,700 | 237,320 | 0.01 | 0.03 |
| Apr-01 | 50.2** | 5.02E-08 | 263,634 | 997,855 | 0.05 | 0.11 |
| May-01 | 50.2** | 5.02E-08 | 797,451 | 3,018,352 | 0.15 | 0.33 |
| Jun-01 | 50.2** | 5.02E-08 | 709,686 | 2,686,162 | 0.13 | 0.30 |
| Jul-01 | 50.2** | 5.02E-08 | 40,060 | 151,627 | 0.01 | 0.02 |
| Aug-01 | 62.0 | 6.20E-08 | 2,665,183 | 10,087,718 | 0.63 | 1.38 |
| Sep-01 | 51.8 | 5.18E-08 | 895,401 | 3,389,093 | 0.18 | 0.39 |
| Oct-01 | 41.6 | 4.16E-08 | 3,441,750 | 13,027,024 | 0.54 | 1.19 |
| Nov-01 | 43.0 | 4.30E-08 | 2,750,430 | 10,410,378 | 0.45 | 0.99 |
| Dec-01 | 44.1*** | 4.41E-08 | 294,673 | 1,115,337 | 0.05 | 0.11 |

**Table 20**
**IRA Chloroform Mass Removal**
**2005 Comprehensive Annual Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, CA**

| Month | Average Chloroform Concentration (µg/L) | Average Chloroform Concentration (kg/L) | Volume of Extracted Groundwater (gal) | Volume of Extracted Groundwater (L) | Mass of Chloroform Removed* (kg) | Mass of Chloroform Removed* (lbs) |
|---|---|---|---|---|---|---|
| **2001** | *49.5* | | **12,533,221** | **47,438,241** | **2.31** | **5.10** |
| Jan-02 | 45.1 | 4.51E-08 | 544,724 | 2,061,780 | 0.09 | 0.20 |
| Feb-02 | 48.0 | 4.80E-08 | 2,516,876 | 9,526,376 | 0.46 | 1.01 |
| Mar-02 | 29.6 | 2.96E-08 | 2,925,660 | 11,073,623 | 0.33 | 0.72 |
| Apr-02 | 29.9 | 2.99E-08 | 3,319,827 | 12,565,545 | 0.38 | 0.83 |
| May-02 | 41.9 | 4.19E-08 | 3,067,445 | 11,610,279 | 0.49 | 1.07 |
| Jun-02 | 50.4**** | 5.04E-08 | 2,809,088 | 10,632,398 | 0.54 | 1.18 |
| Jul-02 | 37.3**** | 3.73E-08 | 3,320,687 | 12,568,800 | 0.47 | 1.03 |
| Aug-02 | 36.8 | 3.68E-08 | 3,145,128 | 11,904,309 | 0.44 | 0.97 |
| Sep-02 | 32.8 | 3.28E-08 | 2,983,863 | 11,293,921 | 0.37 | 0.82 |
| Oct-02 | 30.0 | 3.00E-08 | 2,432,162 | 9,205,733 | 0.28 | 0.61 |
| Nov-02 | 44.9 | 4.49E-08 | 1,478,467 | 5,595,998 | 0.25 | 0.55 |
| Dec-02 | 31.5 | 3.15E-08 | 2,309,269 | 8,740,583 | 0.28 | 0.61 |
| **2002** | *38.2* | | **30,853,196** | **116,779,347** | **4.36** | **9.60** |
| Jan-03 | 29.8 | 2.98E-08 | 1,249,925 | 4,730,966 | 0.14 | 0.31 |
| Feb-03 | 34.1 | 3.41E-08 | 1,830,956 | 6,930,168 | 0.24 | 0.52 |
| Mar-03 | 32.0 | 3.20E-08 | 961,671 | 3,639,925 | 0.12 | 0.26 |
| Apr-03 | 28.5 | 2.85E-08 | 2,592,823 | 9,813,835 | 0.28 | 0.62 |
| May-03 | 37.8 | 3.78E-08 | 1,507,418 | 5,705,577 | 0.22 | 0.48 |
| Jun-03 | 37.8 | 3.78E-08 | 2,873,040 | 10,874,456 | 0.41 | 0.91 |
| Jul-03 | 46.4 | 4.64E-08 | 3,935,911 | 14,897,423 | 0.69 | 1.52 |
| Aug-03 | 59.5 | 5.95E-08 | 4,727,962 | 17,895,336 | 1.06 | 2.35 |
| Sep-03 | 34.1 | 3.41E-08 | 1,173,818 | 4,442,901 | 0.15 | 0.33 |
| Oct-03 | 37.1 | 3.71E-08 | 2,558,755 | 9,684,888 | 0.36 | 0.79 |
| Nov-03 | 42.6 | 4.26E-08 | 3,008,790 | 11,388,270 | 0.49 | 1.07 |
| Dec-03 | 32.3 | 3.23E-08 | 1,396,012 | 5,283,905 | 0.17 | 0.38 |
| **2003** | *37.7* | | **27,817,081** | **105,287,652** | **4.32** | **9.53** |
| Jan-04 | 31.3 | 3.13E-08 | 2,014,641 | 7,625,416 | 0.24 | 0.53 |
| Feb-04 | 29.3 | 2.93E-08 | 2,174,737 | 8,231,380 | 0.24 | 0.53 |
| Mar-04 | 17.8 | 1.78E-08 | 1,784,979 | 6,756,146 | 0.12 | 0.27 |
| Apr-04 | 21.7 | 2.17E-08 | 2,076,523 | 7,859,640 | 0.17 | 0.38 |
| May-04 | 54.9 | 5.49E-08 | 2,125,245 | 8,044,052 | 0.44 | 0.97 |
| Jun-04 | 86.6 | 8.66E-08 | 1,624,490 | 6,148,695 | 0.53 | 1.17 |
| Jul-04 | 83.4 | 8.34E-08 | 1,761,489 | 6,667,236 | 0.56 | 1.23 |
| Aug-04 | 67.3 | 6.73E-08 | 2,102,050 | 7,956,259 | 0.54 | 1.18 |
| Sep-04 | 69.0 | 6.90E-08 | 2,052,145 | 7,767,369 | 0.54 | 1.18 |
| Oct-04 | 76.9 | 7.69E-08 | 1,507,468 | 5,705,766 | 0.44 | 0.97 |
| Nov-04 | 47.4 | 4.74E-08 | 1,708,687 | 6,467,380 | 0.31 | 0.68 |
| Dec-04 | 50.9 | 5.09E-08 | 976,880 | 3,697,491 | 0.19 | 0.41 |
| **2004** | *53.0* | | **21,909,334** | **82,926,829** | **4.31** | **9.49** |
| Jan-05 | NC | NC | 0 | 0 | 0.00 | 0.00 |
| Feb-05 | NC | NC | 0 | 0 | 0.00 | 0.00 |
| Mar-05 | NC | NC | 0 | 0 | 0.00 | 0.00 |
| Apr-05 | NC | NC | 0 | 0 | 0.00 | 0.00 |
| May-05 | 37.29**** | 3.72E-08 | 1,602,719 | 6,066,291 | 0.23 | 0.50 |
| Jun-05 | 41.87**** | 4.18E-08 | 2,368,549 | 8,964,958 | 0.37 | 0.83 |
| Jul-05 | 58.69**** | 5.86E-08 | 2,779,372 | 10,519,923 | 0.62 | 1.36 |
| Aug-05 | 62.69**** | 6.26E-08 | 2,727,404 | 10,323,224 | 0.65 | 1.42 |
| Sep-05 | 49.7 | 4.97E-08 | 2,392,174 | 9,054,379 | 0.45 | 0.99 |
| Oct-05 | 46.5 | 4.65E-08 | 3,157,138 | 11,949,767 | 0.56 | 1.23 |
| Nov-05 | 33.7 | 3.37E-08 | 1,437,031 | 5,439,162 | 0.18 | 0.40 |

**Table 20**
**IRA Chloroform Mass Removal**
**2005 Comprehensive Annual Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, CA**

| Month | Average Chloroform Concentration (µg/L) | Average Chloroform Concentration (kg/L) | Volume of Extracted Groundwater (gal) | Volume of Extracted Groundwater (L) | Mass of Chloroform Removed* (kg) | Mass of Chloroform Removed* (lbs) |
|---|---|---|---|---|---|---|
| Dec-05 | 39.2 | 3.92E-08 | 1,720,866 | 6,513,478 | 0.26 | 0.56 |
| **2005** | *42.3* | | **18,185,253** | **68,831,183** | **3.31** | **7.29** |
| | | **GRAND TOTAL** | **280,777,761** | **1,062,743,825** | **48.20** | **106.27** |

Notes:
Annual Average given in *Italics*
Totals given in **Bold**
* Mass Removed = Average Concentration x Volume of Extracted Groundwate
** Average Concentration calculated from Dec-00 and Aug-01
*** Average Concentration calculated from Nov-01 and Jan-02
**** Concentration represents the difference between the influent and effluent concentrations

Table 21
Proposed 2006 Combined IRA Groundwater Treatment System, RI Groundwater, Surface Water, and Stormwater Monitoring
2005 Comprehensive Annual Water Monitoring Report
LEHR/SCDS Environmental Restoration
Davis, California

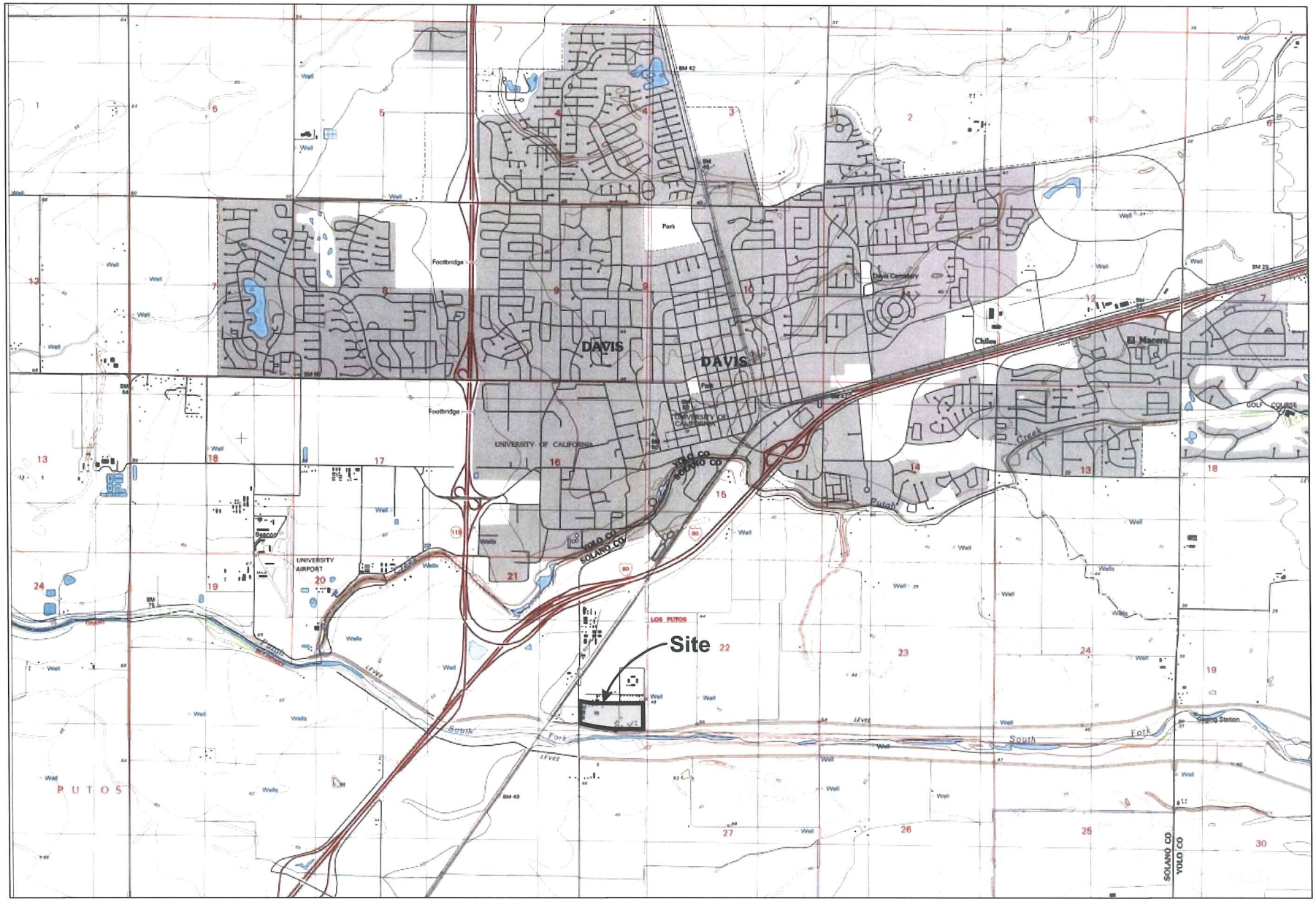
| | | | | | Radiological Analytes | | | Chemical Analytes | | | | | | | | | | | | | Bioassay | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HSU | Program | Wells | Number of Wells | Groundwater Level Measurements | Tritium | C-14 | Other rads | PAHs | VOC | Pesticides & PCBs | Metals | TOC | Nitrates (as N) | Total Chromium | TDS | Alkalinity | TSS | Oil and Grease | Anions (chloride, sulfate) | Cations (Ca, Mg, Na, K) | Acute Aquatic Toxicity | Chronic Aquatic Toxicity |
| HSU-1 | RI/FS, IRA | UCD1-001 | 1 | Q | S | S | | | S | | | | S | S | S | S | | | | | | |
| | RI/FS, IRA | UCD1-003 | 1 | Q | | | | | | | | | | | | | | | | | | |
| | RI/FS, IRA | UCD1-004 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD1-005 | 1 | Q | | | | | | | | | | | | | | | | | | |
| | RI/FS, IRA | UCD1-006 | 1 | Q | | | | | | | | | | | | | | | | | | |
| | RI/FS, IRA | UCD1-008 | 1 | Q | | | | | | | | | | | | | | | | | | |
| | RI/FS, IRA | UCD1-009 | 1 | Q | | | | | | | | | | | | | | | | | | |
| | RI/FS, IRA | UCD1-010 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA, LTPS | UCD1-011 | 1 | Q | S | S | | | S | | S | S | S | S | S | S | | | S | S | | |
| | RI/FS, IRA, DDC | UCD1-012 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD1-013 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA, LTPS | UCD1-018 | 1 | Q | S | S | | | S | | S | S | S | S | S | S | | | S | S | | |
| | RI/FS, IRA | UCD1-019 | 1 | Q | S | S | | | S | | | | S | S | S | S | | | | | | |
| | RI/FS, IRA | UCD1-020 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD1-021 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD1-022 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD1-023 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD1-024 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA, LTPS | UCD1-025 | 1 | Q | S | S | | | S | | S | S | S | S | S | S | | | S | S | | |
| | RI/FS, IRA, LTPS | UCD1-027 Z1, Z2, and Z3 | 1 | | S S S | S S S | | | S S S | | S S S | S S S | S S S | S S S | S S S | S S S | | | S S S | S S S | | |
| | RI/FS, IRA, LTPS | UCD1-028 | 1 | Q | S | S | | | S | | S | S | S | S | S | S | | | S | S | | |
| | RI/FS, IRA | UCD1-034 | 1 | Q | | | | | | | | | | | | | | | | | | |
| | RI/FS, IRA, DDC | UCD1-049 | 1 | Q | S | S | | | S | | | | | | | | | | | | | |
| | RI/FS, IRA, DDC | UCD1-050 | 1 | Q | S | S | | | S | | | | | | | | | | | | | |
| | RI/FS, IRA, DDC | UCD1-051 | 1 | Q | S | S | | | S | | | | | | | | | | | | | |
| | RI/FS, IRA | UCD1-052 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD1-053 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD1-054 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA, DDC | TP-1-A,B,C | 1 | S | | | | | | | | | | | | | | | | | | |
| | RI/FS, IRA, DDC | TP-2-A,B,C | 1 | S | | | | | | | | | | | | | | | | | | |
| | RI/FS, IRA, DDC | TP-3-A,B,C | 1 | S | | | | | | | | | | | | | | | | | | |
| | RI/FS, IRA, DDC | TP-4-A,B,C | 1 | S | | | | | | | | | | | | | | | | | | |
| | RI/FS, IRA, DDC | TP-5-A,B,C | 1 | S | | | | | | | | | | | | | | | | | | |
| | DDC | DDC-1-A, B, and C | 1 | S | | | | | S S S | | | | | | | | | | | | | |
| | DDC | DDC-2-A, B, and C | 1 | S | | | | | S S S | | | | | | | | | | | | | |
| | DDC | DDC-3-A, B, and C | 1 | S | | | | | S S S | | | | | | | | | | | | | |
| | DDC | DDC-4-A, B, and C | 1 | S | | | | | S S S | | | | | | | | | | | | | |
| | DDC | DDC-5-A, B, and C | 1 | S | | | | | S S S | | | | | | | | | | | | | |
| | DDC | DDC-6-A, B, and C | 1 | S | | | | | S S S | | | | | | | | | | | | | |
| HSU-2 | RI/FS, IRA | UCD2-007 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD2-014 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD2-015 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD2-016 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD2-017 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD2-026 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD2-029 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD2-030 | 1 | Q | S | S | | | M M M | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD2-031 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |

Table 21
Proposed 2006 Combined IRA Groundwater Treatment System, RI Groundwater, Surface Water, and Stormwater Monitoring
2005 Comprehensive Annual Water Monitoring Report
LEHR/SCDS Environmental Restoration
Davis, California

| | | | | | Radiological Analytes | | | Chemical Analytes | | | | | | | | | | | | | Bioassay | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HSU | Program | Wells | Number of Wells | Groundwater Level Measurements | Tritium | C-14 | Other rads | PAHs | VOC | Pesticides & PCBs | Metals | TOC | Nitrates (as N) | Total Chromium | TDS | Alkalinity | TSS | Oil and Grease | Anions (chloride, sulfate) | Cations (Ca, Mg, Na, K) | Acute Aquatic Toxicity | Chronic Aquatic Toxicity |
| | RI/FS, IRA | UCD2-032 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD2-035 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD2-036 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD2-037 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD2-038 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD2-039 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD2-040 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD2-045 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD2-046 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA, DDC | UCD2-048 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| HSU-4 | RI/FS, IRA | UCD4-041 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD4-042 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD4-043 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD4-044 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | RI/FS, IRA | UCD4-047 | 1 | Q | S | S | | | S | | | | S | S | S | | | | | | | |
| | Stormwater | LF-1 | NA | | WF | WF | WF | | WF | WF | WF | WF | WF | WF | WF | | WF | WF | | | WF | |
| | | LF-3 | NA | | WF | WF | WF | | WF | WF | WF | WF | WF | WF | WF | | WF | WF | | | WF | |
| | | LS-1 | NA | | WF | WF | WF | | WF | WF | WF | | WF | WF | | | WF | WF | | | WF | |
| | Surface water | STPO | NA | | WF | WF | WF | | WF | WF | WF | | WF | WF | WF | WF | | | | | | |
| | | PCU | NA | | WF | WF | WF | | WF | WF | WF | | WF | WF | WF | WF | | | | | | WF |
| | | PCD | NA | | WF | WF | WF | | WF | WF | WF | | WF | WF | WF | WF | | | | | | WF |
| | Treatment System | Influent | NA | (EW2-01) Q | M | M | | | M | | | M | | | | | | | | | | |
| | | Effluent | NA | (IW2-01) Q | M | | | | M | | M | | M | M | M | M | | | M | M | | |
| | | | *63 wells* | | | | | | | | | | | | | | | | | | | |

Notes:
F = sampled in the fall quarter
M = measured monthly
S = sampled semi-annually in the spring and fall quarters
W = sampled in the winter quarter
NA = Not available
Proposed for abandonment

# FIGURES




NORTH

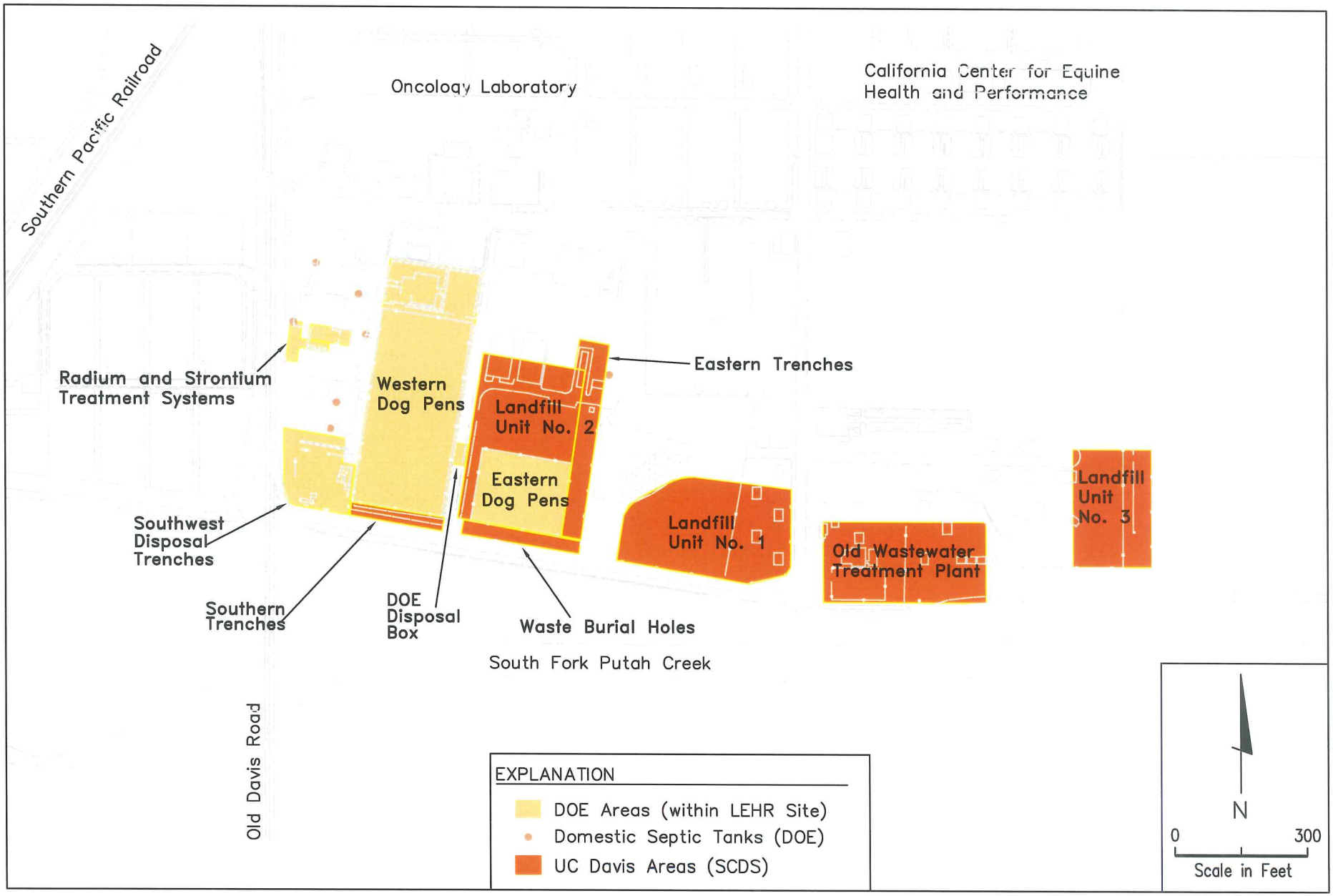
0 2000 4000

Scale in Feet

Source: TOPO! 2001, National Geographic

# SITE VICINITY MAP

2005 Comprehensive Annual Water Monitoring Report
LEHR/SCDS
Davis, California



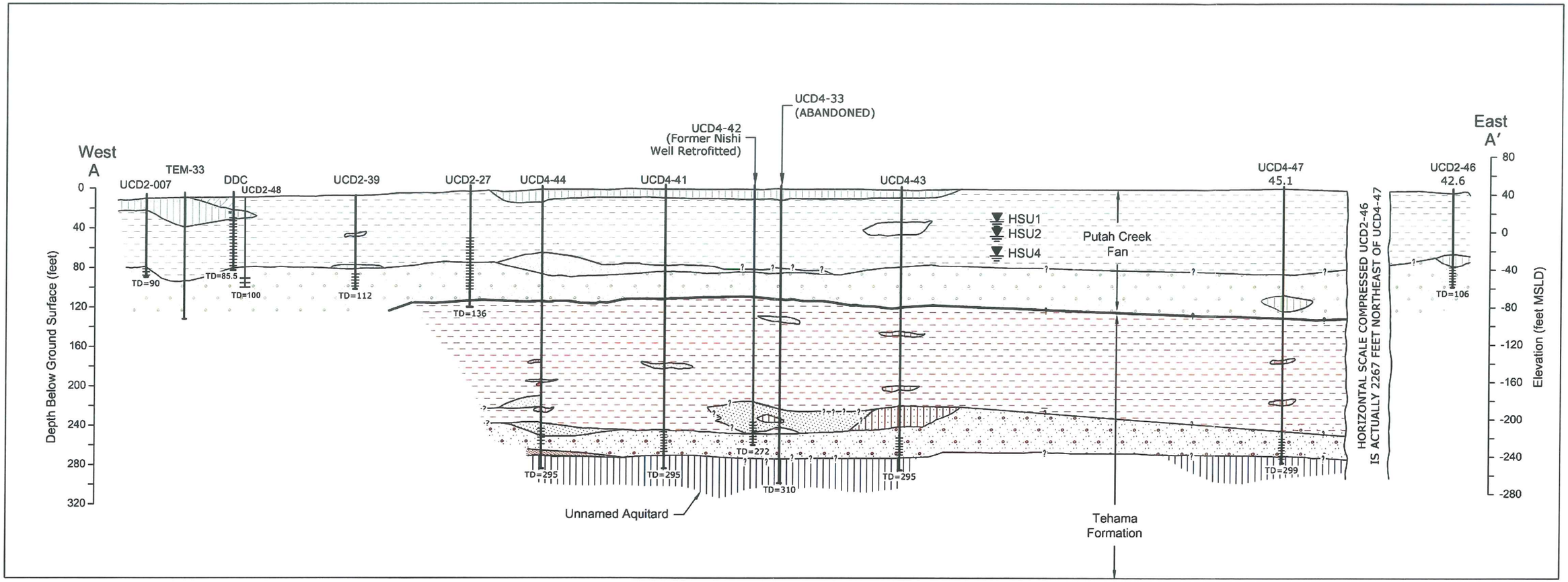

**UC DAVIS AND DOE AREAS**

2005 Comprehensive Annual Water Monitoring Report
LEHR/SCDS
Davis, California

Source: MWH

P:\29000\129042 - LEHR Reporting\2005 Annual\Graphics 1-20-06 Fig2-MWH-WasteDisposal.cdr

FIGURE 2




EXPLANATION

UCD4-43 — HSU4 Monitoring Well

TD=295 — Screened Interval

Contact Between Putah Creek Fan and Tehama Formation

Geologic Contact

Geologic Contact Uncertain

HSU1 — Average August 2000 Water Level in Wells within the Indicated HSU

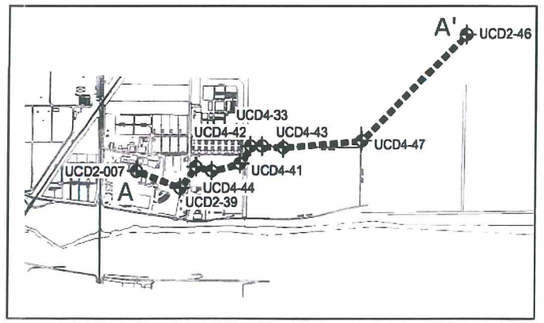
| HSU-1 | HSU-2 | HSU-3 | HSU-4 |
|---|---|---|---|
| Fine Grained Silty Sand (SM) | Fine Grained Silty Sand (SM) | Fine Grained Silty Sand (SM) | Fine Grained Silty Sand (SM) |
| Interbedded Clayey Silt (ML) to Silty Clay (CL) | Interbedded Clayey Silt (ML) to Silty Clay (CL) | Interbedded Clayey Silt (ML) to Silty Clay (CL) | Interbedded Clayey Silt (ML) to Silty Clay (CL) |
| Fine to Coarse Grained Sand (SP) | Fine to Coarse Grained Sand (SP) | Fine to Coarse Grained Sand (SP) | Fine to Coarse Grained Sand (SP) |
| Coarse Grained Sandy Gravel (GP) | Coarse Grained Sandy Gravel (GP) | Coarse Grained Sandy Gravel (GP) | Coarse Grained Sandy Gravel (GP) |
| Silt (ML) With Some Sand and Clay | Silt (ML) With Some Sand and Clay | Silt (ML) With Some Sand and Clay | Silt (ML) With Some Sand and Clay |

90

300

Scale in Feet

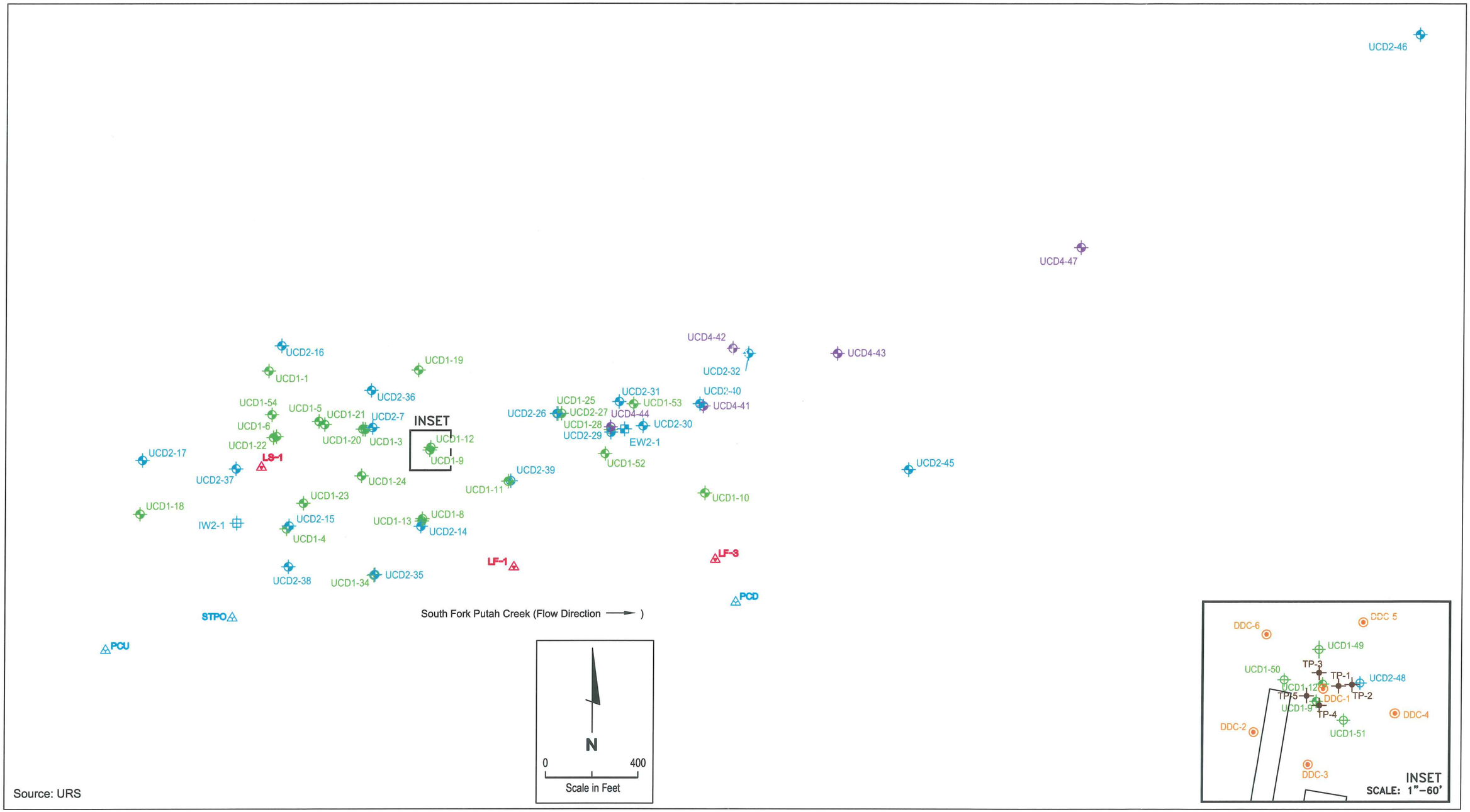
Vertical Exaggeration: 3x




## GENERALIZED HYDROSTRATIGRAPHIC CROSS SECTION A-A'

2005 Comprehensive Annual Water Monitoring Report
LEHR/SCDS
Davis, California

Source: URS




Source: URS

EXPANDED DDC SYSTEM

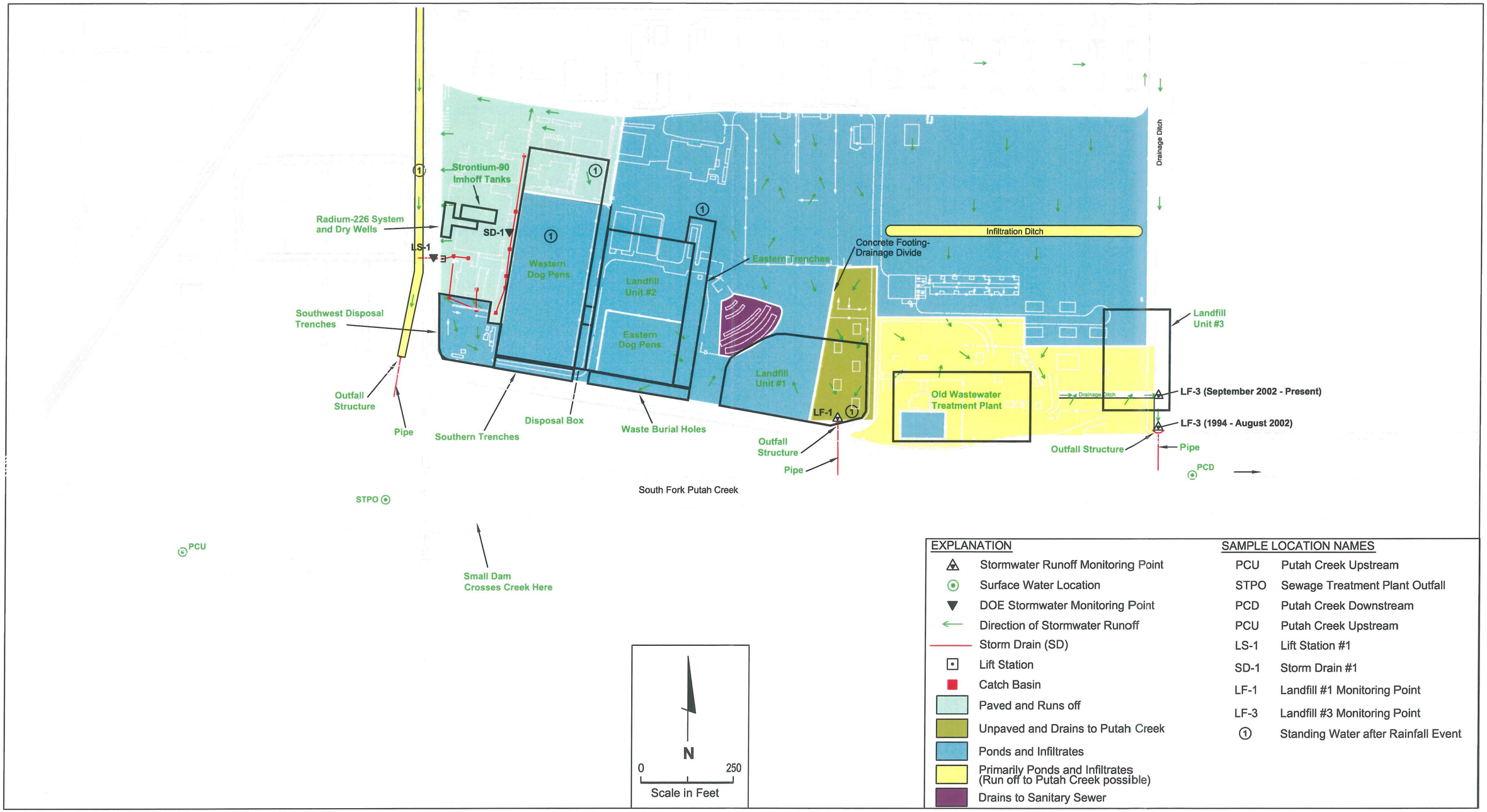
EXPLANATION

- UCD1-11 HSU-1 Monitoring Well
- UCD2-17 HSU-2 Monitoring Well
- EW2-1 HSU-2 Extraction Well
- IW2-1 HSU-2 Injection Well
- UCD4-33 HSU-4 Monitoring Well
- Former Irrigation Well
- STPO Surface Water Sample Location
- LS-1 Stormwater Sample Location
- DDC-1 DDC Well Location
- TP-1 Nested Piezometer Location

# SITE AND WELL LOCATION MAP

2005 Comprehensive Annual Water Monitoring Report
LEHR/SCDS
Davis, California

FIGURE 4



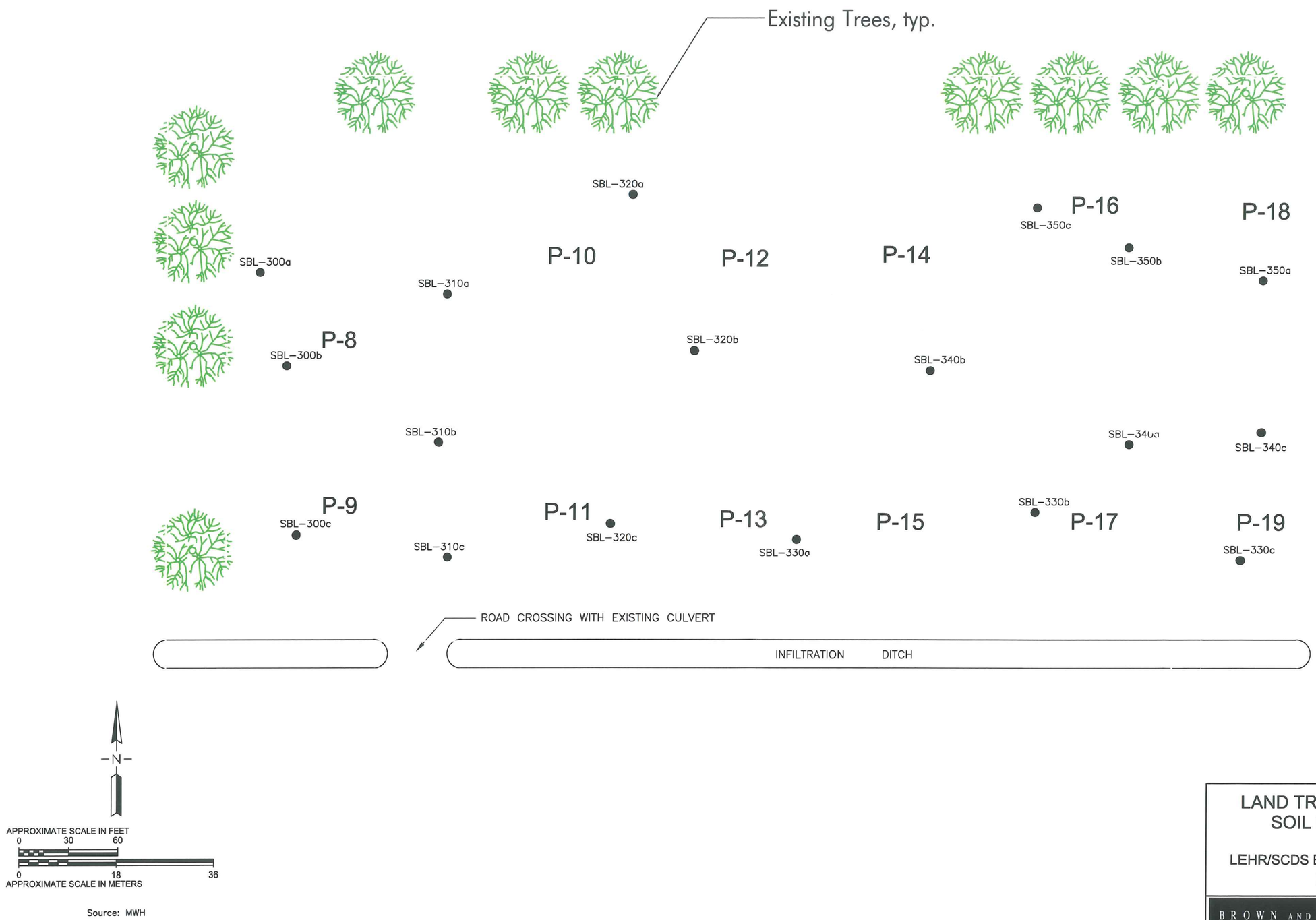

## LOCATION OF STORMWATER AND SURFACE WATER MONITORING POINTS

2005 Comprehensive Annual Water Monitoring Report
LEHR/SCDS
Davis, California

Source: MWH

P:\26000\26393 - LEHR ReportinP:\29000\129042 - LEHR Reporting\2005 Annual\Graphics 1-20-06 Fig5-MWH-StrmSurfWtr.cdr

FIGURE 5




Source: MWH

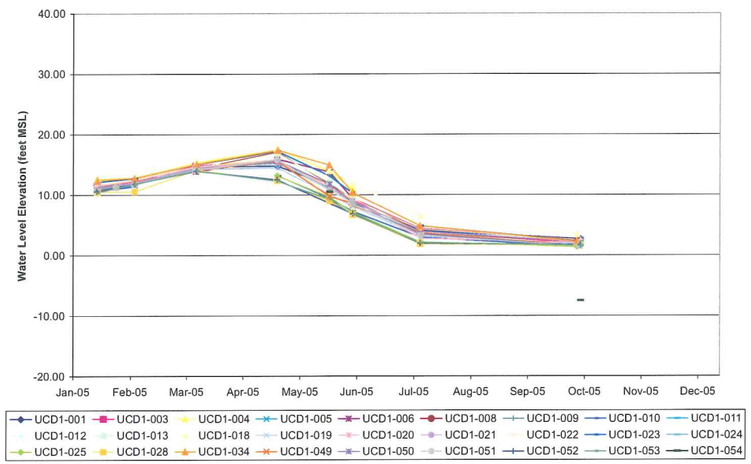
# LAND TREATMENT PILOT STUDY SOIL BORING LOCATIONS

LEHR/SCDS ENVIRONMENTAL RESTORATION
DAVIS, CALIFORNIA

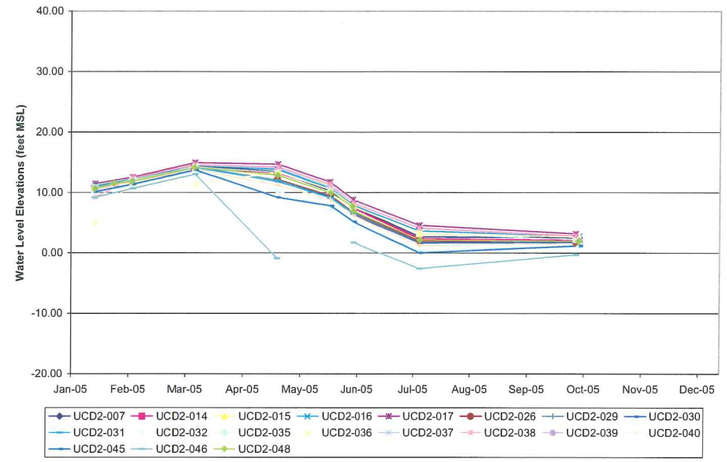
| BROWN AND CALDWELL | Figure By MF | Project No. 129042-003 | Figure |
|---|---|---|---|
| | Date 3/31/06 | Map No. | 6 |

Photo Image Fil
Xref Filename: | LEHR0002 | MW17 | soilboring-new |
Path: P:\29000\129042 - LEHR Reporting\2005 Annu Filename: Ann-05-Fig6-GMX-soilboring Plot date: Mar 31, 2006-03:18:19pm CAD User: jrogers

Water Level Elevations: HSU-1

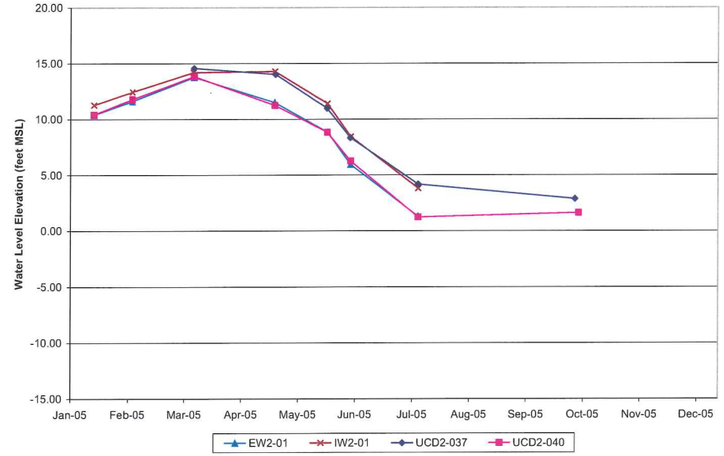



Water Level Elevations: HSU-2



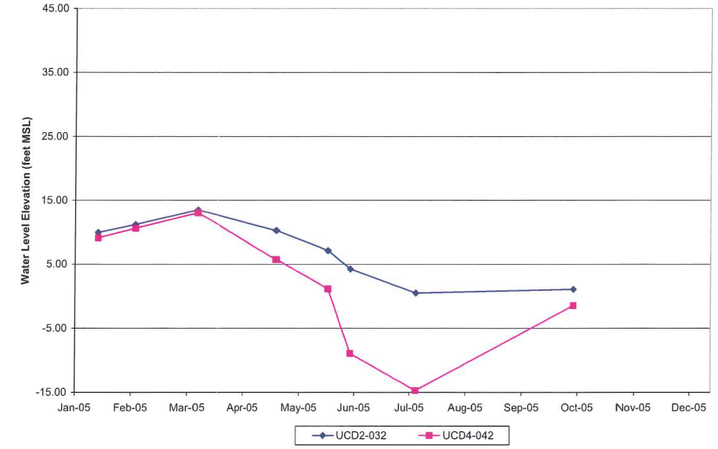

Water Level Elevations: HSU-4

Water Level Elevations: EW2-1 and IW2-1



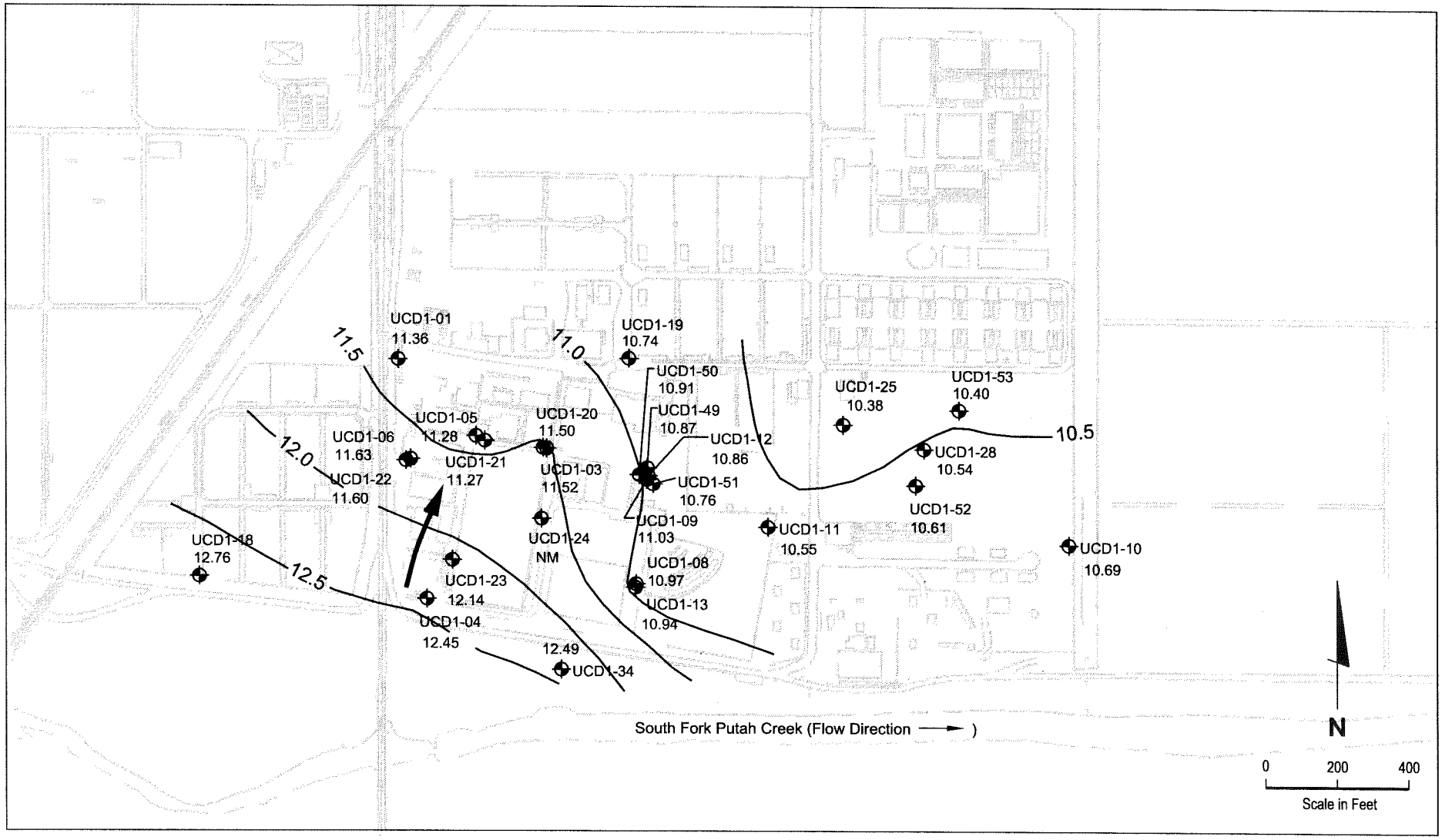

Water Level Elevations: HSU-1 and HSU-2

Water Level Elevations: HSU-2 and HSU-4




## GROUNDWATER ELEVATION GRAPHS

2005 Comprehensive Annual Water Monitoring Report
LEHR/SCDS
Davis, California




EXPLANATION

UCD1-11 HSU-1 Monitoring Well

10.55 Groundwater Elevation Above Mean Sea Level

Groundwater Contour Line, Contour Interval = 0.5

Approximate Groundwater Flow Direction

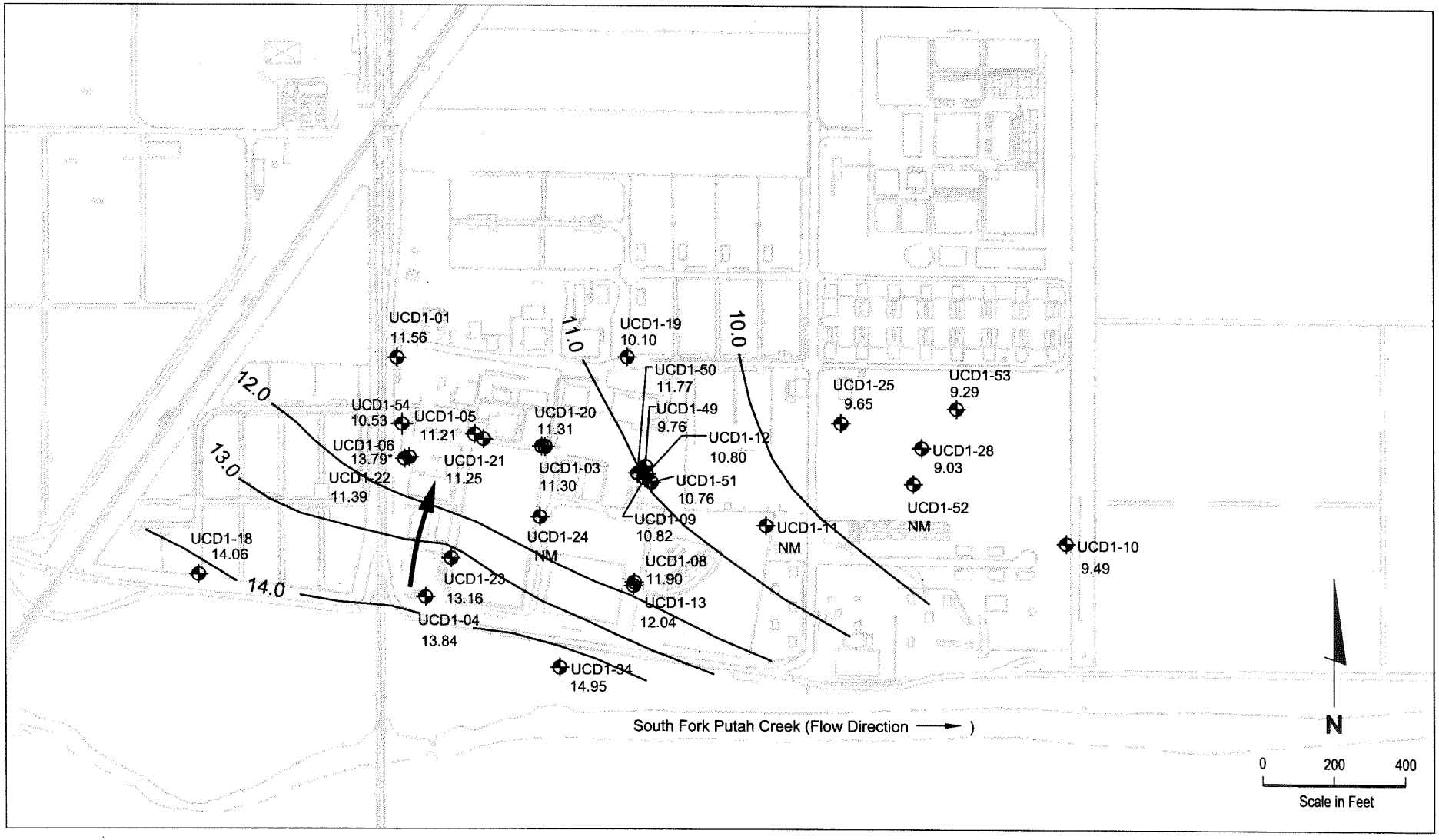
NM Not Measured

# GROUNDWATER ELEVATION CONTOUR MAP - HSU-1 JANUARY 14, 2005

2005 COMPREHENSIVE ANNUAL WATER MONITORING REPORT
LEHR/SCDS
DAVIS, CALIFORNIA

FIGURE 8-A

Path: P:\29000\129042 - LEHR Reporting\2005 Annual\Graphics\ Filename: Ann-05-Fig8A-HSU1-GW-1stQtr Plot date: Jan 27, 2006-10:05:11am CAD User: jrogers




EXPLANATION

UCD1-11 HSU-1 Monitoring Well

10.55 Groundwater Elevation Above Mean Sea Level

Groundwater Contour Line, Contour Interval = 1.0

Approximate Groundwater Flow Direction

NM Not Measured

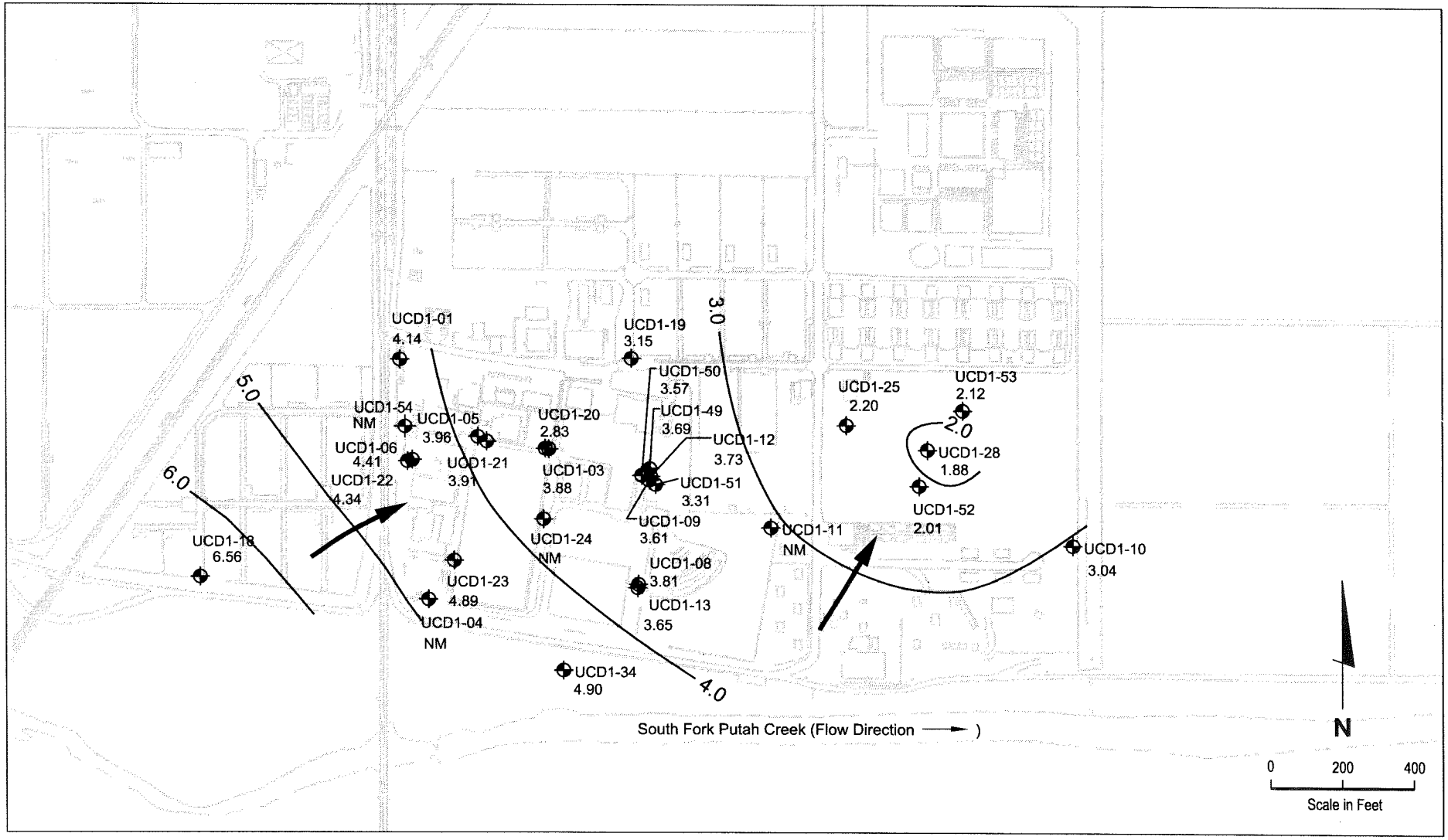
* Not Used in Contouring

# GROUNDWATER ELEVATION CONTOUR MAP - HSU-1 MAY 25, 2005

2005 COMPREHENSIVE ANNUAL WATER MONITORING REPORT
LEHR/SCDS
DAVIS, CALIFORNIA

FIGURE 8-B

Path: P:\29000\129042 - LEHR Reporting\2005 Annual\Graphics\ Filename: Ann-05-Fig8B-HSU1-GW-2ndQtr Plot date: Jan 27, 2006-10:09:07am CAD User: jrogers




EXPLANATION

UCD1-11 HSU-1 Monitoring Well

10.55 Groundwater Elevation Above Mean Sea Level

Groundwater Contour Line, Contour Interval = 1.0

Approximate Groundwater Flow Direction

NM Not Measured

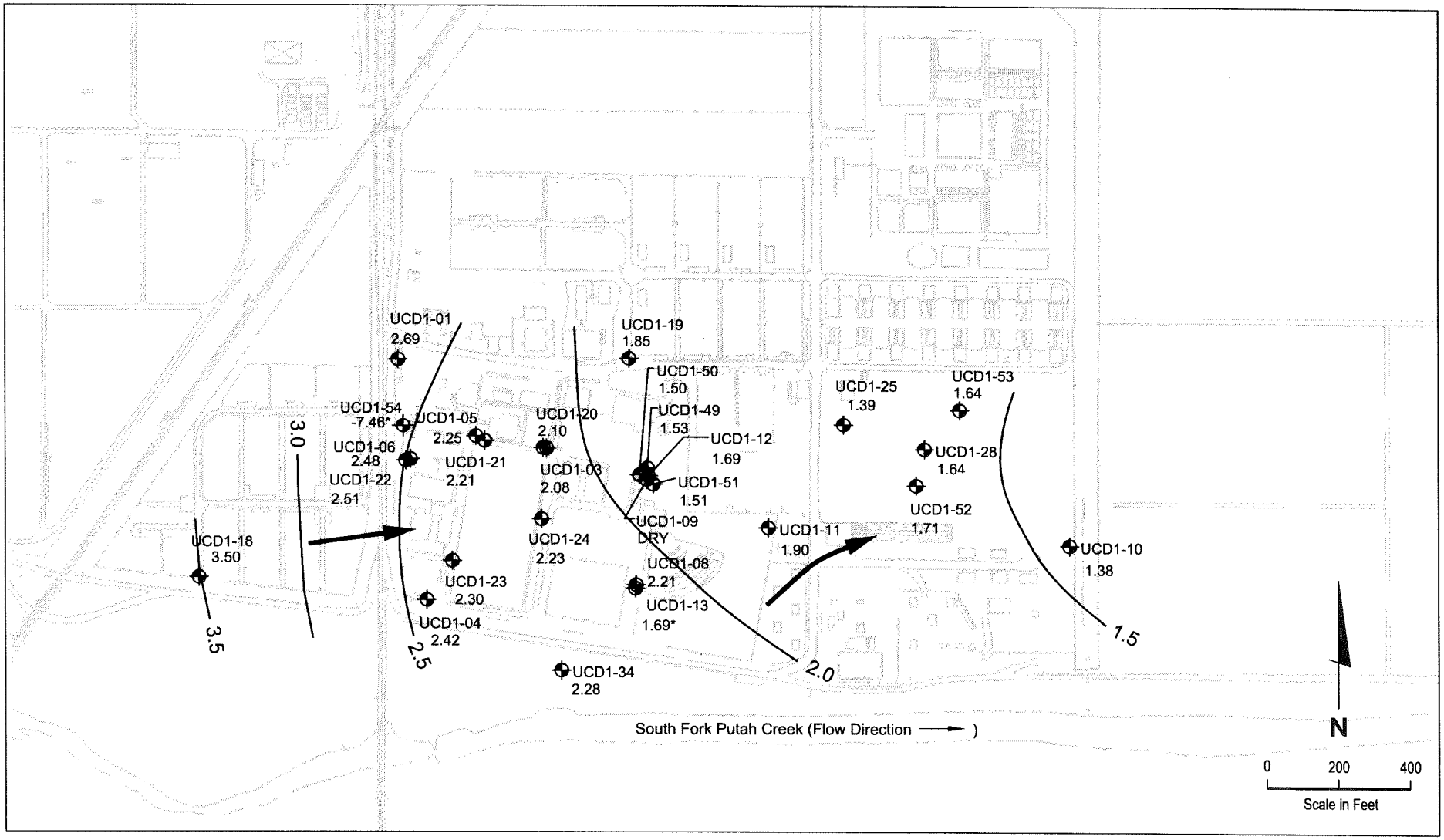
* Not Used in Contouring

# GROUNDWATER ELEVATION CONTOUR MAP - HSU-1 JULY 15, 2005

2005 COMPREHENSIVE ANNUAL WATER MONITORING REPORT
LEHR/SCDS
DAVIS, CALIFORNIA

FIGURE 8-C

Path: P:\29000\129042 - LEHR Reporting\2005 Annual\Graphics\ Filename: Ann-05-Fig8C-HSU1-GW-3rdQtr Plot date: Jan 27, 2006-10:10:16am CAD User: jrogers




EXPLANATION

UCD1-11 HSU-1 Monitoring Well

10.55 Groundwater Elevation Above Mean Sea Level

Groundwater Contour Line, Contour Interval = 0.5

Approximate Groundwater Flow Direction

NM Not Measured

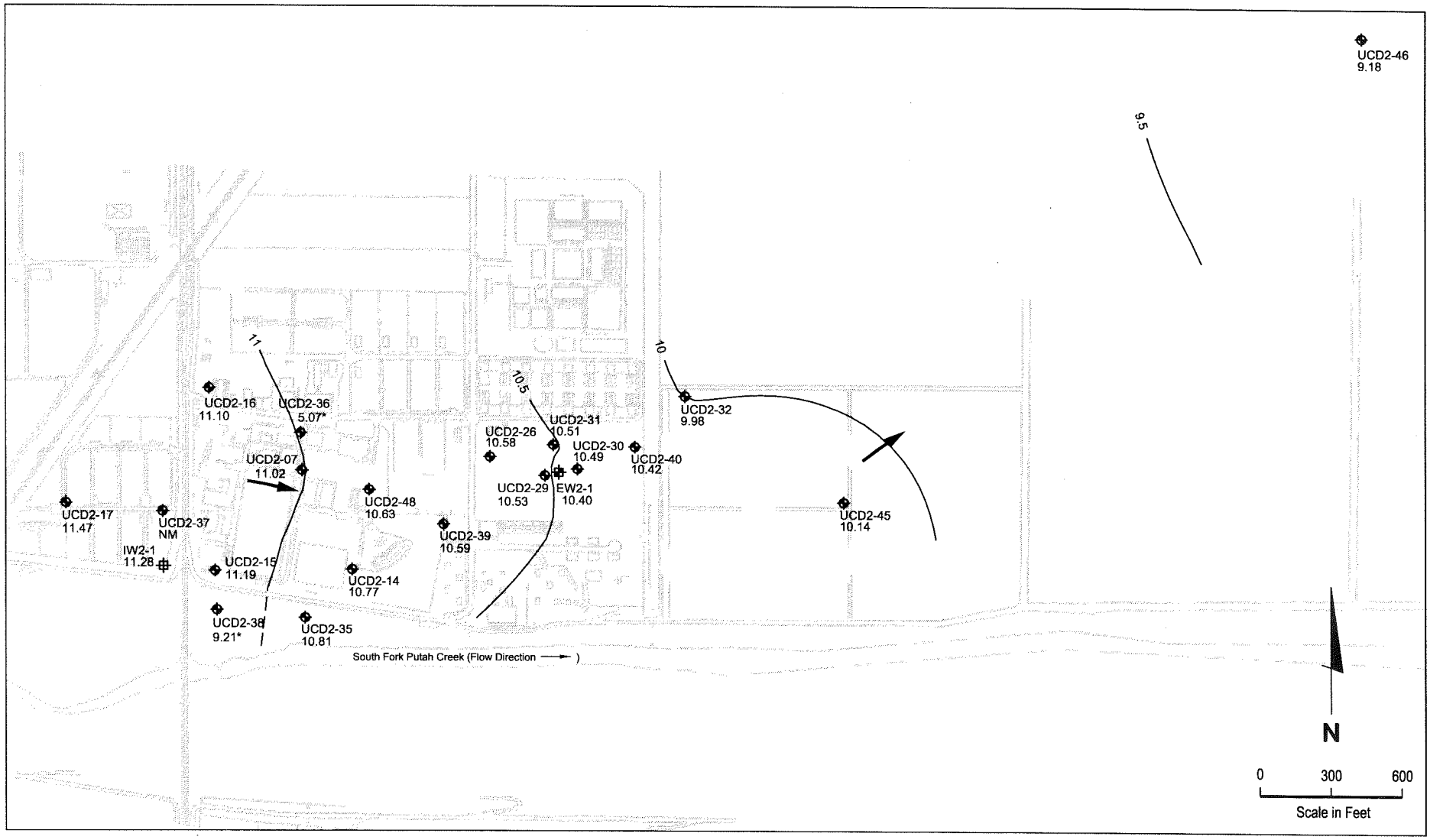
* Not Used in Contouring

# GROUNDWATER ELEVATION CONTOUR MAP - HSU-1 OCTOBER 11-13, 2005

2005 COMPREHENSIVE ANNUAL WATER MONITORING REPORT
LEHR/SCDS
DAVIS, CALIFORNIA

Path: P:\29000\129042 - LEHR Reporting\2005 Annual\Graphics\ Filename: Ann-05-Fig8D-HSU1-GW-4thQtr Plot date: Feb 01, 2006-11:45:15am CAD User: jrogers

FIGURE 8-D




EXPLANATION

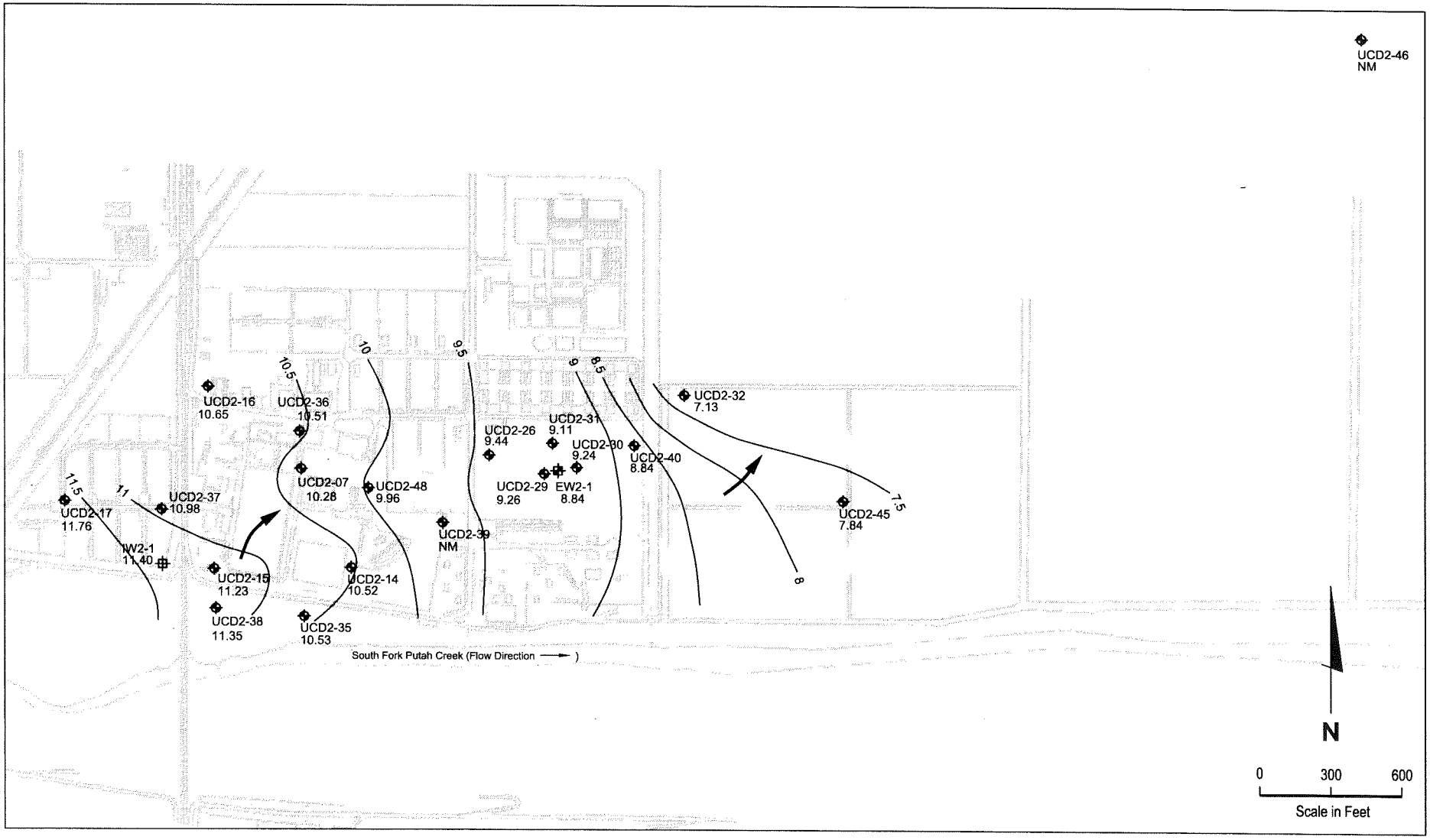
| | | | |
|---|---|---|---|
| UCD2-17 | HSU-2 Monitoring Well | 9.39 | Groundwater Elevation Above Mean Sea Level |
| EW2-1 | HSU-2 Extraction Well | | Groundwater Contour Line, Contour Interval = 0.5 |
| IW2-1 | HSU-2 Injection Well | | Approximate Groundwater Flow Direction |
| * | Not used in contouring | NM | Not Measured |

# GROUNDWATER ELEVATION CONTOUR MAP - HSU-2 JANUARY 14, 2005

2005 COMPREHENSIVE ANNUAL WATER MONITORING REPORT
LEHR/SCDS
DAVIS, CALIFORNIA

Path: P:\29000\129042 - LEHR Reporting\2005 Annual\Graphics\ Filename: Ann-05-Fig9A-HSU2-GW-1stQtr Plot date: May 04, 2006-08:50:58am CAD User: jrogers

FIGURE 9-A




EXPLANATION

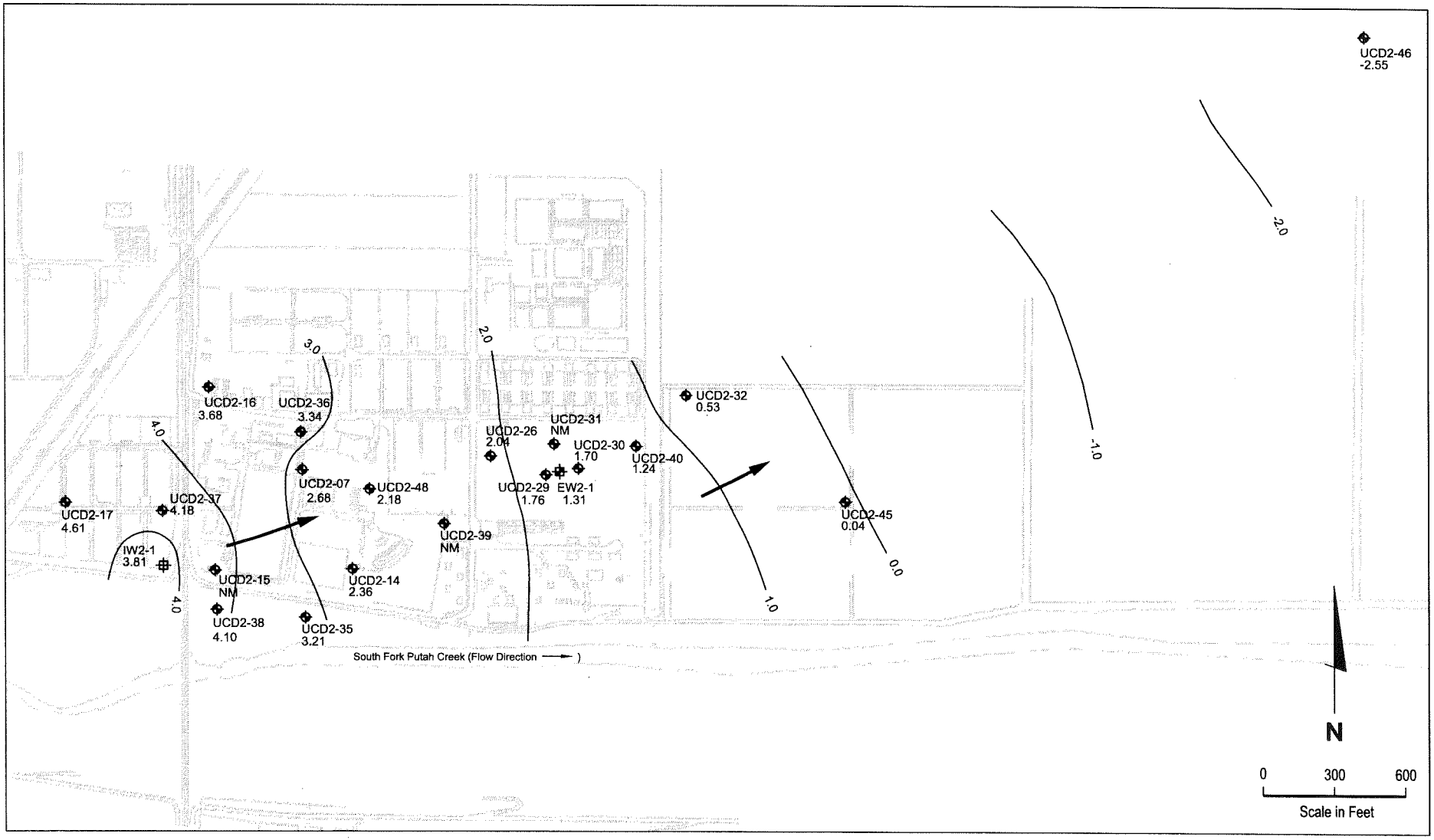
| | | | |
|---|---|---|---|
| UCD2-17 | HSU-2 Monitoring Well | 10.28 | Groundwater Elevation Above Mean Sea Level |
| EW2-1 | HSU-2 Extraction Well | | Groundwater Contour Line, Contour Interval = 0.5 |
| IW2-1 | HSU-2 Injection Well | | Approximate Groundwater Flow Direction |
| * | Not used in contouring | NM | Not Measured |

# GROUNDWATER ELEVATION CONTOUR MAP - HSU-2 MAY 25, 2005

2005 COMPREHENSIVE ANNUAL WATER MONITORING REPORT
LEHR/SCDS
DAVIS, CALIFORNIA

Path: P:\29000\129042 - LEHR Reporting\2005 Annual\Graphics\ Filename: Ann-05-Fig9B-HSU2-GW-2ndQtr Plot date: Jan 27, 2006-10:56:24am CAD User: jrogers

FIGURE 9-B




EXPLANATION

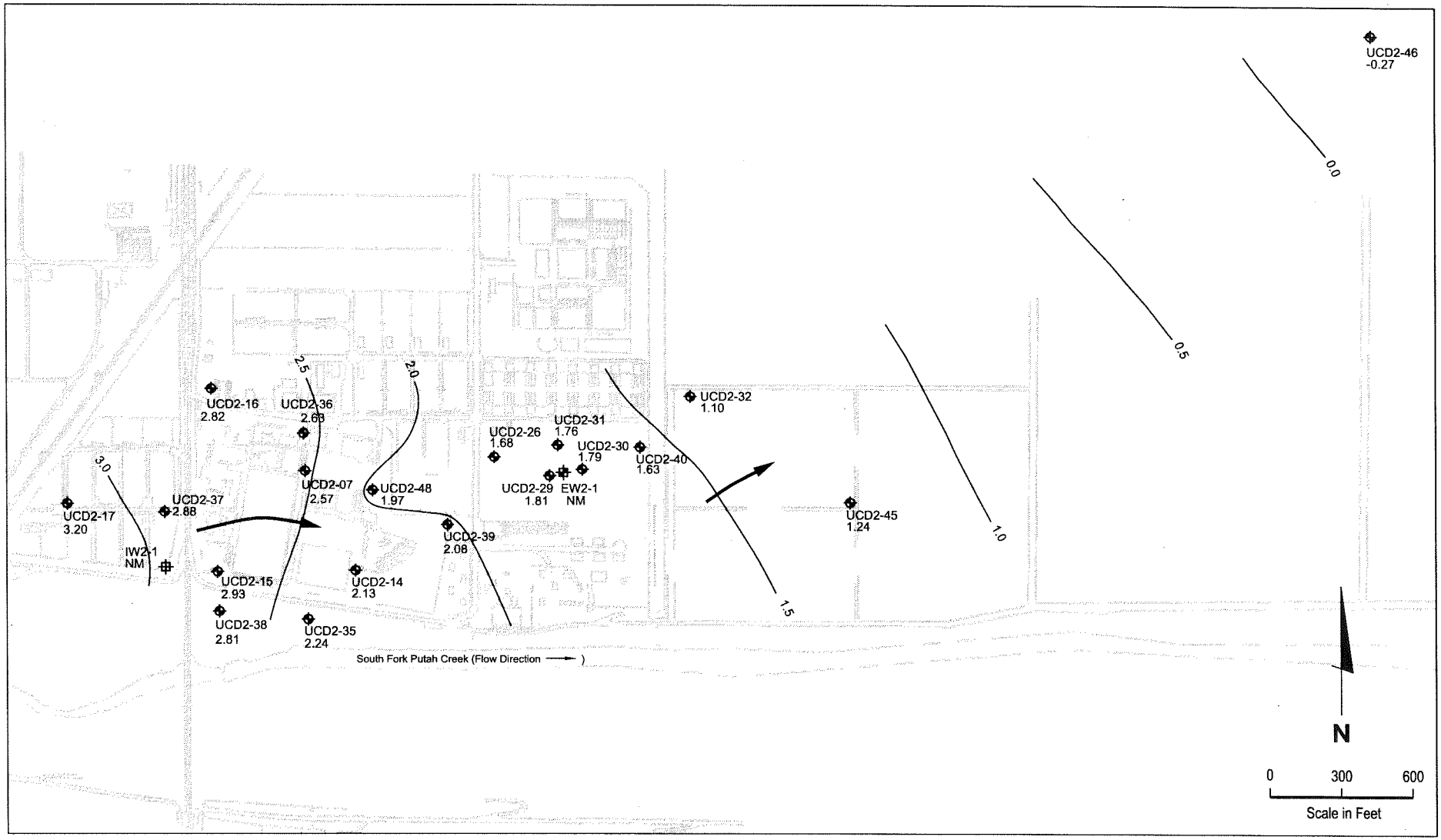
| | | | |
|---|---|---|---|
| UCD2-17 | HSU-2 Monitoring Well | 10.28 | Groundwater Elevation Above Mean Sea Level |
| EW2-1 | HSU-2 Extraction Well | | Groundwater Contour Line, Contour Interval = 1.0 |
| IW2-1 | HSU-2 Injection Well | | Approximate Groundwater Flow Direction |
| * | Not used in contouring | NM | Not Measured |

# GROUNDWATER ELEVATION CONTOUR MAP - HSU-2 JULY 15, 2005

2005 COMPREHENSIVE ANNUAL WATER MONITORING REPORT
LEHR/SCDS
DAVIS, CALIFORNIA

Path: P:\29000\129042 - LEHR Reporting\2005 Annual\Graphics\ Filename: Ann-05-Fig9C-HSU2-GW-3rdQtr Plot date: Jan 27, 2006-10:57:22am CAD User: jrogers

FIGURE 9-C




EXPLANATION

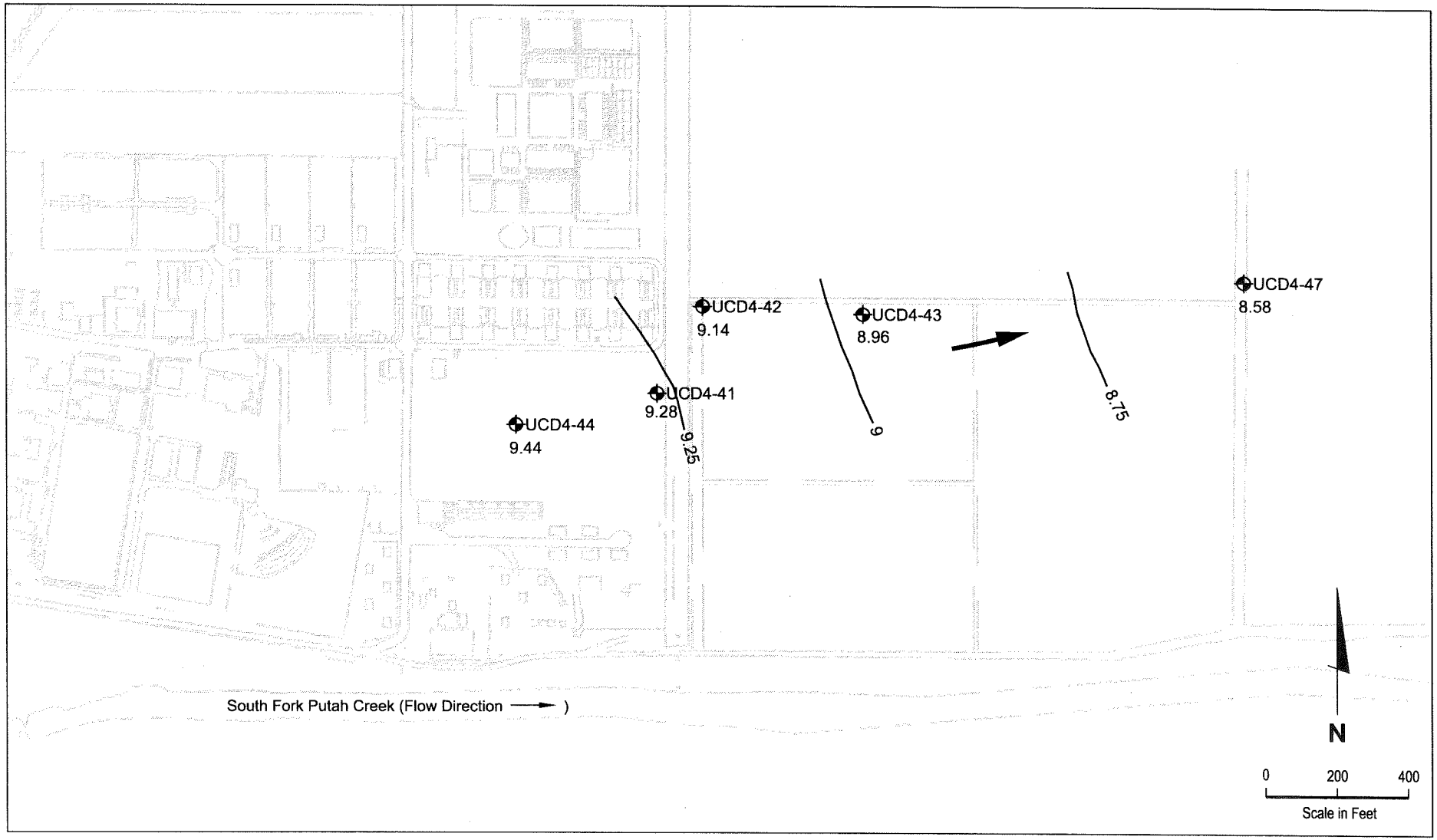
| | | | |
|---|---|---|---|
| UCD2-17 | HSU-2 Monitoring Well | 10.28 | Groundwater Elevation Above Mean Sea Level |
| EW2-1 | HSU-2 Extraction Well | | Groundwater Contour Line, Contour Interval = 0.5 |
| IW2-1 | HSU-2 Injection Well | | Approximate Groundwater Flow Direction |
| * | Not used in contouring | NM | Not Measured |

# GROUNDWATER ELEVATION CONTOUR MAP - HSU-2 OCTOBER 11-13, 2005

2005 COMPREHENSIVE ANNUAL WATER MONITORING REPORT
LEHR/SCDS
DAVIS, CALIFORNIA

Path: P:\29000\129042 - LEHR Reporting\2005 Annual\Graphics\ Filename: Ann-05-Fig9D-HSU2-GW-4thQtr Plot date: Jan 27, 2006-11:12:10am CAD User: jrogers

FIGURE 9-D




EXPLANATION

UCD4-44 HSU-4 Monitoring Well

9.44 Groundwater Elevation Above Mean Sea Level

Groundwater Contour Line, Contour Interval = 0.5

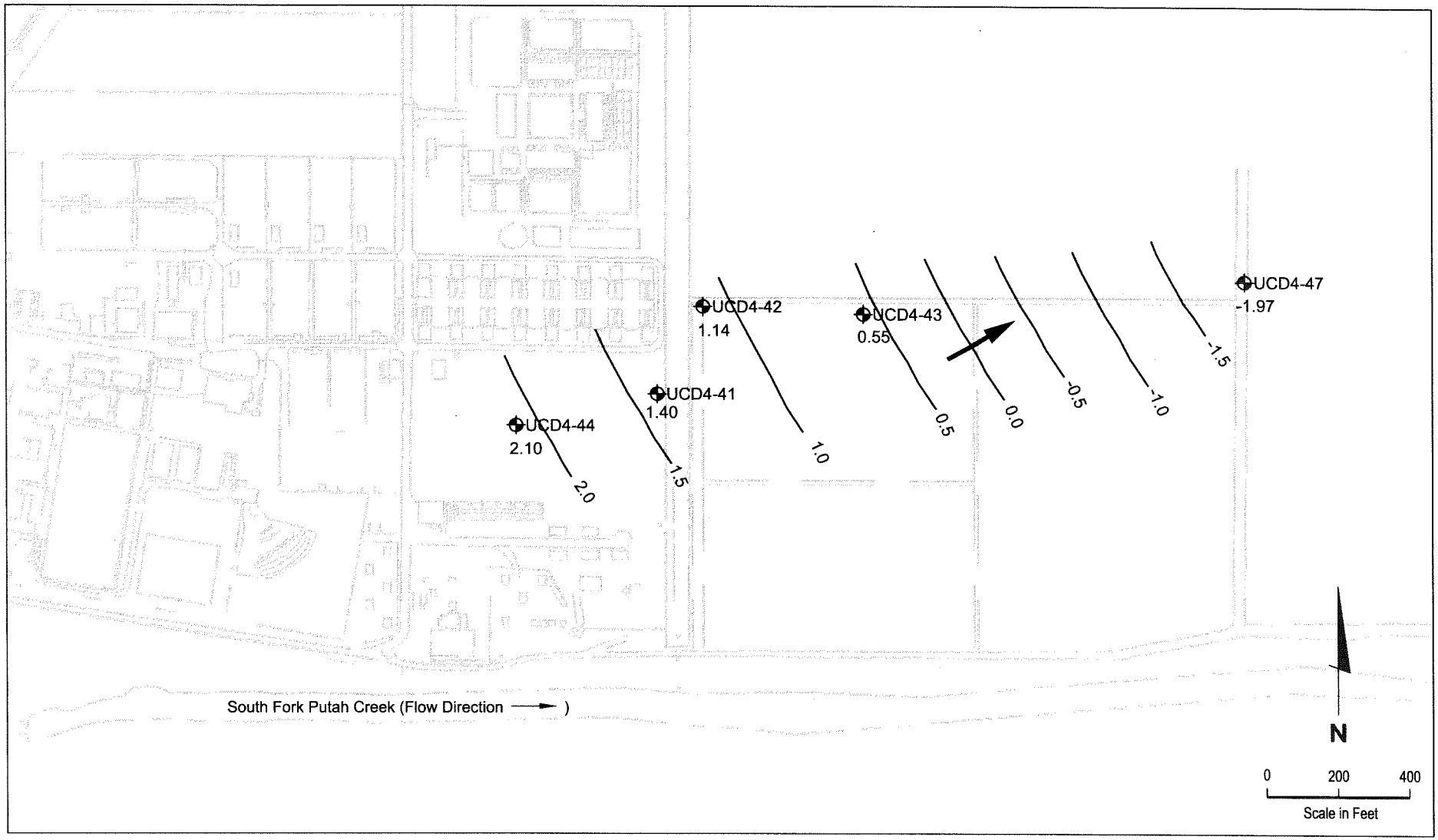
Approximate Groundwater Flow Direction

# GROUNDWATER ELEVATION CONTOUR MAP - HSU-4 JANUARY 14, 2005

2005 COMPREHENSIVE ANNUAL WATER MONITORING REPORT
LEHR/SCDS
DAVIS, CALIFORNIA

Path: P:\29000\129042 - LEHR Reporting\2005 Annual\Graphics\ Filename: Ann-05-Fig10A-HSU4-GW-1stQtr Plot date: Jan 27, 2006-11:37:58am CAD User: jrogers

FIGURE 10-A




EXPLANATION

UCD4-44 HSU-4 Monitoring Well

2.10 Groundwater Elevation Above Mean Sea Level

Groundwater Contour Line, Contour Interval = 0.5

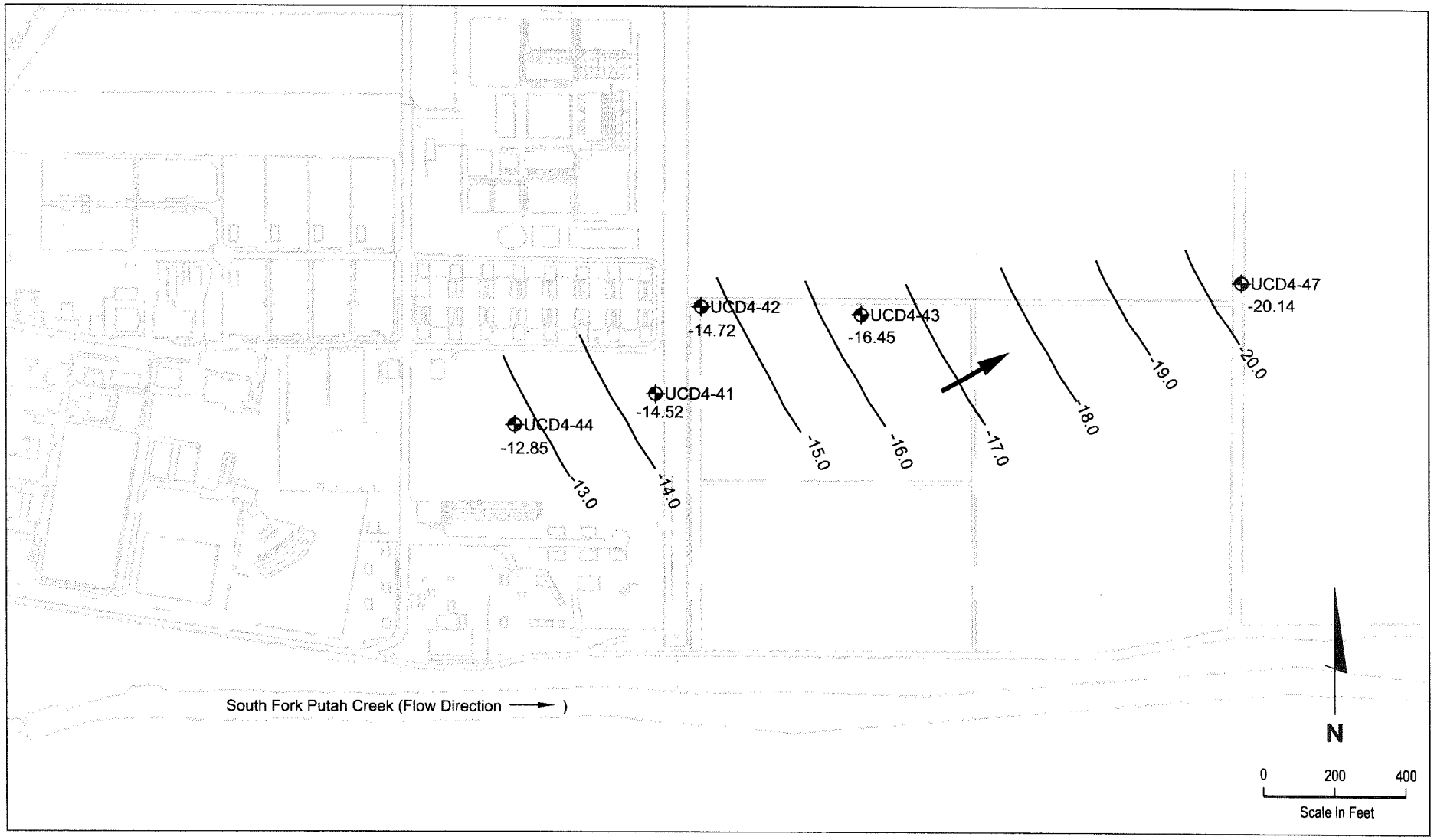
Approximate Groundwater Flow Direction

# GROUNDWATER ELEVATION CONTOUR MAP - HSU-4 MAY 25, 2005

2005 COMPREHENSIVE ANNUAL WATER MONITORING REPORT
LEHR/SCDS
DAVIS, CALIFORNIA

Path: P:\29000\129042 - LEHR Reporting\2005 Annual\Graphics\ Filename: Ann-05-Fig10B-HSU4-GW-2ndQtr Plot date: Jan 27, 2006-11:36:57am CAD User: jrogers

FIGURE 10-B




EXPLANATION

UCD4-44 HSU-4 Monitoring Well

2.10 Groundwater Elevation Above Mean Sea Level

Groundwater Contour Line, Contour Interval = 1.0

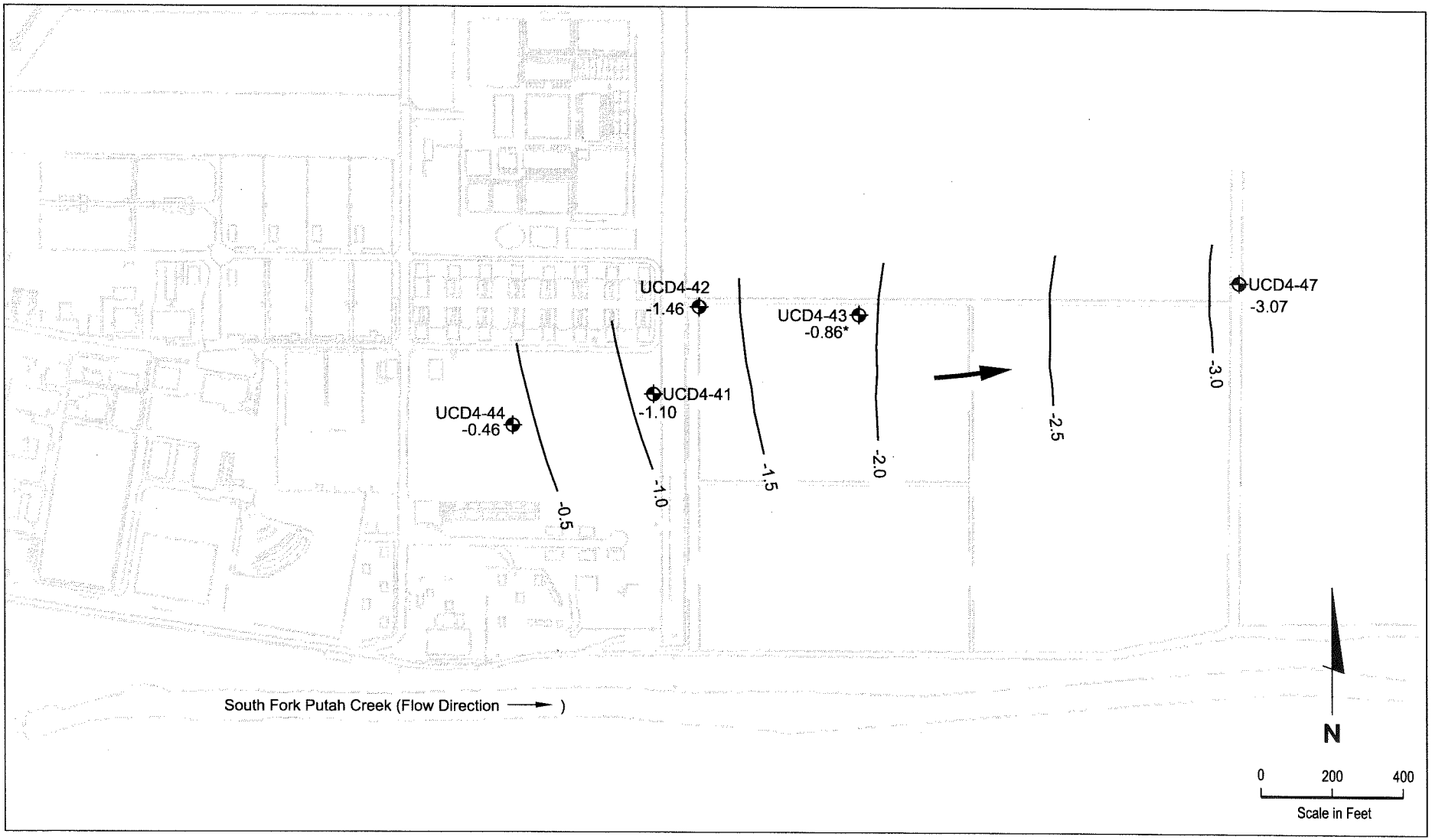
Approximate Groundwater Flow Direction

# GROUNDWATER ELEVATION CONTOUR MAP - HSU-4 JULY 15, 2005

2005 COMPREHENSIVE ANNUAL WATER MONITORING REPORT
LEHR/SCDS
DAVIS, CALIFORNIA

Path: P:\29000\129042 - LEHR Reporting\2005 Annual\Graphics\ Filename: Ann-05-Fig10C-HSU4-GW-3rdQtr Plot date: Jan 27, 2006-11:35:36am CAD User: jrogers

FIGURE 10-C




EXPLANATION

UCD4-44 HSU-4 Monitoring Well

2.10 Groundwater Elevation Above Mean Sea Level

Groundwater Contour Line, Contour Interval = 0.5

Approximate Groundwater Flow Direction

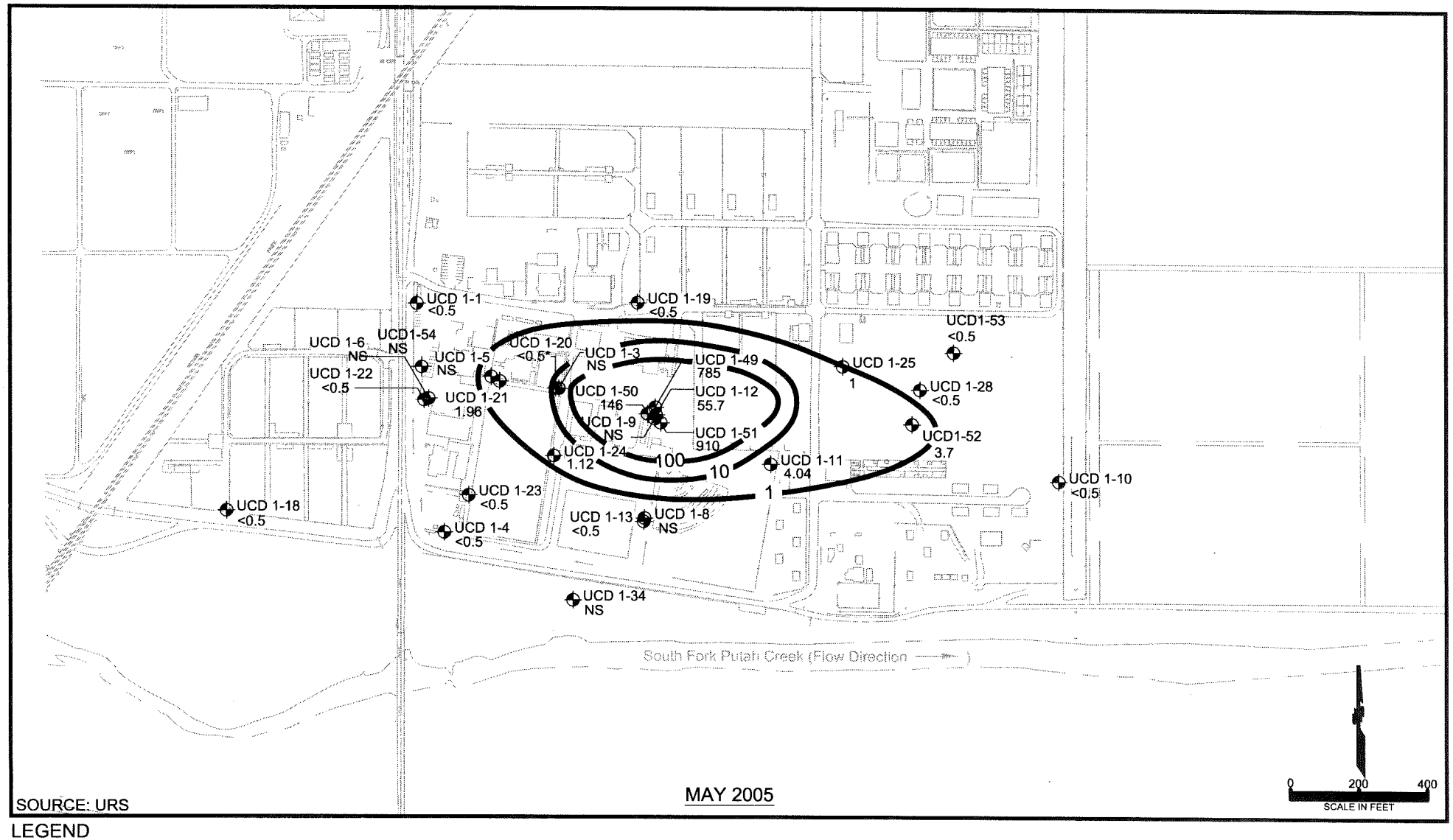
* Not Used in Contouring - Measured 10/24/05

# GROUNDWATER ELEVATION CONTOUR MAP - HSU-4 OCTOBER 11-13, 2005

2005 COMPREHENSIVE ANNUAL WATER MONITORING REPORT
LEHR/SCDS
DAVIS, CALIFORNIA

Path: P:\29000\129042 - LEHR Reporting\2005 Annual\Graphics\ Filename: Ann-05-Fig10D-HSU4-GW-4thQtr Plot date: Feb 01, 2006-11:47:37am CAD User: jrogers

FIGURE 10-D




SOURCE: URS

MAY 2005

LEGEND

| | |
|---|---|
| UCD1-11 | HSU-1 MONITORING WELL |
| <0.5 | RESULT IS LESS THAN THE CRDL |
| NS | NOT SAMPLED |
| * | NOT USED IN CONTOURING |

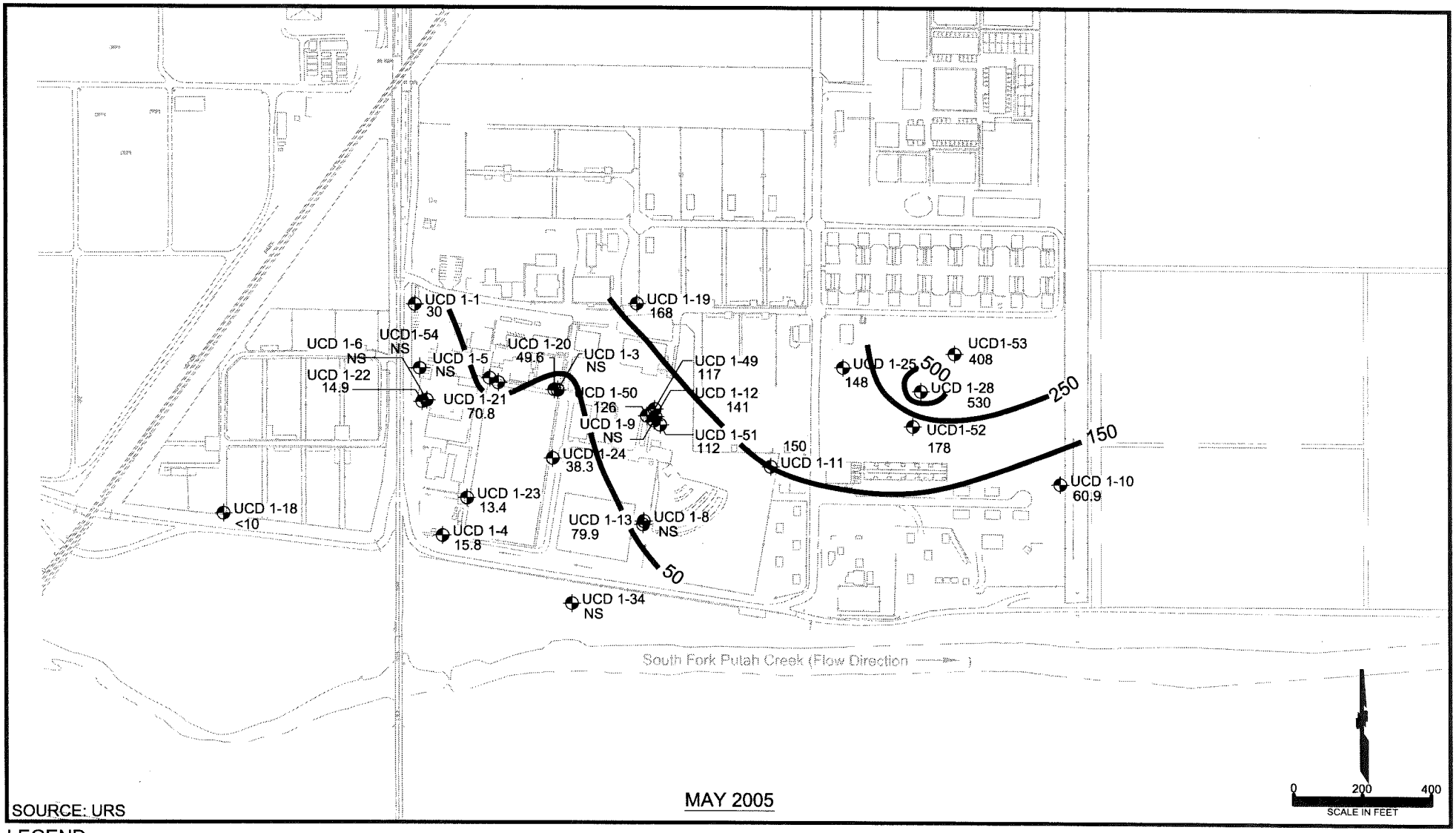
ISOCONCENTRATION CONTOUR. ALL RESULTS REPORTED IN UG/L.

# CHLOROFORM ISOCONCENTRATION CONTOURS IN HSU-1

2005 COMPREHENSIVE ANNUAL WATER MONITORING REPORT
LEHR/SCDS
DAVIS, CALIFORNIA

Path: P:\29000\129042 - LEHR Reporting\2005 Annual\Graphics\ Filename: Ann-05-Fig11-HSU-1 Plot date: Feb 06, 2006-12:47:09pm CAD User: jrogers

FIGURE 11




SOURCE: URS

MAY 2005

LEGEND

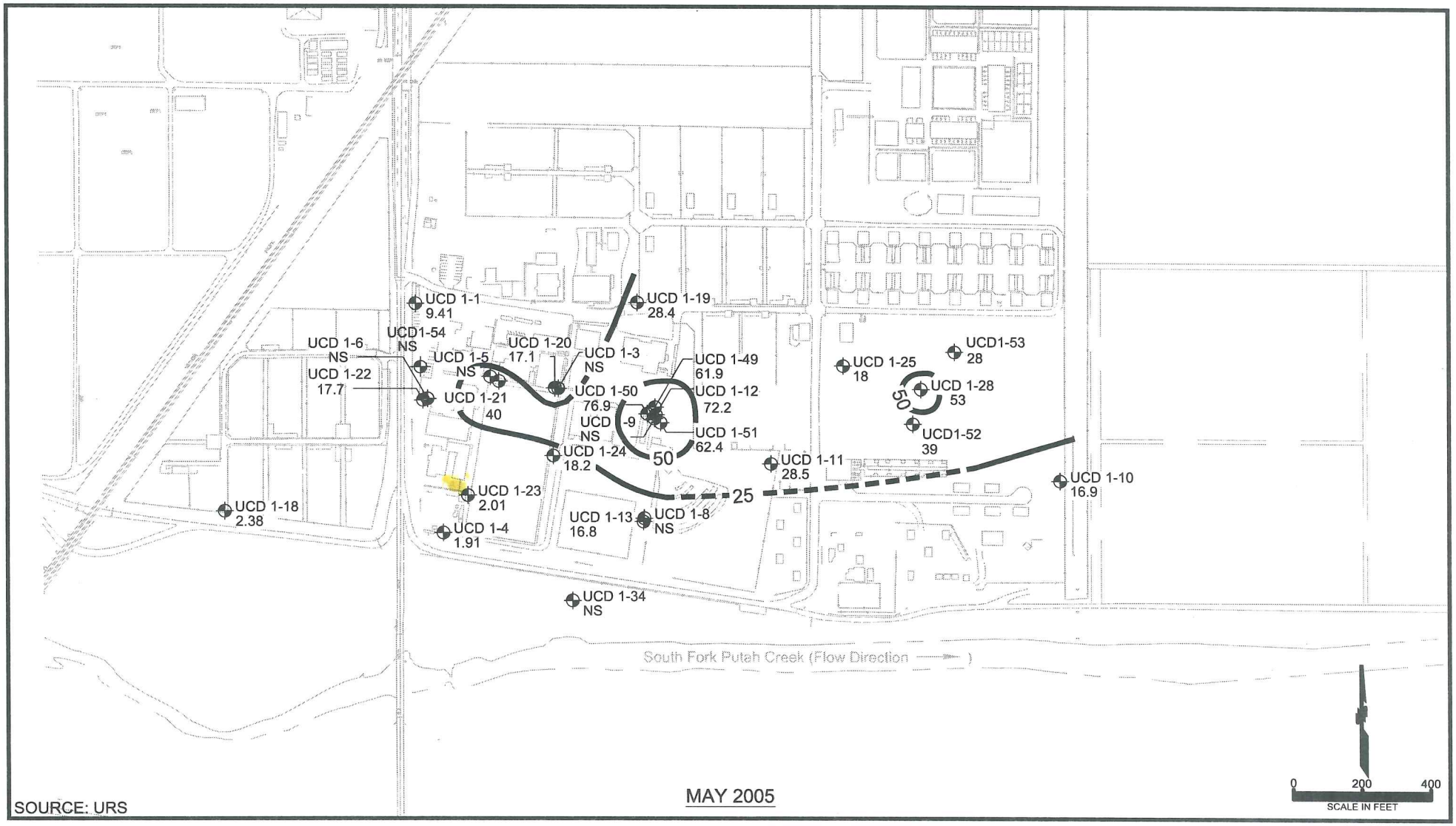
| | |
|---|---|
| UCD1-11 | HSU-1 MONITORING WELL |
| <10 | RESULT IS LESS THAN THE CRDL |
| NS | NOT SAMPLED |
| 50 | ISOCONCENTRATION CONTOUR. ALL RESULTS REPORTED IN UG/L. |

# CHROMIUM ISOCONCENTRATION CONTOURS IN HSU-1

2005 COMPREHENSIVE ANNUAL WATER MONITORING REPORT
LEHR/SCDS
DAVIS, CALIFORNIA

Path: P:\29000\129042 - LEHR Reporting\2005 Annual\Graphics\ Filename: Ann-05-Fig12-HSU-1 Plot date: Feb 06, 2006-12:53:45pm CAD User: jrogers

FIGURE 12




SOURCE: URS

MAY 2005

LEGEND

| | |
|---|---|
| UCD1-11 | HSU-1 MONITORING WELL |
| <0.1 | RESULT IS LESS THAN THE CRDL |
| NS | NOT SAMPLED |

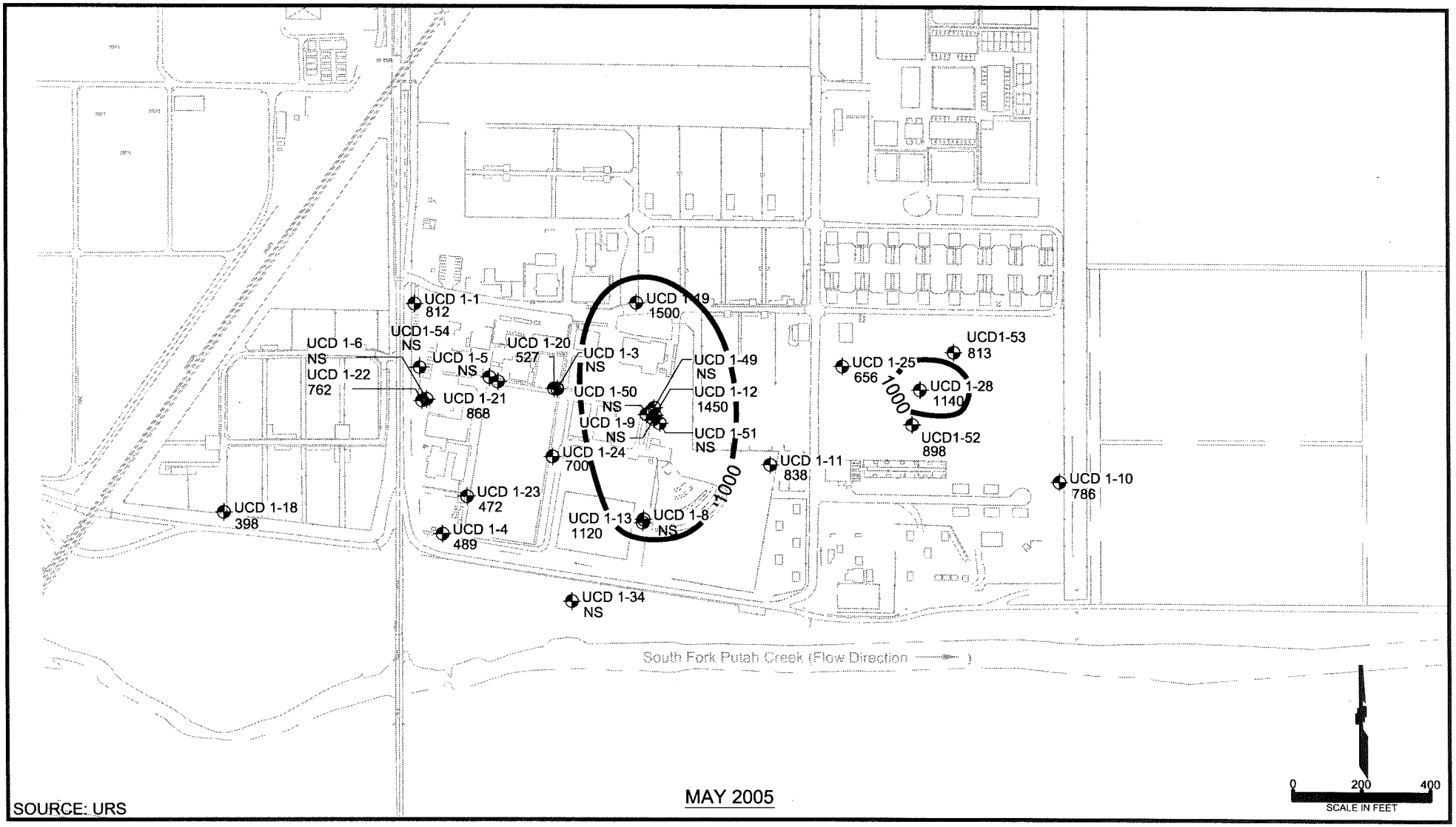
25 ISOCONCENTRATION CONTOUR. ALL RESULTS REPORTED IN UG/L.

# NITRATE AS N ISOCONCENTRATION CONTOURS IN HSU-1

2005 COMPREHENSIVE ANNUAL WATER MONITORING REPORT
LEHR/SCDS
DAVIS, CALIFORNIA

Path: P:\29000\129042 - LEHR Reporting\2005 Annual\Graphics\ Filename: Ann-05-Fig13-HSU-1 Plot date: Feb 06, 2006-12:57:08pm CAD User: jrogers

FIGURE 13




SOURCE: URS

MAY 2005

LEGEND

UCD1-11 HSU-1 MONITORING WELL

<20 RESULT IS LESS THAN THE CRDL

NS NOT SAMPLED

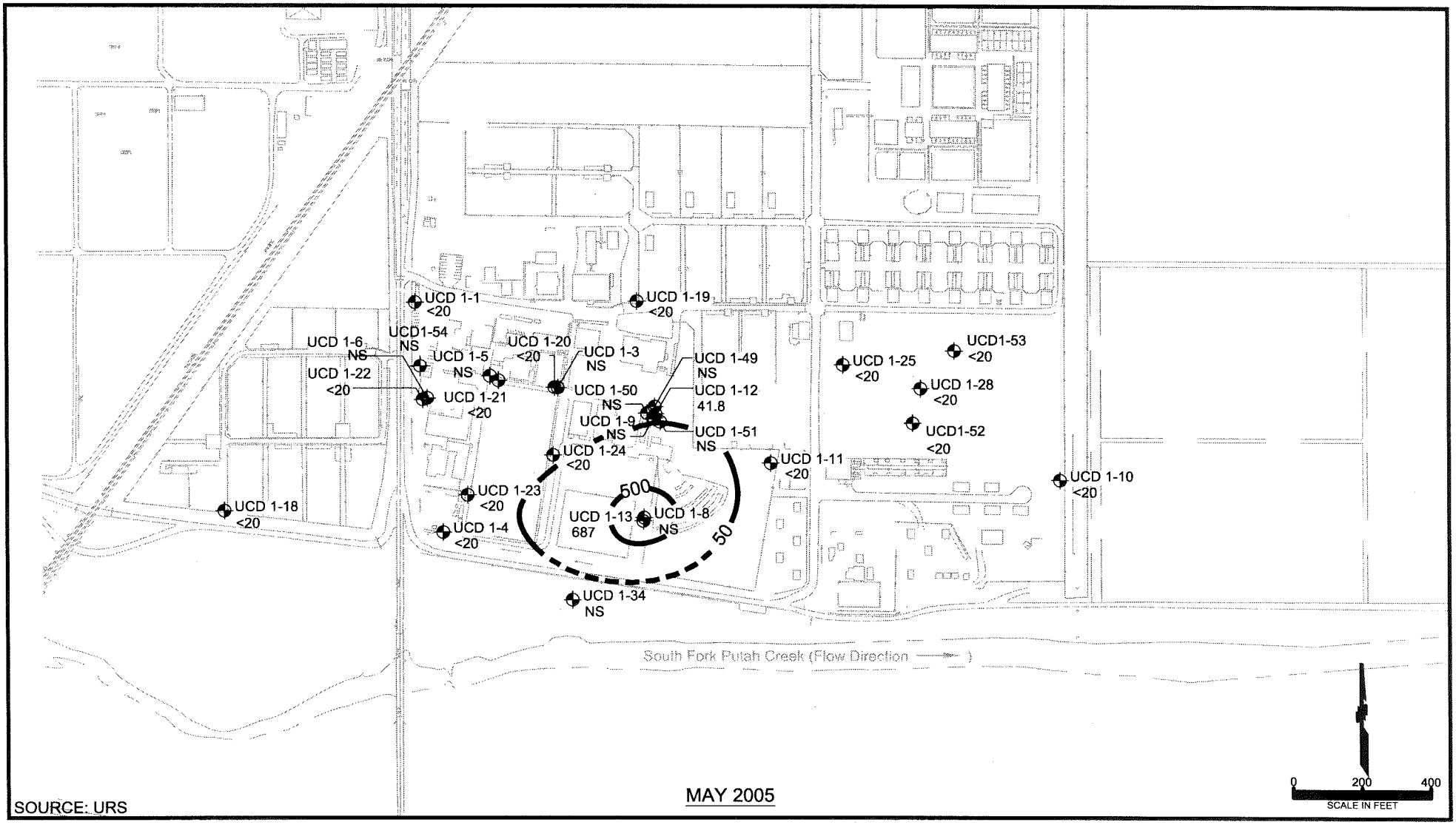
1000 ISOCONCENTRATION CONTOUR. ALL RESULTS REPORTED IN UG/L.

# TDS ISOCONCENTRATION CONTOURS IN HSU-1

2005 COMPREHENSIVE ANNUAL WATER MONITORING REPORT
LEHR/SCDS
DAVIS, CALIFORNIA

Path: P:\29000\129042 - LEHR Reporting\2005 Annual\Graphics\ Filename: Ann-05-Fig14-HSU-1 Plot date: Feb 06, 2006-01:02:59pm CAD User: jrogers

FIGURE 14




SOURCE: URS

MAY 2005

LEGEND

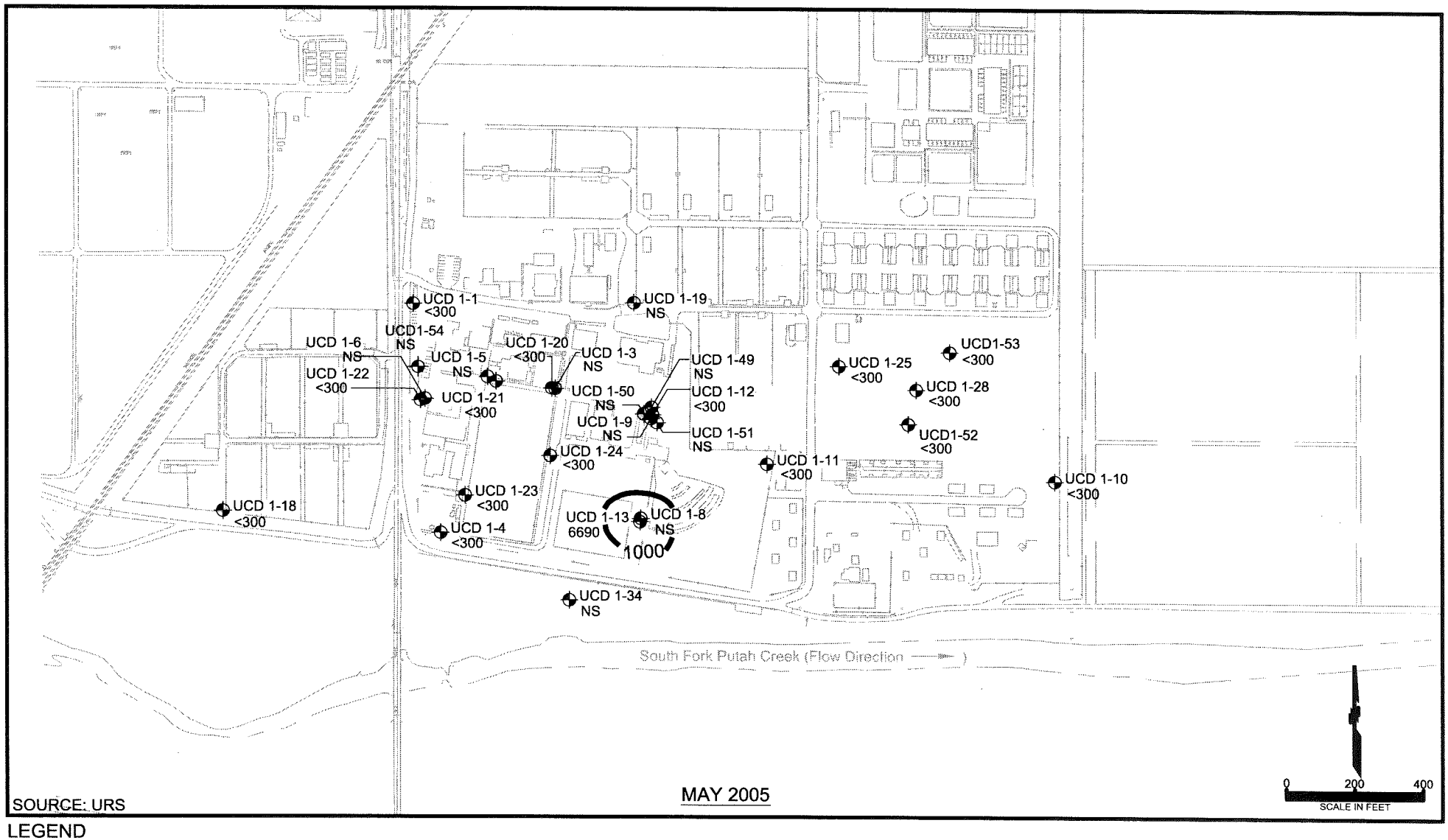
| | |
|---|---|
| UCD1-11 | HSU-1 MONITORING WELL |
| <20 | RESULT IS LESS THAN THE CRDL |
| NS | NOT SAMPLED |
| 50 | ISOCONCENTRATION CONTOUR. ALL RESULTS REPORTED IN UG/L. |

# CARBON-14 ISOCONCENTRATION CONTOURS IN HSU-1

2005 COMPREHENSIVE ANNUAL WATER MONITORING REPORT
LEHR/SCDS
DAVIS, CALIFORNIA

Path: P:\29000\129042 - LEHR Reporting\2005 Annual\Graphics\ Filename: Ann-05-Fig15-HSU-1 Plot date: Feb 06, 2006-01:05:42pm CAD User: jrogers

FIGURE 15




SOURCE: URS

MAY 2005

LEGEND

UCD1-11 HSU-1 MONITORING WELL

<300 RESULT IS LESS THAN THE CRDL

NS NOT SAMPLED

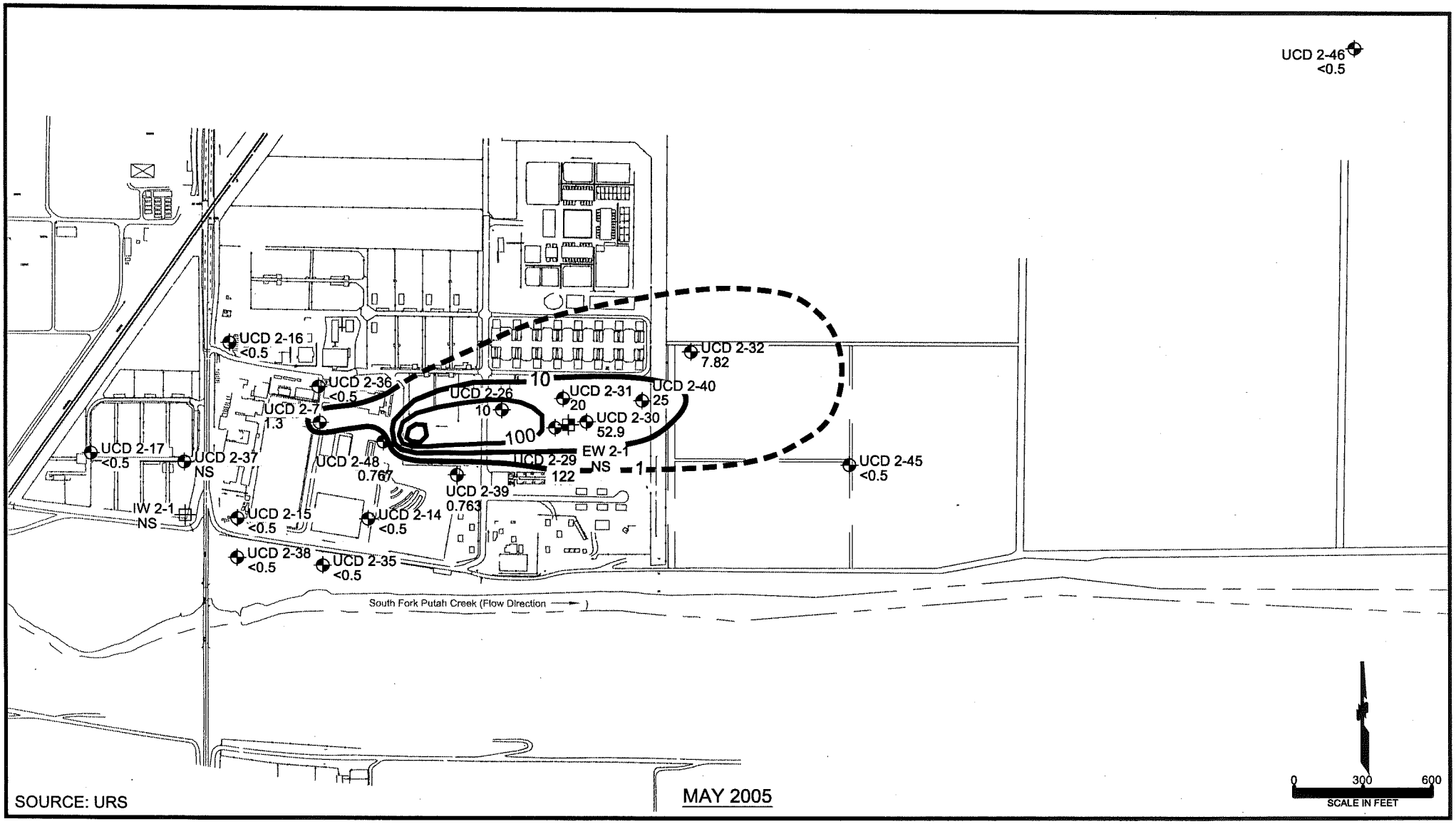
1000 ISOCONCENTRATION CONTOUR. ALL RESULTS REPORTED IN UG/L.

# TRITIUM ISOCONCENTRATION CONTOURS IN HSU-1

2005 COMPREHENSIVE ANNUAL WATER MONITORING REPORT
LEHR/SCDS
DAVIS, CALIFORNIA

Path: P:\29000\129042 - LEHR Reporting\2005 Annual\Graphics\ Filename: Ann-05-Fig16-HSU-1 Plot date: Feb 06, 2006-01:07:55pm CAD User: jrogers

FIGURE 16




SOURCE: URS

MAY 2005

LEGEND

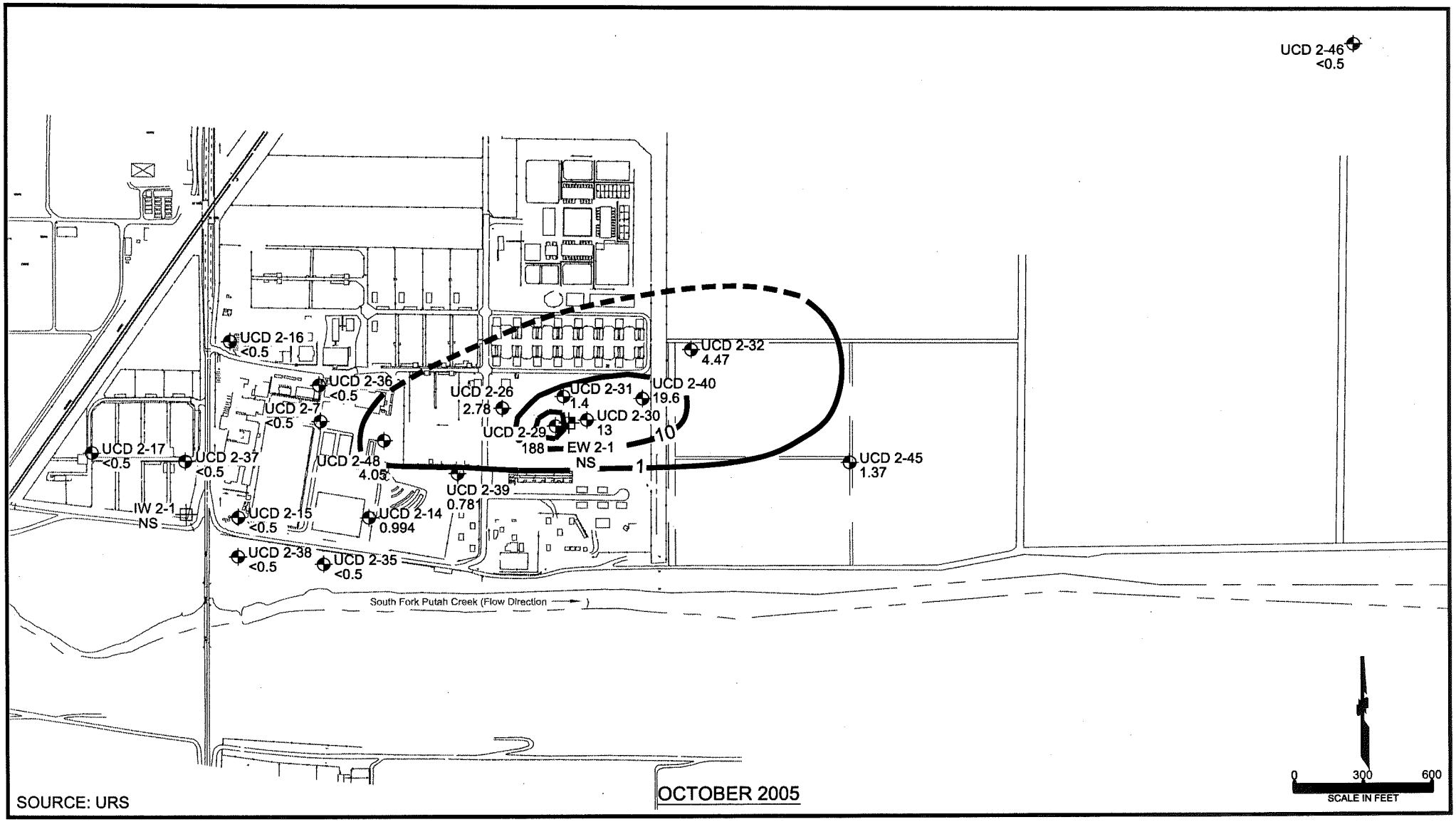
| | | | |
|---|---|---|---|
| UCD1-11 | HSU-2 MONITORING WELL | 10 | ISOCONCENTRATION CONTOUR. ALL RESULTS REPORTED IN UG/L |
| IW 2-1 | HSU-2 EXTRACTION WELL | | |
| IW 2-1 | HSU-2 INJECTION WELL | <0.5 | RESULT IS LESS THAN CRDL |
| NS | NOT SAMPLED | | NOTE: 1,000 UG/L AND 100 UG/l CONTOUR LINES BASED ON 2004 HYDROPUNCH SAMPLES |

# CHLOROFORM ISOCONCENTRATION CONTOURS IN HSU-2, MAY 2005

2005 COMPREHENSIVE ANNUAL WATER MONITORING REPORT
LEHR/SCDS
DAVIS, CALIFORNIA

FIGURE 17-A

Path: P:\29000\129042 - LEHR Reporting\2005 Annual\Graphics\ Filename: Ann-05-Fig17-A-HSU-2 Plot date: May 24, 2006-04:12:47pm CAD User: jrogers




SOURCE: URS

OCTOBER 2005

LEGEND

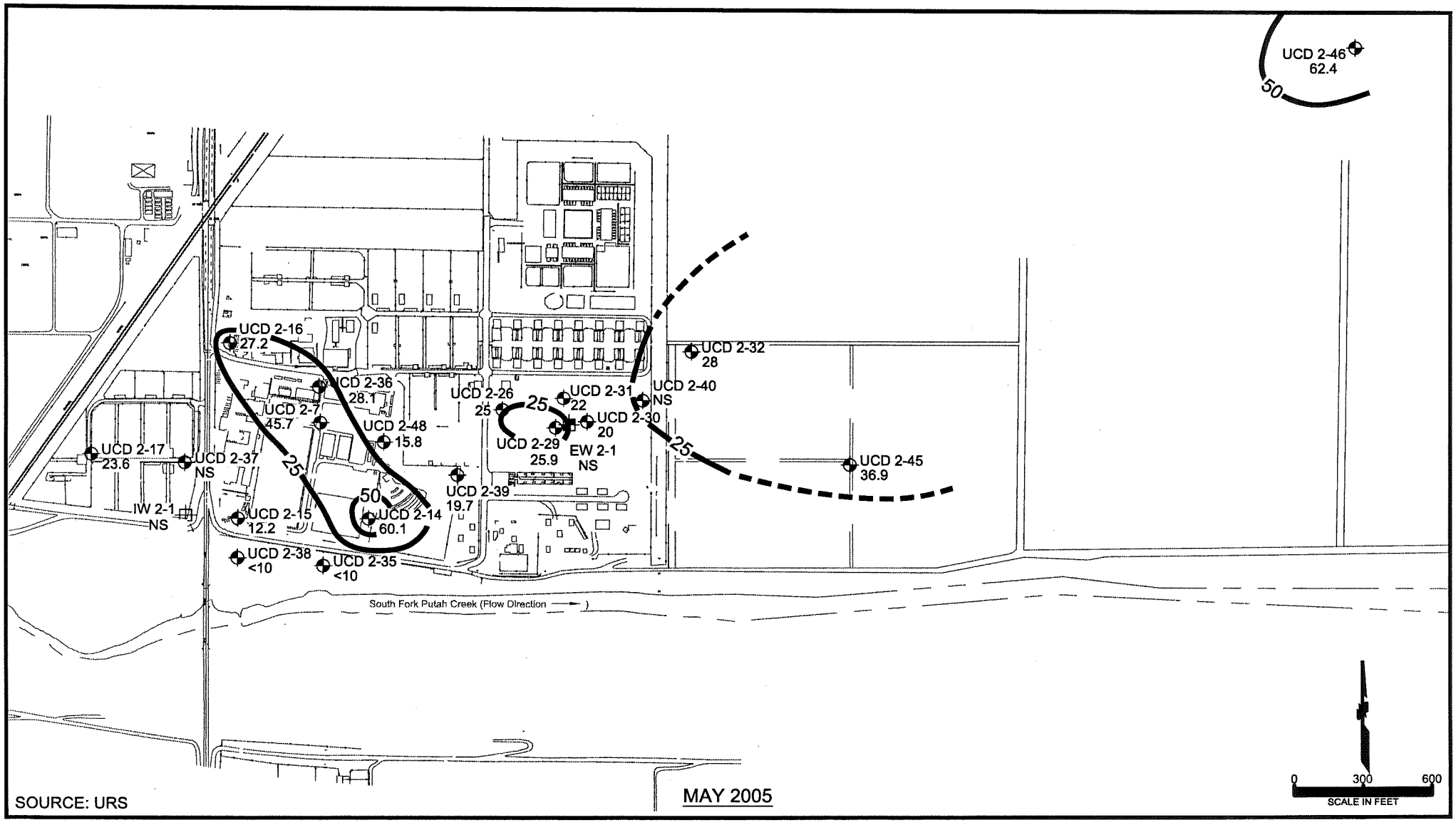
| | | | |
|---|---|---|---|
| UCD1-11 | HSU-2 MONITORING WELL | 10 | ISOCONCENTRATION CONTOUR. ALL RESULTS REPORTED IN UG/L |
| IW 2-1 | HSU-2 EXTRACTION WELL | | |
| IW 2-1 | HSU-2 INJECTION WELL | <0.5 | RESULT IS LESS THAN CRDL |
| NS | NOT SAMPLED | | |

# CHLOROFORM ISOCONCENTRATION CONTOURS IN HSU-2, OCTOBER 2005

2005 COMPREHENSIVE ANNUAL WATER MONITORING REPORT
LEHR/SCDS
DAVIS, CALIFORNIA

FIGURE 17-B

Path: P:\29000\129042 - LEHR Reporting\2005 Annual\Graphics\ Filename: Ann-05-Fig17-B-HSU-2 Plot date: May 24, 2006-04:13:31pm CAD User: jrogers




SOURCE: URS

MAY 2005

LEGEND

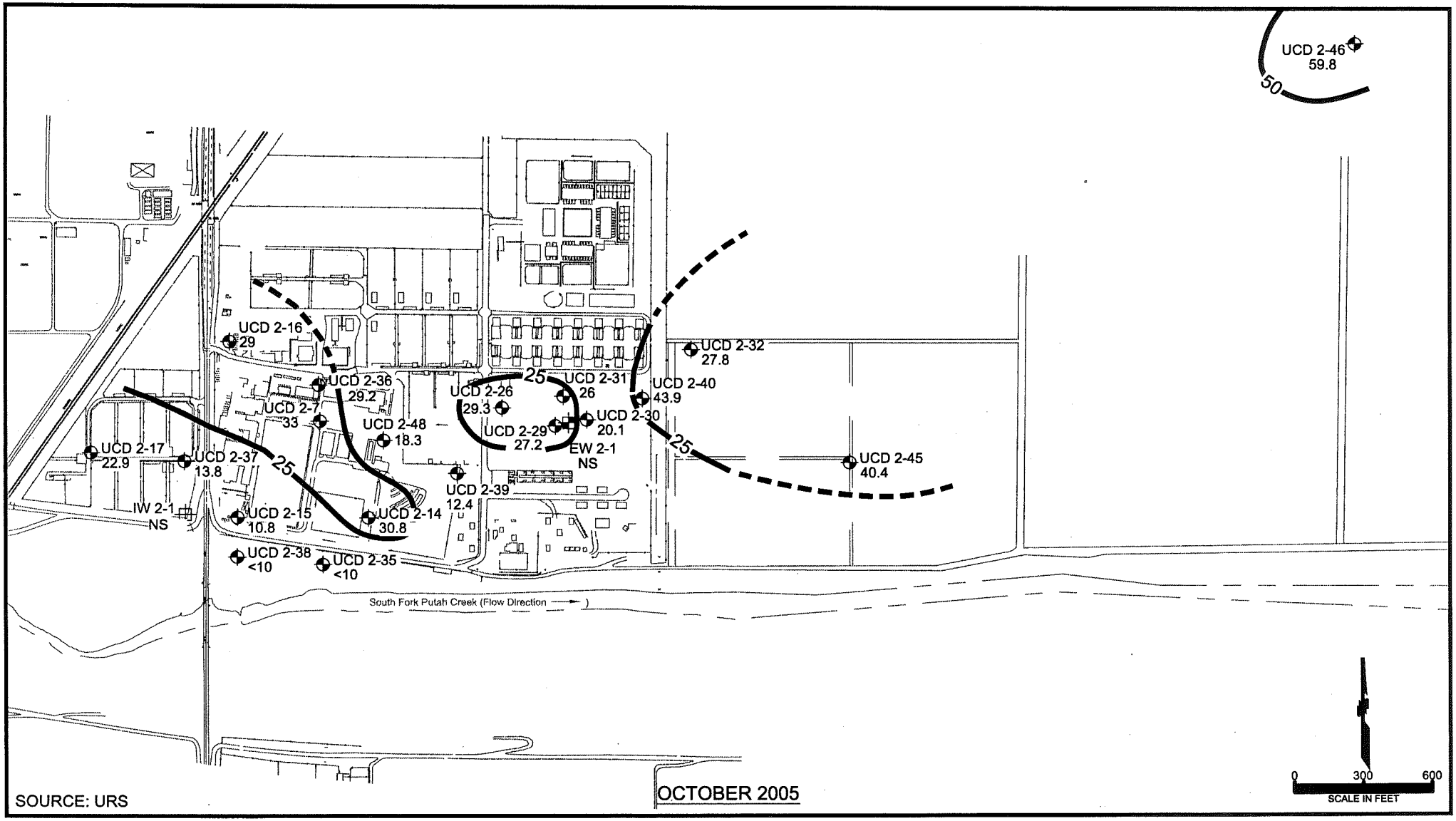
| | | | |
|---|---|---|---|
| UCD1-11 | HSU-2 MONITORING WELL | 25 | ISOCONCENTRATION CONTOUR. ALL RESULTS REPORTED IN UG/L |
| IW 2-1 | HSU-2 EXTRACTION WELL | | |
| IW 2-1 | HSU-2 INJECTION WELL | <10 | RESULT IS LESS THAN CRDL |
| NS | NOT SAMPLED | | |

# CHROMIUM ISOCONCENTRATION CONTOURS IN HSU-2, MAY 2005

2005 COMPREHENSIVE ANNUAL WATER MONITORING REPORT
LEHR/SCDS
DAVIS, CALIFORNIA

FIGURE 18-A

Path: P:\29000\129042 - LEHR Reporting\2005 Annual\Graphics\ Filename: Ann-05-Fig18-A-HSU-2 Plot date: May 24, 2006-04:14:22pm CAD User: jrogers




SOURCE: URS

OCTOBER 2005

LEGEND

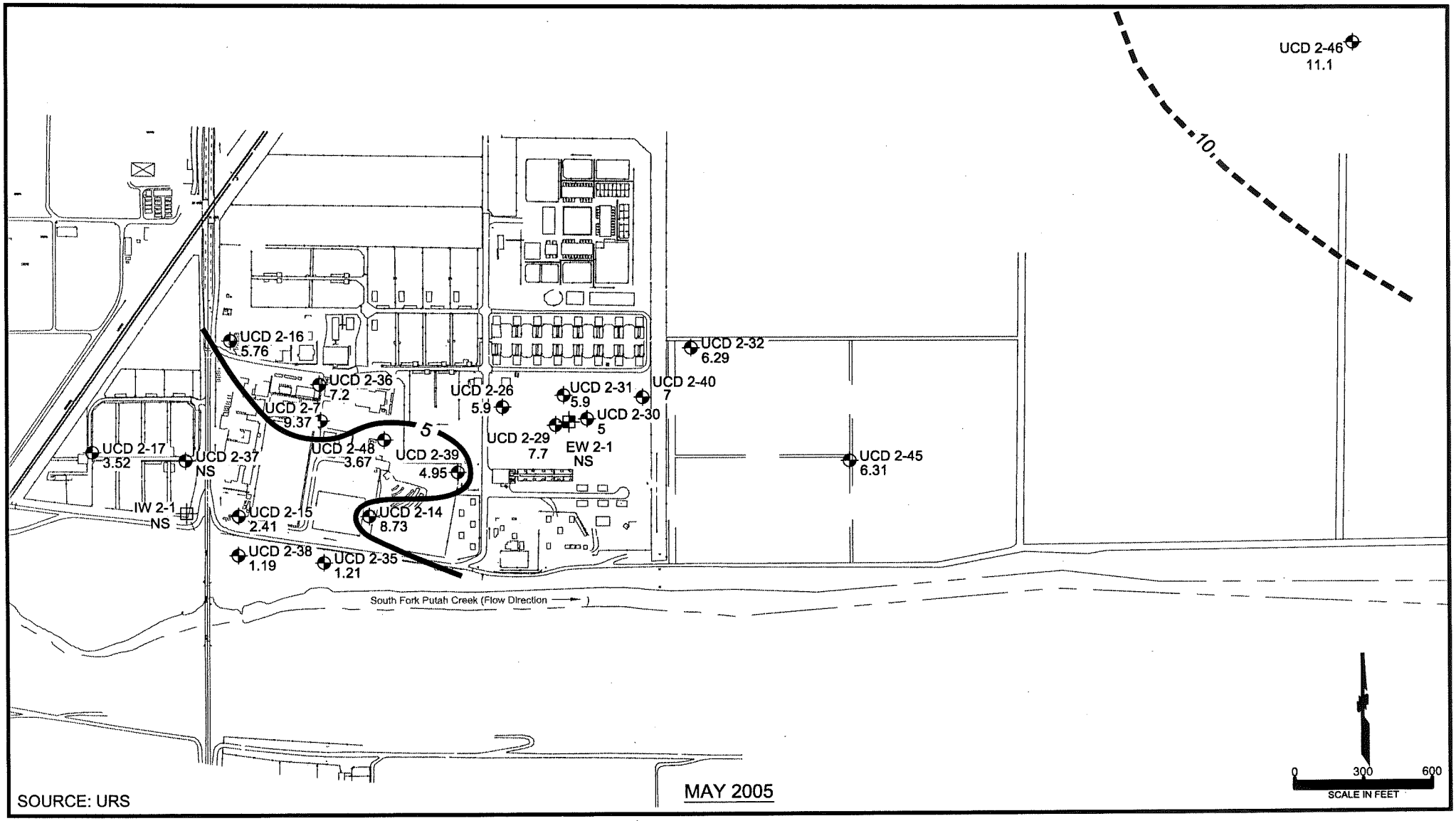
| | | | |
|---|---|---|---|
| UCD1-11 | HSU-2 MONITORING WELL | 25 | ISOCONCENTRATION CONTOUR. ALL RESULTS REPORTED IN UG/L |
| IW 2-1 | HSU-2 EXTRACTION WELL | | |
| IW 2-1 | HSU-2 INJECTION WELL | <10 | RESULT IS LESS THAN CRDL |
| NS | NOT SAMPLED | | |

# CHROMIUM ISOCONCENTRATION CONTOURS IN HSU-2, OCTOBER 2005

2005 COMPREHENSIVE ANNUAL WATER MONITORING REPORT
LEHR/SCDS
DAVIS, CALIFORNIA

FIGURE 18-B

Path: P:\29000\129042 - LEHR Reporting\2005 Annual\Graphics\ Filename: Ann-05-Fig18-B-HSU-2 Plot date: May 24, 2006-04:15:04pm CAD User: jrogers




SOURCE: URS

MAY 2005

LEGEND

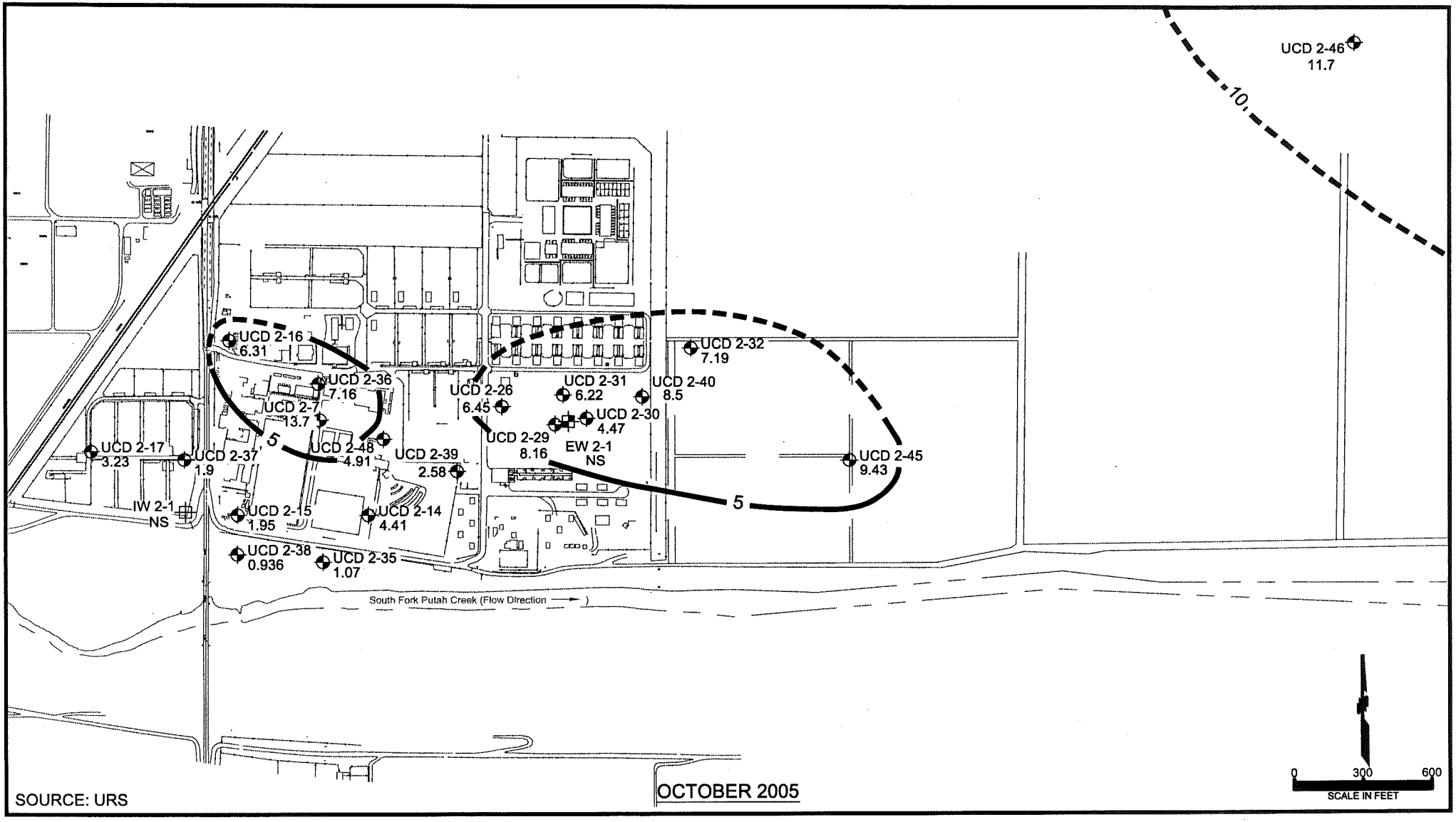
| | |
|---|---|
| UCD1-11 | HSU-2 MONITORING WELL |
| IW 2-1 | HSU-2 EXTRACTION WELL |
| IW 2-1 | HSU-2 INJECTION WELL |
| NS | NOT SAMPLED |
| 10 | ISOCONCENTRATION CONTOUR. ALL RESULTS REPORTED IN UG/L |
| <0.1 | RESULT IS LESS THAN CRDL |

# NITRATE AS N ISOCONCENTRATION CONTOURS IN HSU-2, MAY 2005

2005 COMPREHENSIVE ANNUAL WATER MONITORING REPORT
LEHR/SCDS
DAVIS, CALIFORNIA

FIGURE 19-A

Path: P:\29000\129042 - LEHR Reporting\2005 Annual\Graphics\ Filename: Ann-05-Fig19-A-HSU-2 Plot date: May 24, 2006-04:15:53pm CAD User: jrogers




SOURCE: URS

OCTOBER 2005

LEGEND

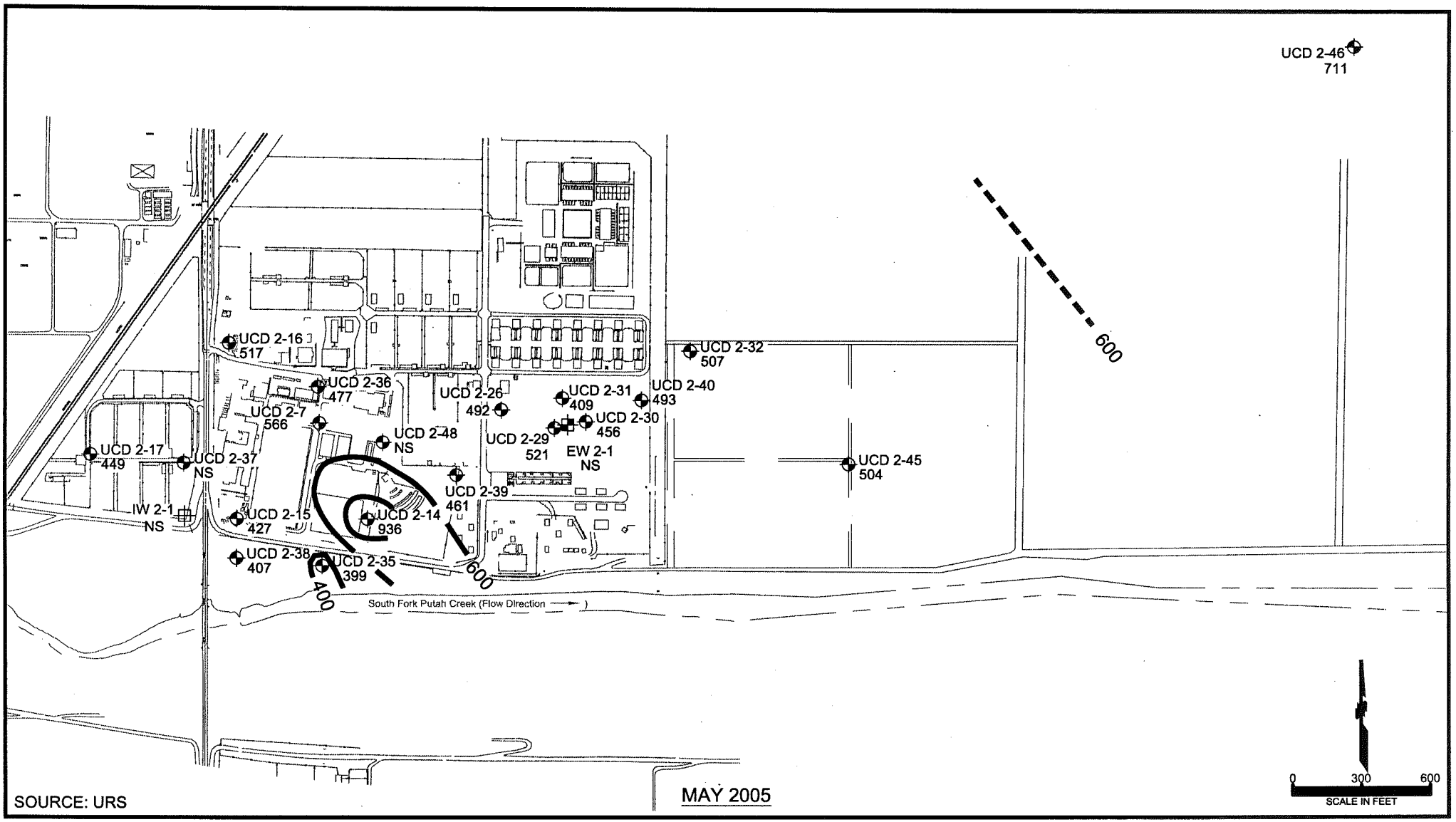
| | | | |
|---|---|---|---|
| UCD1-11 | HSU-2 MONITORING WELL | 5 | ISOCONCENTRATION CONTOUR. ALL RESULTS REPORTED IN UG/L |
| IW 2-1 | HSU-2 EXTRACTION WELL | | |
| IW 2-1 | HSU-2 INJECTION WELL | <0.1 | RESULT IS LESS THAN CRDL |
| NS | NOT SAMPLED | | |

# NITRATE AS N ISOCONCENTRATION CONTOURS IN HSU-2, OCTOBER 2005

2005 COMPREHENSIVE ANNUAL WATER MONITORING REPORT
LEHR/SCDS
DAVIS, CALIFORNIA

FIGURE 19-B

Path: P:\29000\129042 - LEHR Reporting\2005 Annual\Graphics\ Filename: Ann-05-Fig19-B-HSU-2 Plot date: May 24, 2006-04:16:36pm CAD User: jrogers




SOURCE: URS

MAY 2005

LEGEND

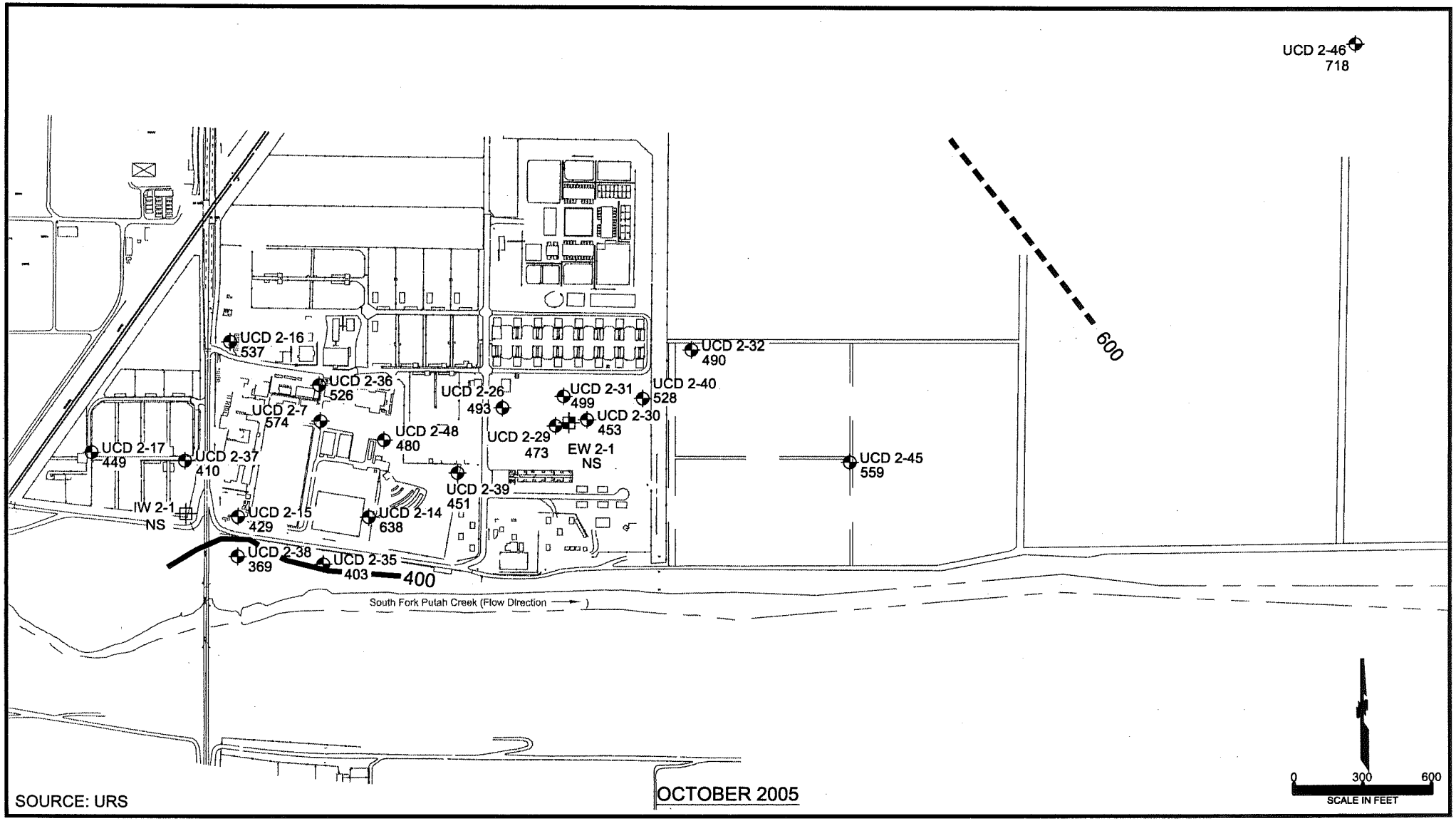
| | | | |
|---|---|---|---|
| UCD1-11 | HSU-2 MONITORING WELL | 409 | ISOCONCENTRATION CONTOUR. ALL RESULTS REPORTED IN UG/L |
| IW 2-1 | HSU-2 EXTRACTION WELL | | |
| IW 2-1 | HSU-2 INJECTION WELL | <20 | RESULT IS LESS THAN CRDL |
| NS | NOT SAMPLED | | |

# TDS ISOCONCENTRATION CONTOURS IN HSU-2, MAY 2005

2005 COMPREHENSIVE ANNUAL WATER MONITORING REPORT
LEHR/SCDS
DAVIS, CALIFORNIA

FIGURE 20-A

Path: P:\29000\129042 - LEHR Reporting\2005 Annual\Graphics\ Filename: Ann-05-Fig20-A-HSU-2 Plot date: May 24, 2006-04:17:19pm CAD User: jrogers




SOURCE: URS

OCTOBER 2005

LEGEND

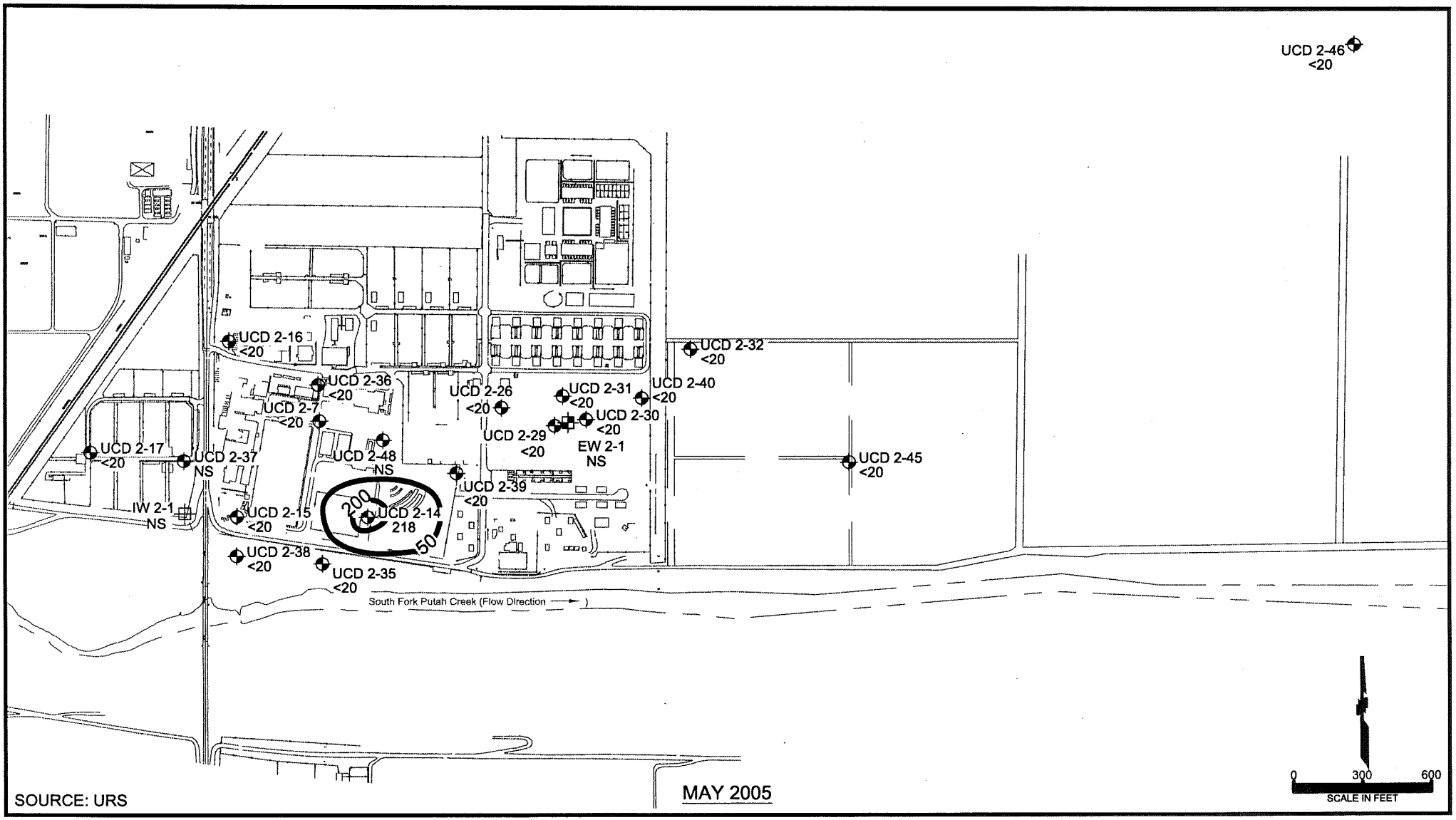
| | | | |
|---|---|---|---|
| UCD1-11 | HSU-2 MONITORING WELL | 409 | ISOCONCENTRATION CONTOUR. ALL RESULTS REPORTED IN UG/L |
| IW 2-1 | HSU-2 EXTRACTION WELL | | |
| IW 2-1 | HSU-2 INJECTION WELL | <20 | RESULT IS LESS THAN CRDL |
| NS | NOT SAMPLED | | |

# TDS ISOCONCENTRATION CONTOURS IN HSU-2, OCTOBER 2005

2005 COMPREHENSIVE ANNUAL WATER MONITORING REPORT
LEHR/SCDS
DAVIS, CALIFORNIA

FIGURE 20-B

Path: P:\29000\129042 - LEHR Reporting\2005 Annual\Graphics\ Filename: Ann-05-Fig20-B-HSU-2 Plot date: May 24, 2006-04:18:04pm CAD User: jrogers




SOURCE: URS

MAY 2005

LEGEND

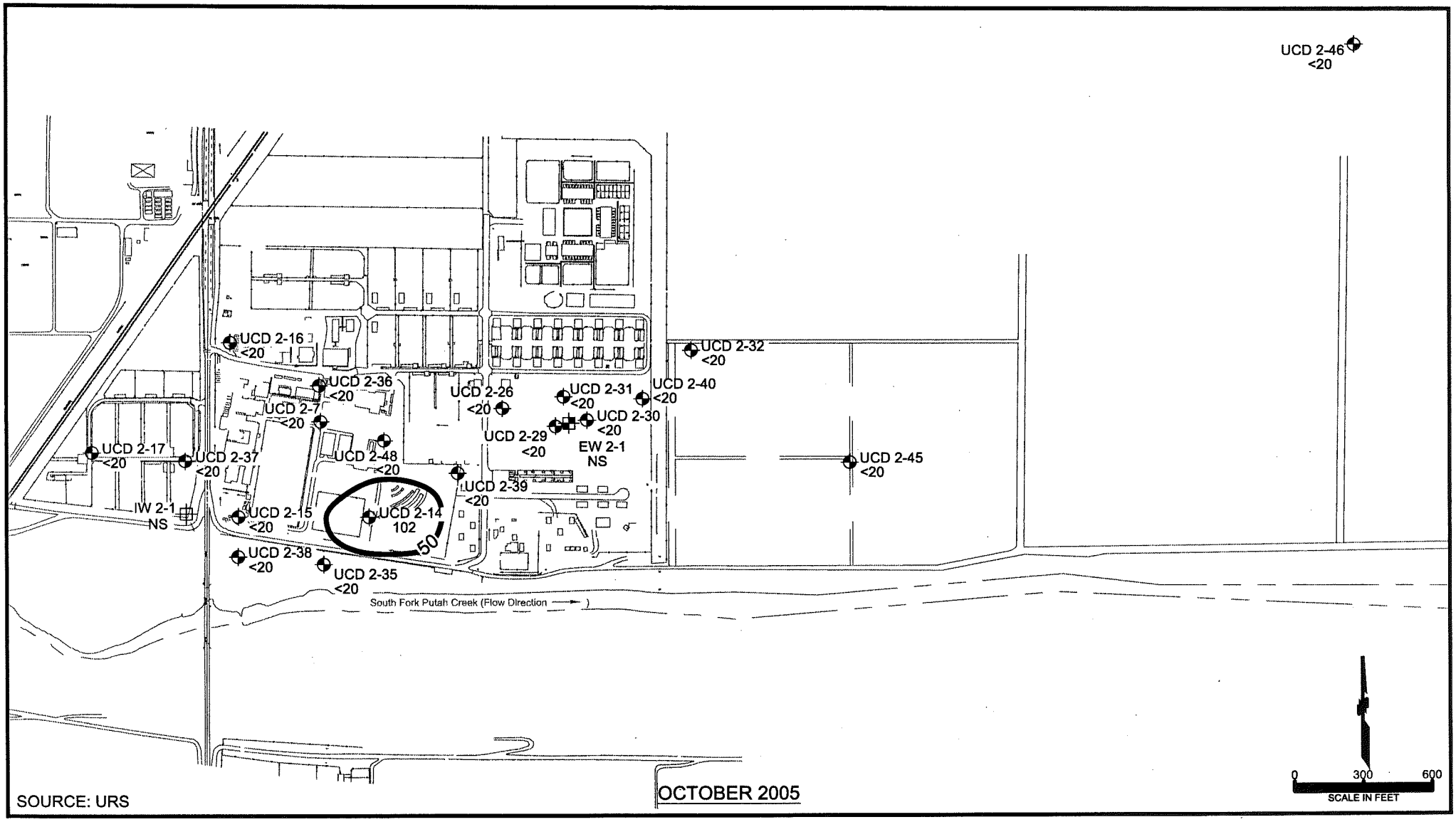
| | | | |
|---|---|---|---|
| UCD1-11 | HSU-2 MONITORING WELL | 50 | ISOCONCENTRATION CONTOUR. ALL RESULTS REPORTED IN UG/L |
| IW 2-1 | HSU-2 EXTRACTION WELL | | |
| IW 2-1 | HSU-2 INJECTION WELL | <20 | RESULT IS LESS THAN CRDL |
| NS | NOT SAMPLED | | |

# CARBON-14 ISOCONCENTRATION CONTOURS IN HSU-2, MAY 2005

2005 COMPREHENSIVE ANNUAL WATER MONITORING REPORT
LEHR/SCDS
DAVIS, CALIFORNIA

FIGURE 21-A

Path: P:\29000\129042 - LEHR Reporting\2005 Annual\Graphics\ Filename: Ann-05-Fig21-A-HSU-2 Plot date: May 24, 2006-04:09:41pm CAD User: jrogers




SOURCE: URS

OCTOBER 2005

LEGEND

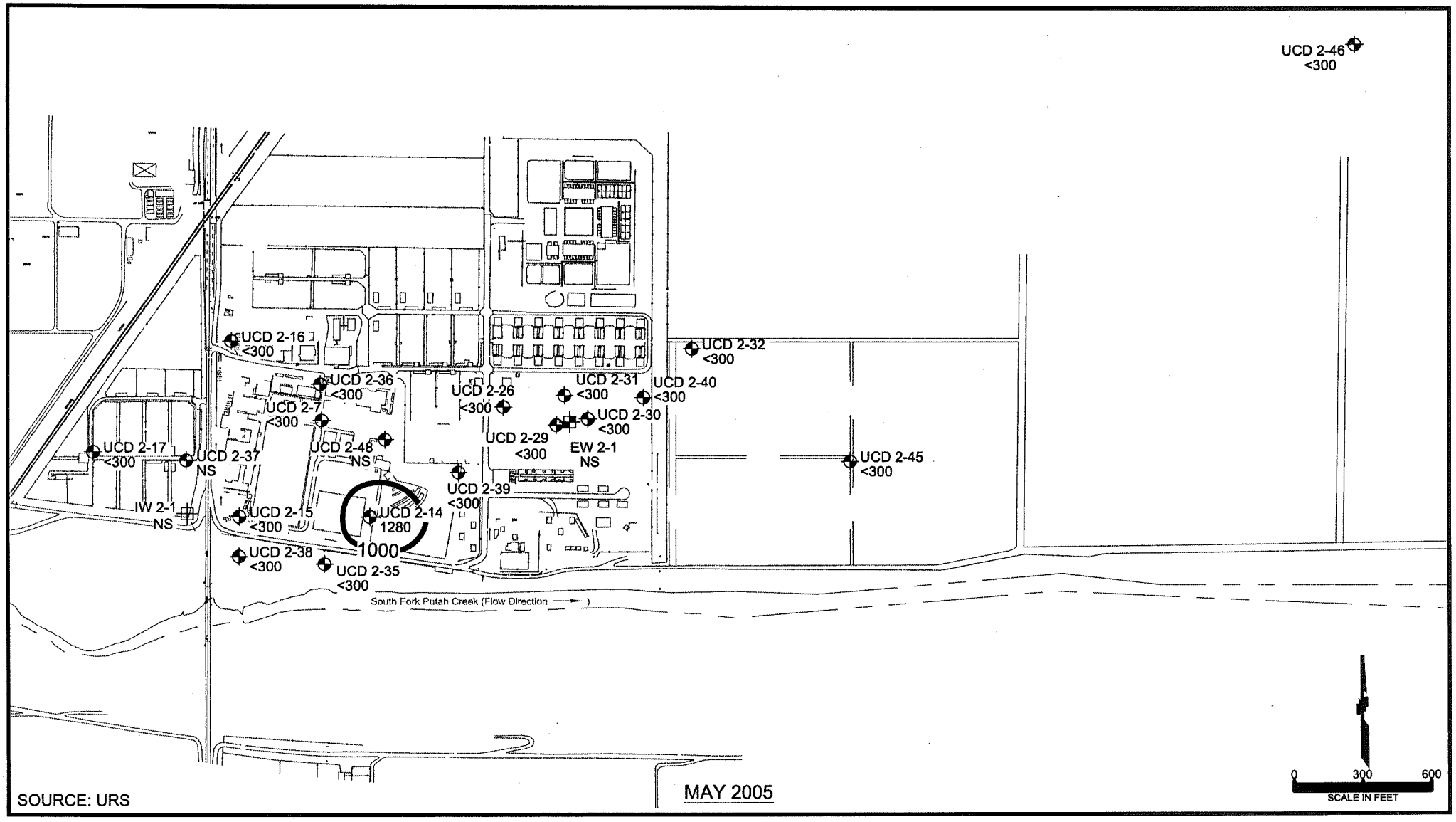
| | | | |
|---|---|---|---|
| UCD1-11 | HSU-2 MONITORING WELL | 50 | ISOCONCENTRATION CONTOUR. ALL RESULTS REPORTED IN UG/L |
| IW 2-1 | HSU-2 EXTRACTION WELL | | |
| IW 2-1 | HSU-2 INJECTION WELL | <20 | RESULT IS LESS THAN CRDL |
| NS | NOT SAMPLED | | |

# CARBON-14 ISOCONCENTRATION CONTOURS IN HSU-2, OCTOBER 2005

2005 COMPREHENSIVE ANNUAL WATER MONITORING REPORT
LEHR/SCDS
DAVIS, CALIFORNIA

FIGURE 21-B

Path: P:\29000\129042 - LEHR Reporting\2005 Annual\Graphics\ Filename: Ann-05-Fig21-B-HSU-2 Plot date: May 24, 2006-04:07:04pm CAD User: jrogers




SOURCE: URS

MAY 2005

LEGEND

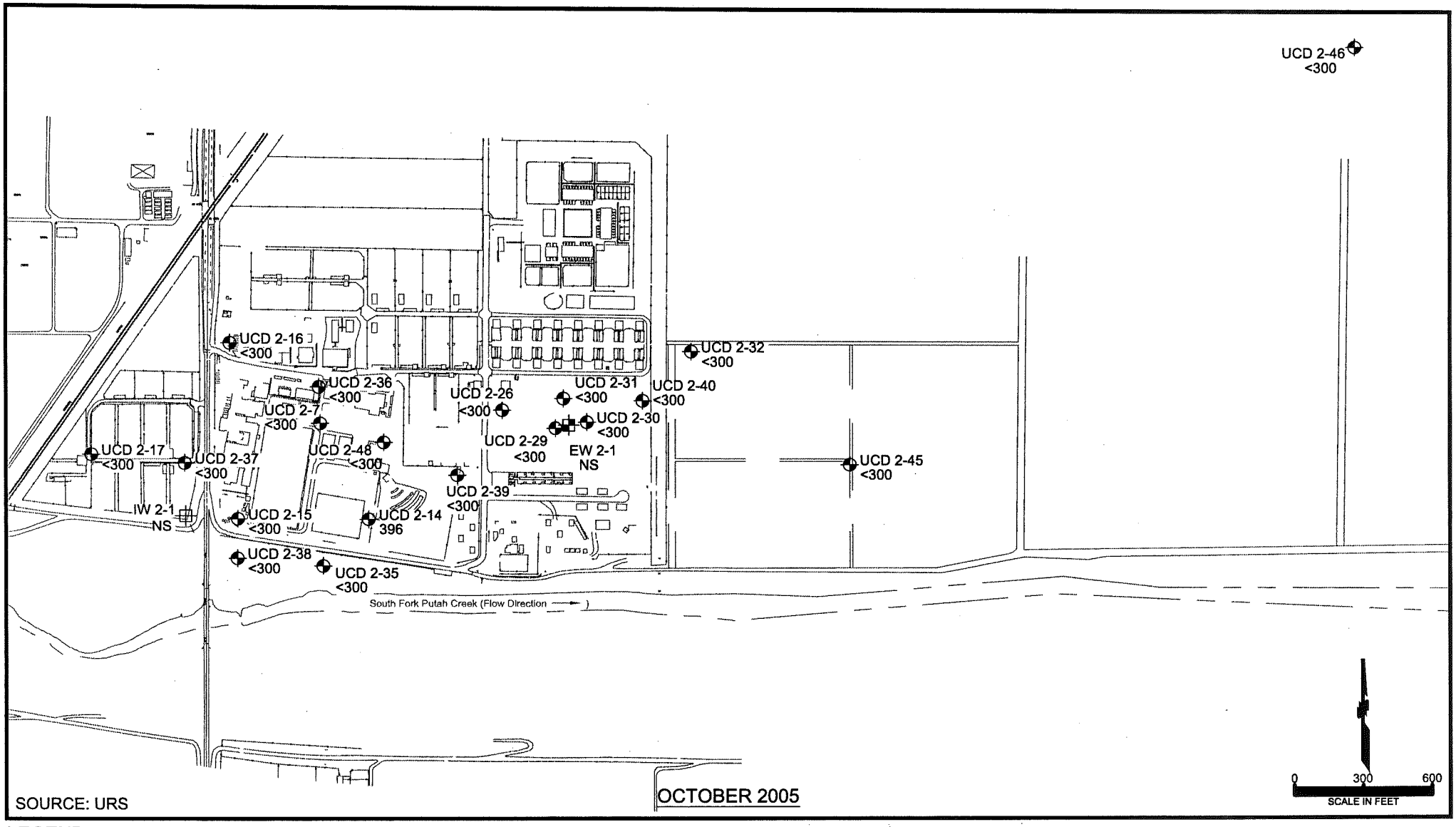
| | | | |
|---|---|---|---|
| UCD1-11 | HSU-2 MONITORING WELL | 1000 | ISOCONCENTRATION CONTOUR. ALL RESULTS REPORTED IN UG/L |
| IW 2-1 | HSU-2 EXTRACTION WELL | | |
| IW 2-1 | HSU-2 INJECTION WELL | <300 | RESULT IS LESS THAN CRDL |
| NS | NOT SAMPLED | | |

# TRITIUM ISOCONCENTRATION CONTOURS IN HSU-2, MAY 2005

2005 COMPREHENSIVE ANNUAL WATER MONITORING REPORT
LEHR/SCDS
DAVIS, CALIFORNIA

FIGURE 22-A

Path: P:\29000\129042 - LEHR Reporting\2005 Annual\Graphics\ Filename: Ann-05-Fig22-A-HSU-2 Plot date: May 24, 2006-04:05:02pm CAD User: jrogers




SOURCE: URS

OCTOBER 2005

LEGEND

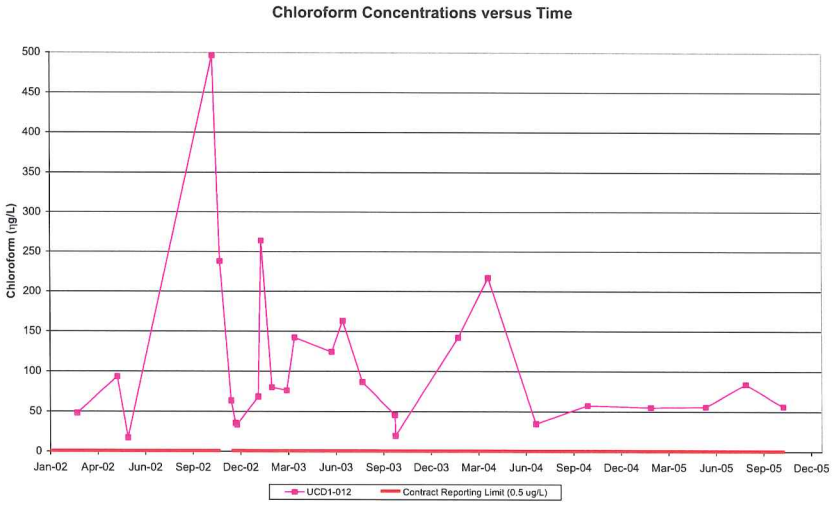
| | | | |
|---|---|---|---|
| UCD1-11 | HSU-2 MONITORING WELL | 1000 | ISOCONCENTRATION CONTOUR. ALL RESULTS REPORTED IN UG/L |
| IW 2-1 | HSU-2 EXTRACTION WELL | | |
| IW 2-1 | HSU-2 INJECTION WELL | <300 | RESULT IS LESS THAN CRDL |
| NS | NOT SAMPLED | | |

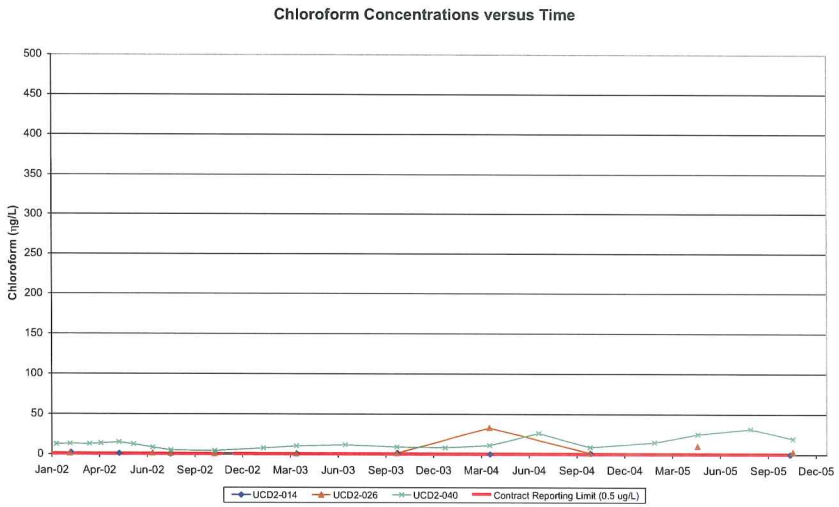
# TRITIUM ISOCONCENTRATION CONTOURS IN HSU-2, OCTOBER 2005

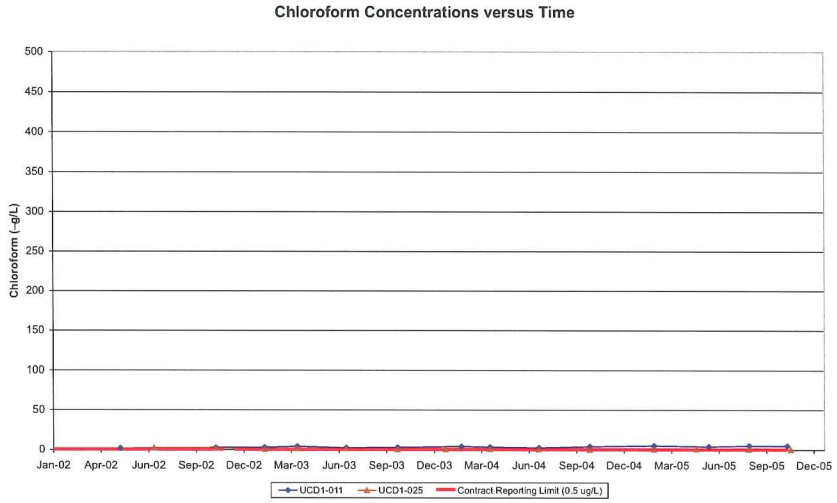
2005 COMPREHENSIVE ANNUAL WATER MONITORING REPORT
LEHR/SCDS
DAVIS, CALIFORNIA

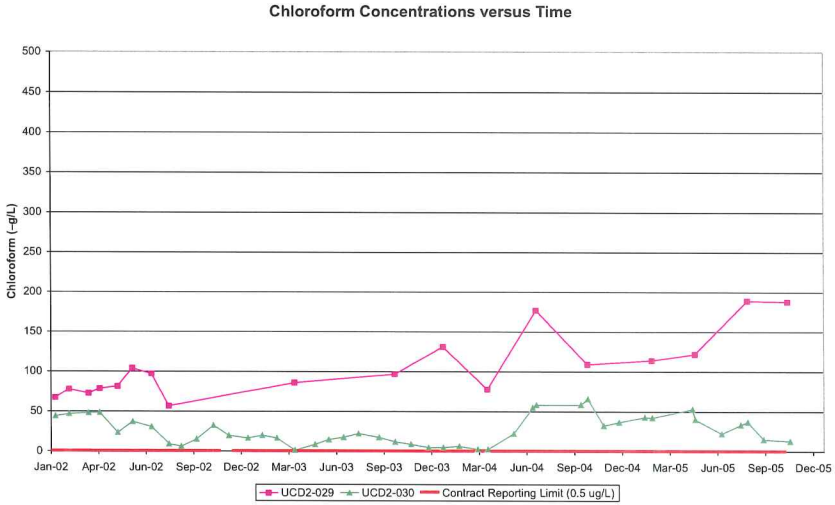
FIGURE 22-B

Path: P:\29000\129042 - LEHR Reporting\2005 Annual\Graphics\ Filename: Ann-05-Fig22-B-HSU-2 Plot date: May 24, 2006-04:11:59pm CAD User: jrogers



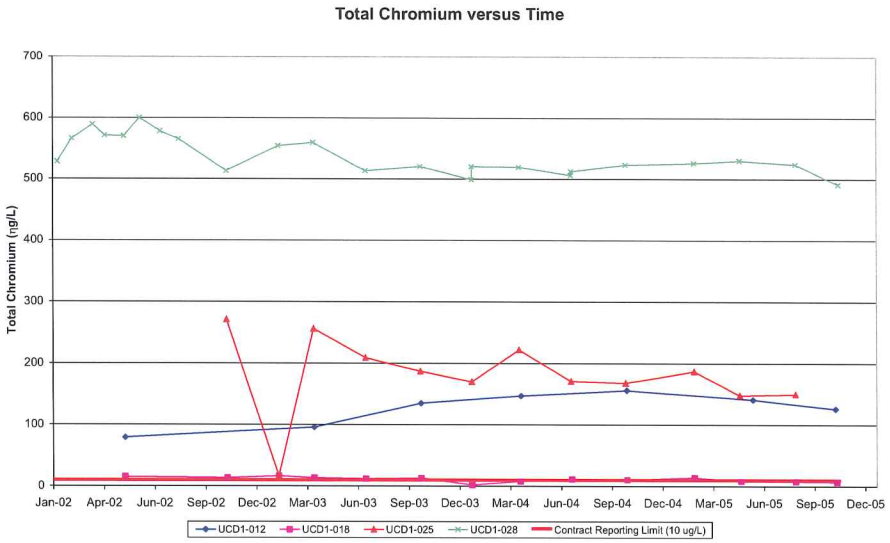



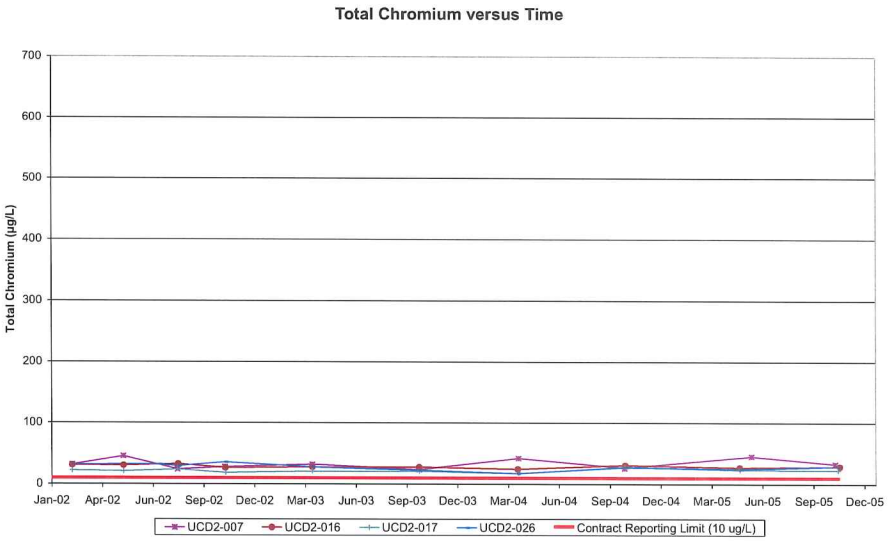




# PLOTS OF CHLOROFORM VERSUS TIME IN SELECTED HSU-1 AND HSU-2 WELLS

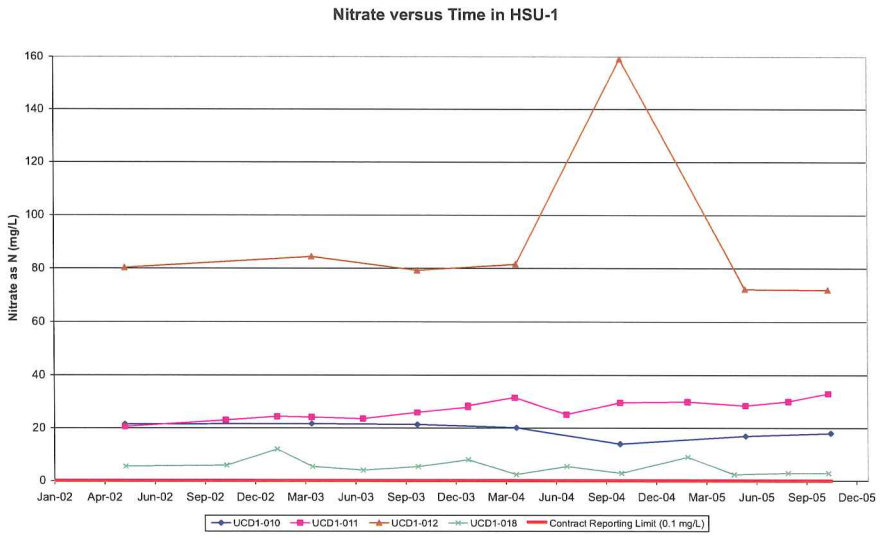
2005 Comprehensive Annual Water Monitoring Report
LEHR/SCDS
Davis, California

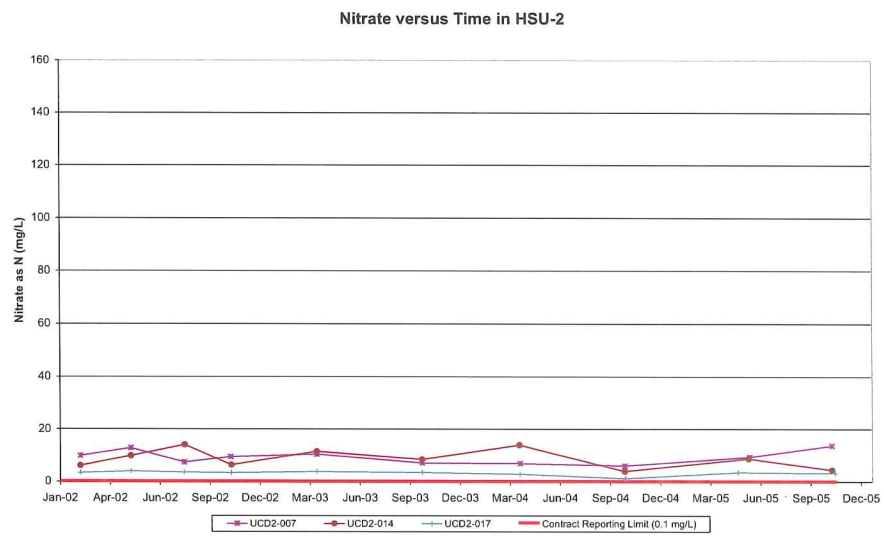



# PLOTS OF TOTAL CHROMIUM VERSUS TIME IN SELECTED HSU-1 AND HSU-2 WELLS

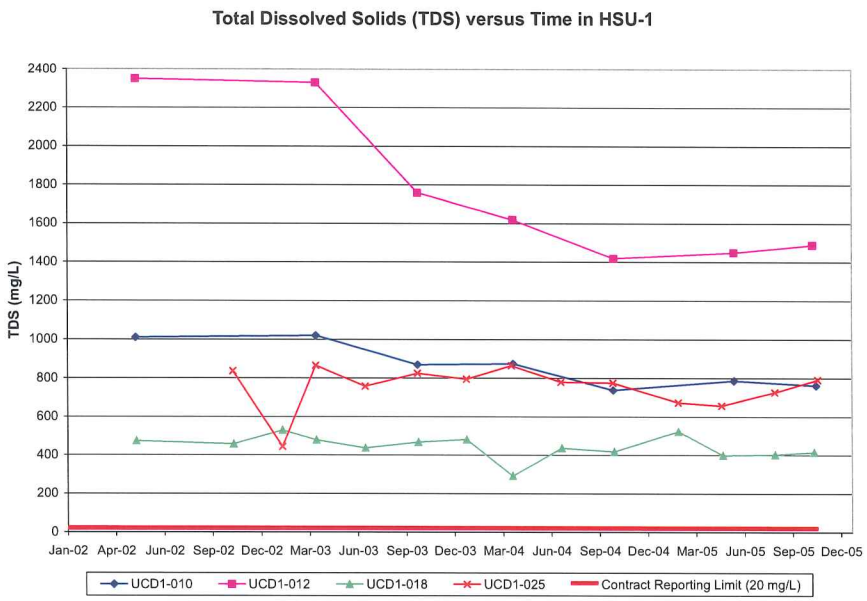
2005 Comprehensive Annual Water Monitoring Report
LEHR/SCDS
Davis, California

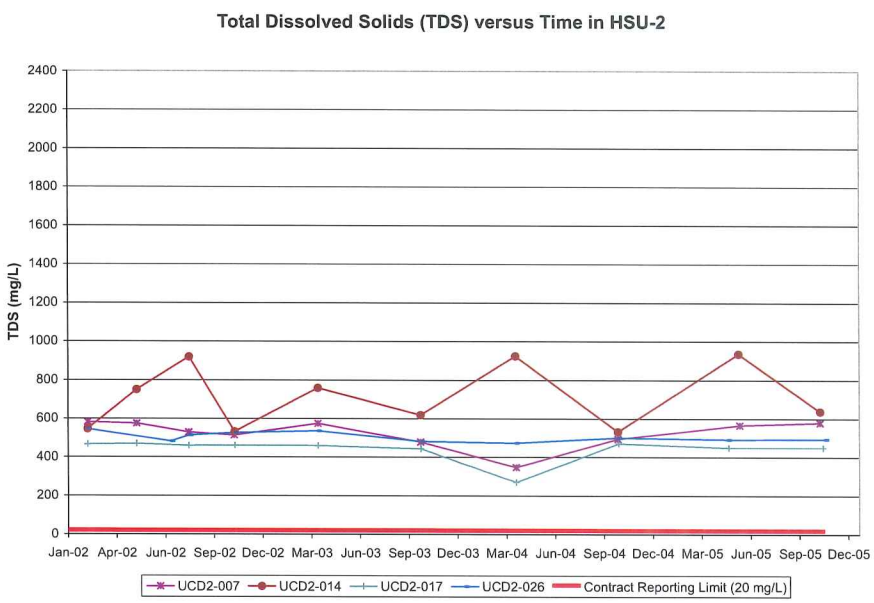



# PLOTS OF NITRATE AS N VERSUS TIME IN SELECTED HSU-1 AND HSU-2 WELLS

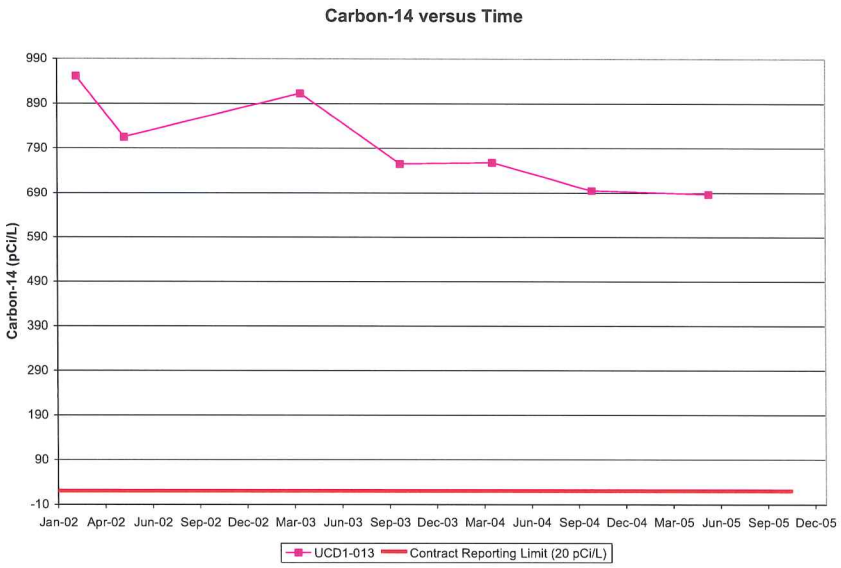
2005 Comprehensive Annual Water Monitoring Report
LEHR/SCDS
Davis, California

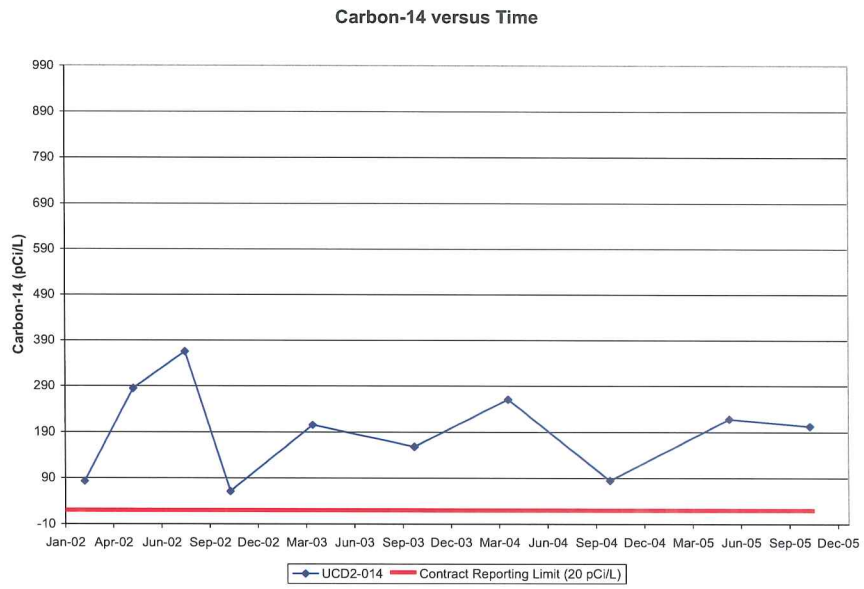


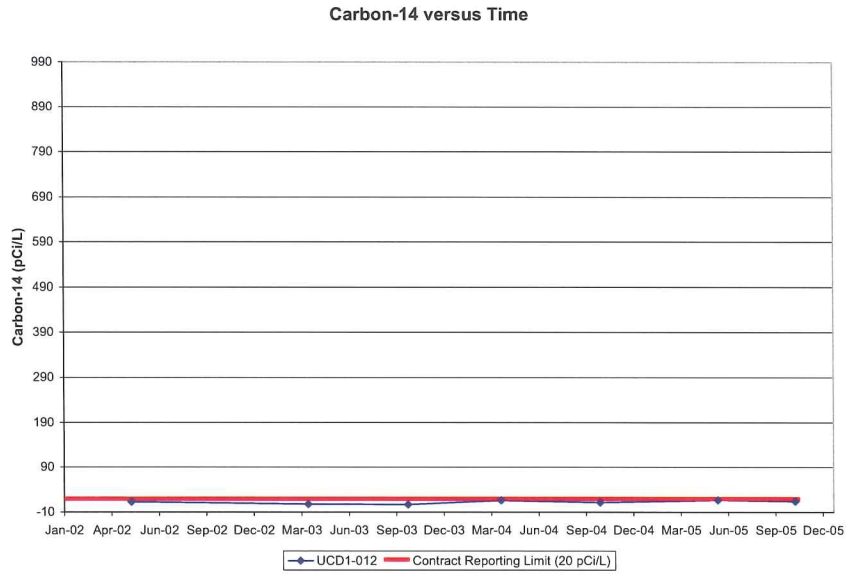



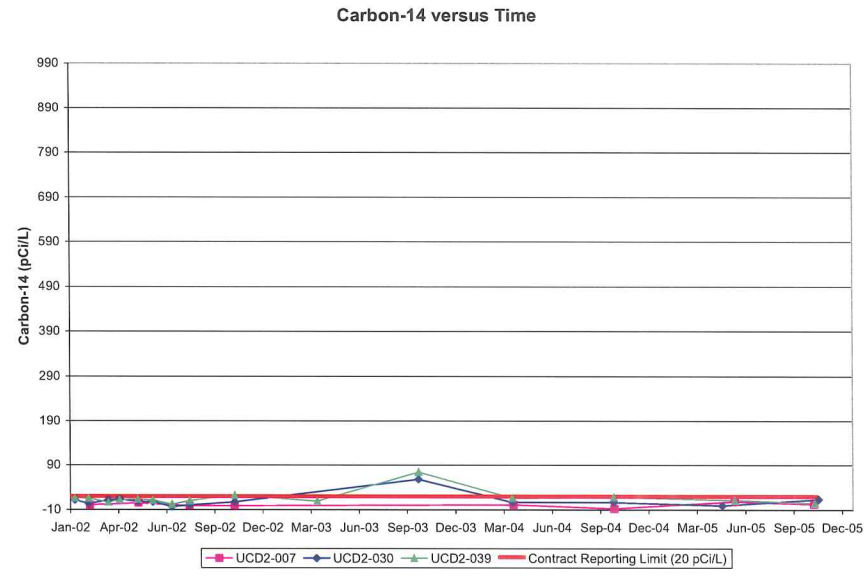

# PLOTS OF TDS VERSUS TIME IN SELECTED HSU-1 AND HSU-2 WELLS

2005 Comprehensive Annual Water Monitoring Report
LEHR/SCDS
Davis, California



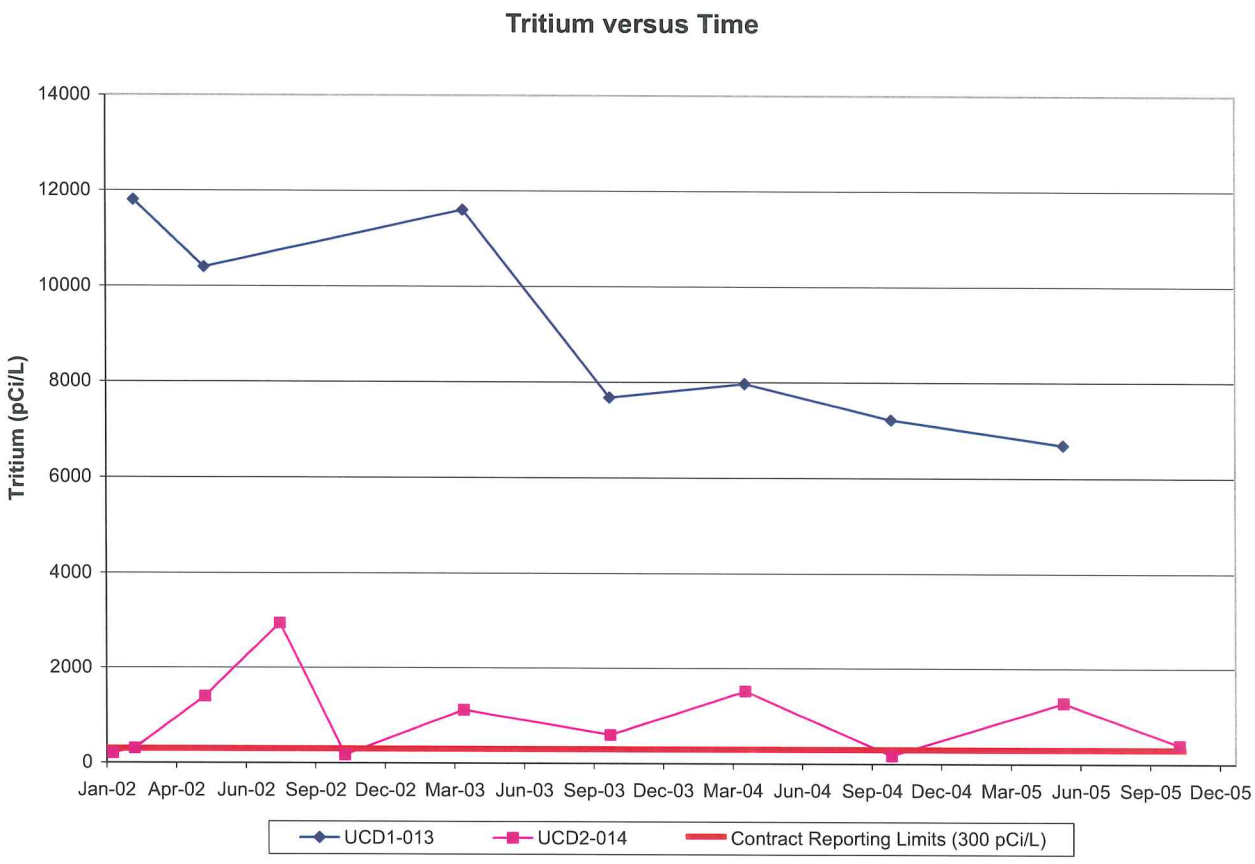



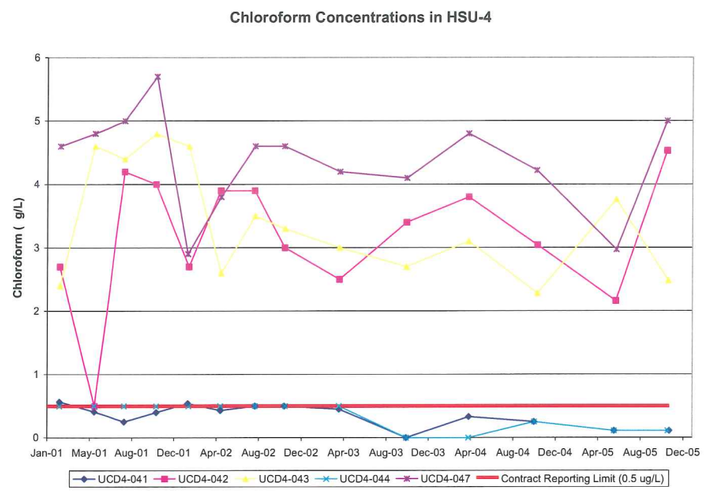

# PLOTS OF CARBON-14 VERSUS TIME IN SELECTED HSU-1 AND HSU-2 WELLS

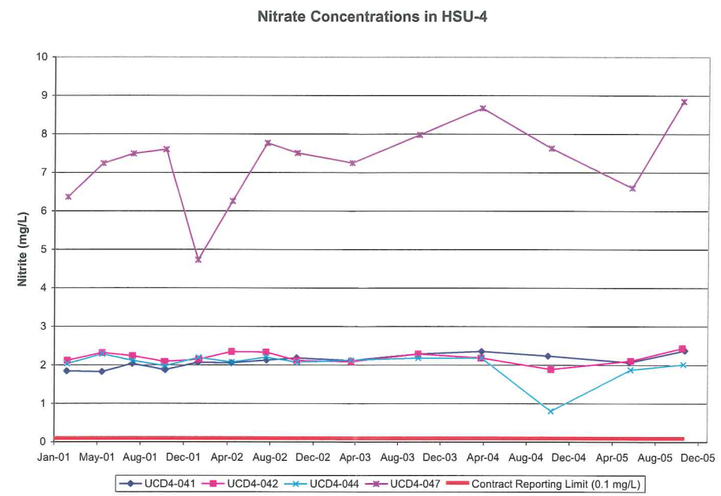
2005 Comprehensive Annual Water Monitoring Report
LEHR/SCDS
Davis, California

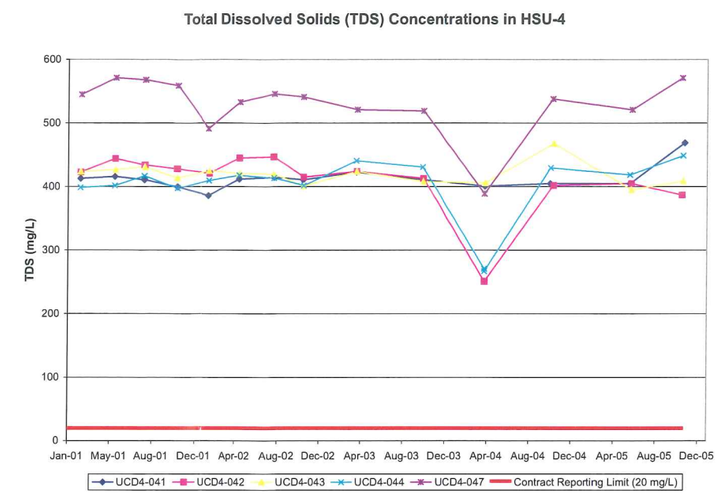


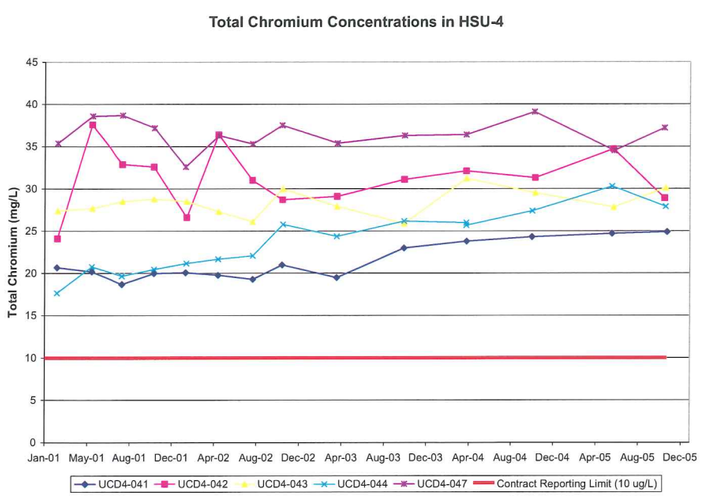

## PLOT OF TRITIUM VERSUS TIME IN SELECTED HSU-1 AND HSU-2 WELLS

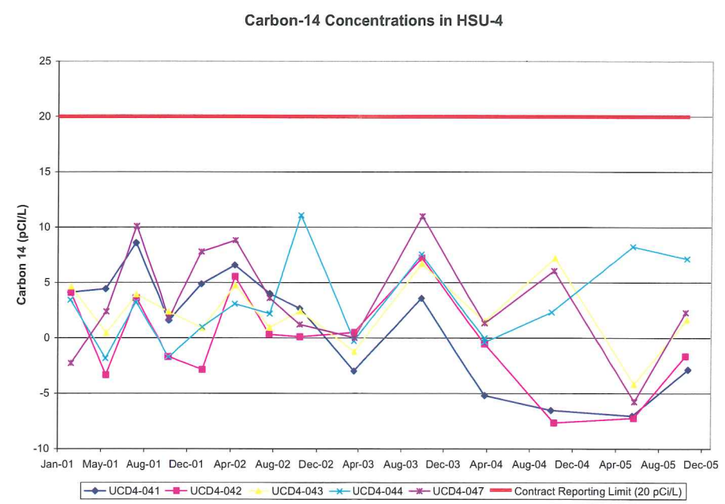
2005 Comprehensive Annual Water Monitoring Report
LEHR/SCDS
Davis, California

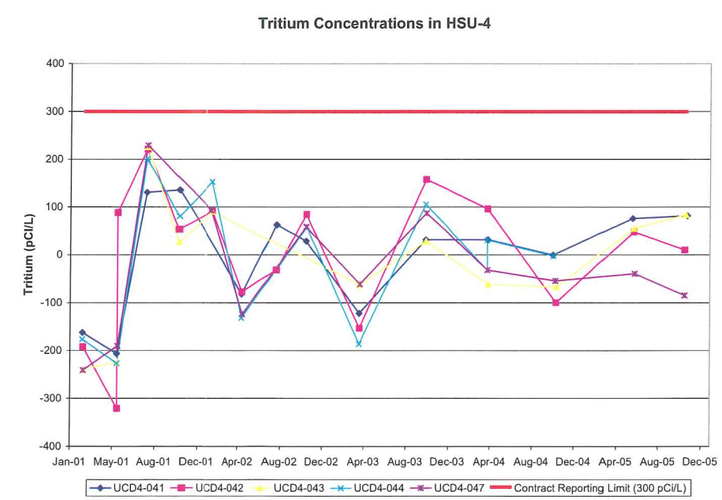


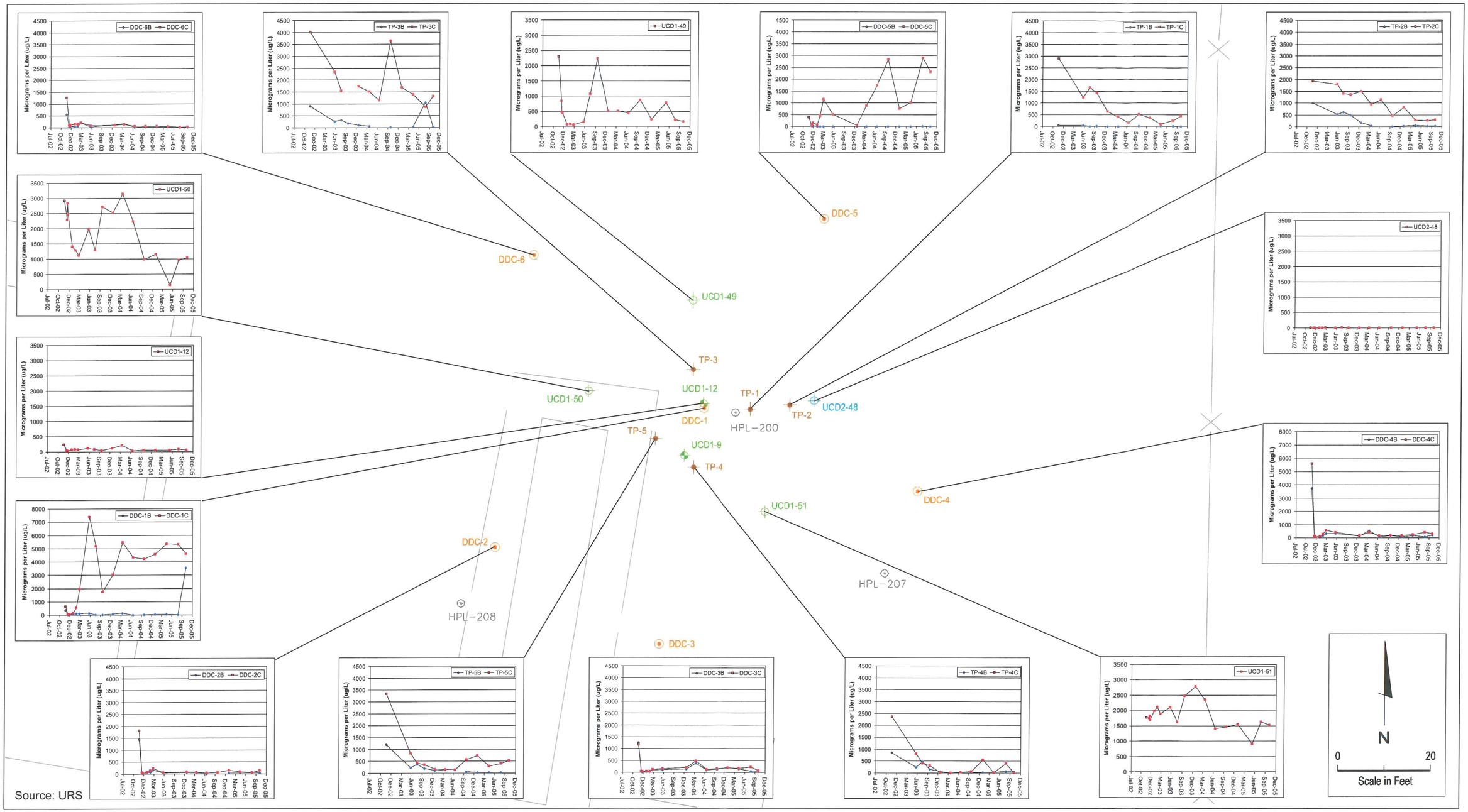




## TIME VS. CONCENTRATIONS IN HSU-4 GRAPHS

2005 Comprehensive Annual Water Monitoring Report
LEHR/SCDS
Davis, California



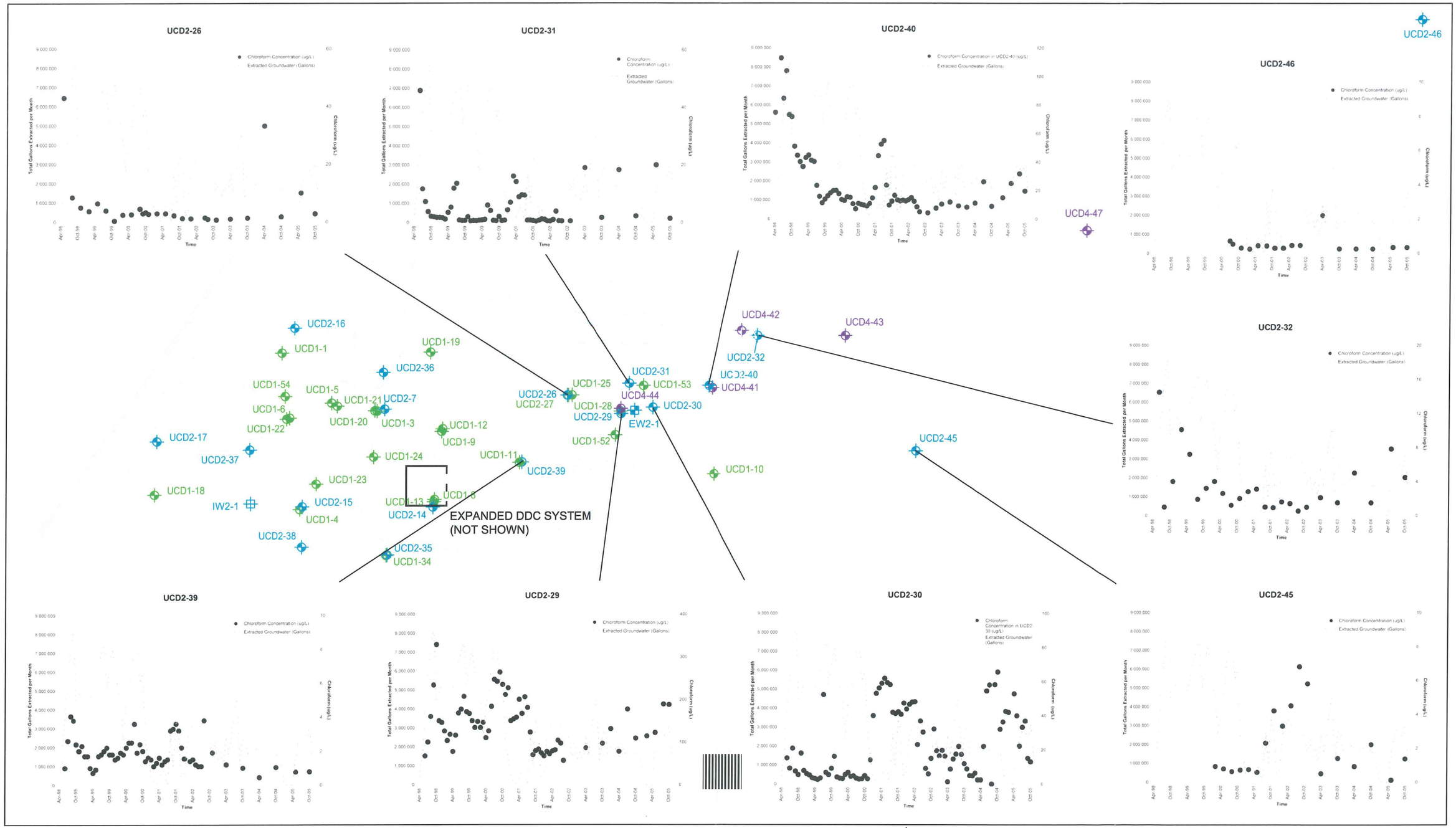

Source: URS

EXPLANATION

- UCD1-11 HSU-1 Monitoring Well
- UCD2-17 HSU-2 Monitoring Well
- EW2-1 HSU-2 Extraction Well
- IW2-1 HSU-2 Injection Well
- UCD4-33 HSU-4 Monitoring Well
- 22N Former Irrigation Well
- STPO Surface Water Sample Location
- LS-1 Stormwater Sample Location
- DDC-1 DDC Well Location
- TP-1 Nested Piezometer Location
- HPL-210 Hydropuch Location

## CHLOROFORM CONCENTRATION VS. TIME PLOTS FOR THE EXPANDED DDC PILOT TEST

2005 Comprehensive Annual Water Monitoring Report
LEHR/SCDS
Davis, California




EXPLANATION

- UCD1-11 HSU-1 Monitoring Well
- UCD2-17 HSU-2 Monitoring Well
- EW2-1 HSU-2 Extraction Well
- IW2-1 HSU-2 Injection Well
- UCD4-33 HSU-4 Monitoring Well
- Former Irrigation Well

N

0 400
Scale in Feet

# CHLOROFORM CONCENTRATION IN HSU-2 VERSUS TIME 1998-2003

2005 Comprehensive Annual Water Monitoring Report
LEHR/SCDS
Davis, California

FIGURE 31

# APPENDIX A

## 2005 Analytical Results for the DDC Monitoring System

**APPENDIX A**
**VOLATILE ORGANIC COMPOUNDS IN THE DDC SYSTEM**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | DDC-1A | DDC-1B | DDC-1B | DDC-1B | DDC-1B | DDC-1B | DDC-1C |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWDC0065 | GWDC0066 | GWDC0067 Dup | GWDC0087 | GWDC0107 | GWDC0127 | GWDC0068 |
| | | Date | 01/20/05 | 01/20/05 | 01/20/05 | 04/27/05 | 08/10/05 | 10/18/05 | 01/20/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.25 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.25 |
| **1,1,2-TRICHLOROETHANE** | 1 | UG/L | **1.17** | **1.42** | **1.43** | **1.59** | 0.853 J | **21.3 J** | **22.3** |
| **1,1-DICHLOROETHANE** | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.101 | < 0.101 | **7.65 J** | **8.02** |
| **1,1-DICHLOROETHENE** | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | **5.14 J** | **7.55** |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 UJ | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.25 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.25 |
| **1,2-DICHLOROETHANE** | 0.5 | UG/L | < 0.25 | 0.295 J | 0.269 J | 0.349 J | < 0.1 | **5.83 J** | **8.57** |
| **1,2-DICHLOROPROPANE** | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.103 | < 0.103 | **0.695 J** | **0.988** |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.25 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.25 |
| 2-HEXANONE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.5 | < 0.5 | < 0.5 UJ | < 0.25 |
| **ACETONE** | 5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.37 | < 0.37 | < 0.37 UJ | < 0.25 |
| BENZENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.135 | < 0.135 | 0.219 J | < 0.25 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.104 | < 0.104 | < 0.104 UJ | < 0.25 |
| **BROMODICHLOROMETHANE** | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | 0.282 J | 0.343 J |
| **BROMOFORM** | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | **0.976 J** | < 0.25 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 UJ | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.446 | < 0.446 | < 0.446 UJ | < 0.25 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.25 |
| **CHLOROBENZENE** | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.25 |
| CHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.25 |
| **CHLOROFORM** | 0.5 | UG/L | **41.9** | **49.7** | **48.1** | **66.9** | **28.1** | **3560 J** | **4580** |
| **CHLOROMETHANE** | 0.5 | UG/L | < 0.25 UJ | < 0.25 UJ | < 0.25 UJ | < 0.24 | < 0.24 | < 0.24 UJ | < 0.25 UJ |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.25 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.25 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.25 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.081 | < 0.081 | < 0.081 UJ | < 0.25 |
| **METHYL ETHYL KETONE (2-BUTANONE)** | 1 | UG/L | < 0.27 | < 0.27 | < 0.27 | < 0.438 | < 0.438 | < 0.438 UJ | < 0.27 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.5 | < 0.5 | < 0.5 UJ | < 0.25 |
| **METHYLENE CHLORIDE** | 1 | UG/L | < 0.25 UJ | < 0.25 UJ | < 0.25 UJ | < 0.2 | < 0.2 | 0.455 J | **3.95 J** |
| STYRENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.25 |
| **TETRACHLOROETHYLENE(PCE)** | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | 0.387 J | 0.339 J |
| **TOLUENE** | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.056 | < 0.056 | < 0.056 UJ | < 0.25 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.25 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.114 | < 0.114 | < 0.114 UJ | < 0.25 |
| **TRICHLOROETHYLENE (TCE)** | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | **1.2 J** | **1.18** |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.11 | < 0.11 | < 0.11 UJ | < 0.25 |
| XYLENES, TOTAL | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.175 | < 0.175 | < 0.175 UJ | < 0.25 |

NS - Not Sampled
Results in **BOLD** indicate detections above the CRDL.
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
µg/L - micrograms per liter

**APPENDIX A**
**VOLATILE ORGANIC COMPOUNDS IN THE DDC SYSTEM**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | DDC-1C | DDC-1C | DDC-1C | DDC-1C | DDC-2A | DDC-2A | DDC-2B |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWDC0088 | GWDC0108 | GWDC0128 | GWDC0129 Dup | GWDC0069 | GWDC0089 | GWDC0070 |
| | | Date | 04/27/05 | 08/10/05 | 10/18/05 | 10/18/05 | 01/19/05 | 04/27/05 | 01/19/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.25 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.25 |
| **1,1,2-TRICHLOROETHANE** | 1 | UG/L | **23.7** | **25.2** | **20.4** | **22.4** | **4.05** | **4.56** | **6.23** |
| **1,1-DICHLOROETHANE** | 0.5 | UG/L | **10.8** | **9.7** | **7.83** | **7.15** | < 0.25 | < 0.101 | < 0.25 |
| **1,1-DICHLOROETHENE** | 0.5 | UG/L | **15.4** | **13** | **7.05** | **6.54** | < 0.25 | < 0.1 | < 0.25 |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.25 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.25 |
| **1,2-DICHLOROETHANE** | 0.5 | UG/L | **9.99** | **8.49** | **6.22** | **6.69** | < 0.25 | < 0.1 | < 0.25 |
| **1,2-DICHLOROPROPANE** | 0.5 | UG/L | **1.23** | **0.978** | **0.768** | **0.828** | < 0.25 | < 0.103 | < 0.25 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.25 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.25 |
| 2-HEXANONE | 1 | UG/L | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 0.25 |
| **ACETONE** | 5 | UG/L | 0.981 J | < 0.37 | < 0.37 | < 0.37 | < 0.25 | 0.505 J | < 0.25 |
| BENZENE | 0.5 | UG/L | < 0.135 | < 0.135 | < 0.135 | 0.255 J | < 0.25 | < 0.135 | < 0.25 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.25 | < 0.104 | < 0.25 |
| **BROMODICHLOROMETHANE** | 0.5 | UG/L | **0.527** | 0.358 J | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.25 |
| **BROMOFORM** | 0.5 | UG/L | < 0.2 | < 0.2 | **0.945 J** | < 0.2 UJ | < 0.25 | < 0.2 | < 0.25 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.446 | < 0.446 | < 0.446 | < 0.446 | < 0.25 | < 0.446 | < 0.25 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.25 |
| **CHLOROBENZENE** | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.25 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.25 |
| **CHLOROFORM** | 0.5 | UG/L | **5350 J** | **5320 J** | **4600** | **3860** | **24.2** | **40.2 J** | **42.1** |
| **CHLOROMETHANE** | 0.5 | UG/L | < 0.24 | < 0.24 | < 0.24 | < 0.24 | < 0.25 UJ | < 0.24 UJ | < 0.25 UJ |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.25 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.25 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.25 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.081 | < 0.081 | < 0.081 | < 0.25 | < 0.081 | < 0.25 |
| **METHYL ETHYL KETONE (2-BUTANONE)** | 1 | UG/L | < 0.438 | < 0.438 | < 0.438 | < 0.438 | < 0.27 | < 0.438 | < 0.27 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 0.25 |
| **METHYLENE CHLORIDE** | 1 | UG/L | **2.59** | **1.76** | < 0.2 | < 0.2 | < 0.25 UJ | < 0.2 | < 0.25 UJ |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.25 UJ |
| **TETRACHLOROETHYLENE(PCE)** | 0.5 | UG/L | **0.521** | 0.487 J | **0.554** | **0.667** | < 0.25 | < 0.1 | < 0.25 |
| **TOLUENE** | 0.5 | UG/L | < 0.056 | < 0.056 | < 0.056 | < 0.056 | < 0.25 | 0.383 J | < 0.25 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.25 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.114 | < 0.114 | < 0.114 | < 0.25 | < 0.114 | < 0.25 |
| **TRICHLOROETHYLENE (TCE)** | 0.5 | UG/L | **1.69** | **1.51** | **1.58** | **1.71** | < 0.25 | < 0.2 | < 0.25 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.25 | < 0.11 | < 0.25 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | < 0.175 | < 0.175 | < 0.175 | < 0.25 | < 0.175 | < 0.25 |

NS - Not Sampled
Results in **BOLD** indicate detections above the CRDL.
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
µg/L - micrograms per liter

**APPENDIX A**
**VOLATILE ORGANIC COMPOUNDS IN THE DDC SYSTEM**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | DDC-2B | DDC-2B | DDC-2B | DDC-2B | DDC-2C | DDC-2C | DDC-2C |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWDC0071 Dup | GWDC0090 | GWDC0110 | GWDC0131 | GWDC0072 | GWDC0091 | GWDC0111 |
| | | Date | 01/19/05 | 04/27/05 | 08/10/05 | 10/18/05 | 01/19/05 | 04/27/05 | 08/10/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 UJ | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 UJ | < 0.2 |
| **1,1,2-TRICHLOROETHANE** | 1 | UG/L | **5.54** | **6.4** | **8.11** | **7.61** | **9.64** | **8.58 J** | **4.57** |
| **1,1-DICHLOROETHANE** | 0.5 | UG/L | < 0.25 | < 0.101 | < 0.101 | < 0.101 | **0.527** | 0.266 J | 0.425 J |
| **1,1-DICHLOROETHENE** | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | 0.257 J | < 0.1 UJ | < 0.1 |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 UJ | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 UJ | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 UJ | < 0.1 |
| **1,2-DICHLOROETHANE** | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | 0.315 J | < 0.1 UJ | **1.24** |
| **1,2-DICHLOROPROPANE** | 0.5 | UG/L | < 0.25 | < 0.103 | < 0.103 | < 0.103 | < 0.25 | < 0.103 UJ | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 UJ | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 UJ | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 UJ | < 0.5 |
| **ACETONE** | 5 | UG/L | < 0.25 | < 0.37 | < 0.37 | < 0.37 | < 0.25 | < 0.37 UJ | < 0.37 |
| BENZENE | 0.5 | UG/L | < 0.25 | < 0.135 | < 0.135 | < 0.135 | < 0.25 | < 0.135 UJ | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.25 | < 0.104 | < 0.104 | < 0.104 | < 0.25 | < 0.104 UJ | < 0.104 |
| **BROMODICHLOROMETHANE** | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 UJ | < 0.1 |
| **BROMOFORM** | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 UJ | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 UJ | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.25 | < 0.446 | < 0.446 | < 0.446 | < 0.25 | < 0.446 UJ | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 UJ | < 0.2 |
| **CHLOROBENZENE** | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 UJ | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 UJ | < 0.2 |
| **CHLOROFORM** | 0.5 | UG/L | **38.2** | **50.4** | **50.4** | **47.8** | **152** | **89.6 J** | **63.5** |
| **CHLOROMETHANE** | 0.5 | UG/L | < 0.25 UJ | < 0.24 | < 0.24 | < 0.24 | < 0.25 | < 0.24 UJ | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 UJ | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 UJ | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 UJ | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.25 | < 0.081 | < 0.081 | < 0.081 | < 0.25 | < 0.081 UJ | < 0.081 |
| **METHYL ETHYL KETONE (2-BUTANONE)** | 1 | UG/L | < 0.27 | < 0.438 | < 0.438 | < 0.438 | < 0.27 | < 0.438 UJ | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 UJ | < 0.5 |
| **METHYLENE CHLORIDE** | 1 | UG/L | < 0.25 UJ | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 UJ | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.25 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 UJ | < 0.1 |
| **TETRACHLOROETHYLENE(PCE)** | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 UJ | < 0.1 |
| **TOLUENE** | 0.5 | UG/L | < 0.25 | < 0.056 | < 0.056 | < 0.056 | < 0.25 | < 0.056 UJ | < 0.056 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 UJ | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.25 | < 0.114 | < 0.114 | < 0.114 | < 0.25 | < 0.114 UJ | < 0.114 |
| **TRICHLOROETHYLENE (TCE)** | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | 0.428 J | < 0.2 UJ | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.25 | < 0.11 | < 0.11 | < 0.11 | < 0.25 | < 0.11 UJ | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.25 | < 0.175 | < 0.175 | < 0.175 | < 0.25 | < 0.175 UJ | < 0.175 |

NS - Not Sampled
Results in **BOLD** indicate detections above the CRDL.
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
µg/L - micrograms per liter

**APPENDIX A**
**VOLATILE ORGANIC COMPOUNDS IN THE DDC SYSTEM**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | DDC-2C | DDC-2C | DDC-3A | DDC-3B | DDC-3B | DDC-3B | DDC-3B |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWDC0112 Dup | GWDC0132 | GWDC0133 | GWDC0074 | GWDC0093 | GWDC0094 Dup | GWDC0114 |
| | | Date | 08/10/05 | 10/18/05 | 10/18/05 | 01/20/05 | 04/27/05 | 04/27/05 | 08/10/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| **1,1,2-TRICHLOROETHANE** | 1 | UG/L | **4.63** | **7.74** | < 0.104 | **1.59** | **1.46** | **1.32** | < 0.104 |
| **1,1-DICHLOROETHANE** | 0.5 | UG/L | 0.432 J | **0.724** | **0.512** | **2.45** | **2.18** | **2.03** | **0.631** |
| **1,1-DICHLOROETHENE** | 0.5 | UG/L | < 0.1 | 0.425 J | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| **1,2-DICHLOROETHANE** | 0.5 | UG/L | **1.19** | **1.38** | **1.42** | **5.47** | **5.04** | **4.42** | **1.45** |
| **1,2-DICHLOROPROPANE** | 0.5 | UG/L | < 0.103 | < 0.103 | < 0.103 | 0.371 J | 0.316 J | < 0.103 | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 |
| **ACETONE** | 5 | UG/L | 0.611 J | < 0.37 | < 0.37 | < 0.25 | < 0.37 | < 0.37 | < 0.37 |
| BENZENE | 0.5 | UG/L | < 0.135 | < 0.135 | < 0.135 | < 0.25 | < 0.135 | < 0.135 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 | < 0.104 | < 0.104 | < 0.25 | < 0.104 | < 0.104 | < 0.104 |
| **BROMODICHLOROMETHANE** | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| **BROMOFORM** | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.446 | < 0.446 | < 0.446 | < 0.25 | < 0.446 | < 0.446 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| **CHLOROBENZENE** | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| **CHLOROFORM** | 0.5 | UG/L | **61.6** | **141** | **34.4** | **204** | **139** | **140** | **39.6** |
| **CHLOROMETHANE** | 0.5 | UG/L | < 0.24 | < 0.24 | < 0.24 | < 0.25 | < 0.24 | < 0.24 | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.081 | < 0.081 | < 0.25 | < 0.081 | < 0.081 | < 0.081 |
| **METHYL ETHYL KETONE (2-BUTANONE)** | 1 | UG/L | < 0.438 | < 0.438 | < 0.438 | < 0.27 | < 0.438 | < 0.438 | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 |
| **METHYLENE CHLORIDE** | 1 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| **TETRACHLOROETHYLENE(PCE)** | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| **TOLUENE** | 0.5 | UG/L | < 0.056 | < 0.056 | < 0.056 | < 0.25 | < 0.056 | < 0.056 | < 0.056 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.114 | < 0.114 | < 0.25 | < 0.114 | < 0.114 | < 0.114 |
| **TRICHLOROETHYLENE (TCE)** | 0.5 | UG/L | 0.247 J | 0.295 J | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.11 | < 0.11 | < 0.25 | < 0.11 | < 0.11 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | < 0.175 | < 0.175 | < 0.25 | < 0.175 | < 0.175 | < 0.175 |

NS - Not Sampled
Results in **BOLD** indicate detections above the CRDL.
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
µg/L - micrograms per liter

**APPENDIX A**
**VOLATILE ORGANIC COMPOUNDS IN THE DDC SYSTEM**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | DDC-3B | DDC-3C | DDC-3C | DDC-3C | DDC-3C | DDC-4A | DDC-4B | DDC-4B |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWDC0134 | GWDC0075 | GWDC0095 | GWDC0115 | GWDC0135 | GWDC0076 | GWDC0077 | GWDC0097 |
| | | Date | 10/18/05 | 01/20/05 | 04/27/05 | 08/10/05 | 10/18/05 | 01/19/05 | 01/19/05 | 04/27/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 |
| **1,1,2-TRICHLOROETHANE** | 1 | UG/L | < 0.104 | **1.51** | **1.46** | 0.535 J | < 0.104 | 0.659 J | 0.781 J | **1.17** |
| **1,1-DICHLOROETHANE** | 0.5 | UG/L | 0.425 J | **2.83** | **2.95** | **4.57** | **1.06** | 0.408 J | 0.424 J | **0.933** |
| **1,1-DICHLOROETHENE** | 0.5 | UG/L | < 0.1 | 0.351 J | 0.269 J | < 0.778 UJ | < 0.1 | < 0.25 | < 0.25 | < 0.1 |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 |
| **1,2-DICHLOROETHANE** | 0.5 | UG/L | **1.27** | **5** | **4.87** | **3.27** | **1.76** | **2.26** | **2.55** | **4.76** |
| **1,2-DICHLOROPROPANE** | 0.5 | UG/L | < 0.103 | 0.388 J | 0.332 J | < 0.103 | < 0.103 | 0.251 J | 0.274 J | 0.452 J |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.25 | < 0.5 |
| **ACETONE** | 5 | UG/L | < 0.37 | < 0.25 | < 0.37 | 0.686 J | < 0.37 | < 0.25 | < 0.25 | < 0.37 |
| BENZENE | 0.5 | UG/L | < 0.135 | < 0.25 | < 0.135 | < 0.135 | < 0.135 | < 0.25 | < 0.25 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 | < 0.25 | < 0.104 | < 0.104 | < 0.104 | < 0.25 | < 0.25 | < 0.104 |
| **BROMODICHLOROMETHANE** | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 |
| **BROMOFORM** | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.446 | < 0.25 | < 0.446 | < 0.446 | < 0.446 | < 0.25 | < 0.25 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 |
| **CHLOROBENZENE** | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 |
| **CHLOROFORM** | 0.5 | UG/L | **29.4** | **184** | **176** | **222** | **57** | **87.2** | **93** | **177** |
| **CHLOROMETHANE** | 0.5 | UG/L | < 0.24 | < 0.25 | < 0.24 | < 0.24 | < 0.24 | < 0.25 | < 0.25 | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.25 | < 0.081 | < 0.081 | < 0.081 | < 0.25 | < 0.25 | < 0.081 |
| **METHYL ETHYL KETONE (2-BUTANONE)** | 1 | UG/L | < 0.438 | < 0.27 | < 0.438 | < 0.438 | < 0.438 | < 0.27 | < 0.27 | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.25 | < 0.5 |
| **METHYLENE CHLORIDE** | 1 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 |
| **TETRACHLOROETHYLENE(PCE)** | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | 0.297 J | < 0.1 | < 0.25 | < 0.25 | < 0.1 |
| **TOLUENE** | 0.5 | UG/L | < 0.056 | < 0.25 | < 0.056 | < 0.056 | < 0.056 | < 0.25 | < 0.25 | < 0.056 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.25 | < 0.114 | < 0.114 | < 0.114 | < 0.25 | < 0.25 | < 0.114 |
| **TRICHLOROETHYLENE (TCE)** | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.25 | < 0.11 | < 0.11 | < 0.11 | < 0.25 | < 0.25 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | < 0.25 | < 0.175 | < 0.175 | < 0.175 | < 0.25 | < 0.25 | < 0.175 |

NS - Not Sampled
Results in **BOLD** indicate detections above the CRDL.
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
µg/L - micrograms per liter

**APPENDIX A**
**VOLATILE ORGANIC COMPOUNDS IN THE DDC SYSTEM**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | DDC-4B | DDC-4B | DDC-4B | DDC-4C | DDC-4C | DDC-4C | DDC-4C |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWDC0117 | GWDC0137 | GWDC0138 Dup | GWDC0078 | GWDC0098 | GWDC0118 | GWDC0139 |
| | | Date | 08/10/05 | 10/18/05 | 10/18/05 | 01/19/05 | 04/27/05 | 08/10/05 | 10/18/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 1 | < 0.1 UJ |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.4 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 2 | < 0.2 UJ |
| **1,1,2-TRICHLOROETHANE** | 1 | UG/L | **2.42** | **1.29** | **1.32** | **1.29** | **1.46** | **16.3** | **1.79 J** |
| **1,1-DICHLOROETHANE** | 0.5 | UG/L | **0.582 J** | **1 J** | 0.463 J | **1.06** | **1.47** | **3.13 J** | **1.99 J** |
| **1,1-DICHLOROETHENE** | 0.5 | UG/L | < 0.2 | < 0.1 | < 0.1 | 0.373 J | < 0.1 | **9.18** | < 0.1 UJ |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.5 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 2.5 | < 0.25 UJ |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.4 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 2 | < 0.2 UJ |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.2 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 1 | < 0.1 UJ |
| **1,2-DICHLOROETHANE** | 0.5 | UG/L | **2.22** | **4.49** | **4.62** | **3.86** | **5.54** | **10.9** | **5.6 J** |
| **1,2-DICHLOROPROPANE** | 0.5 | UG/L | **1.22** | < 0.103 | < 0.103 | **0.61** | **0.624** | **5.26** | **0.532 J** |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.2 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 1 | < 0.1 UJ |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.2 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 1 | < 0.1 UJ |
| 2-HEXANONE | 1 | UG/L | < 1 | < 0.5 | < 0.5 | 0.533 J | < 0.5 | < 5 | < 0.5 UJ |
| **ACETONE** | 5 | UG/L | < 0.74 | < 0.37 | < 0.37 | < 0.25 | < 0.37 | < 3.7 | < 0.37 UJ |
| BENZENE | 0.5 | UG/L | < 0.27 | < 0.135 | < 0.135 | < 0.25 | < 0.135 | < 1.35 | < 0.135 UJ |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.208 | < 0.104 | < 0.104 | < 0.25 | < 0.104 | < 1.04 | < 0.104 UJ |
| **BROMODICHLOROMETHANE** | 0.5 | UG/L | < 0.2 | < 0.1 | < 0.1 | 0.279 J | < 0.1 | < 1 | < 0.1 UJ |
| **BROMOFORM** | 0.5 | UG/L | < 0.4 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 2 | < 0.2 UJ |
| BROMOMETHANE | 1 | UG/L | < 0.5 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 2.5 | < 0.25 UJ |
| CARBON DISULFIDE | 1 | UG/L | < 0.892 | < 0.446 | < 0.446 | 0.63 J | < 0.446 | < 4.46 | < 0.446 UJ |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.4 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 2 | < 0.2 UJ |
| **CHLOROBENZENE** | 0.5 | UG/L | < 0.2 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 1 | < 0.1 UJ |
| CHLOROETHANE | 0.5 | UG/L | < 0.4 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 2 | < 0.2 UJ |
| **CHLOROFORM** | 0.5 | UG/L | **91.1** | **34.2 J** | **192 J** | **164** | **253** | **407** | **296** |
| **CHLOROMETHANE** | 0.5 | UG/L | < 0.48 | < 0.24 | < 0.24 | < 0.25 | < 0.24 | < 2.4 | < 0.24 UJ |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.2 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 1 | < 0.1 UJ |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.4 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 2 | < 0.2 UJ |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.4 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 2 | < 0.2 UJ |
| ETHYLBENZENE | 0.5 | UG/L | < 0.162 | < 0.081 | < 0.081 | < 0.25 | < 0.081 | < 0.81 | < 0.081 UJ |
| **METHYL ETHYL KETONE (2-BUTANONE)** | 1 | UG/L | < 0.876 | < 0.438 | < 0.438 | < 0.27 | < 0.438 | < 4.38 | < 0.438 UJ |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 1 | < 0.5 | < 0.5 | 0.646 J | < 0.5 | < 5 | < 0.5 UJ |
| **METHYLENE CHLORIDE** | 1 | UG/L | < 0.4 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 2 | < 0.2 UJ |
| STYRENE | 0.5 | UG/L | < 0.2 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 1 | < 0.1 UJ |
| **TETRACHLOROETHYLENE(PCE)** | 0.5 | UG/L | < 0.2 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 1 | < 0.1 UJ |
| **TOLUENE** | 0.5 | UG/L | < 0.112 | < 0.056 | < 0.056 | < 0.25 | < 0.056 | < 0.56 | < 0.056 UJ |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.2 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 1 | < 0.1 UJ |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.228 | < 0.114 | < 0.114 | < 0.25 | < 0.114 | < 1.14 | < 0.114 UJ |
| **TRICHLOROETHYLENE (TCE)** | 0.5 | UG/L | < 0.4 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 2 | < 0.2 UJ |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.22 | < 0.11 | < 0.11 | < 0.25 | < 0.11 | < 1.1 | < 0.11 UJ |
| XYLENES, TOTAL | 1 | UG/L | < 0.35 | < 0.175 | < 0.175 | 0.277 J | < 0.175 | < 1.75 | < 0.175 UJ |

NS - Not Sampled
Results in **BOLD** indicate detections above the CRDL.
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
µg/L - micrograms per liter

**APPENDIX A**
**VOLATILE ORGANIC COMPOUNDS IN THE DDC SYSTEM**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | DDC-5A | DDC-5A | DDC-5B | DDC-5B | DDC-5B | DDC-5B | DDC-5B |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWDC0079 | GWDC0099 | GWDC0080 | GWDC0100 | GWDC0120 | GWDC0121 Dup | GWDC0141 |
| | | Date | 01/19/05 | 04/27/05 | 01/19/05 | 04/27/05 | 08/10/05 | 08/10/05 | 10/18/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| **1,1,2-TRICHLOROETHANE** | 1 | UG/L | < 0.25 | < 0.104 | < 0.25 | < 0.104 | < 0.104 | < 0.104 | < 0.104 |
| **1,1-DICHLOROETHANE** | 0.5 | UG/L | < 0.25 | < 0.101 | < 0.25 | < 0.101 | < 0.101 | < 0.101 | < 0.101 |
| **1,1-DICHLOROETHENE** | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| **1,2-DICHLOROETHANE** | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | 0.46 J | < 0.1 |
| **1,2-DICHLOROPROPANE** | 0.5 | UG/L | < 0.25 | < 0.103 | < 0.25 | < 0.103 | < 0.103 | < 0.103 | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.25 | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| **ACETONE** | 5 | UG/L | < 0.25 | 0.756 J | < 0.25 | 1.25 J | **14.7** | **15** | 2.08 J |
| BENZENE | 0.5 | UG/L | < 0.25 | < 0.135 | < 0.25 | < 0.135 | < 0.135 | < 0.135 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.25 | < 0.104 | < 0.25 | < 0.104 | < 0.104 | < 0.104 | < 0.104 |
| **BROMODICHLOROMETHANE** | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| **BROMOFORM** | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.25 | < 0.446 | < 0.25 | < 0.446 | < 0.446 | < 0.446 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| **CHLOROBENZENE** | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| **CHLOROFORM** | 0.5 | UG/L | **1.48** | **5.35** | **1.62** | **6.17** | **7.85** | **8.82** | **2.93** |
| **CHLOROMETHANE** | 0.5 | UG/L | < 0.25 | < 0.24 | < 0.25 | < 0.24 | < 0.24 | < 0.24 | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.25 | < 0.081 | < 0.25 | < 0.081 | < 0.081 | < 0.081 | < 0.081 |
| **METHYL ETHYL KETONE (2-BUTANONE)** | 1 | UG/L | < 0.27 | 0.713 J | < 0.27 | 0.68 J | **3.6** | **3.84** | **1.09** |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.25 | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| **METHYLENE CHLORIDE** | 1 | UG/L | < 0.25 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| **TETRACHLOROETHYLENE(PCE)** | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| **TOLUENE** | 0.5 | UG/L | < 0.25 | < 0.056 | < 0.25 | < 0.056 | < 0.056 | < 0.056 | < 0.056 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.25 | < 0.114 | < 0.25 | < 0.114 | < 0.114 | < 0.114 | < 0.114 |
| **TRICHLOROETHYLENE (TCE)** | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.25 | < 0.11 | < 0.25 | < 0.11 | < 0.11 | < 0.11 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.25 | < 0.175 | < 0.25 | < 0.175 | < 0.175 | < 0.175 | < 0.175 |

NS - Not Sampled
Results in **BOLD** indicate detections above the CRDL.
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
µg/L - micrograms per liter

**APPENDIX A**
**VOLATILE ORGANIC COMPOUNDS IN THE DDC SYSTEM**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | DDC-5C | DDC-5C | DDC-5C | DDC-5C | DDC-6A | DDC-6A | DDC-6A | DDC-6B |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWDC0081 | GWDC0101 | GWDC0122 | GWDC0142 | GWDC0082 | GWDC0102 | GWDC0143 | GWDC0083 |
| | | Date | 01/19/05 | 04/27/05 | 08/10/05 | 10/18/05 | 01/19/05 | 04/27/05 | 10/18/05 | 01/19/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.1 | < 5 | < 0.1 UJ | < 0.25 | < 0.1 | < 0.1 | < 0.25 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.2 | < 10 | < 0.2 UJ | < 0.25 | < 0.2 | < 0.2 | < 0.25 |
| **1,1,2-TRICHLOROETHANE** | 1 | UG/L | **4.5** | **7.41** | **13.6 J** | **14.7 J** | **2** | **2.43** | **1.64** | **2.38** |
| **1,1-DICHLOROETHANE** | 0.5 | UG/L | **1.17** | **1.8** | **246** | **3.76 J** | < 0.25 | < 0.101 | < 0.101 | < 0.25 |
| **1,1-DICHLOROETHENE** | 0.5 | UG/L | **1.32** | **1.68** | **305** | **2.52 J** | < 0.25 | < 0.1 | < 0.1 | < 0.25 |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 12.5 | < 0.25 UJ | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.25 | < 0.2 | < 10 | < 0.2 UJ | < 0.25 | < 0.2 | < 0.2 | < 0.25 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 5 | < 0.1 UJ | < 0.25 | < 0.1 | < 0.1 | < 0.25 |
| **1,2-DICHLOROETHANE** | 0.5 | UG/L | **0.596** | **1.01** | **105** | **1.9 J** | < 0.25 | < 0.1 | < 0.1 | < 0.25 |
| **1,2-DICHLOROPROPANE** | 0.5 | UG/L | < 0.25 | < 0.103 | < 5.15 | < 0.103 UJ | < 0.25 | < 0.103 | < 0.103 | < 0.25 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 5 | < 0.1 UJ | < 0.25 | < 0.1 | < 0.1 | < 0.25 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 5 | < 0.1 UJ | < 0.25 | < 0.1 | < 0.1 | < 0.25 |
| 2-HEXANONE | 1 | UG/L | < 0.25 | < 0.5 | < 25 | < 0.5 UJ | < 0.25 | < 0.5 | < 0.5 | < 0.25 |
| **ACETONE** | 5 | UG/L | < 0.25 | 1.92 J | **36.7 J** | 1.19 J | < 0.25 | < 0.37 | < 0.37 | < 0.25 |
| BENZENE | 0.5 | UG/L | < 0.25 | < 0.135 | < 6.75 | < 0.135 UJ | < 0.25 | < 0.135 | < 0.135 | < 0.25 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.25 | < 0.104 | < 5.2 | < 0.104 UJ | < 0.25 | < 0.104 | < 0.104 | < 0.25 |
| **BROMODICHLOROMETHANE** | 0.5 | UG/L | < 0.25 | < 0.1 | < 5 | < 0.1 UJ | < 0.25 | < 0.1 | < 0.1 | < 0.25 |
| **BROMOFORM** | 0.5 | UG/L | < 0.25 | **0.9** | **87.1** | **1.7 J** | < 0.25 | < 0.2 | < 0.2 | < 0.25 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 12.5 | < 0.25 UJ | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.25 | < 0.446 | < 22.3 | < 0.446 UJ | 0.394 J | < 0.446 | < 0.446 | < 0.25 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.25 | < 0.2 | < 10 | < 0.2 UJ | < 0.25 | < 0.2 | < 0.2 | < 0.25 |
| **CHLOROBENZENE** | 0.5 | UG/L | < 0.25 | 0.403 J | **12.6 J** | < 0.1 UJ | < 0.25 | < 0.1 | < 0.1 | < 0.25 |
| CHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.2 | < 10 | < 0.2 UJ | < 0.25 | < 0.2 | < 0.2 | < 0.25 |
| **CHLOROFORM** | 0.5 | UG/L | **748** | **1020** | **2900** | **2310 J** | **20.9** | **28.5** | **15.7** | **25.1** |
| **CHLOROMETHANE** | 0.5 | UG/L | < 0.25 | < 0.24 | < 12 | < 0.24 UJ | < 0.25 | < 0.24 | < 0.24 | < 0.25 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 5 | < 0.1 UJ | < 0.25 | < 0.1 | < 0.1 | < 0.25 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.25 | < 0.2 | < 10 | < 0.2 UJ | < 0.25 | < 0.2 | < 0.2 | < 0.25 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.25 | 0.308 J | < 10 | 0.294 J | < 0.25 | < 0.2 | < 0.2 | < 0.25 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.25 | < 0.081 | < 4.05 | < 0.081 UJ | < 0.25 | < 0.081 | < 0.081 | < 0.25 |
| **METHYL ETHYL KETONE (2-BUTANONE)** | 1 | UG/L | < 0.27 | 0.722 J | < 21.9 | **1.18 J** | < 0.27 | < 0.438 | < 0.438 | < 0.27 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.25 | < 0.5 | < 25 | < 0.5 UJ | < 0.25 | < 0.5 | < 0.5 | < 0.25 |
| **METHYLENE CHLORIDE** | 1 | UG/L | < 0.25 | < 0.2 | **16.4 J** | < 0.2 UJ | < 0.25 | < 0.2 | < 0.2 | < 0.25 |
| STYRENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 5 | < 0.1 UJ | < 0.25 | < 0.1 | < 0.1 | < 0.25 |
| **TETRACHLOROETHYLENE(PCE)** | 0.5 | UG/L | < 0.25 | < 0.1 | **15 J** | < 0.1 UJ | < 0.25 | < 0.1 | < 0.1 | < 0.25 |
| **TOLUENE** | 0.5 | UG/L | < 0.25 | 0.337 J | < 2.8 | < 0.056 UJ | < 0.25 | **1.07** | < 0.056 | < 0.25 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 5 | < 0.1 UJ | < 0.25 | < 0.1 | < 0.1 | < 0.25 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.25 | < 0.114 | < 5.7 | < 0.114 UJ | < 0.25 | < 0.114 | < 0.114 | < 0.25 |
| **TRICHLOROETHYLENE (TCE)** | 0.5 | UG/L | 0.3 J | 0.406 J | **53.6** | **0.658 J** | < 0.25 | < 0.2 | < 0.2 | < 0.25 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.25 | < 0.11 | < 5.5 | < 0.11 UJ | < 0.25 | < 0.11 | < 0.11 | < 0.25 |
| XYLENES, TOTAL | 1 | UG/L | < 0.25 | < 0.175 | < 8.75 | < 0.175 UJ | < 0.25 | < 0.175 | < 0.175 | < 0.25 |

NS - Not Sampled
Results in **BOLD** indicate detections above the CRDL.
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
µg/L - micrograms per liter

**APPENDIX A**
**VOLATILE ORGANIC COMPOUNDS IN THE DDC SYSTEM**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | DDC-6B | DDC-6B | DDC-6B | DDC-6B | DDC-6C | DDC-6C | DDC-6C |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWDC0103 | GWDC0104 Dup | GWDC0124 | GWDC0144 | GWDC0084 | GWDC0105 | GWDC0125 |
| | | Date | 04/27/05 | 04/27/05 | 08/10/05 | 10/18/05 | 01/19/05 | 04/27/05 | 08/10/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 |
| **1,1,2-TRICHLOROETHANE** | 1 | UG/L | < 0.104 UJ | **2.95 J** | **1.09** | **2.01** | **3.05** | < 0.104 | **1.75** |
| **1,1-DICHLOROETHANE** | 0.5 | UG/L | < 0.101 | < 0.101 | < 0.101 | < 0.101 | < 0.25 | < 0.101 | < 0.101 |
| **1,1-DICHLOROETHENE** | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| **1,2-DICHLOROETHANE** | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| **1,2-DICHLOROPROPANE** | 0.5 | UG/L | < 0.103 | < 0.103 | < 0.103 | < 0.103 | < 0.25 | < 0.103 | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 0.5 |
| **ACETONE** | 5 | UG/L | < 0.37 | < 0.37 | 1.14 J | < 0.37 | < 0.25 | < 0.37 | 0.771 J |
| BENZENE | 0.5 | UG/L | < 0.135 | < 0.135 | < 0.135 | < 0.135 | < 0.25 | < 0.135 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.25 | < 0.104 | < 0.104 |
| **BROMODICHLOROMETHANE** | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| **BROMOFORM** | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.446 | < 0.446 | < 0.446 | < 0.446 | < 0.25 | < 0.446 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 |
| **CHLOROBENZENE** | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 |
| **CHLOROFORM** | 0.5 | UG/L | **29.9** | **32.7 J** | **9.97** | **19.1** | **56.9** | **43.9** | **22.9** |
| **CHLOROMETHANE** | 0.5 | UG/L | < 0.24 | < 0.24 | < 0.24 | < 0.24 | < 0.25 | < 0.24 | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.081 | < 0.081 | < 0.081 | < 0.25 | < 0.081 | < 0.081 |
| **METHYL ETHYL KETONE (2-BUTANONE)** | 1 | UG/L | < 0.438 | < 0.438 | < 0.438 | < 0.438 | < 0.27 | < 0.438 | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 0.5 |
| **METHYLENE CHLORIDE** | 1 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| **TETRACHLOROETHYLENE(PCE)** | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| **TOLUENE** | 0.5 | UG/L | < 0.056 | < 0.056 | < 0.056 | < 0.056 | < 0.25 | < 0.056 | < 0.056 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.114 | < 0.114 | < 0.114 | < 0.25 | < 0.114 | < 0.114 |
| **TRICHLOROETHYLENE (TCE)** | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.25 | < 0.11 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | < 0.175 | < 0.175 | < 0.175 | < 0.25 | < 0.175 | < 0.175 |

NS - Not Sampled
Results in **BOLD** indicate detections above the CRDL.
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
µg/L - micrograms per liter

**APPENDIX A**
**VOLATILE ORGANIC COMPOUNDS IN THE DDC SYSTEM**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | DDC-6C | TP-2B | TP-2B | TP-2B | TP-2B | TP-2C | TP-2C |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWDC0145 | GWTP0077 | GWTP0095 | GWTP0111 | GWTP0128 | GWTP0078 | GWTP0096 |
| | | Date | 10/18/05 | 01/20/05 | 04/28/05 | 08/11/05 | 10/19/05 | 01/20/05 | 04/28/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| **1,1,2-TRICHLOROETHANE** | 1 | UG/L | **1.58** | < 0.25 | < 0.104 | 0.499 J | 0.682 J | **4.9** | < 0.104 |
| **1,1-DICHLOROETHANE** | 0.5 | UG/L | < 0.101 | 0.45 J | 0.342 J | < 0.101 | 0.265 J | **3.07** | **1.08** |
| **1,1-DICHLOROETHENE** | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 UJ | < 0.1 | < 0.1 | **2.15** | < 0.827 UJ |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| **1,2-DICHLOROETHANE** | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.426 UJ | < 0.1 | **2.22** | **1.07** |
| **1,2-DICHLOROPROPANE** | 0.5 | UG/L | < 0.103 | < 0.25 | < 0.103 | < 0.103 | < 0.103 | < 0.25 | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 |
| **ACETONE** | 5 | UG/L | < 0.37 | < 0.25 | < 0.37 UJ | < 0.37 | < 0.37 | 4.45 J | < 0.37 UJ |
| BENZENE | 0.5 | UG/L | < 0.135 | < 0.25 | < 0.135 | < 0.135 | < 0.135 | < 0.25 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 | < 0.25 | < 0.104 | < 0.104 | < 0.104 | < 0.25 | < 0.104 |
| **BROMODICHLOROMETHANE** | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| **BROMOFORM** | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.446 | < 0.25 | < 0.446 | < 0.446 | < 0.446 | < 0.25 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| **CHLOROBENZENE** | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| **CHLOROFORM** | 0.5 | UG/L | **32.8** | **32.6** | **54.7** | **24.4** | **29.7** | **827** | **273** |
| **CHLOROMETHANE** | 0.5 | UG/L | < 0.24 | < 0.25 | < 0.24 | < 0.24 | < 0.24 | < 0.25 | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.25 | < 0.081 | < 0.081 | < 0.081 | < 0.25 | < 0.081 |
| **METHYL ETHYL KETONE (2-BUTANONE)** | 1 | UG/L | < 0.438 | < 0.27 | < 0.438 | < 0.438 | < 0.438 | **15.2** | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 |
| **METHYLENE CHLORIDE** | 1 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 UJ | < 0.2 | < 0.25 | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| **TETRACHLOROETHYLENE(PCE)** | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | 0.266 J | < 0.1 |
| **TOLUENE** | 0.5 | UG/L | < 0.056 | < 0.25 | < 0.056 UJ | < 0.056 | < 0.056 | < 0.25 | < 0.056 UJ |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.25 | < 0.114 | < 0.114 | < 0.114 | < 0.25 | < 0.114 |
| **TRICHLOROETHYLENE (TCE)** | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | 0.431 J | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.25 | < 0.11 | < 0.11 | < 0.11 | < 0.25 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | < 0.25 | < 0.175 | < 0.175 | < 0.175 | < 0.25 | < 0.175 |

NS - Not Sampled
Results in **BOLD** indicate detections above the CRDL.
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
µg/L - micrograms per liter

**APPENDIX A**
**VOLATILE ORGANIC COMPOUNDS IN THE DDC SYSTEM**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | TP-2C | TP-2C | TP-5B | TP-5B | TP-5B | TP-5B | TP-5B |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWTP0112 | GWTP0129 | GWTP0087 | GWTP0088 | GWTP0104 | GWTP0121 | GWTP0137 |
| | | Date | 08/11/05 | 10/19/05 | 01/20/05 | Dup 01/20/05 | 04/28/05 | 08/11/05 | 10/20/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| **1,1,2-TRICHLOROETHANE** | 1 | UG/L | **2.02** | **2.6** | **1.55** | **1.48** | < 0.104 | 0.675 J | 0.532 J |
| **1,1-DICHLOROETHANE** | 0.5 | UG/L | **0.945** | **1.08** | < 0.25 | < 0.25 | < 0.101 | < 0.101 | 0.287 J |
| **1,1-DICHLOROETHENE** | 0.5 | UG/L | < 0.534 UJ | **0.689** | < 0.25 | < 0.25 | < 0.1 UJ | < 0.1 | < 0.1 |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| **1,2-DICHLOROETHANE** | 0.5 | UG/L | < 0.972 UJ | **0.837** | < 0.25 | < 0.25 | < 0.1 | < 0.608 UJ | **0.536** |
| **1,2-DICHLOROPROPANE** | 0.5 | UG/L | < 0.103 | < 0.103 | < 0.25 | < 0.25 | < 0.103 | < 0.103 | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.5 | < 0.5 | < 0.25 | < 0.25 | < 0.5 | < 0.5 | < 0.5 |
| **ACETONE** | 5 | UG/L | **41.4** | < 0.37 | 0.913 J | 0.414 J | < 0.734 UJ | < 0.37 | < 0.37 |
| BENZENE | 0.5 | UG/L | < 0.135 | < 0.135 | < 0.25 | < 0.25 | < 0.135 | < 0.135 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 | < 0.104 | < 0.25 | < 0.25 | < 0.104 | < 0.104 | < 0.104 |
| **BROMODICHLOROMETHANE** | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| **BROMOFORM** | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.446 | < 0.598 UJ | < 0.25 | < 0.25 | < 0.446 | < 0.446 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| **CHLOROBENZENE** | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| **CHLOROFORM** | 0.5 | UG/L | **270** | **287 J** | **37.4** | **38.1** | **36.2** | **23.3 J** | < 24.4 UJ |
| **CHLOROMETHANE** | 0.5 | UG/L | < 0.24 | < 0.24 | < 0.25 | < 0.25 | < 0.24 | < 0.24 | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.081 | < 0.25 | < 0.25 | < 0.081 | < 0.081 | < 0.081 |
| **METHYL ETHYL KETONE (2-BUTANONE)** | 1 | UG/L | **1.05** | < 0.438 | < 0.27 | < 0.27 | < 0.438 | < 0.438 | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | < 0.5 | < 0.25 | < 0.25 | < 0.5 | < 0.5 | < 0.5 |
| **METHYLENE CHLORIDE** | 1 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| **TETRACHLOROETHYLENE(PCE)** | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| **TOLUENE** | 0.5 | UG/L | < 0.056 | < 0.056 | < 0.25 | < 0.25 | < 0.056 UJ | < 0.056 | < 0.056 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.114 | < 0.25 | < 0.25 | < 0.114 | < 0.114 | < 0.114 |
| **TRICHLOROETHYLENE (TCE)** | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.11 | < 0.25 | < 0.25 | < 0.11 | < 0.11 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | < 0.175 | < 0.25 | < 0.25 | < 0.175 | < 0.175 | < 0.175 |

NS - Not Sampled
Results in **BOLD** indicate detections above the CRDL.
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
µg/L - micrograms per liter

**APPENDIX A**
**VOLATILE ORGANIC COMPOUNDS IN THE DDC SYSTEM**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | TP-5C | TP-5C | TP-5C | TP-5C | TP-5C | UCD1-012 | UCD1-012 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWTP0089 | GWTP0105 | GWTP0122 | GWTP0138 | GWTP0139 Dup | GWGW1847 | GWGW1870 |
| | | Date | 01/20/05 | 04/28/05 | 08/11/05 | 10/20/05 | 10/20/05 | 02/10/05 | 05/25/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| **1,1,2-TRICHLOROETHANE** | 1 | UG/L | **5.7** | < 0.104 | **1.82** | **4.84** | **5.4** | < 0.25 | **1.37** |
| **1,1-DICHLOROETHANE** | 0.5 | UG/L | **3.58** | **1.2** | **0.571** | **1.56** | **1.66** | < 0.25 | 0.299 J |
| **1,1-DICHLOROETHENE** | 0.5 | UG/L | **2.07** | < 0.662 UJ | < 0.346 UJ | **0.929** | **1.02** | < 0.25 | < 0.1 |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| **1,2-DICHLOROETHANE** | 0.5 | UG/L | **1.31** | **0.617** | < 0.6 UJ | **0.71** | **0.817** | 0.252 J | 0.387 J |
| **1,2-DICHLOROPROPANE** | 0.5 | UG/L | < 0.25 | < 0.103 | < 0.103 | < 0.103 | < 0.103 | < 0.25 | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 |
| **ACETONE** | 5 | UG/L | 0.47 J | < 0.416 UJ | 1.85 J | < 0.37 | < 0.37 | < 0.25 | < 0.37 |
| BENZENE | 0.5 | UG/L | < 0.25 | < 0.135 | < 0.135 | < 0.135 | < 0.135 | < 0.25 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.25 | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.25 | < 0.104 |
| **BROMODICHLOROMETHANE** | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| **BROMOFORM** | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.25 | < 0.446 | < 0.446 | < 0.446 | < 0.446 | < 0.25 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| **CHLOROBENZENE** | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| **CHLOROFORM** | 0.5 | UG/L | **730** | **284** | **402** | **506** | **513** | **55** | **55.7** |
| **CHLOROMETHANE** | 0.5 | UG/L | < 0.25 | < 0.24 | < 0.24 | < 0.24 | **0.659** | < 0.25 | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.25 | < 0.081 | < 0.081 | < 0.081 | < 0.081 | < 0.25 | < 0.081 |
| **METHYL ETHYL KETONE (2-BUTANONE)** | 1 | UG/L | 0.563 J | < 0.438 | 0.463 J | < 0.438 | < 0.438 | < 0.27 | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 |
| **METHYLENE CHLORIDE** | 1 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 1 UJ |
| STYRENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| **TETRACHLOROETHYLENE(PCE)** | 0.5 | UG/L | 0.325 J | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| **TOLUENE** | 0.5 | UG/L | < 0.25 | < 0.056 UJ | < 0.056 | < 0.056 | < 0.056 | < 0.25 | < 0.056 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.25 | < 0.114 | < 0.114 | < 0.114 | < 0.114 | < 0.25 | < 0.114 |
| **TRICHLOROETHYLENE (TCE)** | 0.5 | UG/L | **0.506** | < 0.2 | < 0.2 | 0.279 J | 0.342 J | < 0.25 | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.25 | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.25 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.25 | < 0.175 | < 0.175 | < 0.175 | < 0.175 | < 0.25 | < 0.175 |

NS - Not Sampled
Results in **BOLD** indicate detections above the CRDL.
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
µg/L - micrograms per liter

**APPENDIX A**
**VOLATILE ORGANIC COMPOUNDS IN THE DDC SYSTEM**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | UCD1-012 | UCD1-012 | UCD1-012 | UCD1-049 | UCD1-049 | UCD1-049 |
|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWGW1871 Dup | GWGW1921 | GWGW1942 | GWGW1855 | GWGW1885 | GWGW1930 |
| | | Date | 05/25/05 | 08/09/05 | 10/19/05 | 01/25/05 | 06/07/05 | 08/09/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 |
| **1,1,2-TRICHLOROETHANE** | 1 | UG/L | **1.19** | **1.19** | **1.24** | **2.39** | **3.46** | **3.5** |
| **1,1-DICHLOROETHANE** | 0.5 | UG/L | 0.234 J | 0.283 J | < 0.101 | 0.274 J | **0.795 J** | 0.178 J |
| **1,1-DICHLOROETHENE** | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 1.87 UJ | **2.17** | **1.05** |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| **1,2-DICHLOROETHANE** | 0.5 | UG/L | 0.325 J | 0.285 J | 0.269 J | < 0.25 | 0.238 J | < 0.1 |
| **1,2-DICHLOROPROPANE** | 0.5 | UG/L | < 0.103 | < 0.103 | < 0.103 | < 0.25 | < 0.103 | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 0.5 |
| **ACETONE** | 5 | UG/L | < 0.37 | < 0.37 | < 0.37 | < 0.25 | 3.45 J | < 0.37 |
| BENZENE | 0.5 | UG/L | < 0.135 | < 0.135 | < 0.135 | < 0.25 | < 0.135 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 | < 0.104 | < 0.104 | < 0.25 | < 0.104 | < 0.104 |
| **BROMODICHLOROMETHANE** | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| **BROMOFORM** | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.446 | < 0.446 | < 0.649 UJ | < 0.25 | < 0.446 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 |
| **CHLOROBENZENE** | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 |
| **CHLOROFORM** | 0.5 | UG/L | **50.2** | **83.7** | **56.1** | **242** | **785 J** | **229** |
| **CHLOROMETHANE** | 0.5 | UG/L | < 0.24 | < 0.24 | < 0.24 | < 0.25 | < 0.24 | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.081 | < 0.081 | < 0.25 | < 0.081 | < 0.081 |
| **METHYL ETHYL KETONE (2-BUTANONE)** | 1 | UG/L | < 0.438 | < 0.438 | < 0.438 | < 0.27 | < 0.438 | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 0.5 |
| **METHYLENE CHLORIDE** | 1 | UG/L | < 0.79 UJ | < 0.2 | < 0.2 | < 0.25 | **1.74 J** | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| **TETRACHLOROETHYLENE(PCE)** | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| **TOLUENE** | 0.5 | UG/L | < 0.056 | < 0.056 | < 0.056 | < 0.25 | < 0.056 | < 0.056 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.114 | < 0.114 | < 0.25 | < 0.114 | < 0.114 |
| **TRICHLOROETHYLENE (TCE)** | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.11 | < 0.11 | < 0.25 | < 0.11 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | < 0.175 | < 0.175 | < 0.25 | < 0.175 | < 0.175 |

NS - Not Sampled
Results in **BOLD** indicate detections above the CRDL.
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
µg/L - micrograms per liter

**APPENDIX A**
**VOLATILE ORGANIC COMPOUNDS IN THE DDC SYSTEM**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | UCD1-049 | UCD1-050 | UCD1-050 | UCD1-050 | UCD1-050 | UCD1-050 | UCD1-051 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWGW1949 | GWGW1856 | GWGW1887 | GWGW1931 | GWGW1950 | GWGW1951 Dup | GWGW1857 |
| | | Date | 10/19/05 | 01/25/05 | 06/07/05 | 08/09/05 | 10/19/05 | 10/19/05 | 01/25/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 |
| **1,1,2-TRICHLOROETHANE** | 1 | UG/L | **3.36** | **7.82** | **22.8** | **11.4** | **19.3** | **18.1** | **3.84** |
| **1,1-DICHLOROETHANE** | 0.5 | UG/L | < 0.101 | **1.32** | **2.48 J** | **1.03** | **1.32** | **1.21** | **22.7** |
| **1,1-DICHLOROETHENE** | 0.5 | UG/L | **0.512** | < 3.32 UJ | **3.72** | **2.28** | **2.42** | **2.42** | **7.04** |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| **1,2-DICHLOROETHANE** | 0.5 | UG/L | < 0.1 | 0.296 J | < 0.1 | 0.211 J | 0.265 J | < 0.1 | **15** |
| **1,2-DICHLOROPROPANE** | 0.5 | UG/L | < 0.103 | < 0.25 | < 0.103 | < 0.103 | < 0.103 | < 0.103 | **0.728** |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| 2-HEXANONE | 1 | UG/L | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.25 |
| **ACETONE** | 5 | UG/L | < 0.37 | < 0.25 | 2.63 J | < 0.37 | < 0.37 | < 0.37 | < 0.25 |
| BENZENE | 0.5 | UG/L | < 0.135 | < 0.25 | < 0.135 | < 0.135 | < 0.135 | < 0.135 | < 0.25 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 | < 0.25 | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.25 |
| **BROMODICHLOROMETHANE** | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| **BROMOFORM** | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.569 UJ | < 0.25 | < 0.446 | < 0.446 | < 0.446 | < 0.619 UJ | < 0.25 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 |
| **CHLOROBENZENE** | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 |
| **CHLOROFORM** | 0.5 | UG/L | **171 J** | **1150** | **146 J** | **965** | **1040 J** | **955 J** | **1540** |
| **CHLOROMETHANE** | 0.5 | UG/L | < 0.24 | < 0.25 | < 0.24 | < 0.24 | **0.723** | < 0.24 | < 0.25 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.25 | 0.116 J | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.25 | < 0.081 | < 0.081 | < 0.081 | < 0.081 | < 0.25 |
| **METHYL ETHYL KETONE (2-BUTANONE)** | 1 | UG/L | < 0.438 | < 0.27 | < 0.438 | < 0.438 | < 0.438 | < 0.438 | < 0.27 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.25 |
| **METHYLENE CHLORIDE** | 1 | UG/L | < 0.2 | < 0.25 | **1.62 J** | < 0.2 | < 0.2 | < 0.2 | < 0.25 |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| **TETRACHLOROETHYLENE(PCE)** | 0.5 | UG/L | < 0.1 | < 0.25 | 0.309 J | < 0.1 | < 0.1 | 0.197 J | **2.35** |
| **TOLUENE** | 0.5 | UG/L | < 0.056 | < 0.25 | < 0.056 | < 0.056 | < 0.056 | < 0.056 | < 0.25 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.25 | < 0.114 | < 0.114 | < 0.114 | < 0.114 | < 0.25 |
| **TRICHLOROETHYLENE (TCE)** | 0.5 | UG/L | < 0.2 | **0.559** | **1.7** | **0.811** | **1.23** | **1.08** | **0.901** |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.25 | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.25 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | < 0.25 | < 0.175 | < 0.175 | < 0.175 | < 0.175 | < 0.25 |

NS - Not Sampled
Results in **BOLD** indicate detections above the CRDL.
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
µg/L - micrograms per liter

**APPENDIX A**
**VOLATILE ORGANIC COMPOUNDS IN THE DDC SYSTEM**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | UCD1-051 | UCD1-051 | UCD1-051 | UCD2-048 | UCD2-048 | UCD2-048 | UCD2-048 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWGW1888 | GWGW1932 | GWGW1952 | GWGW1860 | GWGW1910 | GWGW1938 | GWGW1975 |
| | | Date | 06/07/05 | 08/09/05 | 10/19/05 | 01/25/05 | 06/07/05 | 08/09/05 | 10/19/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| **1,1,2-TRICHLOROETHANE** | 1 | UG/L | **2.31** | **3.12** | **4.43** | < 0.25 | < 0.104 | < 0.104 | < 0.104 |
| **1,1-DICHLOROETHANE** | 0.5 | UG/L | **14.3 J** | **20.6** | **23.1** | < 0.25 | < 0.101 | < 0.101 | < 0.101 |
| **1,1-DICHLOROETHENE** | 0.5 | UG/L | **4.45** | **6.02** | **6.66** | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| **1,2-DICHLOROETHANE** | 0.5 | UG/L | **9.85** | **11.9** | **11.3** | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| **1,2-DICHLOROPROPANE** | 0.5 | UG/L | **0.56** | **0.626** | **0.765** | < 0.25 | < 0.103 | < 0.103 | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 |
| **ACETONE** | 5 | UG/L | **5.27** | < 0.37 | < 0.37 | < 0.25 | 3.17 J | < 0.37 | < 0.37 |
| BENZENE | 0.5 | UG/L | < 0.135 | < 0.135 | < 0.135 | < 0.25 | < 0.135 | < 0.135 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 | < 0.104 | < 0.104 | < 0.25 | < 0.104 | < 0.104 | < 0.104 |
| **BROMODICHLOROMETHANE** | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| **BROMOFORM** | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.446 | < 0.446 | < 0.611 UJ | < 0.25 | < 0.446 | < 0.446 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| **CHLOROBENZENE** | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| **CHLOROFORM** | 0.5 | UG/L | **910 J** | **1630** | **1520 J** | **3.08** | **0.767** | **1.43** | **3.14** |
| **CHLOROMETHANE** | 0.5 | UG/L | < 0.24 | < 0.24 | 0.421 J | < 0.25 | < 0.24 | < 0.24 | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.081 | < 0.081 | < 0.25 | < 0.081 | < 0.081 | < 0.081 |
| **METHYL ETHYL KETONE (2-BUTANONE)** | 1 | UG/L | < 0.438 | < 0.438 | < 0.438 | < 0.27 | < 0.438 | < 0.438 | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 |
| **METHYLENE CHLORIDE** | 1 | UG/L | **1.95 J** | < 0.2 | < 0.2 | < 0.25 | **1.66 J** | < 0.2 | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| **TETRACHLOROETHYLENE(PCE)** | 0.5 | UG/L | **1.85** | **2.26** | **2.44** | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| **TOLUENE** | 0.5 | UG/L | < 0.056 | < 0.056 | < 0.056 | < 0.25 | < 0.056 | < 0.056 | < 0.056 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.114 | < 0.114 | < 0.25 | < 0.114 | < 0.114 | < 0.114 |
| **TRICHLOROETHYLENE (TCE)** | 0.5 | UG/L | **0.575** | **0.828** | **1.06** | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.11 | < 0.11 | < 0.25 | < 0.11 | < 0.11 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | < 0.175 | < 0.175 | < 0.25 | < 0.175 | < 0.175 | < 0.175 |

NS - Not Sampled
Results in **BOLD** indicate detections above the CRDL.
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
µg/L - micrograms per liter

**APPENDIX A**
**VOLATILE ORGANIC COMPOUNDS IN THE DDC SYSTEM**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | UCD2-048 |
|---|---|---|---|
| | | Sample ID | GWGW1976 Dup |
| | | Date | 10/19/05 |
| AnalyteNameShort | CRDL | UnitsID | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 |
| **1,1,2-TRICHLOROETHANE** | 1 | UG/L | < 0.104 |
| **1,1-DICHLOROETHANE** | 0.5 | UG/L | < 0.101 |
| **1,1-DICHLOROETHENE** | 0.5 | UG/L | < 0.1 |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 |
| **1,2-DICHLOROETHANE** | 0.5 | UG/L | < 0.1 |
| **1,2-DICHLOROPROPANE** | 0.5 | UG/L | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.5 |
| **ACETONE** | 5 | UG/L | < 0.37 |
| BENZENE | 0.5 | UG/L | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 |
| **BROMODICHLOROMETHANE** | 0.5 | UG/L | < 0.1 |
| **BROMOFORM** | 0.5 | UG/L | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.645 UJ |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 |
| **CHLOROBENZENE** | 0.5 | UG/L | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 |
| **CHLOROFORM** | 0.5 | UG/L | **4.05** |
| **CHLOROMETHANE** | 0.5 | UG/L | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 |
| **METHYL ETHYL KETONE (2-BUTANONE)** | 1 | UG/L | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 |
| **METHYLENE CHLORIDE** | 1 | UG/L | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.1 |
| **TETRACHLOROETHYLENE(PCE)** | 0.5 | UG/L | < 0.1 |
| **TOLUENE** | 0.5 | UG/L | < 0.056 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 |
| **TRICHLOROETHYLENE (TCE)** | 0.5 | UG/L | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 |

NS - Not Sampled
Results in **BOLD** indicate detections above the CRDL.
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
µg/L - micrograms per liter

**APPENDIX A**
**METALS IN THE DDC SYSTEM**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | TP-2B | TP-2B | TP-2B | TP-2B | TP-2C | TP-2C | TP-2C | TP-2C |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWTP0077 | GWTP0095 | GWTP0111 | GWTP0128 | GWTP0078 | GWTP0096 | GWTP0112 | GWTP0129 |
| | | Date | 01/20/05 | 04/28/05 | 08/11/05 | 10/19/05 | 01/20/05 | 04/28/05 | 08/11/05 | 10/19/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | |
| **CHROMIUM, TOTAL** | 10 | UG/L | **48.7** | **65.5** | **58.8** | **59.1** | **112** | **113** | **116** | **112** |

NS - Not Sampled
Results in **BOLD** indicate detections above the CRDL.
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.

**APPENDIX A**
**METALS IN THE DDC SYSTEM**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | TP-5B | TP-5B | TP-5B | TP-5B | TP-5B | TP-5C | TP-5C |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWTP0087 | GWTP0088 Dup | GWTP0104 | GWTP0121 | GWTP0137 | GWTP0089 | GWTP0105 |
| | | Date | 01/20/05 | 01/20/05 | 04/28/05 | 08/11/05 | 10/20/05 | 01/20/05 | 04/28/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | |
| **CHROMIUM, TOTAL** | 10 | UG/L | **92.2** | **94** | **101** | **95.9** | **85.1** | **123** | **135** |

NS - Not Sampled
Results in **BOLD** indicate detections above the CRDL.
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.

**APPENDIX A**
**METALS IN THE DDC SYSTEM**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | TP-5C | TP-5C | TP-5C | UCD1-012 | UCD1-012 | UCD1-012 | UCD1-049 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWTP0122 | GWTP0138 | GWTP0139 Dup | GWGW1870 | GWGW1871 | GWGW1942 | GWGW1885 |
| | | Date | 08/11/05 | 10/20/05 | 10/20/05 | 05/25/05 | Dup 05/25/05 | 10/19/05 | 06/07/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | |
| **CHROMIUM, TOTAL** | 10 | UG/L | **101** | **105** | **104** | **140** | **141** | **126** | **117** |

NS - Not Sampled
Results in **BOLD** indicate detections above the CRDL.
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.

**APPENDIX A**
**METALS IN THE DDC SYSTEM**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | UCD1-049 | UCD1-050 | UCD1-050 | UCD1-050 | UCD1-051 | UCD1-051 | UCD2-048 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWGW1949 | GWGW1887 | GWGW1950 | GWGW1951 Dup | GWGW1888 | GWGW1952 | GWGW1910 |
| | | Date | 10/19/05 | 06/07/05 | 10/19/05 | 10/19/05 | 06/07/05 | 10/19/05 | 06/07/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | |
| **CHROMIUM, TOTAL** | 10 | UG/L | **119** | **126** | **116** | **116** | **112** | **115** | **15.8** |

NS - Not Sampled
Results in **BOLD** indicate detections above the CRDL.
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.

**APPENDIX A**
**METALS IN THE DDC SYSTEM**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | UCD2-048 | UCD2-048 |
|---|---|---|---|---|
| | | Sample ID | GWGW1975 | GWGW1976 Dup |
| | | Date | 10/19/05 | 10/19/05 |
| AnalyteNameShort | CRDL | UnitsID | | |
| **CHROMIUM, TOTAL** | 10 | UG/L | **18.3** | **17.9** |

NS - Not Sampled
Results in **BOLD** indicate detections above the CRDL.
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.

**APPENDIX A**
**RADS IN THE DDC SYSTEM**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | TP-2B | TP-2B | TP-2B | TP-2B | TP-2C | TP-2C | TP-2C | TP-2C |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWTP0077 | GWTP0095 | GWTP0111 | GWTP0128 | GWTP0078 | GWTP0096 | GWTP0112 | GWTP0129 |
| | | Date | 01/20/05 | 04/28/05 | 08/11/05 | 10/19/05 | 01/20/05 | 04/28/05 | 08/11/05 | 10/19/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | |
| **CARBON-14** | 20 | PCI/L | **66.5 +/- 10.2** | **81.9 +/- 12** | **58.5 +/- 11.4** | **57 +/- 9.66** | **63.1 +/- 10.2** | **75.5 +/- 11** | **46.6 +/- 10.3** | **52.2 +/- 9.67** |
| TRITIUM (HYDROGEN-3) | 300 | PCI/L | < 242 | < 303 | < 270 | < 245 | < 245 | < 297 | < 274 | < 244 |

NS - Not Sampled
Results in **BOLD** indicate detections above the CRDL.
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.

**APPENDIX A**
**RADS IN THE DDC SYSTEM**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | TP-5B | | TP-5B | TP-5B | TP-5B | TP-5C | TP-5C |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWTP0087 | TP-5B GWTP0088 | GWTP0104 | GWTP0121 | GWTP0137 | GWTP0089 | GWTP0105 |
| | | Date | 01/20/05 | Dup 01/20/05 | 04/28/05 | 08/11/05 | 10/20/05 | 01/20/05 | 04/28/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | |
| **CARBON-14** | 20 | PCI/L | **29.4 +/- 9.21** | **35.3 +/- 9.4** | **41.3 +/- 10** | **23.5 +/- 9.95** | **32.7 +/- 9.17** | **74.1 +/- 10.4** | **106 +/- 14** |
| TRITIUM (HYDROGEN-3) | 300 | PCI/L | < 237 | < 254 | < 315 | < 281 | < 242 | < 251 | < 307 |

NS - Not Sampled
Results in **BOLD** indicate detections above the CRDL.
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.

**APPENDIX A**
**RADS IN THE DDC SYSTEM**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
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| | | Location | TP-5C | TP-5C | TP-5C | UCD1-012 | UCD1-012 | UCD1-012 | UCD1-049 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWTP0122 | GWTP0138 | GWTP0139 Dup | GWGW1870 | GWGW1871 Dup | GWGW1942 | GWGW1949 |
| | | Date | 08/11/05 | 10/20/05 | 10/20/05 | 05/25/05 | 05/25/05 | 10/19/05 | 10/19/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | |
| **CARBON-14** | 20 | PCI/L | **27.6 +/- 10.5** | **38.8 +/- 9.28** | **36.5 +/- 9.24** | **41.8 +/- 11** | **39 +/- 11** | **26 +/- 8.96** | < 14.2 |
| TRITIUM (HYDROGEN-3) | 300 | PCI/L | < 273 | < 240 | < 246 | < 280 | < 283 | < 234 | < 212 |

NS - Not Sampled
Results in **BOLD** indicate detections above the CRDL.
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.

**APPENDIX A**
**RADS IN THE DDC SYSTEM**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | UCD1-050 | UCD1-050 | UCD1-051 | UCD2-048 | UCD2-048 |
|---|---|---|---|---|---|---|---|
| | | Sample ID | GWGW1950 | GWGW1951 | GWGW1952 | GWGW1975 | GWGW1976 Dup |
| | | Date | 10/19/05 | Dup 10/19/05 | 10/19/05 | 10/19/05 | 10/19/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | |
| **CARBON-14** | 20 | PCI/L | < 14.1 | < 14.1 | **84.6 +/- 10.4** | < 14.3 | < 14.3 |
| TRITIUM (HYDROGEN-3) | 300 | PCI/L | < 246 | < 247 | < 281 | < 200 | < 207 |

NS - Not Sampled
Results in **BOLD** indicate detections above the CRDL.
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.

**APPENDIX A**
**WET CHEMISTRY IN THE DDC SYSTEM**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | TP-2B | TP-2B | TP-2B | TP-2B | TP-2C | TP-2C | TP-2C | TP-2C |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWTP0077 | GWTP0095 | GWTP0111 | GWTP0128 | GWTP0078 | GWTP0096 | GWTP0112 | GWTP0129 |
| | | Date | 01/20/05 | 04/28/05 | 08/11/05 | 10/19/05 | 01/20/05 | 04/28/05 | 08/11/05 | 10/19/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | |
| **NITRATE AS NITROGEN** | 0.1 | MG/L | **55.9 J** | NS | **70.6 J** | **71 J** | **78.8 J** | NS | **74.3 J** | **74.9 J** |
| **TOTAL DISSOLVED SOLIDS (RESIDUE, FILTERABLE)** | 20 | MG/L | **1460** | **1510** | | **1360** | **1720** | **1600** | **1500** | **1420** |

NS - Not Sampled
Results in **BOLD** indicate detections above the CRDL.
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.

**APPENDIX A**
**WET CHEMISTRY IN THE DDC SYSTEM**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | TP-5B | TP-5B | TP-5B | TP-5B | TP-5B | TP-5C | TP-5C |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWTP0087 | GWTP0088 Dup | GWTP0104 | GWTP0121 | GWTP0137 | GWTP0089 | GWTP0105 |
| | | Date | 01/20/05 | 01/20/05 | 04/28/05 | 08/11/05 | 10/20/05 | 01/20/05 | 04/28/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | |
| **NITRATE AS NITROGEN** | 0.1 | MG/L | **68.1 J** | **68.9 J** | NS | **73 J** | **77 J** | **75.6 J** | NS |
| **TOTAL DISSOLVED SOLIDS (RESIDUE, FILTERABLE)** | 20 | MG/L | **1450** | **1430** | **1340** | **1440** | **1330** | **1590** | **1630** |

NS - Not Sampled
Results in **BOLD** indicate detections above the CRDL.
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.

**APPENDIX A**
**WET CHEMISTRY IN THE DDC SYSTEM**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | TP-5C | TP-5C | TP-5C | UCD1-012 | UCD1-012 | UCD1-012 | UCD1-049 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWTP0122 | GWTP0138 | GWTP0139 Dup | GWGW1870 | GWGW1871 Dup | GWGW1942 | GWGW1885 |
| | | Date | 08/11/05 | 10/20/05 | 10/20/05 | 05/25/05 | 05/25/05 | 10/19/05 | 06/07/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | |
| **NITRATE AS NITROGEN** | 0.1 | MG/L | **72.6 J** | **73.3 J** | **75.9 J** | **72.2** | **68.3** | **72 J** | **61.9** |
| **TOTAL DISSOLVED SOLIDS (RESIDUE, FILTERABLE)** | 20 | MG/L | **1500** | **1520** | **1450** | **1450** | **1380** | **1490** | NS |

NS - Not Sampled
Results in **BOLD** indicate detections above the CRDL.
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.

**APPENDIX A**
**WET CHEMISTRY IN THE DDC SYSTEM**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | UCD1-049 | UCD1-050 | UCD1-050 | UCD1-050 | UCD1-051 | UCD1-051 | UCD2-048 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWGW1949 | GWGW1887 | GWGW1950 | GWGW1951 Dup | GWGW1888 | GWGW1952 | GWGW1910 |
| | | Date | 10/19/05 | 06/07/05 | 10/19/05 | 10/19/05 | 06/07/05 | 10/19/05 | 06/07/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | |
| **NITRATE AS NITROGEN** | 0.1 | MG/L | **75 J** | **76.9** | **78.4 J** | **78.3 J** | **62.4** | **81.9 J** | **3.67** |
| **TOTAL DISSOLVED SOLIDS (RESIDUE, FILTERABLE)** | 20 | MG/L | **1240** | NS | **1490** | **1450** | NS | **1520** | NS |

NS - Not Sampled
Results in **BOLD** indicate detections above the CRDL.
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.

**APPENDIX A**
**WET CHEMISTRY IN THE DDC SYSTEM**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | UCD2-048 | UCD2-048 |
|---|---|---|---|---|
| | | Sample ID | GWGW1975 | GWGW1976 Dup |
| | | Date | 10/19/05 | 10/19/05 |
| AnalyteNameShort | CRDL | UnitsID | | |
| **NITRATE AS NITROGEN** | 0.1 | MG/L | **4.85** | **4.91** |
| **TOTAL DISSOLVED SOLIDS (RESIDUE, FILTERABLE)** | 20 | MG/L | **470** | **480** |

NS - Not Sampled
Results in **BOLD** indicate detections above the CRDL.
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.

**APPENDIX A**
**VOLATILE ORGANIC COMPOUNDS IN THE DDC STACK**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | DDC-Stack | DDC-Stack |
|---|---|---|---|---|
| | | Sample ID | STACK | STACK EXHAUST |
| | | Date | 08/11/05 | 11/09/05 |
| AnalyteNameShort | CRDL | UnitsID | | |
| 1,1,1-TRICHLOROETHANE | | PPBV | < 0.5 | < 0.5 |
| 1,1,2,2-TETRACHLOROETHANE | | PPBV | < 0.5 | < 0.5 |
| 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | | PPBV | < 0.5 | < 0.5 |
| **1,1,2-TRICHLOROETHANE** | | PPBV | < 0.5 | **3.9** |
| 1,1-DICHLOROETHANE | | PPBV | < 0.5 | < 0.5 |
| **1,1-DICHLOROETHENE** | | PPBV | < 0.5 | **0.53** |
| 1,2,4-TRICHLOROBENZENE | | PPBV | < 2 | < 2 |
| **1,2,4-TRIMETHYLBENZENE** | | PPBV | **1.5** | < 0.5 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | | PPBV | < 0.5 | < 0.5 |
| 1,2-DICHLOROBENZENE | | PPBV | < 0.5 | < 0.5 |
| 1,2-DICHLOROETHANE | | PPBV | < 0.5 | < 0.5 |
| 1,2-DICHLOROPROPANE | | PPBV | < 0.5 | < 0.5 |
| 1,2-DICHLOROTETRAFLUOROETHANE | | PPBV | < 0.5 | < 0.5 UJ |
| 1,3,5-TRIMETHYLBENZENE (MESITYLENE) | | PPBV | < 0.5 | < 0.5 |
| 1,3-BUTADIENE | | PPBV | < 0.5 | < 0.5 |
| 1,3-DICHLOROBENZENE | | PPBV | < 0.5 | < 0.5 |
| 1,4-DICHLOROBENZENE | | PPBV | < 0.5 | < 0.5 |
| 1,4-DIOXANE (P-DIOXANE) | | PPBV | < 2 | < 2 |
| **2-HEXANONE** | | PPBV | **2.1 J** | **4.9** |
| 4-ETHYLTOLUENE | | PPBV | < 2 | < 2 |
| BENZENE | | PPBV | < 0.5 | < 0.5 |
| BENZYL CHLORIDE | | PPBV | < 0.5 UJ | < 0.5 |
| BROMODICHLOROMETHANE | | PPBV | < 0.5 | < 0.5 |
| BROMOFORM | | PPBV | < 2 | < 2 |
| BROMOMETHANE | | PPBV | < 0.5 | < 0.5 |
| CARBON DISULFIDE | | PPBV | < 2 UJ | < 2 |
| CARBON TETRACHLORIDE | | PPBV | < 0.5 | < 0.5 |
| CHLOROBENZENE | | PPBV | < 0.5 | < 0.5 |
| **CHLOROETHANE** | | PPBV | < 0.5 UJ | **0.74 J** |
| **CHLOROFORM** | | PPBV | < 0.5 | **200** |
| CHLOROMETHANE | | PPBV | < 2 | < 2 |
| cis-1,2-DICHLOROETHYLENE | | PPBV | < 0.5 | < 0.5 |

**APPENDIX A**
**VOLATILE ORGANIC COMPOUNDS IN THE DDC STACK**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | DDC-Stack | DDC-Stack |
|---|---|---|---|---|
| | | Sample ID | STACK | STACK EXHAUST |
| | | Date | 08/11/05 | 11/09/05 |
| AnalyteNameShort | CRDL | UnitsID | | |
| cis-1,3-DICHLOROPROPENE | | PPBV | < 0.5 | < 0.5 |
| DIBROMOCHLOROMETHANE | | PPBV | < 0.5 | < 0.5 |
| DICHLORODIFLUOROMETHANE | | PPBV | < 0.5 | < 0.5 |
| **ETHANOL** | | PPBV | **3.9** | **4.2** |
| **ETHYLBENZENE** | | PPBV | **0.56** | < 0.5 |
| HEXACHLOROBUTADIENE | | PPBV | < 2 | < 2 |
| ISOPROPANOL | | PPBV | < 2 | < 2 |
| **M,P-XYLENE (SUM OF ISOMERS)** | | PPBV | **2.2** | < 0.5 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | | PPBV | < 2 | < 2 |
| **METHYLENE CHLORIDE** | | PPBV | < 0.5 | **0.69** |
| **n-HEPTANE** | | PPBV | **2.5** | **2.1** |
| n-HEXANE | | PPBV | < 0.5 | < 0.5 |
| **O-XYLENE (1,2-DIMETHYLBENZENE)** | | PPBV | **0.76** | < 0.5 |
| STYRENE | | PPBV | < 0.5 | < 0.5 |
| tert-BUTYL METHYL ETHER | | PPBV | < 2 | < 2 |
| TETRACHLOROETHYLENE(PCE) | | PPBV | < 0.5 | < 0.5 |
| **TOLUENE** | | PPBV | **1.7** | **4** |
| trans-1,2-DICHLOROETHENE | | PPBV | < 2 | < 2 |
| trans-1,3-DICHLOROPROPENE | | PPBV | < 0.5 | < 0.5 |
| TRICHLOROETHYLENE (TCE) | | PPBV | < 0.5 | < 0.5 |
| TRICHLOROFLUOROMETHANE | | PPBV | < 0.5 | < 0.5 |
| VINYL ACETATE | | PPBV | < 2 | < 2 UJ |
| VINYL CHLORIDE | | PPBV | < 0.5 | < 0.5 |

Results in **BOLD** indicate detections.
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.

# APPENDIX B

## Groundwater IRA Treatment System 2005 Operation Log

**Appendix B**
**Groundwater IRA Treatment System 2005 Operation Log**
**2005 Comprehensive Annual Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, CA**

| | | EXTRACTION SYSTEM | | | | | | | CWTP | IRRIGATION | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | System On | | System Off | | Flow Rate | Totalizer | Flow Rate | Totalizer | Totalizer | |
| DATE | TIME | Note | Hours | Note | Hours | (gpm) | (gallons) | (gpm) | (gallons) | (gallons) | Notes |
| 01/01/05 | 0:00 | -- | 0.00 | O | 0.00 | -- | 102,637,912 | -- | 9,073,944 | *7,070,562* | All totalizer values were estimated. |
| 01/05/05 | 11:00 | X | 0.00 | -- | 107.00 | 35 | 102,637,912 | -- | 9,073,944 | 7,070,562 | All totalizer values were estimated. GWT system shut down due to a high injection well level. Injection well needs to be rehabilitated or replaced. |
| 01/05/05 | 11:30 | -- | 0.50 | A | 0.00 | | -- | -- | -- | -- | All totalizer values were estimated. GWT system shut down due to a high injection well level. Injection well needs to be rehabilitated or replaced. |
| 01/31/05 | 0:00 | -- | 0.00 | -- | 612.50 | -- | 102,638,962 | -- | 9,073,944 | *7,071,145* | All totalizer values were estimated. |
| **January Total** | | | **0.50** | | **719.50** | **35** | **1,050** | **19** | **0** | **583** | **January 2005 uptime = 0%** |
| 02/01/05 | 0:00 | -- | 0.00 | O | 0.00 | -- | 102,638,962 | -- | 9,073,944 | *7,071,145* | All totalizer values were estimated. GWT system shut down due to a high injection well level. Injection well needs to be rehabilitated or replaced. |
| 02/28/05 | 0:00 | -- | 0.00 | O | 672.00 | -- | 102,638,962 | -- | 9,073,944 | *7,071,145* | All totalizer values were estimated. |
| **February Total** | | | **0.00** | | **672.00** | **0** | **0** | **0** | **0** | **0** | **February 2005 uptime = 0%** |
| 03/01/05 | 0:00 | -- | 0.00 | O | 0.00 | -- | 102,638,962 | -- | 9,073,944 | *7,071,145* | All totalizer values were estimated. GWT system shut down due to a high injection well level. Injection well needs to be rehabilitated or replaced. |
| 03/31/05 | 0:00 | -- | 0.00 | O | 744.00 | -- | 102,638,962 | -- | 9,073,944 | *7,071,145* | All totalizer values were estimated. |
| **March Total** | | | **0.00** | | **744.00** | **0** | **0** | **0** | **0** | **0** | **March 2005 uptime = 0%** |
| 04/01/05 | 0:00 | -- | 0.00 | O | 0.00 | -- | 102,638,962 | -- | 9,073,944 | *7,071,145* | All totalizer values were estimated. GWT system shut down due to a high injection well level. Injection well needs to be rehabilitated or replaced. |
| 04/30/05 | 0:00 | -- | 0.00 | O | 720.00 | -- | 102,638,962 | -- | 9,073,944 | *7,071,145* | All totalizer values were estimated. |
| **April Total** | | | **0.00** | | **720.00** | **0** | **0** | **0** | **0** | **0** | **April 2005 uptime = 0%** |
| 05/03/05 | 14:30 | X | 0.00 | -- | 62.50 | 53 | 102,644,227 | -- | 9,073,944 | 7,071,145 | GWT system running. Discharging to sewer. Use influent meter for effluent totals. |
| 05/05/05 | 21:00 | -- | 54.50 | A | 0.00 | -- | 102,644,227 | -- | -- | -- | GWT system shut down due to a high influent tank level. |
| 05/09/05 | 11:00 | X | 0.00 | -- | 86.00 | 50 | 102,749,346 | -- | 9,073,944 | 7078455 | GWT system running. Discharging to sewer. Use influent meter for effluent totals. |
| 05/11/05 | 11:00 | -- | 48.00 | A | 0.00 | -- | 102,749,346 | -- | -- | -- | GWT system shut down due to a high influent tank level. |
| 05/12/05 | 13:30 | X | 0.00 | -- | 26.50 | 53 | 102,901,453 | -- | 9,075,388 | 7081708 | GWT system running. Discharging to sewer/irrigation tank. Use influent meter for effluent totals. |
| 05/13/05 | 9:30 | -- | 20.00 | A | 0.00 | -- | 102,901,453 | -- | -- | -- | GWT system shut down due to a high influent tank level. |

**Appendix B**
**Groundwater IRA Treatment System 2005 Operation Log**
**2005 Comprehensive Annual Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, CA**

| | | EXTRACTION SYSTEM | | | | | | | CWTP | IRRIGATION | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | System On | | System Off | | Flow Rate | Totalizer | Flow Rate | Totalizer | Totalizer | |
| DATE | TIME | Note | Hours | Note | Hours | (gpm) | (gallons) | (gpm) | (gallons) | (gallons) | Notes |
| 05/16/05 | 12:15 | X | 0.00 | -- | 74.75 | 55 | 102,965,410 | -- | 9,078,390 | 7081715 | GWT system running. Discharging to sewer/irrigation tank. Use influent meter for effluent totals. |
| 05/23/05 | 10:00 | X | 165.75 | -- | 0.00 | 67 | 103,608,819 | -- | 9,196,186 | 7208175 | GWT system running. Discharging to sewer/irrigation tank. Use influent meter for effluent totals. |
| 05/29/05 | 17:40 | -- | 151.67 | A | 0.00 | -- | 103,608,819 | -- | -- | -- | GWT system shut down due to a high air stripper sump level. |
| 05/31/05 | 11:00 | X | 0.00 | -- | 41.33 | 55 | 104,241,681 | -- | 9,320,300 | 7358370 | GWT system running. Discharging to sewer/irrigation tank. Use influent meter for effluent totals. |
| **May Total** | | | **439.92** | | **291.08** | | **1,602,719** | | **246,356** | **287,225** | **May 2005 uptime = 60%** |
| 06/08/05 | 13:00 | X | 194.00 | -- | 0.00 | 60 | 104,943,281 | -- | 9,459,767 | 7,501,610 | GWT system running. Discharging to sewer/irrigation tank. Use influent meter for effluent totals. |
| 06/17/05 | 11:40 | X | 214.67 | -- | 0.00 | 61 | 105,724,289 | -- | 9,511,849 | 7,556,355 | GWT system running. Discharging to sewer/irrigation tank. Use influent meter for effluent totals. |
| 06/27/05 | 14:00 | X | 457.00 | -- | 0.00 | 63 | 106,606,576 | -- | 9,585,640 | 7,643,598 | GWT system running. Discharging to sewer/irrigation tank. Use influent meter for effluent totals. |
| 06/30/05 | 14:00 | X | 58.00 | -- | 0.00 | 63 | 106,610,230 | -- | 9,585,640 | 7,643,598 | GWT system running. Discharging to sewer/irrigation tank. Use influent meter for effluent totals. |
| **June Total** | | | **923.67** | | **0.00** | **0** | **2,368,549** | **0** | **265,340** | **285,228** | **June 2005 uptime = 100%** |
| 06/30/05 | | | | | | | 106,610,230 | | 9,585,640 | 7,643,598 | |
| 07/06/05 | 11:15 | X | 213.25 | -- | 0.00 | 60 | 107,381,306 | -- | 9,695,155 | 7,769,085 | GWT system running. Discharging to sewer/irrigation tank. Use influent meter for effluent totals. |
| 07/13/05 | 10:15 | X | 167.00 | -- | 0.00 | 60 | 107,847,780 | -- | 9,803,620 | 7,883,890 | GWT system running. Discharging to sewer/irrigation tank. Use influent meter for effluent totals. |
| 07/21/05 | 11:15 | X | 193.00 | -- | 0.00 | 62 | 108,686,078 | -- | 9,999,146 | 8,048,167 | GWT system running. Discharging to sewer/irrigation tank. Use influent meter for effluent totals. |
| 07/29/05 | 14:15 | X | 195.00 | -- | 0.00 | 61 | 109,389,602 | -- | 10,178,083 | 8,254,756 | GWT system running. Discharging to sewer/irrigation tank. Use influent meter for effluent totals. |
| **July Total** | | | **768.25** | | **0.00** | | **2,779,372** | | **592,443** | **611,158** | **July 2005 uptime = 100%** |
| 07/29/05 | 14:15 | X | 195.00 | -- | 0.00 | 63 | 109,389,602 | -- | 10,178,083 | 8,254,756 | GWT system running. Discharging to sewer/irrigation tank. Use influent meter for effluent totals. |
| 08/05/05 | 13:45 | X | 167.50 | -- | 0.00 | 60 | 109,995,191 | -- | 10,285,822 | 8,368,969 | GWT system running. Discharging to sewer/irrigation tank. Use influent meter for effluent totals. |
| 08/12/05 | 14:30 | X | 168.75 | -- | 0.00 | 62 | 110,607,334 | -- | 10,395,716 | 8,472,000 | GWT system running. Discharging to sewer/irrigation tank. Use influent meter for effluent totals. |
| 08/17/05 | 14:15 | -- | 119.75 | M | 0.00 | -- | -- | -- | -- | -- | Effluent volatile organic compound data indicates unusual detections in treated effluent. System shut down 1 hour for stripper inspection. |

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**2005 Comprehensive Annual Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, CA**

| | | EXTRACTION SYSTEM | | | | | | | CWTP | IRRIGATION | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | System On | | System Off | | Flow Rate | Totalizer | Flow Rate | Totalizer | Totalizer | |
| DATE | TIME | Note | Hours | Note | Hours | (gpm) | (gallons) | (gpm) | (gallons) | (gallons) | Notes |
| 08/17/05 | 15:15 | X | 0.00 | -- | 1.00 | 62 | 111,038,447 | -- | 10,444,485 | 8,541,015 | GWT system running. Discharging to sewer/irrigation tank. Use influent meter for effluent totals. |
| 08/22/05 | 11:30 | -- | 116.25 | M | 0.00 | -- | -- | -- | -- | -- | System shut down 3 hours for stripper inspection. |
| 08/22/05 | 14:30 | X | 0.00 | -- | 3.00 | 65 | 111,466,736 | -- | 10,481,560 | 8,586,226 | GWT system running. Discharging to sewer/irrigation tank. Use influent meter for effluent totals. |
| 08/29/05 | 14:00 | X | 167.50 | -- | 0.00 | 63 | 112,117,006 | -- | 10,595,964 | 8,708,365 | GWT system running. Discharging to sewer/irrigation tank. Use influent meter for effluent totals. |
| **August Total** | | | **934.75** | | **4.00** | | **2,727,404** | | **417,881** | **453,609** | **August 2005 uptime = 100%** |
| 09/06/05 | 11:45 | R | 189.75 | -- | 0.00 | 64 | 112,853,515 | -- | 10,705,582 | 8,829,920 | GWT system running. Discharging to sewer/irrigation tank. Use influent meter for effluent totals. |
| 09/13/05 | 13:15 | R | 169.50 | -- | 0.00 | 64 | 113,508,353 | -- | 10,819,314 | 8,961,870 | GWT system running. Discharging to sewer/irrigation tank. Use influent meter for effluent totals. |
| 09/14/05 | 9:15 | -- | 20.00 | A | 0.00 | -- | -- | -- | -- | -- | System shut down. Reason unknown. |
| 09/14/05 | 14:15 | X | 0.00 | -- | 5.00 | 63 | 113,586,275 | -- | 10,829,519 | 8,981,091 | Restarted system. Discharging to the sewer. Irrigation tank at low level. |
| 09/19/05 | 4:15 | -- | 110.00 | A | 0.00 | -- | -- | -- | -- | -- | System shut down due to Extraction Well shutdown. Possible power glitch. |
| 09/19/05 | 11:00 | X | 0.00 | -- | 6.75 | 63 | 113,769,454 | -- | 10,875,734 | 9,033,264 | Restarted system. Discharging to the sewer. Irrigation tank at low level. |
| 09/27/05 | 11:15 | R | 192.25 | -- | 0.00 | 63 | 114,509,180 | -- | 11,041,615 | 9,214,256 | GWT system running. Discharging to irrigation tank. Use influent meter for effluent totals. |
| **September Total** | | | **681.50** | | **11.75** | | **2,392,174** | | **445,651** | **505,891** | **September 2005 uptime = 98%** |
| 10/04/05 | 11:00 | R | 167.75 | -- | 0.00 | 63 | 115,159,815 | -- | 11,154,720 | 9,337,280 | GWT system running. Discharging to irrigation tank. Use influent meter for effluent totals. |
| 10/07/05 | 14:15 | R | 75.25 | -- | 0.00 | 63 | 115,452,627 | -- | 11,242,210 | 9,429,285 | GWT system running. Discharging to irrigation tank. Use influent meter for effluent totals. |
| 10/17/05 | 15:00 | R | 240.75 | -- | 0.00 | 65 | 116,396,050 | -- | 11,332,670 | 9,532,965 | GWT system running. Discharging to sewer. Use influent meter for effluent totals. |
| 10/24/05 | 11:00 | R | 164.00 | -- | 0.00 | 64 | 117,038,386 | -- | 11,388,188 | 9,592,485 | GWT system running. Discharging to irrigation tank. Use influent meter for effluent totals. |
| 10/31/05 | 14:15 | R | 171.25 | -- | 0.00 | 62 | 117,666,318 | -- | 11,426,355 | 9,638,330 | |
| **October Total** | | | **819.00** | | **0.00** | | **3,157,138** | | **384,740** | **424,074** | **October 2005 uptime = 100%** |
| 11/03/05 | 10:55 | R | 68.67 | -- | 0.00 | 63 | 117,917,100 | -- | 11,426,366 | 9,638,330 | GWT system running. Discharging to sewer. Use influent meter for effluent totals. Shut down for 45 min. to repair intake screen. |
| 11/08/05 | 11:15 | R | 120.33 | -- | 0.00 | 62 | 118,363,075 | -- | 11,426,366 | 9,639,480 | GWT system running. Discharging to sewer. Use influent meter for effluent totals. |

**Appendix B**
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**2005 Comprehensive Annual Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, CA**

| | | EXTRACTION SYSTEM | | | | | | | CWTP | IRRIGATION | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | System On | | System Off | | Flow Rate | Totalizer | Flow Rate | Totalizer | Totalizer | |
| DATE | TIME | Note | Hours | Note | Hours | (gpm) | (gallons) | (gpm) | (gallons) | (gallons) | Notes |
| 11/14/05 | 14:15 | R | 147.00 | -- | 0.00 | 62 | 118,366,457 | -- | 11,426,385 | 9,639,480 | GWT system running. Discharging to sewer. Use influent meter for effluent totals. |
| 11/17/05 | 9:00 | -- | 66.75 | A | 0.00 | -- | -- | -- | -- | -- | GWT system shut down due to a high influent tank level. |
| 11/21/05 | 13:30 | X | 0.00 | -- | 100.50 | 50 | 118,539,156 | -- | 11,426,456 | 9,639,480 | Restarted GWT system. High influent tank level. Discharging to sewer. Use influent meter for effluent totals. |
| 11/29/05 | 14:00 | R | 192.50 | -- | 0.00 | 50 | 119,103,349 | -- | 11,454,714 | 9,681,268 | GWT system running. Discharging to sewer. Use influent meter for effluent totals. |
| **NovemberTotal** | | | **595.25** | | **100.50** | | **1,437,031** | | **28,359** | **42,938** | **November 2005 uptime = 86%** |
| 12/07/05 | 13:46 | R | 191.77 | -- | 0.00 | 50 | 119,680,933 | -- | 11,474,114 | 9,696,696 | GWT system running. Discharging to sewer. Use influent meter for effluent totals. |
| 12/13/05 | 13:45 | R | 143.98 | -- | 0.00 | 50 | 120,119,330 | -- | 11,488,721 | 9,711,097 | GWT system running. Discharging to sewer. Use influent meter for effluent totals. |
| 12/14/05 | 13:30 | -- | 23.75 | A | 0.00 | -- | -- | -- | -- | -- | The extractiion well shut down during a power interruption on 12/14. |
| 12/20/05 | 13:00 | X | 0.00 | -- | 143.50 | 53 | 120,190,463 | -- | 11,488,762 | 9,711,098 | Restarted GWT system. Discharging to sewer. Use influent meter for effluent totals. |
| 12/28/05 | 14:00 | R | 193.00 | -- | 0.00 | 54 | 120,824,215 | -- | 11,488,807 | 9,711,098 | Restarted GWT system. Discharging to sewer. Use influent meter for effluent totals. |
| **December Total** | | | **552.50** | | **143.50** | | **1,720,866** | | **34,093** | **29,830** | **December 2005 uptime = 79%** |
| **2005 Total** | | | **4896.33** | | **3406.33** | | **18,186,303** | | **2,414,863** | **2,640,536** | **2005 2005 uptime = 59%** |

Notes:
- A = Automatic Shut-off
- M = Manual Shut-off
- NA = Totalizer Reading not taken
- CWTP = UC Davis Campus Wastewater Treatment Plant
- O = System Off
- R = System Running
- X = System Start-up
- -- = Not Applicable

# APPENDIX C

## 2005 IRA Treatment System Analytical Results

**APPENDIX C**
**VOLATILE ORGANIC COMPOUNDS - IRA SYSTEM**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | SP-2 | SP-2 | SP-2 | SP-2 | SP-2 | SP-2 | SP-2 | SP-2 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | TPIN0323 | TPIN0324 | TPIN0325 | TPIN0326 | TPIN0327 | TPIN0328 | TPIN0329 | TPIN0330 |
| | | Date | 05/03/05 | 06/21/05 | 07/27/05 | 08/10/05 | 09/08/05 | 10/20/05 | 12/01/05 | 12/13/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | < 0.104 | < 0.104 UJ | < 0.104 UJ | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.104 |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | 0.353 J | 0.334 J | 0.384 J | 0.399 J | 0.313 J | 0.332 J | 0.277 J | 0.325 J |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | 0.215 J | < 0.1 UJ | < 0.1 UJ | 0.324 J | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 UJ | < 0.25 UJ | < 0.25 | < 0.25 UJ | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | **0.603** | **0.658 J** | **0.634 J** | **0.754** | **0.615** | **0.579** | **0.574** | **0.53** |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | **0.736** | **0.746 J** | **0.883 J** | **1.03** | **0.793** | **0.781** | **0.66** | **0.709** |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.5 | < 0.5 UJ | < 0.5 UJ | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| ACETONE | 5 | UG/L | < 0.37 | < 0.37 UJ | **11.9 J** | **6.34** | < 0.37 | < 0.37 | < 0.37 | < 0.37 |
| BENZENE | 0.5 | UG/L | < 0.135 | < 0.135 UJ | < 0.135 UJ | < 0.135 | < 0.135 | < 0.135 | < 0.135 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 | < 0.104 UJ | < 0.104 UJ | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.104 |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| BROMOFORM | 0.5 | UG/L | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 UJ | < 0.25 UJ | < 0.25 | < 0.25 | < 0.25 | 0.413 J | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.446 | < 0.446 UJ | < 0.446 UJ | < 0.446 | < 0.446 | < 0.446 | < 0.446 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| CHLOROFORM | 0.5 | UG/L | **39.1** | **44 J** | **61.1 J** | **65.5** | **49.7** | **46.5** | **33.7** | **39.2** |
| CHLOROMETHANE | 0.5 | UG/L | < 0.24 | < 0.24 UJ | < 0.24 UJ | < 0.24 | < 0.24 | < 0.24 | 0.369 J | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.081 UJ | < 0.081 UJ | < 0.081 | < 0.081 | < 0.081 | < 0.081 | < 0.081 |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | < 0.438 | 0.89 J | **2.75 J** | **1.39** | < 0.438 | < 0.438 | < 0.438 | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | < 0.5 UJ | < 0.5 UJ | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| METHYLENE CHLORIDE | 1 | UG/L | < 1.25 UJ | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| TOLUENE | 0.5 | UG/L | < 0.056 | < 0.056 UJ | < 0.056 UJ | < 0.056 | < 0.056 | < 0.056 | < 0.056 | < 0.056 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.114 UJ | < 0.114 UJ | < 0.114 | < 0.114 | < 0.114 | < 0.114 | < 0.114 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.11 UJ | < 0.11 UJ | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | < 0.175 UJ | < 0.175 UJ | < 0.175 | < 0.175 | < 0.175 | < 0.175 | < 0.175 |

NS - Not Sampled
J - Validation qualifier for estimated values; sample exceeds quantitation range
UJ - Estimated value falls below reporting limit
Results in **BOLD** indicate detections above the CRDL
µg/L - micrograms per liter

**APPENDIX C**
**VOLATILE ORGANIC COMPOUNDS - IRA SYSTEM**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | SP-5 | SP-5 | SP-5 | SP-5 | SP-5 | SP-5 | SP-5 | SP-5 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | TPEF0323 | TPEF0324 | TPEF0325 | TPEF0326 | TPEF0327 | TPEF0328 | TPEF0329 | TPEF0330 |
| | | Date | 05/30/05 | 06/21/05 | 07/27/05 | 08/10/05 | 09/08/05 | 10/20/05 | 12/01/05 | 12/13/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | < 0.104 | < 0.104 UJ | < 0.104 UJ | < 0.104 | < 0.104 | < 0.104 UJ | < 0.104 | < 0.104 |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | < 0.101 | < 0.101 UJ | < 0.101 UJ | < 0.101 | < 0.101 | < 0.101 UJ | < 0.101 | < 0.101 |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 UJ | < 0.25 UJ | < 0.25 | < 0.25 | < 0.25 UJ | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | < 0.103 | < 0.103 UJ | < 0.103 UJ | < 0.103 | < 0.103 | < 0.103 UJ | < 0.103 | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.5 | < 0.5 UJ | < 0.5 UJ | < 0.5 | < 0.5 | < 0.5 UJ | < 0.5 | < 0.5 |
| ACETONE | 5 | UG/L | 1.4 J | < 0.37 UJ | < 0.37 UJ | 4.43 J | **5.22** | 0.644 J | < 0.37 | < 0.37 |
| BENZENE | 0.5 | UG/L | < 0.135 | < 0.135 UJ | < 0.135 UJ | < 0.135 | < 0.135 | < 0.135 UJ | < 0.135 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 | < 0.104 UJ | < 0.104 UJ | < 0.104 | < 0.104 | < 0.104 UJ | < 0.104 | < 0.104 |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 |
| BROMOFORM | 0.5 | UG/L | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 UJ | < 0.25 UJ | < 0.25 | < 0.25 | < 0.25 UJ | 0.331 J | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.446 | < 0.446 UJ | < 0.446 UJ | < 0.446 | < 0.446 | < 0.446 UJ | < 0.446 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 |
| CHLOROFORM | 0.5 | UG/L | **1.81** | **2.13 J** | **2.41 J** | **2.81** | < 0.11 | < 0.11 UJ | < 0.11 | < 0.11 |
| CHLOROMETHANE | 0.5 | UG/L | < 0.24 | < 0.24 UJ | < 0.24 UJ | < 0.24 | < 0.24 | < 0.24 UJ | < 0.24 | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.081 UJ | < 0.081 UJ | < 0.081 | < 0.081 | < 0.081 UJ | < 0.081 | < 0.081 |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | < 0.438 | < 0.438 UJ | < 0.438 UJ | < 0.438 | **1.13** | < 0.438 UJ | < 0.438 | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | < 0.5 UJ | < 0.5 UJ | < 0.5 | < 0.5 | < 0.5 UJ | < 0.5 | < 0.5 |
| METHYLENE CHLORIDE | 1 | UG/L | < 1.33 UJ | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 |
| TOLUENE | 0.5 | UG/L | < 0.056 | < 0.056 UJ | < 0.056 UJ | < 0.056 | < 0.056 | < 0.056 UJ | < 0.056 | < 0.056 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.114 UJ | < 0.114 UJ | < 0.114 | < 0.114 | < 0.114 UJ | < 0.114 | < 0.114 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.11 UJ | < 0.11 UJ | < 0.11 | < 0.11 | < 0.11 UJ | < 0.11 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | < 0.175 UJ | < 0.175 UJ | < 0.175 | < 0.175 | < 0.175 UJ | < 0.175 | < 0.175 |

NS - Not Sampled
J - Validation qualifier for estimated values; sample exceeds quantitation range
UJ - Estimated value falls below reporting limit
Results in **BOLD** indicate detections above the CRDL
µg/L - micrograms per liter

**APPENDIX C**
**METALS - IRA SYSTEM**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | SP-5 | SP-5 | SP-5 | SP-5 | SP-5 | SP-5 | SP-5 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | TPEF0323 | TPEF0324 | TPEF0325 | TPEF0326 | TPEF0327 | TPEF0328 | TPEF0329 |
| | | Date | 05/30/05 | 06/21/05 | 07/27/05 | 08/10/05 | 09/08/05 | 10/20/05 | 12/01/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | |
| ANTIMONY | 5 | UG/L | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| ARSENIC | 3 | UG/L | < 1.5 | 1.9 J | 3 J | < 1.5 | 2.99 J | < 3.26 UJ | 2.44 J |
| BARIUM | 20 | UG/L | **183** | **210** | **152** | **171** | **146** | **165** | **162** |
| BERYLLIUM | 1 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| BORON | 50 | UG/L | **574** | **545** | **575** | **571** | **533** | **490** | **513** |
| CADMIUM | 1 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| CALCIUM | 2000 | UG/L | **44100** | **64500** | **40900** | **42400** | | | **41200** |
| CHROMIUM, TOTAL | 10 | UG/L | **21.7** | **24** | **22.5** | **23.2** | **21.7** | **21.9** | **25.2** |
| COBALT | 10 | UG/L | 0.458 J | 0.278 J | 0.326 J | 0.512 J | 0.483 J | 0.331 J | 0.257 J |
| COPPER | 10 | UG/L | 2.64 J | 5.81 J | 1.95 J | 1.42 J | 1.76 J | 1.28 J | 1.2 J |
| IRON | 100 | UG/L | **137** | **347** | **147** | **180** | **181** | **158** | **168** |
| LEAD | 3 | UG/L | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| MAGNESIUM | 2000 | UG/L | **70500** | **73600** | **69300** | **73400** | NS | NS | **74600** |
| MANGANESE | 10 | UG/L | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 |
| MERCURY | 0.2 | UG/L | < 0.05 | < 0.05 | < 0.106 UJ | < 0.05 | < 0.05 | 0.0503 J | < 0.107 UJ |
| MOLYBDENUM | 10 | UG/L | 1.81 J | 1.61 J | 1.61 J | 1.84 J | 1.62 J | 1.73 J | 1.77 J |
| NICKEL | 20 | UG/L | 1.79 J | 2.05 J | 1.49 J | 2.04 J | 2.06 J | 1.71 J | 1.28 J |
| POTASSIUM | 2000 | UG/L | 779 J | 771 J | 750 J | 764 J | NS | NS | 743 J |
| SELENIUM | 3 | UG/L | < 2.5 | < 2.5 | **3.4 J** | < 2.5 | < 2.5 | < 2.5 | < 2.5 |
| SILVER | 10 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| SODIUM | 2000 | UG/L | **40500** | **42000** | **37800** | **40500** | NS | NS | **39900** |
| THALLIUM | 10 | UG/L | < 0.4 | < 0.4 | < 0.4 | < 0.4 | < 0.4 | < 0.4 | < 0.4 |
| VANADIUM | 10 | UG/L | < 5.91 UJ | **10.5** | < 12.5 UJ | < 8.16 UJ | 9.2 J | **10.1 J** | < 9.54 UJ |
| ZINC | 20 | UG/L | 7.53 J | 18.2 J | < 6.76 UJ | < 3.94 UJ | 6.46 J | < 2 | 2.1 J |

NS - Not Sampled
J - Validation qualifier for estimated values; sample exceeds quantitation range
UJ - Estimated value falls below reporting limit
Results in **BOLD** indicate detections above the CRDL

**APPENDIX C**
**RADs - IRA SYSTEM**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | SP-2 | SP-2 | | SP-2 | SP-2 | SP-2 | SP-2 | SP-2 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | TPIN0323 | TPIN0324 | SP-2 TPIN0325 | TPIN0326 | TPIN0327 | TPIN0328 | TPIN0329 | TPIN0330 |
| | | Date | 05/03/05 | 06/21/05 | 07/27/05 | 08/10/05 | 09/08/05 | 10/20/05 | 12/01/05 | 12/13/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | |
| ACTINIUM 228 | 20 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS |
| AMERICIUM-241 | 1 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS |
| BISMUTH-212 | 70 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS |
| BISMUTH-214 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS |
| CARBON-14 | 20 | PCI/L | < 17 | < 14.8 | < 15.9 | < 14 | < 13.9 | < 13.6 | < 12.7 | < 12.6 |
| CESIUM-137 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS |
| COBALT-60 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-210 | 150 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-212 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-214 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS |
| PLUTONIUM-241 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS |
| POTASSIUM-40 | 100 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS |
| RADIUM-226 | 1 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS |
| SODIUM-22 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS |
| STRONTIUM-90 | 1 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS |
| THALLIUM-208 | 5 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS |
| THORIUM-234 | 200 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS |
| TRITIUM (HYDROGEN-3) | 300 | PCI/L | < 195 | < 208 | < 289 | < 271 | < 261 | < 220 | < 278 | < 208 |
| URANIUM-235 | 25 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS |
| URANIUM-238 | 500 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS |

NS - Not Sampled
J - Validation qualifier for estimated values; sample exceeds quantitation range
UJ - Estimated value falls below reporting limit
Results in **BOLD** indicate detections above the CRDL
µg/L - micrograms per liter

**APPENDIX C**
**WET CHEMISTRY - IRA SYSTEM**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | ASDP | ASDP | ASDP | ASDP | ASDP | ASDP | ASDP | ASDP |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | ASDP0323 | ASDP0324 | ASDP0325 | ASDP0326 | ASDP0327 | ASDP0328 | ASDP0329 | ASDP0330 |
| | | Date | 05/30/05 | 06/21/05 | 07/27/05 | 08/10/05 | 09/08/05 | 10/20/05 | 12/01/05 | 12/13/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | |
| ALKALINITY, TOTAL (AS CaCO3) | 10 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| CHLORIDE (AS CL) | 1 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| NITRATE AS NITROGEN | 0.1 | MG/L | **5.56 J** | **6.23** | **6.28** | **6.36** | **5.93** | **5.78 J** | **6.18** | **7.33** |
| SULFATE (AS SO4) | 1 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| TOTAL DISSOLVED SOLIDS (RESIDUE, FILTERABLE) | 20 | MG/L | **462** | **493** | **482** | **509** | **479** | **504** | **485** | **459** |
| TOTAL ORGANIC CARBON | 1 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| TOTAL SUSPENDED SOLIDS | | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |

NS - Not Sampled
J - Validation qualifier for estimated values; sample exceeds quantitation range
UJ - Estimated value falls below reporting limit
Results in **BOLD** indicate detections above the CRDL

**APPENDIX C**
**WET CHEMISTRY - IRA SYSTEM**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

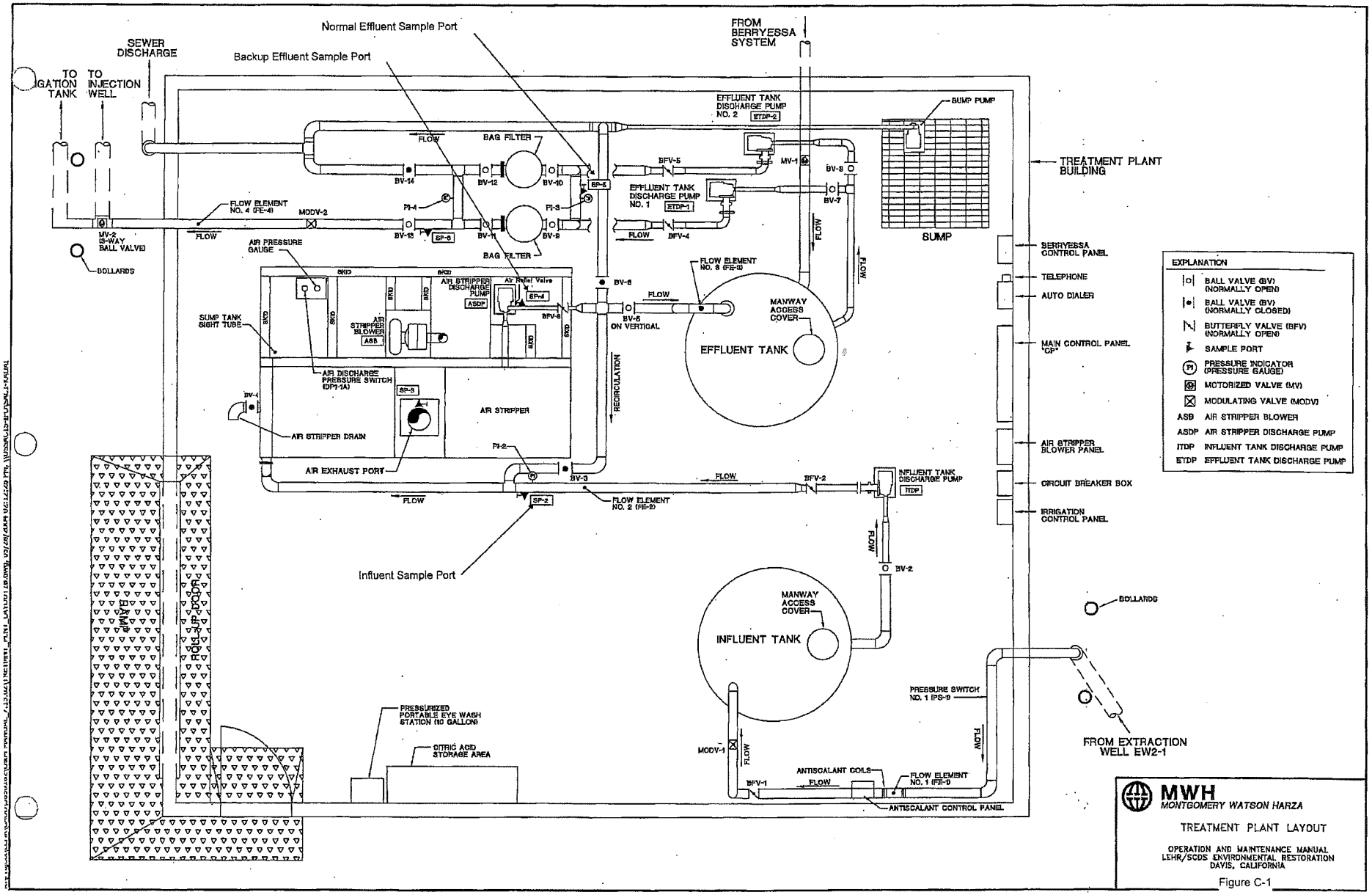
| | | Location | SP-2 | SP-2 | SP-2 | SP-2 | SP-2 | SP-2 | SP-2 | SP-5 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | TPIN0324 | TPIN0325 | TPIN0326 | TPIN0327 | TPIN0328 | TPIN0329 | TPIN0330 | TPEF0323 |
| | | Date | 06/21/05 | 07/27/05 | 08/10/05 | 09/08/05 | 10/20/05 | 12/01/05 | 12/13/05 | 05/30/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | |
| ALKALINITY, TOTAL (AS CaCO3) | 10 | MG/L | NS | NS | NS | NS | NS | NS | NS | **353** |
| CHLORIDE (AS CL) | 1 | MG/L | NS | NS | NS | NS | NS | NS | NS | **19.4** |
| NITRATE AS NITROGEN | 0.1 | MG/L | NS | NS | NS | NS | NS | NS | NS | **5.52 J** |
| SULFATE (AS SO4) | 1 | MG/L | NS | NS | NS | NS | NS | NS | NS | **36.8** |
| TOTAL DISSOLVED SOLIDS (RESIDUE, FILTERABLE) | 20 | MG/L | NS | NS | NS | NS | NS | NS | NS | **469** |
| TOTAL ORGANIC CARBON | 1 | MG/L | **1.1** | **1.62** | 0.885 J | **1.35** | **1.42** | < 0.939 UJ | < 1.17 UJ | NS |
| TOTAL SUSPENDED SOLIDS | | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |

NS - Not Sampled
J - Validation qualifier for estimated values; sample exceeds quantitation range
UJ - Estimated value falls below reporting limit
Results in **BOLD** indicate detections above the CRDL

**APPENDIX C**
**WET CHEMISTRY - IRA SYSTEM**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | SP-5 | SP-5 | SP-5 | SP-5 | SP-5 | SP-5 | SP-5 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | TPEF0324 | TPEF0325 | TPEF0326 | TPEF0327 | TPEF0328 | TPEF0329 | TPEF0330 |
| | | Date | 06/21/05 | 07/27/05 | 08/10/05 | 09/08/05 | 10/20/05 | 12/01/05 | 12/13/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | |
| ALKALINITY, TOTAL (AS CaCO3) | 10 | MG/L | **396** | **372** | **402** | **342** | **348** | **364** | **369** |
| CHLORIDE (AS CL) | 1 | MG/L | **19.7** | **21.3** | **21** | **18.8** | **20.5** | **21.1** | **25.6** |
| NITRATE AS NITROGEN | 0.1 | MG/L | **6.21** | **6.3** | **6.34** | **5.93** | **5.94 J** | **6.2** | **7.33** |
| SULFATE (AS SO4) | 1 | MG/L | **36.5** | **39** | **38.3** | **34.9** | **38.7** | **39.6** | **45.5** |
| TOTAL DISSOLVED SOLIDS (RESIDUE, FILTERABLE) | 20 | MG/L | **484** | **482** | **495** | **483** | **493** | **467** | **481** |
| TOTAL ORGANIC CARBON | 1 | MG/L | NS | 0.62 | NS | NS | NS | NS | < 0.856 UJ |
| TOTAL SUSPENDED SOLIDS | | MG/L | NS | NS | NS | NS | NS | NS | NS |

NS - Not Sampled
J - Validation qualifier for estimated values; sample exceeds quantitation range
UJ - Estimated value falls below reporting limit
Results in **BOLD** indicate detections above the CRDL



Normal Effluent Sample Port
Backup Effluent Sample Port
SEWER DISCHARGE
TO IRRIGATION TANK
TO INJECTION WELL
FROM BERRYESSA SYSTEM
EFFLUENT TANK DISCHARGE PUMP NO. 2 ETDP-2
SUMP PUMP
TREATMENT PLANT BUILDING
BAG FILTER
BAG FILTER
EFFLUENT TANK DISCHARGE PUMP NO. 1 ETDP-1
SUMP
FLOW ELEMENT NO. 4 (FE-4)
MODV-2
MV-2 (3-WAY BALL VALVE)
BOLLARDS
AIR PRESSURE GAUGE
AIR STRIPPER DISCHARGE PUMP ASDP
Air Relief Valve
AIR STRIPPER BLOWER ASB
SUMP TANK SIGHT TUBE
AIR DISCHARGE PRESSURE SWITCH (DP1-1A)
AIR STRIPPER
AIR STRIPPER DRAIN
AIR EXHAUST PORT
FLOW ELEMENT NO. 3 (FE-3)
BV-5 ON VERTICAL
MANWAY ACCESS COVER
EFFLUENT TANK
RECIRCULATION
FLOW ELEMENT NO. 2 (FE-2)
INFLUENT TANK DISCHARGE PUMP ITDP
Influent Sample Port
MANWAY ACCESS COVER
INFLUENT TANK
BERRYESSA CONTROL PANEL
TELEPHONE
AUTO DIALER
MAIN CONTROL PANEL "CP"
AIR STRIPPER BLOWER PANEL
CIRCUIT BREAKER BOX
IRRIGATION CONTROL PANEL
BOLLARDS
FROM EXTRACTION WELL EW2-1
PRESSURE SWITCH NO. 1 (PS-1)
ANTISCALANT COILS
FLOW ELEMENT NO. 1 (FE-1)
ANTISCALANT CONTROL PANEL
MODV-1
PRESSURIZED PORTABLE EYE WASH STATION (10 GALLON)
CITRIC ACID STORAGE AREA
ROLL-UP DOOR
EXPLANATION
BALL VALVE (BV) (NORMALLY OPEN)
BALL VALVE (BV) (NORMALLY CLOSED)
BUTTERFLY VALVE (BFV) (NORMALLY OPEN)
SAMPLE PORT
PRESSURE INDICATOR (PRESSURE GAUGE)
MOTORIZED VALVE (MV)
MODULATING VALVE (MODV)
ASB AIR STRIPPER BLOWER
ASDP AIR STRIPPER DISCHARGE PUMP
ITDP INFLUENT TANK DISCHARGE PUMP
ETDP EFFLUENT TANK DISCHARGE PUMP
MWH
MONTGOMERY WATSON HARZA
TREATMENT PLANT LAYOUT
OPERATION AND MAINTENANCE MANUAL
LEHR/SCDS ENVIRONMENTAL RESTORATION
DAVIS, CALIFORNIA


Figure C-1

# APPENDIX D

## 2005 Analytical Results for LTPS Soil and Groundwater

**APPENDIX D**
**VOLATILE ORGANIC COMPOUNDS IN THE LTPS GROUNDWATER WELLS**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | UCD1-011 | UCD1-011 | UCD1-011 | UCD1-011 | UCD1-011 | UCD1-018 | UCD1-018 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWGW1845 | GWGW1846 Dup | GWGW1869 | GWGW1920 | GWGW1941 | GWGW1848 | GWGW1849 Dup |
| | | Date | 02/10/05 | 02/10/05 | 05/25/05 | 08/10/05 | 10/21/05 | 02/10/05 | 02/10/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.25 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.25 |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.104 | < 0.104 | < 0.104 | < 0.25 | < 0.25 |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.101 | < 0.101 | < 0.101 | < 0.25 | < 0.25 |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.25 |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.25 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.25 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.25 |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.103 | < 0.103 | < 0.103 | < 0.25 | < 0.25 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.25 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.25 |
| 2-HEXANONE | 1 | UG/L | < 0.25 | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.25 |
| ACETONE | 5 | UG/L | < 0.25 | < 0.25 | < 0.37 | < 0.37 | < 0.37 | < 0.25 | < 0.25 |
| BENZENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.135 | < 0.135 | < 0.135 | < 0.25 | < 0.25 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.104 | < 0.104 | < 0.104 | < 0.25 | < 0.25 |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.25 |
| BROMOFORM | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.25 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | 0.594 J | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.25 | < 0.25 | < 0.446 | < 0.446 | < 0.446 | < 0.25 | < 0.25 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.25 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.25 |
| CHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.25 |
| CHLOROFORM | 0.5 | UG/L | **4.77** | **5.22** | **4.04** | **5.17** | **4.9** | < 0.25 | < 0.25 |
| CHLOROMETHANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.24 | < 0.24 | < 0.24 | < 0.25 | < 0.25 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.25 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.25 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.25 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.081 | < 0.081 | < 0.081 | < 0.25 | < 0.25 |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | < 0.27 | < 0.27 | < 0.438 | < 0.438 | < 0.438 | < 0.27 | < 0.27 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.25 | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.25 |
| METHYLENE CHLORIDE | 1 | UG/L | < 0.25 | < 0.25 | < 0.585 UJ | < 0.2 | < 0.2 | < 0.25 | < 0.25 |
| STYRENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.25 |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.25 |
| TOLUENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.056 | < 0.056 | < 0.056 | < 0.25 | < 0.25 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.25 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.114 | < 0.114 | < 0.114 | < 0.25 | < 0.25 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.25 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.11 | < 0.11 | < 0.11 | < 0.25 | < 0.25 |
| XYLENES, TOTAL | 1 | UG/L | < 0.25 | < 0.25 | < 0.175 | < 0.175 | < 0.175 | < 0.25 | < 0.25 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micrograms per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX D**
**VOLATILE ORGANIC COMPOUNDS IN THE LTPS GROUNDWATER WELLS**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | UCD1-018 | UCD1-018 | UCD1-018 | UCD1-018 | UCD1-025 | UCD1-025 | UCD1-025 | UCD1-025 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWGW1873 | GWGW1922 | GWGW1923 Dup | GWGW1943 | GWGW1850 | GWGW1880 | GWGW1924 | GWGW1944 |
| | | Date | 05/04/05 | 08/09/05 | 08/09/05 | 10/21/05 | 02/10/05 | 05/02/05 | 08/09/05 | 10/28/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.25 | < 0.104 | < 0.104 | < 0.104 |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | < 0.101 | < 0.101 | < 0.101 | < 0.101 | < 0.25 | < 0.101 | < 0.101 | < 0.101 |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | < 0.103 | < 0.103 | < 0.103 | < 0.103 | < 0.25 | < 0.103 | < 0.103 | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 |
| ACETONE | 5 | UG/L | < 0.37 | < 0.37 | < 0.37 | < 0.37 | < 0.25 | < 0.37 | < 0.37 | < 0.772 UJ |
| BENZENE | 0.5 | UG/L | < 0.135 | < 0.135 | < 0.135 | < 0.135 | < 0.25 | < 0.135 | < 0.135 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 UJ | < 0.104 | < 0.104 | < 0.104 | < 0.25 | < 0.104 | < 0.104 | < 0.104 |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| BROMOFORM | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | 0.343 J | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.446 | < 0.446 | < 0.446 | < 0.446 | < 0.25 | < 0.446 | < 0.446 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| CHLOROFORM | 0.5 | UG/L | < 0.11 | < 0.11 | < 0.11 | < 0.11 | **0.553** | **1** | **0.708** | 0.419 J |
| CHLOROMETHANE | 0.5 | UG/L | < 0.24 | < 0.24 | < 0.24 | < 0.24 | < 0.25 | < 0.24 | < 0.24 | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.081 | < 0.081 | < 0.081 | < 0.25 | < 0.081 | < 0.081 | < 0.081 |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | < 0.438 | < 0.438 | < 0.438 | < 0.438 | < 0.27 | < 0.438 | < 0.438 | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 |
| METHYLENE CHLORIDE | 1 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| TOLUENE | 0.5 | UG/L | < 0.056 | < 0.056 | < 0.056 | < 0.056 | < 0.25 | < 0.056 | < 0.056 | < 0.056 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.114 | < 0.114 | < 0.114 | < 0.25 | < 0.114 | < 0.114 | < 0.114 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.25 | < 0.11 | < 0.11 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | < 0.175 | < 0.175 | < 0.175 | < 0.25 | < 0.175 | < 0.175 | < 0.175 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micrograms per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX D**
**VOLATILE ORGANIC COMPOUNDS IN THE LTPS GROUNDWATER WELLS**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | UCD1-027Z1 | UCD1-027Z1 | UCD1-027Z1 | UCD1-027Z3 | UCD1-027Z3 | UCD1-027Z3 | UCD1-028 | UCD1-028 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWGW1851 | GWGW1925 | GWGW1945 | GWGW1853 | GWGW1927 | GWGW1947 | GWGW1854 | GWGW1884 |
| | | Date | 01/13/05 | 08/02/05 | 10/20/05 | 01/13/05 | 08/02/05 | 12/13/05 | 02/10/05 | 05/02/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | < 0.25 | < 0.104 | < 0.104 | < 0.25 | < 0.104 | < 0.104 | < 0.25 | < 0.104 |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.101 | < 0.101 | < 0.25 | < 0.101 | < 0.101 | < 0.25 | < 0.101 |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 UJ | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.103 | < 0.103 | < 0.25 | < 0.103 | < 0.103 | < 0.25 | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.25 | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.25 | < 0.5 |
| ACETONE | 5 | UG/L | < 0.25 | 1.28 J | < 0.37 | < 0.25 | 3.44 J | < 0.37 | < 0.25 | < 0.37 |
| BENZENE | 0.5 | UG/L | < 0.25 | < 0.135 | < 0.135 | < 0.25 | < 0.135 | < 0.135 | < 0.25 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.25 | < 0.104 | < 0.104 | < 0.25 | < 0.104 | < 0.104 | < 0.25 | < 0.104 |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| BROMOFORM | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.25 UJ | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | 0.546 J | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.25 | < 0.446 | < 0.446 | < 0.25 | < 0.446 | < 0.446 | < 0.25 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| CHLOROFORM | 0.5 | UG/L | < 0.25 | < 0.11 | < 0.11 | < 0.25 | < 0.11 | < 0.11 | < 0.25 | < 0.11 |
| CHLOROMETHANE | 0.5 | UG/L | < 0.25 | < 0.24 | < 0.24 | < 0.25 | < 0.24 | < 0.24 | < 0.25 | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.25 | < 0.081 | < 0.081 | < 0.25 | < 0.081 | < 0.081 | < 0.25 | < 0.081 |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | < 0.27 | < 0.438 | < 0.438 | < 0.27 | 0.889 J | < 0.438 | < 0.27 | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.25 | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.25 | < 0.5 |
| METHYLENE CHLORIDE | 1 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 UJ | < 0.25 | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| TOLUENE | 0.5 | UG/L | < 0.25 | < 0.056 | < 0.056 | < 0.25 | < 0.056 | < 0.056 | < 0.25 | < 0.056 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.25 | < 0.114 | < 0.114 | < 0.25 | < 0.114 | < 0.114 | < 0.25 | < 0.114 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.25 | < 0.11 | < 0.11 | < 0.25 | < 0.11 | < 0.11 | < 0.25 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.25 | < 0.175 | < 0.175 | < 0.25 | < 0.175 | < 0.175 | < 0.25 | < 0.175 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micrograms per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX D**
**VOLATILE ORGANIC COMPOUNDS IN THE LTPS GROUNDWATER WELLS**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | UCD1-028 | UCD1-028 | UCD1-028 |
|---|---|---|---|---|---|
| | | Sample ID | GWGW1928 | GWGW1929 Dup | GWGW1948 |
| | | Date | 08/09/05 | 08/09/05 | 10/24/05 |
| AnalyteNameShort | CRDL | UnitsID | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | < 0.104 | < 0.104 | < 0.104 |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | < 0.101 | < 0.101 | < 0.101 |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | < 0.103 | < 0.103 | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.5 | < 0.5 | < 0.5 |
| ACETONE | 5 | UG/L | < 0.37 | < 0.37 | < 0.37 |
| BENZENE | 0.5 | UG/L | < 0.135 | < 0.135 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 | < 0.104 | < 0.104 |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 |
| BROMOFORM | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.446 | < 0.446 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 |
| CHLOROFORM | 0.5 | UG/L | < 0.11 | < 0.11 | < 0.11 |
| CHLOROMETHANE | 0.5 | UG/L | < 0.24 | < 0.24 | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.081 | < 0.081 |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | < 0.438 | < 0.438 | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | < 0.5 | < 0.5 |
| METHYLENE CHLORIDE | 1 | UG/L | < 0.2 | < 0.2 | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 |
| TOLUENE | 0.5 | UG/L | < 0.056 | < 0.056 | < 0.056 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.114 | < 0.114 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.11 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | < 0.175 | < 0.175 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micrograms per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX D**
**METALS IN THE LTPS GROUNDWATER WELLS**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | UCD1-011 | UCD1-011 | UCD1-011 | UCD1-011 | UCD1-011 | UCD1-018 | UCD1-018 | UCD1-018 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWGW1845 | GWGW1846 Dup | GWGW1869 | GWGW1920 | GWGW1941 | GWGW1848 | GWGW1849 | GWGW1873 |
| | | Date | 02/10/05 | 02/10/05 | 05/25/05 | 08/10/05 | 10/21/05 | 02/10/05 | Dup 02/10/05 | 05/04/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | |
| ANTIMONY | 5 | UG/L | < 0.28 | < 0.28 | < 0.5 | < 0.5 | < 0.5 | < 0.28 | < 0.28 | < 0.5 |
| ARSENIC | 3 | UG/L | < 1 | < 1 | 2.94 J | **4.38 J** | < 3.45 UJ | < 1 | 1.18 J | 2.12 J |
| BARIUM | 20 | UG/L | **333** | **318** | **308** | **318** | **312** | **159** | **158** | **129** |
| BERYLLIUM | 1 | UG/L | < 0.08 | < 0.08 | < 0.1 | < 0.1 | < 0.1 | < 0.08 | < 0.08 | < 0.1 |
| BORON | 50 | UG/L | **862** | **874** | **786** | **865** | **757** | **602** | **582** | **531** |
| CADMIUM | 1 | UG/L | 0.136 J | < 0.04 | < 0.1 | < 0.1 | < 0.1 | 0.042 J | < 0.04 | < 0.1 |
| CALCIUM | 2000 | UG/L | **48200** | **48000** | **49100** | NS | NS | **33600** | **34000** | **27400** |
| CHROMIUM, TOTAL | 10 | UG/L | **147** | **147** | **150** | **151** | **144** | **14.5** | **13.9 +/- 4** | 8.43 J |
| COBALT | 10 | UG/L | 0.701 J | 0.682 J | 0.668 UJ | 0.76 J | 0.624 J | 0.586 J | 0.557 J | 0.403 J |
| COPPER | 10 | UG/L | 0.992 J | 0.956 J | 0.853 J | 0.815 J | 1.03 J | 1.25 J | 1.23 J | 0.664 J |
| IRON | 100 | UG/L | **204** | **197** | **165** | **210** | **195** | **140** | **140** | 95.1 J |
| LEAD | 3 | UG/L | < 0.05 | < 0.05 | < 0.5 | < 0.5 | < 0.5 | < 0.05 | < 0.05 | < 0.5 |
| MAGNESIUM | 2000 | UG/L | **134000** | **132000 +/- 1** | **132000** | NS | NS | **92000** | **92500** | **71100** |
| MANGANESE | 10 | UG/L | < 1.61 | < 1.61 | < 1 | < 1 | < 1 | < 1.61 | < 1.61 | < 1 |
| MERCURY | 0.2 | UG/L | < 0.0472 | < 0.0472 | < 0.05 | < 0.05 | < 0.05 | < 0.0472 | < 0.0472 | < 0.05 |
| MOLYBDENUM | 10 | UG/L | 1.17 J | 1.07 J | 1.11 J | 1.11 J | 1.13 J | 1.34 J | 1.32 J | 1.46 J |
| NICKEL | 20 | UG/L | 1.83 J | 1.88 J | 1.99 J | 2.11 J | 1.78 J | 9.95 J | 9.87 J | 3.85 J |
| POTASSIUM | 2000 | UG/L | 536 J | 528 J | 525 J | NS | NS | 357 J | 350 J | 320 J |
| SELENIUM | 3 | UG/L | **9.47** | < 8.95 UJ | **9.58** | **8.87** | **7.8** | < 3.06 UJ | < 3.56 UJ | < 2.5 |
| SILVER | 10 | UG/L | < 0.04 | < 0.04 | < 0.2 | < 0.2 | < 0.2 | < 0.04 | < 0.04 | < 0.2 |
| SODIUM | 2000 | UG/L | **77100** | **76600 +/- 1** | **73900** | NS | NS | **32400** | **32600** | **30600** |
| THALLIUM | 10 | UG/L | 0.382 J | 0.104 J | < 0.4 | < 0.4 | 0.564 J | 0.031 J | < 0.02 | < 0.4 |
| VANADIUM | 10 | UG/L | **13.2** | **13.3** | **21 J** | < 7.45 UJ | **37.4** | 7.22 J | 5.53 J | 8.47 J |
| ZINC | 20 | UG/L | 3.12 J | 1.87 J | < 2 | < 3.28 UJ | < 2 | 2.33 J | 1.15 J | < 2 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micrograms per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX D**
**METALS IN THE LTPS GROUNDWATER WELLS**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | UCD1-018 | UCD1-018 | UCD1-018 | UCD1-025 | UCD1-025 | UCD1-025 | UCD1-025 | UCD1-027Z1 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWGW1922 | GWGW1923 Dup | GWGW1943 | GWGW1850 | GWGW1880 | GWGW1924 | GWGW1944 | GWGW1851 |
| | | Date | 08/09/05 | 08/09/05 | 10/21/05 | 02/10/05 | 05/02/05 | 08/09/05 | 10/28/05 | 01/13/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | |
| ANTIMONY | 5 | UG/L | < 0.5 | < 0.5 | < 0.5 | < 0.28 | < 0.5 | < 0.5 | < 0.5 | 0.523 J |
| ARSENIC | 3 | UG/L | 2.16 J | 1.69 J | < 3.35 UJ | < 1 | 2.95 J | < 1.5 | < 1.5 | < 3.27 UJ |
| BARIUM | 20 | UG/L | **128** | **130** | **127** | **294** | **266** | **282** | **260** | **167** |
| BERYLLIUM | 1 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.08 | < 0.1 | < 0.1 | < 0.1 | < 0.08 |
| BORON | 50 | UG/L | **536** | **556** | **450** | **864** | **663** | **861** | **736** | **614** |
| CADMIUM | 1 | UG/L | < 0.1 | < 0.1 | < 0.1 | 0.079 J | 0.12 J | < 0.1 | < 0.1 | 0.093 J |
| CALCIUM | 2000 | UG/L | NS | NS | NS | **41000** | **38000** | NS | NS | **43300** |
| CHROMIUM, TOTAL | 10 | UG/L | 7.62 J | 8.01 J | 7.17 J | **187** | **148** | **150** | NS | < 2.23 UJ |
| COBALT | 10 | UG/L | 0.43 J | 0.45 J | 0.345 J | 1.01 | 0.963 J | 1.28 | 1.26 | 7.34 |
| COPPER | 10 | UG/L | 0.687 J | 0.928 J | 0.829 J | 1.24 J | 1 J | 1.22 J | 1.17 J | 1.08 J |
| IRON | 100 | UG/L | 70.7 J | 69.2 J | 98.5 J | **169** | **137** | **107** | **110** | **103** |
| LEAD | 3 | UG/L | < 0.5 | < 0.5 | < 0.5 | < 0.05 | < 0.5 | < 0.5 | < 0.5 | 0.36 J |
| MAGNESIUM | 2000 | UG/L | NS | NS | NS | **129000** | **111000** | NS | NS | **80900** |
| MANGANESE | 10 | UG/L | < 1 | < 1 | < 1 | **27.7** | **51** | **49** | **43.1** | **872** |
| MERCURY | 0.2 | UG/L | < 0.05 | < 0.05 | < 0.05 | < 0.0472 | < 0.05 | < 0.05 | < 0.05 | < 0.0472 |
| MOLYBDENUM | 10 | UG/L | 1.45 J | 1.41 J | 1.52 J | 0.557 J | 0.54 J | 0.539 J | 0.561 J | **88.3** |
| NICKEL | 20 | UG/L | 4.19 J | 4.03 J | 3.52 J | **71.2** | **50** | **42.5** | **43.4** | **696** |
| POTASSIUM | 2000 | UG/L | NS | NS | NS | 1310 J | **2410** | NS | NS | 1340 J |
| SELENIUM | 3 | UG/L | < 2.5 | < 2.5 | < 2.5 | < 3.38 UJ | **3.5 J** | 2.77 J | < 2.5 | < 4.54 UJ |
| SILVER | 10 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.04 | < 0.2 | < 0.2 | < 0.2 | < 0.04 |
| SODIUM | 2000 | UG/L | NS | NS | NS | **74600** | **68600** | NS | NS | **89900** |
| THALLIUM | 10 | UG/L | < 0.4 | < 0.4 | < 0.4 | < 0.02 | 1.5 J | < 0.4 | 0.577 J | 0.395 J |
| VANADIUM | 10 | UG/L | < 4.71 UJ | < 4.38 UJ | 9.14 J | **12** | **17.9 J** | **13.1 J** | **30.9** | < 5.44 |
| ZINC | 20 | UG/L | < 2 | < 2 | < 2 | 4.32 J | 6 J | 4.91 J | 5.59 J | **305** |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micrograms per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX D**
**METALS IN THE LTPS GROUNDWATER WELLS**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | UCD1-027Z1 | UCD1-027Z1 | UCD1-027Z3 | UCD1-027Z3 | UCD1-027Z3 | UCD1-028 | UCD1-028 | UCD1-028 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWGW1925 | GWGW1945 | GWGW1853 | GWGW1927 | GWGW1947 | GWGW1854 | GWGW1884 | GWGW1928 |
| | | Date | 08/02/05 | 10/20/05 | 01/13/05 | 08/02/05 | 12/13/05 | 02/10/05 | 05/02/05 | 08/09/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | |
| ANTIMONY | 5 | UG/L | < 0.5 | NS | 0.497 J | < 0.5 | 0.503 J | < 0.28 | < 0.5 | < 0.5 |
| ARSENIC | 3 | UG/L | < 2.91 UJ | NS | < 4.51 UJ | < 2.6 UJ | < 1.5 | < 1 | **5.4** | < 1.5 |
| BARIUM | 20 | UG/L | **149** | NS | **220** | **193** | **196** | **323** | **332** | **321** |
| BERYLLIUM | 1 | UG/L | < 0.1 | NS | < 0.08 | < 0.1 | < 0.1 | < 0.08 | < 0.1 | < 0.1 |
| BORON | 50 | UG/L | **558 J** | NS | **773 J** | **617 J** | **577** | **1230** | **1040** | **1240** |
| CADMIUM | 1 | UG/L | 0.262 J | NS | < 0.04 | < 0.1 | < 0.1 | < 0.04 | < 0.1 | < 0.1 |
| CALCIUM | 2000 | UG/L | NS | NS | **38300** | NS | NS | **53300** | **53700** | NS |
| CHROMIUM, TOTAL | 10 | UG/L | < 1 | < 1 | < 1.4 UJ | < 1 | < 1 | **526** | **530** | **524** |
| COBALT | 10 | UG/L | **10.3 J** | NS | 5.87 | 5.18 J | 5.81 | 0.997 J | 0.5 J | 1.06 |
| COPPER | 10 | UG/L | 0.838 J | NS | < 0.69 | 0.431 J | < 0.471 UJ | 1.27 J | 0.74 J | 1.03 J |
| IRON | 100 | UG/L | **225** | NS | **108** | **177** | **156** | **225** | **205** | **142** |
| LEAD | 3 | UG/L | < 0.5 | NS | 0.359 J | < 0.5 | < 0.5 | < 0.05 | < 0.5 | < 0.5 |
| MAGNESIUM | 2000 | UG/L | NS | NS | **96200** | NS | NS | **192000** | **190000** | NS |
| MANGANESE | 10 | UG/L | **1660** | NS | **790 J** | **704** | **740** | < 1.61 | < 1 | < 1 |
| MERCURY | 0.2 | UG/L | < 0.05 | NS | < 0.0472 | < 0.05 | < 0.05 | < 0.0472 | < 0.05 | < 0.05 |
| MOLYBDENUM | 10 | UG/L | **232** | NS | 9.75 J | 9.62 J | 9.44 J | 0.884 J | 0.68 J | 0.775 J |
| NICKEL | 20 | UG/L | **1130 J** | NS | **230** | **205 J** | **254** | 2.53 J | 1.9 J | 2.45 J |
| POTASSIUM | 2000 | UG/L | NS | NS | 1400 J | NS | NS | 910 J | 907 J | NS |
| SELENIUM | 3 | UG/L | < 2.5 | NS | < 3.24 UJ | < 2.5 | < 2.5 | **14.4** | **19** | **14.1** |
| SILVER | 10 | UG/L | < 0.2 | NS | < 0.04 | < 0.2 | < 0.2 | < 0.04 | < 0.2 | < 0.2 |
| SODIUM | 2000 | UG/L | NS | NS | **84900** | NS | NS | **111000** | **120000** | NS |
| THALLIUM | 10 | UG/L | 0.773 J | NS | 0.063 J | < 0.4 | < 0.4 | < 0.02 | 0.534 J | < 0.4 |
| VANADIUM | 10 | UG/L | 2.66 J | NS | < 5.44 | 5.85 J | < 2 | **24.7** | **46** | **38.7** |
| ZINC | 20 | UG/L | **259 J** | NS | **139** | **127 J** | **127** | 1.49 J | < 2 | < 2 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micrograms per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX D**
**METALS IN THE LTPS GROUNDWATER WELLS**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | UCD1-028 | UCD1-028 |
|---|---|---|---|---|
| | | Sample ID | GWGW1929 Dup | GWGW1948 |
| | | Date | 08/09/05 | 10/24/05 |
| AnalyteNameShort | CRDL | UnitsID | | |
| ANTIMONY | 5 | UG/L | < 0.5 | < 0.5 |
| ARSENIC | 3 | UG/L | 1.82 J | **3.22 J** |
| BARIUM | 20 | UG/L | **330** | **306** |
| BERYLLIUM | 1 | UG/L | < 0.1 | < 0.1 |
| BORON | 50 | UG/L | **1150** | **1060** |
| CADMIUM | 1 | UG/L | < 0.1 | < 0.1 |
| CALCIUM | 2000 | UG/L | NS | NS |
| CHROMIUM, TOTAL | 10 | UG/L | **516** | **491** |
| COBALT | 10 | UG/L | 1 | 0.836 J |
| COPPER | 10 | UG/L | 1.19 J | < 2.63 UJ |
| IRON | 100 | UG/L | **148** | **241** |
| LEAD | 3 | UG/L | < 0.5 | < 0.5 |
| MAGNESIUM | 2000 | UG/L | NS | NS |
| MANGANESE | 10 | UG/L | < 1 | < 1 |
| MERCURY | 0.2 | UG/L | < 0.05 | < 0.05 |
| MOLYBDENUM | 10 | UG/L | 0.812 J | 1.16 J |
| NICKEL | 20 | UG/L | 2.38 J | < 3.1 UJ |
| POTASSIUM | 2000 | UG/L | NS | NS |
| SELENIUM | 3 | UG/L | **14.3** | **12.7** |
| SILVER | 10 | UG/L | < 0.2 | < 0.2 |
| SODIUM | 2000 | UG/L | NS | NS |
| THALLIUM | 10 | UG/L | < 0.4 | 0.53 J |
| VANADIUM | 10 | UG/L | **45** | **108** |
| ZINC | 20 | UG/L | < 2 | 3.06 J |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micrograms per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX D**
**RADS IN LTPS GROUNDWATER WELLS**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | UCD1-011 | UCD1-011 | UCD1-011 | UCD1-011 | UCD1-011 | UCD1-018 | UCD1-018 | UCD1-018 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWGW1845 | GWGW1846 Dup | GWGW1869 | GWGW1920 | GWGW1941 | GWGW1848 | GWGW1849 Dup | GWGW1873 |
| | | Date | 02/10/05 | 02/10/05 | 05/25/05 | 08/10/05 | 10/21/05 | 02/10/05 | 02/10/05 | 05/04/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | |
| CARBON-14 | 20 | PCI/L | < 17.9 | < 17.5 | < 17 | < 13.9 | < 13.6 | < 17.5 | < 17.6 | < 16.4 |
| TRITIUM (HYDROGEN-3) | 300 | PCI/L | < 228 | < 227 | < 278 | < 251 | < 277 | < 228 | < 225 | < 242 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micrograms per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX D**
**RADS IN LTPS GROUNDWATER WELLS**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | UCD1-018 | UCD1-018 | UCD1-018 | UCD1-025 | UCD1-025 | UCD1-025 | UCD1-025 | UCD1-027Z1 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWGW1922 | GWGW1923 Dup | GWGW1943 | GWGW1850 | GWGW1880 | GWGW1924 | GWGW1944 | GWGW1851 |
| | | Date | 08/09/05 | 08/09/05 | 10/21/05 | 02/10/05 | 05/02/05 | 08/09/05 | 10/28/05 | 01/13/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | |
| CARBON-14 | 20 | PCI/L | < 13.8 | < 13.9 | < 13.6 | < 17.3 | < 16.6 | < 13.9 | < 15.1 | < 15.4 |
| TRITIUM (HYDROGEN-3) | 300 | PCI/L | < 255 | < 271 | < 293 | < 228 | < 300 | < 288 | < 243 | **2880 +/- 254** |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micrograms per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX D**
**RADS IN LTPS GROUNDWATER WELLS**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | UCD1-027Z1 | UCD1-027Z1 | UCD1-027Z3 | UCD1-027Z3 | UCD1-027Z3 | UCD1-028 | UCD1-028 | UCD1-028 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWGW1925 | GWGW1945 | GWGW1853 | GWGW1927 | GWGW1947 | GWGW1854 | GWGW1884 | GWGW1928 |
| | | Date | 08/02/05 | 10/20/05 | 01/13/05 | 08/02/05 | 12/13/05 | 02/10/05 | 05/02/05 | 08/09/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | |
| CARBON-14 | 20 | PCI/L | < 14 | < 13.5 | < 15.4 | < 13.8 | < 12.6 | < 17.4 | < 16.6 | < 14.7 |
| TRITIUM (HYDROGEN-3) | 300 | PCI/L | < 255 | < 261 | < 234 | < 248 | < 208 | < 228 | < 304 | < 268 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micrograms per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX D**
**RADS IN LTPS GROUNDWATER WELLS**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | UCD1-028 | UCD1-028 |
|---|---|---|---|---|
| | | Sample ID | GWGW1929 Dup | GWGW1948 |
| | | Date | 08/09/05 | 10/24/05 |
| AnalyteNameShort | CRDL | UnitsID | | |
| CARBON-14 | 20 | PCI/L | < 14.3 | < 15.6 |
| TRITIUM (HYDROGEN-3) | 300 | PCI/L | < 272 | < 244 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micrograms per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX D**
**WET CHEMISTRY IN LTPS GROUNDWATER WELLS**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | UCD1-011 | UCD1-011 | UCD1-011 | UCD1-011 | UCD1-011 | UCD1-018 | UCD1-018 | UCD1-018 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWGW1845 | GWGW1846 Dup | GWGW1869 | GWGW1920 | GWGW1941 | GWGW1848 | GWGW1849 Dup | GWGW1873 |
| | | Date | 02/10/05 | 02/10/05 | 05/25/05 | 08/10/05 | 10/21/05 | 02/10/05 | 02/10/05 | 05/04/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | |
| ALKALINITY, TOTAL (AS CaCO3) | 10 | MG/L | **544** | **562** | **560** | **604** | **526** | **392** | **376** | **325** |
| CHLORIDE (AS CL) | 1 | MG/L | **42.7** | **42.6** | **42.8** | **44.4** | **48.2** | **23.1** | **23.1** | **14.2** |
| NITRATE AS NITROGEN | 0.1 | MG/L | **30.1 J** | **29.9 J** | **28.5** | **30 J** | **33 J** | **8.94 J** | **8.97 J** | **2.38** |
| SULFATE (AS SO4) | 1 | MG/L | **34.4** | **34.6** | **32.9 J** | **35.9** | **36.1** | **38.4** | **38.4** | **36.6** |
| TOTAL DISSOLVED SOLIDS (RESIDUE, FILTERABLE) | 20 | MG/L | **825** | **851** | **838** | **873** | **835** | **522** | **514** | **398** |
| TOTAL ORGANIC CARBON | 1 | MG/L | **2.47** | **2.27** | **3.34** | **1.38** | **1.7** | **2.34** | **2.47** | **1.63** |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micrograms per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX D**
**WET CHEMISTRY IN LTPS GROUNDWATER WELLS**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | UCD1-018 | UCD1-018 | UCD1-018 | UCD1-025 | UCD1-025 | UCD1-025 | UCD1-025 | UCD1-027Z1 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWGW1922 | GWGW1923 Dup | GWGW1943 | GWGW1850 | GWGW1880 | GWGW1924 | GWGW1944 | GWGW1851 |
| | | Date | 08/09/05 | 08/09/05 | 10/21/05 | 02/10/05 | 05/02/05 | 08/09/05 | 10/28/05 | 01/13/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | |
| ALKALINITY, TOTAL (AS CaCO3) | 10 | MG/L | **324** | **325** | **304** | **561** | **506** | **498** | **499** | **555** |
| CHLORIDE (AS CL) | 1 | MG/L | **13.2** | **13.3** | **13.4** | **33.4** | **28** | **33.7** | **33.7** | **23.1** |
| NITRATE AS NITROGEN | 0.1 | MG/L | **2.91** | **2.93** | **2.85** | **23.4 J** | **18** | **24.2 J** | **24.4 J** | **2.14** |
| SULFATE (AS SO4) | 1 | MG/L | **34.2** | **34.3** | **34.8** | **34.1** | **27** | **29.4** | **30.4** | **34.5** |
| TOTAL DISSOLVED SOLIDS (RESIDUE, FILTERABLE) | 20 | MG/L | **402** | **402** | **414** | **672** | **656** | **726** | **791** | **631** |
| TOTAL ORGANIC CARBON | 1 | MG/L | 0.94 J | **1.21** | **1.44** | **3.21** | **3.4** | **2.13** | **2.43** | **8.68** |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micrograms per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX D**
**WET CHEMISTRY IN LTPS GROUNDWATER WELLS**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | UCD1-027Z1 | UCD1-027Z1 | UCD1-027Z3 | UCD1-027Z3 | UCD1-027Z3 | UCD1-028 | UCD1-028 | UCD1-028 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWGW1925 | GWGW1945 | GWGW1853 | GWGW1927 | GWGW1947 | GWGW1854 | GWGW1884 | GWGW1928 |
| | | Date | 08/02/05 | 10/20/05 | 01/13/05 | 08/02/05 | 12/13/05 | 02/10/05 | 05/02/05 | 08/09/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | |
| ALKALINITY, TOTAL (AS CaCO3) | 10 | MG/L | **548** | NS | **560** | **507** | **515** | **708** | **737** | **709** |
| CHLORIDE (AS CL) | 1 | MG/L | **23.1** | NS | **29.7** | **27.3** | **38.2** | **41.4** | **38.8** | **47.2** |
| NITRATE AS NITROGEN | 0.1 | MG/L | **1.56** | **0.318 J** | **4.2** | **5.32** | **5.46 J** | **56.7 J** | **53** | **67.2 J** |
| SULFATE (AS SO4) | 1 | MG/L | **30.1** | NS | **39.8** | **44.1** | **46.1** | **36.5** | **42** | **41.2** |
| TOTAL DISSOLVED SOLIDS (RESIDUE, FILTERABLE) | 20 | MG/L | **623** | NS | **637** | **610** | **601** | **1140** | **1140** | **1180** |
| TOTAL ORGANIC CARBON | 1 | MG/L | NS | **7.01** | **7.13** | NS | **5.36** | **2.47** | **3.7** | **1.76** |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micrograms per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX D**
**WET CHEMISTRY IN LTPS GROUNDWATER WELLS**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | UCD1-028 | UCD1-028 |
|---|---|---|---|---|
| | | Sample ID | GWGW1929 Dup | GWGW1948 |
| | | Date | 08/09/05 | 10/24/05 |
| AnalyteNameShort | CRDL | UnitsID | | |
| ALKALINITY, TOTAL (AS CaCO3) | 10 | MG/L | **700** | NS |
| CHLORIDE (AS CL) | 1 | MG/L | **45.8** | NS |
| NITRATE AS NITROGEN | 0.1 | MG/L | **64.4 J** | **62.2 J** |
| SULFATE (AS SO4) | 1 | MG/L | **39** | NS |
| TOTAL DISSOLVED SOLIDS (RESIDUE, FILTERABLE) | 20 | MG/L | **1180** | **1150** |
| TOTAL ORGANIC CARBON | 1 | MG/L | **1.72** | **2.07** |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micrograms per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX D**
**2005 LTPS SOIL SAMPLING RESULTS**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| Sample Location: | | SBL-300 | SBL-300 | SBL-310 | SBL-310 | SBL-310 | SBL-320 | SBL-320 | SBL-320 | SBL-330 | SBL-330 | SBL-330 | SBL-340 | SBL-340 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date: | | 12/15/2005 | 12/15/2005 | 12/15/2005 | 12/15/2005 | 12/15/2005 | 12/15/2005 | 12/15/2005 | 12/15/2005 | 12/15/2005 | 12/15/2005 | 12/15/2005 | 12/15/2005 | 12/15/2005 |
| Sample Depth (ft bgs): | | 1 | 3 | 1 | 3 | 5 | 1 | 3 | 5 | 1 | 3 | 5 | 1 | 3 |
| AnalyteNameShort | UnitsID | | | | | | | | | | | | | |
| ANTIMONY | MG/KG | < 2.33 | < 2.19 | 2.29 | < 2.36 | < 2.24 | 3.38 | < 2.36 | < 2.18 | < 2.38 | < 2.18 | < 2.1 | < 2.39 | < 2.15 |
| ARSENIC | MG/KG | 10.2 | 7.71 | 7.9 | 7.52 | 7.13 | 6.97 | 5.92 | 5.44 | 7.53 | 5.09 | 6.54 | 7.66 | 5.49 |
| BARIUM | MG/KG | 194 | 192 | 181 | 158 | 168 | 182 | 180 | 171 | 195 | 152 | 161 | 225 | 160 |
| BERYLLIUM | MG/KG | 0.592 | 0.524 | 0.462 | 0.418 | 0.456 | 0.494 | 0.463 | 0.463 | 0.5 | 0.401 | 0.432 | 0.617 | 0.43 |
| CADMIUM | MG/KG | < 0.582 | < 0.548 | < 0.566 | < 0.591 | < 0.56 | < 0.596 | < 0.59 | < 0.545 | < 0.594 | < 0.545 | < 0.524 | < 0.597 | < 0.538 |
| CHLORIDE (AS CL) | MG/KG | 11 | 8.09 | 10.2 | 8.18 | 6.97 | 7.41 | 10.5 | 10.2 | 23.9 | 8.52 | 2.42 | 14.5 | 4.81 |
| CHROMIUM, TOTAL | MG/KG | 143 | 157 | 167 | 166 | 197 | 153 | 176 | 152 | 142 | 182 | 178 | 145 | 175 |
| COBALT | MG/KG | 24.8 | 25.7 | 24.6 | 22.5 | 24.3 | 25.2 | 24.3 | 24.9 | 24.5 | 23.9 | 22.9 | 26.4 | 22.7 |
| COPPER | MG/KG | 44.9 | 40.2 | 36.4 | 29.9 | 32.3 | 39 | 35.2 | 35.6 | 37.8 | 30.2 | 29.5 | 48.6 | 30.9 |
| LEAD | MG/KG | 9.57 | 7.34 | 7.76 | 6.16 | 6.4 | 7.44 | 6.4 | 8.1 | 8.34 | 6.55 | 5.49 | 9.27 | 6.78 |
| MERCURY | MG/KG | 0.356 | 0.664 | 2.28 | 1.11 | 1.53 | 2.26 | 2.44 | 1.4 | 1.67 | 0.479 | 0.801 | 1.19 | 1.12 |
| MOLYBDENUM | MG/KG | 0.55 | 0.521 | 0.518 | 0.507 | 0.335 | 0.369 | 0.518 | 0.389 | 0.278 | < 0.218 | 0.241 | < 0.239 | < 0.215 |
| NICKEL | MG/KG | 272 | 308 | 311 | 283 | 324 | 308 | 302 | 315 | 274 | 291 | 285 | 279 | 276 |
| NITRATE AS NITROGEN | MG/KG | 1.59 | 0.797 | 0.887 | 0.609 | < 0.228 | 1.8 | 0.81 | 0.741 | 36.8 | 1.17 | 0.651 | 1.5 | 0.731 |
| NITROGEN, AMMONIA (AS N) | MG/KG | 15.3 | 11.3 | 15.4 | 10.2 | 8.13 | 16.7 | 10.2 | 9.43 | 9.69 | 4.14 | 4.84 | 16.7 | 8.61 |
| Orthophosphate as P | MG/KG | 2.69 | 0.524 | 3.2 | 0.41 | < 0.228 | 9.63 | 0.634 | < 0.224 | 2.99 | < 0.209 | < 0.213 | 2.81 | < 0.185 |
| pH | PH UNITS | 7.85 | 7.83 | 7.87 | 7.93 | 8 | 7.76 | 7.76 | 7.78 | 7.71 | 8.02 | 8.24 | 7.88 | 7.76 |
| SELENIUM | MG/KG | < 3.49 | < 3.29 | < 3.39 | < 3.55 | < 3.36 | < 3.58 | < 3.54 | < 3.27 | < 3.57 | < 3.27 | < 3.15 | < 3.58 | < 3.23 |
| SILVER | MG/KG | 0.158 | < 0.11 | < 0.113 | < 0.118 | < 0.112 | < 0.119 | < 0.118 | < 0.109 | < 0.119 | < 0.109 | < 0.105 | < 0.119 | < 0.108 |
| SULFATE (AS SO4) | MG/KG | 20.8 | 17.1 | 26.6 | 19.7 | 23.4 | 18.2 | 22.7 | 19.9 | 46.8 | 11.6 | 15.7 | 23 | 8.9 |
| THALLIUM | MG/KG | < 2.91 | < 2.74 | 3.33 | < 2.96 | < 2.8 | < 2.98 | < 2.95 | < 2.72 | < 2.97 | 3.1 | < 2.62 | 3 | < 2.69 |
| TOTAL KJELDAHL NITROGEN | MG/KG | 671 | 515 | 443 | 245 | 285 | 626 | 356 | 343 | 500 | 257 | 250 | 1040 | 360 |
| TOTAL ORGANIC CARBON | MG/KG | 7260 | 6140 | 4210 | 2780 | 2630 | 6000 | 3180 | 2600 | 4410 | 1940 | 1690 | 7480 | 2770 |
| VANADIUM | MG/KG | 84.8 | 76.5 | 74.1 | 66.2 | 72.6 | 77.4 | 73.1 | 70.5 | 79.3 | 69.2 | 73.6 | 91.3 | 69.1 |
| ZINC | MG/KG | 84 | 77.8 | 70.8 | 62.8 | 65 | 73.3 | 67.6 | 70.7 | 72.6 | 62.5 | 63.8 | 90.3 | 63 |

ft bgs = feet below ground surface
mg/kg = milligrams of analyte per kilogram of soil

**APPENDIX D**
**2005 LTPS SOIL SAMPLING RESULTS**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | Sample Location: | SBL-300 | SBL-340 | SBL-350 | SBL-350 | SBL-350 |
|---|---|---|---|---|---|---|
| | Date: | 12/15/2005 | 12/15/2005 | 12/15/2005 | 12/15/2005 | 12/15/2005 |
| | Sample Depth (ft bgs): | 1 | 5 | 1 | 3 | 5 |
| AnalyteNameShort | UnitsID | | | | | |
| ANTIMONY | MG/KG | < 2.33 | 2.27 | < 2.35 | < 2.15 | 2.2 |
| ARSENIC | MG/KG | 10.2 | 6.6 | 7.46 | 6.95 | 6.68 |
| BARIUM | MG/KG | 194 | 163 | 223 | 181 | 153 |
| BERYLLIUM | MG/KG | 0.592 | 0.437 | 0.599 | 0.492 | 0.422 |
| CADMIUM | MG/KG | < 0.582 | < 0.531 | < 0.588 | < 0.538 | < 0.535 |
| CHLORIDE (AS CL) | MG/KG | 11 | 14.3 | 8.98 | 7.51 | 5.94 |
| CHROMIUM, TOTAL | MG/KG | 143 | 174 | 141 | 142 | 148 |
| COBALT | MG/KG | 24.8 | 24.1 | 26.4 | 25.1 | 21.5 |
| COPPER | MG/KG | 44.9 | 31.7 | 47.5 | 39.3 | 29.8 |
| LEAD | MG/KG | 9.57 | 6.14 | 10.5 | 7.85 | 10.2 |
| MERCURY | MG/KG | 0.356 | 0.947 | 0.358 | 0.594 | 0.985 |
| MOLYBDENUM | MG/KG | 0.55 | < 0.213 | 0.374 | < 0.215 | < 0.214 |
| NICKEL | MG/KG | 272 | 291 | 280 | 282 | 257 |
| NITRATE AS NITROGEN | MG/KG | 1.59 | 1.12 | 1.48 | 1.31 | 0.673 |
| NITROGEN, AMMONIA (AS N) | MG/KG | 15.3 | 5.63 | 23.5 | 9.69 | 8.77 |
| Orthophosphate as P | MG/KG | 2.69 | < 0.193 | 0.523 | 0.411 | 0.271 |
| pH | PH UNITS | 7.85 | 8.07 | 7.76 | 7.63 | 7.91 |
| SELENIUM | MG/KG | < 3.49 | < 3.19 | < 3.53 | < 3.23 | < 3.21 |
| SILVER | MG/KG | 0.158 | < 0.106 | < 0.118 | < 0.108 | < 0.107 |
| SULFATE (AS SO4) | MG/KG | 20.8 | 24.8 | 11.2 | 22 | 18.9 |
| THALLIUM | MG/KG | < 2.91 | < 2.66 | < 2.94 | 3.15 | 2.94 |
| TOTAL KJELDAHL NITROGEN | MG/KG | 671 | 319 | 900 | 409 | 254 |
| TOTAL ORGANIC CARBON | MG/KG | 7260 | 3010 | 11200 | 3850 | 3180 |
| VANADIUM | MG/KG | 84.8 | 76.8 | 92.4 | 83 | 69 |
| ZINC | MG/KG | 84 | 65.7 | 91.2 | 74.6 | 61.6 |

ft bgs = feet below ground surface
mg/kg = milligrams of analyte per kilogram of soil

# APPENDIX E

## Complete Analytical Results for 2005 Stormwater and Surface Water

**APPENDIX E**
**VOLATILE ORGANIC COMPOUNDS IN STORMWATER AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | LF-01 | LF-01 | LF-03 | LS-01 | LS-01 | LS-01 | LS-01 | PCD | PCD | PCU | PCU |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | STMW0133 | STMW0135 | STMW0136 | RWSW0036 | RWSW0037 Dup | RWSW0038 | RWSW0039 Dup | SWSW0274 | SWSW0276 | SWSW0273 | SWSW0277 Dup |
| | | Date | 01/11/05 | 12/28/05 | 12/28/05 | 03/22/05 | 03/22/05 | 12/01/05 | 12/01/05 | 01/12/05 | 12/28/05 | 01/12/05 | 12/28/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.34 | < 0.34 | < 0.3 | < 0.3 | < 0.25 | < 0.1 | < 0.25 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.49 | < 0.49 | < 0.25 | < 0.25 | < 0.25 | < 0.2 | < 0.25 | < 0.2 |
| 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | | UG/L | NS | NS | NS | < 2.5 | < 2.5 | NS | NS | NS | NS | NS | NS |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | < 0.25 | < 0.104 | < 0.104 | < 0.44 | < 0.44 | < 0.25 | < 0.25 | < 0.25 | < 0.104 | < 0.25 | < 0.104 |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.101 | < 0.101 | < 0.41 | < 0.41 | < 0.3 | < 0.3 | < 0.25 | < 0.101 | < 0.25 | < 0.101 |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.41 | < 0.41 | < 0.3 | < 0.3 | < 0.25 | < 0.1 | < 0.25 | < 0.1 |
| 1,2,4-TRICHLOROBENZENE | 10 | UG/L | NS | NS | NS | < 0.42 | < 0.42 | < 0.3 | < 0.3 | NS | NS | NS | NS |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.75 UJ | < 0.75 UJ | < 0.5 | < 0.5 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.2 | < 0.25 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.36 | < 0.36 | 0.39 J | < 0.25 | < 0.25 | < 0.1 | < 0.25 | < 0.1 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.29 | < 0.29 | 0.32 J | < 0.25 | < 0.25 | < 0.1 | < 0.25 | < 0.1 |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.103 | < 0.103 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.103 | < 0.25 | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.33 | < 0.33 | < 0.42 UJ | < 0.25 | < 0.25 | < 0.1 | < 0.25 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.53 UJ | < 0.45 UJ | < 0.25 | < 0.1 | < 0.25 | < 0.1 |
| 2-BUTANONE | | UG/L | NS | NS | NS | NS | NS | < 1.25 | < 1.25 | NS | NS | NS | NS |
| 2-HEXANONE | 1 | UG/L | < 0.25 | < 0.5 | < 0.5 | < 1.45 | < 1.45 | < 1.25 | < 1.25 | < 0.25 | < 0.5 | < 0.25 | < 0.5 |
| ACETONE | 5 | UG/L | 2.4 J | < 6.46 UJ | < 8.52 UJ | **6.3** | **6.5** | < 20.4 UJ | < 22.8 UJ | 1.42 J | < 5.13 UJ | < 0.25 | < 5.07 UJ |
| BENZENE | 0.5 | UG/L | < 0.25 | < 0.135 | < 0.135 | < 0.33 | < 0.33 | < 0.41 UJ | < 0.3 | < 0.25 | < 0.135 | < 0.25 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.25 | < 0.104 | < 0.104 | NS | NS | NS | NS | < 0.25 | < 0.104 | < 0.25 | < 0.104 |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.38 | < 0.38 | < 0.25 | < 0.25 | < 0.25 | < 0.1 | < 0.25 | < 0.1 |
| BROMOFORM | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.5 | < 0.5 | < 0.25 | < 0.25 | < 0.25 | < 0.2 | < 0.25 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.25 | < 0.446 | < 0.446 | < 1.91 | < 1.91 | **4.1 J** | < 1.25 | < 0.25 | < 0.446 | < 0.25 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.29 | < 0.29 | < 0.32 UJ | < 0.25 | < 0.25 | < 0.2 | < 0.25 | < 0.2 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.32 | < 0.32 | < 0.25 | < 0.25 | < 0.25 | < 0.1 | < 0.25 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.2 | < 0.25 | < 0.2 |
| CHLOROFORM | 0.5 | UG/L | < 0.25 | < 0.11 | < 0.11 | < 0.36 | < 0.36 | < 0.25 | < 0.25 | < 0.25 | < 0.11 | < 0.25 | < 0.11 |
| CHLOROMETHANE | 0.5 | UG/L | < 0.25 | < 0.24 | < 0.24 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.24 | < 0.25 | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.3 | < 0.3 | < 0.3 | < 0.3 | < 0.25 | < 0.1 | < 0.25 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.3 | < 0.3 | < 0.25 | < 0.25 | < 0.25 | < 0.2 | < 0.25 | < 0.2 |
| CYCLOHEXANE | | UG/L | NS | NS | NS | < 0.33 | < 0.33 | < 0.3 | < 0.3 | NS | NS | NS | NS |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.29 | < 0.29 | < 0.25 | < 0.25 | < 0.25 | < 0.2 | < 0.25 | < 0.2 |
| DICHLORODIFLUOROMETHANE | | UG/L | NS | NS | NS | < 0.43 | < 0.43 | < 0.5 | < 0.5 | NS | NS | NS | NS |
| ETHYLBENZENE | 0.5 | UG/L | < 0.25 | < 0.081 | < 0.081 | < 0.21 | < 0.21 | < 0.34 UJ | < 0.25 | < 0.25 | < 0.081 | < 0.25 | < 0.081 |
| ISOPROPYLBENZENE (CUMENE) | | UG/L | NS | NS | NS | < 0.29 | < 0.29 | < 0.25 | < 0.25 | NS | NS | NS | NS |
| METHYL ACETATE | | UG/L | NS | NS | NS | < 1.45 | < 1.45 | < 1.25 | < 1.25 | NS | NS | NS | NS |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | < 0.27 | < 0.598 UJ | < 0.944 UJ | < 2.31 | < 2.31 | NS | NS | < 0.27 | < 0.438 | < 0.27 | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.25 | < 0.5 | < 0.5 | < 1.78 | < 1.78 | < 1.25 | < 1.25 | < 0.25 | < 0.5 | < 0.25 | < 0.5 |
| METHYLCYCLOHEXANE | | UG/L | NS | NS | NS | < 0.34 | < 0.34 | < 0.25 | < 0.25 | NS | NS | NS | NS |
| METHYLENE CHLORIDE | 1 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 1.9 | < 1.9 | < 2 | < 2 | < 0.25 | < 0.2 | < 0.25 | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.25 | < 0.25 | 0.31 J | < 0.25 | < 0.25 | < 0.1 | < 0.25 | < 0.1 |
| tert-BUTYL METHYL ETHER | | UG/L | NS | NS | NS | < 0.32 | < 0.32 | < 0.25 | < 0.25 | NS | NS | NS | NS |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.33 | < 0.33 | 0.47 J | < 0.25 | < 0.25 | < 0.1 | < 0.25 | < 0.1 |
| TOLUENE | 0.5 | UG/L | < 0.25 | < 0.056 | < 0.056 | < 0.39 | < 0.39 | < 0.51 UJ | < 0.5 UJ | < 0.25 | < 0.056 | < 0.25 | < 0.056 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.37 | < 0.37 | 0.4 J | < 0.3 | < 0.25 | < 0.1 | < 0.25 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.25 | < 0.114 | < 0.114 | < 0.29 | < 0.29 | < 0.25 | < 0.25 | < 0.25 | < 0.114 | < 0.25 | < 0.114 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.36 | < 0.36 | 0.27 J | < 0.25 | < 0.25 | < 0.2 | < 0.25 | < 0.2 |
| TRICHLOROFLUOROMETHANE | | UG/L | NS | NS | NS | < 0.5 | < 0.5 | < 0.31 | < 0.31 | NS | NS | NS | NS |
| TRICHLOROTRIFLUOROETHANE | | UG/L | NS | NS | NS | NS | NS | < 1 | < 1 | NS | NS | NS | NS |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.25 | < 0.11 | < 0.11 | < 0.55 | < 0.55 | < 0.5 | < 0.5 | < 0.25 | < 0.11 | < 0.25 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.25 | < 0.175 | < 0.175 | < 0.25 | < 0.25 | < 1.2 UJ | < 0.65 UJ | < 0.25 | < 0.175 | < 0.25 | < 0.175 |

NS - Not Sampled
J - Validation qualifier for estimated values; sample exceeds quantiataion range.
UJ - Estimated value falls below reporting limit.
UG/L - micrograms per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX E**
**VOLATILE ORGANIC COMPOUNDS IN STORMWATER AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | PCU | STPO | STPO |
|---|---|---|---|---|---|
| | | Sample ID | SWSW0278 | SWSW0275 | SWSW0279 |
| | | Date | 12/28/05 | 01/12/05 | 12/28/05 |
| AnalyteNameShort | CRDL | UnitsID | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 |
| 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE | | UG/L | NS | NS | NS |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | < 0.104 | < 0.25 | < 0.104 |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | < 0.101 | < 0.25 | < 0.101 |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 |
| 1,2,4-TRICHLOROBENZENE | 10 | UG/L | NS | NS | NS |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | < 0.103 | < 0.25 | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 |
| 2-BUTANONE | | UG/L | NS | NS | NS |
| 2-HEXANONE | .1 | UG/L | < 0.5 | < 0.25 | < 0.5 |
| ACETONE | 5 | UG/L | < 4.16 UJ | 2.09 J | 4.59 UJ |
| BENZENE | 0.5 | UG/L | < 0.135 | < 0.25 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 | < 0.25 | < 0.104 |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 |
| BROMOFORM | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.446 | < 0.25 | **1.05** |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 |
| CHLOROFORM | 0.5 | UG/L | < 0.11 | < 0.25 | < 0.264 UJ |
| CHLOROMETHANE | 0.5 | UG/L | < 0.24 | < 0.25 | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 |
| CYCLOHEXANE | | UG/L | NS | NS | NS |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 |
| DICHLORODIFLUOROMETHANE | | UG/L | NS | NS | NS |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.25 | < 0.081 |
| ISOPROPYLBENZENE (CUMENE) | | UG/L | NS | NS | NS |
| METHYL ACETATE | | UG/L | NS | NS | NS |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | < 0.438 | < 0.27 | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | < 0.25 | < 0.5 |
| METHYLCYCLOHEXANE | | UG/L | NS | NS | NS |
| METHYLENE CHLORIDE | 1 | UG/L | < 0.2 | < 0.25 | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 |
| tert-BUTYL METHYL ETHER | | UG/L | NS | NS | NS |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 |
| TOLUENE | 0.5 | UG/L | < 0.056 | < 0.25 | < 0.056 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.25 | < 0.114 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 |
| TRICHLOROFLUOROMETHANE | | UG/L | NS | NS | NS |
| TRICHLOROTRIFLUOROETHANE | | UG/L | NS | NS | NS |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.25 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | < 0.25 | < 0.175 |

NS - Not Sampled
J - Validation qualifier for estimated values; sample exceeds quantiataion range.
UJ - Estimated value falls below reporting limit.
UG/L - micrograms per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX E**
**METALS IN STORMWATER AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | LF-01 | LF-01 | LS-01 | LS-01 | LS-01 | LS-01 | PCD | PCD | PCU | PCU | PCU | STPO | STPO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | STMW0133 | STMW0135 | RWSW0036 | RWSW0037 | RWSW0038 | RWSW0039 Dup | SWSW0274 | SWSW0276 | SWSW0273 | SWSW0277 Dup | SWSW0278 | SWSW0275 | SWSW0279 |
| | | Date | 01/11/05 | 12/28/05 | 03/22/05 | Dup 03/22/05 | 12/01/05 | 12/01/05 | 01/12/05 | 12/28/05 | 01/12/05 | 12/28/05 | 12/28/05 | 01/12/05 | 12/28/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | | | | | | |
| ANTIMONY | 5 | UG/L | 0.688 J | 0.645 J | **79** | **91** | **76.9** | **77.6** | 0.513 J | 0.918 J | 0.476 J | 0.774 J | 0.738 J | 0.309 J | < 0.5 |
| ARSENIC | 3 | UG/L | < 5.31 UJ | **4.87 J** | 2.1 J | < 1.5 | 2.76 J | 2.03 J | < 6.8 UJ | < 1.5 | < 7.43 UJ | < 1.5 | < 1.5 | < 6.03 UJ | **3.69 J** |
| BARIUM | 20 | UG/L | **105** | **97.6** | **21** | 17 | **41.3** | **65.6** | **129** | **69.4** | **124** | **75.3** | **73.5** | **83.8** | **54.6** |
| BERYLLIUM | 1 | UG/L | 0.255 J | 0.321 J | < 0.1 | < 0.1 | < 0.1 | 0.126 J | 0.368 J | < 0.1 | 0.27 J | < 0.1 | < 0.1 | < 0.08 | < 0.1 |
| BORON | 50 | UG/L | **51.1** | **50.7** | NS | NS | NS | NS | **201** | **303** | **212** | **328** | **320** | **741** | **809** |
| CADMIUM | 1 | UG/L | 0.331 J | 0.331 J | 0.11 J | < 0.1 | 0.273 J | 0.377 J | 0.147 J | < 0.1 | 0.154 J | < 0.1 | < 0.1 | < 0.04 | < 0.1 |
| CHROMIUM, TOTAL | 10 | UG/L | **41.6** | **54.2** | < 2.1 UJ | < 1.9 UJ | **12.7** | **23.1** | **27.8** | 6.28 J | **23.4** | 4.33 J | 4.19 J | 2.62 J | 2.22 J |
| COBALT | 10 | UG/L | 8.61 | **10.4** | 1.5 | 0.97 J | 2.48 | 4.5 | 4.63 | 1.01 | 3.93 | 0.457 J | 0.406 J | 0.455 J | 0.523 J |
| COPPER | 10 | UG/L | **21.4** | **21.2** | **11** | 9.8 | **14.3** | **22.9** | **17.2** | 4.07 J | **15** | 2.45 J | 2.24 J | 3.07 J | 2.45 J |
| IRON | 100 | UG/L | **12700** | **15200** | **8000** | **3600** | **4020** | **7030** | **13400** | **958** | **11300** | **455** | **337** | **101** | **126** |
| LEAD | 3 | UG/L | **14.9** | **16.7** | 2.3 | 1.9 J | **8.38** | **13.5** | **4.13** | < 0.5 | **3.55** | < 0.5 | < 0.5 | 0.231 J | < 0.5 |
| MANGANESE | 10 | UG/L | **242** | **315** | **310 J** | **170 J** | **94.7** | **168** | **184** | **28** | **155** | **16.5** | **14.6** | < 1.61 | < 1 |
| MERCURY | 0.2 | UG/L | **0.224** | **0.249** | < 0.04 | < 0.04 | < 0.05 | 0.072 J | < 0.0472 | < 0.05 | < 0.0472 | < 0.05 | < 0.05 | < 0.0472 | < 0.05 |
| MOLYBDENUM | 10 | UG/L | 0.434 J | 0.433 J | 0.42 J | 0.39 J | < 0.406 UJ | < 0.44 UJ | 0.855 J | 2.52 J | 0.531 J | 0.949 J | 0.877 J | **17** | **33.9** |
| NICKEL | 20 | UG/L | **73.9** | **83.7** | 4.1 | 4.3 | **20.6** | **34.9** | **34** | 8.86 J | **28** | 4.16 J | 3.65 J | 2.5 J | 2.67 J |
| SELENIUM | 3 | UG/L | < 2.15 UJ | < 2.5 | < 2.9 UJ | < 3.3 UJ | < 2.5 | < 2.5 | < 1.37 UJ | < 2.5 | < 2.66 UJ | < 2.5 | < 2.5 | < 3.27 UJ | < 2.5 |
| SILVER | 10 | UG/L | < 0.04 | < 0.2 | < 0.2 | < 0.2 | 0.437 J | 0.9 J | 0.065 J | < 0.2 | 0.06 J | < 0.2 | < 0.2 | < 0.04 | < 0.2 |
| THALLIUM | 10 | UG/L | 0.562 J | < 0.4 | < 0.4 | < 0.4 | < 0.4 | < 0.4 | 0.191 J | < 0.4 | 0.429 J | < 0.4 | < 0.4 | 0.179 J | < 0.4 |
| VANADIUM | 10 | UG/L | **33.4** | **32.6** | < 2 | < 2 | < 15.1 UJ | < 21.7 UJ | **36** | 4.74 J | **30.3** | < 2 | 2.12 J | **10.8** | 9.55 J |
| ZINC | 20 | UG/L | **158** | **143** | **82** | **93.5** | **136** | **181** | **40.2** | < 14.8 UJ | **33.4** | < 6.66 UJ | < 5.6 UJ | **44** | **34.5** |

NS - Not Sampled
J - Validation qualifier for estimated values; sample exceeds quantiataion range.
UJ - Estimated value falls below reporting limit.
UG/L - micrograms per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX E**
**RADS IN STORMWATER AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | LF-01 | LF-01 | LS-01 | LS-01 | | LS-01 | PCD |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | STMW0133 | STMW0135 | RWSW0036 | RWSW0037 Dup | LS-01 RWSW0038 | RWSW0039 Dup | SWSW0274 |
| | | Date | 01/11/05 | 12/28/05 | 03/22/05 | 03/22/05 | 12/01/05 | 12/01/05 | 01/12/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | |
| CARBON-14 | 20 | PCI/L | < 11.1 | < 20.7 | < 17.6 | < 17.6 | < 12.7 | < 12.8 | < 11.1 |
| RADIUM-226 | 1 | PCI/L | < 0.7 | < 0.489 | < 0.657 | < 0.583 | **1.88 +/- 0.635 J** | < 0.792 UJ | < 0.667 |
| STRONTIUM-90 | 1 | PCI/L | < 0.537 | < 0.915 | < 0.492 | < 0.745 | < 0.736 | < 0.687 | < 0.398 |
| TRITIUM (HYDROGEN-3) | 300 | PCI/L | < 249 | < 257 | < 428 | < 432 | < 247 | < 245 | < 251 |

NS - Not Sampled
J - Validation qualifier for estimated values; sample exceeds quantiataion range.
UJ - Estimated value falls below reporting limit.
UG/L - micrograms per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX E**
**RADS IN STORMWATER AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | PCD | PCU | PCU | PCU | STPO | STPO |
|---|---|---|---|---|---|---|---|---|
| | | Sample ID | SWSW0276 | SWSW0273 | SWSW0277 Dup | SWSW0278 | SWSW0275 | SWSW0279 |
| | | Date | 12/28/05 | 01/12/05 | 12/28/05 | 12/28/05 | 01/12/05 | 12/28/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | |
| CARBON-14 | 20 | PCI/L | < 20.7 | < 11.1 | < 20.6 | < 20.8 | < 11.1 | < 20.6 |
| RADIUM-226 | 1 | PCI/L | < 0.516 | < 0.9 UJ | < 0.351 | < 0.33 | < 0.556 UJ | < 0.453 |
| STRONTIUM-90 | 1 | PCI/L | < 0.722 | < 0.394 | < 0.561 | < 0.59 | < 0.451 | < 0.547 |
| TRITIUM (HYDROGEN-3) | 300 | PCI/L | < 261 | < 243 | < 261 | < 259 | < 237 | < 260 |

NS - Not Sampled
J - Validation qualifier for estimated values; sample exceeds quantiataion range.
UJ - Estimated value falls below reporting limit.
UG/L - micrograms per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX E**
**PESTICIDES/PCBS IN STORMWATER AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | LF-01 | LF-01 | LS-01 | LS-01 | LS-01 | LS-01 | PCD |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | STMW0133 | STMW0135 | RWSW0036 | RWSW0037 Dup | RWSW0038 | RWSW0039 Dup | SWSW0274 |
| | | Date | 01/11/05 | 12/28/05 | 03/22/05 | 03/22/05 | 12/01/05 | 12/01/05 | 01/12/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | |
| 4,4'-DDD | | UG/L | NS | NS | NS | NS | < 0.019 | < 0.0183 | NS |
| 4,4'-DDE | | UG/L | NS | NS | NS | NS | < 0.019 | < 0.0183 | NS |
| 4,4'-DDT | | UG/L | NS | NS | NS | NS | < 0.0284 | < 0.0274 | NS |
| ALDRIN | 0.01 | UG/L | < 0.0053 UJ | < 0.00048 | < 0.047 | < 0.048 | < 0.00948 | < 0.00913 | < 0.0051 |
| ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE) | 0.01 | UG/L | < 0.00146 UJ | < 0.00048 | < 0.047 | < 0.048 | < 0.00948 | < 0.00913 | < 0.00141 |
| ALPHA ENDOSULFAN | 0.01 | UG/L | < 0.00621 UJ | < 0.00048 | < 0.047 | < 0.048 | NS | NS | < 0.00597 |
| ALPHA-CHLORDANE | 0.01 | UG/L | < 0.00253 UJ | < 0.00048 | < 0.047 | < 0.048 | NS | NS | < 0.00243 |
| **AROCHLOR 1016** | | UG/L | NS | NS | NS | NS | < 0.474 | < 0.457 | NS |
| **AROCHLOR 1221** | | UG/L | NS | NS | NS | NS | < 0.79 | < 0.761 | NS |
| **AROCHLOR 1232** | | UG/L | NS | NS | NS | NS | < 0.474 | < 0.457 | NS |
| **AROCHLOR 1242** | | UG/L | NS | NS | NS | NS | < 0.569 | < 0.548 | NS |
| **AROCHLOR 1248** | | UG/L | NS | NS | NS | NS | < 0.474 | < 0.457 | NS |
| **AROCHLOR 1254** | | UG/L | NS | NS | NS | NS | < 0.474 | < 0.457 | NS |
| **AROCHLOR 1260** | | UG/L | NS | NS | NS | NS | < 0.474 | < 0.457 | NS |
| BETA BHC (BETA HEXACHLOROCYCLOHEXANE) | 0.01 | UG/L | < 0.00288 UJ | < 0.00048 | < 0.047 | < 0.048 | < 0.00948 | < 0.00913 | < 0.00277 |
| BETA ENDOSULFAN | 0.02 | UG/L | < 0.012 UJ | 0.0103 J | < 0.094 | < 0.096 | NS | NS | < 0.0115 |
| CHLORDANE | | UG/L | NS | NS | NS | NS | < 0.0948 | < 0.0913 | NS |
| DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE) | 0.01 | UG/L | < 0.00278 UJ | < 0.00048 | < 0.047 | < 0.048 | < 0.00948 | < 0.00913 | < 0.00267 |
| DIELDRIN | 0.02 | UG/L | < 0.00389 UJ | 0.00652 J | < 0.094 | < 0.096 | < 0.0284 | < 0.0274 | < 0.00374 |
| ENDOSULFAN I | | UG/L | NS | NS | NS | NS | < 0.00948 | < 0.00913 | NS |
| ENDOSULFAN II | | UG/L | NS | NS | NS | NS | < 0.0209 | < 0.0201 | NS |
| ENDOSULFAN SULFATE | 0.02 | UG/L | < 0.0047 UJ | 0.00395 J | < 0.094 | < 0.096 | < 0.0118 | < 0.0114 | < 0.00451 |
| ENDRIN | 0.02 | UG/L | < 0.00384 UJ | < 0.00048 | < 0.094 | < 0.096 | < 0.00948 | < 0.00913 | < 0.00369 |
| ENDRIN ALDEHYDE | 0.02 | UG/L | < 0.00702 UJ | < 0.00096 | < 0.094 | < 0.096 | < 0.019 | < 0.0183 | < 0.00675 |
| ENDRIN KETONE | 0.02 | UG/L | < 0.00465 UJ | < 0.00096 | < 0.094 | < 0.096 | < 0.019 | < 0.0183 | < 0.00447 |
| GAMMA BHC (LINDANE) | 0.01 | UG/L | < 0.00212 UJ | < 0.00048 | < 0.047 | < 0.048 | < 0.00948 | < 0.00913 | < 0.00204 |
| GAMMA-CHLORDANE | 0.01 | UG/L | < 0.00369 UJ | < 0.00072 | < 0.047 | < 0.048 | NS | NS | < 0.00354 |
| HEPTACHLOR | 0.01 | UG/L | < 0.00591 UJ | < 0.00048 | < 0.047 | < 0.048 | < 0.00948 | < 0.00913 | < 0.00568 |
| HEPTACHLOR EPOXIDE | 0.01 | UG/L | < 0.00303 UJ | < 0.00072 | < 0.047 | < 0.048 | < 0.0142 | < 0.0137 | < 0.00291 |
| METHOXYCHLOR | 0.1 | UG/L | < 0.028 UJ | < 0.00481 | < 0.47 | < 0.48 | < 0.0948 | < 0.0913 | < 0.0269 |
| p,p'-DDD | 0.02 | UG/L | < 0.00556 UJ | 0.00207 J | < 0.094 | < 0.096 | NS | NS | < 0.00534 |
| p,p'-DDE | 0.02 | UG/L | < 0.00444 UJ | 0.0033 J | < 0.094 | < 0.096 | NS | NS | < 0.00427 |
| p,p'-DDT | 0.02 | UG/L | < 0.011 UJ | 0.00419 J | < 0.094 | < 0.096 | NS | NS | < 0.0106 |
| PCB-1016 (AROCHLOR 1016) | 0.2 | UG/L | < 0.253 UJ | < 0.024 | < 0.94 | < 0.96 | NS | NS | < 0.243 |
| PCB-1221 (AROCHLOR 1221) | 0.4 | UG/L | < 0.421 UJ | < 0.04 | < 1.9 | < 1.9 | NS | NS | < 0.404 |
| PCB-1232 (AROCHLOR 1232) | 0.2 | UG/L | < 0.253 UJ | < 0.024 | < 0.94 | < 0.96 | NS | NS | < 0.243 |
| PCB-1242 (AROCHLOR 1242) | 0.2 | UG/L | < 0.303 UJ | < 0.0288 | < 0.94 | < 0.96 | NS | NS | < 0.291 |
| PCB-1248 (AROCHLOR 1248) | 0.2 | UG/L | < 0.253 UJ | < 0.024 | < 0.94 | < 0.96 | NS | NS | < 0.243 |
| PCB-1254 (AROCHLOR 1254) | 0.2 | UG/L | < 0.253 UJ | < 0.024 | < 0.94 | < 0.96 | NS | NS | < 0.243 |
| PCB-1260 (AROCHLOR 1260) | 0.2 | UG/L | < 0.253 UJ | < 0.024 | < 0.94 | < 0.96 | NS | NS | < 0.243 |
| TOXAPHENE | 1 | UG/L | < 0.106 UJ | < 0.012 | < 4.7 | < 4.8 | < 0.237 | < 0.228 | < 0.102 |

NS - Not Sampled
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UJ - Estimated value falls below reporting limit.
UG/L - micrograms per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX E**
**PESTICIDES/PCBS IN STORMWATER AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | PCD | PCU | PCU | PCU | STPO | STPO |
|---|---|---|---|---|---|---|---|---|
| | | Sample ID | SWSW0276 | SWSW0273 | SWSW0277 Dup | SWSW0278 | SWSW0275 | SWSW0279 |
| | | Date | 12/28/05 | 01/12/05 | 12/28/05 | 12/28/05 | 01/12/05 | 12/28/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | |
| 4,4'-DDD | | UG/L | NS | NS | NS | NS | NS | NS |
| 4,4'-DDE | | UG/L | NS | NS | NS | NS | NS | NS |
| 4,4'-DDT | | UG/L | NS | NS | NS | NS | NS | NS |
| ALDRIN | 0.01 | UG/L | < 0.00049 | < 0.00515 | < 0.00048 | < 0.00048 | < 0.0052 | < 0.00048 |
| ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE) | 0.01 | UG/L | < 0.00049 | < 0.00142 | < 0.00048 | < 0.00048 | < 0.00144 | < 0.00048 |
| ALPHA ENDOSULFAN | 0.01 | UG/L | < 0.00049 | < 0.00603 | < 0.00048 | < 0.00048 | < 0.00609 | < 0.00048 |
| ALPHA-CHLORDANE | 0.01 | UG/L | < 0.00049 | < 0.00245 | < 0.00048 | < 0.00048 | < 0.00248 | < 0.00048 |
| **AROCHLOR 1016** | | UG/L | NS | NS | NS | NS | NS | NS |
| **AROCHLOR 1221** | | UG/L | NS | NS | NS | NS | NS | NS |
| **AROCHLOR 1232** | | UG/L | NS | NS | NS | NS | NS | NS |
| **AROCHLOR 1242** | | UG/L | NS | NS | NS | NS | NS | NS |
| **AROCHLOR 1248** | | UG/L | NS | NS | NS | NS | NS | NS |
| **AROCHLOR 1254** | | UG/L | NS | NS | NS | NS | NS | NS |
| **AROCHLOR 1260** | | UG/L | NS | NS | NS | NS | NS | NS |
| BETA BHC (BETA HEXACHLOROCYCLOHEXANE) | 0.01 | UG/L | < 0.00049 | < 0.00279 | < 0.00048 | < 0.00048 | < 0.00282 | < 0.00048 |
| BETA ENDOSULFAN | 0.02 | UG/L | < 0.00107 | < 0.0116 | < 0.00105 | < 0.00106 | < 0.0117 | < 0.00105 |
| CHLORDANE | | UG/L | NS | NS | NS | NS | NS | NS |
| DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE) | 0.01 | UG/L | < 0.00049 | < 0.0027 | < 0.00048 | < 0.00048 | < 0.00272 | < 0.00048 |
| DIELDRIN | 0.02 | UG/L | < 0.00146 | < 0.00377 | < 0.00143 | < 0.00144 | < 0.00381 | < 0.00143 |
| ENDOSULFAN I | | UG/L | NS | NS | NS | NS | NS | NS |
| ENDOSULFAN II | | UG/L | NS | NS | NS | NS | NS | NS |
| ENDOSULFAN SULFATE | 0.02 | UG/L | < 0.00061 | < 0.00456 | < 0.0006 | < 0.0006 | < 0.0046 | < 0.0006 |
| ENDRIN | 0.02 | UG/L | < 0.00049 | < 0.00373 | < 0.00048 | < 0.00048 | < 0.00376 | < 0.00048 |
| ENDRIN ALDEHYDE | 0.02 | UG/L | < 0.00097 | < 0.00681 | < 0.00095 | < 0.00096 | < 0.00688 | < 0.00095 |
| ENDRIN KETONE | 0.02 | UG/L | < 0.00097 | < 0.00451 | < 0.00095 | < 0.00096 | < 0.00455 | < 0.00095 |
| GAMMA BHC (LINDANE) | 0.01 | UG/L | < 0.00049 | < 0.00206 | < 0.00048 | < 0.00048 | < 0.00208 | < 0.00048 |
| GAMMA-CHLORDANE | 0.01 | UG/L | < 0.00073 | < 0.00358 | < 0.00071 | < 0.00072 | < 0.00361 | < 0.00071 |
| HEPTACHLOR | 0.01 | UG/L | < 0.00049 | < 0.00574 | < 0.00048 | < 0.00048 | < 0.00579 | < 0.00048 |
| HEPTACHLOR EPOXIDE | 0.01 | UG/L | < 0.00073 | < 0.00294 | < 0.00071 | < 0.00072 | < 0.00297 | < 0.00071 |
| METHOXYCHLOR | 0.1 | UG/L | < 0.00485 | < 0.0272 | < 0.00476 | < 0.00481 | < 0.0275 | < 0.00476 |
| p,p'-DDD | 0.02 | UG/L | < 0.00097 | < 0.00539 | 0.0012 J | < 0.00096 | < 0.00545 | < 0.00095 |
| p,p'-DDE | 0.02 | UG/L | 0.00174 J | < 0.00431 | 0.0032 J | 0.00221 J | < 0.00436 | < 0.00095 |
| p,p'-DDT | 0.02 | UG/L | < 0.00146 | < 0.0107 | 0.00561 J | 0.00425 J | < 0.0108 | < 0.00143 |
| PCB-1016 (AROCHLOR 1016) | 0.2 | UG/L | < 0.0243 | < 0.245 | < 0.0238 | < 0.024 | < 0.248 | < 0.0238 |
| PCB-1221 (AROCHLOR 1221) | 0.4 | UG/L | < 0.0404 | < 0.408 | < 0.0397 | < 0.04 | < 0.412 | < 0.0397 |
| PCB-1232 (AROCHLOR 1232) | 0.2 | UG/L | < 0.0243 | < 0.245 | < 0.0238 | < 0.024 | < 0.248 | < 0.0238 |
| PCB-1242 (AROCHLOR 1242) | 0.2 | UG/L | < 0.0291 | < 0.294 | < 0.0286 | < 0.0288 | < 0.297 | < 0.0286 |
| PCB-1248 (AROCHLOR 1248) | 0.2 | UG/L | < 0.0243 | < 0.245 | < 0.0238 | < 0.024 | < 0.248 | < 0.0238 |
| PCB-1254 (AROCHLOR 1254) | 0.2 | UG/L | < 0.0243 | < 0.245 | < 0.0238 | < 0.024 | < 0.248 | < 0.0238 |
| PCB-1260 (AROCHLOR 1260) | 0.2 | UG/L | < 0.0243 | < 0.245 | < 0.0238 | < 0.024 | < 0.248 | < 0.0238 |
| TOXAPHENE | 1 | UG/L | < 0.0121 | < 0.103 | < 0.0119 | < 0.012 | < 0.104 | < 0.0119 |

NS - Not Sampled
J - Validation qualifier for estimated values; sample exceeds quantiataion range.
UJ - Estimated value falls below reporting limit.
UG/L - micrograms per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX E**
**WET CHEMISTRY IN STORMWATER AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | LF-01 | LF-01 | LS-01 | LS-01 | LS-01 | | PCD |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | STMW0133 | STMW0135 | RWSW0036 | RWSW0037 Dup | RWSW0038 | LS-01 RWSW0039 | SWSW0274 |
| | | Date | 01/11/05 | 12/28/05 | 03/22/05 | 03/22/05 | 12/01/05 | Dup 12/01/05 | 01/12/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | |
| NITRATE AS NITROGEN | 0.1 | MG/L | **0.521** | **0.509 J** | **0.168** | **0.289** | **0.405** | **0.386** | **0.552** |
| OIL & GREASE, TOTAL REC | 2 | MG/L | < 1.36 | **3.3 J** | NS | NS | NS | NS | NS |
| TOTAL DISSOLVED SOLIDS (RESIDUE, FILTERABLE) | 20 | MG/L | **62.8** | **85** | **148** | **70** | 15 J | **49 J** | **191** |
| TOTAL ORGANIC CARBON | 1 | MG/L | **4.51** | **2.87** | **15** | **15.2** | **15.7** | **15.1** | NS |
| TOTAL SUSPENDED SOLIDS | | MG/L | **148** | **207** | **20** | **12** | **186 J** | **351 J** | NS |

NS - Not Sampled
J - Validation qualifier for estimated values; sample exceeds quantiataion range.
UJ - Estimated value falls below reporting limit.
UG/L - micrograms per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX E**
**WET CHEMISTRY IN STORMWATER AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | PCD | PCU | PCU | PCU | STPO | STPO |
|---|---|---|---|---|---|---|---|---|
| | | Sample ID | SWSW0276 | SWSW0273 | SWSW0277 Dup | SWSW0278 | SWSW0275 | SWSW0279 |
| | | Date | 12/28/05 | 01/12/05 | 12/28/05 | 12/28/05 | 01/12/05 | 12/28/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | |
| NITRATE AS NITROGEN | 0.1 | MG/L | **1.96** | **0.457** | **2.41** | **2.41** | **9.34** | **3.67** |
| OIL & GREASE, TOTAL REC | 2 | MG/L | NS | NS | NS | NS | NS | NS |
| TOTAL DISSOLVED SOLIDS (RESIDUE, FILTERABLE) | 20 | MG/L | **269** | **193** | **268** | **268** | **710** | **649** |
| TOTAL ORGANIC CARBON | 1 | MG/L | NS | NS | NS | NS | NS | NS |
| TOTAL SUSPENDED SOLIDS | . | MG/L | NS | NS | NS | NS | NS | NS |

NS - Not Sampled
J - Validation qualifier for estimated values; sample exceeds quantiataion range.
UJ - Estimated value falls below reporting limit.
UG/L - micrograms per liter
Results in **BOLD** indicate detections above the CRDL.

# APPENDIX E
## AQUATIC TOXICITY IN STORMWATER AND SURFACE WATER
### Groundwater Treatment System and Water Monitoring Report
### LEHR/SCDS Environmental Restoration
### Davis, California

| **Acute Aquatic Toxicity Analysis** | Location | LF-01 | LF-01 | LS-01 | LS-01 | LS-01 | LS-01 | LS-01 | LS-01 |
|---|---|---|---|---|---|---|---|---|---|
| | Sample ID | STMW0133 | STMW0135 | RWSW0036 | RWSW0037 | RWSW0036RE | RWSW0037RE | RWSW0038 | RWSW0039 Dup |
| | Date | 1/11/2005 | 12/28/2005 | 3/22/2005 | Dup 3/22/2005 | 4/8/2005 | 4/8/2005 | 12/1/2005 | 12/1/2005 |
| AnalyteNameShort | UnitsID | | | | | | | | |
| PIMEPHALIS SPECIES - SURVIVAL | % survival | 100 N | 90 N | 35 T | 70 T | 100 N | 100 N | 85 N | 100 N |

| **Chronic Aquatic Toxicity Analysis** | Location | PCD | PCD | PCU | PCU |
|---|---|---|---|---|---|
| | Sample ID | SWSW0274 | SWSW0276 | SWSW0273 | SWSW0278 |
| | Date | 1/12/2005 | 12/28/2005 | 1/12/2005 | 12/28/2005 |
| AnalyteNameShort | UnitsID | | | | |
| CERIODAPHNIA SPECIES - REPRODUCTION | NOEC | 100% | 100% | 100% | 100% |
| CERIODAPHNIA SPECIES - SURVIVAL | NOEC | 100% | 100% | 100% | 100% |
| PIMEPHALIS SPECIES - GROWTH | NOEC | 100% | 100% | 100% | 50% |
| PIMEPHALIS SPECIES - SURVIVAL | NOEC | 100% | 100% | 100% | 100% |
| SELENASTRUM SPECIES - Growth/Cell Multiplication | NOEC | 100% | 50% | 100% | 100% |

NOEC - No Observed Effect Concentration. Results listed is the sample concentration in which no observable effect was noted during analysis; 100% is a non-diluted sample.
N - No toxicity; the % survival for the storm water sample was not significantly different from the % survival for the associated laboratory control.
T - Toxicity detected; the % survival for the storm water sample was significantly lower than the % survival for the associated laboratory control.
Toxicity related to low oxygen levels in standing water due to pump malfunction. LS-1 aquatic toxicity was resampled on April 8, 2005.

# APPENDIX F

## Complete Analytical Results for 2005 Groundwater, Stormwater, and Surface Water

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | DDC-1A<br>GWDC0065<br>01/20/05 | DDC-1B<br>GWDC0066<br>01/20/05 | DDC-1B<br>GWDC0067<br>Dup 01/20/05 | DDC-1B<br>GWDC0087<br>04/27/05 | DDC-1B<br>GWDC0107<br>08/10/05 | DDC-1B<br>GWDC0127<br>10/18/05 | DDC-1C<br>GWDC0068<br>01/20/05 | DDC-1C<br>GWDC0088<br>04/27/05 | DDC-1C<br>GWDC0108<br>08/10/05 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.25 | < 0.1 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.25 | < 0.2 | < 0.2 |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | **1.17** | **1.42** | **1.43** | **1.59** | 0.853 J | **21.3 J** | **22.3** | **23.7** | **25.2** |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.101 | < 0.101 | **7.65 J** | **8.02** | **10.8** | **9.7** |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | **5.14 J** | **7.55** | **15.4** | **13** |
| 1,2,4-TRICHLOROBENZENE | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 UJ | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.25 | < 0.2 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.25 | < 0.1 | < 0.1 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | < 0.25 | 0.295 J | 0.269 J | 0.349 J | < 0.1 | **5.83 J** | **8.57** | **9.99** | **8.49** |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.103 | < 0.103 | **0.695 J** | **0.988** | **1.23** | **0.978** |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.25 | < 0.1 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.25 | < 0.1 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.5 | < 0.5 | < 0.5 UJ | < 0.25 | < 0.5 | < 0.5 |
| ACETONE | 5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.37 | < 0.37 | < 0.37 UJ | < 0.25 | 0.981 J | < 0.37 |
| BENZENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.135 | < 0.135 | 0.219 J | < 0.25 | < 0.135 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.104 | < 0.104 | < 0.104 UJ | < 0.25 | < 0.104 | < 0.104 |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | 0.282 J | 0.343 J | **0.527** | 0.358 J |
| BROMOFORM | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | **0.976 J** | < 0.25 | < 0.2 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 UJ | < 0.25 | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.446 | < 0.446 | < 0.446 UJ | < 0.25 | < 0.446 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.25 | < 0.2 | < 0.2 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.25 | < 0.1 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.25 | < 0.2 | < 0.2 |
| CHLOROFORM | 0.5 | UG/L | **41.9** | **49.7** | **48.1** | **66.9** | **28.1** | **3560 J** | **4580** | **5350 J** | **5320 J** |
| CHLOROMETHANE | 0.5 | UG/L | < 0.25 UJ | < 0.25 UJ | < 0.25 UJ | < 0.24 | < 0.24 | < 0.24 UJ | < 0.25 UJ | < 0.24 | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.25 | < 0.1 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.25 | < 0.2 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.25 | < 0.2 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.081 | < 0.081 | < 0.081 UJ | < 0.25 | < 0.081 | < 0.081 |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | < 0.27 | < 0.27 | < 0.27 | < 0.438 | < 0.438 | < 0.438 UJ | < 0.27 | < 0.438 | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.5 | < 0.5 | < 0.5 UJ | < 0.25 | < 0.5 | < 0.5 |
| METHYLENE CHLORIDE | 1 | UG/L | < 0.25 UJ | < 0.25 UJ | < 0.25 UJ | < 0.2 | < 0.2 | 0.455 J | **3.95 J** | **2.59** | **1.76** |
| STYRENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.25 | < 0.1 | < 0.1 |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | 0.387 J | 0.339 J | **0.521** | 0.487 J |
| TOLUENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.056 | < 0.056 | < 0.056 UJ | < 0.25 | < 0.056 | < 0.056 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.25 | < 0.1 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.114 | < 0.114 | < 0.114 UJ | < 0.25 | < 0.114 | < 0.114 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | **1.2 J** | **1.18** | **1.69** | **1.51** |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.11 | < 0.11 | < 0.11 UJ | < 0.25 | < 0.11 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.175 | < 0.175 | < 0.175 UJ | < 0.25 | < 0.175 | < 0.175 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | DDC-1C<br>GWDC0128<br>10/18/05 | DDC-1C<br>GWDC0129 Dup<br>10/18/05 | DDC-2A<br>GWDC0069<br>01/19/05 | DDC-2A<br>GWDC0089<br>04/27/05 |
|---|---|---|---|---|---|---|
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | **20.4** | **22.4** | **4.05** | **4.56** |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | **7.83** | **7.15** | < 0.25 | < 0.101 |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | **7.05** | **6.54** | < 0.25 | < 0.1 |
| 1,2,4-TRICHLOROBENZENE | 10 | UG/L | NS | NS | NS | NS |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | **6.22** | **6.69** | < 0.25 | < 0.1 |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | **0.768** | **0.828** | < 0.25 | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.5 | < 0.5 | < 0.25 | < 0.5 |
| ACETONE | 5 | UG/L | < 0.37 | < 0.37 | < 0.25 | 0.505 J |
| BENZENE | 0.5 | UG/L | < 0.135 | 0.255 J | < 0.25 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 | < 0.104 | < 0.25 | < 0.104 |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| BROMOFORM | 0.5 | UG/L | **0.945 J** | < 0.2 UJ | < 0.25 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.446 | < 0.446 | < 0.25 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| CHLOROFORM | 0.5 | UG/L | **4600** | **3860** | **24.2** | **40.2 J** |
| CHLOROMETHANE | 0.5 | UG/L | < 0.24 | < 0.24 | < 0.25 UJ | < 0.24 UJ |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.081 | < 0.25 | < 0.081 |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | < 0.438 | < 0.438 | < 0.27 | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | < 0.5 | < 0.25 | < 0.5 |
| METHYLENE CHLORIDE | 1 | UG/L | < 0.2 | < 0.2 | < 0.25 UJ | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | **0.554** | **0.667** | < 0.25 | < 0.1 |
| TOLUENE | 0.5 | UG/L | < 0.056 | < 0.056 | < 0.25 | 0.383 J |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.114 | < 0.25 | < 0.114 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | **1.58** | **1.71** | < 0.25 | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.11 | < 0.25 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | < 0.175 | < 0.25 | < 0.175 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | DDC-2B | DDC-2B | DDC-2B | DDC-2B | DDC-2B | DDC-2C | DDC-2C | DDC-2C |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWDC0070 | GWDC0071 | GWDC0090 | GWDC0110 | GWDC0131 | GWDC0072 | GWDC0091 | GWDC0111 |
| | | Date | 01/19/05 | Dup 01/19/05 | 04/27/05 | 08/10/05 | 10/18/05 | 01/19/05 | 04/27/05 | 08/10/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 UJ | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 UJ | < 0.2 |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | **6.23** | **5.54** | **6.4** | **8.11** | **7.61** | **9.64** | **8.58 J** | **4.57** |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.101 | < 0.101 | < 0.101 | **0.527** | 0.266 J | 0.425 J |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | 0.257 J | < 0.1 UJ | < 0.1 |
| 1,2,4-TRICHLOROBENZENE | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 UJ | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 UJ | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 UJ | < 0.1 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | 0.315 J | < 0.1 UJ | **1.24** |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.103 | < 0.103 | < 0.103 | < 0.25 | < 0.103 UJ | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 UJ | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 UJ | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.25 | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 UJ | < 0.5 |
| ACETONE | 5 | UG/L | < 0.25 | < 0.25 | < 0.37 | < 0.37 | < 0.37 | < 0.25 | < 0.37 UJ | < 0.37 |
| BENZENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.135 | < 0.135 | < 0.135 | < 0.25 | < 0.135 UJ | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.104 | < 0.104 | < 0.104 | < 0.25 | < 0.104 UJ | < 0.104 |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 UJ | < 0.1 |
| BROMOFORM | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 UJ | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 UJ | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.25 | < 0.25 | < 0.446 | < 0.446 | < 0.446 | < 0.25 | < 0.446 UJ | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 UJ | < 0.2 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 UJ | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 UJ | < 0.2 |
| CHLOROFORM | 0.5 | UG/L | **42.1** | **38.2** | **50.4** | **50.4** | **47.8** | **152** | **89.6 J** | **63.5** |
| CHLOROMETHANE | 0.5 | UG/L | < 0.25 UJ | < 0.25 UJ | < 0.24 | < 0.24 | < 0.24 | < 0.25 | < 0.24 UJ | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 UJ | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 UJ | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 UJ | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.081 | < 0.081 | < 0.081 | < 0.25 | < 0.081 UJ | < 0.081 |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | < 0.27 | < 0.27 | < 0.438 | < 0.438 | < 0.438 | < 0.27 | < 0.438 UJ | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.25 | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 UJ | < 0.5 |
| METHYLENE CHLORIDE | 1 | UG/L | < 0.25 UJ | < 0.25 UJ | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 UJ | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.25 UJ | < 0.25 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 UJ | < 0.1 |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 UJ | < 0.1 |
| TOLUENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.056 | < 0.056 | < 0.056 | < 0.25 | < 0.056 UJ | < 0.056 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 UJ | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.114 | < 0.114 | < 0.114 | < 0.25 | < 0.114 UJ | < 0.114 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | 0.428 J | < 0.2 UJ | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.11 | < 0.11 | < 0.11 | < 0.25 | < 0.11 UJ | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.25 | < 0.25 | < 0.175 | < 0.175 | < 0.175 | < 0.25 | < 0.175 UJ | < 0.175 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

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**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | DDC-2C | DDC-2C | DDC-3A | DDC-3B | DDC-3B | DDC-3B | DDC-3B | DDC-3B |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWDC0112 Dup | GWDC0132 | GWDC0133 | GWDC0074 | GWDC0093 | GWDC0094 Dup | GWDC0114 | GWDC0134 |
| | | Date | 08/10/05 | 10/18/05 | 10/18/05 | 01/20/05 | 04/27/05 | 04/27/05 | 08/10/05 | 10/18/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | **4.63** | **7.74** | < 0.104 | **1.59** | **1.46** | **1.32** | < 0.104 | < 0.104 |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | 0.432 J | **0.724** | **0.512** | **2.45** | **2.18** | **2.03** | **0.631** | 0.425 J |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | 0.425 J | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,2,4-TRICHLOROBENZENE | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | **1.19** | **1.38** | **1.42** | **5.47** | **5.04** | **4.42** | **1.45** | **1.27** |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | < 0.103 | < 0.103 | < 0.103 | 0.371 J | 0.316 J | < 0.103 | < 0.103 | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| ACETONE | 5 | UG/L | 0.611 J | < 0.37 | < 0.37 | < 0.25 | < 0.37 | < 0.37 | < 0.37 | < 0.37 |
| BENZENE | 0.5 | UG/L | < 0.135 | < 0.135 | < 0.135 | < 0.25 | < 0.135 | < 0.135 | < 0.135 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 | < 0.104 | < 0.104 | < 0.25 | < 0.104 | < 0.104 | < 0.104 | < 0.104 |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| BROMOFORM | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.446 | < 0.446 | < 0.446 | < 0.25 | < 0.446 | < 0.446 | < 0.446 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| CHLOROFORM | 0.5 | UG/L | **61.6** | **141** | **34.4** | **204** | **139** | **140** | **39.6** | **29.4** |
| CHLOROMETHANE | 0.5 | UG/L | < 0.24 | < 0.24 | < 0.24 | < 0.25 | < 0.24 | < 0.24 | < 0.24 | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.081 | < 0.081 | < 0.25 | < 0.081 | < 0.081 | < 0.081 | < 0.081 |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | < 0.438 | < 0.438 | < 0.438 | < 0.27 | < 0.438 | < 0.438 | < 0.438 | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| METHYLENE CHLORIDE | 1 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| TOLUENE | 0.5 | UG/L | < 0.056 | < 0.056 | < 0.056 | < 0.25 | < 0.056 | < 0.056 | < 0.056 | < 0.056 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.114 | < 0.114 | < 0.25 | < 0.114 | < 0.114 | < 0.114 | < 0.114 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | 0.247 J | 0.295 J | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.11 | < 0.11 | < 0.25 | < 0.11 | < 0.11 | < 0.11 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | < 0.175 | < 0.175 | < 0.25 | < 0.175 | < 0.175 | < 0.175 | < 0.175 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | DDC-3C | DDC-3C | DDC-3C | DDC-3C | DDC-4A | DDC-4B | DDC-4B | DDC-4B | DDC-4B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWDC0075 | GWDC0095 | GWDC0115 | GWDC0135 | GWDC0076 | GWDC0077 | GWDC0097 | GWDC0117 | GWDC0137 |
| | | Date | 01/20/05 | 04/27/05 | 08/10/05 | 10/18/05 | 01/19/05 | 01/19/05 | 04/27/05 | 08/10/05 | 10/18/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.2 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.4 | < 0.2 |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | **1.51** | **1.46** | 0.535 J | < 0.104 | 0.659 J | 0.781 J | **1.17** | **2.42** | **1.29** |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | **2.83** | **2.95** | **4.57** | **1.06** | 0.408 J | 0.424 J | **0.933** | **0.582 J** | **1 J** |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | 0.351 J | 0.269 J | < 0.778 UJ | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.2 | < 0.1 |
| 1,2,4-TRICHLOROBENZENE | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.5 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.4 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.2 | < 0.1 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | **5** | **4.87** | **3.27** | **1.76** | **2.26** | **2.55** | **4.76** | **2.22** | **4.49** |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | 0.388 J | 0.332 J | < 0.103 | < 0.103 | 0.251 J | 0.274 J | 0.452 J | **1.22** | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.2 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.2 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.25 | < 0.5 | < 1 | < 0.5 |
| ACETONE | 5 | UG/L | < 0.25 | < 0.37 | 0.686 J | < 0.37 | < 0.25 | < 0.25 | < 0.37 | < 0.74 | < 0.37 |
| BENZENE | 0.5 | UG/L | < 0.25 | < 0.135 | < 0.135 | < 0.135 | < 0.25 | < 0.25 | < 0.135 | < 0.27 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.25 | < 0.104 | < 0.104 | < 0.104 | < 0.25 | < 0.25 | < 0.104 | < 0.208 | < 0.104 |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.2 | < 0.1 |
| BROMOFORM | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.4 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.5 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.25 | < 0.446 | < 0.446 | < 0.446 | < 0.25 | < 0.25 | < 0.446 | < 0.892 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.4 | < 0.2 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.2 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.4 | < 0.2 |
| CHLOROFORM | 0.5 | UG/L | **184** | **176** | **222** | **57** | **87.2** | **93** | **177** | **91.1** | **34.2 J** |
| CHLOROMETHANE | 0.5 | UG/L | < 0.25 | < 0.24 | < 0.24 | < 0.24 | < 0.25 | < 0.25 | < 0.24 | < 0.48 | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.2 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.4 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.4 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.25 | < 0.081 | < 0.081 | < 0.081 | < 0.25 | < 0.25 | < 0.081 | < 0.162 | < 0.081 |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | < 0.27 | < 0.438 | < 0.438 | < 0.438 | < 0.27 | < 0.27 | < 0.438 | < 0.876 | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.25 | < 0.5 | < 1 | < 0.5 |
| METHYLENE CHLORIDE | 1 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.4 | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.2 | < 0.1 |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | < 0.25 | < 0.1 | 0.297 J | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.2 | < 0.1 |
| TOLUENE | 0.5 | UG/L | < 0.25 | < 0.056 | < 0.056 | < 0.056 | < 0.25 | < 0.25 | < 0.056 | < 0.112 | < 0.056 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.2 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.25 | < 0.114 | < 0.114 | < 0.114 | < 0.25 | < 0.25 | < 0.114 | < 0.228 | < 0.114 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.4 | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.25 | < 0.11 | < 0.11 | < 0.11 | < 0.25 | < 0.25 | < 0.11 | < 0.22 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.25 | < 0.175 | < 0.175 | < 0.175 | < 0.25 | < 0.25 | < 0.175 | < 0.35 | < 0.175 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | DDC-4B<br>GWDC0138 Dup<br>10/18/05 | DDC-4C<br>GWDC0078<br>01/19/05 | DDC-4C<br>GWDC0098<br>04/27/05 | DDC-4C<br>GWDC0118<br>08/10/05 | DDC-4C<br>GWDC0139<br>10/18/05 | DDC-5A<br>GWDC0079<br>01/19/05 | DDC-5A<br>GWDC0099<br>04/27/05 | DDC-5B<br>GWDC0080<br>01/19/05 | DDC-5B<br>GWDC0100<br>04/27/05 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 1 | < 0.1 UJ | < 0.25 | < 0.1 | < 0.25 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 2 | < 0.2 UJ | < 0.25 | < 0.2 | < 0.25 | < 0.2 |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | **1.32** | **1.29** | **1.46** | **16.3** | **1.79 J** | < 0.25 | < 0.104 | < 0.25 | < 0.104 |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | 0.463 J | **1.06** | **1.47** | **3.13 J** | **1.99 J** | < 0.25 | < 0.101 | < 0.25 | < 0.101 |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | 0.373 J | < 0.1 | **9.18** | < 0.1 UJ | < 0.25 | < 0.1 | < 0.25 | < 0.1 |
| 1,2,4-TRICHLOROBENZENE | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 2.5 | < 0.25 UJ | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 2 | < 0.2 UJ | < 0.25 | < 0.2 | < 0.25 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 1 | < 0.1 UJ | < 0.25 | < 0.1 | < 0.25 | < 0.1 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | **4.62** | **3.86** | **5.54** | **10.9** | **5.6 J** | < 0.25 | < 0.1 | < 0.25 | < 0.1 |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | < 0.103 | **0.61** | **0.624** | **5.26** | **0.532 J** | < 0.25 | < 0.103 | < 0.25 | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 1 | < 0.1 UJ | < 0.25 | < 0.1 | < 0.25 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 1 | < 0.1 UJ | < 0.25 | < 0.1 | < 0.25 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.5 | 0.533 J | < 0.5 | < 5 | < 0.5 UJ | < 0.25 | < 0.5 | < 0.25 | < 0.5 |
| ACETONE | 5 | UG/L | < 0.37 | < 0.25 | < 0.37 | < 3.7 | < 0.37 UJ | < 0.25 | 0.756 J | < 0.25 | 1.25 J |
| BENZENE | 0.5 | UG/L | < 0.135 | < 0.25 | < 0.135 | < 1.35 | < 0.135 UJ | < 0.25 | < 0.135 | < 0.25 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 | < 0.25 | < 0.104 | < 1.04 | < 0.104 UJ | < 0.25 | < 0.104 | < 0.25 | < 0.104 |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.1 | 0.279 J | < 0.1 | < 1 | < 0.1 UJ | < 0.25 | < 0.1 | < 0.25 | < 0.1 |
| BROMOFORM | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 2 | < 0.2 UJ | < 0.25 | < 0.2 | < 0.25 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 2.5 | < 0.25 UJ | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.446 | 0.63 J | < 0.446 | < 4.46 | < 0.446 UJ | < 0.25 | < 0.446 | < 0.25 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 2 | < 0.2 UJ | < 0.25 | < 0.2 | < 0.25 | < 0.2 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 1 | < 0.1 UJ | < 0.25 | < 0.1 | < 0.25 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 2 | < 0.2 UJ | < 0.25 | < 0.2 | < 0.25 | < 0.2 |
| CHLOROFORM | 0.5 | UG/L | **192 J** | **164** | **253** | **407** | **296** | **1.48** | **5.35** | **1.62** | **6.17** |
| CHLOROMETHANE | 0.5 | UG/L | < 0.24 | < 0.25 | < 0.24 | < 2.4 | < 0.24 UJ | < 0.25 | < 0.24 | < 0.25 | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 1 | < 0.1 UJ | < 0.25 | < 0.1 | < 0.25 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 2 | < 0.2 UJ | < 0.25 | < 0.2 | < 0.25 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 2 | < 0.2 UJ | < 0.25 | < 0.2 | < 0.25 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.25 | < 0.081 | < 0.81 | < 0.081 UJ | < 0.25 | < 0.081 | < 0.25 | < 0.081 |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | < 0.438 | < 0.27 | < 0.438 | < 4.38 | < 0.438 UJ | < 0.27 | 0.713 J | < 0.27 | 0.68 J |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | 0.646 J | < 0.5 | < 5 | < 0.5 UJ | < 0.25 | < 0.5 | < 0.25 | < 0.5 |
| METHYLENE CHLORIDE | 1 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 2 | < 0.2 UJ | < 0.25 | < 0.2 | < 0.25 | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 1 | < 0.1 UJ | < 0.25 | < 0.1 | < 0.25 | < 0.1 |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 1 | < 0.1 UJ | < 0.25 | < 0.1 | < 0.25 | < 0.1 |
| TOLUENE | 0.5 | UG/L | < 0.056 | < 0.25 | < 0.056 | < 0.56 | < 0.056 UJ | < 0.25 | < 0.056 | < 0.25 | < 0.056 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 1 | < 0.1 UJ | < 0.25 | < 0.1 | < 0.25 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.25 | < 0.114 | < 1.14 | < 0.114 UJ | < 0.25 | < 0.114 | < 0.25 | < 0.114 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 2 | < 0.2 UJ | < 0.25 | < 0.2 | < 0.25 | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.25 | < 0.11 | < 1.1 | < 0.11 UJ | < 0.25 | < 0.11 | < 0.25 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | 0.277 J | < 0.175 | < 1.75 | < 0.175 UJ | < 0.25 | < 0.175 | < 0.25 | < 0.175 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | DDC-5B | DDC-5B | DDC-5B | DDC-5C | DDC-5C | DDC-5C | DDC-5C | DDC-6A | DDC-6A |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWDC0120 | GWDC0121 Dup | GWDC0141 | GWDC0081 | GWDC0101 | GWDC0122 | GWDC0142 | GWDC0082 | GWDC0102 |
| | | Date | 08/10/05 | 08/10/05 | 10/18/05 | 01/19/05 | 04/27/05 | 08/10/05 | 10/18/05 | 01/19/05 | 04/27/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 5 | < 0.1 UJ | < 0.25 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 10 | < 0.2 UJ | < 0.25 | < 0.2 |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | < 0.104 | < 0.104 | < 0.104 | **4.5** | **7.41** | **13.6 J** | **14.7 J** | **2** | **2.43** |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | < 0.101 | < 0.101 | < 0.101 | **1.17** | **1.8** | **246** | **3.76 J** | < 0.25 | < 0.101 |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | **1.32** | **1.68** | **305** | **2.52 J** | < 0.25 | < 0.1 |
| 1,2,4-TRICHLOROBENZENE | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 12.5 | < 0.25 UJ | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 10 | < 0.2 UJ | < 0.25 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 5 | < 0.1 UJ | < 0.25 | < 0.1 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | < 0.1 | 0.46 J | < 0.1 | **0.596** | **1.01** | **105** | **1.9 J** | < 0.25 | < 0.1 |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | < 0.103 | < 0.103 | < 0.103 | < 0.25 | < 0.103 | < 5.15 | < 0.103 UJ | < 0.25 | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 5 | < 0.1 UJ | < 0.25 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 5 | < 0.1 UJ | < 0.25 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 25 | < 0.5 UJ | < 0.25 | < 0.5 |
| ACETONE | 5 | UG/L | **14.7** | **15** | **2.08 J** | < 0.25 | 1.92 J | **36.7 J** | **1.19 J** | < 0.25 | < 0.37 |
| BENZENE | 0.5 | UG/L | < 0.135 | < 0.135 | < 0.135 | < 0.25 | < 0.135 | < 6.75 | < 0.135 UJ | < 0.25 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 | < 0.104 | < 0.104 | < 0.25 | < 0.104 | < 5.2 | < 0.104 UJ | < 0.25 | < 0.104 |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 5 | < 0.1 UJ | < 0.25 | < 0.1 |
| BROMOFORM | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | **0.9** | **87.1** | **1.7 J** | < 0.25 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 12.5 | < 0.25 UJ | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.446 | < 0.446 | < 0.446 | < 0.25 | < 0.446 | < 22.3 | < 0.446 UJ | 0.394 J | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 10 | < 0.2 UJ | < 0.25 | < 0.2 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | 0.403 J | **12.6 J** | < 0.1 UJ | < 0.25 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 10 | < 0.2 UJ | < 0.25 | < 0.2 |
| CHLOROFORM | 0.5 | UG/L | **7.85** | **8.82** | **2.93** | **748** | **1020** | **2900** | **2310 J** | **20.9** | **28.5** |
| CHLOROMETHANE | 0.5 | UG/L | < 0.24 | < 0.24 | < 0.24 | < 0.25 | < 0.24 | < 12 | < 0.24 UJ | < 0.25 | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 5 | < 0.1 UJ | < 0.25 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 10 | < 0.2 UJ | < 0.25 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | 0.308 J | < 10 | 0.294 J | < 0.25 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.081 | < 0.081 | < 0.25 | < 0.081 | < 4.05 | < 0.081 UJ | < 0.25 | < 0.081 |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | **3.6** | **3.84** | **1.09** | < 0.27 | 0.722 J | < 21.9 | **1.18 J** | < 0.27 | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 25 | < 0.5 UJ | < 0.25 | < 0.5 |
| METHYLENE CHLORIDE | 1 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | **16.4 J** | < 0.2 UJ | < 0.25 | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 5 | < 0.1 UJ | < 0.25 | < 0.1 |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | **15 J** | < 0.1 UJ | < 0.25 | < 0.1 |
| TOLUENE | 0.5 | UG/L | < 0.056 | < 0.056 | < 0.056 | < 0.25 | 0.337 J | < 2.8 | < 0.056 UJ | < 0.25 | **1.07** |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 5 | < 0.1 UJ | < 0.25 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.114 | < 0.114 | < 0.25 | < 0.114 | < 5.7 | < 0.114 UJ | < 0.25 | < 0.114 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | 0.3 J | 0.406 J | **53.6** | **0.658 J** | < 0.25 | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.11 | < 0.11 | < 0.25 | < 0.11 | < 5.5 | < 0.11 UJ | < 0.25 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | < 0.175 | < 0.175 | < 0.25 | < 0.175 | < 8.75 | < 0.175 UJ | < 0.25 | < 0.175 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | DDC-6A | DDC-6B | DDC-6B | DDC-6B | DDC-6B | DDC-6B | DDC-6C | DDC-6C | DDC-6C |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWDC0143 | GWDC0083 | GWDC0103 | GWDC0104 Dup | GWDC0124 | GWDC0144 | GWDC0084 | GWDC0105 | GWDC0125 |
| | | Date | 10/18/05 | 01/19/05 | 04/27/05 | 04/27/05 | 08/10/05 | 10/18/05 | 01/19/05 | 04/27/05 | 08/10/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | **1.64** | **2.38** | < 0.104 UJ | **2.95 J** | **1.09** | **2.01** | **3.05** | < 0.104 | **1.75** |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | < 0.101 | < 0.25 | < 0.101 | < 0.101 | < 0.101 | < 0.101 | < 0.25 | < 0.101 | < 0.101 |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| 1,2,4-TRICHLOROBENZENE | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | < 0.103 | < 0.25 | < 0.103 | < 0.103 | < 0.103 | < 0.103 | < 0.25 | < 0.103 | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 0.5 |
| ACETONE | 5 | UG/L | < 0.37 | < 0.25 | < 0.37 | < 0.37 | **1.14 J** | < 0.37 | < 0.25 | < 0.37 | 0.771 J |
| BENZENE | 0.5 | UG/L | < 0.135 | < 0.25 | < 0.135 | < 0.135 | < 0.135 | < 0.135 | < 0.25 | < 0.135 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 | < 0.25 | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.25 | < 0.104 | < 0.104 |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| BROMOFORM | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.446 | < 0.25 | < 0.446 | < 0.446 | < 0.446 | < 0.446 | < 0.25 | < 0.446 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 |
| CHLOROFORM | 0.5 | UG/L | **15.7** | **25.1** | **29.9** | **32.7 J** | **9.97** | **19.1** | **56.9** | **43.9** | **22.9** |
| CHLOROMETHANE | 0.5 | UG/L | < 0.24 | < 0.25 | < 0.24 | < 0.24 | < 0.24 | < 0.24 | < 0.25 | < 0.24 | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.25 | < 0.081 | < 0.081 | < 0.081 | < 0.081 | < 0.25 | < 0.081 | < 0.081 |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | < 0.438 | < 0.27 | < 0.438 | < 0.438 | < 0.438 | < 0.438 | < 0.27 | < 0.438 | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 0.5 |
| METHYLENE CHLORIDE | 1 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| TOLUENE | 0.5 | UG/L | < 0.056 | < 0.25 | < 0.056 | < 0.056 | < 0.056 | < 0.056 | < 0.25 | < 0.056 | < 0.056 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.25 | < 0.114 | < 0.114 | < 0.114 | < 0.114 | < 0.25 | < 0.114 | < 0.114 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.25 | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.25 | < 0.11 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | < 0.25 | < 0.175 | < 0.175 | < 0.175 | < 0.175 | < 0.25 | < 0.175 | < 0.175 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | DDC-6C | LF-01 | LF-01 | LF-03 | LS-01 | LS-01 | PCD | PCD | PCU |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWDC0145 | STMW0133 | STMW0135 | STMW0136 | RWSW0036 | RWSW0037 | SWSW0274 | SWSW0276 | SWSW0273 |
| | | Date | 10/18/05 | 01/11/05 | 12/28/05 | 12/28/05 | 03/22/05 | 03/22/05 | 01/12/05 | 12/28/05 | 01/12/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.34 | < 0.34 | < 0.25 | < 0.1 | < 0.25 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.49 | < 0.49 | < 0.25 | < 0.2 | < 0.25 |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | **1.58** | < 0.25 | < 0.104 | < 0.104 | < 0.44 | < 0.44 | < 0.25 | < 0.104 | < 0.25 |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | < 0.101 | < 0.25 | < 0.101 | < 0.101 | < 0.41 | < 0.41 | < 0.25 | < 0.101 | < 0.25 |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.41 | < 0.41 | < 0.25 | < 0.1 | < 0.25 |
| 1,2,4-TRICHLOROBENZENE | 10 | UG/L | NS | NS | NS | NS | < 0.42 | < 0.42 | NS | NS | NS |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.75 UJ | < 0.75 UJ | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.25 | < 0.2 | < 0.25 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.36 | < 0.36 | < 0.25 | < 0.1 | < 0.25 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.29 | < 0.29 | < 0.25 | < 0.1 | < 0.25 |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | < 0.103 | < 0.25 | < 0.103 | < 0.103 | < 0.25 | < 0.25 | < 0.25 | < 0.103 | < 0.25 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.33 | < 0.33 | < 0.25 | < 0.1 | < 0.25 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.25 | < 0.1 | < 0.25 |
| 2-HEXANONE | 1 | UG/L | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 1.45 | < 1.45 | < 0.25 | < 0.5 | < 0.25 |
| ACETONE | 5 | UG/L | < 0.37 | 2.4 J | < 6.46 UJ | < 8.52 UJ | **6.3** | **6.5** | 1.42 J | < 5.13 UJ | < 0.25 |
| BENZENE | 0.5 | UG/L | < 0.135 | < 0.25 | < 0.135 | < 0.135 | < 0.33 | < 0.33 | < 0.25 | < 0.135 | < 0.25 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 | < 0.25 | < 0.104 | < 0.104 | NS | NS | < 0.25 | < 0.104 | < 0.25 |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.38 | < 0.38 | < 0.25 | < 0.1 | < 0.25 |
| BROMOFORM | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.5 | < 0.5 | < 0.25 | < 0.2 | < 0.25 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.5 | < 0.5 | < 0.25 | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.446 | < 0.25 | < 0.446 | < 0.446 | < 1.91 | < 1.91 | < 0.25 | < 0.446 | < 0.25 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.29 | < 0.29 | < 0.25 | < 0.2 | < 0.25 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.32 | < 0.32 | < 0.25 | < 0.1 | < 0.25 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.5 | < 0.5 | < 0.25 | < 0.2 | < 0.25 |
| CHLOROFORM | 0.5 | UG/L | **32.8** | < 0.25 | < 0.11 | < 0.11 | < 0.36 | < 0.36 | < 0.25 | < 0.11 | < 0.25 |
| CHLOROMETHANE | 0.5 | UG/L | < 0.24 | < 0.25 | < 0.24 | < 0.24 | < 0.5 | < 0.5 | < 0.25 | < 0.24 | < 0.25 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.3 | < 0.3 | < 0.25 | < 0.1 | < 0.25 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.3 | < 0.3 | < 0.25 | < 0.2 | < 0.25 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.29 | < 0.29 | < 0.25 | < 0.2 | < 0.25 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.25 | < 0.081 | < 0.081 | < 0.21 | < 0.21 | < 0.25 | < 0.081 | < 0.25 |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | < 0.438 | < 0.27 | < 0.598 UJ | < 0.944 UJ | < 2.31 | < 2.31 | < 0.27 | < 0.438 | < 0.27 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 1.78 | < 1.78 | < 0.25 | < 0.5 | < 0.25 |
| METHYLENE CHLORIDE | 1 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 1.9 | < 1.9 | < 0.25 | < 0.2 | < 0.25 |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.25 | < 0.1 | < 0.25 |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.33 | < 0.33 | < 0.25 | < 0.1 | < 0.25 |
| TOLUENE | 0.5 | UG/L | < 0.056 | < 0.25 | < 0.056 | < 0.056 | < 0.39 | < 0.39 | < 0.25 | < 0.056 | < 0.25 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.37 | < 0.37 | < 0.25 | < 0.1 | < 0.25 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.25 | < 0.114 | < 0.114 | < 0.29 | < 0.29 | < 0.25 | < 0.114 | < 0.25 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.36 | < 0.36 | < 0.25 | < 0.2 | < 0.25 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.25 | < 0.11 | < 0.11 | < 0.55 | < 0.55 | < 0.25 | < 0.11 | < 0.25 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | < 0.25 | < 0.175 | < 0.175 | < 0.25 | < 0.25 | < 0.25 | < 0.175 | < 0.25 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | PCU SWSW0277<br>Dup 12/28/05 | PCU<br>SWSW0278<br>12/28/05 | STPO<br>SWSW0275<br>01/12/05 | STPO<br>SWSW0279<br>12/28/05 | SP-2<br>TPIN0323<br>05/03/05 | SP-2<br>TPIN0324<br>06/21/05 | SP-2<br>TPIN0325<br>07/27/05 | SP-2<br>TPIN0326<br>08/10/05 | SP-2<br>TPIN0327<br>09/08/05 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | < 0.104 | < 0.104 | < 0.25 | < 0.104 | < 0.104 | < 0.104 UJ | < 0.104 UJ | < 0.104 | < 0.104 |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | < 0.101 | < 0.101 | < 0.25 | < 0.101 | 0.353 J | 0.334 J | 0.384 J | 0.399 J | 0.313 J |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 | 0.215 J | < 0.1 UJ | < 0.1 UJ | 0.324 J | < 0.1 |
| 1,2,4-TRICHLOROBENZENE | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 UJ | < 0.25 UJ | < 0.25 | < 0.25 UJ |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 | **0.603** | **0.658 J** | **0.634 J** | **0.754** | **0.615** |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | < 0.103 | < 0.103 | < 0.25 | < 0.103 | **0.736** | **0.746 J** | **0.883 J** | **1.03** | **0.793** |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 UJ | < 0.5 UJ | < 0.5 | < 0.5 |
| ACETONE | 5 | UG/L | < 5.07 UJ | < 4.16 UJ | 2.09 J | **4.59 UJ** | < 0.37 | < 0.37 UJ | **11.9 J** | **6.34** | < 0.37 |
| BENZENE | 0.5 | UG/L | < 0.135 | < 0.135 | < 0.25 | < 0.135 | < 0.135 | < 0.135 UJ | < 0.135 UJ | < 0.135 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 | < 0.104 | < 0.25 | < 0.104 | < 0.104 | < 0.104 UJ | < 0.104 UJ | < 0.104 | < 0.104 |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 |
| BROMOFORM | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 UJ | < 0.25 UJ | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.446 | < 0.446 | < 0.25 | **1.05** | < 0.446 | < 0.446 UJ | < 0.446 UJ | < 0.446 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 |
| CHLOROFORM | 0.5 | UG/L | < 0.11 | < 0.11 | < 0.25 | < 0.264 UJ | **39.1** | **44 J** | **61.1 J** | **65.5** | **49.7** |
| CHLOROMETHANE | 0.5 | UG/L | < 0.24 | < 0.24 | < 0.25 | < 0.24 | < 0.24 | < 0.24 UJ | < 0.24 UJ | < 0.24 | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.081 | < 0.25 | < 0.081 | < 0.081 | < 0.081 UJ | < 0.081 UJ | < 0.081 | < 0.081 |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | < 0.438 | < 0.438 | < 0.27 | < 0.438 | < 0.438 | 0.89 J | **2.75 J** | **1.39** | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 UJ | < 0.5 UJ | < 0.5 | < 0.5 |
| METHYLENE CHLORIDE | 1 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 1.25 UJ | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 |
| TOLUENE | 0.5 | UG/L | < 0.056 | < 0.056 | < 0.25 | < 0.056 | < 0.056 | < 0.056 UJ | < 0.056 UJ | < 0.056 | < 0.056 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.114 | < 0.25 | < 0.114 | < 0.114 | < 0.114 UJ | < 0.114 UJ | < 0.114 | < 0.114 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.11 | < 0.25 | < 0.11 | < 0.11 | < 0.11 UJ | < 0.11 UJ | < 0.11 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | < 0.175 | < 0.25 | < 0.175 | < 0.175 | < 0.175 UJ | < 0.175 UJ | < 0.175 | < 0.175 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | SP-2<br>TPIN0328<br>10/20/05 | SP-2<br>TPIN0329<br>12/01/05 | SP-2<br>TPIN0330<br>12/13/05 | SP-5<br>TPEF0323<br>05/30/05 | SP-5<br>TPEF0324<br>06/21/05 | SP-5<br>TPEF0325<br>07/27/05 | SP-5<br>TPEF0326<br>08/10/05 | SP-5<br>TPEF0327<br>09/08/05 | SP-5<br>TPEF0328<br>10/20/05 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 UJ |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 UJ |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.104 UJ | < 0.104 UJ | < 0.104 | < 0.104 | < 0.104 UJ |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | 0.332 J | 0.277 J | 0.325 J | < 0.101 | < 0.101 UJ | < 0.101 UJ | < 0.101 | < 0.101 | < 0.101 UJ |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 UJ |
| 1,2,4-TRICHLOROBENZENE | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 UJ | < 0.25 UJ | < 0.25 | < 0.25 | < 0.25 UJ |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 UJ |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 UJ |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | **0.579** | **0.574** | **0.53** | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 UJ |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | **0.781** | **0.66** | **0.709** | < 0.103 | < 0.103 UJ | < 0.103 UJ | < 0.103 | < 0.103 | < 0.103 UJ |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 UJ |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 UJ |
| 2-HEXANONE | 1 | UG/L | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 UJ | < 0.5 UJ | < 0.5 | < 0.5 | < 0.5 UJ |
| ACETONE | 5 | UG/L | < 0.37 | < 0.37 | < 0.37 | 1.4 J | < 0.37 UJ | < 0.37 UJ | **4.43 J** | **5.22** | 0.644 J |
| BENZENE | 0.5 | UG/L | < 0.135 | < 0.135 | < 0.135 | < 0.135 | < 0.135 UJ | < 0.135 UJ | < 0.135 | < 0.135 | < 0.135 UJ |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.104 UJ | < 0.104 UJ | < 0.104 | < 0.104 | < 0.104 UJ |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 UJ |
| BROMOFORM | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 UJ |
| BROMOMETHANE | 1 | UG/L | < 0.25 | 0.413 J | < 0.25 | < 0.25 | < 0.25 UJ | < 0.25 UJ | < 0.25 | < 0.25 | < 0.25 UJ |
| CARBON DISULFIDE | 1 | UG/L | < 0.446 | < 0.446 | < 0.446 | < 0.446 | < 0.446 UJ | < 0.446 UJ | < 0.446 | < 0.446 | < 0.446 UJ |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 UJ |
| CHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 UJ |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 UJ |
| CHLOROFORM | 0.5 | UG/L | **46.5** | **33.7** | **39.2** | **1.81** | **2.13 J** | **2.41 J** | **2.81** | < 0.11 | < 0.11 UJ |
| CHLOROMETHANE | 0.5 | UG/L | < 0.24 | 0.369 J | < 0.24 | < 0.24 | < 0.24 UJ | < 0.24 UJ | < 0.24 | < 0.24 | < 0.24 UJ |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 UJ |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 UJ |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 UJ |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.081 | < 0.081 | < 0.081 | < 0.081 UJ | < 0.081 UJ | < 0.081 | < 0.081 | < 0.081 UJ |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | < 0.438 | < 0.438 | < 0.438 | < 0.438 | < 0.438 UJ | < 0.438 UJ | < 0.438 | **1.13** | < 0.438 UJ |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 UJ | < 0.5 UJ | < 0.5 | < 0.5 | < 0.5 UJ |
| METHYLENE CHLORIDE | 1 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 1.33 UJ | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 UJ |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 UJ |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 UJ |
| TOLUENE | 0.5 | UG/L | < 0.056 | < 0.056 | < 0.056 | < 0.056 | < 0.056 UJ | < 0.056 UJ | < 0.056 | < 0.056 | < 0.056 UJ |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 UJ |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.114 | < 0.114 | < 0.114 | < 0.114 UJ | < 0.114 UJ | < 0.114 | < 0.114 | < 0.114 UJ |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 UJ |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.11 UJ | < 0.11 UJ | < 0.11 | < 0.11 | < 0.11 UJ |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | < 0.175 | < 0.175 | < 0.175 | < 0.175 UJ | < 0.175 UJ | < 0.175 | < 0.175 | < 0.175 UJ |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micrograms per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | SP-5 | SP-5 | TP-1B | TP-1B | TP-1B | TP-1B | TP-1B | TP-1C | TP-1C |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | TPEF0329 | TPEF0330 | GWTP0074 | GWTP0091 | GWTP0107 | GWTP0124 | GWTP0125 Dup | GWTP0075 | GWTP0092 |
| | | Date | 12/01/05 | 12/13/05 | 01/19/05 | 04/28/05 | 08/11/05 | 10/18/05 | 10/18/05 | 01/19/05 | 04/28/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | < 0.104 | < 0.104 | **1.21** | < 0.104 | 0.608 J | < 0.104 | < 0.104 | **3.23** | < 0.104 |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | < 0.101 | < 0.101 | < 0.25 | < 0.101 | < 0.101 | < 0.101 | < 0.101 | **1.64** | 0.414 J |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | **0.841** | < 0.1 UJ |
| 1,2,4-TRICHLOROBENZENE | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 UJ |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.531 UJ | < 0.1 | < 0.1 | **1.19** | 0.374 J |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | < 0.103 | < 0.103 | < 0.25 | < 0.103 | < 0.103 | < 0.103 | < 0.103 | < 0.25 | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 |
| ACETONE | 5 | UG/L | < 0.37 | < 0.37 | < 5.48 UJ | < 0.37 UJ | < 0.37 | < 0.37 | < 0.37 | **159** | < 0.37 UJ |
| BENZENE | 0.5 | UG/L | < 0.135 | < 0.135 | < 0.25 | < 0.135 | < 0.135 | < 0.135 | < 0.135 | < 0.25 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 | < 0.104 | < 0.25 | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.25 | < 0.104 |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| BROMOFORM | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | 0.331 J | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.446 | < 0.446 | < 0.25 | < 0.446 | < 0.446 | < 0.446 | < 0.446 | < 0.25 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| CHLOROFORM | 0.5 | UG/L | < 0.11 | < 0.11 | < 21.2 UJ | **22.7** | **13.1** | **5.81 J** | **2.53 J** | **365** | **93.7** |
| CHLOROMETHANE | 0.5 | UG/L | < 0.24 | < 0.24 | < 0.25 | < 0.24 | < 0.24 | < 0.24 | < 0.24 | < 0.25 | < 0.24 UJ |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.081 | < 0.25 | < 0.081 | < 0.081 | < 0.081 | < 0.081 | < 0.25 | < 0.081 |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | < 0.438 | < 0.438 | < 4.96 UJ | < 0.438 | < 0.438 | < 0.438 | < 0.438 | **208** | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 |
| METHYLENE CHLORIDE | 1 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| TOLUENE | 0.5 | UG/L | < 0.056 | < 0.056 | < 0.25 | < 0.056 UJ | < 0.056 | < 0.056 | < 0.056 | **0.578** | < 0.056 UJ |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.114 | < 0.25 | < 0.114 | < 0.114 | < 0.114 | < 0.114 | < 0.25 | < 0.114 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.11 | < 0.25 | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.25 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | < 0.175 | < 0.25 | < 0.175 | < 0.175 | < 0.175 | < 0.175 | 0.475 J | < 0.175 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | TP-1C | | TP-1C | TP-2B | TP-2B | TP-2B | TP-2B | TP-2C | TP-2C |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWTP0108 | TP-1C GWTP0109 | GWTP0126 | GWTP0077 | GWTP0095 | GWTP0111 | GWTP0128 | GWTP0078 | GWTP0096 |
| | | Date | 08/11/05 | Dup 08/11/05 | 10/18/05 | 01/20/05 | 04/28/05 | 08/11/05 | 10/19/05 | 01/20/05 | 04/28/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 UJ | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 UJ | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | **2.13** | **2.36** | **2.94 J** | < 0.25 | < 0.104 | 0.499 J | 0.682 J | **4.9** | < 0.104 |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | **0.746** | **0.783** | **0.893 J** | 0.45 J | 0.342 J | < 0.101 | 0.265 J | **3.07** | **1.08** |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | < 0.355 UJ | < 0.507 UJ | < 0.1 UJ | < 0.25 | < 0.1 UJ | < 0.1 | < 0.1 | **2.15** | < 0.827 UJ |
| 1,2,4-TRICHLOROBENZENE | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 UJ | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 UJ | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 UJ | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | < 0.852 UJ | < 0.886 UJ | **0.672 J** | < 0.25 | < 0.1 | < 0.426 UJ | < 0.1 | **2.22** | **1.07** |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | < 0.103 | < 0.103 | < 0.103 UJ | < 0.25 | < 0.103 | < 0.103 | < 0.103 | < 0.25 | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 UJ | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 UJ | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.5 | < 0.5 | < 0.5 UJ | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 |
| ACETONE | 5 | UG/L | 0.776 J | 0.748 J | **1.36 J** | < 0.25 | < 0.37 UJ | < 0.37 | < 0.37 | 4.45 J | < 0.37 UJ |
| BENZENE | 0.5 | UG/L | < 0.135 | < 0.135 | < 0.135 UJ | < 0.25 | < 0.135 | < 0.135 | < 0.135 | < 0.25 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 | < 0.104 | < 0.104 UJ | < 0.25 | < 0.104 | < 0.104 | < 0.104 | < 0.25 | < 0.104 |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 UJ | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| BROMOFORM | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 UJ | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 UJ | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.446 | < 0.446 | < 0.446 UJ | < 0.25 | < 0.446 | < 0.446 | < 0.446 | < 0.25 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 UJ | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 UJ | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 UJ | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| CHLOROFORM | 0.5 | UG/L | **217** | **253** | **430** | **32.6** | **54.7** | **24.4** | **29.7** | **827** | **273** |
| CHLOROMETHANE | 0.5 | UG/L | < 0.24 | < 0.24 | < 0.24 UJ | < 0.25 | < 0.24 | < 0.24 | < 0.24 | < 0.25 | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 UJ | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 UJ | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 UJ | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.081 | < 0.081 UJ | < 0.25 | < 0.081 | < 0.081 | < 0.081 | < 0.25 | < 0.081 |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | < 0.438 | < 0.438 | < 0.438 UJ | < 0.27 | < 0.438 | < 0.438 | < 0.438 | **15.2** | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | < 0.5 | < 0.5 UJ | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 |
| METHYLENE CHLORIDE | 1 | UG/L | < 0.2 | < 0.2 | < 0.2 UJ | < 0.25 | < 0.2 | < 0.2 UJ | < 0.2 | < 0.25 | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 UJ | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 UJ | < 0.25 | < 0.1 | < 0.1 | < 0.1 | 0.266 J | < 0.1 |
| TOLUENE | 0.5 | UG/L | < 0.056 | < 0.056 | < 0.056 UJ | < 0.25 | < 0.056 UJ | < 0.056 | < 0.056 | < 0.25 | < 0.056 UJ |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 UJ | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.114 | < 0.114 UJ | < 0.25 | < 0.114 | < 0.114 | < 0.114 | < 0.25 | < 0.114 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | **1.54** | < 0.2 | < 0.2 UJ | < 0.25 | < 0.2 | < 0.2 | < 0.2 | 0.431 J | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.11 | < 0.11 UJ | < 0.25 | < 0.11 | < 0.11 | < 0.11 | < 0.25 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | < 0.175 | < 0.175 UJ | < 0.25 | < 0.175 | < 0.175 | < 0.175 | < 0.25 | < 0.175 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | TP-2C | TP-2C | TP-3B | TP-3B | TP-3B | TP-3B | TP-3B | TP-3C | TP-3C |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWTP0112 | GWTP0129 | GWTP0080 | GWTP0098 | GWTP0114 | GWTP0115 Dup | GWTP0131 | GWTP0081 | GWTP0099 |
| | | Date | 08/11/05 | 10/19/05 | 01/21/05 | 04/28/05 | 08/11/05 | 08/11/05 | 10/19/05 | 01/21/05 | 04/28/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | **2.02** | **2.6** | **1.73** | **1.2** | **5.31** | **4.86** | 0.982 J | **11.5** | **6.12** |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | **0.945** | **1.08** | < 0.25 | < 0.101 | **2.5** | **1.94** | 0.269 J | **4.06** | **2.85** |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | < 0.534 UJ | **0.689** | < 0.25 | < 0.1 | **2.47** | **1.87** | < 0.1 | **4.07** | **2.82** |
| 1,2,4-TRICHLOROBENZENE | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | < 0.972 UJ | **0.837** | < 0.25 | < 0.1 | < 1.05 UJ | < 1.26 UJ | 0.432 J | **1.55** | **1.21** |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | < 0.103 | < 0.103 | < 0.25 | < 0.103 | < 0.103 | < 0.103 | < 0.103 | < 0.25 | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 |
| ACETONE | 5 | UG/L | **41.4** | < 0.37 | < 20.9 UJ | 0.441 J | < 0.37 | < 0.37 | < 0.37 | < 0.411 UJ | 1.8 J |
| BENZENE | 0.5 | UG/L | < 0.135 | < 0.135 | < 0.25 | < 0.135 | < 0.135 | < 0.135 | < 0.135 | < 0.25 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 | < 0.104 | < 0.25 | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.25 | < 0.104 |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| BROMOFORM | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.446 | < 0.598 UJ | 0.546 J | < 0.446 | < 0.446 | < 0.446 | < 0.689 UJ | < 0.25 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| CHLOROFORM | 0.5 | UG/L | **270** | **287 J** | < 28.1 UJ | **28.2** | **1060** | **988** | **36.5** | **1690** | **1400** |
| CHLOROMETHANE | 0.5 | UG/L | < 0.24 | < 0.24 | < 0.25 UJ | < 0.24 | < 0.24 | < 0.24 | < 0.24 | < 0.25 | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.081 | < 0.25 | < 0.081 | < 0.081 | < 0.081 | < 0.081 | < 0.25 | < 0.081 |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | **1.05** | < 0.438 | < 0.27 | < 0.438 | < 0.438 | < 0.438 | < 0.438 | < 5.36 UJ | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 |
| METHYLENE CHLORIDE | 1 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | 0.297 J | < 0.1 |
| TOLUENE | 0.5 | UG/L | < 0.056 | < 0.056 | < 0.25 | < 0.056 | < 0.056 | < 0.056 | < 0.056 | < 0.25 | < 0.056 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | NS |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.114 | < 0.25 | < 0.114 | < 0.114 | < 0.114 | < 0.114 | < 0.25 | < 0.114 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.2 | 0.378 J | 0.343 J | < 0.2 | **0.897** | 0.446 J |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.11 | < 0.25 | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.25 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | < 0.175 | < 0.25 | < 0.175 | < 0.175 | < 0.175 | < 0.175 | < 0.25 | < 0.175 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | TP-3C | TP-3C | TP-4B | | TP-4B | TP-4B | TP-4B | TP-4C | TP-4C |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWTP0116 | GWTP0132 | GWTP0083 | TP-4B GWTP0084 | GWTP0101 | GWTP0118 | GWTP0134 | GWTP0085 | GWTP0102 |
| | | Date | 08/11/05 | 10/19/05 | 01/19/05 | Dup 01/19/05 | 04/28/05 | 08/12/05 | 10/19/05 | 01/19/05 | 04/28/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | **4.47** | **7.36** | **1.2** | **1.18** | 0.978 J | **1.1** | **1.05** | **3.72** | < 0.104 |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | **2.05** | **2.4** | < 0.25 | < 0.25 | < 0.101 | < 0.101 | 0.343 J | **9.12** | < 0.101 |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | **2.06** | **2.78** | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | **3.2** | < 0.1 |
| 1,2,4-TRICHLOROBENZENE | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | < 1.02 UJ | **0.925** | 0.269 J | 0.263 J | < 0.1 | < 0.1 | 0.272 J | **3.19** | < 0.1 |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | < 0.103 | < 0.103 | < 0.25 | < 0.25 | < 0.103 | < 0.103 | < 0.103 | 0.315 J | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.5 | < 0.5 | < 0.25 | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 |
| ACETONE | 5 | UG/L | < 0.37 | < 0.37 | < 0.25 | < 0.25 | < 0.37 | < 0.37 | < 0.37 | < 13.9 UJ | < 0.37 |
| BENZENE | 0.5 | UG/L | < 0.135 | < 0.135 | < 0.25 | < 0.25 | < 0.135 | < 0.135 | < 0.135 | < 0.25 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 | < 0.104 | < 0.25 | < 0.25 | < 0.104 | < 0.104 | < 0.104 | < 0.25 | < 0.104 |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| BROMOFORM | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | 0.253 J | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.446 | < 0.583 UJ | < 0.25 | < 0.25 | < 0.446 | < 0.446 | < 0.62 UJ | < 0.25 | 0.611 J |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| CHLOROFORM | 0.5 | UG/L | **871** | **1320 J** | **35.8** | **34.7** | **26.8** | **70.4** | **52.7** | **545** | **10.3** |
| CHLOROMETHANE | 0.5 | UG/L | < 0.24 | 0.411 J | < 0.25 | < 0.25 | < 0.24 | < 0.24 | < 0.24 | < 0.25 | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.081 | < 0.25 | < 0.25 | < 0.081 | < 0.081 | < 0.081 | < 0.25 | < 0.081 |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | < 0.438 | < 0.438 | < 0.27 | < 0.27 | < 0.438 | < 0.438 | < 0.438 | **16.1** | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | < 0.5 | < 0.25 | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 |
| METHYLENE CHLORIDE | 1 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | **0.81** | < 0.1 |
| TOLUENE | 0.5 | UG/L | < 0.056 | < 0.056 | < 0.25 | < 0.25 | < 0.056 | < 0.056 | < 0.056 | < 0.25 | 0.364 J |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.114 | < 0.25 | < 0.25 | < 0.114 | < 0.114 | < 0.114 | < 0.25 | < 0.114 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | 0.318 J | 0.483 J | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | **0.974** | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.11 | < 0.25 | < 0.25 | < 0.11 | < 0.11 | < 0.11 | < 0.25 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | < 0.175 | < 0.25 | < 0.25 | < 0.175 | < 0.175 | < 0.175 | < 0.25 | < 0.175 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | TP-4C<br>GWTP0119<br>08/12/05 | TP-4C<br>GWTP0135<br>10/19/05 | TP-5B<br>GWTP0087<br>01/20/05 | TP-5B<br>GWTP0088 Dup<br>01/20/05 | TP-5B<br>GWTP0104<br>04/28/05 | TP-5B<br>GWTP0121<br>08/11/05 | TP-5B<br>GWTP0137<br>10/20/05 | TP-5C<br>GWTP0089<br>01/20/05 | TP-5C<br>GWTP0105<br>04/28/05 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | **1.6** | **4.02** | **1.55** | **1.48** | < 0.104 | 0.675 J | 0.532 J | **5.7** | < 0.104 |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | **5.49** | **12.1** | < 0.25 | < 0.25 | < 0.101 | < 0.101 | 0.287 J | **3.58** | **1.2** |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | **2.19** | **3.64** | < 0.25 | < 0.25 | < 0.1 UJ | < 0.1 | < 0.1 | **2.07** | < 0.662 UJ |
| 1,2,4-TRICHLOROBENZENE | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | < 1.78 UJ | **3.35** | < 0.25 | < 0.25 | < 0.1 | < 0.608 UJ | **0.536** | **1.31** | **0.617** |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | 0.179 J | 0.46 J | < 0.25 | < 0.25 | < 0.103 | < 0.103 | < 0.103 | < 0.25 | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.5 | < 0.5 | < 0.25 | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 |
| ACETONE | 5 | UG/L | **1.28 J** | < 0.37 | 0.913 J | 0.414 J | < 0.734 UJ | < 0.37 | < 0.37 | 0.47 J | < 0.416 UJ |
| BENZENE | 0.5 | UG/L | < 0.135 | < 0.135 | < 0.25 | < 0.25 | < 0.135 | < 0.135 | < 0.135 | < 0.25 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 | < 0.104 | < 0.25 | < 0.25 | < 0.104 | < 0.104 | < 0.104 | < 0.25 | < 0.104 |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| BROMOFORM | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.446 | < 0.596 UJ | < 0.25 | < 0.25 | < 0.446 | < 0.446 | < 0.446 | < 0.25 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| CHLOROFORM | 0.5 | UG/L | **404** | **769 J** | **37.4** | **38.1** | **36.2** | **23.3 J** | < 24.4 UJ | **730** | **284** |
| CHLOROMETHANE | 0.5 | UG/L | < 0.24 | 0.253 J | < 0.25 | < 0.25 | < 0.24 | < 0.24 | < 0.24 | < 0.25 | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.081 | < 0.25 | < 0.25 | < 0.081 | < 0.081 | < 0.081 | < 0.25 | < 0.081 |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | < 0.438 | < 0.438 | < 0.27 | < 0.27 | < 0.438 | < 0.438 | < 0.438 | 0.563 J | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | < 0.5 | < 0.25 | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 |
| METHYLENE CHLORIDE | 1 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | **0.661** | **1.12** | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | 0.325 J | < 0.1 |
| TOLUENE | 0.5 | UG/L | < 0.056 | < 0.056 | < 0.25 | < 0.25 | < 0.056 UJ | < 0.056 | < 0.056 | < 0.25 | < 0.056 UJ |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.114 | < 0.25 | < 0.25 | < 0.114 | < 0.114 | < 0.114 | < 0.25 | < 0.114 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | **0.633** | **1.09** | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | **0.506** | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.11 | < 0.25 | < 0.25 | < 0.11 | < 0.11 | < 0.11 | < 0.25 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | < 0.175 | < 0.25 | < 0.25 | < 0.175 | < 0.175 | < 0.175 | < 0.25 | < 0.175 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | TP-5C | TP-5C | TP-5C | UCD1-001 | UCD1-004 | UCD1-010 | UCD1-010 | UCD1-011 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWTP0122 | GWTP0138 | GWTP0139 Dup | GWGW1866 | GWGW1867 | GWGW1868 | GWGW1940 | GWGW1845 |
| | | Date | 08/11/05 | 10/20/05 | 10/20/05 | 05/04/05 | 05/23/05 | 05/25/05 | 10/25/05 | 02/10/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | **1.82** | **4.84** | **5.4** | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.25 |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | **0.571** | **1.56** | **1.66** | < 0.101 | < 0.101 | < 0.101 | < 0.101 | < 0.25 |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | < 0.346 UJ | **0.929** | **1.02** | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| 1,2,4-TRICHLOROBENZENE | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | < 0.6 UJ | **0.71** | **0.817** | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | < 0.103 | < 0.103 | < 0.103 | < 0.103 | < 0.103 | < 0.103 | < 0.103 | < 0.25 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| 2-HEXANONE | 1 | UG/L | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.25 |
| ACETONE | 5 | UG/L | **1.85 J** | < 0.37 | < 0.37 | < 0.37 | < 0.37 | < 0.37 | < 0.37 | < 0.25 |
| BENZENE | 0.5 | UG/L | < 0.135 | < 0.135 | < 0.135 | < 0.135 | < 0.135 | < 0.135 | < 0.135 | < 0.25 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 | < 0.104 | < 0.104 | < 0.104 UJ | < 0.104 | < 0.104 | < 0.104 | < 0.25 |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| BROMOFORM | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.446 | < 0.446 | < 0.446 | < 0.446 | < 0.446 | < 0.446 | < 0.446 | < 0.25 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 |
| CHLOROFORM | 0.5 | UG/L | **402** | **506** | **513** | < 0.11 | < 0.11 | < 0.11 | < 0.11 | **4.77** |
| CHLOROMETHANE | 0.5 | UG/L | < 0.24 | < 0.24 | **0.659** | < 0.24 | < 0.24 | < 0.24 | < 0.24 | < 0.25 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.081 | < 0.081 | < 0.081 | < 0.081 | < 0.081 | < 0.081 | < 0.25 |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | 0.463 J | < 0.438 | < 0.438 | < 0.438 | < 0.438 | < 0.438 | < 0.438 | < 0.27 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.25 |
| METHYLENE CHLORIDE | 1 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| TOLUENE | 0.5 | UG/L | < 0.056 | < 0.056 | < 0.056 | < 0.056 | < 0.056 | < 0.056 | < 0.056 | < 0.25 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.114 | < 0.114 | < 0.114 | < 0.114 | < 0.114 | < 0.114 | < 0.25 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | < 0.2 | 0.279 J | 0.342 J | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.25 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | < 0.175 | < 0.175 | < 0.175 | < 0.175 | < 0.175 | < 0.175 | < 0.25 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD1-011<br>GWGW1846 Dup<br>02/10/05 | UCD1-011<br>GWGW1869<br>05/25/05 | UCD1-011<br>GWGW1920<br>08/10/05 | UCD1-011<br>GWGW1941<br>10/21/05 | UCD1-012<br>GWGW1847<br>02/10/05 | UCD1-012<br>GWGW1870<br>05/25/05 | UCD1-012<br>GWGW1871 Dup<br>05/25/05 | UCD1-012<br>GWGW1921<br>08/09/05 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | < 0.25 | < 0.104 | < 0.104 | < 0.104 | < 0.25 | **1.37** | **1.19** | **1.19** |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.101 | < 0.101 | < 0.101 | < 0.25 | 0.299 J | 0.234 J | 0.283 J |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 1,2,4-TRICHLOROBENZENE | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | 0.252 J | 0.387 J | 0.325 J | 0.285 J |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.103 | < 0.103 | < 0.103 | < 0.25 | < 0.103 | < 0.103 | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 |
| ACETONE | 5 | UG/L | < 0.25 | < 0.37 | < 0.37 | < 0.37 | < 0.25 | < 0.37 | < 0.37 | < 0.37 |
| BENZENE | 0.5 | UG/L | < 0.25 | < 0.135 | < 0.135 | < 0.135 | < 0.25 | < 0.135 | < 0.135 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.25 | < 0.104 | < 0.104 | < 0.104 | < 0.25 | < 0.104 | < 0.104 | < 0.104 |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| BROMOFORM | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | **0.594 J** | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.25 | < 0.446 | < 0.446 | < 0.446 | < 0.25 | < 0.446 | < 0.446 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| CHLOROFORM | 0.5 | UG/L | **5.22** | **4.04** | **5.17** | **4.9** | **55** | **55.7** | **50.2** | **83.7** |
| CHLOROMETHANE | 0.5 | UG/L | < 0.25 | < 0.24 | < 0.24 | < 0.24 | < 0.25 | < 0.24 | < 0.24 | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.25 | < 0.081 | < 0.081 | < 0.081 | < 0.25 | < 0.081 | < 0.081 | < 0.081 |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | < 0.27 | < 0.438 | < 0.438 | < 0.438 | < 0.27 | < 0.438 | < 0.438 | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 |
| METHYLENE CHLORIDE | 1 | UG/L | < 0.25 | < 0.585 UJ | < 0.2 | < 0.2 | < 0.25 | < 1 UJ | < 0.79 UJ | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| TOLUENE | 0.5 | UG/L | < 0.25 | < 0.056 | < 0.056 | < 0.056 | < 0.25 | < 0.056 | < 0.056 | < 0.056 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.25 | < 0.114 | < 0.114 | < 0.114 | < 0.25 | < 0.114 | < 0.114 | < 0.114 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.25 | < 0.11 | < 0.11 | < 0.11 | < 0.25 | < 0.11 | < 0.11 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.25 | < 0.175 | < 0.175 | < 0.175 | < 0.25 | < 0.175 | < 0.175 | < 0.175 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micrograms per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | UCD1-012 | UCD1-013 | UCD1-018 | UCD1-018 | UCD1-018 | UCD1-018 | UCD1-018 | UCD1-018 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWGW1942 | GWGW1872 | GWGW1848 | GWGW1849 Dup | GWGW1873 | GWGW1922 | GWGW1923 Dup | GWGW1943 |
| | | Date | 10/19/05 | 05/23/05 | 02/10/05 | 02/10/05 | 05/04/05 | 08/09/05 | 08/09/05 | 10/21/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | **1.24** | < 0.104 | < 0.25 | < 0.25 | < 0.104 | < 0.104 | < 0.104 | < 0.104 |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | < 0.101 | < 0.101 | < 0.25 | < 0.25 | < 0.101 | < 0.101 | < 0.101 | < 0.101 |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,2,4-TRICHLOROBENZENE | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | 0.269 J | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | < 0.103 | < 0.103 | < 0.25 | < 0.25 | < 0.103 | < 0.103 | < 0.103 | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.5 | < 0.5 | < 0.25 | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| ACETONE | 5 | UG/L | < 0.37 | < 0.37 | < 0.25 | < 0.25 | < 0.37 | < 0.37 | < 0.37 | < 0.37 |
| BENZENE | 0.5 | UG/L | < 0.135 | < 0.135 | < 0.25 | < 0.25 | < 0.135 | < 0.135 | < 0.135 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 | < 0.104 | < 0.25 | < 0.25 | < 0.104 UJ | < 0.104 | < 0.104 | < 0.104 |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| BROMOFORM | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | 0.343 J |
| CARBON DISULFIDE | 1 | UG/L | < 0.649 UJ | < 0.446 | < 0.25 | < 0.25 | < 0.446 | < 0.446 | < 0.446 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| CHLOROFORM | 0.5 | UG/L | **56.1** | 0.31 J | < 0.25 | < 0.25 | < 0.11 | < 0.11 | < 0.11 | < 0.11 |
| CHLOROMETHANE | 0.5 | UG/L | < 0.24 | < 0.24 | < 0.25 | < 0.25 | < 0.24 | < 0.24 | < 0.24 | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.081 | < 0.25 | < 0.25 | < 0.081 | < 0.081 | < 0.081 | < 0.081 |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | < 0.438 | < 0.438 | < 0.27 | < 0.27 | < 0.438 | < 0.438 | < 0.438 | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | < 0.5 | < 0.25 | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| METHYLENE CHLORIDE | 1 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| TOLUENE | 0.5 | UG/L | < 0.056 | < 0.056 | < 0.25 | < 0.25 | < 0.056 | < 0.056 | < 0.056 | < 0.056 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.114 | < 0.25 | < 0.25 | < 0.114 | < 0.114 | < 0.114 | < 0.114 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.11 | < 0.25 | < 0.25 | < 0.11 | < 0.11 | < 0.11 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | < 0.175 | < 0.25 | < 0.25 | < 0.175 | < 0.175 | < 0.175 | < 0.175 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | UCD1-019 | UCD1-020 | UCD1-021 | UCD1-022 | UCD1-023 | UCD1-024 | UCD1-025 | UCD1-025 | UCD1-025 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWGW1874 | GWGW1875 | GWGW1876 | GWGW1877 | GWGW1878 | GWGW1879 | GWGW1850 | GWGW1880 | GWGW1924 |
| | | Date | 05/04/05 | 05/25/05 | 05/23/05 | 05/23/05 | 05/23/05 | 05/25/05 | 02/10/05 | 05/02/05 | 08/09/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.25 | < 0.104 | < 0.104 |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | < 0.101 | < 0.101 | < 0.101 | < 0.101 | < 0.101 | < 0.101 | < 0.25 | < 0.101 | < 0.101 |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| 1,2,4-TRICHLOROBENZENE | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | < 0.103 | < 0.103 | < 0.103 | < 0.103 | < 0.103 | < 0.103 | < 0.25 | < 0.103 | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 0.5 |
| ACETONE | 5 | UG/L | < 0.37 | < 0.37 | < 0.37 | < 0.37 | < 0.37 | < 0.37 | < 0.25 | < 0.37 | < 0.37 |
| BENZENE | 0.5 | UG/L | < 0.135 | < 0.135 | < 0.135 | < 0.135 | < 0.135 | < 0.135 | < 0.25 | < 0.135 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 UJ | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.25 | < 0.104 | < 0.104 |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| BROMOFORM | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.446 | < 0.446 | < 0.446 | < 0.446 | < 0.446 | < 0.446 | < 0.25 | < 0.446 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 |
| CHLOROFORM | 0.5 | UG/L | < 0.11 | < 0.11 | **1.96** | < 0.11 | < 0.11 | **1.12** | **0.553** | **1** | **0.708** |
| CHLOROMETHANE | 0.5 | UG/L | < 0.24 | < 0.24 | < 0.24 | < 0.24 | < 0.24 | < 0.24 | < 0.25 | < 0.24 | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.081 | < 0.081 | < 0.081 | < 0.081 | < 0.081 | < 0.25 | < 0.081 | < 0.081 |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | < 0.438 | < 0.438 | < 0.438 | < 0.438 | < 0.438 | < 0.438 | < 0.27 | < 0.438 | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 0.5 |
| METHYLENE CHLORIDE | 1 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| TOLUENE | 0.5 | UG/L | < 0.056 | < 0.056 | < 0.056 | < 0.056 | < 0.056 | < 0.056 | < 0.25 | < 0.056 | < 0.056 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.114 | < 0.114 | < 0.114 | < 0.114 | < 0.114 | < 0.25 | < 0.114 | < 0.114 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.25 | < 0.11 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | < 0.175 | < 0.175 | < 0.175 | < 0.175 | < 0.175 | < 0.25 | < 0.175 | < 0.175 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | UCD1-025 | UCD1-027Z1 | UCD1-027Z1 | UCD1-027Z1 | UCD1-027Z1 | UCD1-027Z2 | UCD1-027Z2 | UCD1-027Z2 | UCD1-027Z2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWGW1944 | GWGW1851 | GWGW1881 | GWGW1925 | GWGW1945 | GWGW1852 | GWGW1882 | GWGW1926 | GWGW1946 |
| | | Date | 10/28/05 | 01/13/05 | 05/03/05 | 08/02/05 | 10/20/05 | 01/13/05 | 05/03/05 | 08/02/05 | 10/20/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | < 0.104 | < 0.25 | < 0.104 | < 0.104 | < 0.104 | < 0.25 | < 0.104 | < 0.104 | < 0.104 |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | < 0.101 | < 0.25 | < 0.101 | < 0.101 | < 0.101 | < 0.25 | < 0.101 | < 0.101 | < 0.101 |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.404 UJ | < 0.1 | < 0.1 | < 0.25 | < 0.1 UJ | < 0.1 | < 0.1 |
| 1,2,4-TRICHLOROBENZENE | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | < 0.103 | < 0.25 | < 0.103 | < 0.103 | < 0.103 | < 0.25 | < 0.103 | < 0.103 | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 |
| ACETONE | 5 | UG/L | < 0.772 UJ | < 0.25 | < 0.37 UJ | **1.28 J** | < 0.37 | 1.86 J | < 0.37 UJ | **1.59 J** | **1.44 J** |
| BENZENE | 0.5 | UG/L | < 0.135 | < 0.25 | < 0.135 | < 0.135 | < 0.135 | < 0.25 | < 0.135 | < 0.135 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 | < 0.25 | < 0.104 | < 0.104 | < 0.104 | < 0.25 | < 0.104 | < 0.104 | < 0.104 |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| BROMOFORM | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | **0.546 J** | < 0.25 | < 0.25 | < 0.25 | 0.455 J |
| CARBON DISULFIDE | 1 | UG/L | < 0.446 | < 0.25 | < 0.446 | < 0.446 | < 0.446 | < 0.25 | < 0.446 | < 0.446 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| CHLOROFORM | 0.5 | UG/L | 0.419 J | < 0.25 | < 0.11 | < 0.11 | < 0.11 | < 0.25 | < 0.11 | < 0.11 | < 0.11 |
| CHLOROMETHANE | 0.5 | UG/L | < 0.24 | < 0.25 | < 0.24 | < 0.24 | < 0.24 | < 0.25 | < 0.24 | < 0.24 | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.25 | < 0.081 | < 0.081 | < 0.081 | < 0.25 | < 0.081 | < 0.081 | < 0.081 |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | < 0.438 | < 0.27 | < 0.438 | < 0.438 | < 0.438 | < 0.27 | < 0.438 | **0.612 J** | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 |
| METHYLENE CHLORIDE | 1 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| TOLUENE | 0.5 | UG/L | < 0.056 | < 0.25 | < 0.056 | < 0.056 | < 0.056 | < 0.25 | < 0.056 | < 0.056 | < 0.056 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.25 | < 0.114 | < 0.114 | < 0.114 | < 0.25 | < 0.114 | < 0.114 | < 0.114 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.25 | < 0.11 | < 0.11 | < 0.11 | < 0.25 | < 0.11 | < 0.11 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | < 0.25 | < 0.175 | < 0.175 | < 0.175 | < 0.25 | < 0.175 | < 0.175 | < 0.175 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | UCD1-027Z3 | UCD1-027Z3 | UCD1-027Z3 | UCD1-027Z3 | UCD1-028 | UCD1-028 | UCD1-028 | UCD1-028 | UCD1-028 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWGW1853 | GWGW1883 | GWGW1927 | GWGW1947 | GWGW1854 | GWGW1884 | GWGW1928 | GWGW1929 Dup | GWGW1948 |
| | | Date | 01/13/05 | 05/03/05 | 08/02/05 | 12/13/05 | 02/10/05 | 05/02/05 | 08/09/05 | 08/09/05 | 10/24/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | < 0.25 | < 0.104 | < 0.104 | < 0.104 | < 0.25 | < 0.104 | < 0.104 | < 0.104 | < 0.104 |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.101 | < 0.101 | < 0.101 | < 0.25 | < 0.101 | < 0.101 | < 0.101 | < 0.101 |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | < 0.25 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,2,4-TRICHLOROBENZENE | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 UJ | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.103 | < 0.103 | < 0.103 | < 0.25 | < 0.103 | < 0.103 | < 0.103 | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| ACETONE | 5 | UG/L | < 0.25 | < 0.37 UJ | **3.44 J** | < 0.37 | < 0.25 | < 0.37 | < 0.37 | < 0.37 | < 0.37 |
| BENZENE | 0.5 | UG/L | < 0.25 | < 0.135 | < 0.135 | < 0.135 | < 0.25 | < 0.135 | < 0.135 | < 0.135 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.25 | < 0.104 | < 0.104 | < 0.104 | < 0.25 | < 0.104 | < 0.104 | < 0.104 | < 0.104 |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| BROMOFORM | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 UJ | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.25 | < 0.446 | < 0.446 | < 0.446 | < 0.25 | < 0.446 | < 0.446 | < 0.446 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| CHLOROFORM | 0.5 | UG/L | < 0.25 | < 0.11 | < 0.11 | < 0.11 | < 0.25 | < 0.11 | < 0.11 | < 0.11 | < 0.11 |
| CHLOROMETHANE | 0.5 | UG/L | < 0.25 | < 0.24 | < 0.24 | < 0.24 | < 0.25 | < 0.24 | < 0.24 | < 0.24 | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.25 | < 0.081 | < 0.081 | < 0.081 | < 0.25 | < 0.081 | < 0.081 | < 0.081 | < 0.081 |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | < 0.27 | < 0.438 | **0.889 J** | < 0.438 | < 0.27 | < 0.438 | < 0.438 | < 0.438 | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| METHYLENE CHLORIDE | 1 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| TOLUENE | 0.5 | UG/L | < 0.25 | < 0.056 | < 0.056 | < 0.056 | < 0.25 | < 0.056 | < 0.056 | < 0.056 | < 0.056 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.25 | < 0.114 | < 0.114 | < 0.114 | < 0.25 | < 0.114 | < 0.114 | < 0.114 | < 0.114 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.25 | < 0.11 | < 0.11 | < 0.11 | < 0.25 | < 0.11 | < 0.11 | < 0.11 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.25 | < 0.175 | < 0.175 | < 0.175 | < 0.25 | < 0.175 | < 0.175 | < 0.175 | < 0.175 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | UCD1-049 | UCD1-049 | UCD1-049 | UCD1-049 | UCD1-050 | UCD1-050 | UCD1-050 | UCD1-050 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWGW1855 | GWGW1885 | GWGW1930 | GWGW1949 | GWGW1856 | GWGW1887 | GWGW1931 | GWGW1950 |
| | | Date | 01/25/05 | 06/07/05 | 08/09/05 | 10/19/05 | 01/25/05 | 06/07/05 | 08/09/05 | 10/19/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | **2.39** | **3.46** | **3.5** | **3.36** | **7.82** | **22.8** | **11.4** | **19.3** |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | 0.274 J | **0.795 J** | 0.178 J | < 0.101 | **1.32** | **2.48 J** | **1.03** | **1.32** |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | < 1.87 UJ | **2.17** | **1.05** | **0.512** | < 3.32 UJ | **3.72** | **2.28** | **2.42** |
| 1,2,4-TRICHLOROBENZENE | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | < 0.25 | 0.238 J | < 0.1 | < 0.1 | 0.296 J | < 0.1 | 0.211 J | 0.265 J |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.103 | < 0.103 | < 0.103 | < 0.25 | < 0.103 | < 0.103 | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 |
| ACETONE | 5 | UG/L | < 0.25 | 3.45 J | < 0.37 | < 0.37 | < 0.25 | 2.63 J | < 0.37 | < 0.37 |
| BENZENE | 0.5 | UG/L | < 0.25 | < 0.135 | < 0.135 | < 0.135 | < 0.25 | < 0.135 | < 0.135 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.25 | < 0.104 | < 0.104 | < 0.104 | < 0.25 | < 0.104 | < 0.104 | < 0.104 |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| BROMOFORM | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.25 | < 0.446 | < 0.446 | < 0.569 UJ | < 0.25 | < 0.446 | < 0.446 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| CHLOROFORM | 0.5 | UG/L | **242** | **785 J** | **229** | **171 J** | **1150** | **146 J** | **965** | **1040 J** |
| CHLOROMETHANE | 0.5 | UG/L | < 0.25 | < 0.24 | < 0.24 | < 0.24 | < 0.25 | < 0.24 | < 0.24 | **0.723** |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | 0.116 J | < 0.1 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.25 | < 0.081 | < 0.081 | < 0.081 | < 0.25 | < 0.081 | < 0.081 | < 0.081 |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | < 0.27 | < 0.438 | < 0.438 | < 0.438 | < 0.27 | < 0.438 | < 0.438 | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 |
| METHYLENE CHLORIDE | 1 | UG/L | < 0.25 | **1.74 J** | < 0.2 | < 0.2 | < 0.25 | **1.62 J** | < 0.2 | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | 0.309 J | < 0.1 | < 0.1 |
| TOLUENE | 0.5 | UG/L | < 0.25 | < 0.056 | < 0.056 | < 0.056 | < 0.25 | < 0.056 | < 0.056 | < 0.056 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.25 | < 0.114 | < 0.114 | < 0.114 | < 0.25 | < 0.114 | < 0.114 | < 0.114 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 | **0.559** | **1.7** | **0.811** | **1.23** |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.25 | < 0.11 | < 0.11 | < 0.11 | < 0.25 | < 0.11 | < 0.11 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.25 | < 0.175 | < 0.175 | < 0.175 | < 0.25 | < 0.175 | < 0.175 | < 0.175 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD1-050<br>GWGW1951 Dup<br>10/19/05 | UCD1-051<br>GWGW1857<br>01/25/05 | UCD1-051<br>GWGW1888<br>06/07/05 | UCD1-051<br>GWGW1932<br>08/09/05 | UCD1-051<br>GWGW1952<br>10/19/05 | UCD1-052<br>GWGW1862<br>02/10/05 | UCD1-052<br>GWGW1911<br>05/02/05 | UCD1-052<br>GWGW1933<br>08/09/05 | UCD1-052<br>GWGW1953<br>10/25/05 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | **18.1** | **3.84** | **2.31** | **3.12** | **4.43** | < 0.25 | < 0.104 | < 0.104 | < 0.104 |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | **1.21** | **22.7** | **14.3 J** | **20.6** | **23.1** | < 0.25 | < 0.101 | < 0.101 | < 0.101 |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | **2.42** | **7.04** | **4.45** | **6.02** | **6.66** | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 1,2,4-TRICHLOROBENZENE | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | < 0.1 | **15** | **9.85** | **11.9** | **11.3** | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | < 0.103 | **0.728** | **0.56** | **0.626** | **0.765** | < 0.25 | < 0.103 | < 0.103 | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 |
| ACETONE | 5 | UG/L | < 0.37 | < 0.25 | **5.27** | < 0.37 | < 0.37 | < 0.25 | 2 J | < 0.37 | < 0.37 |
| BENZENE | 0.5 | UG/L | < 0.135 | < 0.25 | < 0.135 | < 0.135 | < 0.135 | < 0.25 | < 0.135 | < 0.135 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 | < 0.25 | < 0.104 | < 0.104 | < 0.104 | < 0.25 | < 0.104 | < 0.104 | < 0.104 |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| BROMOFORM | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.619 UJ | < 0.25 | < 0.446 | < 0.446 | < 0.611 UJ | < 0.25 | < 0.446 | < 0.446 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| CHLOROFORM | 0.5 | UG/L | **955 J** | **1540** | **910 J** | **1630** | **1520 J** | **2.61** | **3.7** | **2.7** | **2.74** |
| CHLOROMETHANE | 0.5 | UG/L | < 0.24 | < 0.25 | < 0.24 | < 0.24 | 0.421 J | < 0.25 | < 0.24 | < 0.24 | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.25 | < 0.081 | < 0.081 | < 0.081 | < 0.25 | < 0.081 | < 0.081 | < 0.081 |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | < 0.438 | < 0.27 | < 0.438 | < 0.438 | < 0.438 | < 0.27 | < 0.438 | < 0.438 | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 |
| METHYLENE CHLORIDE | 1 | UG/L | < 0.2 | < 0.25 | **1.95 J** | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | 0.197 J | **2.35** | **1.85** | **2.26** | **2.44** | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| TOLUENE | 0.5 | UG/L | < 0.056 | < 0.25 | < 0.056 | < 0.056 | < 0.056 | < 0.25 | < 0.056 | < 0.056 | < 0.056 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.25 | < 0.114 | < 0.114 | < 0.114 | < 0.25 | < 0.114 | < 0.114 | < 0.114 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | **1.08** | **0.901** | **0.575** | **0.828** | **1.06** | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.25 | < 0.11 | < 0.11 | < 0.11 | < 0.25 | < 0.11 | < 0.11 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | < 0.25 | < 0.175 | < 0.175 | < 0.175 | < 0.25 | < 0.175 | < 0.175 | < 0.175 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | UCD1-053 | UCD1-053 | UCD1-053 | UCD1-053 | UCD2-007 | UCD2-007 | UCD2-014 | UCD2-014 | UCD2-015 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWGW1863 | GWGW1912 | GWGW1934 | GWGW1954 | GWGW1889 | GWGW1955 | GWGW1890 | GWGW1956 | GWGW1891 |
| | | Date | 02/10/05 | 05/02/05 | 08/09/05 | 10/28/05 | 05/25/05 | 10/20/05 | 05/23/05 | 10/20/05 | 05/23/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | < 0.25 | < 0.104 | < 0.104 | < 0.104 UJ | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.104 |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.101 | < 0.101 | < 0.101 UJ | < 0.101 | < 0.101 | < 0.101 | < 0.101 | < 0.101 |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,2,4-TRICHLOROBENZENE | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 UJ | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.103 | < 0.103 | < 0.103 UJ | < 0.103 | < 0.103 | < 0.103 | < 0.103 | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.25 | < 0.5 | < 0.5 | < 0.5 UJ | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| ACETONE | 5 | UG/L | < 0.25 | < 0.37 | < 0.37 | < 1.94 UJ | **10.1** | < 0.37 | < 0.37 | < 0.37 | < 0.37 |
| BENZENE | 0.5 | UG/L | < 0.25 | < 0.135 | < 0.135 | < 0.135 UJ | < 0.135 | < 0.135 | < 0.135 | < 0.135 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.25 | < 0.104 | < 0.104 | < 0.104 UJ | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.104 |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| BROMOFORM | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 UJ | < 0.25 | < 0.25 | < 0.25 | 0.315 J | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.25 | < 0.446 | < 0.446 | < 0.446 UJ | < 0.446 | < 0.446 | < 0.446 | < 0.446 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| CHLOROFORM | 0.5 | UG/L | < 0.25 | < 0.11 | < 0.11 | < 0.11 UJ | **1.3** | < 0.11 | < 0.11 | **0.994** | < 0.11 |
| CHLOROMETHANE | 0.5 | UG/L | < 0.25 | < 0.24 | < 0.24 | < 0.24 UJ | < 0.24 | < 0.24 | < 0.24 | < 0.24 | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.25 | < 0.081 | < 0.081 | < 0.081 UJ | < 0.081 | < 0.081 | < 0.081 | < 0.081 | < 0.081 |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | < 0.27 | < 0.438 | < 0.438 | < 0.438 UJ | < 0.438 | < 0.438 | < 0.438 | < 0.438 | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.25 | < 0.5 | < 0.5 | < 0.5 UJ | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| METHYLENE CHLORIDE | 1 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| TOLUENE | 0.5 | UG/L | < 0.25 | < 0.056 | < 0.056 | < 0.056 UJ | < 0.056 | < 0.056 | < 0.056 | < 0.056 | < 0.056 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.25 | < 0.114 | < 0.114 | < 0.114 UJ | < 0.114 | < 0.114 | < 0.114 | < 0.114 | < 0.114 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.25 | < 0.11 | < 0.11 | < 0.11 UJ | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.25 | < 0.175 | < 0.175 | < 0.175 UJ | < 0.175 | < 0.175 | < 0.175 | < 0.175 | < 0.175 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD2-015<br>GWGW1957<br>10/28/05 | UCD2-016<br>GWGW1892<br>05/04/05 | UCD2-016<br>GWGW1958<br>10/28/05 | UCD2-016<br>GWGW1959 Dup<br>10/28/05 |
|---|---|---|---|---|---|---|
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | < 0.104 | < 0.104 | < 0.104 | < 0.104 |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | < 0.101 | < 0.101 | < 0.101 | < 0.101 |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,2,4-TRICHLOROBENZENE | 10 | UG/L | NS | NS | NS | NS |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | < 0.103 | < 0.103 | < 0.103 | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| ACETONE | 5 | UG/L | < 0.512 UJ | < 0.37 | < 1.13 UJ | < 0.411 UJ |
| BENZENE | 0.5 | UG/L | < 0.135 | < 0.135 | < 0.135 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 | < 0.104 UJ | < 0.104 | < 0.104 |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| BROMOFORM | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.446 | < 0.446 | < 0.446 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| CHLOROFORM | 0.5 | UG/L | < 0.11 | < 0.11 | < 0.11 | < 0.11 |
| CHLOROMETHANE | 0.5 | UG/L | < 0.24 | < 0.24 | < 0.24 | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.081 | < 0.081 | < 0.081 |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | < 0.438 | < 0.438 | < 0.438 | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| METHYLENE CHLORIDE | 1 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| TOLUENE | 0.5 | UG/L | < 0.056 | < 0.056 | < 0.056 | < 0.056 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.114 | < 0.114 | < 0.114 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.11 | < 0.11 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | < 0.175 | < 0.175 | < 0.175 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

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**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD2-017<br>GWGW1893<br>05/04/05 | UCD2-017<br>GWGW1894 Dup<br>05/04/05 | UCD2-017<br>GWGW1960<br>10/25/05 | UCD2-026<br>GWGW1895<br>05/02/05 | UCD2-026<br>GWGW1961<br>10/28/05 | UCD2-029<br>GWGW1861<br>02/10/05 | UCD2-029<br>GWGW1896<br>05/02/05 | UCD2-029<br>GWGW1935<br>08/09/05 | UCD2-029<br>GWGW1962<br>10/24/05 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.25 | < 0.104 | < 0.104 | 0.251 J |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | < 0.101 | < 0.101 | < 0.101 | < 0.101 | < 0.101 | 0.485 J | **0.559** | **0.588** | **0.614** |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | 0.396 J | 0.463 J | **0.53** | 0.439 J |
| 1,2,4-TRICHLOROBENZENE | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | **0.673** | **0.883** | **0.786** | **0.815** |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | < 0.103 | < 0.103 | < 0.103 | < 0.103 | < 0.103 | **0.818** | **1** | **1.4** | **1.18** |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 |
| ACETONE | 5 | UG/L | < 0.37 | < 0.37 | < 0.37 | < 0.37 | < 1.27 UJ | < 0.25 | < 0.37 | < 0.37 | < 0.37 |
| BENZENE | 0.5 | UG/L | < 0.135 | < 0.135 | < 0.135 | < 0.135 | < 0.135 | < 0.25 | < 0.135 | < 0.135 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 UJ | < 0.104 UJ | < 0.104 | < 0.104 | < 0.104 | < 0.25 | < 0.104 | < 0.104 | < 0.104 |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| BROMOFORM | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.446 | < 0.446 | < 0.446 | < 0.446 | < 0.446 | < 0.25 | < 0.446 | < 0.446 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| CHLOROFORM | 0.5 | UG/L | < 0.11 | < 0.11 | < 0.11 | **10** | **2.78** | **114** | **122** | **189** | **188** |
| CHLOROMETHANE | 0.5 | UG/L | < 0.24 | < 0.24 | < 0.24 | < 0.24 | < 0.24 | < 0.25 | < 0.24 | < 0.24 | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.081 | < 0.081 | < 0.081 | < 0.081 | < 0.25 | < 0.081 | < 0.081 | < 0.081 |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | < 0.438 | < 0.438 | < 0.438 | < 0.438 | < 0.438 | < 0.27 | < 0.438 | < 0.438 | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.25 | < 0.5 | < 0.5 | < 0.5 |
| METHYLENE CHLORIDE | 1 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 | < 0.1 | < 0.1 | < 0.1 |
| TOLUENE | 0.5 | UG/L | < 0.056 | < 0.056 | < 0.056 | < 0.056 | < 0.056 | < 0.25 | < 0.056 | < 0.056 | < 0.056 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | 0.406 J | < 0.1 | < 0.1 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.114 | < 0.114 | < 0.114 | < 0.114 | < 0.25 | < 0.114 | < 0.114 | < 0.114 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 | < 0.2 | < 0.2 | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.25 | < 0.11 | < 0.11 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | < 0.175 | < 0.175 | < 0.175 | < 0.175 | < 0.25 | < 0.175 | < 0.175 | < 0.175 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD2-030<br>GWGW1858<br>01/27/05 | UCD2-030<br>GWGW1864<br>02/10/05 | UCD2-030<br>GWGW1865<br>04/27/05 | UCD2-030<br>GWGW1897<br>05/02/05 | UCD2-030<br>GWGW1918<br>06/21/05 | UCD2-030<br>GWGW1919<br>07/27/05 | UCD2-030<br>GWGW1936<br>08/09/05 | UCD2-030<br>GWGW1939<br>09/08/05 | UCD2-030<br>GWGW1963<br>10/28/05 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 UJ |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 UJ |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.104 | < 0.104 | < 0.104 UJ | < 0.104 UJ | < 0.104 | < 0.104 | < 0.104 UJ |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | 0.356 J | 0.294 J | 0.289 J | 0.309 J | 0.301 J | 0.464 J | **0.535** | < 0.101 | < 0.101 UJ |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | 0.337 J | 0.339 J | < 0.1 | < 0.1 UJ |
| 1,2,4-TRICHLOROBENZENE | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 UJ | < 0.25 | < 0.25 | < 0.25 | < 0.25 UJ | < 0.25 UJ | < 0.25 | < 0.25 | < 0.25 UJ |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 UJ |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 UJ |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | **0.616** | **0.562** | **0.589** | **0.605** | **0.512 J** | **0.768 J** | **0.889** | 0.286 J | 0.258 J |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | **0.794** | **0.715** | **0.745** | **0.751** | **0.533 J** | **0.877 J** | **1.08** | 0.394 J | < 0.103 UJ |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 UJ |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 UJ |
| 2-HEXANONE | 1 | UG/L | < 0.25 | < 0.25 | < 0.5 | < 0.5 | < 0.5 UJ | < 0.5 UJ | < 0.5 | < 0.5 | < 0.5 UJ |
| ACETONE | 5 | UG/L | < 0.25 | < 0.25 | < 0.37 | < 0.37 | < 0.37 UJ | < 0.37 UJ | < 0.37 | < 0.37 | < 1.97 UJ |
| BENZENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.135 | < 0.135 | < 0.135 UJ | < 0.135 UJ | < 0.135 | < 0.135 | < 0.135 UJ |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.104 | < 0.104 | < 0.104 UJ | < 0.104 UJ | < 0.104 | < 0.104 | < 0.104 UJ |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 UJ |
| BROMOFORM | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 UJ |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 UJ | < 0.25 UJ | < 0.25 | < 0.25 | < 0.25 UJ |
| CARBON DISULFIDE | 1 | UG/L | < 0.25 | < 0.25 | < 0.446 | < 0.446 | < 0.446 UJ | < 0.446 UJ | < 0.446 | < 0.446 | < 0.446 UJ |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 UJ |
| CHLOROBENZENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 UJ |
| CHLOROETHANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 UJ |
| CHLOROFORM | 0.5 | UG/L | **42.6** | **42** | **52.9** | **40** | **22.2 J** | **33.3 J** | **36.9** | **15.1** | **13 J** |
| CHLOROMETHANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.24 | < 0.24 | < 0.24 UJ | < 0.24 UJ | < 0.24 | < 0.24 | < 0.24 UJ |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 UJ |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 UJ |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 UJ |
| ETHYLBENZENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.081 | < 0.081 | < 0.081 UJ | < 0.081 UJ | < 0.081 | < 0.081 | < 0.081 UJ |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | < 0.27 | < 0.27 | < 0.438 | < 0.438 | < 0.438 UJ | < 0.438 UJ | < 0.438 | < 0.438 | < 0.438 UJ |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.25 | < 0.25 | < 0.5 | < 0.5 | < 0.5 UJ | < 0.5 UJ | < 0.5 | < 0.5 | < 0.5 UJ |
| METHYLENE CHLORIDE | 1 | UG/L | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 UJ |
| STYRENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 UJ |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 UJ |
| TOLUENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.056 | < 0.056 | < 0.056 UJ | < 0.056 UJ | < 0.056 | < 0.056 | < 0.056 UJ |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 UJ |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.114 | < 0.114 | < 0.114 UJ | < 0.114 UJ | < 0.114 | < 0.114 | < 0.114 UJ |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 UJ |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.11 | < 0.11 | < 0.11 UJ | < 0.11 UJ | < 0.11 | < 0.11 | < 0.11 UJ |
| XYLENES, TOTAL | 1 | UG/L | < 0.25 | < 0.25 | < 0.175 | < 0.175 | < 0.175 UJ | < 0.175 UJ | < 0.175 | < 0.175 | < 0.175 UJ |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD2-031<br>GWGW1898<br>05/02/05 | UCD2-031<br>GWGW1964<br>10/28/05 | UCD2-032<br>GWGW1899<br>05/25/05 | UCD2-032<br>GWGW1965<br>10/21/05 | UCD2-035<br>GWGW1900<br>05/25/05 | UCD2-035<br>GWGW1966<br>10/25/05 | UCD2-035<br>GWGW1967<br>Dup 10/25/05 | UCD2-036<br>GWGW1901<br>05/04/05 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | < 0.104 | < 0.104 UJ | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.104 |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | < 0.101 | < 0.101 UJ | < 0.101 | < 0.101 | < 0.101 | < 0.101 | < 0.101 | < 0.101 |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,2,4-TRICHLOROBENZENE | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 UJ | < 0.25 UJ | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | < 0.103 | < 0.103 UJ | < 0.103 | < 0.103 | < 0.103 | < 0.103 | < 0.103 | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.5 | < 0.5 UJ | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| ACETONE | 5 | UG/L | < 0.37 | < 0.731 UJ | < 0.37 | < 0.37 | < 0.37 | < 0.37 | < 0.37 | < 0.37 |
| BENZENE | 0.5 | UG/L | < 0.135 UJ | < 0.135 UJ | < 0.135 | < 0.135 | < 0.135 | < 0.135 | < 0.135 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 | < 0.104 UJ | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.104 UJ |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| BROMOFORM | 0.5 | UG/L | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 UJ | < 0.25 | 0.331 J | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.446 | < 0.446 UJ | < 0.446 | < 0.446 | < 0.446 | < 0.446 | < 0.446 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| CHLOROFORM | 0.5 | UG/L | **20 J** | **1.4 J** | **7.82** | **4.47** | < 0.11 | < 0.11 | < 0.11 | < 0.11 |
| CHLOROMETHANE | 0.5 | UG/L | < 0.24 UJ | < 0.24 UJ | < 0.24 | < 0.24 | < 0.24 | < 0.24 | < 0.24 | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.081 UJ | < 0.081 | < 0.081 | < 0.081 | < 0.081 | < 0.081 | < 0.081 |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | < 0.438 | < 0.438 UJ | < 0.438 | < 0.438 | < 0.438 | < 0.438 | < 0.438 | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | < 0.5 UJ | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| METHYLENE CHLORIDE | 1 | UG/L | < 0.2 | < 0.2 UJ | < 0.65 UJ | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| TOLUENE | 0.5 | UG/L | < 0.056 UJ | < 0.056 UJ | < 0.056 | < 0.056 | < 0.056 | < 0.056 | < 0.056 | < 0.056 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.114 UJ | < 0.114 | < 0.114 | < 0.114 | < 0.114 | < 0.114 | < 0.114 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.11 UJ | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | < 0.175 UJ | < 0.175 | < 0.175 | < 0.175 | < 0.175 | < 0.175 | < 0.175 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD2-036<br>GWGW1902<br>Dup 05/04/05 | UCD2-036<br>GWGW1968<br>10/20/05 | UCD2-037<br>GWGW1969<br>10/25/05 | UCD2-038<br>GWGW1970<br>10/25/05 | UCD2-038<br>GWGW1904<br>05/25/05 | UCD2-039<br>GWGW1905<br>05/25/05 | UCD2-039<br>GWGW1971<br>10/21/05 | UCD2-040<br>GWGW1859<br>02/10/05 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.25 |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | < 0.101 | < 0.101 | < 0.101 | < 0.101 | < 0.101 | < 0.101 | < 0.101 | < 0.25 |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| 1,2,4-TRICHLOROBENZENE | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | < 0.103 | < 0.103 | < 0.103 | < 0.103 | < 0.103 | < 0.103 | < 0.103 | < 0.25 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| 2-HEXANONE | 1 | UG/L | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.25 |
| ACETONE | 5 | UG/L | < 0.37 | < 0.37 | < 0.37 | < 0.37 | < 0.37 | < 0.37 | < 0.37 | < 0.25 |
| BENZENE | 0.5 | UG/L | < 0.135 | < 0.135 | < 0.135 | < 0.135 | < 0.135 | < 0.135 | < 0.135 | < 0.25 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 UJ | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.25 |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| BROMOFORM | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | 0.25 J | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.446 | < 0.446 | < 0.446 | < 0.446 | < 0.446 | < 0.446 | < 0.446 | < 0.25 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 |
| CHLOROFORM | 0.5 | UG/L | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.11 | **0.763** | **0.781** | **15** |
| CHLOROMETHANE | 0.5 | UG/L | < 0.24 | < 0.24 | < 0.24 | < 0.24 | < 0.24 | < 0.24 | < 0.24 | < 0.25 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.081 | < 0.081 | < 0.081 | < 0.081 | < 0.081 | < 0.081 | < 0.25 |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | < 0.438 | < 0.438 | < 0.438 | < 0.438 | < 0.438 | < 0.438 | < 0.438 | < 0.27 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.25 |
| METHYLENE CHLORIDE | 1 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.724 UJ | < 0.2 | < 0.25 |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| TOLUENE | 0.5 | UG/L | < 0.056 | < 0.056 | < 0.056 | < 0.056 | < 0.056 | < 0.056 | < 0.056 | < 0.25 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.114 | < 0.114 | < 0.114 | < 0.114 | < 0.114 | < 0.114 | < 0.25 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.25 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | < 0.175 | < 0.175 | < 0.175 | < 0.175 | < 0.175 | < 0.175 | < 0.25 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD2-040<br>GWGW1906<br>05/02/05 | UCD2-040<br>GWGW1937<br>08/09/05 | UCD2-040<br>GWGW1972<br>10/28/05 | UCD2-045<br>GWGW1907<br>05/25/05 | UCD2-045<br>GWGW1973<br>10/21/05 | UCD2-046<br>GWGW1908<br>05/25/05 | UCD2-046<br>GWGW1909<br>Dup<br>05/25/05 | UCD2-046<br>GWGW1974<br>10/21/05 | UCD2-048<br>GWGW1860<br>01/25/05 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | < 0.104 | < 0.104 | < 0.104 UJ | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.25 |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | < 0.101 | < 0.101 | < 0.101 UJ | < 0.101 | < 0.101 | < 0.101 | < 0.101 | < 0.101 | < 0.25 |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| 1,2,4-TRICHLOROBENZENE | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 UJ | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | 0.25 J | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | 0.293 J | < 0.103 | < 0.103 UJ | < 0.103 | < 0.103 | < 0.103 | < 0.103 | < 0.103 | < 0.25 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| 2-HEXANONE | 1 | UG/L | < 0.5 | < 0.5 | < 0.5 UJ | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.25 |
| ACETONE | 5 | UG/L | < 0.37 | < 0.37 | < 1.2 UJ | < 0.37 | < 0.37 | < 0.37 | **0.685 J** | < 0.37 | < 0.25 |
| BENZENE | 0.5 | UG/L | < 0.135 | < 0.135 | < 0.135 UJ | < 0.135 | < 0.135 | < 0.135 | < 0.135 | < 0.135 | < 0.25 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 | < 0.104 | < 0.104 UJ | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.25 |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| BROMOFORM | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 UJ | < 0.25 | 0.673 J | < 0.25 | < 0.25 | 0.473 J | < 0.25 |
| CARBON DISULFIDE | 1 | UG/L | < 0.446 | < 0.446 | < 0.446 UJ | < 0.446 | < 0.446 | < 0.446 | < 0.446 | < 0.446 | < 0.25 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 |
| CHLOROFORM | 0.5 | UG/L | **25** | **31.8** | **19.6 J** | < 0.11 | **1.37** | 0.295 J | 0.34 J | 0.332 J | **3.08** |
| CHLOROMETHANE | 0.5 | UG/L | < 0.24 | < 0.24 | < 0.24 UJ | < 0.24 | < 0.24 | < 0.24 | < 0.24 | < 0.24 | < 0.25 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.081 | < 0.081 UJ | < 0.081 | < 0.081 | < 0.081 | < 0.081 | < 0.081 | < 0.25 |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | < 0.438 | < 0.438 | < 0.438 UJ | < 0.438 | < 0.438 | < 0.438 | < 0.438 | < 0.438 | < 0.27 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | < 0.5 | < 0.5 UJ | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.25 |
| METHYLENE CHLORIDE | 1 | UG/L | < 0.2 | < 0.2 | < 0.2 UJ | < 0.752 UJ | < 0.2 | < 0.745 UJ | < 0.801 UJ | < 0.2 | < 0.25 |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| TOLUENE | 0.5 | UG/L | < 0.056 | < 0.056 | < 0.056 UJ | < 0.056 | < 0.056 | < 0.056 | < 0.056 | < 0.056 | < 0.25 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.25 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.114 | < 0.114 UJ | < 0.114 | < 0.114 | < 0.114 | < 0.114 | < 0.114 | < 0.25 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.25 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.11 | < 0.11 UJ | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.25 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | < 0.175 | < 0.175 UJ | < 0.175 | < 0.175 | < 0.175 | < 0.175 | < 0.175 | < 0.25 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD2-048<br>GWGW1910<br>06/07/05 | UCD2-048<br>GWGW1938<br>08/09/05 | UCD2-048<br>GWGW1975<br>10/19/05 | UCD2-048<br>GWGW1976<br>Dup<br>10/19/05 | UCD4-041<br>GWGW0913<br>05/26/05 | UCD4-041<br>GWGW1977<br>10/28/05 | UCD4-042<br>GWGW1914<br>05/30/05 | UCD4-042<br>GWGW1978<br>10/21/05 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.104 UJ | < 0.104 | < 0.104 |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | < 0.101 | < 0.101 | < 0.101 | < 0.101 | < 0.101 | < 0.101 UJ | < 0.101 | < 0.101 |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 |
| 1,2,4-TRICHLOROBENZENE | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 UJ | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | < 0.103 | < 0.103 | < 0.103 | < 0.103 | < 0.103 | < 0.103 UJ | < 0.103 | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 UJ | < 0.5 | < 0.5 |
| ACETONE | 5 | UG/L | **3.17 J** | < 0.37 | < 0.37 | < 0.37 | < 0.37 | < 0.505 UJ | < 0.37 | < 0.37 |
| BENZENE | 0.5 | UG/L | < 0.135 | < 0.135 | < 0.135 | < 0.135 | < 0.135 | < 0.135 UJ | < 0.135 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.104 UJ | < 0.104 | < 0.104 |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 |
| BROMOFORM | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 UJ | < 0.25 | 0.546 J |
| CARBON DISULFIDE | 1 | UG/L | < 0.446 | < 0.446 | < 0.446 | < 0.645 UJ | < 0.446 | < 0.446 UJ | < 0.446 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 |
| CHLOROFORM | 0.5 | UG/L | **0.767** | **1.43** | **3.14** | **4.05** | < 0.11 | < 0.11 UJ | **2.16** | **4.53** |
| CHLOROMETHANE | 0.5 | UG/L | < 0.24 | < 0.24 | < 0.24 | < 0.24 | < 0.24 | < 0.24 UJ | < 0.24 | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.081 | < 0.081 | < 0.081 | < 0.081 | < 0.081 UJ | < 0.081 | < 0.081 |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | < 0.438 | < 0.438 | < 0.438 | < 0.438 | < 0.438 | < 0.438 UJ | < 0.438 | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 UJ | < 0.5 | < 0.5 |
| METHYLENE CHLORIDE | 1 | UG/L | **1.66 J** | < 0.2 | < 0.2 | < 0.2 | < 0.872 UJ | < 0.2 UJ | < 0.967 UJ | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 |
| TOLUENE | 0.5 | UG/L | < 0.056 | < 0.056 | < 0.056 | < 0.056 | < 0.056 | < 0.056 UJ | < 0.056 | < 0.056 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.114 | < 0.114 | < 0.114 | < 0.114 | < 0.114 UJ | < 0.114 | < 0.114 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 UJ | < 0.2 | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.11 UJ | < 0.11 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | < 0.175 | < 0.175 | < 0.175 | < 0.175 | < 0.175 UJ | < 0.175 | < 0.175 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD4-043<br>GWGW1915<br>05/30/05 | UCD4-043<br>GWGW1979<br>10/24/05 | UCD4-044<br>GWGW0916<br>05/26/05 | UCD4-044<br>GWGW1980<br>10/24/05 | UCD4-047<br>GWGW1917<br>06/01/05 | UCD4-047<br>GWGW1981<br>10/21/05 |
|---|---|---|---|---|---|---|---|---|
| 1,1,1-TRICHLOROETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,1,2,2-TETRACHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| 1,1,2-TRICHLOROETHANE | 1 | UG/L | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.104 |
| 1,1-DICHLOROETHANE | 0.5 | UG/L | < 0.101 | < 0.101 | < 0.101 | < 0.101 | < 0.101 | < 0.101 |
| 1,1-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,2,4-TRICHLOROBENZENE | 10 | UG/L | NS | NS | NS | NS | NS | NS |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.5 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 |
| 1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,2-DICHLOROETHANE | 0.5 | UG/L | < 0.1 | 0.187 J | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,2-DICHLOROPROPANE | 0.5 | UG/L | < 0.103 | < 0.103 | < 0.103 | < 0.103 | < 0.103 | < 0.103 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| 2-HEXANONE | 1 | UG/L | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| ACETONE | 5 | UG/L | < 0.37 | < 0.37 | < 0.37 | < 0.37 | < 0.995 UJ | < 0.37 |
| BENZENE | 0.5 | UG/L | < 0.135 | < 0.135 | < 0.135 | < 0.135 | < 0.135 | < 0.135 |
| BROMOCHLOROMETHANE | 1 | UG/L | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.104 | < 0.104 |
| BROMODICHLOROMETHANE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| BROMOFORM | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| BROMOMETHANE | 1 | UG/L | < 0.25 | < 0.25 | < 0.25 | < 0.25 | < 0.25 | 0.359 J |
| CARBON DISULFIDE | 1 | UG/L | < 0.446 | < 0.446 | < 0.446 | < 0.446 | < 0.446 | < 0.446 |
| CARBON TETRACHLORIDE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| CHLOROBENZENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| CHLOROETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| CHLOROFORM | 0.5 | UG/L | **3.76** | **2.48** | < 0.11 | < 0.11 | **2.97** | **5** |
| CHLOROMETHANE | 0.5 | UG/L | < 0.24 | < 0.24 | < 0.24 | < 0.24 | < 0.24 | < 0.24 |
| cis-1,2-DICHLOROETHYLENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| cis-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| DIBROMOCHLOROMETHANE | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| ETHYLBENZENE | 0.5 | UG/L | < 0.081 | < 0.081 | < 0.081 | < 0.081 | < 0.081 | < 0.081 |
| METHYL ETHYL KETONE (2-BUTANONE) | 1 | UG/L | < 0.438 | < 0.438 | < 0.438 | < 0.438 | < 0.438 | < 0.438 |
| METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE) | 1 | UG/L | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 |
| METHYLENE CHLORIDE | 1 | UG/L | < 0.755 UJ | < 0.2 | < 0.686 UJ | < 0.2 | < 0.782 UJ | < 0.2 |
| STYRENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 UJ | < 0.1 | < 0.1 | < 0.1 |
| TETRACHLOROETHYLENE(PCE) | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| TOLUENE | 0.5 | UG/L | < 0.056 | < 0.056 | < 0.056 | < 0.056 | < 0.056 | < 0.056 |
| trans-1,2-DICHLOROETHENE | 0.5 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 |
| trans-1,3-DICHLOROPROPENE | 0.5 | UG/L | < 0.114 | < 0.114 | < 0.114 | < 0.114 | < 0.114 | < 0.114 |
| TRICHLOROETHYLENE (TCE) | 0.5 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 |
| VINYL CHLORIDE | 0.5 | UG/L | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.11 | < 0.11 |
| XYLENES, TOTAL | 1 | UG/L | < 0.175 | < 0.175 | < 0.175 | < 0.175 | < 0.175 | < 0.175 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
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**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | LF-01 | LF-01 | LS-01 | LS-01 | PCD | PCD | PCU | | | STPO | STPO |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | STMW0133 | STMW0135 | RWSW0036 | RWSW0037 | SWSW0274 | SWSW0276 | SWSW0273 | PCU SWSW0277 | PCU SWSW0278 | SWSW0275 | SWSW0279 |
| | | Date | 01/11/05 | 12/28/05 | 03/22/05 | 03/22/05 | 01/12/05 | 12/28/05 | 01/12/05 | Dup 12/28/05 | 12/28/05 | 01/12/05 | 12/28/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | | | | |
| ANTIMONY | 5 | UG/L | 0.688 J | 0.645 J | **79** | **91** | 0.513 J | 0.918 J | 0.476 J | 0.774 J | 0.738 J | 0.309 J | < 0.5 |
| ARSENIC | 3 | UG/L | < 5.31 UJ | **4.87 J** | 2.1 J | < 1.5 | < 6.8 UJ | < 1.5 | < 7.43 UJ | < 1.5 | < 1.5 | < 6.03 UJ | **3.69 J** |
| BARIUM | 20 | UG/L | **105** | **97.6** | **21** | 17 | **129** | **69.4** | **124** | **75.3** | **73.5** | **83.8** | **54.6** |
| BERYLLIUM | 1 | UG/L | 0.255 J | 0.321 J | < 0.1 | < 0.1 | 0.368 J | < 0.1 | 0.27 J | < 0.1 | < 0.1 | < 0.08 | < 0.1 |
| BORON | 50 | UG/L | **51.1** | **50.7** | NS | NS | **201** | **303** | **212** | **328** | **320** | **741** | **809** |
| CADMIUM | 1 | UG/L | 0.331 J | 0.331 J | 0.11 J | < 0.1 | 0.147 J | < 0.1 | 0.154 J | < 0.1 | < 0.1 | < 0.04 | < 0.1 |
| CALCIUM | 2000 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| CHROMIUM, TOTAL | 10 | UG/L | **41.6** | **54.2** | < 2.1 UJ | < 1.9 UJ | **27.8** | 6.28 J | **23.4** | 4.33 J | 4.19 J | 2.62 J | 2.22 J |
| COBALT | 10 | UG/L | 8.61 | **10.4** | 1.5 | 0.97 J | 4.63 | 1.01 | 3.93 | 0.457 J | 0.406 J | 0.455 J | 0.523 J |
| COPPER | 10 | UG/L | **21.4** | **21.2** | **11** | 9.8 | **17.2** | 4.07 J | **15** | 2.45 J | 2.24 J | 3.07 J | 2.45 J |
| IRON | 100 | UG/L | **12700** | **15200** | **8000** | **3600** | **13400** | **958** | **11300** | **455** | **337** | **101** | **126** |
| LEAD | 3 | UG/L | **14.9** | **16.7** | 2.3 | 1.9 J | **4.13** | < 0.5 | **3.55** | < 0.5 | < 0.5 | 0.231 J | < 0.5 |
| MAGNESIUM | 2000 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| MANGANESE | 10 | UG/L | **242** | **315** | **310 J** | **170 J** | **184** | **28** | **155** | **16.5** | **14.6** | < 1.61 | < 1 |
| MERCURY | 0.2 | UG/L | **0.224** | **0.249** | < 0.04 | < 0.04 | < 0.0472 | < 0.05 | < 0.0472 | < 0.05 | < 0.05 | < 0.0472 | < 0.05 |
| MOLYBDENUM | 10 | UG/L | 0.434 J | 0.433 J | 0.42 J | 0.39 J | 0.855 J | 2.52 J | 0.531 J | 0.949 J | 0.877 J | **17** | **33.9** |
| NICKEL | 20 | UG/L | **73.9** | **83.7** | 4.1 | 4.3 | **34** | 8.86 J | **28** | 4.16 J | 3.65 J | 2.5 J | 2.67 J |
| POTASSIUM | 2000 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| SELENIUM | 3 | UG/L | < 2.15 UJ | < 2.5 | < 2.9 UJ | < 3.3 UJ | < 1.37 UJ | < 2.5 | < 2.66 UJ | < 2.5 | < 2.5 | < 3.27 UJ | < 2.5 |
| SILVER | 10 | UG/L | < 0.04 | < 0.2 | < 0.2 | < 0.2 | 0.065 J | < 0.2 | 0.06 J | < 0.2 | < 0.2 | < 0.04 | < 0.2 |
| SODIUM | 2000 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| THALLIUM | 10 | UG/L | 0.562 J | < 0.4 | < 0.4 | < 0.4 | 0.191 J | < 0.4 | 0.429 J | < 0.4 | < 0.4 | 0.179 J | < 0.4 |
| VANADIUM | 10 | UG/L | **33.4** | **32.6** | < 2 | < 2 | **36** | 4.74 J | **30.3** | < 2 | 2.12 J | **10.8** | 9.55 J |
| ZINC | 20 | UG/L | **158** | **143** | **82** | **93.5** | **40.2** | < 14.8 UJ | **33.4** | < 6.66 UJ | < 5.6 UJ | **44** | **34.5** |

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UJ - Estimated value falls below reporting limit.
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**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | SP-5 | SP-5 | SP-5 | SP-5 | SP-5 | SP-5 | SP-5 | TP-2B | TP-2B | TP-2B | TP-2B | TP-2C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | TPEF0323 | TPEF0324 | TPEF0325 | TPEF0326 | TPEF0327 | TPEF0328 | TPEF0329 | GWTP0077 | GWTP0095 | GWTP0111 | GWTP0128 | GWTP0078 |
| | | Date | 05/30/05 | 06/21/05 | 07/27/05 | 08/10/05 | 09/08/05 | 10/20/05 | 12/01/05 | 01/20/05 | 04/28/05 | 08/11/05 | 10/19/05 | 01/20/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | | | | | |
| ANTIMONY | 5 | UG/L | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | NS | NS | NS | NS | NS |
| ARSENIC | 3 | UG/L | < 1.5 | 1.9 J | 3 J | < 1.5 | 2.99 J | < 3.26 UJ | 2.44 J | NS | NS | NS | NS | NS |
| BARIUM | 20 | UG/L | **183** | **210** | **152** | **171** | **146** | **165** | **162** | NS | NS | NS | NS | NS |
| BERYLLIUM | 1 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | NS | NS | NS | NS | NS |
| BORON | 50 | UG/L | **574** | **545** | **575** | **571** | **533** | **490** | **513** | NS | NS | NS | NS | NS |
| CADMIUM | 1 | UG/L | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | NS | NS | NS | NS | NS |
| CALCIUM | 2000 | UG/L | **44100** | **64500** | **40900** | **42400** | NS | NS | **41200** | NS | NS | NS | NS | NS |
| CHROMIUM, TOTAL | 10 | UG/L | **21.7** | **24** | **22.5** | **23.2** | **21.7** | **21.9** | **25.2** | **48.7** | **65.5** | **58.8** | **59.1** | **112** |
| COBALT | 10 | UG/L | 0.458 J | 0.278 J | 0.326 J | 0.512 J | 0.483 J | 0.331 J | 0.257 J | NS | NS | NS | NS | NS |
| COPPER | 10 | UG/L | 2.64 J | 5.81 J | 1.95 J | 1.42 J | 1.76 J | 1.28 J | 1.2 J | NS | NS | NS | NS | NS |
| IRON | 100 | UG/L | **137** | **347** | **147** | **180** | **181** | **158** | **168** | NS | NS | NS | NS | NS |
| LEAD | 3 | UG/L | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | NS | NS | NS | NS | NS |
| MAGNESIUM | 2000 | UG/L | **70500** | **73600** | **69300** | **73400** | NS | NS | **74600** | NS | NS | NS | NS | NS |
| MANGANESE | 10 | UG/L | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | NS | NS | NS | NS | NS |
| MERCURY | 0.2 | UG/L | < 0.05 | < 0.05 | < 0.106 UJ | < 0.05 | < 0.05 | 0.0503 J | < 0.107 UJ | NS | NS | NS | NS | NS |
| MOLYBDENUM | 10 | UG/L | 1.81 J | 1.61 J | 1.61 J | 1.84 J | 1.62 J | 1.73 J | 1.77 J | NS | NS | NS | NS | NS |
| NICKEL | 20 | UG/L | 1.79 J | 2.05 J | 1.49 J | 2.04 J | 2.06 J | 1.71 J | 1.28 J | NS | NS | NS | NS | NS |
| POTASSIUM | 2000 | UG/L | 779 J | 771 J | 750 J | 764 J | NS | NS | 743 J | NS | NS | NS | NS | NS |
| SELENIUM | 3 | UG/L | < 2.5 | < 2.5 | **3.4 J** | < 2.5 | < 2.5 | < 2.5 | < 2.5 | NS | NS | NS | NS | NS |
| SILVER | 10 | UG/L | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | NS | NS | NS | NS | NS |
| SODIUM | 2000 | UG/L | **40500** | **42000** | **37800** | **40500** | NS | NS | **39900** | NS | NS | NS | NS | NS |
| THALLIUM | 10 | UG/L | < 0.4 | < 0.4 | < 0.4 | < 0.4 | < 0.4 | < 0.4 | < 0.4 | NS | NS | NS | NS | NS |
| VANADIUM | 10 | UG/L | < 5.91 UJ | **10.5** | < 12.5 UJ | < 8.16 UJ | 9.2 J | **10.1 J** | < 9.54 UJ | NS | NS | NS | NS | NS |
| ZINC | 20 | UG/L | 7.53 J | 18.2 J | < 6.76 UJ | < 3.94 UJ | 6.46 J | < 2 | 2.1 J | NS | NS | NS | NS | NS |

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**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | TP-2C<br>GWTP0096<br>04/28/05 | TP-2C<br>GWTP0112<br>08/11/05 | TP-2C<br>GWTP0129<br>10/19/05 | TP-5B<br>GWTP0087<br>01/20/05 | TP-5B GWTP0088<br>Dup 01/20/05 | TP-5B<br>GWTP0104<br>04/28/05 | TP-5B<br>GWTP0121<br>08/11/05 | TP-5B<br>GWTP0137<br>10/20/05 | TP-5C<br>GWTP0089<br>01/20/05 | TP-5C<br>GWTP0105<br>04/28/05 | TP-5C<br>GWTP0122<br>08/11/05 | TP-5C<br>GWTP0138<br>10/20/05 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ANTIMONY | 5 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| ARSENIC | 3 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BARIUM | 20 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BERYLLIUM | 1 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BORON | 50 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| CADMIUM | 1 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| CALCIUM | 2000 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| CHROMIUM, TOTAL | 10 | UG/L | **113** | **116** | **112** | **92.2** | **94** | **101** | **95.9** | **85.1** | **123** | **135** | **101** | **105** |
| COBALT | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| COPPER | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| IRON | 100 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD | 3 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| MAGNESIUM | 2000 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| MANGANESE | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| MERCURY | 0.2 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| MOLYBDENUM | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| NICKEL | 20 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| POTASSIUM | 2000 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| SELENIUM | 3 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| SILVER | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| SODIUM | 2000 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| THALLIUM | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| VANADIUM | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| ZINC | 20 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |

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**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | TP-5C GWTP0139<br>Dup 10/20/05 | UCD1-001<br>GWGW1866<br>05/04/05 | UCD1-004<br>GWGW1867<br>05/23/05 | UCD1-010<br>GWGW1868<br>05/25/05 | UCD1-010<br>GWGW1940<br>10/25/05 | UCD1-011<br>GWGW1845<br>02/10/05 | UCD1-011<br>GWGW1846 Dup<br>02/10/05 | UCD1-011<br>GWGW1869<br>05/25/05 | UCD1-011<br>GWGW1920<br>08/10/05 | UCD1-011<br>GWGW1941<br>10/21/05 | UCD1-012<br>GWGW1870<br>05/25/05 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ANTIMONY | 5 | UG/L | NS | NS | NS | NS | NS | < 0.28 | < 0.28 | < 0.5 | < 0.5 | < 0.5 | NS |
| ARSENIC | 3 | UG/L | NS | NS | NS | NS | NS | < 1 | < 1 | 2.94 J | **4.38 J** | < 3.45 UJ | NS |
| BARIUM | 20 | UG/L | NS | NS | NS | NS | NS | **333** | **318** | **308** | **318** | **312** | NS |
| BERYLLIUM | 1 | UG/L | NS | NS | NS | NS | NS | < 0.08 | < 0.08 | < 0.1 | < 0.1 | < 0.1 | NS |
| BORON | 50 | UG/L | NS | NS | NS | NS | NS | **862** | **874** | **786** | **865** | **757** | NS |
| CADMIUM | 1 | UG/L | NS | NS | NS | NS | NS | 0.136 J | < 0.04 | < 0.1 | < 0.1 | < 0.1 | NS |
| CALCIUM | 2000 | UG/L | NS | NS | NS | NS | NS | **48200** | **48000** | **49100** | NS | NS | NS |
| CHROMIUM, TOTAL | 10 | UG/L | **104** | **30** | **15.8** | **60.9** | **55.5** | **147** | **147** | **150** | **151** | **144** | **140** |
| COBALT | 10 | UG/L | NS | NS | NS | NS | NS | 0.701 J | 0.682 J | 0.668 UJ | 0.76 J | 0.624 J | NS |
| COPPER | 10 | UG/L | NS | NS | NS | NS | NS | 0.992 J | 0.956 J | 0.853 J | 0.815 J | 1.03 J | NS |
| IRON | 100 | UG/L | NS | NS | NS | NS | NS | **204** | **197** | **165** | **210** | **195** | NS |
| LEAD | 3 | UG/L | NS | NS | NS | NS | NS | < 0.05 | < 0.05 | < 0.5 | < 0.5 | < 0.5 | NS |
| MAGNESIUM | 2000 | UG/L | NS | NS | NS | NS | NS | **134000** | **132000 +/- 1** | **132000** | NS | NS | NS |
| MANGANESE | 10 | UG/L | NS | NS | NS | NS | NS | < 1.61 | < 1.61 | < 1 | < 1 | < 1 | NS |
| MERCURY | 0.2 | UG/L | NS | NS | NS | NS | NS | < 0.0472 | < 0.0472 | < 0.05 | < 0.05 | < 0.05 | NS |
| MOLYBDENUM | 10 | UG/L | NS | NS | NS | NS | NS | 1.17 J | 1.07 J | 1.11 J | 1.11 J | 1.13 J | NS |
| NICKEL | 20 | UG/L | NS | NS | NS | NS | NS | 1.83 J | 1.88 J | 1.99 J | 2.11 J | 1.78 J | NS |
| POTASSIUM | 2000 | UG/L | NS | NS | NS | NS | NS | 536 J | 528 J | 525 J | NS | NS | NS |
| SELENIUM | 3 | UG/L | NS | NS | NS | NS | NS | **9.47** | < 8.95 UJ | **9.58** | **8.87** | **7.8** | NS |
| SILVER | 10 | UG/L | NS | NS | NS | NS | NS | < 0.04 | < 0.04 | < 0.2 | < 0.2 | < 0.2 | NS |
| SODIUM | 2000 | UG/L | NS | NS | NS | NS | NS | **77100** | **76600 +/- 1** | **73900** | NS | NS | NS |
| THALLIUM | 10 | UG/L | NS | NS | NS | NS | NS | 0.382 J | 0.104 J | < 0.4 | < 0.4 | 0.564 J | NS |
| VANADIUM | 10 | UG/L | NS | NS | NS | NS | NS | **13.2** | **13.3** | **21 J** | < 7.45 UJ | **37.4** | NS |
| ZINC | 20 | UG/L | NS | NS | NS | NS | NS | 3.12 J | 1.87 J | < 2 | < 3.28 UJ | < 2 | NS |

NS - Not Sampled
J - Validation qualifier for estimated value; sample ex
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRD

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD1-012<br>GWGW1871 Dup<br>05/25/05 | UCD1-012<br>GWGW1942<br>10/19/05 | UCD1-013<br>GWGW1872<br>05/23/05 | UCD1-018<br>GWGW1848<br>02/10/05 | UCD1-018<br>GWGW1849 Dup<br>02/10/05 | UCD1-018<br>GWGW1873<br>05/04/05 | UCD1-018<br>GWGW1922<br>08/09/05 | UCD1-018<br>GWGW1923 Dup<br>08/09/05 | UCD1-018<br>GWGW1943<br>10/21/05 | UCD1-019<br>GWGW1874<br>05/04/05 | UCD1-020<br>GWGW1875<br>05/25/05 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ANTIMONY | 5 | UG/L | NS | NS | NS | < 0.28 | < 0.28 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | NS | NS |
| ARSENIC | 3 | UG/L | NS | NS | NS | < 1 | 1.18 J | 2.12 J | 2.16 J | 1.69 J | < 3.35 UJ | NS | NS |
| BARIUM | 20 | UG/L | NS | NS | NS | **159** | **158** | **129** | **128** | **130** | **127** | NS | NS |
| BERYLLIUM | 1 | UG/L | NS | NS | NS | < 0.08 | < 0.08 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | NS | NS |
| BORON | 50 | UG/L | NS | NS | NS | **602** | **582** | **531** | **536** | **556** | **450** | NS | NS |
| CADMIUM | 1 | UG/L | NS | NS | NS | 0.042 J | < 0.04 | < 0.1 | < 0.1 | < 0.1 | < 0.1 | NS | NS |
| CALCIUM | 2000 | UG/L | NS | NS | NS | **33600** | **34000** | **27400** | NS | NS | NS | NS | NS |
| CHROMIUM, TOTAL | 10 | UG/L | **141** | **126** | **79.9** | **14.5** | **13.9 +/- 4** | 8.43 J | 7.62 J | 8.01 J | 7.17 J | **168** | **49.6** |
| COBALT | 10 | UG/L | NS | NS | NS | 0.586 J | 0.557 J | 0.403 J | 0.43 J | 0.45 J | 0.345 J | NS | NS |
| COPPER | 10 | UG/L | NS | NS | NS | 1.25 J | 1.23 J | 0.664 J | 0.687 J | 0.928 J | 0.829 J | NS | NS |
| IRON | 100 | UG/L | NS | NS | NS | **140** | **140** | 95.1 J | 70.7 J | 69.2 J | 98.5 J | NS | NS |
| LEAD | 3 | UG/L | NS | NS | NS | < 0.05 | < 0.05 | < 0.5 | < 0.5 | < 0.5 | < 0.5 | NS | NS |
| MAGNESIUM | 2000 | UG/L | NS | NS | NS | **92000** | **92500** | **71100** | NS | NS | NS | NS | NS |
| MANGANESE | 10 | UG/L | NS | NS | NS | < 1.61 | < 1.61 | < 1 | < 1 | < 1 | < 1 | NS | NS |
| MERCURY | 0.2 | UG/L | NS | NS | NS | < 0.0472 | < 0.0472 | < 0.05 | < 0.05 | < 0.05 | < 0.05 | NS | NS |
| MOLYBDENUM | 10 | UG/L | NS | NS | NS | 1.34 J | 1.32 J | 1.46 J | 1.45 J | 1.41 J | 1.52 J | NS | NS |
| NICKEL | 20 | UG/L | NS | NS | NS | 9.95 J | 9.87 J | 3.85 J | 4.19 J | 4.03 J | 3.52 J | NS | NS |
| POTASSIUM | 2000 | UG/L | NS | NS | NS | 357 J | 350 J | 320 J | NS | NS | NS | NS | NS |
| SELENIUM | 3 | UG/L | NS | NS | NS | < 3.06 UJ | < 3.56 UJ | < 2.5 | < 2.5 | < 2.5 | < 2.5 | NS | NS |
| SILVER | 10 | UG/L | NS | NS | NS | < 0.04 | < 0.04 | < 0.2 | < 0.2 | < 0.2 | < 0.2 | NS | NS |
| SODIUM | 2000 | UG/L | NS | NS | NS | **32400** | **32600** | **30600** | NS | NS | NS | NS | NS |
| THALLIUM | 10 | UG/L | NS | NS | NS | 0.031 J | < 0.02 | < 0.4 | < 0.4 | < 0.4 | < 0.4 | NS | NS |
| VANADIUM | 10 | UG/L | NS | NS | NS | 7.22 J | 5.53 J | 8.47 J | < 4.71 UJ | < 4.38 UJ | 9.14 J | NS | NS |
| ZINC | 20 | UG/L | NS | NS | NS | 2.33 J | 1.15 J | < 2 | < 2 | < 2 | < 2 | NS | NS |

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**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD1-021<br>GWGW1876<br>05/23/05 | UCD1-022<br>GWGW1877<br>05/23/05 | UCD1-023<br>GWGW1878<br>05/23/05 | UCD1-024<br>GWGW1879<br>05/25/05 | UCD1-025<br>GWGW1850<br>02/10/05 | UCD1-025<br>GWGW1880<br>05/02/05 | UCD1-025<br>GWGW1924<br>08/09/05 | UCD1-025<br>GWGW1944<br>10/28/05 | UCD1-027Z1<br>GWGW1851<br>01/13/05 | UCD1-027Z1<br>GWGW1881<br>05/03/05 | UCD1-027Z1<br>GWGW1925<br>08/02/05 | UCD1-027Z1<br>GWGW1945<br>10/20/05 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ANTIMONY | 5 | UG/L | NS | NS | NS | NS | < 0.28 | < 0.5 | < 0.5 | < 0.5 | 0.523 J | < 0.5 | < 0.5 | NS |
| ARSENIC | 3 | UG/L | NS | NS | NS | NS | < 1 | 2.95 J | < 1.5 | < 1.5 | < 3.27 UJ | < 1.5 | < 2.91 UJ | NS |
| BARIUM | 20 | UG/L | NS | NS | NS | NS | **294** | **266** | **282** | **260** | **167** | **168** | **149** | NS |
| BERYLLIUM | 1 | UG/L | NS | NS | NS | NS | < 0.08 | < 0.1 | < 0.1 | < 0.1 | < 0.08 | < 0.1 | < 0.1 | NS |
| BORON | 50 | UG/L | NS | NS | NS | NS | **864** | **663** | **861** | **736** | **614** | **595** | **558 J** | NS |
| CADMIUM | 1 | UG/L | NS | NS | NS | NS | 0.079 J | 0.12 J | < 0.1 | < 0.1 | 0.093 J | < 0.203 UJ | 0.262 J | NS |
| CALCIUM | 2000 | UG/L | NS | NS | NS | NS | **41000** | **38000** | NS | NS | **43300** | **47300** | NS | NS |
| CHROMIUM, TOTAL | 10 | UG/L | **70.8** | **14.9** | **13.4** | **38.3** | **187** | **148** | **150** | NS | < 2.23 UJ | 1.32 J | < 1 | < 1 |
| COBALT | 10 | UG/L | NS | NS | NS | NS | 1.01 | 0.963 J | 1.28 | 1.26 | 7.34 | 9.25 | **10.3 J** | NS |
| COPPER | 10 | UG/L | NS | NS | NS | NS | 1.24 J | 1 J | 1.22 J | 1.17 J | 1.08 J | 1.25 J | 0.838 J | NS |
| IRON | 100 | UG/L | NS | NS | NS | NS | **169** | **137** | **107** | **110** | **103** | **191** | **225** | NS |
| LEAD | 3 | UG/L | NS | NS | NS | NS | < 0.05 | < 0.5 | < 0.5 | < 0.5 | 0.36 J | < 0.5 UJ | < 0.5 | NS |
| MAGNESIUM | 2000 | UG/L | NS | NS | NS | NS | **129000** | **111000** | NS | NS | **80900** | **84300** | NS | NS |
| MANGANESE | 10 | UG/L | NS | NS | NS | NS | **27.7** | **51** | **49** | **43.1** | **872** | **1230** | **1660** | NS |
| MERCURY | 0.2 | UG/L | NS | NS | NS | NS | < 0.0472 | < 0.05 | < 0.05 | < 0.05 | < 0.0472 | < 0.05 | < 0.05 | NS |
| MOLYBDENUM | 10 | UG/L | NS | NS | NS | NS | 0.557 J | 0.54 J | 0.539 J | 0.561 J | **88.3** | **176** | **232** | NS |
| NICKEL | 20 | UG/L | NS | NS | NS | NS | **71.2** | **50** | **42.5** | **43.4** | **696** | **882** | **1130 J** | NS |
| POTASSIUM | 2000 | UG/L | NS | NS | NS | NS | 1310 J | **2410** | NS | NS | 1340 J | 1490 J | NS | NS |
| SELENIUM | 3 | UG/L | NS | NS | NS | NS | < 3.38 UJ | **3.5 J** | 2.77 J | < 2.5 | < 4.54 UJ | < 2.5 | < 2.5 | NS |
| SILVER | 10 | UG/L | NS | NS | NS | NS | < 0.04 | < 0.2 | < 0.2 | < 0.2 | < 0.04 | < 0.2 | < 0.2 | NS |
| SODIUM | 2000 | UG/L | NS | NS | NS | NS | **74600** | **68600** | NS | NS | **89900** | **88400** | NS | NS |
| THALLIUM | 10 | UG/L | NS | NS | NS | NS | < 0.02 | 1.5 J | < 0.4 | 0.577 J | 0.395 J | 1.18 J | 0.773 J | NS |
| VANADIUM | 10 | UG/L | NS | NS | NS | NS | **12** | **17.9 J** | **13.1 J** | **30.9** | < 5.44 | 2.01 J | 2.66 J | NS |
| ZINC | 20 | UG/L | NS | NS | NS | NS | 4.32 J | 6 J | 4.91 J | 5.59 J | **305** | **274** | **259 J** | NS |

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**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | UCD1-027Z2 | UCD1-027Z2 | UCD1-027Z2 | UCD1-027Z2 | UCD1-027Z3 | UCD1-027Z3 | UCD1-027Z3 | UCD1-027Z3 | UCD1-028 | UCD1-028 | UCD1-028 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWGW1852 | GWGW1882 | GWGW1926 | GWGW1946 | GWGW1853 | GWGW1883 | GWGW1927 | GWGW1947 | GWGW1854 | GWGW1884 | GWGW1928 |
| | | Date | 01/13/05 | 05/03/05 | 08/02/05 | 10/20/05 | 01/13/05 | 05/03/05 | 08/02/05 | 12/13/05 | 02/10/05 | 05/02/05 | 08/09/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | | | | |
| ANTIMONY | 5 | UG/L | 0.3 J | < 0.5 | < 0.5 | NS | 0.497 J | < 0.5 | < 0.5 | 0.503 J | < 0.28 | < 0.5 | < 0.5 |
| ARSENIC | 3 | UG/L | < 3.91 UJ | < 1.5 | < 1.77 UJ | NS | < 4.51 UJ | < 1.5 | < 2.6 UJ | < 1.5 | < 1 | **5.4** | < 1.5 |
| BARIUM | 20 | UG/L | **290** | **265** | **264** | NS | **220** | **201** | **193** | **196** | **323** | **332** | **321** |
| BERYLLIUM | 1 | UG/L | < 0.08 | < 0.1 | < 0.1 | NS | < 0.08 | < 0.1 | < 0.1 | < 0.1 | < 0.08 | < 0.1 | < 0.1 |
| BORON | 50 | UG/L | **931** | **771** | **753 J** | NS | **773 J** | **624** | **617 J** | **577** | **1230** | **1040** | **1240** |
| CADMIUM | 1 | UG/L | < 0.04 | < 0.331 UJ | < 0.1 | NS | < 0.04 | 0.108 UJ | < 0.1 | < 0.1 | < 0.04 | < 0.1 | < 0.1 |
| CALCIUM | 2000 | UG/L | **44100** | **41100** | NS | NS | **38300** | **37600** | NS | NS | **53300** | **53700** | NS |
| CHROMIUM, TOTAL | 10 | UG/L | < 2.36 UJ | 1.33 J | < 1 | < 1 | < 1.4 UJ | < 1 | < 1 | < 1 | **526** | **530** | **524** |
| COBALT | 10 | UG/L | **16.9** | **17.4** | **16.3 J** | NS | 5.87 | 6.14 | 5.18 J | 5.81 | 0.997 J | 0.5 J | 1.06 |
| COPPER | 10 | UG/L | 0.778 J | 0.69 J | 0.529 J | NS | < 0.69 | 0.543 J | 0.431 J | < 0.471 UJ | 1.27 J | 0.74 J | 1.03 J |
| IRON | 100 | UG/L | **120** | **180** | **211** | NS | **108** | **167** | **177** | **156** | **225** | **205** | **142** |
| LEAD | 3 | UG/L | 0.354 J | < 0.5 UJ | < 0.5 | NS | 0.359 J | < 0.5 UJ | < 0.5 | < 0.5 | < 0.05 | < 0.5 | < 0.5 |
| MAGNESIUM | 2000 | UG/L | **122000** | **114000** | NS | NS | **96200** | **99900** | NS | NS | **192000** | **190000** | NS |
| MANGANESE | 10 | UG/L | **1260** | **1350** | **1350** | NS | **790 J** | **694** | **704** | **740** | < 1.61 | < 1 | < 1 |
| MERCURY | 0.2 | UG/L | < 0.0472 | < 0.05 | < 0.05 | NS | < 0.0472 | < 0.05 | < 0.05 | < 0.05 | < 0.0472 | < 0.05 | < 0.05 |
| MOLYBDENUM | 10 | UG/L | 3.64 J | 3.36 J | 3.52 J | NS | 9.75 J | 9.31 J | 9.62 J | 9.44 J | 0.884 J | 0.68 J | 0.775 J |
| NICKEL | 20 | UG/L | **823** | **875** | **891 J** | NS | **230** | **340** | **205 J** | **254** | 2.53 J | 1.9 J | 2.45 J |
| POTASSIUM | 2000 | UG/L | 1540 J | 1500 J | NS | NS | 1400 J | 1380 J | NS | NS | 910 J | 907 J | NS |
| SELENIUM | 3 | UG/L | < 4.95 UJ | 2.85 J | < 2.5 | NS | < 3.24 UJ | < 2.5 | < 2.5 | < 2.5 | **14.4** | **19** | **14.1** |
| SILVER | 10 | UG/L | < 0.04 | < 0.2 | < 0.2 | NS | < 0.04 | < 0.2 | < 0.2 | < 0.2 | < 0.04 | < 0.2 | < 0.2 |
| SODIUM | 2000 | UG/L | **86400** | **75600** | NS | NS | **84900** | **74800** | NS | NS | **111000** | **120000** | NS |
| THALLIUM | 10 | UG/L | 0.132 J | 0.482 J | < 0.4 | NS | 0.063 J | < 0.4 | < 0.4 | < 0.4 | < 0.02 | 0.534 J | < 0.4 |
| VANADIUM | 10 | UG/L | < 5.44 | < 2 | 3.32 J | NS | < 5.44 | < 2 | 5.85 J | < 2 | **24.7** | **46** | **38.7** |
| ZINC | 20 | UG/L | **289** | **262** | **265 J** | NS | **139** | **113** | **127 J** | **127** | 1.49 J | < 2 | < 2 |

NS - Not Sampled
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UJ - Estimated value falls below reporting limit.
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**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD1-028<br>GWGW1929 Dup<br>08/09/05 | UCD1-028<br>GWGW1948<br>10/24/05 | UCD1-049<br>GWGW1885<br>06/07/05 | UCD1-049<br>GWGW1949<br>10/19/05 | UCD1-050<br>GWGW1887<br>06/07/05 | UCD1-050<br>GWGW1950<br>10/19/05 | UCD1-050<br>GWGW1951 Dup<br>10/19/05 | UCD1-051<br>GWGW1888<br>06/07/05 | UCD1-051<br>GWGW1952<br>10/19/05 | UCD1-052<br>GWGW1862<br>02/10/05 | UCD1-052<br>GWGW1911<br>05/02/05 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ANTIMONY | 5 | UG/L | < 0.5 | < 0.5 | NS | NS | NS | NS | NS | NS | NS | < 0.28 | < 0.5 |
| ARSENIC | 3 | UG/L | 1.82 J | **3.22 J** | NS | NS | NS | NS | NS | NS | NS | < 1 | **4.6 J** |
| BARIUM | 20 | UG/L | **330** | **306** | NS | NS | NS | NS | NS | NS | NS | **111** | **220** |
| BERYLLIUM | 1 | UG/L | < 0.1 | < 0.1 | NS | NS | NS | NS | NS | NS | NS | < 0.08 | < 0.1 |
| BORON | 50 | UG/L | **1150** | **1060** | NS | NS | NS | NS | NS | NS | NS | **755** | **894** |
| CADMIUM | 1 | UG/L | < 0.1 | < 0.1 | NS | NS | NS | NS | NS | NS | NS | 0.073 J | < 0.1 |
| CALCIUM | 2000 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | **44800** | **54600** |
| CHROMIUM, TOTAL | 10 | UG/L | **516** | **491** | **117** | **119** | **126** | **116** | **116** | **112** | **115** | **99.3** | **178** |
| COBALT | 10 | UG/L | 1 | 0.836 J | NS | NS | NS | NS | NS | NS | NS | 0.87 J | 0.364 J |
| COPPER | 10 | UG/L | 1.19 J | < 2.63 UJ | NS | NS | NS | NS | NS | NS | NS | 4.37 J | 2.07 J |
| IRON | 100 | UG/L | **148** | **241** | NS | NS | NS | NS | NS | NS | NS | **200** | **200** |
| LEAD | 3 | UG/L | < 0.5 | < 0.5 | NS | NS | NS | NS | NS | NS | NS | < 0.05 | < 0.5 |
| MAGNESIUM | 2000 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | **102000** | **143000** |
| MANGANESE | 10 | UG/L | < 1 | < 1 | NS | NS | NS | NS | NS | NS | NS | **19.5** | < 1 |
| MERCURY | 0.2 | UG/L | < 0.05 | < 0.05 | NS | NS | NS | NS | NS | NS | NS | < 0.0472 | < 0.05 |
| MOLYBDENUM | 10 | UG/L | 0.812 J | 1.16 J | NS | NS | NS | NS | NS | NS | NS | 1.29 J | 1.76 J |
| NICKEL | 20 | UG/L | 2.38 J | < 3.1 UJ | NS | NS | NS | NS | NS | NS | NS | 4.25 J | 2 J |
| POTASSIUM | 2000 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | **3730** | 1110 J |
| SELENIUM | 3 | UG/L | **14.3** | **12.7** | NS | NS | NS | NS | NS | NS | NS | **15.2** | **20** |
| SILVER | 10 | UG/L | < 0.2 | < 0.2 | NS | NS | NS | NS | NS | NS | NS | < 0.04 | < 0.2 |
| SODIUM | 2000 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | **69000** | **102000** |
| THALLIUM | 10 | UG/L | < 0.4 | 0.53 J | NS | NS | NS | NS | NS | NS | NS | 0.124 J | < 0.4 |
| VANADIUM | 10 | UG/L | **45** | **108** | NS | NS | NS | NS | NS | NS | NS | **10.7** | **20 J** |
| ZINC | 20 | UG/L | < 2 | 3.06 J | NS | NS | NS | NS | NS | NS | NS | 8.05 J | 2.55 J |

NS - Not Sampled
J - Validation qualifier for estimated value; sample ex
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRD

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | UCD1-052 | UCD1-052 | UCD1-053 | UCD1-053 | UCD1-053 | UCD1-053 | UCD2-007 | UCD2-007 | UCD2-014 | UCD2-014 | UCD2-015 | UCD2-015 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | GWGW1933 | GWGW1953 | GWGW1863 | GWGW1912 | GWGW1934 | GWGW1954 | GWGW1889 | GWGW1955 | GWGW1890 | GWGW1956 | GWGW1891 | GWGW1957 |
| | | Date | 08/09/05 | 10/25/05 | 02/10/05 | 05/02/05 | 08/09/05 | 10/28/05 | 05/25/05 | 10/20/05 | 05/23/05 | 10/20/05 | 05/23/05 | 10/28/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | | | | | |
| ANTIMONY | 5 | UG/L | < 0.5 | NS | < 0.28 | < 0.5 | < 0.5 | NS | NS | NS | NS | NS | NS | NS |
| ARSENIC | 3 | UG/L | 2.42 J | NS | < 1 | **4 J** | 2.09 J | NS | NS | NS | NS | NS | NS | NS |
| BARIUM | 20 | UG/L | **116** | NS | **112** | **111** | **113** | NS | NS | NS | NS | NS | NS | NS |
| BERYLLIUM | 1 | UG/L | < 0.1 | NS | < 0.08 | < 0.1 | < 0.1 | NS | NS | NS | NS | NS | NS | NS |
| BORON | 50 | UG/L | **1010** | NS | **991** | **874** | **907** | NS | NS | NS | NS | NS | NS | NS |
| CADMIUM | 1 | UG/L | < 0.1 | NS | < 0.04 | < 0.1 | < 0.1 | NS | NS | NS | NS | NS | NS | NS |
| CALCIUM | 2000 | UG/L | NS | NS | **48200** | **44100** | NS | NS | NS | NS | NS | NS | NS | NS |
| CHROMIUM, TOTAL | 10 | UG/L | **160** | **163** | **434** | **408** | **434** | **448** | **45.7** | **33** | **60.1** | **30.8** | **12.2** | **10.8** |
| COBALT | 10 | UG/L | 0.853 J | NS | 0.727 J | 0.3 J | 0.747 J | NS | NS | NS | NS | NS | NS | NS |
| COPPER | 10 | UG/L | 1.21 J | NS | 1.57 J | 0.86 J | 1.4 J | NS | NS | NS | NS | NS | NS | NS |
| IRON | 100 | UG/L | **196** | NS | **225** | **174** | **206** | NS | NS | NS | NS | NS | NS | NS |
| LEAD | 3 | UG/L | < 0.5 | NS | < 0.05 | < 0.5 | < 0.5 | NS | NS | NS | NS | NS | NS | NS |
| MAGNESIUM | 2000 | UG/L | NS | NS | **123000** | **120000** | NS | NS | NS | NS | NS | NS | NS | NS |
| MANGANESE | 10 | UG/L | 1.85 J | NS | < 1.61 | < 1 | 2.25 J | NS | NS | NS | NS | NS | NS | NS |
| MERCURY | 0.2 | UG/L | < 0.05 | NS | < 0.0472 | < 0.05 | < 0.05 | NS | NS | NS | NS | NS | NS | NS |
| MOLYBDENUM | 10 | UG/L | 1.72 J | NS | 1.82 J | 1.97 J | 1.87 J | NS | NS | NS | NS | NS | NS | NS |
| NICKEL | 20 | UG/L | 2.94 J | NS | 2.71 J | 2 J | 2.97 J | NS | NS | NS | NS | NS | NS | NS |
| POTASSIUM | 2000 | UG/L | NS | NS | 1430 J | 1190 J | NS | NS | NS | NS | NS | NS | NS | NS |
| SELENIUM | 3 | UG/L | **19.7** | NS | **24.6** | **26** | **22.2** | NS | NS | NS | NS | NS | NS | NS |
| SILVER | 10 | UG/L | < 0.2 | NS | < 0.04 | < 0.2 | < 0.2 | NS | NS | NS | NS | NS | NS | NS |
| SODIUM | 2000 | UG/L | NS | NS | **84600** | **96800** | NS | NS | NS | NS | NS | NS | NS | NS |
| THALLIUM | 10 | UG/L | < 0.4 | NS | 0.063 J | < 0.4 | < 0.4 | NS | NS | NS | NS | NS | NS | NS |
| VANADIUM | 10 | UG/L | **16.4 J** | NS | **22.3** | **36** | **35.3** | NS | NS | NS | NS | NS | NS | NS |
| ZINC | 20 | UG/L | < 2 | NS | 2.79 J | < 2 | < 2 | NS | NS | NS | NS | NS | NS | NS |

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UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRD

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD2-016<br>GWGW1892<br>05/04/05 | UCD2-016<br>GWGW1958<br>10/28/05 | UCD2-016<br>GWGW1959 Dup<br>10/28/05 | UCD2-017<br>GWGW1893<br>05/04/05 | UCD2-017<br>GWGW1894 Dup<br>05/04/05 | UCD2-017<br>GWGW1960<br>10/25/05 | UCD2-026<br>GWGW1895<br>05/02/05 | UCD2-026<br>GWGW1961<br>10/28/05 | UCD2-029<br>GWGW1896<br>05/02/05 | UCD2-029<br>GWGW1962<br>10/24/05 | UCD2-030<br>GWGW1897<br>05/02/05 | UCD2-030<br>GWGW1963<br>10/28/05 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ANTIMONY | 5 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| ARSENIC | 3 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BARIUM | 20 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BERYLLIUM | 1 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BORON | 50 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| CADMIUM | 1 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| CALCIUM | 2000 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| CHROMIUM, TOTAL | 10 | UG/L | **27.2** | **29** | **28.7** | **22.4** | **23.6** | **22.9** | **25** | **29.3** | **25.9** | **27.2** | **20** | **20.1** |
| COBALT | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| COPPER | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| IRON | 100 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD | 3 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| MAGNESIUM | 2000 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| MANGANESE | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| MERCURY | 0.2 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| MOLYBDENUM | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| NICKEL | 20 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| POTASSIUM | 2000 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| SELENIUM | 3 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| SILVER | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| SODIUM | 2000 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| THALLIUM | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| VANADIUM | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| ZINC | 20 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |

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J - Validation qualifier for estimated value; sample ex
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRD

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD2-031<br>GWGW1898<br>05/02/05 | UCD2-031<br>GWGW1964<br>10/28/05 | UCD2-032<br>GWGW1899<br>05/25/05 | UCD2-032<br>GWGW1965<br>10/21/05 | UCD2-035<br>GWGW1900<br>05/25/05 | UCD2-035<br>GWGW1966<br>10/25/05 | UCD2-035<br>GWGW1967 Dup<br>10/25/05 | UCD2-036<br>GWGW1901<br>05/04/05 | UCD2-036<br>GWGW1902 Dup<br>05/04/05 | UCD2-036<br>GWGW1968<br>10/20/05 | UCD2-037<br>GWGW1969<br>10/25/05 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ANTIMONY | 5 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| ARSENIC | 3 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BARIUM | 20 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BERYLLIUM | 1 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BORON | 50 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| CADMIUM | 1 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| CALCIUM | 2000 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| CHROMIUM, TOTAL | 10 | UG/L | **22** | **26** | **28** | **27.8** | 6.1 J | 5.91 J | 6.64 J | **28.1** | **28** | **29.2** | **13.8** |
| COBALT | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| COPPER | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| IRON | 100 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD | 3 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| MAGNESIUM | 2000 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| MANGANESE | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| MERCURY | 0.2 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| MOLYBDENUM | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| NICKEL | 20 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| POTASSIUM | 2000 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| SELENIUM | 3 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| SILVER | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| SODIUM | 2000 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| THALLIUM | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| VANADIUM | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| ZINC | 20 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |

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UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRD

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD2-038<br>GWGW1904<br>05/25/05 | UCD2-038<br>GWGW1970<br>10/25/05 | UCD2-039<br>GWGW1905<br>05/25/05 | UCD2-039<br>GWGW1971<br>10/21/05 | UCD2-040<br>GWGW1972<br>10/28/05 | UCD2-045<br>GWGW1907<br>05/25/05 | UCD2-045<br>GWGW1973<br>10/21/05 | UCD2-046<br>GWGW1908<br>05/25/05 | UCD2-046<br>GWGW1909 Dup<br>05/25/05 | UCD2-046<br>GWGW1974<br>10/21/05 | UCD2-048<br>GWGW1910<br>06/07/05 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ANTIMONY | 5 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| ARSENIC | 3 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BARIUM | 20 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BERYLLIUM | 1 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BORON | 50 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| CADMIUM | 1 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| CALCIUM | 2000 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| CHROMIUM, TOTAL | 10 | UG/L | 6.04 J | 4.55 J | **19.7** | **12.4** | **43.9** | **36.9** | **40.4** | **62.4** | **61** | **59.8** | **15.8** |
| COBALT | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| COPPER | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| IRON | 100 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD | 3 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| MAGNESIUM | 2000 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| MANGANESE | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| MERCURY | 0.2 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| MOLYBDENUM | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| NICKEL | 20 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| POTASSIUM | 2000 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| SELENIUM | 3 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| SILVER | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| SODIUM | 2000 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| THALLIUM | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| VANADIUM | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| ZINC | 20 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |

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UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
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**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD2-048<br>GWGW1975<br>10/19/05 | UCD2-048<br>GWGW1976 Dup<br>10/19/05 | UCD4-041<br>GWGW0913<br>05/26/05 | UCD4-041<br>GWGW1977<br>10/28/05 | UCD4-042<br>GWGW1914<br>05/30/05 | UCD4-042<br>GWGW1978<br>10/21/05 | UCD4-043<br>GWGW1915<br>05/30/05 | UCD4-043<br>GWGW1979<br>10/24/05 | UCD4-044<br>GWGW0916<br>05/26/05 | UCD4-044<br>GWGW1980<br>10/24/05 | UCD4-047<br>GWGW1917<br>06/01/05 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ANTIMONY | 5 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| ARSENIC | 3 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BARIUM | 20 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BERYLLIUM | 1 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BORON | 50 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| CADMIUM | 1 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| CALCIUM | 2000 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| CHROMIUM, TOTAL | 10 | UG/L | **18.3** | **17.9** | **24.7** | **24.9** | **34.7** | **28.9** | **27.8** | **30.1** | **30.3** | **27.9** | **34.5** |
| COBALT | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| COPPER | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| IRON | 100 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD | 3 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| MAGNESIUM | 2000 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| MANGANESE | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| MERCURY | 0.2 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| MOLYBDENUM | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| NICKEL | 20 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| POTASSIUM | 2000 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| SELENIUM | 3 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| SILVER | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| SODIUM | 2000 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| THALLIUM | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| VANADIUM | 10 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| ZINC | 20 | UG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |

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UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRD

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**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location<br>Sample ID<br>Date | UCD4-047<br>GWGW1981<br>10/21/05 |
|---|---|---|---|
| AnalyteNameShort | CRDL | UnitsID | |
| ANTIMONY | 5 | UG/L | NS |
| ARSENIC | 3 | UG/L | NS |
| BARIUM | 20 | UG/L | NS |
| BERYLLIUM | 1 | UG/L | NS |
| BORON | 50 | UG/L | NS |
| CADMIUM | 1 | UG/L | NS |
| CALCIUM | 2000 | UG/L | NS |
| CHROMIUM, TOTAL | 10 | UG/L | **37.2** |
| COBALT | 10 | UG/L | NS |
| COPPER | 10 | UG/L | NS |
| IRON | 100 | UG/L | NS |
| LEAD | 3 | UG/L | NS |
| MAGNESIUM | 2000 | UG/L | NS |
| MANGANESE | 10 | UG/L | NS |
| MERCURY | 0.2 | UG/L | NS |
| MOLYBDENUM | 10 | UG/L | NS |
| NICKEL | 20 | UG/L | NS |
| POTASSIUM | 2000 | UG/L | NS |
| SELENIUM | 3 | UG/L | NS |
| SILVER | 10 | UG/L | NS |
| SODIUM | 2000 | UG/L | NS |
| THALLIUM | 10 | UG/L | NS |
| VANADIUM | 10 | UG/L | NS |
| ZINC | 20 | UG/L | NS |

NS - Not Sampled
J - Validation qualifier for estimated value; sample e›
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRD

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**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | LF-01<br>STMW0133<br>01/11/05 | LF-01<br>STMW0135<br>12/28/05 | LS-01<br>RWSW0036<br>03/22/05 | LS-01<br>RWSW0037<br>03/22/05 | PCD<br>SWSW0274<br>01/12/05 | PCD<br>SWSW0276<br>12/28/05 | PCU<br>SWSW0273<br>01/12/05 | PCU<br>SWSW0277 Dup<br>12/28/05 | PCU SWSW0278<br>12/28/05 | STPO<br>SWSW0275<br>01/12/05 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACTINIUM 228 | 20 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| AMERICIUM-241 | 1 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BISMUTH-212 | 70 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BISMUTH-214 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| CARBON-14 | 20 | PCI/L | < 11.1 | < 20.7 | < 17.6 | < 17.6 | < 11.1 | < 20.7 | < 11.1 | < 20.6 | < 20.8 | < 11.1 |
| CESIUM-137 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| COBALT-60 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-210 | 150 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-212 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-214 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| PLUTONIUM-241 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| POTASSIUM-40 | 100 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| RADIUM-226 | 1 | PCI/L | < 0.7 | < 0.489 | < 0.657 | < 0.583 | < 0.667 | < 0.516 | < 0.9 UJ | < 0.351 | < 0.33 | < 0.556 UJ |
| SODIUM-22 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| STRONTIUM-90 | 1 | PCI/L | < 0.537 | < 0.915 | < 0.492 | < 0.745 | < 0.398 | < 0.722 | < 0.394 | < 0.561 | < 0.59 | < 0.451 |
| THALLIUM-208 | 5 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| THORIUM-234 | 200 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| TRITIUM (HYDROGEN-3) | 300 | PCI/L | < 249 | < 257 | < 428 | < 432 | < 251 | < 261 | < 243 | < 261 | < 259 | < 237 |
| URANIUM-235 | 25 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| URANIUM-238 | 500 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | STPO<br>SWSW0279<br>12/28/05 | SP-2<br>TPIN0323<br>05/03/05 | SP-2<br>TPIN0324<br>06/21/05 | SP-2<br>TPIN0325<br>07/27/05 | SP-2<br>TPIN0326<br>08/10/05 | SP-2<br>TPIN0327<br>09/08/05 | SP-2<br>TPIN0328<br>10/20/05 | SP-2<br>TPIN0329<br>12/01/05 | SP-2<br>TPIN0330<br>12/13/05 | TP-2B<br>GWTP0077<br>01/20/05 | TP-2B<br>GWTP0095<br>04/28/05 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACTINIUM 228 | 20 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| AMERICIUM-241 | 1 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BISMUTH-212 | 70 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BISMUTH-214 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| CARBON-14 | 20 | PCI/L | < 20.6 | < 17 | < 14.8 | < 15.9 | < 14 | < 13.9 | < 13.6 | < 12.7 | < 12.6 | **66.5 +/- 10.2** | **81.9 +/- 12** |
| CESIUM-137 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| COBALT-60 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-210 | 150 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-212 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-214 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| PLUTONIUM-241 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| POTASSIUM-40 | 100 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| RADIUM-226 | 1 | PCI/L | < 0.453 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| SODIUM-22 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| STRONTIUM-90 | 1 | PCI/L | < 0.547 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| THALLIUM-208 | 5 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| THORIUM-234 | 200 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| TRITIUM (HYDROGEN-3) | 300 | PCI/L | < 260 | < 195 | < 208 | < 289 | < 271 | < 261 | < 220 | < 278 | < 208 | < 242 | < 303 |
| URANIUM-235 | 25 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| URANIUM-238 | 500 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceec
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | TP-2B<br>GWTP0111<br>08/11/05 | TP-2B<br>GWTP0128<br>10/19/05 | TP-2C<br>GWTP0078<br>01/20/05 | TP-2C<br>GWTP0096<br>04/28/05 | TP-2C<br>GWTP0112<br>08/11/05 | TP-2C<br>GWTP0129<br>10/19/05 | TP-5B<br>GWTP0087<br>01/20/05 | TP-5B<br>GWTP0088 Dup<br>01/20/05 | TP-5B<br>GWTP0104<br>04/28/05 | TP-5B<br>GWTP0121<br>08/11/05 | TP-5B<br>GWTP0137<br>10/20/05 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACTINIUM 228 | 20 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| AMERICIUM-241 | 1 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BISMUTH-212 | 70 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BISMUTH-214 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| CARBON-14 | 20 | PCI/L | **58.5 +/- 11.4** | **57 +/- 9.66** | **63.1 +/- 10.2** | **75.5 +/- 11** | **46.6 +/- 10.3** | **52.2 +/- 9.67** | **29.4 +/- 9.21** | **35.3 +/- 9.4** | **41.3 +/- 10** | **23.5 +/- 9.95** | **32.7 +/- 9.17** |
| CESIUM-137 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| COBALT-60 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-210 | 150 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-212 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-214 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| PLUTONIUM-241 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| POTASSIUM-40 | 100 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| RADIUM-226 | 1 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| SODIUM-22 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| STRONTIUM-90 | 1 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| THALLIUM-208 | 5 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| THORIUM-234 | 200 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| TRITIUM (HYDROGEN-3) | 300 | PCI/L | < 270 | < 245 | < 245 | < 297 | < 274 | < 244 | < 237 | < 254 | < 315 | < 281 | < 242 |
| URANIUM-235 | 25 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| URANIUM-238 | 500 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceec
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | TP-5C<br>GWTP0089<br>01/20/05 | TP-5C<br>GWTP0105<br>04/28/05 | TP-5C<br>GWTP0122<br>08/11/05 | TP-5C<br>GWTP0138<br>10/20/05 | TP-5C<br>GWTP0139 Dup<br>10/20/05 | UCD1-001<br>GWGW1866<br>05/04/05 | UCD1-004<br>GWGW1867<br>05/23/05 | UCD1-010<br>GWGW1868<br>05/25/05 | UCD1-011<br>GWGW1845<br>02/10/05 | UCD1-011<br>GWGW1846 Dup<br>02/10/05 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACTINIUM 228 | 20 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| AMERICIUM-241 | 1 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BISMUTH-212 | 70 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BISMUTH-214 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| CARBON-14 | 20 | PCI/L | **74.1 +/- 10.4** | **106 +/- 14** | **27.6 +/- 10.5** | **38.8 +/- 9.28** | **36.5 +/- 9.24** | < 15.9 | < 16.7 | < 17.3 | < 17.9 | < 17.5 |
| CESIUM-137 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| COBALT-60 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-210 | 150 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-212 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-214 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| PLUTONIUM-241 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| POTASSIUM-40 | 100 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| RADIUM-226 | 1 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| SODIUM-22 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| STRONTIUM-90 | 1 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| THALLIUM-208 | 5 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| THORIUM-234 | 200 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| TRITIUM (HYDROGEN-3) | 300 | PCI/L | < 251 | < 307 | < 273 | < 240 | < 246 | < 246 | < 246 | < 279 | < 228 | < 227 |
| URANIUM-235 | 25 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| URANIUM-238 | 500 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceec
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

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**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD1-011<br>GWGW1869<br>05/25/05 | UCD1-011<br>GWGW1920<br>08/10/05 | UCD1-011<br>GWGW1941<br>10/21/05 | UCD1-012<br>GWGW1870<br>05/25/05 | UCD1-012<br>GWGW1871 Dup<br>05/25/05 | UCD1-012<br>GWGW1942<br>10/19/05 | UCD1-013<br>GWGW1872<br>05/23/05 | UCD1-018<br>GWGW1848<br>02/10/05 | UCD1-018<br>GWGW1849 Dup<br>02/10/05 | UCD1-018<br>GWGW1873<br>05/04/05 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACTINIUM 228 | 20 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| AMERICIUM-241 | 1 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BISMUTH-212 | 70 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BISMUTH-214 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| CARBON-14 | 20 | PCI/L | < 17 | < 13.9 | < 13.6 | **41.8 +/- 11** | **39 +/- 11** | **26 +/- 8.96** | **687 +/- 20** | < 17.5 | < 17.6 | < 16.4 |
| CESIUM-137 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| COBALT-60 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-210 | 150 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-212 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-214 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| PLUTONIUM-241 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| POTASSIUM-40 | 100 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| RADIUM-226 | 1 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| SODIUM-22 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| STRONTIUM-90 | 1 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| THALLIUM-208 | 5 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| THORIUM-234 | 200 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| TRITIUM (HYDROGEN-3) | 300 | PCI/L | < 278 | < 251 | < 277 | < 280 | < 283 | < 234 | **6690 +/- 373** | < 228 | < 225 | < 242 |
| URANIUM-235 | 25 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| URANIUM-238 | 500 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceec
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

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**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD1-018<br>GWGW1922<br>08/09/05 | UCD1-018<br>GWGW1923 Dup<br>08/09/05 | UCD1-018<br>GWGW1943<br>10/21/05 | UCD1-019<br>GWGW1874<br>05/04/05 | UCD1-020<br>GWGW1875<br>05/25/05 | UCD1-021<br>GWGW1876<br>05/23/05 | UCD1-022<br>GWGW1877<br>05/23/05 | UCD1-023<br>GWGW1878<br>05/23/05 | UCD1-024<br>GWGW1879<br>05/25/05 | UCD1-025<br>GWGW1850<br>02/10/05 | UCD1-025<br>GWGW1880<br>05/02/05 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACTINIUM 228 | 20 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| AMERICIUM-241 | 1 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BISMUTH-212 | 70 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BISMUTH-214 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| CARBON-14 | 20 | PCI/L | < 13.8 | < 13.9 | < 13.6 | < 16 | < 17.5 | < 17.2 | < 16.8 | < 16.8 | < 16.7 | < 17.3 | < 16.6 |
| CESIUM-137 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| COBALT-60 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-210 | 150 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-212 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-214 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| PLUTONIUM-241 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| POTASSIUM-40 | 100 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| RADIUM-226 | 1 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| SODIUM-22 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| STRONTIUM-90 | 1 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| THALLIUM-208 | 5 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| THORIUM-234 | 200 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| TRITIUM (HYDROGEN-3) | 300 | PCI/L | < 255 | < 271 | < 293 | < 244 | < 276 | < 245 | < 247 | < 245 | < 283 | < 228 | < 300 |
| URANIUM-235 | 25 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| URANIUM-238 | 500 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceec
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

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**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD1-025<br>GWGW1924<br>08/09/05 | UCD1-025<br>GWGW1944<br>10/28/05 | UCD1-027Z1<br>GWGW1851<br>01/13/05 | UCD1-027Z1<br>GWGW1881<br>05/03/05 | UCD1-027Z1<br>GWGW1925<br>08/02/05 | UCD1-027Z1<br>GWGW1945<br>10/20/05 | UCD1-027Z2<br>GWGW1852<br>01/13/05 | UCD1-027Z2<br>GWGW1882<br>05/03/05 | UCD1-027Z2<br>GWGW1926<br>08/02/05 | UCD1-027Z2<br>GWGW1946<br>10/20/05 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACTINIUM 228 | 20 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| AMERICIUM-241 | 1 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BISMUTH-212 | 70 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BISMUTH-214 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| CARBON-14 | 20 | PCI/L | < 13.9 | < 15.1 | < 15.4 | < 17.1 | < 14 | < 13.5 | < 15.3 | < 17 | < 14.2 | < 13.6 |
| CESIUM-137 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| COBALT-60 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-210 | 150 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-212 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-214 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| PLUTONIUM-241 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| POTASSIUM-40 | 100 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| RADIUM-226 | 1 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| SODIUM-22 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| STRONTIUM-90 | 1 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| THALLIUM-208 | 5 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| THORIUM-234 | 200 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| TRITIUM (HYDROGEN-3) | 300 | PCI/L | < 288 | < 243 | **2880 +/- 254** | < 246 | < 255 | < 261 | < 238 | < 245 | < 256 | < 258 |
| URANIUM-235 | 25 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| URANIUM-238 | 500 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceec
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD1-027Z3<br>GWGW1853<br>01/13/05 | UCD1-027Z3<br>GWGW1883<br>05/03/05 | UCD1-027Z3<br>GWGW1927<br>08/02/05 | UCD1-027Z3<br>GWGW1947<br>12/13/05 | UCD1-028<br>GWGW1854<br>02/10/05 | UCD1-028<br>GWGW1884<br>05/02/05 | UCD1-028<br>GWGW1928<br>08/09/05 | UCD1-028<br>GWGW1929 Dup<br>08/09/05 | UCD1-028<br>GWGW1948<br>10/24/05 | UCD1-049<br>GWGW1949<br>10/19/05 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACTINIUM 228 | 20 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| AMERICIUM-241 | 1 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BISMUTH-212 | 70 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BISMUTH-214 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| CARBON-14 | 20 | PCI/L | < 15.4 | < 16.5 | < 13.8 | < 12.6 | < 17.4 | < 16.6 | < 14.7 | < 14.3 | < 15.6 | < 14.2 |
| CESIUM-137 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| COBALT-60 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-210 | 150 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-212 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-214 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| PLUTONIUM-241 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| POTASSIUM-40 | 100 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| RADIUM-226 | 1 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| SODIUM-22 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| STRONTIUM-90 | 1 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| THALLIUM-208 | 5 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| THORIUM-234 | 200 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| TRITIUM (HYDROGEN-3) | 300 | PCI/L | < 234 | < 245 | < 248 | < 208 | < 228 | < 304 | < 268 | < 272 | < 244 | < 212 |
| URANIUM-235 | 25 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| URANIUM-238 | 500 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceec
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD1-050<br>GWGW1950<br>10/19/05 | UCD1-050<br>GWGW1951 Dup<br>10/19/05 | UCD1-051<br>GWGW1952<br>10/19/05 | UCD1-052<br>GWGW1862<br>02/10/05 | UCD1-052<br>GWGW1911<br>05/02/05 | UCD1-052<br>GWGW1933<br>08/09/05 | UCD1-052<br>GWGW1953<br>10/25/05 | UCD1-053<br>GWGW1863<br>02/10/05 | UCD1-053<br>GWGW1912<br>05/02/05 | UCD1-053<br>GWGW1934<br>08/09/05 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACTINIUM 228 | 20 | PCI/L | NS | NS | NS | < 17.3 | < 9.89 | NS | NS | < 17 | < 10.5 | NS |
| AMERICIUM-241 | 1 | PCI/L | NS | NS | NS | < 0.337 | < 0.379 | NS | NS | < 0.379 | < 1.38 | NS |
| BISMUTH-212 | 70 | PCI/L | NS | NS | NS | 31 +/- 19 | < 19.7 | NS | NS | < 29.2 | < 22.7 | NS |
| BISMUTH-214 | 10 | PCI/L | NS | NS | NS | **13.2 +/- 9.75** | **62 +/- 9.8** | NS | NS | < 9.64 | **42 +/- 8.1** | NS |
| CARBON-14 | 20 | PCI/L | < 14.1 | < 14.1 | **84.6 +/- 10.4** | < 17.2 | < 16.5 | < 14 | < 14 | < 17.5 | < 17.4 | < 13.9 |
| CESIUM-137 | 10 | PCI/L | NS | NS | NS | < 3.98 | < 2.51 | NS | NS | < 3.72 | < 2.7 | NS |
| COBALT-60 | 10 | PCI/L | NS | NS | NS | < 4.56 | < 2.52 | NS | NS | < 3.73 | < 2.82 | NS |
| LEAD-210 | 150 | PCI/L | NS | NS | NS | < 969 | < 526 | NS | NS | < 683 | < 63.8 | NS |
| LEAD-212 | 10 | PCI/L | NS | NS | NS | < 7.52 | < 5.13 | NS | NS | < 7.74 | < 4.52 | NS |
| LEAD-214 | 10 | PCI/L | NS | NS | NS | **17.7 +/- 11.5** | **66 +/- 10.2** | NS | NS | < 9.68 | **45 +/- 8.2** | NS |
| PLUTONIUM-241 | 10 | PCI/L | NS | NS | NS | < 7.51 | < 9.44 | NS | NS | < 6.37 | < 9.31 | NS |
| POTASSIUM-40 | 100 | PCI/L | NS | NS | NS | < 45.6 | < 34.5 | NS | NS | < 34.3 | < 37.7 | NS |
| RADIUM-226 | 1 | PCI/L | NS | NS | < 0.481 | 0.372 +/- 0.273 J | < 0.42 | NS | NS | < 0.588 | < 0.37 | NS |
| SODIUM-22 | 10 | PCI/L | NS | NS | NS | < 4.25 | < 2.55 | NS | NS | < 3.71 | < 2.9 | NS |
| STRONTIUM-90 | 1 | PCI/L | NS | NS | NS | < 0.708 | < 0.359 | NS | NS | < 0.51 | < 0.467 | NS |
| THALLIUM-208 | 5 | PCI/L | NS | NS | NS | < 5.4 | < 3.01 | NS | NS | < 4.69 | < 2.89 | NS |
| THORIUM-234 | 200 | PCI/L | NS | NS | NS | < 237 | < 167 | NS | NS | < 179 | < 67.7 | NS |
| TRITIUM (HYDROGEN-3) | 300 | PCI/L | < 246 | < 247 | < 281 | < 225 | < 301 | < 272 | < 249 | < 231 | < 303 | < 263 |
| URANIUM-235 | 25 | PCI/L | NS | NS | NS | < 27.9 | < 20.4 | NS | NS | < 27.2 | < 18 | NS |
| URANIUM-238 | 500 | PCI/L | NS | NS | NS | < 189 | < 135 | NS | NS | < 179 | < 67.7 | NS |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceec
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD1-053<br>GWGW1954<br>10/28/05 | UCD2-007<br>GWGW1889<br>05/25/05 | UCD2-007<br>GWGW1955<br>10/20/05 | UCD2-014<br>GWGW1890<br>05/23/05 | UCD2-014<br>GWGW1956<br>10/20/05 | UCD2-015<br>GWGW1891<br>05/23/05 | UCD2-015<br>GWGW1957<br>10/28/05 | UCD2-016<br>GWGW1892<br>05/04/05 | UCD2-016<br>GWGW1958<br>10/28/05 | UCD2-016<br>GWGW1959 Dup<br>10/28/05 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACTINIUM 228 | 20 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| AMERICIUM-241 | 1 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BISMUTH-212 | 70 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BISMUTH-214 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| CARBON-14 | 20 | PCI/L | < 15.1 | < 17.2 | < 13.7 | **218 +/- 14** | **102 +/- 10.6** | < 16.8 | < 15.6 | < 16.6 | < 15.2 | < 14.8 |
| CESIUM-137 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| COBALT-60 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-210 | 150 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-212 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-214 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| PLUTONIUM-241 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| POTASSIUM-40 | 100 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| RADIUM-226 | 1 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| SODIUM-22 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| STRONTIUM-90 | 1 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| THALLIUM-208 | 5 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| THORIUM-234 | 200 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| TRITIUM (HYDROGEN-3) | 300 | PCI/L | < 247 | < 283 | < 268 | **1280 +/- 206** | **396 +/- 173** | < 247 | < 201 | < 245 | < 241 | < 247 |
| URANIUM-235 | 25 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| URANIUM-238 | 500 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |

NS - Not Sampled
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UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

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**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD2-017<br>GWGW1893<br>05/04/05 | UCD2-017<br>GWGW1894 Dup<br>05/04/05 | UCD2-017<br>GWGW1960<br>10/25/05 | UCD2-026<br>GWGW1895<br>05/02/05 | UCD2-026<br>GWGW1961<br>10/28/05 | UCD2-029<br>GWGW1896<br>05/02/05 | UCD2-029<br>GWGW1962<br>10/24/05 | UCD2-030<br>GWGW1897<br>05/02/05 | UCD2-030<br>GWGW1963<br>10/28/05 | UCD2-031<br>GWGW1898<br>05/02/05 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACTINIUM 228 | 20 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| AMERICIUM-241 | 1 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BISMUTH-212 | 70 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BISMUTH-214 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| CARBON-14 | 20 | PCI/L | < 16.4 | < 16.6 | < 14.1 | < 16.5 | < 15.7 | < 16.6 | < 15.1 | < 16.5 | < 15.1 | < 16.6 |
| CESIUM-137 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| COBALT-60 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-210 | 150 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-212 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-214 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| PLUTONIUM-241 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| POTASSIUM-40 | 100 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| RADIUM-226 | 1 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| SODIUM-22 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| STRONTIUM-90 | 1 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| THALLIUM-208 | 5 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| THORIUM-234 | 200 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| TRITIUM (HYDROGEN-3) | 300 | PCI/L | < 245 | < 243 | < 241 | < 288 | < 242 | < 283 | < 243 | < 282 | < 249 | < 303 |
| URANIUM-235 | 25 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| URANIUM-238 | 500 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceec
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

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**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD2-031<br>GWGW1964<br>10/28/05 | UCD2-032<br>GWGW1899<br>05/25/05 | UCD2-032<br>GWGW1965<br>10/21/05 | UCD2-035<br>GWGW1900<br>05/25/05 | UCD2-035<br>GWGW1966<br>10/25/05 | UCD2-035<br>GWGW1967 Dup<br>10/25/05 | UCD2-036<br>GWGW1901<br>05/04/05 | UCD2-036<br>GWGW1902 Dup<br>05/04/05 | UCD2-036<br>GWGW1968<br>10/20/05 | UCD2-037<br>GWGW1969<br>10/25/05 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACTINIUM 228 | 20 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| AMERICIUM-241 | 1 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BISMUTH-212 | 70 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BISMUTH-214 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| CARBON-14 | 20 | PCI/L | < 14.9 | < 17.2 | < 13.6 | < 17.5 | < 14.1 | < 14.1 | < 16.4 | < 16.5 | < 13.7 | < 14.2 |
| CESIUM-137 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| COBALT-60 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-210 | 150 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-212 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-214 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| PLUTONIUM-241 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| POTASSIUM-40 | 100 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| RADIUM-226 | 1 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| SODIUM-22 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| STRONTIUM-90 | 1 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| THALLIUM-208 | 5 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| THORIUM-234 | 200 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| TRITIUM (HYDROGEN-3) | 300 | PCI/L | < 247 | < 281 | < 255 | < 281 | < 287 | < 243 | < 244 | < 246 | < 268 | < 247 |
| URANIUM-235 | 25 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| URANIUM-238 | 500 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceed
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

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**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD2-038<br>GWGW1904<br>05/25/05 | UCD2-038<br>GWGW1970<br>10/25/05 | UCD2-039<br>GWGW1905<br>05/25/05 | UCD2-039<br>GWGW1971<br>10/21/05 | UCD2-040<br>GWGW1906<br>05/02/05 | UCD2-040<br>GWGW1972<br>10/28/05 | UCD2-045<br>GWGW1907<br>05/25/05 | UCD2-045<br>GWGW1973<br>10/21/05 | UCD2-046<br>GWGW1908<br>05/25/05 | UCD2-046<br>GWGW1909 Dup<br>05/25/05 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACTINIUM 228 | 20 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| AMERICIUM-241 | 1 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BISMUTH-212 | 70 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BISMUTH-214 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| CARBON-14 | 20 | PCI/L | < 17.2 | < 14.1 | < 17.5 | < 13.6 | < 16.4 | < 14.9 | < 17.3 | < 13.5 | < 17.7 | < 16.7 |
| CESIUM-137 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| COBALT-60 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-210 | 150 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-212 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-214 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| PLUTONIUM-241 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| POTASSIUM-40 | 100 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| RADIUM-226 | 1 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| SODIUM-22 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| STRONTIUM-90 | 1 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| THALLIUM-208 | 5 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| THORIUM-234 | 200 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| TRITIUM (HYDROGEN-3) | 300 | PCI/L | < 279 | < 246 | < 281 | < 268 | < 297 | < 244 | < 283 | < 267 | < 284 | < 279 |
| URANIUM-235 | 25 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| URANIUM-238 | 500 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceec
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

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**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD2-046<br>GWGW1974<br>10/21/05 | UCD2-048<br>GWGW1975<br>10/19/05 | UCD2-048<br>GWGW1976 Dup<br>10/19/05 | UCD4-041<br>GWGW0913<br>05/26/05 | UCD4-041<br>GWGW1977<br>10/28/05 | UCD4-042<br>GWGW1914<br>05/30/05 | UCD4-042<br>GWGW1978<br>10/21/05 | UCD4-043<br>GWGW1915<br>05/30/05 | UCD4-043<br>GWGW1979<br>10/24/05 | UCD4-044<br>GWGW0916<br>05/26/05 | UCD4-044<br>GWGW1980<br>10/24/05 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACTINIUM 228 | 20 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| AMERICIUM-241 | 1 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BISMUTH-212 | 70 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| BISMUTH-214 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| CARBON-14 | 20 | PCI/L | < 13.6 | < 14.3 | < 14.3 | < 16.9 | < 15 | < 17.1 | < 13.6 | < 17.1 | < 14.7 | < 17.2 | < 15.3 |
| CESIUM-137 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| COBALT-60 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-210 | 150 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-212 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| LEAD-214 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| PLUTONIUM-241 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| POTASSIUM-40 | 100 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| RADIUM-226 | 1 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| SODIUM-22 | 10 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| STRONTIUM-90 | 1 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| THALLIUM-208 | 5 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| THORIUM-234 | 200 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| TRITIUM (HYDROGEN-3) | 300 | PCI/L | < 270 | < 200 | < 207 | < 199 | < 241 | < 218 | < 261 | < 193 | < 248 | < 195 | < 246 |
| URANIUM-235 | 25 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| URANIUM-238 | 500 | PCI/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceed
UJ - Estimated value falls below reporting limit.
UG/L - micrograms per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD4-047<br>GWGW1917<br>06/01/05 | UCD4-047<br>GWGW1981<br>10/21/05 |
|---|---|---|---|---|
| ACTINIUM 228 | 20 | PCI/L | NS | NS |
| AMERICIUM-241 | 1 | PCI/L | NS | NS |
| BISMUTH-212 | 70 | PCI/L | NS | NS |
| BISMUTH-214 | 10 | PCI/L | NS | NS |
| CARBON-14 | 20 | PCI/L | < 16.9 | < 13.7 |
| CESIUM-137 | 10 | PCI/L | NS | NS |
| COBALT-60 | 10 | PCI/L | NS | NS |
| LEAD-210 | 150 | PCI/L | NS | NS |
| LEAD-212 | 10 | PCI/L | NS | NS |
| LEAD-214 | 10 | PCI/L | NS | NS |
| PLUTONIUM-241 | 10 | PCI/L | NS | NS |
| POTASSIUM-40 | 100 | PCI/L | NS | NS |
| RADIUM-226 | 1 | PCI/L | NS | NS |
| SODIUM-22 | 10 | PCI/L | NS | NS |
| STRONTIUM-90 | 1 | PCI/L | NS | NS |
| THALLIUM-208 | 5 | PCI/L | NS | NS |
| THORIUM-234 | 200 | PCI/L | NS | NS |
| TRITIUM (HYDROGEN-3) | 300 | PCI/L | < 247 | < 263 |
| URANIUM-235 | 25 | PCI/L | NS | NS |
| URANIUM-238 | 500 | PCI/L | NS | NS |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceec
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | ASDP<br>ASDP0323<br>05/30/05 | ASDP<br>ASDP0324<br>06/21/05 | ASDP<br>ASDP0325<br>07/27/05 | ASDP<br>ASDP0326<br>08/10/05 | ASDP<br>ASDP0327<br>09/08/05 | ASDP<br>ASDP0328<br>10/20/05 | ASDP<br>ASDP0329<br>12/01/05 | ASDP<br>ASDP0330<br>12/13/05 | LF-01<br>STMW0133<br>01/11/05 | LF-01<br>STMW0135<br>12/28/05 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ALKALINITY, TOTAL (AS CaCO3) | 10 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| CHLORIDE (AS CL) | 1 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| NITRATE AS NITROGEN | 0.1 | MG/L | **5.56 J** | **6.23** | **6.28** | **6.36** | **5.93** | **5.78 J** | **6.18** | **7.33** | **0.521** | **0.509 J** |
| SULFATE (AS SO4) | 1 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| TOTAL DISSOLVED SOLIDS (RESIDUE, FILTERABLE) | 20 | MG/L | **462** | **493** | **482** | **509** | **479** | **504** | **485** | **459** | **62.8** | **85** |
| TOTAL ORGANIC CARBON | 1 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS | **4.51** | **2.87** |
| TOTAL SUSPENDED SOLIDS | | MG/L | NS | NS | NS | NS | NS | NS | NS | NS | **148** | **207** |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | LS-01<br>RWSW0036<br>03/22/05 | LS-01<br>RWSW0037<br>03/22/05 | PCD<br>SWSW0274<br>01/12/05 | PCD<br>SWSW0276<br>12/28/05 | PCU<br>SWSW0273<br>01/12/05 | PCU Dup SWSW0277<br>12/28/05 | PCU<br>SWSW0278<br>12/28/05 | STPO<br>SWSW0275<br>01/12/05 | STPO<br>SWSW0279<br>12/28/05 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ALKALINITY, TOTAL (AS CaCO3) | 10 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| CHLORIDE (AS CL) | 1 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| NITRATE AS NITROGEN | 0.1 | MG/L | **0.168** | **0.289** | **0.552** | **1.96** | **0.457** | **2.41** | **2.41** | **9.34** | **3.67** |
| SULFATE (AS SO4) | 1 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| TOTAL DISSOLVED SOLIDS (RESIDUE, FILTERABLE) | 20 | MG/L | **148** | **70** | **191** | **269** | **193** | **268** | **268** | **710** | **649** |
| TOTAL ORGANIC CARBON | 1 | MG/L | **15** | **15.2** | NS | NS | NS | NS | NS | NS | NS |
| TOTAL SUSPENDED SOLIDS | | MG/L | **20** | **12** | NS | NS | NS | NS | NS | NS | NS |

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Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | SP-2<br>TPIN0324<br>06/21/05 | SP-2<br>TPIN0325<br>07/27/05 | SP-2<br>TPIN0326<br>08/10/05 | SP-2<br>TPIN0327<br>09/08/05 | SP-2<br>TPIN0328<br>10/20/05 | SP-2<br>TPIN0329<br>12/01/05 | SP-2<br>TPIN0330<br>12/13/05 | SP-5<br>TPEF0323<br>05/30/05 | SP-5<br>TPEF0324<br>06/21/05 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ALKALINITY, TOTAL (AS CaCO3) | 10 | MG/L | NS | NS | NS | NS | NS | NS | NS | **353** | **396** |
| CHLORIDE (AS CL) | 1 | MG/L | NS | NS | NS | NS | NS | NS | NS | **19.4** | **19.7** |
| NITRATE AS NITROGEN | 0.1 | MG/L | NS | NS | NS | NS | NS | NS | NS | **5.52 J** | **6.21** |
| SULFATE (AS SO4) | 1 | MG/L | NS | NS | NS | NS | NS | NS | NS | **36.8** | **36.5** |
| TOTAL DISSOLVED SOLIDS (RESIDUE, FILTERABLE) | 20 | MG/L | NS | NS | NS | NS | NS | NS | NS | **469** | **484** |
| TOTAL ORGANIC CARBON | 1 | MG/L | **1.1** | **1.62** | 0.885 J | **1.35** | **1.42** | < 0.939 UJ | < 1.17 UJ | NS | NS |
| TOTAL SUSPENDED SOLIDS | | MG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS |

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UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | SP-5<br>TPEF0325<br>07/27/05 | SP-5<br>TPEF0326<br>08/10/05 | SP-5<br>TPEF0327<br>09/08/05 | SP-5<br>TPEF0328<br>10/20/05 | SP-5<br>TPEF0329<br>12/01/05 | SP-5<br>TPEF0330<br>12/13/05 | TP-2B<br>GWTP0077<br>01/20/05 | TP-2B<br>GWTP0095<br>04/28/05 | TP-2B<br>GWTP0111<br>08/11/05 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ALKALINITY, TOTAL (AS CaCO3) | 10 | MG/L | **372** | **402** | **342** | **348** | **364** | **369** | NS | NS | NS |
| CHLORIDE (AS CL) | 1 | MG/L | **21.3** | **21** | **18.8** | **20.5** | **21.1** | **25.6** | NS | NS | NS |
| NITRATE AS NITROGEN | 0.1 | MG/L | **6.3** | **6.34** | **5.93** | **5.94 J** | **6.2** | **7.33** | **55.9 J** | NS | **70.6 J** |
| SULFATE (AS SO4) | 1 | MG/L | **39** | **38.3** | **34.9** | **38.7** | **39.6** | **45.5** | NS | NS | NS |
| TOTAL DISSOLVED SOLIDS (RESIDUE, FILTERABLE) | 20 | MG/L | **482** | **495** | **483** | **493** | **467** | **481** | **1460** | **1510** | |
| TOTAL ORGANIC CARBON | 1 | MG/L | 0.62 | NS | NS | NS | NS | < 0.856 UJ | NS | NS | NS |
| TOTAL SUSPENDED SOLIDS | | MG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS |

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**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | TP-2B<br>GWTP0128<br>10/19/05 | TP-2C<br>GWTP0078<br>01/20/05 | TP-2C<br>GWTP0096<br>04/28/05 | TP-2C<br>GWTP0112<br>08/11/05 | TP-2C<br>GWTP0129<br>10/19/05 | TP-5B<br>GWTP0087<br>01/20/05 | TP-5B GWTP0088<br>Dup 01/20/05 | TP-5B<br>GWTP0104<br>04/28/05 |
|---|---|---|---|---|---|---|---|---|---|---|
| ALKALINITY, TOTAL (AS CaCO3) | 10 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| CHLORIDE (AS CL) | 1 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| NITRATE AS NITROGEN | 0.1 | MG/L | **71 J** | **78.8 J** | NS | **74.3 J** | **74.9 J** | **68.1 J** | **68.9 J** | NS |
| SULFATE (AS SO4) | 1 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| TOTAL DISSOLVED SOLIDS (RESIDUE, FILTERABLE) | 20 | MG/L | **1360** | **1720** | **1600** | **1500** | **1420** | **1450** | **1430** | **1340** |
| TOTAL ORGANIC CARBON | 1 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| TOTAL SUSPENDED SOLIDS | | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |

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UG/L - micorgrams per liter
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**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | TP-5B<br>GWTP0121<br>08/11/05 | TP-5B<br>GWTP0137<br>10/20/05 | TP-5C<br>GWTP0089<br>01/20/05 | TP-5C<br>GWTP0105<br>04/28/05 | TP-5C<br>GWTP0122<br>08/11/05 | TP-5C<br>GWTP0138<br>10/20/05 | TP-5C<br>GWTP0139 Dup<br>10/20/05 | UCD1-001<br>GWGW1866<br>05/04/05 |
|---|---|---|---|---|---|---|---|---|---|---|
| ALKALINITY, TOTAL (AS CaCO3) | 10 | MG/L | NS | NS | NS | NS | NS | NS | NS | **904** |
| CHLORIDE (AS CL) | 1 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| NITRATE AS NITROGEN | 0.1 | MG/L | **73 J** | **77 J** | **75.6 J** | **83.9** | **72.6 J** | **73.3 J** | **75.9 J** | **9.41** |
| SULFATE (AS SO4) | 1 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| TOTAL DISSOLVED SOLIDS (RESIDUE, FILTERABLE) | 20 | MG/L | **1440** | **1330** | **1590** | **1630** | **1500** | **1520** | **1450** | **812** |
| TOTAL ORGANIC CARBON | 1 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| TOTAL SUSPENDED SOLIDS | | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD1-004<br>GWGW1867<br>05/23/05 | UCD1-010<br>GWGW1868<br>05/25/05 | UCD1-010<br>GWGW1940<br>10/25/05 | UCD1-011<br>GWGW1845<br>02/10/05 | UCD1-011<br>GWGW1846 Dup<br>02/10/05 | UCD1-011<br>GWGW1869<br>05/25/05 | UCD1-011<br>GWGW1920<br>08/10/05 | UCD1-011<br>GWGW1941<br>10/21/05 |
|---|---|---|---|---|---|---|---|---|---|---|
| ALKALINITY, TOTAL (AS CaCO3) | 10 | MG/L | NS | NS | NS | **544** | **562** | **560** | **604** | **526** |
| CHLORIDE (AS CL) | 1 | MG/L | NS | NS | NS | **42.7** | **42.6** | **42.8** | **44.4** | **48.2** |
| NITRATE AS NITROGEN | 0.1 | MG/L | **1.91** | **16.9** | **18** | **30.1 J** | **29.9 J** | **28.5** | **30 J** | **33 J** |
| SULFATE (AS SO4) | 1 | MG/L | NS | NS | NS | **34.4** | **34.6** | **32.9 J** | **35.9** | **36.1** |
| TOTAL DISSOLVED SOLIDS (RESIDUE, FILTERABLE) | 20 | MG/L | **489** | **786** | **761** | **825** | **851** | **838** | **873** | **835** |
| TOTAL ORGANIC CARBON | 1 | MG/L | NS | NS | NS | **2.47** | **2.27** | **3.34** | **1.38** | **1.7** |
| TOTAL SUSPENDED SOLIDS | | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |

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UJ - Estimated value falls below reporting limit.
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**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD1-012<br>GWGW1870<br>05/25/05 | UCD1-012<br>GWGW1871 Dup<br>05/25/05 | UCD1-012<br>GWGW1942<br>10/19/05 | UCD1-013<br>GWGW1872<br>05/23/05 | UCD1-018<br>GWGW1848<br>02/10/05 | UCD1-018<br>GWGW1849<br>Dup 02/10/05 | UCD1-018<br>GWGW1873<br>05/04/05 | UCD1-018<br>GWGW1922<br>08/09/05 |
|---|---|---|---|---|---|---|---|---|---|---|
| ALKALINITY, TOTAL (AS CaCO3) | 10 | MG/L | NS | NS | NS | NS | **392** | **376** | **325** | **324** |
| CHLORIDE (AS CL) | 1 | MG/L | NS | NS | NS | NS | **23.1** | **23.1** | **14.2** | **13.2** |
| NITRATE AS NITROGEN | 0.1 | MG/L | **72.2** | **68.3** | **72 J** | **16.8** | **8.94 J** | **8.97 J** | **2.38** | **2.91** |
| SULFATE (AS SO4) | 1 | MG/L | NS | NS | NS | NS | **38.4** | **38.4** | **36.6** | **34.2** |
| TOTAL DISSOLVED SOLIDS (RESIDUE, FILTERABLE) | 20 | MG/L | **1450** | **1380** | **1490** | **1120** | **522** | **514** | **398** | **402** |
| TOTAL ORGANIC CARBON | 1 | MG/L | NS | NS | NS | NS | **2.34** | **2.47** | **1.63** | 0.94 J |
| TOTAL SUSPENDED SOLIDS | | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |

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UJ - Estimated value falls below reporting limit.
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**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD1-018<br>GWGW1923 Dup<br>08/09/05 | UCD1-018<br>GWGW1943<br>10/21/05 | UCD1-019<br>GWGW1874<br>05/04/05 | UCD1-020<br>GWGW1875<br>05/25/05 | UCD1-021<br>GWGW1876<br>05/23/05 | UCD1-022<br>GWGW1877<br>05/23/05 | UCD1-023<br>GWGW1878<br>05/23/05 | UCD1-024<br>GWGW1879<br>05/25/05 |
|---|---|---|---|---|---|---|---|---|---|---|
| ALKALINITY, TOTAL (AS CaCO3) | 10 | MG/L | **325** | **304** | **1030** | NS | NS | NS | NS | NS |
| CHLORIDE (AS CL) | 1 | MG/L | **13.3** | **13.4** | NS | NS | NS | NS | NS | NS |
| NITRATE AS NITROGEN | 0.1 | MG/L | **2.93** | **2.85** | **28.4** | **17.1** | **40** | **17.7** | **2.01** | **18.2** |
| SULFATE (AS SO4) | 1 | MG/L | **34.3** | **34.8** | NS | NS | NS | NS | NS | NS |
| TOTAL DISSOLVED SOLIDS (RESIDUE, FILTERABLE) | 20 | MG/L | **402** | **414** | **1150** | **527** | **868** | **762** | **472** | **700** |
| TOTAL ORGANIC CARBON | 1 | MG/L | **1.21** | **1.44** | NS | NS | NS | NS | NS | NS |
| TOTAL SUSPENDED SOLIDS | | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |

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**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD1-025<br>GWGW1850<br>02/10/05 | UCD1-025<br>GWGW1880<br>05/02/05 | UCD1-025<br>GWGW1924<br>08/09/05 | UCD1-025<br>GWGW1944<br>10/28/05 | UCD1-027Z1<br>GWGW1851<br>01/13/05 | UCD1-027Z1<br>GWGW1881<br>05/03/05 | UCD1-027Z1<br>GWGW1925<br>08/02/05 | UCD1-027Z1<br>GWGW1945<br>10/20/05 |
|---|---|---|---|---|---|---|---|---|---|---|
| ALKALINITY, TOTAL (AS CaCO3) | 10 | MG/L | **561** | **506** | **498** | **499** | **555** | **558** | **548** | NS |
| CHLORIDE (AS CL) | 1 | MG/L | **33.4** | **28** | **33.7** | **33.7** | **23.1** | **20.6** | **23.1** | NS |
| NITRATE AS NITROGEN | 0.1 | MG/L | **23.4 J** | **18** | **24.2 J** | **24.4 J** | **2.14** | **4.14** | **1.56** | **0.318 J** |
| SULFATE (AS SO4) | 1 | MG/L | **34.1** | **27** | **29.4** | **30.4** | **34.5** | **29.4** | **30.1** | NS |
| TOTAL DISSOLVED SOLIDS (RESIDUE, FILTERABLE) | 20 | MG/L | **672** | **656** | **726** | **791** | **631** | **595** | **623** | NS |
| TOTAL ORGANIC CARBON | 1 | MG/L | **3.21** | **3.4** | **2.13** | **2.43** | **8.68** | **7.9** | NS | **7.01** |
| TOTAL SUSPENDED SOLIDS | | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |

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**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD1-027Z2<br>GWGW1852<br>01/13/05 | UCD1-027Z2<br>GWGW1882<br>05/03/05 | UCD1-027Z2<br>GWGW1926<br>08/02/05 | UCD1-027Z2<br>GWGW1946<br>10/20/05 | UCD1-027Z3<br>GWGW1853<br>01/13/05 | UCD1-027Z3<br>GWGW1883<br>05/03/05 | UCD1-027Z3<br>GWGW1927<br>08/02/05 | UCD1-027Z3<br>GWGW1947<br>12/13/05 |
|---|---|---|---|---|---|---|---|---|---|---|
| ALKALINITY, TOTAL (AS CaCO3) | 10 | MG/L | **585** | **605** | **596** | NS | **560** | **533** | **507** | **515** |
| CHLORIDE (AS CL) | 1 | MG/L | **39** | **37.7** | **40** | NS | **29.7** | **26.5** | **27.3** | **38.2** |
| NITRATE AS NITROGEN | 0.1 | MG/L | **15.3 J** | **17.5** | **19.7** | **17.2 J** | **4.2** | **8.74** | **5.32** | **5.46 J** |
| SULFATE (AS SO4) | 1 | MG/L | **37.7** | **39.4** | **39.7** | NS | **39.8** | **40.3** | **44.1** | **46.1** |
| TOTAL DISSOLVED SOLIDS (RESIDUE, FILTERABLE) | 20 | MG/L | **759** | **765** | **749** | NS | **637** | **626** | **610** | **601** |
| TOTAL ORGANIC CARBON | 1 | MG/L | **5.38** | **5.47** | NS | **3.23** | **7.13** | **4.9** | NS | **5.36** |
| TOTAL SUSPENDED SOLIDS | | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |

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UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD1-028<br>GWGW1854<br>02/10/05 | UCD1-028<br>GWGW1884<br>05/02/05 | UCD1-028<br>GWGW1928<br>08/09/05 | UCD1-028<br>GWGW1929 Dup<br>08/09/05 | UCD1-028<br>GWGW1948<br>10/24/05 | UCD1-049<br>GWGW1885<br>06/07/05 | UCD1-049<br>GWGW1949<br>10/19/05 | UCD1-050<br>GWGW1887<br>06/07/05 |
|---|---|---|---|---|---|---|---|---|---|---|
| ALKALINITY, TOTAL (AS CaCO3) | 10 | MG/L | **708** | **737** | **709** | **700** | NS | NS | NS | NS |
| CHLORIDE (AS CL) | 1 | MG/L | **41.4** | **38.8** | **47.2** | **45.8** | NS | NS | NS | NS |
| NITRATE AS NITROGEN | 0.1 | MG/L | **56.7 J** | **53** | **67.2 J** | **64.4 J** | **62.2 J** | **61.9** | **75 J** | **76.9** |
| SULFATE (AS SO4) | 1 | MG/L | **36.5** | **42** | **41.2** | **39** | NS | NS | NS | NS |
| TOTAL DISSOLVED SOLIDS (RESIDUE, FILTERABLE) | 20 | MG/L | **1140** | **1140** | **1180** | **1180** | **1150** | NS | **1240** | NS |
| TOTAL ORGANIC CARBON | 1 | MG/L | **2.47** | **3.7** | **1.76** | **1.72** | **2.07** | NS | NS | NS |
| TOTAL SUSPENDED SOLIDS | | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |

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**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD1-050<br>GWGW1950<br>10/19/05 | UCD1-050<br>GWGW1951 Dup<br>10/19/05 | UCD1-051<br>GWGW1888<br>06/07/05 | UCD1-051<br>GWGW1952<br>10/19/05 | UCD1-052<br>GWGW1862<br>02/10/05 | UCD1-052<br>GWGW1911<br>05/02/05 | UCD1-052<br>GWGW1933<br>08/09/05 | UCD1-052<br>GWGW1953<br>10/25/05 |
|---|---|---|---|---|---|---|---|---|---|---|
| ALKALINITY, TOTAL (AS CaCO3) | 10 | MG/L | NS | NS | NS | NS | **479** | **535** | **549** | NS |
| CHLORIDE (AS CL) | 1 | MG/L | NS | NS | NS | NS | **66.6** | **64.7** | **78.7** | NS |
| NITRATE AS NITROGEN | 0.1 | MG/L | **78.4 J** | **78.3 J** | **62.4** | **81.9 J** | **38.9 J** | **39 J** | **46.4 J** | **43.8** |
| SULFATE (AS SO4) | 1 | MG/L | NS | NS | NS | NS | **50.2** | **50.9** | **51.2** | NS |
| TOTAL DISSOLVED SOLIDS (RESIDUE, FILTERABLE) | 20 | MG/L | **1490** | **1450** | NS | **1520** | **888** | **898** | **946** | **922** |
| TOTAL ORGANIC CARBON | 1 | MG/L | NS | NS | NS | NS | **3.48** | **1.96** | **2.23** | NS |
| TOTAL SUSPENDED SOLIDS | | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |

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**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD1-053<br>GWGW1863<br>02/10/05 | UCD1-053<br>GWGW1912<br>05/02/05 | UCD1-053<br>GWGW1934<br>08/09/05 | UCD1-053<br>GWGW1954<br>10/28/05 | UCD2-007<br>GWGW1889<br>05/25/05 | UCD2-007<br>GWGW1955<br>10/20/05 | UCD2-014<br>GWGW1890<br>05/23/05 | UCD2-014<br>GWGW1956<br>10/20/05 | UCD2-015<br>GWGW1891<br>05/23/05 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ALKALINITY, TOTAL (AS CaCO3) | 10 | MG/L | **527** | **553** | **535** | NS | NS | NS | NS | NS | NS |
| CHLORIDE (AS CL) | 1 | MG/L | **42.9** | **40** | **39.5** | NS | NS | NS | NS | NS | NS |
| NITRATE AS NITROGEN | 0.1 | MG/L | **28.4 J** | **28 J** | **32 J** | **33.4 J** | **9.37** | **13.7 J** | **8.73** | **4.41 J** | **2.41** |
| SULFATE (AS SO4) | 1 | MG/L | **43.3** | **39.7** | **40.4** | NS | NS | NS | NS | NS | NS |
| TOTAL DISSOLVED SOLIDS (RESIDUE, FILTERABLE) | 20 | MG/L | **809** | **813** | **871** | **863** | **566** | **579** | **936** | **638** | **427** |
| TOTAL ORGANIC CARBON | 1 | MG/L | **2.24** | **1.88** | **1.35** | NS | NS | NS | NS | NS | NS |
| TOTAL SUSPENDED SOLIDS | | MG/L | NS | NS | NS | NS | NS | NS | NS | NS | NS |

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**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD2-015<br>GWGW1957<br>10/28/05 | UCD2-016<br>GWGW1892<br>05/04/05 | UCD2-016<br>GWGW1958<br>10/28/05 | UCD2-016<br>GWGW1959 Dup<br>10/28/05 | UCD2-017<br>GWGW1893<br>05/04/05 | UCD2-017<br>GWGW1894 Dup<br>05/04/05 | UCD2-017<br>GWGW1960<br>10/25/05 | UCD2-026<br>GWGW1895<br>05/02/05 |
|---|---|---|---|---|---|---|---|---|---|---|
| ALKALINITY, TOTAL (AS CaCO3) | 10 | MG/L | NS | **542** | NS | NS | **470** | **381** | NS | **393** |
| CHLORIDE (AS CL) | 1 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| NITRATE AS NITROGEN | 0.1 | MG/L | **1.95** | **5.76** | **6.15** | **6.31** | **2.65** | **3.52** | **3.23** | **5.9** |
| SULFATE (AS SO4) | 1 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| TOTAL DISSOLVED SOLIDS (RESIDUE, FILTERABLE) | 20 | MG/L | **429** | **517** | **521** | **537** | **449** | **444** | **449** | **492** |
| TOTAL ORGANIC CARBON | 1 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| TOTAL SUSPENDED SOLIDS | | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |

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**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD2-026<br>GWGW1961<br>10/28/05 | UCD2-029<br>GWGW1896<br>05/02/05 | UCD2-029<br>GWGW1962<br>10/24/05 | UCD2-030<br>GWGW1897<br>05/02/05 | UCD2-030<br>GWGW1963<br>10/28/05 | UCD2-031<br>GWGW1898<br>05/02/05 | UCD2-031<br>GWGW1964<br>10/28/05 | UCD2-032<br>GWGW1899<br>05/25/05 |
|---|---|---|---|---|---|---|---|---|---|---|
| ALKALINITY, TOTAL (AS CaCO3) | 10 | MG/L | NS | **412** | NS | **382** | NS | **399** | NS | NS |
| CHLORIDE (AS CL) | 1 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| NITRATE AS NITROGEN | 0.1 | MG/L | **6.45** | **7.7** | **8.16** | **5** | **4.47** | **5.9** | **6.22** | **6.29** |
| SULFATE (AS SO4) | 1 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| TOTAL DISSOLVED SOLIDS (RESIDUE, FILTERABLE) | 20 | MG/L | **493** | **521** | **473** | **456** | **493** | **489** | **499** | **507** |
| TOTAL ORGANIC CARBON | 1 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| TOTAL SUSPENDED SOLIDS | | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |

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**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD2-032<br>GWGW1965<br>10/21/05 | UCD2-035<br>GWGW1900<br>-05/25/05 | UCD2-035<br>GWGW1966<br>10/25/05 | UCD2-035<br>GWGW1967 Dup<br>10/25/05 | UCD2-036<br>GWGW1901<br>05/04/05 | UCD2-036<br>GWGW1902 Dup<br>05/04/05 | UCD2-036<br>GWGW1968<br>10/20/05 | UCD2-037<br>GWGW1969<br>10/25/05 |
|---|---|---|---|---|---|---|---|---|---|---|
| ALKALINITY, TOTAL (AS CaCO3) | 10 | MG/L | NS | NS | NS | NS | **455** | **393** | NS | NS |
| CHLORIDE (AS CL) | 1 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| NITRATE AS NITROGEN | 0.1 | MG/L | **7.19** | **1.21** | **1.05** | **1.07** | **7.2** | **6.69** | **7.16 J** | **1.9** |
| SULFATE (AS SO4) | 1 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| TOTAL DISSOLVED SOLIDS (RESIDUE, FILTERABLE) | 20 | MG/L | **490** | **399** | **403** | **400** | **477** | **492** | **526** | **410** |
| TOTAL ORGANIC CARBON | 1 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| TOTAL SUSPENDED SOLIDS | | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |

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**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD2-038<br>GWGW1904<br>05/25/05 | UCD2-038<br>GWGW1970<br>10/25/05 | UCD2-039<br>GWGW1905<br>05/25/05 | UCD2-039<br>GWGW1971<br>10/21/05 | UCD2-040<br>GWGW1906<br>05/02/05 | UCD2-040<br>GWGW1972<br>10/28/05 | UCD2-045<br>GWGW1907<br>05/25/05 | UCD2-045<br>GWGW1973<br>10/21/05 |
|---|---|---|---|---|---|---|---|---|---|---|
| ALKALINITY, TOTAL (AS CaCO3) | 10 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| CHLORIDE (AS CL) | 1 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| NITRATE AS NITROGEN | 0.1 | MG/L | **1.19** | **0.936** | **4.95** | **2.58** | **7** | **8.5** | **6.31** | **9.43** |
| SULFATE (AS SO4) | 1 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| TOTAL DISSOLVED SOLIDS (RESIDUE, FILTERABLE) | 20 | MG/L | **407** | **369** | **461** | **451** | **493** | **528** | **504** | **559** |
| TOTAL ORGANIC CARBON | 1 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| TOTAL SUSPENDED SOLIDS | | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |

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**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD2-046<br>GWGW1908<br>05/25/05 | UCD2-046<br>GWGW1909 Dup<br>05/25/05 | UCD2-046<br>GWGW1974<br>10/21/05 | UCD2-048<br>GWGW1910<br>06/07/05 | UCD2-048<br>GWGW1975<br>10/19/05 | UCD2-048<br>GWGW1976 Dup<br>10/19/05 | UCD4-041<br>GWGW0913<br>05/26/05 | UCD4-041<br>GWGW1977<br>10/28/05 |
|---|---|---|---|---|---|---|---|---|---|---|
| ALKALINITY, TOTAL (AS CaCO3) | 10 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| CHLORIDE (AS CL) | 1 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| NITRATE AS NITROGEN | 0.1 | MG/L | **11** | **11.1** | **11.7 J** | **3.67** | **4.85** | **4.91** | **2.07** | **2.38** |
| SULFATE (AS SO4) | 1 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| TOTAL DISSOLVED SOLIDS (RESIDUE, FILTERABLE) | 20 | MG/L | **710** | **711** | **718** | NS | **470** | **480** | **405** | **469** |
| TOTAL ORGANIC CARBON | 1 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| TOTAL SUSPENDED SOLIDS | | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |

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**Davis, California**

| AnalyteNameShort | CRDL | Location<br>Sample ID<br>Date<br>UnitsID | UCD4-042<br>GWGW1914<br>05/30/05 | UCD4-042<br>GWGW1978<br>10/21/05 | UCD4-043<br>GWGW1915<br>05/30/05 | UCD4-043<br>GWGW1979<br>10/24/05 | UCD4-044<br>GWGW0916<br>05/26/05 | UCD4-044<br>GWGW1980<br>10/24/05 | UCD4-047<br>GWGW1917<br>06/01/05 | UCD4-047<br>GWGW1981<br>10/21/05 |
|---|---|---|---|---|---|---|---|---|---|---|
| ALKALINITY, TOTAL (AS CaCO3) | 10 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| CHLORIDE (AS CL) | 1 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| NITRATE AS NITROGEN | 0.1 | MG/L | **2.11 J** | **2.44** | **1.88 J** | **2.02** | **2.08** | **2.4** | **6.6 J** | **8.85** |
| SULFATE (AS SO4) | 1 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| TOTAL DISSOLVED SOLIDS (RESIDUE, FILTERABLE) | 20 | MG/L | **405** | **387** | **395** | **409** | **419** | **449** | **521** | **571** |
| TOTAL ORGANIC CARBON | 1 | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |
| TOTAL SUSPENDED SOLIDS | | MG/L | NS | NS | NS | NS | NS | NS | NS | NS |

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**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | LS-01 | LS-01 |
|---|---|---|---|---|
| | | Sample ID | RWSW0036 | RWSW0037 |
| | | Date | 03/22/05 | 03/22/05 |
| AnalyteNameShort | CRDL | UnitsID | | |
| OIL & GREASE, TOTAL REC | 2 | MG/L | < 1.3 | **2.78** |

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UJ - Estimated value falls below reporting limit.
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**Groundwater Treatment System and Water Monitoring Report**
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**Davis, California**

| | | Location | UCD1-052 | UCD1-052 | UCD1-053 | UCD1-053 |
|---|---|---|---|---|---|---|
| | | Sample ID | GWGW1862 | GWGW1911 | GWGW1863 | GWGW1912 |
| | | Date | 02/10/05 | 05/02/05 | 02/10/05 | 05/02/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | |
| 1,2,4-TRICHLOROBENZENE | 10 | UG/L | < 0.717 | < 1.98 | < 0.724 | < 1.92 |
| 1,2-DICHLOROBENZENE | 0.5 | UG/L | < 0.414 | < 1.98 | < 0.418 | < 1.92 |
| 1,3-DICHLOROBENZENE | 0.5 | UG/L | < 0.414 | < 1.98 | < 0.418 | < 1.92 |
| 1,4-DICHLOROBENZENE | 0.5 | UG/L | < 0.313 | < 1.98 | < 0.316 | < 1.92 |
| 2,4,5-TRICHLOROPHENOL | 10 | UG/L | < 0.98 | < 0.99 | < 0.99 | < 0.962 |
| 2,4,6-TRICHLOROPHENOL | 10 | UG/L | < 0.394 | < 1.98 | < 0.398 | < 1.92 |
| 2,4-DICHLOROPHENOL | 10 | UG/L | < 0.475 | < 1.98 | < 0.48 | < 1.92 |
| 2,4-DIMETHYLPHENOL | 10 | UG/L | < 0.475 | < 1.98 | < 0.48 | < 1.92 |
| 2,4-DINITROPHENOL | 25 | UG/L | < 5.05 | < 9.9 | < 5.1 | < 9.62 |
| 2,4-DINITROTOLUENE | 10 | UG/L | < 0.707 | < 1.98 | < 0.714 | < 1.92 |
| 2,6-DINITROTOLUENE | 10 | UG/L | < 0.505 | < 1.98 | < 0.51 | < 1.92 |
| 2-CHLORONAPHTHALENE | 10 | UG/L | < 0.404 | < 0.347 | < 0.408 | < 0.337 |
| 2-CHLOROPHENOL | 10 | UG/L | < 0.414 | < 1.98 | < 0.418 | < 1.92 |
| 2-METHYLNAPHTHALENE | 10 | UG/L | < 0.505 | < 0.297 | < 0.51 | < 0.288 |
| 2-METHYLPHENOL (o-CRESOL) | 10 | UG/L | < 0.455 | < 1.98 | < 0.459 | < 1.92 |
| 2-NITROANILINE | 25 | UG/L | < 1.01 | < 1.98 | < 1.02 | < 1.92 |
| 2-NITROPHENOL | 10 | UG/L | < 0.596 | < 1.98 | < 0.602 | < 1.92 |
| 3,3'-DICHLOROBENZIDINE | 10 | UG/L | < 0.515 | < 0.99 | < 0.52 | < 0.962 |
| 3-NITROANILINE | 25 | UG/L | < 0.646 | < 1.98 | < 0.653 | < 1.92 |
| 4,6-DINITRO-2-METHYLPHENOL | 25 | UG/L | < 1.01 | < 2.97 | < 1.02 | < 2.88 |
| 4-BROMOPHENYL PHENYL ETHER | 10 | UG/L | < 1.23 | < 1.98 | < 1.24 | < 1.92 |
| 4-CHLORO-3-METHYLPHENOL | 10 | UG/L | < 0.697 | < 1.98 | < 0.704 | < 1.92 |
| 4-CHLOROANILINE | 10 | UG/L | < 1.11 | < 1.98 | < 1.12 | < 1.92 |
| 4-CHLOROPHENYL PHENYL ETHER | 10 | UG/L | < 0.848 | < 1.98 | < 0.857 | < 1.92 |
| 4-NITROANILINE | 25 | UG/L | < 0.677 | < 2.97 | < 0.684 | < 2.88 |
| 4-NITROPHENOL | 25 | UG/L | < 5.05 | < 1.98 | < 5.1 | < 1.92 |
| ACENAPHTHENE | 10 | UG/L | < 0.505 | < 0.307 | < 0.51 | < 0.298 |
| ACENAPHTHYLENE | 10 | UG/L | < 0.505 | < 0.198 | < 0.51 | < 0.192 |
| ANTHRACENE | 10 | UG/L | < 0.505 | < 0.198 | < 0.51 | < 0.192 |
| BENZO(a)ANTHRACENE | 10 | UG/L | < 0.505 | < 0.198 | < 0.51 | < 0.192 |
| BENZO(a)PYRENE | 10 | UG/L | < 0.505 | < 0.198 | < 0.51 | < 0.192 |
| BENZO(b)FLUORANTHENE | 10 | UG/L | < 0.505 | < 0.198 | < 0.51 | < 0.192 |
| BENZO(g,h,i)PERYLENE | 10 | UG/L | < 0.505 | < 0.198 | < 0.51 | < 0.192 |
| BENZO(k)FLUORANTHENE | 10 | UG/L | < 0.505 | < 0.198 | < 0.51 | < 0.192 |
| BENZYL BUTYL PHTHALATE | 10 | UG/L | < 0.687 | < 1.98 | < 0.694 | < 1.92 |
| bis(2-CHLOROETHOXY) METHANE | 10 | UG/L | < 0.485 | < 2.97 | < 0.49 | < 2.88 |
| bis(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER) | 10 | UG/L | < 1.38 | < 1.98 | < 1.4 | < 1.92 |
| bis(2-CHLOROISOPROPYL) ETHER | 10 | UG/L | < 0.808 | < 1.98 | < 0.816 | < 1.92 |
| bis(2-ETHYLHEXYL) PHTHALATE | 10 | UG/L | < 1.31 | 3 J | < 1.33 | 3 J |
| CARBAZOLE | 10 | UG/L | < 0.505 | < 0.198 | < 0.51 | < 0.192 |
| CHRYSENE | 10 | UG/L | < 0.505 | < 0.198 | < 0.51 | < 0.192 |
| DIBENZ(a,h)ANTHRACENE | 10 | UG/L | < 0.505 | < 0.198 | < 0.51 | < 0.192 |
| DIBENZOFURAN | 10 | UG/L | < 0.424 | < 1.98 | < 0.429 | < 1.92 |
| DIETHYL PHTHALATE | 10 | UG/L | < 0.899 | < 1.98 | < 0.908 | < 1.92 |
| DIMETHYL PHTHALATE | 10 | UG/L | < 0.535 | < 1.98 | < 0.541 | < 1.92 |
| DI-n-BUTYL PHTHALATE | 10 | UG/L | < 1.01 | < 1.98 | < 1.02 | < 1.92 |
| DI-n-OCTYLPHTHALATE | 10 | UG/L | < 0.879 | < 2.97 | < 0.888 | < 2.88 |
| DIPHENYLAMINE | 10 | UG/L | < 0.798 | < 2.97 UJ | < 0.806 | < 2.88 |
| FLUORANTHENE | 10 | UG/L | < 0.505 | < 0.198 | < 0.51 | < 0.192 |

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | UCD1-052 | UCD1-052 | UCD1-053 | UCD1-053 |
|---|---|---|---|---|---|---|
| | | Sample ID | GWGW1862 | GWGW1911 | GWGW1863 | GWGW1912 |
| | | Date | 02/10/05 | 05/02/05 | 02/10/05 | 05/02/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | |
| FLUORENE | 10 | UG/L | < 0.505 | < 0.198 | < 0.51 | < 0.192 |
| HEXACHLOROBENZENE | 10 | UG/L | < 0.657 | < 1.98 | < 0.663 | < 1.92 |
| HEXACHLOROBUTADIENE | 10 | UG/L | < 0.323 | < 1.98 | < 0.327 | < 1.92 |
| HEXACHLOROCYCLOPENTADIENE | 10 | UG/L | < 1.01 | < 1.98 UJ | < 1.02 | < 1.92 |
| HEXACHLOROETHANE | 10 | UG/L | < 0.434 | < 1.98 | < 0.439 | < 1.92 |
| INDENO(1,2,3-c,d)PYRENE | 10 | UG/L | < 0.505 | < 0.198 | < 0.51 | < 0.192 |
| ISOPHORONE | 10 | UG/L | < 0.596 | < 1.98 | < 0.602 | < 1.92 |
| NAPHTHALENE | 10 | UG/L | < 0.111 | < 0.297 | < 0.112 | < 0.288 |
| NITROBENZENE | 10 | UG/L | < 0.636 | < 2.97 | < 0.643 | < 2.88 |
| N-NITROSODI-n-PROPYLAMINE | 10 | UG/L | < 0.758 | < 1.98 | < 0.765 | < 1.92 |
| PENTACHLOROPHENOL | 25 | UG/L | < 5.05 | < 1.98 | < 5.1 | < 1.92 |
| PHENANTHRENE | 10 | UG/L | < 0.505 | < 0.198 | < 0.51 | < 0.192 |
| PHENOL | 10 | UG/L | < 0.303 | < 0.99 | < 0.306 | < 0.962 |
| PYRENE | 10 | UG/L | < 0.505 | < 0.297 | < 0.51 | < 0.288 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
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**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | LF-01 | LF-01 | LS-01 | LS-01 | PCD | PCD | PCU | | PCU |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample ID | STMW0133 | STMW0135 | RWSW0036 | RWSW0037 | SWSW0274 | SWSW0276 | SWSW0273 | PCU SWSW0277 | SWSW0278 |
| | | Date | 01/11/05 | 12/28/05 | 03/22/05 | 03/22/05 | 01/12/05 | 12/28/05 | 01/12/05 | Dup 12/28/05 | 12/28/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | | | | |
| ALDRIN | 0.01 | UG/L | < 0.0053 UJ | < 0.00048 | < 0.047 | < 0.048 | < 0.0051 | < 0.00049 | < 0.00515 | < 0.00048 | < 0.00048 |
| ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE) | 0.01 | UG/L | < 0.00146 UJ | < 0.00048 | < 0.047 | < 0.048 | < 0.00141 | < 0.00049 | < 0.00142 | < 0.00048 | < 0.00048 |
| ALPHA ENDOSULFAN | 0.01 | UG/L | < 0.00621 UJ | < 0.00048 | < 0.047 | < 0.048 | < 0.00597 | < 0.00049 | < 0.00603 | < 0.00048 | < 0.00048 |
| ALPHA-CHLORDANE | 0.01 | UG/L | < 0.00253 UJ | < 0.00048 | < 0.047 | < 0.048 | < 0.00243 | < 0.00049 | < 0.00245 | < 0.00048 | < 0.00048 |
| BETA BHC (BETA HEXACHLOROCYCLOHEXANE) | 0.01 | UG/L | < 0.00288 UJ | < 0.00048 | < 0.047 | < 0.048 | < 0.00277 | < 0.00049 | < 0.00279 | < 0.00048 | < 0.00048 |
| BETA ENDOSULFAN | 0.02 | UG/L | < 0.012 UJ | 0.0103 J | < 0.094 | < 0.096 | < 0.0115 | < 0.00107 | < 0.0116 | < 0.00105 | < 0.00106 |
| DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE) | 0.01 | UG/L | < 0.00278 UJ | < 0.00048 | < 0.047 | < 0.048 | < 0.00267 | < 0.00049 | < 0.0027 | < 0.00048 | < 0.00048 |
| DIELDRIN | 0.02 | UG/L | < 0.00389 UJ | 0.00652 J | < 0.094 | < 0.096 | < 0.00374 | < 0.00146 | < 0.00377 | < 0.00143 | < 0.00144 |
| ENDOSULFAN SULFATE | 0.02 | UG/L | < 0.0047 UJ | 0.00395 J | < 0.094 | < 0.096 | < 0.00451 | < 0.00061 | < 0.00456 | < 0.0006 | < 0.0006 |
| ENDRIN | 0.02 | UG/L | < 0.00384 UJ | < 0.00048 | < 0.094 | < 0.096 | < 0.00369 | < 0.00049 | < 0.00373 | < 0.00048 | < 0.00048 |
| ENDRIN ALDEHYDE | 0.02 | UG/L | < 0.00702 UJ | < 0.00096 | < 0.094 | < 0.096 | < 0.00675 | < 0.00097 | < 0.00681 | < 0.00095 | < 0.00096 |
| ENDRIN KETONE | 0.02 | UG/L | < 0.00465 UJ | < 0.00096 | < 0.094 | < 0.096 | < 0.00447 | < 0.00097 | < 0.00451 | < 0.00095 | < 0.00096 |
| GAMMA BHC (LINDANE) | 0.01 | UG/L | < 0.00212 UJ | < 0.00048 | < 0.047 | < 0.048 | < 0.00204 | < 0.00049 | < 0.00206 | < 0.00048 | < 0.00048 |
| GAMMA-CHLORDANE | 0.01 | UG/L | < 0.00369 UJ | < 0.00072 | < 0.047 | < 0.048 | < 0.00354 | < 0.00073 | < 0.00358 | < 0.00071 | < 0.00072 |
| HEPTACHLOR | 0.01 | UG/L | < 0.00591 UJ | < 0.00048 | < 0.047 | < 0.048 | < 0.00568 | < 0.00049 | < 0.00574 | < 0.00048 | < 0.00048 |
| HEPTACHLOR EPOXIDE | 0.01 | UG/L | < 0.00303 UJ | < 0.00072 | < 0.047 | < 0.048 | < 0.00291 | < 0.00073 | < 0.00294 | < 0.00071 | < 0.00072 |
| METHOXYCHLOR | 0.1 | UG/L | < 0.028 UJ | < 0.00481 | < 0.47 | < 0.48 | < 0.0269 | < 0.00485 | < 0.0272 | < 0.00476 | < 0.00481 |
| p,p'-DDD | 0.02 | UG/L | < 0.00556 UJ | 0.00207 J | < 0.094 | < 0.096 | < 0.00534 | < 0.00097 | < 0.00539 | 0.0012 J | < 0.00096 |
| p,p'-DDE | 0.02 | UG/L | < 0.00444 UJ | 0.0033 J | < 0.094 | < 0.096 | < 0.00427 | 0.00174 J | < 0.00431 | 0.0032 J | 0.00221 J |
| p,p'-DDT | 0.02 | UG/L | < 0.011 UJ | 0.00419 J | < 0.094 | < 0.096 | < 0.0106 | < 0.00146 | < 0.0107 | 0.00561 J | 0.00425 J |
| PCB-1016 (AROCHLOR 1016) | 0.2 | UG/L | < 0.253 UJ | < 0.024 | < 0.94 | < 0.96 | < 0.243 | < 0.0243 | < 0.245 | < 0.0238 | < 0.024 |
| PCB-1221 (AROCHLOR 1221) | 0.4 | UG/L | < 0.421 UJ | < 0.04 | < 1.9 | < 1.9 | < 0.404 | < 0.0404 | < 0.408 | < 0.0397 | < 0.04 |
| PCB-1232 (AROCHLOR 1232) | 0.2 | UG/L | < 0.253 UJ | < 0.024 | < 0.94 | < 0.96 | < 0.243 | < 0.0243 | < 0.245 | < 0.0238 | < 0.024 |
| PCB-1242 (AROCHLOR 1242) | 0.2 | UG/L | < 0.303 UJ | < 0.0288 | < 0.94 | < 0.96 | < 0.291 | < 0.0291 | < 0.294 | < 0.0286 | < 0.0288 |
| PCB-1248 (AROCHLOR 1248) | 0.2 | UG/L | < 0.253 UJ | < 0.024 | < 0.94 | < 0.96 | < 0.243 | < 0.0243 | < 0.245 | < 0.0238 | < 0.024 |
| PCB-1254 (AROCHLOR 1254) | 0.2 | UG/L | < 0.253 UJ | < 0.024 | < 0.94 | < 0.96 | < 0.243 | < 0.0243 | < 0.245 | < 0.0238 | < 0.024 |
| PCB-1260 (AROCHLOR 1260) | 0.2 | UG/L | < 0.253 UJ | < 0.024 | < 0.94 | < 0.96 | < 0.243 | < 0.0243 | < 0.245 | < 0.0238 | < 0.024 |
| TOXAPHENE | 1 | UG/L | < 0.106 UJ | < 0.012 | < 4.7 | < 4.8 | < 0.102 | < 0.0121 | < 0.103 | < 0.0119 | < 0.012 |

NS - Not Sampled
J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.

**APPENDIX F**
**VOLATILE ORGANIC COMPOUNDS - GROUNDWATER, STORMWATER, AND SURFACE WATER**
**Groundwater Treatment System and Water Monitoring Report**
**LEHR/SCDS Environmental Restoration**
**Davis, California**

| | | Location | STPO | STPO | UCD1-052 | UCD1-052 | UCD1-053 | UCD1-053 |
|---|---|---|---|---|---|---|---|---|
| | | Sample ID | SWSW0275 | SWSW0279 | GWGW1862 | GWGW1911 | GWGW1863 | GWGW1912 |
| | | Date | 01/12/05 | 12/28/05 | 02/10/05 | 05/02/05 | 02/10/05 | 05/02/05 |
| AnalyteNameShort | CRDL | UnitsID | | | | | | |
| ALDRIN | 0.01 | UG/L | < 0.0052 | < 0.00048 | < 0.00053 | < 0.00245 UJ | < 0.00053 | < 0.00238 UJ |
| ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE) | 0.01 | UG/L | < 0.00144 | < 0.00048 | < 0.00015 | < 0.00245 UJ | < 0.00015 | < 0.00238 UJ |
| ALPHA ENDOSULFAN | 0.01 | UG/L | < 0.00609 | < 0.00048 | < 0.00062 | < 0.00245 UJ | < 0.00062 | < 0.00238 UJ |
| ALPHA-CHLORDANE | 0.01 | UG/L | < 0.00248 | < 0.00048 | < 0.00025 | < 0.00245 UJ | < 0.00025 | < 0.00238 UJ |
| BETA BHC (BETA HEXACHLOROCYCLOHEXANE) | 0.01 | UG/L | < 0.00282 | < 0.00048 | < 0.00029 | < 0.00245 UJ | < 0.00029 | < 0.00238 UJ |
| BETA ENDOSULFAN | 0.02 | UG/L | < 0.0117 | < 0.00105 | < 0.0012 | < 0.00539 UJ | < 0.0012 | < 0.00524 UJ |
| DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE) | 0.01 | UG/L | < 0.00272 | < 0.00048 | < 0.00028 | < 0.00245 UJ | < 0.00028 | < 0.00238 UJ |
| DIELDRIN | 0.02 | UG/L | < 0.00381 | < 0.00143 | < 0.00039 | < 0.00735 UJ | < 0.00039 | < 0.00714 UJ |
| ENDOSULFAN SULFATE | 0.02 | UG/L | < 0.0046 | < 0.0006 | < 0.00047 | < 0.00306 UJ | < 0.00047 | < 0.00298 UJ |
| ENDRIN | 0.02 | UG/L | < 0.00376 | < 0.00048 | < 0.00038 | < 0.00245 UJ | < 0.00038 | < 0.00238 UJ |
| ENDRIN ALDEHYDE | 0.02 | UG/L | < 0.00688 | < 0.00095 | < 0.0007 | < 0.0049 UJ | < 0.0007 | < 0.00476 UJ |
| ENDRIN KETONE | 0.02 | UG/L | < 0.00455 | < 0.00095 | < 0.00047 | < 0.0049 UJ | < 0.00047 | < 0.00476 UJ |
| GAMMA BHC (LINDANE) | 0.01 | UG/L | < 0.00208 | < 0.00048 | < 0.00021 | < 0.00245 UJ | < 0.00021 | < 0.00238 UJ |
| GAMMA-CHLORDANE | 0.01 | UG/L | < 0.00361 | < 0.00071 | < 0.00037 | < 0.00368 UJ | < 0.00037 | < 0.00357 UJ |
| HEPTACHLOR | 0.01 | UG/L | < 0.00579 | < 0.00048 | < 0.00059 | < 0.00245 UJ | < 0.00059 | < 0.00238 UJ |
| HEPTACHLOR EPOXIDE | 0.01 | UG/L | < 0.00297 | < 0.00071 | < 0.0003 | < 0.00368 UJ | < 0.0003 | < 0.00357 UJ |
| METHOXYCHLOR | 0.1 | UG/L | < 0.0275 | < 0.00476 | < 0.0028 | < 0.0245 UJ | < 0.0028 | < 0.0238 UJ |
| p,p'-DDD | 0.02 | UG/L | < 0.00545 | < 0.00095 | < 0.00056 | < 0.0049 UJ | < 0.00056 | < 0.00476 UJ |
| p,p'-DDE | 0.02 | UG/L | < 0.00436 | < 0.00095 | < 0.00044 | < 0.0049 UJ | < 0.00044 | < 0.00476 UJ |
| p,p'-DDT | 0.02 | UG/L | < 0.0108 | < 0.00143 | < 0.0011 | < 0.00735 UJ | < 0.0011 | < 0.00714 UJ |
| PCB-1016 (AROCHLOR 1016) | 0.2 | UG/L | < 0.248 | < 0.0238 | < 0.0253 | < 0.0429 UJ | < 0.0253 | < 0.0417 UJ |
| PCB-1221 (AROCHLOR 1221) | 0.4 | UG/L | < 0.412 | < 0.0397 | < 0.0421 | < 0.204 UJ | < 0.0421 | < 0.198 UJ |
| PCB-1232 (AROCHLOR 1232) | 0.2 | UG/L | < 0.248 | < 0.0238 | < 0.0253 | < 0.0931 UJ | < 0.0253 | < 0.0905 UJ |
| PCB-1242 (AROCHLOR 1242) | 0.2 | UG/L | < 0.297 | < 0.0286 | < 0.0303 | < 0.109 UJ | < 0.0303 | < 0.106 UJ |
| PCB-1248 (AROCHLOR 1248) | 0.2 | UG/L | < 0.248 | < 0.0238 | < 0.0253 | < 0.0662 UJ | < 0.0253 | < 0.0643 UJ |
| PCB-1254 (AROCHLOR 1254) | 0.2 | UG/L | < 0.248 | < 0.0238 | 0.0419 J | < 0.0623 UJ | 0.0694 J | < 0.0605 UJ |
| PCB-1260 (AROCHLOR 1260) | 0.2 | UG/L | < 0.248 | < 0.0238 | < 0.0253 | < 0.0328 UJ | < 0.0253 | < 0.0319 UJ |
| TOXAPHENE | 1 | UG/L | < 0.104 | < 0.0119 | < 0.0106 | < 0.0613 UJ | < 0.0106 | < 0.0595 UJ |

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J - Validation qualifier for estimated value; sample exceeds quantitation range.
UJ - Estimated value falls below reporting limit.
UG/L - micorgrams per liter
Results in **BOLD** indicate detections above the CRDL.