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November 4, 2009

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**Subject: Feasibility Study/Remedial Action Plan
Schlage Operable Unit and San Francisco County Portion of
Universal Paragon Corporation Operable Unit
San Francisco, California
MACTEC Project No. 4096088522 01.02.04.01**

Dear Ms. Lasky:

Enclosed please find two (2) copies of the *Feasibility Study/Remedial Action Plan, Schlage OU and San Francisco County Portion of UPC OU, San Francisco, California*, dated November 4, 2009.

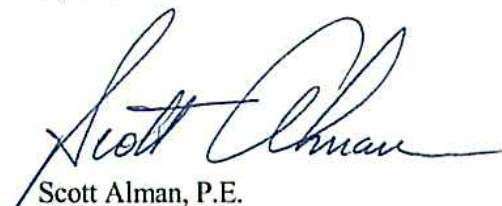
An electronic copy of the document has also been uploaded to our FTP site in PDF format in portions of 10 MB or less for your convenience in downloading, and the document will also be emailed to you in PDF format.

Please feel free to contact Mr. Alman at (510) 628-3246 with any questions.

Yours very truly,

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cc: Steve Hanson, Universal Paragon Corporation

Feasibility Study/Remedial Action Plan
Schlage Operable Unit and
San Francisco County Portion of
Universal Paragon Corporation Operable Unit
San Francisco, California

MACTEC Project No. 4096088522 01.02.04.01

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ACRONYMS

AMSL	above mean sea level
ARARs	Applicable or Relevant and Appropriate Requirements
BAAQMD	Bay Area Air Quality Management District
bgs	below ground surface
BP	BP PLT-I, LLC
BTEX	benzene, toluene, ethyl benzene, and xylenes
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CHHSLs	California Human Health Screening Levels
CM/Sec	centimeters per second
COCs	chemicals of concern
CUL	cleanup level
CVOCs	chlorinated volatile organic compounds
DCE	cis-1,2-dichloroethene
Dhc	dehalococoides
DNAPL	dense non-aqueous phase liquids
DO	dissolved oxygen
DTSC	California Department of Toxic Substances Control
DWR	Department of Water Resources
EIR	Environmental Impact Report
EPA	U.S. Environmental Protection Agency
EPC	Exposure point concentration
ERD	enhanced reductive dechlorination
FS	Feasibility Study
ft	feet
GAC	granular activated carbon
gpm	gallons per minute
GRAs	general response actions
GWETS	groundwater extraction and treatment system
HHRA	Human Health Risk Assessment
HSC	California Health and Safety Code
IAL	Integrated Analytical Laboratories, LLC
ISCO	in situ chemical oxidation
ISOTEC	ISOTEC, Inc.
LBNL	Lawrence Berkeley National Laboratory
LTM	long term monitoring plan
LUC	land use control
MACTEC	MACTEC Engineering and Consulting, Inc.
MCL	Maximum Contaminant Level
MFR	Modified Fenton's Reagent
µg/L	micrograms per liter
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MNA	Monitored Natural Attenuation
MTBE	methyl tertiary butyl ether

NBAR	non-binding allocation of responsibility
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NELAP	National Environmental Laboratory Accreditation Program
NPL	National Priorities List
O&M	operations and maintenance
ORP	oxidation reduction potential
OSHA	Occupational Safety and Health Administration
OSWER	Office of Solid Waste and Emergency Response
OU	Operable Unit
PAHs	polynuclear aromatic hydrocarbons
PCE	tetrachloroethene
P.E.	Professional Engineer
P.G.	Professional Geologist
PRGs	Preliminary Remediation Goals, EPA Region IX (now RSLs)
PRPs	potentially responsible parties
PSG	passive soil gas
QA	Quality Assessment
QAPP	Quality Assurance Project Plan
QC	Quality Control
RAOs	Remedial Action Objectives
RAP	Remedial Action Plan
RAW	Remedial Work Plan
RCRA	Resource Conservation and Recovery Act
RDIP	Remedial Design and Implementation Plan
RI	Remedial Investigation
ROI	radius of influence
RSLs	Regional Screening Levels, US EPA Region IX (formerly PRGs)
Schlage OU	Schlage Operable Unit
SFDPH	San Francisco Department of Public Health
Site	Schlage OU and San Francisco County portion of UPC OU
SP OU-1	former Southern Pacific Brisbane Rail Yard – Operable Unit 1
SP	former Southern Pacific
SPTC	Southern Pacific Transportation Company
SVE	soil vapor extraction
SVETS	soil vapor extraction and treatment system
TBC	To-be-Considered Requirements
TCE	trichloroethene
TDS	total dissolved solids
TO	Toxic Organics
TOC	total organic carbon
TPH	total petroleum hydrocarbons
TPH-g	total petroleum hydrocarbons as gasoline
TRCG	Target Redevelopment Cleanup Goal
UCL	Upper confidence limit
UPC OU	Universal Paragon Corporation Operable Unit
UPC	Universal Paragon Corporation, Inc.
USCS/ASTM	Unified Soil Classification System/American Society of Testing Materials
UST	underground storage tanks
VC	vinyl chloride
VCR	vinyl chloride reductase

VOCs volatile organic compounds
XRF x-ray fluorescence

EXECUTIVE SUMMARY

This Feasibility Study/Remedial Action Plan (FS/RAP) describes the preferred remedial actions for soil and groundwater at the Schlage Operable Unit (Schlage OU), and for soil in the San Francisco County portion of the Universal Paragon Corporation, Inc. (UPC) Operable Unit (UPC OU), located in San Francisco, California (the Site) (Figures 1-1 and 1-2).

The remedial actions described in this FS/RAP were selected to meet the remedial action objectives for contaminated soil and groundwater at the Site, and to prepare the Site for redevelopment. UPC plans to redevelop the Site with a combination of public open space and residential podium housing above commercial or parking structures.

A California Department of Toxic Substances Control (DTSC) Consent Order signed in 2008 establishes legal and administrative responsibilities and procedures for cleanup of chemical releases at the Site. Operable units for the Site were defined in the Consent Order (*DTSC, 2008*) as follows. The Schlage OU is defined as the former Schlage Lock site in addition to soil and groundwater impacted with volatile organic compounds (VOCs) located within the northern portion of the former Southern Pacific Brisbane Rail Yard – Operable Unit 1 (former SP OU-1). The UPC OU is defined as soil and groundwater on the former SP OU-1 that is impacted with chemicals other than VOCs. The former SP OU-1 is wholly incorporated into the Schlage and UPC OUs and no longer exists as a separate OU. For the purposes of this FS/RAP the “Site” consists of the groundwater portion of the Schlage OU, and the soil portions of both the Schlage and UPC OUs that are located within the City and County of San Francisco.

Site Background

The Site consists of approximately 20 acres in San Francisco, located north of Sunnysdale Avenue, between Bayshore Boulevard on the west, and the Union Pacific/Joint Powers Board railroad tracks on the east, and Blanken Avenue to the north. The former Schlage Lock facility consists of approximately 12.66 acres. The San Francisco portion of the UPC OU consists of parcels totaling approximately 7 acres that were formerly part of the SP Rail Yard operations. Soil and groundwater at the former Schlage Lock facility are primarily impacted with chlorinated VOCs (CVOCs). Impacts from historical operations at SP OU-1 are primarily metals in soil.

The Schlage Lock Company manufactured door hardware and lock parts at the San Francisco facility from 1926 to 1999, with facility expansions during that period resulting in five major plant buildings being constructed. The manufacturing processes conducted at the plant included stamping and machining metal alloys; deburring brass, bronze, nickel, silver and steel parts; electroplating; and cleaning brass and bronze parts with Safety Kleen 150, a petroleum naphtha solvent. In 1980, Pacific Lithograph Company acquired a portion of the facility, and used solvent products in lithographic processing until 1993. In 1999, all equipment was removed, except for several underground storage tanks (USTs) that were closed in place and are scheduled to be removed prior to site development. Buildings are being demolished to facilitate redevelopment of the Site. Removal of hazardous and regulated materials (e.g., lead based paint and asbestos) from inside the buildings was completed in March 2009; demolition began in April 2009 and is expected to be completed in August 2009.

Site Investigations and Remedial Activities

Numerous investigations to assess the nature and extent of contaminants have been conducted on the Site, with regulatory oversight, beginning in 1982. The results of the investigations indicate that soil and

groundwater are primarily impacted by CVOCs at the Schlage OU, and near-surface soils at the UPC OU are impacted by metals.

Previous removal activities at the Site have included the removal or closure in place of six diesel USTs; removal of sumps and contaminated floor slabs and approximately 80 cubic yards of CVOC-contaminated soil from the Schlage Lock facility; and soil removal in the area of the former oil/water separator adjacent to the southwest Site boundary along the joint sewer line.

Previous remedial activities include the operation of a groundwater extraction and treatment system (GWETS), and a soil vapor extraction and treatment system (SVETS) to remove CVOCs in soil and groundwater at the Schlage OU.

Chemicals of Concern

The chemicals of concern (COCs) at the Site for which cleanup levels were developed are: CVOCs in soils and groundwater at the Schlage OU; the metals arsenic, lead, cadmium at the Schlage and UPC OUs. The specific CVOCs for which cleanup levels were developed include tetrachloroethene (PCE), trichloroethene (TCE), 1,1-DCE, cis-1,2-dichloroethene (DCE), trans-1,2-DCE, and vinyl chloride (VC).

Risk Analysis

For the purposes of the risk analysis, future Site receptors were assumed to be exposed to Site contaminants under two redevelopment scenarios, which are consistent with the plans approved by the San Francisco Planning Department: Public Open Space (Zone 1) and Commercial (Zones 2 and 3). Although Zones 2 and 3 also contain multi-family residential development, the podium style of building construction and commercial use of the ground floors precludes residential occupation of the ground level.

Cleanup Levels and Target Redevelopment Cleanup Goals

The development and application of cleanup levels (CULs) and target redevelopment cleanup goals (TRCGs) were based on redevelopment- and media-specific considerations.

Remedial Action Objectives

Remedial Action Objectives (RAOs), specific goals for protecting human health and the environment, are evaluated using Applicable or Relevant and Appropriate Requirements (ARARs) and To-Be-Considered Requirements (TBCs). The functional objectives for the Site are to (1) comply with ARARs, including remediation of groundwater to achieve Maximum Contaminant Level (MCLs); and (2) address unacceptable exposure for each exposure pathway of concern for each redevelopment zone through remediation to CULs. In addition, TRCGs will be used for planning purposes to assess when redevelopment activities can be initiated at portions of the Site.

Feasibility Study and Alternatives Analysis

To the extent practicable, redevelopment plans were integrated into the remedial planning for the Site. To the extent that redevelopment activities serve to eliminate pathways of exposure to future Site receptors (e.g., fill placement that minimizes direct exposure to impacted media), these activities were integrated into the remedial technology screening and development of remedial alternatives.

The results of the evaluation identified and selected the following in situ groundwater remedial technologies for further evaluation in pilot treatability studies at the Site: (1) Enhanced Reductive Dechlorination; and (2) In Situ Chemical Oxidation.

Evaluation and Comparative Analysis of Alternatives and Preferred Remedial Approach

Four remedial alternatives were subjected to: (1) a detailed alternative analysis pursuant to the nine criteria of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and the six criteria of Section 2535b.1 of the California Health and Safety Code (HSC); and (2) comparative analysis identifying the advantages and disadvantages of each alternative when compared to other alternatives.

Based on the evaluation and comparison of the four alternatives, *Alternative 3: Excavation and Onsite Treatment, Relocation and Capping for Soils, and In Situ Groundwater Treatment and Monitoring*, is the preferred remedial action alternative identified for implementation at the Site.

This alternative includes excavation and onsite treatment of approximately 15,000 cubic yards of soil containing CVOC concentrations above CULs within the Schlage OU, and excavation and relocation or capping of approximately 22,000 cubic yards of metals-impacted soils containing concentrations above CULs. Groundwater will be treated in situ using Enhanced Reductive Dechlorination (ERD). Long term groundwater monitoring will also be performed. A Land Use Control consisting of a State Land Use Covenant and deed restriction will be recorded on the title to the property to limit human exposures for contaminants left in place in soil above levels considered protective of unrestricted use of the Site, and will include the following restrictions:

- No first floor residences or daycare facilities;
- No hospital or schools;
- No growing of food;
- Where concentrations of groundwater COCs are above their MCL, no use of underlying groundwater;
- No excavation in contaminated soil without a Soil Management Plan and DTSC approval.

The total estimated cost associated with implementation of this alternative is approximately \$5,438,000, which includes capital costs of \$4,452,000, and operations and maintenance (O&M) costs of \$986,000.

1.0 INTRODUCTION

MACTEC Engineering and Consulting, Inc. (MACTEC), on behalf of BP PLT-I, LLC (BP), is pleased to submit this Feasibility Study/Remedial Action Plan (FS/RAP), which describes the preferred remedial actions necessary to address soil and groundwater contamination at the Schlage Operable Unit (Schlage OU), and soil contamination in the San Francisco County portion of the Universal Paragon Corporation (UPC) Operable Unit (UPC OU), located in San Francisco, California (the Site) (Figures 1-1 and 1-2).

A California Department of Toxic Substances Control (DTSC) Consent Order signed in 2008 establishes legal and administrative responsibilities and procedures for cleanup of chemical releases at the Site. Operable units for the Site were defined in the Consent Order (*DTSC, 2008*) as follows. The Schlage OU is defined as the former Schlage Lock site in addition to soil and groundwater impacted with volatile organic compounds (VOCs) located within the northern portion of the former Southern Pacific Brisbane Rail Yard – Operable Unit 1 (former SP OU-1). The UPC OU is defined as soil and groundwater on the former SP OU-1 that is impacted with chemicals other than VOCs. The former SP OU-1 is wholly incorporated into the Schlage and UPC OUs and no longer exists as a separate OU. For the purposes of this FS/RAP the “Site” consists of the groundwater portion of the Schlage OU, and the soil portions of both the Schlage and UPC OUs that are located within the City and County of San Francisco. The former Schlage Lock site is located north of Sunnysdale Avenue and east of Bayshore Boulevard, at 2401-2555 Bayshore Boulevard in San Francisco. The former SP OU-1 portion of the Site is located north of Geneva Avenue and east of Bayshore Boulevard, in San Francisco and Brisbane.

The remedial actions described in this FS/RAP were selected to address contaminated soil and groundwater at the Site, and are based on the remedies developed to meet remedial action objectives (RAOs) for redevelopment and occupancy of the Site, including potential future beneficial uses of Site groundwater.

1.1 Purpose of this Feasibility Study/Remedial Action Plan

This section describes the purpose of this FS/RAP, which is to comply with the provisions of the California Health and Safety Code (HSC) Section 25356.1 by assessing Site information and identifying the preferred remedies for the Site. This FS/RAP provides the following components specified in the California Environmental Protection Agency, DTSC Guidance Document No. EO-95-007-PP, Remedial Action Plan Policy (*DTSC, 1995*):

- Site background, including a summary of Site history, Site use, previous investigations, and previous removal actions;
- Summary of Site risks, including an overview of the extent of site contamination and chemicals of concern (COCs), the risks to human health and/or the environment, and the determination of cleanup levels;
- Summary and evaluation of remedial technologies considered, the development of remedial action alternatives, a summary of the alternatives evaluated, a description of the preferred remedy, and the basis for the remedy selection; and
- Summary of public relations activities, including a solicitation for public review and comments on the preferred remedies.

1.2 FS/RAP Organization

This FS/RAP was prepared in accordance with DTSC Guidance Document No. EO-95-007-PP, *Remedial Action Plan (RAP) Policy* (DTSC, 1995) and the U.S. Environmental Protection Agency's (EPA's) *A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents* (EPA, 1999). This report is organized as follows:

- **Section 1.0, Introduction:** Discusses the purpose of the document; presents the report organization; outlines the regulatory framework under which this work is being performed; discusses the non-binding allocation of responsibility (NBAR) process; and presents the project schedule.
- **Section 2.0, Site Background:** Summarizes and discusses the history of the Site; outlines UPC's redevelopment plans, summarizes the previous investigations and remedial activities, Regional and Site geology and hydrogeology; and the results of the Schlage OU Data Gap Investigation.
- **Section 3.0, Nature and Extent of Contamination:** Summarizes the nature and extent of contamination in soil and groundwater at the Schlage OU, and in soil at the UPC OU, and the site contaminants retained as COCs.
- **Section 4.0, Site-Specific Health Risks:** Summarizes the cleanup levels and goals detailed in Appendix D and Appendix E, based on the assessment of site-specific health risks.
- **Section 5.0, Remedial Action Objectives:** Presents potential Applicable or Relevant and Appropriate Requirements (ARARs) for implementation of remedial actions at the Site, and RAOs developed for cleanup of the Site.
- **Section 6.0, Feasibility Study and Alternatives Analysis:** Describes the screening of the general response actions and corresponding remedial technologies, a summary of the results of the in situ chemical oxidation (ISCO) and enhanced reductive dechlorination (ERD) treatability studies conducted at the Site; and an evaluation and comparison of potentially applicable remedial alternatives. A comparison of estimated costs is presented in Appendix F.
- **Section 7.0, Preferred Remedial Approach:** Summarizes the preferred remedial approach; discusses the excavation and in situ remedial activities; outlines the sampling methodology to confirm cleanup levels have been met following soil and groundwater remedial actions; and outlines post-remediation operation and maintenance plans and Land Use Controls that will be implemented.
- **Section 8.0, Schedule:** Presents the schedule for approval of the FS/RAP, completion of the Remedial Design and Implementation Plan (RDIP), and completion of the remedial actions at the Site.
- **Section 9.0, References:** Presents references to documents cited in this FS/RAP.
- **Appendix A, Summary of Historical Soil Analytical Data:** Presents tables with historical soil analytical data for the Schlage and UPC OUs.

- **Appendix B, Data Gap Investigations and Treatability Studies Documentation:** Presents the objectives of the data gap investigation and groundwater treatability studies conducted at the Site; and summarizes the data gap investigation activities ISCO bench scale activities, and ISCO and ERD treatability study field activities conducted at the Site. Includes an evaluation of the groundwater treatability study results and recommendations for full-scale implementation of ERD. Presents boring logs of wells installed in treatability study areas; field documentation compiled during the data gap investigation and treatability studies; and summary reports prepared by ISOTEC, Inc., the ISCO subcontractor, describing the ISCO bench scale and field treatability studies.
- **Appendix C, Laboratory Analytical Reports:** Presents a compilation of laboratory analytical and geotechnical testing reports for the data gap investigation and the treatability study activities.
- **Appendix D, Risk-Based Soil Gas Cleanup Levels, Schlage OU:** Presents the risk-based soil gas cleanup levels and maximum containment levels (MCLs) for groundwater for the Schlage OU.
- **Appendix E, Risk-Based Target Redevelopment Cleanup Goals, Schlage OU:** Presents the risk-based target redevelopment cleanup goals for soil and groundwater in the Schlage OU.
- **Appendix F, Estimated Cost Summary Tables for Remedial Alternatives:** Provides cost estimates for implementation of the remedial action alternatives evaluated for the Schlage and UPC OUs.
- **Appendix G, Administrative Record List:** Lists the contents of the Administrative Record for the Site.
- **Appendix H, CEQA Documentation:** Contains the DTSC California Environmental Quality Act (CEQA) document for the Site.
- **Appendix I, Responsiveness Summary:** Contains responses to public comments received on the FS/RAP.

1.3 Regulatory Framework

This FS/RAP has been prepared pursuant to California HSC Section 25356.1 in accordance with the DTSC Guidance Document No. EO-95-007-PP, *Remedial Action Plan Policy* (DTSC, 1995). The preferred remedial actions meet the requirements specified in the California HSC Chapters 6.5 and 6.8. The FS/RAP is also consistent with the applicable Federal requirements for the evaluation and selection of a final remedial action as outlined in the EPA's *National Oil and Hazardous Substances Pollution Contingency Plan (NCP)*, 40 Code of Federal Regulations (CFR), Part 300.400 (EPA, 1990). Although the Site is not listed on the EPA's Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) National Priorities List (NPL), it is being cleaned up under CERCLA authority which requires that remedial actions at Federal Superfund sites achieve a level of cleanup that is protective of human health and the environment (42.U.S.C. §§9601 *et. seq.*).

In the May 2008 Consent Order, BP assumed responsibility for environmental remediation of the Schlage OU, and UPC assumed responsibility for the UPC OU. The May 2008 Consent Order establishes legal

and administrative responsibilities and procedures for cleanup of chemical releases at the Site and will guide BP and UPC when conducting the remedial actions required by this FS/RAP.

1.4 Preliminary Non-Binding Allocation of Responsibility

The preliminary Non-Binding Allocation of Responsibility (NBAR) process under California HSC Section 25356.1(e) requires DTSC to prepare a preliminary NBAR among all identifiable potentially responsible parties (PRPs). California HSC Section 25356.3(a) allows PRPs with an aggregate allocation in excess of 50% to convene an arbitration proceeding by submitting to binding arbitration before an arbitration panel. If PRPs with over 50% of the allocation convene arbitration, then any other PRP wishing to do so may also submit to binding arbitration.

The sole purpose of the NBAR is to establish which PRPs will have an aggregate allocation in excess of 50% and can therefore convene arbitration if they so choose. The NBAR, which is based on the evidence available to the DTSC, is not binding to anyone, including PRPs, DTSC, or the arbitration panel. If a panel is convened, its proceedings are *de novo* and do not constitute a review of the provisional allocation. The arbitration panel's allocation will be based on the panel's application of the criteria spelled out in HSC Section 25356.3(c) to the evidence produced at the arbitration hearing. Once arbitration is convened, or waived, the NBAR has no further effect, in arbitration, litigation or any other proceeding, except that both the NBAR and the arbitration panel's allocation are admissible in a court of law, pursuant to HSC Section 25356.7 for the sole purpose of showing the good faith of the parties who have discharged the arbitration panel's decision.

As described above, under the May 2008 Consent Order, BP assumed responsibility for environmental remediation of Schlage OU, and UPC assumed responsibility for UPC OU.

1.5 Project Schedule

The remedial technologies considered in this FS/RAP are those that offer the potential for completion of remedial activities within a reasonable time period to allow redevelopment of the Site to begin. The schedule goal is to have portions of the Site north of Visitacion Avenue ready for redevelopment by October 2010, and portions of the Site south of Visitacion Avenue remediated sufficiently for redevelopment to begin by October 2011. Groundwater monitoring will continue after remediation until concentrations of COCs reach the cleanup levels.

2.0 SITE BACKGROUND

2.1 Site Description

The Site consists of approximately 20 acres in San Francisco, located north of Sunnydale Avenue, between Bayshore Boulevard on the west, and the Union Pacific/Joint Powers Board railroad tracks on the east, and Blanken Avenue to the north (Figure 1-1). The Site consists of the former Schlage Lock facility and the former SP OU-1 (Figure 1-2). The surface elevation of the Site ranges from approximately 10 to 50 feet above mean sea level (AMSL).

The former Schlage Lock facility is located north of Sunnydale Avenue and east of Bayshore Boulevard, at 2401-2555 Bayshore Boulevard in San Francisco, and is the location of the former Schlage Lock Company manufacturing facility. The former Schlage Lock facility consists of San Francisco County Tax Assessor Parcel Numbers 30-5087-003-001, 30-5087-003A-01, 30-5099-014-01, 30-5100-010-01, 30-5100-002-01, 30-5100-003-01, and 30-5101-007-01. This property has a recorded area of 12.66 acres (*DTSC, 2008*).

The former Southern Pacific (SP) Brisbane Rail Yard portion of the Site is located north of Geneva Avenue and east of Bayshore Boulevard, in San Francisco and Brisbane. SP OU-1 consists of the northern portion of the former Brisbane Rail Yard and includes all or portions of the following County Tax Assessors Parcels: San Francisco County Tax Assessor Parcel Numbers 30-5107-001-01, 30-5101-006-01, 30-5087-004-01, 5107-003, 5107-004, together with easements for access, railroad rights of way and spur tracks, and portions of San Mateo County Tax Assessor Parcel Number 005-340-060. Approximately 7 acres in San Francisco are within the Site. This FS/RAP does not address soil on the San Mateo County parcels.

2.2 Historical Use Summary

The Schlage Lock Company manufactured door hardware and lock parts at the San Francisco facility from 1926 to 1999. Ingersoll-Rand acquired the company in 1974. Schlage Lock started its operations in a building known as Plant 1. The size of the facility was expanded by the construction of Plant 2 in 1942, Plant 3 in 1950, and lastly Plant 1X in 1963. The manufacturing processes conducted at the plant included stamping and machining metal alloys; deburring brass, bronze, nickel, silver and steel parts; electroplating; and cleaning brass and bronze parts with Safety Kleen 150, a petroleum naphtha solvent. The plant ceased operation in December 1999.

In 1980, Pacific Lithograph Company acquired Plant 3. Pacific Lithograph used solvent products in lithographic processing until 1993. In 1995, Touch-Plate International, a Schlage subsidiary, acquired the Plant 3 and 3X Buildings from Pacific Lithograph. The Schlage Lock Company ceased all manufacturing at the Site in 1999 and removed all of its equipment, except for several underground storage tanks (USTs) that were closed in place under a permit from the San Francisco Department of Public Health (SFDPH). The closed in place USTs are scheduled to be removed prior to site development.

UPC acquired the Schlage Lock property from Ingersoll Rand in May 2008 as part of a litigation settlement. Buildings remain on the Site, but are slated for demolition to facilitate redevelopment of the Site. Removal of hazardous materials (e.g., lead based paint and asbestos) from inside the buildings was completed in March 2009 to prepare the buildings for demolition, which began in April 2009.

The SP OU-1 portion of the Site was acquired by Southern Pacific Transportation Company (SPTC) in 1896. SPTC operated the former Brisbane Rail Yard from 1914 through 1960. The property was used for major railcar rehabilitation, locomotive maintenance operations, and material transfer operations. Tuntex USA, Inc. was granted title to the San Francisco parcels of the SPTC property in August 1990. Tuntex USA, Inc. changed its corporation name to UPC effective January 1, 1997. UPC holds title to the San Francisco portions of the OU-1 property. Other than remediation activities, no manufacturing operations have occurred on the SP OU-1 property since it was acquired by UPC. The San Francisco portion of the SP OU-1 has been rented periodically since before the transfer of the property to its current owner, for various temporary storage uses by different companies, including storage of semi-truck trailers, landscape maintenance, and a small truck repair shop.

2.3 UPC Redevelopment Plan

UPC plans to redevelop the Site in accordance with an Environmental Impact Report (EIR) certified by the San Francisco Redevelopment Agency on December 16, 2008 and the Planning Commission on December 18, 2008. Figure 2-1 presents the proposed redevelopment plan for the Site in accordance with the certified EIR, which consists of the following three redevelopment zones, which are consistent with the plans approved by the San Francisco Planning Department:

- Zone 1 – Public open space on grade.
- Zone 2 – Residential over commercial podium construction.
- Zone 3 – Residential over podium parking and street level commercial construction.

2.4 Site Investigations

Investigations to assess the nature and extent of contaminants have been conducted on the Site, with regulatory oversight, beginning in 1982. Historical soil analytical data is presented in Appendix A. A compilation of cumulative water level and water quality data from groundwater monitoring wells at the Site is presented in the fourth quarter 2008 groundwater monitoring report (*MACTEC, 2009b*). A description of the nature and extent of soil and groundwater contamination is presented in Section 3.1, and the COCs identified in soil at the Schlage and UPC OUs, and groundwater at the Schlage OU, are presented in Section 3.2.

Previous Site Investigations

Multiple previous investigations and assessments have been conducted at the Site since 1982. During these activities, more than 100 borings, 145 groundwater monitoring, soil vapor extraction (SVE), soil gas monitoring points, and groundwater extraction wells were installed and sampled at the Site (*T&R, 2001a*). Soil and groundwater were analyzed for one or more of the following: VOCs, benzene, toluene, ethyl benzene, and xylenes (BTEX), metals, cyanide, and total petroleum hydrocarbons (TPH). The results of these investigations are summarized below.

Plant 2 Investigations 1982 - 1985

The objective of these investigations was to evaluate concentrations of priority pollutant metals in soil and groundwater near the former plating operations in Plant 2. The groundwater samples contained detectable concentrations of chromium, lead, mercury, nickel, and copper (*T&R, 2001a*).

Preliminary Site Assessment of Pacific Lithograph Building - 1993

In August 1993, an investigation of the Pacific Lithograph Building was conducted. Shallow soil samples were collected from under the Plant 3 degreasing room sump, from immediately outside the former strip and degreasing rooms and opposite the sump, and from the southeastern corner of the Plant 3X building near the loading dock. Soil samples were analyzed for VOCs, chlorinated VOCs (CVOCs), and the CAM 17 metals (California Code of Regulations (CCR) Title 22 California Assessment Manual). Tetrachloroethene (PCE) and trichloroethene (TCE) were detected in the sample from under the Plant 3 sump at elevated concentrations (T&R, 1994).

Preliminary Endangerment Assessment - 1994

In 1994, a Preliminary Endangerment Assessment was conducted in the portion of the Schlage OU south of Visitation Avenue. The primary objectives of this investigation were to: 1) conduct additional delineation of contamination; 2) investigate the soil beneath suspected on-site chemical use and storage areas at Pacific Lithograph; and 3) further assess the quality of shallow groundwater upgradient of the Pacific Lithograph Building (i.e., upgradient of Schlage Plants 3 and 3X). Groundwater samples were obtained from soil borings and a concrete-lined floor pit inside of the Pacific Lithograph Building. Depending on location, water samples contained detections of halogenated VOCs, metals, BTEX, TPH as gasoline (TPH-g), TPH as diesel, and Oil and Grease (T&R, 1994).

Interim Remedial Investigation - 1995

This investigation included historical research of the Schlage, Bodinson, Norton Trust, and SPTC properties as well as an assessment of the Schlage and Sunquest properties. Samples confirmed the presence of CVOCs, TPH, and metals in groundwater and soil (T&R, 1995a).

Plant 3X Loading Dock Area Investigation - 1997

The objective of this 1997 investigation was to evaluate the lateral extent and distribution of contamination, and to evaluate geotechnical conditions relevant to design of potential remedial actions. The assessment consisted of a screening-level passive soil gas (PSG) survey followed by confirmatory soil and groundwater sampling at selected boring locations (T&R, 1998a).

Maintenance Shed Area Investigation - 1998

Specific objectives of this assessment were to evaluate potential sources within the area of the maintenance shed. A PSG was conducted at 20 locations, and soil gas samples were analyzed for CVOCs. The results of the investigation indicated that no vadose zone source was present in the area (T&R, 1998b).

Field Investigation Report, Schlage/Tuntex Sites - 1998

The primary purpose of this investigation in September 1998 was additional characterization of CVOC distribution in groundwater near the boundary between the Schlage and Sunquest properties. The investigation included depth-discrete groundwater sampling, soil sampling, and a PSG survey (T&R, 1998c).

Preliminary Soil and Groundwater Investigation Plants 1, IX and 2 - 1998

This investigation was conducted to evaluate the nature and extent of potential contamination at Plants 1, IX, and 2 north of Visitation Avenue. Soil, soil gas, and groundwater samples were collected and were analyzed for VOCs, TPH, total cyanide, pH, cadmium, chromium, hexavalent chromium, lead, nickel, and zinc (T&R, 1998d).

Additional Groundwater Characterization - 2000

The general purpose of the characterization program conducted in December 1999 and January 2000 was to further delineate the extent of VOCs in groundwater and to collect data to support a Human Health Risk Assessment (HHRA) and a groundwater feasibility study consistent with the planned redevelopment of the Schlage property (T&R, 2001b).

Remedial Investigation Report Joint Groundwater Operable Unit – 2002

The objective of the investigation was to evaluate the nature and extent of groundwater contamination beneath both the Former Schlage Lock and the SP OU-1 properties. The investigation: 1) evaluated the hydrogeology and geology of the Site as it relates to groundwater and contamination migration; 2) compiled all available groundwater chemical data into a single document along with a representative summary of hydrogeological data and information; 3) characterized the nature and extent of contamination in the groundwater at the Site; 4) determined and evaluated transport routes of the chemical substances present in groundwater at the Site; and 5) developed a foundation of data necessary for the preparation of a Risk Assessment, and subsequent RAP or (RAW) for the groundwater at the Site. The chemicals of concern at the Site were identified as CVOCs located in three water-bearing zones: A-Fill, A-Sand, and B-Sand. The report also presented an outline of the objectives of the groundwater remedy (i.e., pump and treat) that was operating at the time (B&M, T&R, 2002).

Remedial Action Plan – 2005

A RAP was prepared by Brown and Caldwell, and Treadwell & Rollo, to assess whether revisions were required to a groundwater RAP submitted in 1993 (B&M and T&R, 2005). The report also was intended to address potential residual dense non-aqueous phase liquids (DNAPL) that may be trapped and immobile locally within the pore spaces of the aquifer sands, or adsorbed onto the silt and clay minerals in the aquitard layers. Four remedial alternatives were developed and evaluated for remediating contaminated groundwater. The remedial alternative proposed: 1) groundwater extraction from ten groundwater extraction wells, including seven existing wells plus three additional wells added to enhance recovery in high concentration zones; 2) ex situ treatment of extracted groundwater by activated carbon to remove liquid and vapor phase VOCs; 3) discharge of treated water to the local sanitary sewer; and 4) institutional controls (B&M and T&R, 2005).

Groundwater Monitoring

Groundwater monitoring has been carried out on the Schlage OU since 1995, in accordance with the Operation and Maintenance agreement between the DTSC and Sunquest. From 1995 through the present, groundwater monitoring has been conducted at various times by Recon Environmental Corp., SCS Engineers, Burns & McDonnell, and MACTEC. Groundwater samples from all of the wells have been analyzed for CVOCs. Groundwater from designated wells also has been analyzed for TPH, total chromium, hexavalent chromium, BTEX, and Methyl Tertiary Butyl Ether (MTBE).

Since the third quarter of 2008, MACTEC has conducted quarterly groundwater monitoring events for the Schlage OU on behalf of BP, in accordance with BP's contractual agreement with UPC for completing environmental remediation of the Schlage OU. Groundwater monitoring was performed in accordance with MACTEC's *Revised Proposed Long Term Groundwater Monitoring Plan (MACTEC, 2008c)*.

Data Gap Investigation

From July 2008 through March 2009, MACTEC conducted data gap investigation and treatability study activities in accordance with the *Data Gap Investigation and Treatability Studies Work Plan, Schlage OU, San Francisco and Brisbane, California (MACTEC, 2008a)* in order to evaluate current Site conditions after operation of the Soil Vapor Extraction and Treatment System (SVETS) and Groundwater Extraction and Treatment System (GWETS) described in Section 2.5. A summary of the data gap investigation conducted at the Schlage OU in fall 2008 is presented in Appendix B. The objectives of the data gap investigation activities were to:

- Compare the current concentrations of CVOCs in soil with historical concentrations collected prior to SVE treatment within the SVE treatment system area of influence (SVETS).
- Assess the current CVOC concentrations between the SVETS area and the area around soil boring TR-21 and groundwater monitoring wells SW-08 and LF-10B.
- Assess the current CVOC concentrations in Upper and Lower A-Zone groundwater at the location of the former degreasing room/strip room areas (i.e., the historical primary source).
- Assess the CVOC concentrations in Upper and Lower A-Zone groundwater between the SVETS area and the area around soil boring TR-21 and groundwater monitoring wells SW-08 and LF-10B.
- Classify soils based on soil physical property (geotechnical) testing.

The chemical analytical results from the data gap investigation indicate the following:

- In soil samples collected from soil borings MEC-1 and MEC-2 in the SVETS area after operation of the SVETS, the maximum reported PCE and TCE concentrations of 1 milligram per kilogram (mg/kg) and 0.23 mg/kg, respectively, are significantly lower than maximum concentrations reported prior to SVETS operation (95 mg/kg and 100 mg/kg, respectively), in soil boring SVE-4, located within close proximity of the MEC borings.
- In soil samples collected from soil borings MEC-3 through MEC-6 in the area between the SVETS area and the area around TR-21, SW-08, and LF-10B, PCE and TCE concentrations are generally lower than those reported in the SVETS area.
- Reported PCE and TCE concentrations in groundwater were higher in the Lower A-Zone than in the Upper A-Zone, which is consistent with trends observed from routine groundwater monitoring events.
- The highest total combined PCE and TCE concentrations in groundwater (123,000 micrograms per liter [$\mu\text{g/L}$]) were reported in a Lower A-Zone groundwater sample collected from boring MEC-5, near well LF-10B; the well location where the highest combined PCE and TCE concentrations have consistently been reported during routine groundwater monitoring events.

The results of the geotechnical testing show the pH, soil types and porosity appear favorable to in-situ remediation. Additionally, the medium to fine sand beneath the Site have relatively low percentages of silt and clays, which appears conducive for remediation of CVOCs through aeration of soil stockpiles.

2.5 Previous Remedial Activities

Remedial activities were initiated in 1987, as summarized below.

Primary and Secondary Source Removal

UST Removals

In 1987, four diesel USTs located at 2401 Bayshore Boulevard were closed-in-place by filling with concrete, and one diesel UST was converted into a storage tank for boiler water (L&W, 1989). Two of the abandoned in place USTs were located in the Plant 2X building under ramps near Plant 2, and the other two were located outside the Plant 2 building in a parking area along Bayshore Boulevard (MACTEC, 2008d). A certificate of completion letter from the SFDPH dated January 11, 1988, stated that all work was completed satisfactorily, and that no further investigation or cleanup was required. In 1989, one 300-gallon diesel UST was removed in accordance with the City of San Francisco Department of Public Health regulations (L&W, 1989). A certificate of completion letter from the SFDPH dated January 23, 1990, stated that all work was completed satisfactorily, and that no further investigation or cleanup was required. The closed in place USTs and converted storage tank are scheduled to be removed prior to site development.

Soil Excavation

In 1996, several sumps and contaminated floor slabs were removed from the former degreasing room and strip room areas of Plant 3 on the Schlage Lock property, along with approximately 80 cubic yards of CVOC-contaminated soil (T&R, 1995b, 1996). In 1993, VOC- and petroleum hydrocarbon-impacted soils were excavated adjacent to the southwest Site boundary along the joint sewer line in the area of the former oil/water separator as part of a removal action within the former SP OU-1 (B&M and T&R, 2005, and B&M, 2006a).

Soil Vapor Extraction and Treatment System (SVETS), and Groundwater Extraction and Treatment System (GWETS)

Based on the results of previous remedial investigations conducted at the Site that indicated significant CVOC contamination was present in soil and groundwater at the Site, the SVETS and GWETS were constructed and operated as required by DTSC and summarized in the *Removal Action Design and Implementation Work Plan* (Geomatrix, 1995), and the *Draft Remedial Action Plan, Joint Ground Water Operable Unit, Schlage Site, San Francisco, California* (B&M, 2003).

SVETS

In 1999, a SVETS was installed in the vicinity of the former degreasing room in Plant 3 at the former Schlage Lock facility. The SVETS consisted of eight extraction wells, one piezometer, and 44 soil vapor monitoring points. Treated vapor was discharged under a permit with the Bay Area Air Quality Management District (BAAQMD). The SVETS was decommissioned in September 2008, with DTSC approval. The system equipment was removed, and salvaged and/or disposed offsite. The extraction wells, the piezometer, and the soil vapor monitoring points were destroyed in January 2009. The SVETS

removed approximately 3,830 pounds (1.91 tons) of CVOCs during operation from 1999 through September 2008.

GWETS

The GWETS was constructed in 1994 and became operational in 1995. The GWETS operated from 1995 until July 2008, when the system was turned off with DTSC approval to ensure the operations did not impact the pilot in situ treatability tests conducted at the Site in fall of 2008 (Appendix B). Extracted groundwater was treated by adsorption using granular activated carbon (GAC) and the treated water was discharged to a sanitary sewer under an existing industrial wastewater discharge permit. The primary functions of the GWETS were to establish hydraulic control of the CVOC impacted groundwater and perform CVOC mass removal. As of June 2008, approximately 5,135 pounds (2.57 tons) of PCE and 668 pounds (0.33 tons) of TCE, the primary CVOCs found in groundwater have been removed by the GWETS. The treatment system is used intermittently to process well development and well purge water, and rinsate from field activities.

2.6 Regional Geology and Site Geology

2.6.1 Regional Geology

The Site is near the San Francisco Bay, and in the recent geologic past was part of the Bay. The near surface geology has largely been controlled by the changing morphology of the Bay Area over geologic time.

The Site is located upon Quaternary-age (less than approximately 2 million years old) dune, alluvial (stream-deposited), and estuarine sediments, with some man-made fill. This sequence of sediments reflects a gradual, episodic rise in relative sea level (and Bay level) over the last few million years.

Franciscan bedrock crops out at elevations above approximately 100 feet immediately north of the Site, and at lower elevations on the east side of Tunnel Avenue, east of the Site. The Franciscan assemblage in the area is reportedly generally sheared and locally highly weathered, and consists of greenstone (a volcanic rock), interbedded chert and shale (sedimentary rocks formed in the deep ocean), and interbedded sandstone and shale (formed in medium to shallow-depth ocean). These rocks have subsequently been partly metamorphosed, sheared, and uplifted by tectonic activity. No Franciscan rocks are known to crop out on the Site, but occur at a depth of about 50 to 60 feet below ground surface (bgs) beneath the Site.

2.6.2 Site Geology

Based on borings drilled for the subsurface investigations at this Site, the principal geologic strata at the Site are as follows:

- A-Fill;
- Bay Margin Deposits;
- A-Sand;
- A-Aquitard; and

- B-Sand.

Maps depicting the location of a generalized geologic cross section, and a geologic cross-section A-A' are presented on Figures 2-2 and 2-3, respectively.

The A-Fill ranges in thickness from 0 to 15 feet, and consists of heterogeneous mixture of clay, silt, coarse sand, and gravel with fragments of brick, stone, and wood from the 1906 San Francisco earthquake rubble. The A-Fill was placed directly on the marine sediments that comprise the Bay Margin deposits. Reported values of A-Fill hydraulic conductivity range from 6×10^{-2} centimeters per second (cm/sec) to 1.4×10^{-5} cm/sec (*B&M and T&R, 2002*).

The Bay Margin deposits consist of two principal lithologies, a low-permeability clay locally termed Bay Mud and a somewhat more permeable silty sand. The silty sand unit represents a near-shore facies. This unit is typically brown, with small amounts of clay, and interbedded with significant amounts of organic matter (roots, stems, etc.) and fossil shells in some places. The Bay Mud facies consists of a grayish green to black, high plasticity clay with occasional sand and silt lenses, deposited on the floor of the old San Francisco Bay. The northern edge of this facies is approximately coincident with Sunnydale Avenue and the "Sunquest building" as shown on Figure 2-2, trending east-southeast, and thickening toward the south. In the vicinity of the car wash at Sunnydale Avenue and Bayshore Boulevard, the edge of the facies turns southward. In borings drilled at the Site, the thickness of the Bay Margin unit ranges from zero to approximately 25 feet thick. Further, the unit typically occurs at depths of approximately 3 to 15 feet bgs. The Bay Margin deposits typically overlie a unit referred to as A-Sand. Reported values of the hydraulic conductivities of the Bay Mud facies of the Bay Margin units range from 9.5×10^{-7} cm/sec to 1.5×10^{-8} cm/sec (*B&M and T&R, 2002*).

The A-Sand is a yellow-to-brown, fine-to-medium-grained quartz sand with some minor interstitial silt and clay. The sand is medium dense to very dense at depth. The thickness of the A-Sand beneath the Site ranges from approximately 14 to 33 feet thick. The A-Sand overlies and is separated from the B-Sand by a southward dipping clay unit referred to as the A-Aquitard. Reported values of the A-Sand hydraulic conductivities range from 8.8×10^{-3} cm/sec to 3.5×10^{-5} cm/sec (*B&M, T&R, 2002*).

The A-Aquitard is a yellow to brown, stiff, low-plasticity clay to sandy clay with occasional lenses of cleaner sand. The unit dips southward and the depth to the top of this unit is approximately 20 feet bgs.

The B-Sand unit occurs below the A-Aquitard and is similar to the A-Sand in lithology. The top of the B-Sand has been encountered at depths ranging from 55 to 60 feet bgs.

2.7 Site Hydrogeology

2.7.1 Upper and Lower A-Zones

Groundwater at the Site occurs at shallow depths within unconsolidated sediments; depths ranged from approximately 2.61 to 28.48 feet bgs in the fourth quarter 2008 groundwater monitoring event. The Bay Mud facies of the Bay Margin deposits is intermittently present across the Site (Figure 2-3); therefore, groundwater occurs in unconfined conditions within the A-Fill and the underlying A-Sand, and the groundwater in the two units is in direct hydraulic communication. In this portion of the Site, A-Zone monitoring wells screened in the upper interval are classified as Upper A-Zone wells, and those screened in the lower interval of the A-Zone are classified as Lower A-Zone wells. In the fourth quarter 2008 monitoring event, the horizontal hydraulic gradient in the Upper A-Zone was estimated to be

approximately 0.01 feet per foot, and in the Lower A-Zone was estimated to be approximately 0.012 feet per foot (Figures 2-4 and 2-5).

The groundwater contours presented in the Upper and Lower A-Zone aquifers are similar north of the Bay Margin Deposits, suggesting that hydrogeologic differentiation between the A-Zone aquifer into Upper and Lower Zones is an artificial construct in this portion of the Site (MACTEC, 2009b). In the southern portion of Schlage OU, some wells screened within the Lower A-Zone exhibit artesian conditions (Figure 2-3). The confining units that over and underlay the B-Zone result in hydraulic heads in this aquifer that are greater relative to head in the A-Zone aquifer units. Figure 2-3 shows this relative difference in heads, as the potentiometric surface of B-Zone is at least 10 feet higher than that of the Lower A-Zone throughout the Site. However, localized areas of artesian conditions occur within the Lower A-Zone, where the confining unit separating the A-Zone and B-Zone is discontinuous (i.e., near MEC-13LA and GT-1). Groundwater elevation at MEC-13LA, for example, is reported to be approximately 24 feet AMSL during well installation activities. This is similar to elevations at nearby SW-07B, indicating hydraulic communication between the A and B-Zones in this region of the site. Where artesian conditions are observed, the apparent hydraulic head is approximately 3 feet above ground surface.

A combined stormwater/sanitary sewer runs along Sunnydale Avenue (Figures 2-2 and 2-3). In the Lower A-Zone, groundwater flow is toward the combined sewer within its vicinity (Figure 2-5). In the Upper A-Zone, groundwater flow redirection toward the combined sewer is not evident from the measured groundwater elevations in wells located within the vicinity of the combined sewer.

According to the 2002 Joint Remedial Investigation (RI) Report prepared by Burns and McDonnell and Treadwell and Rollo, the estimated infiltration rates from the A-Zone into the sewer were several orders of magnitude lower than the base flow in the sewer. In addition, CVOC concentrations did not exceed the discharge limits of the GWETS in samples collected from the sewer with the groundwater pumping system offline. Based on these data, the RI Report concluded that infiltration rates relative to the baseflow in the sewer are not significant (B&M, T&R, 2002).

Well construction details are presented in Table 2-1. Upper A-Zone well screen intervals vary depending on changes in site elevation and depth to groundwater at the Site, and range from 5 to 20 feet bgs. Lower A-Zone well screen intervals occur generally at 20 to 40 feet bgs. B-Zone wells are generally screened from 45 to 65 ft bgs, with some wells screened deeper.

Summaries of groundwater elevation and analytical data, including the fourth quarter 2008 groundwater monitoring event, are presented in Tables 2-2 and 2-3, respectively.

2.7.2 B-Zone

The B-Sand is separated from the A-Sand by low permeability sediments of the A-Aquitard. Groundwater in the B-Sand (i.e., the B-Zone) also occurs under confined conditions with a significant upward gradient from the B-Sand to the A-Sand. Some B-Zone wells exhibit artesian flow. Groundwater flow in the B-Zone is not affected by the Sunnydale Sewer.

In the fourth quarter 2008 monitoring event, the horizontal hydraulic gradient in the B-Zone was estimated to be approximately 0.008 feet per foot (Figure 2-6).

2.8 Groundwater Use

Groundwater at the Site is not used for domestic or industrial purposes, but is considered a potential drinking water aquifer. The City of San Francisco provides the Site and surrounding residences and businesses with public water. Water service originates from the Hetch Hetchy Reservoir in the Sierra Nevada Mountains (*T&R, 2005*). However, groundwater is to be considered for potential use for municipal or domestic water supply, unless total dissolved solids (TDS) exceed 3,000 milligrams per liter (mg/L) per the State Water Resources Control Board policy (Resolution 88-63). Historically monitoring wells on the Site were analyzed for TDS with observed concentrations ranging from 300 to 4,400 mg/L (*B&M, 2006c*).

3.0 NATURE AND EXTENT OF CONTAMINATION

This section presents a summary of the nature and extent of contamination in soil and groundwater at the Schlage OU, and in soil at the UPC OU, and identifies the site contaminants retained as COCs.

3.1 Nature and Extent of Contamination

3.1.1 Schlage OU

A summary of the nature and extent of contamination in shallow soils (i.e., above the groundwater table) and groundwater within the Schlage OU is presented below.

3.1.1.1 Shallow Soils

Soil samples have been collected at the Schlage OU since 1994. Detailed compilation of soil sampling results at the Schlage OU is presented in the Soil Operable Unit, Remedial Investigation Report (*T&R, 2001a*). A brief outline of the reported CVOCs, BTEX, TPH-g, and metals detected is presented below.

CVOCs: PCE and TCE are the primary CVOCs reported at the Schlage OU. Historically, soil samples from saturated and unsaturated zones were analyzed for CVOCs. The historical high PCE and TCE concentrations in soils reported in the former degreasing room/strip room areas, which are within the influence of the SVETS area, are not included in the concentration ranges presented below because this area has since been remediated using SVETS, and historical concentrations are not anticipated to be reflective of current conditions.

Figures 3-1 and 3-2 present the isoconcentration contours of PCE and TCE in soils at the Schlage OU.

- PCE concentrations ranged from below laboratory limits to 8 mg/kg.
- TCE concentrations ranged from below laboratory reporting limits to 16 mg/kg.
- Cis-1,2-DCE concentrations ranged from below laboratory reporting limits to 0.65 mg/kg.

1,1,1-trichloroethane, 1,1,2-trichloroethane, carbon tetrachloride, and methylene chloride were reported in one or more soil samples collected in the southern portion of the Site (Appendix A). No other CVOCs were reported above laboratory reporting limits in soil samples collected at the Schlage OU.

BTEX/TPH-g: BTEX/TPH-g analytical data collected from the Schlage OU are presented in Appendix A.

- Benzene, ethylbenzene, and xylenes were not reported above laboratory reporting limits in collected soil samples.
- Toluene was reported at a concentration of 0.006 mg/kg in multiple soil samples.
- TPH-g concentrations ranged from below laboratory reporting limits to 2,880 mg/kg in soil samples. Only one soil sample collected at 1.5 feet bgs in TR-67 soil boring had a TPH-g concentration (2,880 mg/kg) in excess of 1,000 mg/kg. At this location, the sample collected at 5 feet bgs did not report TPH-g above laboratory reporting limits.

Metals: Heavy metals, including arsenic, chromium, lead, cadmium, and mercury were reported in soil samples collected at the former Schlage Lock facility.

- Arsenic concentrations ranged from below laboratory reporting limits to 8 mg/kg (TR-2) in soil samples.
- Total chromium concentrations ranged from below laboratory reporting limits to 340 mg/kg (P-1). Hexavalent chromium concentrations ranged from below laboratory reporting limits to 6 mg/kg (P-1).
- Lead concentrations ranged from below laboratory reporting limits to 5,600 mg/kg (TR-24).
- Cadmium concentrations ranged from below laboratory reporting limits to 39 mg/kg (TR-9).
- Mercury concentrations ranged from below laboratory reporting limits to 36 mg/kg (TR-4).

3.1.1.2 Groundwater

Groundwater at the Site has been historically identified as consisting of the following zones according to aquifer characteristics: Upper A-Zone; Lower A-Zone, and B-Zone. The results of investigations and groundwater monitoring at the Site are summarized below by these three zones.

Figures 3-4 through 3-6 present the total of PCE, TCE, cis-1,2-DCE, and vinyl chloride (VC) isoconcentrations in the Upper A-Zone, Lower A-Zone, and B-Zone groundwater, respectively, based on the fourth quarter groundwater monitoring data (MACTEC, 2009b). If data were available from wells not included in the current groundwater monitoring program, the maps incorporate the most recent data from historical measurements over the two year period of 2007 to 2008.

3.1.1.2.1 Upper A-Zone Groundwater

The Bay Mud facies within the bay margin deposits is typically absent, and the Upper A-Zone groundwater occurs within the unconsolidated sediments of the A-Fill/A-Sand. The wells screened in the upper interval are referred to as Upper A-Zone wells. Wells screened in the Upper A-Zone range from approximately 5 to 10 feet bgs in the north (near SW-02UA) to approximately 10 to 23 feet bgs near the San Francisco/San Mateo County line (near SW-11UA).

To the south of the county line, where the Bay Mud facies separates the A-Fill from the A-Sand, groundwater contained within the A-Fill is referred to as Upper A-Zone groundwater. The wells screened within the Upper A-Zone are referred to as Upper A-Zone wells, and the well screens range from 4 to 8.5 feet bgs to the south of the county line (near LF-1AR) and from 3 to 10 feet bgs in the south (near MK-5A).

CVOCs

Historically, the primary CVOCs detected above laboratory reporting limits in Upper A-Zone groundwater were PCE, TCE, DCE, and VC.

During the fourth quarter 2008 groundwater monitoring event, the ranges in concentrations of the primary CVOCs in Upper A-Zone groundwater were:

- PCE concentrations ranged from less than reporting limits to 4,900 µg/L in monitoring well LF-11A.
- TCE concentrations ranged from less than reporting limits to 9,500 µg/L in monitoring well LF-12A.
- Cis-1,2-DCE concentrations ranged from less than reporting limits to 760 µg/L in monitoring well LF-11A.
- VC concentrations ranged from less than reporting limits to 230 µg/L in monitoring well LF-11A.

Cis-1,2-DCE and vinyl chloride concentrations in the Upper A-Zone in excess of the values presented above were observed during ERD pilot testing activities conducted near monitoring well SW-07UA. These concentrations are considered transient and are expected to attenuate as the pilot test proceeds.

TPH and BTEX Compounds (including methyl tertiary butyl ether [MTBE])

TPH and BTEX compounds have been historically monitored in Upper A-Zone groundwater at monitoring well MW-5AF. Since its installation in first quarter 2007, TPH and BTEX compounds (including MTBE) have not been detected in excess of laboratory reporting limits in this well.

Metals

Heavy metals including chromium and nickel have been historically monitored in Upper A-Zone groundwater monitoring wells on the Schlage OU.

- Analytical results for total chromium in the fourth quarter 2008 ranged from less than reporting limits to 31 µg/L in monitoring well SW-06UA.
- Analytical results for hexavalent chromium in the fourth quarter 2008 ranged from less than reporting limits to 17 µg/L in monitoring well SW-02UA.
- Analytical results for nickel in the fourth quarter 2008 ranged from less than reporting limits (<50 µg/L) in monitoring well SW-22UA to 3,000 µg/L in monitoring well SW-06UA.

Following the ISCO pilot test described in Appendix B, hexavalent chromium was detected in excess of the concentrations reported above, in monitoring well LF-10A (27 µg/L), but below the MCL of 50 µg/L for total chromium. This occurrence may potentially be the result of oxidation of trivalent chromium due to injection of an oxidant during the ISCO pilot treatability study near that well, and is expected to return to trivalent chromium over time as subsurface redox conditions return to their pre-injection state. Groundwater samples will continue to be analyzed for hexavalent chromium under the existing groundwater monitoring program.

3.1.1.2.2 Lower A-Zone Groundwater

To the north of the San Francisco/San Mateo County line, where the Bay Mud facies within the bay margin deposits is typically absent, the lower A-Zone groundwater occurs within the unconsolidated sediments of the A-Fill/A-Sand. The wells screened in the lower interval are referred to as Lower A-Zone wells. Wells screened in the Lower A-Zone range from approximately 10 to 15 feet bgs in the north (near

SW-02LA) to approximately 19 to 43 feet bgs near the San Francisco/San Mateo County line (near SW-12LA).

To the south of the county line, where the Bay Mud facies separates the A-Fill from the A-Sand, groundwater contained within the A-Sand is referred to as Upper A-Zone groundwater. The wells screened within the Lower A-Zone are referred to as Lower A-Zone wells, and the well screens range from 37 to 42 feet bgs to the south of the county line (near SW-14LA) and from 17 to 27 feet bgs in the south (near MK-5B).

CVOCs

Historically, the primary CVOCs detected above laboratory reporting limits in Lower A-Zone groundwater were PCE, TCE, DCE, and VC.

During the fourth quarter 2008 groundwater monitoring event, the ranges in concentrations of the primary CVOCs in Lower A-Zone groundwater were:

- PCE concentrations ranged from less than reporting limits to 9,500 µg/L in monitoring well LF-10B.
- TCE concentrations ranged from less than reporting limits to 230,000 µg/L in monitoring well LF-10B.
- Cis-1,2-DCE concentrations ranged from less than reporting limits to 48 µg/L in monitoring well LF-11A.
- VC concentrations did not exceed laboratory reporting limits in wells sampled.

Cis-1,2-DCE and vinyl chloride concentrations in the Lower A-Zone in excess of the values presented above were observed during ERD pilot testing activities conducted near monitoring well SW-07LA. These concentrations are considered transient and are expected to attenuate as the pilot test proceeds.

Metals

Heavy metals including total and hexavalent chromium have been historically monitored in Lower A-Zone groundwater monitoring wells.

- Analytical results for total chromium in Lower A-zone in the fourth quarter 2008 were less than reporting limits.
- Analytical results for hexavalent chromium in the Lower A-Zone in the fourth quarter 2008 ranged from less than reporting limits to 18 µg/L in monitoring well SW-02LA.

3.1.1.2.3 B-Zone Groundwater

B-Zone groundwater comprises the B-Zone aquifer below approximately 55 feet bgs. B-Zone groundwater at the Site is monitored in eight groundwater monitoring wells under the current monitoring program; all of the wells are located in the central portion of the Site.

The highest concentrations of CVOCs in the B-Zone are located near monitoring well SW-08B (combined CVOC concentration of 98.4 µg/L for the fourth quarter 2008).

CVOCs

Historically, the primary CVOCs detected above laboratory reporting limits in B-Zone groundwater were PCE, TCE, cis-1,2-dichloroethene (DCE), and VC.

During the fourth quarter 2008 groundwater monitoring event, the ranges in concentrations of the primary CVOCs in B-Zone groundwater were:

- PCE concentrations ranged from less than reporting limits to 32 µg/L in monitoring well SW-08B.
- TCE concentrations ranged from less than reporting limits to 59 µg/L in monitoring well SW-08B.
- Cis-1-2-DCE concentrations ranged from less than reporting limits to 7.4 µg/L in monitoring well SW-08B.
- VC concentrations were not detected above laboratory reporting limits in wells sampled.

3.1.1.3 Soil Gas

As described in Section 2.5, previous remedial investigations conducted at the Site indicated CVOC contamination was present in soil gas. In 1999, a SVETS was installed in the vicinity of the former degreasing room in Plant 3 at the former Schlage Lock facility to extract and treat soil gas with elevated concentrations of CVOCs. The SVETS was decommissioned in September 2008, with DTSC approval. The SVETS removed approximately 3,830 pounds (1.91 tons) of CVOCs in soil gas during operation from 1999 through September 2008.

From July 2008 through March 2009, MACTEC conducted data gap investigation activities as described in Section 2.4 in order to evaluate current Site conditions after operation of the SVETS. The chemical analytical results from the data gap investigation indicated soil samples collected in the SVETS area after operation of the SVETS had maximum reported PCE and TCE concentrations of 1 mg/kg and 0.23 mg/kg, respectively, that are significantly lower than maximum concentrations reported prior to SVETS operation (95 mg/kg and 100 mg/kg, respectively).

The soil gas data that is available for the Site was collected prior to operation and decommissioning of the SVETS. Cleanup levels for soil gas at the Site were developed as summarized in Section 4.1 to mitigate potential health risks from inhalation of CVOC vapors. Soil gas samples will be collected as part of remediation confirmation sampling activities described in Section 7.3 to document soil gas concentrations and confirm cleanup levels have been met.

3.1.2 UPC OU

A summary of the nature and extent of contamination in soils within the UPC OU is presented below.

Heavy metals, including arsenic, lead, and cadmium were reported at elevated concentrations in soil samples collected at the UPC OU.

- Arsenic concentrations ranged from below laboratory reporting limits to 240 mg/kg (B-8) in soil samples.
- Lead concentrations ranged from below laboratory reporting limits to 810 mg/kg (TR-24).
- Cadmium concentrations ranged from below laboratory reporting limits to 41.2 mg/kg (MW-5B).

Metals in soil have been detected in shallow (0 to 3 feet bgs) and deeper (4 to 6 feet bgs) soils above screening levels in five sampling locations at the Site (Figure 3-3). In addition, x-ray fluorescence (XRF) screening of near-surface (1- to 2-feet deep) samples in support of ongoing litigation between UPC and Union Pacific Railroad indicates more widespread lateral extent of arsenic and lead. Based on this screening program and the relatively few near-surface soil samples that have been collected, the lateral distribution of metals at the Site appears to be more extensive than the previous localized detections, and will require additional soil sample collection and laboratory analyses to confirm XRF indications of elevated arsenic and lead in near-surface soil. Because the XRF data is intended to be for screening purposes, the results have not been included in this FS/RAP.

There is uncertainty relative to the lateral extent of contamination of metals in soil where soil sampling data has not been collected beneath pavement that overlies much of the OU. Figure 3-3 shows the estimated extent of elevated metals contamination in near-surface soils where additional soil sample collection and laboratory analyses is required to confirm XRF indications of elevated arsenic and lead.

3.2 Chemicals of Concern

3.2.1 Schlage OU

3.2.1.1 Shallow Soils

The maximum concentrations of reported chemicals were compared to regulatory screening criteria. VOCs (CVOCs and BTEX), whose maximum concentrations exceeded the EPA Region IX Regional Screening Levels (RSLs) (EPA, 2008) were retained as COCs. PCE and TCE were the only VOCs whose concentrations exceeded the Region IX RSLs (Table 3-1). Although cis-1,2-DCE, trans-1,2-DCE, and VC were not detected above laboratory reporting limits and/or their Region IX RSLs because these VOCs are degradation products of PCE and TCE and maybe formed as a result of breakdown of PCE and TCE, they were also retained as COCs.

Maximum concentrations of metals detected at the Schlage Lock facility were compared with their residential California Human Health Screening Levels (CHHSLs; CalEPA, 2005). Arsenic, cadmium, and lead were the only metals whose concentrations exceeded their residential CHHSLs; therefore, these metals were retained as COCs (Table 3-1).

COCs in soils at the Schlage OU are:

- PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, 1,1-DCE, and VC; and
- Arsenic, cadmium, and lead.

3.2.1.2 Groundwater

Chemicals reported above laboratory reporting limits over the 2-year period between 2007 and 2008 in Upper A-Zone, Lower A-Zone, and B-Zone groundwater were compared with their respective primary MCLs (Table 3-3). Only those chemicals which were reported at concentrations that exceed MCLs were noted as COCs.

CVOCs detected in groundwater above primary MCLs that were retained as COCs at the Schlage OU are:

- PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, VC, 1,1,2-TCA, 1,1-DCA, 1,1-DCE, 1,2-DCA, Carbon tetrachloride, MC, and TCA.

A review of the analytical data from years 2007 and 2008 indicates that besides PCE, TCE, and their degradation products, cis-1,2-DCE, trans-1,2-DCE, 1,1-DCE, and VC, other CVOC detections were isolated and did not significantly exceed screening levels (Table D3-1, Appendix D). Therefore, these compounds were not retained as COCs for site groundwater. However, during site remedial activities, groundwater samples will be tested for CVOCs, including those noted above in addition to PCE/TCE and their degradation products, by EPA 8010. Nickel was the only metal with reported detections above its primary MCL in two of the Site wells (SW-06UA and SW-10UA; Table 3-3).

3.2.2 UPC OU

3.2.2.1 Soils

Similar to Schlage OU, only those metals whose concentrations exceeded residential CHHSLs were retained as COCs for UPC OU (Table 3-2). CVOCs are not COCs in soil at the UPC OU.

COCs in soil at the UPC OU are:

- Arsenic, lead, and cadmium.

4.0 SITE SPECIFIC HEALTH RISKS

This section presents the cleanup levels (CULs) and target redevelopment cleanup goals (TRCGs) developed for COCs present in soil, soil gas, and groundwater based on the assessment of health risks, and describes how they will be applied to remedial actions at the Site as follows:

- Section 4.1: Cleanup Levels for COCs
- Section 4.2: Target Redevelopment Cleanup Goals for COCs
- Section 4.3: Application of Cleanup Levels and Target Redevelopment Cleanup Goals.

CULs and TRCGs were developed based on the future redevelopment plans for the property. The redevelopment envisions a number of different land uses, or Redevelopment Zones, as described in Section 2.3. The following section describes the anticipated receptors and potential exposure risks for the various land uses in the three redevelopment zones being considered for the Site.

Redevelopment Zones

The CULs and TRCGs were developed to be protective of site receptors that would occupy each of the following zones, which are consistent with the plans approved by the San Francisco Planning Department:

- Zone 1 – Public open space on grade.
- Zone 2 – Residential over commercial podium construction.
- Zone 3 – Residential over podium parking and street level commercial construction.

Although Zones 2 and 3 both provide for residential development, the podium type of building construction precludes residential occupation of the ground level. The on grade portions of Zone 2 buildings are anticipated to be occupied by full-time commercial workers, and on grade portions of Zone 3 buildings would, in the highest intensity of use, be occupied by full-time parking attendants. In that the receptors in both Zones 2 and 3 are commercial receptors, the risk assumptions for Zones 2 and 3 are the same. Therefore, for the purposes of the risk analysis, exposure assumptions were developed for only two scenarios: Zone 1 (open space), and Zones 2 and 3 (commercial). During the risk analysis process, potential exposure to each COC was calculated for each Zone, using either the Open Space or the Commercial exposure scenario, as appropriate.

Media-Specific CULs

As detailed in Section 3.0 above, the COCs at the Schlage OU are CVOCs and metals in soil, and CVOCs in groundwater. The COCs at the UPC OU are metals in soil. The pathways for site receptors to be exposed to these COCs are inhalation of vapors, and ingestion or contact with groundwater or soil.

Soil Gas CULs

The CULs for soil gas were developed to mitigate potential health risks from inhalation of CVOC vapors that could volatilize from contaminated soil or groundwater and collect in enclosed spaces. The soil gas CULs developed using the Zones 2 and 3 commercial exposure assumptions are the most restrictive and

will be applied to the entire Site, including park and open space areas. Appendix D provides a detailed description of the CUL development for CVOCs in soil gas.

Groundwater CULs

The CULs for groundwater are the California MCLs. Although groundwater at the Site is not used for drinking water, the classification of the aquifer requires cleanup to the drinking water standard. These CULs are also protective of all receptors for exposure to soil gas in indoor air.

Soil CULs

The CULs for metals in soil were selected based on background concentrations, recreational exposure, and commercial exposure scenarios. CULs for metals were developed in the *Risk Analysis for Universal Paragon Corporation Operable Unit (UPC OU)* (Risk analysis; MACTEC, 2009a) and selected from other previously published documents.

Redevelopment Planning and Tracking of Remediation Progress

It is anticipated that redevelopment on a portion of the property may begin prior to achieving the final remedial action objections for the entire Site. Currently, soil gas CVOC concentrations limit the Site's suitability for redevelopment. Therefore, at some point during the remediation, soil gas sampling will be conducted and the results used to demonstrate that a given portion of the property is suitable for redevelopment.

During the implementation of the remedy, soil and groundwater samples will be taken to track the progress of the cleanup. Because volatilization of CVOCs from soil and groundwater contribute to soil gas, results of soil and groundwater sampling can be used to estimate theoretical soil gas concentrations. These estimates have been used to develop TRCGs for CVOCs in groundwater as an indication as to when soil gas concentrations should meet the soil gas CULs. The TRCGs for CVOCs in soil were selected based on the more stringent of an impact to groundwater standard, or risk to a commercial worker.

Soil and groundwater TRCGs will be used for planning purposes only to assess when soil gas sampling should be conducted to demonstrate that redevelopment activities can be initiated at the Site. TRCGs are an interim guidance value for the contractors and will not be used to evaluate completion of the remedy.

Appendix E provides a detailed description of the TRCG development for CVOCs in soil and groundwater.

4.1 Cleanup Levels for COCs

4.1.1 Soil Gas Cleanup Levels

The following are soil gas CULs for CVOCs at the Site:

CVOC COCs	Soil Gas Cleanup Levels (µg/L)
1,1-DCE	2,190
cis-1,2-DCE	383
trans-1,2-DCE	657
PCE	5.2
TCE	15
VC	0.39

Appendix D provides a detailed description of the CUL development for CVOCs in soil gas.

4.1.2 Soil Cleanup Levels

Cleanup Levels for Metals: The following are CULs for arsenic and cadmium in soil at the Site:

COCs	Cleanup Levels (mg/kg)
Arsenic	19.1
Cadmium	7.5

The arsenic CUL presented in the risk analysis (*MACTEC, 2009a*) is a value developed by Lawrence Berkeley National Laboratory (LBNL) that has been accepted as a background concentration for arsenic in the Bay Area and as applicable to the Site. Soil above the water table within the UPC OU is primarily fill placed in the early 1900s. Based on review of existing arsenic data from soil samples collected in both the San Francisco and Brisbane portions of the UPC OU fill, it appears that above a concentration of approximately 23 mg/kg, concentrations increase significantly, indicating likely impacts from historic site activities. This arsenic concentration is comparable to the published background value of 19.1 mg/kg developed by LBNL as an indicator of whether there are metals impacts in native soils or in non-native soils that exceed regional background concentrations. Therefore, the LBNL background value for arsenic was chosen as a representative value for the Site. The commercial CHHSL value for arsenic is lower than background; therefore, background was selected. The CUL for cadmium is the commercial CHHSL.

The following are CULs for lead in soil at the Site:

COCs	Lead Cleanup Levels	
	Zone 1 (mg/kg)	Zones 2 and 3 (mg/kg)
Lead	559	800

The lead CUL of 559 mg/kg is developed in the risk analysis (*MACTEC, 2009a*) for recreational receptors, and the lead CUL of 800 mg/kg is the commercial value from the RSL (*EPA, 2008*).

4.1.3 Groundwater Cleanup Levels

The following CULs for CVOCs in groundwater at the Site are MCLs under California Code of Regulations, Title 22 § 64444:

CVOC COCs	Cleanup Levels (MCLs) (µg/L)
1,1-DCE	6
cis-1,2-DCE	6
trans-1,2-DCE	10
PCE	5
TCE	5
VC	0.5

4.2 Target Redevelopment Cleanup Goals for CVOCs

Soil and groundwater TRCGs will be used for planning purposes only to assess when soil gas sampling should be conducted to demonstrate that redevelopment activities can be initiated at the Site. TRCGs are an interim guidance value for the contractors and will not be used to evaluate completion of the remedy. During the implementation of the remedy, soil and groundwater samples will be taken to track the progress of the cleanup, and will be compared to TRCGs.

4.2.1 Target Redevelopment Cleanup Goals for Soil

The following are soil TRCGs for CVOCs at the Site:

CVOC COCs	Target Soil Redevelopment Goals (mg/kg)
1,1-DCE	1.03
cis-1,2-DCE	0.19
trans-1,2-DCE	0.67
PCE	0.7
TCE	0.46
VC	0.05

The soil TRCGs are the lower of the TRCGs developed for protection of groundwater via leaching, and protection of commercial receptors that could be potentially exposed via the direct exposure pathway (i.e., incidental ingestion, dermal contact, ambient air inhalation).

Appendix E provides a detailed description of the TRCG development for CVOCs in soil.

4.2.2 Target Redevelopment Cleanup Goals for Groundwater

The following are groundwater TRCGs for CVOCs at the Site:

CVOC COCs	Target Groundwater Redevelopment Goals (µg/L)
1,1-DCE	2,407
cis-1,2-DCE	2,295
trans-1,2-DCE	1,715
PCE	7.2
TCE	38
VC	0.5

The groundwater TRCGs are the lower of TRCGs developed for construction worker contact with groundwater, and vapor intrusion to indoor air for commercial receptors.

Appendix E provides a detailed description of the TRCG development for CVOCs in groundwater.

4.3 Application of Cleanup Levels

The typical concept of human exposure at a site or within a defined exposure area is an individual's contact with contaminated media on a periodic and random basis. Because of the repeated nature of such contact, human exposure does not really occur at a fixed point but rather at a variety of points with equal likelihood that any given point within the exposure area will be the contact location on any given day. The EPA recommends that the arithmetic average of chemical concentrations, or Exposure Point Concentrations (EPCs), within an exposure area be calculated for comparison to site cleanup levels (*EPA, 1989b*). To evaluate possible exposure to multiple chemicals, the effects of multiple chemicals are assumed to be additive. The EPA further recommends that an upper confidence limit (UCL) be used to represent the EPC to account for variability in the data set and uncertainty in estimating an arithmetic mean. EPCs for the CVOCs in each media of concern will be calculated using EPA's ProUCL Version 4.0. The comparison of EPC to CUL ratios will be used to demonstrate that any remaining CVOC chemical or combination of chemicals are not likely to pose substantial health risks, and to help determine whether or not further action may be necessary.

5.0 REMEDIAL ACTION OBJECTIVES

Remedial Action Objectives (RAOs), specific goals for protecting human health and the environment, are evaluated using ARARs and To-Be-Considered Requirements (TBCs). The following presents ARARs and RAOs for the Site.

5.1 Applicable or Relevant and Appropriate Requirements

ARARs are location-specific, action-specific, and chemical-specific requirements listed in table format, summarized in text, with comments indicating how compliance will be achieved.

Table 5-1 presents the following information: 1) a list of all ARARs and TBCs that have been identified for the Site; 2) the legal citation(s) for each ARAR and TBC; 3) a brief description of each ARAR and TBC; 4) determination as to whether each citation is an ARAR or TBC; 5) identification of the specific portions of the Site included in this FS/RAP for which each ARAR or TBC applies; and 6) a brief description of the actions to be taken as required by each ARAR or TBC in conjunction with implementation of the selected remedial alternative for the Site.

Section 121(d) of CERCLA, 42 U.S.C. § 9621(d), requires remedial actions to attain or justify the waiver of applicable, or relevant and appropriate, federal and state environmental or state facility siting requirements. These applicable, or relevant and appropriate requirements are referred to as “ARARs.” Federal ARARs may include requirements promulgated under any federal environmental laws. State ARARs may only include promulgated, enforceable environmental or facility-siting laws of general application that are more stringent or broader in scope than federal ARARs and that are identified by the state in a timely manner.

Applicable requirements are those cleanup standards, standards of control, criteria, or limitations that specifically address conditions, circumstances, or activities at a site. Relevant and appropriate requirements are those cleanup standards, standards of control, criteria, or limitations that, while not directly “applicable” to conditions, circumstances, or activities at the site, address problems or situations sufficiently similar to those encountered at the site so that their use is well suited to the site. A requirement that is not directly applicable must be both relevant and appropriate based on site-specific factors to be an ARAR. The criteria for determining relevance and appropriateness are listed in the NCP, 40 CFR § 300.400(g)(2).

Non-promulgated advisories or guidance issued by federal or state government are not legally binding and do not have the status of potential ARARs. Such advisories or guidance, which are termed “To-be-Considered” (TBC) material, are used during the cleanup process to further the goal of protecting human health and the environment.

ARARs only include substantive, not administrative, requirements, and pertain only to onsite matters. Any offsite activities must comply with all applicable federal, state, and local laws, including both substantive and administrative requirements.

ARARs are identified on a site-specific basis from information about the chemicals at the site, the actions that may take place at the site, and the features of the site location. There are three general ARAR categories:

- Chemical-specific,

- Action-specific, and
- Location-specific.

Chemical-specific ARARs are numerical values or methodologies that, when applied to site-specific conditions, result in the establishment of numerical values. They are used to determine acceptable concentrations of specific hazardous substances, pollutants, and contaminants in the environment. If a chemical is subject to more than one numerical value or methodology, the most stringent is generally selected.

Location-specific ARARs are restrictions placed on the concentration of hazardous substances, pollutants, or contaminants or the conduct of activities solely because they are in specific locations, such as wetlands or floodplains.

Action-specific ARARs are technology- or activity-based requirements or limitations on actions taken with respect to hazardous substances, pollutants, or contaminants.

The analysis and identification of chemical-specific, location-specific, and action-specific ARARs for the selected remedies for the Site follow EPA guidance, including CERCLA Compliance with Other Laws Manual (Interim Final), EPA Office of Solid Waste and Emergency Response (OSWER) Directive 9234.1-01, August 1988 (*EPA, 1988*), and the CERCLA Compliance with Other Laws Manual: Part II, Clean Air Act and Other Environmental Statutes and State Requirements (Interim Final), OSWER Directive 9234.1-02, August 1989 (*EPA, 1989a*). ARARs have not been identified for portions of the Site included in this FS/RAP for which there is no unacceptable risk present based on the risk analysis presented in Section 4.0 (*EPA, 1999*).

5.2 Site Remedial Action Objectives

The RAOs are statements of the general goals of a cleanup. The following RAOs for cleanup at the Site include:

- Protection of human health and the environment;
- Cost-effective cleanup of the Site consistent with their intended land use; specific land use designations are identified in Section 2.3 and shown on Figure 2-1;
- Consistency of the selected remedial alternative for each portion of the Site with the overall redevelopment plans for the Site;
- Recycling or reuse of excavated materials to the extent practicable;
- Compliance with ARARs and TBCs; and
- Preference for permanent (“clean closure”) remedies whenever practicable, cost-effective, and consistent with future land use.

The functional objectives for the Site are to: 1) comply with ARARs, including remediation of groundwater to achieve MCLs; and 2) to reduce potential exposure by controlling the exposure pathway for each of the following redevelopment zones through remediation to CULs identified in the tables presented in Section 4.0.

Zone 1 – Public open space on grade

Soils: Mitigate unacceptable exposure to COC-impacted soils via the following exposure pathways:

- Incidental ingestion;
- Dermal contact; and
- Inhalation of vapors volatilizing into outdoor air.

Groundwater: Achieve MCLs and mitigate unacceptable exposure to COC-impacted groundwater via the following exposure pathway:

- Inhalation of vapors volatilizing into outdoor air.

Zones 2 and 3 – Residential over commercial podium construction, and Residential over podium parking and street level commercial construction

Soils: Mitigate unacceptable exposure to COC-impacted soils via the following exposure pathways:

- Incidental ingestion;
- Dermal contact;
- Inhalation of vapors volatilizing into outdoor air; and
- Inhalation of vapors volatilizing into indoor air.

Groundwater: Achieve MCLs and mitigate unacceptable exposure to COC-impacted groundwater via the following exposure pathways:

- Inhalation of vapors volatilizing into indoor air.

6.0 FEASIBILITY STUDY AND ALTERNATIVES ANALYSIS

This section presents: 1) the remedial technology screening matrix based on contaminated media, redevelopment zone; CULs; and rough development grading requirements; 2) the criteria used to develop and evaluate remedial technologies; 3) the development of remedial action alternatives based on the screening and evaluation; and 4) provides an assessment of remedial alternatives developed for Schlage OU and UPC OU, and rationale for selection of the preferred remedial approach.

6.1 Remedial Technology Screening

This section outlines the range of general response actions to address contamination at the Site, and corresponding remedial technologies that are potentially applicable for the contaminated soil and groundwater at the Site.

To the extent practicable, redevelopment efforts were integrated into the remedial planning for the Site. For example, separate cleanup goals were developed for each type of redevelopment zone and based on anticipated exposure scenarios corresponding to the type of redevelopment. To the extent that redevelopment activities serve to eliminate pathways of exposure to future Site receptors, these activities were integrated into the remedial technology screening and development of remedial alternatives.

6.1.1 General Response Actions

A range of general response actions (GRAs) for which corresponding remedial technologies may be applicable to site conditions were identified for the Schlage and UPC OUs for initial baseline evaluation and comparison purposes under RAP Guidance in Section 6.1.2. The GRAs considered for the Site include: no action, institutional controls, migration controls, ex situ treatment, and in situ treatment approaches. One or more remedial technologies that correspond to the GRAs were then evaluated and compared based on three criteria: 1) effectiveness; 2) implementability; and 3) relative costs.

To refine the range of remedial technologies that would potentially be developed into remedial alternatives for the Site that must undergo detailed analysis, the NCP at 40 CFR §300.430(e)(7) provides the opportunity to initially screen them against the short- and long-term aspects of the following three criteria:

- **Effectiveness:** Alternatives are judged on the degree to which an alternative reduces toxicity, mobility, or volume through treatment, minimizes residual risks and affords long-term protection, complies with ARARs, minimizes short-term impacts, and how quickly it achieves protection. Alternatives providing significantly less effectiveness than other, more promising alternatives may be eliminated. Alternatives that do not provide adequate protection of human health and the environment shall be eliminated from further consideration.
- **Implementability:** This criterion focuses on the technical feasibility and availability of the technologies each alternative would employ, and the administrative feasibility of implementing the alternative. Alternatives that are technically or administratively infeasible, or require equipment, specialists, or facilities that are not available within a reasonable period of time may be eliminated from further consideration.
- **Cost:** Costs of construction and any long-term costs to operate and maintain the alternatives shall be considered. Costs that are grossly excessive compared to the overall effectiveness of

alternatives may be used as a factor to exclude alternatives from further consideration. Alternatives providing effectiveness and implementability comparable to that of another alternative by employing a similar method of treatment or engineering control, but at greater cost, may also be eliminated.

6.1.2 Remedial Technology Screening

This section describes the screening and selection of the range of remedial technologies that are potentially applicable for the contaminated soil, soil gas, and groundwater at the Site.

The Remedial Technology Screening Matrix presented in Table 6-1 was used to guide whether a technology should be retained for further consideration based on: 1) the nature and extent of the current levels of contamination at the Site after previous removal activities and operation of the SVETS and GWETS were conducted as summarized in Section 2.4, and 2) redevelopment zone-specific considerations. In addition, an initial evaluation of remedial technologies potentially applicable for Site groundwater was conducted as part of the development of the *Data Gap Investigation and Treatability Studies Work Plan (MACTEC, 2008a)* summarized in Section 2.4 and presented in Appendix B. The results of the evaluation identified and selected the following in situ groundwater remedial technologies for further evaluation in pilot treatability studies at the Site: 1) Enhanced Reductive Dechlorination; and 2) In Situ Chemical Oxidation.

Land Use Controls (administrative/institutional mechanisms) would be included as components of the remedial action alternatives developed based on the remedial technology screening. These controls may be applicable both within the short term (e.g., to prevent reuse of groundwater until CULs are achieved), and in the long term to: 1) maintain the reuses consistent with the risk exposures assumed in the development of CULs for the preferred remedial actions, and 2) prevent unrestricted reuses of areas where residual contamination may remain.

The following technologies retained from the screening for each OU were then incorporated in the development of remedial action alternatives described in Section 6.3:

- No Action for Soils and Groundwater;
- Monitored Natural Attenuation for Groundwater;
- Land Use Controls for Soils and Groundwater – Restrictions limiting site use to its intended purpose;
- Containment Controls for Soils – Hardscape Capping and Soil Cover Capping;
- Ex Situ Treatment for Soils – Excavation and Offsite Disposal, Excavation and Onsite Treatment and Relocation; and
- In Situ Treatment for Groundwater – Enhanced Reductive Dechlorination and In Situ Chemical Oxidation.

6.2 Remedial Alternatives Evaluation

6.2.1 Description of Evaluation Criteria

Site remedial alternatives were subjected to: 1) a detailed alternative analysis pursuant to the nine criteria of the NCP and the six criteria of Section 2535b.1 of the HSC; and 2) comparative analysis identifying the advantages and disadvantages of each alternative when compared to other alternatives considered for each of the OUs within the Site.

The nine NCP criteria include two threshold, five balancing, and two modifying criteria. For a remedial alternative to be considered an appropriate remedial action, it must meet both threshold criteria. Balancing criteria provide an opportunity to identify and evaluate strengths, weaknesses, and the cost-effectiveness of an alternative. Modifying criteria are evaluated after the public comment period.

This section introduces these criteria. Summaries of the comparative evaluations of alternatives for the remedial action areas included in this FS/RAP are presented in Section 6.4.

The HSC requires that the remedial alternatives be evaluated relative to the following six additional criteria:

- 1 Health and safety risks posed by the site conditions;
- 2 The effect of COCs present on probable present and future uses of contaminated or threatened resources;
- 3 The effect on available groundwater resources for present, future, and probable beneficial uses (treatment alternatives that reduce the volume, toxicity, and mobility of contaminants as opposed to alternatives that use offsite transport and disposal are preferred);
- 4 Site-specific conditions (potential for offsite migration) and existing contaminant background levels;
- 5 Cost-effectiveness, considering the short-term and long-term costs of the remedial action and whether deferral of a remedial action could result in a cost increase or hazard increase to human health or the environment; and
- 6 The potential environmental impacts of the remedial alternative such as land disposal of contaminated material versus treatment to remove or reduce its volume, toxicity, or mobility prior to disposal.

The six HSC criteria are similar to and covered under the nine NCP criteria in this FS/RAP described below.

Threshold Criteria

Overall Protection of Human Health and the Environment - Addresses whether or not a remedy provides adequate protection and describes how risks posed through each exposure pathway are eliminated, reduced, or controlled through treatment, engineering controls, or Land Use Controls (LUCs) (i.e., administrative/institutional controls).

Compliance with ARARs - Addresses whether or not a remedy will meet all appropriate Federal, State and local environmental laws and regulations.

Balancing Criteria

Long-term Effectiveness and Permanence - Considers the ability of a remedy to provide reliable protection of human health and the environment over time once cleanup goals have been achieved.

Reduction of Toxicity, Mobility, and Volume Through Treatment - Evaluates the anticipated performance of the alternative with respect to the reduction of toxicity, mobility, and volume of contaminants. This criterion reflects the preference for treatment of contaminated soil and groundwater as opposed to offsite transport and disposal.

Short-term Effectiveness - Evaluates the period of time needed to complete the remedy, and any adverse impact on human health and the environment that may be posed during the construction and implementation period, until cleanup standards are achieved.

Implementability - Refers to the technical and administrative feasibility of a remedy, including the availability of materials and services needed to implement a remedial option.

Cost - Evaluates the capital, and operations and maintenance (O&M) costs of each alternative. Cost estimates of this type are considered accurate to a range of minus 30% to plus 50%. The reasons for this range are the variability of construction materials, variability in construction costs over time, the complexity of developing site-specific cost factors, and the sensitivity of construction costs to economic factors such as interest rates and materials costs.

Modifying Criteria

These criteria will be addressed during the public review and comment period on this FS/RAP, and will be summarized in the Responsiveness Summary to this FS/RAP.

Regulatory Agency Acceptance - Indicates whether, based on their review of the information, the applicable regulatory agencies would agree with the preferred alternative.

Community Acceptance - The FS/RAP is subject to public review and comment prior to selection of the remedial action alternative. This criterion assesses whether community concerns are addressed by the remedy, and whether or not the community has a preference for a remedy. The final remedies in this FS/RAP will be selected following the public comment period.

6.3 Description of Remedial Action Alternatives

This section describes the remedial action alternatives that were developed based on assembly of the following applicable remedial technologies that passed the initial screening:

Soil Technologies	Groundwater Technologies
No Action	
Land Use Controls -- Land Use Covenant and deed restriction with the following prohibitions: <ul style="list-style-type: none"> • No first floor residences or daycare facilities • No hospital or schools • No growing of food • Where concentrations of groundwater COCs are above their MCL, no use of underlying groundwater • No excavation in contaminated soil without a Soil Management Plan and DTSC approval 	
Capping -- Soil Cover -- Hardscape	Monitored Natural Attenuation / Groundwater Monitoring
Excavation -- Onsite Treatment -- Offsite Disposal	In Situ Groundwater Treatment -- In Situ Chemical Oxidation -- Enhanced Reductive Dechlorination

The following Site-wide remedial action alternatives were developed based on the screening of remedial technologies presented in Section 6.2 and summarized on Table 6-1:

Alternative 1: No Action

Alternative 2: Land Use Controls and Monitored Natural Attenuation for Groundwater

Alternative 3: Excavation, Onsite Treatment, Relocation and Capping for Soils / In Situ Groundwater Treatment and Monitoring

Alternative 4: Excavation and Offsite Disposal for Soils / In Situ Groundwater Treatment and Monitoring.

Alternatives 2, 3, and 4 also include a Land Use Control consisting of a Land Use Covenant and deed restriction with the prohibitions specified above, and described in detail in Section 7.7. These alternatives are described below, and evaluated and compared in Section 6.4 based on the criteria presented in Section 6.2.

6.3.1 Alternative 1—No Action

No additional control or protection of human health and the environment would be implemented for the contamination present at the Site. This alternative is required as a baseline alternative for comparison to other alternatives under RAP Guidance. There is negligible cost associated with this alternative.

6.3.2 Alternative 2—Land Use Controls and Monitored Natural Attenuation

This alternative assumes no active remediation would be implemented, and LUCs would be imposed to prohibit reuses of the Site that would pose a risk. Long term groundwater monitoring would also be performed under a Monitored Natural Attenuation (MNA) program. For costing purposes under EPA Guidance, it assumed groundwater monitoring would be conducted for 30 years (*EPA, 1989c*).

The components of this alternative include the following.

Schlage OU and UPC OU

- Implementation of LUCs to prohibit unrestricted reuse of the property and reuse of groundwater beneath the Site; monitoring and reporting on LUC management; and closure reporting for UPC OU.

Schlage OU

- Long term MNA of the existing monitoring well network of up to 28 wells. Thirty years of groundwater monitoring and periodic reporting based on the currently approved long term monitoring plan (LTM), for the LTM analytes and biological parameters identified in the Data Gap/Treatability Study Investigation presented in Appendix B. For costing purposes, it is assumed that quarterly monitoring would be performed for Years 1 to 10; semi-annual monitoring would be performed for Years 11 to 20; and annual monitoring would be performed for Years 21 to 30.

The total cost of this alternative is estimated at \$1,590,000 (Appendix F).

Monitoring of LUCs would be implemented to confirm that LUCs are performing as intended. Ongoing groundwater monitoring would also be implemented to assess the impacts of COCs on environmental conditions at the Site, and to track concentration trends in groundwater impacted by chemical releases. MNA is defined as follows (*EPA, 1999*):

“...the reliance on natural attenuation processes (within the context of a carefully controlled and monitored site cleanup approach) to achieve site-specific remediation objectives within a time frame that is reasonable compared to that offered by other more active methods. The “natural attenuation processes” that are at work in such a remediation approach include a variety of physical, chemical, or biological processes that, under favorable conditions, act without human intervention to reduce the mass, toxicity, mobility, volume, or concentration of contaminants in soil and groundwater. These in situ processes include biodegradation; dispersion; dilution; sorption; volatilization; radioactive decay; and chemical or biological stabilization, transformation, or destruction of contaminants.”

There is evidence from groundwater monitoring at the Site that natural attenuation of groundwater COCs is occurring (Appendix B). It is assumed that MNA would eventually be capable of achieving RAOs for groundwater at the Site.

A deed restriction would be recorded on the title to the property to prevent human exposures to contaminants left in place in soil and groundwater above levels considered protective of unrestricted use of the Site as described in Section 7.7.

6.3.3 Alternative 3—Excavation and Onsite Treatment, Relocation and Capping for Soils / In Situ Groundwater Treatment and Monitoring

This alternative includes excavation and onsite treatment of approximately 15,000 cubic yards of soil containing CVOC concentrations above CULs within Schlage OU, and excavation and relocation or capping of approximately 22,000 cubic yards of metals-impacted soils containing concentrations above CULs on the UPC OU. Excavated soils that do not meet onsite treatment criteria, or contain hazardous materials for which available capacity is not available under soil cover, hardscape, or roadways, would be transported and disposed offsite at a Class I or Class II permitted landfill facility, depending on concentrations of COCs and acceptance criteria. Groundwater would be treated in situ using ERD. Long term groundwater monitoring would also be performed. A deed restriction would be recorded on the title to the property to prevent human exposures to contaminants left in place in soil and groundwater above levels considered protective of unrestricted use of the Site as described in Section 7.7.

The total estimated cost associated with implementation of this alternative is approximately \$5,438,000, which includes capital costs of \$4,452,000, and O&M costs of \$986,000 (Appendix F).

Soils Remediation

CVOC-Impacted Soils

- Excavation and onsite treatment by aeration for CVOC-impacted soils with concentrations of COCs that exceed soil TRCGs (Section 4.2).
- Relocation of treated CVOC-impacted soils in Zones 1, 2, and 3.

Figure 6-1 presents the location of the planned soil excavation to address CVOC-impacted soils, and the proposed location for onsite soil aeration. Soils would be removed that contain concentrations of COCs above soil TRCGs. Based on the areal dimensions and the planned depths of excavation, it is anticipated that approximately 15,000 cubic yards of soil would require excavation. Excavated soils would be treated onsite using soil aeration techniques, reducing the carbon footprint for handling the soil compared to hauling the soil offsite for disposal. Common mechanical soil aeration methods would be used to agitate the contaminated soil to volatilize CVOCs. Regular tilling of the soil would be the primary method used to aerate the soil within the treatment bed, using equipment commonly used in farming. If determined to be necessary by the remedial design to meet the estimated CULs within the 3 month treatment timeframe, air may also be blown into the treatment bed using slotted piping or other means to increase the flow of air through the soils and accelerate the volatilization of CVOCs.

Design details on soil aeration would be provided in the RDIP. Methods that would be used to aerate the soil are anticipated to include the following:

- The pad surface would be rolled with a vibratory roller to reduce infiltration during aeration.
- A perimeter berm would be constructed to control stormwater runoff and runoff using topsoil, K-rail (jersey barriers), or clean site soil.
- The material to be treated would be placed in the cell in lifts of approximately 2 feet, or at the depth determined in the RDIP required to process the total excavated volume of soil under BAAQMD regulations.

- The material would be regularly aerated using a harrow-type plow with sharp revolving circular blades or similar type of equipment; the frequency would be determined in the RDIP and modified during field activities in order to meet soil CULs.
- Water or wetting agent would be applied as necessary to meet dust monitoring or air monitoring criteria.
- Upon completion of treatment, the material would be relocated to areas where it is suitable for reuse, or compacted in place if material meets reuse criteria at the treatment location.
- The treatment area would be reclaimed as part of site redevelopment.

Based on review of existing Site data, aeration of excavated soil would be effective in treating excavated soils impacted with PCE and TCE. For costing purposes, it is assumed a portion of the 15,000 cubic yards of CVOC soils that will be excavated may contain concentrations of PCE and TCE that exceed the range of concentrations treatable by soil aeration to CULs, and approximately 6,000 cubic yards of soil may be transported and disposed offsite at a permitted landfill facility. Treated soils would be relocated and placed a minimum of 2 feet above the groundwater table; details will be specified in the RDIP.

Metals-Impacted Soils

- Excavation and/or capping of metals-impacted soils with concentrations of COCs that exceed soil CULs (Section 4.1).
- Relocation of excavated soils in Zones 1, 2, and 3.

Figure 2-1 shows the planned redevelopment zones where soil excavated to address metals-impacted soils would be relocated. Soil excavated to address metals-impacted soils would be relocated and placed a minimum of 2 feet above the groundwater table. In areas slated for Zone 1 redevelopment, soils would be placed under a soil cap of minimum 3 foot thickness consistent with the EIR, or under hardscape. Soils may also be placed in Zones 2 and 3 under roadways, hardscape, or a minimum of 1 foot beneath clean utility corridors; details will be specified in the RDIP. Capping of metals-impacted soils will separate it from direct exposure to surface water and the design of the cap will prevent ponding to minimize infiltration.

Figure 3-3 shows the potential area affected by metals contamination in near-surface soils where additional soil sample collection and laboratory analyses are required to confirm XRF indications of elevated arsenic and lead. Based on the areal dimensions and the depths of potential metals-impacted soils, it is anticipated that approximately 22,000 cubic yards of soil could require mitigation by capping, or targeted excavation and relocation, and capping. The RDIP will describe the sampling procedures to define the limit of excavation. Localized hotspots of metals-impacted soils may be excavated and removed from the UPC OU based on measured concentrations.

Offsite Disposal of Excavated Soils

A portion of excavated soils may also be transported and disposed offsite at a permitted Class I or Class II landfill facility if: (1) it does not meet onsite aeration treatment criteria (i.e., TRCGs) within the anticipated timeframe of 3 months, and/or (2) although not anticipated, if hazardous materials are identified, and available capacity is not available onsite for placement under soil cover, hardscape, or

roadways. Soils that contain concentrations of COCs meeting Class I landfill acceptance criteria would be transported and disposed offsite at the Kettleman Hills Facility in Kettleman City, California, or other approved disposal sites. Soils that contain concentrations of COCs meeting Class II landfill acceptance criteria would be transported and disposed offsite at either the Allied Waste Forward Landfill Facility in Manteca, California, or the Clean Harbor Landfill in Kettleman City, California, or other approved disposal sites.

Groundwater Remediation

A-Zone Groundwater

- In situ treatment by ERD for CVOC-impacted groundwater in the Upper A-Zone and Lower A-Zone (A-Zone) aquifer to concentrations below groundwater CULs (MCLs) (Section 4.1).
- Long term groundwater monitoring. For costing purposes under EPA Guidance, it assumed groundwater monitoring would be conducted for 30 years (*EPA, 1989c*).

Appendix B presents the results of the pilot treatability studies conducted at the Site, which indicate a relatively low efficiency of ISCO at the Site, and current data on the ERD pilot tests continue to demonstrate the on-going dechlorination is occurring. Therefore, groundwater remediation by in situ ERD is identified as the preferred remedial technology for CVOCs in groundwater in the A-Zone aquifer. Figure 6-2 presents the layout of planned injection points of electron donor reagents (e.g., lactate). The RDIP would present the design details for implementation of ERD, which is anticipated to consist of the following:

- Injection points: A total of approximately 300 to 400 injection points would be used to inject lactate. Based on the radius of influence (ROI) of approximately 10 to 30 feet estimated from the ERD pilot tests, the injection points would be spaced 20 to 30 feet apart along the direction perpendicular to groundwater flow, and the distance between the upgradient and downgradient injection points (i.e., along the groundwater flow direction) would be approximately 50 to 60 feet. This distance is estimated based on a residence time for lactate-enhanced biodegradation of 4 to 6 months according to the pilot test results and under the average groundwater flow conditions.
- Dosage of electron donors: Based on the CVOC concentrations detected in May 2009 and stoichiometric calculations, it is anticipated a total volume of approximately 375,000 to 625,000 gallons of a 60% lactate solution would be injected; approximately 1,250 to 2,100 gallons through each injection point.
- Injection schedule: Given the designed residence time described above, the anticipated injection schedule is to initially perform two injection events scheduled once every 4 to 6 months. However, up to 3 or 4 injection events and/or modifications to the number of injection points and dosage may be warranted as part of the final implementation, based on field observations and groundwater monitoring results indicating the establishment of reductive groundwater conditions.
- Post-injection groundwater monitoring: The performance of the system would be monitored with regards to achieving remedial action objectives and the need for system modifications. It is assumed that any system modifications identified as necessary would be performed within 6 months after injection based on the first several months of weekly or bi-weekly groundwater monitoring results, including key field parameters such as pH, oxidation reduction potential (ORP), and dissolved oxygen (DO), and/or total organic carbon (TOC). For cost estimating

purposes, it is assumed that approximately 6 months after the injection when the system modifications are completed, post-injection performance groundwater monitoring would be conducted bi-monthly for Months 7 to 12, quarterly for Years 1 to 2; semi-annually for Years 3 to 6; and annually for Years 7 to 30. CVOCs and dechlorination products would be monitored to determine the treatment effectiveness. Supplemental analyses, including TOC, electron acceptors, and field geochemical parameters, would also be collected and analyzed as part of in situ treatment performance monitoring.

This proposed approach to remediate the contaminated A-Zone groundwater at the Site using in situ ERD treatment is based on the current available information regarding observed concentrations of CVOCs and pilot test results. Details on full-scale field implementation of the proposed approach would be provided in the RDIP.

B-Zone Groundwater

Figure 6-3 shows the combined CVOC (PCE, TCE, cis-1,2-DCE, VC) concentrations of five wells screened within the B-Zone since December 2004. B-Zone wells omitted from the figure have been sampled only intermittently (< 5 times) since 2005. A generally decreasing trend is evident in most wells plotted in Figure 6-3. Concentrations at SW-12B were generally stable between 2005 and 2008, but have been in decline since February 2008.

The hydrogeology of the B-Zone aquifer makes it unsuitable for an in-situ remediation option such as the ERD proposed for the A-Zone. Figure 2-3 shows the piezometric surface of the B-Zone that is approximately 10 feet above the current ground surface of the Site. Fluid pressure in injection boreholes would have to be overcome by the injection rig to ensure effective distribution of the injectant in the aquifer. Additionally, heaving sands flowing up the injection borehole, as was experienced during the installation of well MEC-13LA, are also likely to occur, impeding effectiveness of injection efforts within the B-Zone aquifer. The artesian conditions of the B-Zone make injection of a remedial compound technically impractical.

For these reasons, Monitored Natural Attenuation (MNA) is the selected remedial option for the B-Zone CVOC plume. Data from continued quarterly monitoring of the B-Zone wells will be evaluated to assess the effectiveness of the following factors in remediating the CVOC plume in the B-Zone: (1) source removal of CVOC-impacted soils; (2) ERD remediation in the A-Zone; and (3) MNA. A formal assessment will occur at the first five-year review.

Groundwater Remediation Operation and Maintenance

An operation and maintenance (O&M) Plan for the groundwater remediation system will be prepared after initial implementation of the remedy described in the RDIP. The O&M Plan will include a description of the:

- ERD injection system performance groundwater monitoring program for A-Zone groundwater;
- Long term monitoring program of the A-Zone and B-Zone groundwater for a period of 30 years assumed for costing purposes;
- Annual evaluation reporting on the system performance, and 5-year reviews if necessary based on the timeframe required to achieve MCLs; and

- Contingency Plan that would be implemented if system performance evaluations indicate modifications are required to the ERD injection approach described in the RDIP.

6.3.4 Alternative 4—Excavation and Offsite Disposal for Soils / In Situ Groundwater Treatment and Monitoring

This alternative includes excavation and offsite disposal of approximately 37,000 cubic yards of soil containing COCs above CULs, and in situ treatment of groundwater using ERD as described under Alternative 3. Excavated soils would be transported and disposed at an offsite, permitted waste management facility. The excavated areas would be backfilled with a combination of clean, imported backfill soils and clean overburden from excavations. Groundwater would be treated in situ using ERD, and long term groundwater monitoring would be conducted.

The total estimated cost associated with implementation of this alternative is approximately \$10,302,000, which includes capital costs of \$9,317,000, and O&M costs of \$986,000 (Appendix F).

Soils Remediation

Schlage OU Soils

- Excavation and offsite disposal for CVOC-impacted soils with concentrations of COCs that exceed soil TRCGs (Section 4.2).
- Excavation and offsite disposal for metals-impacted soils with concentrations of COCs that exceed soil CULs (Section 4.1).

Figure 6-1 presents the location of the planned soil excavation to address CVOC-impacted soils. Excavated soils would be transported and disposed offsite at a permitted landfill facility. Based on the areal dimensions and the planned depths of excavation, it is anticipated that approximately 15,000 cubic yards of soil would require excavation and offsite disposal.

UPC OU Soils

- Excavation and offsite disposal of metals-impacted soils with concentrations of COCs that exceed soil CULs (Section 4.1).

Figure 3-3 presents the location of the area where near-surface metals-impacted soils have been identified at the UPC OU. Soils impacted with metals above CULs would be excavated, transported, and disposed offsite at a permitted landfill facility. Data indicates that there would be exceedances of lead and arsenic in the northeastern portion of the OU. Figure 3-3 shows the potential area anticipated to be limited in depth to near-surface, shallow soils that is affected by metals contamination in soils. Additional soil sample collection and laboratory analyses is required to confirm XRF indications of elevated arsenic and lead in near-surface soil. Based on the areal dimensions and the depths of potential metals-impacted soils, it is anticipated that approximately 22,000 cubic yards of soil could require excavation and offsite disposal.

Groundwater Remediation

Schlage OU Groundwater

As described under Alternative 3, A-Zone groundwater would be treated in situ by ERD for CVOC-impacted groundwater, and long term groundwater monitoring would be conducted for A-Zone and B-Zone groundwater.

6.4 Summary Evaluation and Comparative Analysis of Remedial Action Alternatives

The four remedial alternatives identified in Section 6.3 were assessed using the nine NCP criteria for CERCLA sites established by EPA (EPA, 1989c) and additional California HSC criteria, as introduced in Section 6.2. A summary of the alternative evaluation and comparison is included below and presented on Table 6-2.

Threshold Criteria

Overall Protection of Human Health and the Environment, and Compliance with ARARs

Alternatives 1 and 2 would not provide for protection of human health and the environment nor meet RAOs or comply with ARARs; therefore, these alternatives could not be selected. Alternatives 3 and 4 would meet both threshold criteria.

Balancing Criteria

Reduction of Toxicity, Mobility, and Volume

Alternatives 1 and 2 would not reduce the toxicity, mobility, or volume of contaminants in soil or groundwater. Alternative 3 would reduce the toxicity, mobility, and volume of CVOC contaminants in soil and groundwater, and would reduce the mobility of metals contaminants in soil because they would be isolated beneath a cap of soil cover or hardscape. Although Alternative 4 would reduce the toxicity, mobility, and volume of contaminants in soil at the Site, the bulk of the contaminated soil would merely be transferred to a permitted landfill facility. CVOCs in groundwater would be treated below CULs.

Long Term Effectiveness and Permanence

Alternative 1 would not prevent exposures in the long term, because no action would be taken to mitigate site risks. Alternative 2 would prevent exposures in the long term by maintaining a LUC, and performing long-term groundwater monitoring under the MNA program and periodic reviews of its protectiveness; however, it would not be consistent with the future and planned site uses. Alternative 3 would offer long-term effectiveness and permanence because impacted soils would be remediated and relocated, or capped onsite in compliance with zone-specific exposure assumptions and CUL requirements, and groundwater would be remediated below CULs. Alternative 4 would offer long-term effectiveness and permanence because impacted soils would be removed and transferred offsite in compliance with Zone-specific exposure assumptions and CUL requirements, and groundwater would be remediated below CULs.

Short Term Effectiveness

Alternatives 1 and 2 would not be effective in the short term. For Alternatives 3 and 4, the period of time needed to complete the remedy would be similar, and short term protectiveness would be provided by

implementing measures to protect remedial construction workers, and through Occupational Safety and Health Administration (OSHA) work standards during excavation, onsite treatment, and relocation and capping (Alternative 3), and excavation and offsite disposal (Alternative 4), respectively.

Implementability

All Alternatives are readily implementable from a technical and administrative feasibility perspective. However, Alternative 2 would be easier to implement from a technical perspective than Alternatives 3 and 4 because it only involves administrative action for implementing the LUC and long term monitoring of groundwater and reporting, compared to excavation of soils and in situ treatment of groundwater under Alternatives 3 and 4, and onsite treatment of soils under Alternative 3.

Cost

Of the two remedial alternatives that are protective of human health and the environment, Alternative 3 (\$5,438,000) has a significantly lower total associated cost than Alternative 4 (\$10,302,000) (Appendix F).

Modifying Criteria

Regulatory Agency and Community Acceptance

Formal assessment of regulatory agency and community acceptance will be considered during the public comment period on this FS/RAP, and documented in the final FS/RAP.

Additional HSC Criteria

Alternatives 1 and 2 do not meet several California HSC criteria, including the health and safety risks posed by contamination at the Site and the effect of contamination on future uses of the Site.

Alternative 3 would likely meet all California HSC criteria, and Alternative 4 would likely meet all criteria except for reduction of toxicity, mobility, and volume of contaminants. Alternative 4 would also result in offsite environmental impacts due to hauling and transportation of soil to an offsite landfill facility.

7.0 PREFERRED REMEDIAL APPROACH

This section provides an overview of the implementation activities for the preferred remedial approach. Based on the evaluation and comparison of the four alternatives, *Alternative 3: Excavation and Onsite Treatment, Relocation and Capping for Soils, and In Situ Groundwater Treatment and Monitoring* is the preferred alternative.

This section is organized by remedial activity as follows:

- Excavation and onsite treatment, relocation, and capping;
- Soil confirmation sampling;
- Soil gas confirmation sampling;
- In situ remediation of CVOC-impacted groundwater;
- Groundwater monitoring;
- Operation and Maintenance of Groundwater Remediation System, and
- Land Use Controls.

Specific information regarding the pre-construction activities, excavation of soils, stockpiling and staging of soils, haul roads, traffic control elements, air monitoring programs, erosion control measures, and other details regarding the preferred remedial approach will be set forth in the RDIP and O&M plans. If additional impacted soils are discovered during Site demolition or grading activities, appropriate management and characterization of impacted soils will be conducted. Although not anticipated, if any hazardous materials are identified onsite, they will either be: (1) relocated under areas slated for Zone 1 redevelopment under a soil cap of minimum 3-foot thickness consistent with the EIR; (2) placed in Zones 2 and 3 under roadways; or (3) excavated and disposed offsite.

7.1 Excavation and Onsite Treatment and Relocation of Soils

Excavation, Onsite Treatment, and Relocation of CVOC-Impacted Soils

Figure 6-1 presents the location of the planned soil excavation to address CVOC-impacted soils and proposed onsite soil aeration treatment area.

The dimensions of the planned soil excavation are such that CVOCs in soil that exist at concentrations above Soil TRCGs will be removed. If the dimensions of the planned excavation are expanded to the southeast during implementation based on soil or soil gas confirmation sampling results, the excavation will not extend into the area where a previous soil removal action was conducted around the former oil/water separator (*B&M and T&R 2005, B&M, 2006b*). Any soil contamination identified in this area would be addressed under the UPC Brisbane project.

Excavated soils will be treated onsite using soil aeration techniques (Figure 6-1). Design details on soil aeration will be provided in the RDIP. Based on review of existing Site data, aeration of excavated soil

will be effective in treating the majority of excavated soils impacted with PCE and TCE through use of ambient aeration methods such as tilling, disking, and air injection.

Onsite soil aeration will be performed under the applicable rules and regulations of the BAAQMD, and in accordance with the *Draft Dust and Air Quality Monitoring Plan (MACTEC, 2009c)*.

Once PCE and TCE concentrations are lowered below the soil TRCGs through soil aeration techniques, the treated soil can be backfilled into excavations and relocated onsite. Prior to relocation of treated soil, soil samples will be collected at the frequency noted in the *DTSC's Information Advisory, Clean Imported Fill* of 12 samples for the first 5,000 cubic yards, and one sample per each additional 1,000 cubic yards (*DTSC, 2001*). The collected soil samples will be tested for CVOCs by EPA 8010 and compared to their respective soil TRCGs (Section 4.2).

Prior to initiating site development, in accordance with current DTSC requirements, confirmation soil gas sampling will be conducted to confirm that the CVOC concentrations in soil gas are below CULs.

Soils that do not meet onsite aeration treatment criteria (i.e., TRCGs) within the anticipated timeframe of 3 months or contain hazardous materials would be transported and disposed offsite at a Class I (Kettleman Hills Facility) or Class II (Allied Waste Forward Landfill or Clean Harbor Landfill) or other approved disposal sites, depending on concentrations of COCs and acceptance criteria.

Excavation and Relocation or Capping of Metals-Impacted Soils

Figure 3-3 presents the location of the isolated areas containing near-surface metals-impacted soils within the Schlage OU, and the location of soil anticipated to be limited in depth to near-surface, shallow soils that is potentially impacted by elevated concentrations of metals at the UPC OU. Within the UPC OU, additional soil sample collection and laboratory analyses are required to confirm XRF indications of elevated arsenic and lead. Based on the areal dimensions and the depths of potential metals-impacted soils, it is anticipated that approximately 22,000 cubic yards of soil could require mitigation by capping, or targeted excavation and relocation, and capping. The RDIP will describe the sampling procedures to define the limit of excavation. Localized hotspots of metals-impacted soils may be excavated and removed from the UPC OU based on measured concentrations.

Figure 2-1 shows the planned redevelopment zones where soil excavated to address metals-impacted soils will be relocated and placed a minimum of 2 feet above the groundwater table. In areas slated for Zone 1 redevelopment, soils will be placed under a soil cap of minimum 3-foot thickness consistent with the EIR. Soils may also be placed in Zones 2 and 3 under roadways, hardscape, or a minimum of 1 foot beneath clean utility corridors; details will be specified in the RDIP.

Due to the assumed presence of lead and arsenic in near-surface soil, additional samples will be collected to refine the extent of soils to be excavated prior to design of soil relocation and/or capping activities. Following receipt of analytical results for near-surface metals, a comparison of the volume of impacted soil to the volume of available fill space in Redevelopment Zone 1 will be completed, taking into consideration the volume of treated CVOC-impacted soils that is also slated to be relocated to this zone. The additional metals-impacted soils with concentrations exceeding soil CULs (Section 4.1) at UPC OU that are outside the limits of hardscape areas will be capped with landscaping or relocated for placement underneath the hardscape areas.

Soils that do not meet CULs or contain hazardous materials and for which available capacity is not available onsite under cover, hardscape, or roadways would be transported and disposed offsite at a

Class I (Kettleman Hills Facility) or Class II (Allied Waste Forward Landfill or Clean Harbor Landfill), or other approved disposal sites, depending on concentrations of COCs and acceptance criteria.

Confirmation Sampling Strategy

CVOCs in Soil, Soil Gas, and Groundwater

Confirmation sampling will be performed to determine that CULs for CVOCs in soil, soil gas, and groundwater have been met according to the following sequence of field activities and sampling strategy that will be described in detail in the RDIP:

1. Soil confirmation sampling in excavations to verify soil TRCGs have been met;
2. Backfilling the excavation with treated soil;
3. Soil gas confirmation sampling in backfilled areas to verify soil gas CULs have been met;
4. In situ treatment using ERD;
5. Groundwater monitoring to verify when groundwater TRCGs have been met and redevelopment activities can be initiated; and
6. Long term groundwater monitoring to verify when groundwater CULs (MCLs) have been met.

Metals in Soil

Confirmation sampling will be performed to determine that CULs for metals in soil have been met according to the following sequence of field activities and sampling strategy that will be described in detail in the RDIP:

1. Soil confirmation sampling in excavations to verify soil CULs have been met;
2. Backfilling the excavation with clean soil, or
3. Placement of soil beneath hardscape and/or a minimum of 3 feet of clean cover over soils in designated zones, consistent with the EIR.

7.2 Soil Confirmation Sampling Program

Soil confirmation sampling activities will be conducted as part of the excavation and removal of COC-impacted soils at each remedial action area. Confirmation sampling will be performed to verify concentrations of COCs in soil are below soil CULs for metals (Section 4.1) and soil TRCGs for CVOCs (Section 4.2), and will be applied according to the methodology presented in Section 4.3.

All confirmation samples, including Quality Assurance/Quality Control (QA/QC) samples (e.g., duplicates, equipment blanks), will be collected and analyzed in accordance with the Quality Assurance Project Plan (QAPP) for the Site (MACTEC, 2008b).

Two types of confirmation samples may be collected:

- **Bottom samples:** collected from the floor or bottom of all excavations; and

- Sidewall samples: collected from the sidewalls midway between the ground surface and the excavation bottom.

Based on the estimated size of the site excavation areas, a sampling grid with a cell size of 50 feet by 50 feet will be used to guide the collection of excavation bottom and sidewall samples. Therefore, the on center spacing of the bottom samples and sidewall samples will be 50 feet. The samples will be analyzed for site-specific COCs. Details of the sampling and analysis approach will be described in the RDIP.

7.3 Soil Gas Confirmation Sampling Program

After CVOC-impacted soils have been excavated and treated onsite, and the excavation has been backfilled with treated soils and prior to initiating Site redevelopment, soil gas confirmation sampling will be conducted to confirm soil gas CULs have been met. Soil gas sampling will be conducted on a sampling grid in accordance with the protocols presented in *Advisory—Active Soil Gas Investigations (DTSC, 2003)*. The collected samples will be tested for CVOC COCs by Toxic Organics (TO) Test Method and compared with soil gas CULs (Section 4.1), which will be applied according to the methodology presented in Section 4.3. The sampling will be conducted at 5 feet below rough development grade in accordance with the protocols presented in *Advisory—Active Soil Gas Investigations (DTSC, 2003)*.

It is anticipated that soil gas sampling at the Site will be conducted in a phased manner to document confirmation of completion of remedial activities and facilitate redevelopment that is anticipated to occur in a phased manner. Details of the sampling and analysis approach will be described in the RDIP.

7.4 In Situ Groundwater Remediation

The purpose of in situ remediation activities is to reduce CVOC concentrations in groundwater to below CULs (Section 4.1). Groundwater TRCGs were developed that are protective of site receptors so the progress of groundwater remedial actions can be assessed to identify when redevelopment activities can be initiated (Section 4.2). Groundwater remedial actions will be planned and implemented to achieve groundwater CULs (MCLs); however, the TRCGs will be achieved within a shorter timeframe that will allow redevelopment activities to be initiated.

In situ treatment by ERD for CVOC-impacted A-Zone groundwater is the preferred groundwater remedial action. It is anticipated that several injections may be necessary to reduce CVOC concentrations in groundwater below CULs. The RDIP will specify the type and volume of injectant, number of injection points, and depth intervals. Injection will be performed under the oversight of a California Registered Professional Engineer (P.E.) or Professional Geologist (P.G.), and a responsible/competent person will be onsite to provide direction to the injection contractor based on observed field conditions. If there are observed releases coming from the subsurface, injection activities will be stopped and necessary adjustments to the injection methods will be made.

Based on the results of the pilot scale ERD treatability study, a favorable response to lactate injection was observed in well MEC-13UA, located 30 feet downgradient of the injection array, demonstrated by: 1) increases in TOC concentrations; 2) reductions in non-target electron acceptor concentrations (e.g., dissolved oxygen, nitrate, and sulfate); and 3) declines in PCE and TCE concentrations. The results of the pilot scale treatability study indicates that injection of 20% sodium lactate has been successful in breaking down PCE and TCE into cis-1,2-DCE and VC. However, complete dechlorination of cis-1,2-DCE and VC has not yet been fully demonstrated. If complete breakdown of these products is not observed

through continued groundwater sampling in the pilot study area, a more persistent donor source such as soybean oil and/or microbial enhancement may be required.

This proposed approach to remediate the contaminated groundwater at the Site is based on the current available information regarding observed concentrations of CVOCs and pilot test results. Full-scale field implementation of the proposed approach should be flexible and allow for modifications if necessary as outlined below:

- **Modifications to the injection grid, the delivery frequency, and mass of injected reagents of electron donors:** The refinement of the injection points within the groundwater hot-spot area and readjustment of the injection points at locations where concentrations of CVOCs are below MCLs will be updated if new information is available at the time of implementation. Timely modifications in the reagent delivery and injection frequency should be tied to regular monitoring in the remediation zone.
- **Application of bioaugmentation:** Although significant degradation of PCE and TCE to DCE and VC have been observed in the ERD pilot test, the final step from VC to ethene in the sequential dechlorination process does not appear to be proceeding at a measurable rate, likely due to an insufficient population of dehalococoides bacteria (*Dhcs*) including vinyl chloride reductase (VCR). While it is possible that native microbial populations may in time evolve a more significant VCR fraction that will aid in the process of degrading VC into ethene, the timeframe for VC to degrade to concentrations below MCLs is unknown based on current data, and could exceed the four year estimates for degradation of PCE and TCE to concentrations below MCLs. Therefore, bacteria capable of sustained degradation and dechlorination of VC may be injected into the subsurface as part of the ERD to accelerate the process of degrading VC to ethene. Based on preliminary research and information provided by vendors of microorganisms, bioaugmentation has been successfully applied at several Bay Area sites with similar conditions, and would likely be applicable at the Site. Assessment of the feasibility of applying bioaugmentation during ERD treatment at the Site will be presented in the RDIP.

7.5 Groundwater Monitoring Program

Groundwater monitoring will be performed in accordance with the DTSC approved long term groundwater monitoring plan (*MACTEC, 2008e*). Supplemental analyses, including TOC, electron acceptors, field geochemical parameters, and Dhc, will also be collected and analyzed as part of in situ treatment performance monitoring. The well network and frequency of the supplemental analyses will be presented in the RDIP.

Groundwater monitoring data will be used to evaluate the effectiveness of remedial activities and progress toward RAOs. The status of site remediation will be reviewed in groundwater monitoring reports to be submitted to the DTSC. It is assumed that post-injection performance groundwater monitoring will be conducted quarterly for Years 1 to 2; semi-annually for Years 3 to 6; and annually for Years 7 to 30.

7.6 Operation and Maintenance of Groundwater Remediation System

An operation and maintenance (O&M) Plan for the groundwater remediation system will be prepared after initial implementation of the remedy described in the RDIP. The O&M Plan will include a description of the:

- ERD injection system performance groundwater monitoring program for A-Zone groundwater;

- Long term monitoring program of the A-Zone and B-Zone groundwater for a period of 30 years assumed for costing purposes;
- Annual evaluation reporting on the system performance, and 5-year reviews if necessary based on the timeframe required to achieve MCLs; and
- Contingency Plan that would be implemented if system performance evaluations indicate modifications are required to the ERD injection approach described in the RDIP.

As set forth in the Consent Order (*DTSC, 2008*), an O&M Plan would be prepared which describes the ongoing operation and maintenance of the remedy described in the RDIP. Within thirty (30) days of the date of DTSC's request, an O&M Plan that includes an implementation schedule would be prepared and submitted to DTSC for approval. Upon approval of the O&M Plan, an O&M Agreement, including Financial Assurance pursuant to California Health and Safety Code section 25355.2, would be signed between DTSC and the entity responsible for conducting the O&M. The financial assurance mechanisms shall meet the requirements of Health and Safety Code section 25355.2, and are subject to the review and approval of DTSC.

7.7 Land Use Controls

A LUC consisting of a State Land Use Covenant and a deed restriction will be recorded on the title to the property to limit human exposures for contaminants left in place in soil above levels considered protective of unrestricted use of the Site. If contamination remains in soils below CULs but above unrestricted residential use levels, a deed restriction will be implemented that specifies the following prohibitions:

- No first floor residences or daycare facilities;
- No hospital or schools;
- No growing of food;
- Where concentrations of groundwater COCs are above their MCL, no use of underlying groundwater; and
- No excavation in contaminated soil without a Soil Management Plan and DTSC approval.

For areas where metals remain above unrestricted levels a deed restriction would be recorded which would contain the following requirements/restrictions:

- The Owner shall provide written notice to the Department not later than thirty (30) days after any conveyance of any ownership interest in the Property (excluding Leases, and mortgages, liens, and other non-possessory encumbrances).
- The Covenant shall be incorporated by reference in each and every deed and Lease for any portion of the Property.
- The Owner agrees to pay the Department's costs in administering the Covenant.

Soil Management

- No activities that will disturb the soil at or below 3 feet below grade (e.g., excavation, grading, removal, trenching, filling, earth movement, mining, or drilling) shall be allowed on the Property without a Soil Management Plan approved by the Department in advance.
- Any contaminated soils brought to the surface by grading, excavation, trenching or backfilling shall be managed in accordance with all applicable provisions of state and federal law.

Non-Interference with Cap

- Activities that may disturb the Cap (e.g., excavation, grading, removal, trenching, filling, earth movement, or mining) shall not be permitted on the Capped Property without prior written approval by the Department.
- All uses and development of the Capped Property shall preserve the integrity or effectiveness of the Cap.
- The Cap shall not be altered without prior written approval by the Department.

The Department shall have reasonable right of entry and access to the Property for inspection, monitoring, and other activities consistent with the purposes of this Covenant as deemed necessary by the Department in order to protect the public health or safety, or the environment.

The Owner shall conduct an annual inspection of the Property verifying compliance with this Covenant, and shall submit an annual inspection report to the Department for its approval by January 15th of each year.

As set forth in the Consent Order (*DTSC, 2008*), an O&M Plan would be prepared which describes the ongoing operation and maintenance of the remedy described in the RDIP. Within thirty (30) days of the date of DTSC's request, an O&M Plan that includes an implementation schedule would be prepared and submitted to DTSC for approval. Upon approval of the O&M Plan, an O&M Agreement, including Financial Assurance pursuant to California Health and Safety Code section 25355.2, would be signed between DTSC and the entity responsible for conducting the O&M. The financial assurance mechanisms shall meet the requirements of Health and Safety Code section 25355.2, and are subject to the review and approval of DTSC.

8.0 SCHEDULE

The schedule for project implementation will be presented for review and comment by the DTSC.

Task	Schedule
FS/RAP Approval	Fall 2009
Remedial Design and Permitting	Fall 2009
Soil Excavation	Fall 2009
Onsite Soil Aeration and Relocation/Capping	Fall 2009
In Situ Soil Gas Confirmation Sampling North of Visitacion Avenue in Schlage OU	Winter 2010
In Situ Groundwater Remediation	Winter 2010
In Situ Soil Gas Confirmation Sampling Between Visitacion Avenue and Sunnydale Avenue in Schlage OU	Spring 2010
In Situ Soil Gas Confirmation Sampling for Groundwater Remedial Unit in the Schlage OU	Spring 2011
Long Term Groundwater Monitoring	2009 - 2039

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TABLES

Table 2-1. Monitoring Well Construction Details

Well Name	Installation Date	Water Bearing Zone Screened	Easting	Northing	Top of Casing Elevation (ft MSL)	Ground Surface Elevation (ft MSL)	Casing Diameter (inches)	Total Well Depth	Total Boring Depth (ft bgs)	Screened Interval (ft bgs)
BMW-1	1/6/2006	Lower A	6011422.01	2085618.60	17.25	--	2	55	58.4	45-55
BMW-2	1/6/2006	Lower A	6011343.04	2085368.96	15.62	--	2	59	60.9	49-59
GT-1	--	B	6010959.38	2085707.68	11.97	9.39	--	143	143	118-143
GT-2	--	Lower A	6011203.95	2084989.53	11.66	9.16	--	40	40	25-40
GT-3	12/28/1993	Lower A	6010665.54	2086181.08	14.39	11.89	4	43	43	28-43
GT-4	--	Lower A	6010919.59	2086698.19	23.36	23.86	4	43	43	28-43
GWE-1	11/22/1993	Upper A	6010968.67	2085814.49	9.92	10.00	5	13	13	4-13
GWE-2	11/22/1993	Upper A	6011054.44	2085490.49	7.16	7.80	5	9	9	4-9
GWE-3	11/22/1993	Upper A	6010888.14	2085241.31	8.58	9.17	5	16	16	5-16
GWE-4	11/22/1993	Upper A	6010847.46	2085508.23	8.08	9.00	5	16	16	5-16
GWE-5	--	Upper A	6010721.00	2085963.57	9.58	9.70	--	16	16	5-16
GWE-6	11/30/1993	Lower A	6010853.93	2086055.64	14.95	16.03	4	41	41	26-41
GWE-7	11/29/1993	Lower A	6010957.24	2086024.05	12.08	12.65	4	40	40	30-40
GWE-8	11/23/1993	Lower A	6011110.73	2086099.77	14.40	15.51	4	42	42	27-42
LF-10A	4/27/1990	Upper A	6011158.42	2086132.70	16.51	20.03	2	13	45	8-13
LF-10B	5/15/1990	Lower A	6011137.68	2086223.46	16.35	19.99	2	44	45	34-44
LF-11A	10/31/1990	Lower A	6010984.54	2086223.46	18.68	20.00	2	20	20	10-20
LF-11B	11/14/1990	B	6010976.08	2086718.11	25.44	22.00	2	65	65	55-65
LF-12A	10/31/1990	Lower A	6011118.20	2086583.16	23.39	23.00	2	23.5	23.5	13.5-23.5
LF-12B	--	B	6011272.81	2086551.81	22.19	23.00	--	52.5	--	42.5-52.5
LF-1AR	--	Upper A	--	--	--	--	--	--	--	--
LF-2B	--	Lower A	6010966.74	2085570.84	11.58	9.00	--	44	44	33-44
LF-9A	4/27/1990	Upper A	6010834.11	2086115.70	15.83	16.50	2	20	20	10-20
LF-9B	5/16/1990	Lower A	6010835.46	2086115.11	15.95	16.50	2	43	45	33-43
LF-9C	10/8/1990	B	6010853.84	2086107.71	16.04	16.29	2	82	82	72-82
MEC-10LA	8/1/2008	Lower A	6011140.85	2086162.23	15.86	16.28	2	43	43	33-43
MEC-10UA	8/1/2008	Upper A	6011143.39	2086154.47	15.91	16.19	2	18	18	8-18
MEC-11UA	8/4/2008	Upper A	6011473.21	2086960.89	23.58	23.79	2	16	16	6-16
MEC-12LA	7/31/2008	Lower A	6011167.82	2086463.41	21.41	21.64	2	40	40	35-40
MEC-12UA	7/31/2008	Upper A	6011170.65	2086469.93	21.19	21.67	2	15	20	15-20
MEC-13LA	8/4/2008	Lower A	6011155.69	2086429.99	21.31	21.52	2	55	55	50-55
MEC-13UA	7/31/2008	Upper A	6011157.37	2086435.52	20.91	21.60	2	35	35	15-35
MK-1A	--	--	--	--	--	--	--	--	--	--
MK-2A	1/13/1986	Upper A	6010203.07	2084851.62	12.96	9.83	2	13	13	3-13
MK-3B	--	Lower A	6010527.68	2085607.89	8.75	9.04	--	43	--	33-43

Table 2-1. Monitoring Well Construction Details

Well Name	Installation Date	Water Bearing Zone Screened	Easting	Northing	Top of Casing Elevation (ft MSL)	Ground Surface Elevation (ft MSL)	Casing Diameter (inches)	Total Well Depth	Total Boring Depth (ft bgs)	Screened Interval (ft bgs)
MK-4A	1/14/1986	Upper A	6011398.17	2085855.03	17.46	14.65	2	15	15	5-15
MK-4B	1/22/1986	Lower A	6011398.48	2085847.11	18.02	15.38	2	32	35	23-32
MK-5AR	3/7/2007	Upper A	--	--	--	--	--	--	--	--
MK-5B	1/20/1986	Lower A	6010861.61	2085011.17	11.77	8.68	2	27	29	17-27
MK-6A	1/14/1986	Upper A	6011472.96	2085084.86	17.28	14.05	2	18	20	8-18
MK-6B	1/21/1986	Lower A	6011480.78	2085088.08	17.00	14.29	2	47	50	37-47
MK-9A	--	Upper A	6010302.80	2085812.63	12.66	12.54	--	10	--	2-10
MK-9B	--	Lower A	6010294.04	2085816.15	17.29	11.00	--	26	--	21-26
MW-10A	3/16/1984	--	--	--	9.59	--	--	--	--	3-13
MW-10B	3/23/1984	--	--	--	10.19	--	--	--	--	33-38
MW-11A	3/16/1984	Upper A	6011444.86	2084456.54	14.19	--	2	13	16	3-13
MW-11B	3/28/1984	Lower A	6011458.75	2084452.94	14.85	--	2	38	41.5	33-38
MW-12B	3/28/1984	--	--	--	14.00	--	--	--	--	21.5-26.5
MW-13A	3/27/1984	Upper A	--	--	7.81	--	--	--	--	3-13
MW-13B	3/27/1984	--	--	--	--	--	--	--	--	33-38
MW-14A	3/21/1984	Upper A	--	--	7.58	--	--	--	--	3-13
MW-14B	3/21/1984	--	--	--	8.18	--	--	--	--	43-48
MW-15A	3/21/1984	--	--	--	8.67	--	--	--	--	3-13
MW-16A	3/21/1984	--	--	--	9.24	--	--	--	--	3-13
MW-16B	3/20/1984	--	--	--	9.95	--	--	--	--	35-40
MW-17A	3/19/1984	--	--	--	8.45	--	--	--	--	3-13
MW-17B	3/19/1984	--	--	--	8.30	--	--	--	--	35-40
MW-1B	3/28/1984	--	--	--	8.14	--	--	--	--	34.5-39.5
MW-2B	3/13/1984	Lower A	6010197.64	2084838.52	13.88	9.00	2	40	40	35-40
MW-3A	3/15/1984	Upper A	6010452.95	2085434.08	11.18	9.00	--	15.3	--	2.5-12.5
MW-4A	3/15/1984	Upper A	6010533.45	2085775.00	12.82	9.50	2	12	12	2-12
MW-5AF	--	--	--	--	12.19	--	--	--	--	--
MW-5B	3/22/1984	Lower A	6010788.57	2085020.02	11.83	13.00	--	38.6	38.6	30-35
MW-6AR	2/8/2005	Upper A	6011062.19	2085808.24	13.02	--	2	13	13	5-13
MW-6B	3/23/1984	Lower A	6011084.04	2085808.84	13.97	12.00	2	35	35	30-35
MW-7A	3/16/1984	Upper A	6010979.53	2085592.00	11.19	9.00	2	13	13	3-13
MW-8A	3/16/1984	Upper A	6010784.50	2085277.60	10.62	9.00	2	13	13	3-13
MW-8B	3/25/1984	Lower A	6010800.40	2085273.05	13.25	11.25	--	38	38	33-38
MW-9A	3/28/1984	Lower A	--	--	11.26	--	--	--	--	3-13
MW-9B	3/29/1984	Upper A	--	--	10.20	--	--	--	--	34-39

Table 2-1. Monitoring Well Construction Details

Well Name	Installation Date	Water Bearing Zone Screened	Easting	Northing	Top of Casing Elevation (ft MSL)	Ground Surface Elevation (ft MSL)	Casing Diameter (inches)	Total Well Depth	Total Boring Depth (ft bgs)	Screened Interval (ft bgs)
PZ-1LA	--	Lower A	6010528.77	2086222.95	13.52	13.86	--	33	--	28-33
PZ-1UA	--	Upper A	6010524.14	2086224.78	13.67	14.00	--	15	--	10-15
PZ-2UA	--	Upper A	6010508.36	2086190.96	14.11	14.44	--	35	--	30-35
PZ-3LA	--	Lower A	6010969.70	2086060.95	14.55	14.80	--	33	--	28-33
PZ-3UA	--	Upper A	6010978.52	2086058.69	14.35	14.61	--	25	--	20-25
PZ-4LA	--	Lower A	6011153.89	2086023.16	12.95	13.20	--	33	--	28-33
PZ-4UA	--	Upper A	6011142.08	2086025.47	12.65	13.00	--	21	--	16-21
PZ-5LA	--	Lower A	6011151.86	2086005.73	12.43	12.77	--	33	--	28-33
PZ-5UA	--	Upper A	6011140.94	2086005.84	12.37	12.63	--	20	--	15-20
PZ-6LA	--	Lower A	6011464.65	2085961.87	16.69	16.92	--	30	--	25-30
PZ-6UA	--	Upper A	6011469.29	2085952.05	16.63	16.89	--	40	--	25-40
PZ-7LA	--	Lower A	6011468.67	2085932.86	16.69	16.94	--	34	--	29-34
PZ-7UA	--	Upper A	6011462.12	2085933.51	16.63	16.82	--	29	--	24-29
SW-02LA	12/6/1999	Lower A	6011473.240	2086992.597	23.64	24.13	0.25	15	16	10-15
SW-02UA	12/6/1999	Upper A	6011473.240	2086992.597	23.64	24.13	0.25	10	16	5-10
SW-03B	12/11/1999	B	6011169.136	2086829.089	29.23	29.65	0.25	69	70	64-69
SW-03LA	12/11/1999	Lower A	6011169.136	2086829.089	29.23	29.65	0.25	32	70	27-32
SW-03UA	12/11/1999	Upper A	6011169.136	2086829.089	29.23	29.65	0.25	20	70	15-20
SW-04B	12/10/1999	B	6011032.057	2086684.882	24.70	25.26	0.25	65	66	60-65
SW-04LA	12/10/1999	Lower A	6011032.057	2086684.882	24.70	25.26	0.25	35	66	30-35
SW-04UA	12/10/1999	Upper A	6011032.057	2086684.882	24.70	25.26	0.25	22	66	17-22
SW-05B	12/6/1999	B	6011277.317	2086605.609	23.13	23.60	0.25	64	65	59-64
SW-05LA	12/6/1999	Lower A	6011277.317	2086605.609	23.13	23.60	0.25	33	65	28-33
SW-05UA	12/6/1999	Upper A	6011277.317	2086605.609	23.13	23.60	0.25	25	65	20-25
SW-06LA	12/12/1999	Lower A	6011063.901	2086456.293	21.56	22.15	0.25	42	45	37-42
SW-06UA	12/12/1999	Upper A	6011063.901	2086456.293	21.56	22.15	0.25	25	45	20-25
SW-07B	12/3/1999	B	6011163.574	2086448.786	21.18	21.65	0.25	68	70	63-68
SW-07LA	12/3/1999	Lower A	6011163.574	2086448.786	21.18	21.65	0.25	40	70	35-40
SW-07UA	12/3/1999	Upper A	6011163.574	2086448.786	21.18	21.65	0.25	20	70	15-20
SW-08B	12/14/1999	B	6011162.638	2086306.726	19.10	19.61	0.25	68	69	63-68
SW-08LA	12/14/1999	Lower A	6011162.638	2086306.726	19.10	19.61	0.25	36	69	31-36
SW-08UA	12/14/1999	Upper A	6011162.638	2086306.726	19.10	19.61	0.25	25	69	20-25
SW-09B	12/1/1999	B	6011350.015	2086211.481	17.38	17.89	0.25	65	67	60-65
SW-09LA	12/1/1999	Lower A	6011350.015	2086211.481	17.38	17.89	0.25	42	67	37-42
SW-09UA	12/1/1999	Upper A	6011350.015	2086211.481	17.38	17.89	0.25	25	67	20-25

Table 2-1. Monitoring Well Construction Details

Well Name	Installation Date	Water Bearing Zone Screened	Easting	Northing	Top of Casing Elevation (ft MSL)	Ground Surface Elevation (ft MSL)	Casing Diameter (inches)	Total Well Depth	Total Boring Depth (ft bgs)	Screened Interval (ft bgs)
SW-10LA	12/8/1999	Lower A	6011002.585	2086277.231	21.48	21.95	0.25	40	45	35-40
SW-10UA	12/8/1999	Upper A	6011002.585	2086277.231	21.48	21.95	0.25	25	45	20-25
SW-11B	12/9/1999	B	6010817.496	2086091.252	15.38	15.96	0.25	65	66	60-65
SW-11LA	12/9/1999	Lower A	6010817.496	2086091.252	15.38	15.96	0.25	40	66	35-40
SW-11UA	12/9/1999	Upper A	6010817.496	2086091.252	15.38	15.96	0.25	20	66	15-20
SW-12B	12/18/1999	B	6011007.421	2086031.903	12.82	13.32	0.25	68	70	63-68
SW-12LA	12/18/1999	Lower A	6011007.421	2086031.903	12.82	13.32	0.25	42	70	37-42
SW-12UA	12/18/1999	Lower A	6011007.421	2086031.903	12.82	13.32	0.25	25	70	20-25
SW-13LA	12/18/1999	Lower A	6010970.337	2086388.683	22.34	22.56	0.25	35	40	30-35
SW-13UA	12/18/1999	Upper A	6010970.337	2086388.683	22.34	22.56	0.25	18	40	12-18
SW-14B	12/18/1999	B	6010870.726	2085854.518	10.34	10.82	0.25	65	66	60-65
SW-14LA	12/18/1999	Lower A	6010870.726	2085854.518	10.34	10.82	0.25	42	66	37-42
SW-14UA	12/18/1999	Upper A	6010870.726	2085854.518	10.34	10.82	0.25	20	66	15-20
SW-16LA	--	Lower A	6011034.954	208433.037	11.27	8.63	--	45	55	40-45
SW-17LA	12/20/1999	Lower A	6010767.066	2086043.833	14.92	12.22	0.25	40	45	35-40
SW-17UA	12/20/1999	Upper A	6010767.066	2086043.833	14.92	12.22	0.25	18	45	13-18
SW-18B	--	B	6011182.990	2085778.320	11.85	9.33	2	68.5	69	63.5-68.5
SW-18LA	--	Lower A	6011188.050	2085785.250	12.38	9.49	1	39	39	34-39
SW-18UA	--	Upper A	6011195.110	2085795.580	9.29	9.56	1	10	10	5-10
TRW-01	7/26/1995	Upper A	6011282.20	2087282.56	22.39	--	2	18	18.5	8-18
TRW-02	--	Upper A	6011374.35	2087281.56	46.22	--	2	27	29.5	12-27
TRW-03	--	--	6011619.36	2087350.88	63.26	63.94	--	29	29.0	9-29

Notes

ft MSL = feet above mean sea level

ft bgs = feet below ground surface

-- = not available

Wells installed prior to 2008: Information based on available well construction logs and well construction tables from Treadwell & Rollo and Burns & McDonnell

Checked by: MH-F

Approved by: MS

Table 2-2. Summary of Groundwater Historical Elevation Data

Station Name	Date	Top of Casing Elevation ^a (feet msl)	Depth to Water ^b (feet)	Groundwater Elevation (feet msl)
Upper A Aquifer				
GWE-1	9/8/2008	9.92	5.13	4.79
GWE-2	9/8/2008	7.16	2.42	4.74
GWE-3	9/8/2008	8.58	3.77	4.81
GWE-4	9/8/2008	8.08	3.32	4.76
LF-10A	9/8/2008	16.51	5.76	10.75
LF-11A	9/8/2008	18.68	8.33	10.35
LF-11A	11/3/2008	18.68	8.25	10.43
LF-9A	9/8/2008	15.83	5.98	9.85
MK-2A	9/8/2008	12.93	5.01	7.92
MK-2A	11/3/2008	12.93	4.82	8.11
MK-4A	9/8/2008	17.46	12.54	4.92
MK-4A	11/3/2008	17.46	12.61	4.85
MK-5A	9/8/2008	10.88	6.30	4.58
MK-5A	11/3/2008	10.88	6.22	4.66
MK-6A	9/8/2008	17.28	12.76	4.52
MK-6A	11/3/2008	17.28	12.95	4.33
MW-11A	9/8/2008	14.07	9.56	4.51
MW-11A	11/3/2008	14.07	9.77	4.30
MW-4A	9/8/2008	12.82	7.40	5.42
MW-5AF	9/8/2008	12.19	4.63	7.56
MW-5AF	11/3/2008	12.19	4.36	7.83
MW-6AR	9/8/2008	13.30	8.53	4.77
MW-6AR	11/3/2008	13.30	8.45	4.85
MW-7A	9/8/2008	11.19	6.46	4.73
MW-7A	11/3/2008	11.19	6.28	4.91
MW-8A	9/8/2008	10.62	5.87	4.75
SW-02UA	5/26/2000	23.64	4.10	19.54
SW-02UA	9/6/2000	23.64	4.89	18.75
SW-02UA	12/8/2000	23.64	5.03	18.61
SW-02UA	4/13/2001	23.64	4.51	19.13
SW-02UA	8/6/2001	23.64	5.29	18.35
SW-02UA	12/7/2001	23.64	4.97	18.67
SW-02UA	3/15/2002	23.64	4.37	19.27
SW-02UA	6/3/2002	23.64	4.78	18.86
SW-02UA	9/9/2002	23.64	5.28	18.36
SW-02UA	12/10/2002	23.64	5.47	18.17
SW-02UA	3/2/2003	23.64	4.45	19.19
SW-02UA	6/2/2003	23.64	4.49	19.15
SW-02UA	8/25/2003	23.64	5.15	18.49
SW-02UA	12/15/2003	23.64	4.98	18.66
SW-02UA	3/25/2004	23.64	4.37	19.27
SW-02UA	6/7/2004	23.64	5.00	18.64
SW-02UA	9/7/2004	23.64	5.29	18.35
SW-02UA	12/6/2004	23.64	5.40	18.24
SW-02UA	2/28/2005	23.64	4.35	19.29
SW-02UA	2/28/2005	23.64	4.54	19.10
SW-02UA	9/12/2005	23.64	5.45	18.19
SW-02UA	11/28/2005	23.64	5.80	17.84
SW-02UA	3/6/2006	23.64	4.74	18.90
SW-02UA	6/5/2006	23.64	4.39	19.25
SW-02UA	8/30/2006	23.64	5.12	18.52
SW-02UA	11/29/2006	23.64	5.51	18.13
SW-02UA	3/6/2007	23.64	4.71	18.93
SW-02UA	5/25/2007	23.64	5.12	18.52
SW-02UA	8/27/2007	23.64	5.80	17.84
SW-02UA	11/27/2007	23.64	5.84	17.80
SW-02UA	2/25/2008	23.64	4.21	19.43

Table 2-2. Summary of Groundwater Historical Elevation Data

Station Name	Date	Top of Casing Elevation ^a (feet msl)	Depth to Water ^b (feet)	Groundwater Elevation (feet msl)
SW-02UA	6/17/2008	23.64	5.78	17.86
SW-02UA	9/8/2008	23.64	5.98	17.66
SW-02UA	11/3/2008	23.64	6.01	17.63
SW-03UA	5/26/2000	29.23	11.69	17.54
SW-03UA	9/6/2000	29.23	12.24	16.99
SW-03UA	12/8/2000	29.23	12.64	16.59
SW-03UA	4/13/2001	29.23	12.26	16.97
SW-03UA	8/6/2001	29.23	12.56	16.67
SW-03UA	12/7/2001	29.23	12.62	16.61
SW-03UA	3/15/2002	29.23	11.95	17.28
SW-03UA	6/3/2002	29.23	12.25	16.98
SW-03UA	9/9/2002	29.23	12.68	16.55
SW-03UA	12/10/2002	29.23	12.89	16.34
SW-03UA	3/2/2003	29.23	11.99	17.24
SW-03UA	6/2/2003	29.23	12.28	16.95
SW-03UA	8/25/2003	29.23	12.86	16.37
SW-03UA	12/15/2003	29.23	12.95	16.28
SW-03UA	3/25/2004	29.23	12.46	16.77
SW-03UA	6/7/2004	29.23	12.95	16.28
SW-03UA	9/7/2004	29.23	13.42	15.81
SW-03UA	12/6/2004	29.23	13.53	15.70
SW-03UA	2/28/2005	29.23	12.96	16.27
SW-03UA	2/28/2005	29.23	12.59	16.64
SW-03UA	9/12/2005	29.23	13.18	16.05
SW-03UA	11/28/2005	29.23	13.49	15.74
SW-03UA	3/6/2006	29.23	12.53	16.70
SW-03UA	6/5/2006	29.23	12.36	16.87
SW-03UA	8/30/2006	29.23	12.76	16.47
SW-03UA	11/29/2006	29.23	13.50	15.73
SW-03UA	3/6/2007	29.23	12.50	16.73
SW-03UA	5/25/2007	29.23	12.84	16.39
SW-03UA	8/27/2007	29.23	13.17	16.06
SW-03UA	11/27/2007	29.23	13.40	15.83
SW-03UA	2/25/2008	29.23	12.53	16.70
SW-03UA	6/17/2008	29.23	13.33	15.90
SW-03UA	9/8/2008	29.23	13.39	15.84
SW-04UA	5/26/2000	24.70	9.68	15.02
SW-04UA	9/6/2000	24.70	10.18	14.52
SW-04UA	12/8/2000	24.70	10.06	14.64
SW-04UA	4/13/2001	24.70	9.56	15.14
SW-04UA	8/6/2001	24.70	9.99	14.71
SW-04UA	12/7/2001	24.70	10.01	14.69
SW-04UA	3/15/2002	24.70	9.91	14.79
SW-04UA	6/3/2002	24.70	10.27	14.43
SW-04UA	9/9/2002	24.70	10.27	14.43
SW-04UA	12/10/2002	24.70	10.64	14.06
SW-04UA	3/2/2003	24.70	9.72	14.98
SW-04UA	6/2/2003	24.70	10.17	14.53
SW-04UA	8/25/2003	24.70	10.42	14.28
SW-04UA	12/15/2003	24.70	10.08	14.62
SW-04UA	3/25/2004	24.70	9.75	14.95
SW-04UA	6/7/2004	24.70	10.13	14.57
SW-04UA	9/7/2004	24.70	10.84	13.86
SW-04UA	12/6/2004	24.70	10.53	14.17
SW-04UA	2/28/2005	24.70	9.93	14.77
SW-04UA	2/28/2005	24.70	9.73	14.97
SW-04UA	9/12/2005	24.70	10.25	14.45
SW-04UA	11/28/2005	24.70	10.56	14.14

Table 2-2. Summary of Groundwater Historical Elevation Data

Station Name	Date	Top of Casing Elevation ^a (feet msl)	Depth to Water ^b (feet)	Groundwater Elevation (feet msl)
SW-04UA	3/6/2006	24.70	9.75	14.95
SW-04UA	6/5/2006	24.70	9.68	15.02
SW-04UA	8/30/2006	24.70	10.01	14.69
SW-04UA	11/29/2006	24.70	10.04	14.66
SW-04UA	3/6/2007	24.70	9.57	15.13
SW-04UA	5/25/2007	24.70	10.10	14.60
SW-04UA	8/27/2007	24.70	10.09	14.61
SW-04UA	11/27/2007	24.70	10.32	14.38
SW-04UA	2/25/2008	24.70	10.32	14.38
SW-04UA	6/17/2008	24.70	10.36	14.34
SW-04UA	9/8/2008	24.70	10.20	14.50
SW-04UA	11/3/2008	24.70	10.25	14.45
SW-05UA	5/26/2000	23.13	8.83	14.30
SW-05UA	9/6/2000	23.13	9.23	13.90
SW-05UA	12/8/2000	23.13	9.38	13.75
SW-05UA	4/13/2001	23.13	8.84	14.29
SW-05UA	8/6/2001	23.13	9.36	13.77
SW-05UA	12/7/2001	23.13	9.15	13.98
SW-05UA	3/15/2002	23.13	8.87	14.26
SW-05UA	6/3/2002	23.13	9.16	13.97
SW-05UA	9/9/2002	23.13	9.38	13.75
SW-05UA	12/10/2002	23.13	9.57	13.56
SW-05UA	3/2/2003	23.13	8.89	14.24
SW-05UA	6/2/2003	23.13	9.19	13.94
SW-05UA	8/25/2003	23.13	9.64	13.49
SW-05UA	12/15/2003	23.13	9.32	13.81
SW-05UA	3/25/2004	23.13	8.99	14.14
SW-05UA	6/7/2004	23.13	9.45	13.68
SW-05UA	9/7/2004	23.13	9.79	13.34
SW-05UA	12/6/2004	23.13	9.80	13.33
SW-05UA	2/28/2005	23.13	9.15	13.98
SW-05UA	2/28/2005	23.13	8.96	14.17
SW-05UA	9/12/2005	23.13	9.53	13.60
SW-05UA	11/28/2005	23.13	9.74	13.39
SW-05UA	3/6/2006	23.13	8.88	14.25
SW-05UA	6/5/2006	23.13	8.90	14.23
SW-05UA	8/30/2006	23.13	9.11	14.02
SW-05UA	11/29/2006	23.13	9.29	13.84
SW-05UA	3/6/2007	23.13	8.77	14.36
SW-05UA	5/25/2007	23.13	9.12	14.01
SW-05UA	8/27/2007	23.13	9.32	13.81
SW-05UA	11/27/2007	23.13	9.59	13.54
SW-05UA	2/25/2008	23.13	8.58	14.55
SW-05UA	6/17/2008	23.13	9.49	13.64
SW-05UA	9/8/2008	23.13	9.40	13.73
SW-05UA	11/3/2008	23.13	9.28	13.85
SW-06UA	5/26/2000	21.56	9.28	12.28
SW-06UA	9/6/2000	21.56	9.35	12.21
SW-06UA	12/8/2000	21.56	9.55	12.01
SW-06UA	4/13/2001	21.56	9.50	12.06
SW-06UA	8/6/2001	21.56	9.52	12.04
SW-06UA	12/7/2001	21.56	9.37	12.19
SW-06UA	3/15/2002	21.56	9.19	12.37
SW-06UA	6/3/2002	21.56	9.54	12.02
SW-06UA	9/9/2002	21.56	9.63	11.93
SW-06UA	12/10/2002	21.56	9.82	11.74
SW-06UA	3/2/2003	21.56	9.26	12.30
SW-06UA	6/2/2003	21.56	9.27	12.29

Table 2-2. Summary of Groundwater Historical Elevation Data

Station Name	Date	Top of Casing Elevation ^a (feet msl)	Depth to Water ^b (feet)	Groundwater Elevation (feet msl)
SW-06UA	8/25/2003	21.56	9.60	11.96
SW-06UA	12/15/2003	21.56	9.56	12.00
SW-06UA	3/25/2004	21.56	9.25	12.31
SW-06UA	6/7/2004	21.56	9.58	11.98
SW-06UA	9/7/2004	21.56	9.95	11.61
SW-06UA	12/6/2004	21.56	9.93	11.63
SW-06UA	2/28/2005	21.56	9.29	12.27
SW-06UA	2/28/2005	21.56	9.19	12.37
SW-06UA	9/12/2005	21.56	9.73	11.83
SW-06UA	11/28/2005	21.56	9.92	11.64
SW-06UA	3/6/2006	21.56	9.01	12.55
SW-06UA	6/5/2006	21.56	9.13	12.43
SW-06UA	8/30/2006	21.56	9.37	12.19
SW-06UA	11/29/2006	21.56	9.47	12.09
SW-06UA	3/6/2007	21.56	9.10	12.46
SW-06UA	5/25/2007	21.56	8.39	13.17
SW-06UA	8/27/2007	21.56	9.62	11.94
SW-06UA	11/27/2007	21.56	9.75	11.81
SW-06UA	2/25/2008	21.56	9.04	12.52
SW-06UA	6/17/2008	21.56	9.83	11.73
SW-06UA	9/8/2008	21.56	9.54	12.02
SW-06UA	11/3/2008	21.56	9.48	12.08
SW-07UA	5/26/2000	21.18	8.80	12.38
SW-07UA	9/6/2000	21.18	8.91	12.27
SW-07UA	12/8/2000	21.18	9.12	12.06
SW-07UA	4/13/2001	21.18	8.67	12.51
SW-07UA	8/6/2001	21.18	9.09	12.09
SW-07UA	12/7/2001	21.18	8.88	12.30
SW-07UA	3/15/2002	21.18	8.68	12.50
SW-07UA	6/3/2002	21.18	9.06	12.12
SW-07UA	9/9/2002	21.18	9.18	12.00
SW-07UA	12/10/2002	21.18	9.37	11.81
SW-07UA	3/2/2003	21.18	8.78	12.40
SW-07UA	6/2/2003	21.18	8.83	12.35
SW-07UA	8/25/2003	21.18	9.11	12.07
SW-07UA	12/15/2003	21.18	9.08	12.10
SW-07UA	3/25/2004	21.18	8.82	12.36
SW-07UA	6/7/2004	21.18	6.10	15.08
SW-07UA	9/7/2004	21.18	9.49	11.69
SW-07UA	12/6/2004	21.18	9.45	11.73
SW-07UA	2/28/2005	21.18	8.74	12.44
SW-07UA	2/28/2005	21.18	8.87	12.31
SW-07UA	9/12/2005	21.18	9.34	11.84
SW-07UA	11/28/2005	21.18	9.53	11.65
SW-07UA	3/6/2006	21.18	8.58	12.60
SW-07UA	6/5/2006	21.18	8.72	12.46
SW-07UA	8/30/2006	21.18	9.00	12.18
SW-07UA	11/29/2006	21.18	9.07	12.11
SW-07UA	3/6/2007	21.18	8.68	12.50
SW-07UA	5/25/2007	21.18	8.97	12.21
SW-07UA	8/27/2007	21.18	9.17	12.01
SW-07UA	11/27/2007	21.18	9.32	11.86
SW-07UA	2/25/2008	21.18	8.64	12.54
SW-07UA	6/17/2008	21.18	9.43	11.75
SW-07UA	9/8/2008	21.18	9.07	12.11
SW-08UA	5/26/2000	19.10	8.50	10.60
SW-08UA	9/6/2000	19.10	7.97	11.13
SW-08UA	12/8/2000	19.10	8.19	10.91

Table 2-2. Summary of Groundwater Historical Elevation Data

Station Name	Date	Top of Casing Elevation ^a (feet msl)	Depth to Water ^b (feet)	Groundwater Elevation (feet msl)
SW-08UA	4/13/2001	19.10	7.85	11.25
SW-08UA	8/6/2001	19.10	8.20	10.90
SW-08UA	12/7/2001	19.10	7.98	11.12
SW-08UA	3/15/2002	19.10	7.82	11.28
SW-08UA	6/3/2002	19.10	8.21	10.89
SW-08UA	9/9/2002	19.10	8.16	10.94
SW-08UA	12/10/2002	19.10	8.41	10.69
SW-08UA	3/2/2003	19.10	8.01	11.09
SW-08UA	6/2/2003	19.10	7.96	11.14
SW-08UA	8/25/2003	19.10	8.19	10.91
SW-08UA	12/15/2003	19.10	8.13	10.97
SW-08UA	3/25/2004	19.10	7.93	11.17
SW-08UA	6/7/2004	19.10	8.21	10.89
SW-08UA	9/7/2004	19.10	8.62	10.48
SW-08UA	12/6/2004	19.10	8.52	10.58
SW-08UA	2/28/2005	19.10	8.10	11.00
SW-08UA	2/28/2005	19.10	7.88	11.22
SW-08UA	9/12/2005	19.10	8.48	10.62
SW-08UA	11/28/2005	19.10	8.65	10.45
SW-08UA	3/6/2006	19.10	7.68	11.42
SW-08UA	6/5/2006	19.10	7.92	11.18
SW-08UA	8/30/2006	19.10	8.15	10.95
SW-08UA	11/29/2006	19.10	8.12	10.98
SW-08UA	3/6/2007	19.10	7.84	11.26
SW-08UA	5/25/2007	19.10	8.12	10.98
SW-08UA	8/27/2007	19.10	8.29	10.81
SW-08UA	11/27/2007	19.10	8.42	10.68
SW-08UA	2/25/2008	19.10	7.77	11.33
SW-08UA	6/17/2008	19.10	8.69	10.41
SW-08UA	9/8/2008	19.10	8.08	11.02
SW-08UA	11/3/2008	19.10	7.98	11.12
SW-09UA	5/26/2000	17.38	6.46	10.92
SW-09UA	9/6/2000	17.38	6.30	11.08
SW-09UA	12/8/2000	17.38	6.43	10.95
SW-09UA	4/13/2001	17.38	6.25	11.13
SW-09UA	8/6/2001	17.38	6.53	10.85
SW-09UA	12/7/2001	17.38	6.15	11.23
SW-09UA	3/15/2002	17.38	6.03	11.35
SW-09UA	6/3/2002	17.38	6.51	10.87
SW-09UA	9/9/2002	17.38	6.53	10.85
SW-09UA	12/10/2002	17.38	6.85	10.53
SW-09UA	3/2/2003	17.38	6.35	11.03
SW-09UA	6/2/2003	17.38	6.34	11.04
SW-09UA	8/25/2003	17.38	6.66	10.72
SW-09UA	12/15/2003	17.38	6.41	10.97
SW-09UA	3/25/2004	17.38	6.26	11.12
SW-09UA	6/7/2004	17.38	6.69	10.69
SW-09UA	9/7/2004	17.38	7.11	10.27
SW-09UA	12/6/2004	17.38	6.79	10.59
SW-09UA	2/28/2005	17.38	6.44	10.94
SW-09UA	9/12/2005	17.38	6.93	10.45
SW-09UA	11/28/2005	17.38	8.10	9.28
SW-09UA	3/6/2006	17.38	5.94	11.44
SW-09UA	6/5/2006	17.38	6.37	11.01
SW-09UA	8/30/2006	17.38	6.68	10.70
SW-09UA	11/29/2006	17.38	6.56	10.82
SW-09UA	3/6/2007	17.38	6.19	11.19
SW-09UA	5/25/2007	17.38	6.55	10.83

Table 2-2. Summary of Groundwater Historical Elevation Data

Station Name	Date	Top of Casing Elevation ^a (feet msl)	Depth to Water ^b (feet)	Groundwater Elevation (feet msl)
SW-09UA	8/27/2007	17.38	6.76	10.62
SW-09UA	11/27/2007	17.38	6.85	10.53
SW-09UA	2/25/2008	17.38	6.13	11.25
SW-09UA	6/17/2008	17.38	7.08	10.30
SW-09UA	9/8/2008	17.38	6.34	11.04
SW-09UA	11/3/2008	17.38	6.33	11.05
SW-10UA	5/26/2000	21.48	10.92	10.56
SW-10UA	9/6/2000	21.48	10.80	10.68
SW-10UA	12/8/2000	21.48	10.98	10.50
SW-10UA	4/13/2001	21.48	10.77	10.71
SW-10UA	8/6/2001	21.48	11.12	10.36
SW-10UA	12/7/2001	21.48	10.69	10.79
SW-10UA	3/15/2002	21.48	10.72	10.76
SW-10UA	6/3/2002	21.48	11.14	10.34
SW-10UA	9/9/2002	21.48	11.05	10.43
SW-10UA	12/10/2002	21.48	11.32	10.16
SW-10UA	3/2/2003	21.48	10.91	10.57
SW-10UA	6/2/2003	21.48	10.78	10.70
SW-10UA	8/25/2003	21.48	11.02	10.46
SW-10UA	12/15/2003	21.48	10.91	10.57
SW-10UA	3/25/2004	21.48	10.78	10.70
SW-10UA	6/7/2004	21.48	11.11	10.37
SW-10UA	9/7/2004	21.48	11.44	10.04
SW-10UA	12/6/2004	21.48	11.34	10.14
SW-10UA	2/28/2005	21.48	10.92	10.56
SW-10UA	2/28/2005	21.48	10.75	10.73
SW-10UA	9/12/2005	21.48	11.33	10.15
SW-10UA	11/28/2005	21.48	11.48	10.00
SW-10UA	3/6/2006	21.48	10.43	11.05
SW-10UA	6/5/2006	21.48	10.67	10.81
SW-10UA	8/30/2006	21.48	10.98	10.50
SW-10UA	11/29/2006	21.48	10.85	10.63
SW-10UA	3/6/2007	21.48	10.65	10.83
SW-10UA	5/25/2007	21.48	10.90	10.58
SW-10UA	8/27/2007	21.48	11.03	10.45
SW-10UA	11/27/2007	21.48	11.20	10.28
SW-10UA	2/25/2008	21.48	10.62	10.86
SW-10UA	6/17/2008	21.48	36.75	-15.27
SW-10UA	9/8/2008	21.48	10.79	10.69
SW-11UA	5/26/2000	15.38	6.94	8.44
SW-11UA	9/6/2000	15.38	6.41	8.97
SW-11UA	12/8/2000	15.38	6.61	8.77
SW-11UA	4/13/2001	15.38	6.71	8.67
SW-11UA	8/6/2001	15.38	7.04	8.34
SW-11UA	12/7/2001	15.38	6.28	9.10
SW-11UA	3/15/2002	15.38	6.59	8.79
SW-11UA	6/3/2002	15.38	7.31	8.07
SW-11UA	9/9/2002	15.38	6.76	8.62
SW-11UA	12/10/2002	15.38	7.20	8.18
SW-11UA	3/2/2003	15.38	6.89	8.49
SW-11UA	6/2/2003	15.38	6.41	8.97
SW-11UA	8/25/2003	15.38	6.54	8.84
SW-11UA	12/15/2003	15.38	6.39	8.99
SW-11UA	3/25/2004	15.38	6.39	8.99
SW-11UA	6/7/2004	15.38	7.10	8.28
SW-11UA	9/7/2004	15.38	7.35	8.03
SW-11UA	12/6/2004	15.38	7.10	8.28
SW-11UA	2/28/2005	15.38	6.61	8.77

Table 2-2. Summary of Groundwater Historical Elevation Data

Station Name	Date	Top of Casing Elevation ^a (feet msl)	Depth to Water ^b (feet)	Groundwater Elevation (feet msl)
SW-11UA	2/28/2005	15.38	6.92	8.46
SW-11UA	9/12/2005	15.38	7.22	8.16
SW-11UA	11/28/2005	15.38	7.35	8.03
SW-11UA	3/6/2006	15.38	6.05	9.33
SW-11UA	6/5/2006	15.38	6.07	9.31
SW-11UA	8/30/2006	15.38	6.79	8.59
SW-11UA	11/29/2006	15.38	6.36	9.02
SW-11UA	3/6/2007	15.38	6.41	8.97
SW-11UA	5/25/2007	15.38	6.68	8.70
SW-11UA	8/27/2007	15.38	6.73	8.65
SW-11UA	11/27/2007	15.38	6.77	8.61
SW-11UA	2/25/2008	15.38	6.34	9.04
SW-11UA	6/17/2008	15.38	7.20	8.18
SW-11UA	9/8/2008	15.38	6.15	9.23
SW-11UA	11/3/2008	15.38	6.15	9.23
SW-12UA	5/26/2000	12.82	3.51	9.31
SW-12UA	9/6/2000	12.82	2.75	10.07
SW-12UA	12/8/2000	12.82	2.97	9.85
SW-12UA	4/13/2001	12.82	3.18	9.64
SW-12UA	8/6/2001	12.82	3.49	9.33
SW-12UA	12/7/2001	12.82	2.48	10.34
SW-12UA	3/15/2002	12.82	3.03	9.79
SW-12UA	6/3/2002	12.82	3.51	9.31
SW-12UA	9/9/2002	12.82	2.92	9.90
SW-12UA	12/10/2002	12.82	3.76	9.06
SW-12UA	3/2/2003	12.82	3.38	9.44
SW-12UA	6/2/2003	12.82	3.00	9.82
SW-12UA	8/25/2003	12.82	2.98	9.84
SW-12UA	12/15/2003	12.82	2.81	10.01
SW-12UA	3/25/2004	12.82	2.79	10.03
SW-12UA	6/7/2004	12.82	3.67	9.15
SW-12UA	9/7/2004	12.82	3.99	8.83
SW-12UA	12/6/2004	12.82	3.59	9.23
SW-12UA	2/28/2005	12.82	3.50	9.32
SW-12UA	2/28/2005	12.82	3.22	9.60
SW-12UA	9/12/2005	12.82	3.94	8.88
SW-12UA	11/28/2005	12.82	4.13	8.69
SW-12UA	3/6/2006	12.82	2.55	10.27
SW-12UA	6/5/2006	12.82	2.74	10.08
SW-12UA	8/30/2006	12.82	3.76	9.06
SW-12UA	11/29/2006	12.82	2.88	9.94
SW-12UA	3/6/2007	12.82	3.24	9.58
SW-12UA	5/25/2007	12.82	3.42	9.40
SW-12UA	8/27/2007	12.82	3.64	9.18
SW-12UA	11/27/2007	12.82	3.75	9.07
SW-12UA	2/25/2008	12.82	2.72	10.10
SW-12UA	6/17/2008	12.82	3.80	9.02
SW-12UA	9/8/2008	12.82	2.70	10.12
SW-12UA	11/3/2008	12.82	2.61	10.21
SW-13UA	5/26/2000	22.34	10.75	11.59
SW-13UA	9/6/2000	22.34	10.84	11.50
SW-13UA	12/8/2000	22.34	11.12	11.22
SW-13UA	4/13/2001	22.34	10.88	11.46
SW-13UA	8/6/2001	22.34	11.01	11.33
SW-13UA	12/7/2001	22.34	10.95	11.39
SW-13UA	3/15/2002	22.34	10.85	11.49
SW-13UA	6/3/2002	22.34	11.16	11.18
SW-13UA	9/9/2002	22.34	11.20	11.14

Table 2-2. Summary of Groundwater Historical Elevation Data

Station Name	Date	Top of Casing Elevation ^a (feet msl)	Depth to Water ^b (feet)	Groundwater Elevation (feet msl)
SW-13UA	12/10/2002	22.34	11.44	10.90
SW-13UA	3/2/2003	22.34	10.91	11.43
SW-13UA	6/2/2003	22.34	10.89	11.45
SW-13UA	8/25/2003	22.34	11.16	11.18
SW-13UA	12/15/2003	22.34	11.04	11.30
SW-13UA	3/25/2004	22.34	10.85	11.49
SW-13UA	6/7/2004	22.34	11.15	11.19
SW-13UA	9/7/2004	22.34	11.55	10.79
SW-13UA	12/6/2004	22.34	11.49	10.85
SW-13UA	2/28/2005	22.34	10.89	11.45
SW-13UA	2/28/2005	22.34	10.76	11.58
SW-13UA	9/12/2005	22.34	11.28	11.06
SW-13UA	11/28/2005	22.34	11.48	10.86
SW-13UA	3/6/2006	22.34	10.50	11.84
SW-13UA	6/5/2006	22.34	10.65	11.69
SW-13UA	8/29/2006	22.34	10.92	11.42
SW-13UA	8/30/2006	22.34	10.88	11.46
SW-13UA	3/6/2007	22.34	10.62	11.72
SW-13UA	5/25/2007	22.34	10.88	11.46
SW-13UA	8/27/2007	22.34	11.11	11.23
SW-13UA	11/27/2007	22.34	11.29	11.05
SW-13UA	2/25/2008	22.34	11.29	11.05
SW-13UA	6/17/2008	22.34	11.23	11.11
SW-13UA	9/8/2008	22.34	11.00	11.34
SW-14UA	5/26/2000	10.34	1.31	9.03
SW-14UA	9/6/2000	10.34	0.63	9.71
SW-14UA	12/8/2000	10.34	0.82	9.52
SW-14UA	4/13/2001	10.34	1.02	9.32
SW-14UA	8/6/2001	10.34	1.41	8.93
SW-14UA	12/7/2001	10.34	0.60	9.74
SW-14UA	3/15/2002	10.34	0.61	9.73
SW-14UA	6/3/2002	10.34	1.03	9.31
SW-14UA	9/9/2002	10.34	0.96	9.38
SW-14UA	12/10/2002	10.34	1.60	8.74
SW-14UA	3/2/2003	10.34	1.25	9.09
SW-14UA	6/2/2003	10.34	0.69	9.65
SW-14UA	8/25/2003	10.34	1.20	9.14
SW-14UA	12/15/2003	10.34	0.80	9.54
SW-14UA	3/25/2004	10.34	0.56	9.78
SW-14UA	6/7/2004	10.34	1.56	8.78
SW-14UA	9/7/2004	10.34	1.92	8.42
SW-14UA	12/6/2004	10.34	1.06	9.28
SW-14UA	2/28/2005	10.34	0.61	9.73
SW-14UA	2/28/2005	10.34	0.46	9.88
SW-14UA	11/28/2005	10.34	1.76	8.58
SW-14UA	6/5/2006	10.34	1.30	9.04
SW-14UA	8/30/2006	10.34	1.30	9.04
SW-14UA	11/29/2006	10.34	0.70	9.64
SW-14UA	3/6/2007	10.34	0.88	9.46
SW-14UA	5/25/2007	10.34	1.09	9.25
SW-14UA	8/27/2007	10.34	0.84	9.50
SW-14UA	11/27/2007	10.34	0.94	9.40
SW-14UA	2/25/2008	10.34	0.06	10.28
SW-14UA	6/17/2008	10.34	0.38	9.96
SW-14UA	9/8/2008	10.34	0.00	10.34
SW-17UA	5/26/2000	14.92	6.80	8.12
SW-17UA	9/6/2000	14.92	6.35	8.57
SW-17UA	12/8/2000	14.92	6.33	8.59

Table 2-2. Summary of Groundwater Historical Elevation Data

Station Name	Date	Top of Casing Elevation ^a (feet msl)	Depth to Water ^b (feet)	Groundwater Elevation (feet msl)
SW-17UA	4/13/2001	14.92	6.35	8.57
SW-17UA	8/6/2001	14.92	6.73	8.19
SW-17UA	12/7/2001	14.92	9.00	5.92
SW-17UA	3/15/2002	14.92	6.16	8.76
SW-17UA	6/3/2002	14.92	6.82	8.10
SW-17UA	9/9/2002	14.92	6.43	8.49
SW-17UA	12/10/2002	14.92	6.87	8.05
SW-17UA	3/2/2003	14.92	6.58	8.34
SW-17UA	6/2/2003	14.92	6.19	8.73
SW-17UA	8/25/2003	14.92	6.42	8.50
SW-17UA	12/15/2003	14.92	4.85	10.07
SW-17UA	3/25/2004	14.92	5.99	8.93
SW-17UA	6/7/2004	14.92	6.73	8.19
SW-17UA	9/7/2004	14.92	7.17	7.75
SW-17UA	12/6/2004	14.92	6.54	8.38
SW-17UA	2/28/2005	14.92	6.62	8.30
SW-17UA	2/28/2005	14.92	6.24	8.68
SW-17UA	9/12/2005	14.92	6.86	8.06
SW-17UA	11/28/2005	14.92	6.95	7.97
SW-17UA	3/6/2006	14.92	5.59	9.33
SW-17UA	6/5/2006	14.92	5.80	9.12
SW-17UA	8/29/2006	14.92	6.03	8.89
SW-17UA	8/30/2006	14.92	6.57	8.35
SW-17UA	3/6/2007	14.92	6.13	8.79
SW-17UA	5/25/2007	14.92	6.35	8.57
SW-17UA	8/27/2007	14.92	6.46	8.46
SW-17UA	11/27/2007	14.92	6.64	8.28
SW-17UA	2/25/2008	14.92	6.64	8.28
SW-17UA	6/17/2008	14.92	6.64	8.28
SW-17UA	9/8/2008	14.92	5.76	9.16
SW-18UA	4/13/2001	9.29	0.11	9.18
SW-18UA	8/6/2001	9.29	4.65	4.64
SW-18UA	12/7/2001	9.29	2.68	6.61
SW-18UA	3/15/2002	9.29	3.16	6.13
SW-18UA	6/3/2002	9.29	4.16	5.13
SW-18UA	9/9/2002	9.29	4.65	4.64
SW-18UA	12/10/2002	9.29	4.42	4.87
SW-18UA	3/2/2003	9.29	3.10	6.19
SW-18UA	6/2/2003	9.29	3.97	5.32
SW-18UA	8/25/2003	9.29	4.76	4.53
SW-18UA	12/15/2003	9.29	3.16	6.13
SW-18UA	3/25/2004	9.29	3.23	6.06
SW-18UA	6/7/2004	9.29	4.26	5.03
SW-18UA	9/7/2004	9.29	4.81	4.48
SW-18UA	12/6/2004	9.29	4.19	5.10
SW-18UA	2/28/2005	9.29	3.75	5.54
SW-18UA	2/28/2005	9.29	2.14	7.15
SW-18UA	9/12/2005	9.29	4.55	4.74
SW-18UA	11/28/2005	9.29	4.66	4.63
SW-18UA	3/6/2006	9.29	1.65	7.64
SW-18UA	6/5/2006	9.29	3.57	5.72
SW-18UA	8/29/2006	9.29	4.37	4.92
SW-18UA	8/30/2006	9.29	4.49	4.80
SW-18UA	3/6/2007	9.29	2.41	6.88
SW-18UA	5/25/2007	9.29	3.78	5.51
SW-18UA	8/27/2007	9.29	4.54	4.75
SW-18UA	11/27/2007	9.29	4.48	4.81
SW-18UA	2/25/2008	9.29	2.24	7.05

Table 2-2. Summary of Groundwater Historical Elevation Data

Station Name	Date	Top of Casing Elevation ^a (feet msl)	Depth to Water ^b (feet)	Groundwater Elevation (feet msl)
SW-18UA	6/17/2008	9.29	4.40	4.89
SW-18UA	9/8/2008	9.29	4.68	4.61
SW-19UA	6/2/2003	27.99	9.65	18.34
SW-19UA	8/25/2003	27.99	10.26	17.73
SW-19UA	12/15/2003	27.99	10.46	17.53
SW-19UA	3/25/2004	27.99	9.42	18.57
SW-19UA	6/7/2004	27.99	9.94	18.05
SW-19UA	9/7/2004	27.99	10.47	17.52
SW-19UA	12/6/2004	27.99	10.69	17.30
SW-19UA	2/28/2005	27.99	9.48	18.51
SW-19UA	2/28/2005	27.99	9.55	18.44
SW-19UA	9/12/2005	27.99	10.27	17.72
SW-19UA	11/28/2005	27.99	10.69	17.30
SW-19UA	3/6/2006	27.99	9.70	18.29
SW-19UA	6/5/2006	27.99	9.15	18.84
SW-19UA	8/29/2006	27.99	10.29	17.70
SW-19UA	8/30/2006	27.99	9.86	18.13
SW-19UA	3/6/2007	27.99	9.63	18.36
SW-19UA	5/25/2007	27.99	9.92	18.07
SW-19UA	8/27/2007	27.99	10.45	17.54
SW-19UA	11/27/2007	27.99	10.67	17.32
SW-19UA	2/25/2008	27.99	9.55	18.44
SW-19UA	6/17/2008	27.99	10.32	17.67
SW-19UA	9/8/2008	27.99	10.76	17.23
SW-20UA	6/2/2003	45.87	25.49	20.38
SW-20UA	8/25/2003	45.87	26.19	19.68
SW-20UA	12/15/2003	45.87	26.77	19.10
SW-20UA	3/25/2004	45.87	24.99	20.88
SW-20UA	6/7/2004	45.87	25.51	20.36
SW-20UA	9/7/2004	45.87	26.28	19.59
SW-20UA	12/6/2004	45.87	26.68	19.19
SW-20UA	2/28/2005	45.87	25.64	20.23
SW-20UA	2/28/2005	45.87	24.80	21.07
SW-20UA	9/12/2005	45.87	25.92	19.95
SW-20UA	11/28/2005	45.87	26.54	19.33
SW-20UA	3/6/2006	45.87	25.50	20.37
SW-20UA	6/5/2006	45.87	24.16	21.71
SW-20UA	8/29/2006	45.87	26.11	19.76
SW-20UA	8/30/2006	45.87	25.11	20.76
SW-20UA	3/6/2007	45.87	25.60	20.27
SW-20UA	5/25/2007	45.87	25.67	20.20
SW-20UA	8/27/2007	45.87	26.30	19.57
SW-20UA	11/27/2007	45.87	26.73	19.14
SW-20UA	2/25/2008	45.87	25.69	20.18
SW-20UA	6/17/2008	45.87	26.17	19.70
SW-20UA	9/8/2008	45.87	26.78	19.09
SW-21UA	6/2/2003	45.68	24.20	21.48
SW-21UA	8/25/2003	45.68	25.17	20.51
SW-21UA	12/15/2003	45.68	25.75	19.93
SW-21UA	3/25/2004	45.68	23.63	22.05
SW-21UA	6/7/2004	45.68	24.32	21.36
SW-21UA	9/7/2004	45.68	25.28	20.40
SW-21UA	12/6/2004	45.68	25.77	19.91
SW-21UA	2/28/2005	45.68	24.32	21.36
SW-21UA	2/28/2005	45.68	23.47	22.21
SW-21UA	9/12/2005	45.68	24.67	21.01
SW-21UA	11/28/2005	45.68	25.43	20.25
SW-21UA	3/6/2006	45.68	24.00	21.68

Table 2-2. Summary of Groundwater Historical Elevation Data

Station Name	Date	Top of Casing Elevation ^a (feet msl)	Depth to Water ^b (feet)	Groundwater Elevation (feet msl)
SW-21UA	6/5/2006	45.68	22.34	23.34
SW-21UA	8/29/2006	45.68	24.08	21.60
SW-21UA	8/30/2006	45.68	23.62	22.06
SW-21UA	3/6/2007	45.68	24.20	21.48
SW-21UA	5/25/2007	45.68	24.32	21.36
SW-21UA	8/27/2007	45.68	25.00	20.68
SW-21UA	11/27/2007	45.68	25.48	20.20
SW-21UA	2/25/2008	45.68	24.28	21.40
SW-21UA	6/17/2008	45.68	24.89	20.79
SW-21UA	9/8/2008	45.68	25.50	20.18
SW-22UA	6/2/2003	45.70	24.73	20.97
SW-22UA	8/25/2003	45.70	25.46	20.24
SW-22UA	12/15/2003	45.70	25.73	19.97
SW-22UA	3/25/2004	45.70	24.57	21.13
SW-22UA	6/7/2004	45.70	24.74	20.96
SW-22UA	9/7/2004	45.70	25.55	20.15
SW-22UA	12/6/2004	45.70	25.77	19.93
SW-22UA	2/28/2005	45.70	24.84	20.86
SW-22UA	2/28/2005	45.70	24.47	21.23
SW-22UA	9/12/2005	45.70	25.39	20.31
SW-22UA	11/28/2005	45.70	26.03	19.67
SW-22UA	3/6/2006	45.70	24.96	20.74
SW-22UA	6/5/2006	45.70	23.88	21.82
SW-22UA	8/29/2006	45.70	25.78	19.92
SW-22UA	8/30/2006	45.70	24.80	20.90
SW-22UA	3/6/2007	45.70	25.18	20.52
SW-22UA	5/25/2007	45.70	25.32	20.38
SW-22UA	8/27/2007	45.70	26.15	19.55
SW-22UA	11/27/2007	45.70	26.47	19.23
SW-22UA	2/25/2008	45.70	25.25	20.45
SW-22UA	6/17/2008	45.70	25.95	19.75
SW-22UA	9/8/2008	45.70	26.68	19.02
SW-22UA	11/3/2008	45.70	26.81	18.89
SW-23UA	6/2/2003	45.72	26.74	18.98
SW-23UA	8/25/2003	45.72	27.45	18.27
SW-23UA	12/15/2003	45.72	28.97	16.75
SW-23UA	3/25/2004	45.72	26.82	18.90
SW-23UA	6/7/2004	45.72	26.96	18.76
SW-23UA	9/7/2004	45.72	27.69	18.03
SW-23UA	12/6/2004	45.72	27.73	17.99
SW-23UA	2/28/2005	45.72	27.05	18.67
SW-23UA	2/28/2005	45.72	26.82	18.90
SW-23UA	9/12/2005	45.72	27.64	18.08
SW-23UA	11/28/2005	45.72	28.05	17.67
SW-23UA	3/6/2006	45.72	27.12	18.60
SW-23UA	6/5/2006	45.72	26.33	19.39
SW-23UA	8/29/2006	45.72	27.66	18.06
SW-23UA	8/30/2006	45.72	27.16	18.56
SW-23UA	3/6/2007	45.72	27.38	18.34
SW-23UA	5/25/2007	45.72	27.42	18.30
SW-23UA	8/27/2007	45.72	28.08	17.64
SW-23UA	11/27/2007	45.72	28.89	16.83
SW-23UA	2/25/2008	45.72	26.80	18.92
SW-23UA	6/17/2008	45.72	29.34	16.38
SW-23UA	9/8/2008	45.72	28.35	17.37
SW-23UA	11/3/2008	45.72	28.48	17.24
TRW-1	9/8/2008	22.39	9.38	13.01
TRW-1	11/3/2008	22.39	9.23	13.16

Table 2-2. Summary of Groundwater Historical Elevation Data

Station Name	Date	Top of Casing Elevation ^a (feet msl)	Depth to Water ^b (feet)	Groundwater Elevation (feet msl)
TRW-2	12/8/2000	46.22	20.91	25.31
TRW-2	4/13/2001	46.22	19.62	26.60
TRW-2	8/6/2001	46.22	21.20	25.02
TRW-2	12/7/2001	46.22	20.01	26.21
TRW-2	3/15/2002	46.22	17.95	28.27
TRW-2	6/3/2002	46.22	19.02	27.20
TRW-2	9/9/2002	46.22	17.89	28.33
TRW-2	12/10/2002	46.22	20.90	25.32
TRW-2	3/2/2003	46.22	18.45	27.77
TRW-2	6/2/2003	46.22	18.44	27.78
TRW-2	8/25/2003	46.22	19.56	26.66
TRW-2	12/15/2003	46.22	19.85	26.37
TRW-2	3/25/2004	46.22	15.98	30.24
TRW-2	6/7/2004	46.22	18.82	27.40
TRW-2	9/7/2004	46.22	24.60	21.62
TRW-2	12/6/2004	46.22	20.96	25.26
TRW-2	2/28/2005	46.22	17.79	28.43
TRW-2	2/28/2005	46.22	16.95	29.27
TRW-2	9/12/2005	46.22	19.79	26.43
TRW-2	11/28/2005	46.22	20.62	25.60
TRW-2	3/6/2006	46.22	17.56	28.66
TRW-2	6/5/2006	46.22	14.99	31.23
TRW-2	8/29/2006	46.22	19.97	26.25
TRW-2	8/30/2006	46.22	18.25	27.97
TRW-2	3/6/2007	46.22	18.69	27.53
TRW-2	5/25/2007	46.22	19.29	26.93
TRW-2	8/27/2007	46.22	20.48	25.74
TRW-2	11/27/2007	46.22	21.11	25.11
TRW-2	2/25/2008	46.22	18.96	27.26
TRW-2	6/17/2008	46.22	20.35	25.87
TRW-2	9/8/2008	46.22	21.28	24.94
TRW-2	11/3/2008	46.22	21.59	24.63
Lower A Aquifer				
BMW-1	9/8/2008	17.25	6.68	10.57
BMW-2	9/8/2008	15.62	3.64	11.98
GT-3	9/8/2008	14.39	5.37	9.02
GT-3	11/3/2008	14.39	5.68	8.71
GWE-6	9/8/2008	14.95	5.27	9.68
GWE-7	9/8/2008	12.08	1.95	10.13
GWE-8	9/8/2008	14.40	3.79	10.61
LF-10B	9/8/2008	16.35	5.68	10.67
LF-10B	11/3/2008	16.35	5.79	10.56
LF-12A	9/8/2008	23.45	10.41	13.04
LF-12A	11/3/2008	23.45	10.62	12.83
LF-1AR	9/8/2008	11.83	8.88	2.95
LF-9B	9/8/2008	15.95	6.42	9.53
MK-4B	9/8/2008	18.02	7.35	10.67
MK-4B	11/3/2008	18.02	7.39	10.63
MW-5AF	9/8/2008	12.19	4.63	7.56
MW-5AF	11/3/2008	12.19	4.36	7.83
MK-5B	9/8/2008	11.77	0.94	10.83
MK-5B	11/3/2008	11.77	1.05	10.72
MK-6B	9/8/2008	17.00	4.86	12.14
MK-6B	11/3/2008	17.00	5.04	11.96
MW-11B	9/8/2008	15.17	3.53	11.64
MW-11B	11/3/2008	15.17	3.70	11.47
MW-2B	9/8/2008	13.88	0.55	13.33
MW-2B	11/3/2008	13.88	0.63	13.25

Table 2-2. Summary of Groundwater Historical Elevation Data

Station Name	Date	Top of Casing Elevation ^a (feet msl)	Depth to Water ^b (feet)	Groundwater Elevation (feet msl)
MW-6B	9/8/2008	13.97	3.47	10.50
MW-6B	11/3/2008	13.97	3.48	10.49
SW-02LA	5/26/2000	23.64	4.08	19.56
SW-02LA	9/6/2000	23.64	4.89	18.75
SW-02LA	12/8/2000	23.64	5.01	18.63
SW-02LA	4/13/2001	23.64	4.52	19.12
SW-02LA	8/6/2001	23.64	5.28	18.36
SW-02LA	12/7/2001	23.64	4.97	18.67
SW-02LA	3/15/2002	23.64	4.38	19.26
SW-02LA	6/3/2002	23.64	4.79	18.85
SW-02LA	9/9/2002	23.64	5.26	18.38
SW-02LA	12/10/2002	23.64	5.45	18.19
SW-02LA	3/2/2003	23.64	4.42	19.22
SW-02LA	6/2/2003	23.64	4.52	19.12
SW-02LA	8/25/2003	23.64	5.15	18.49
SW-02LA	12/15/2003	23.64	4.98	18.66
SW-02LA	3/25/2004	23.64	4.35	19.29
SW-02LA	6/7/2004	23.64	5.00	18.64
SW-02LA	9/7/2004	23.64	5.37	18.27
SW-02LA	12/6/2004	23.64	5.39	18.25
SW-02LA	2/28/2005	23.64	4.55	19.09
SW-02LA	2/28/2005	23.64	4.35	19.29
SW-02LA	9/12/2005	23.64	5.46	18.18
SW-02LA	11/27/2005	23.64	5.81	17.83
SW-02LA	3/6/2006	23.64	4.74	18.90
SW-02LA	6/5/2006	23.64	4.39	19.25
SW-02LA	8/30/2006	23.64	5.11	18.53
SW-02LA	11/29/2006	23.64	5.53	18.11
SW-02LA	3/6/2007	23.64	4.72	18.92
SW-02LA	5/25/2007	23.64	5.10	18.54
SW-02LA	8/27/2007	23.64	5.78	17.86
SW-02LA	11/27/2007	23.64	5.83	17.81
SW-02LA	2/25/2008	23.64	4.22	19.42
SW-02LA	6/17/2008	23.64	5.72	17.92
SW-02LA	9/8/2008	23.64	6.00	17.64
SW-02LA	11/3/2008	23.64	6.11	17.53
SW-03LA	5/26/2000	29.23	11.67	17.56
SW-03LA	9/6/2000	29.23	12.23	17.00
SW-03LA	12/8/2000	29.23	12.53	16.70
SW-03LA	4/13/2001	29.23	12.12	17.11
SW-03LA	8/6/2001	29.23	12.50	16.73
SW-03LA	12/7/2001	29.23	12.51	16.72
SW-03LA	3/15/2002	29.23	11.92	17.31
SW-03LA	6/3/2002	29.23	12.24	16.99
SW-03LA	9/9/2002	29.23	12.62	16.61
SW-03LA	12/10/2002	29.23	14.40	14.83
SW-03LA	3/2/2003	29.23	11.95	17.28
SW-03LA	6/2/2003	29.23	12.22	17.01
SW-03LA	8/25/2003	29.23	12.77	16.46
SW-03LA	12/15/2003	29.23	12.90	16.33
SW-03LA	3/25/2004	29.23	12.41	16.82
SW-03LA	6/7/2004	29.23	12.86	16.37
SW-03LA	9/7/2004	29.23	13.36	15.87
SW-03LA	12/6/2004	29.23	13.51	15.72
SW-03LA	2/28/2005	29.23	12.65	16.58
SW-03LA	2/28/2005	29.23	12.49	16.74
SW-03LA	9/12/2005	29.23	13.13	16.10
SW-03LA	11/27/2005	29.23	13.44	15.79

Table 2-2. Summary of Groundwater Historical Elevation Data

Station Name	Date	Top of Casing Elevation ^a (feet msl)	Depth to Water ^b (feet)	Groundwater Elevation (feet msl)
SW-03LA	3/6/2006	29.23	12.44	16.79
SW-03LA	6/5/2006	29.23	12.28	16.95
SW-03LA	8/30/2006	29.23	12.71	16.52
SW-03LA	11/29/2006	29.23	13.00	16.23
SW-03LA	3/6/2007	29.23	12.45	16.78
SW-03LA	5/25/2007	29.23	12.78	16.45
SW-03LA	8/27/2007	29.23	13.13	16.10
SW-03LA	11/27/2007	29.23	13.31	15.92
SW-03LA	2/25/2008	29.23	12.49	16.74
SW-03LA	6/17/2008	29.23	13.31	15.92
SW-03LA	9/8/2008	29.23	13.35	15.88
SW-03LA	11/3/2008	29.23	26.64	2.59
SW-04LA	5/26/2000	24.70	9.52	15.18
SW-04LA	9/6/2000	24.70	10.14	14.56
SW-04LA	12/8/2000	24.70	9.99	14.71
SW-04LA	4/13/2001	24.70	9.48	15.22
SW-04LA	8/6/2001	24.70	9.91	14.79
SW-04LA	12/7/2001	24.70	9.96	14.74
SW-04LA	3/15/2002	24.70	9.96	14.74
SW-04LA	6/3/2002	24.70	10.35	14.35
SW-04LA	9/9/2002	24.70	10.20	14.50
SW-04LA	12/10/2002	24.70	10.25	14.45
SW-04LA	3/2/2003	24.70	9.67	15.03
SW-04LA	6/2/2003	24.70	10.21	14.49
SW-04LA	8/25/2003	24.70	10.34	14.36
SW-04LA	12/15/2003	24.70	10.05	14.65
SW-04LA	3/25/2004	24.70	9.68	15.02
SW-04LA	6/7/2004	24.70	10.09	14.61
SW-04LA	9/7/2004	24.70	10.82	13.88
SW-04LA	12/6/2004	24.70	10.57	14.13
SW-04LA	2/28/2005	24.70	9.90	14.80
SW-04LA	2/28/2005	24.70	9.68	15.02
SW-04LA	9/12/2005	24.70	10.22	14.48
SW-04LA	11/27/2005	24.70	10.53	14.17
SW-04LA	3/6/2006	24.70	9.71	14.99
SW-04LA	6/5/2006	24.70	9.53	15.17
SW-04LA	8/30/2006	24.70	9.97	14.73
SW-04LA	11/29/2006	24.70	9.98	14.72
SW-04LA	3/6/2007	24.70	9.51	15.19
SW-04LA	5/25/2007	24.70	10.05	14.65
SW-04LA	8/27/2007	24.70	10.04	14.66
SW-04LA	11/27/2007	24.70	10.28	14.42
SW-04LA	2/25/2008	24.70	10.28	14.42
SW-04LA	6/17/2008	24.70	10.34	14.36
SW-04LA	9/8/2008	24.70	10.18	14.52
SW-04LA	11/3/2008	24.70	10.23	14.47
SW-05LA	5/26/2000	23.13	8.80	14.33
SW-05LA	9/6/2000	23.13	9.23	13.90
SW-05LA	12/8/2000	23.13	9.48	13.65
SW-05LA	4/13/2001	23.13	8.81	14.32
SW-05LA	8/6/2001	23.13	9.32	13.81
SW-05LA	12/7/2001	23.13	9.12	14.01
SW-05LA	3/15/2002	23.13	8.83	14.30
SW-05LA	6/3/2002	23.13	9.15	13.98
SW-05LA	9/9/2002	23.13	9.41	13.72
SW-05LA	12/10/2002	23.13	9.57	13.56
SW-05LA	3/2/2003	23.13	8.86	14.27
SW-05LA	6/2/2003	23.13	9.21	13.92

Table 2-2. Summary of Groundwater Historical Elevation Data

Station Name	Date	Top of Casing Elevation ^a (feet msl)	Depth to Water ^b (feet)	Groundwater Elevation (feet msl)
SW-05LA	8/25/2003	23.13	9.58	13.55
SW-05LA	12/15/2003	23.13	9.28	13.85
SW-05LA	3/25/2004	23.13	8.98	14.15
SW-05LA	6/7/2004	23.13	9.47	13.66
SW-05LA	9/7/2004	23.13	10.79	12.34
SW-05LA	12/6/2004	23.13	9.80	13.33
SW-05LA	2/28/2005	23.13	9.04	14.09
SW-05LA	2/28/2005	23.13	8.94	14.19
SW-05LA	9/12/2005	23.13	9.51	13.62
SW-05LA	11/27/2005	23.13	9.72	13.41
SW-05LA	3/6/2006	23.13	8.71	14.42
SW-05LA	6/5/2006	23.13	8.78	14.35
SW-05LA	8/30/2006	23.13	9.10	14.03
SW-05LA	11/29/2006	23.13	9.25	13.88
SW-05LA	3/6/2007	23.13	8.69	14.44
SW-05LA	5/25/2007	23.13	9.04	14.09
SW-05LA	8/27/2007	23.13	9.30	13.83
SW-05LA	11/27/2007	23.13	9.49	13.64
SW-05LA	2/25/2008	23.13	8.51	14.62
SW-05LA	6/17/2008	23.13	9.38	13.75
SW-05LA	9/8/2008	23.13	9.38	13.75
SW-05LA	11/3/2008	23.13	9.26	13.87
SW-06LA	5/26/2000	21.56	9.64	11.92
SW-06LA	9/6/2000	21.56	9.64	11.92
SW-06LA	12/8/2000	21.56	9.87	11.69
SW-06LA	4/13/2001	21.56	9.52	12.04
SW-06LA	8/6/2001	21.56	9.83	11.73
SW-06LA	12/7/2001	21.56	9.65	11.91
SW-06LA	3/15/2002	21.56	9.59	11.97
SW-06LA	6/3/2002	21.56	9.88	11.68
SW-06LA	9/9/2002	21.56	9.94	11.62
SW-06LA	12/10/2002	21.56	10.15	11.41
SW-06LA	3/2/2003	21.56	9.61	11.95
SW-06LA	6/2/2003	21.56	9.61	11.95
SW-06LA	8/25/2003	21.56	9.90	11.66
SW-06LA	12/15/2003	21.56	9.80	11.76
SW-06LA	3/25/2004	21.56	9.55	12.01
SW-06LA	6/7/2004	21.56	9.88	11.68
SW-06LA	9/7/2004	21.56	10.21	11.35
SW-06LA	12/6/2004	21.56	10.19	11.37
SW-06LA	2/28/2005	21.56	9.60	11.96
SW-06LA	2/28/2005	21.56	9.50	12.06
SW-06LA	9/12/2005	21.56	10.00	11.56
SW-06LA	11/27/2005	21.56	10.23	11.33
SW-06LA	3/6/2006	21.56	9.27	12.29
SW-06LA	6/5/2006	21.56	9.38	12.18
SW-06LA	8/30/2006	21.56	9.68	11.88
SW-06LA	11/29/2006	21.56	9.75	11.81
SW-06LA	3/6/2007	21.56	9.38	12.18
SW-06LA	5/25/2007	21.56	9.69	11.87
SW-06LA	8/27/2007	21.56	9.86	11.70
SW-06LA	11/27/2007	21.56	10.02	11.54
SW-06LA	2/25/2008	21.56	9.41	12.15
SW-06LA	6/17/2008	21.56	10.15	11.41
SW-06LA	9/8/2008	21.56	9.80	11.76
SW-06LA	11/3/2008	21.56	9.74	11.82
SW-07LA	5/26/2000	21.18	8.79	12.39
SW-07LA	9/6/2000	21.18	8.88	12.30

Table 2-2. Summary of Groundwater Historical Elevation Data

Station Name	Date	Top of Casing Elevation ^a (feet msl)	Depth to Water ^b (feet)	Groundwater Elevation (feet msl)
SW-07LA	12/8/2000	21.18	9.18	12.00
SW-07LA	4/13/2001	21.18	8.66	12.52
SW-07LA	8/6/2001	21.18	9.07	12.11
SW-07LA	12/7/2001	21.18	8.83	12.35
SW-07LA	3/15/2002	21.18	8.65	12.53
SW-07LA	6/3/2002	21.18	9.03	12.15
SW-07LA	9/9/2002	21.18	9.15	12.03
SW-07LA	12/10/2002	21.18	9.37	11.81
SW-07LA	3/2/2003	21.18	8.79	12.39
SW-07LA	6/2/2003	21.18	8.84	12.34
SW-07LA	8/25/2003	21.18	9.11	12.07
SW-07LA	12/15/2003	21.18	9.09	12.09
SW-07LA	3/25/2004	21.18	8.81	12.37
SW-07LA	6/7/2004	21.18	6.12	15.06
SW-07LA	9/7/2004	21.18	9.48	11.70
SW-07LA	12/6/2004	21.18	9.43	11.75
SW-07LA	2/28/2005	21.18	8.85	12.33
SW-07LA	2/28/2005	21.18	8.70	12.48
SW-07LA	9/12/2005	21.18	9.33	11.85
SW-07LA	11/27/2005	21.18	9.52	11.66
SW-07LA	3/6/2006	21.18	8.57	12.61
SW-07LA	6/5/2006	21.18	8.71	12.47
SW-07LA	8/30/2006	21.18	8.99	12.19
SW-07LA	11/29/2006	21.18	9.03	12.15
SW-07LA	3/6/2007	21.18	8.64	12.54
SW-07LA	5/25/2007	21.18	8.97	12.21
SW-07LA	8/27/2007	21.18	9.15	12.03
SW-07LA	11/27/2007	21.18	9.31	11.87
SW-07LA	2/25/2008	21.18	8.64	12.54
SW-07LA	6/17/2008	21.18	9.42	11.76
SW-07LA	9/8/2008	21.18	9.03	12.15
SW-08LA	5/26/2000	19.10	8.50	10.60
SW-08LA	9/6/2000	19.10	7.94	11.16
SW-08LA	12/8/2000	19.10	8.18	10.92
SW-08LA	4/13/2001	19.10	7.81	11.29
SW-08LA	8/6/2001	19.10	8.76	10.34
SW-08LA	12/7/2001	19.10	7.90	11.20
SW-08LA	3/15/2002	19.10	7.78	11.32
SW-08LA	6/3/2002	19.10	8.19	10.91
SW-08LA	9/9/2002	19.10	8.16	10.94
SW-08LA	12/10/2002	19.10	8.40	10.70
SW-08LA	3/2/2003	19.10	7.98	11.12
SW-08LA	6/2/2003	19.10	7.93	11.17
SW-08LA	8/25/2003	19.10	8.16	10.94
SW-08LA	12/15/2003	19.10	8.12	10.98
SW-08LA	3/25/2004	19.10	7.90	11.20
SW-08LA	6/7/2004	19.10	8.24	10.86
SW-08LA	9/7/2004	19.10	8.59	10.51
SW-08LA	12/6/2004	19.10	8.48	10.62
SW-08LA	2/28/2005	19.10	8.05	11.05
SW-08LA	2/28/2005	19.10	7.85	11.25
SW-08LA	9/12/2005	19.10	8.47	10.63
SW-08LA	11/27/2005	19.10	8.63	10.47
SW-08LA	3/6/2006	19.10	7.62	11.48
SW-08LA	6/5/2006	19.10	7.90	11.20
SW-08LA	8/30/2006	19.10	8.15	10.95
SW-08LA	11/29/2006	19.10	8.09	11.01
SW-08LA	3/6/2007	19.10	7.82	11.28

Table 2-2. Summary of Groundwater Historical Elevation Data

Station Name	Date	Top of Casing Elevation ^a (feet msl)	Depth to Water ^b (feet)	Groundwater Elevation (feet msl)
SW-08LA	5/25/2007	19.10	8.11	10.99
SW-08LA	8/27/2007	19.10	8.27	10.83
SW-08LA	11/27/2007	19.10	8.40	10.70
SW-08LA	2/25/2008	19.10	7.75	11.35
SW-08LA	6/17/2008	19.10	8.65	10.45
SW-08LA	9/8/2008	19.10	8.05	11.05
SW-08LA	11/3/2008	19.10	7.97	11.13
SW-09LA	5/26/2000	17.38	6.39	10.99
SW-09LA	9/6/2000	17.38	6.24	11.14
SW-09LA	12/8/2000	17.38	6.48	10.90
SW-09LA	4/13/2001	17.38	6.22	11.16
SW-09LA	8/6/2001	17.38	6.51	10.87
SW-09LA	12/7/2001	17.38	6.22	11.16
SW-09LA	3/15/2002	17.38	6.04	11.34
SW-09LA	6/3/2002	17.38	6.49	10.89
SW-09LA	9/9/2002	17.38	6.49	10.89
SW-09LA	12/10/2002	17.38	6.80	10.58
SW-09LA	3/2/2003	17.38	6.29	11.09
SW-09LA	6/2/2003	17.38	6.29	11.09
SW-09LA	8/25/2003	17.38	6.58	10.80
SW-09LA	12/15/2003	17.38	6.40	10.98
SW-09LA	3/25/2004	17.38	6.22	11.16
SW-09LA	6/7/2004	17.38	6.65	10.73
SW-09LA	9/7/2004	17.38	7.07	10.31
SW-09LA	12/6/2004	17.38	6.79	10.59
SW-09LA	2/28/2005	17.38	6.40	10.98
SW-09LA	9/12/2005	17.38	6.90	10.48
SW-09LA	11/27/2005	17.38	7.06	10.32
SW-09LA	3/6/2006	17.38	5.94	11.44
SW-09LA	6/5/2006	17.38	6.32	11.06
SW-09LA	8/30/2006	17.38	6.63	10.75
SW-09LA	11/29/2006	17.38	6.51	10.87
SW-09LA	3/6/2007	17.38	6.12	11.26
SW-09LA	5/25/2007	17.38	6.48	10.90
SW-09LA	8/27/2007	17.38	6.70	10.68
SW-09LA	11/27/2007	17.38	6.80	10.58
SW-09LA	2/25/2008	17.38	6.08	11.30
SW-09LA	6/17/2008	17.38	7.10	10.28
SW-09LA	9/8/2008	17.38	6.34	11.04
SW-09LA	11/3/2008	17.38	6.27	11.11
SW-10LA	5/26/2000	21.48	10.90	10.58
SW-10LA	9/6/2000	21.48	10.76	10.72
SW-10LA	12/8/2000	21.48	10.95	10.53
SW-10LA	4/13/2001	21.48	10.79	10.69
SW-10LA	8/6/2001	21.48	11.11	10.37
SW-10LA	12/7/2001	21.48	10.68	10.80
SW-10LA	3/15/2002	21.48	10.74	10.74
SW-10LA	6/3/2002	21.48	11.17	10.31
SW-10LA	9/9/2002	21.48	11.02	10.46
SW-10LA	12/10/2002	21.48	11.31	10.17
SW-10LA	3/2/2003	21.48	10.92	10.56
SW-10LA	6/2/2003	21.48	10.79	10.69
SW-10LA	8/25/2003	21.48	10.99	10.49
SW-10LA	12/15/2003	21.48	10.90	10.58
SW-10LA	3/25/2004	21.48	10.76	10.72
SW-10LA	6/7/2004	21.48	11.12	10.36
SW-10LA	9/7/2004	21.48	11.45	10.03
SW-10LA	12/6/2004	21.48	11.35	10.13

Table 2-2. Summary of Groundwater Historical Elevation Data

Station Name	Date	Top of Casing Elevation ^a (feet msl)	Depth to Water ^b (feet)	Groundwater Elevation (feet msl)
SW-10LA	2/28/2005	21.48	10.89	10.59
SW-10LA	2/28/2005	21.48	10.75	10.73
SW-10LA	9/12/2005	21.48	11.31	10.17
SW-10LA	11/27/2005	21.48	11.50	9.98
SW-10LA	3/6/2006	21.48	10.36	11.12
SW-10LA	6/5/2006	21.48	10.65	10.83
SW-10LA	8/30/2006	21.48	10.97	10.51
SW-10LA	11/29/2006	21.48	10.85	10.63
SW-10LA	3/6/2007	21.48	10.64	10.84
SW-10LA	5/25/2007	21.48	10.90	10.58
SW-10LA	8/27/2007	21.48	11.02	10.46
SW-10LA	11/27/2007	21.48	11.19	10.29
SW-10LA	2/25/2008	21.48	10.62	10.86
SW-10LA	6/17/2008	21.48	11.35	10.13
SW-10LA	9/8/2008	21.48	10.76	10.72
SW-11LA	5/26/2000	15.38	6.93	8.45
SW-11LA	9/6/2000	15.38	6.39	8.99
SW-11LA	12/8/2000	15.38	6.56	8.82
SW-11LA	4/13/2001	15.38	6.73	8.65
SW-11LA	8/6/2001	15.38	7.06	8.32
SW-11LA	12/7/2001	15.38	6.26	9.12
SW-11LA	3/15/2002	15.38	6.63	8.75
SW-11LA	6/3/2002	15.38	7.34	8.04
SW-11LA	9/9/2002	15.38	6.73	8.65
SW-11LA	12/10/2002	15.38	7.17	8.21
SW-11LA	3/2/2003	15.38	6.85	8.53
SW-11LA	6/2/2003	15.38	6.33	9.05
SW-11LA	8/25/2003	15.38	6.50	8.88
SW-11LA	12/15/2003	15.38	6.35	9.03
SW-11LA	3/25/2004	15.38	6.30	9.08
SW-11LA	6/7/2004	15.38	7.13	8.25
SW-11LA	9/7/2004	15.38	7.36	8.02
SW-11LA	12/6/2004	15.38	7.09	8.29
SW-11LA	2/28/2005	15.38	6.98	8.40
SW-11LA	2/28/2005	15.38	6.66	8.72
SW-11LA	9/12/2005	15.38	7.24	8.14
SW-11LA	11/27/2005	15.38	7.37	8.01
SW-11LA	3/6/2006	15.38	6.06	9.32
SW-11LA	6/5/2006	15.38	6.04	9.34
SW-11LA	8/30/2006	15.38	6.79	8.59
SW-11LA	11/29/2006	15.38	6.31	9.07
SW-11LA	3/6/2007	15.38	6.42	8.96
SW-11LA	5/25/2007	15.38	6.69	8.69
SW-11LA	8/27/2007	15.38	6.74	8.64
SW-11LA	11/27/2007	15.38	6.79	8.59
SW-11LA	2/25/2008	15.38	6.34	9.04
SW-11LA	6/17/2008	15.38	7.20	8.18
SW-11LA	9/8/2008	15.38	6.12	9.26
SW-11LA	11/3/2008	15.38	6.12	9.26
SW-12LA	5/26/2000	12.82	3.48	9.34
SW-12LA	9/6/2000	12.82	2.72	10.10
SW-12LA	12/8/2000	12.82	2.96	9.86
SW-12LA	4/13/2001	12.82	3.17	9.65
SW-12LA	8/6/2001	12.82	3.46	9.36
SW-12LA	12/7/2001	12.82	2.48	10.34
SW-12LA	3/15/2002	12.82	3.04	9.78
SW-12LA	6/3/2002	12.82	3.52	9.30
SW-12LA	9/9/2002	12.82	2.95	9.87

Table 2-2. Summary of Groundwater Historical Elevation Data

Station Name	Date	Top of Casing Elevation ^a (feet msl)	Depth to Water ^b (feet)	Groundwater Elevation (feet msl)
SW-12LA	12/10/2002	12.82	3.79	9.03
SW-12LA	3/2/2003	12.82	3.41	9.41
SW-12LA	6/2/2003	12.82	2.98	9.84
SW-12LA	8/25/2003	12.82	2.96	9.86
SW-12LA	12/15/2003	12.82	2.82	10.00
SW-12LA	3/25/2004	12.82	2.76	10.06
SW-12LA	6/7/2004	12.82	3.69	9.13
SW-12LA	9/7/2004	12.82	3.99	8.83
SW-12LA	12/6/2004	12.82	3.59	9.23
SW-12LA	2/28/2005	12.82	3.24	9.58
SW-12LA	2/28/2005	12.82	3.52	9.30
SW-12LA	9/12/2005	12.82	3.95	8.87
SW-12LA	11/27/2005	12.82	4.15	8.67
SW-12LA	3/6/2006	12.82	2.54	10.28
SW-12LA	6/5/2006	12.82	2.70	10.12
SW-12LA	8/30/2006	12.82	3.85	8.97
SW-12LA	11/29/2006	12.82	2.86	9.96
SW-12LA	3/6/2007	12.82	3.25	9.57
SW-12LA	5/25/2007	12.82	3.44	9.38
SW-12LA	8/27/2007	12.82	3.66	9.16
SW-12LA	11/27/2007	12.82	3.77	9.05
SW-12LA	2/25/2008	12.82	2.72	10.10
SW-12LA	6/17/2008	12.82	3.85	8.97
SW-12LA	9/8/2008	12.82	2.68	10.14
SW-12LA	11/3/2008	12.82	2.62	10.20
SW-13LA	5/26/2000	22.34	10.88	11.46
SW-13LA	9/6/2000	22.34	10.92	11.42
SW-13LA	12/8/2000	22.34	11.05	11.29
SW-13LA	4/13/2001	22.34	10.76	11.58
SW-13LA	8/6/2001	22.34	11.01	11.33
SW-13LA	12/7/2001	22.34	10.86	11.48
SW-13LA	3/15/2002	22.34	11.11	11.23
SW-13LA	6/3/2002	22.34	11.11	11.23
SW-13LA	9/9/2002	22.34	11.18	11.16
SW-13LA	12/10/2002	22.34	11.40	10.94
SW-13LA	3/2/2003	22.34	10.88	11.46
SW-13LA	6/2/2003	22.34	10.84	11.50
SW-13LA	8/25/2003	22.34	11.16	11.18
SW-13LA	12/15/2003	22.34	10.97	11.37
SW-13LA	3/25/2004	22.34	10.78	11.56
SW-13LA	6/7/2004	22.34	11.10	11.24
SW-13LA	9/7/2004	22.34	11.49	10.85
SW-13LA	12/6/2004	22.34	11.45	10.89
SW-13LA	2/28/2005	22.34	10.72	11.62
SW-13LA	2/28/2005	22.34	10.84	11.50
SW-13LA	9/12/2005	22.34	11.25	11.09
SW-13LA	11/28/2005	22.34	11.44	10.90
SW-13LA	3/6/2006	22.34	10.43	11.91
SW-13LA	6/5/2006	22.34	10.56	11.78
SW-13LA	8/30/2006	22.34	10.82	11.52
SW-13LA	11/29/2006	22.34	10.87	11.47
SW-13LA	3/6/2007	22.34	10.55	11.79
SW-13LA	5/25/2007	22.34	10.82	11.52
SW-13LA	8/27/2007	22.34	11.16	11.18
SW-13LA	11/27/2007	22.34	11.19	11.15
SW-13LA	2/25/2008	22.34	11.19	11.15
SW-13LA	6/17/2008	22.34	11.10	11.24
SW-13LA	9/8/2008	22.34	10.95	11.39

Table 2-2. Summary of Groundwater Historical Elevation Data

Station Name	Date	Top of Casing Elevation ^a (feet msl)	Depth to Water ^b (feet)	Groundwater Elevation (feet msl)
SW-14LA	5/26/2000	10.34	1.29	9.05
SW-14LA	9/6/2000	10.34	0.58	9.76
SW-14LA	12/8/2000	10.34	0.81	9.53
SW-14LA	4/13/2001	10.34	0.96	9.38
SW-14LA	8/6/2001	10.34	1.46	8.88
SW-14LA	12/7/2001	10.34	0.66	9.68
SW-14LA	3/15/2002	10.34	0.58	9.76
SW-14LA	6/3/2002	10.34	0.74	9.60
SW-14LA	9/9/2002	10.34	0.89	9.45
SW-14LA	12/10/2002	10.34	1.53	8.81
SW-14LA	3/2/2003	10.34	1.17	9.17
SW-14LA	6/2/2003	10.34	0.64	9.70
SW-14LA	8/25/2003	10.34	1.13	9.21
SW-14LA	12/15/2003	10.34	0.48	9.86
SW-14LA	3/25/2004	10.34	0.54	9.80
SW-14LA	6/7/2004	10.34	1.51	8.83
SW-14LA	9/7/2004	10.34	1.87	8.47
SW-14LA	12/6/2004	10.34	1.03	9.31
SW-14LA	2/28/2005	10.34	0.38	9.96
SW-14LA	2/28/2005	10.34	0.58	9.76
SW-14LA	9/12/2005	10.34	1.57	8.77
SW-14LA	11/28/2005	10.34	1.68	8.66
SW-14LA	6/5/2006	10.34	1.25	9.09
SW-14LA	8/30/2006	10.34	1.25	9.09
SW-14LA	11/29/2006	10.34	0.66	9.68
SW-14LA	3/6/2007	10.34	0.82	9.52
SW-14LA	5/25/2007	10.34	1.04	9.30
SW-14LA	8/27/2007	10.34	0.69	9.65
SW-14LA	11/27/2007	10.34	0.76	9.58
SW-14LA	2/25/2008	10.34	0.00	10.34
SW-14LA	6/17/2008	10.34	0.00	10.34
SW-14LA	9/8/2008	10.34	0.00	10.34
SW-17LA	5/26/2000	14.92	6.72	8.20
SW-17LA	9/6/2000	14.92	6.21	8.71
SW-17LA	12/8/2000	14.92	6.24	8.68
SW-17LA	4/13/2001	14.92	6.28	8.64
SW-17LA	8/6/2001	14.92	6.68	8.24
SW-17LA	12/7/2001	14.92	8.95	5.97
SW-17LA	3/15/2002	14.92	6.14	8.78
SW-17LA	6/3/2002	14.92	6.88	8.04
SW-17LA	9/9/2002	14.92	6.39	8.53
SW-17LA	12/10/2002	14.92	6.82	8.10
SW-17LA	3/2/2003	14.92	6.55	8.37
SW-17LA	6/2/2003	14.92	6.16	8.76
SW-17LA	8/25/2003	14.92	6.36	8.56
SW-17LA	12/15/2003	14.92	5.81	9.11
SW-17LA	3/25/2004	14.92	5.96	8.96
SW-17LA	6/7/2004	14.92	6.73	8.19
SW-17LA	9/7/2004	14.92	7.14	7.78
SW-17LA	12/6/2004	14.92	6.54	8.38
SW-17LA	2/28/2005	14.92	6.17	8.75
SW-17LA	2/28/2005	14.92	6.58	8.34
SW-17LA	9/12/2005	14.92	6.82	8.10
SW-17LA	11/28/2005	14.92	6.96	7.96
SW-17LA	3/6/2006	14.92	5.54	9.38
SW-17LA	6/5/2006	14.92	5.73	9.19
SW-17LA	8/30/2006	14.92	6.54	8.38
SW-17LA	11/29/2006	14.92	5.97	8.95

Table 2-2. Summary of Groundwater Historical Elevation Data

Station Name	Date	Top of Casing Elevation ^a (feet msl)	Depth to Water ^b (feet)	Groundwater Elevation (feet msl)
SW-17LA	3/6/2007	14.92	6.09	8.83
SW-17LA	5/25/2007	14.92	6.30	8.62
SW-17LA	8/27/2007	14.92	6.43	8.49
SW-17LA	11/27/2007	14.92	6.61	8.31
SW-17LA	2/25/2008	14.92	6.61	8.31
SW-17LA	6/17/2008	14.92	6.54	8.38
SW-17LA	9/8/2008	14.92	5.74	9.18
SW-18LA	4/13/2001	12.38	-1.52	13.90
SW-18LA	8/6/2001	12.38	1.91	10.47
SW-18LA	12/7/2001	12.38	2.48	9.90
SW-18LA	3/15/2002	12.38	1.64	10.74
SW-18LA	6/3/2002	12.38	2.16	10.22
SW-18LA	9/9/2002	12.38	1.97	10.41
SW-18LA	12/10/2002	12.38	2.45	9.93
SW-18LA	3/2/2003	12.38	2.00	10.38
SW-18LA	6/2/2003	12.38	1.78	10.60
SW-18LA	8/25/2003	12.38	2.32	10.06
SW-18LA	12/15/2003	12.38	2.03	10.35
SW-18LA	3/25/2004	12.38	1.88	10.50
SW-18LA	6/7/2004	12.38	2.53	9.85
SW-18LA	9/7/2004	12.38	2.80	9.58
SW-18LA	12/6/2004	12.38	2.53	9.85
SW-18LA	2/28/2005	12.38	1.95	10.43
SW-18LA	2/28/2005	12.38	2.27	10.11
SW-18LA	9/12/2005	12.38	2.73	9.65
SW-18LA	11/28/2005	12.38	2.89	9.49
SW-18LA	3/6/2006	12.38	1.37	11.01
SW-18LA	6/5/2006	12.38	0.82	11.56
SW-18LA	8/30/2006	12.38	2.46	9.92
SW-18LA	11/29/2006	12.38	2.06	10.32
SW-18LA	3/6/2007	12.38	1.94	10.44
SW-18LA	5/25/2007	12.38	2.23	10.15
SW-18LA	8/27/2007	12.38	2.34	10.04
SW-18LA	11/27/2007	12.38	2.57	9.81
SW-18LA	2/25/2008	12.38	1.70	10.68
SW-18LA	6/17/2008	12.38	2.43	9.95
SW-18LA	9/8/2008	12.38	1.88	10.50
B Aquifer				
SW-03B	5/26/2000	29.23	2.11	27.12
SW-03B	9/6/2000	29.23	2.90	26.33
SW-03B	12/8/2000	29.23	3.14	26.09
SW-03B	4/13/2001	29.23	2.26	26.97
SW-03B	8/6/2001	29.23	3.27	25.96
SW-03B	12/7/2001	29.23	3.33	25.90
SW-03B	3/15/2002	29.23	2.44	26.79
SW-03B	6/3/2002	29.23	2.79	26.44
SW-03B	9/9/2002	29.23	3.22	26.01
SW-03B	12/10/2002	29.23	3.72	25.51
SW-03B	3/2/2003	29.23	2.43	26.80
SW-03B	6/2/2003	29.23	2.43	26.80
SW-03B	8/25/2003	29.23	3.02	26.21
SW-03B	12/15/2003	29.23	3.45	25.78
SW-03B	3/25/2004	29.23	2.30	26.93
SW-03B	6/7/2004	29.23	2.89	26.34
SW-03B	9/7/2004	29.23	3.41	25.82
SW-03B	12/6/2004	29.23	3.53	25.70
SW-03B	2/28/2005	29.23	2.16	27.07
SW-03B	2/28/2005	29.23	1.93	27.30

Table 2-2. Summary of Groundwater Historical Elevation Data

Station Name	Date	Top of Casing Elevation ^a (feet msl)	Depth to Water ^b (feet)	Groundwater Elevation (feet msl)
SW-03B	9/12/2005	29.23	2.65	26.58
SW-03B	11/28/2005	29.23	3.01	26.22
SW-03B	3/6/2006	29.23	1.68	27.55
SW-03B	6/5/2006	29.23	1.03	28.20
SW-03B	8/30/2006	29.23	1.68	27.55
SW-03B	12/22/2006	29.23	2.37	26.86
SW-03B	3/6/2007	29.23	1.80	27.43
SW-03B	5/25/2007	29.23	2.21	27.02
SW-03B	8/27/2007	29.23	2.62	26.61
SW-03B	11/27/2007	29.23	3.06	26.17
SW-03B	2/25/2008	29.23	2.14	27.09
SW-03B	6/17/2008	29.23	3.06	26.17
SW-03B	9/8/2008	29.23	3.25	25.98
SW-04B	5/26/2000	24.70	-2.01	26.71
SW-04B	9/6/2000	24.70	-1.28	25.98
SW-04B	12/8/2000	24.70	-1.06	25.76
SW-04B	4/13/2001	24.70	-1.45	26.15
SW-04B	8/6/2001	24.70	-0.76	25.46
SW-04B	12/7/2001	24.70	-0.71	25.41
SW-04B	3/15/2002	24.70	-1.57	26.27
SW-04B	6/3/2002	24.70	-1.30	26.00
SW-04B	9/9/2002	24.70	-0.59	25.29
SW-04B	12/10/2002	24.70	-1.03	25.73
SW-04B	3/2/2003	24.70	-1.62	26.32
SW-04B	6/2/2003	24.70	-1.69	26.39
SW-04B	8/25/2003	24.70	-0.96	25.66
SW-04B	12/15/2003	24.70	-0.73	25.43
SW-04B	3/25/2004	24.70	-1.76	26.46
SW-04B	6/7/2004	24.70	-1.19	25.89
SW-04B	9/7/2004	24.70	-0.61	25.31
SW-04B	12/6/2004	24.70	-0.66	25.36
SW-04B	2/28/2005	24.70	-1.89	26.59
SW-04B	2/28/2005	24.70	-2.12	26.82
SW-04B	9/12/2005	24.70	-1.43	26.13
SW-04B	11/28/2005	24.70	-1.11	25.81
SW-04B	3/6/2006	24.70	-2.29	26.99
SW-04B	6/5/2006	24.70	-3.07	27.77
SW-04B	8/30/2006	24.70	-2.41	27.11
SW-04B	12/22/2006	24.70	-2.18	26.88
SW-04B	3/6/2007	24.70	-2.36	27.06
SW-04B	5/25/2007	24.70	-2.06	26.76
SW-04B	8/27/2007	24.70	-1.57	26.27
SW-04B	11/27/2007	24.70	-1.12	25.82
SW-04B	2/25/2008	24.70	-1.12	25.82
SW-04B	6/17/2008	24.70	-1.12	25.82
SW-04B	9/8/2008	24.70	-1.08	25.78
SW-04B	11/3/2008	24.70	-1.01	25.71
SW-05B	5/26/2000	23.13	-2.52	25.65
SW-05B	9/6/2000	23.13	-1.84	24.97
SW-05B	12/8/2000	23.13	-1.67	24.80
SW-05B	4/13/2001	23.13	-2.11	25.24
SW-05B	8/6/2001	23.13	-1.50	24.63
SW-05B	12/7/2001	23.13	-1.45	24.58
SW-05B	3/15/2002	23.13	-2.29	25.42
SW-05B	6/3/2002	23.13	-2.03	25.16
SW-05B	9/9/2002	23.13	-1.68	24.81
SW-05B	12/10/2002	23.13	-1.22	24.35
SW-05B	3/2/2003	23.13	-2.32	25.45

Table 2-2. Summary of Groundwater Historical Elevation Data

Station Name	Date	Top of Casing Elevation ^a (feet msl)	Depth to Water ^b (feet)	Groundwater Elevation (feet msl)
SW-05B	6/2/2003	23.13	-2.35	25.48
SW-05B	8/25/2003	23.13	-1.79	24.92
SW-05B	12/15/2003	23.13	-1.37	24.50
SW-05B	3/25/2004	23.13	-2.44	25.57
SW-05B	6/7/2004	23.13	-1.61	24.74
SW-05B	9/7/2004	23.13	-1.13	24.26
SW-05B	12/6/2004	23.13	-1.13	24.26
SW-05B	2/28/2005	23.13	-2.57	25.70
SW-05B	2/28/2005	23.13	-2.75	25.88
SW-05B	9/12/2005	23.13	-2.11	25.24
SW-05B	11/28/2005	23.13	-1.74	24.87
SW-05B	3/6/2006	23.13	-2.98	26.11
SW-05B	6/5/2006	23.13	-3.38	26.51
SW-05B	8/30/2006	23.13	-3.00	26.13
SW-05B	12/22/2006	23.13	-2.79	25.92
SW-05B	3/6/2007	23.13	-2.92	26.05
SW-05B	5/25/2007	23.13	-2.65	25.78
SW-05B	8/27/2007	23.13	-2.15	25.28
SW-05B	11/27/2007	23.13	-1.77	24.90
SW-05B	2/25/2008	23.13	-2.70	25.83
SW-05B	6/17/2008	23.13	-1.75	24.88
SW-05B	9/8/2008	23.13	-1.69	24.82
SW-05B	11/3/2008	23.13	-1.40	24.53
SW-07B	5/26/2000	21.18	-3.91	25.09
SW-07B	9/6/2000	21.18	-3.26	24.44
SW-07B	12/8/2000	21.18	-3.11	24.29
SW-07B	4/13/2001	21.18	-3.49	24.67
SW-07B	8/6/2001	21.18	-2.89	24.07
SW-07B	12/7/2001	21.18	-2.57	23.75
SW-07B	3/15/2002	21.18	-3.58	24.76
SW-07B	6/3/2002	21.18	-3.33	24.51
SW-07B	9/9/2002	21.18	-2.89	24.07
SW-07B	12/10/2002	21.18	-2.57	23.75
SW-07B	3/2/2003	21.18	-3.59	24.77
SW-07B	6/2/2003	21.18	-3.69	24.87
SW-07B	8/25/2003	21.18	-3.11	24.29
SW-07B	12/15/2003	21.18	-2.78	23.96
SW-07B	3/25/2004	21.18	-3.79	24.97
SW-07B	6/7/2004	21.18	-3.27	24.45
SW-07B	9/7/2004	21.18	-2.74	23.92
SW-07B	12/6/2004	21.18	-2.72	23.90
SW-07B	2/28/2005	21.18	-3.87	25.05
SW-07B	2/28/2005	21.18	-3.97	25.15
SW-07B	9/12/2005	21.18	-3.41	24.59
SW-07B	11/28/2005	21.18	-3.08	24.26
SW-07B	3/6/2006	21.18	-3.92	25.10
SW-07B	6/5/2006	21.18	-4.83	26.01
SW-07B	8/30/2006	21.18	-4.28	25.46
SW-07B	12/22/2006	21.18	-4.09	25.27
SW-07B	3/6/2007	21.18	-4.27	25.45
SW-07B	5/25/2007	21.18	-3.98	25.16
SW-07B	8/27/2007	21.18	-3.54	24.72
SW-07B	11/27/2007	21.18	-3.15	24.33
SW-07B	2/25/2008	21.18	-4.01	25.19
SW-07B	6/17/2008	21.18	-3.11	24.29
SW-07B	9/8/2008	21.18	-3.09	24.27
SW-08B	5/26/2000	19.10	-4.92	24.02
SW-08B	9/6/2000	19.10	-4.32	23.42

Table 2-2. Summary of Groundwater Historical Elevation Data

Station Name	Date	Top of Casing Elevation ^a (feet msl)	Depth to Water ^b (feet)	Groundwater Elevation (feet msl)
SW-08B	12/8/2000	19.10	-4.22	23.32
SW-08B	4/13/2001	19.10	-4.60	23.70
SW-08B	8/6/2001	19.10	-3.97	23.07
SW-08B	12/7/2001	19.10	-3.93	23.03
SW-08B	3/15/2002	19.10	-4.62	23.72
SW-08B	6/3/2002	19.10	-4.41	23.51
SW-08B	9/9/2002	19.10	-3.94	23.04
SW-08B	12/10/2002	19.10	-3.69	22.79
SW-08B	3/2/2003	19.10	-4.63	23.73
SW-08B	6/2/2003	19.10	-4.68	23.78
SW-08B	8/25/2003	19.10	-4.19	23.29
SW-08B	12/15/2003	19.10	-3.90	23.00
SW-08B	3/25/2004	19.10	-4.83	23.93
SW-08B	6/7/2004	19.10	-4.27	23.37
SW-08B	9/7/2004	19.10	-3.86	22.96
SW-08B	12/6/2004	19.10	-3.91	23.01
SW-08B	2/28/2005	19.10	-4.41	23.51
SW-08B	2/28/2005	19.10	-4.88	23.98
SW-08B	9/12/2005	19.10	-4.43	23.53
SW-08B	11/28/2005	19.10	-4.11	23.21
SW-08B	3/6/2006	19.10	-5.32	24.42
SW-08B	6/5/2006	19.10	-5.87	24.97
SW-08B	8/30/2006	19.10	-5.33	24.43
SW-08B	12/22/2006	19.10	-5.17	24.27
SW-08B	3/6/2007	19.10	-5.32	24.42
SW-08B	5/25/2007	19.10	-4.76	23.86
SW-08B	8/27/2007	19.10	-4.59	23.69
SW-08B	11/27/2007	19.10	-4.31	23.41
SW-08B	2/25/2008	19.10	-5.11	24.21
SW-08B	6/17/2008	19.10	-4.12	23.22
SW-08B	9/8/2008	19.10	-4.29	23.39
SW-08B	11/3/2008	19.10	-4.10	23.20
SW-09B	5/26/2000	17.38	-5.86	23.24
SW-09B	9/6/2000	17.38	-5.28	22.66
SW-09B	12/8/2000	17.38	-5.13	22.51
SW-09B	4/13/2001	17.38	-4.62	22.00
SW-09B	8/6/2001	17.38	-4.90	22.28
SW-09B	12/7/2001	17.38	-4.93	22.31
SW-09B	3/15/2002	17.38	-5.58	22.96
SW-09B	6/3/2002	17.38	-5.36	22.74
SW-09B	9/9/2002	17.38	-4.95	22.33
SW-09B	12/10/2002	17.38	-4.68	22.06
SW-09B	3/2/2003	17.38	-5.73	23.11
SW-09B	6/2/2003	17.38	-5.62	23.00
SW-09B	8/25/2003	17.38	-5.07	22.45
SW-09B	12/15/2003	17.38	-4.94	22.32
SW-09B	3/25/2004	17.38	-5.76	23.14
SW-09B	6/7/2004	17.38	-5.09	22.47
SW-09B	9/7/2004	17.38	-4.72	22.10
SW-09B	12/6/2004	17.38	-4.65	22.03
SW-09B	2/28/2005	17.38	-5.87	23.25
SW-09B	9/12/2005	17.38	-5.24	22.62
SW-09B	11/28/2005	17.38	-5.10	22.48
SW-09B	3/6/2006	17.38	-6.21	23.59
SW-09B	6/5/2006	17.38	-6.73	24.11
SW-09B	8/30/2006	17.38	-6.19	23.57
SW-09B	12/22/2006	17.38	-6.08	23.46
SW-09B	3/6/2007	17.38	-6.22	23.60

Table 2-2. Summary of Groundwater Historical Elevation Data

Station Name	Date	Top of Casing Elevation ^a (feet msl)	Depth to Water ^b (feet)	Groundwater Elevation (feet msl)
SW-09B	5/25/2007	17.38	-5.91	23.29
SW-09B	8/27/2007	17.38	-5.49	22.87
SW-09B	11/27/2007	17.38	-5.21	22.59
SW-09B	2/25/2008	17.38	-5.94	23.32
SW-09B	6/17/2008	17.38	-5.10	22.48
SW-09B	9/8/2008	17.38	-5.11	22.49
SW-09B	11/3/2008	17.38	-4.99	22.37
SW-11B	5/26/2000	15.38	-6.57	21.95
SW-11B	9/6/2000	15.38	-6.07	21.45
SW-11B	12/8/2000	15.38	-5.89	21.27
SW-11B	4/13/2001	15.38	-6.40	21.78
SW-11B	8/6/2001	15.38	-5.46	20.84
SW-11B	12/7/2001	15.38	-5.70	21.08
SW-11B	3/15/2002	15.38	-6.32	21.70
SW-11B	6/3/2002	15.38	-6.04	21.42
SW-11B	9/9/2002	15.38	-5.64	21.02
SW-11B	12/10/2002	15.38	-5.49	20.87
SW-11B	3/2/2003	15.38	-6.22	21.60
SW-11B	6/2/2003	15.38	-6.31	21.69
SW-11B	8/25/2003	15.38	-5.88	21.26
SW-11B	12/15/2003	15.38	-5.68	21.06
SW-11B	3/25/2004	15.38	-6.42	21.80
SW-11B	6/7/2004	15.38	-5.97	21.35
SW-11B	9/7/2004	15.38	-5.58	20.96
SW-11B	12/6/2004	15.38	-5.71	21.09
SW-11B	2/28/2005	15.38	-6.44	21.82
SW-11B	2/28/2005	15.38	-6.49	21.87
SW-11B	9/12/2005	15.38	-6.02	21.40
SW-11B	11/28/2005	15.38	-5.82	21.20
SW-11B	3/6/2006	15.38	-6.81	22.19
SW-11B	6/5/2006	15.38	-7.28	22.66
SW-11B	8/30/2006	15.38	-6.83	22.21
SW-11B	12/22/2006	15.38	-6.74	22.12
SW-11B	3/6/2007	15.38	-6.81	22.19
SW-11B	5/25/2007	15.38	-6.60	21.98
SW-11B	8/27/2007	15.38	-6.28	21.66
SW-11B	11/27/2007	15.38	-6.03	21.41
SW-11B	2/25/2008	15.38	-6.66	22.04
SW-11B	6/17/2008	15.38	-5.82	21.20
SW-11B	9/8/2008	15.38	-5.98	21.36
SW-11B	11/3/2008	15.38	-5.73	21.11
SW-12B	5/26/2000	12.82	-8.88	21.70
SW-12B	9/6/2000	12.82	-8.38	21.20
SW-12B	12/8/2000	12.82	-8.33	21.15
SW-12B	4/13/2001	12.82	-8.59	21.41
SW-12B	8/6/2001	12.82	-6.09	18.91
SW-12B	12/7/2001	12.82	-8.10	20.92
SW-12B	3/15/2002	12.82	-8.65	21.47
SW-12B	6/3/2002	12.82	-8.42	21.24
SW-12B	9/9/2002	12.82	-8.05	20.87
SW-12B	12/10/2002	12.82	-7.84	20.66
SW-12B	3/2/2003	12.82	-8.60	21.42
SW-12B	6/2/2003	12.82	-8.66	21.48
SW-12B	8/25/2003	12.82	-8.20	21.02
SW-12B	12/15/2003	12.82	-7.96	20.78
SW-12B	3/25/2004	12.82	-8.71	21.53
SW-12B	6/7/2004	12.82	-8.33	21.15
SW-12B	9/7/2004	12.82	-7.95	20.77

Table 2-2. Summary of Groundwater Historical Elevation Data

Station Name	Date	Top of Casing Elevation ^a (feet msl)	Depth to Water ^b (feet)	Groundwater Elevation (feet msl)
SW-12B	12/6/2004	12.82	-7.95	20.77
SW-12B	2/28/2005	12.82	-8.76	21.58
SW-12B	2/28/2005	12.82	-8.82	21.64
SW-12B	9/12/2005	12.82	-8.31	21.13
SW-12B	11/28/2005	12.82	-8.11	20.93
SW-12B	3/6/2006	12.82	-9.75	22.57
SW-12B	6/5/2006	12.82	-9.64	22.46
SW-12B	8/30/2006	12.82	-9.18	22.00
SW-12B	12/22/2006	12.82	-9.06	21.88
SW-12B	3/6/2007	12.82	-10.30	23.12
SW-12B	5/25/2007	12.82	-9.00	21.82
SW-12B	8/27/2007	12.82	-8.62	21.44
SW-12B	11/27/2007	12.82	-8.35	21.17
SW-12B	2/25/2008	12.82	-9.00	21.82
SW-12B	6/17/2008	12.82	-8.17	20.99
SW-12B	9/8/2008	12.82	-8.35	21.17
SW-12B	11/3/2008	12.82	-8.10	20.92
SW-14B	5/26/2000	10.34	-9.94	20.28
SW-14B	9/6/2000	10.34	-9.52	19.86
SW-14B	12/8/2000	10.34	-9.66	20.00
SW-14B	4/13/2001	10.34	-8.50	18.84
SW-14B	8/6/2001	10.34	-8.38	18.72
SW-14B	12/7/2001	10.34	-8.45	18.79
SW-14B	3/15/2002	10.34	-9.68	20.02
SW-14B	6/3/2002	10.34	-9.68	20.02
SW-14B	9/9/2002	10.34	-9.06	19.40
SW-14B	12/10/2002	10.34	-8.89	19.23
SW-14B	3/2/2003	10.34	-9.42	19.76
SW-14B	6/2/2003	10.34	-9.34	19.68
SW-14B	8/25/2003	10.34	-9.29	19.63
SW-14B	12/15/2003	10.34	-9.10	19.44
SW-14B	3/25/2004	10.34	-10.04	20.38
SW-14B	6/7/2004	10.34	-9.27	19.61
SW-14B	9/7/2004	10.34	-9.27	19.61
SW-14B	12/6/2004	10.34	-6.72	17.06
SW-14B	2/28/2005	10.34	-9.76	20.10
SW-14B	2/28/2005	10.34	-9.64	19.98
SW-14B	11/28/2005	10.34	-8.76	19.10
SW-14B	6/5/2006	10.34	-10.50	20.84
SW-14B	5/25/2007	10.34	-9.58	19.92
SW-14B	8/27/2007	10.34	-11.73	22.07
SW-14B	11/27/2007	10.34	-9.40	19.74
SW-14B	2/25/2008	10.34	-9.98	20.32
SW-14B	6/17/2008	10.34	-9.30	19.64
SW-14B	9/8/2008	10.34	-9.10	19.44
SW-14B	11/3/2008	10.34	-9.33	19.67
SW-18B	5/26/2000	11.85	-7.64	19.49
SW-18B	9/6/2000	11.85	-7.22	19.07
SW-18B	12/8/2000	11.85	-6.89	18.74
SW-18B	4/13/2001	11.85	-8.02	19.87
SW-18B	8/6/2001	11.85	-6.01	17.86
SW-18B	12/7/2001	11.85	-5.58	17.43
SW-18B	3/15/2002	11.85	-5.58	17.43
SW-18B	6/3/2002	11.85	-6.13	17.98
SW-18B	9/9/2002	11.85	-6.51	18.36
SW-18B	12/10/2002	11.85	-6.39	18.24
SW-18B	3/2/2003	11.85	-6.84	18.69
SW-18B	6/2/2003	11.85	-7.08	18.93
SW-18B	8/25/2003	11.85	-6.66	18.51

Table 2-2. Summary of Groundwater Historical Elevation Data

Station Name	Date	Top of Casing Elevation ^a (feet msl)	Depth to Water ^b (feet)	Groundwater Elevation (feet msl)
SW-18B	12/15/2003	11.85	-5.78	17.63
SW-18B	3/25/2004	11.85	-6.98	18.83
SW-18B	6/7/2004	11.85	-6.42	18.27
SW-18B	9/7/2004	11.85	-5.62	17.47
SW-18B	12/6/2004	11.85	-5.36	17.21
SW-18B	2/28/2005	11.85	-6.47	18.32
SW-18B	2/28/2005	11.85	-6.80	18.65
SW-18B	9/12/2005	11.85	-5.44	17.29
SW-18B	11/28/2005	11.85	-6.99	18.84
SW-18B	3/6/2006	11.85	-8.02	19.87
SW-18B	6/5/2006	11.85	-7.12	18.97
SW-18B	8/30/2006	11.85	-7.61	19.46
SW-18B	12/22/2006	11.85	-7.68	19.53
SW-18B	3/6/2007	11.85	-7.63	19.48
SW-18B	5/25/2007	11.85	-6.94	18.79
SW-18B	8/27/2007	11.85	-6.88	18.73
SW-18B	11/27/2007	11.85	-6.78	18.63
SW-18B	2/25/2008	11.85	-7.48	19.33
SW-18B	6/17/2008	11.85	-6.83	18.68
SW-18B	9/8/2008	11.85	-6.92	18.77
SW-18B	11/3/2008	11.85	-6.69	18.54

Footnotes:

^a Elevations are given in feet above mean sea level (MSL).

^b Depth to water is measured from top of well casing.

Negative values represent measurements above top of casing.
 feet msl = feet mean sea level

Checked by: MH-F

Approved by: MS

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
Upper A					
GWE-1	12/1/1997	96	650	1,200	110
GWE-1	5/1/1998	240	1,700	1,400	61
GWE-1	4/7/1999	60	340	610	41
GWE-1	7/1/1999	500	1,600	720	30
GWE-1	11/3/1999	460	1,300	660	24
GWE-1	2/1/2000	49	250	470	76
GWE-1	5/5/2000	210	920	840	43
GWE-1	11/14/2000	270	1,100	480	33
GWE-1	5/30/2001	260	1,200	640	17
GWE-1	8/21/2001	260	970	500	ND(50)
GWE-1	11/1/2001	230	900	410	11
GWE-1	2/26/2002	15	80	590	59
GWE-1	8/28/2002	190	850	480	13
GWE-1	2/27/2003	30	170	450	32
GWE-1	8/3/2003	210	870	470	10
GWE-1	2/17/2004	20	100	360	39
GWE-1	8/4/2004	140	730	480	11
GWE-1	2/16/2005	11	ND(1)	190	27
GWE-1	8/25/2005	100	570	500	12
GWE-1	2/16/2006	6	59	270	28
GWE-1	8/23/2006	73	440	510	16
GWE-1	2/8/2007	24	160	460	46
GWE-1	8/7/2007	110	450	380	4
GWE-1	2/8/2008	7	56	110	45
GWE-2	12/1/1997	ND(0.5)	13	130	25
GWE-2	5/1/1998	ND(4)	80	600	65
GWE-2	4/1/1999	ND(20)	67	450	24
GWE-2	7/1/1999	ND(0.5)	97	620	51
GWE-2	11/3/1999	ND(0.5)	45	680	49
GWE-2	2/1/2000	ND(1.7)	72	440	18
GWE-2	5/5/2000	ND(1.7)	58	450	24
GWE-2	11/13/2000	ND(2.5)	46	520	39
GWE-2	3/1/2001	ND(0.5)	10	150	6
GWE-2	5/30/2001	ND(0.5)	ND(0.5)	1	1
GWE-2	8/22/2001	ND(5)	13	170	41
GWE-2	11/1/2001	ND(0.5)	1	2	ND(0.5)
GWE-2	2/26/2002	ND(0.7)	45	280	15
GWE-2	8/28/2002	53	600	440	28
GWE-2	2/27/2003	ND(1)	37	280	13
GWE-2	8/3/2003	ND(1.7)	32	400	42
GWE-2	2/17/2004	ND(0.7)	27	190	12
GWE-2	8/4/2004	ND(1.3)	25	340	52
GWE-2	2/18/2005	ND(0.5)	8	25	1
GWE-2	8/25/2005	6	59	230	56
GWE-2	2/16/2006	ND(1.7)	35	200	19
GWE-2	8/23/2006	ND(1.7)	25	240	44
GWE-2	2/8/2007	ND(1)	20	130	18
GWE-2	8/7/2007	ND(0.7)	6	110	22
GWE-2	2/8/2008	ND(0.5)	29	75	4
GWE-3	12/1/1997	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GWE-3	5/1/1998	ND(1)	ND(1)	ND(1)	ND(2)
GWE-3	4/1/1999	ND(5)	ND(5)	ND(5)	ND(10)
GWE-3	7/1/1999	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
GWE-3	11/3/1999	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
GWE-3	2/1/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
GWE-3	5/5/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
GWE-3	11/13/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
GWE-3	5/30/2001	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GWE-3	8/21/2001	ND(5)	ND(5)	ND(5)	ND(10)
GWE-3	11/1/2001	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GWE-3	2/26/2002	ND(0.5)	ND(0.5)	1	ND(0.5)
GWE-3	8/28/2002	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GWE-3	2/27/2003	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GWE-3	8/3/2003	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GWE-3	2/17/2004	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GWE-3	8/4/2004	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GWE-3	2/16/2005	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GWE-3	8/25/2005	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GWE-3	2/16/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GWE-3	8/23/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GWE-3	2/8/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GWE-3	8/7/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GWE-3	2/8/2008	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GWE-4	12/1/1997	ND(0.5)	ND(0.5)	8	12
GWE-4	5/1/1998	ND(1)	ND(1)	2	2
GWE-4	4/1/1999	ND(5)	ND(5)	ND(5)	ND(10)
GWE-4	7/1/1999	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
GWE-4	11/3/1999	ND(0.5)	ND(0.5)	11	37
GWE-4	2/1/2000	ND(0.5)	ND(0.5)	9	18
GWE-4	5/5/2000	ND(0.5)	ND(0.5)	2	3
GWE-4	11/13/2000	ND(0.5)	ND(0.5)	6	26
GWE-4	5/30/2001	ND(0.5)	ND(0.5)	1	1
GWE-4	8/21/2001	ND(5)	ND(5)	ND(5)	ND(10)
GWE-4	11/1/2001	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GWE-4	2/26/2002	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GWE-4	8/28/2002	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GWE-4	2/27/2003	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GWE-4	8/3/2003	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GWE-4	2/17/2004	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GWE-4	8/4/2004	ND(0.5)	ND(0.5)	ND(0.5)	1
GWE-4	2/16/2005	ND(0.5)	ND(0.5)	ND(0.5)	1
GWE-4	8/25/2005	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GWE-4	2/16/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GWE-4	8/23/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GWE-4	2/8/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GWE-4	8/7/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GWE-4	2/8/2008	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GWE-5	12/1/1997	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GWE-5	5/1/1998	ND(50)	ND(50)	ND(50)	ND(100)
GWE-5	4/1/1999	ND(250)	ND(250)	ND(250)	ND(500)
GWE-5	7/1/1999	ND(0.5)	2	24	2
GWE-5	11/3/1999	ND(7.1)	ND(7.1)	22	ND(14)
GWE-5	2/1/2000	ND(0.5)	1	16	3
GWE-5	5/5/2000	ND(0.5)	2	23	2
GWE-5	8/31/2000	ND(0.5)	1	20	1
GWE-5	11/16/2000	ND(0.5)	2	23	2
GWE-5	11/1/2001	ND(6.3)	ND(6.3)	15	ND(6.3)

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
GWE-5	2/26/2002	ND(10)	ND(10)	15	ND(10)
GWE-5	8/2/2002	ND(17)	ND(17)	ND(17)	ND(17)
GWE-5	2/27/2003	ND(1)	1	19	1
GWE-5	8/4/2004	ND(0.5)	1	18	2
GWE-5	2/5/2005	290	7,900	ND(63)	ND(63)
GWE-5	5/5/2005	240	5,100	880	ND(31)
GWE-5	8/5/2005	150	610	900	ND(17)
GWE-5	2/17/2006	18	ND(17)	190	49
GWE-5	8/24/2006	ND(17)	ND(17)	53	ND(17)
LF-10A	12/1/1997	260	1,700	ND(0.5)	ND(0.5)
LF-10A	5/1/1998	160	1,200	ND(10)	ND(20)
LF-10A	4/1/1999	190	950	ND(5)	ND(10)
LF-10A	7/1/1999	190	1,200	6	ND(10)
LF-10A	11/3/1999	140	1,100	6	ND(8.3)
LF-10A	2/1/2000	77	580	6	ND(5)
LF-10A	5/5/2000	130	810	8	ND(5)
LF-10A	8/31/2000	120	490	8	ND(1.7)
LF-10A	11/14/2000	99	830	5	ND(3.6)
LF-10A	2/28/2001	120	770	11	ND(3.1)
LF-10A	5/31/2001	120	770	8	ND(2.5)
LF-10A	8/20/2001	120	950	ND(25)	ND(50)
LF-10A	11/1/2001	89	790	7	ND(2.5)
LF-10A	2/26/2002	71	350	5	ND(1.3)
LF-10A	8/28/2002	84	540	7	ND(2.5)
LF-10A	2/27/2003	74	380	6	ND(1)
LF-10A	8/3/2003	70	470	7	ND(1.7)
LF-10A	2/18/2004	79	370	6	ND(1.7)
LF-10A	8/4/2004	96	720	6	ND(2.5)
LF-10A	2/18/2005	59	320	3	ND(2)
LF-10A	8/24/2005	81	500	6	ND(3.1)
LF-10A	2/17/2006	54	350	ND(3.1)	ND(3.1)
LF-10A	8/24/2006	62	430	ND(3.1)	ND(3.1)
LF-10A	2/9/2007	64	410	ND(3.1)	ND(3.1)
LF-10A	8/7/2007	52	300	4	ND(3.1)
LF-10A	2/8/2008	57	410	ND(2.5)	ND(2.5)
LF-10A	8/15/2008	49	540	3	ND(0.50)
LF-10A	9/3/2008	49	460	3	ND(0.50)
LF-10A	9/23/2008	50	450	3	ND(0.50)
LF-10A	10/21/2008	53	410	4	ND(0.50)
LF-10A	11/6/2008	40	410	3	ND(0.50)
LF-11A	12/1/1997	5,900	3,600	2,900	ND(0.5)
LF-11A	5/1/1998	6,600	4,600	4,900	140
LF-11A	4/1/1999	8,400	4,600	3,000	ND(500)
LF-11A	7/1/1999	19,000	5,600	2,500	ND(100)
LF-11A	11/3/1999	17,000	4,200	2,800	ND(1300)
LF-11A	2/1/2000	15,000	4,200	3,200	69
LF-11A	5/5/2000	18,000	4,800	3,200	390
LF-11A	8/31/2000	20,000	3,900	2,300	ND(100)
LF-11A	11/15/2000	15,000	2,600	1,900	ND(100)
LF-11A	2/28/2001	12,000	2,400	1,800	68
LF-11A	5/31/2001	13,000	2,000	1,500	ND(50)
LF-11A	8/20/2001	8,600	1,500	1,400	ND(310)
LF-11A	11/1/2001	9,400	1,300	1,100	ND(50)
LF-11A	2/27/2002	11,000	1,500	1,200	39

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
LF-11A	5/28/2002	7,800	1,300	980	ND(20)
LF-11A	8/28/2002	8,200	1,100	1,100	78
LF-11A	11/14/2002	6,400	1,100	980	71
LF-11A	2/27/2003	5,900	1,100	700	21
LF-11A	5/27/2003	5,200	890	570	ND(500)
LF-11A	11/24/2003	5,600	840	610	66
LF-11A	2/17/2004	5,000	740	350	29
LF-11A	5/11/2004	6,300	960	400	ND(13)
LF-11A	8/4/2004	12,000	880	360	52
LF-11A	11/17/2004	14,000	480	170	ND(42)
LF-11A	2/17/2005	6,500	460	200	ND(63)
LF-11A	5/5/2005	5,600	650	390	170
LF-11A	8/24/2005	8,500	750	390	160
LF-11A	11/5/2005	7,800	700	300	210
LF-11A	2/17/2006	7,600	450	220	120
LF-11A	5/16/2006	11,000	1,000	440	130
LF-11A	8/24/2006	9,400	510	220	ND(63)
LF-11A	11/6/2006	12,000	360	170	ND(63)
LF-11A	2/8/2007	9,800	360	180	ND(63)
LF-11A	5/2/2007	7,900	400	220	90
LF-11A	8/7/2007	8,400	340	160	ND(63)
LF-11A	11/15/2007	6,900	420	140	82
LF-11A	2/8/2008	5,200	290	190	46
LF-11A	5/8/2008	5,300	380	250	94
LF-11A	9/9/2008	8,900 A/	450 A/	510 A/	100 A/
LF-11A	11/5/2008	4,900 A/	710 A/	760 A/	230 A/
LF-1A	12/1/1997	ND(0.5)	21	410	120
LF-1A	5/1/1998	ND(1)	1	60	43
LF-1A	4/1/1999	ND(10)	ND(10)	210	130
LF-1A	7/1/1999	ND(2.5)	5	620	300
LF-1A	11/3/1999	ND(2.5)	4	630	400
LF-1A	2/1/2000	ND(2)	6	360	200
LF-1A	5/5/2000	ND(1)	6	260	190
LF-1A	8/31/2000	ND(1.7)	2	490	300
LF-1A	11/15/2000	ND(2)	ND(2)	480	330
LF-1A	3/1/2001	ND(1)	3	200	110
LF-1A	5/31/2001	ND(1.7)	12	470	170
LF-1A	8/20/2001	ND(25)	ND(25)	490	210
LF-1A	11/1/2001	ND(2)	5	250	280
LF-1A	2/26/2002	ND(0.7)	4	170	160
LF-1A	8/29/2002	ND(1.7)	4	470	330
LF-1A	2/27/2003	ND(0.5)	1	160	160
LF-1A	8/3/2003	ND(1)	1	380	260
LF-1A	2/18/2004	ND(0.5)	4	130	140
LF-1A	8/4/2004	ND(1)	1	310	340
LF-1A	2/16/2005	ND(0.5)	3	94	92
LF-1A	8/23/2005	ND(1)	ND(1)	120	120
LF-1A	2/16/2006	ND(0.5)	2	89	91
LF-1A	8/23/2006	ND(1)	ND(1)	170	180
LF-1A	2/8/2007	ND(0.5)	1	90	97
LF-1A	8/7/2007	ND(0.5)	1	160	140
LF-9A	12/1/1997	240	180	80	ND(0.5)
LF-9A	4/1/1999	200	130	99	5
LF-9A	7/1/1999	420	680	80	15

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
LF-9A	11/3/1999	660	810	100	ND(50)
LF-9A	2/1/2000	17,000	3,000	140	ND(100)
LF-9A	5/5/2000	9,500	5,600	140	ND(100)
LF-9A	8/31/2000	29,000	2,500	ND(100)	ND(100)
LF-9A	10/12/2000	13,000	1,000	130	25
LF-9A	11/14/2000	5,700	690	360	ND(25)
LF-9A	1/18/2001	3,500	360	110	18
LF-9A	2/26/2001	1,700	340	73	14
LF-9A	3/19/2001	2,100	490	180	24
LF-9A	5/31/2001	1,400	320	290	34
LF-9A	8/20/2001	1,600	750	210	ND(100)
LF-9A	11/1/2001	1,200	610	170	29
LF-9A	2/27/2002	710	290	100	20
LF-9A	5/28/2002	680	250	220	32
LF-9A	8/29/2002	490	210	200	29
LF-9A	11/14/2002	440	210	230	40
LF-9A	2/27/2003	550	200	120	25
LF-9A	5/27/2003	380	170	220	45
LF-9A	8/3/2003	310	130	230	39
LF-9A	11/24/2003	450	210	220	41
LF-9A	2/19/2004	200	120	100	19
LF-9A	5/11/2004	200	180	110	26
LF-9A	8/4/2004	760	310	310	44
LF-9A	11/17/2004	2,600	1,100	230	38
LF-9A	2/18/2005	1,100	780	110	21
LF-9A	5/5/2005	930	670	200	24
LF-9A	8/24/2005	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-9A	11/5/2005	780	750	150	21
LF-9A	2/16/2006	980	730	160	26
LF-9A	5/16/2006	540	420	220	25
LF-9A	8/24/2006	280	180	300	26
LF-9A	11/6/2006	65	43	270	42
LF-9A	2/9/2007	190	140	230	27
LF-9A	5/2/2007	110	74	140	19
LF-9A	8/7/2007	190	85	89	15
LF-9A	11/15/2007	70	61	190	28
LF-9A	2/8/2008	41	45	50	11
LF-9A	5/8/2008	98	67	96	15
MEC-10UA	8/12/2008	2	21	ND(0.50)	ND(0.50)
MEC-10UA	9/4/2008	9	78 /MHA	ND(0.50)	ND(0.50)
MEC-10UA	9/23/2008	15	160	ND(0.50)	ND(0.50)
MEC-10UA	10/21/2008	110	1,000	ND(0.50)	ND(0.50)
MEC-10UA	11/5/2008	90	740	ND(0.50)	ND(0.50)
MEC-11UA	8/12/2008	20	140	ND(0.50)	ND(0.50)
MEC-11UA	9/3/2008	16	130 /MHA	ND(0.50)	ND(0.50)
MEC-11UA	9/23/2008	10	130	ND(0.50)	ND(0.50)
MEC-11UA	10/22/2008	14	130 /MHA	1	ND(0.50)
MEC-11UA	11/6/2008	9	150	2	ND(0.50)
MEC-12UA	8/11/2008	1	11	ND(0.50)	ND(0.50)
MEC-12UA	9/2/2008	2	130 /MHA	ND(0.50)	ND(0.50)
MEC-12UA	9/24/2008	1	16	ND(0.50)	ND(0.50)
MEC-12UA	10/20/2008	ND(0.50)	20	ND(0.50)	ND(0.50)
MEC-12UA	11/6/2008	1	51	ND(0.50)	ND(0.50)
MEC-13UA	8/11/2008	31,000	88,000	ND(120)	ND(120)

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MEC-13UA	9/2/2008	5,000	9,500	ND(10)	ND(10)
MEC-13UA	9/24/2008	3,400	9,200	ND(5.0)	ND(5.0)
MEC-13UA	10/20/2008	8,400	15,000	280	ND(10)
MEC-13UA	11/6/2008	15,000	21,000	100	ND(5.0)
MK-4A	12/1/1997	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4A	4/1/1999	ND(5)	ND(5)	ND(5)	ND(10)
MK-4A	7/1/1999	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
MK-4A	11/3/1999	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
MK-4A	2/1/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
MK-4A	5/5/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
MK-4A	7/1/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4A	8/9/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4A	8/29/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4A	8/31/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4A	9/12/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4A	10/11/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4A	11/13/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
MK-4A	2/28/2001	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4A	5/31/2001	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4A	8/22/2001	ND(5)	ND(5)	ND(5)	ND(10)
MK-4A	11/1/2001	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4A	2/27/2002	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4A	8/29/2002	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4A	2/27/2003	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4A	8/3/2003	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4A	2/17/2004	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4A	8/4/2004	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4A	2/16/2005	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4A	8/24/2005	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4A	2/16/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4A	8/23/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4A	2/7/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4A	8/7/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4A	2/8/2008	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4A	11/4/2008	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/
MK-5A	11/4/2008	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/
MK-6A	12/1/1997	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-6A	4/1/1999	ND(5)	ND(5)	ND(5)	ND(10)
MK-6A	7/1/1999	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
MK-6A	11/3/1999	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
MK-6A	2/1/2000	ND(0.5)	ND(0.5)	1	ND(1)
MK-6A	5/5/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
MK-6A	8/31/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-6A	11/13/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
MK-6A	3/1/2001	ND(0.5)	ND(0.5)	1	ND(0.5)
MK-6A	5/31/2001	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-6A	8/21/2001	ND(5)	ND(5)	ND(5)	ND(10)
MK-6A	11/1/2001	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-6A	2/27/2002	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-6A	8/29/2002	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-6A	2/27/2003	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-6A	8/3/2003	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-6A	11/1/2003	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-6A	2/19/2004	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MK-6A	8/4/2004	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-6A	2/17/2005	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-6A	8/23/2005	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-6A	2/15/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-6A	8/24/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-6A	2/7/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-6A	8/7/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-6A	2/8/2008	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-6A	11/4/2008	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/
MW-5AF	5/4/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MW-5AF	8/7/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MW-5AF	11/15/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MW-5AF	5/8/2008	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MW-5AF	11/4/2008	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/
MW-6A	12/1/1997	6	120	74	ND(0.5)
MW-6A	5/1/1998	7	120	220	ND(4)
MW-6A	4/1/1999	4	78	140	ND(5)
MW-6A	7/1/1999	ND(0.5)	2	1	ND(1)
MW-6A	11/3/1999	ND(0.5)	4	1	ND(1)
MW-6A	2/1/2000	6	98	190	16
MW-6A	5/5/2000	6	87	160	1
MW-6A	7/5/2000	ND(0.5)	5	3	1
MW-6A	7/11/2000	1	45	77	5
MW-6A	7/17/2000	1	33	71	3
MW-6A	8/9/2000	ND(0.5)	13	20	2
MW-6A	8/29/2000	ND(0.5)	7	13	ND(0.5)
MW-6A	8/31/2000	ND(0.5)	7	13	ND(0.5)
MW-6A	9/12/2000	ND(0.5)	2	7	6
MW-6A	10/11/2000	ND(0.5)	2	2	4
MW-6A	11/14/2000	ND(0.5)	12	22	3
MW-6A	3/1/2001	1	30	30	1
MW-6A	5/31/2001	ND(0.5)	2	2	ND(0.5)
MW-6A	8/21/2001	ND(5)	8	ND(5)	ND(10)
MW-6A	11/1/2001	ND(0.5)	1	1	ND(0.5)
MW-6A	2/26/2002	3	58	110	3
MW-6A	8/29/2002	ND(0.5)	3	2	ND(0.5)
MW-6A	2/27/2003	1	19	31	1
MW-6A	8/3/2003	ND(0.5)	6	2	ND(0.5)
MW-6A	2/17/2004	3	45	79	2
MW-6AR	2/17/2005	2	31	31	ND(0.5)
MW-6AR	8/25/2005	ND(0.5)	1	8	4
MW-6AR	2/16/2006	2	31	42	1
MW-6AR	8/24/2006	ND(0.5)	ND(0.5)	1	ND(0.5)
MW-6AR	2/8/2007	1	13	34	5
MW-6AR	8/7/2007	ND(0.5)	1	ND(0.5)	ND(0.5)
MW-6AR	2/8/2008	1	20	10	ND(0.5)
MW-6AR	11/4/2008	ND(0.50) A/	1.2 A/	0.93 A/	1.4 A/
MW-7A	12/1/1997	ND(0.5)	120	500	53
MW-7A	5/1/1998	3	37	170	27
MW-7A	4/1/1999	ND(10)	39	300	23
MW-7A	7/1/1999	ND(2)	29	690	97
MW-7A	11/3/1999	8	83	310	42
MW-7A	2/1/2000	4	55	290	19
MW-7A	5/5/2000	6	67	250	16

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-7A	7/5/2000	10	94	250	24
MW-7A	7/11/2000	9	86	210	14
MW-7A	7/17/2000	9	86	210	9
MW-7A	8/9/2000	12	90	160	6
MW-7A	8/29/2000	6	54	110	4
MW-7A	8/31/2000	6	54	110	4
MW-7A	9/12/2000	9	79	180	9
MW-7A	10/11/2000	9	88	240	15
MW-7A	11/15/2000	9	83	450	27
MW-7A	5/31/2001	3	46	260	36
MW-7A	8/21/2001	ND(20)	39	620	68
MW-7A	11/1/2001	ND(1)	4	260	88
MW-7A	2/26/2002	ND(0.8)	11	200	40
MW-7A	8/29/2002	ND(1)	4	270	110
MW-7A	2/27/2003	ND(0.5)	13	160	28
MW-7A	8/3/2003	ND(1)	4	310	120
MW-7A	2/18/2004	ND(0.5)	9	150	28
MW-7A	8/4/2004	ND(1)	4	250	76
MW-7A	2/17/2005	ND(0.7)	5	91	14
MW-7A	8/25/2005	ND(0.5)	1	100	72
MW-7A	2/16/2006	ND(0.7)	4	94	16
MW-7A	8/23/2006	ND(0.7)	1	120	59
MW-7A	2/9/2007	ND(0.5)	2	70	29
MW-7A	8/7/2007	ND(0.5)	ND(0.5)	87	91
MW-7A	2/8/2008	ND(0.5)	2	46	16
MW-7A	11/4/2008	ND(0.50) A/	ND(0.50) A/	8.4 A/	34 A/
MW-8A	12/1/1997	ND(0.5)	12	16	9
MW-8A	5/1/1998	ND(1)	ND(1)	7	8
MW-8A	4/1/1999	ND(5)	ND(5)	5	6
MW-8A	7/1/1999	ND(0.5)	ND(0.5)	8	17
MW-8A	11/3/1999	ND(0.5)	ND(0.5)	8	15
MW-8A	2/1/2000	ND(0.5)	ND(0.5)	8	5
MW-8A	5/5/2000	ND(0.5)	ND(0.5)	6	6
MW-8A	8/31/2000	ND(0.5)	ND(0.5)	6	6
MW-8A	11/15/2000	ND(0.5)	ND(0.5)	8	10
MW-8A	2/28/2001	ND(0.5)	ND(0.5)	4	3
MW-8A	5/31/2001	ND(0.5)	ND(0.5)	4	7
MW-8A	8/21/2001	ND(5)	ND(5)	ND(5)	ND(10)
MW-8A	11/1/2001	ND(0.5)	ND(0.5)	1	2
MW-8A	2/27/2002	ND(0.5)	ND(0.5)	1	1
MW-8A	8/29/2002	ND(0.5)	ND(0.5)	1	2
MW-8A	2/27/2003	ND(0.5)	ND(0.5)	1	1
MW-8A	8/3/2003	ND(0.5)	ND(0.5)	1	2
MW-8A	2/17/2004	ND(0.5)	ND(0.5)	1	1
MW-8A	8/4/2004	ND(0.5)	ND(0.5)	1	2
MW-8A	2/16/2005	ND(0.5)	ND(0.5)	1	1
MW-8A	8/25/2005	ND(0.5)	ND(0.5)	1	2
MW-8A	2/16/2006	ND(0.5)	ND(0.5)	1	1
MW-8A	8/23/2006	ND(0.5)	ND(0.5)	1	2
MW-8A	2/8/2007	ND(0.5)	ND(0.5)	1	1
MW-8A	8/7/2007	ND(0.5)	ND(0.5)	1	2
MW-8A	2/8/2008	ND(0.5)	ND(0.5)	1	1
SW-02UA	1/20/2000	42	140	1	ND(1)
SW-02UA	5/25/2000	44	160	1	ND(1)

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
SW-02UA	9/6/2000	34	110	1	ND(1)
SW-02UA	12/11/2000	29	130	ND(0.5)	ND(1)
SW-02UA	4/16/2001	62	170	ND(0.5)	ND(0.5)
SW-02UA	8/8/2001	34	110	ND(0.5)	ND(0.5)
SW-02UA	12/11/2001	47	120	ND(0.5)	ND(0.5)
SW-02UA	3/18/2002	95	190	ND(0.5)	ND(0.5)
SW-02UA	6/5/2002	70	160	ND(0.5)	ND(0.5)
SW-02UA	9/11/2002	58	140	ND(0.5)	ND(0.5)
SW-02UA	12/12/2002	45	130	ND(0.5)	ND(0.5)
SW-02UA	3/3/2003	80	160	ND(0.5)	ND(0.5)
SW-02UA	6/4/2003	52	140	ND(0.5)	ND(0.5)
SW-02UA	8/26/2003	55	120	ND(0.5)	ND(0.5)
SW-02UA	8/28/2003	55	120	ND(0.5)	ND(0.5)
SW-02UA	12/15/2003	58	120	ND(0.5)	ND(0.5)
SW-02UA	3/29/2004	51	110	ND(0.5)	ND(0.5)
SW-02UA	6/8/2004	43	100	ND(0.5)	ND(0.5)
SW-02UA	9/8/2004	30	76	ND(0.7)	ND(0.7)
SW-02UA	12/7/2004	42	87	ND(0.5)	ND(0.5)
SW-02UA	3/2/2005	54	90	ND(0.5)	ND(0.5)
SW-02UA	6/9/2005	42	93	ND(0.7)	ND(0.7)
SW-02UA	9/13/2005	36	95	ND(0.5)	ND(0.5)
SW-02UA	12/2/2005	32	74	ND(0.5)	ND(0.5)
SW-02UA	3/9/2006	42	78	ND(0.5)	ND(0.5)
SW-02UA	6/8/2006	52	82	ND(0.5)	ND(0.5)
SW-02UA	9/1/2006	50	81	ND(0.5)	ND(0.5)
SW-02UA	12/1/2006	40	71	ND(0.5)	ND(0.5)
SW-02UA	3/8/2007	43	99	ND(0.5)	ND(0.5)
SW-02UA	5/31/2007	33	78	ND(0.5)	ND(0.5)
SW-02UA	8/29/2007	27	74	ND(0.5)	ND(0.5)
SW-02UA	11/28/2007	31	70	ND(0.5)	ND(0.5)
SW-02UA	2/27/2008	39	69	ND(0.5)	ND(0.5)
SW-02UA	6/19/2008	44 A/	71 A/	ND(0.50) A/	ND(0.50) A/
SW-02UA	8/14/2008	35	59	ND(0.50)	ND(0.50)
SW-02UA	9/3/2008	17	54	ND(0.50)	ND(0.50)
SW-02UA	9/9/2008	19 A/	60 A/	ND(0.50) A/	ND(0.50) A/
SW-02UA	9/23/2008	24	63	ND(0.50)	ND(0.50)
SW-02UA	10/22/2008	26	69	ND(0.50)	ND(0.50)
SW-02UA	11/4/2008	25 A/	69 A/	ND(0.50) A/	ND(0.50) A/
SW-03UA	1/26/2000	1	16	ND(0.5)	ND(1)
SW-03UA	5/30/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
SW-03UA	9/11/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
SW-03UA	12/12/2000	ND(0.5)	ND(0.7)	ND(0.5)	ND(1)
SW-03UA	4/17/2001	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03UA	8/9/2001	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03UA	12/11/2001	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03UA	3/18/2002	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03UA	6/5/2002	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03UA	9/12/2002	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03UA	12/10/2002	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03UA	3/3/2003	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03UA	6/5/2003	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03UA	8/26/2003	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03UA	8/28/2003	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03UA	12/15/2003	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
SW-03UA	3/26/2004	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03UA	6/9/2004	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03UA	9/8/2004	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03UA	12/7/2004	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03UA	3/1/2005	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03UA	6/9/2005	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03UA	9/15/2005	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03UA	11/29/2005	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03UA	12/2/2005	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03UA	3/8/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03UA	6/7/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03UA	9/5/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03UA	12/4/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03UA	3/12/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03UA	5/30/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03UA	8/29/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03UA	11/30/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03UA	2/27/2008	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03UA	6/18/2008	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/
SW-04UA	1/25/2000	2	3	ND(0.5)	ND(1)
SW-04UA	5/30/2000	1	10	2	ND(1)
SW-04UA	9/11/2000	11	29	34	ND(1)
SW-04UA	12/12/2000	4	21	6	ND(1)
SW-04UA	4/16/2001	23	39	41	ND(0.5)
SW-04UA	8/8/2001	11	25	22	ND(0.5)
SW-04UA	12/10/2001	4	6	1	ND(0.5)
SW-04UA	3/18/2002	31	29	12	ND(0.5)
SW-04UA	6/6/2002	22	24	8	ND(0.5)
SW-04UA	9/12/2002	22	35	4	ND(0.5)
SW-04UA	12/11/2002	4	14	1	ND(0.5)
SW-04UA	3/5/2003	10	10	3	ND(0.5)
SW-04UA	6/4/2003	30	24	5	ND(0.5)
SW-04UA	8/26/2003	7	15	3	ND(0.5)
SW-04UA	12/15/2003	3	22	2	ND(0.5)
SW-04UA	3/26/2004	17	16	2	ND(0.5)
SW-04UA	6/9/2004	11	17	3	ND(0.5)
SW-04UA	9/9/2004	5	26	2	ND(0.5)
SW-04UA	9/12/2004	22	35	4	ND(0.5)
SW-04UA	12/7/2004	14	27	2	ND(0.5)
SW-04UA	3/2/2005	10	17	1	ND(0.5)
SW-04UA	6/9/2005	22	17	2	ND(0.5)
SW-04UA	9/13/2005	4	16	1	ND(0.5)
SW-04UA	12/2/2005	9	25	1	ND(0.5)
SW-04UA	3/8/2006	30	23	1	ND(0.5)
SW-04UA	6/8/2006	12	6	1	ND(0.5)
SW-04UA	9/5/2006	10	11	1	ND(0.5)
SW-04UA	12/4/2006	11	13	2	ND(0.5)
SW-04UA	3/9/2007	19	13	1	ND(0.5)
SW-04UA	5/31/2007	7	6	ND(0.5)	ND(0.5)
SW-04UA	8/29/2007	9	10	ND(0.5)	ND(0.5)
SW-04UA	11/28/2007	7	9	ND(0.5)	ND(0.5)
SW-04UA	2/28/2008	16	8	1	ND(0.5)
SW-04UA	6/18/2008	6.8 A/	8.9 A/	ND(0.50) A/	ND(0.50) A/
SW-04UA	11/4/2008	3.5 A/	11 A/	ND(0.50) A/	ND(0.50) A/

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
SW-05UA	1/20/2000	26	340	1	ND(1)
SW-05UA	5/25/2000	78	2,100	480	ND(13)
SW-05UA	9/7/2000	130	2,600	76	ND(20)
SW-05UA	12/11/2000	140	3,300	35	ND(25)
SW-05UA	4/16/2001	14	160	2	ND(0.6)
SW-05UA	8/9/2001	28	530	3	ND(1.7)
SW-05UA	12/11/2001	18	170	3	ND(0.5)
SW-05UA	3/18/2002	31	420	ND(1.7)	ND(1.7)
SW-05UA	6/5/2002	80	1,300	ND(4.2)	ND(4.2)
SW-05UA	9/11/2002	55	830	ND(3.1)	ND(3.1)
SW-05UA	12/11/2002	77	1,000	ND(2.5)	ND(2.5)
SW-05UA	3/3/2003	31	450	1	ND(0.8)
SW-05UA	6/4/2003	62	1,000	ND(4.2)	ND(4.2)
SW-05UA	8/26/2003	40	500	ND(2)	ND(2)
SW-05UA	12/16/2003	98	1,300	ND(5)	ND(5)
SW-05UA	3/30/2004	150	1,600	ND(5)	ND(5)
SW-05UA	6/9/2004	220	2,100	ND(5)	ND(5)
SW-05UA	9/10/2004	220	2,200	ND(17)	ND(17)
SW-05UA	12/7/2004	200	1,700	ND(10)	ND(10)
SW-05UA	3/2/2005	42	210	ND(2)	ND(2)
SW-05UA	6/9/2005	17	38	ND(0.5)	ND(0.5)
SW-05UA	9/13/2005	13	60	ND(0.5)	ND(0.5)
SW-05UA	12/2/2005	8	13	ND(0.5)	ND(0.5)
SW-05UA	3/8/2006	5	8	ND(0.5)	ND(0.5)
SW-05UA	6/7/2006	3	3	ND(0.5)	ND(0.5)
SW-05UA	9/1/2006	4	5	ND(0.5)	ND(0.5)
SW-05UA	12/4/2006	2	11	ND(0.5)	ND(0.5)
SW-05UA	3/9/2007	2	7	ND(0.5)	ND(0.5)
SW-05UA	5/30/2007	1	5	ND(0.5)	ND(0.5)
SW-05UA	8/29/2007	1	3	ND(0.5)	ND(0.5)
SW-05UA	11/28/2007	1	8	ND(0.5)	ND(0.5)
SW-05UA	2/27/2008	ND(0.5)	1	ND(0.5)	ND(0.5)
SW-05UA	2/28/2008	ND(0.5)	1	ND(0.5)	ND(0.5)
SW-05UA	6/18/2008	ND(0.50) A/	5.0 A/	ND(0.50) A/	ND(0.50) A/
SW-05UA	8/14/2008	ND(0.50)	9	ND(0.50)	ND(0.50)
SW-05UA	9/2/2008	1	13	ND(0.50)	ND(0.50)
SW-05UA	9/24/2008	ND(0.50)	11	ND(0.50)	ND(0.50)
SW-05UA	10/20/2008	1	18	ND(0.50)	ND(0.50)
SW-05UA	11/3/2008	ND(0.50) A/	15 A/	ND(0.50) A/	ND(0.50) A/
SW-06UA	1/25/2000	810	740	ND(3.1)	ND(6.3)
SW-06UA	5/25/2000	1,900	2,500	ND(8.3)	ND(17)
SW-06UA	9/6/2000	770	1,000	170	ND(10)
SW-06UA	12/13/2000	1,000	1,300	68	ND(8.3)
SW-06UA	4/17/2001	1,300	2,900	56	ND(13)
SW-06UA	8/7/2001	500	980	35	ND(3.6)
SW-06UA	12/12/2001	590	1,100	57	ND(3.1)
SW-06UA	3/18/2002	3,800	5,800	ND(17)	ND(17)
SW-06UA	6/6/2002	4,200	6,600	ND(20)	ND(20)
SW-06UA	9/11/2002	5,700	5,900	ND(17)	ND(17)
SW-06UA	12/12/2002	3,200	4,000	ND(17)	ND(17)
SW-06UA	3/4/2003	1,800	2,900	ND(10)	ND(10)
SW-06UA	6/3/2003	1,200	1,700	ND(6.3)	ND(6.3)
SW-06UA	8/26/2003	1,400	1,400	ND(6.3)	ND(6.3)
SW-06UA	12/16/2003	2,200	2,500	ND(10)	ND(10)

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
SW-06UA	3/26/2004	990	1,300	7	ND(5)
SW-06UA	6/10/2004	1,000	1,400	ND(7.1)	ND(7.1)
SW-06UA	9/9/2004	1,300	1,400	9	ND(8.3)
SW-06UA	12/10/2004	2,400	3,400	7	ND(3.6)
SW-06UA	3/1/2005	1,900	2,300	ND(13)	ND(13)
SW-06UA	6/8/2005	1,200	1,900	ND(10)	ND(10)
SW-06UA	9/14/2005	1,300	1,600	ND(8.3)	ND(8.3)
SW-06UA	12/2/2005	1,100	1,300	ND(10)	ND(10)
SW-06UA	3/7/2006	680	1,100	ND(7.1)	ND(7.1)
SW-06UA	6/6/2006	170	250	4	ND(1.7)
SW-06UA	8/31/2006	87	85	5	ND(0.5)
SW-06UA	12/5/2006	56	85	5	ND(0.5)
SW-06UA	3/6/2007	160	210	5	ND(1.3)
SW-06UA	5/29/2007	220	250	7	ND(0.5)
SW-06UA	8/28/2007	220	300	ND(2.5)	ND(2.5)
SW-06UA	11/29/2007	360	420	4	ND(1)
SW-06UA	2/28/2008	640	630	5	ND(2.5)
SW-06UA	6/17/2008	1400 A/	2100 A/	4.1 A/	ND(0.50) A/
SW-06UA	9/9/2008	3900 A/	4200 A/	5.2 A/	ND(2.5) A/
SW-06UA	11/5/2008	2700 A/	3700 A/	6.2 A/	ND(5.0) A/
SW-07UA	1/20/2000	36	3,200	910	ND(20)
SW-07UA	5/24/2000	13	1,300	140	ND(10)
SW-07UA	9/5/2000	7	960	240	ND(7.1)
SW-07UA	12/11/2000	9	1,400	290	ND(13)
SW-07UA	4/16/2001	7	950	130	ND(3.1)
SW-07UA	8/7/2001	7	870	79	ND(3.1)
SW-07UA	8/8/2001	7	870	79	ND(3.1)
SW-07UA	12/13/2001	5	1,600	130	ND(4.2)
SW-07UA	3/21/2002	4	930	7	ND(3.6)
SW-07UA	6/4/2002	2	540	6	ND(1.7)
SW-07UA	9/10/2002	3	550	5	ND(2.5)
SW-07UA	12/11/2002	3	980	4	ND(0.5)
SW-07UA	3/2/2003	3	690	5	ND(2)
SW-07UA	6/4/2003	ND(4.2)	970	ND(4.2)	ND(4.2)
SW-07UA	8/27/2003	ND(5)	1,400	ND(5)	ND(5)
SW-07UA	12/16/2003	ND(6.3)	1,300	ND(6.3)	ND(6.3)
SW-07UA	3/29/2004	ND(12)	1,000	ND(5)	ND(5)
SW-07UA	6/8/2004	6	1,100	ND(3.6)	ND(3.6)
SW-07UA	9/9/2004	ND(7.1)	1,000	ND(7.1)	ND(7.1)
SW-07UA	12/7/2004	ND(6.3)	1,000	ND(6.3)	ND(6.3)
SW-07UA	3/1/2005	ND(5)	730	ND(5)	ND(5)
SW-07UA	6/7/2005	4	550	ND(3.1)	ND(3.1)
SW-07UA	9/14/2005	ND(10)	1,300	ND(10)	ND(10)
SW-07UA	11/29/2005	ND(10)	1,400	ND(10)	ND(10)
SW-07UA	12/7/2005	ND(6.3)	1,000	ND(6.3)	ND(6.3)
SW-07UA	3/7/2006	11	1,700	ND(10)	ND(10)
SW-07UA	6/6/2006	17	2,000	ND(10)	ND(10)
SW-07UA	8/31/2006	22	3,500	ND(20)	ND(20)
SW-07UA	11/30/2006	ND(25)	4,100	ND(25)	ND(25)
SW-07UA	3/8/2007	ND(20)	3,200	ND(20)	ND(20)
SW-07UA	5/29/2007	ND(25)	2,800	ND(25)	ND(25)
SW-07UA	8/28/2007	ND(20)	3,000	ND(20)	ND(20)
SW-07UA	11/29/2007	ND(6.3)	2,500	ND(6.3)	ND(6.3)
SW-07UA	2/26/2008	ND(8.3)	1,300	ND(8.3)	ND(8.3)

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
SW-07UA	6/17/2008	1.1 A/	120 A/MHA	2.2 A/	ND(0.50) A/
SW-07UA	8/14/2008	1	910	2	ND(0.50)
SW-07UA	9/2/2008	1,100	9,900	ND(25)	ND(25)
SW-07UA	9/25/2008	2,400	7,400	440	ND(5.0)
SW-07UA	10/20/2008	2,100	4,400	2,400	ND(5.0)
SW-07UA	11/6/2008	220	530	1,100	13
SW-08UA	1/24/2000	3,500	20,000	ND(63)	ND(130)
SW-08UA	5/24/2000	2,800	18,000	ND(83)	ND(170)
SW-08UA	9/5/2000	2,300	18,000	ND(63)	ND(130)
SW-08UA	12/11/2000	1,800	16,000	84	ND(170)
SW-08UA	4/16/2001	1,300	15,000	ND(50)	ND(50)
SW-08UA	8/8/2001	1,800	20,000	ND(71)	ND(71)
SW-08UA	12/10/2001	1,500	19,000	ND(71)	ND(71)
SW-08UA	12/13/2001	1,500	19,000	ND(71)	ND(71)
SW-08UA	3/21/2002	1,600	13,000	74	ND(42)
SW-08UA	6/4/2002	2,000	23,000	ND(83)	ND(83)
SW-08UA	9/11/2002	2,000	22,000	ND(83)	ND(83)
SW-08UA	12/11/2002	2,000	24,000	ND(71)	ND(71)
SW-08UA	3/2/2003	1,700	20,000	ND(63)	ND(63)
SW-08UA	6/5/2003	780	11,000	ND(50)	ND(50)
SW-08UA	8/27/2003	1,300	15,000	ND(63)	ND(63)
SW-08UA	12/15/2003	2,300	13,000	59	ND(50)
SW-08UA	3/29/2004	2,500	13,000	ND(50)	ND(50)
SW-08UA	6/8/2004	2,200	11,000	ND(50)	ND(50)
SW-08UA	9/8/2004	3,000	11,000	ND(71)	ND(71)
SW-08UA	12/7/2004	2,100	11,000	ND(63)	ND(63)
SW-08UA	3/1/2005	770	5,200	ND(31)	ND(31)
SW-08UA	6/7/2005	1,400	9,700	ND(36)	ND(36)
SW-08UA	9/14/2005	2,800	10,000	ND(83)	ND(83)
SW-08UA	11/30/2005	2,400	9,800	ND(83)	ND(83)
SW-08UA	3/7/2006	2,200	5,700	ND(36)	ND(36)
SW-08UA	6/7/2006	2,200	6,100	ND(36)	ND(36)
SW-08UA	9/1/2006	1,600	3,200	ND(25)	ND(25)
SW-08UA	12/5/2006	830	2,200	ND(25)	ND(10)
SW-08UA	3/8/2007	1,900	4,000	ND(25)	ND(25)
SW-08UA	5/29/2007	1,600	3,100	ND(17)	ND(17)
SW-08UA	8/28/2007	1,300	3,600	ND(36)	ND(36)
SW-08UA	11/29/2007	1,500	3,100	ND(20)	ND(20)
SW-08UA	2/27/2008	970	2,700	ND(20)	ND(20)
SW-08UA	6/18/2008	1,200 A/	3,700 A/	1.8 A/	ND(0.50) A/
SW-08UA	8/15/2008	1,800	5,200	ND(5.0)	ND(5.0)
SW-08UA	9/3/2008	1,000	4,600	ND(5.0)	ND(5.0)
SW-08UA	9/9/2008	850 A/	3,900 A/	ND(2.5) A/	ND(2.5) A/
SW-08UA	9/23/2008	660	4,000	ND(5.0)	ND(5.0)
SW-08UA	10/21/2008	1,100	5,100	ND(50)	ND(50)
SW-08UA	11/3/2008	80 A/	380 A/	2.1 A/	ND(1.0) A/
SW-09UA	1/20/2000	1	10	ND(0.5)	ND(1)
SW-09UA	5/30/2000	1	7	ND(0.5)	ND(1)
SW-09UA	9/6/2000	1	8	ND(0.5)	ND(1)
SW-09UA	12/12/2000	1	6	ND(0.5)	ND(1)
SW-09UA	4/18/2001	ND(0.5)	6	ND(0.5)	ND(0.5)
SW-09UA	8/9/2001	ND(0.5)	6	ND(0.5)	ND(0.5)
SW-09UA	12/10/2001	ND(0.5)	3	ND(0.5)	ND(0.5)
SW-09UA	3/20/2002	1	6	ND(0.5)	ND(0.5)

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
SW-09UA	6/4/2002	1	6	ND(0.5)	ND(0.5)
SW-09UA	9/10/2002	1	6	ND(0.5)	ND(0.5)
SW-09UA	12/10/2002	ND(1)	3	ND(1)	ND(1)
SW-09UA	3/4/2003	1	6	ND(0.5)	ND(0.5)
SW-09UA	6/5/2003	1	6	ND(0.5)	ND(0.5)
SW-09UA	8/28/2003	ND(0.5)	5	ND(0.5)	ND(0.5)
SW-09UA	12/16/2003	1	5	ND(0.5)	ND(0.5)
SW-09UA	3/30/2004	ND(0.5)	4	ND(0.5)	ND(0.5)
SW-09UA	6/10/2004	1	4	ND(0.5)	ND(0.5)
SW-09UA	9/10/2004	ND(0.5)	4	ND(0.5)	ND(0.5)
SW-09UA	12/9/2004	ND(4.7)	9	ND(0.5)	ND(0.5)
SW-09UA	6/7/2005	1	7	ND(0.5)	ND(0.5)
SW-09UA	9/14/2005	32	97	1	ND(0.5)
SW-09UA	9/30/2005	ND(0.5)	6	ND(0.5)	ND(0.5)
SW-09UA	11/30/2005	ND(0.5)	5	ND(0.5)	ND(0.5)
SW-09UA	3/7/2006	1	3	ND(0.5)	ND(0.5)
SW-09UA	6/6/2006	ND(0.5)	5	ND(0.5)	ND(0.5)
SW-09UA	9/1/2006	ND(0.5)	4	ND(0.5)	ND(0.5)
SW-09UA	12/5/2006	ND(0.5)	6	ND(0.5)	ND(0.5)
SW-09UA	3/9/2007	ND(0.5)	4	ND(0.5)	ND(0.5)
SW-09UA	6/1/2007	ND(0.5)	4	ND(0.5)	ND(0.5)
SW-09UA	8/30/2007	ND(0.5)	3	ND(0.5)	ND(0.5)
SW-09UA	11/29/2007	ND(0.5)	3	ND(0.5)	ND(0.5)
SW-09UA	2/26/2008	ND(0.5)	4	ND(0.5)	ND(0.5)
SW-09UA	6/18/2008	ND(0.50) A/	3.9 A/	ND(0.50) A/	ND(0.50) A/
SW-09UA	11/4/2008	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/
SW-10UA	1/25/2000	41	43	1	ND(1)
SW-10UA	5/30/2000	18	18	11	ND(1)
SW-10UA	9/7/2000	29	32	31	ND(1)
SW-10UA	12/12/2000	25	16	11	ND(1)
SW-10UA	4/17/2001	62	120	19	ND(0.5)
SW-10UA	8/8/2001	52	53	30	ND(0.5)
SW-10UA	12/11/2001	330	660	25	ND(2)
SW-10UA	3/20/2002	180	150	ND(0.7)	ND(0.7)
SW-10UA	6/6/2002	860	1,300	ND(5)	ND(5)
SW-10UA	9/11/2002	1,500	2,900	ND(10)	ND(10)
SW-10UA	12/10/2002	800	1,100	ND(4.2)	ND(4.2)
SW-10UA	3/4/2003	620	700	ND(2.5)	ND(2.5)
SW-10UA	6/3/2003	250	290	ND(1)	ND(1)
SW-10UA	8/27/2003	110	51	ND(0.5)	ND(0.5)
SW-10UA	12/17/2003	56	20	ND(0.5)	ND(0.5)
SW-10UA	3/26/2004	95	59	1	ND(0.5)
SW-10UA	6/9/2004	51	24	1	ND(0.5)
SW-10UA	9/9/2004	46	15	ND(0.5)	ND(0.5)
SW-10UA	12/9/2004	37	15	ND(0.5)	ND(0.5)
SW-10UA	3/1/2005	39	33	ND(0.5)	ND(0.5)
SW-10UA	6/7/2005	25	14	1	ND(0.5)
SW-10UA	9/14/2005	19	8	1	ND(0.5)
SW-10UA	12/2/2005	18	7	ND(0.5)	ND(0.5)
SW-10UA	3/7/2006	19	10	1	ND(0.5)
SW-10UA	6/6/2006	18	5	ND(0.5)	ND(0.5)
SW-10UA	8/31/2006	10	3	ND(0.5)	ND(0.5)
SW-10UA	12/5/2006	17	6	ND(0.5)	ND(0.5)
SW-10UA	3/6/2007	16	4	ND(0.5)	ND(0.5)

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
SW-10UA	5/29/2007	13	4	ND(0.5)	ND(0.5)
SW-10UA	8/28/2007	16	4	ND(0.5)	ND(0.5)
SW-10UA	11/29/2007	9	2	ND(0.5)	ND(0.5)
SW-10UA	2/28/2008	10	3	ND(0.5)	ND(0.5)
SW-10UA	6/17/2008	3.7 A/	1.3 A/	ND(0.50) A/	ND(0.50) A/
SW-11UA	1/24/2000	870	740	ND(3.6)	ND(7.1)
SW-11UA	5/31/2000	1,800	3,400	200	ND(33)
SW-11UA	9/7/2000	5,000	6,800	160	ND(50)
SW-11UA	12/14/2000	3,800	1,200	210	ND(33)
SW-11UA	4/17/2001	1,700	3,500	160	18
SW-11UA	8/10/2001	1,300	1,100	180	17
SW-11UA	12/12/2001	1,100	930	170	15
SW-11UA	3/20/2002	1,500	3,700	120	ND(13)
SW-11UA	6/6/2002	1,300	1,300	390	45
SW-11UA	9/12/2002	1,200	2,200	220	15
SW-11UA	12/11/2002	940	630	350	57
SW-11UA	3/3/2003	1,000	920	420	42
SW-11UA	3/4/2003	1,000	920	420	42
SW-11UA	6/5/2003	900	690	470	46
SW-11UA	8/27/2003	870	380	300	31
SW-11UA	12/16/2003	740	570	260	20
SW-11UA	3/29/2004	1,100	2,300	490	100
SW-11UA	4/30/2004	900	810	250	61
SW-11UA	6/8/2004	900	910	160	31
SW-11UA	9/9/2004	9,800	3,500	170	30
SW-11UA	12/9/2004	6,700	2,000	250	ND(36)
SW-11UA	3/2/2005	5,400	910	160	ND(42)
SW-11UA	6/7/2005	6,500	1,800	130	45
SW-11UA	9/14/2005	3,700	3,000	170	ND(31)
SW-11UA	11/30/2005	1,700	1,100	140	24
SW-11UA	3/8/2006	2,400	1,700	120	20
SW-11UA	6/7/2006	1,200	500	160	15
SW-11UA	9/6/2006	400	150	110	ND(3.6)
SW-11UA	12/4/2006	580	150	78	ND(4.2)
SW-11UA	3/9/2007	340	140	110	7
SW-11UA	5/30/2007	370	140	180	20
SW-11UA	8/29/2007	300	92	100	5
SW-11UA	11/28/2007	160	83	100	6
SW-11UA	2/27/2008	240	110	94	18
SW-11UA	6/18/2008	220 A/	110 A/	130 A/	23 A/
SW-11UA	9/9/2008	5,200 A/	3,200 A/	33 A/	ND(2.5) A/
SW-11UA	11/5/2008	600 A/	900 A/	17 A/	0.55 A/
SW-12UA	1/25/2000	13	190	1	ND(1)
SW-12UA	5/31/2000	3	63	9	6
SW-12UA	9/6/2000	3	78	12	2
SW-12UA	12/13/2000	9	330	10	ND(2)
SW-12UA	4/18/2001	3	180	40	3
SW-12UA	8/10/2001	7	130	7	ND(0.5)
SW-12UA	12/12/2001	3	68	18	ND(0.5)
SW-12UA	3/20/2002	2	17	ND(0.5)	ND(0.5)
SW-12UA	6/4/2002	2	23	17	ND(0.5)
SW-12UA	9/10/2002	2	36	4	ND(0.5)
SW-12UA	12/11/2002	2	27	2	ND(0.5)
SW-12UA	3/4/2003	2	22	2	ND(0.5)

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
SW-12UA	6/5/2003	1	13	1	ND(0.5)
SW-12UA	8/28/2003	2	16	2	ND(0.5)
SW-12UA	12/17/2003	2	25	3	ND(0.5)
SW-12UA	3/29/2004	2	21	2	ND(0.5)
SW-12UA	6/10/2004	2	24	3	ND(0.5)
SW-12UA	9/10/2004	21	530	ND(4.2)	ND(4.2)
SW-12UA	12/9/2004	13	270	ND(2)	ND(2)
SW-12UA	3/2/2005	7	95	2	ND(0.5)
SW-12UA	6/9/2005	10	220	ND(1.7)	ND(1.7)
SW-12UA	9/14/2005	34	980	ND(8.3)	ND(8.3)
SW-12UA	11/30/2005	37	900	ND(7.1)	ND(7.1)
SW-12UA	3/7/2006	19	790	ND(5)	ND(5)
SW-12UA	6/7/2006	28	900	ND(6.3)	ND(6.3)
SW-12UA	9/5/2006	53	740	8	ND(4.2)
SW-12UA	12/4/2006	53	850	9	ND(7.1)
SW-12UA	3/9/2007	47	510	11	ND(3.1)
SW-12UA	5/30/2007	43	690	11	ND(3.6)
SW-12UA	8/29/2007	47	550	9	ND(5)
SW-12UA	11/29/2007	40	510	13	ND(2)
SW-12UA	2/27/2008	20	740	6	ND(4.2)
SW-12UA	6/18/2008	13 A/	520 A/	2.3 A/	ND(0.50) A/
SW-12UA	9/9/2008	3.3 A/	51 A/	1.2 A/	ND(0.50) A/
SW-12UA	11/4/2008	2.4 A/	29 A/	1.5 A/	ND(0.50) A/
SW-13UA	1/24/2000	6	33	79	1
SW-13UA	5/25/2000	10	67	60	1
SW-13UA	9/11/2000	21	110	84	1
SW-13UA	12/14/2000	12	83	120	1
SW-13UA	4/18/2001	26	150	96	1
SW-13UA	8/10/2001	12	92	130	1
SW-13UA	12/13/2001	22	110	110	1
SW-13UA	3/21/2002	41	150	71	1
SW-13UA	6/7/2002	46	170	72	1
SW-13UA	9/11/2002	44	170	80	1
SW-13UA	12/13/2002	35	180	96	1
SW-13UA	3/5/2003	40	170	80	1
SW-13UA	6/5/2003	40	160	65	1
SW-13UA	8/28/2003	13	80	52	1
SW-13UA	12/17/2003	13	78	70	1
SW-13UA	3/30/2004	41	170	62	1
SW-13UA	6/8/2004	31	140	68	1
SW-13UA	9/10/2004	37	150	53	1
SW-13UA	12/8/2004	47	150	51	1
SW-13UA	3/3/2005	24	130	66	1
SW-13UA	6/8/2005	30	130	60	1
SW-13UA	9/14/2005	22	97	33	1
SW-13UA	11/29/2005	17	78	34	1
SW-13UA	3/9/2006	27	130	43	1
SW-13UA	6/7/2006	8	48	18	1
SW-13UA	9/5/2006	43	140	32	1
SW-13UA	12/5/2006	21	99	43	1
SW-13UA	3/12/2007	18	95	38	1
SW-13UA	6/1/2007	26	120	26	1
SW-13UA	8/30/2007	38	120	35	1
SW-13UA	11/30/2007	38	82	32	1

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
SW-13UA	2/28/2008	34	100	37	1
SW-13UA	6/19/2008	21 A/	120 A/	37 A/	ND(0.50) A/
SW-17UA	9/15/2005	4	6	5	ND(0.5)
SW-17UA	11/30/2005	26	28	12	ND(0.5)
SW-17UA	3/8/2006	33	33	18	ND(0.5)
SW-17UA	6/8/2006	21	18	11	ND(0.5)
SW-17UA	9/6/2006	59	47	41	1
SW-17UA	12/5/2006	92	68	59	2
SW-17UA	3/12/2007	51	32	50	1
SW-17UA	5/30/2007	43	22	27	ND(0.5)
SW-17UA	8/30/2007	33	16	15	1
SW-17UA	11/28/2007	17	11	10	ND(0.5)
SW-17UA	2/26/2008	20	12	10	ND(0.5)
SW-17UA	6/18/2008	15 A/	12 A/	4.9 A/	ND(0.50) A/
SW-19UA	4/25/2003	4	27	ND(0.5)	ND(0.5)
SW-19UA	6/4/2003	4	28	ND(0.5)	ND(0.5)
SW-19UA	8/26/2003	5	27	ND(0.5)	ND(0.5)
SW-19UA	12/16/2003	5	30	ND(0.5)	ND(0.5)
SW-19UA	3/30/2004	5	34	ND(0.5)	ND(0.5)
SW-19UA	6/10/2004	5	27	ND(0.5)	ND(0.5)
SW-19UA	9/8/2004	4	25	ND(0.5)	ND(0.5)
SW-19UA	12/8/2004	9	39	ND(0.5)	ND(0.5)
SW-19UA	3/2/2005	6	30	ND(0.5)	ND(0.5)
SW-19UA	6/8/2005	3	22	ND(0.5)	ND(0.5)
SW-19UA	9/13/2005	3	22	ND(0.5)	ND(0.5)
SW-19UA	12/2/2005	3	18	ND(0.5)	ND(0.5)
SW-19UA	3/9/2006	3	14	ND(0.5)	ND(0.5)
SW-19UA	6/9/2006	3	14	ND(0.5)	ND(0.5)
SW-19UA	9/5/2006	2	10	ND(0.5)	ND(0.5)
SW-19UA	12/4/2006	2	12	ND(0.5)	ND(0.5)
SW-19UA	3/7/2007	3	18	ND(0.5)	ND(0.5)
SW-19UA	5/31/2007	2	13	ND(0.5)	ND(0.5)
SW-19UA	8/30/2007	3	10	ND(0.5)	ND(0.5)
SW-19UA	11/30/2007	2	10	ND(0.5)	ND(0.5)
SW-19UA	2/27/2008	3	14	ND(0.5)	ND(0.5)
SW-19UA	6/19/2008	2.2 A/	10 A/	ND(0.50) A/	ND(0.50) A/
SW-20UA	4/24/2003	1	6	ND(0.5)	ND(0.5)
SW-20UA	6/4/2003	1	6	ND(0.5)	ND(0.5)
SW-20UA	8/26/2003	2	10	ND(0.5)	ND(0.5)
SW-20UA	12/16/2003	1	4	ND(0.5)	ND(0.5)
SW-20UA	3/30/2004	2	9	ND(0.5)	ND(0.5)
SW-20UA	6/10/2004	2	9	ND(0.5)	ND(0.5)
SW-20UA	9/8/2004	2	10	ND(0.5)	ND(0.5)
SW-20UA	12/8/2004	1	4	ND(0.5)	ND(0.5)
SW-20UA	3/3/2005	ND(0.5)	2	ND(0.5)	ND(0.5)
SW-20UA	6/8/2005	1	6	ND(0.5)	ND(0.5)
SW-20UA	9/15/2005	1	7	ND(0.5)	ND(0.5)
SW-20UA	11/29/2005	2	10	ND(0.5)	ND(0.5)
SW-20UA	3/9/2006	1	4	ND(0.5)	ND(0.5)
SW-20UA	6/8/2006	2	6	ND(0.5)	ND(0.5)
SW-20UA	9/6/2006	1	4	ND(0.5)	ND(0.5)
SW-20UA	12/1/2006	1	5	ND(0.5)	ND(0.5)
SW-20UA	3/12/2007	1	3	ND(0.5)	ND(0.5)
SW-20UA	5/30/2007	1	6	ND(0.5)	ND(0.5)

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
SW-20UA	8/28/2007	1	6	ND(0.5)	ND(0.5)
SW-20UA	11/28/2007	1	5	ND(0.5)	ND(0.5)
SW-20UA	2/26/2008	1	3	ND(0.5)	ND(0.5)
SW-20UA	6/19/2008	2.9 A/	14 A/	ND(0.50) A/	ND(0.50) A/
SW-22UA	4/24/2003	3	32	ND(0.5)	ND(0.5)
SW-22UA	6/4/2003	9	72	ND(0.5)	ND(0.5)
SW-22UA	8/26/2003	4	45	ND(0.5)	ND(0.5)
SW-22UA	12/16/2003	4	47	ND(0.5)	ND(0.5)
SW-22UA	3/30/2004	4	32	ND(0.5)	ND(0.5)
SW-22UA	6/9/2004	7	39	ND(0.5)	ND(0.5)
SW-22UA	9/8/2004	5	43	ND(0.5)	ND(0.5)
SW-22UA	12/8/2004	4	39	ND(0.5)	ND(0.5)
SW-22UA	3/3/2005	6	42	ND(0.5)	ND(0.5)
SW-22UA	6/8/2005	3	18	ND(0.5)	ND(0.5)
SW-22UA	9/15/2005	4	32	ND(0.5)	ND(0.5)
SW-22UA	11/29/2005	4	25	ND(0.5)	ND(0.5)
SW-22UA	3/9/2006	5	26	ND(0.5)	ND(0.5)
SW-22UA	6/8/2006	4	20	ND(0.5)	ND(0.5)
SW-22UA	9/6/2006	2	11	ND(0.5)	ND(0.5)
SW-22UA	12/1/2006	4	19	ND(0.5)	ND(0.5)
SW-22UA	3/7/2007	12	45	ND(0.5)	ND(0.5)
SW-22UA	5/30/2007	5	20	ND(0.5)	ND(0.5)
SW-22UA	8/28/2007	4	17	ND(0.5)	ND(0.5)
SW-22UA	11/28/2007	4	18	ND(0.5)	ND(0.5)
SW-22UA	2/26/2008	4	25	ND(0.5)	ND(0.5)
SW-22UA	6/19/2008	3.3 A/	17 A/	ND(0.50) A/	ND(0.50) A/
SW-22UA	9/9/2008	3.2 A/	16 A/	ND(0.50) A/	ND(0.50) UJ/
SW-22UA	11/6/2008	3.8 A/	18 A/	ND(0.50) A/	ND(0.50) A/
SW-23UA	8/14/2008	1	63	ND(0.50)	ND(0.50)
SW-23UA	9/3/2008	ND(0.50)	13	ND(0.50)	ND(0.50)
SW-23UA	9/24/2008	1	63	ND(0.50)	ND(0.50)
SW-23UA	10/21/2008	1	60	ND(0.50)	ND(0.50)
SW-23UA	11/6/2008	1	56	ND(0.50)	ND(0.50)
TRW-1	12/1/1997	69	610	ND(0.5)	ND(0.5)
TRW-1	4/1/1999	73	850	ND(36)	ND(71)
TRW-1	7/1/1999	130	1,300	ND(5)	ND(10)
TRW-1	11/3/1999	93	1,200	ND(42)	ND(83)
TRW-1	2/1/2000	370	4,300	ND(17)	ND(33)
TRW-1	5/5/2000	74	180	ND(0.7)	ND(1.4)
TRW-1	8/31/2000	54	170	ND(0.5)	ND(1)
TRW-1	11/14/2000	25	94	ND(0.5)	ND(0.5)
TRW-1	2/28/2001	32	95	2	ND(0.5)
TRW-1	5/31/2001	11	26	ND(0.5)	ND(0.5)
TRW-1	8/21/2001	13	46	ND(5)	ND(10)
TRW-1	11/1/2001	29	95	2	ND(0.5)
TRW-1	2/27/2002	9	20	ND(0.5)	ND(0.5)
TRW-1	5/28/2002	10	28	ND(0.5)	ND(0.5)
TRW-1	8/28/2002	11	37	ND(0.5)	ND(0.5)
TRW-1	2/27/2003	7	16	ND(0.5)	ND(0.5)
TRW-1	8/3/2003	9	43	ND(0.5)	ND(0.5)
TRW-1	2/18/2004	7	19	ND(0.5)	ND(0.5)
TRW-1	8/4/2004	6	17	ND(0.5)	ND(0.5)
TRW-1	2/18/2005	7	17	ND(0.5)	ND(0.5)
TRW-1	8/24/2005	15	86	1	ND(0.5)

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
TRW-1	2/17/2006	20	74	5	ND(0.5)
TRW-1	8/24/2006	20	49	1	ND(0.5)
TRW-1	2/9/2007	160	820	1	ND(0.5)
TRW-1	8/7/2007	73	150	ND(1.3)	ND(1.3)
TRW-1	2/8/2008	91	450	ND(3.1)	ND(0.5)
TRW-1	11/4/2008	6.0 A/	19 A/	ND(0.50) A/	ND(0.50) A/
TRW-2	12/11/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
TRW-2	4/16/2001	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
TRW-2	8/9/2001	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
TRW-2	12/10/2001	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
TRW-2	3/20/2002	1	1	ND(0.5)	ND(0.5)
TRW-2	6/5/2002	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
TRW-2	9/13/2002	ND(0.5)	1	ND(0.5)	ND(0.5)
TRW-2	12/10/2002	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
TRW-2	3/3/2003	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
TRW-2	6/4/2003	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
TRW-2	8/26/2003	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
TRW-2	12/16/2003	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
TRW-2	3/30/2004	1	1	ND(0.5)	ND(0.5)
TRW-2	6/10/2004	ND(0.5)	1	ND(0.5)	ND(0.5)
TRW-2	9/8/2004	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
TRW-2	12/8/2004	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
TRW-2	3/3/2005	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
TRW-2	6/8/2005	1	1	ND(0.5)	ND(0.5)
TRW-2	9/15/2005	4	2	ND(0.5)	ND(0.5)
TRW-2	11/29/2005	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
TRW-2	3/9/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
TRW-2	6/8/2006	1	1	ND(0.5)	ND(0.5)
TRW-2	9/6/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
TRW-2	12/1/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
TRW-2	3/7/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
TRW-2	5/30/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
TRW-2	8/28/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
TRW-2	11/28/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
TRW-2	2/26/2008	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
TRW-2	6/19/2008	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/
TRW-2	11/6/2008	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/
Lower A Aquifer					
BMW-1	2/16/2006	3	9	ND(0.5)	ND(0.5)
BMW-1	8/23/2006	3	6	ND(0.5)	ND(0.5)
BMW-1	2/7/2007	3	7	ND(0.5)	ND(0.5)
BMW-1	8/7/2007	3	5	ND(0.5)	ND(0.5)
BMW-1	2/8/2008	3	5	ND(0.5)	ND(0.5)
BMW-2	2/17/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
BMW-2	8/23/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
BMW-2	2/7/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
BMW-2	8/7/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
BMW-2	2/8/2008	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
BMW-2	11/4/2008	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/
GT-3	12/1/1997	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GT-3	4/5/1999	ND(5)	ND(5)	ND(5)	ND(10)
GT-3	7/1/1999	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
GT-3	11/3/1999	ND(5)	ND(5)	ND(5)	ND(10)
GT-3	2/1/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
GT-3	5/5/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
GT-3	8/31/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GT-3	11/14/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GT-3	2/26/2001	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GT-3	5/31/2001	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GT-3	8/22/2001	ND(5)	ND(5)	ND(5)	ND(10)
GT-3	11/1/2001	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GT-3	2/27/2002	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GT-3	8/29/2002	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GT-3	2/27/2003	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GT-3	2/18/2004	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GT-3	8/4/2004	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GT-3	2/5/2005	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GT-3	8/24/2005	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GT-3	2/16/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GT-3	8/22/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GT-3	2/7/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GT-3	8/7/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GT-3	2/8/2008	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GT-3	11/4/2008	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/
GT-4	12/1/1997	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GWE-5	5/1/1998	ND(50)	ND(50)	ND(50)	ND(100)
GWE-5	4/1/1999	ND(250)	ND(250)	ND(250)	ND(500)
GWE-5	7/1/1999	ND(0.5)	2	24	2
GWE-5	11/3/1999	ND(7.1)	ND(7.1)	22	ND(14)
GWE-5	2/1/2000	ND(0.5)	1	16	3
GWE-5	5/5/2000	ND(0.5)	2	23	2
GWE-5	8/31/2000	ND(0.5)	1	20	1
GWE-5	11/16/2000	ND(0.5)	2	23	2
GWE-5	11/1/2001	ND(6.3)	ND(6.3)	15	ND(6.3)
GWE-5	2/26/2002	ND(10)	ND(10)	15	ND(10)
GWE-5	8/2/2002	ND(17)	ND(17)	ND(17)	ND(17)
GWE-5	2/27/2003	ND(1)	1	19	1
GWE-5	8/4/2004	ND(0.5)	1	18	2
GWE-5	2/5/2005	290	7,900	ND(63)	ND(63)
GWE-5	5/5/2005	240	5,100	880	ND(31)
GWE-5	8/5/2005	150	610	900	ND(17)
GWE-5	2/17/2006	18	ND(17)	190	49
GWE-5	8/24/2006	ND(17)	ND(17)	53	ND(17)
GWE-6	12/1/1997	1,800	5,300	150	ND(0.5)
GWE-6	5/1/1998	4,000	5,900	120	ND(80)
GWE-6	4/1/1999	7,800	5,400	ND(250)	ND(500)
GWE-6	7/1/1999	6,700	8,800	63	ND(63)
GWE-6	11/3/1999	5,900	10,000	72	ND(71)
GWE-6	2/1/2000	6,400	12,000	88	ND(71)
GWE-6	5/5/2000	5,900	11,000	180	ND(71)
GWE-6	11/16/2000	5,100	13,000	130	ND(83)
GWE-6	5/30/2001	4,900	16,000	120	ND(50)
GWE-6	8/21/2001	5,000	15,000	ND(500)	ND(1000)
GWE-6	11/1/2001	3,000	13,000	110	ND(50)
GWE-6	2/26/2002	2,800	13,000	110	ND(50)
GWE-6	5/28/2002	2,800	13,000	130	ND(50)
GWE-6	8/28/2002	3,800	18,000	98	ND(50)
GWE-6	11/14/2002	4,000	22,000	73	ND(63)

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
GWE-6	2/27/2003	3,300	17,000	ND(63)	ND(63)
GWE-6	5/27/2003	3,000	17,000	ND(830)	ND(1700)
GWE-6	8/3/2003	2,300	14,000	72	ND(50)
GWE-6	11/24/2003	2,600	13,000	ND(71)	ND(71)
GWE-6	2/17/2004	2,700	12,000	50	ND(50)
GWE-6	5/11/2004	3,500	16,000	37	ND(20)
GWE-6	8/4/2004	3,700	15,000	ND(100)	ND(100)
GWE-6	11/17/2004	3,600	14,000	ND(50)	ND(50)
GWE-6	2/16/2005	3,500	9,900	67	ND(100)
GWE-6	5/5/2005	3,400	11,000	72	ND(71)
GWE-6	8/24/2005	4,200	14,000	ND(83)	ND(83)
GWE-6	11/5/2005	4,600	10,000	ND(83)	ND(83)
GWE-6	2/16/2006	5,200	12,000	ND(71)	ND(71)
GWE-6	5/16/2006	5,000	11,000	ND(100)	ND(100)
GWE-6	8/24/2006	5,400	8,000	ND(50)	ND(50)
GWE-6	11/6/2006	6,600	8,800	ND(42)	ND(42)
GWE-6	2/8/2007	4,500	7,500	ND(50)	ND(50)
GWE-6	5/2/2007	6,700	8,100	ND(71)	ND(71)
GWE-6	8/7/2007	5,800	7,200	ND(50)	ND(50)
GWE-6	11/15/2007	4,100	6,600	ND(50)	ND(50)
GWE-6	2/8/2008	3,700	6,700	ND(50)	ND(50)
GWE-7	12/1/1997	4,900	13,000	420	ND(0.5)
GWE-7	5/1/1998	2,900	12,000	510	ND(170)
GWE-7	4/1/1999	2,100	9,700	380	ND(1000)
GWE-7	7/1/1999	2,200	13,000	210	ND(83)
GWE-7	11/3/1999	1,600	9,700	140	ND(63)
GWE-7	2/1/2000	1,800	12,000	90	ND(71)
GWE-7	5/5/2000	1,500	12,000	53	ND(71)
GWE-7	11/16/2000	1,700	15,000	48	ND(83)
GWE-7	5/30/2001	1,800	16,000	ND(50)	ND(50)
GWE-7	8/20/2001	1,700	13,000	ND(500)	ND(1000)
GWE-7	11/1/2001	1,400	14,000	ND(50)	ND(50)
GWE-7	2/26/2002	730	9,400	ND(36)	ND(36)
GWE-7	5/28/2002	2,000	19,000	ND(63)	ND(63)
GWE-7	8/28/2002	2,300	18,000	54	ND(50)
GWE-7	11/14/2002	1,400	18,000	ND(63)	ND(63)
GWE-7	2/27/2003	1,500	18,000	ND(50)	ND(50)
GWE-7	5/27/2003	1,400	18,000	ND(630)	ND(1300)
GWE-7	8/3/2003	1,100	13,000	ND(50)	ND(50)
GWE-7	11/24/2003	1,300	12,000	ND(42)	ND(42)
GWE-7	2/17/2004	1,100	8,500	ND(36)	ND(36)
GWE-7	5/11/2004	1,200	11,000	21	ND(20)
GWE-7	8/4/2004	1,200	8,600	ND(71)	ND(71)
GWE-7	11/17/2004	1,000	7,200	ND(71)	ND(71)
GWE-7	2/6/2005	950	7,900	ND(42)	ND(42)
GWE-7	5/5/2005	890	7,800	ND(63)	ND(63)
GWE-7	8/24/2005	920	7,800	41	ND(40)
GWE-7	11/5/2005	1,000	7,100	ND(50)	ND(50)
GWE-7	2/16/2006	1,100	7,900	59	ND(50)
GWE-7	5/16/2006	1,200	8,300	55	ND(50)
GWE-7	8/24/2006	1,000	6,200	66	ND(50)
GWE-7	11/6/2006	1,100	7,500	ND(50)	ND(50)
GWE-7	2/8/2007	1,100	6,700	ND(50)	ND(50)
GWE-7	5/2/2007	1,300	8,500	56	ND(50)

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
GWE-7	11/15/2007	1,100	6,500	63	ND(50)
GWE-7	2/8/2008	820	5,400	ND(50)	ND(50)
GWE-8	12/1/1997	2,100	31,000	ND(0.5)	ND(0.5)
GWE-8	5/1/1998	1,600	31,000	ND(200)	ND(400)
GWE-8	4/1/1999	2,400	37,000	ND(1000)	ND(2000)
GWE-8	7/1/1999	2,200	46,000	ND(170)	ND(330)
GWE-8	11/3/1999	2,600	43,000	ND(130)	ND(250)
GWE-8	2/1/2000	5,100	12,000	98	ND(71)
GWE-8	5/5/2000	2,400	39,000	ND(130)	ND(250)
GWE-8	11/16/2000	2,200	41,000	ND(170)	ND(330)
GWE-8	5/30/2001	2,300	41,000	ND(170)	ND(170)
GWE-8	8/20/2001	2,000	36,000	ND(1300)	ND(2500)
GWE-8	11/1/2001	2,500	50,000	ND(130)	ND(130)
GWE-8	2/26/2002	2,100	42,000	ND(130)	ND(130)
GWE-8	5/28/2002	2,800	52,000	ND(170)	ND(170)
GWE-8	8/28/2002	1,900	39,000	ND(100)	ND(100)
GWE-8	11/14/2002	2,200	48,000	ND(130)	ND(130)
GWE-8	2/27/2003	2,400	47,000	ND(200)	ND(200)
GWE-8	5/27/2003	2,200	55,000	ND(2000)	ND(4000)
GWE-8	8/3/2003	1,300	33,000	ND(130)	ND(130)
GWE-8	11/24/2003	1,600	30,000	ND(170)	ND(170)
GWE-8	2/17/2004	1,900	31,000	ND(130)	ND(130)
GWE-8	5/11/2004	1,800	37,000	ND(130)	ND(130)
GWE-8	8/4/2004	1,600	33,000	ND(170)	ND(170)
GWE-8	11/17/2004	1,700	30,000	ND(100)	ND(100)
GWE-8	2/16/2005	1,600	27,000	ND(130)	ND(130)
GWE-8	5/5/2005	1,700	30,000	ND(170)	ND(170)
GWE-8	8/24/2005	1,400	32,000	ND(71)	ND(71)
GWE-8	11/5/2005	1,500	24,000	ND(200)	ND(200)
GWE-8	2/16/2006	1,500	26,000	ND(170)	ND(170)
GWE-8	5/16/2006	1,700	26,000	ND(63)	ND(63)
GWE-8	8/24/2006	1,200	16,000	ND(100)	ND(100)
GWE-8	11/8/2006	1,500	20,000	ND(100)	ND(100)
GWE-8	2/8/2007	2,000	26,000	ND(170)	ND(170)
GWE-8	5/2/2007	1,800	22,000	ND(170)	ND(170)
GWE-8	8/7/2007	1,800	19,000	ND(170)	ND(170)
GWE-8	11/15/2007	1,500	21,000	ND(170)	ND(170)
GWE-8	2/8/2008	1,100	20,000	ND(170)	ND(100)
LF-10B	12/1/1997	5,900	240,000	ND(0.5)	ND(0.5)
LF-10B	5/1/1998	8,400	340,000	ND(2500)	ND(5000)
LF-10B	4/1/1999	10,000	350,000	ND(13000)	ND(25000)
LF-10B	7/1/1999	8,400	260,000	ND(1000)	ND(2000)
LF-10B	11/3/1999	8,800	330,000	ND(830)	ND(1700)
LF-10B	2/1/2000	11,000	390,000	ND(1300)	ND(2500)
LF-10B	5/5/2000	7,400	250,000	ND(1300)	ND(2500)
LF-10B	8/31/2000	8,600	290,000	ND(1000)	ND(1000)
LF-10B	11/14/2000	5,800	260,000	ND(420)	ND(420)
LF-10B	2/28/2001	7,900	270,000	ND(1300)	ND(1300)
LF-10B	5/31/2001	5,500	200,000	ND(1000)	ND(1000)
LF-10B	8/21/2001	ND(7100)	250,000	ND(7100)	ND(14000)
LF-10B	11/1/2001	5,900	210,000	ND(710)	ND(710)
LF-10B	2/27/2002	6,200	220,000	ND(630)	ND(630)
LF-10B	8/28/2002	8,900	280,000	ND(710)	ND(710)
LF-10B	2/27/2003	14,000	370,000	ND(1300)	ND(1300)

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
LF-10B	8/3/2003	6,700	210,000	ND(830)	ND(830)
LF-10B	2/19/2004	8,500	230,000	ND(830)	ND(830)
LF-10B	8/4/2004	9,000	250,000	ND(1700)	ND(1700)
LF-10B	2/18/2005	11,000	250,000	ND(2500)	ND(2500)
LF-10B	8/24/2005	12,000	290,000	ND(1700)	ND(1700)
LF-10B	2/17/2006	7,000	220,000	ND(2000)	ND(2000)
LF-10B	8/24/2006	4,100	120,000	ND(630)	ND(630)
LF-10B	2/9/2007	9,800	250,000	ND(2500)	ND(2500)
LF-10B	8/7/2007	12,000	220,000	ND(1700)	ND(1700)
LF-10B	2/8/2008	9,700	230,000	ND(1300)	ND(2500)
LF-10B	8/15/2008	13,000	400,000	ND(50)	ND(50)
LF-10B	9/4/2008	11,000	320,000	ND(250)	ND(250)
LF-10B	9/23/2008	10,000	340,000	ND(250)	ND(250)
LF-10B	10/21/2008	10,000	260,000	ND(250)	ND(250)
LF-10B	11/5/2008	9,500 A/	230,000 A/	ND(250) A/	ND(250) A/
LF-12A	12/1/1997	1,500	2,500	1	ND(0.5)
LF-12A	5/1/1998	1,900	3,200	ND(17)	ND(33)
LF-12A	4/1/1999	1,200	2,500	ND(130)	ND(250)
LF-12A	7/1/1999	1,200	2,200	ND(8.3)	ND(17)
LF-12A	11/3/1999	1,200	2,500	ND(83)	ND(170)
LF-12A	2/1/2000	930	2,000	ND(6.3)	ND(13)
LF-12A	5/5/2000	990	2,000	ND(6.3)	ND(13)
LF-12A	8/31/2000	1,400	2,500	2	ND(1)
LF-12A	11/15/2000	910	2,000	ND(6.3)	ND(13)
LF-12A	2/28/2001	980	1,900	ND(6.3)	ND(6.3)
LF-12A	5/31/2001	3,800	8,100	ND(10)	ND(10)
LF-12A	8/20/2001	1,100	2,400	ND(63)	ND(130)
LF-12A	11/1/2001	1,100	2,400	ND(10)	ND(10)
LF-12A	2/27/2002	1,200	3,100	ND(8.3)	ND(8.3)
LF-12A	5/28/2002	1,100	2,800	ND(8.3)	ND(8.3)
LF-12A	8/28/2002	1,500	3,100	ND(10)	ND(10)
LF-12A	11/14/2002	1,100	2,900	ND(8.3)	ND(8.3)
LF-12A	2/27/2003	2,000	4,700	ND(17)	ND(17)
LF-12A	5/27/2003	900	2,200	ND(100)	ND(200)
LF-12A	8/3/2003	1,000	2,300	ND(10)	ND(10)
LF-12A	11/24/2003	3,800	8,400	ND(36)	ND(36)
LF-12A	2/18/2004	1,000	2,400	ND(10)	ND(10)
LF-12A	5/11/2004	890	2,000	ND(3.1)	ND(3.1)
LF-12A	8/4/2004	920	1,900	ND(17)	ND(17)
LF-12A	11/17/2004	1,500	3,000	ND(20)	ND(20)
LF-12A	2/18/2005	880	2,200	ND(20)	ND(20)
LF-12A	5/5/2005	4,700	10,000	ND(71)	ND(71)
LF-12A	8/24/2005	1,000	2,800	ND(17)	ND(17)
LF-12A	11/5/2005	890	2,100	ND(17)	ND(17)
LF-12A	2/17/2006	2,000	5,400	ND(17)	ND(17)
LF-12A	5/16/2006	1,000	2,600	ND(13)	ND(13)
LF-12A	8/24/2006	720	1,500	ND(10)	ND(10)
LF-12A	11/6/2006	1,800	4,000	ND(25)	ND(25)
LF-12A	2/9/2007	1,100	2,000	ND(13)	ND(13)
LF-12A	5/2/2007	1,200	2,800	ND(17)	ND(33)
LF-12A	8/7/2007	830	1,500	ND(10)	ND(10)
LF-12A	11/15/2007	550	1,500	ND(8.3)	ND(8.3)
LF-12A	2/8/2008	1,700	4,400	ND(31)	ND(31)
LF-12A	5/8/2008	3,000	7,100	ND(10)	ND(10)

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
LF-12A	9/9/2008	2,800 A/	8,000 A/	8.2 A/	ND(5.0) A/
LF-12A	11/5/2008	3,100 A/	9,500 A/	ND(10) A/	ND(10) A/
LF-9B	12/1/1997	360	1,300	ND(0.5)	ND(0.5)
LF-9B	4/1/1999	150	510	ND(25)	ND(50)
LF-9B	7/1/1999	110	310	ND(1.3)	ND(2.5)
LF-9B	11/3/1999	120	320	ND(13)	ND(25)
LF-9B	2/1/2000	140	370	ND(1.3)	ND(2.5)
LF-9B	5/5/2000	340	140	ND(1.3)	ND(2.5)
LF-9B	8/31/2000	7,500	18,000	ND(50)	ND(50)
LF-9B	11/14/2000	2,000	6,500	ND(25)	ND(25)
LF-9B	2/26/2001	8,500	32,000	2	ND(0.5)
LF-9B	5/31/2001	15,000	47,000	ND(170)	ND(170)
LF-9B	8/22/2001	7,200	25,000	ND(830)	ND(1700)
LF-9B	11/1/2001	18,000	49,000	ND(200)	ND(200)
LF-9B	2/27/2002	18,000	51,000	ND(170)	ND(170)
LF-9B	5/28/2002	15,000	53,000	ND(170)	ND(170)
LF-9B	8/29/2002	6,700	29,000	ND(130)	ND(130)
LF-9B	11/14/2002	12,000	48,000	ND(130)	ND(130)
LF-9B	2/27/2003	9,400	36,000	ND(170)	ND(170)
LF-9B	5/27/2003	11,000	39,000	ND(1700)	ND(3300)
LF-9B	8/3/2003	10,000	30,000	ND(100)	ND(100)
LF-9B	11/24/2003	11,000	31,000	ND(130)	ND(130)
LF-9B	2/18/2004	13,000	32,000	ND(100)	ND(100)
LF-9B	5/11/2004	12,000	30,000	ND(100)	ND(100)
LF-9B	8/4/2004	5,000	15,000	ND(130)	ND(130)
LF-9B	11/17/2004	4,400	8,500	ND(50)	ND(50)
LF-9B	2/18/2005	2,600	5,600	ND(36)	ND(36)
LF-9B	5/5/2005	2,100	6,500	ND(42)	ND(42)
LF-9B	8/24/2005	2,200	6,800	ND(63)	ND(63)
LF-9B	11/5/2005	1,800	5,000	ND(63)	ND(63)
LF-9B	2/17/2006	2,000	5,800	ND(36)	ND(36)
LF-9B	5/16/2006	1,800	4,600	ND(25)	ND(25)
LF-9B	8/24/2006	1,100	2,500	ND(17)	ND(17)
LF-9B	11/6/2006	1,200	2,800	ND(17)	ND(17)
LF-9B	2/9/2007	870	2,200	ND(17)	ND(17)
LF-9B	5/2/2007	540	1,400	ND(10)	ND(10)
LF-9B	8/7/2007	540	1,100	ND(7.1)	ND(7.1)
LF-9B	11/15/2007	460	920	ND(7.1)	ND(7.1)
LF-9B	2/8/2008	380	800	ND(4.2)	ND(4.2)
LF-9B	5/8/2008	140	260	ND(2)	ND(2)
MEC-10LA	8/12/2008	4,300	34,000	ND(10)	ND(10)
MEC-10LA	9/4/2008	2,200	21,000	ND(10)	ND(10)
MEC-10LA	9/24/2008	2,200	26,000	ND(10)	ND(10)
MEC-10LA	10/21/2008	1,300	14,000	ND(10)	ND(10)
MEC-10LA	11/6/2008	1,200	13,000	ND(10)	ND(10)
MEC-12LA	8/11/2008	7	47	ND(0.50)	ND(0.50)
MEC-12LA	9/2/2008	5	34	ND(0.50)	ND(0.50)
MEC-12LA	9/25/2008	7	26	ND(0.50)	ND(0.50)
MEC-12LA	10/20/2008	2	13	ND(0.50)	ND(0.50)
MEC-12LA	11/6/2008	3	14	ND(0.50)	ND(0.50)
MEC-13LA	8/11/2008	1,000	3,800	ND(5.0)	ND(5.0)
MEC-13LA	9/2/2008	970	3,500	ND(2.5)	ND(2.5)
MEC-13LA	9/24/2008	830	2,300	3	ND(2.5)
MEC-13LA	11/6/2008	420	1,200	31	ND(1.0)

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MK-4B	12/1/1997	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4B	4/1/1999	ND(5)	ND(5)	ND(5)	ND(10)
MK-4B	7/1/1999	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
MK-4B	11/3/1999	ND(0.5)	1	ND(0.5)	ND(1)
MK-4B	2/1/2000	1	ND(0.5)	ND(0.5)	ND(1)
MK-4B	5/5/2000	ND(0.5)	1	ND(0.5)	ND(1)
MK-4B	7/5/2000	ND(0.5)	1	ND(0.5)	ND(0.5)
MK-4B	7/11/2000	ND(0.5)	1	ND(0.5)	ND(0.5)
MK-4B	7/17/2000	ND(0.5)	1	ND(0.5)	ND(0.5)
MK-4B	8/9/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4B	8/29/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4B	8/31/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4B	9/12/2000	ND(0.5)	1	ND(0.5)	ND(0.5)
MK-4B	10/11/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4B	11/13/2000	ND(0.5)	1	ND(0.5)	ND(1)
MK-4B	2/28/2001	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4B	5/31/2001	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4B	8/22/2001	ND(5)	ND(5)	ND(5)	ND(10)
MK-4B	11/1/2001	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4B	2/27/2002	ND(0.5)	1	ND(0.5)	ND(0.5)
MK-4B	8/29/2002	ND(0.5)	1	ND(0.5)	ND(0.5)
MK-4B	2/27/2003	ND(0.5)	1	ND(0.5)	ND(0.5)
MK-4B	8/3/2003	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4B	2/17/2004	ND(0.5)	1	ND(0.5)	ND(0.5)
MK-4B	8/4/2004	ND(0.5)	1	ND(0.5)	ND(0.5)
MK-4B	2/16/2005	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4B	8/25/2005	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4B	2/16/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4B	8/23/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4B	2/7/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4B	8/7/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4B	2/8/2008	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MK-4B	11/4/2008	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/
MK-5B	11/4/2008	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/
MW-5AF	5/4/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MW-5AF	8/7/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MW-5AF	11/15/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MW-5AF	5/8/2008	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
MW-5AF	11/4/2008	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/
MW-6B	12/1/1997	13	130	8	ND(0.5)
MW-6B	5/1/1998	13	140	7	ND(2)
MW-6B	4/1/1999	13	140	4	ND(10)
MW-6B	7/1/1999	14	180	4	ND(1)
MW-6B	11/3/1999	13	140	4	ND(1)
MW-6B	2/1/2000	14	160	4	ND(1)
MW-6B	5/5/2000	15	150	4	ND(1)
MW-6B	7/5/2000	20	190	4	ND(0.5)
MW-6B	7/11/2000	19	180	4	ND(0.5)
MW-6B	7/17/2000	16	160	4	ND(0.5)
MW-6B	8/9/2000	14	140	4	ND(0.5)
MW-6B	8/29/2000	17	170	4	ND(0.5)
MW-6B	8/31/2000	16	170	4	ND(0.5)
MW-6B	9/12/2000	10	120	3	ND(0.5)
MW-6B	10/11/2000	15	170	3	ND(0.5)

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-6B	11/13/2000	12	170	3	ND(1)
MW-6B	1/18/2001	16	200	3	ND(0.5)
MW-6B	3/1/2001	15	190	3	ND(0.7)
MW-6B	3/19/2001	14	160	3	ND(0.7)
MW-6B	5/31/2001	21	210	3	ND(0.7)
MW-6B	8/21/2001	15	180	ND(7.1)	ND(14)
MW-6B	11/1/2001	14	180	3	ND(0.5)
MW-6B	2/26/2002	15	190	3	ND(0.7)
MW-6B	8/29/2002	15	180	4	ND(0.5)
MW-6B	2/27/2003	14	180	3	ND(0.7)
MW-6B	8/3/2003	12	170	4	ND(0.5)
MW-6B	2/18/2004	14	160	4	ND(0.7)
MW-6B	8/4/2004	12	140	4	ND(1)
MW-6B	2/17/2005	13	160	3	ND(1.3)
MW-6B	8/25/2005	15	160	4	ND(1.3)
MW-6B	2/16/2006	16	170	5	ND(1)
MW-6B	8/24/2006	15	140	5	ND(1)
MW-6B	2/9/2007	17	170	5	ND(1)
MW-6B	8/7/2007	17	140	5	ND(1)
MW-6B	2/8/2008	14	140	5	ND(1)
MW-6B	11/4/2008	13 A/	150 A/	5.1 A/	ND(0.50) A/
SW-02LA	8/14/2008	31 /MHA	94 /MHA	ND(0.50)	ND(0.50)
SW-02LA	9/3/2008	11	77	ND(0.50)	ND(0.50)
SW-02LA	9/23/2008	16	79 /MHA	ND(0.50)	ND(0.50)
SW-02LA	10/22/2008	21	83	ND(0.50)	ND(0.50)
SW-02LA	11/5/2008	13	120	ND(0.50)	ND(0.50)
SW-04LA	11/4/2008	ND(0.50) A/	0.96 A/	ND(0.50) A/	ND(0.50) A/
SW-05LA	1/20/2000	2	91	ND(0.5)	ND(1)
SW-05LA	5/25/2000	37	1,300	250	ND(7.1)
SW-05LA	9/7/2000	3	170	61	ND(1)
SW-05LA	12/11/2000	51	1,700	53	ND(17)
SW-05LA	4/17/2001	16	200	4	ND(0.7)
SW-05LA	8/9/2001	18	410	2	ND(1.7)
SW-05LA	12/11/2001	9	110	2	ND(0.5)
SW-05LA	3/19/2002	11	150	1	ND(0.5)
SW-05LA	6/5/2002	21	470	ND(1.7)	ND(1.7)
SW-05LA	9/11/2002	3	41	ND(0.5)	ND(0.5)
SW-05LA	12/11/2002	5	71	1	ND(0.5)
SW-05LA	3/3/2003	4	52	1	ND(0.5)
SW-05LA	6/4/2003	2	34	1	ND(0.5)
SW-05LA	8/26/2003	3	19	ND(0.5)	ND(0.5)
SW-05LA	12/16/2003	4	78	1	ND(0.5)
SW-05LA	3/30/2004	7	130	1	ND(0.5)
SW-05LA	6/9/2004	10	150	1	ND(0.5)
SW-05LA	9/10/2004	11	200	ND(2)	ND(2)
SW-05LA	12/7/2004	16	230	2	ND(1.3)
SW-05LA	3/2/2005	21	96	ND(0.5)	ND(0.5)
SW-05LA	6/9/2005	7	36	ND(0.5)	ND(0.5)
SW-05LA	9/13/2005	7	18	ND(0.5)	ND(0.5)
SW-05LA	12/2/2005	5	5	ND(0.5)	ND(0.5)
SW-05LA	3/8/2006	3	3	ND(0.5)	ND(0.5)
SW-05LA	6/6/2006	2	1	ND(0.5)	ND(0.5)
SW-05LA	9/1/2006	2	2	ND(0.5)	ND(0.5)
SW-05LA	12/4/2006	1	3	ND(0.5)	ND(0.5)

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
SW-05LA	3/9/2007	1	3	ND(0.5)	ND(0.5)
SW-05LA	5/30/2007	ND(0.5)	2	ND(0.5)	ND(0.5)
SW-05LA	8/29/2007	ND(0.5)	1	ND(0.5)	ND(0.5)
SW-05LA	11/28/2007	ND(0.5)	3	ND(0.5)	ND(0.5)
SW-05LA	2/27/2008	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-05LA	6/18/2008	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/
SW-05LA	8/14/2008	ND(0.50)	3	ND(0.50)	ND(0.50)
SW-05LA	9/2/2008	ND(0.50)	2	ND(0.50)	ND(0.50)
SW-05LA	9/24/2008	ND(0.50)	1	ND(0.50)	ND(0.50)
SW-05LA	10/20/2008	ND(0.50)	4	ND(0.50)	ND(0.50)
SW-05LA	11/3/2008	ND(0.50) A/	0.61 A/	ND(0.50) A/	ND(0.50) A/
SW-06LA	1/25/2000	200	370	2	ND(2.5)
SW-06LA	5/25/2000	760	1,100	15	ND(10)
SW-06LA	9/6/2000	280	470	47	ND(4)
SW-06LA	12/13/2000	190	380	100	ND(2.5)
SW-06LA	4/18/2001	610	1,500	140	ND(3.8)
SW-06LA	8/7/2001	97	220	41	ND(1)
SW-06LA	12/12/2001	330	490	48	ND(1.3)
SW-06LA	3/19/2002	840	1,400	59	ND(5)
SW-06LA	6/6/2002	850	1,500	58	ND(5)
SW-06LA	9/11/2002	1,000	1,500	42	ND(6.3)
SW-06LA	12/12/2002	780	1,000	39	ND(3.6)
SW-06LA	3/4/2003	420	640	33	ND(2)
SW-06LA	6/3/2003	180	270	43	ND(0.8)
SW-06LA	8/26/2003	130	150	27	ND(0.8)
SW-06LA	12/17/2003	150	160	15	ND(0.5)
SW-06LA	3/26/2004	170	190	22	ND(0.5)
SW-06LA	6/10/2004	130	120	25	ND(0.6)
SW-06LA	9/9/2004	270	290	22	ND(1)
SW-06LA	12/10/2004	180	160	130	ND(1.3)
SW-06LA	3/1/2005	120	170	59	ND(1)
SW-06LA	6/8/2005	180	260	24	ND(1.7)
SW-06LA	9/14/2005	370	430	13	ND(3.1)
SW-06LA	12/2/2005	120	130	14	ND(1)
SW-06LA	3/7/2006	110	120	7	ND(1)
SW-06LA	6/6/2006	150	150	4	ND(0.7)
SW-06LA	8/31/2006	98	96	11	ND(0.5)
SW-06LA	12/5/2006	69	70	6	ND(0.7)
SW-06LA	3/6/2007	92	69	4	ND(0.5)
SW-06LA	5/29/2007	71	52	3	ND(0.7)
SW-06LA	8/28/2007	65	61	2	ND(0.5)
SW-06LA	11/29/2007	66	60	4	ND(0.5)
SW-06LA	2/28/2008	66	61	3	ND(0.5)
SW-06LA	6/17/2008	47 A/	55 A/	0.96 A/	ND(0.50) A/
SW-06LA	9/9/2008	42 A/	64 A/	0.89 A/	ND(0.50) A/
SW-06LA	11/5/2008	56 A/	120 A/	1.6 A/	ND(0.50) A/
SW-07LA	1/24/2000	770	16,000	6,900	ND(130)
SW-07LA	5/24/2000	430	3,700	1,200	ND(20)
SW-07LA	9/5/2000	150	3,700	600	ND(25)
SW-07LA	12/11/2000	180	2,200	460	ND(13)
SW-07LA	4/16/2001	110	3,300	120	ND(13)
SW-07LA	8/7/2001	190	5,000	140	ND(17)
SW-07LA	12/13/2001	140	1,700	210	ND(5)
SW-07LA	3/21/2002	200	1,400	94	ND(5)

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
SW-07LA	6/4/2002	120	1,200	120	ND(5)
SW-07LA	9/10/2002	210	970	66	ND(3.1)
SW-07LA	12/11/2002	200	850	55	ND(2.5)
SW-07LA	3/2/2003	120	510	170	ND(1.3)
SW-07LA	6/4/2003	160	440	67	ND(2)
SW-07LA	8/27/2003	88	440	62	ND(1.7)
SW-07LA	12/16/2003	200	510	42	ND(1.7)
SW-07LA	3/29/2004	180	860	50	ND(1.7)
SW-07LA	6/8/2004	120	400	19	ND(1.3)
SW-07LA	9/9/2004	92	460	35	ND(2.5)
SW-07LA	12/7/2004	130	780	28	ND(4.2)
SW-07LA	3/1/2005	81	410	12	ND(3.1)
SW-07LA	6/7/2005	36	180	5	ND(1)
SW-07LA	9/15/2005	56	160	10	ND(0.5)
SW-07LA	11/29/2005	73	250	8	ND(1.7)
SW-07LA	3/7/2006	26	92	3	ND(0.5)
SW-07LA	6/6/2006	17	56	2	ND(0.5)
SW-07LA	8/31/2006	29	100	4	ND(0.7)
SW-07LA	12/1/2006	20	55	3	ND(0.5)
SW-07LA	3/8/2007	20	97	2	ND(0.5)
SW-07LA	5/29/2007	12	65	3	ND(0.5)
SW-07LA	8/28/2007	10	36	2	ND(0.5)
SW-07LA	11/29/2007	15	80	2	ND(0.5)
SW-07LA	2/26/2008	18	98	2	ND(0.5)
SW-07LA	6/17/2008	12 A/	73 A/	11 A/	ND(0.50) A/
SW-07LA	8/14/2008	11	53	2	ND(0.50)
SW-07LA	9/2/2008	1,400	19,000	ND(25)	ND(25)
SW-07LA	9/25/2008	43	820	78	ND(1.0)
SW-07LA	10/20/2008	97	860	450	6
SW-07LA	11/6/2008	2,600	4,300	470	36
SW-08LA	1/24/2000	900	8,600	ND(36)	ND(71)
SW-08LA	5/24/2000	3,600	21,000	620	ND(200)
SW-08LA	9/5/2000	6,700	31,000	270	ND(250)
SW-08LA	12/11/2000	4,600	28,000	190	ND(170)
SW-08LA	4/17/2001	1,400	9,000	50	ND(25)
SW-08LA	8/8/2001	4,000	21,000	ND(71)	ND(71)
SW-08LA	12/13/2001	3,600	17,000	160	ND(50)
SW-08LA	3/21/2002	3,600	16,000	400	ND(50)
SW-08LA	6/4/2002	5,200	33,000	230	ND(170)
SW-08LA	9/11/2002	6,100	37,000	190	ND(100)
SW-08LA	12/11/2002	6,000	40,000	130	ND(130)
SW-08LA	3/2/2003	5,300	34,000	130	ND(83)
SW-08LA	6/5/2003	4,200	31,000	140	ND(100)
SW-08LA	8/27/2003	3,600	29,000	ND(130)	ND(130)
SW-08LA	12/15/2003	4,000	21,000	ND(110)	ND(100)
SW-08LA	3/29/2004	4,300	20,000	160	ND(100)
SW-08LA	6/8/2004	3,100	15,000	81	ND(71)
SW-08LA	9/8/2004	3,300	14,000	ND(100)	ND(100)
SW-08LA	12/7/2004	3,400	15,000	ND(83)	ND(83)
SW-08LA	3/1/2005	2,000	9,100	ND(83)	ND(83)
SW-08LA	6/7/2005	2,100	13,000	ND(50)	ND(50)
SW-08LA	9/14/2005	3,100	13,000	ND(100)	ND(100)
SW-08LA	11/30/2005	3,500	11,000	ND(100)	ND(100)
SW-08LA	3/7/2006	2,500	9,200	ND(71)	ND(71)

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
SW-08LA	6/7/2006	2,100	7,300	ND(63)	ND(63)
SW-08LA	9/1/2006	2,100	5,200	48	ND(10)
SW-08LA	12/5/2006	2,300	6,600	73	ND(63)
SW-08LA	3/8/2007	2,500	7,200	66	ND(50)
SW-08LA	5/29/2007	2,200	4,500	49	ND(25)
SW-08LA	8/28/2007	2,100	5,200	ND(50)	ND(50)
SW-08LA	11/29/2007	1,900	4,600	ND(50)	ND(50)
SW-08LA	2/27/2008	1,400	3,700	38	ND(36)
SW-08LA	6/18/2008	2,000 A/	6,100 A/	20 A/	ND(0.50) A/
SW-08LA	8/15/2008	2,300	6,700	57	ND(5.0)
SW-08LA	9/3/2008	1,500	5,800	49	ND(5.0)
SW-08LA	9/9/2008	1,900 A/	6,800 A/	44 A/	ND(2.5) A/
SW-08LA	9/23/2008	1,300	5,600	46	ND(5.0)
SW-08LA	10/21/2008	1,200	5,800	21	ND(5.0)
SW-08LA	11/3/2008	1,400 A/	5,900 A/	51 A/	ND(50) A/
SW-09LA	1/24/2000	1	12	ND(0.5)	ND(1)
SW-09LA	5/30/2000	1	8	ND(0.5)	ND(1)
SW-09LA	9/6/2000	1	7	ND(0.5)	ND(1)
SW-09LA	12/12/2000	1	5	ND(0.5)	ND(1)
SW-09LA	4/18/2001	1	6	ND(0.5)	ND(0.5)
SW-09LA	8/10/2001	1	6	ND(0.5)	ND(0.5)
SW-09LA	12/11/2001	ND(0.5)	4	ND(0.5)	ND(0.5)
SW-09LA	3/20/2002	1	6	ND(0.5)	ND(0.5)
SW-09LA	6/4/2002	1	7	ND(0.5)	ND(0.5)
SW-09LA	9/10/2002	1	7	ND(0.5)	ND(0.5)
SW-09LA	12/10/2002	ND(0.5)	2	ND(0.5)	ND(0.5)
SW-09LA	3/4/2003	1	3	ND(0.5)	ND(0.5)
SW-09LA	6/5/2003	1	7	ND(0.5)	ND(0.5)
SW-09LA	8/28/2003	1	6	ND(0.5)	ND(0.5)
SW-09LA	12/16/2003	1	6	ND(0.5)	ND(0.5)
SW-09LA	3/30/2004	1	6	ND(0.5)	ND(0.5)
SW-09LA	6/10/2004	ND(0.5)	4	ND(0.5)	ND(0.5)
SW-09LA	9/10/2004	ND(0.5)	5	ND(0.5)	ND(0.5)
SW-09LA	12/9/2004	4	8	ND(0.5)	ND(0.5)
SW-09LA	6/7/2005	1	7	ND(0.5)	ND(0.5)
SW-09LA	9/14/2005	18	51	ND(0.5)	ND(0.5)
SW-09LA	9/30/2005	ND(0.5)	5	ND(0.5)	ND(0.5)
SW-09LA	11/30/2005	ND(0.5)	4	ND(0.5)	ND(0.5)
SW-09LA	3/7/2006	ND(0.8)	5	ND(0.5)	ND(0.5)
SW-09LA	6/6/2006	ND(0.5)	5	ND(0.5)	ND(0.5)
SW-09LA	9/1/2006	ND(0.5)	4	ND(0.5)	ND(0.5)
SW-09LA	12/5/2006	ND(0.5)	5	ND(0.5)	ND(0.5)
SW-09LA	3/9/2007	ND(0.5)	5	ND(0.5)	ND(0.5)
SW-09LA	6/1/2007	ND(0.5)	5	ND(0.5)	ND(0.5)
SW-09LA	8/30/2007	ND(0.5)	3	ND(0.5)	ND(0.5)
SW-09LA	11/29/2007	ND(0.5)	4	ND(0.5)	ND(0.5)
SW-09LA	2/26/2008	ND(0.5)	3	ND(0.5)	ND(0.5)
SW-09LA	6/18/2008	ND(0.50) A/	4.2 A/	ND(0.50) A/	ND(0.50) A/
SW-09LA	11/4/2008	ND(0.50) A/	3.4 A/	ND(0.50) A/	ND(0.50) A/
SW-10LA	1/25/2000	ND(0.5)	1	ND(0.5)	ND(1)
SW-10LA	5/30/2000	5	14	14	ND(1)
SW-10LA	9/7/2000	24	38	32	ND(1)
SW-10LA	12/12/2000	7	6	15	ND(1)
SW-10LA	4/17/2001	18	30	35	ND(0.5)

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
SW-10LA	8/8/2001	49	41	7	ND(0.5)
SW-10LA	12/11/2001	38	51	29	ND(0.5)
SW-10LA	3/20/2002	10	15	ND(0.5)	ND(0.5)
SW-10LA	6/6/2002	8	13	ND(0.5)	ND(0.5)
SW-10LA	9/11/2002	12	32	ND(0.5)	ND(0.5)
SW-10LA	12/12/2002	23	60	1	ND(0.5)
SW-10LA	3/4/2003	32	82	1	ND(0.5)
SW-10LA	6/3/2003	30	61	1	ND(0.5)
SW-10LA	8/27/2003	22	30	1	ND(0.5)
SW-10LA	12/17/2003	32	24	ND(0.5)	ND(0.5)
SW-10LA	3/26/2004	23	15	ND(0.5)	ND(0.5)
SW-10LA	6/9/2004	70	53	2	ND(0.5)
SW-10LA	9/9/2004	25	13	ND(0.5)	ND(0.5)
SW-10LA	12/9/2004	41	16	ND(0.5)	ND(0.5)
SW-10LA	3/1/2005	32	29	ND(0.5)	ND(0.5)
SW-10LA	6/8/2005	21	6	ND(0.5)	ND(0.5)
SW-10LA	9/14/2005	17	4	ND(0.5)	ND(0.5)
SW-10LA	12/2/2005	15	4	ND(0.5)	ND(0.5)
SW-10LA	3/7/2006	12	2	ND(0.5)	ND(0.5)
SW-10LA	6/6/2006	18	4	ND(0.5)	ND(0.5)
SW-10LA	8/31/2006	22	5	ND(0.5)	ND(0.5)
SW-10LA	12/5/2006	16	3	ND(0.5)	ND(0.5)
SW-10LA	3/6/2007	15	3	ND(0.5)	ND(0.5)
SW-10LA	5/29/2007	15	2	ND(0.5)	ND(0.5)
SW-10LA	8/28/2007	27	4	ND(0.5)	ND(0.5)
SW-10LA	11/29/2007	13	2	ND(0.5)	ND(0.5)
SW-10LA	2/28/2008	8	3	ND(0.5)	ND(0.5)
SW-10LA	6/18/2008	2.9 A/	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/
SW-11LA	1/24/2000	41	320	ND(1.3)	ND(2.5)
SW-11LA	5/31/2000	1,700	2,700	140	50
SW-11LA	9/7/2000	680	3,400	49	46
SW-11LA	12/14/2000	1,600	2,100	150	48
SW-11LA	4/18/2001	1,800	5,800	960	86
SW-11LA	8/10/2001	1,400	2,800	310	32
SW-11LA	12/12/2001	860	1,700	190	43
SW-11LA	3/20/2002	900	2,900	89	ND(10)
SW-11LA	6/6/2002	1,200	3,800	320	21
SW-11LA	9/12/2002	790	3,200	180	28
SW-11LA	12/11/2002	1,100	2,600	340	41
SW-11LA	3/3/2003	580	1,800	2,700	40
SW-11LA	6/5/2003	770	2,600	1,800	32
SW-11LA	8/27/2003	740	2,000	660	30
SW-11LA	12/16/2003	710	2,300	450	33
SW-11LA	3/29/2004	450	1,600	2,600	1,400
SW-11LA	4/30/2004	1,100	3,500	770	280
SW-11LA	6/8/2004	950	1,700	280	49
SW-11LA	9/9/2004	9,300	4,100	270	79
SW-11LA	12/9/2004	5,800	2,900	230	ND(42)
SW-11LA	3/2/2005	6,700	2,000	520	ND(36)
SW-11LA	6/7/2005	5,700	2,200	300	ND(36)
SW-11LA	9/15/2005	4,500	3,300	280	ND(31)
SW-11LA	11/30/2005	2,500	1,400	170	ND(31)
SW-11LA	3/8/2006	2,800	1,500	140	ND(17)
SW-11LA	6/7/2006	1,700	740	230	ND(10)

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
SW-11LA	9/6/2006	970	220	120	ND(13)
SW-11LA	12/4/2006	670	180	74	ND(4.2)
SW-11LA	3/9/2007	750	190	150	ND(5)
SW-11LA	5/30/2007	750	170	180	8
SW-11LA	8/29/2007	410	98	98	ND(3.1)
SW-11LA	11/28/2007	390	100	120	ND(3.1)
SW-11LA	2/27/2008	440	140	120	9
SW-11LA	6/18/2008	430 A/	150 A/	140 A/	18 A/
SW-11LA	9/9/2008	520 A/	1,700 A/	32 A/	0.79 A/
SW-11LA	11/5/2008	260 A/	300 A/	6.8 A/	ND(0.50) A/
SW-12LA	1/25/2000	84	980	ND(3.1)	ND(6.3)
SW-12LA	5/31/2000	12	140	2	1
SW-12LA	9/6/2000	130	4,600	ND(13)	ND(25)
SW-12LA	12/13/2000	25	760	21	ND(6.3)
SW-12LA	3/19/2001	580	14,000	230	79
SW-12LA	8/10/2001	13	360	19	2
SW-12LA	12/13/2001	32	1,400	7	ND(4.2)
SW-12LA	3/20/2002	160	5,200	ND(17)	ND(17)
SW-12LA	6/4/2002	11	140	7	ND(0.5)
SW-12LA	9/10/2002	12	150	4	ND(0.5)
SW-12LA	12/12/2002	8	73	2	ND(0.5)
SW-12LA	3/4/2003	6	66	3	ND(0.5)
SW-12LA	6/5/2003	7	67	1	ND(0.5)
SW-12LA	8/28/2003	5	60	2	ND(0.5)
SW-12LA	12/17/2003	7	180	3	ND(0.5)
SW-12LA	3/29/2004	7	180	2	ND(0.5)
SW-12LA	6/10/2004	5	60	2	ND(0.5)
SW-12LA	9/10/2004	26	730	ND(6.3)	ND(6.3)
SW-12LA	12/9/2004	20	530	ND(3.1)	ND(3.1)
SW-12LA	3/2/2005	8	180	ND(1)	ND(1)
SW-12LA	6/9/2005	17	450	ND(2.5)	ND(2.5)
SW-12LA	9/14/2005	34	960	ND(7.1)	ND(7.1)
SW-12LA	11/30/2005	42	990	ND(7.1)	ND(7.1)
SW-12LA	3/8/2006	23	990	ND(7.1)	ND(7.1)
SW-12LA	6/7/2006	31	930	ND(6.3)	ND(6.3)
SW-12LA	9/5/2006	52	740	7	ND(4.2)
SW-12LA	12/4/2006	83	1,500	ND(10)	ND(10)
SW-12LA	3/9/2007	53	550	6	ND(4.2)
SW-12LA	5/30/2007	46	680	9	ND(6.3)
SW-12LA	8/29/2007	54	610	7	ND(6.3)
SW-12LA	11/29/2007	47	460	8	ND(2.5)
SW-12LA	2/27/2008	38	880	7	ND(3.6)
SW-12LA	6/18/2008	19 A/	580 A/	2.5 A/	ND(0.50) A/
SW-12LA	9/9/2008	36 A/	1,700 A/	1.2 A/	ND(1.0) A/
SW-12LA	11/4/2008	74 A/	1,200 A/	ND(5.0) A/	ND(5.0) A/
SW-13LA	1/24/2000	2	8	6	ND(1)
SW-13LA	5/25/2000	1	6	7	ND(1)
SW-13LA	9/11/2000	1	2	2	ND(1)
SW-13LA	12/14/2000	1	5	3	ND(1)
SW-13LA	4/18/2001	1	5	3	ND(0.5)
SW-13LA	8/10/2001	1	5	1	ND(0.5)
SW-13LA	12/14/2001	2	10	12	ND(0.5)
SW-13LA	3/21/2002	2	5	1	ND(0.5)
SW-13LA	6/7/2002	ND(0.5)	2	ND(0.5)	ND(0.5)

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
SW-13LA	9/13/2002	1	3	ND(0.5)	ND(0.5)
SW-13LA	12/13/2002	2	4	3	ND(0.5)
SW-13LA	3/5/2003	2	5	ND(0.5)	ND(0.5)
SW-13LA	6/5/2003	1	3	ND(0.5)	ND(0.5)
SW-13LA	8/28/2003	1	3	1	ND(0.5)
SW-13LA	12/17/2003	1	3	2	ND(0.5)
SW-13LA	3/30/2004	2	6	6	ND(0.5)
SW-13LA	6/9/2004	1	ND(0.5)	3	ND(0.5)
SW-13LA	9/13/2004	1	1	1	ND(0.5)
SW-13LA	12/8/2004	9	15	1	ND(0.5)
SW-13LA	3/3/2005	2	5	1	ND(0.5)
SW-13LA	6/8/2005	1	3	ND(0.5)	ND(0.5)
SW-13LA	9/14/2005	ND(0.5)	1	ND(0.5)	ND(0.5)
SW-13LA	11/29/2005	1	2	ND(0.5)	ND(0.5)
SW-13LA	3/9/2006	1	2	ND(0.5)	ND(0.5)
SW-13LA	6/7/2006	1	2	ND(0.5)	ND(0.5)
SW-13LA	9/5/2006	2	5	ND(0.5)	ND(0.5)
SW-13LA	12/5/2006	1	3	1	ND(0.5)
SW-13LA	3/12/2007	2	3	1	ND(0.5)
SW-13LA	6/1/2007	1	3	1	ND(0.5)
SW-13LA	8/30/2007	1	2	1	ND(0.5)
SW-13LA	11/30/2007	2	3	1	ND(0.5)
SW-13LA	2/28/2008	1	3	1	ND(0.5)
SW-13LA	6/19/2008	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/
SW-17LA	9/15/2005	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-17LA	11/30/2005	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-17LA	3/8/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-17LA	6/8/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-17LA	9/6/2006	1	1	1	ND(0.5)
SW-17LA	12/5/2006	1	1	1	ND(0.5)
SW-17LA	3/12/2007	1	1	1	ND(0.5)
SW-17LA	5/30/2007	1	1	1	ND(0.5)
SW-17LA	8/29/2007	1	ND(0.5)	1	ND(0.5)
SW-17LA	11/28/2007	ND(0.5)	ND(0.5)	1	ND(0.5)
SW-17LA	2/26/2008	1	ND(0.5)	ND(0.5)	ND(0.5)
SW-17LA	6/18/2008	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/
B Aquifer					
GT-1	12/1/1997	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
GT-1	5/26/1998	ND(1)	ND(1)	ND(1)	ND(2)
LF-11B	4/1/1999	ND(5)	ND(5)	ND(5)	ND(10)
LF-11B	7/1/1999	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
LF-11B	11/3/1999	ND(5)	ND(5)	ND(5)	ND(10)
LF-11B	2/1/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
LF-11B	5/5/2000	ND(0.5)	ND(0.5)	2	ND(1)
LF-11B	8/31/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-11B	11/14/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-11B	3/1/2001	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-11B	5/31/2001	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-11B	8/22/2001	ND(5)	ND(5)	ND(5)	ND(10)
LF-11B	11/1/2001	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-11B	2/27/2002	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-11B	8/29/2002	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-11B	2/27/2003	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-11B	8/3/2003	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
LF-11B	8/4/2004	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-11B	2/17/2005	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-11B	8/25/2005	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-11B	2/16/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-11B	8/22/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-11B	2/7/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-11B	8/7/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-11B	2/8/2008	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-12B	12/1/1997	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-2B	7/1/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-2B	8/1/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-2B	8/29/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-2B	9/1/2000	ND(0.5)	3	ND(0.5)	ND(0.5)
LF-2B	10/1/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-2B	1/1/2001	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-2B	3/1/2001	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-9C	12/1/1997	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-9C	4/1/1999	ND(5)	ND(5)	ND(5)	ND(10)
LF-9C	7/1/1999	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
LF-9C	11/3/1999	ND(5)	ND(5)	ND(5)	ND(10)
LF-9C	2/1/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
LF-9C	5/5/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
LF-9C	8/31/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-9C	11/14/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-9C	2/26/2001	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-9C	5/31/2001	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-9C	8/22/2001	ND(5)	ND(5)	ND(5)	ND(10)
LF-9C	11/1/2001	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-9C	2/26/2002	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-9C	8/29/2002	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-9C	8/3/2003	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-9C	2/18/2004	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-9C	8/4/2004	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-9C	2/17/2005	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-9C	8/23/2005	2,400	2,200	270	26
LF-9C	11/5/2005	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-9C	2/17/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-9C	5/16/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-9C	8/22/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-9C	2/7/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-9C	5/2/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-9C	8/7/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-9C	11/15/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-9C	2/8/2008	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
LF-9C	5/8/2008	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03B	1/26/2000	1	17	ND(0.5)	ND(1)
SW-03B	5/30/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
SW-03B	9/11/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
SW-03B	12/12/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
SW-03B	4/17/2001	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03B	8/9/2001	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03B	12/11/2001	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03B	3/18/2002	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03B	6/5/2002	ND(0.5)	ND(0.5)	1	ND(0.5)

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
SW-03B	9/12/2002	ND(0.5)	ND(0.5)	1	ND(0.5)
SW-03B	12/10/2002	ND(0.5)	ND(0.5)	1	ND(0.5)
SW-03B	3/3/2003	ND(0.5)	ND(0.5)	1	ND(0.5)
SW-03B	6/5/2003	ND(0.5)	ND(0.5)	1	ND(0.5)
SW-03B	8/26/2003	ND(0.5)	ND(0.5)	1	ND(0.5)
SW-03B	12/15/2003	ND(0.5)	ND(0.5)	1	ND(0.5)
SW-03B	3/26/2004	ND(0.5)	ND(0.5)	1	ND(0.5)
SW-03B	6/9/2004	ND(0.5)	ND(0.5)	1	ND(0.5)
SW-03B	9/8/2004	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03B	12/7/2004	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03B	3/1/2005	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03B	6/9/2005	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03B	9/15/2005	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03B	11/29/2005	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03B	3/8/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03B	6/8/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03B	9/5/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03B	12/4/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03B	3/12/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03B	5/30/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03B	8/29/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03B	11/30/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03B	2/27/2008	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-03B	6/18/2008	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/
SW-04B	1/25/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
SW-04B	5/30/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
SW-04B	9/11/2000	2	ND(0.5)	ND(0.5)	ND(1)
SW-04B	12/12/2000	2	ND(0.5)	ND(0.5)	ND(1)
SW-04B	4/16/2001	2	1	ND(0.5)	ND(0.5)
SW-04B	8/8/2001	2	1	ND(0.5)	ND(0.5)
SW-04B	12/10/2001	2	1	1	ND(0.5)
SW-04B	3/19/2002	2	1	ND(0.5)	ND(0.5)
SW-04B	6/6/2002	27	4	9	ND(0.5)
SW-04B	9/12/2002	4	1	2	ND(0.5)
SW-04B	12/11/2002	5	1	2	ND(0.5)
SW-04B	3/5/2003	6	1	5	ND(0.5)
SW-04B	3/6/2003	6	1	5	ND(1.5)
SW-04B	6/4/2003	5	1	4	ND(0.5)
SW-04B	8/26/2003	7	1	8	ND(0.5)
SW-04B	12/15/2003	5	1	9	ND(0.5)
SW-04B	3/26/2004	5	1	11	ND(0.5)
SW-04B	6/9/2004	4	1	5	ND(0.5)
SW-04B	9/9/2004	4	1	8	ND(0.5)
SW-04B	12/7/2004	4	1	6	ND(0.5)
SW-04B	3/2/2005	4	1	4	ND(0.5)
SW-04B	6/9/2005	6	1	6	ND(0.5)
SW-04B	9/13/2005	8	2	17	ND(0.5)
SW-04B	12/2/2005	3	1	3	ND(0.5)
SW-04B	3/8/2006	4	1	2	ND(0.5)
SW-04B	6/8/2006	3	1	2	ND(0.5)
SW-04B	9/5/2006	4	1	1	ND(0.5)
SW-04B	12/4/2006	3	ND(0.5)	ND(0.5)	ND(0.5)
SW-04B	3/9/2007	4	1	2	ND(0.5)
SW-04B	5/31/2007	4	1	1	ND(0.5)

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
SW-04B	8/29/2007	5	1	1	ND(0.5)
SW-04B	11/28/2007	3	1	1	ND(0.5)
SW-04B	2/27/2008	3	1	1	ND(0.5)
SW-04B	2/28/2008	3	1	1	ND(0.5)
SW-04B	6/18/2008	1.5 A/	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/
SW-04B	11/4/2008	2.5 A/	0.72 A/	1.0 A/	ND(0.50) A/
SW-05B	1/20/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
SW-05B	5/25/2000	ND(0.5)	ND(0.5)	1	ND(1)
SW-05B	9/7/2000	ND(0.5)	31	3	ND(1)
SW-05B	12/12/2000	1	33	1	ND(1)
SW-05B	4/17/2001	ND(0.5)	2	ND(0.5)	ND(0.5)
SW-05B	8/9/2001	1	2	ND(0.5)	ND(0.5)
SW-05B	12/11/2001	ND(0.5)	1	ND(0.5)	ND(0.5)
SW-05B	3/19/2002	1	1	ND(0.5)	ND(0.5)
SW-05B	6/5/2002	1	6	ND(0.5)	ND(0.5)
SW-05B	9/11/2002	1	8	ND(0.5)	ND(0.5)
SW-05B	12/11/2002	1	8	ND(0.5)	ND(0.5)
SW-05B	3/3/2003	1	4	ND(0.5)	ND(0.5)
SW-05B	6/4/2003	1	2	ND(0.5)	ND(0.5)
SW-05B	8/26/2003	1	4	ND(0.5)	ND(0.5)
SW-05B	12/16/2003	1	15	ND(0.5)	ND(0.5)
SW-05B	3/30/2004	2	16	ND(0.5)	ND(0.5)
SW-05B	6/9/2004	3	36	ND(0.5)	ND(0.5)
SW-05B	9/10/2004	3	53	ND(0.5)	ND(0.5)
SW-05B	12/7/2004	4	27	ND(0.5)	ND(0.5)
SW-05B	3/2/2005	1	2	ND(0.5)	ND(0.5)
SW-05B	6/10/2005	1	1	ND(0.5)	ND(0.5)
SW-05B	9/13/2005	1	ND(0.5)	ND(0.5)	ND(0.5)
SW-05B	12/2/2005	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-05B	3/8/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-05B	6/8/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-05B	9/1/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-05B	12/4/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-05B	3/9/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-05B	5/30/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-05B	8/29/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-05B	11/28/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-05B	2/27/2008	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-05B	6/19/2008	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/
SW-05B	11/3/2008	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/
SW-07B	1/20/2000	3	110	ND(0.5)	ND(1)
SW-07B	5/24/2000	8	170	54	ND(1.4)
SW-07B	9/5/2000	11	150	21	ND(1)
SW-07B	12/11/2000	15	160	14	ND(1)
SW-07B	4/16/2001	20	210	12	ND(0.7)
SW-07B	8/7/2001	18	210	9	ND(1)
SW-07B	12/13/2001	16	190	5	ND(0.5)
SW-07B	3/21/2002	17	110	2	ND(0.5)
SW-07B	6/4/2002	14	120	3	ND(0.5)
SW-07B	9/11/2002	12	110	6	ND(0.5)
SW-07B	12/11/2002	15	150	7	ND(0.5)
SW-07B	3/2/2003	9	48	1	ND(0.5)
SW-07B	6/4/2003	9	85	3	ND(0.5)
SW-07B	8/27/2003	6	68	1	ND(0.5)

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
SW-07B	12/16/2003	7	48	1	ND(0.5)
SW-07B	3/29/2004	9	55	ND(0.5)	ND(0.5)
SW-07B	6/8/2004	9	73	1	ND(0.5)
SW-07B	9/10/2004	7	75	1	ND(0.5)
SW-07B	12/7/2004	5	37	ND(0.5)	ND(0.5)
SW-07B	3/1/2005	3	16	ND(0.5)	ND(0.5)
SW-07B	6/7/2005	3	9	ND(0.5)	ND(0.5)
SW-07B	9/15/2005	1	6	ND(0.5)	ND(0.5)
SW-07B	11/29/2005	5	33	ND(0.5)	ND(0.5)
SW-07B	3/7/2006	1	4	ND(0.5)	ND(0.5)
SW-07B	6/6/2006	1	2	ND(0.5)	ND(0.5)
SW-07B	8/31/2006	2	7	ND(0.5)	ND(0.5)
SW-07B	12/1/2006	1	2	ND(0.5)	ND(0.5)
SW-07B	3/8/2007	1	5	ND(0.5)	ND(0.5)
SW-07B	5/29/2007	1	3	ND(0.5)	ND(0.5)
SW-07B	8/28/2007	ND(0.5)	2	ND(0.5)	ND(0.5)
SW-07B	11/29/2007	1	4	ND(0.5)	ND(0.5)
SW-07B	2/26/2008	1	5	ND(0.5)	ND(0.5)
SW-07B	6/17/2008	ND(0.50) A/	2.5 A/	ND(0.50) A/	ND(0.50) A/
SW-08B	1/24/2000	1	16	3	ND(1)
SW-08B	5/24/2000	7	65	2	ND(1)
SW-08B	9/5/2000	27	150	4	ND(1)
SW-08B	12/11/2000	24	180	4	ND(1.4)
SW-08B	4/16/2001	32	74	1	ND(0.5)
SW-08B	8/8/2001	43	110	1	ND(0.5)
SW-08B	12/13/2001	45	190	3	ND(0.5)
SW-08B	3/21/2002	45	140	5	ND(0.5)
SW-08B	6/4/2002	41	220	19	ND(0.8)
SW-08B	9/11/2002	52	300	36	ND(1)
SW-08B	12/11/2002	79	450	46	ND(1.3)
SW-08B	3/2/2003	52	310	35	ND(1.3)
SW-08B	6/5/2003	55	290	40	ND(1)
SW-08B	8/27/2003	43	210	25	ND(0.7)
SW-08B	12/16/2003	61	300	35	ND(1)
SW-08B	3/29/2004	110	500	100	ND(1)
SW-08B	6/8/2004	88	340	90	ND(1.7)
SW-08B	9/8/2004	73	260	53	ND(2.5)
SW-08B	12/7/2004	130	420	160	ND(2.5)
SW-08B	3/1/2005	64	130	21	ND(0.5)
SW-08B	6/7/2005	70	130	19	ND(0.5)
SW-08B	9/14/2005	92	330	150	ND(3.1)
SW-08B	11/30/2005	70	210	80	ND(1.3)
SW-08B	3/7/2006	78	270	150	ND(1.3)
SW-08B	6/7/2006	59	120	52	ND(1)
SW-08B	9/1/2006	75	140	70	ND(0.7)
SW-08B	12/5/2006	78	160	110	ND(1)
SW-08B	3/8/2007	72	110	58	ND(0.5)
SW-08B	5/29/2007	70	86	38	ND(0.5)
SW-08B	8/28/2007	64	71	37	ND(0.5)
SW-08B	11/29/2007	55	83	46	ND(0.5)
SW-08B	2/27/2008	40	31	6	ND(0.5)
SW-08B	6/18/2008	44 A/	55 A/	7.8 A/	ND(0.50) A/
SW-08B	9/9/2008	43 A/MHA	78 A/MHA	39 A/	ND(0.50) A/
SW-08B	11/3/2008	32 A/	59 A/	7.4 A/	ND(0.50) A/

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
SW-09B	1/20/2000	ND(0.5)	1	ND(0.5)	ND(1)
SW-09B	5/30/2000	ND(0.5)	1	ND(0.5)	ND(1)
SW-09B	9/6/2000	ND(0.5)	1	ND(0.5)	ND(1)
SW-09B	12/12/2000	ND(0.5)	1	ND(0.5)	ND(1)
SW-09B	4/18/2001	ND(0.5)	1	ND(0.5)	ND(0.5)
SW-09B	8/10/2001	ND(0.5)	1	ND(0.5)	ND(0.5)
SW-09B	12/10/2001	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-09B	3/20/2002	1	1	ND(0.5)	ND(0.5)
SW-09B	6/4/2002	ND(0.5)	1	ND(0.5)	ND(0.5)
SW-09B	9/10/2002	ND(0.5)	1	ND(0.5)	ND(0.5)
SW-09B	12/10/2002	ND(0.5)	1	ND(0.5)	ND(0.5)
SW-09B	3/4/2003	ND(0.5)	1	ND(0.5)	ND(0.5)
SW-09B	6/5/2003	ND(0.5)	1	ND(0.5)	ND(0.5)
SW-09B	8/28/2003	ND(0.5)	1	ND(0.5)	ND(0.5)
SW-09B	12/16/2003	ND(0.5)	1	ND(0.5)	ND(0.5)
SW-09B	3/30/2004	ND(0.5)	1	ND(0.5)	ND(0.5)
SW-09B	6/10/2004	ND(0.5)	1	ND(0.5)	ND(0.5)
SW-09B	9/10/2004	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-09B	12/9/2004	1	1	ND(0.5)	ND(0.5)
SW-09B	6/7/2005	1	1	ND(0.5)	ND(0.5)
SW-09B	9/14/2005	ND(0.5)	1	ND(0.5)	ND(0.5)
SW-09B	11/30/2005	ND(0.5)	1	ND(0.5)	ND(0.5)
SW-09B	3/7/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-09B	6/6/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-09B	9/1/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-09B	12/5/2006	ND(0.5)	1	ND(0.5)	ND(0.5)
SW-09B	3/9/2007	ND(0.5)	1	ND(0.5)	ND(0.5)
SW-09B	6/1/2007	ND(0.5)	1	ND(0.5)	ND(0.5)
SW-09B	8/30/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-09B	11/29/2007	ND(0.5)	1	ND(0.5)	ND(0.5)
SW-09B	2/26/2008	ND(0.5)	1	ND(0.5)	ND(0.5)
SW-09B	6/18/2008	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/
SW-09B	11/4/2008	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/
SW-11B	1/24/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
SW-11B	5/31/2000	6	17	1	ND(1)
SW-11B	9/7/2000	24	52	1	ND(1)
SW-11B	12/14/2000	52	68	1	ND(1)
SW-11B	8/10/2001	80	96	24	3
SW-11B	12/12/2001	98	73	6	1
SW-11B	3/20/2002	93	71	6	ND(0.5)
SW-11B	6/6/2002	100	110	7	1
SW-11B	9/12/2002	87	94	6	1
SW-11B	12/11/2002	82	120	10	1
SW-11B	3/3/2003	85	79	19	1
SW-11B	6/5/2003	66	67	83	2
SW-11B	8/27/2003	50	47	34	3
SW-11B	12/16/2003	51	60	29	4
SW-11B	3/29/2004	50	39	29	23
SW-11B	4/30/2004	38	31	11	12
SW-11B	6/8/2004	40	36	4	4
SW-11B	9/9/2004	42	36	15	5
SW-11B	12/9/2004	98	61	17	3
SW-11B	3/2/2005	99	55	19	2
SW-11B	6/7/2005	130	44	15	2

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
SW-11B	9/15/2005	310	150	150	14
SW-11B	11/30/2005	160	60	17	1
SW-11B	3/8/2006	320	130	100	9
SW-11B	6/7/2006	130	39	9	ND(0.7)
SW-11B	9/6/2006	130	32	21	2
SW-11B	12/4/2006	170	31	23	3
SW-11B	3/9/2007	110	18	17	3
SW-11B	5/30/2007	120	20	24	4
SW-11B	8/29/2007	88	16	19	4
SW-11B	11/28/2007	56	11	14	3
SW-11B	2/27/2008	93	15	20	3
SW-11B	6/18/2008	46 A/	8.2 A/	2.6 A/	ND(0.50) A/
SW-11B	9/9/2008	39 A/	9.8 A/	8.9 A/	2.2 A/
SW-11B	11/5/2008	17 A/	1.9 A/	ND(0.50) A/	ND(0.50) A/
SW-12B	1/24/2000	1	41	ND(0.5)	ND(1)
SW-12B	5/31/2000	2	19	ND(0.5)	ND(1)
SW-12B	9/7/2000	2	20	ND(0.5)	ND(1)
SW-12B	12/13/2000	1	21	1	ND(1)
SW-12B	4/18/2001	2	96	2	2
SW-12B	8/10/2001	2	37	1	1
SW-12B	12/12/2001	2	23	2	1
SW-12B	3/20/2002	2	18	2	ND(0.5)
SW-12B	6/4/2002	1	22	3	2
SW-12B	9/10/2002	1	15	2	1
SW-12B	12/12/2002	1	11	1	1
SW-12B	3/4/2003	1	10	2	2
SW-12B	6/5/2003	1	10	3	2
SW-12B	8/28/2003	ND(0.5)	5	1	1
SW-12B	12/17/2003	ND(0.5)	5	1	1
SW-12B	3/29/2004	ND(0.5)	4	1	1
SW-12B	6/10/2004	ND(0.5)	5	1	1
SW-12B	9/10/2004	ND(0.5)	7	1	ND(0.5)
SW-12B	12/9/2004	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-12B	3/2/2005	ND(0.5)	9	1	1
SW-12B	6/9/2005	ND(3.1)	54	18	17
SW-12B	9/14/2005	4	45	7	5
SW-12B	11/30/2005	1	21	1	2
SW-12B	3/8/2006	1	38	3	3
SW-12B	6/7/2006	1	50	6	4
SW-12B	9/5/2006	3	88	7	3
SW-12B	12/4/2006	2	50	6	3
SW-12B	3/9/2007	2	61	9	3
SW-12B	5/30/2007	2	52	11	4
SW-12B	8/29/2007	2	53	8	3
SW-12B	11/29/2007	2	48	11	4
SW-12B	2/27/2008	3	52	10	4
SW-12B	6/18/2008	1.4 A/	19 A/	0.88 A/	ND(0.50) A/
SW-12B	9/9/2008	1.4 A/	22 A/	1.3 A/	ND(0.50) UJ/
SW-12B	11/4/2008	1.5 A/	22 A/	1.5 A/	ND(0.50) A/
SW-14B	1/25/2000	ND(0.5)	1	ND(0.5)	ND(1)
SW-14B	5/31/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
SW-14B	9/11/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
SW-14B	12/13/2000	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)
SW-14B	4/19/2001	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
SW-14B	8/13/2001	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-14B	12/10/2001	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-14B	3/18/2002	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-14B	6/4/2002	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-14B	6/5/2002	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-14B	9/13/2002	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-14B	12/10/2002	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-14B	3/3/2003	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-14B	6/6/2003	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-14B	8/25/2003	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-14B	12/15/2003	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-14B	3/30/2004	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-14B	6/9/2004	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-14B	9/9/2004	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-14B	12/10/2004	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-14B	3/3/2005	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-14B	6/10/2005	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-14B	9/15/2005	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-14B	11/30/2005	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-14B	3/8/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-14B	6/9/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-14B	5/31/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-14B	8/29/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-14B	11/28/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-14B	2/26/2008	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-14B	6/18/2008	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/
SW-14B	9/9/2008	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/	ND(0.50) UJ/
SW-14B	11/5/2008	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/
SW-18B	4/23/2001	1	15	1	ND(0.5)
SW-18B	8/13/2001	1	9	ND(0.5)	ND(0.5)
SW-18B	12/10/2001	1	8	ND(0.5)	ND(0.5)
SW-18B	3/18/2002	1	7	ND(0.5)	ND(0.5)
SW-18B	6/5/2002	1	7	ND(0.5)	ND(0.5)
SW-18B	9/10/2002	1	7	ND(0.5)	ND(0.5)
SW-18B	12/11/2002	ND(0.5)	5	ND(0.5)	ND(0.5)
SW-18B	3/3/2003	ND(0.5)	1	ND(0.5)	ND(0.5)
SW-18B	6/5/2003	ND(0.5)	1	ND(0.5)	ND(0.5)
SW-18B	6/6/2003	ND(0.5)	1	ND(0.5)	ND(0.5)
SW-18B	8/25/2003	ND(0.5)	1	ND(0.5)	ND(0.5)
SW-18B	12/15/2003	ND(0.5)	1	ND(0.5)	ND(0.5)
SW-18B	3/29/2004	ND(0.5)	1	ND(0.5)	ND(0.5)
SW-18B	6/9/2004	ND(0.5)	1	ND(0.5)	ND(0.5)
SW-18B	9/9/2004	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-18B	12/10/2004	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-18B	3/3/2005	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-18B	6/10/2005	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-18B	9/15/2005	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-18B	11/30/2005	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-18B	3/8/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-18B	6/8/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-18B	6/9/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-18B	9/6/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-18B	12/1/2006	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-18B	3/9/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)

Table 2-3. Summary of Groundwater Analytical Data

Well Name	Sample Date	Tetrachloroethene (µg/L)	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
SW-18B	5/31/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-18B	8/29/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-18B	11/28/2007	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-18B	2/26/2008	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
SW-18B	6/19/2008	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/
SW-18B	9/9/2008	ND(0.50) A/	1.5 A/	ND(0.50) A/	ND(0.50) UJ/
SW-18B	11/5/2008	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/	ND(0.50) A/

Abbreviations:

µg/L = Micrograms per liter.

ND = Not detected at the reporting level in parentheses.

Qualifier **Qualifier Description** (Qualifiers are listed as validation qualifier / lab qualifier where applicable [e.g. /MHA])

Laboratory Assigned Qualifiers

MHA Due to high levels of analyte in the sample, the MS/MSD does not provide useful spike recovery information. See Blank Spike (LCS).

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of the quantitation necessary to accurately and precisely measure the analyte.

MACTEC Validation Assigned Qualifiers

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Approved: MS

A Sample has undergone routine data validation.

Table 3-1.
 Chemicals of Concern in Soil, Schlage OU

Chemical	Regulatory Screening Levels (RSLs) ¹	Maximum Soil Concentration (mg/kg)	Chemical of Concern (COC)
Chlorinated Volatile Organic Compounds			
PCE	0.57	12	Yes
TCE	2.8	62	Yes
VC ³	1.7	ND	Yes
1,1-DCE ³	250	ND	Yes
cis-1,2-DCE ³	780	3.8	Yes
trans-1,2-DCE ³	110	ND	Yes
Metals			
Arsenic	0.07	8	Yes
Cadmium	1.7	12.3	Yes
Lead	150	190	Yes

Notes:

mg/kg = milligrams per kilogram

1) RSL = Regional Screening Levels, USEPA, 2008

2) Isolated detections of other chemicals above RSLs were not identified as COCs (i.e., BTEX, TPH, VC (see text)).

3) Chemicals retained as COCs because they are daughter products of PCE and TCE.

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Table 3-2. Chemicals of Concern in Soil, UPC OU

Chemicals of Potential Concern	Regulatory Screening Levels (RSLs) ^a (mg/kg)	Maximum Soil Concentration ^b (mg/kg)	Maximum Soil Concentration Exceeds the RSL	Chemicals of Concern
Polycyclic Aromatic Hydrocarbons^c				
Benzo(a)pyrene	0.15	--	No	No
Metals				
Aluminum	77,000	34,000	No	No
Arsenic	0.07	240	Yes	Yes
Barium	5,200	250	No	No
Cadmium	1.7	5.2	Yes	Yes
Chromium	100,000	280	No	No
Copper	3,000	39	No	No
Lead	150	810	Yes	Yes
Mercury	18	1.6	No	No
Selenium	380	1	No	No
Silver	380	0.3	No	No

Abbreviations:

RSLs = Regulatory screening levels.
 mg/kg = Milligrams per kilogram.
 -- = Not available.
 ND = Not detected.

Footnotes:

^a Values are from California Environmental Protection Agency (CalEPA) California Human Health Screening Levels (CHHS *CalEPA, 2005*). For the COCs that did not have an established CHHSL, the Region 9 *Regional Screening Levels (EPA, 2008)* were used. No CHHSL was established for Total Chromium; the CHHSL for Chromium 3+ was used as the most similar.

^b The selection of analytes is based on previous studies conducted on the San Francisco portion of the Universal Paragon Corporation Operable Unit (UPC OU). The analytes and maximum soil concentrations were compiled from Burns & McDor *Soil Sampling Summary Report (2006a)* and *OU-1 Additional Investigation, San Francisco and Brisbane, California (2006b)*; Treadwell & Rollo's *Soil Operable Unit Remedial Investigation Report (2001)*, and Levine-Fricke's *Feasibility Study Report, Bayshore Railyard, Brisbane, California (1991)*.

^c Polycyclic aromatic hydrocarbons (PAHs) were sampled in 1990 at the oil/water separator as described in Levine-Fricke's *Feasibility Study Report, Bayshore Railyard, Brisbane, California (1991)*. However, the sample with detections was excavated in 1993 as described in IT Corporation *Bayshore Railyard North Area Remediation Report (1994)*. PAHs have not been detected elsewhere on the site, but they are typically present in anthropogenic fill soils. Therefore, PAHs are retained as a chemical concern, but evaluated as an estimated order of potential potency.

References:

Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell), 2006a. *Soil Sampling Report*. Universal Paragon Corporation, San Francisco and Brisbane, California. January.
 Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell), 2006b. *OU-1 Additional Investigation*, San Francisco and Brisbane, California. January.
 California Environmental Protection Agency (CalEPA), 2005. *Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties*. January.
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 Levine-Fricke, 1991. *Feasibility Study Report, Bayshore Railyard, Brisbane, California*. December 1.
 Treadwell & Rollo, 2001. *Soil Operable Unit, Remedial Investigation Report*. Schlage Lock Company Site. June.
 United States Environmental Protection Agency (EPA), 2008. *Regional Screening Levels*. Region 9. September.

Checked by: NM

Approved by: MS

TABLE 5-1. POTENTIALLY APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS (ARARS)

ARAR Type	Standard, Requirement, Criteria, Limitation	Citation	Description
Federal ARARs			
Chemical	Clean Air Act	42 USC 7401-7642	Emission standards for stationary and mobile sources.
Chemical	Hazardous Waste Identification	40 CFR 261.24	Establishes criteria to determine whether solid waste exhibits hazard characteristics.
Chemical/ Action	Classification and regulation of hazardous waste	40 CFR 260	Establishes criteria for the determination of hazardous waste and its regulation.
Action	National Pollutant Discharge Elimination System (NPDES)	40 CFR Parts 122-124	Establishes requirements to ensure storm water discharges do not contribute to a violation of surface water quality standards.
Action	NPDES	40 CFR Part 403 (33- USC 1251-1376)	Establishes national pretreatment standards to control pollutants that pass through or interfere with treatment processes in POTWs or that may contaminate sewage sludge.
Action	Comprehensive, Environmental Response, Compensation and Recovery Act and Superfund Amendments and Reauthorization Act of 1986, and National Oil and Hazardous Substances Pollution Contingency Plan	40 CFR 300	Establishes policies and procedures for investigation and remediation decisions for protection of public health and the environment.

TABLE 5-1. POTENTIALLY APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS (ARARS)

ARAR Type	Standard, Requirement, Criteria, Limitation	Citation	Description
Chemical/ Action	Clean Water Act	33 USC 1251	Establishes regulatory and nonregulatory tools to sharply reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff.
Action	Drinking Water Standards	40 CFR Part 141	Establishes maximum contaminant levels to protect water quality in public drinking water systems.
Action	Occupational Health and Safety	29 CFR 1910, 120	Establishes requirements for health and safety training.
TBC	Health Risk Assessment	US EPA, Risk Assessment Guidance for Superfund (1989)	Guidance and framework to assess health risk.
State and Local ARARs			
Chemical	Ambient Air Quality Standards	HSC 39000-44071	Establishes standards for emissions of chemical vapors and dust.
Action	Emission Standard	BAAQMD Regulation 6	Establishes emission standards for particulates.
Action	Emission Standard	BAAQMD Regulations 2 and 8	Establish emission and permitting standards for volatile organic compounds (VOCs).
Chemical	Determination of Characteristic Wastes	22 CCR 66261.24	Establishes criteria for identifying characteristic wastes.
Action	Hazardous Waste Control	HAC 25100-25250.26	Establishes hazardous waste control measures.
Action	Hazardous Waste Generator Requirements	22 CCR 66262.11 et seq.	Establishes standards applicable to generators of hazardous waste.
Action	Discharge to POTW	City/County Wastewater Discharge Requirements	Establishes pretreatment standards to control pollutants.

TABLE 5-1. POTENTIALLY APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS (ARARS)

ARAR Type	Standard, Requirement, Criteria, Limitation	Citation	Description
Action	State Superfund Act	HSC 25300 et. seq.	Establishes policies and procedures for investigation and remediation decisions for protection of public health and the environment.
Action	DTSC Site Mitigation Program Policies and Procedures	DTSC	Applicable policies, procedures, management memos, and related guidance documents.
Action	Drinking Water Standards	22 CCR 64431 and 64444	Establishes maximum contaminant levels to protect water quality in public drinking water systems.
Action	Porter-Cologne Water quality Control Act	RWQCB	Establishes policies and procedures for investigation and remediation decisions for preservation and protection of waters of the state for beneficial uses.
Action	Water Quality Control Plan (Basin Plan) for the San Francisco Bay Basin	RWQCB	Establishes water quality objectives for the San Francisco Bay.
Action	California Occupational Health and Safety	8 CCR 1500, 2300, and 3200 et seq.	Establishes standards for working conditions and employees matter; and notification requirements.
Action	Environmental Impact Review	PRC 21000-2177	Mandates environmental impact review of project approved by governmental agencies
Action	Land Use Covenants	22 CCR 67391.1	Specify that a land use covenant imposing appropriate limitations on land use shall be executed and recorded when hazardous materials, hazardous wastes or constituents, or hazardous substances will remain at the property at levels, which are not suitable for unrestricted use of the land.

TABLE 5-1. POTENTIALLY APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS (ARARS)

TBC	Health Risk Assessment	DTSC, Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties (2005)	Guidance and framework to assess health risk.
TBC	Health Risk Assessment	RWQCB, Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater (2005)	Guidance and framework to assess health risk

BAAQMD Bay Area Air Quality Management District
 CCR California Code of Regulations
 DTSC Department of Toxic Substances Control
 HSC California Health and Safety Code
 POTW Publicly Owned Treatment Works
 PRC California Public Resources Code
 RWQCB Regional Water Quality Control Board
 RCRA Resource Conservation and Recovery Act
 USC United States Code
 TBC To Be Considered

Checked by: MH-F Approved by: MS

Table 6-1. Remedial Technology Screening Matrix

Potential Remedial Technologies	Contaminated Media									
	Soil				Soil Gas		Groundwater			
	Chemicals of Concern									
	VOCs/Metals/PAHs				VOCs		VOCs			
	Ex Situ Treatment	In Situ Treatment	Containment	Institutional Controls	In Situ Treatment	Institutional Controls	Ex Situ Treatment	In Situ Treatment	Containment	Institutional Controls
Metals/PAHs -Excavation -Onsite consolidation -Offsite Disposal -Stabilization VOCs - VOC "Hot Spot" Excavation -Aeration -Thermal Desorption -Biodegradation -Vapor Extraction & Off-gas treatment	VOCs -Vapor Extraction & Off-gas Treatment -Bioventing -Enhanced Biodegradation	Metals/PAHs Barriers -Soil/ Hardscape Cap -Asphalt/Concrete Slab Cap - Engineered Vapor Barrier Cap	VOCs/Metals/PAHs -Land Use/Deed/Zoning Restriction	Single/Dual Phase Vapor Extraction & Off-gas treatment -Carbon -Biodegradation -Air Stripping	-Land Use/Deed/Zoning Restriction -Monitoring	Extraction & Aboveground Treatment -Carbon -UV/Oxidation -Biodegradation -Air Stripping -Air Sparging	-Reductive Dechlorination -Chemical Oxidation -Dual Phase Extraction -Enhanced Biodegradation	Vertical Barriers -Sheet piles - Slurry wall - Hydraulic Control with Pump and Treat	-Use Restriction -Monitoring	
Screen Technologies for Each Land Use/Development Zone										
Zone 1 – Public Open Space On Grade	None Anticipated to be Retained	None Anticipated to be Retained	Metals/PAHs Barriers -Soil/ Hardscape Cap -Asphalt/Concrete Slab Cap	Metals/PAHs -Land Use/Deed/Zoning Restriction	Single Phase Vapor Extraction & Off-gas treatment -Carbon	-Monitoring	Extraction & Aboveground Treatment -Carbon	-Chemical Oxidation -Enhanced Biodegradation	Vertical Barriers - Hydraulic Control with Pump and Treat	-Use Restriction -Monitoring
Zone 2 – Residential Over Commercial Podium Construction	VOCs - VOC "Hot Spot" Excavation -Aeration -Vapor Extraction & Off-gas treatment	VOCs -Vapor Extraction & Off-gas	Metals/PAHs Barriers -Soil/ Hardscape Cap -Asphalt/Concrete Slab Cap	Metals/PAHs -Land Use/Deed/Zoning Restriction	Single Phase Vapor Extraction & Off-gas treatment -Carbon	-Monitoring	Extraction & Aboveground Treatment -Carbon	-Chemical Oxidation -Enhanced Biodegradation	Vertical Barriers - Hydraulic Control with Pump and Treat	-Use Restriction -Monitoring
Zone 3 – Residential Over Podium Construction	VOCs - VOC "Hot Spot" Excavation -Aeration -Vapor Extraction & Off-gas treatment	VOCs -Vapor Extraction & Off-gas	Metals/PAHs Barriers -Soil/ Hardscape Cap -Asphalt/Concrete Slab Cap	Metals/PAHs -Land Use/Deed/Zoning Restriction	Single Phase Vapor Extraction & Off-gas treatment -Carbon	-Monitoring	Extraction & Aboveground Treatment -Carbon	-Chemical Oxidation -Enhanced Biodegradation	Vertical Barriers - Hydraulic Control with Pump and Treat	-Use Restriction -Monitoring

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Table 6-2. Evaluation of Remedial Alternatives Summary

Criteria	Alternative			
	Alternative 1– No Action	Alternative 2– LUCs and MNA	Alternative 3– Excavation, Onsite Treatment, Relocation and Capping, In Situ Groundwater Treatment and Monitoring	Alternative 4– Excavation, Offsite Disposal, In Situ Groundwater Treatment and Monitoring
Overall Protection of Human Health and the Environment	-	-	+	+
Compliance with ARARs/TBCs	-	-	+	+
Long-Term Effectiveness and Permanence	-	+	+	+
Reduction of Toxicity, Mobility, or Volume	-	-	+	-
Short-Term Effectiveness	-	-	+	+
Implementability	-	+	+	-
Relative Costs	+ (\$0)	+ (\$1.6M)	+ (\$5.4M)	- (\$10.3M)
DTSC Acceptance	-	-	+	-
Community Approval	-	-	?	?
Health and Safety Risks	-	+	+	+
Beneficial Uses of Groundwater at the Site	-	-	+	+
Total Ranking	-10	-2	10	2
<p>Notes: ARARs: Applicable or Relevant and Appropriate Requirements LUC: Land Use Control M: million MNA: Monitored natural attenuation TBCs: To-Be-Considered Criteria</p> <p style="text-align: right;">- negative response + positive response</p>				

Checked by: KC

Approved by: MS

FIGURES

APPENDIX A

SUMMARY OF HISTORICAL SOIL ANALYTICAL DATA

APPENDIX B

DATA GAP INVESTIGATIONS AND TREATABILITY
STUDIES DOCUMENTATION

APPENDIX C

LABORATORY ANALYTICAL REPORTS

(On CD)

APPENDIX D

RISK-BASED SOIL GAS CLEANUP LEVELS, SCHLAGE OU

APPENDIX E

RISK-BASED TARGET REDEVELOPMENT CLEANUP GOALS,
SCHLAGE OU

APPENDIX F

ESTIMATED COST SUMMARY TABLES FOR REMEDIAL ALTERNATIVES

APPENDIX G

ADMINISTRATIVE RECORD LIST

APPENDIX H

CEQA DOCUMENTATION

APPENDIX I

RESPONSIVENESS SUMMARY

