E.O. Lawrence Berkeley National Laboratory
University of California
Environmental Restoration Program

United States Department of Energy

ENVIRONMENTAL RESTORATION PROGRAM

QUARTERLY PROGRESS REPORT
THIRD QUARTER FISCAL YEAR 2006
(April 1 to June 30, 2006)

for the
Lawrence Berkeley National Laboratory
Hazardous Waste Facility Permit

November 2006

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Hazardous Waste Facility Permit

A Joint Effort of
Environment, Health and Safety Division and
Earth Sciences Division
Lawrence Berkeley National Laboratory
Berkeley, CA 94720

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Hazardous Waste Facility Permit

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REGISTERED GEOLOGIST
DAVID A. BASKIN
No. 4438
Exp. 4/07
STATE OF CALIFORNIA

Prepared by:

David A Baskin

Date: Nov. 20, 2006

David Baskin
Professional Geologist

Approved by:

Iraj Javandel

Date: 11/21/2006

Iraj Javandel
Environmental Restoration Program
Lawrence Berkeley National Laboratory

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LIST OF ABBREVIATIONS

AOC	Area of Concern
BC	BC Laboratories
Cal-EPA	California Environmental Protection Agency
CAP	Corrective Action Program
CMS	Corrective Measures Study
CMI	Corrective Measures Implementation
DCA	Dichloroethane
DCE	Dichloroethene
DOE	U.S. Department of Energy
DTSC	Cal-EPA Department of Toxic Substances Control
EBMUD	East Bay Municipal Utility District
EH&S	Environment, Health and Safety Division
EML	LBNL Environmental Measurement Laboratory
EPA	U. S. Environmental Protection Agency
ERP	Environmental Restoration Program
FY	Fiscal Year (October 1 to September 30)
GAC	Granular Activated Carbon
HRC	Hydrogen Release Compounds
HWHF	Hazardous Waste Handling Facility
ICMs	Interim Corrective Measures
LBNL	Lawrence Berkeley National Laboratory
MCL	Maximum Contaminant Level
MCS	Media Cleanup Standard
MDA	Minimum Detectable Activity
mg/kg	milligrams per kilogram
µg/L	micrograms per liter (10^{-6} grams per liter)
NTLF	National Tritium Labeling Facility
PCBs	Polychlorinated Biphenyls
PCE	Tetrachloroethene (Perchloroethene)
pCi/L	picocuries per liter (10^{-12} curies per liter)
QA	Quality Assurance
QC	Quality Control
RCRA	Resource Conservation and Recovery Act
RFA	RCRA Facility Assessment
RFI	RCRA Facility Investigation
RPD	Relative Percent Difference
RPM	Remedial Project Manager
SVE	Soil Vapor Extraction
SWMU	Solid Waste Management Unit
TCE	Trichloroethene
TPH	Total Petroleum Hydrocarbons
UC	University of California
VOCs	Volatile Organic Compounds
Water Board	Regional Water Quality Control Board

EXECUTIVE SUMMARY

The Lawrence Berkeley National Laboratory (LBNL) Hazardous Waste Handling Facility operates under a Resource Conservation and Recovery Act (RCRA), Part B Hazardous Waste Facility Permit. The Permit requires LBNL to investigate and address all releases of hazardous waste at the facility and to issue quarterly progress reports. This Quarterly Progress Report covers LBNL Environmental Restoration Program (ERP) activities conducted as part of the RCRA Corrective Actions Program (CAP), during the third quarter of fiscal year 2006 (FY06) (April 1 through June 30, 2006).

GROUNDWATER MONITORING

Groundwater monitoring data collected during the third quarter of FY06 (reporting period) are consistent with previous results. Concentrations of volatile organic compounds (VOCs) detected in groundwater continued generally to decrease due to the corrective measures that have been implemented. No VOCs were detected in the two perimeter wells that were sampled during the reporting period.

The number of groundwater samples submitted for each type of analysis during the reporting period is shown in the following table:

Number of Groundwater Samples Collected During the Third Quarter of FY 2006

	VOCs	Metals	Tritium	Total
Monitoring Wells Primary Samples	98		1	99
Duplicate Samples	2			2
Trip Blanks	7			7
Rinse Blanks	8		1	9
Temporary Sampling Points	124	2	1	127
Duplicate Samples	1			1
Extraction/Injection Wells	71			71
TOTAL	311	2	3	316

VOCs: Volatile Organic Compounds

The groundwater plumes and other areas of groundwater contamination where halogenated hydrocarbons were detected at concentrations above Maximum Contaminant Levels (MCLs) for drinking water during the reporting period are listed in the following table. Also listed in the table, are the maximum concentrations of the halogenated VOCs that were detected above MCLs.

Maximum Concentrations (µg/L) of Halogenated Hydrocarbons Detected Above MCLs During the Third Quarter of FY06

Area	Groundwater Unit	1,1-DCA	1,2-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,1,2,2-PCA	PCE	TCE	vinyl chloride	carbon tet
	Drinking Water MCL	5	0.5	6	6	10	1	5	5	0.5	0.5
Bevalac	Building 71 Plume Building 71B Lobe				268			61	35	16	
	Building 51/64 Plume	7,040	45	1,170	242	47	1.3	212	724	180	
	Building 51L Plume	20			177			10	349	11	
	SB51A-01-8B[a]										
Old Town	Old Town Plume										
	Building 7 Lobe			57	310			31,300	22,200	5	1,280
	Building 25A Lobe			19				18	84		
	Building 52 Lobe						3.3	16	8.1		3.6
Support	Building 69A Area				110					41	
	Building 76 Plume[a]										
	Building 75A Area				65				9.4		
	Building 77 Area[a]										

DCA: dichloroethane PCE: tetrachloroethene carbon tet: carbon tetrachloride
DCE: dichloroethene TCE: trichloroethene PCA: tetrachloroethane

a) Wells in this area were not sampled during the reporting period

No aromatic hydrocarbons were detected in groundwater at concentrations above the MCLs during the reporting period.

Concentrations of tritium detected in groundwater have generally declined since closure of the National Tritium Labeling Facility (NTLF) in December 2001, and continue to show declining trends in almost all wells monitoring the Building 75 Tritium Plume. The concentrations of tritium have been below the MCL (<20,000 pCi/L) in all groundwater samples collected since the second quarter of FY05.

Groundwater samples were collected from two temporary groundwater sampling points to obtain water quality data during injection of Hydrogen Release Compounds® (HRC®) at Building 71B. HRC pilot testing previously resulted in temporary increases in the concentrations of several metals in the groundwater, apparently a result of the lowered pH. Elevated concentrations of metals were not detected in either sample collected during the reporting period.

SURFACE WATER SAMPLING

Surface water samples were collected from upstream and downstream locations on Chicken Creek and analyzed for tritium. No tritium was detected (<300 pCi/L).

MEETINGS

A Remedial Project Managers (RPM) meeting was held on May 11, 2006.

DOCUMENTS

LBNL submitted the following documents to the regulatory agencies during the reporting period:

- Workplan for Soil Excavation, Upgradient Core Area, Building 7 Lobe of the Old Town Groundwater Solvent Plume.
- Quarterly Progress Report for the first Quarter of FY06.
- Permit Application to install three HRC injection wells southwest of Building 64.
- Request that in situ chemical oxidation be eliminated as a component of the approved corrective measure for the Building 71B groundwater plume.

Also, in response to a request from the City of Berkeley, LBNL submitted a letter detailing its role; intent, cleanup goals, timetable, and budget for the environmental cleanup program.

QUALITY ASSURANCE / QUALITY CONTROL (QA/QC)

No QA/QC issues were identified that would result in a failure to meet data quality objectives.

CORRECTIVE MEASURES FOR SOIL

Former Building 7 Sump- Old Town Groundwater Solvent Plume Source Area

The approved corrective measure for the Building 7 lobe of the Old Town Groundwater Solvent Plume source area is excavation and offsite disposal of contaminated soil. Excavation of contaminated soil was started on April 15, 2006 by drilling shafts using 2- to 4- foot diameter augers. A groundwater extraction well (EW7-06-1) was constructed in the first, and deepest, shaft drilled. The remaining auger holes were backfilled with approximately 8 to 12 inches of crushed rock covered with 2 feet of bentonite, and then backfilled to the surface with lean concrete. The depths of the holes and the placement of the crushed rock are designed to direct groundwater flow in the source area toward the extraction well.

Building 51 Motor Generator Room Basement Filter Sump

Polychlorinated biphenyl (PCB)-contaminated concrete and soil beneath the Building 51 Motor Generator Room Basement are considered to be the likely sources of PCB-contaminated groundwater detected beneath the basement. To help expedite the long-term goal of restoring groundwater at LBNL to MCLs, the PCB-contaminated soil and concrete is being removed. To determine the extent of contamination, 28 concrete samples and 5 soil samples were collected during the reporting period and analyzed for PCBS. PCBs were detected at a maximum concentration of 34,000 mg/kg in the concrete and 1.23 mg/kg in the soil. Contaminated soil was excavated to a depth of approximately 5 feet from the area around the sump. Additional sampling and removal of PCB-contaminated material is planned for the next reporting period.

CORRECTIVE MEASURES FOR GROUNDWATER

There have been significant reductions in concentrations of halogenated VOCs in the groundwater at LBNL. These reductions are primarily the result of the corrective measures that have been implemented. The status of the ongoing corrective measures for groundwater is discussed below.

Old Town Groundwater Solvent Plume (Building 7 lobe)

- Continued operation of the in situ soil flushing system (Building 7 Groundwater Collection Trench) in the Building 7 lobe source area downgradient from the former Building 7 sump location.
- Continued operation of the in situ soil flushing system in the Building 7 lobe core area downgradient from the Building 7 Groundwater Collection Trench.
- Continued operation of the Building 58 West and Building 58 Southeast Groundwater Collection Trenches to control plume migration.
- Continued dual-phase (groundwater and soil vapor) extraction on the Building 53/58 slope.

Old Town Groundwater Solvent Plume (Building 52 Lobe)

- Continued in situ soil flushing in the Building 52 lobe source area.
- Continued extraction and treatment of groundwater from the Building 46 subdrain.

Old Town Groundwater Solvent Plume (Building 25A Lobe)

- Continued in situ soil flushing in the Building 25A lobe source area.
- Construction of the groundwater treatment system for in situ soil flushing south of Building 25 was completed. Groundwater is extracted from MW25-95-5, treated to non-detectable levels of VOCs, and then injected into MW25-98-10.

Building 51/64 Groundwater Solvent Plume

- Continued in situ soil flushing in the Building 51/64 Groundwater Solvent Plume source area.
- Installed three new wells for the injection of HRC.

Building 71B Lobe of the Building 71 Groundwater Solvent Plume Area

- Continued in situ soil flushing/HRC injection in the Building 71B source area.

Building 69A Area of Groundwater Contamination

- Continued HRC injection in the Building 69A Area of Groundwater Contamination.
- Installed two new wells for the injection of HRC.

Building 51L Groundwater Solvent Plume

- Continued groundwater extraction and treatment in the Building 51L Groundwater Solvent Plume source area.

Contaminated Drain Lines

- Continued capture and treatment of contaminated Building 51 area hydrauger effluent. Concentrations of VOCs in all Building 51 area hydraugers have declined to levels below MCLs.
- Continued extraction and treatment of contaminated water from the Building 51 drainage system.
- Continued to extract and treat water from an electrical utility manhole (EMH-133).
- Continued extraction and treatment of water from the concrete sump installed inside Building 51A.
- Continued extraction and treatment of water from the concrete sump (SB58-98-4) that was installed adjacent to an abandoned corrugated metal pipe subdrain west of Building 58.

In addition to the corrective measures noted above, operation of the Building 6 dual-phase (groundwater and soil vapor) extraction system continued.

GROUNDWATER TREATMENT SYSTEMS

Extracted groundwater and contaminated effluent from drain lines and hydraugers are treated to non-detectable levels of VOCs at granular activated carbon (GAC) treatment systems. The treated water is injected into the subsurface for soil flushing purposes, or if not needed for flushing, discharged to the sanitary sewer. During the reporting period 4,285,051 gallons of water were treated, with the total volume treated to date more than 64,000,000 gallons.

SECTION 1

INTRODUCTION

1.1 PURPOSE AND SCOPE

The Lawrence Berkeley National Laboratory (LBNL) Hazardous Waste Handling Facility (HWHF) operates under a Resource Conservation and Recovery Act (RCRA), Part B Hazardous Waste Facility Permit issued by the California Environmental Protection Agency (CAL-EPA) Department of Toxic Substances Control (DTSC). The Permit was issued on May 4, 1993, and requires LBNL to investigate and address all releases of hazardous waste that may have occurred at the facility and issue quarterly progress reports. In accordance with permit requirements, this Quarterly Progress Report covers the following subjects:

a. A description of work completed (Executive Summary)
b. Summaries of all findings, including summaries of laboratory data (Section 2)
c. Summaries of all problems or potential problems encountered during the reporting period and actions taken to rectify problems (Section 3)
d. Projected work for the next reporting period (Section 5).

This report documents RCRA Corrective Action Program (CAP) activities conducted by the LBNL Environmental Restoration Program (ERP) during the third quarter of fiscal year (FY) 2006 (FY06), which covers the period from April 1 through June 30, 2006. Historical trends in contaminant concentrations in groundwater are discussed in the "Quarterly Progress Report and Annual Status Summary", which is submitted to the DTSC annually at the end of February of each year. The annual summary report includes tables of the historical groundwater data for volatile organic compounds (VOCs) and four quarters of groundwater data for other analytes. It also provides a discussion of ERP procedures, regulatory guidance documents, laboratory procedures, and the groundwater monitoring schedule. The most recent annual status summary report is the fourth quarter FY05 report (LBNL, 2006a).

1.2 BACKGROUND

The investigation, characterization, and cleanup of contamination at LBNL is being conducted as part of the RCRA Corrective Action Program (CAP).

The principal components of the CAP are:

1) RCRA Facility Assessment (RFA)
2) RCRA Facility Investigation (RFI)
3) Interim Corrective Measures (ICMs)
4) Corrective Measures Study (CMS)
5) Corrective Measures Implementation (CMI).

LBNL is currently in the final phase of the CAP, Corrective Measures Implementation (CMI). The purpose of the CMI is to design, construct, operate, maintain, and monitor the corrective measures (cleanup activities) specified by LBNL in the Corrective Measures Implementation (CMI) Workplan (LBNL, 2005a) and approved by the DTSC. Implementation of these activities is needed to reduce or eliminate the potentially adverse effects to human health or the environment posed by the historic releases of chemicals to soil and groundwater at LBNL.

1.3 SITE DESCRIPTION

LBNL is a research facility managed by the University of California (UC) for the United States Department of Energy (DOE). From an initial emphasis on nuclear physics research in the 1940s, LBNL has diversified to include materials sciences, chemistry, earth sciences, biosciences, and energy conservation research. The facility is located in the Berkeley/Oakland Hills in Alameda County, California (Figure 1). The western three-quarters of LBNL are in Berkeley and the eastern quarter is in Oakland. A map of the site showing the surface topography is included as Figure 2.

1.4 DOCUMENTATION OF INVESTIGATION RESULTS

Results of environmental investigations that have been conducted at LBNL are documented in the following reports:

- Quarterly summaries of RCRA CAP activities conducted since January 1993 have been presented in the LBNL ERP Quarterly Progress Reports (LBNL, 1993-2006).
- Results of the initial environmental investigations at LBNL are described in the RCRA Facility Assessment (LBNL, 1992a) and the RCRA Facility Investigation Work Plan (LBNL, 1992b).
- Results of environmental investigations conducted from October 1992 through June 1994 are documented in the RCRA Facility Investigation Phase I Progress Report (LBNL, 1994).
- Results of environmental investigations conducted from July 1, 1994 to June 30, 1995 are documented in the RCRA Facility Investigation Phase II Progress Report (LBNL, 1995).
- Results of environmental investigations conducted from June 30, 1995 through September 22, 2000 are documented in the RCRA Facility Investigation Report (LBNL, 2000).

1.5 PROJECT ORGANIZATION

LBNL's various divisions manage and operate the laboratory facilities on site. The DOE provides funding and oversight of these operations. Investigations of areas that contain potential environmental contamination, including soil, surface water, and groundwater, are conducted at LBNL under the ERP, which is part of a nationwide effort by the DOE to identify and clean up contaminated areas at its facilities. The LBNL ERP is part of the Environmental Services Group of the LBNL Environment, Health and Safety (EH&S) Division.

For reporting purposes, the RCRA Facility Assessment (LBNL, 1992a) subdivided LBNL into 15 Areas. Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) identified in the RFA were given designations based on their locations in one of the 15 Areas. Subsequently, during the RFI, the 15 Areas were grouped into the following four areas, based on

the locations of groundwater plumes, the direction of groundwater flow, and potential contaminant migration pathways.

- Bevalac Area (RFA Areas 1, 9 and 15)
- Old Town Area (RFA Areas 2, 7, 10, and 14)
- Support Services Area (RFA Areas 3, 4, and 5)
- Outlying Areas (RFA Areas 6, 8, 11, 12, and 13).

Figures and tables presented in this report are organized based on these four areas. The locations of the four areas are shown on Figure 3.

SECTION 2

ENVIRONMENTAL ACTIVITIES CONDUCTED DURING THE REPORTING PERIOD (April through June 2006)

2.1 ANALYTICAL METHODS

Environmental samples collected during the reporting period were analyzed by the LBNL Environmental Measurement Laboratory (EML), Eberline, and BC Laboratories (BC), as indicated in the following table:

Analytical Laboratory

Analytical Method	Groundwater	Surface Water	Soil
VOCs (EPA 8260)	EML/BC		
PCBs (EPA 8082)	BC		BC
Metals (EPA 6000 & 7000 series)	BC		
Tritium (EPA 906)	Eberline	Eberline	

Notes: VOCs: Volatile organic compounds
PCBs: Polychlorinated biphenyls

The complete list of United States Environmental Protection Agency (EPA) Method 8260 analytes and quantitation limits (assuming no sample dilution) for each laboratory are shown in Table 1. Quantitation limits for other analyses are included in the tables of results.

2.2 GROUNDWATER MONITORING SUMMARY

Groundwater samples are collected from groundwater monitoring wells and analyzed for VOCs, metals, and tritium in accordance with the schedule approved by the Regional Water Quality Control Board (Water Board) (LBNL, 2005b). Selected samples are also analyzed for polychlorinated biphenyls (PCBs) and total petroleum hydrocarbons (TPH). Groundwater samples are also collected from temporary groundwater sampling points, slope stability wells, groundwater extraction wells, and hydraugers. The locations of slope stability wells are shown on Figure 4. The locations of groundwater monitoring wells, temporary groundwater sampling

points, extraction wells, and hydraugers are shown on Figures 5 and 6a through 6i. Slope stability wells and hydraugers were not installed for groundwater monitoring purposes, and therefore the results from these installations are not considered valid for quantitative determination of groundwater concentrations.

The sampling locations and analytical methods for groundwater sampling conducted during the current period are presented in Table 2. Water level data are presented in Table 3. Table 4 provides groundwater monitoring well construction details. The table numbers corresponding to the tables containing the groundwater analytical results for the different types of sampling locations are noted below:

Table Numbers for Groundwater Analytical Result

Chemical	Area	Groundwater Monitoring Wells	Temporary Groundwater Sampling Points	Groundwater Extraction or Injection Wells	Other Locations	Hydraugers
Volatile Organic Compounds (VOCs)	Bevalac	5-1	5-2 & 9	5-3	—	8
	Old Town	6-1	6-2	6-3	6-4	8
	Support Services	7-1	7-2	7-3	—	—
	Outlying	—	—	—	—	—
Tritium	Site Wide	11	11	—		—
Metals	Bevalac	—	12	—	—	—

Tables listing VOC concentrations are subdivided into halogenated non-aromatic compounds, which are primarily derived from solvents, and nonhalogenated or aromatic compounds, which are primarily derived from petroleum products. The locations where concentrations of VOCs exceeded Maximum Contaminant Levels (MCLs) for drinking water during the reporting period and the specific VOCs that exceeded MCLs are listed in Table 10. The areas of groundwater contamination where MCLs are exceeded are shown on Figure 7. Groundwater at LBNL is not used for domestic, irrigation, or industrial purposes; drinking water is supplied by the East Bay Municipal Utility District (EBMUD).

During the RFI, ten groundwater contamination plumes were identified at LBNL. In addition to the plumes, five localized areas of solvent-contaminated groundwater were identified in the Support Services Area of LBNL. Seven of the ten plumes contain halogenated non-

aromatic VOCs, two contain diesel-range petroleum hydrocarbons, and one contains tritium. Two of the plumes, the Old Town Groundwater Solvent Plume and the Building 71 Groundwater Solvent Plume, have been subdivided into multiple lobes to reflect the commingling of contaminated groundwater derived from different sources. The following table lists figure numbers for contaminant concentration maps and groundwater elevation maps for eight of the plumes, the five areas of solvent-contaminated groundwater, and monitoring wells in the Outlying Areas and along the site perimeter. The remaining two plumes (Building 71 Freon plume and Building 37 solvent plume) are not included in the table because contaminant concentrations previously declined to levels substantially below MCLs. Detailed discussions of the characteristics of each of these plumes, plume lobes, and areas of groundwater contamination are provided in the RFI Report (LBNL, 2000) and in the most recent annual summary report (LBNL, 2006a).

Groundwater Monitoring - Figure Index

Plume or Area of Groundwater Contamination	Figure Number	
	Concentration Map	Groundwater Level Elevation Map
Halogenated Non-Aromatic VOCs		
Bevalac Area		9
Building 71 Solvent Plume (AOC 1-9)		
Building 71 Lobe	8a	
Building 71B Lobe	8a	
Building 51/64 Solvent Plume (AOC 9-13)	8a & 8b	
Building 51L Solvent Plume	8a & 8c	
Old Town Area		12
Old Town Solvent Plume (AOCs 2-4 and 10-5)		
Building 7 Lobe	10 & 11	
Building 52 Lobe	10	
Building 25A Lobe	10	
Support Services Area		14
Building 69A, 75, 75A, 75B, and 77 Areas of Groundwater Contamination	13	
Building 76 Solvent Plume (AOC 4-5)	13	
Outlying Areas	15	
Petroleum Hydrocarbons		
Building 7 Diesel Plume (AOC 2-1)		12
Building 74 Diesel Plume (AOC 11-1)		
Tritium		
Building 75 Tritium Plume (SWMU 3-7).	16	14
Building 71 Area.		9

Groundwater monitoring results for the reporting period were consistent with previously reported results. A summary of the results is provided below.

Halogenated Volatile Organic Compounds

Monitoring wells (MWP-1, MWP-2, MWP-4 through MWP-8, and CD-92-28) were constructed to monitor the potential offsite migration of contaminated groundwater. Several other wells also monitor the quality of groundwater downgradient from the developed areas of the site including MW88-93-11A, MW62-92-26, MW62-92-27, MW74-94-7, MW74-94-8; MW61-92-12; MW25-95-27, MW31-98-17, and OW3-225. These 17 monitoring wells have been designated as site perimeter wells (Water Board, 1999) and their locations are shown on Figure 15.

No VOCs were detected in MWP-1 or MWP-7 during the reporting period. None of the other perimeter or offsite wells was sampled. Trichloroethene (TCE) and tetrachloroethene (PCE), which were both detected in MWP-7 at a concentration of 1.6 µg/L, were the only VOCs detected in the perimeter or offsite wells during the previous reporting period. MWP-7 monitors the Building 37 Groundwater Solvent Plume. Concentrations of halogenated hydrocarbons detected in MWP-7 have been below MCLs since May 2000.

VOCs detected at concentrations above MCLs for drinking water during the reporting period are summarized in the following table.

Maximum Concentrations (µg/L) of Halogenated Hydrocarbons Detected Above MCLs During the Third Quarter of FY06

Area	Groundwater Unit	1,1-DCA	1,2-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,1,2,2-PCA	PCE	TCE	vinyl chloride	carbon tet
	Drinking Water MCL	5	0.5	6	6	10	1	5	5	0.5	0.5
Bevalac	Building 71 Plume Building 71B Lobe				268			61	35	16	
	Building 51/64 Plume	7,040	45	1,170	242	47	1.3	212	724	180	
	Building 51L Plume	20			177			10	349	11	
	SB51A-01-8B[a]										
Old Town	Old Town Plume										
	Building 7 Lobe			57	310			31,300	22,200	5	1,280
	Building 25A Lobe			19				18	84		
	Building 52 Lobe						3.3	16	8.1		3.6
Support	Building 69A Area				110					41	
	Building 76 Plume[a]										
	Building 75A Area				65				9.4		
	Building 77 Area[a]										

DCA: dichloroethane PCE: tetrachloroethene carbon tet: carbon tetrachloride
DCE: dichloroethene TCE: trichloroethene PCA: tetrachloroethane

a) Wells in this area were not sampled during the reporting period

Aromatic or Non-Halogenated Hydrocarbons

Wells in which aromatic or non-halogenated hydrocarbons were detected during the reporting period are listed in the following table. Concentrations of aromatic or non-halogenated hydrocarbons detected were all below MCLs. There is no MCL for 1,4-dioxane or p-isopropyltoluene. The California Department of Health Services Drinking Water Notification

Level for 1,4-dioxane is 3 µg/L. The Notification Level is a health-based advisory level used to provide information to public water systems about certain non-regulated chemicals in drinking water that lack MCLs, and do not apply to LBNL.

Aromatic or Non-Halogenated Hydrocarbons Detected in Groundwater During the Third Quarter of FY06

Chemical	MCL (µg/L)	Well Number	Maximum Concentration (µg/L)
toluene	150	SB64-02-1 SB64-02-2	3.1 2.2
ethylbenzene	300	EW7-06-1	3.4
xylenes	1750	EW7-06-1	9.1
p-isopropyltoluene	not established	SB69A-99-1	1.1
1,4-dioxane	not established	SB64-02-1A	11,000

Tritium

Groundwater samples were collected from one groundwater monitoring well (MW31-98-17) and one temporary groundwater sampling point (SB75-02-1) monitoring the Building 75 Tritium Plume and analyzed for tritium (Table 11). The sampling locations and concentrations of tritium detected are shown on Figure 16.

Concentrations of tritium have been declining since closure of the National Tritium Labeling Facility (NTLF) in December 2001, or show more recent declining trends in almost all wells monitoring the plume. Temporary sampling point SB75-02-1, which is located in the source area of the plume, is an exception to the decreasing trend. The increasing trend in SB75-02-1 (963 pCi/L during the reporting period) may be the result of groundwater with higher concentrations of tritium being drawn toward the well when the well is purged prior to sampling. Tritium concentrations have been below the MCL (<20,000 pCi/L) in all groundwater samples collected since the second quarter of FY05.

Metals

Groundwater samples were collected during the reporting period from two temporary groundwater sampling points monitoring the source area of the Building 71B lobe of the

Building 71 Groundwater Solvent Plume. The purpose of the sampling was to obtain water quality data during injection of Hydrogen Release Compounds® (HRC®). HRC injection is a component of the corrective measure approved for the plume. As reported previously, HRC pilot testing resulted in temporary increases in the concentrations of several metals in the groundwater, apparently a result of the lowered pH. The lowered pH caused naturally occurring metals in the soil to dissolve into the groundwater. However, elevated concentrations of metals were not detected in either sample collected during the reporting period (Table 12).

2.3 SURFACE WATER SAMPLING

Surface water samples were collected from upstream and downstream locations on Chicken Creek and analyzed for tritium. No tritium was detected (<300 pCi/L) (Table 13).

2.4 DOCUMENTS AND MEETINGS

Documents

LBNL submitted the following documents to the regulatory agencies during the reporting period:

- Workplan for Soil Excavation Upgradient Core Area Building 7 Lobe of the Old Town Groundwater Solvent Plume to the DTSC on April 5, 2006 (LBNL, 2006d).
- Quarterly Progress Report for the first Quarter of FY06 to the DTSC on May 31, 2006, in compliance with LBNL's RCRA Part B Permit (LBNL, 2006e).
- LBNL submitted a Permit Application to install three HRC injection wells southwest of Building 64 to the City of Berkley Toxics Program on May 23, 2006.

Also, in response to a request from the Berkeley City Manager to clarify LBNL's process for site restoration, on April 25, 2006, LBNL provided a letter detailing its role; intent, cleanup goals, timetable, and budget for the environmental clean up program (LBNL, 2006b). The DOE also submitted a letter to the City of Berkeley on May 10, 2006 to address the city's concerns.

At the May 11, 2006 Remedial Project Managers (RPM) meeting, LBNL submitted a letter with backup documentation to DTSC proposing that in situ chemical oxidation be eliminated as a component of the approved corrective measure for the Building 71B groundwater

plume. The rationale for the request was that in-situ soil flushing together with the injection of HRC has been effective in expediting the degradation of the groundwater contaminants in the Building 71B area (LBNL, 2006c).

Meetings

The following meeting was held with the regulatory agencies during the reporting period:

- A Remedial Project Managers (RPM) meeting was held at the DTSC offices on May 11, 2006. Representatives of the DTSC, City of Berkeley, LBNL, and DOE attended.

SECTION 3

SUMMARY OF PROBLEMS ENCOUNTERED

3.1 DEFINITIONS

In accordance with the LBNL RCRA Part B Hazardous Waste Facility Permit, Quarterly Progress Reports are required to address problems encountered and actions taken to rectify problems. Problems are defined herein as follows:

1. Quality Assurance and Quality Control (QA/QC) problems that would result in failure to meet data quality objectives.
2. Findings that indicate the presence of contamination that could impact human health or the environment, and for which activities are not specified in existing workplans to either further evaluate or remediate the contamination.

3.2 QUALITY ASSURANCE / QUALITY CONTROL

No QA/QC issues were identified that would result in a failure to meet data quality objectives.

Field Quality Control

Eight field (equipment/rinse) blanks and seven trip blanks were collected and analyzed for VOCs during the reporting period (Table 17). In addition, one field (equipment/rinse) blank was analyzed for tritium (Table 11). No analytes were detected in the blanks.

Three duplicate groundwater samples were collected and analyzed for VOCs during the reporting period. The duplicate samples were analyzed by BC Laboratories and the LBNL EML. Results of the duplicate samples were consistent.

Laboratory Quality Control

Laboratory QA/QC problems identified in the laboratory data packages are noted in the following table. The affected samples were noted (flagged) in the database. The data validation review indicated that the identified laboratory QA/QC problems were not sufficient to assign an "R" qualifier (i.e., the data are not usable for any project purpose) to any of the data.

Analytical Laboratory Deficiencies

Laboratory	Chain of Custody	Deficiency
BC	06-5-4 06-5-20	The surrogate recovery for decachlorobiphenyl was not within control limits.
BC	06-5-8	Continuing Calibration Verification (CCV) recovery was not within established control limits for acrolein, acrylonitrile, vinyl acetate, and 2-chloroethyl vinyl ether.
BC	06-5-11	CCV recovery was not within established control limits for vinyl acetate.
BC	06-5-13 06-5-15	Matrix spike precision was not within the control limits for PCB-1260.
BC	06-5-19	CCV recovery was not within established control limits for decachlorobiphenyl.

SECTION 4

STATUS OF CORRECTIVE MEASURES

Activities associated with corrective measures implemented for soil during the reporting period, the status of ongoing corrective measures for groundwater, and other significant findings related to corrective measures are discussed in this section.

4.1 CORRECTIVE MEASURES FOR SOIL

Former Building 7 Sump- Old Town Groundwater Solvent Plume Source Area

The approved corrective measure for the Building 7 lobe of the Old Town Groundwater Plume source area is excavation and offsite disposal of contaminated soil. Excavation of contaminated soil was started on April 15, 2006 using large diameter augers, with the first shaft drilled to a depth of 52.5 feet using a 4-foot diameter auger. A 5-inch diameter PVC casing was installed in this shaft, and then the annulus was backfilled with 4.5 feet of crushed rock, 3 feet of bentonite, and lean concrete to the surface. Additional contaminated soil was excavated from the source area during the reporting period by drilling nine more 4-foot diameter shafts, two 2-foot diameter shafts, and one 3-foot diameter shaft to depths ranging between approximately 47 and 50 feet. These shafts were backfilled with approximately 8 to 12 inches of crushed rock covered with 2 feet of bentonite, and then backfilled to the surface with lean concrete. The depths of the shafts and the placement of the crushed rock are designed to direct groundwater flow in the source area toward the extraction well constructed in the first shaft (EW7-06-1). A groundwater sample collected from EW7-06-1 in April 2006 contained 3,263 µg/L of total VOCs. The excavated soil is being disposed of offsite at a Class II landfill.

Prior to their destruction during shaft drilling, soil water samples were collected in the source area from multi-level vadose zone monitoring well VZM-OT2 and heater test instrument wells HI7-00-1 and HI7-00-2 and analyzed for VOCs. Total VOCs were detected at maximum

concentrations of 7,747 µg/L in OT2, 35,730 µg/L in HI7-00-1, and 81,497 µg/L in HI7-00-2 (Table 14).

Building 51 Motor Generator Room Basement Filter Sump

PCB contaminated concrete and soil beneath the Building 51 Motor Generator Room Basement is the likely source of PCB-contaminated groundwater detected beneath the basement. To help expedite the long-term goal of restoring groundwater at LBNL to Maximum Contaminant Levels (MCLs) for drinking water, the PCB contaminated soil and concrete is being removed.

During the second quarter of FY06 an approximately 30 square-foot section of the concrete floor was removed in the Building 51 Motor Generator Room Basement adjacent to the filter sump, to allow the excavation of PCB-contaminated soil. In April 2006, three samples (SS51 Concrete Top Half, Bottom Half, and Full Depth) were collected from different depths in the removed concrete and analyzed for PCBs. PCBs (34,000 mg/kg maximum) were detected in all three samples (Table 15). In May 2006, in situ concrete samples were collected on a 2-foot by 2-foot grid from 25 locations (CS-51-06-1 through CS-51-06-25) near the sump to delineate the extent of PCB contamination in the concrete. PCBs (4,700 mg/kg Aroclor 1242 and 690 mg/kg Aroclor 1254 maximum) were detected in all of the samples (Table 15). The sampling locations and concentrations of PCBs detected are shown on Figure 17. Also in May 2006, soil was excavated to a depth of 5 feet from the area of removed concrete and five soil samples ((SS-B51 Filter Sump Exc-F1 through –F5) were collected from the floor of the excavation. PCBs (Aroclor 1254 and/or Aroclor 1242) were detected in two of the samples at a maximum total concentration of 1.23 mg/kg (Table 16). The sampling locations and concentrations of PCBs detected in the soil are shown on Figure 17.

4.2 CORRECTIVE MEASURES FOR GROUNDWATER

The extent of groundwater contamination during the current reporting period and in 1999 is compared on Figure 18, Figure 19, and Figure 20 for total halogenated VOC concentrations greater than 10 µg/L, 100 µg/L, and 1,000 µg/L, respectively. As can be seen on the figures, there have been significant reductions in concentrations of halogenated VOCs in the

groundwater since 1999. These reductions are the result of Interim Corrective Measures (ICM) that were implemented during the RFI and the corrective measures that have been implemented for the site.

Old Town Groundwater Solvent Plume (Building 7 lobe)

- Continued operation of the in situ soil flushing system (Building 7 Groundwater Collection Trench) in the Building 7 lobe source area downgradient from the former Building 7 sump location.
- Continued operation of the in situ soil flushing system in the Building 7 lobe core area downgradient from the Building 7 Groundwater Collection Trench.
- Continued operation of the Building 58 West and Building 58 Southeast Groundwater Collection Trenches to control plume migration.
- Continued dual-phase (groundwater and soil vapor) extraction on the Building 53/58 slope.

Old Town Groundwater Solvent Plume (Building 52 Lobe)

- Continued in situ soil flushing in the Building 52 lobe source area.
- Continued extraction and treatment of groundwater from the Building 46 subdrain.

Old Town Groundwater Solvent Plume (Building 25A Lobe)

- Continued in situ soil flushing in the Building 25A lobe source area.

Construction of the groundwater treatment system for in situ soil flushing south of Building 25 was completed. In situ soil flushing was started on April 28, 2006. Groundwater is extracted from MW25-95-5, treated to non-detectable levels of VOCs, and then injected into MW25-98-10.

Building 51/64 Groundwater Solvent Plume

In situ soil flushing in the Building 51/64 Groundwater Solvent Plume source area continued. Except for the two shallowest levels (SB64-02-1A at 11 feet and SB64-02-1B at 15.5 feet) of six-port well SB64-02-1 inside Building 64 (Table 5-2), total halogenated hydrocarbon

concentrations detected in the Building 51/64 plume source area have decreased to less than 1,000 µg/L. Each port of SB64-02-1 monitors an approximately 2- to 3-foot interval.

Three new wells (IW64-06-1, IW64-06-2, and IW64-06-3) were installed for the injection of HRC. The locations of the injection wells are shown on Figure 8b. Well construction details are provided in the following table.

Construction Details for HRC Injection Wells

	Boring Depth (feet bgs)	Boring Diameter (inches)	Casing Diameter (inches)	Screen Interval (feet bgs)	Slot Size (inches)	Drain Rock Interval (feet bgs)	Bentonite Chips (feet bgs)	Grout (feet bgs)
IW64-06-1	31	13	5	11-21	0.020	9-31	7-9	1.5-7
				21-31	3/8 perforated			
IW64-06-2	25.5	13	5	10-20	0.020	9-25.5	6-9	1.5-6
				20-25	3/8 perforated			
IW64-06-3	31	13	5	11-31	3/8 perforated	9-31	7-9	1.5-7

Building 71B Lobe of the Building 71 Groundwater Solvent Plume Area

- Continued in situ soil flushing/ HRC injection in the Building 71B source area.

Building 69A Area of Groundwater Contamination

HRC injection in the Building 69A Area of Groundwater Contamination source area continued. Two new wells (IW69A-06-1 and IW69A-06-2) were installed for the injection of HRC. The locations of the two injection wells are shown on Figure 13. Well construction details are provided in the following table.

Construction Details for HRC Injection Wells

	Boring Depth (feet bgs)	Boring Diameter (inches)	Casing Diameter (inches)	Screen Interval (feet bgs)	Perforation Size (inches)	Drain Rock (feet bgs)	Bentonite Chips (feet bgs)	Grout (feet bgs)
IW69A-06-1	35	13	5	24-34	3/8	22 to 34	1.5 to 12 19-22	12-19
IW69A-06-2	30	13	5	19-29	3/8	17 to 29	1.5 to 10 14 to 17	10 to 14

Building 51L Groundwater Solvent Plume

- Continued groundwater extraction and treatment in the Building 51L Groundwater Solvent Plume source area.

Contaminated Drain Lines

- Continued capture and treatment of contaminated Building 51 area hydrauger effluent. Concentrations of VOCs in all Building 51 area hydraugers have declined to levels below MCLs.
- Continued extraction and treatment of contaminated water from the Building 51 drainage system.
- Continued to extract and treat water from an electrical utility manhole (EMH-133).
- Continued extraction and treatment of water from the concrete sump installed inside Building 51A.
- Continued extraction and treatment of water from the concrete sump (SB58-98-4) that was installed to intercept the flow of contaminated water from an abandoned corrugated metal pipe subdrain west of Building 58.

In addition to the corrective measures noted above, the following activities continued during the reporting period:

- A new vacuum pump was installed at the Building 6 dual phase treatment system and on May 11, 2006, soil vapor extraction (SVE) resumed from MW6-95-14. The groundwater extraction rate from MW6-95-14 was increased to enhance the effectiveness of SVE by further lowering of the water table.

4.3 GROUNDWATER TREATMENT SYSTEMS

Extracted groundwater and contaminated effluent from drain lines and hydraugers is treated to non-detectable levels of VOCs at granular activated carbon (GAC) treatment systems. The treated water is injected into the subsurface for soil flushing purposes or discharged to the sanitary sewer in accordance with the provisions of LBNL's Wastewater Discharge permit issued by EBMUD. The following table summarizes the volumes of water treated at each GAC treatment system and the disposition of the treated water.

The Building 37 Treatment System was installed to treat contaminated groundwater extracted from MWP-7 and MW37-92-6. Since the concentrations of VOCs detected in

groundwater samples collected from both of these wells had been below MCLs since February 2000, the system was dismantled in June 2006.

Summary of Treatment Systems

Treatment System	Volume Treated Third Quarter FY06 (gallons)	Total Volume Treated (gallons)	Discharge/Reuse
Building 6 Bioventing	178,045	3,089,663	Soil flushing
Building 7 Trench	702,907	10,787,729	Recirculated or sanitary sewer
Building 25	103,383	103,383	Recirculated
Building 25A	197,669	1,229,028	Recirculated
Building 37*	33,899	1,818,711	
Building 46	885,406	17,905,440	Recirculated or sanitary sewer
Building 51 Firetrail	686,949	9,749,731	Sanitary sewer or soil flushing
Building 51 Hydraugers**	0	9,482,665	
Building 51 MGR Basement	278,449	4,062,204	Sanitary sewer
Building 51L	81,960	1,111,266	Sanitary sewer
Building 53	695,449	3,562,408	Recirculated
Building 64	410,533	1,401,397	Recirculated
Building 71B	30,402	262,328	Recirculated
Total Volume Treated	4,285,051	64,565,953	

* System was dismantled in June 2006.
**System no longer operational. Hydrauger effluent is now treated at Building 51 Firetrail Treatment System.

SECTION 5

UPCOMING REPORTING PERIOD ACTIVITIES (FOURTH QUARTER FY 2006)

This section describes the activities that were completed during the fourth quarter of FY06, the upcoming reporting period. Results of these activities will be reported in the next Quarterly Progress Report, scheduled for submittal to DTSC in February 2007.

5.1 GROUNDWATER MONITORING

The number of groundwater samples submitted for each type of analysis during the fourth quarter of FY06 is shown in the following table:

Number of Groundwater Samples Collected During the Fourth Quarter of FY 2006

	VOCs	TPH				PCBs	Metals	Tritium	Total
		D	G	K	FI				
Monitoring Wells Primary Samples	160	7	1	2	3	6	11	8	198
Duplicate Samples	3							1	4
Trip Blanks	14								14
Rinse Blanks	11	1	2					2	16
Slope Stability Wells								4	4
Temporary Sampling Points	136						1	15	152
Extraction Wells	69								69

VOCs: Volatile Organic Compounds
TPH-D: Total Petroleum Hydrocarbons in the diesel range
TPH-G: Total Petroleum Hydrocarbons in the gasoline range
TPH-K: Total Petroleum Hydrocarbons in the kerosene range
TPH-FI: Total Petroleum Hydrocarbons-fuel identification
PCBs: Polychlorinated Biphenyls

After receiving a permit from the City of Berkeley, the eight groundwater monitoring wells (MW88-93-13, MW51-98-5, MW25A-98-6, MW75-99-4, MW71B-00-2, MW58A-00-3, MW25A-00-5, and MW52A-00-6) were properly destroyed on August 10 and August 11, 2006. These wells had been approved for destruction by the Water Board (Water Board, 2005).

Groundwater extraction wells EW51L-99-1 and EW51L-00-1 were properly destroyed on August 16, 2006. These two wells were located in the planned excavation zone for the Building 51L Groundwater Solvent Plume source area.

5.2 REPORTS AND MEETINGS

Reports

The following reports were submitted to the regulatory agencies:

- On July 18, 2006 LBNL submitted a permit application to the City of Berkeley to properly destroy two groundwater monitoring wells (MW51L-01-4 and MW51L-01-3) in the planned excavation area at the former location of Building 51L (Building 51L Groundwater Solvent Plume source area).
- On August 2, 2006 LBNL submitted a permit application to the City of Berkeley to properly destroy nine groundwater monitoring wells. Destruction of these wells had been approved by the Water Board.
- On August 31, 2006, LBNL submitted the Quarterly Progress Report for the Second Quarter of FY06 to the DTSC, in compliance with LBNL's RCRA Part B Permit.

Meetings

The following meeting was held with the regulatory agencies:

- A Remedial Project Managers (RPM) meeting was held at the DTSC offices on August 31, 2006.

5.3 CORRECTIVE MEASURES

Corrective Measures for Soil

Building 7 Lobe of the Old Town groundwater Solvent Plume Source Area

Excavation of contaminated soil from the source area of the Building 7 lobe of the Old Town Groundwater Solvent Plume was completed during the fourth quarter of FY06. Eleven additional large diameter shafts (2 to 4 feet diameter) were drilled to approximate depths of 47.5

to 49 feet. After placing 8 to 12 inches of crushed rock and approximately 2 feet of bentonite in the bottom of each shaft, the shafts were backfilled with lean concrete to the surface. The sanitary sewer and storm drain lines that passed through the excavation area were reinstalled and the surface was restored.

Building 7 Lobe of the Old Town Groundwater Plume Core Area

Removal of contaminated soil from the Building 7 lobe core area was initiated. Two 2-foot diameter shafts were drilled to depths of 50 and 52 feet in the upgradient core area downgradient from the groundwater collection trench. The shafts were backfilled with 1 foot of crushed rock, 2 feet of bentonite, and lean concrete to the surface.

Building 51 Motor Generator Room Basement Filter Sump Area

Removal of the PCB-contaminated soil and concrete from the Building 51 Motor Generator Room Basement continued. An additional area of the concrete floor slab was removed and the underlying soil excavated to a depth of approximately 4 feet. On July 10, 2006, eight additional confirmatory soil samples were collected from the floor of the excavation. The concrete platform at the southern end of the basement was removed and on July 26, 2006, 21 concrete samples were collected on a 2-foot by 2-foot grid at a depth of 6 inches in the underlying floor slab. The concrete floor slab was removed from this area, along with the underlying base rock and soil to a depth of approximately 2 to 2.5 feet. On September 6, 2006, six confirmatory soil samples were collected, three from the walls and three from the floor of this additional excavation area. Soil and concrete samples were analyzed for PCBs by EPA Method 8082. The required cleanup level (1 mg/kg) was achieved and the excavation was backfilled with lean concrete.

Building 51L Groundwater Solvent Plume Source Area

Two new catch basins were installed outside the planned excavation area and the 8-inch storm drain that extended through the excavation area was rerouted to a new catch basin.

Two groundwater monitoring wells (MW51L-01-4 and MW51L-01-3) that were located in the Planned Building 51L excavation area were properly destroyed on July 20, 2006.

On July 31, 2006, LBNL issued the Notice to Proceed for shoring and excavating the Building 51L Groundwater Solvent Plume source area. On August 9, 2006, saw cutting and removal of the concrete overlying the excavation area was started. Twenty-four steel beams were installed to a maximum depth of 45 feet in deep borings drilled along the perimeter of the excavation area, and excavation was started. Wood lagging was installed between the steel beams to shore the excavation as the excavation was deepened in 5-foot increments. The excavated soil was transported offsite and disposed of at the Vasco Road Class II landfill.

The approved workplan for the Building 51L source area required the collection of seven post-excavation confirmation soil samples from the walls and three from the floor of the excavation. On August 29, 2006 and September 1, 2006 ten confirmatory soil samples were collected from the excavation walls. The samples were collected approximately 1/3 of the way down from the surface to the excavation floor, as required by the approved workplan. The concentration of PCE exceeded the Media Cleanup Standard (MCS) in two of the wall samples. On September 15, 2006, seven confirmatory soil samples were collected from the floor of the excavation. The concentration of vinyl chloride exceeded the MCS in three of the samples. Subsequently additional soil was excavated until the concentrations of all VOCs were below the MCS in confirmatory floor and wall samples. This activity continued into the first quarter of FY06, with a total of 27 wall samples and 20 floor samples being collected

Corrective Measures for Groundwater

The corrective measures for groundwater described in Section 4.2 continued through the fourth quarter of FY06. In addition, the following new activities were implemented to enhance the existing corrective measures or evaluate their effectiveness.

Building 25A Lobe of the Old Town Groundwater Solvent Plume

To evaluate the effectiveness of soil flushing south of Building 25, flushing was temporarily halted on July 10, 2006 after about 70 days of operation. Groundwater samples were

collected on July 10 and July 14, 2006, with concentrations of all VOCS below MCLs. Operation of the system was resumed on July 14, 2006. The system was temporarily halted again on September 2, 2006 to monitor for possible rebound in contaminant levels. Concentrations of VOCs in groundwater samples collected on September 25, 2006 were all below MCLs. If concentrations remain below cleanup levels (MCLs) for four quarters of monitoring, a letter will be submitted to the regulators requesting that the wells south of Building 25 be closed and the Building 25 Treatment System will be dismantled.

5.4 PLANNED ACTIVITIES

In addition to the ongoing activities described in the previous sections of this report, following is a list of activities planned for the first and second quarters of FY07 (October 1 2006 to March 31, 2007):

- Submit the Quarterly Progress Reports for the third and fourth quarters of FY06 to the DTSC.
- Complete implementation of the corrective measures (excavation) in the source area of the Building 51L Groundwater Solvent Plume.
- Complete activities associated with the removal of contaminated soil from the Building 7 lobe source area.
- Complete activities associated with removal of contaminated soil from the Building 7 lobe core area
- Continue to hold RPM meetings with the regulatory agencies.
- Conduct quarterly groundwater sampling and continue depth-to-water measurements.
- Submit the Corrective Measures Implementation Report to the regulatory agencies.

SECTION 6

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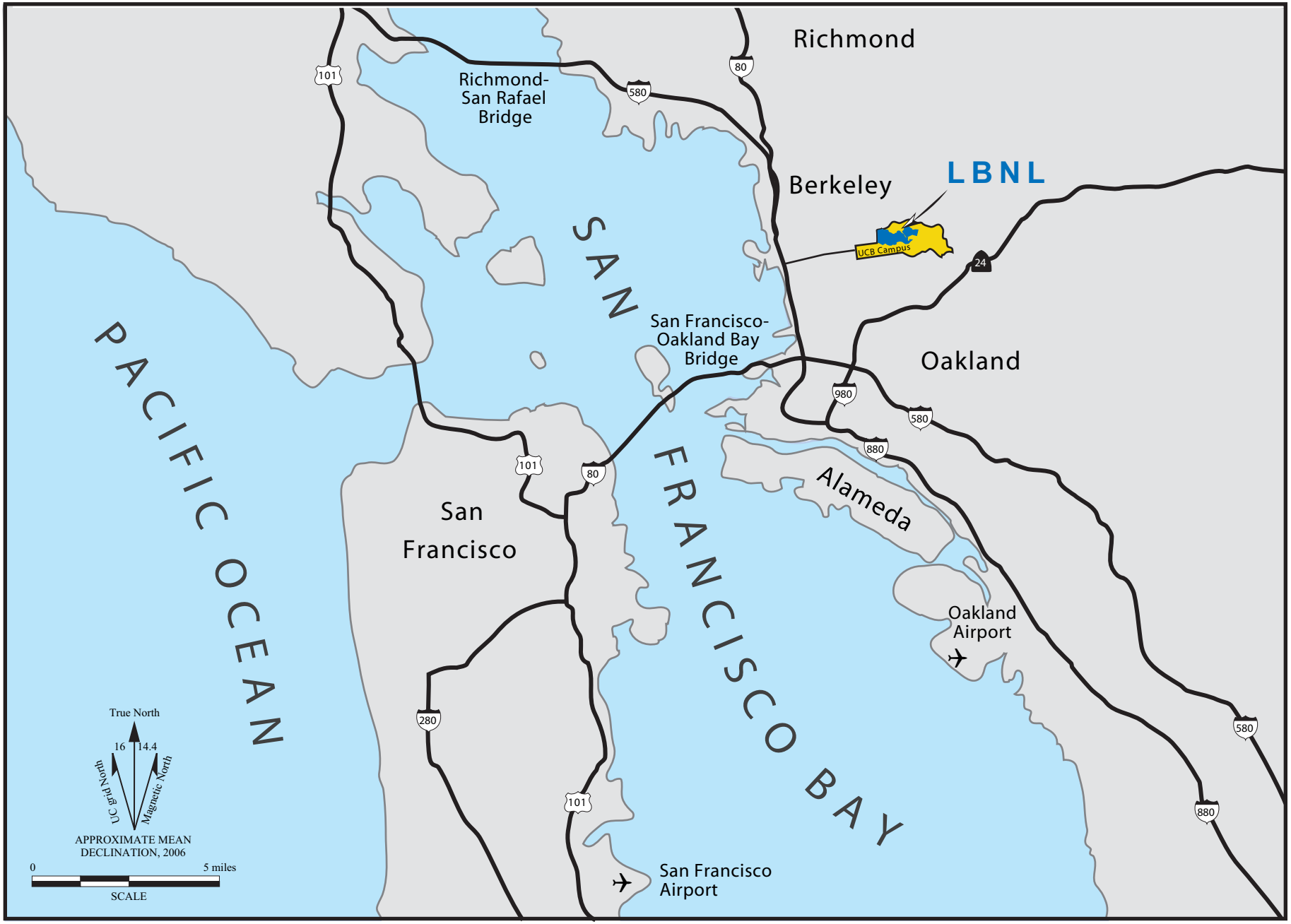

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Figure 1. Regional Setting of the Lawrence Berkeley National Laboratory (LBNL).

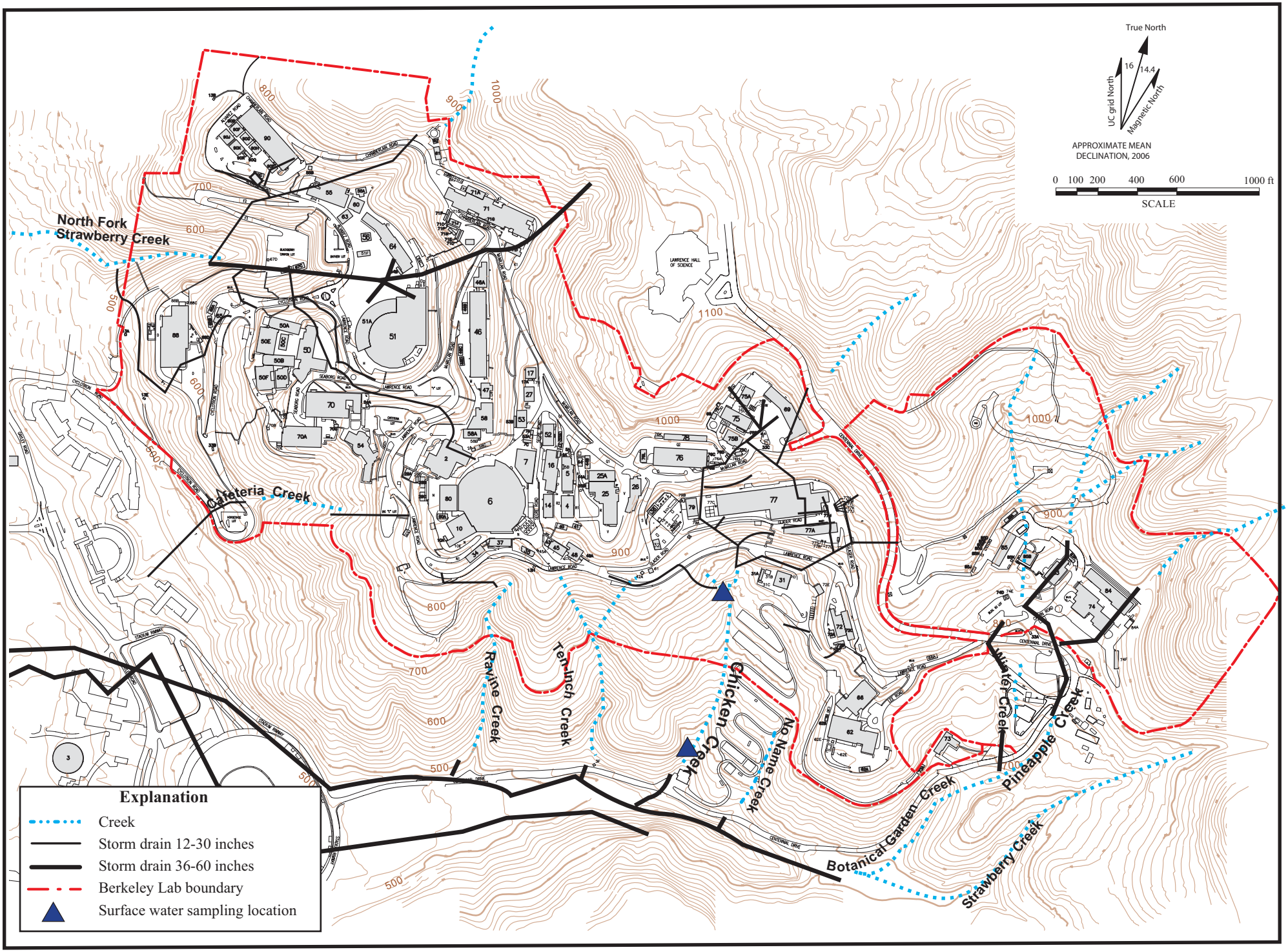

Figure 2. Site Map and Topography and Surface Water Sampling Locations Third Quarter FY06.

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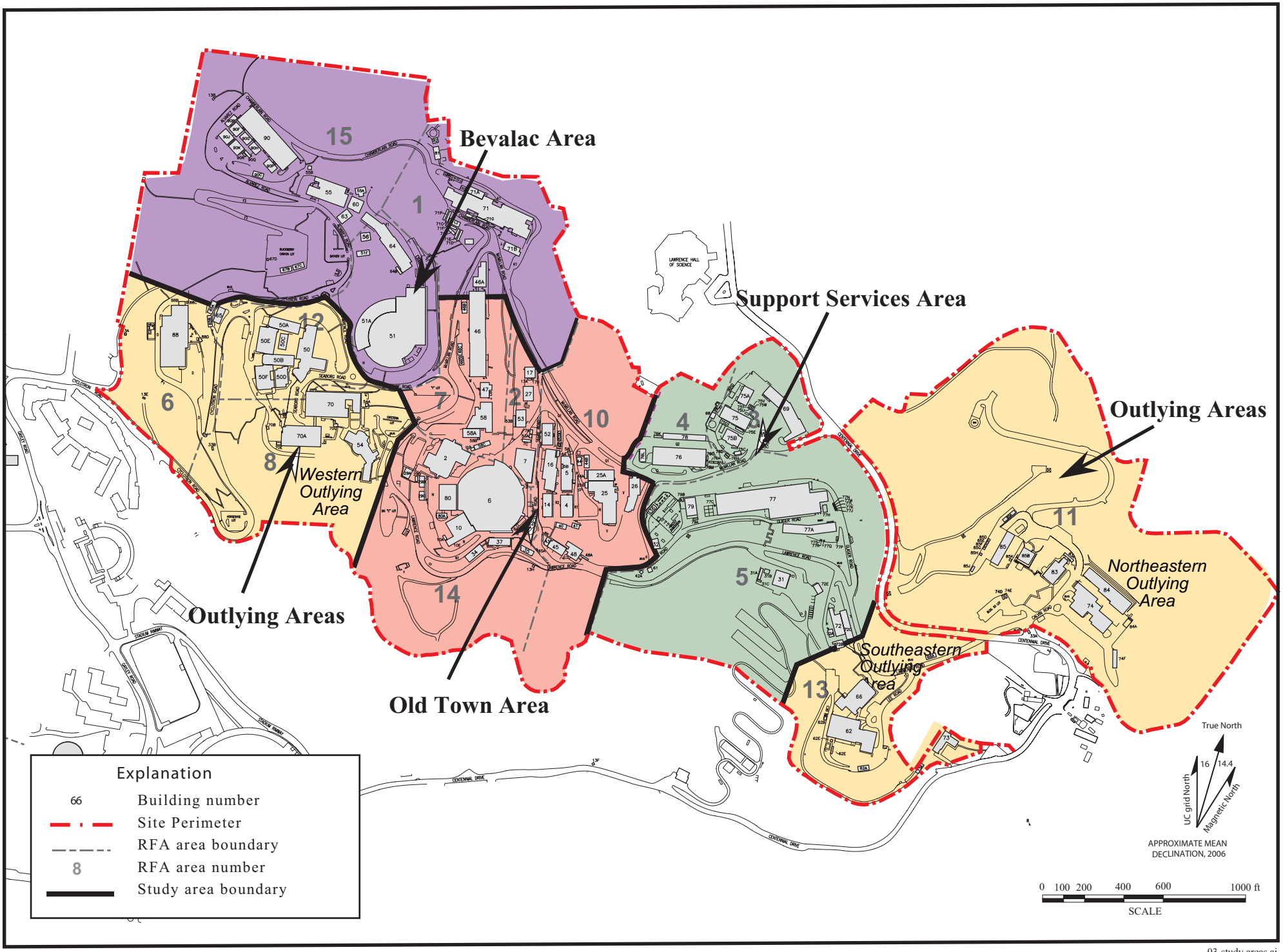

Figure 3. Locations of Study Areas, Lawrence Berkeley National Laboratory.

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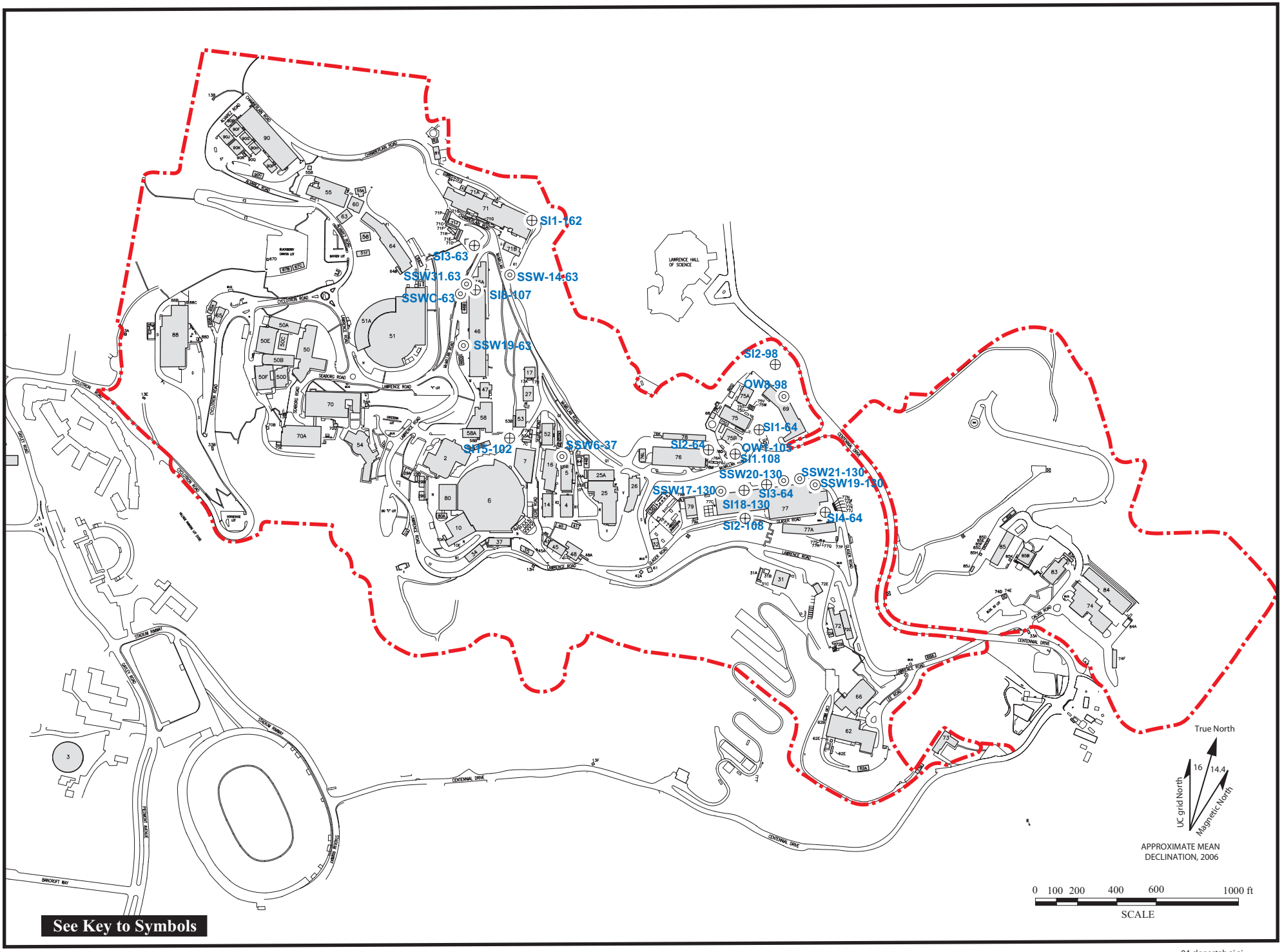
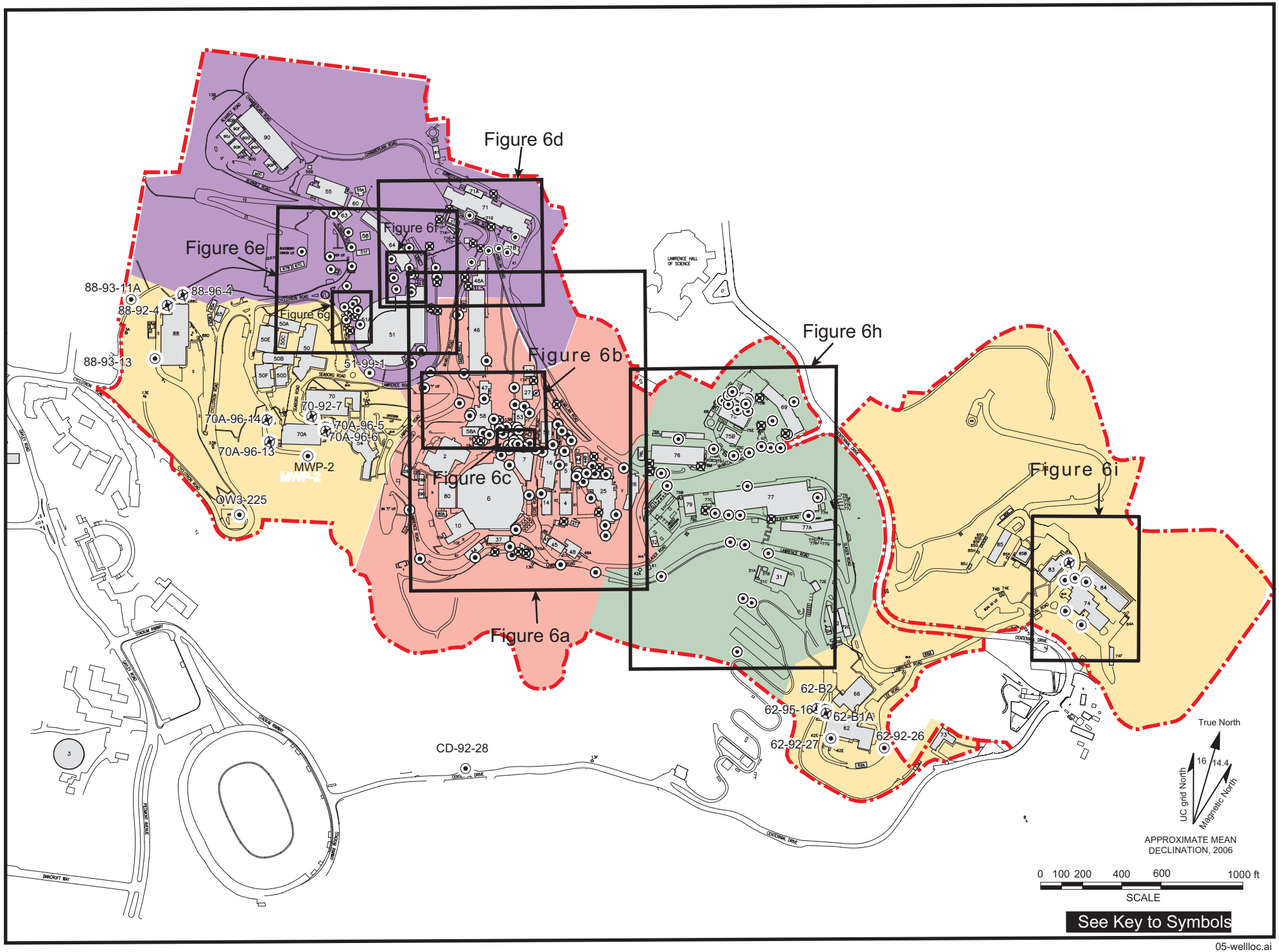


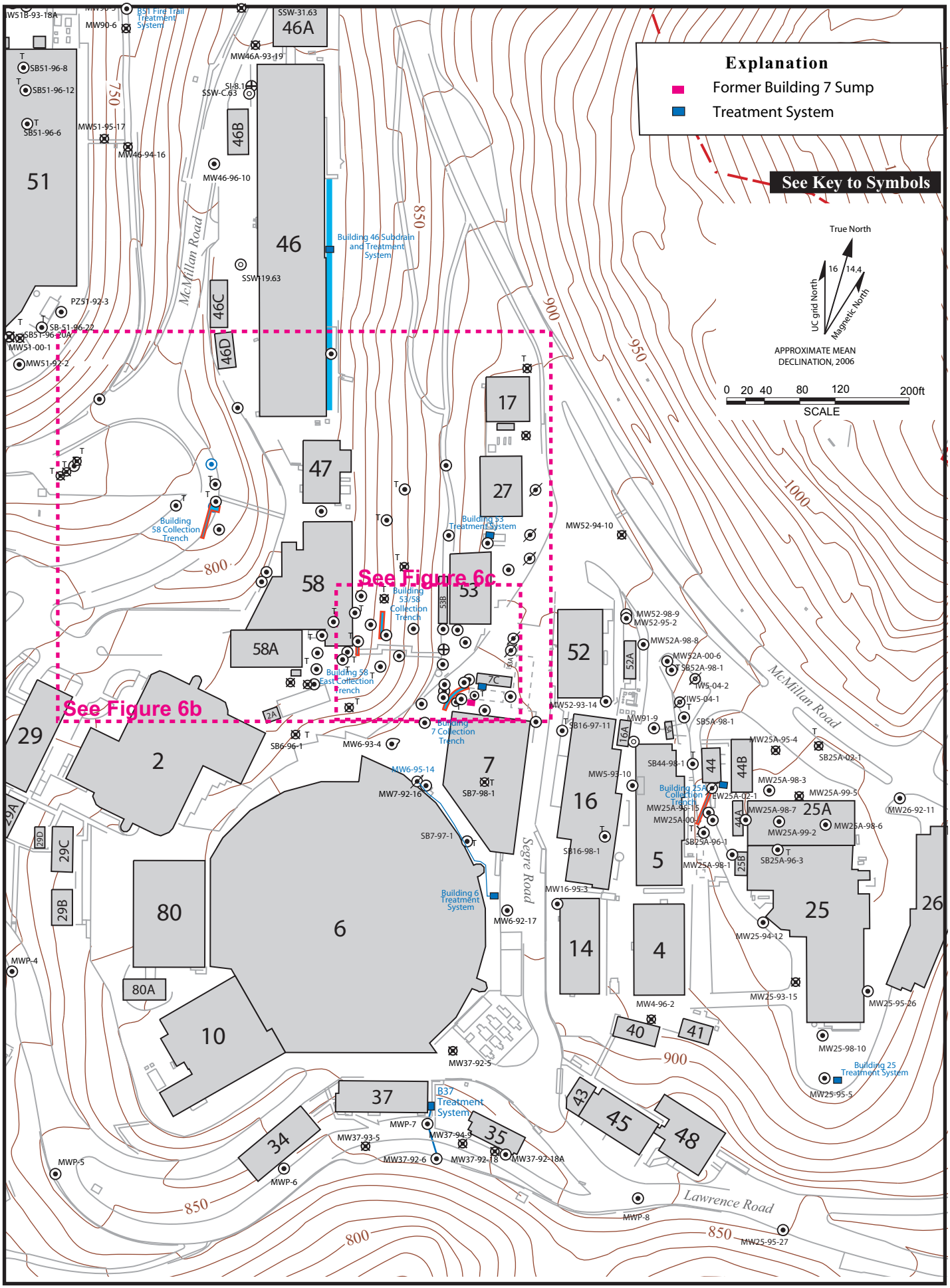
Figure 4. Slope Stability, Slope Indicator, and Observation Well Locations, Lawrence Berkeley National Laboratory (LBNL).

04-slopestab.ai.ai
3/06



05-wellloc.ai
3/06

Figure 5. Monitoring Well Locations at Lawrence Berkeley National Laboratory.



6a-wellocOT.ai
3/06

Figure 6a. Well Location Map of Old Town Area, Lawrence Berkeley National Laboratory

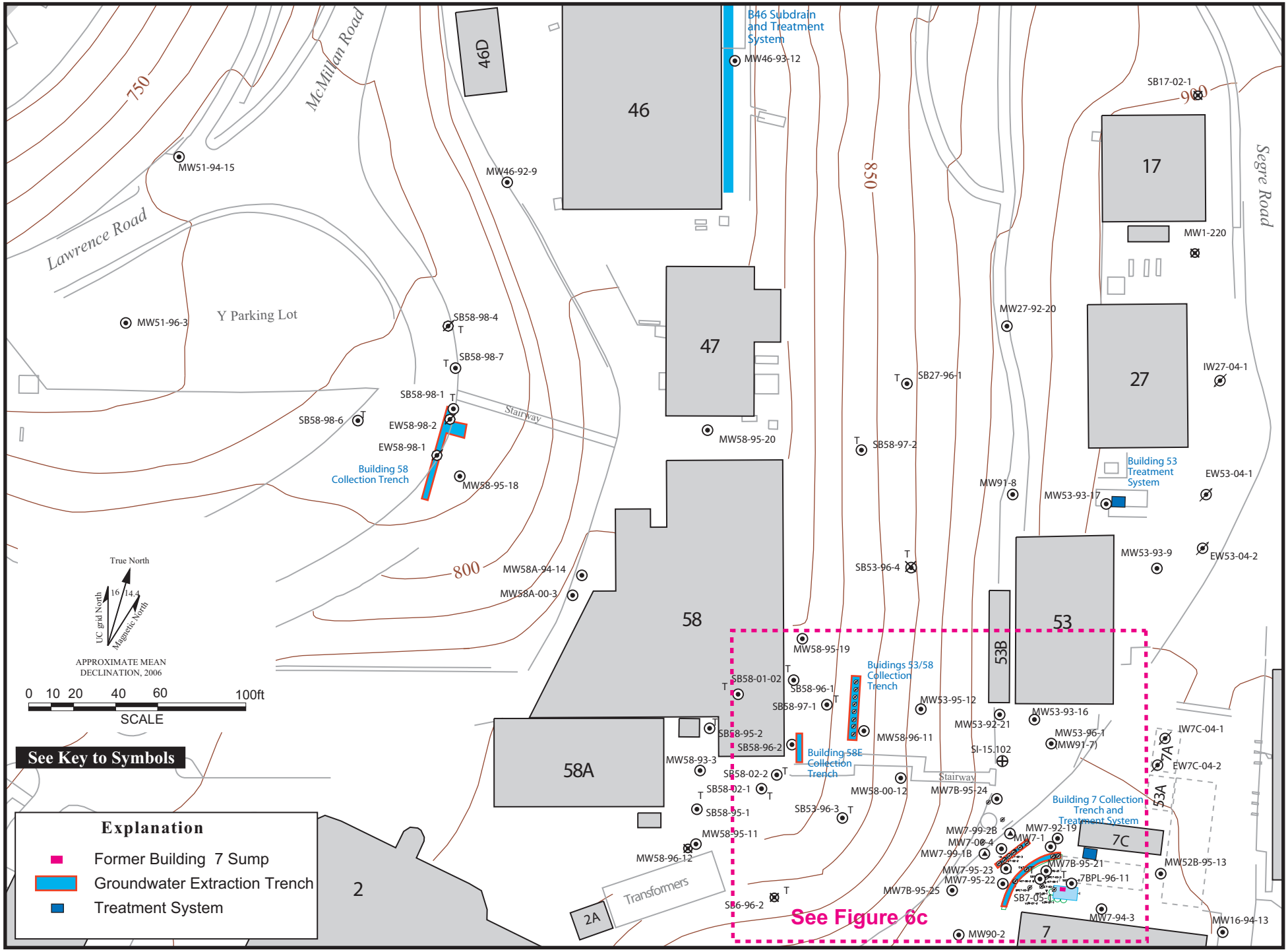


Figure 6b. Well Location Map of the Central Old Town Area, Lawrence Berkeley National Laboratory.

6b-OTDetail.ai
11/05

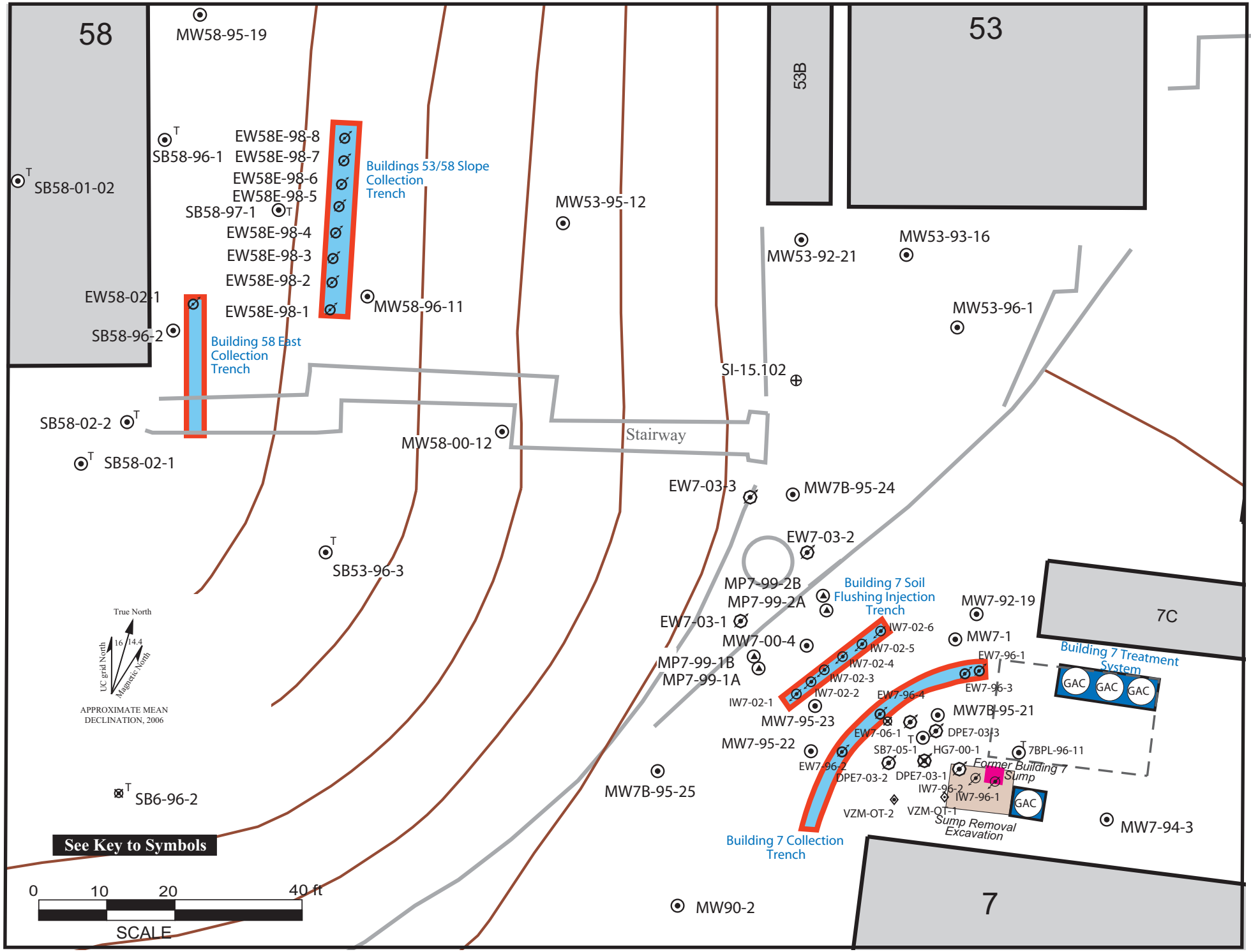


Figure 6c. Well Location Map of the Old Town Plume Source Area, Lawrence Berkeley National Laboratory.

6c-OTsumparea.ai
3/06

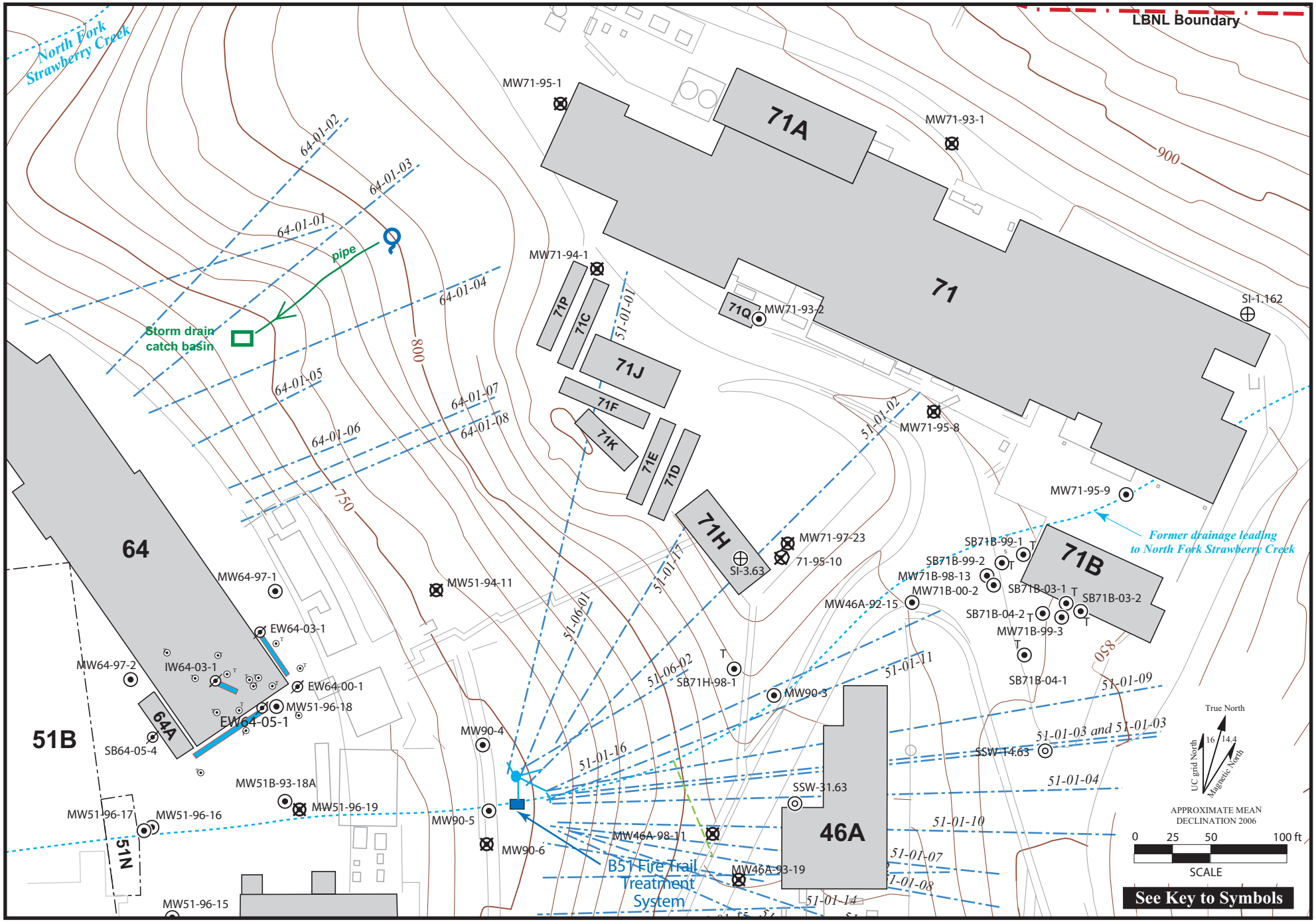


Figure 6d. Well Location Map of the Building 71 Area, Lawrence Berkeley National Laboratory.

6d_B71base.ai
11/05

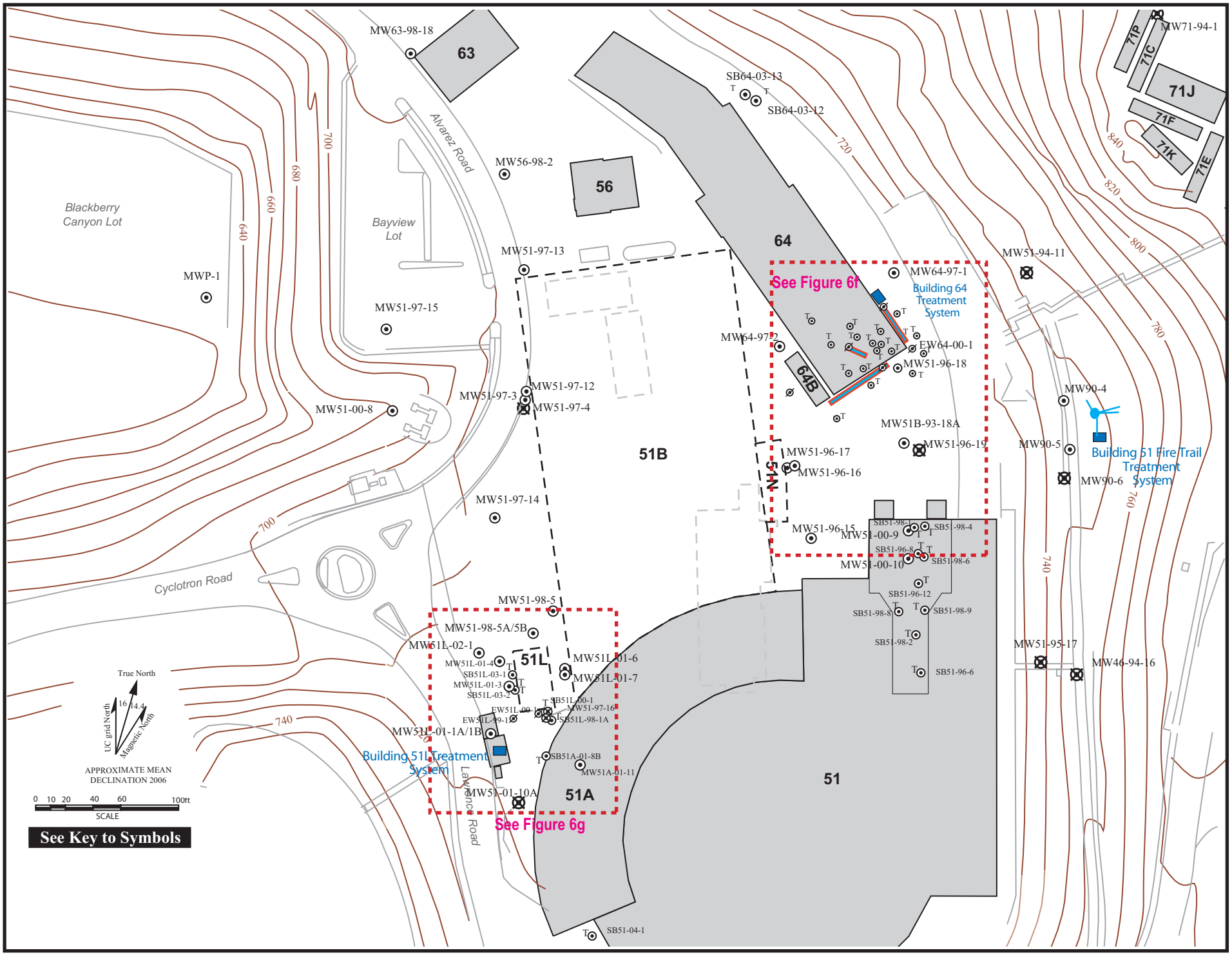


Figure 6e. Well Location Map of the Building 51 and Building 64 Areas, Lawrence Berkeley National Laboratory.

6e-B51baser1.ai
2/06

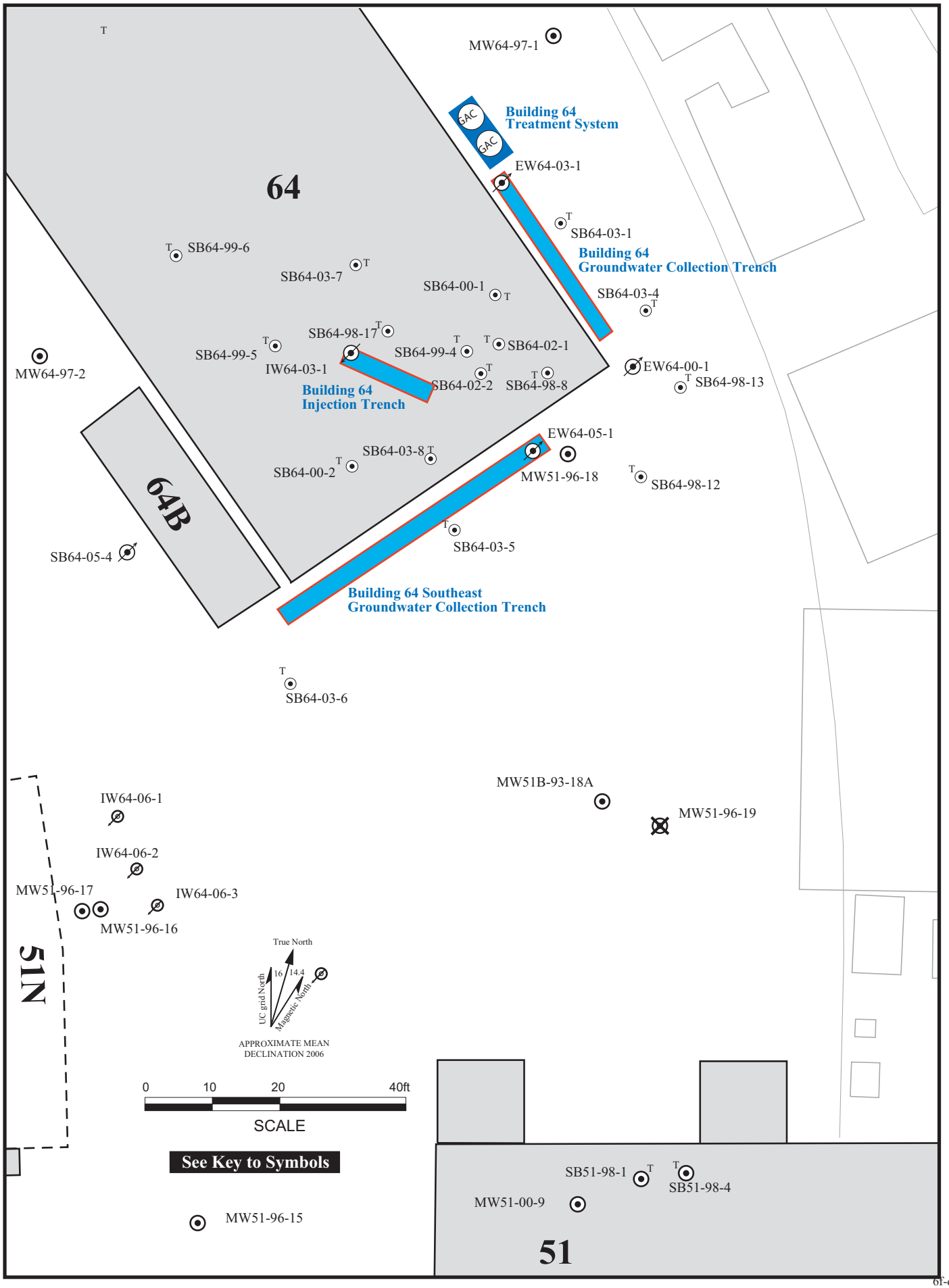
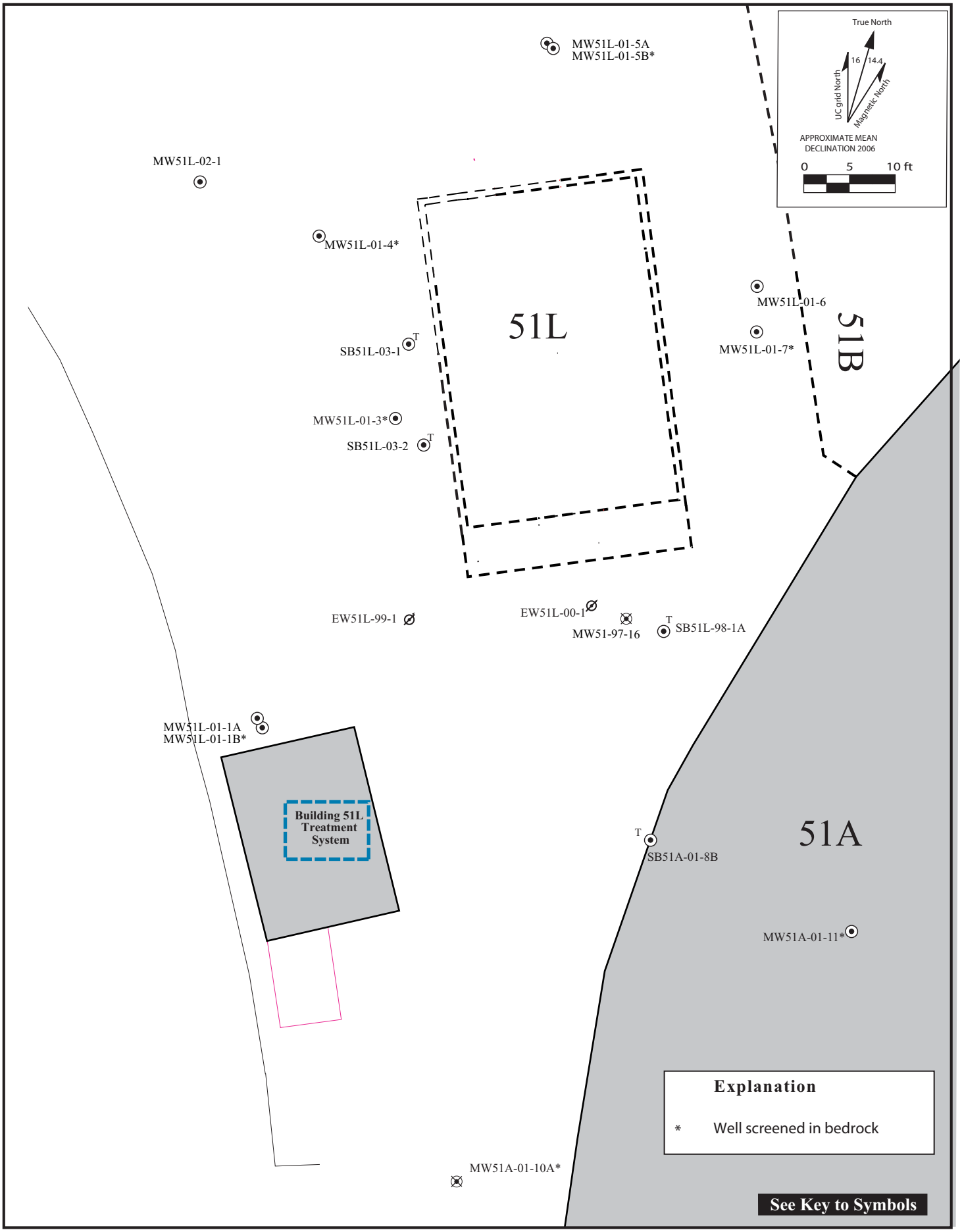


Figure 6f. Well Location Map of the Building 51/64 Plume Source Area, Lawrence Berkeley National Laboratory.



6g-B51L.ai
11/05

Figure 6g. Well Location Map of the Building 51L Area, Lawrence Berkeley National Laboratory.

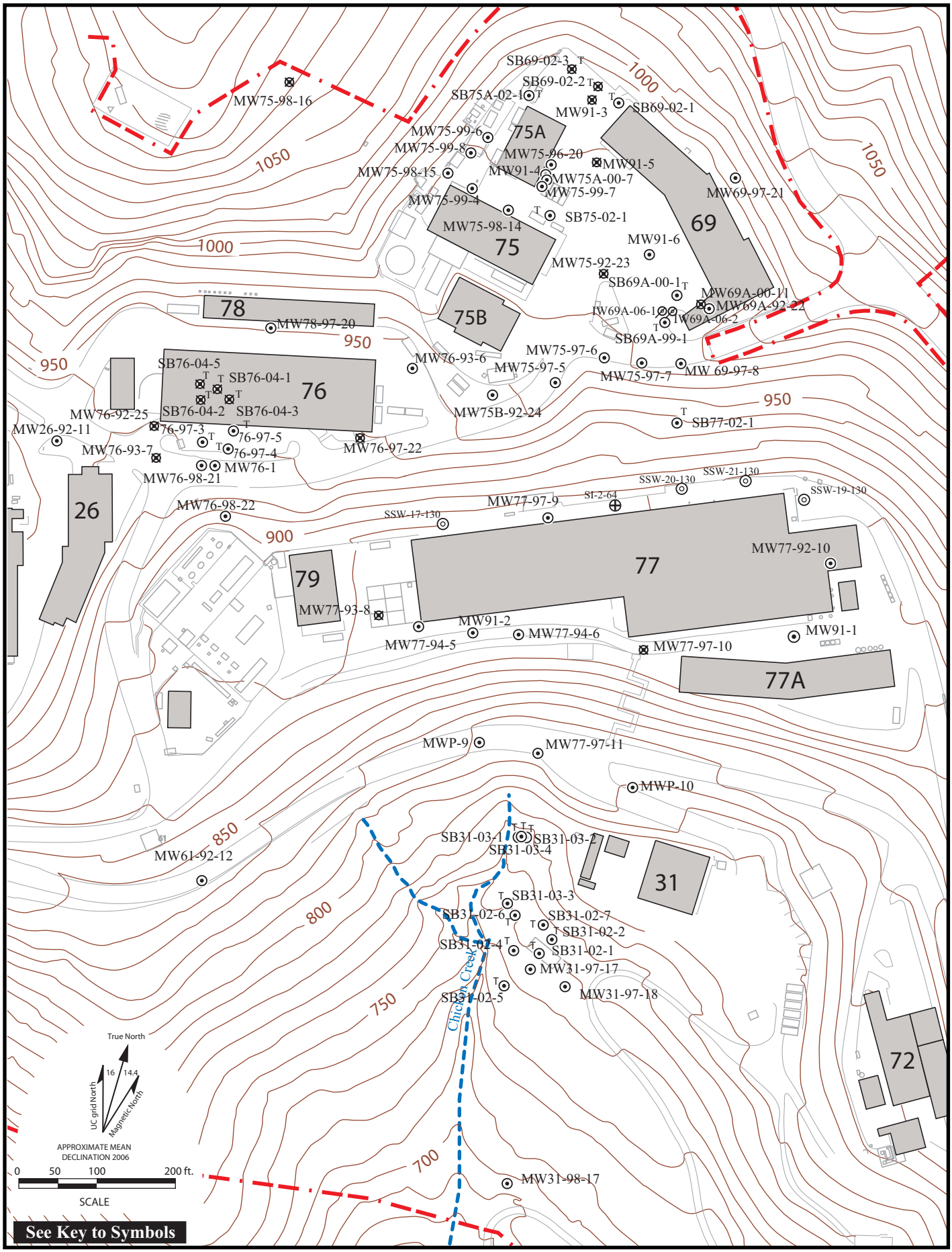
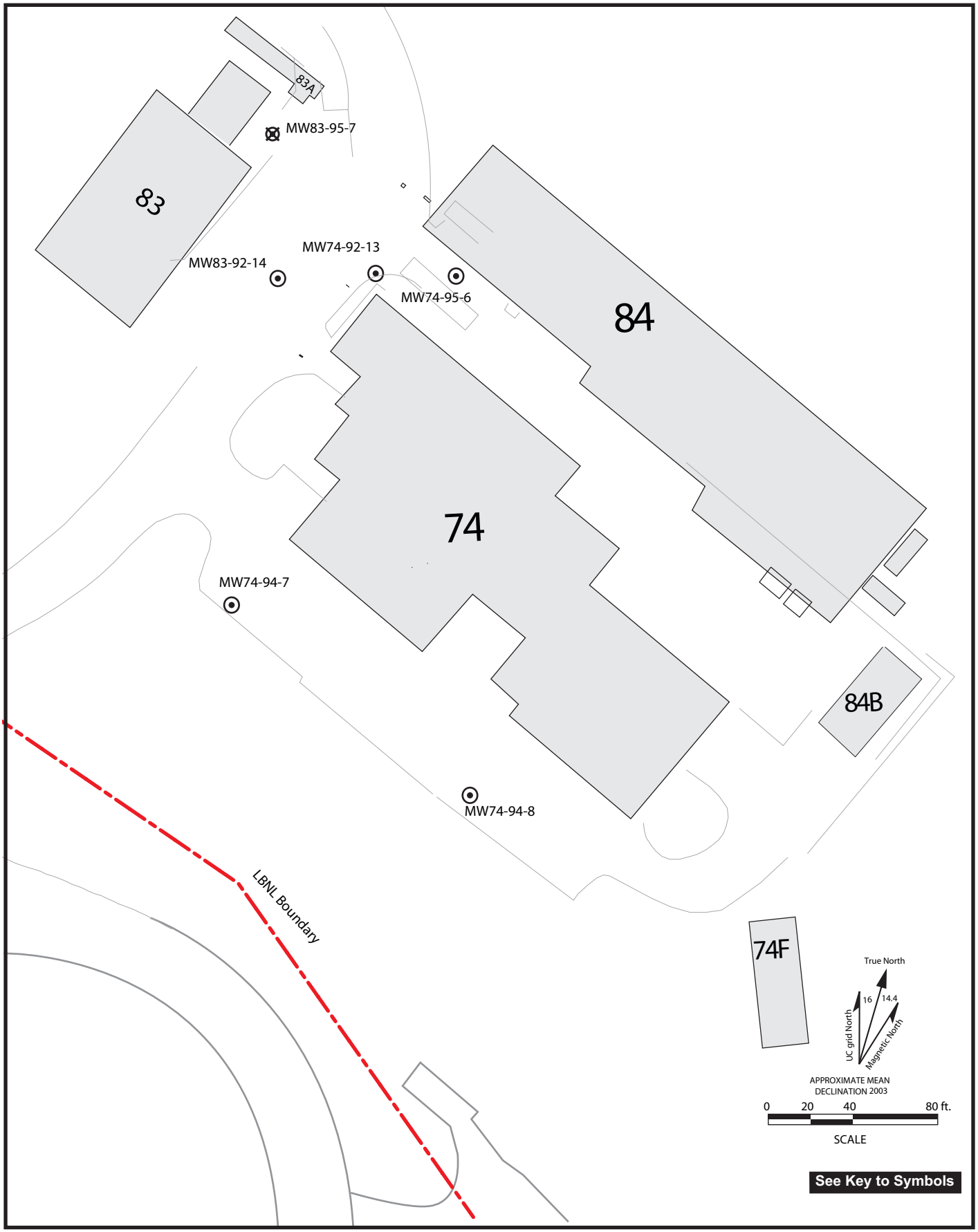


Figure 6h. Well Location Map of the Corporation Yard Area, Lawrence Berkeley National Laboratory.

6h-Corpyrdloc.ai
3/06



06i-b74 well locations.ai
3/06

Figure 6i. Well Location Map of the Building 74 Area, Lawrence Berkeley National Laboratory

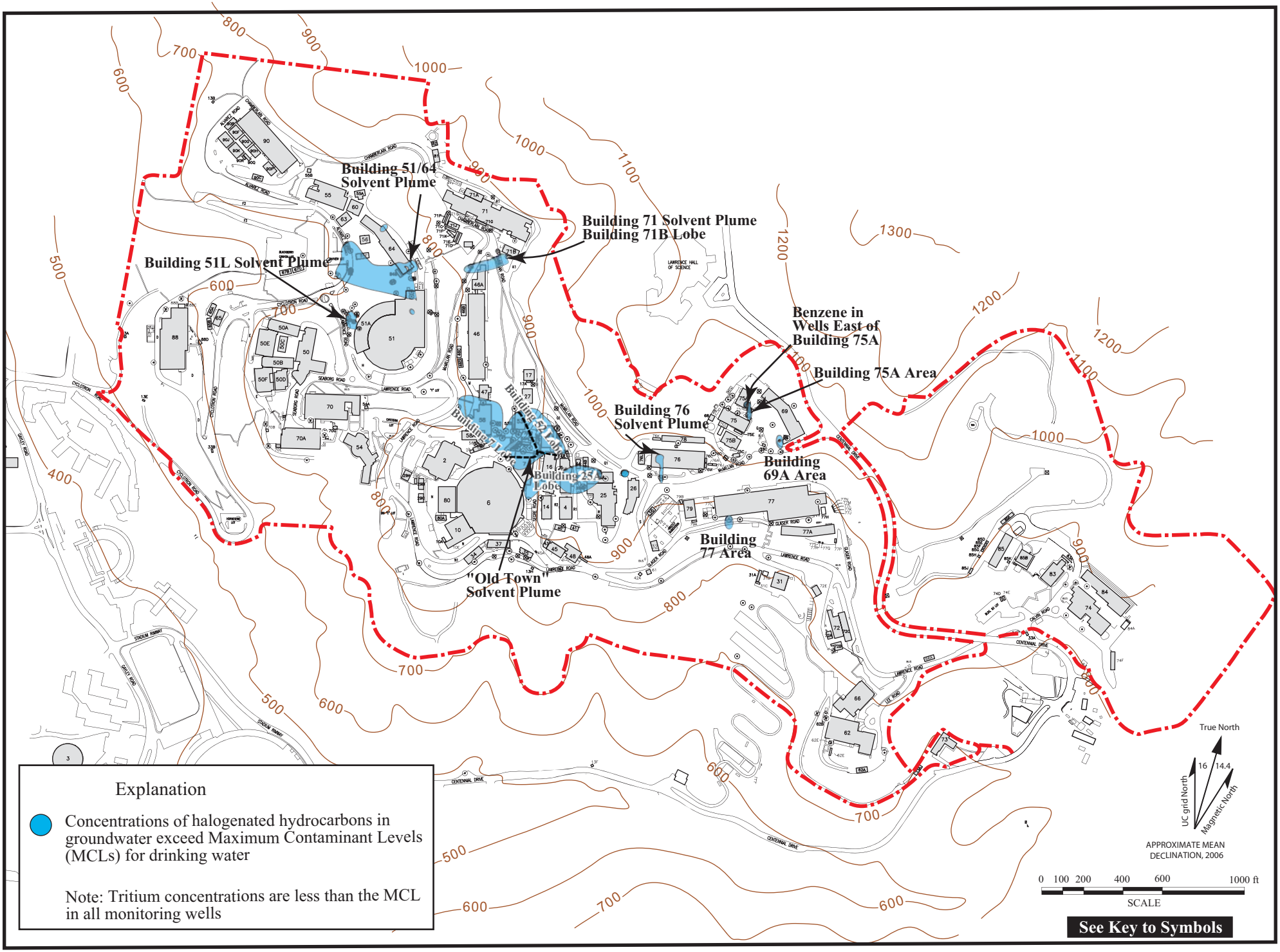
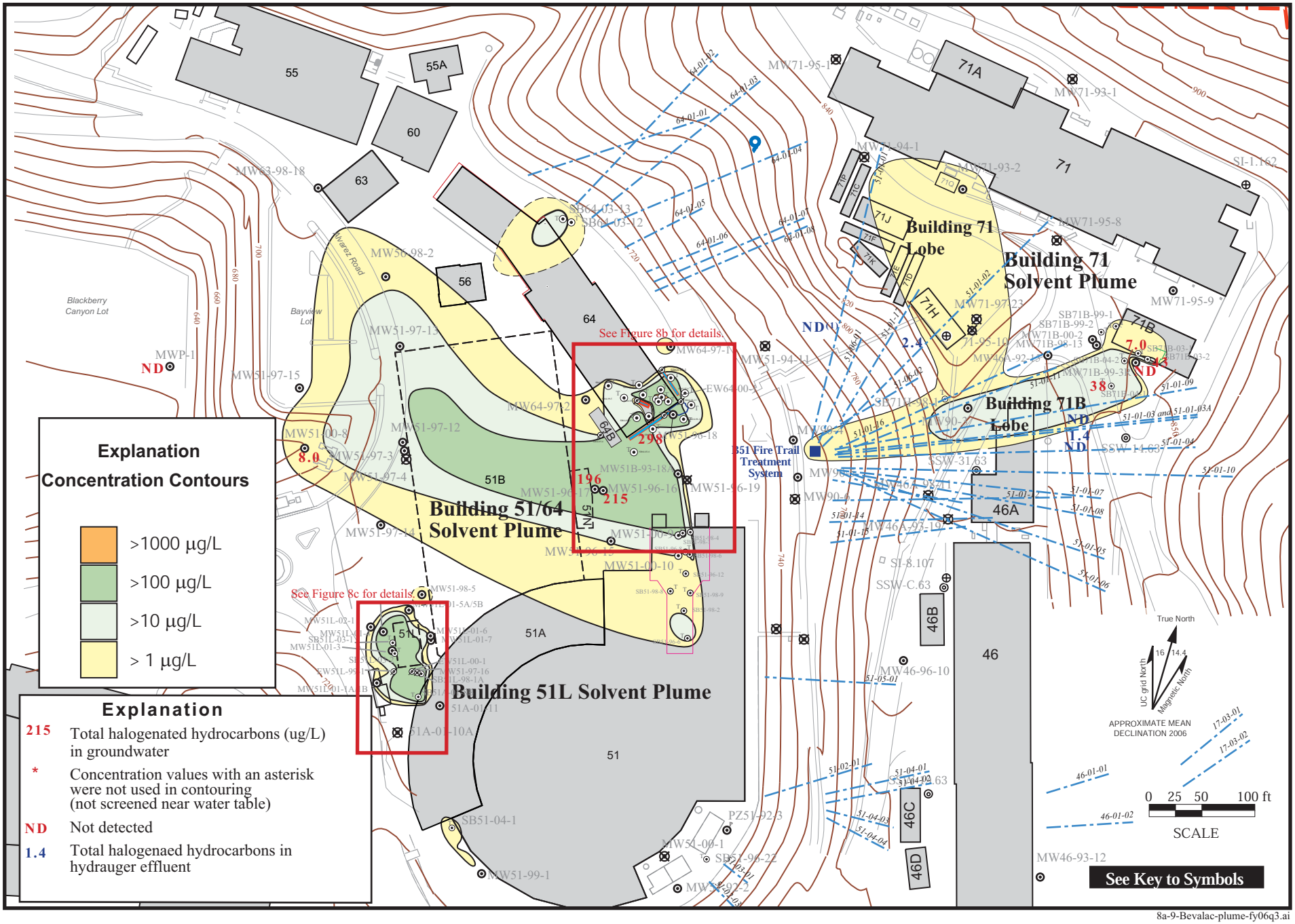


Figure 7. Extent of Groundwater Contamination Above MCLs, Third Quarter FY06.

7-plumes-q3.ai
10/06



8a-9-Bevalac-plume-fy06q3.ai
10/06

Figure 8a. Isoconcentration Contour Map, Total Halogenated Hydrocarbons in Groundwater (ug/L) in the Bevalac Area, Third Quarter FY06.

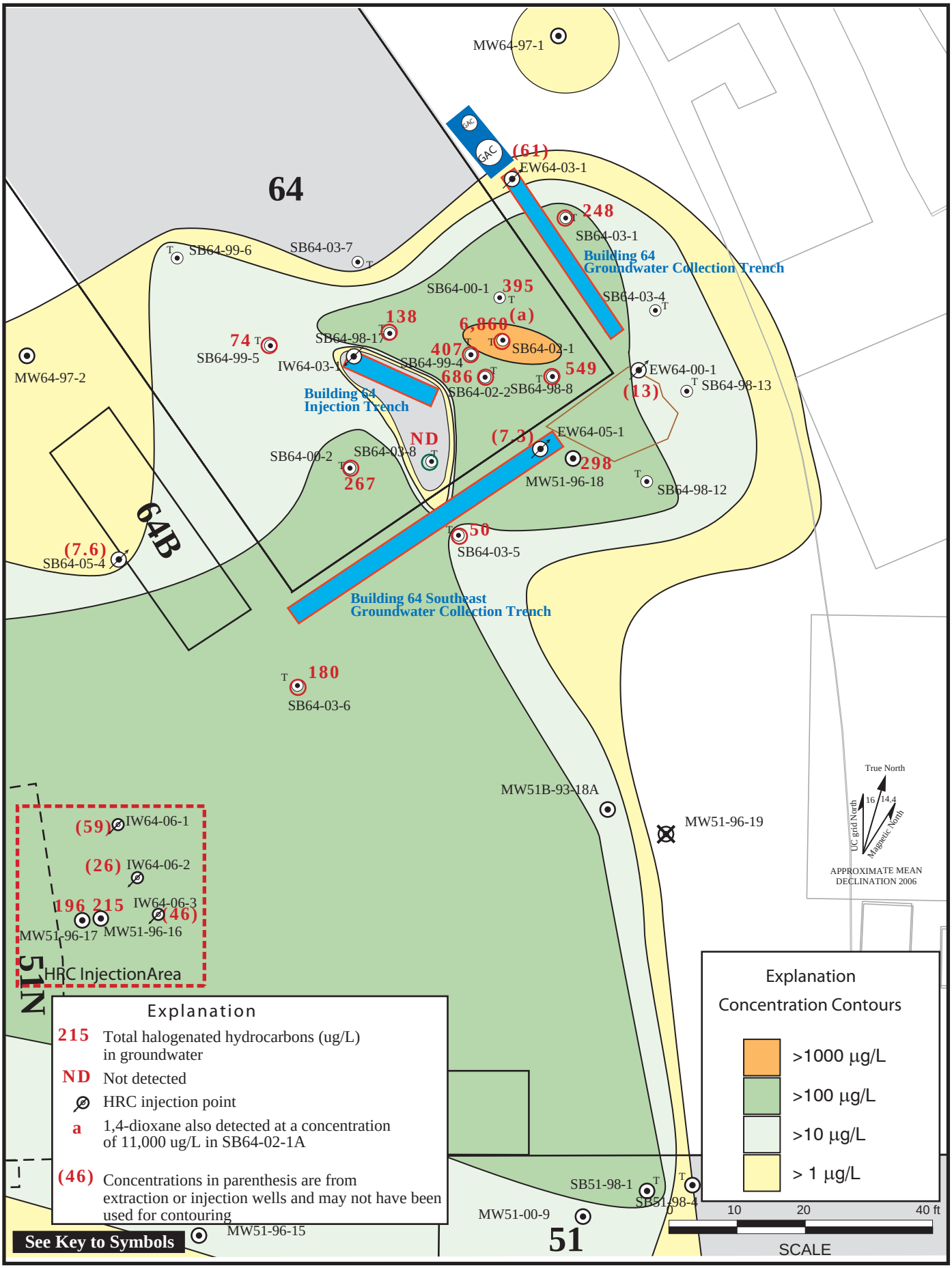
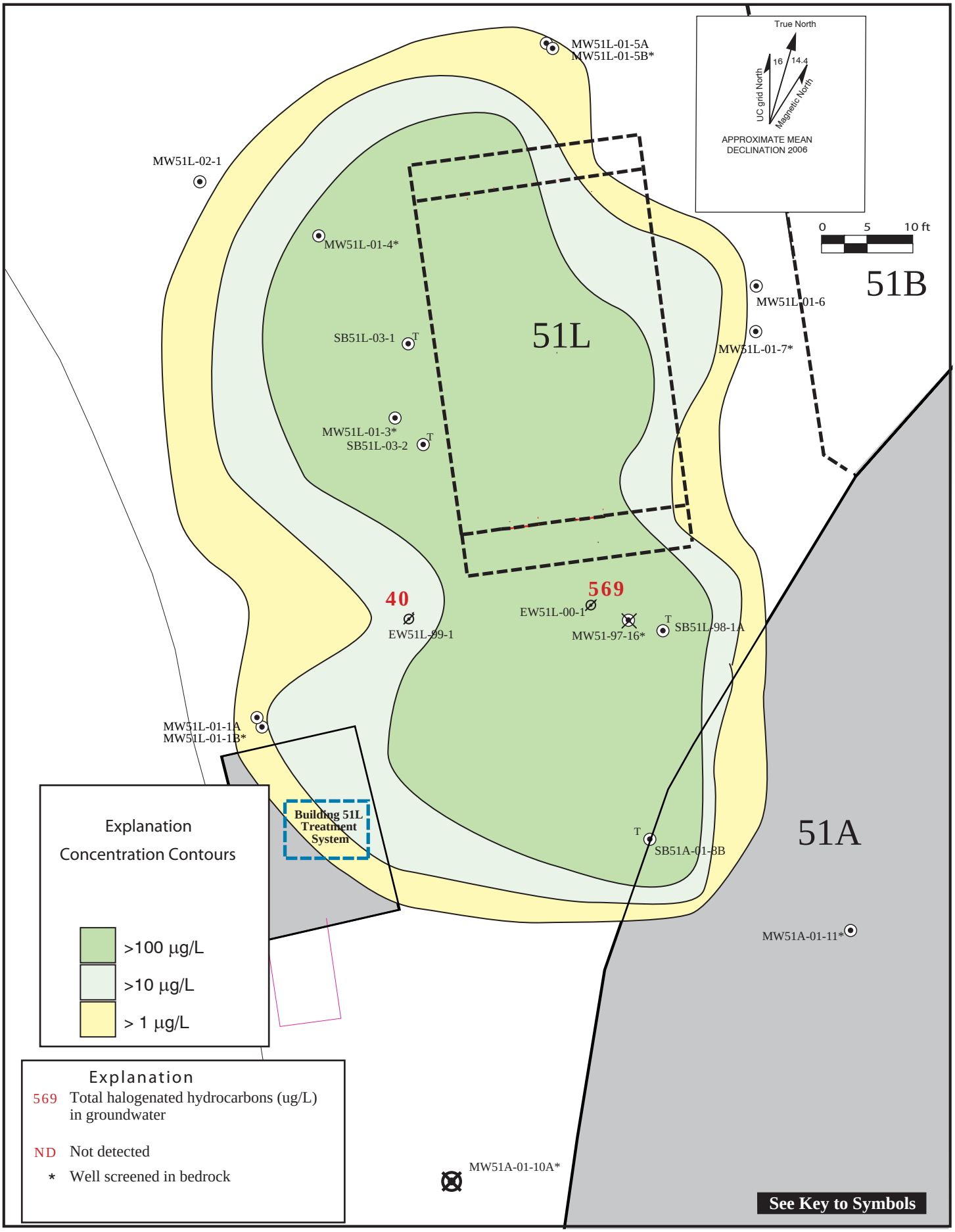


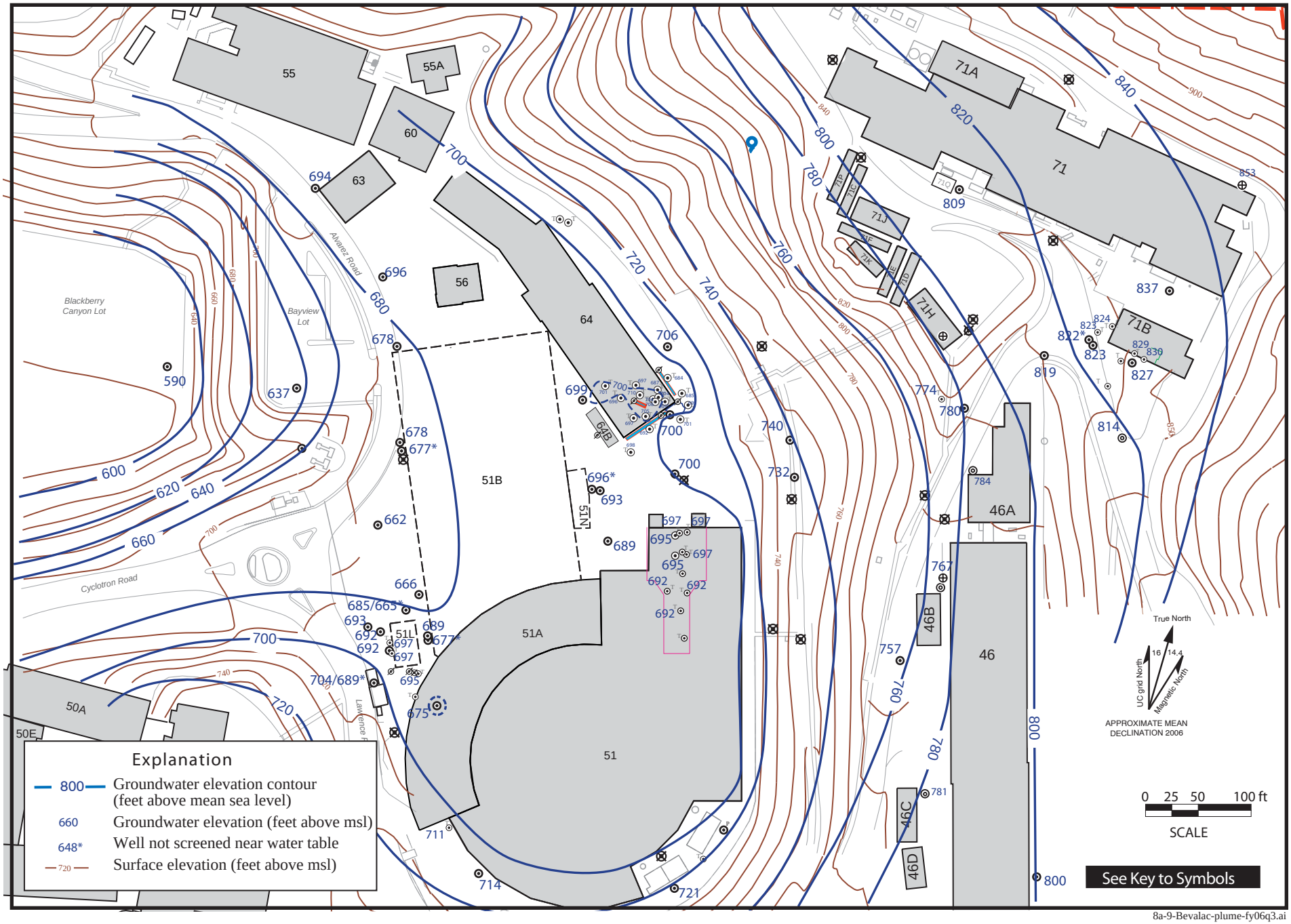
Figure 8b. Isoconcentration Contour Map, Total Halogenated Hydrocarbons in Groundwater, Source Area Building 51/64 Solvent Plume, Third Quarter FY06.

8b-b64vocsfy06q2
10/06



8c-b51lltotlvocsfy06q3
8/06

Figure 8c. Isoconcentration Contour Map, Total Halogenated Hydrocarbons in Groundwater in Fill, Building 51L Solvent Plume, Third Quarter FY06.



8a-9-Bevalac-plume-fy06q3.ai
10/06

Figure 9. Water Level Elevation Map in the Bevalac Area, Third Quarter FY06.

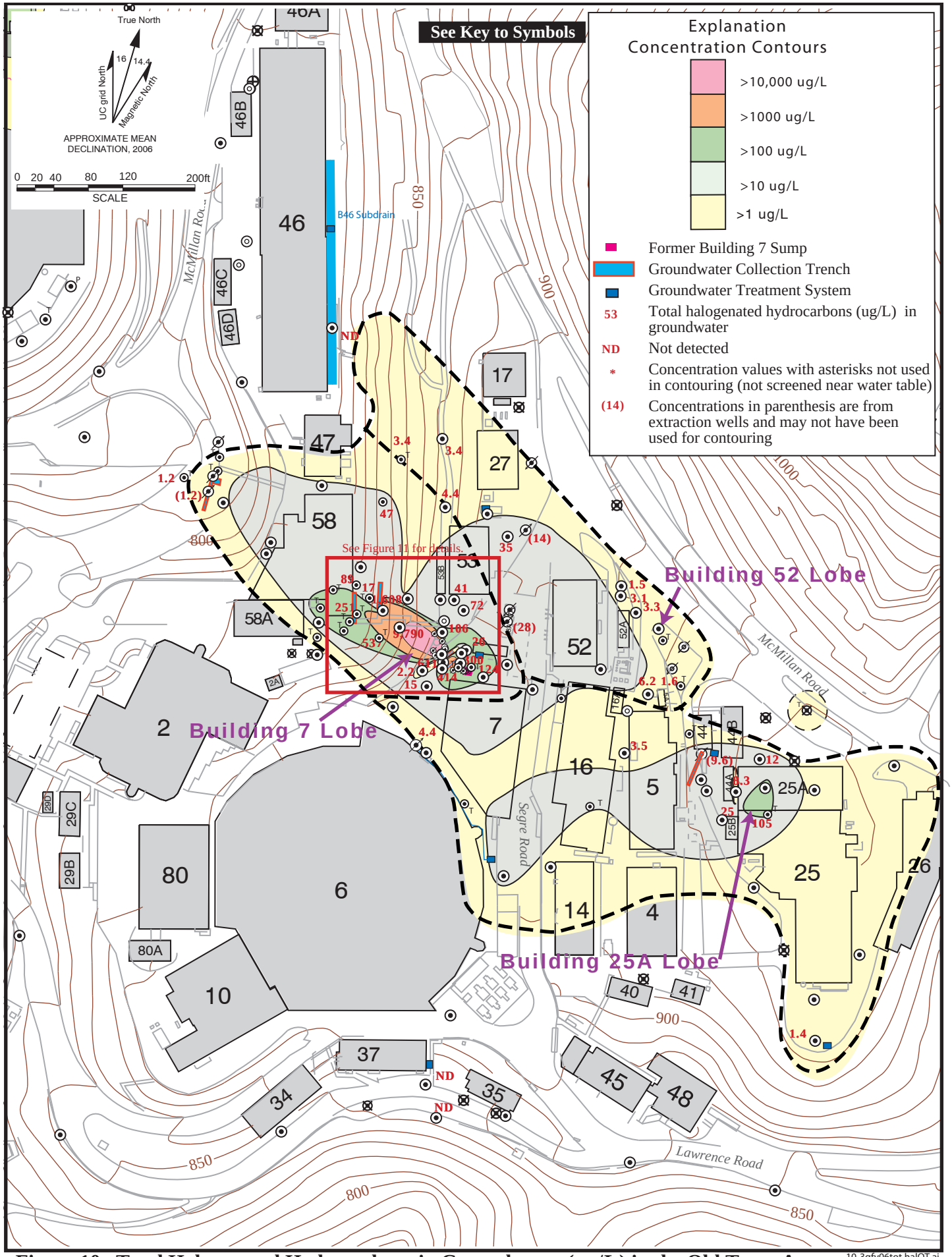


Figure 10. Total Halogenated Hydrocarbons in Groundwater (ug/L) in the Old Town Area, Third Quarter FY06.

10-3qfy06tot halOT.ai
10/06

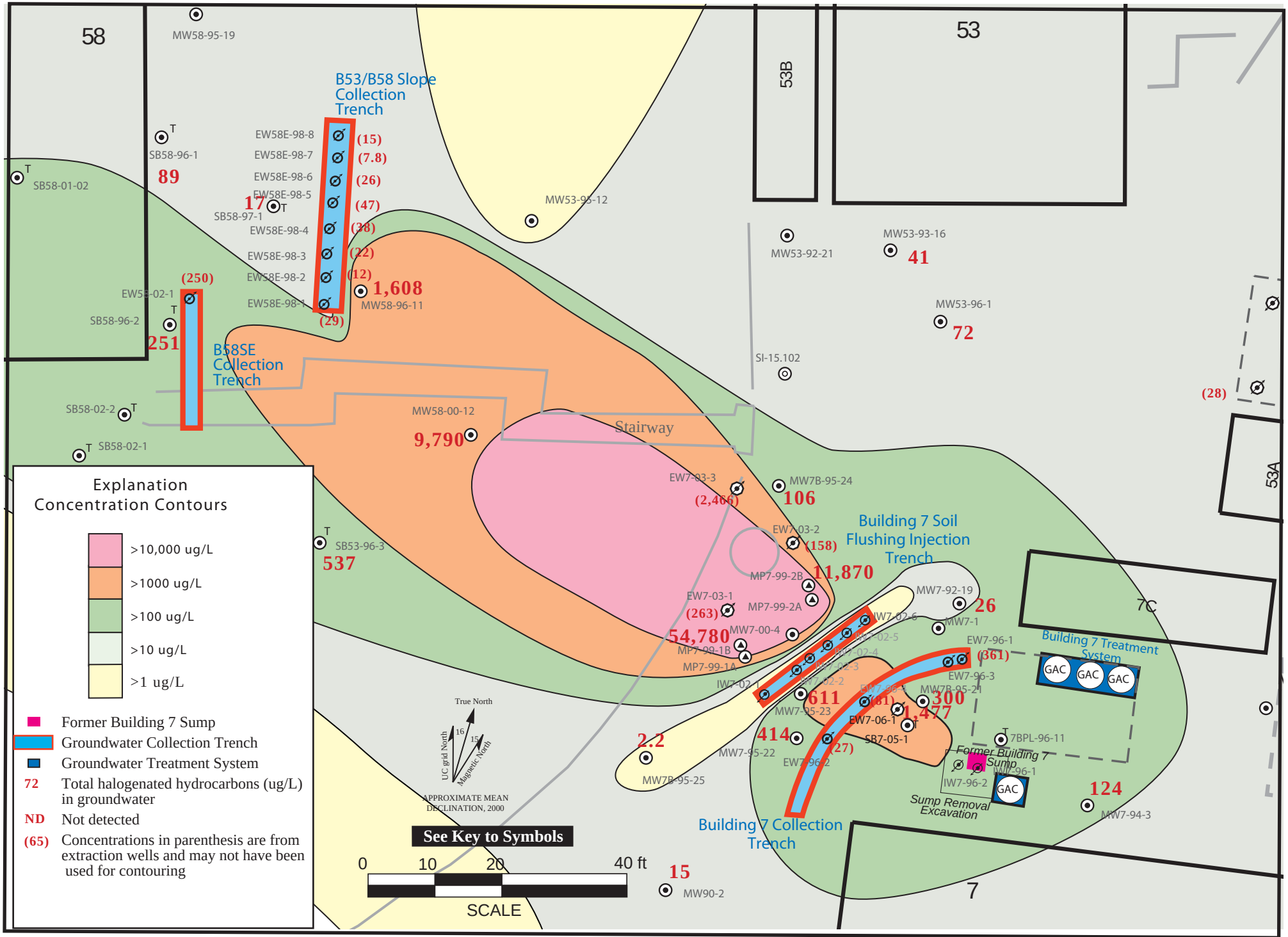
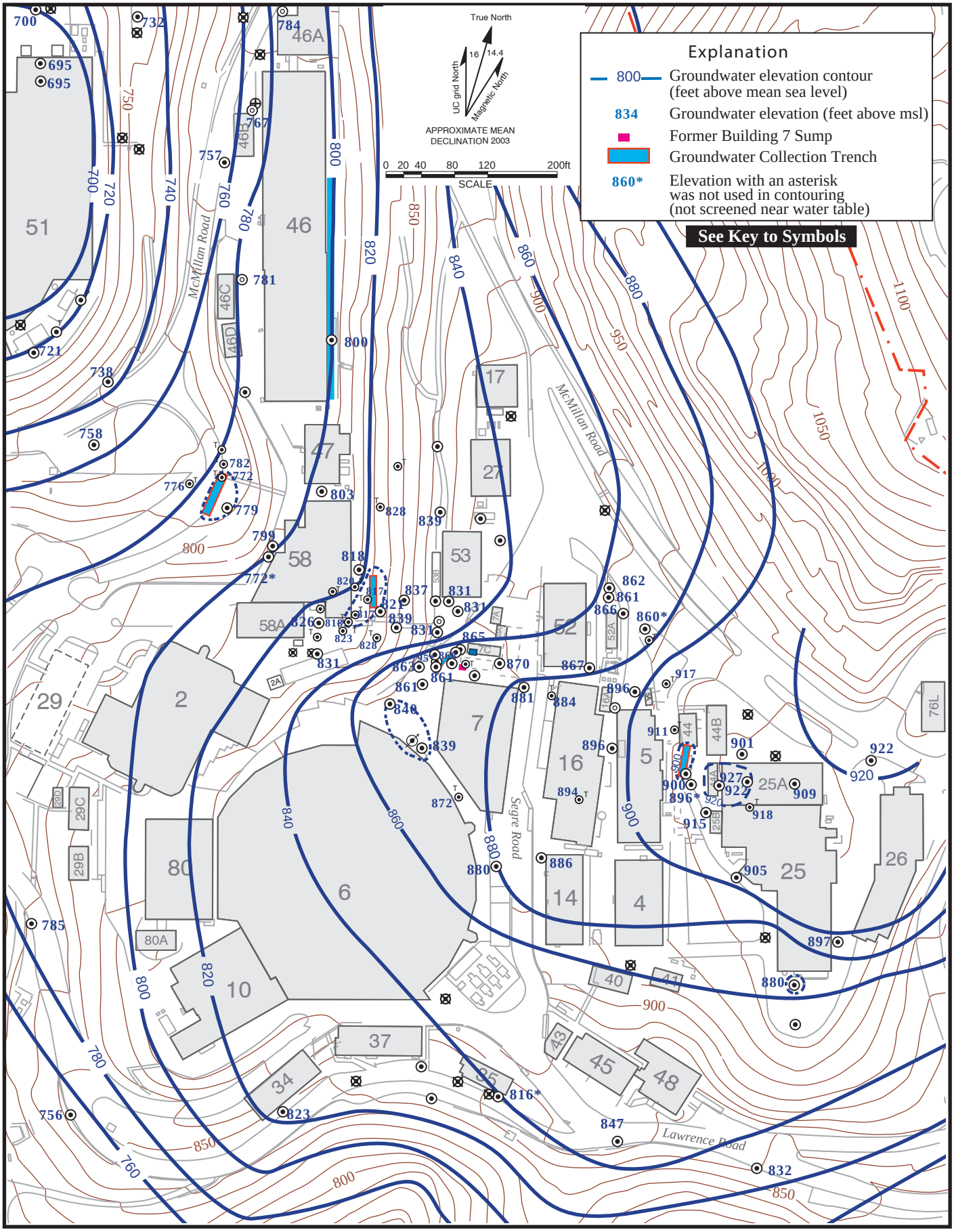


Figure 11. Total Halogenated Hydrocarbons in Groundwater (ug/L) in the Source Area for the Old Town Plume, Third Quarter FY06.

11-OTsumpareaVOCs.ai
10/06



12-OT wl fy06q3.ai
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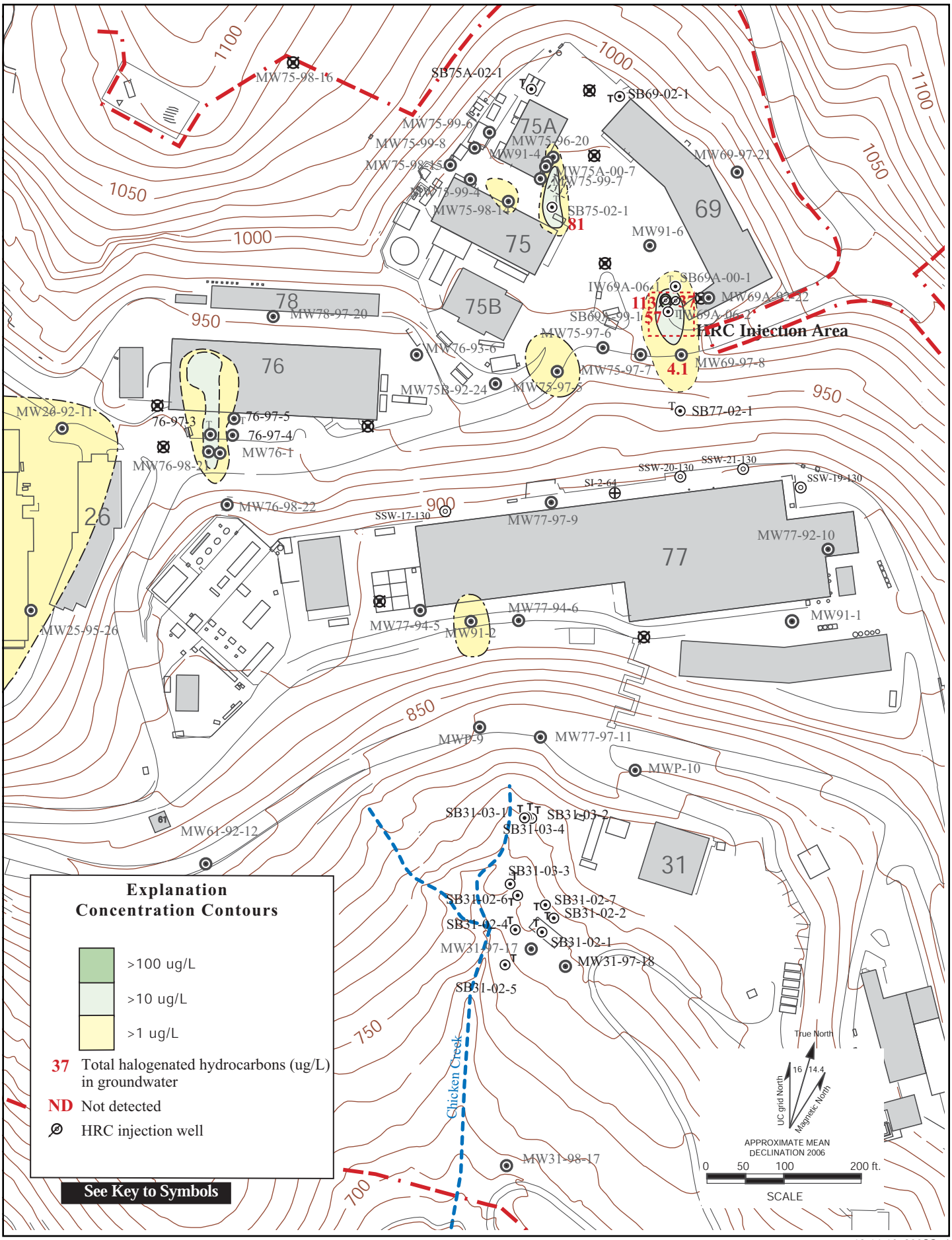
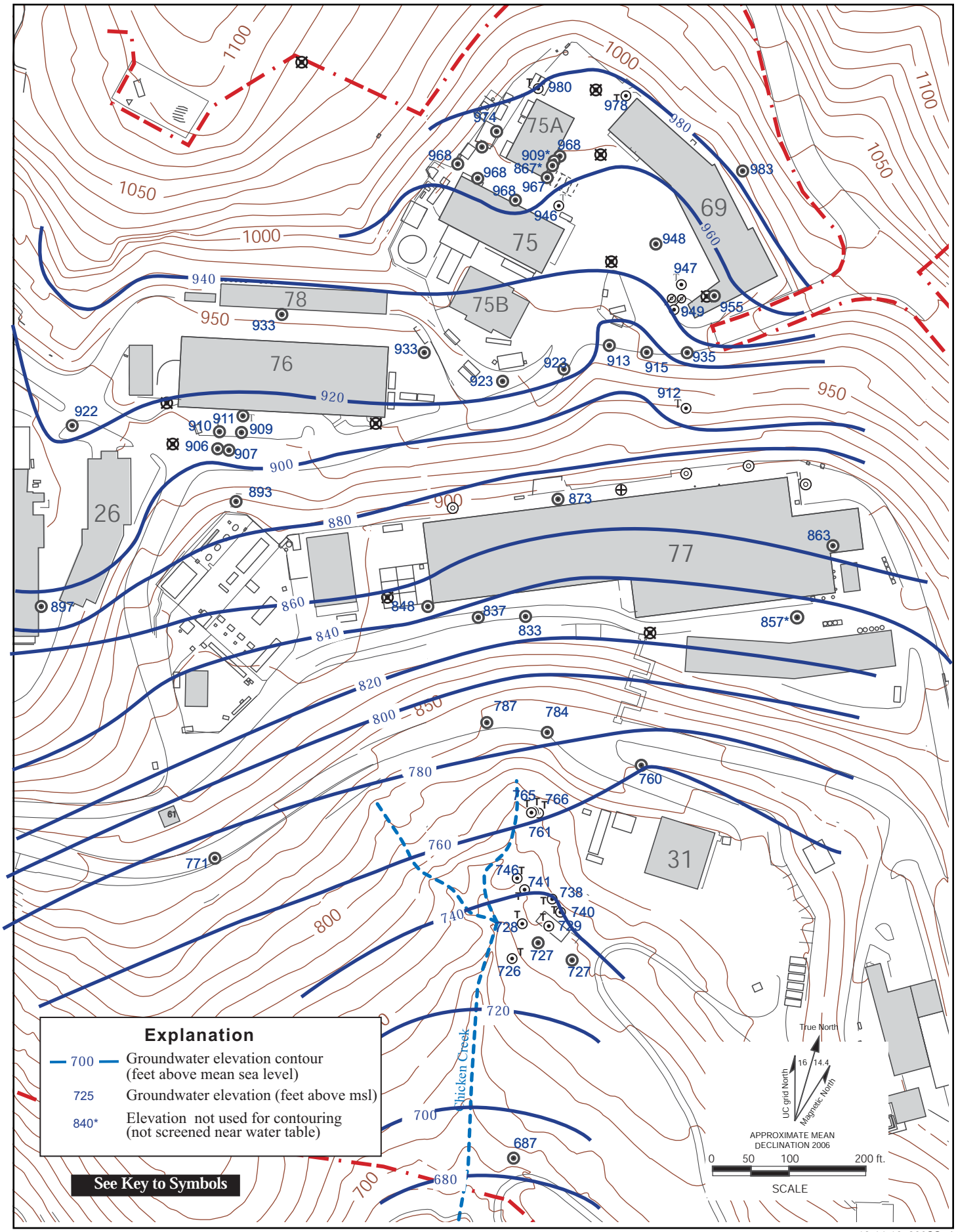
Figure 12. Water Level Elevation Map of the Old Town Area, Third Quarter FY06.



13-14-16q306SS.ai
10/06

Figure 13. Total Halogenated Hydrocarbons in Groundwater (ug/L) in the Support Services Area, Third Quarter FY06.



13-14-16q306SS.ai
10/06

Figure 14. Water Level Elevation Map of the Support Services Area, Third Quarter FY06.

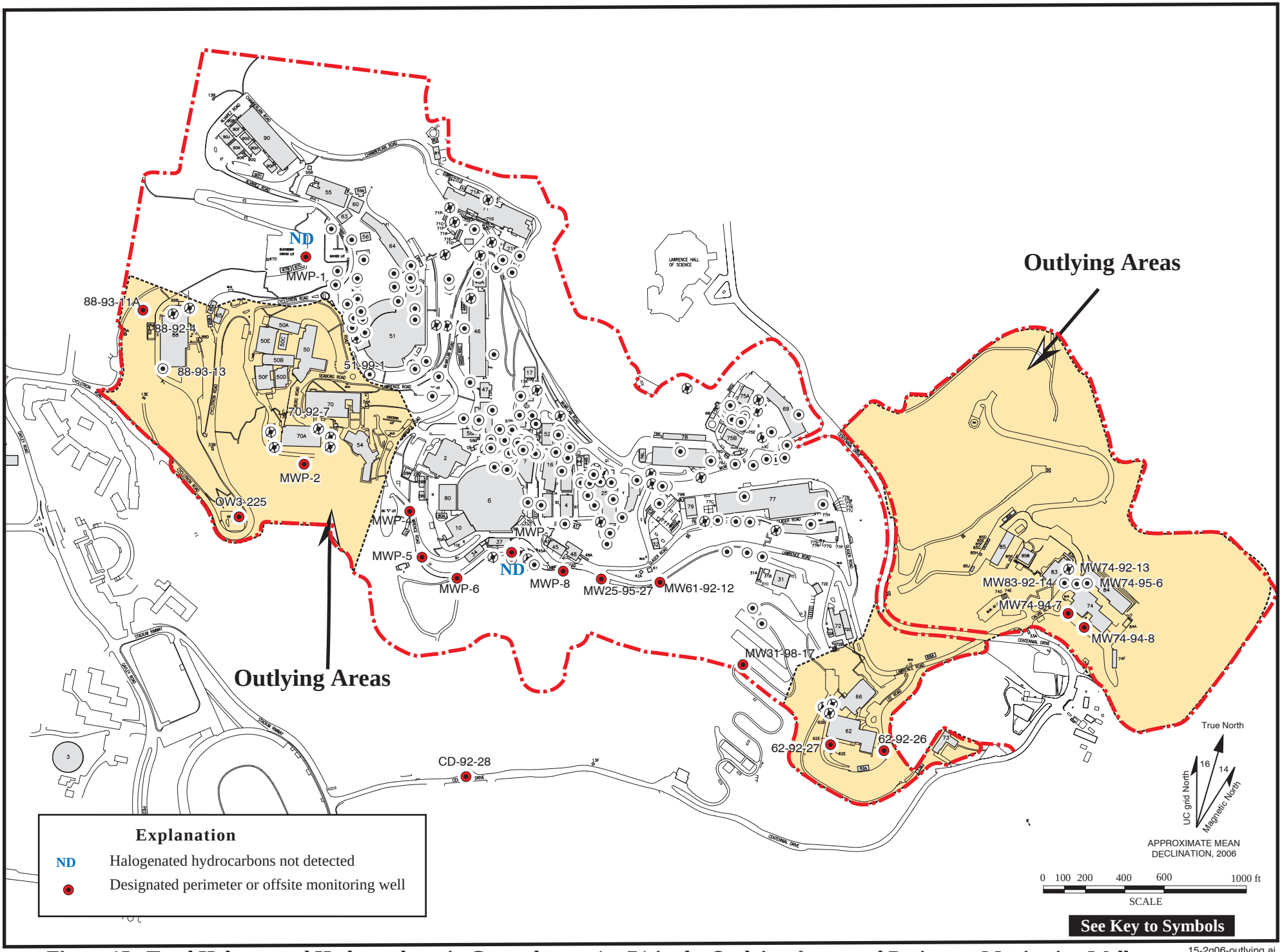
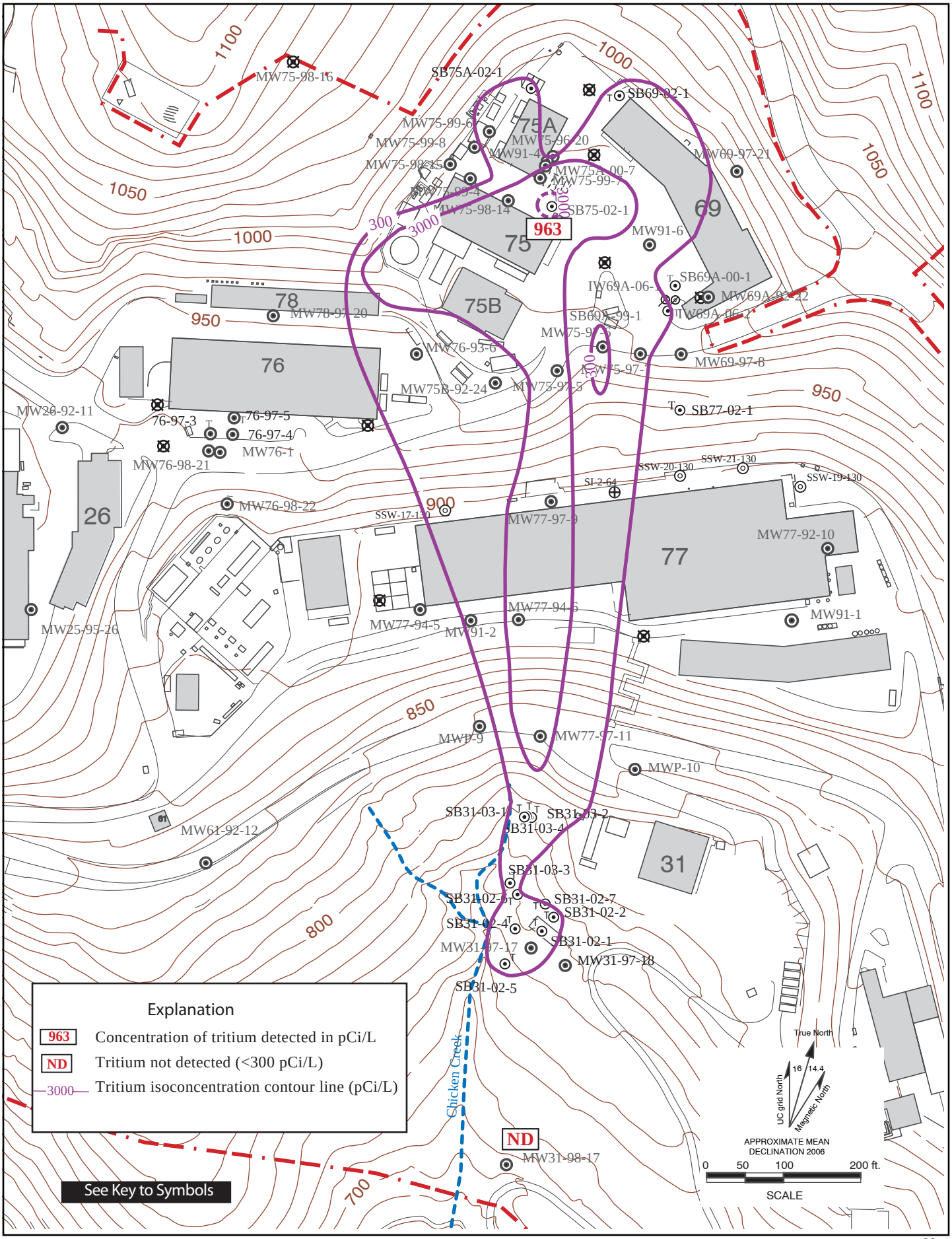


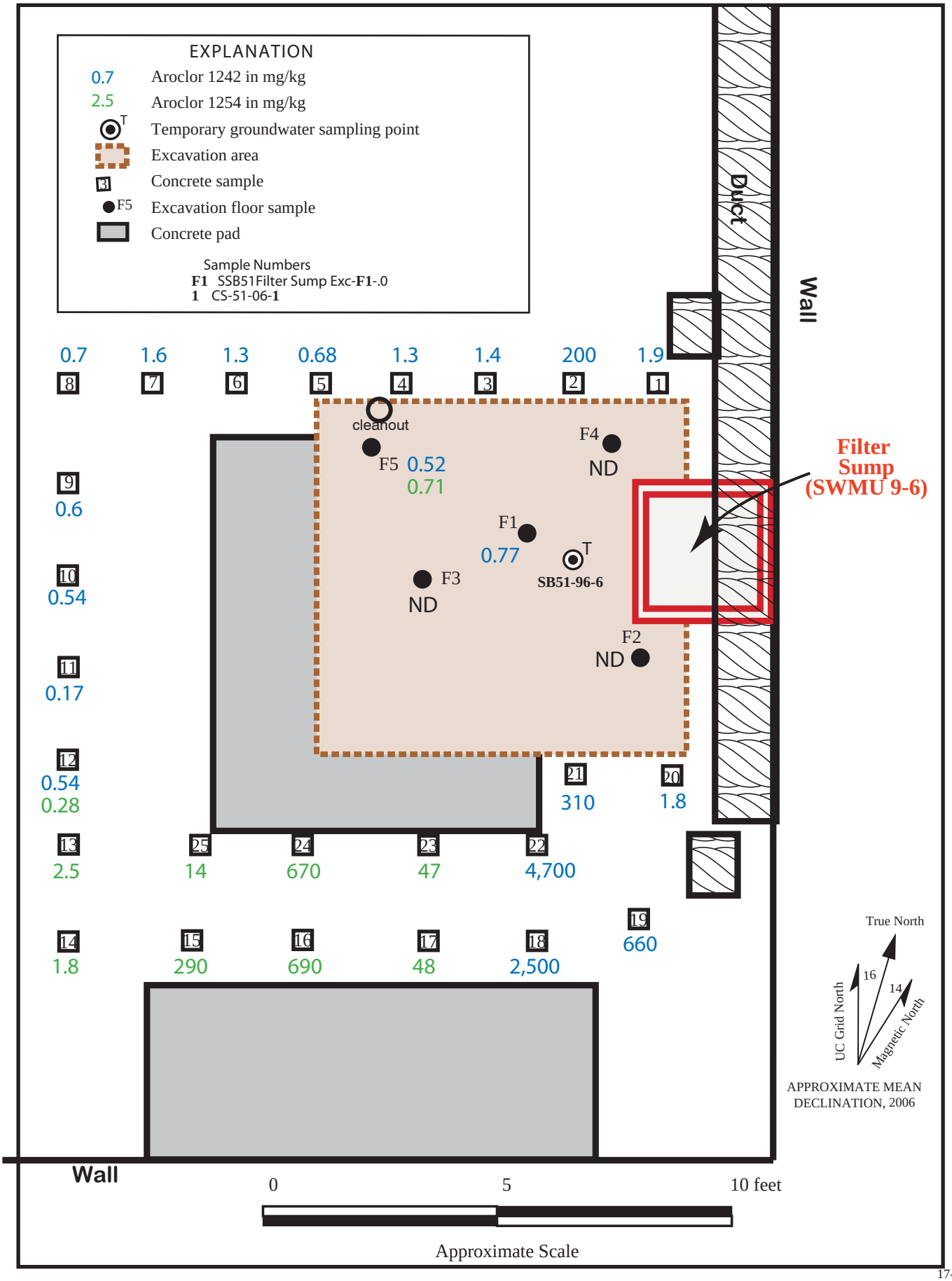
Figure 15. Total Halogenated Hydrocarbons in Groundwater (ug/L) in the Outlying Areas and Perimeter Monitoring Wells, Third Quarter FY06.

15-2q06-outlying.ai
10/06



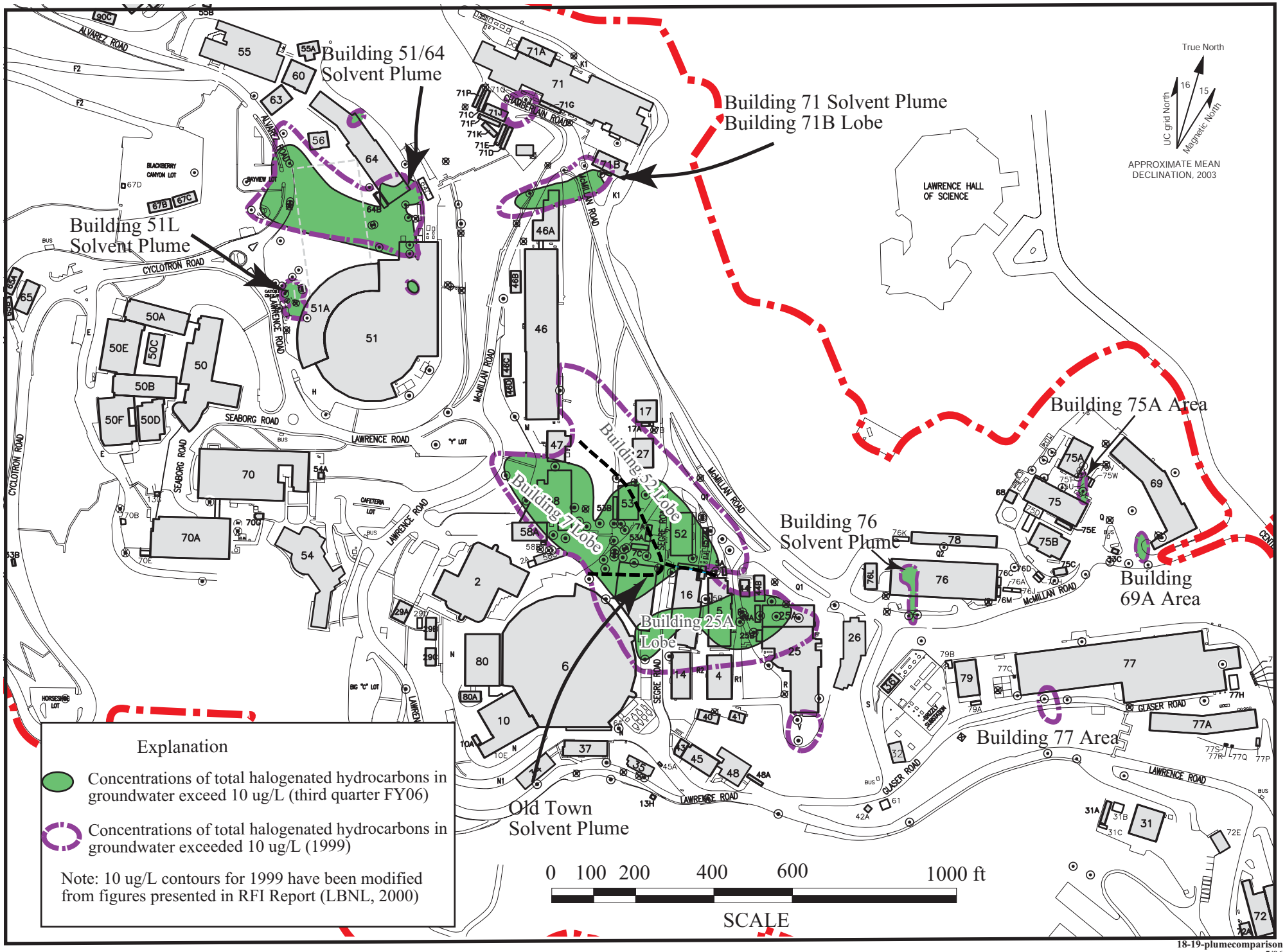
13-14-16q306SS.ai
10/06

Figure 16. Tritium Concentrations in Groundwater (pCi/L) in Corporation Yard Area, Third Quarter FY06.



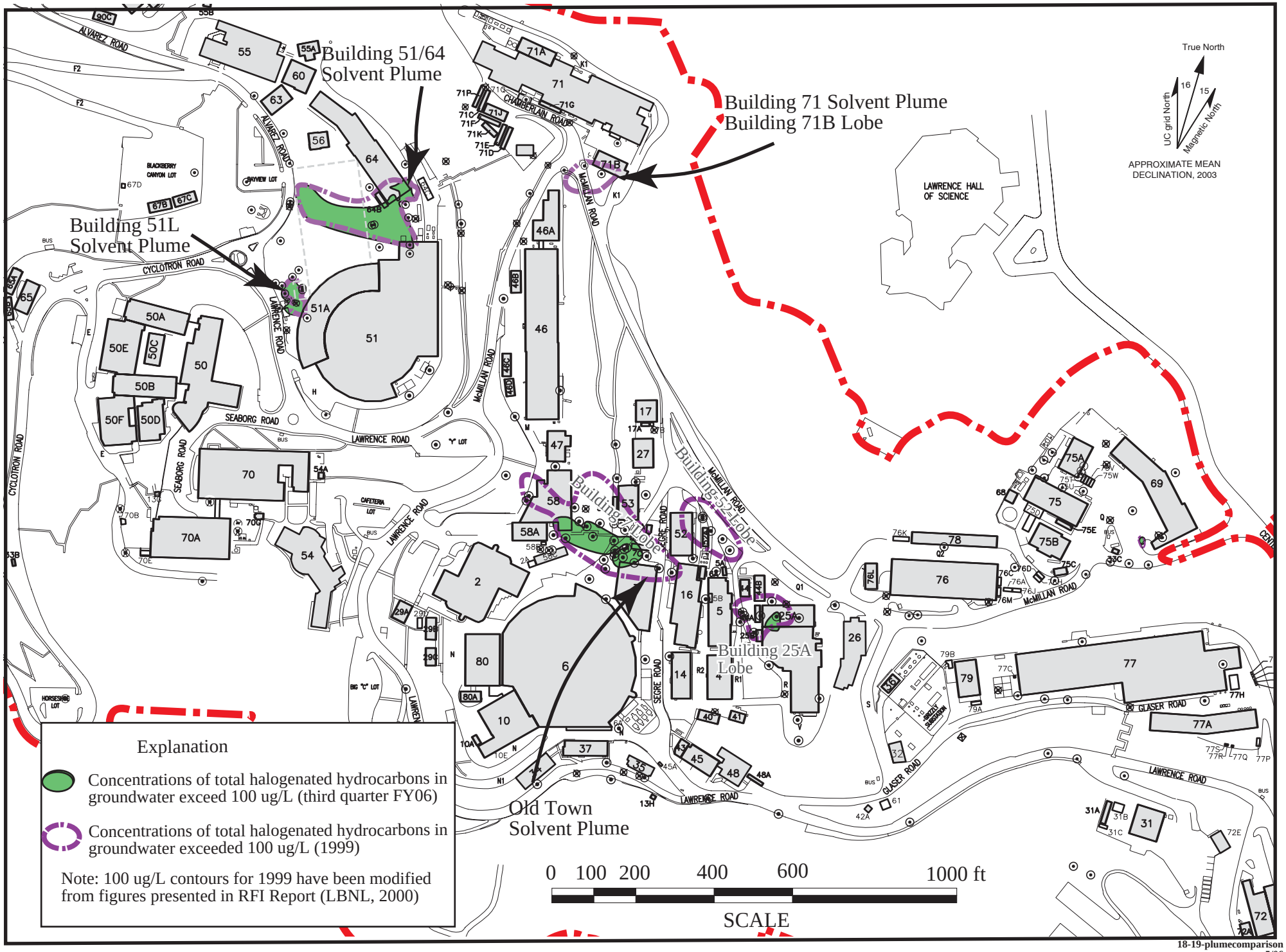
17-mgrpcbs.ai
10/06

Figure 17. Concentrations of PCBs Detected in Soil and Concrete (mg/kg) Third Quarter FY06, Building 51 Motor Generator Room Basement Filter Sump.



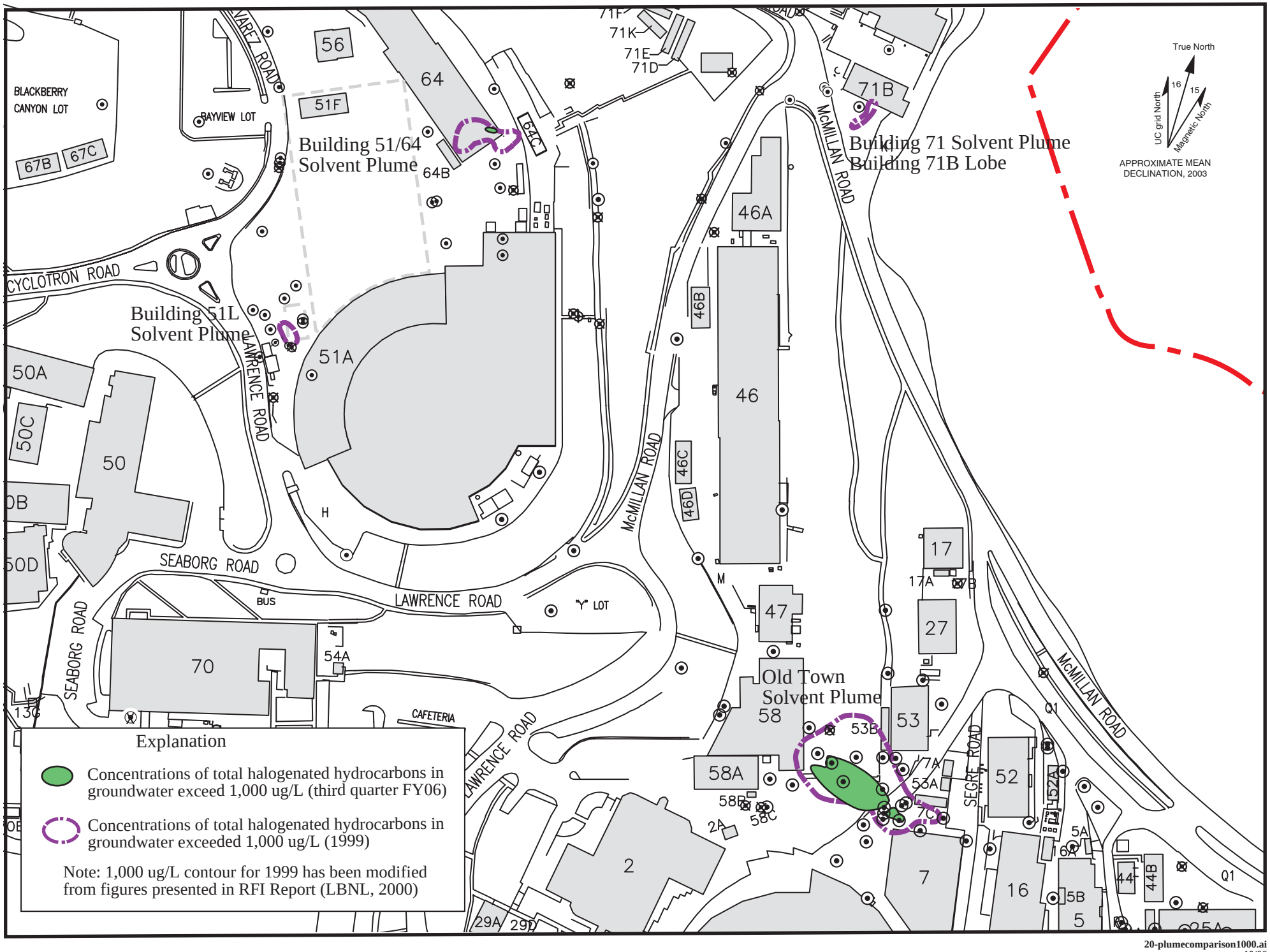
18-19-plumecomparison
5/06

Figure 18. Extent of Groundwater Contamination (Total VOCs > 10 ug/L) Third Quarter FY06 Compared to 1999.



18-19-plumecomparison
5/06

Figure 19. Extent of Groundwater Contamination (Total VOCs > 100 ug/L) Third Quarter FY06 Compared to 1999.



20-plumecomparison1000.ai
10/06

Figure 20. Extent of Groundwater Contamination (Total VOCs > 1,000 ug/L) Third Quarter FY06 Compared to 1999.

MW25-95-5	Groundwater monitoring well
MW90-6	Properly destroyed monitoring well
T SB76-97-3	Temporary groundwater sampling point
T SB64-98-16	Properly destroyed sampling point
EW EW	Groundwater extraction well
IW	Groundwater injection well
DP	Dual phase extraction well
SSW-31.63	Slope stability well
SI-3.63	Slope indicator well
71-95-10 or VZM-OT-1	Vadose zone monitoring well
SG-76W-7	Soil gas probe
	Shallow soil sampling location
	Soil boring
	Angled soil boring
L-3	Vacuum lysimeter
	Shallow soil-gas sampling location
7-95-1	Soil-gas monitoring well
PZ51-92-3	Piezometer
	Groundwater monitoring point
	Spring

LT	Less than reporting limit
ND (or <)	Not detected
NS	Not sampled
NA	Not analyzed
grab or g	Grab sample
Dup	Duplicated sample
51-01-10	Hydrauger
	Sanitary sewer line
	Storm drain line
	Surface creek
A A'	Cross section
	LBNL site boundary
	Fence
B 17	Surface structure (e.g. buildings, etc.)

700	Topographic contour line (elevation in ft above mean sea level)
700	Water level contour line (elevation in ft above mean sea level)
746.53	Water level elevation (ft above mean sea level)
	Area of groundwater contamination

NOTES:
All other symbols used are explained on the figures.
Not all symbols may be included on the attached figures for the current reporting period.

Symbols.ai
6/99

Key to Symbols Used on Figures.

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Table 17. LBNL Groundwater Quality Control Samples, Volatile Organic Compounds – EPA Method 8260, 3rd Quarter FY2006.

Table 1
EPA Method 8260 Quantitation Limits
for Soil and Groundwater Samples
3rd Quarter FY 2006

	Water Samples µg/L		Soil samples mg/kg
Compound	LBNL EML	BC Laboratories	BC Laboratories
Benzene	1.0	0.5	0.005
Bromobenzene	1.0	0.5	0.005
Bromochloromethane	2.0	0.5	0.005
Bromodichloromethane	1.0	0.5	0.005
Bromoform	2.0	0.5	0.005
Bromomethane	10.0	1	0.005
n-Butylbenzene	1.0	0.5	0.005
sec-Butylbenzene	1.0	0.5	0.005
tert-Butylbenzene	1.0	0.5	0.005
Carbon Tetrachloride	1.0	0.5	0.005
Chlorobenzene	1.0	0.5	0.005
Chlorodifluoromethane (Freon-22)	30.0		
Chloroethane	30.0	0.5	0.005
Chloroform	3.0	0.5	0.005
Chloromethane	10.0	0.5	0.005
2-Chlorotoluene	2.0	0.5	0.005
4-Chlorotoluene	2.0	0.5	0.005
Dibromochloromethane	2.0	0.5	0.005
1,2-Dibromo-3-chloropropane	2.0	1	0.005
1,2-Dibromoethane	2.0	0.5	0.005
Dibromomethane	1.0	0.5	0.005
1,2-Dichlorobenzene	1.0	0.5	0.005
1,3-Dichlorobenzene	1.0	0.5	0.005
1,4-Dichlorobenzene	1.0	0.5	0.005
Dichlorodifluoromethane (Freon-12)	3.0	0.5	0.005
1,1-Dichloroethane	1.0	0.5	0.005
1,2-Dichloroethane	2.0	0.5	0.005
1,1-Dichloroethene	1.0	0.5	0.005
cis-1,2-Dichloroethene	1.0	0.5	0.005
trans-1,2-Dichloroethene	1.0	0.5	0.005
Dichlorofluoromethane (Freon-21)	3.0		
1,2-Dichloropropane	1.0	0.5	0.005
1,3-Dichloropropane	1.0	0.5	0.005
2,2-Dichloropropane	1.0	0.5	0.005
1,1-Dichloropropene	1.0	0.5	0.005
cis-1,3-Dichloropropene	1.0	0.5	0.005
trans-1,3-Dichloropropene	1.0	0.5	0.005
1,2-Dichlorotetrafluoroethane (Freon-114	3.0		
Dichlorotrifluoroethane (Freon-123)	1.0		
1,2-Dichlorotrifluoroethane (Freon-123A)	1.0		
Ethylbenzene	1.0	0.5	0.005
Hexachlorobutadiene	3.0	0.5	0.005
Isopropylbenzene	2.0	0.5	0.005
p-Isopropyltoluene	1.0	0.5	0.005
Methylene Chloride	1.0	1	0.01
Methyl tert-Butyl Ether	5.0	0.5	0.005
Naphthalene	2.0	0.5	0.005
n-Propylbenzene	1.0	0.5	0.005
Styrene	1.0	0.5	0.005
1,1,2,2-Tetrachloroethane	1.0	0.5	0.005
1,1,1,2-Tetrachloroethane	2.0	0.5	0.005
Tetrachloroethene	1.0	0.5	0.005
Toluene	1.0	0.5	0.005
1,2,3-Trichlorobenzene	2.0	0.5	0.005
1,2,4-Trichlorobenzene	1.0	0.5	0.005
1,1,1-Trichloroethane	1.0	0.5	0.005
1,1,2-Trichloroethane	1.0	0.5	0.005
Trichloroethene	1.0	0.5	0.005
Trichlorofluoromethane (Freon-11)	2.0	0.5	0.005
1,2,3-Trichloropropane	1.0	1	0.005
Trichlorotrifluoroethane (Freon-113)	1.0	0.5	0.005
1,2,4-Trimethylbenzene	1.0	0.5	0.005
1,3,5-Trimethylbenzene	1.0	0.5	0.005
Vinyl Chloride	1.0	0.5	0.005
Total-Xylene	2.0	1	0.01

= Compound not included in analysis

Table 2
GROUNDWATER SAMPLING LOCATIONS AND ANALYTICAL METHODS
3rd QUARTER FY 2006

		VOCs - 8260					
Location	Area	Page #	Apr	May	June	Metals	Tritium
Trip Blank		T-59	√√	√√√√√.			
Field Blank		T-59	√√√√	√√√√			√
MW90-2^{S}	2	T-34		√			
MW90-3^{S}	1						
MW90-4^{A}	1						
MW90-5^{S}	1						
MW91-1^{A}	5						
MW91-2^{S}	5						
MW91-4^{N}	3						
MW91-6^{N}	3						
MW91-8^{S}	2	T-34	√	√	√		
MW91-9^{A}	10	T-34	√	√	√		
MWP-1	15	T-19	√				
MWP-2^{S}	8						
MWP-4^{S}	14						
MWP-5^{S}	14						
MWP-6^{S}	14						
MWP-7^{T}	14	T-34		√			
MWP-8^{S}	10						
MWP-9^{A}	5						
MWP-10^{N}	5						
MW7-1^{N}	2						
MW76-1^{A}	4						
51-92-2^{N}	9						
37-92-6^{N}	14	T-31		√			
46-92-9^{A}	7						
77-92-10^{N}	5						
26-92-11^{A}	10						
61-92-12^{S}	5						
74-92-13^{N}	11						
83-92-14^{N}	11						
46A-92-15^{A}	1						
7-92-16^{S}	2						

Table 2 (Cont'd)
GROUNDWATER SAMPLING LOCATIONS AND ANALYTICAL METHODS
3rd QUARTER FY 2006

		VOCs - 8260					
Location	Area	Page #	Apr	May	June	Metals	Tritium
75B-92-24^{N}	3						
62-92-26^{S}	13						
62-92-27^{S}	13						
CD-92-28^{S}	OS						
71-93-2^{N}	1						
58-93-3^{S}	7						
6-93-4^{A}	2						
76-93-6^{N}	4						
53-93-9^{Q}	2	T-32	√√	√√	√√		
5-93-10^{S}	10	T-29	√	√	√		
88-93-11A^{S}	6						
46-93-12^{S}	7	T-31	√				
88-93-13^{N}	6						
52-93-14^{A}	10						
53-93-16-42'^{A}	2						
53-93-16-69'^{S}	2	T-33	√√	√√	√√		
53-93-17^{N}	2						
51B-93-18A^{S}	9						
7-94-3^{S}	2	T-29		√			
77-94-5^{N}	5						
77-94-6^{N}	5						
74-94-7^{S}	11						
74-94-8^{S}	11						
25-94-12^{A}	10						
16-94-13^{A}	10						
58A-94-14^{S}	7						
51-94-15^{A}	7						
52-95-2B^{S}	10	T-31	√√	√	√√		
16-95-3^{N}	10						
25-95-5^{N}	10	T-30		√			
74-95-6^{A}	11						
71-95-9^{N}	1						

Table 2 (Cont'd)
GROUNDWATER SAMPLING LOCATIONS AND ANALYTICAL METHODS
3rd QUARTER FY 2006

		VOCs - 8260					
Location	Area	Page #	Apr	May	June	Metals	Tritium
7-95-23[Q]	2	T-29	√	√	√		
7B-95-24[Q]	2	T-30	√	√	√		
7B-95-25[S]	2	T-30		√			
25-95-26[A]	10						
25-95-27[S]	10						
53-96-1[A]	2	T-33	√	√	√		
51-96-3[A]	7						
46-96-10[A]	7						
58-96-11[Q]	2	T-33	√	√	√		
51-96-15[S]	9						
51-96-16[S]	9	T-19	√	√	√		
51-96-17[A]	9	T-19	√	√	√		
51-96-18[S]	9	T-19	√	√	√		
75-96-20[A]	3						
64-97-1[A]	9						
64-97-2[S]	9						
51-97-3[A]	9						
75-97-5[N]	3						
75-97-6[N]	3						
75-97-7[N]	3						
69-97-8[S]	3	T-42	√	√	√		
77-97-9[N]	5						
77-97-11[N]	5						
51-97-12[S]	9						
51-97-13[A]	9						
51-97-14[A]	9						
51-97-15[S]	9						
31-97-17[N]	5						
31-97-18[N]	5						
78-97-20[N]	4						
69-97-21[N]	3						
25A-98-1[S]	10	T-30	√		√		

Table 2 (Cont'd)
GROUNDWATER SAMPLING LOCATIONS AND ANALYTICAL METHODS
3rd QUARTER FY 2006

		VOCs - 8260					
Location	Area	Page #	Apr	May	June	Metals	Tritium
31-98-17[S]	5	T-51					√
63-98-18[A]	15						
76-98-21[S]	4						
76-98-22[S]	4						
51-99-1[N]	9						
25A-99-2[S]	10						
71B-99-3R[Q]	1	T-19	√√		√√		
75-99-6[N]	3						
75-99-7[N]	3						
75-99-8[N]	3						
7-00-4[A]	2						
52A-00-6[N]	10						
75A-00-7[A]	3						
51-00-8[Q]	9	T-19	√				
51-00-9[N]	9						
51-00-10[A]	9						
58-00-12[Q]	7	T-34	√	√,D	√		
51L-01-1A[A]	9						
51L-01-1B[N]	9						
51L-01-3[A]	9						
51L-01-4[A]	9						
51L-01-5A[A]	9						
51L-01-5B[A]	9						
51L-01-6[A]	9						
51L-01-7[A]	9						
51A-01-11[A]	9						
51L-02-1[A]	9						
OW3-225[S]	8						
Hydraugers							
37-01-01	14	T-45		√			
51-01-01	9	T-45		√			
51-01-02	9	T-45		√			
51-01-03	9	T-45		√			

Table 2 (Cont'd)
GROUNDWATER SAMPLING LOCATIONS AND ANALYTICAL METHODS
3rd QUARTER FY 2006

		VOCs - 8260					
Location	Area	Page #	Apr	May	June	Metals	Tritium
Temporary Groundwater Sampling Points							
SB58-97-1	7	T-36		√			
SB58-97-2	7	T-36	√	√	√		
SB58-98-6	7	T-36		√			
SB64-98-8	9	T-20	√	√√	√√		
SB64-98-17	9	T-20	√	√√	√√		
SB64-99-4	9	T-20	√	√√	√√		
SB64-99-5	9	T-21	√	√√	√√		
SB64-00-1	9	T-21	√	√√	√√		
SB64-00-2	9	T-21	√	√√	√√		
SB64-02-1A	9	T-22	√,D	√	√		
SB64-02-1B	9	T-22	√	√	√		
SB64-02-1C	9	T-22	√	√	√		
SB64-02-1D	9	T-22	√	√	√		
SB64-02-1E	9	T-22	√	√	√		
SB64-02-1F	9	T-23	√	√	√		
SB64-02-2A	9	T-23	√	√	√		
SB64-02-2B	9	T-23	√		√√		
SB64-02-2C	9	T-23	√	√	√		
SB64-02-2D	9	T-23	√	√	√		
SB64-02-2E	9	T-24	√	√	√		
SB64-02-2F	9	T-24	√	√			
SB64-03-1B	9	T-24	√	√√	√√		
SB64-03-5	9	T-24	√	√	√		
SB64-03-6	9	T-25	√	√	√		
SB64-03-8	9	T-25		√			
SB64-05-4	9	T-25	√	√√	√√		
SB69A-99-1	3	T-43	√√	√	√√		
SB71B-03-1	1	T-25	√√	√√	√√	√	
SB71B-03-2	1	T-26	√√√	√√	√√	√	
SB71B-04-1	1	T-26	√√	√√	√√		

Table 2 (Cont'd)
GROUNDWATER SAMPLING LOCATIONS AND ANALYTICAL METHODS
3rd QUARTER FY 2006

		VOCs - 8260					
Location	Area	Page #	Apr	May	June	Metals	Tritium
Extraction / Injection Wells							
EW7-96-1	2	T-37	√	√	√		
EW7-96-2	2	T-37	√	√	√		
EW7-96-4R	2	T-37	√	√	√		
EW7-03-1	2	T-37	√	√	√		
EW7-03-2	2	T-37	√	√	√		
EW7-03-3	2	T-38	√	√	√		
EW7-06-1	2	T-38	√		√		
EW7C-04-2	2	T-38	√√	√√	√√		
EW25A-02-1	10	T-38	√√	√√	√√		
EW51L-99-1	9	T-27	√				
EW51L-00-1	9	T-27	√				
EW53-04-2	2	T-39	√√	√√	√√		
EW58-98-1[T]	7	T-39		√			
EW58E-98-1	7	T-39		√			
EW58E-98-2	7	T-40		√			
EW58E-98-3	7	T-40		√			
EW58E-98-4	7	T-40		√			
EW58E-98-5	7	T-40		√			
EW58E-98-6	7	T-40		√			
EW58E-98-7	7	T-40		√			
EW58E-98-8	7	T-40		√			
EW58-02-1[T]	9	T-40	√	√			
EW64-00-1[T]	9	T-27	√	√√	√√		
EW64-03-1[T]	9	T-27	√	√√	√√		
EW64-05-1[T]	9	T-28	√	√√	√√		
IW64-06-1	9	T-28			√		
IW64-06-2	9	T-28			√		
IW64-06-3	9	T-28			√		
IW69A-06-1	3	T-44		√			
IW69A-06-2	3	T-44		√			

= all compounds less than Quantitation Limit or Minimum Detectable Activity (Radionuclides)

Minimum required groundwater monitoring well sampling schedule for VOCs

Table 3
Groundwater Elevations in LBNL Monitoring Wells
3rd Quarter FY 2006

Well Number	Top of Casing Elevation (feet)	Date	Depth to Water (feet)	Groundwater Elevation (feet msl)		Change from Previous Quarter
				Current Quarter	Previous Quarter	
Bevalac Area						
46A-92-15	830.10	5/25	11.38	818.72	816.47	2.25
51-92-2	724.69	5/25	3.94	720.75	719.96	0.79
51-96-15	709.83	5/25	20.94	688.89	688.88	0.01
51-96-16	709.72	5/25	16.62	693.10	692.55	0.55
51-96-17	709.64	5/25	13.30	696.34	696.62	-0.28
51-96-18	710.76	5/25	11.00	699.76	700.24	-0.48
51-97-3	709.81	5/25	32.91	676.90	676.54	0.36
51-97-12	709.37	5/25	30.95	678.42	678.02	0.40
51-97-13	709.48	5/25	31.15	678.33	678.00	0.33
51-97-14	708.89	5/25	46.89	662.00	662.37	-0.37
51-97-15	706.11	5/25	69.22	636.89	636.20	0.69
51-98-5	709.63	5/25	43.71	665.92	665.86	0.06
51-99-1	724.44	5/25	10.51	713.93	713.73	0.20
51-00-8	682.11		NM		660.49	
51-00-9	698.16	5/26	2.69	695.47	695.53	-0.06
51-00-10	698.18	5/26	2.70	695.48	695.52	-0.04
51A-01-11	709.74	5/25	34.43	675.31	680.03	-4.72
51B-93-18A	709.95	5/25	9.50	700.45	700.88	-0.43
51L-01-1A	710.04	5/25	6.52	703.52	702.62	0.90
51L-01-1B	710.04	5/25	21.10	688.94	700.91	-11.97
51L-01-3	709.54	5/25	17.35	692.19	692.56	-0.37
51L-01-4	709.87	5/25	17.41	692.46	692.85	-0.39
51L-01-5A	709.96	5/25	24.65	685.31	683.08	2.23
51L-01-5B	709.94	5/25	44.59	665.35	666.31	-0.96
51L-01-6	709.80	5/25	21.00	688.80	687.87	0.93
51L-01-7	709.76	5/25	33.22	676.54	675.45	1.09

Well Number	Top of Casing Elevation (feet)	Date	Depth to Water (feet)	Groundwater Elevation (feet msl)		Change from Previous Quarter
				Current Quarter	Previous Quarter	
51L-02-1	709.74	5/25	16.93	692.81	690.92	1.89
56-98-2	709.76	5/25	14.08	695.68	693.68	2.00
63-98-18	709.99	5/25	15.74	694.25	693.73	0.52
64-97-1	709.94	5/25	4.16	705.78	705.42	0.36
64-97-2	709.65	5/25	10.39	699.26	697.91	1.35
71-93-2	844.39	5/25	35.04	809.35	810.36	-1.01
71-95-9	854.18	5/25	17.21	836.97	836.90	0.07
71B-98-13	832.33	5/25	8.88	823.45	821.25	2.20
71B-99-3R	840.13	5/25	12.95	827.18	826.25	0.93
71B-00-2	832.41	5/25	10.31	822.10	818.82	3.28
MW90-3	820.60	5/25	40.88	779.72	779.81	-0.09
MW90-4	746.15	5/25	5.94	740.21	739.26	0.95
MW90-5	745.75	5/25	14.17	731.58	730.78	0.80
MWP-1	630.65	5/25	40.73	589.92	589.55	0.37
Old Town						
5-93-10	914.90	5/25	18.53	896.37	896.77	-0.40
6-92-17	891.20	5/25	11.47	879.73	879.78	-0.05
6-93-4	881.60	5/25	41.58	840.02	845.38	-5.36
MW7-1	884.13	5/25	11.17	872.96	872.75	0.21
7-92-16	882.40	5/25	43.20	839.20	844.77	-5.57
7-92-19	884.80	5/25	19.31	865.49	867.58	-2.09
7-94-3	882.88		NM		NM	
7-95-22	882.16	5/25	20.81	861.35	863.52	-2.17
7-95-23	882.37	5/25	14.65	867.72	867.93	-0.21
7-00-4	883.18	5/26	88.21	794.97	792.24	2.73
7B-95-21	883.63		NM		866.77	
7B-95-24	883.88	5/26	52.41	831.47	831.40	0.07

Table 3 (Cont'd)
Groundwater Elevations in LBNL Monitoring Wells
3rd Quarter FY 2006

Well Number	Top of Casing Elevation	Date	Depth to Water (feet)	Groundwater		Change from Previous
				Current Quarter	Previous Quarter	
7B-95-25	882.03	5/26	18.58	863.45	864.81	-1.36
16-94-13	892.50	5/25	11.32	881.18	880.79	0.39
16-95-3	901.52	5/26	15.09	886.43	887.31	-0.88
25-94-12	937.59	5/25	33.07	904.52	905.25	-0.73
25-95-5	932.88		NM		858.38	
25-95-26	935.81	5/26	38.48	897.33	897.53	-0.20
25-95-27	859.83	5/25	27.62	832.21	832.65	-0.44
25-98-10	934.42	5/26	54.50	879.92	860.14	19.78
25A-95-15	931.68	5/25	32.04	899.64	913.73	-14.09
25A-98-1	936.88	5/26	22.34	914.54	903.54	11.00
25A-98-3	940.14	5/26	39.60	900.54	899.59	0.95
25A-98-6	939.90	5/26	30.86	909.04	909.50	-0.46
25A-98-7	942.71	5/26	15.47	927.24	930.14	-2.90
25A-99-2	940.45	5/26	18.86	921.59	915.30	6.29
25A-00-5	933.12	5/25	37.47	895.65	893.94	1.71
26-92-11	936.19	5/26	14.38	921.81	923.59	-1.78
27-92-20	881.10		NM		835.27	
37-92-18A	861.20	5/25	45.12	816.08	814.48	1.60
46-92-9	805.30	5/26	73.06	732.24	730.49	1.75
46-93-12	807.57	5/26	7.53	800.04	800.08	-0.04
46-96-10	790.35	5/26	32.97	757.38	757.97	-0.59
51-94-15	771.17	5/26	33.30	737.87	738.83	-0.96
51-96-3	766.44	5/26	8.61	757.83	757.68	0.15
52-93-14	900.03	5/25	33.41	866.62	868.49	-1.87
52-95-2A	910.27	5/26	43.15	867.12	867.65	-0.53
52-95-2B	910.23	5/26	48.78	861.45	NM	
52-98-9	910.86	5/26	48.92	861.94	860.64	1.30
52A-98-8A	913.56	5/26	31.66	881.90	882.32	-0.42
52A-98-8B	913.51	5/26	47.32	866.19	867.81	-1.62

Well Number	Top of Casing Elevation	Date	Depth to Water (feet)	Groundwater		Change from Previous
				Current Quarter	Previous Quarter	
52A-00-6	917.34	5/25	57.68	859.66	859.03	0.63
52B-95-13	887.40	5/25	17.20	870.20	871.73	-1.53
53-92-21-130	886.97	5/25	68.88	818.09	817.51	0.58
53-92-21-147	886.99	5/25	67.59	819.40	818.90	0.50
53-92-21-167	886.97	5/25	67.56	819.41	818.41	1.00
53-92-21-193	886.98	5/25	82.91	804.07	803.53	0.54
53-93-9	900.68		NM		839.12	
53-93-16-42'	887.45	5/25	38.32	849.13	NM	
53-93-16-69'	887.40	5/25	56.82	830.58	821.72	8.86
53-93-17	902.62		NM		843.72	
53-95-12	867.45	5/25	30.89	836.56	835.39	1.17
53-96-1	887.64	5/25	56.90	830.74	830.16	0.58
58-93-3	830.06	5/26	3.63	826.43	826.00	0.43
58-95-11	831.62	5/26	0.95	830.67	831.01	-0.34
58-95-18	788.61	5/26	9.86	778.75	781.04	-2.29
58-95-19	834.33	5/26	16.47	817.86	817.68	0.18
58-95-20	818.81	5/26	15.36	803.45	804.70	-1.25
58-96-11	848.23	5/26	27.67	820.56	816.28	4.28
58-00-12	860.62	5/26	21.86	838.76	834.08	4.68
58A-94-14	821.73	5/26	22.76	798.97	800.77	-1.80
58A-00-3	822.54	5/26	50.41	772.13	761.72	10.41
MW90-2	880.78	5/25	19.52	861.26	861.20	0.06
MW91-8	887.02	5/25	48.52	838.50	836.63	1.87
MW91-9	915.67	5/25	19.96	895.71	897.32	-1.61
MWP-4	831.56	5/25	46.32	785.24	783.54	1.70
MWP-5	852.37	5/25	95.98	756.39	756.07	0.32
MWP-6	845.44	5/25	22.41	823.03	821.87	1.16
MWP-8	872.34	5/25	25.75	846.59	844.88	1.71

Table 3 (Cont'd)
Groundwater Elevations in LBNL Monitoring Wells
3rd Quarter FY 2006

Well Number	Top of Casing Elevation	Date	Depth to Water (feet)	Groundwater		Change from Previous
				Current Quarter	Previous Quarter	
Support Services						
31-97-17	746.15	5/25	19.31	726.84	727.79	-0.95
31-97-18	747.80	5/25	20.57	727.23	727.55	-0.32
31-98-17	693.47	5/25	6.82	686.65	680.39	6.26
61-92-12	843.90	5/25	73.13	770.77	767.82	2.95
69-97-8	975.75	5/25	40.97	934.78	934.62	0.16
69-97-21	1003.40	5/25	20.67	982.73	981.96	0.77
69A-92-22	977.06	5/25	22.47	954.59	955.28	-0.69
75-96-20	979.07	5/25	10.77	968.30	969.05	-0.75
75-97-5	963.73	5/25	40.56	923.17	920.45	2.72
75-97-6	967.89	5/25	55.14	912.75	911.67	1.08
75-97-7	970.70	5/25	55.44	915.26	909.29	5.97
75-98-14	977.94	5/25	10.26	967.68	965.92	1.76
75-98-15	977.97	5/25	9.74	968.23	966.99	1.24
75-99-4	977.90	5/25	9.73	968.17	966.96	1.21
75-99-6	979.94	5/25	6.06	973.88	968.06	5.82
75-99-7	977.92	5/25	11.33	966.59	966.73	-0.14
75-99-8	979.34		NM		970.86	
75A-00-7	978.32	5/25	111.27	867.05	858.04	9.01
75B-92-24	956.90	5/25	33.83	923.07	923.87	-0.80
MW76-1	923.70	5/25	16.41	907.29	905.81	1.48
76-93-6	948.61	5/25	15.42	933.19	933.85	-0.66
76-98-21	923.20	5/25	17.51	905.69	908.49	-2.80
76-98-22	904.57	5/25	11.98	892.59	892.54	0.05
77-92-10	879.11	5/25	16.02	863.09	857.01	6.08

Well Number	Top of Casing Elevation	Date	Depth to Water (feet)	Groundwater		Change from Previous
				Current Quarter	Previous Quarter	
77-94-5	878.96	5/25	30.99	847.97	NM	
77-94-6	876.76	5/25	44.17	832.59	831.86	0.73
77-97-9	888.69	5/25	15.76	872.93	867.65	5.28
77-97-11	814.67	5/25	30.77	783.90	783.59	0.31
78-97-20	949.54	5/25	17.04	932.50	932.95	-0.45
MW91-1	877.98	5/25	21.22	856.76	855.33	1.43
MW91-2	877.27	5/25	39.87	837.40	834.07	3.33
MW91-4	978.55	5/25	69.71	908.84	900.99	7.85
MW91-6	975.22	5/25	27.07	948.15	948.94	-0.79
MWP-9	818.83	5/25	32.16	786.67	787.56	-0.89
MWP-10	809.74	5/25	49.79	759.95	759.85	0.10
Outlying Areas						
62-92-26	773.70	5/25	35.06	738.64	730.41	8.23
62-92-27	769.90	5/25	28.42	741.48	740.88	0.60
74-92-13	834.90	5/25	11.68	823.22	822.84	0.38
74-94-7	819.82	5/25	12.93	806.89	800.04	6.85
74-94-8	815.74	5/25	19.10	796.64	803.08	-6.44
74-95-6	838.66	5/25	16.46	822.20	822.13	0.07
83-92-14	830.09		NM		818.13	
88-93-11A	537.35	5/25	62.92	474.43	472.48	1.95
88-93-13	581.50	5/25	107.72	473.78	468.32	5.46
CD-92-28	486.29	5/26	15.82	470.47	469.79	0.68
MWP-2	710.33	5/26	47.80	662.53	657.17	5.36
OW3-225	570.00	5/26	56.44	513.56	507.98	5.58

NM = Not measured

Table 4
LBNL Monitoring Well Construction Details

Location ID	Area	Completion Date	Abandonment Date	UC Grid North Coordinate	UC Grid East Coordinate	Top of Casing Elevation (ft above MSL)	Casing Diameter (inches)	Approximate Screened Interval (ft below TOC)	Screened Geologic Unit
MW90-2	2	7/19/1990		253.21	2637.82	880.78	2	25-35	Orinda
MW90-3	1	7/23/1990		1134.60	2460.40	820.60	2	48-58	Colluvium
MW90-4	1	12/1/1990		1103.90	2289.30	746.15	2	15-25	Colluvium
MW90-5	1	12/1/1990		1067.30	2293.70	745.75	4	15-25	Colluvium
MW90-6	1	12/1/1990	9/17/2002	1046.70	2291.60	746.00	2	15-25	Colluvium / Orinda
MW91-1	5	5/30/1991		-69.08	4050.61	877.98	2	44-54	Orinda
MW91-2	5	5/31/1991		-65.83	3666.47	877.27	2	40-50	Orinda
MW91-3	3	6/4/1991	9/21/2005	566.47	3807.95	981.69	2	53-63	Orinda
MW91-4	3	12/2/1991		476.81	3756.52	978.21	2	115-145	Orinda
MW91-5	3	6/3/1991	9/21/2005	490.76	3815.48	978.28	2	30-40	Orinda
MW91-6	3	11/17/1991		382.38	3879.71	975.22	4	34-44	Orinda
MW91-8	2	1/9/1992		465.11	2662.97	887.02	2	65.5-75.5	Moraga
MW91-9	10	12/9/1991		246.20	2896.17	915.67	2	28.5-38.5	Orinda
MWP-1	15	6/6/1991		1177.15	1674.81	630.65	2	39-49	Colluvium
MWP-2	8	12/6/1991		219.37	1693.34	710.33	2	66-76	Great Valley
MWP-4	14	6/19/1991		-36.08	2169.41	831.56	2	43-53	Great Valley
MWP-5	14	6/25/1991		-262.06	2213.41	852.37	2	98-108	Great Valley
MWP-6	14	6/9/1991		-256.79	2476.38	845.44	2	27-37	Great Valley
MWP-7	14	6/10/1991		-206.48	2638.97	854.01	2	25-35	Orinda / Great Valley
MWP-8	10	6/14/1991		-292.68	2876.29	872.34	2	25-35	Orinda
MWP-9	5	6/18/1991		-196.07	3674.77	818.83	2	51-61	Great Valley
MWP-10	5	6/8/1991		-246.37	3862.41	809.74	2	57-67	Great Valley
MW1-220	2	9/24/1988	9/26/2005	578.73	2751.09	901.64	4	83-93	Moraga
MW7-1	2	8/12/1988		295.97	2681.13	884.13	4	8-18	
MW62-B1A	13	9/26/1987	9/20/2005	-987.16	4129.20	757.70	2	23-33	
MW62-B2	13	9/1/1986	9/7/2005	-984.02	4127.06	756.60	2	24-34	
MW76-1	4	8/9/1988		137.13	3366.07	923.70	4	20-30	
51-92-2	9	3/19/1992		660.30	2174.22	724.69	2	6.5-16.5	Orinda
88-92-4	6	3/18/1992	9/28/2005	931.05	1029.80	590.82	2	49-59	Great Valley
37-92-5	14	3/28/1992	12/9/2005	-125.20	2668.23	881.56	2	85-105	Great Valley

Table 4 (Cont'd)
LBNL Monitoring Well Construction Details

Location ID	Area	Completion Date	Abandonment Date	UC Grid North Coordinate	UC Grid East Coordinate	Top of Casing Elevation (ft above MSL)	Casing Diameter (inches)	Approximate Screened Interval (ft below TOC)	Screened Formation Name
37-92-6	14	2/23/1992		-245.60	2649.39	854.15	2	29-39	Great Valley
70-92-7	8	3/8/1992	9/12/2005	403.84	1708.83	762.93	2	20.8-25.8	Great Valley
46-92-9	7	3/1/1992		612.25	2423.20	805.30	2	68.5-78.5	Orinda
77-92-10	5	3/3/1992		19.05	4092.31	879.11	2	48-68	Orinda
26-92-11	10	3/9/1992		165.02	3175.74	936.19	2	20.5-30.5	Orinda
61-92-12	5	2/28/1992		-356.90	3347.90	843.90	2	89-99	Orinda
74-92-13	11	4/15/1992		-355.80	5301.10	834.90	2	38.2-48.2	San Pablo (?)
83-92-14	11	2/22/1992		-354.70	5254.65	830.09	2	48-58	San Pablo (?)
46A-92-15	1	9/12/1992		1187.20	2539.10	830.10	2	29-39	Colluvium / Orinda
7-92-16	2	8/28/1992		181.20	2635.90	882.40	2	39-59	Moraga
6-92-17	14	8/27/1992		40.50	2729.10	891.20	2	24-39	Moraga/Orinda
37-92-18	14	8/31/1992	9/25/2002	-237.40	2723.80	860.30	2	19-29	Orinda
37-92-18A	14	9/14/1992		-240.60	2730.30	861.20	2	49-69	Great Valley
7-92-19	2	8/29/1992		299.60	2684.50	884.80	2	24-39	Moraga/Orinda
27-92-20	2	10/14/1992		544.10	2661.00	881.10	2	63.5-83.5	Moraga/Orinda
53-92-21-130'	2	10/92		358.33	2657.18	886.97	2	125-130	Orinda
53-92-21-147'	2	10/92		357.94	2657.11	886.99	2	142-147	Orinda
53-92-21-167'	2	10/92		358.07	2656.90	886.97	2	162-167	Orinda
53-92-21-193'	2	10/92		358.35	2656.90	886.98	2	188-193	Orinda
69A-92-22	3	1/22/1993		320.97	3951.1	977.06	2	44-64	Orinda
75-92-23	3	9/2/1992	9/26/2005	362.50	3797.00	972.10	6	29-49	Colluvium
75B-92-24	3	9/1/1992		218.40	3692.30	956.90	2	37-57	Orinda
76-92-25	4	9/13/1992	9/18/2002	181.90	3293.20	928.70	2	23.5-38	Orinda
62-92-26	13	9/3/1992		-1157.60	4402.30	773.70	2	47-57	Great Valley
62-92-27	13	9/4/1992		-1112.00	4157.10	769.90	2	56-66	Great Valley
CD-92-28	OS	10/26/1992		-1240.92	2435.51	486.29	2	45-55	Great Valley
71-93-1	1	9/9/1993	9/19/2005	1458.58	2562.60	872.39	2	43-63	Moraga/Orinda
71-93-2	1	9/8/1993		1352.87	2441.60	844.39	2	39-59	Moraga
58-93-3	7	5/17/1994		331.23	2515.06	830.06	2	14-24	Colluvium/Moraga
6-93-4	2	9/10/1993		229.92	2599.52	881.60	2	35-50	Artificial Fill/Moraga

Table 4 (Cont'd)
LBNL Monitoring Well Construction Details

Location ID	Area	Completion Date	Abandonment Date	UC Grid North Coordinate	UC Grid East Coordinate	Top of Casing Elevation (ft above MSL)	Casing Diameter (inches)	Approximate Screened Interval (ft below TOC)	Screened Formation Name
37-93-5	14	8/26/1993	9/18/2002	-231.11	2573.04	850.17	2	39-49	Great Valley
76-93-6	4	8/25/1993		252.62	3600.80	948.61	2	34-44	Orinda
76-93-7	4	8/28/1993	9/27/2005	141.90	3299.84	924.85	2	24-39	Orinda
77-93-8	5	8/23/1993	9/19/2005	-44.32	3554.55	879.01	2	16-26	Art Fill/Col/Orinda
53-93-9	2	9/9/1993		427.92	2732.45	900.68	2	68-88	Moraga/Orinda
5-93-10	10	9/10/1993		179.51	2873.28	914.90	2	22-37	Moraga/Orinda
88-93-11A	6	3/2/1994		956.00	864.20	537.35	2	55-65	Great Valley
46-93-12	7	9/7/1993		673.46	2530.88	807.57	2	8.5-13.5	Moraga/Orinda
88-93-13	6	11/1/1993		671.81	980.85	581.50	2	118.5-138.5	Great Valley
52-93-14	10	12/9/1993		276.79	2842.59	900.03	2	24.5-39.5	Moraga/Orinda
25-93-15	10	11/8/1993	9/14/2005	-46.77	3057.62	936.44	2	55-75	Moraga/Orinda
53-93-16-42'	2	1/29/1994		356.87	2674.05	887.45	2	31.5-41.5	Moraga
53-93-16-69'	2	1/29/1994		356.74	2673.78	887.40	4	58.5-68.5	Moraga
53-93-17	2	11/2/1993		458.40	2707.41	902.62	2	60.5-75.5	Moraga
51B-93-18A	9	5/19/1994		1070.65	2174.99	709.95	2	23.5-43.5	Orinda
46A-93-19	1	1/15/1994	9/28/2005	1024.48	2439.82	809.77	2	44-64	Orinda
71-94-1	1	5/21/1994	9/16/2005	1381.17	2358.57	845.84	2	38.5-48.5	Moraga
7-94-3	2	5/13/1994		267	2705.26	882.88	2	22.5-42.5	Orinda
77-94-5	5	5/9/1994		-53.24	3604.82	878.96	2	43.5-63.5	Orinda
77-94-6	5	5/5/1994		-67.94	3722.2	876.76	2	40.5-60.5	Orinda
74-94-7	11	4/28/1994		-508.66	5233.24	819.82	2	33.5-43.5	San Pablo (?)
74-94-8	11	5/10/1994		-594.5	5343.25	815.74	2	20-30	Col/Alluv/San Pablo (?)
37-94-9	14	5/12/1994	9/9/2005	-228.55	2682.42	856.51	2	24-44	Orinda/Great Valley
52-94-10	10	10/17/1994	9/20/2005	465.38	2859.99	906.04	2	47-67	Moraga/Orinda
51-94-11	1	10/18/1994	9/16/2005	1194.70	2263.64	756.83	4	8-18	Moraga/Orinda
25-94-12	10	10/14/1994		24.60	3021.73	937.59	2	26-46	Moraga/Orinda
16-94-13	10	10/11/1994		253.46	2762.79	892.50	2	22-42	Orinda
58A-94-14	7	10/4/1994		424.85	2457.65	821.73	2	21-41	Moraga/Orinda
51-94-15	7	11/7/1994		625.97	2264.47	771.17	4	30-40	Orinda
46-94-16	9	11/7/1994	9/19/2002	906.27	2300.02	756.16	2		Orinda

Table 4 (Cont'd)
LBNL Monitoring Well Construction Details

Location ID	Area	Completion Date	Abandonment Date	UC Grid North Coordinate	UC Grid East Coordinate	Top of Casing Elevation (ft above MSL)	Casing Diameter (inches)	Approximate Screened Interval (ft below TOC)	Screened Formation Name
71-95-1	1	4/11/1995	9/17/2002	1479.30	2335.13	846.94	2		Moraga
52-95-2A	10	8/29/1995		372.05	2864.37	910.27	2	34.5-44.5	Moraga
52-95-2B	10	8/29/1995		372.19	2864.56	910.23	2	65-110	Moraga/Orinda
16-95-3	10	4/18/1995		45.73	2787.74	901.52	2	23-30	Moraga/Orinda
25A-95-4	10	4/20/1995	9/19/2005	219.82	3033.97	938.35	2	28-48	Orinda
25-95-5	10	8/22/1995		-154.47	3091.60	932.88	2	69-94	Moraga/Orinda
74-95-6	11	7/14/1995		-354.67	5334.83	838.66	4	35-50	San Pablo (?)
83-95-7	11	7/14/1995	9/27/2005	-285.14	5246.70	840.75	4	36-46	San Pablo (?)
71-95-8	1	4/13/1995	9/16/2005	1298.86	2549.05	839.09	2	29-49	Orinda
71-95-9	1	4/14/1995		1249.27	2662.35	854.18	2	23.5-38.5	Artificial Fill/Colluvium
58-95-11	7	5/15/1995		296.22	2512.06	831.62	4	8.5-28.5	Moraga/Orinda
53-95-12	2	7/19/1995		360.87	2616.60	867.45	1	35-50	Moraga/Orinda
52B-95-13	10	7/21/1995		282.76	2732.91	887.40	1	16-31	Moraga/Orinda
6-95-14	2	8/15/1995		184.75	2631.08	881.43	4	22-67	Moraga/Orinda
25A-95-15	10	8/3/1995		148.22	2960.59	931.68	2	29-49	Orinda
62-95-16	13	8/4/1995	9/20/2005	-972.38	4088.45	741.06	4	18.5-33.5	Great Valley
51-95-17	9	2/12/1996	11/18/2002	913.86	2272.51	744.67	2	22-37	Orinda
58-95-18	7	8/9/1995		471.88	2401.55	788.61	4	7.5-17.5	Colluvium/Moraga/Orinda
58-95-19	7	9/13/1995		395.42	2562.55	834.33	1	20.5-30.5	Orinda
58-95-20	7	8/8/1995		494.26	2517.86	818.81	2	14.5-34.5	Moraga/Orinda
7B-95-21	2	8/11/1995		283.95	2679.19	883.63	4	13.5-38.5	Moraga/Orinda
7-95-22	2	8/10/1995		278.23	2659.08	882.16	4	13.5-38.5	Moraga
7-95-23	2	12/22/1995		285.15	2659.67	882.37	4	43-53	Moraga/Orinda
7B-95-24	2	12/18/1995		318.75	2655.51	883.88	4	53-73	Moraga/Orinda
7B-95-25	2	12/13/1995		274.27	2634.08	882.03	2	24-44	Moraga
25-95-26	10	4/29/1996		-54.01	3139.20	935.81	2	38-58	Moraga
25-95-27	10	12/20/1995		-327.09	3045.68	859.83	2	19.5-34.5	Orinda
53-96-1 (MW91-7)	2	4/19/1996		344.37	2682.54	887.64	4	67-82	Moraga/Orinda
4-96-2	10	4/17/1996	9/13/2005	-84.00	2889.05	912.64	2	45-65	Orinda
51-96-3	9	4/23/1996		546.48	2240.66	766.44	4		Colluvium

Table 4 (Cont'd)
LBNL Monitoring Well Construction Details

Location ID	Area	Completion Date	Abandonment Date	UC Grid North Coordinate	UC Grid East Coordinate	Top of Casing Elevation (ft above MSL)	Casing Diameter (inches)	Approximate Screened Interval (ft below TOC)	Screened Formation Name
88-96-4	6	4/26/1996	9/6/2005	968.53	1105.35	594.25	2	46.5-66.5	Great Valley
70A-96-5	8	4/15/1996	11/13/2002	370.50	1757.93	762.68	4	15-30	Great Valley
70A-96-6	8	4/16/1996	11/13/2002	334.24	1764.19	762.67	4	20-40	Great Valley
46-96-10	7	11/4/1996		886.68	2397.81	790.35	2	22-37	Moraga
58-96-11	2	6/11/1996		350.19	2588.64	848.23	2	15-40	Moraga/Orinda
58-96-12	7	12/4/1996	9/16/2002	295.46	2508.67	831.84	4	2-7	Fill/Moraga
70A-96-13	8	9/24/1996	9/7/2005	292.97	1511.04	711.87	2	111-141	Great Valley
70A-96-14	8	9/24/1996	9/8/2005	392.41	1498.87	716.64	2	112-142	Great Valley
51-96-15	9	9/26/1996		1004.38	2109.8	709.83	2	20-40	Orinda
51-96-16	9	9/25/1996		1054.3	2095.66	709.72	2	10-30	Artificial Fill
51-96-17	9	9/25/1996		1054.56	2093.45	709.64	2	35-55	Orinda
51-96-18	9	9/27/1996		1126.37	2170.13	710.76	2	6-16	Orinda
51-96-19	9	9/27/1996	9/12/2005	1066.52	2184.14	709.40	2	5-15	Artificial Fill
75-96-20	3	2/13/1997		487.72	3762.28	979.07	2	24.5-49.5	Orinda ?
64-97-1	9	5/20/1997		1194.82	2167.79	709.94	2	4.5-24.5	Orinda
64-97-2	9	5/20/1997		1142.40	2085.16	709.65	2	9-29	Orinda
51-97-3	9	6/3/1997		1102.96	1902.48	709.81	2	54.5-74.5	Artificial Fill
51-97-4	9	6/25/1997	9/15/2005	1101.16	1902.01	709.66	2	89-104	Orinda
75-97-5	3	7/19/1997		232.73	3768.01	963.73	2	39-69	Orinda
75-97-6	3	5/22/1997		262.75	3819.22	967.89	4	53.5-73.5	Orinda
75-97-7	3	6/9/1997		253.44	3870.26	970.70	2	58.5-78.5	Orinda
69-97-8	3	9/13/1997		256.51	3937.09	975.75	2.25	50-70	Colluvium/Orinda
77-97-9	5	6/4/1997		76.53	3753.30	888.69	2	19-49	Colluvium/Orinda
77-97-10	5	5/21/1997	9/18/2002	-91.93	3871.35	877.73	2	32-52	Colluvium/Orinda
77-97-11	5	6/24/1997		-205.88	3749.71	814.67	2	22.5-42.5	Colluvium/Orinda
51-97-12	9	9/2/1997		1109.18	1904.55	709.37	2	29.5-49.5	Artificial Fill
51-97-13	9	9/11/1997		1196.36	1901.98	709.48	2	48-68	Artificial Fill
51-97-14	9	9/10/1997		1020.26	1883.14	708.89	2	44-64	Artificial Fill
51-97-15	9	9/12/1997		1155.18	1803.16	706.11	2	88-108	Artificial Fill

Table 4 (Cont'd)
LBNL Monitoring Well Construction Details

Location ID	Area	Completion Date	Abandonment Date	UC Grid North Coordinate	UC Grid East Coordinate	Top of Casing Elevation (ft above MSL)	Casing Diameter (inches)	Approximate Screened Interval (ft below TOC)	Screened Formation Name
51-97-16	9	9/9/1997	3/17/2005	875.26	1917.64	709.58	2	14.5-34.5	Art. Fill/Great Valley
31-97-17	5	9/5/1997		-459.67	3738.68	746.15	2	21.5-31.5	Colluvium
31-97-18	5	9/4/1997		-480.52	3779.68	747.80	2	39.5-59.5	Colluvium/Great Valley
78-97-20	4	10/10/1997		298.21	3429.47	949.54	2	14-34	Orinda
69-97-21	3	9/23/1997		471.24	3985.45	1003.4	2	18.5-38.5	Orinda
76-97-22	4	10/17/1997	9/25/2002	165.14	3545.94	937.91	2	25-45	Colluvium/Orinda
71-97-23	1	9/8/1997	9/15/2005	1221.62	2469.83	844.45	2	39.5-59.5	Artificial Fill/Orinda
25A-98-1	10	4/23/1998		99.79	2986.86	936.88	2	30-50	Orinda
56-98-2	9	4/24/1998		1264.86	1887.99	709.76	2	35-55	Artificial Fill/Orinda
25A-98-3	10	4/21/1998		175.76	3027.87	940.14	2	25-45	Orinda
64-98-4	9	4/20/1998	3/15/2000	1133.05	2172.54	711.12	2	5-15	Orinda
51-98-5	9	5/8/1998	8/10/2006	951.70	1922.10	709.63	2	30-50	Colluvium
25A-98-6	10	10/2/1998	8/10/2006	134.29	3091.47	939.90	2	20.5-40.5	Moraga/Orinda
25A-98-7	10	9/1/1998		140.51	3001.67	942.71	2	19-34	Orinda
52A-98-8A	10	9/16/1998		339.79	2883.49	913.56	2	23-33	Colluvium
52A-98-8B	10	9/17/1998		339.86	2883.73	913.51	2	60-80	Moraga
52-98-9	10	9/11/1998		377.44	2864.09	910.86	2	60-80	Moraga
25-98-10	10	9/12/1998		-105.23	3087.97	934.42	2	70-90	Moraga/Orinda
46A-98-11	1	11/3/1998	11/16/2002	1049.68	2422.42	813.66	2	54-74	Orinda
71B-98-13	1	9/23/1998		1202.90	2583.97	832.33	2	15-30	Artificial Fill/Orinda
75-98-14	3	9/17/1998		436.14	3711.28	977.94	2	20-35	Orinda
75-98-15	3	9/21/1998		479.95	3640.78	977.97	2	20-35	Orinda
75-98-16	3	10/12/1998	9/16/2002	603.26	3451.27	1074.19	2	69-89	Orinda
31-98-17	5	9/14/1998		-719.39	3709.06	693.47	2	50-60	Colluvium
63-98-18	15	9/15/1998		1352.18	1819.94	709.99	2	20-35	Artificial Fill
64-98-19	9	2/1/1999	3/15/2000	1130.56	2178.51	711.11	2	21-26	Orinda
64-98-20	9	4/30/1999	8/2000	1133.29	2180.09	710.98	2	9.5-14.5	Orinda
76-98-21	4	9/25/1998		137.79	3352.42	923.20	2	15-35	Orinda
76-98-22	4	12/18/1998		72.85	3375.83	904.57	2	19-39	Orinda

Table 4 (Cont'd)
LBNL Monitoring Well Construction Details

Location ID	Area	Completion Date	Abandonment Date	UC Grid North Coordinate	UC Grid East Coordinate	Top of Casing Elevation (ft above MSL)	Casing Diameter (inches)	Approximate Screened Interval (ft below TOC)	Screened Formation Name
51-99-1	9	5/1/1999		679.33	1978.83	724.44	2	25-35	Great Valley
25A-99-2	10	5/1/1999		137.70	3037.07	940.45	2	20-30	Moraga/Orinda
71B-99-3	1	7/6/1999	10/2000	1179.35	2637.78	843.21	2	20-30	Orinda
71B-99-3R	1	4/5/2001		1178.62	2629.15	840.13	4	24-34	Orinda
75-99-4	3	7/20/1999	8/10/2006	462.42	3665.77	977.90	2	19.5-34.5	Orinda
25A-99-5	10	7/19/1999	9/23/2005	166.42	3062.06	940.16	2	24-44	Orinda
75-99-6	3	11/19/1999		519.69	3687.82	979.94	2	15.5-25.5	Orinda
75-99-7	3	11/19/1999		463.30	3749.60	977.92	2	14-24	Artificial Fill/Orinda
75-99-8	3	12/6/1999		502.05	3669.34	979.34	2	20-30	Orinda
51-00-1	9	2/5/2000	9/7/2005	690.86	2162.65	725.28	2	20-25	Orinda
71B-00-2	1	3/20/2000	8/10/2006	1197.37	2587.90	832.41	2	45-60	Orinda
58A-00-3	7	5/17/2000	8/10/2006	415.38	2454.06	822.54	2	69-84	Orinda
7-00-4	2	5/17/2000		294.69	2658.33	883.18	2	84-99	Orinda
25A-00-5	10	5/17/2000	8/10/2006	139.64	2965.28	933.12	2	68-83	Orinda
52A-00-6	10	5/17/2000		321.30	2911.46	917.34	2	105-120	Orinda
75A-00-7	3	1/5/2001		469.39	3758.40	978.32	2	115-145	Orinda
51-00-8	9	9/7/2000		1095.81	1806.71	682.11	2	20-40	Artificial Fill/Orinda
51-00-9	9	10/2/2000		1008.33	2177.85	698.16	2	5-10	Orinda
51-00-10	9	10/3/2000		988.59	2177.76	698.18	2	5-10	Orinda
69A-00-11	3	9/8/2000	9/19/2005	321.66	3943.67	977.05	2	19.5-39.5	Orinda
58-00-12	7	10/5/2000		326.88	2607.24	860.62	2	38-59	Orinda/Mixed Unit
51L-01-1A	9	7/23/2001		864.13	1878.36	710.04	2	4-9	Artificial Fill/Colluvium
51L-01-1B	9	7/23/2001		863.88	1878.37	710.04	2	15-30	Great Valley
51L-01-3	9	12/20/2001		896.88	1893.03	709.54	2	34.5-49.5	Great Valley
51L-01-4	9	7/23/2001		915.93	1884.49	709.87	2	30-45	Great Valley
51L-01-5A	9	7/16/2001		936.13	1908.95	709.96	2	18-33	Artificial Fill/Colluvium
51L-01-5B	9	7/16/2001		936.09	1908.62	709.94	2	48.5-63.5	Great Valley
51L-01-6	9	7/18/2001		911.02	1931.44	709.80	2	20-30	Artificial Fill/Colluvium
51L-01-7	9	7/17/2001		906.47	1931.41	709.76	2	60-75	Great Valley
51A-01-10A	9	10/3/2001	9/14/2005	814.28	1900.05	709.78	2	15-30	Great Valley

Table 4 (Cont'd)
LBNL Monitoring Well Construction Details

Location ID	Area	Completion Date	Abandonment Date	UC Grid North Coordinate	UC Grid East Coordinate	Top of Casing Elevation (ft above MSL)	Casing Diameter (inches)	Approximate Screened Interval (ft below TOC)	Screened Formation Name
51A-01-11	9	9/28/2001		841.85	1941.48	709.74	2	30-45	Great Valley
51L-02-1	9	1/11/2002		921.03	1871.48	709.74	2	20-30	Fill/Colluvium/Great Valley
Soil Gas Wells									
74-95-6	11	7/14/1995					1	15-20	San Pablo (?)
83-95-7	11	7/14/1995					1	25-30	San Pablo (?)
71-95-10	1	4/17/1995	9/15/2005				3/4"	9.9-10.4	Artificial Fill
							3/4"	20.1-20.6	Artificial Fill
							3/4"	32.7-33.2	Artificial Fill

Artificial Fill: soils placed during grading activities
Colluvium: Quaternary soil/colluvium
Alluvium: Quaternary alluvium
San Pablo (?): shallow marine sandstones tentatively assigned to the San Pablo Group
Orinda: Orinda Formation sediments
Great Valley: Upper Cretaceous sedimentary rocks
Moraga: Moraga Formation volcanics

Table 5-1
Bevalac Area Groundwater Monitoring Well Results
Volatile Organic Compounds - EPA Method 8260
3rd Quarter FY 2006
(concentrations in µg/L)

		51-96-16			51-96-17			51-96-18			51-00-8	71B-99-3R				MWP-1
Constituent	MCL	Apr-06	May-06	Jun-06	Apr-06	May-06	Jun-06	Apr-06	May-06	Jun-06	Apr-06	Apr-06	Apr-06	Jun-06	Jun-06	Apr-06
Aromatic or Non-Halogenated Hydrocarbons																
Benzene	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
ter-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	300	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Isopropylbenzene		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
p-Isopropyltoluene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl tert-Butyl Ether	13	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
n-Propylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	150	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	1750	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Aromatic Hydrocarbons																
Halogenated Hydrocarbons																
Bromodichloromethane	80	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	80	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Carbon Tetrachloride	0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane		<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30
Chloroform	80	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,1-Dichloroethane	5	7.4	7.8	6.4	5.1	4.6	4.7	72.6	70.0	60.8	4.2	<1	<1	<1	<1	<1
1,2-Dichloroethane	0.5	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1-Dichloroethene	6	<1	1.8	2.0	2.6	2.1	2.2	15.5	15.5	12.6	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	6	146.0	124.0	136.0	153.0	129.0	112.0	3.1	3.4	2.6	3.8	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	10	24.8	24.8	24.2	47.2	42.1	40.1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene Chloride	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	<1	1.1	<1	<1	<1	<1	207.0	193.0	160.0	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	200	<1	<1	<1	<1	<1	<1	3.2	3.9	2.8	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	5	20.4	21.1	18.7	12.9	12.4	11.9	64.8	72.8	59.0	<1	<1	<1	<1	<1	<1
Freon-11	150	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<2	<2	<2	<1
Freon-113	1200	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Freon-123A		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl Chloride	0.5	16.8	18.3	27.8	32.8	24.1	25.4	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Halogenated Hydrocarbons		215.4	198.9	215.1	253.6	214.3	196.3	366.2	358.6	297.8	8.0					
Total Concentration of VOCs		215.4	198.9	215.1	253.6	214.3	196.3	366.2	358.6	297.8	8.0					

MCL = Maximum contaminant level for drinking water
All analyses by LBNL EML unless otherwise noted
* = Analysis by BC Laboratories

< = Less than Quantitation Limit
= Compound not included in analysis

Table 5-2
Bevalac Area Temporary Groundwater Sampling Point Results
Volatile Organic Compounds - EPA Method 8260
3rd Quarter FY 2006
(concentrations in µg/L)

Constituent	MCL	SB64-98-8					SB64-98-17					SB64-99-4	
		Apr-06	May-06	May-06	Jun-06	Jun-06	Apr-06	May-06	May-06	Jun-06	Jun-06	Apr-06	May-0
Aromatic or Non-Halogenated Hydrocarbons													
Benzene	1	<5	<10	<5	<5	<5	<1	<1	<1	<1	<1	<50	<10
n-Butylbenzene		<5	<10	<5	<5	<5	<1	<1	<1	<1	<1	<50	<10
sec-Butylbenzene		<5	<10	<5	<5	<5	<1	<1	<1	<1	<1	<50	<10
ter-Butylbenzene		<5	<10	<5	<5	<5	<1	<1	<1	<1	<1	<50	<10
Chlorobenzene		<5	<10	<5	<5	<5	<1	<1	<1	<1	<1	<50	<10
Ethylbenzene	300	<5	<10	<5	<5	<5	<1	<1	<1	<1	<1	<50	<10
Isopropylbenzene		<10	<20	<10	<10	<10	<2	<2	<2	<2	<2	<100	<20
p-Isopropyltoluene		<5	<10	<5	<5	<5	<1	<1	<1	<1	<1	<50	<10
Methyl tert-Butyl Ether	13	<25	<50	<25	<25	<25	<5	<5	<5	<5	<5	<250	<50
Naphthalene		<10	<20	<10	<10	<10	<2	<2	<2	<2	<2	<100	<20
n-Propylbenzene		<5	<10	<5	<5	<5	<1	<1	<1	<1	<1	<50	<10
Toluene	150	<5	<10	<5	<5	<5	<1	<1	<1	<1	<1	<50	<10
Xylenes, total	1750	<10	<20	<10	<10	<10	<2	<2	<2	<2	<2	<100	<20
Total Aromatic Hydrocarbons													
Halogenated Non-Aromatic Hydrocarbons													
Bromodichloromethane	80	<5	<10	<5	<5	<5	<1	<1	<1	<1	<1	<50	<10
Bromomethane	80	<50	<100	<50	<50	<50	<10	<10	<10	<10	<10	<500	<100
Carbon Tetrachloride	0.5	<5	<10	<5	<5	<5	<1	<1	<1	<1	<1	<50	<10
Chloroethane		<150	<300	<150	<150	<150	<30	<30	<30	<30	<30	<1500	<300
Chloroform	80	<15	<30	<15	<15	<15	<3	<3	<3	<3	<3	<150	<30
Chloromethane		<50	<100	<50	<50	<50	<10	<10	<10	<10	<10	<500	<100
1,1-Dichloroethane	5	481	474.0	372	402	333	132.0	95.9	156.0	138.0	129.0	508	645.0
1,2-Dichloroethane	0.5	<10	<20	<10	<10	<10	<2	<2	<2	<2	<2	<100	<20
1,1-Dichloroethene	6	77.4	92.8	58.3	58.7	44.8	13.6	9.1	13.9	12.5	2.8	<50	53.4
cis-1,2-Dichloroethene	6	<5	<10	<5	<5	5.7	2.7	2.0	3.8	2.9	2.7	<50	<10
trans-1,2-Dichloroethene	10	<5	<10	<5	<5	<5	<1	<1	<1	<1	<1	<50	<10
1,3-Dichloropropane	5	<5	<10	<5	<5	<5	<1	<1	<1	<1	<1	<50	<10
Methylene Chloride	5	<5	<10	<5	<5	<5	<1	<1	<1	<1	<1	<50	<10
1,1,1,2-Tetrachloroethane		<10	<20	<10	<10	<10	<2	<2	<2	<2	<2	<100	<20
1,1,2,2-Tetrachloroethan	1	<5	<10	<5	<5	<5	<1	<1	<1	<1	<1	<50	<10
Tetrachloroethene	5	78.7	90.8	62.2	61.3	60.1	<1	<1	<1	<1	<1	<50	15.7
1,1,1-Trichloroethane	200	<5	<10	<5	<5	<5	<1	<1	<1	<1	<1	<50	<10
1,1,2-Trichloroethane	5	<5	<10	<5	<5	<5	<1	<1	<1	<1	<1	<50	<10
Trichloroethene	5	131.0	144.0	113.0	119.0	105.0	3.1	2.6	3.4	3.7	3.5	71	63.7
Freon-113	1200	<5	<10	<5	<5	<5	<1	<1	<1	<1	<1	<50	<10
Freon-123A		<5	<10	<5	<5	<5	<1	<1	<1	<1	<1	<50	<10
Vinyl Chloride	0.5	<5	<10	<5	<5	<5	<1	<1	4.9	2.3	<1	<50	23.2
Total Halogenated Hydrocarbon		768.1	801.6	605.5	641.0	548.6	151.4	109.6	182.0	159.4	138.0	579	801.0
Total Concentration of VOCs		768.1	801.6	605.5	641.0	548.6	151.4	109.6	182.0	159.4	138.0	579	801.0

Table 5-2 (Cont'd)
Bevalac Area Temporary Groundwater Sampling Point Results
Volatile Organic Compounds - EPA Method 8260
3rd Quarter FY 2006
(concentrations in µg/L)

Constituent	MCL	SB64-99-5					SB64-00-1					SB64-00-2	
		Apr-06	May-06	May-06	Jun-06	Jun-06	Apr-06	May-06	May-06	Jun-06	Jun-06	Apr-06	May
Aromatic or Non-Halogenated Hydrocarbons													
Benzene	1	<1	<1	<1	<1	<1	<10	<1	<10	<10	<10	<1	<1
n-Butylbenzene		<1	<1	<1	<1	<1	<10	<1	<10	<10	<10	<1	<1
sec-Butylbenzene		<1	<1	<1	<1	<1	<10	<1	<10	<10	<10	<1	<1
ter-Butylbenzene		<1	<1	<1	<1	<1	<10	<1	<10	<10	<10	<1	<1
Chlorobenzene		<1	<1	<1	<1	<1	<10	<1	<10	<10	<10	<1	<1
Ethylbenzene	300	<1	<1	<1	<1	<1	<10	<1	<10	<10	<10	<1	<1
Isopropylbenzene		<2	<2	<2	<2	<2	<20	<2	<20	<20	<20	<2	<2
p-Isopropyltoluene		<1	<1	<1	<1	<1	<10	<1	<10	<10	<10	<1	<1
Methyl tert-Butyl Ether	13	<5	<5	<5	<5	<5	<50	<5	<50	<50	<50	<5	<5
Naphthalene		<2	<2	<2	<2	<2	<20	<2	<20	<20	<20	<2	<2
n-Propylbenzene		<1	<1	<1	<1	<1	<10	<1	<10	<10	<10	<1	<1
Toluene	150	<1	<1	<1	<1	<1	<10	<1	<10	<10	<10	<1	<1
Xylenes, total	1750	<2	<2	<2	<2	<2	<20	<2	<20	<20	<20	<2	<2
Total Aromatic Hydrocarbons													
Halogenated Non-Aromatic Hydrocarbons													
Bromodichloromethane	80	<1	<1	<1	<1	<1	<10	<1	<10	<10	<10	<1	<1
Bromomethane	80	<10	<10	<10	<10	<10	<100	<10	<100	<100	<100	<10	<1
Carbon Tetrachloride	0.5	<1	<1	<1	<1	<1	<10	<1	<10	<10	<10	<1	<1
Chloroethane		<30	<30	<30	<30	<30	<300	<30	<300	<300	<300	<30	<3
Chloroform	80	<3	<3	<3	<3	<3	<30	<3	<30	<30	<30	<3	<3
Chloromethane		<10	<10	<10	<10	<10	<100	<10	<100	<100	<100	<10	<1
1,1-Dichloroethane	5	61.1	67.6	38.8	82.4	50.0	187.0	176.0	245.0	193.0	333.0	65.3	40
1,2-Dichloroethane	0.5	<2	<2	<2	<2	<2	<20	2.1	<20	<20	<20	2.7	<2
1,1-Dichloroethene	6	12.9	21.1	13.8	29.2	11.1	<10	7.5	<10	<10	21.3	284.0	17
cis-1,2-Dichloroethene	6	<1	<1	<1	<1	<1	<10	3.9	<10	<10	<10	2.9	<1
trans-1,2-Dichloroethene	10	<1	<1	<1	<1	<1	<10	<1	<10	<10	<10	<1	<1
1,3-Dichloropropane	5	<1	<1	<1	<1	<1	<10	<1	<10	<10	<10	<1	<1
Methylene Chloride	5	<1	<1	<1	<1	<1	<10	1.6	<10	<10	<10	<1	<1
1,1,1,2-Tetrachloroethane		<2	<2	<2	<2	<2	<20	<2	<20	<20	<20	<2	<2
1,1,2,2-Tetrachloroethane	1	<1	<1	<1	<1	<1	<10	<1	<10	<10	<10	<1	<1
Tetrachloroethene	5	<1	2.3	<1	3.3	3.0	<10	2.2	<10	<10	<10	33.4	21
1,1,1-Trichloroethane	200	<1	<1	<1	<1	<1	<10	<1	<10	<10	<10	<1	<1
1,1,2-Trichloroethane	5	<1	<1	<1	<1	<1	<10	<1	<10	<10	<10	<1	<1
Trichloroethene	5	4.4	10.4	3.5	15.6	9.8	25.7	20.6	27.6	24.5	40.2	80.2	54
Freon-113	1200	<1	<1	<1	<1	<1	<10	<1	<10	<10	<10	<1	<1
Freon-123A		<1	<1	<1	<1	<1	<10	<1	<10	<10	<10	<1	<1
Vinyl Chloride	0.5	<1	<1	<1	<1	<1	<10	<1	<10	<10	<10	<1	<1
Total Halogenated Hydrocarbons		78.4	101.4	56.1	130.5	73.9	212.7	213.9	272.6	217.5	394.5	468.5	29
Total Concentration of VOCs		78.4	101.4	56.1	130.5	73.9	212.7	213.9	272.6	217.5	394.5	468.5	29

Table 5-2 (Cont'd)
Bevalac Area Temporary Groundwater Sampling Point Results
Volatile Organic Compounds - EPA Method 8260
3rd Quarter FY 2006
(concentrations in µg/L)

			SB64-02-1A				SB64-02-1B			SB64-02-1C			SB64-02-1D	
Jun-06	Constituent	MCL	Apr-06	Apr-06(D)[1]	May-06	Jun-06	Apr-06	May-06	Jun-06	Apr-06	May-06	Jun-06	Apr-06	M
	Aromatic or Non-Halogenated Hydrocarbons													
<10	Benzene	1	<100	<25	<100	<100	<1	<1	<1	<10	<10	<10	<1	
<10	n-Butylbenzene		<100		<100	<100	<1	<1	<1	<10	<10	<10	<1	
<10	sec-Butylbenzene		<100		<100	<100	<1	<1	<1	<10	<10	<10	<1	
<10	ter-Butylbenzene		<100		<100	<100	<1	<1	<1	<10	<10	<10	<1	
<10	Chlorobenzene		<100	<25	<100	<100	<1	<1	<1	<10	<10	<10	<1	
<10	Ethylbenzene	300	<100	<25	<100	<100	<1	<1	<1	<10	<10	<10	<1	
<20	Isopropylbenzene		<200		<200	<200	<2	<2	<2	<20	<20	<20	<2	
<10	p-Isopropyltoluene		<100		<100	<100	<1	<1	<1	<10	<10	<10	<1	
<50	Methyl tert-Butyl Ether	13	<500		<500	<500	<5	<5	<5	<50	<50	<50	<5	
<20	Naphthalene		<200		<200	<200	<2	<2	<2	<20	<20	<20	<2	
<10	n-Propylbenzene		<100		<100	<100	<1	<1	<1	<10	<10	<10	<1	
<10	Toluene	150	<100	<25	<100	<100	1.5	<1	1.9	<10	<10	<10	<1	
<20	Xylenes, total	1750	<200	<50	<200	<200	<2	<2	<2	<20	<20	<20	<2	
	Total Aromatic Hydrocarbons						1.5		1.9					
	Halogenated Non-Aromatic Hydrocarbons													
<10	Bromodichloromethane	80	<100	<25	<100	<100	<1	<1	<1	<10	<10	<10	<1	
<100	Bromomethane	80	<1000	<50	<1000	<1000	<10	<10	<10	<100	<100	<100	<10	
<10	Carbon Tetrachloride	0.5	<100	<25	<100	<100	<1	<1	<1	<10	<10	<10	<1	
<300	Chloroethane		<3000	<25	<3000	<3000	<30	<30	<30	<300	<300	<300	<30	
<30	Chloroform	80	<300	<25	<300	<300	<3	<3	<3	<30	<30	<30	<3	
<100	Chloromethane		<1000	<25	<1000	<1000	<10	<10	<10	<100	<100	<100	<10	
41.6	1,1-Dichloroethane	5	5,580	6,100	7,040	5,340	311.0	206.0	686.0	708.0	887.0	731.0	120.0	1
<20	1,2-Dichloroethane	0.5	<200	45	<200	<200	3.4	3.2	6.2	<20	<20	<20	<2	
151.0	1,1-Dichloroethene	6	916	1,000	1,170	765	98.4	63.0	145.0	104.0	108.0	109.0	34.1	
<10	cis-1,2-Dichloroethene	6	<100	48	<100	<100	113.0	72.7	242.0	71.9	68.5	73.0	16.0	
<10	trans-1,2-Dichloroethene	10	<100	<25	<100	<100	<1	<1	<1	<10	<10	<10	<1	
<10	1,3-Dichloropropane	5	<100	<25	<100	<100	<1	<1	<1	<10	<10	<10	<1	
<10	Methylene Chloride	5	<100	<50	<100	<100	<1	<1	<1	<10	<10	<10	<1	
<20	1,1,1,2-Tetrachloroethane		<200	<25	<200	<200	<2	<2	<2	<20	<20	<20	<2	
<10	1,1,2,2-Tetrachloroethane	1	<100	<25	<100	<100	<1	<1	<1	<10	<10	<10	<1	
21.3	Tetrachloroethene	5	162	200	212	119	4.6	9.4	5.4	<10	<10	<10	1.1	
<10	1,1,1-Trichloroethane	200	<100	46	<100	<100	<1	<1	1.2	<10	<10	<10	<1	
<10	1,1,2-Trichloroethane	5	<100	<25	<100	<100	<1	<1	<1	<10	<10	<10	<1	
52.8	Trichloroethene	5	584	640	724	460	93.6	70.3	66.0	32.1	18.1	29.1	12.0	
<10	Freon-113	1200	<100	<25	<100	<100	<1	<1	<1	<10	<10	<10	<1	
<10	Freon-123A		<100		<100	<100	<1	<1	<1	<10	<10	<10	<1	
<10	Vinyl Chloride	0.5	116	120	180	176	94.2	82.5	148.0	55.9	43.8	53.2	35.0	2
266.7	Total Halogenated Hydrocarbons		7,358	8,199	9,326	6,860	718.2	507.1	1,299.8	971.9	1,125.4	995.3	218.2	1
266.7	Total Concentration of VOCs		7,358	8,199	9,326	6,860	719.7	507.1	1,301.7	971.9	1,125.4	995.3	218.2	1

Table 5-2 (Cont'd)
Bevalac Area Temporary Groundwater Sampling Point Re
Volatile Organic Compounds - EPA Method 8260
3rd Quarter FY 2006
(concentrations in µg/L)

-1E				SB64-02-1F			SB64-02-2A			SB64-02-2B			SB64-
May-06	Jun-06	Constituent	MCL	Apr-06	May-06	Jun-06	Apr-06	May-06	Jun-06	Apr-06	Jun-06	Jun-06	Apr-
		Aromatic or Non-Halogenated Hydrocarbons											
<1	<1	Benzene	1	<1	<1	<1	<1	<1	<1	<1	<10	<10	<1
<1	<1	n-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<10	<10	<1
<1	<1	sec-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<10	<10	<1
<1	<1	ter-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<10	<10	<1
<1	<1	Chlorobenzene		<1	<1	<1	<1	<1	<1	<1	<10	<10	<1
<1	<1	Ethylbenzene	300	<1	<1	<1	<1	<1	<1	<1	<10	<10	<1
<2	<2	Isopropylbenzene		<2	<2	<2	<2	<2	<2	<2	<20	<20	<2
<1	<1	p-Isopropyltoluene		<1	<1	<1	<1	<1	<1	<1	<10	<10	<1
<5	<5	Methyl tert-Butyl Ether	13	<5	<5	<5	<5	<5	<5	<5	<50	<50	<5
<2	<2	Naphthalene		<2	<2	<2	<2	<2	<2	<2	<20	<20	<2
<1	<1	n-Propylbenzene		<1	<1	<1	<1	<1	<1	<1	<10	<10	<1
1.2	1.3	Toluene	150	3.1	1.5	1.8	<1	<1	<1	<1	<10	<10	<1
<2	<2	Xylenes, total	1750	<2	<2	<2	<2	<2	<2	<2	<20	<20	<2
1.2	1.3	Total Aromatic Hydrocarbons		3.1	1.5	1.8							
		Halogenated Non-Aromatic Hydrocarbons											
<1	<1	Bromodichloromethane	80	<1	<1	<1	<1	<1	<1	<1	<10	<10	<1
<10	<10	Bromomethane	80	<10	<10	<10	<10	<10	<10	<10	<100	<100	<1(
<1	<1	Carbon Tetrachloride	0.5	<1	<1	<1	<1	<1	<1	<1	<10	<10	<1
<30	<30	Chloroethane		<30	<30	<30	<30	<30	<30	<30	<300	<300	<3(
<3	<3	Chloroform	80	<3	<3	<3	<3	<3	<3	<3	<30	<30	<3
<10	<10	Chloromethane		<10	<10	<10	<10	<10	<10	<10	<100	<100	<1(
67.8	124.0	1,1-Dichloroethane	5	76.4	65.9	200.0	412.0	338.0	375.0	90.0	681.0	501.0	87.
<2	<2	1,2-Dichloroethane	0.5	<2	<2	2.1	4.7	5.4	4.6	<2	<20	<20	<2
10.8	41.2	1,1-Dichloroethene	6	10.3	11.5	63.9	65.9	61.6	57.3	17.1	87.7	62.3	40.
4.5	12.9	cis-1,2-Dichloroethene	6	3.9	3.7	19.6	48.4	109.0	157.0	11.6	27.3	14.8	20.
<1	<1	trans-1,2-Dichloroethene	10	<1	<1	<1	<1	<1	<1	<1	<10	<10	<1
<1	<1	1,3-Dichloropropane	5	<1	<1	<1	<1	<1	<1	<1	<10	<10	<1
<1	<1	Methylene Chloride	5	<1	<1	<1	<1	<1	<1	<1	<10	<10	<1
<2	<2	1,1,1,2-Tetrachloroethane		<2	<2	<2	<2	<2	<2	<2	<20	<20	<2
<1	<1	1,1,2,2-Tetrachloroethane	1	<1	<1	<1	1.2	1.3	<1	<1	<10	<10	<1
1.5	3.4	Tetrachloroethene	5	1.1	1.9	5.7	28.2	15.0	6.0	4.5	<10	<10	<1
<1	<1	1,1,1-Trichloroethane	200	<1	<1	<1	<1	<1	<1	<1	<10	<10	<1
<1	<1	1,1,2-Trichloroethane	5	<1	<1	<1	<1	<1	<1	<1	<10	<10	<1
9.4	25.2	Trichloroethene	5	7.2	10.1	40.4	129.0	117.0	81.5	17.1	20.3	15.0	4.6
<1	<1	Freon-113	1200	<1	<1	<1	<1	<1	<1	<1	<10	<10	<1
<1	<1	Freon-123A		<1	<1	<1	<1	<1	<1	<1	<10	<10	<1
12.6	33.5	Vinyl Chloride	0.5	17.2	10.4	51.3	4.2	4.6	4.9	<1	<10	<10	2.4
106.6	240.2	Total Halogenated Hydrocarbons		116.1	103.5	383.0	693.6	651.9	686.3	140.3	816.3	593.1	155
107.8	241.5	Total Concentration of VOCs		119.2	105.0	384.8	693.6	651.9	686.3	140.3	816.3	593.1	155

Table 5-2 (Cont'd)
Bevalac Area Temporary Groundwater Sampling Poi
Volatile Organic Compounds - EPA Method 82
3rd Quarter FY 2006
(concentrations in µg/L)

SB64-02-2D					SB64-02-2E			SB64-02-2F		SB64-03-1B		
Apr-06	May-06	Jun-06	Constituent	MCL	Apr-06	May-06	Jun-06	Apr-06	May-06	Apr-06	May-06	May-(
			Aromatic or Non-Halogenated Hydrocarbons									
<1	<1	<1	Benzene	1	<1	<1	<1	<1	<1	<1	<1	<1
<1	<1	<1	n-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1
<1	<1	<1	sec-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1
<1	<1	<1	ter-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1
<1	<1	<1	Chlorobenzene		<1	<1	<1	<1	<1	<1	<1	<1
<1	<1	<1	Ethylbenzene	300	<1	<1	<1	<1	<1	<1	<1	<1
<2	<2	<2	Isopropylbenzene		<2	<2	<2	<2	<2	<2	<2	<2
<1	<1	<1	p-Isopropyltoluene		<1	<1	<1	<1	<1	<1	<1	<1
<5	<5	<5	Methyl tert-Butyl Ether	13	<5	<5	<5	<5	<5	<5	<5	<5
<2	<2	<2	Naphthalene		<2	<2	<2	<2	<2	<2	<2	<2
<1	<1	<1	n-Propylbenzene		<1	<1	<1	<1	<1	<1	<1	<1
1.1	<1	1.3	Toluene	150	2.0	2.1	1.8	1.5	2.2	<1	<1	<1
<2	<2	<2	Xylenes, total	1750	<2	<2	<2	<2	<2	<2	<2	<2
1.1		1.3	Total Aromatic Hydrocarbons		2.0	2.1	1.8	1.5	2.2			
			Halogenated Non-Aromatic Hydrocarbons									
<1	<1	<1	Bromodichloromethane	80	<1	<1	<1	<1	<1	<1	<1	<1
<10	<10	<10	Bromomethane	80	<10	<10	<10	<10	<10	<10	<10	<10
<1	<1	<1	Carbon Tetrachloride	0.5	<1	<1	<1	<1	<1	<1	<1	<1
<30	<30	<30	Chloroethane		<30	<30	<30	<30	<30	<30	<30	<30
<3	<3	<3	Chloroform	80	<3	<3	<3	<3	<3	<3	<3	<3
<10	<10	<10	Chloromethane		<10	<10	<10	<10	<10	<10	<10	<10
118.0	65.7	123.0	1,1-Dichloroethane	5	73.4	70.4	67.9	413.0	215.0	161.0	212.0	201.(
<2	<2	<2	1,2-Dichloroethane	0.5	<2	<2	<2	<2	2.5	<2	<2	<2
34.6	16.4	35.8	1,1-Dichloroethene	6	30.8	28.7	25.3	41.9	55.5	14.9	18.2	18.0
17.6	10.3	16.2	cis-1,2-Dichloroethene	6	15.6	14.7	14.0	28.5	34.0	<1	2.9	3.4
<1	<1	<1	trans-1,2-Dichloroethene	10	<1	<1	<1	<1	<1	<1	<1	<1
<1	<1	<1	1,3-Dichloropropane	5	<1	<1	<1	<1	<1	<1	<1	<1
<1	<1	<1	Methylene Chloride	5	<1	<1	<1	<1	<1	<1	<1	<1
<2	<2	<2	1,1,1,2-Tetrachloroethane		<2	<2	<2	<2	<2	<2	<2	<2
<1	<1	<1	1,1,2,2-Tetrachloroethane	1	<1	<1	<1	<1	<1	<1	<1	<1
1.3	3	<1	Tetrachloroethene	5	2.1	1.4	1.3	<1	<1	3.4	3.6	3.6
<1	<1	<1	1,1,1-Trichloroethane	200	<1	<1	<1	<1	<1	<1	<1	<1
<1	<1	<1	1,1,2-Trichloroethane	5	<1	<1	<1	<1	<1	<1	<1	<1
6.6	13.8	5.3	Trichloroethene	5	10.6	6.4	5.3	4.0	4.8	25.7	33.8	35.2
<1	<1	<1	Freon-113	1200	<1	<1	<1	<1	<1	<1	<1	<1
<1	<1	<1	Freon-123A		<1	<1	<1	<1	<1	<1	<1	<1
1.5	<1	1.2	Vinyl Chloride	0.5	2.5	1.9	1.6	2.1	2.6	<1	<1	<1
179.6	109.2	181.5	Total Halogenated Hydrocarbons		135.0	123.5	115.4	489.5	314.4	205.0	270.5	261.:
180.7	109.2	182.8	Total Concentration of VOCs		137.0	125.6	117.2	491.0	316.6	205.0	270.5	261.:

Table 5-2 (Cont'd)
Bevalac Area Temporary Groundwater Sampling
Volatile Organic Compounds - EPA Metho
3rd Quarter FY 2006
(concentrations in µg/L)

SB64-03-5					SB64-03-6			SB64-03-8	SB64-05-4				
Apr-06	May-06	Jun-06	Constituent	MCL	Apr-06	May-06	Jun-06	May-06	Apr-06	May-06	May-06	Jun-06	
			Aromatic or Non-Halogenated Hydrocarbons										
<1	<1	<1	Benzene	1	<1	<1	<1	<1	<1	<1	<1	<1	
<1	<1	<1	n-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	
<1	<1	<1	sec-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	
<1	<1	<1	ter-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	
<1	<1	<1	Chlorobenzene		<1	<1	<1	<1	<1	<1	<1	<1	
<1	<1	<1	Ethylbenzene	300	<1	<1	<1	<1	<1	<1	<1	<1	
<2	<2	<2	Isopropylbenzene		<2	<2	<2	<2	<2	<2	<2	<2	
<1	<1	<1	p-Isopropyltoluene		<1	<1	<1	<1	<1	<1	<1	<1	
<5	<5	<5	Methyl tert-Butyl Ether	13	<5	<5	<5	<5	<5	<5	<5	<5	
<2	<2	<2	Naphthalene		<2	<2	<2	<2	<2	<2	<2	<2	
<1	<1	<1	n-Propylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	
<1	<1	<1	Toluene	150	<1	<1	<1	<1	<1	<1	<1	<1	
<2	<2	<2	Xylenes, total	1750	<2	<2	<2	<2	<2	<2	<2	<2	
			Total Aromatic Hydrocarbons										
			Halogenated Non-Aromatic Hydrocarbons										
<1	<1	<1	Bromodichloromethane	80	<1	<1	<1	<1	<1	<1	<1	<1	
<10	<10	<10	Bromomethane	80	<10	<10	<10	<10	<10	<10	<10	<10	
<1	<1	<1	Carbon Tetrachloride	0.5	<1	<1	<1	<1	<1	<1	<1	<1	
<30	<30	<30	Chloroethane		<30	<30	<30	<30	<30	<30	<30	<30	
<3	<3	<3	Chloroform	80	<3	<3	<3	<3	<3	<3	<3	<3	
<10	<10	<10	Chloromethane		<10	<10	<10	<10	<10	<10	<10	<10	
3.6	2.9	3.7	1,1-Dichloroethane	5	2.0	1.7	1.8	<1	2.0	1.5	1.6	1.2	
<2	<2	<2	1,2-Dichloroethane	0.5	<2	<2	<2	<2	<2	<2	<2	<2	
3.8	5.0	4.4	1,1-Dichloroethene	6	5.2	4.5	3.5	<1	<1	2.0	2.1	1.6	
3.7	3.0	3.5	cis-1,2-Dichloroethene	6	13.5	10.2	10.4	<1	<1	<1	<1	<1	
<1	<1	<1	trans-1,2-Dichloroethene	10	<1	<1	<1	<1	<1	<1	<1	<1	
<1	<1	<1	1,3-Dichloropropane	5	<1	<1	<1	<1	<1	<1	<1	<1	
<1	<1	<1	Methylene Chloride	5	<1	<1	<1	<1	<1	<1	<1	<1	
<2	<2	<2	1,1,1,2-Tetrachloroethane		<2	<2	<2	<2	<2	<2	<2	<2	
<1	<1	<1	1,1,2,2-Tetrachloroethane	1	<1	<1	<1	<1	<1	<1	<1	<1	
4.2	4.2	4.4	Tetrachloroethene	5	10.0	8.8	8.3	<1	4.5	3.1	3.3	3.0	
<1	<1	<1	1,1,1-Trichloroethane	200	<1	<1	<1	<1	<1	<1	<1	<1	
<1	<1	<1	1,1,2-Trichloroethane	5	<1	<1	<1	<1	<1	<1	<1	<1	
39.0	39.6	33.9	Trichloroethene	5	168.0	148.0	156.0	<1	4.7	2.8	3.3	3.3	
<1	<1	<1	Freon-113	1200	<1	<1	<1	<1	<1	<1	<1	<1	
<1	<1	<1	Freon-123A		<1	<1	<1	<1	<1	<1	<1	<1	
<1	<1	<1	Vinyl Chloride	0.5	<1	<1	<1	<1	<1	<1	<1	<1	
54.3	54.7	49.9	Total Halogenated Hydrocarbons		198.7	173.2	180.0		11.2	9.4	10.3	9.1	
54.3	54.7	49.9	Total Concentration of VOCs		198.7	173.2	180.0		11.2	9.4	10.3	9.1	

Table 5-2 (Cont'd)
Bevalac Area Temporary Groundwater Sampli
Volatile Organic Compounds - EPA Me
3rd Quarter FY 2006
(concentrations in µg/L)

						SB71B-03-2						
May-06	May-06	Jun-06	Jun-06	Constituent	MCL	Apr-06	Apr-06	Apr-06	May-06	May-06	Jun-06	Jun-0
				Aromatic or Non-Halogenated Hydrocarbons								
<1	<1	<1	<1	Benzene	1	<1	<1	<1	<1	<1	<1	<1
<1	<1	<1	<1	n-Butylbenzene		<1	<1	<1	<1	<1	<1	<1
<1	<1	<1	<1	sec-Butylbenzene		<1	<1	<1	<1	<1	<1	<1
<1	<1	<1	<1	ter-Butylbenzene		<1	<1	<1	<1	<1	<1	<1
<1	<1	<1	<1	Chlorobenzene		<1	<1	<1	<1	<1	<1	<1
<1	<1	<1	<1	Ethylbenzene	300	<1	<1	<1	<1	<1	<1	<1
<2	<2	<2	<2	Isopropylbenzene		<2	<2	<2	<2	<2	<2	<2
<1	<1	<1	<1	p-Isopropyltoluene		<1	<1	<1	<1	<1	<1	<1
<5	<5	<5	<5	Methyl tert-Butyl Ether	13	<5	<5	<5	<5	<5	<5	<5
<2	<2	<2	<2	Naphthalene		<2	<2	<2	<2	<2	<2	<2
<1	<1	<1	<1	n-Propylbenzene		<1	<1	<1	<1	<1	<1	<1
<1	<1	<1	<1	Toluene	150	<1	<1	<1	<1	<1	<1	<1
<2	<2	<2	<2	Xylenes, total	1750	<2	<2	<2	<2	<2	<2	<2
				Total Aromatic Hydrocarbons								
				Halogenated Non-Aromatic Hydrocarbons								
<1	<1	<1	<1	Bromodichloromethane	80	<1	<1	<1	<1	<1	<1	<1
<10	<10	<10	<10	Bromomethane	80	<10	<10	<10	<10	<10	<10	<10
<1	<1	<1	<1	Carbon Tetrachloride	0.5	<1	<1	<1	<1	<1	<1	<1
<30	<30	<30	<30	Chloroethane		<30	<30	<30	<30	<30	<30	<30
<3	<3	<3	<3	Chloroform	80	<3	<3	<3	<3	<3	<3	<3
<10	<10	<10	<10	Chloromethane		<10	<10	<10	<10	<10	<10	<10
<1	<1	<1	<1	1,1-Dichloroethane	5	<1	<1	<1	<1	<1	<1	<1
<2	<2	<2	<2	1,2-Dichloroethane	0.5	<2	<2	<2	<2	<2	<2	<2
<1	<1	<1	<1	1,1-Dichloroethene	6	<1	<1	<1	<1	<1	<1	<1
3.5	5.3	2.7	3.1	cis-1,2-Dichloroethene	6	268.0	37.4	125.0	46.6	31.8	74.8	19.8
<1	<1	<1	<1	trans-1,2-Dichloroethene	10	<1	<1	<1	<1	<1	<1	<1
<1	<1	<1	<1	1,3-Dichloropropane	5	<1	<1	<1	<1	<1	<1	<1
<1	<1	<1	<1	Methylene Chloride	5	<1	<1	<1	<1	<1	<1	<1
<2	<2	<2	<2	1,1,1,2-Tetrachloroethane		<2	<2	<2	<2	<2	<2	<2
<1	<1	<1	<1	1,1,2,2-Tetrachloroethane	1	<1	<1	<1	<1	<1	<1	<1
<1	<1	<1	<1	Tetrachloroethene	5	61.1	11.3	20.3	12.4	8.7	6.9	7.9
<1	<1	<1	<1	1,1,1-Trichloroethane	200	<1	<1	<1	<1	<1	<1	<1
<1	<1	<1	<1	1,1,2-Trichloroethane	5	<1	<1	<1	<1	<1	<1	<1
<1	1.4	<1	<1	Trichloroethene	5	23.7	34.7	18.5	17.1	11.5	2.4	10.9
<1	<1	<1	<1	Freon-113	1200	<1	<1	<1	<1	<1	<1	<1
<1	<1	<1	<1	Freon-123A		<1	<1	<1	<1	<1	<1	<1
3.5	3.9	2.9	3.9	Vinyl Chloride	0.5	12.9	16.3	9.6	7.4	7.1	4.3	4.3
7.0	10.6	5.6	7.0	Total Halogenated Hydrocarbons		365.7	99.7	173.4	83.5	59.1	88.4	42.9
7.0	10.6	5.6	7.0	Total Concentration of VOCs		365.7	99.7	173.4	83.5	59.1	88.4	42.9

MCL = Maximum contaminant level for drinking water
All analyses by LBNL EML unless otherwise noted
* = Analysis by BC Laboratories

May-06	May-06	Jun-06	Jun-06
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<2	<2	<2	<2
<1	<1	<1	<1
<5	<5	<5	<5
<2	<2	<2	<2
<1	<1	<1	<1
<1	<1	<1	<1
<2	<2	<2	<2
<1	<1	<1	<1
<10	<10	<10	<10
<1	<1	<1	<1
<30	<30	<30	<30
<3	<3	<3	<3
<10	<10	<10	<10
<1	<1	<1	<1
<2	<2	<2	<2
<1	<1	<1	<1
8.5	6.9	6.1	6.5
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
<2	<2	<2	<2
<1	<1	<1	<1
29.0	24.5	19.8	20.0
<1	<1	<1	<1
<1	<1	<1	<1
15.2	12.0	10.1	11.0
<1	<1	<1	<1
<1	<1	<1	<1
<1	<1	<1	<1
52.7	43.4	36.0	37.5
52.7	43.4	36.0	37.5

= Less than Quantitation Limit
= Compound not included in analysis
cate sample

Table 5-3
Bevalac Area Extraction/Injection Well Sampling Results
Volatile Organic Compounds - EPA Method 8260
3rd Quarter FY 2006
(concentrations in µg/L)

Constituent	MCL	EW51L-99-1	EW51L-00-1	EW64-00-1					EW64-03-1				
		Apr-06	Apr-06	Apr-06	May-06	May-06	Jun-06	Jun-06	Apr-06	May-06	May-06	Jun-06	Jun-06
Aromatic or Non-Halogenated Hydrocarbons													
Benzene	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
ter-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	300	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Isopropylbenzene		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
p-Isopropyltoluene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl tert-Butyl Ether	13	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
n-Propylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	150	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	1750	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Aromatic Hydrocarbons													
Halogenated Non-Aromatic Hydrocarbons													
Bromodichloromethane	80	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	80	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Carbon Tetrachloride	0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chloroform	80	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,1-Dichloroethane	5	<1	20.4	3.9	7.4	7.1	6.2	7.9	19.8	27.1	51.6	48.3	54.4
1,2-Dichloroethane	0.5	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1-Dichloroethene	6	<1	<1	<1	<1	<1	<1	<1	<1	2.1	3.7	2.5	<1
cis-1,2-Dichloroethene	6	9.3	177.0	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene Chloride	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1,2-Tetrachloroethane		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1,2,2-Tetrachloroethane	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	4.1	10.4	2.0	2.7	4.2	2.8	2.7	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	200	<1	1.0	<1	<1	3.6	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	5	26.3	349.0	1.5	2.1	2.6	2.4	2.4	2.8	4.3	7.7	7.3	6.8
Freon-113	1200	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Freon-123A		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl Chloride	0.5	<1	11.1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Halogenated Hydrocarbons		39.7	568.9	7.4	12.2	17.5	11.4	13.0	22.6	33.5	63.0	58.1	61.2
Total Concentration of VOCs		39.7	568.9	7.4	12.2	17.5	11.4	13.0	22.6	33.5	63.0	58.1	61.2

Table 5-3 (Cont'd)
Bevalac Area Extraction/Injection Well Sampling Results
Volatile Organic Compounds - EPA Method 8260
3rd Quarter FY 2006
(concentrations in µg/L)

Constituent	MCL	EW64-05-1					IW64-06-1	IW64-06-2	IW64-06-3
		Apr-06	May-06	May-06	Jun-06	Jun-06	Jun-06	Jun-06	Jun-06
Aromatic or Non-Halogenated Hydrocarbons									
Benzene	1	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1
ter-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene		<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	300	<1	<1	<1	<1	<1	<1	<1	<1
Isopropylbenzene		<2	<2	<2	<2	<2	<2	<2	<2
p-Isopropyltoluene		<1	<1	<1	<1	<1	<1	<1	<1
Methyl tert-Butyl Ether	13	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene		<2	<2	<2	<2	<2	<2	<2	<2
n-Propylbenzene		<1	<1	<1	<1	<1	<1	<1	<1
Toluene	150	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	1750	<2	<2	<2	<2	<2	<2	<2	<2
Total Aromatic Hydrocarbons									
Halogenated Non-Aromatic Hydrocarbons									
Bromodichloromethane	80	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	80	<2	<2	<2	<2	<2	<2	<2	<2
Carbon Tetrachloride	0.5	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane		<10	<10	<10	<10	<10	<10	<10	<10
Chloroform	80	<3	<3	<3	<3	<3	<3	<3	<3
1,1-Dichloroethane	5	<1	<1	<1	<1	1.2	3.3	3.7	1.7
1,2-Dichloroethane	0.5	<2	<2	<2	<2	<2	<2	<2	<2
1,1-Dichloroethene	6	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	6	<1	<1	<1	<1	<1	24.4	17.7	12.4
trans-1,2-Dichloroethene	10	<1	<1	<1	<1	<1	1.9	1.3	6.9
1,2-Dichloropropane	5	<1	<1	<1	<1	<1	<1	<1	<1
Methylene Chloride	5	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1,2-Tetrachloroethane		<2	<2	<2	<2	<2	<2	<2	<2
1,1,2,2-Tetrachloroethane	1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	2.7	2.8	2.8	2.4	2.7	18.3	<1	2.0
1,1,1-Trichloroethane	200	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	5	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	5	4.1	3.9	4.2	3.5	3.4	10.8	3.3	20.7
Freon-113	1200	<1	<1	<1	<1	<1	<1	<1	<1
Freon-123A		<1	<1	<1	<1	<1	<1	<1	<1
Vinyl Chloride	0.5	<1	<1	<1	<1	<1	<1	<1	2.7
Total Halogenated Hydrocarbons		6.8	6.7	7.0	5.9	7.3	58.7	26.0	46.4
Total Concentration of VOCs		6.8	6.7	7.0	5.9	7.3	58.7	26.0	46.4

MCL = Maximum contaminant level for drinking water

All analyses by LBNL EML unless otherwise noted

< = Less than Quantitation Limit

Table 6-1
Old Town Area Groundwater Monitoring Well Results
Volatile Organic Compounds - EPA Method 8260
3rd Quarter FY 2006
(concentrations in µg/L)

Constituent	MCL	5-93-10			6-95-14[T]	7-92-19	7-94-3	7-95-22			7-95-23		
		Apr-06	May-06	Jun-06	May-06[T]	May-06	May-06	Apr-06	May-06	Jun-06	Apr-06	May-06	Jun-06
Aromatic or Non-Halogenated Hydrocarbons													
Benzene	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5
n-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5
sec-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5
ter-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5
1,4-Dichlorobenzene	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5
Ethylbenzene	300	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5
Isopropylbenzene		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10
p-Isopropyltoluene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5
Methyl tert-Butyl Ether	13	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<25
Naphthalene		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10
n-Propylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5
Toluene	150	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5
1,2,4-Trimethylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5
1,3,5-Trimethylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5
Xylenes, total	1750	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10
Total Aromatic Hydrocarbons													
Halogenated Hydrocarbons													
Bromodichloromethane	80	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5
Bromoform	80	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10
Carbon Tetrachloride	0.5	<1	<1	<1	<1	<1	2.0	3.3	1.8	4.4	4.7	15.3	10.5
Chloroform	80	<3	<3	<3	<3	<3	3.9	<3	<3	<3	<3	<3	<15
1,1-Dichloroethane	5	<1	<1	<1	<1	<1	1.7	<1	<1	<1	<1	<1	<5
1,2-Dichloroethane	0.5	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10
1,1-Dichloroethene	6	<1	<1	<1	<1	<1	8.4	<1	<1	1.8	<1	1.4	<5
cis-1,2-Dichloroethene	6	<1	<1	<1	<1	<1	2.5	2.3	<1	5.2	<1	2.4	<5
trans-1,2-Dichloroethene	10	<1	<1	<1	<1	<1	2.5	<1	<1	<1	<1	<1	<5
Methylene Chloride	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5
1,1,1,2-Tetrachloroethane		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<10
1,1,2,2-Tetrachloroethane	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5
Tetrachloroethene	5	<1	<1	<1	<1	19.3	71.1	149.0	85.4	270.0	136.0	246.0	256
1,1,1-Trichloroethane	200	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5
1,1,2-Trichloroethane	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5
Trichloroethene	5	2.9	2.5	3.5	4.4	7.1	32.3	66.2	29.5	133.0	205.0	338.0	344
Freon-113	1200	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5
Freon-123A		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5
Vinyl Chloride	0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5
Total Halogenated Hydrocarbons		2.9	2.5	3.5	4.4	26.4	124.4	220.8	116.7	414.4	345.7	603.1	610.5
Total Concentration of VOCs		2.9	2.5	3.5	4.4	26.4	124.4	220.8	116.7	414.4	345.7	603.1	610.5

Table 6-1 (Cont'd)
Old Town Area Groundwater Monitoring Well Results
Volatile Organic Compounds - EPA Method 8260
3rd Quarter FY 2006
(concentrations in µg/L)

		7B-95-24			7B-95-25	25-95-5	25A-98-1		25A-98-3				
Constituent	MCL	Apr-06	May-06	Jun-06	May-06	May-06	Apr-06	Jun-06	Apr-06	Apr-06	May-06	May-06	Jun-06
Aromatic or Non-Halogenated Hydrocarbons													
Benzene	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
ter-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	300	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Isopropylbenzene		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
p-Isopropyltoluene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl tert-Butyl Ether	13	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
n-Propylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	150	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	1750	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Aromatic Hydrocarbons													
Halogenated Hydrocarbons													
Bromodichloromethane	80	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	80	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Carbon Tetrachloride	0.5	1.9	3.1	1.7	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	80	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,1-Dichloroethane	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	0.5	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1-Dichloroethene	6	<1	2.3	1.5	<1	<1	2.8	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	6	3.8	5.0	3.4	<1	<1	2.8	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene Chloride	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1,2-Tetrachloroethane		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1,2,2-Tetrachloroethane	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	105.0	137.0	78.1	2.2	<1	<1	<1	<1	2.2	<1	<1	<1
1,1,1-Trichloroethane	200	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	5	22.7	35.5	21.1	<1	1.4	69.2	25.0	18.8	20.0	20.3	24.4	14.5
Freon-113	1200	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Freon-123A		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl Chloride	0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Halogenated Hydrocarbons		133.4	182.9	105.8	2.2	1.4	74.8	25.0	18.8	22.2	20.3	24.4	14.5
Total Concentration of VOCs		133.4	182.9	105.8	2.2	1.4	74.8	25.0	18.8	22.2	20.3	24.4	14.5

Table 6-1 (Cont'd)
Old Town Area Groundwater Monitoring Well Results
Volatile Organic Compounds - EPA Method 8260
3rd Quarter FY 2006
(concentrations in µg/L)

		25A-98-7(cont'd)				27-92-20		37-92-6[T]	46-93-12	52-95-2B			
Constituent	MCL	May-06	May-06	Jun-06	Jun-06	Apr-06	Jun-06	May-06[I]	Apr-06	Apr-06	Apr-06	May-06	J
Aromatic or Non-Halogenated Hydrocarbons													
Benzene	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
n-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
sec-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
ter-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,4-Dichlorobenzene	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Ethylbenzene	300	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Isopropylbenzene		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	
p-Isopropyltoluene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Methyl tert-Butyl Ether	13	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	
Naphthalene		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	
n-Propylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Toluene	150	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2,4-Trimethylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,3,5-Trimethylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Xylenes, total	1750	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	
Total Aromatic Hydrocarbons													
Halogenated Hydrocarbons													
Bromodichloromethane	80	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Bromoform	80	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	
Carbon Tetrachloride	0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Chloroform	80	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	
1,1-Dichloroethane	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,2-Dichloroethane	0.5	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	
1,1-Dichloroethene	6	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
cis-1,2-Dichloroethene	6	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
trans-1,2-Dichloroethene	10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Methylene Chloride	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1,1,2-Tetrachloroethane		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	
1,1,2,2-Tetrachloroethane	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	3.3	
Tetrachloroethene	5	<1	<1	<1	<1	<1	1.3	<1	<1	<1	<1	1.7	
1,1,1-Trichloroethane	200	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
1,1,2-Trichloroethane	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Trichloroethene	5	13.6	10.8	9.4	8.3	<1	2.1	<1	<1	2.0	1.8	2.6	
Freon-113	1200	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Freon-123A		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Vinyl Chloride	0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Total Halogenated Hydrocarbons		13.6	10.8	9.4	8.3		3.4			2.0	1.8	7.6	
Total Concentration of VOCs		13.6	10.8	9.4	8.3		3.4			2.0	1.8	7.6	

Table 6-1 (Cont'd)
Old Town Area Groundwater Monitoring Well Results
Volatile Organic Compounds - EPA Method 8260
3rd Quarter FY 2006
(concentrations in µg/L)

		52-98-9			52A-98-8B				53-93-9				
Constituent	MCL	Apr-06	May-06	Jun-06	Apr-06	Apr-06	Jun-06	Jun-06	Apr-06	Apr-06	May-06	May-06	Jun-06
Aromatic or Non-Halogenated Hydrocarbons													
Benzene	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
ter-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	300	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Isopropylbenzene		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
p-Isopropyltoluene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl tert-Butyl Ether	13	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
n-Propylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	150	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	1750	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Aromatic Hydrocarbons													
Halogenated Hydrocarbons													
Bromodichloromethane	80	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	80	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Carbon Tetrachloride	0.5	<1	<1	<1	<1	<1	<1	<1	2.0	2.3	3.2	3.6	3.0
Chloroform	80	<3	<3	<3	<3	<3	<3	<3	5.5	5.7	7.0	7.3	6.1
1,1-Dichloroethane	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	0.5	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1-Dichloroethene	6	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	6	<1	1.0	<1	<1	2.0	1.3	1.3	<1	<1	1.8	1.6	1.2
trans-1,2-Dichloroethene	10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene Chloride	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1,2-Tetrachloroethane		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1,2,2-Tetrachloroethane	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	<1	<1	<1	<1	<1	<1	<1	7.2	9.9	14.6	16.3	13.3
1,1,1-Trichloroethane	200	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	5	2.6	1.6	1.5	2.5	2.4	2.1	2.0	4.6	5.9	7.5	8.1	6.7
Freon-113	1200	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Freon-123A		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl Chloride	0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Halogenated Hydrocarbons		2.6	2.6	1.5	2.5	4.4	3.4	3.3	19.3	23.8	34.1	36.9	30.3
Total Concentration of VOCs		2.6	2.6	1.5	2.5	4.4	3.4	3.3	19.3	23.8	34.1	36.9	30.3

Table 6-1 (Cont'd)
Old Town Area Groundwater Monitoring Well Results
Volatile Organic Compounds - EPA Method 8260
3rd Quarter FY 2006
(concentrations in µg/L)

		53-93-16-69'						53-96-1			58-96-11	
Constituent	MCL	Apr-06	Apr-06	May-06	May-06	Jun-06	Jun-06	Apr-06	May-06	Jun-06	Apr-06	May-(
Aromatic or Non-Halogenated Hydrocarbons												
Benzene	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<10
n-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<10
sec-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<10
ter-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<10
1,4-Dichlorobenzene	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<10
Ethylbenzene	300	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<10
Isopropylbenzene		<2	<2	<2	<2	<2	<2	<2	<2	<2	<20	<20
p-Isopropyltoluene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<10
Methyl tert-Butyl Ether	13	<5	<5	<5	<5	<5	<5	<5	<5	<5	<50	<50
Naphthalene		<2	<2	<2	<2	<2	<2	<2	<2	<2	<20	<20
n-Propylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<10
Toluene	150	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<10
1,2,4-Trimethylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<10
1,3,5-Trimethylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<10
Xylenes, total	1750	<2	<2	<2	<2	<2	<2	<2	<2	<2	<20	<20
Total Aromatic Hydrocarbons												
Halogenated Hydrocarbons												
Bromodichloromethane	80	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<10
Bromoform	80	<2	<2	<2	<2	<2	<2	<2	<2	<2	<20	<20
Carbon Tetrachloride	0.5	<1	3.8	3.0	3.4	2.9	2.6	2.7	9.3	2.7	50.5	43.7
Chloroform	80	<3	3.6	3.8	4.0	4.6	4.0	3.0	4.7	<3	<30	<30
1,1-Dichloroethane	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<10
1,2-Dichloroethane	0.5	<2	<2	<2	<2	<2	<2	<2	<2	<2	<20	<20
1,1-Dichloroethene	6	<1	<1	<1	<1	<1	<1	2.4	3.5	1.6	<10	<10
cis-1,2-Dichloroethene	6	<1	2.2	<1	1.3	1.5	1.5	15.7	4.0	7.9	28.0	28.1
trans-1,2-Dichloroethene	10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<10
Methylene Chloride	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<10
1,1,1,2-Tetrachloroethane		<2	<2	<2	<2	<2	<2	<2	<2	<2	<20	<20
1,1,2,2-Tetrachloroethane	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<10
Tetrachloroethene	5	<1	62.4	28.6	32.1	31.3	23.1	49.4	68.6	38.5	1,680.0	1,250
1,1,1-Trichloroethane	200	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<10
1,1,2-Trichloroethane	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<10
Trichloroethene	5	2.4	21.6	11.1	12.4	12.6	10.1	21.0	26.1	17.9	924.0	801.(
Freon-113	1200	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<10
Freon-123A		<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<10
Vinyl Chloride	0.5	<1	<1	<1	<1	<1	<1	5.0	<1	3.0	<10	<10
Total Halogenated Hydrocarbons		2.4	93.6	46.5	53.2	52.9	41.3	99.2	116.2	71.6	2,682.5	2,122
Total Concentration of VOCs		2.4	93.6	46.5	53.2	52.9	41.3	99.2	116.2	71.6	2,682.5	2,122

Table 6-1(Cont'd)
Old Town Area Groundwater Monitoring Well Results
Volatile Organic Compounds - EPA Method 8260
3rd Quarter FY 2006
(concentrations in µg/L)

		58-00-12				MW90-2	MW91-8			MW91-9	
Constituent	MCL	Apr-06	May-06	May-06(D)*	Jun-06	May-06	Apr-06	May-06	Jun-06	Apr-06	May-06
Aromatic or Non-Halogenated Hydrocarbons											
Benzene	1	<100	<500	<50	<500	<1	<1	<1	<1	<1	<1
n-Butylbenzene		<100	<500		<500	<1	<1	<1	<1	<1	<1
sec-Butylbenzene		<100	<500		<500	<1	<1	<1	<1	<1	<1
ter-Butylbenzene		<100	<500		<500	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	5	<100	<500		<500	<1	<1	<1	<1	<1	<1
Ethylbenzene	300	<100	<500	<50	<500	<1	<1	<1	<1	<1	<1
Isopropylbenzene		<200	<1000		<1000	<2	<2	<2	<2	<2	<2
p-Isopropyltoluene		<100	<500		<500	<1	<1	<1	<1	<1	<1
Methyl tert-Butyl Ether	13	<500	<250		<250	<5	<5	<5	<5	<5	<5
Naphthalene		<200	<1000		<1000	<2	<2	<2	<2	<2	<2
n-Propylbenzene		<100	<500		<500	<1	<1	<1	<1	<1	<1
Toluene	150	<100	<500	<50	<500	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene		<100	<500		<500	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene		<100	<500		<500	<1	<1	<1	<1	<1	<1
Xylenes, total	1750	<200	<1000	<100	<1000	<2	<2	<2	<2	<2	<2
Total Aromatic Hydrocarbons											
Halogenated Hydrocarbons											
Bromodichloromethane	80	<100	<500	<50	<500	<1	<1	<1	<1	<1	<1
Bromoform	80	<200	<1000	<50	<1000	<2	<2	<2	<2	<2	<2
Carbon Tetrachloride	0.5	489	<500	310	<500	<1	<1	<1	<1	<1	<1
Chloroform	80	<300	<1500	<50	<1500	<3	<3	<3	<3	<3	<3
1,1-Dichloroethane	5	<100	<500	<50	<500	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	0.5	<200	<1000	<50	<1000	<2	<2	<2	<2	<2	<2
1,1-Dichloroethene	6	<100	<500	57	<500	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	6	310	<500	220	<500	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	10	<100	<500	<50	<500	<1	<1	<1	<1	<1	<1
Methylene Chloride	5	<100	<500	<100	<500	<1	<1	<1	<1	<1	<1
1,1,1,2-Tetrachloroethane		<200	<1000	<50	<1000	<2	<2	<2	<2	<2	<2
1,1,2,2-Tetrachloroethane	1	<100	<500	<50	<500	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	10,700	9,310	8,200	5,660	14.2	<1	<1	2.1	4.9	6.9
1,1,1-Trichloroethane	200	<100	<500	<50	<500	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	5	<100	<500	<50	<500	<1	<1	<1	<1	<1	<1
Trichloroethene	5	8,780	6,200	5,000	4,130	1.2	<1	<1	2.3	<1	<1
Freon-113	1200	<100	<500	<50	<500	<1	<1	<1	<1	<1	<1
Freon-123A		<100	<500		<500	<1	<1	<1	<1	<1	<1
Vinyl Chloride	0.5	<100	<500	<50	<500	<1	<1	<1	<1	<1	<1
Total Halogenated Hydrocarbons		20,279	15,510	13,787	9,790	15.4			4.4	4.9	6.9
Total Concentration of VOCs		20,279	15,510	13,787	9,790	15.4			4.4	4.9	6.9

MCL = Maximum contaminant level for drinking water
All analyses by LBNL EML unless otherwise noted
* = Analysis by BC Laboratories

< = Less than Quantitation l
= Compound not included
(D) = Duplicate Sample

Table 6-2
Old Town Area Temporary Groundwater Sampling Point Results
Volatile Organic Compounds - EPA Method 8260
3rd Quarter FY 2006
(concentrations in µg/L)

Constituent	MCL	SB5A-98-1		SB25A-96-3	SB27-96-1				SB53-96-3		
		Apr-06	Jun-06	Apr-06	Apr-06	Apr-06	May-06	Jun-06	Apr-06	May-06	
Aromatic or Non-Halogenated Hydrocarbons											
Benzene	1	<1	<1	<1	<1	<1	<1	<1	<10	<10	
n-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<10	<10	
sec-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<10	<10	
ter-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<10	<10	
Ethylbenzene	300	<1	<1	<1	<1	<1	<1	<1	<10	<10	
Isopropylbenzene		<2	<2	<2	<2	<2	<2	<2	<20	<20	
p-Isopropyltoluene		<1	<1	<1	<1	<1	<1	<1	<10	<10	
Methyl tert-Butyl Ether	13	<5	<5	<5	<5	<5	<5	<5	<50	<50	
Naphthalene		<2	<2	<2	<2	<2	<2	<2	<20	<20	
n-Propylbenzene		<1	<1	<1	<1	<1	<1	<1	<10	<10	
Toluene	150	<1	<1	<1	<1	<1	<1	<1	<10	<10	
1,2,4-Trimethylbenzene		<1	<1	<1	<1	<1	<1	<1	<10	<10	
1,3,5-Trimethylbenzene		<1	<1	<1	<1	<1	<1	<1	<10	<10	
Xylenes, total	1750	<2	<2	<2	<2	<2	<2	<2	<20	<20	
Total Aromatic Hydrocarbons											
Halogenated Non-Aromatic Hydrocarbons											
Bromodichloromethane	80	<1	<1	<1	<1	<1	<1	<1	<10	<10	
Carbon Tetrachloride	0.5	<1	<1	<1	<1	<1	<1	<1	<10	<10	
Chloroform	80	<3	<3	<3	<3	<3	<3	<3	<30	<30	
1,1-Dichloroethane	5	<1	<1	<1	<1	<1	<1	<1	<10	<10	
1,2-Dichloroethane	0.5	<2	<2	<2	<2	<2	<2	<2	<20	<20	
1,1-Dichloroethene	6	<1	<1	18.9	<1	<1	<1	<1	<10	<10	
cis-1,2-Dichloroethene	6	<1	<1	3.0	<1	<1	<1	<1	19.0	<10	
trans-1,2-Dichloroethene	10	<1	<1	<1	<1	<1	<1	<1	<10	<10	
1,2-Dichloropropane	5	<1	<1	<1	<1	<1	<1	<1	<10	<10	
Methylene Chloride	5	<1	<1	<1	<1	<1	<1	<1	<10	<10	
1,1,1,2-Tetrachloroethane		<2	<2	<2	<2	<2	<2	<2	<20	<20	
1,1,2,2-Tetrachloroethane	1	<1	<1	<1	<1	<1	<1	<1	<10	<10	
Tetrachloroethene	5	18.4	1.6	<1	1.7	1.5	<1	1.3	486	248	
1,1,1-Trichloroethane	200	<1	<1	<1	<1	<1	<1	<1	<10	<10	
1,1,2-Trichloroethane	5	<1	<1	<1	<1	<1	<1	<1	<10	<10	
Trichloroethene	5	<1	<1	83.5	1.9	1.7	1.8	2.1	136.0	59.7	
Freon-113	1200	<1	<1	<1	<1	<1	<1	<1	<10	<10	
Freon-123A		<1	<1	<1	<1	<1	<1	<1	<10	<10	
Vinyl Chloride	0.5	<1	<1	<1	<1	<1	<1	<1	<10	<10	
Total Halogenated Hydrocarbons		18.4	1.6	105.4	3.6	3.2	1.8	3.4	641.0	307.7	
Total Concentration of VOCs		18.4	1.6	105.4	3.6	3.2	1.8	3.4	641.0	307.7	

Table 6-2 (Cont'd)
Old Town Area Temporary Groundwater Sampling Point Results
Volatile Organic Compounds - EPA Method 8260
3rd Quarter FY 2006
(concentrations in µg/L)

Constituent	MCL	SB58-96-2	SB58-97-1	SB58-97-2			SB58-98-6
		May-06	May-06	Apr-06	May-06	Jun-06	May-06
Aromatic or Non-Halogenated Hydrocarbons							
Benzene	1	<10	<1	<1	<1	<1	<1
n-Butylbenzene		<10	<1	<1	<1	<1	<1
sec-Butylbenzene		<10	<1	<1	<1	<1	<1
ter-Butylbenzene		<10	<1	<1	<1	<1	<1
Ethylbenzene	300	<10	<1	<1	<1	<1	<1
Isopropylbenzene		<20	<2	<2	<2	<2	<2
p-Isopropyltoluene		<10	<1	<1	<1	<1	<1
Methyl tert-Butyl Ether	13	<50	<5	<5	<5	<5	<5
Naphthalene		<20	<2	<2	<2	<2	<2
n-Propylbenzene		<10	<1	<1	<1	<1	<1
Toluene	150	<10	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene		<10	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene		<10	<1	<1	<1	<1	<1
Xylenes, total	1750	<20	<2	<2	<2	<2	<2
Total Aromatic Hydrocarbons							
Halogenated Non-Aromatic Hydrocarbons							
Bromodichloromethane	80	<10	<1	<1	<1	<1	<1
Carbon Tetrachloride	0.5	<10	<1	<1	<1	<1	<1
Chloroform	80	<30	<3	<3	<3	<3	<3
1,1-Dichloroethane	5	<10	<1	<1	<1	<1	<1
1,2-Dichloroethane	0.5	<20	<2	<2	<2	<2	<2
1,1-Dichloroethene	6	<10	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	6	<10	1.9	17.3	22.8	38.2	<1
trans-1,2-Dichloroethene	10	<10	<1	<1	<1	<1	<1
1,2-Dichloropropane	5	<10	<1	<1	<1	<1	<1
Methylene Chloride	5	<10	<1	<1	<1	<1	<1
1,1,1,2-Tetrachloroethane		<20	<2	<2	<2	<2	<2
1,1,2,2-Tetrachloroethane	1	<10	<1	<1	<1	<1	<1
Tetrachloroethene	5	166	12.3	1.1	1.3	1.6	1.2
1,1,1-Trichloroethane	200	<10	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	5	<10	<1	<1	<1	<1	<1
Trichloroethene	5	84.7	2.5	3.2	3.2	3.9	<1
Freon-113	1200	<10	<1	<1	<1	<1	<1
Freon-123A		<10	<1	<1	<1	<1	<1
Vinyl Chloride	0.5	<10	<1	<1	2.0	3.6	<1
Total Halogenated Hydrocarbons		250.7	16.7	21.6	29.3	47.3	1.2
Total Concentration of VOCs		250.7	16.7	21.6	29.3	47.3	1.2

MCL = Maximum contaminant level for drinking water
All analyses by LBNL EML unless otherwise noted
* = Analysis by BC Laboratories

<	= Less than Quantitation Limit
	= Compound not included in analysis

Table 6-3
Old Town Area Extraction Well Sampling Results
Volatile Organic Compounds - EPA Method 8260
3rd Quarter FY 2006
(concentrations in µg/L)

Constituent	MCL	EW7-96-1			EW7-96-2			EW7-96-4R			EW7-03-1		
		Apr-06	May-06	Jun-06	Apr-06	May-06	Jun-06	Apr-06	May-06	Jun-06	Apr-06	May-06	Jun-06
Aromatic or Non-Halogenated Hydrocarbons													
Benzene	1	<1	<1	<10	<1	<1	<1	<1	<1	<10	<1	<5	<5
n-Butylbenzene		<1	<1	<10	<1	<1	<1	<1	<1	<10	<1	<5	<5
sec-Butylbenzene		<1	<1	<10	<1	<1	<1	<1	<1	<10	<1	<5	<5
ter-Butylbenzene		<1	<1	<10	<1	<1	<1	<1	<1	<10	<1	<5	<5
1,4-Dichlorobenzene	5	<1	<1	<10	<1	<1	<1	<1	<1	<10	<1	<5	<5
Ethylbenzene	300	<1	<1	<10	<1	<1	<1	<1	<1	<10	<1	<5	<5
Isopropylbenzene		<2	<2	<20	<2	<2	<2	<2	<2	<20	<2	<10	<10
p-Isopropyltoluene		<1	<1	<10	<1	<1	<1	<1	<1	<10	<1	<5	<5
Methyl tert-Butyl Ether	13	<5	<5	<50	<5	<5	<5	<5	<5	<50	<5	<25	<25
Naphthalene		<2	<2	<20	<2	<2	<2	<2	<2	<20	<2	<10	<10
n-Propylbenzene		<1	<1	<10	<1	<1	<1	<1	<1	<10	<1	<5	<5
Toluene	150	<1	<1	<10	<1	<1	<1	<1	<1	<10	<1	<5	<5
Xylenes, total	1750	<2	<2	<20	<2	<2	<2	<2	<2	<20	<2	<10	<10
Total Aromatic Hydrocarbons													
Halogenated Non-Aromatic Hydrocarbons													
Bromodichloromethane	80	<1	<1	<10	<1	<1	<1	<1	<1	<10	<1	<5	<5
Bromoform	80	<2	<2	<20	<2	<2	<2	<2	<2	<20	<2	<10	<10
Carbon Tetrachloride	0.5	3.5	3.6	<10	<1	<1	<1	<1	8.7	<10	7.7	5.2	6.6
Chloromethane		<10	<10	<100	<10	<10	<10	<10	<10	<100	<10	<50	<50
Chloroform	80	<3	<3	<30	<3	<3	<3	<3	<3	<30	<3	<15	<15
1,1-Dichloroethane	5	<1	<1	<10	<1	<1	<1	<1	<1	<10	<1	<5	<5
1,2-Dichloroethane	0.5	<2	<2	<20	<2	<2	<2	<2	<2	<20	<2	<10	<10
1,1-Dichloroethene	6	<1	<1	<10	<1	<1	<1	<1	<1	<10	<1	<5	<5
cis-1,2-Dichloroethene	6	<1	<1	<10	<1	<1	<1	<1	<1	<10	3.1	<5	<5
trans-1,2-Dichloroethene	10	<1	<1	<10	<1	<1	<1	<1	<1	<10	<1	<5	<5
1,2-Dichloropropane	5	<1	<1	<10	<1	<1	<1	<1	<1	<10	<1	<5	<5
Methylene Chloride	5	<1	<1	<10	<1	<1	<1	<1	<1	<10	<1	<5	<5
1,1,1,2-Tetrachloroethane		<2	<2	<20	<2	<2	<2	<2	<2	<20	<2	<10	<10
1,1,2,2-Tetrachloroethane	1	<1	<1	<10	<1	<1	<1	<1	<1	<10	<1	<5	<5
Tetrachloroethene	5	591.0	837.0	361.0	48.6	42.9	22.2	141.0	907.0	80.6	301.0	175.0	177.0
1,1,1-Trichloroethane	200	<1	<1	<10	<1	<1	<1	<1	<1	<10	<1	<5	<5
1,1,2-Trichloroethane	5	<1	<1	<10	<1	<1	<1	<1	<1	<10	<1	<5	<5
Trichloroethene	5	27.4	25.4	<10	9.7	9.4	5.2	5.6	51.5	<10	142.0	64.2	79.3
Freon-113	1200	<1	<1	<10	<1	<1	<1	<1	<1	<10	<1	<5	<5
Freon-123A		<1	<1	<10	<1	<1	<1	<1	<1	<10	<1	<5	<5
Vinyl Chloride	0.5	<1	<1	<10	<1	<1	<1	<1	<1	<10	<1	<5	<5
Total Halogenated Hydrocarbons		621.9	866.0	361.0	58.3	52.3	27.4	146.6	967.2	80.6	453.8	244.4	262.9
Total Concentration of VOCs		621.9	866.0	361.0	58.3	52.3	27.4	146.6	967.2	80.6	453.8	244.4	262.9

Table 6-3 (Cont'd)
Old Town Area Extraction Well Sampling Results
Volatile Organic Compounds - EPA Method 8260
3rd Quarter FY 2006
(concentrations in µg/L)

Constituent	MCL	EW7-03-3			EW7-06-1		EW7C-04-2					
		Apr-06	May-06	Jun-06	Apr-06	Jun-06	Apr-06	Apr-06	May-06	May-06	Jun-06	
Aromatic or Non-Halogenated Hydrocarbons												
Benzene	1	<1	<10	<10	<1	<10	<1	<1	<1	<1	<1	
n-Butylbenzene		<1	<10	<10	<1	<10	<1	<1	<1	<1	<1	
sec-Butylbenzene		<1	<10	<10	<1	<10	<1	<1	<1	<1	<1	
ter-Butylbenzene		<1	<10	<10	<1	<10	<1	<1	<1	<1	<1	
1,4-Dichlorobenzene	5	<1	<10	<10	<1	<10	<1	<1	<1	<1	<1	
Ethylbenzene	300	<1	<10	<10	3.4	<10	<1	<1	<1	<1	<1	
Isopropylbenzene		<2	<20	<20	<2	<20	<2	<2	<2	<2	<2	
p-Isopropyltoluene		<1	<10	<10	<1	<10	<1	<1	<1	<1	<1	
Methyl tert-Butyl Ether	13	<5	<50	<50	<5	<50	<5	<5	<5	<5	<5	
Naphthalene		<2	<20	<20	<2	<20	<2	<2	<2	<2	<2	
n-Propylbenzene		<1	<10	<10	<1	<10	<1	<1	<1	<1	<1	
Toluene	150	<1	<10	<10	<1	<10	<1	<1	<1	<1	<1	
Xylenes, total	1750	<2	<20	<20	9.1	<20	<2	<2	<2	<2	<2	
Total Aromatic Hydrocarbons					12.5							
Halogenated Non-Aromatic Hydrocarbons												
Bromodichloromethane	80	<1	<10	<10	<1	<10	<1	<1	<1	<1	<1	
Bromoform	80	<2	<20	<20	<2	<20	<2	<2	<2	<2	<2	
Carbon Tetrachloride	0.5	34.8	39.9	38.2	6.2	<10	3.8	4.5	2.9	2.7	3.3	
Chloromethane		<10	<100	<100	<10	<100	<10	<10	<10	<10	<10	
Chloroform	80	<3	<30	<30	<3	<30	3.5	<3	<3	<3	<3	
1,1-Dichloroethane	5	1.5	<10	<10	<1	<10	<1	<1	<1	<1	<1	
1,2-Dichloroethane	0.5	<2	<20	<20	<2	<20	<2	<2	<2	<2	<2	
1,1-Dichloroethene	6	8.2	<10	<10	<1	<10	<1	<1	<1	<1	<1	
cis-1,2-Dichloroethene	6	30.2	19.9	19.3	<1	42.5	<1	<1	<1	<1	<1	
trans-1,2-Dichloroethene	10	<1	<10	<10	<1	<10	<1	<1	<1	<1	<1	
1,2-Dichloropropane	5	<1	<10	<10	<1	<10	<1	<1	<1	<1	<1	
Methylene Chloride	5	<1	<10	<10	<1	<10	<1	<1	<1	<1	<1	
1,1,1,2-Tetrachloroethane		4.0	<20	<20	<1	<20	<2	<2	<2	<2	<2	
1,1,2,2-Tetrachloroethane	1	<1	<10	<10	<1	<10	<1	<1	<1	<1	<1	
Tetrachloroethene	5	2,260	2,220	1,790	3,200	1,370	28.2	29.5	21.2	19.9	22.4	
1,1,1-Trichloroethane	200	<1	<10	<10	<1	<10	<1	<1	<1	<1	<1	
1,1,2-Trichloroethane	5	<1	<10	<10	<1	<10	<1	<1	<1	<1	<1	
Trichloroethene	5	677.0	645	618	56.7	64.3	4.9	5.4	4.7	4.3	5.1	
Freon-113	1200	<1	<10	<10	<1	<10	<1	<1	<1	<1	<1	
Freon-123A		<1	<10	<10	<1	<10	<1	<1	<1	<1	<1	
Vinyl Chloride	0.5	<1	<10	<10	<1	<10	<1	<1	<1	<1	<1	
Total Halogenated Hydrocarbons		3,015.7	2,924.8	2,465.5	3,262.9	1,476.8	40.4	39.4	28.8	26.9	30.8	
Total Concentration of VOCs		3,015.7	2,924.8	2,465.5	3,275.4	1,476.8	40.4	39.4	28.8	26.9	30.8	

Table 6-3 (Cont'd)
Old Town Area Extraction Well Sampling Results
Volatile Organic Compounds - EPA Method 8260
3rd Quarter FY 2006
(concentrations in µg/L)

Constituent	MCL	EW25A-02-1(cont'd)				EW53-04-2					
		May-06	May-06	Jun-06	Jun-06	Apr-06	Apr-06	May-06	May-06	Jun-06	Jun-0
Aromatic or Non-Halogenated Hydrocarbons											
Benzene	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
ter-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	300	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Isopropylbenzene		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
p-Isopropyltoluene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl tert-Butyl Ether	13	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
n-Propylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	150	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	1750	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Aromatic Hydrocarbons											
Halogenated Non-Aromatic Hydrocarbons											
Bromodichloromethane	80	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	80	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Carbon Tetrachloride	0.5	<1	<1	<1	<1	<1	<1	<1	1.1	1.2	1.1
Chloromethane		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Chloroform	80	<3	<3	<3	<3	4.0	3.8	4.3	4.3	3.6	4.0
1,1-Dichloroethane	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	0.5	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1-Dichloroethene	6	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	6	<1	<1	<1	<1	<1	<1	<1	1.5	1.3	1.2
trans-1,2-Dichloroethene	10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene Chloride	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1,2-Tetrachloroethane		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1,2,2-Tetrachloroethane	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	<1	<1	<1	<1	3.8	3.3	3.2	3.7	3.2	3.8
1,1,1-Trichloroethane	200	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	5	10.1	21.1	4.5	9.6	4.4	3.6	3.5	4.0	3.8	3.7
Freon-113	1200	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Freon-123A		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl Chloride	0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Halogenated Hydrocarbons		10.1	21.1	4.5	9.6	12.2	10.7	11.0	14.6	13.1	13.8
Total Concentration of VOCs		10.1	21.1	4.5	9.6	12.2	10.7	11.0	14.6	13.1	13.8

Table 6-3 (Cont'd)
Old Town Area Extraction Well Sampling Results
Volatile Organic Compounds - EPA Method 8260
3rd Quarter FY 2006
(concentrations in µg/L)

Constituent	MCL	EW58E-98-2	EW58E-98-3	EW58E-98-4	EW58E-98-5	EW58E-98-6	EW58E-98-7	EW58E-98-8	EW58-02-1	
		May-06	May-06	May-06	May-06	May-06	May-06	May-06	Apr-06	May-06
Aromatic or Non-Halogenated Hydrocarbons										
Benzene	1	<1	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1
ter-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	5	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	300	<1	<1	<1	<1	<1	<1	<1	<1	<1
Isopropylbenzene		<2	<2	<2	<2	<2	<2	<2	<2	<2
p-Isopropyltoluene		<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl tert-Butyl Ether	13	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene		<2	<2	<2	<2	<2	<2	<2	<2	<2
n-Propylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	150	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	1750	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Aromatic Hydrocarbons										
Halogenated Non-Aromatic Hydrocarbons										
Bromodichloromethane	80	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	80	<2	<2	<2	<2	<2	<2	<2	<2	<2
Carbon Tetrachloride	0.5	<1	<1	<1	<1	<1	<1	<1	6.9	2.5
Chloromethane		<10	<10	<10	<10	<10	<10	<10	<10	<10
Chloroform	80	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,1-Dichloroethane	5	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	0.5	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1-Dichloroethene	6	<1	<1	<1	<1	<1	<1	<1	4.0	2.2
cis-1,2-Dichloroethene	6	<1	1.2	2.2	3.9	3.4	1.2	2.2	21.4	10.3
trans-1,2-Dichloroethene	10	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	5	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene Chloride	5	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1,2-Tetrachloroethane		<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1,2,2-Tetrachloroethane	1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	4.3	7.5	9.8	14.7	6.1	3.6	5.6	468	179
1,1,1-Trichloroethane	200	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	5	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	5	7.4	13.5	25.6	28.7	16.6	3.0	6.7	144.0	55.7
Freon-113	1200	<1	<1	<1	<1	<1	<1	<1	<1	<1
Freon-123A		<1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl Chloride	0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Halogenated Hydrocarbons		11.7	22.2	37.6	47.3	26.1	7.8	14.5	644.3	249.7
Total Concentration of VOCs		11.7	22.2	37.6	47.3	26.1	7.8	14.5	644.3	249.7

MCL = Maximum contaminant level for drinking water
All analyses by LBNL EML unless otherwise noted
* = Analysis by BC Laboratories

<	= Less than Quantitation Limit
	= Compound not included in analysis

Table 6-4
Old Town Area Sampling Results from Other Locations
Volatile Organic Compounds - EPA Method 8260
3rd Quarter FY 2006
(concentrations in µg/L)

Constituent	MCL	MP7-99-1B May-06	MP7-99-1B May-06(D)*	MP7-99-2B May-06
Aromatic or Non-Halogenated Hydrocarbons				
Benzene	1	<500	<500	<500
n-Butylbenzene		<500		<500
sec-Butylbenzene		<500		<500
ter-Butylbenzene		<500		<500
Ethylbenzene	300	<500	<500	<500
Isopropylbenzene		<1000		<1000
p-Isopropyltoluene		<500		<500
Methyl tert-Butyl Ether	13	<2500		<2500
Naphthalene		<1000		<1000
n-Propylbenzene		<500		<500
Toluene	150	<500	<500	<500
1,2,4-Trimethylbenzene		<500		<500
1,3,5-Trimethylbenzene		<500		<500
Xylenes, total	1750	<1000	<1000	<1000
Total Aromatic Hydrocarbons				
Halogenated Non-Aromatic Hydrocarbons				
Bromodichloromethane	80	<500	<500	<500
Carbon Tetrachloride	0.5	1,280	1,100	<500
Chloroform	80	<1500	<500	<1500
1,1-Dichloroethane	5	<500	<500	<500
1,2-Dichloroethane	0.5	<1000	<500	<1000
1,1-Dichloroethene	6	<500	<500	<500
cis-1,2-Dichloroethene	6	<500	<500	<500
trans-1,2-Dichloroethene	10	<500	<500	<500
1,2-Dichloropropane	5	<500	<500	<500
Methylene Chloride	5	<500	<1000	<500
1,1,1,2-Tetrachloroethane		<1000	<500	<1000
1,1,2,2-Tetrachloroethane	1	<500	<500	<500
Tetrachloroethene	5	31,300	29,000	6,690
1,1,1-Trichloroethane	200	<1000	<500	<1000
1,1,2-Trichloroethane	5	<1000	<500	<1000
Trichloroethene	5	22,200	20,000	5,180
Freon-113	1200	<500	<500	<500
Freon-123A		<500		<500
Vinyl Chloride	0.5	<500	<500	<500
Total Halogenated Hydrocarbons		54,780	50,100	11,870
Total Concentration of VOCs		54,780	50,100	11,870

MCL = Maximum contaminant level for drinking water
All analyses by LBNL EML unless otherwise noted
* = Analysis by BC Laboratories

<	= Less than Quantitation Limit
	= Compound not included in analysis

(D) = Duplicate sample

Table 7-1
Support Services Area Groundwater Monitoring Well Results
Volatile Organic Compounds - EPA Method 8260
3rd Quarter FY 2006
(concentrations in µg/L)

Constituent	MCL	69-97-8		
		Apr-06	May-06	Jun-06
Aromatic or Non-Halogenated Hydrocarbons				
Benzene	1	<1	<1	<1
n-Butylbenzene		<1	<1	<1
sec-Butylbenzene		<1	<1	<1
ter-Butylbenzene		<1	<1	<1
Ethylbenzene	300	<1	<1	<1
Isopropylbenzene		<2	<2	<2
p-Isopropyltoluene		<1	<1	<1
Naphthalene		<2	<2	<2
n-Propylbenzene		<1	<1	<1
Toluene	150	<1	<1	<1
1,2,4-Trimethylbenzene		<1	<1	<1
1,3,5-Trimethylbenzene		<1	<1	<1
Xylenes, total	1750	<2	<2	<2
Total Aromatic Hydrocarbons				
Halogenated Non-Aromatic Hydrocarbons				
Carbon Tetrachloride	0.5	<1	<1	<1
Chloroform	80	<3	<3	<3
1,1-Dichloroethane	5	<1	<1	<1
1,2-Dichloroethane	0.5	<2	<2	<2
1,1-Dichloroethene	6	<1	<1	<1
cis-1,2-Dichloroethene	6	7.2	4.1	4.1
trans-1,2-Dichloroethene	10	<1	<1	<1
Methylene Chloride	5	<1	<1	<1
Tetrachloroethene	5	<1	<1	<1
1,1,1-Trichloroethane	200	<1	<1	<1
1,1,2-Trichloroethane	5	<1	<1	<1
Trichloroethene	5	<1	<1	<1
Freon-113	1200	<1	<1	<1
Vinyl Chloride	0.5	<1	<1	<1
Total Halogenated Hydrocarbons		7.2	4.1	4.1
Total Concentration of VOCs		7.2	4.1	4.1

MCL = Maximum contaminant level for drinking water

<1 = Less than Quantitation Limit

All analyses by LBNL EML unless otherwise noted

* = Analysis by BC Laboratories

Table 7-2
Support Services Area Temporary Groundwater Sampling Point Results
Volatile Organic Compounds - EPA Method 8260
3rd Quarter FY 2006
(Concentrations in µg/L)

Constituent	MCL	SB69A-99-1 Apr-06	Apr-06	May-06	Jun-06	Jun-06	SB75-02-1 May-06
Aromatic or Non-Halogenated Hydrocarbons							
Benzene	1	<1	<1	<1	<1	<1	<1
n-Butylbenzene		<1	<1	<1	<1	<1	<1
sec-Butylbenzene		<1	<1	<1	<1	<1	<1
ter-Butylbenzene		<1	<1	<1	<1	<1	<1
Chlorobenzene		<1	<1	<1	<1	<1	<1
Ethylbenzene	300	<1	<1	<1	<1	<1	<1
Isopropylbenzene		<2	<2	<2	<2	<2	<2
p-Isopropyltoluene		<1	<1	<1	1.1	<1	<1
Methyl tert-Butyl Ether	13	<5	<5	<5	<5	<5	<5
Naphthalene		<2	<2	<2	<2	<2	<2
n-Propylbenzene		<1	<1	<1	<1	<1	<1
Toluene	150	<1	<1	<1	<1	<1	<1
Xylenes, total	1750	<2	<2	<2	<2	<2	<2
Total Aromatic Hydrocarbons					1.1		
Halogenated Non-Aromatic Hydrocarbons							
Bromodichloromethane	80	<1	<1	<1	<1	<1	<1
Carbon Tetrachloride	0.5	<1	<1	<1	<1	<1	<1
Chloroethane		<30	<30	<30	<30	<30	<30
Chloroform	80	<3	<3	<3	<3	<3	5.1
1,1-Dichloroethane	5	<1	<1	<1	<1	<1	2.0
1,2-Dichloroethane	0.5	<2	<2	<2	<2	<2	<2
1,1-Dichloroethene	6	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	6	26.9	16.9	38.1	18.0	15.9	64.8
trans-1,2-Dichloroethene	10	<1	<1	<1	<1	<1	<1
Methylene Chloride	5	<1	<1	<1	<1	<1	<1
1,1,1,2-Tetrachloroethane		<2	<2	<2	<2	<2	<2
Tetrachloroethene	5	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	200	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	5	<1	<1	<1	<1	<1	<1
Trichloroethene	5	<1	<1	<1	<1	<1	9.4
Freon-113	1200	<1	<1	<1	<1	<1	<1
Freon-123A		<1	<1	<1	<1	<1	<1
Vinyl Chloride	0.5	25.3	40.0	22.0	34.9	41.0	<1
Total Halogenated Hydrocarbons		52.2	56.9	60.1	52.9	56.9	81.3
Total Concentration of VOCs		52.2	56.9	60.1	54.0	56.9	81.3

MCL = Maximum contaminant level for drinking water
All analyses by LBNL EML unless otherwise noted

<	= Less than Quantitation Limit
	= Compound not included in analysis

Table 7-3
Support Services Area Injection Well Sampling Results
Volatile Organic Compounds - EPA Method 8260
3rd Quarter FY 2006
(Concentrations in µg/L)

Constituent	MCL	IW69A-06-1 May-06	IW69A-06-2 May-06
Aromatic or Non-Halogenated Hydrocarbons			
Benzene	1	<1	<1
n-Butylbenzene		<1	<1
sec-Butylbenzene		<1	<1
ter-Butylbenzene		<1	<1
Chlorobenzene		<1	<1
Ethylbenzene	300	<1	<1
Isopropylbenzene		<2	<2
p-Isopropyltoluene		<1	<1
Methyl tert-Butyl Ether	13	<5	<5
Naphthalene		<2	<2
n-Propylbenzene		<1	<1
Toluene	150	<1	<1
Xylenes, total	1750	<2	<2
Total Aromatic Hydrocarbons			
Halogenated Non-Aromatic Hydrocarbons			
Bromodichloromethane	80	<1	<1
Carbon Tetrachloride	0.5	<1	<1
Chloroethane		<30	<30
Chloroform	80	<3	<3
1,1-Dichloroethane	5	<1	<1
1,2-Dichloroethane	0.5	<2	<2
1,1-Dichloroethene	6	<1	<1
cis-1,2-Dichloroethene	6	110.0	37.0
trans-1,2-Dichloroethene	10	2.9	<1
Methylene Chloride	5	<1	<1
1,1,1,2-Tetrachloroethane		<2	<2
Tetrachloroethene	5	<1	<1
1,1,1-Trichloroethane	200	<1	<1
1,1,2-Trichloroethane	5	<1	<1
Trichloroethene	5	<1	<1
Freon-113	1200	<1	<1
Freon-123A		<1	<1
Vinyl Chloride	0.5	<1	<1
Total Halogenated Hydrocarbons		112.9	37.0
Total Concentration of VOCs		112.9	37.0

MCL = Maximum contaminant level for drinking water
All analyses by LBNL EML unless otherwise noted

< = Less than Quantitation Limit

Table 8
LBNL Hydrauger Monitoring Results
Volatile Organic Compounds - EPA Method 8260
3rd Quarter FY 2006
(Concentrations in µg/L)

Constituent	MCL	37-01-01 May-06	51-01-01 May-06	51-01-02 May-06	51-01-03 May-06	51-01-03A May-06	51-01-04 May-06
Aromatic or Non-Halogenated Hydrocarbons							
Benzene	1	<1	<1	<1	<1	<1	<1
n-Butylbenzene		<1	<1	<1	<1	<1	<1
sec-Butylbenzene		<1	<1	<1	<1	<1	<1
ter-Butylbenzene		<1	<1	<1	<1	<1	<1
Chlorobenzene		<1	<1	<1	<1	<1	<1
Ethylbenzene	700	<1	<1	<1	<1	<1	<1
Isopropylbenzene		<2	<2	<2	<2	<2	<2
p-Isopropyltoluene		<1	<1	<1	<1	<1	<1
Methyl tert-Butyl Ether	13	<5	<5	<5	<5	<5	<5
Naphthalene		<2	<2	<2	<2	<2	<2
n-Propylbenzene		<1	<1	<1	<1	<1	<1
Toluene	150	<1	<1	<1	<1	<1	<1
Xylenes, total	1750	<2	<2	<2	<2	<2	<2
Total Aromatic Hydrocarbons							
Halogenated Non-Aromatic Hydrocarbons							
Bromodichloromethane	80	<1	<1	<1	<1	<1	<1
Carbon Tetrachloride	0.5	<1	<1	<1	<1	<1	<1
Chloroform	80	<3	4.9	<3	<3	<3	<3
Chloroethane		<30	<30	<30	<30	<30	<30
1,1-Dichloroethane	5	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	0.5	<2	<2	<2	<2	<2	<2
1,1-Dichloroethene	6	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	6	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	10	<1	<1	<1	<1	<1	<1
Methylene Chloride	5	<1	<1	<1	<1	<1	<1
1,1,1,2-Tetrachloroethane		<2	<2	<2	<2	<2	<2
Tetrachloroethene	5	<1	<1	<1	<1	1.4	<1
1,1,1-Trichloroethane	200	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	5	<1	<1	<1	<1	<1	<1
Trichloroethene	5	<1	<1	2.4	<1	<1	<1
Freon-11		<2	<2	<2	<2	<2	<2
Freon-113	1200	<1	2.5	<1	<1	<1	<1
Vinyl Chloride	0.5	<1	<1	<1	<1	<1	<1
Total Halogenated Hydrocarbons			7.4	2.4		1.4	
Total Concentration of VOCs			7.4	2.4		1.4	

MCL = Maximum contaminant level for drinking water
All analyses by LBNL EML unless otherwise noted

< = Less than Quantitation Limit

Table 9
Other Chemical Detections
Volatile Organic Compounds - EPA Method 8260
3rd Quarter FY2006
(concentrations in µg/L)

Constituent	SB64-02-1A
	Apr-06
1,4-Dioxane	11,000

Analysis by BC Laboratories

Table 10
Volatile Organic Compounds Detected in Groundwater Above MCLs
EPA Method 8260
3rd Quarter FY 2006
(concentrations in µg/L)

	Halogenated VOCs									
	1,1-DCA	1,2-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,1,2,2-PCA	PCE	TCE	VINYL CHLORIDE	CARBON TE
MCLs	5	0.5	6	6	10	1	5	5	0.5	0.5
Building 71 VOC Plume - Building 71B Lobe										
SB71B-03-1									5.0	
SB71B-03-2				268.0			61.1	34.7	16.3	
SB71B-04-1				9.8			34.1	15.5		
Building 51/64 VOC Plume										
MW51-96-16	7.8			146.0	24.8			21.1	27.8	
MW51-96-17	5.1			153.0	47.2			12.9	32.8	
MW51-96-18	72.6		15.5				207.0	72.8		
SB64-98-8	481.0		92.8	5.7			90.8	144.0		
SB64-98-17	156.0		13.9						4.9	
SB64-99-4	645.0		53.4				15.7	71.0	23.2	
SB64-99-5	82.4		29.2					15.6		
SB64-00-1	333.0	2.1	21.3					40.2		
SB64-00-2	65.3	2.7	284.0				33.4	80.2		
SB64-02-1A	7,040	45.0	1,170	48.0			212.0	724.0	180.0	
SB64-02-1B	686.0	6.2	145.0	242.0			9.4	93.6	148.0	
SB64-02-1C	887.0		109.0	73.0				32.1	55.9	
SB64-02-1D	163.0		45.2	17.7				24.4	43.1	
SB64-02-1E	124.0		41.2	12.9				25.2	33.5	
SB64-02-1F	200.0	2.1	63.9	19.6			5.7	40.4	51.3	
SB64-02-2A	412.0	5.4	65.9	157.0		1.3	28.2	129.0	4.9	
SB64-02-2B	681.0		87.7	27.3				20.3		
SB64-02-2C	94.4		42.2	22.1				5.4	2.4	
SB64-02-2D	123.0		35.8	17.6				13.8	1.5	
SB64-02-2E	73.4		30.8	15.6				10.6	2.5	
SB64-02-2F	413.0	2.5	55.5	34.0					2.6	
SB64-03-1B	212.0	2.4	18.0					35.2		
SB64-03-5								39.6		
SB64-03-6				13.5			10.0	168.0		
EW64-00-1	7.9									
EW64-03-1	54.4							7.7		
IW64-06-1				24.4			18.3	10.8		
IW64-06-2				17.7						
IW64-06-3				12.4				20.7	2.7	

Table 10 (Cont'd)
Volatile Organic Compounds Detected in Groundwater Above MCLs
EPA Method 8260
3rd Quarter FY 2006
(concentrations in µg/L)

Halogenated VOCs

	1,1-DCA	1,2-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,1,2,2-PCA	PCE	TCE	VINYL CHLORIDE	CARBON TE
MCLs	5	0.5	6	6	10	1	5	5	0.5	0.5
Building 51L Plume										
EW51L-99-1				9.3				26.3		
EW51L-00-1	20.4			177.0			10.4	349.0	11.1	
Old Town VOC Plume - Building 7 Lobe										
MW7-92-19							19.3	7.1		
MW7-94-3			8.4				71.1	32.3		2
MW7-95-22							270.0	133.0		4.4
MW7-95-23							256.0	344.0		15.3
MW7B-95-21							1,000	118.0		2.7
MW7B-95-24							137.0	35.5		3.1
MW53-93-16-69'							62.4	21.6		3.8
MW53-96-1				15.7			68.6	26.1	5.0	9.3
MW58-96-11				28.7			1,680	924.0		50.5
MW58-00-12			57.0	310.0			10,700	8,780		489.0
MW90-2							14.2			
SB53-96-3				19.0			486	136.0		
SB58-96-1				8.4			44.4	35.9		
SB58-96-2							166.0	84.7		
SB58-97-1							12.3			
SB58-97-2				38.2					3.6	
EW7-96-1							837.0	27.4		3.6
EW7-96-2							48.6	9.7		
EW7-96-4R							907.0	51.5		8.7
EW7-03-1							301.0	142.0		7.7
EW7-03-2R							183.0	106.0		6.2
EW7-03-3			8.2	30.2			2,260	677.0		39.9
EW7-06-1				42.5			3,200	64.3		6.2
EW7C-04-2							29.5	5.4		4.5
EW58E-98-1							14	14.9		

Table 10 (Cont'd)
Volatile Organic Compounds Detected in Groundwater Above MCLs
EPA Method 8260
3rd Quarter FY 2006
(concentrations in µg/L)

Halogenated VOCs

	1,1-DCA	1,2-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	1,1,2,2-PCA	PCE	TCE	VINYL CHLORIDE	CARBON TE
MCLs	5	0.5	6	6	10	1	5	5	0.5	0.5
EW58E-98-2								7.4		
EW58E-98-3							7.5	13.5		
EW58E-98-4							9.8	25.6		
EW58E-98-5							14.7	28.7		
EW58E-98-6							6.1	16.6		
EW58E-98-8							5.6	6.7		
EW58-02-1				21.4			486.0	144.0		6.9
MP7-99-1B							31,300	22,200		1,280
MP7-99-2B							6,690	5,180		
Old Town VOC Plume - Building 25A Lobe										
MW25A-98-1								69.2		
MW25A-98-3								24.4		
MW25A-98-7								13.6		
SB5A-98-1							18.4			
SB25A-96-3			18.9					83.5		
EW25A-02-1								21.1		
Old Town VOC Plume - Building 52 Lobe										
MW91-9							6.9			
MW52-95-2B						3.3				
MW53-93-9							16.3	8.1		3.6
EW53-04-2										1.2
Building 69 Area of Groundwater Contamination										
MW69-97-8				7.2						
SB69A-99-1				38.1					41.0	
IW69A-06-1				110.0						
IW69A-06-2				37.0						
Building 75A Area of Groundwater Contamination										
SB75-02-1				64.8				9.4		

MCL - Maximum contaminant level for drinking water (determined by California DHS)
Note: Numbers represent the highest concentrations detected in the reporting quarter.

Table 11
Concentration of Tritium in Groundwater
(Concentrations in pCi/L)
MCL = 20,000 pCi/L
July 2005 through June 2006

Area	Well No.	FY2005 Qtr 4 Jul-Sept	FY2006 Qtr 1 Oct-Dec	FY2006 Qtr 2 Jan-Mar	FY2006 Qtr 3 Apr-June
Groundwater Monitoring Wells					
1	MW90-3	<300			
	MW90-4	<300			
	MW90-5	<300			
	46A-92-15	<300			
	71-93-1	<300			
	71-95-8	<300			
	71-95-9	500		<300	
	71B-98-13	<300			
	71B-99-3R	570			
3	MW91-3	<300			
	MW91-4	470			
	MW91-5	1,740			
	MW91-6	2,240			
	69A-92-22	<300			
	75-92-23	840			
	75B-92-24	1,050		879	
	75-96-20	<300			
	75-97-5	16,200 16,600 (D)		15,800 16,000 (D)	
	75-97-6	<300			
	75-97-7	436		385	
	69-97-8	<300			
	69-97-21	<300			
	75-98-14	5,820		5,490	
	75-98-15	<300			
	75-99-4	<300			
	75-99-6 75-99-6R	1,990 3,920		2,710	
	75-99-7	5,610			
	75-99-8	<300			
	75A-00-7	<300			
	69A-00-11	<300			
4	MW76-1	<300			
	76-93-6	2,300		330	
	76-93-7	<300			
	78-97-20	1,390			

Table 11 (Cont'd)
Concentration of Tritium in Groundwater
(Concentrations in pCi/L)
MCL = 20,000 pCi/L
July 2005 through June 2006

Area	Well No.	FY2005 Qtr 4 Jul-Sept	FY2006 Qtr 1 Oct-Dec	FY2006 Qtr 2 Jan-Mar	FY2006 Qtr 3 Apr-June
4	76-98-21	<300			
	76-98-22	<300			
5	MW91-1	<300			
	MW91-2	1,270			
	MWP-9	<300			
	MWP-10	<300			
	77-92-10	<300			
	61-92-12	<300			
	77-93-8	<300			
	77-94-5	<300			
	77-94-6	6,200 6,000 (D)		6,620 7,070(D)	
	77-97-9	8,380 8,310 (D)			
	77-97-11	5,140		4,580	
	31-97-17	1,420		1,390	
	31-97-18	<300			
	31-98-17	<300	<200	<300	<300
6	88-93-11A	<300			
8	MWP-2	<300			
	OW3-225	<300			
10	MWP-8	<300			
	25-95-27	<300			
	52-94-10	<300			
	52-95-2B	<300			
11	74-94-7	<300			
	74-94-8	<300			
13	62-92-26	<300			
	62-92-27	<300			
14	MWP-4	<300			
	MWP-5	<300			
	MWP-6	<300			
	MWP-7	<300			
	37-92-6	<300			
	37-92-18A	<300			
	37-94-9	<300			

Table 11 (Cont'd)
Concentration of Tritium in Groundwater
(Concentrations in pCi/L)
MCL = 20,000 pCi/L
July 2005 through June 2006

Area	Well No.	FY2005 Qtr 4 Jul-Sept	FY2006 Qtr 1 Oct-Dec	FY2006 Qtr 2 Jan-Mar	FY2006 Qtr 3 Apr-June
15	MWP-1	<300			
OS	CD-92-28	<300			
Temporary Groundwater Sampling Points					
3	SB69A-99-1	794	746	714	
	SB69A-00-1	<300		<300	
	SB69-02-1A			857	
	SB69-02-1B			<300	
	SB75-02-1	783		909	963
	SB75A-02-1A			658	
	SB75A-02-1B			<300	
5	SB31-02-1	1,150		753	
	SB31-02-2	1,120		832	
	SB31-02-4	2,370		1,800	
	SB31-02-5	2,340		1,820	
	SB31-02-6	503		390	
	SB31-02-7	<300		<300	
	SB31-03-1	3,230		1,690	
	SB31-03-2	3,900		2,010	
	SB31-03-3			1,240	
	SB31-03-4	2,230		2,320	
	SB77-02-1	<300		<300	
Slope Stability/Indicator Facilities					
5	SSW17-130	1,710		<300	
	SSW19-130	541		603	
	SSW20-130	1,130		1,120	
	SSW21-130	<300		<300	
Quality Assurance Samples					
	Rinse Blank	<300 <300 <300 <300	<200	<300 <300 <300	<300

MCL = Maximum contaminant level for drinking water determined by California DTSC

	= Not Sampled
<	= Less than minimum detectable activity (MDA)

(D) = Duplicate sample

Table 12
CONCENTRATION OF METALS IN GROUNDWATER
3rd Quarter FY 2006
(All Concentrations in µg/L)

				Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Hg	Mo	Ni	Se	Ag	Tl	V	Zn
			MCL:	6	10	1000	4	5	50	NS	1300 (b)	15 (b)	2	NS	100	50	100 (a)	2	NS	5000 (a)
			Background**	<2	53(56)*	540	<1	<1	25	9.3	28	<2	<0.2	85(156)*	18	12	<10	<1	62	31
AREA	**WELL NO.**	**LAB**	**DATE**																	
1	SB71B-03-1	BC	Jun-06	<2	35	520	<1	<1	<10	<50	<10	<1	<0.2	<50	20	4	<10	<5	12	<10
	SB71B-03-2	BC	Jun-06	<2	18	500	<1	<1	<10	<50	<10	<1	<0.2	<50	<10	4.5	<10	<1	17	<10

MCL: Maximum contaminant level for drinking water (determined by California DHS)

< = Not detected

(a): secondary MCL

BC: Analysis by BC Laboratories

(b): action level

* Background concentrations in parentheses represent values for wells screened in the Orinda Formation

NS: Not Specified

** LBNL Maximum Background Level

Table 13
CONCENTRATION OF TRITIUM IN SURFACE WATER
3rd Quarter FY 2006
MCL = 20,000 pCi/L

Location	**Concentration (pCi/L)**
Chicken Creek Down Stream	<300
Chicken Creek Up Stream	<300

< = Less than minimum detectable activity (MDA)

Table 14
Soil-Water Sampling Results
Volatile Organic Compounds - EPA Method 8260
3rd Quarter FY 2006
(Concentrations in µg/L)

Constituent	MCL	OT2-1 May-06	OT2-2 May-06	OT2-4 May-06	OT2-B May-06	OT2-C May-06	OT2-7 May-06
Aromatic or Non-Halogenated Hydrocarbons							
Benzene	1	<1	<1	<10	<10	<10	<1
n-Butylbenzene		<1	<1	<10	<10	<10	<1
sec-Butylbenzene		<1	<1	<10	<10	<10	<1
ter-Butylbenzene		<1	<1	<10	<10	<10	<1
Chlorobenzene		<1	<1	<10	<10	<10	<1
Ethylbenzene	700	<1	<1	<10	<10	<10	<1
Isopropylbenzene		<2	<2	<20	<20	<20	<2
p-Isopropyltoluene		<1	<1	<10	<10	<10	<1
Methyl tert-Butyl Ether	13	<5	<5	<50	<50	<50	<5
Naphthalene		<2	<2	<20	<20	<20	<2
n-Propylbenzene		<1	<1	<10	<10	<10	<1
Toluene	150	<1	<1	<10	<10	<10	<1
Xylenes, total	1750	<2	<2	<20	<20	<20	<1
Total Aromatic Hydrocarbons							
Halogenated Non-Aromatic Hydrocarbons							
Bromodichloromethane	80	<1	<1	<10	<10	<10	<1
Carbon Tetrachloride	0.5	<1	<1	<10	<10	<10	<1
Chloroform	80	3.8	<3	<30	<30	<30	<3
Chloroethane		<30	<30	<30	<30	<30	<30
1,1-Dichloroethane	5	<1	<1	<10	<10	<10	<1
1,2-Dichloroethane	0.5	<2	<2	<20	<20	<20	<2
1,1-Dichloroethene	6	10.8	<1	<10	<10	<10	<1
cis-1,2-Dichloroethene	6	190.0	<1	<10	<10	<10	<1
trans-1,2-Dichloroethene	10	2.6	<1	<10	<10	<10	<1
Methylene Chloride	5	<1	<1	<10	<10	<10	<1
1,1,1,2-Tetrachloroethane		<2	<2	<20	<20	<20	<2
Tetrachloroethene	5	7290.0	5870.0	186.0	172.0	114.0	4.7
1,1,1-Trichloroethane	200	<1	<1	<10	<10	<10	<1
1,1,2-Trichloroethane	5	<1	<1	<10	<10	<10	<1
Trichloroethene	5	250.0	32.3	<10	<10	<10	<1
Freon-113	1200	<1	<1	<10	<10	<10	<1
Freon-11		<2	<2	<20	<20	<20	<2
Vinyl Chloride	0.5	<1	<1	<10	<10	<10	<1
Total Halogenated Hydrocarbons		7,747.2	5,902.3	186.0	172.0	114.0	4.7
Total Concentration of VOCs		7,747.2	5,902.3	186.0	172.0	114.0	4.7

MCL = Maximum contaminant level for drinking water
All analyses by LBNL EML unless otherwise noted

< = Less than Quantitation Limit

Table 14 (Cont'd)
Soil-Water Sampling Results
Volatile Organic Compounds - EPA Method 8260
3rd Quarter FY 2006
(concentrations in µg/L)

Constituent	MCL	HI7-00-1-20' May-06	HI7-00-1-25' May-06	HI7-00-1-30' May-06	HI7-00-1-35' May-06	HI7-00-1-40' May-06	HI7-00-1-45' May-06	HI7-00-2-15' May-06	HI7-00-2-30' May-06	HI7-00-2-40' May-06	HI7-00-2-45' May-06
Aromatic or Non-Halogenated Hydrocarbons											
Benzene	1	<50	<50	<50	<500	<50	<50	<10	<50	<50	<50
n-Butylbenzene		<50	<50	<50	<500	<50	<50	<10	<50	<50	<50
sec-Butylbenzene		<50	<50	<50	<500	<50	<50	<10	<50	<50	<50
ter-Butylbenzene		<50	<50	<50	<500	<50	<50	<10	<50	<50	<50
Ethylbenzene	300	<50	<50	<50	<500	<50	<50	<10	<50	<50	<50
Isopropylbenzene		<100	<100	<100	<1000	<100	<100	<20	<100	<100	<100
p-Isopropyltoluene		<50	<50	<50	<500	<50	<50	<10	<50	<50	<50
Methyl tert-Butyl Ether	13	<250	<250	<250	<2500	<250	<250	<50	<250	<250	<250
Naphthalene		<100	<100	<100	<1000	<100	<100	<20	<100	<100	<100
n-Propylbenzene		<50	<50	<50	<500	<50	<50	<10	<50	<50	<50
Toluene	150	<50	<50	<50	<500	<50	<50	<10	<50	<50	<50
1,2,4-Trimethylbenzene		<50	<50	<50	<500	<50	<50	<10	<50	<50	<50
1,3,5-Trimethylbenzene		<50	<50	<50	<500	<50	<50	<10	<50	<50	<50
Xylenes, total	1750	<100	<100	<100	<1000	<100	<100	<20	<100	<100	<100
Total Aromatic Hydrocarbons											
Halogenated Non-Aromatic Hydrocarbons											
Bromodichloromethane	80	<50	<50	<50	<500	<50	<50	<10	<50	<50	<50
Carbon Tetrachloride	0.5	<50	<50	<50	<500	<50	<50	<10	<50	97.1	<50
Chloroform	80	<150	<150	<150	<1500	<150	<150	<30	<150	<150	<150
1,1-Dichloroethane	5	<50	<50	<50	<500	<50	<50	<10	<50	<50	<50
1,2-Dichloroethane	0.5	<100	<100	<100	<1000	<100	<100	<20	<100	<100	<100
1,1-Dichloroethene	6	<50	<50	<50	<500	<50	<50	<10	<50	<50	<50
cis-1,2-Dichloroethene	6	<50	<50	<50	<500	<50	<50	<10	<50	<50	<50
trans-1,2-Dichloroethene	10	<50	<50	<50	<500	<50	<50	<10	<50	<50	<50
1,2-Dichloropropane	5	<50	<50	<50	<500	<50	<50	<10	<50	<50	<50
Methylene Chloride	5	<50	<50	<50	<500	<50	<50	<10	<50	<50	<50
1,1,1,2-Tetrachloroethane		<100	<100	<100	<1000	<100	<100	<20	<100	<100	<100
1,1,2,2-Tetrachloroethane	1	<50	<50	<50	<500	<50	<50	<10	<50	<50	<50
Tetrachloroethene	5	3,740	2,120	4,640	12,900	35,600	13,600	135	1,310	69,300	24,100
1,1,1-Trichloroethane	200	<50	<50	<50	<500	<50	<50	<10	<50	<50	<50
1,1,2-Trichloroethane	5	<50	<50	<50	<500	<50	<50	<10	<50	<50	<50
Trichloroethene	5	<50	<50	<50	<500	130	247	<10	77.9	12,100	6,770
Freon-113	1200	<50	<50	<50	<500	<50	<50	<10	<50	<50	<50
Freon-123A		<50	<50	<50	<500	<50	<50	<10	<50	<50	<50
Vinyl Chloride	0.5	<50	<50	<50	<500	<50	<50	<10	<50	<50	<50
Total Halogenated Hydrocarbons		3,740	2,120	4,640	12,900	35,730	13,847	135	1,387.9	81,497.1	30,870
Total Concentration of VOCs		3,740	2,120	4,640	12,900	35,730	13,847	135	1,387.9	81,497.1	30,870

MCL = Maximum contaminant level for drinking water
All analyses by LBNL EML unless otherwise noted

< = Less than Quantitation Limit

Table 15
Concrete Sampling Results (mg/kg)
3rd Quarter FY 2006

				PCB	
Location	Sample ID	Date	Lab	1242	1254
B51 Filter Sump Excavation	SS-B51 Concrete Top Half	Apr-06	BC	5,600	<500
	SS-B51 Concrete Bottom Half	Apr-06	BC	110	<50
	SS-B51 Concrete Full Depth	Apr-06	BC	34,000	<10000
	CS-51-06-1	May-06	BC	1.9	<1
	CS-51-06-2	May-06	BC	200	<10
	CS-51-06-3	May-06	BC	1.4	<1
	CS-51-06-4	May-06	BC	1.3	<1
	CS-51-06-5	May-06	BC	0.68	<0.5
	CS-51-06-6	May-06	BC	1.3	<1
	CS-51-06-7	May-06	BC	1.6	<1
	CS-51-06-8	May-06	BC	0.7	<0.5
	CS-51-06-9	May-06	BC	0.6	<0.5
	CS-51-06-10	May-06	BC	0.54	<0.5
	CS-51-06-11	May-06	BC	0.17	<0.01
	CS-51-06-12	May-06	BC	0.54	0.28
	CS-51-06-13	May-06	BC	<0.5	2.5
	CS-51-06-14	May-06	BC	<0.5	1.8
	CS-51-06-15	May-06	BC	<20	290
	CS-51-06-16	May-06	BC	<40	690
	CS-51-06-17	May-06	BC	<10	48
	CS-51-06-18	May-06	BC	2,500	<200
	CS-51-06-19	May-06	BC	660	<100
	CS-51-06-20	May-06	BC	1.8	<0.2
	CS-51-06-21	May-06	BC	310	<50
	CS-51-06-22	May-06	BC	4,700	<400
	CS-51-06-23	May-06	BC	<5	47
	CS-51-06-24	May-06	BC	<80	670
	CS-51-06-25	May-06	BC	<10	14

BC = Analysis by BC Laboratories

< = Less than Quantitation Limit

Table 16
Soil Sampling Results (mg/kg)
3rd Quarter FY 2006

					PCB	
Location	Sample ID	Depth (ft)	Date	Lab	1242	1254
B51	SS-B51 Filter Sump Exc-F1-5	5	May-06	BC	0.77	<0.5
	SS-B51 Filter Sump Exc-F2-5	5	May-06	BC	<0.5	<0.5
	SS-B51 Filter Sump Exc-F3-5	5	May-06	BC	<0.5	<0.5
	SS-B51 Filter Sump Exc-F4-5	5	May-06	BC	<0.5	<0.5
	SS-B51 Filter Sump Exc-F5-5	5	May-06	BC	0.52	0.71

BC = Analysis by BC Laboratories

< = Less than Quantitation Limit

Table 17
LBNL Groundwater Quality Control Samples
Volatile Organic Compounds - EPA Method 8260
3rd Quarter FY 2006
(concentrations in µg/L)

Constituent	MCL	Equipment (Rinseate) Blanks								Trip Blanks						
		Apr-06	Apr-06	Apr-06	Apr-06	May-06	May-06	May-06	May-06	Apr-06	Apr-06	May-06	May-06	May-06	May-06	May-06
Aromatic and Non-Halogenated Hydrocarbons																
Benzene	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
n-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
sec-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
ter-Butylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	300	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Isopropylbenzene		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
p-Isopropyltoluene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl tert-Butyl Ether	13	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
n-Propylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	150	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	1750	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Aromatic Hydrocarbons																
Halogenated Non-Aromatic Hydrocarbons																
Carbon Tetrachloride	0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	80	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Dibromochloromethane	80	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	0.5	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,1-Dichloroethene	6	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	6	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene Chloride	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	200	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Freon-113	1200	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vinyl Chloride	0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Halogenated Hydrocarbons																
Total Concentration of VOCs																

MCL = Maximum contaminant level for drinking water
All analyses by LBNL EML unless otherwise noted
* = Analysis by BC Laboratories

< = Less than Quantitation Limit
= Compound not included in analysis