safety-kleen®

ENVIRONMENTAL PROTECTION
PM 3:03

June 29, 1998

Via Certified Mail No. Z103265540

CS
SITE 3229

Mr. Robert M. Senga, Unit Chief
California Environmental Protection Agency
Department of Toxic Substances Control
Southern California Region
Facility Permitting Branch
1011 N. Grandview Avenue
Glendale, California 91201

Re: **Safety-Kleen Corp. Service Center**
400 Market Street
Oakland, California

Dear Mr. Senga:

Enclosed is the quarterly monitoring and sampling report which summarizes the groundwater monitoring and vapor extraction activities conducted at the above-referenced facility. This report covers the period from March 1998 through May 1998. Safety-Kleen Corp. (Safety-Kleen) is following the modified groundwater sampling schedule as described in the letter submitted on July 13, 1994, and as modified and approved by Alameda County in a response letter dated July 27, 1994.

As you are aware, oversight of this project has been reassigned within Safety-Kleen. The new contact is:

Sara C. Brothers, CPG
2720 Girard NE
Albuquerque, New Mexico 87107
Phone (505) 888-3952
Fax (505) 883-6228

If you have any questions, please call me at (505) 888-3952.

Sincerely,

Greg Hoehn
for Sara C. Brothers, CPG
Senior Project Manager - Remediation
Safety-Kleen Corp.

Enclosure

cc: Scott Davies, Safety-Kleen Corp.
Marty White, Safety-Kleen Corp.
Branch Environmental File (999)
Jennifer Eberle, Alameda County - Department of Environmental Health
Loretta Barsamian, California Regional Water Quality Control Board
Greg Hoehn, SECOR International Incorporated

OAKLND12.L03 - WP6.1
June 29, 1998
SECOR Job No. 70005-009-12

SECOR
International Incorporated

QUARTERLY GROUNDWATER MONITORING AND SOIL VAPOR EXTRACTION REPORT MARCH-MAY 1998 SAFETY-KLEEN SERVICE CENTER 400 MARKET STREET OAKLAND, CALIFORNIA

SECOR Job No. 70005-009-12

Prepared For:
Safety-Kleen Corp. 6-29-98
2720 Girard NE
Albuquerque, New Mexico 87107

Submitted By:
SECOR International Incorporated
1390 Willow Pass Road
Suite 360
Concord, California 94520

June 29, 1998

REGISTERED GEOLOGIST
THOMAS W. CROSBY
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Expires 5/31/99
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1.0 INTRODUCTION

This report presents the results of groundwater monitoring and sampling activities conducted for the quarter of March through May 1998 at the Safety-Kleen Service Center located at 400 Market Street in Oakland, California (Figures 1 and 2). Also included are the results of soil vapor extraction (SVE) system monitoring and sampling for the period.

2.0 PROJECT BACKGROUND INFORMATION

The Safety-Kleen Oakland Service Center is a local distribution center for Safety-Kleen products. Three single-walled underground storage tanks (USTs) were removed and replaced with two new 12,000-gallon double-walled tanks in June and July of 1990. Product and waste mineral spirits are currently stored in the two double-walled USTs at the site. One UST is used to consolidate waste mineral spirits prior to shipment to a Safety-Kleen Recycle Center and one UST is used for storage of product mineral spirits prior to distribution to Safety-Kleen customers.

During the single-walled tank removal, mineral spirits-impacted soil was excavated from the tank pit as allowable by site conditions. Additionally, a product recovery well and a vapor extraction system withdrawal network were installed in the tank pit area. Tank removal and excavation activities are documented in the Report of Underground Storage Tank Replacement Activities dated September 1990.

A product pumping system was installed in recovery well RW-1 to remove separate-phase product from the water table and began operation on January 19, 1993. The product pumping system was removed on November 20, 1995, and replaced with a passive hydrocarbon skimming device which is capable of removing product thickness within the well to a sheen.

The SVE system consists of seven horizontal vapor extraction perforated pipelines and a vapor extraction and treatment system. A system to extract and treat soil vapor utilizing regenerative polymer adsorption began full-scale operation on June 1, 1993. The SVE system was modified and restarted on November 28, 1995, utilizing the current granular activated carbon (GAC) treatment system. Figure 3 depicts the layout of the vapor extraction pipelines and the vapor treatment system.

2.1 Regulatory Status

The Safety-Kleen Oakland facility operates under a Hazardous Waste Facility Permit (Part B Permit; ID No. CAD053044053) which became effective on March 29, 1992. A RCRA Facility Assessment (RFA) performed by the Department of Toxic Substances Control (DTSC) identified three solid waste management units (SWMUs) and one area of concern (AOC) at the facility. The results of the RFA were transmitted in the RFA Report dated June 1993. The Corrective Action Module of the Part B Permit (Section V) specified the need to submit a RCRA Facility Investigation (RFI) Work Plan to assess impacts related to the three SWMUs and the AOC. The RFI Work Plan was submitted on February 1, 1996. The DTSC approved the RFI Work Plan in a correspondence dated February 23, 1996. The RFI Work Plan summarized site characterization work conducted at the site through February 1996 for the AOC and SWMUs identified in the RFA.

Subsequent to approval of the RFI Work Plan, an RFI Report was submitted to the DTSC on March 27, 1996, and was approved by that agency in a correspondence dated May 20, 1996. The RFI Report states that the extent of total petroleum hydrocarbons as mineral spirits (TPHms) and volatile organic compound (VOC) impact at the facility are well defined and that the site characterization activities, which have been completed adequately, assess the subsurface in the vicinity of the USTs and return and fill shelter. The investigations have determined that soil impact is present immediately adjacent to the UST pit and has migrated along the capillary fringe as far as monitoring well MW-8 (see Figure 2).

In a correspondence dated September 20, 1996, the California Environmental Protection Agency (Cal-EPA) - DTSC requested that Safety-Kleen prepare a Corrective Measures (CM) Report for the Oakland, California facility. Safety-Kleen submitted the CM Report on December 2, 1996. The purpose of the CM Report is to: 1) document the corrective measures which have been taken at the site to date, 2) evaluate the effectiveness of the corrective measures currently in use, and 3) provide an assessment of potential alternative methods. The CM Report is pending agency review.

3.0 SCOPE OF WORK

Groundwater monitoring work conducted during this quarter consisted of measuring depth-to-water in 11 groundwater monitoring wells and one recovery well, and the annual sampling of 10 groundwater monitoring wells, as specified by the quarterly sampling schedule. SVE activities conducted during this quarter consisted of the operation and maintenance of the SVE system and monthly influent and effluent vapor sampling. The following sections provide a description of the work steps conducted.

3.1 Soil Vapor Extraction System

The SVE system consists of two 1,500-pound GAC vessels connected in series to a manifold attached to seven horizontal vapor extraction perforated pipelines (see Figure 3). The SVE system operation resumed March 17, 1998 (after blower repairs were completed) and was operated in approximately two-week cycles this quarter in an attempt to improve removal efficiency. While the SVE system is operating, monitoring occurs biweekly and consists of measuring influent and effluent vapor concentrations using a photo-ionization detector (PID) or a flame-ionization detector (FID). During this quarter, SVE system influent and effluent vapor samples were collected on March 17, April 28, and May 28, 1998. The vapor samples were submitted to a state-certified analytical laboratory under chain-of-custody manifest and analyzed for TPHms by U.S. Environmental Protection Agency (EPA) Method 8015 (modified), for benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8020, and for halogenated VOCs by EPA Method 8010. The laboratory failed to analyze the April 28, 1998, samples for halogenated VOCs, so no results are available for that sample date. The results of the SVE system operation and sampling are presented in Section 4.1 and SVE system monitoring data are summarized in Table 1.

3.2 Mineral Spirits Recovery

The mineral spirits recovery pump that was located in recovery well RW-1 failed and was replaced by a passive recovery skimmer in November 1995. A passive recovery skimmer was also placed in monitoring well MW-9 (see Figure 2) at that time. Mineral spirits recovered from recovery well RW-1 and monitoring well MW-9 is emptied directly to the waste mineral spirits UST at the site and is incorporated into the Safety-Kleen recycling process. The amount of recovered product is recorded each time the skimmer is emptied. Measurable product has not been present in the skimmers since July 1996.

3.3 Groundwater Monitoring and Sampling

On April 13, 1998, on- and off-site monitoring wells were monitored for depth-to-water, and groundwater samples were collected from monitoring wells MW-1 through MW-6, MW-8, MW-9, MW-12 and MW-13 for laboratory analysis. Monitoring wells MW-7 and MW-10 have been abandoned. Monitoring well MW-

11 was not sampled because tree roots have grown through the well casing and are obstructing the well. A trip blank accompanied the samples from the site to the laboratory and was analyzed for quality assurance and quality control purposes.

All accessible monitoring wells were monitored for depth-to-water using a water-level indicator calibrated to 0.01-foot. The depth-to-water measurements were used with well survey data to prepare a groundwater potentiometric surface map (Figure 4). Prior to collecting groundwater samples, the wells were purged using a low flow pump with dedicated tubing. In-line water quality indicator parameters were continuously monitored and water levels were taken during purging in order to adjust the flow rate for minimal drawdown. Samples were collected after pH, temperature, conductivity, and turbidity had stabilized for at least three successive readings. The samples were placed into laboratory supplied sample containers, labeled, placed on ice in an insulated cooler, and logged onto the chain-of-custody document. A trip blank accompanied the samples during transport to the laboratory and was analyzed for quality assurance and quality control purposes. Field data sheets that include depth-to-water measurements and well purge data are included in Appendix A.

The groundwater samples were delivered to a state-certified laboratory for analysis under chain-of-custody documentation. The groundwater samples were analyzed for the presence of BTEX by EPA Method 8020, for TPHms by EPA Method 8015 (modified), and for halogenated VOCs by EPA Method 8010.

Prior to use and between each well, all non-single-use equipment was decontaminated by double-washing with a laboratory grade detergent in clean water and triple-rinsed using deionized water. Purge water and decontamination water generated during well purging and sampling was placed in the waste mineral spirits UST pending transport for treatment at a Safety-Kleen recycle facility.

4.0 RESULTS

4.1 Soil Vapor Extraction System

The results of SVE system monitoring conducted through May 28, 1998 are summarized on Table 1. Table 1 presents data on the system flow rate and PID measurements from the SVE system vapor influent, the vapor effluent after each carbon adsorption vessel, and the system final vapor effluent. Based on the system monitoring data, the SVE system has continued to meet the Bay Area Air Quality Management District (BAAQMD) permit limits of 10 parts per million per unit volume (ppmv) in the system effluent based on PID or FID readings. For this quarter, SVE system influent and effluent vapor samples were collected on March 17, April 28, and May 28, 1998.

The analysis of the influent sample collected on March 17, 1998, detected TPHms at a concentration of 78 micrograms per liter (μg/L), toluene at 0.12 μg/L, and xylenes at 0.68 μg/L. The influent halogenated VOC analysis detected tetrachloroethene (PCE) at 3.5 μg/L and 1,1,1-trichloroethane (TCA) at 2.1 μg/L. The March 17, 1998 system effluent sample reported a TPHms concentration of 12 μg/L.

As noted in Section 3.1, the laboratory failed to analyze the April 28, 1998, samples for halogenated VOCs. The analysis of the influent sample collected on April 28, 1998, detected TPHms at 70 μg/L, toluene at 0.50 μg/L, ethylbenzene at 0.29 μg/L, and xylenes at 2.4 μg/L. The April 28, 1998 effluent sample reportedly contained 10 μg/L of TPHms.

The influent sample collected on May 28, 1998, contained TPHms at a concentration of 21 μg/L, PCE at a concentration of 9.7 μg/L, and 1,1,1-TCA at a concentration of 8.3 μg/L. The May 28, 1998 effluent sample reportedly contained a concentration of toluene at 0.24 μg/L and xylenes at 0.65 μg/L.

In an attempt to improve system efficiency, Safety-Kleen continued operating the SVE system this quarter in a pulsed (on/off) mode of approximately two-week cycles. Table 1 summarizes the dates when the SVE system was shutdown and restarted. Table 2 summarizes the estimated SVE system mineral spirits removal to date. Data collected from initial start-up through May 28, 1998, indicate a total of 5261 pounds of mineral spirits have been removed from the subsurface by the SVE system. Copies of SVE system analytical reports are included as Appendix B.

4.2 Mineral Spirits Recovery

Mineral spirits product has been collected in monitoring well MW-9 and recovery well RW-1 via passive recovery skimmers and by hand bailing at the time of groundwater monitoring and sampling. No product was accumulated in the skimmers during this reporting period. The last measurable product recovered was in July 1996. The total volume of mineral spirits product removed from the subsurface to date is approximately 444 gallons.

4.3 Groundwater Elevations

Groundwater elevations and depth-to-water measurements for the April 13, 1998 event are presented in Table 3. The average water-table elevation on April 13, 1998 was 3.81 feet above mean sea level (amsl), an increase of 2.53 feet since the February 1998 event. A groundwater potentiometric surface map prepared with the April 13, 1998 data is presented as Figure 4.

As shown in Figure 4, the on- and off-site groundwater flow direction remains to the southwest, consistent with historic site data. The hydraulic gradient was 0.006 feet/foot (ft/ft) across the site as measured between monitoring wells MW-4 and MW-2. The gradient is consistent with previous data for the site. A summary of groundwater elevations since January 1993 is provided as Table 4.

4.4 Groundwater Conditions

An annual groundwater sampling event of all monitoring wells (except MW-11, which is not accessible due to the presence of roots growing through the casing) was performed on April 13, 1998. No analytes (TPHms, BTEX, or halogenated VOCs) were detected in the groundwater samples analyzed from monitoring wells MW-1, MW-2, MW-3, MW-5, and MW-6, or MW-13 which is constructed with a screen interval from 65 to 70 feet below ground surface (bgs). Trichloroethene (TCE) was detected above the maximum contaminant level (MCL) of 5 μg/L in monitoring wells MW-4, MW-8, MW-9, and MW-12 at 30.9, 8.0, 36.0, and 12.6 μg/L, respectively. The compound 1,2-dichloroethane (1,2-DCA) was detected above the MCL of 0.5 μg/L in monitoring well MW-9 at 4.5 μg/L and in monitoring well MW-12 at 1.5 μg/L. The following additional compounds were detected above their respective MCLs in the sample from monitoring well MW-9:

- Benzene
- 1,1-DCA
- *cis*-1,2-dichloroethene (*cis*-1,2-DCE)
- Chlorobenzene
- 1,4-dichlorobenzene (1,4-DCB)
- Vinyl chloride

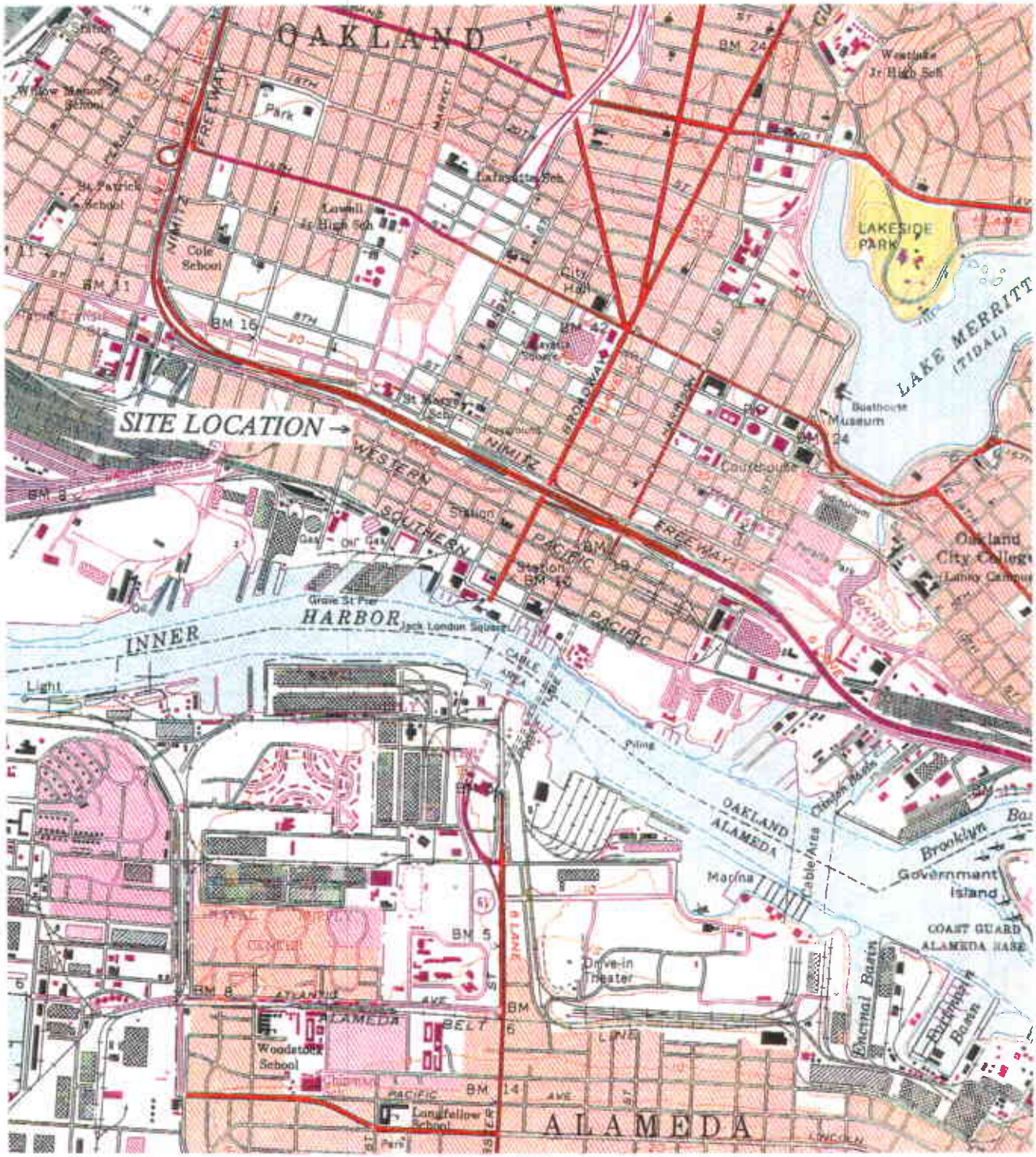
The following VOCs were detected above the laboratory method reporting limit, but below MCLs, if established:

- Toluene in monitoring well MW-9
- Ethylbenzene in monitoring well MW-9
- Total xylenes in monitoring well MW-9
- 1,1-DCA in monitoring well MW-12

- *cis*-1,2-DCE in monitoring well MW-4
- 1,1,1-TCA in monitoring well MW-9
- Chlorobenzene in monitoring well MW-9
- 1,2-DCB in monitoring well MW-9
- 1,3-DCB in monitoring well MW-9
- Dichlorodifluoromethane (Freon 12) in monitoring well MW-12
- Chloroethane in monitoring well MW-9
- Chlorotoluene in monitoring well MW-9
- Trichloropropane in monitoring well MW-9

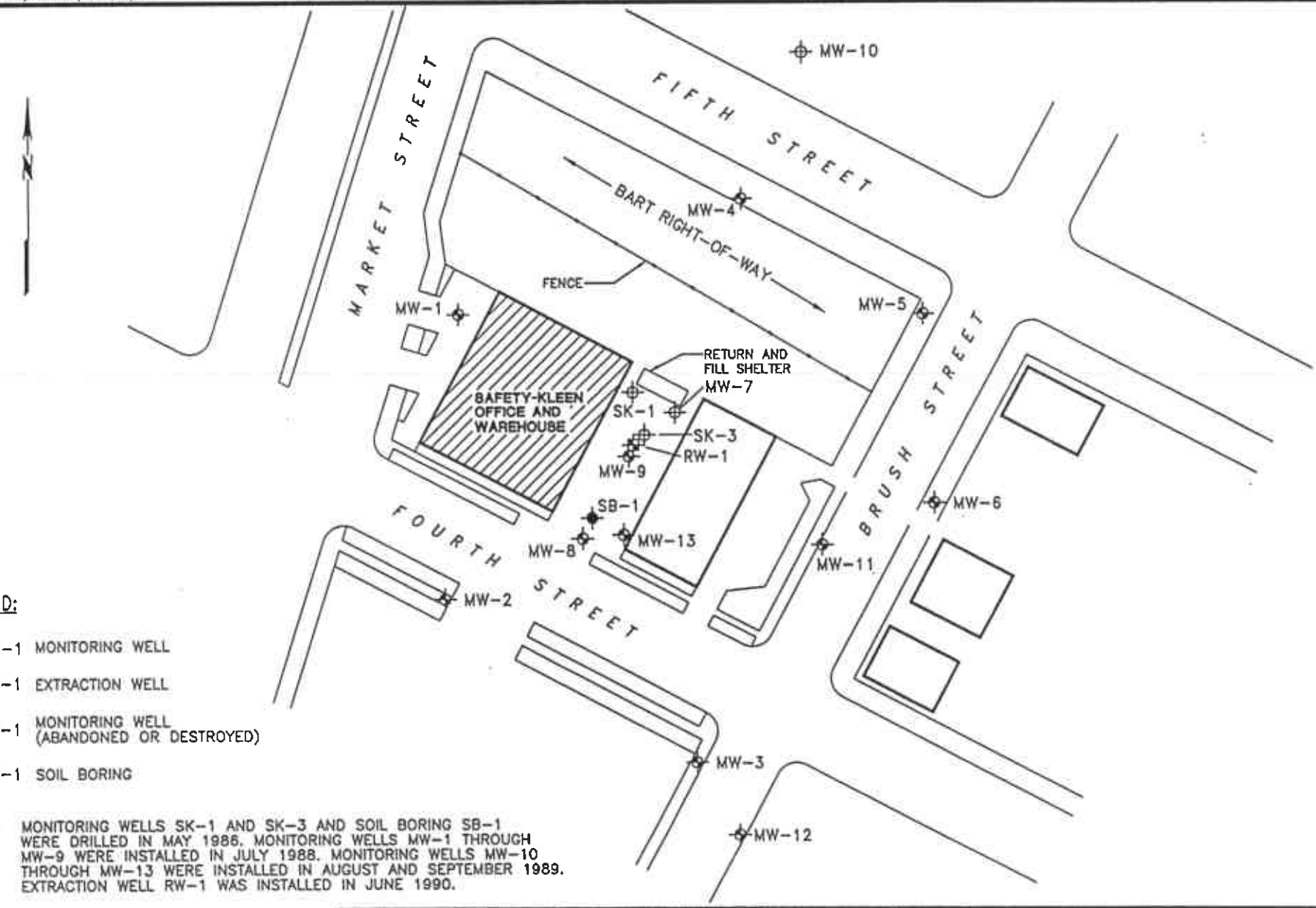
TPHms was detected in the groundwater sample collected from monitoring well MW-9 at a concentration of 927 µg/L. Figure 5 depicts the chemical distribution in the groundwater samples collected on April 13, 1998. A summary of analytical test results showing compounds detected since the April 1993 sampling event are presented in Table 5. Copies of the groundwater laboratory analytical reports are included in Appendix C.

OAKLAND WEST QUADRANGLE
California
7.5 Minute Series (Topographic)



DRAFTED BY: TS	CHECKED BY: GDH	PROJECT NO. 70005-009	FIGURE 1	*SECOR* 1390 Willow Pass Road Suite 360 Concord, CA 94520
DWG. DATE: 04-05-94	REV. DATE: 06-15-95	Safety-Kleen Corp. 400 Market Street Oakland, California	Site Location Map	
FILE NAME: Oakland7.F01				

199509.061018 X:\S-KLEEN\OAKLAND\SITE



LEGEND:

- MW-1 MONITORING WELL
- RW-1 EXTRACTION WELL
- SK-1 MONITORING WELL (ABANDONED OR DESTROYED)
- SB-1 SOIL BORING

NOTES: MONITORING WELLS SK-1 AND SK-3 AND SOIL BORING SB-1 WERE DRILLED IN MAY 1986. MONITORING WELLS MW-1 THROUGH MW-9 WERE INSTALLED IN JULY 1988. MONITORING WELLS MW-10 THROUGH MW-13 WERE INSTALLED IN AUGUST AND SEPTEMBER 1989. EXTRACTION WELL RW-1 WAS INSTALLED IN JUNE 1990.

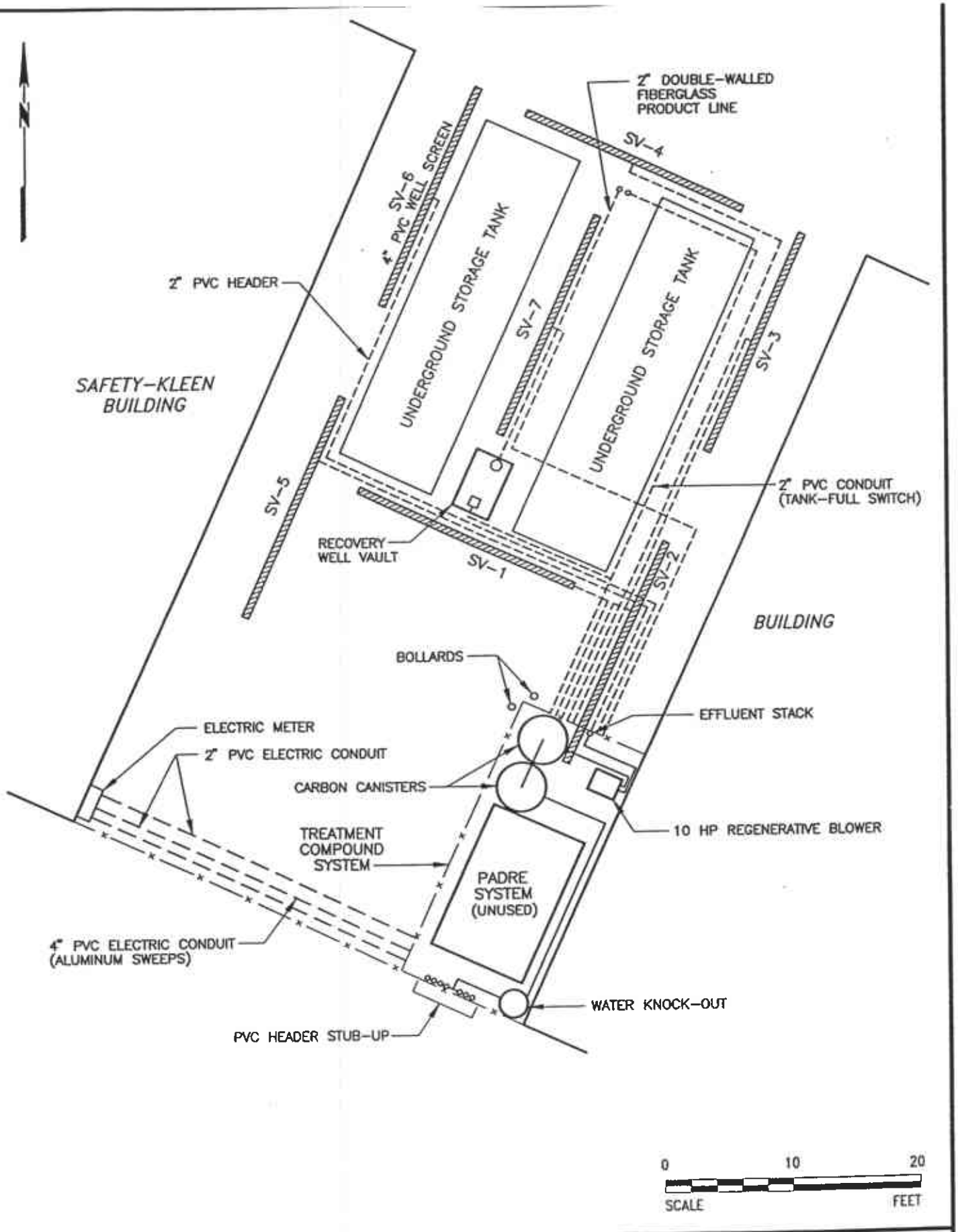
0 80 160
SCALE FEET

SECOR INTERNATIONAL INCORPORATED

DRAWN	CCR
APPR	RR/GH
DATE	26NOV96
JOB NO.	70005-009

FIGURE 2
SAFETY-KLEEN SERVICE CENTER
400 MARKET STREET
OAKLAND, CALIFORNIA

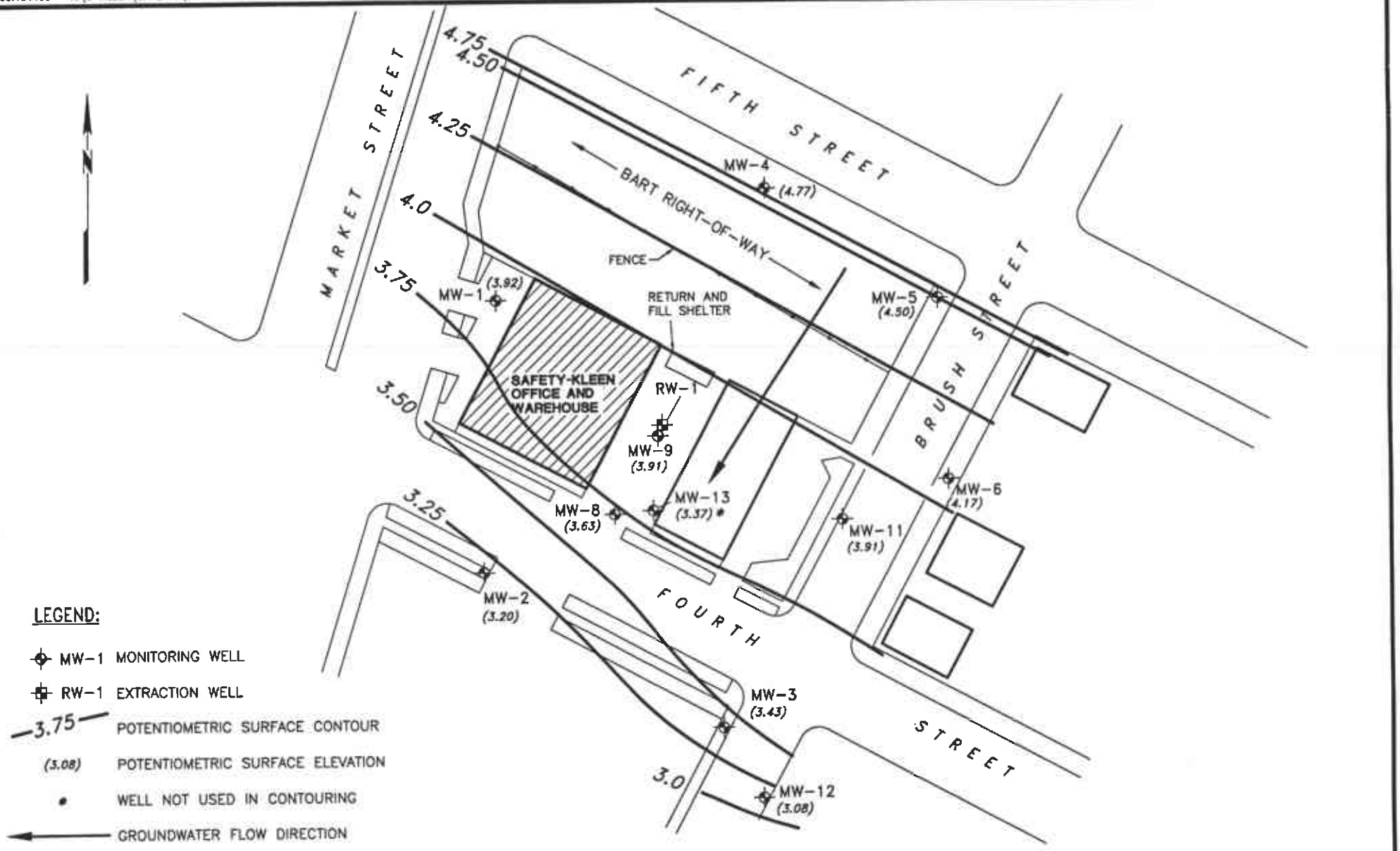
SITE PLAN



SECOR INTERNATIONAL INCORPORATED	DRAWN: CCR APPR: GH DATE: 08DEC95 JOB NO.: 70005-009	FIGURE 3 SAFETY-KLEEN SERVICE CENTER 400 MARKET STREET OAKLAND, CALIFORNIA **SOIL VAPOR EXTRACTION SYSTEM LAYOUT**

199512.071928 X:\18-KLEEN\OAKLAND\SITE2

199805.131406 X:\S-KLEEN\OAKLAND\SURFAC13



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DATE	13MAY98
JOB NO.	70005-009

FIGURE 4

SAFETY-KLEEN SERVICE CENTER
400 MARKET STREET
OAKLAND, CALIFORNIA

POTENTIOMETRIC SURFACE MAP
APRIL 13, 1998

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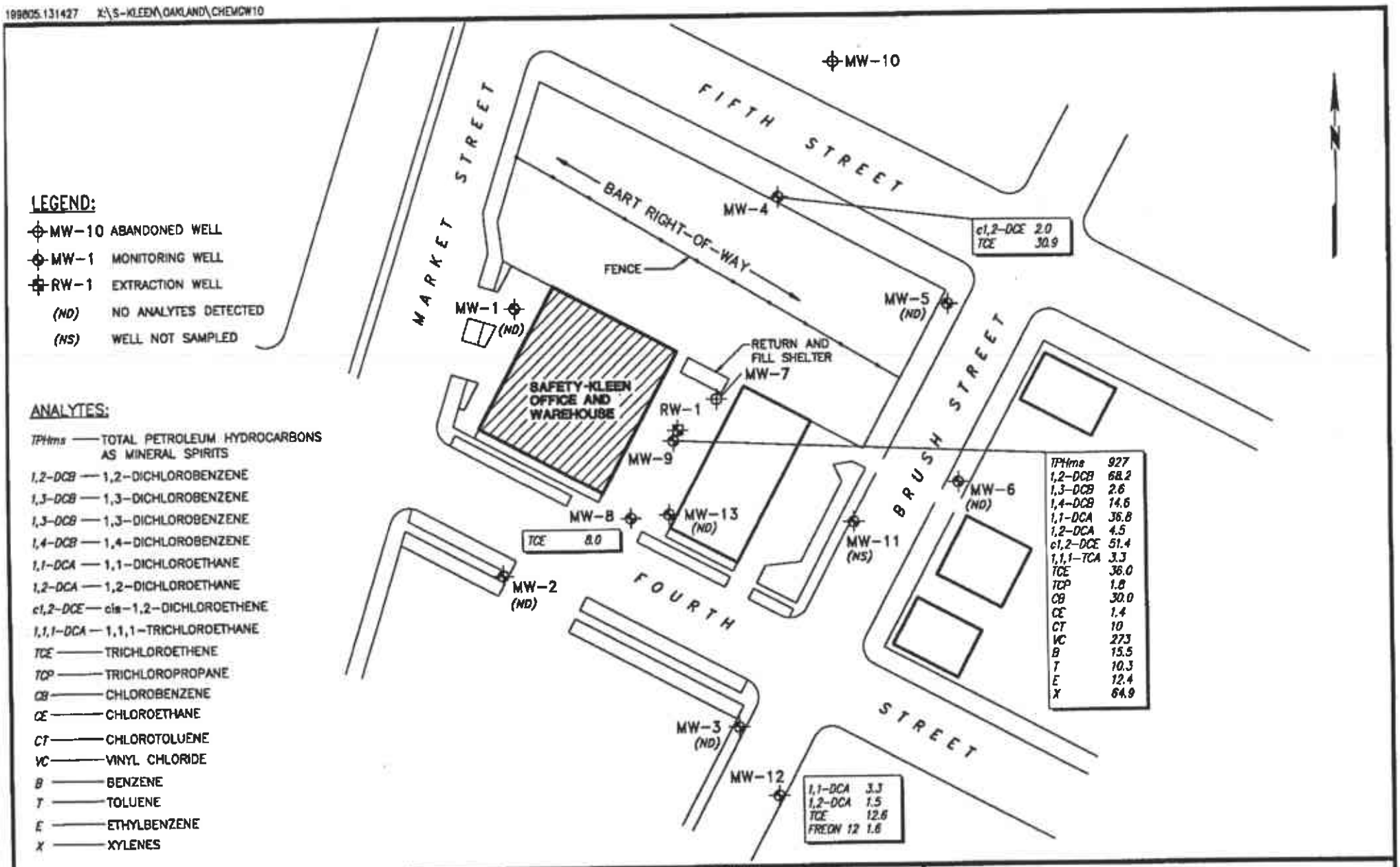

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DATE	29JUN98
JOB NO.	70005-009

FIGURE 5
SAFETY-KLEEN SERVICE CENTER
400 MARKET STREET
OAKLAND, CALIFORNIA
CHEMICAL DISTRIBUTION IN GROUNDWATER
APRIL 13, 1998

Table 1
Soil Vapor Extraction System Monitoring Data

Safety-Kleen Service Center
400 Market Street
Oakland, California

Date	Elapsed Time* (hours)	Well Extraction Vacuum (inches H20)	KO Vacuum (inches H20)	Extraction Flow Rate (ft/min)	(scfm)	System Influent (PID/FID units)	#1 Carbon Effluent (PID/FID units)	#2 Carbon Effluent (PID/FID units)	System Effluent (PID/FID units)	Notes
12/08/95	363	6.5	22	5000	107	413	3	5	6	* System restarted using carbon adsorption on 11/28/95.
12/21/95	677	6	20	5000	107	80	36	1	1	Influent and Effluent samples collected
01/09/96	1134	9	22	5000	106	169	42	3	2	Influent and Effluent samples collected
01/24/95	1489	5.5	17	2200	47	43	43	24	6	
02/06/96	1803	5	16	6000	129	63	61	33	16	Influent and Effluent samples collected
02/21/96	2158	8	20	5500	117	60	48	38	8	
03/08/96	2540	10	23	5000	106	184	52	45	16	Influent and Effluent samples collected
03/20/96	2635	12	23	5000	106	430	362	311	22	
04/03/96	2906	12	25	5000	106	290	45	32	2	FID used, Influent and Effluent samples collected, Carbon changed.
04/18/96	3268	11	24	5000	106	500	30	9	3	FID used.
05/02/96	3594	NM	24	5000	109	109	45	0	0	Influent and Effluent samples collected
05/16/96	3934	NM	23	5000	109	117	151	3	1	
05/31/96	4289	0.15	25	5000	109	54	61	1	0	Influent and Effluent samples collected
07/01/96	5039	11	23	5000	106	325	150	75	37	Influent and Effluent samples collected
07/17/96	5422	10	24	5000	106	159	160	163	33	System shut down for carbon replacement
08/20/96	5424	7	17	3200	68	300	0	0	0	System restarted with new carbon
08/22/96	5470	7	17	3000	64	300	1	1	0	Influent and Effluent samples collected
09/03/96	5760	0.15	16	3500	76	131	0	0	0	
09/26/96	6316	8	15	3550	76	165	30	1	2	Influent and Effluent samples collected
10/03/96	6478	8	15	3000	64	231	70	42	13	

Table 1
Soil Vapor Extraction System Monitoring Data

Safety-Kleen Service Center
400 Market Street
Oakland, California

Date	Elapsed Time* (hours)	Well Extraction Vacuum (inches H20)	KO Vacuum (inches H20)	Extraction Flow Rate (ft/min)	(scfm)	System Influent (PID/FID units)	#1 Carbon Effluent (PID/FID units)	#2 Carbon Effluent (PID/FID units)	System Effluent (PID/FID units)	Notes
10/10/96	6645	8	15	3500	75	269	189	21	13	Influent and Effluent samples collected
10/22/96	6939	7	15	3000	64	480	442	2	1	Influent and Effluent samples collected
10/29/96	71040	8	16	4000	85	149	143	8	1	
11/13/96	7467	8	16	3500	75	120	90	40	8	Influent and Effluent samples collected
12/03/96	7944	0.19	25	5000	109	60	53	0	0	
12/18/96	8299	0.14	26	5500	120	51	55	5	5	Influent and Effluent samples collected
01/06/97	8684	24	38	4000	82	40	17	6	4	
01/17/97	8950	24	36	4000	82	147	153	83	7	Influent and Effluent samples collected
01/30/97	9259	24	37	3000	61	20	7	7	2	
02/10/97	9523	24	35	3500	72	192	306	111	4	Influent and Effluent samples collected
02/25/97	9887	22	34	3500	72	50	20	10	2	
03/07/97	10124	20	35	4000	83	40	9	5	2	Influent and Effluent samples collected
03/26/97	10587	22	35	3500	72	72	191	82	2	
04/10/97	10941	19	34	4000	83	15	33	4	3	
05/01/97	11440	23	30	3000	62	5	3	1	0	Influent and Effluent samples collected
05/14/97	11752	31	38	2000	40	19	17	9	0	
05/16/97	11798	NM	NM	NM	NM	NM	NM	NM	NM	System shutdown for carbon changeout
06/05/97	11798	20	30	8000	165	35	17	2	2	Carbon Changeout, Restart System, Influent and Effluent samples collected
06/17/97	12090	NM	30	8500	185	23	0	0	0	Shutdown system
06/30/97	12091	NM	29	4200	91	110	1	0	0	Restart system, Influent and Effluent samples collected

Table 1
Soil Vapor Extraction System Monitoring Data

Safety-Kleen Service Center
400 Market Street
Oakland, California

Date	Elapsed Time* (hours)	Well Extraction Vacuum (inches H20)	KO Vacuum (inches H20)	Extraction Flow Rate (ft/min)	Extraction Flow Rate (scfm)	System Influent (PID/FID units)	#1 Carbon Effluent (PID/FID units)	#2 Carbon Effluent (PID/FID units)	System Effluent (PID/FID units)	Notes
07/17/97	12496	NM	28	4800	104	6	0	0	0	Shutdown system
07/30/97	12497	NM	28	8000	174	19	0	0	0	Restart system, Influent and Effluent samples collected
08/13/97	12837	NM	27	8500	185	12	0	0	0	Shutdown system
08/28/97	12837	18	30	8000	166	35	2	1	0	Restart system, Influent and Effluent samples collected
09/10/97	13148	>1	29	8250	179	9	0	0	0	Shutdown system
09/24/97	13149	NM	27	4000	87	25	0	0	0	Restart system, Influent and Effluent samples collected
10/08/97	13488	NM	26	8000	174	9	0	0	0	Shutdown system
10/23/97	13488	16	29	8000	167	25	4	0	0	Restart system, Influent and Effluent samples collected
11/14/97	14018	NM	28	8000	174	68	0	0	0	Shutdown system
11/26/97	14020	10	29	8000	170	6	22	0	0	Restart system
12/11/97	14377	15	30	10000	210	0	0	0	0	Influent and Effluent samples collected, Shutdown system
12/22/97	14378	18	30	10000	208	20	1	1	1	Restart system, Influent and Effluent samples collected
01/06/98	14742	6.5	28	NM	-	2	0	0	0	Shutdown system
03/17/98	14743	58	42	10000	187	0	0	0	0	Restart system, Influent and Effluent samples collected
04/06/98	15222	24	30	10000	205	33	4	4	1	Shutdown system
04/28/98	15222	6.5	23	NM	-	17	2	2	0	Restart system, Influent and Effluent samples collected
05/19/98	15731	>1	43	NM	-	3	2	3	0	Shutdown system
05/28/98	15731	34	40	10000	199	4	1	0	0	Restart system, Influent and Effluent samples collected

Notes:
ft/min = feet per minute
scfm = standard cubic feet per minute assuming ambient temperature and ideal gas
NM = not measured

Table 2
Soil Vapor Extraction System
Mineral Spirits Removal

Safety-Kleen Service Center
400 Market Street
Oakland, California

Sample Date	Elapsed Time (hours)	Run Time This Period (hours)	Extraction Flow Rate (scfm)	TPHms Influent (µg/L)	Removal Rate (lbs/day)	Cummulative TPHms Removed (lbs)	Notes
11/28/95		Carbon adsorbtion system start-up				1798	TPHms removed by prior system.
12/21/95	677	677	107	823	7.9	2020	
01/09/96	1134	457	106	1116	10.6	2221	
02/06/96	1803	669	129	999	11.5	2542	
03/08/96	2540	737	106	1821	17.2	3071	
04/03/96	2906	366	106	1116	10.6	3232	
05/02/96	3594	688	109	1586	15.4	3675	
05/31/96	4289	695	109	1234	12.0	4023	
07/01/96	5039	750	106	82	0.8	4047	
08/22/96	5470	431	64	500	2.9	4098	
09/26/96	6316	846	76	1300	8.8	4409	
10/10/96	6645	329	75	880	5.9	4490	
10/22/96	6939	294	64	670	3.8	4537	
11/13/96	7467	528	75	460	3.1	4604	
12/18/96	8299	833	120	220	2.4	4686	
01/17/97	8950	651	82	69	0.5	4700	
02/10/97	9523	573	72	98	0.6	4715	
03/07/97	10124	601	83	ND (<50)	0	4715	
05/01/97	11440	1316	62	ND (<50)	0	4715	

Table 2
Soil Vapor Extraction System
Mineral Spirits Removal

Safety-Kleen Service Center
400 Market Street
Oakland, California

Sample Date	Elapsed Time (hours)	Run Time This Period (hours)	Extraction Flow Rate (scfm)	TPHms Influent (µg/L)	Removal Rate (lbs/day)	Cummulative TPHms Removed (lbs)	Notes
06/05/97	11798	358	165	910	13.4	4915	Began pulsing system.
06/30/97	12091	293	91	550	4.5	4969	
07/30/97	12497	406	174	150	2.3	5009	
08/28/97	12837	340	166	550	8.2	5124	
09/24/97	13149	311	87	350	2.7	5160	
10/23/97	13488	340	167	220	3.3	5206	
12/11/97	14377	889	210	ND (<50)	0	5206	
12/22/97	14378	1	208	ND (<50)	0	5206	
03/17/98	14743	365	187	78	1.3	5226	
04/28/98	15222	479	214	70	1.3	5253	
05/28/98	15731	509	199	21	0.4	5261	

Notes:
scfm = cubic feet per minute
µg/L = micrograms per liter
lbs = pounds

Table 3
Groundwater Monitoring Data
April 13, 1998

Safety-Kleen Service Center
400 Market Street
Oakland, California

Well I.D.	TOC Elevation (ft msl)	DTW (ft)	DTP (ft)	PT (ft)	Adjusted Elevation (ft msl)
MW-1	7.99	4.07	-	-	3.92
MW-2	8.20	5.00	-		3.20
MW-3	6.66	3.23	-	-	3.43
MW-4	10.32	5.55	-	-	4.77
MW-5	10.28	5.78	-	-	4.50
MW-6	8.97	4.80	-	-	4.17
MW-7*	-	-	-	-	-
MW-8	7.80	4.17	-	-	3.63
MW-9	8.21	4.30	-	-	3.91
MW-10**	-	-	-	-	-
MW-11	7.91	4.00	-	-	3.91
MW-12	6.74	3.66	-	-	3.08
MW-13	8.08	4.71	-	-	3.37
RW-1	-	3.58	3.50	0.08	-

Notes:
* Well destroyed in May 1990.
** Well destroyed in July 1995.

TOC	= Top-of-casing
DTW	= Depth-to-water
DTP	= Depth-to-product
PT	= Product thickness
ft msl	= Feet relative to mean sea level

Table 4
Historical Summary of Groundwater Elevations
(in feet relative to mean sea level)

Safety-Kleen Service Center
400 Market Street
Oakland, California

Date	Well Identification											
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-8	MW-9	MW-10	MW-11	MW-12	MW-13
01/20/93	1.29	1	0.86	1.57	1.48	1.27	1.08	1.15	1.73	1.16	0.44	0.58
04/20/93	1.09	0.51	0.38	1.52	1.42	1.08	0.74	0.95	1.85	0.9	0.1	0.4
07/20/93	0.27	-0.23	-0.27	0.68	0.62	0.37	-0.01	-0.68	0.99	0.2	-0.72	-0.15
10/20/93	-0.02	-0.51	-0.66	0.32	0.17	-0.12	-0.35	0.14	0.62	-0.22	-0.91	-0.57
01/19/94	-0.01	-0.52	-0.77	0.33	0.48	-0.1	-0.37	-0.49	0.6	-0.14	-1.05	-0.65
04/20/94	0.55	0.05	-0.09	0.85	0.74	0.46	0.22	0.33	-	0.34	-0.76	-0.09
07/19/94	0.25	-0.2	-0.31	0.62	0.55	0.23	-0.03	0.08	0.9	0.09	-0.7	-0.22
10/19/94	0.08	-0.33	-0.44	0.41	0.38	0.12	-0.15	0.01	-	0.01	-0.59	-0.33
01/04/95	1.95	1.53	1.64	2.41	2.49	2.24	1.79	1.85	-	2.06	1.44	1.33
04/10/95	3.09	2.46	2.49	3.71	3.73	3.42	2.79	2.95	-	3.18	2.22	1.98
07/11/95	2.04	1.53	1.53	2.54	2.5	2.26	1.76	1.93	-	2.01	1.33	1.53
10/12/95	1.38	0.94	1.01	1.81	1.27	1.56	1.15	1.32	-	1.42	0.94	1.06
01/09/96	1.82	1.4	0.64	2.21	2.21	2.04	1.61	1.54	-	1.85	-	1.51

Table 4
Historical Summary of Groundwater Elevations
(in feet relative to mean sea level)

Safety-Kleen Service Center
400 Market Street
Oakland, California

Date	Well Identification											
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-8	MW-9	MW-10	MW-11	MW-12	MW-13
04/02/96	2.81	2.4	2.46	3.33	3.36	3.17	2.58	2.51	-	2.91	2.24	2.38
07/01/96	2.16	1.7	1.75	2.67	2.63	2.35	1.9	1.93	-	2.18	-	1.84
11/01/96	1.09	0.7	0.75	1.47	1.47	1.18	0.9	0.86	-	-	-	0.78
01/17/97	2.89	2.39	2.58	3.48	3.52	3.34	2.7	2.57	-	-	-	2.5
04/10/97	2.43	1.89	1.99	2.92	2.86	2.53	2.18	2.19	-	2.45	1.71	1.99
07/17/97	1.7	1.19	1.25	2.15	2.12	1.86	1.44	1.29	-	-	1.12	1.35
10/08/97	1.4	0.94	0.97	1.79	1.76	1.51	1.16	1.35	-	-	0.84	1.06
01/12/98	3.02	2.99	3.12	3.45	3.49	3.34	2.89	2.63	-	3.15	2.5	2.48
04/13/98	3.92	3.2	3.43	4.77	4.5	4.17	3.63	3.91	-	3.91	3.08	3.37

Notes:
Groundwater elevations are in feet relative to mean sea-level datum.

- = Not measured

Table 5
Summary of Groundwater Analytical Results
Detected Compounds (Results in µg/L)

Safety-Kleen Service Center
400 Market Street
Oakland, California

Well No.	Date	TPHfms	Benzene	Toluene	Ethyl-benzene	Xylenes	1,1-DCE	1,1-DCA	1,2-DCA	cis-1,2-DCE	trans-1,2-DCE	Chloroform	1,1,1-TCA	TCE	PCE	Chloro-benzene	Dichloro-propane	1,2-DCB	1,3-DCB	1,4-DCB	TCFM	Freon 12	Chloro-ethane	Chloro-toluene	Trichloro-propane	Vinyl chloride
MCL		*NE*	*1*	*150*	*700*	*1750*	*6*	*5*	*0.5*	*6*	*10*	*NE*	*200*	*5*	*5*	*70*	*5*	*600*	*NE*	*5*	*150*	*NE*	*NE*	*NE*	*NE*	*0.5*
MW-1	Apr-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jan-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jan-95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Apr-95	-	-	-	-	-	-	-	-	-	-	-	-	-	0.7	-	-	-	-	-	-	-	-	-	-	-
	Jul-95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jan-96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Apr-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-96**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Nov-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jan-97**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jan-97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Apr-97**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-97**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jul-97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jan-98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Apr-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	Apr-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jan-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jan-95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jan-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Nov-96**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Nov-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jan-97**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jan-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-97**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-97**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.3	-	-	-	-	-	-	-	-	-	-
	Jan-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 5
Summary of Groundwater Analytical Results
Detected Compounds (Results in µg/L)

Safety-Kleen Service Center
400 Market Street
Oakland, California

Well No.	Date	TPHmo	Benzene	Toluene	Ethyl-benzene	Xylenes	1,1-DCE	1,1-DCA	1,2-DCA	cis-1,2-DCE	trans-1,2-DCE	Chloroform	1,1,1-TCA	TCE	PCE	Chloro-benzene	Dichloro-propane	1,2-DCB	1,3-DCB	1,4-DCB	TCFM	Freon 12	Chloro-ethane	Chloro-toluene	Trichloro-propane	Vinyl chloride
MCL		*NE*	*1*	*150*	*700*	*1750*	*6*	*5*	*0.5*	*6*	*10*	*NE*	*200*	*5*	*5*	*70*	*5*	*600*	*NE*	*5*	*150*	*NE*	*NE*	*NE*	*NE*	*0.5*
MW-3	Apr-93	-	-	-	-	-	-	-	-	-	-	-	-	0.7	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jan-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8	-	-	-	-	-
	Jul-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jan-95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-95	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jan-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Nov-96**	-	-	-	-	-	-	-	-	-	-	-	-	1.6	-	-	-	-	-	-	-	-	-	-	-	-
	Nov-96	-	-	-	-	-	-	-	-	-	-	-	-	4.9	-	-	-	-	-	-	-	-	-	-	-	-
	Jan-97**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jan-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-97**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-97**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.1	-	-	-	-	-	-	-	-	-	-
	Jan-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	Apr-93	-	-	-	-	-	-	-	-	-	-	7.6	-	2400	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-93	-	-	-	-	-	-	-	-	-	53	-	-	1100	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-93	* 400	-	-	-	-	-	-	-	-	0.6	1.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jan-94	* 270	-	-	-	-	-	-	-	-	1.1	-	-	790	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-94	* 760	-	-	-	-	-	-	-	-	1.7	5.0	-	1600	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-94	* 200	-	-	-	-	-	-	-	-	-	-	-	410	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-94	* 330	-	-	-	-	-	-	-	-	-	-	-	650	-	-	-	-	-	-	-	-	-	-	-	-
	Jan-95	-	-	-	-	-	0.7	-	-	-	1.4	-	-	700	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-95	-	-	1.2	-	-	0.8	-	-	-	1	-	-	440	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-95	-	-	-	-	-	5.2	-	-	11.8	3.2	-	-	247	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-95	-	-	-	-	-	4	-	-	-	3	3	-	207	-	-	-	-	-	-	-	-	-	-	-	1
	Jan-96	-	-	-	-	-	3	-	-	17	4	6	-	157	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-96	-	-	-	-	-	6	-	-	10	1.7	1.3	-	140	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-96	-	-	-	-	-	4.8	-	-	11.3	1.2	1.8	-	224	-	-	-	-	-	-	-	-	-	-	-	-
	Nov-96**	-	-	-	-	-	5.1	-	-	5.1	-	1.6	1.1	242.4	-	1.2	-	-	-	-	-	-	-	-	-	-
	Nov-96	-	-	-	-	-	5	-	-	9.2	1.2	1.8	-	269	-	-	-	-	-	-	-	-	-	-	-	-
	Jan-97**	-	-	-	-	-	5.7	-	-	4.4	-	1.9	1.2	156.2	-	-	-	-	-	-	-	-	-	-	-	-
	Jan-97	-	-	-	-	-	6.4	-	-	7.2	-	2.3	1.2	188.7	1.1	-	-	-	-	-	-	-	-	-	-	-
	Apr-97**	-	-	-	-	-	5.6	-	-	7.5	-	1.5	1.4	152.6	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-97	-	-	-	-	-	5.7	-	-	9.7	-	1.4	-	215.9	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-97**	-	-	-	-	-	6.7	-	-	6.6	-	2.5	1.6	136.8	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-97	-	-	-	-	-	6.8	-	-	6.5	-	1.7	-	161.7	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.2	-	-	-	-	-	-	-	-	-	-
	Jan-98	-	-	-	-	-	11.7	-	-	15.5	-	1	-	163	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-98	-	-	-	-	-	-	-	-	2	-	-	-	30.9	-	-	-	-	-	-	-	-	-	-	-	-

Table 5
Summary of Groundwater Analytical Results
Detected Compounds (Results in µg/L)

Safety-Kleen Service Center
400 Market Street
Oakland, California

Well No.	Date	TPHms	Benzene	Toluene	Ethyl-benzene	Xylenes	1,1-DCE	1,1-DCA	1,2-DCA	cis-1,2-DCE	trans-1,2-DCE	Chloroform	1,1,1-TCA	TCE	PCE	Chloro-benzene	Dichloro-propane	1,2-DCB	1,3-DCB	1,4-DCB	TCFM	Freon 12	Chloro-ethane	Chloro-toluene	Trichloro-propane	Vinyl chloride
MCL		*NE*	*1*	*150*	*700*	*1750*	*6*	*5*	*0.5*	*6*	*10*	*NE*	*200*	*5*	*5*	*70*	*5*	*600*	*NE*	*5*	*150*	*NE*	*NE*	*NE*	*NE*	*0.5*
MW-5	Apr-93	-	-	-	-	-	1.5	-	-	-	-	-	4	-	-	-	-	-	-	-	18	-	-	-	-	-
	Jul-93	-	-	-	-	-	0.6	-	-	-	-	-	6	-	-	-	-	-	-	-	19	-	-	-	-	-
	Oct-93	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jan-94	-	-	-	-	-	-	-	-	-	4.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-94	-	-	-	-	-	-	-	-	-	3.5	-	7.2	-	-	-	-	-	-	-	7.9	-	-	-	-	-
	Jul-94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jan-95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Apr-95	-	-	-	-	-	-	-	-	-	-	-	9.1	-	-	-	-	-	-	-	-	-	-	-	-	16
	Jul-95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jan-96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Apr-96	-	-	-	-	-	-	-	-	-	-	1.4	-	8.2	-	-	-	-	-	-	4.5	-	-	-	-	-
	Jul-96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-96**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jan-97**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jan-97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Apr-97**	-	-	-	-	-	-	-	-	-	-	3.2	-	3.6	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-97	-	-	-	-	-	-	-	-	-	-	2.9	-	3	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-97**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jul-97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jan-98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Apr-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-6	Apr-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-93	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-93	-	-	-	-	-	-	-	-	-	-	-	1.3	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jan-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-94	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jan-95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Apr-95	-	-	-	-	-	-	-	-	-	-	-	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jan-96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Apr-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-96**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jan-97**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jan-97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Apr-97**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-97**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jul-97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jan-98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Apr-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 5
Summary of Groundwater Analytical Results
Detected Compounds (Results in µg/L)

Safety-Kleen Service Center
400 Market Street
Oakland, California

Well No.	Date	TPHms	Benzene	Toluene	Ethyl-benzene	Xylenes	1,1-DCE	1,1-DCA	1,2-DCA	cis-1,2-DCE	trans-1,2-DCE	Chloroform	1,1,1-TCA	TCE	PCE	Chloro-benzene	Dichloro-propane	1,2-DCB	1,3-DCB	1,4-DCB	TCFM	Freon 12	Chloro-ethane	Chloro-toluene	Trichloro-propane	Vinyl chloride
MCL		*NE*	*1*	*150*	*700*	*1750*	*6*	*5*	*0.5*	*6*	*10*	*NE*	*200*	*5*	*5*	*70*	*5*	*600*	*NE*	*5*	*150*	*NE*	*NE*	*NE*	*NE*	*0.5*
MW-8	Apr-93	-	-	-	-	-	-	3.4	9.4	-	-	-	-	14	1.8	11	0.6	2.6	-	-	-	-	-	-	-	-
	Jul-93	-	-	-	-	-	-	-	5	-	1	-	-	31	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-93	-	-	-	-	-	-	-	5.2	-	-	-	-	15	-	5.4	-	-	-	-	-	-	-	-	-	-
	Jan-94	* 60	-	-	-	-	-	8.6	11	-	-	-	2.5	22	2	16	-	4.8	-	-	-	-	-	-	-	-
	Apr-94	-	-	-	-	-	-	3.7	7.1	-	-	-	1.5	18	0.8	-	0.8	-	-	-	-	-	-	-	-	-
	Jul-94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-94	-	-	-	-	-	-	5.5	-	-	-	-	-	23	-	2.4	-	-	-	-	-	-	-	-	-	-
	Jan-95	-	-	-	-	-	-	-	-	-	-	-	-	2.6	-	1.2	-	-	-	-	-	-	-	-	-	-
	Apr-95	-	-	-	-	-	-	-	-	-	-	-	-	15	0.4	-	-	-	-	-	-	-	-	-	-	-
	Jul-95	-	-	-	-	-	3.5	6.2	9.8	25.57	2.3	-	-	163	3.2	6.9	-	3.8	-	-	-	-	-	-	-	2.6
	Oct-95	-	-	-	-	-	7	5	10	63	6	-	-	557	2	4	-	3	-	-	-	-	-	-	-	4
	Jan-96	-	-	-	-	-	19	7	11	56	4	13	-	486	2	6	-	5	-	-	-	-	-	-	-	5
	Apr-96	-	-	-	-	-	7.2	2.9	5.1	63	2.9	-	-	569	1.1	3.3	-	2	-	-	-	-	-	-	-	1.6
	Jul-96	-	-	-	-	-	-	-	-	-	-	-	1.3	1352	2	-	-	-	-	1.1	-	-	-	-	-	6.3
	Nov-96**	-	-	-	-	-	3.2	16.7	9.5	44.5	1.1	1.7	2.5	339.2	3.4	23.3	3	24.4	-	3.9	-	-	-	-	-	9.8
	Nov-96	-	-	-	-	-	1.3	4.3	6	60.6	2.9	3.9	-	1156.8	1.6	5.8	-	5.7	-	1.1	-	-	-	-	-	3.5
	Jan-97**	-	-	-	-	-	-	-	-	1.2	-	-	-	2.9	22.5	-	-	-	-	-	-	-	-	-	-	-
	Jan-97	-	-	-	-	-	-	-	2.1	22.6	1.3	1.4	-	500.3	13	1.2	-	1.4	-	-	-	-	-	-	-	-
	Apr-97**	-	-	-	-	-	-	3.6	2.1	17	-	-	-	95	4.9	3.4	-	3.3	-	-	-	-	-	-	-	-
	Apr-97	-	-	-	-	-	-	4.8	3.4	50	-	-	-	241.9	4.8	4.6	-	4.5	-	-	-	-	-	-	-	-
	Jul-97**	-	-	-	-	-	-	-	3.6	38.6	2.3	3.2	-	803	1.2	1.3	-	1.4	-	-	-	-	-	-	-	-
	Jul-97	-	-	-	-	-	1.2	1	3.5	42.4	2.3	2.6	-	792	1.2	1.7	-	1.7	-	-	-	-	-	-	-	-
	Oct-97	-	-	-	-	-	-	-	3.5	43.5	2.4	1.5	-	920	-	-	-	-	-	-	-	-	-	-	-	-
	Jan-98	-	-	-	-	-	-	-	-	5.8	-	-	-	19.5	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-98	-	-	-	-	-	-	-	-	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
MW-9	Apr-93	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jul-93	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-93	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jan-94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Apr-94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jul-94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jan-95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Apr-95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jul-95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jan-96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Apr-96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jul-96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-96**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jan-97**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jan-97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Apr-97**	1536	14.9	13.3	13.5	12.3	-	48	8.2	40.9	-	-	10.7	12.5	-	28.6	1.6	77.2	4.6	17.2	-	-	2	9.9	4.6	131.7
	Apr-97	1846	17.4	17.2	23.2	19.3	-	56.6	7.6	47.1	-	-	13.8	16.1	-	44.5	1.4	131.8	4.2	34.4	-	-	2	19.2	4.2	135.6
	Jul-97**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jul-97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jan-98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Apr-98	927	15.8	10.3	12.4	64.9	-	36.8	4.5	51.4	-	-	3.3	36	-	30	-	68.2	2.6	14.6	-	-	1.4	10	1.8	27.1

Table 5
Summary of Groundwater Analytical Results
Detected Compounds (Results in µg/L)

Safety-Kleen Service Center
400 Market Street
Oakland, California

Well No.	Date	TPHms	Benzene	Toluene	Ethyl-benzene	Xylenes	1,1-DCE	1,1-DCA	1,2-DCA	cis-1,2-DCE	trans-1,2-DCE	Chloroform	1,1,1-TCA	TCE	PCE	Chloro-benzene	Dichloro-propane	1,2-DCB	1,3-DCB	1,4-DCB	TCFM	Freon 12	Chloro-ethane	Chloro-toluene	Trichloro-propane	Vinyl chloride
MCL		*NE*	*1*	*150*	*700*	*1750*	*6*	*5*	*0.5*	*6*	*10*	*NE*	*200*	*5*	*5*	*70*	*5*	*600*	*NE*	*5*	*150*	*NE*	*NE*	*NE*	*NE*	*0.5*
MW-10	Apr-93	-	-	-	-	-	-	-	-	-	-	1.2	-	45	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-93	-	-	-	-	-	2	-	-	-	17	0.5	0.8	54	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-93	-	-	-	-	-	-	-	-	-	3	-	-	42	-	-	-	-	-	-	-	-	-	-	-	-
	Jan-94	-	-	-	-	-	-	-	-	-	0.4	-	-	67	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jul-94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jan-95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Apr-95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jul-95	Well Destroyed July 1995																								
MW-11	Apr-93	-	-	-	-	-	-	-	-	-	-	-	-	9.1	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-93	-	-	-	-	-	2	-	-	-	3	-	2	36	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-93	-	-	-	-	-	-	-	-	-	-	-	-	11	-	-	-	-	-	-	-	-	-	-	-	-
	Jan-94	-	-	-	-	-	-	-	-	-	-	-	-	2.6	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-94	-	-	-	-	-	-	-	-	-	-	-	-	3.1	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jan-95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Apr-95	-	-	-	-	-	-	-	-	-	-	-	-	3.4	-	-	-	-	-	-	-	-	-	-	-	1.4
	Jul-95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jan-96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Apr-96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jul-96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-96**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jan-97**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jan-97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Apr-97**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Apr-97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jul-97**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jul-97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jan-98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Apr-98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12	Apr-93	-	-	-	-	-	-	2.6	-	-	-	-	-	17	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-93	-	-	-	-	-	-	2	2	-	3	-	-	30	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-93	-	-	-	-	-	-	-	-	-	-	-	-	24	-	-	-	-	-	-	-	-	-	-	-	-
	Jan-94	-	-	-	-	-	-	2.3	1.2	-	-	-	-	11	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-94	-	-	-	-	-	-	1.7	1.9	-	-	-	-	41	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-94	-	-	-	-	-	-	1.6	-	-	-	-	-	24	-	-	-	-	-	-	-	-	-	-	-	-
	Jan-95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Apr-95	-	-	-	-	-	-	3.8	-	-	-	-	-	59	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-95	-	-	-	-	-	2	4	3	5	2	-	-	95	-	-	2	-	-	-	-	-	-	-	-	-
	Jan-96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Apr-96	-	-	-	-	-	-	2.9	1.6	-	-	1.1	-	7.5	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 5
Summary of Groundwater Analytical Results
Detected Compounds (Results in µg/L)

Safety-Kleen Service Center
400 Market Street
Oakland, California

Well No.	Date	TPHms	Benzene	Toluene	Ethyl-benzene	Xylenes	1,1-DCE	1,1-DCA	1,2-DCA	cis-1,2-DCE	trans-1,2-DCE	Chloroform	1,1,1-TCA	TCE	PCE	Chloro-benzene	Dichloro-propane	1,2-DCB	1,3-DCB	1,4-DCB	TCFM	Freon 12	Chloro-ethane	Chloro-toluene	Trichloro-propane	Vinyl chloride
MCL		*NE*	*1*	*150*	*700*	*1750*	*6*	*5*	*0.5*	*6*	*10*	*NE*	*200*	*5*	*5*	*70*	*5*	*600*	*NE*	*5*	*150*	*NE*	*NE*	*NE*	*NE*	*0.5*
MW-12 (Cont.)	Nov-96**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jan-97**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jan-97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Apr-97**	-	-	-	-	-	-	6.2	3.5	1.1	-	-	-	9.5	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-97	-	-	-	-	-	-	6.3	3.5	1.4	-	-	-	24.3	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-97**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jul-97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-97	-	-	-	-	-	-	4.5	2.6	2.1	-	-	-	41.9	-	-	-	-	-	-	-	-	-	-	-	-
	Jan-98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Apr-98	-	-	-	-	-	-	3.3	1.5	-	-	-	-	12.6	-	-	-	-	-	-	-	1.6	-	-	-	-
MW-13	Apr-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-93	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-93	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jan-94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Apr-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jan-95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Apr-95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jan-96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Apr-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-96**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Nov-96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jan-97**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jan-97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Apr-97**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-97**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jul-97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Oct-97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Jan-98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Apr-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 5
Summary of Groundwater Analytical Results
Detected Compounds (Results in µg/L)

Safety-Kleen Service Center
400 Market Street
Oakland, California

Notes:
Concentrations of compounds detected equal to or greater than the MCL are shaded.
(1) In addition to the constituents listed, chloromethane was detected at 1.0 µg/L.

TPHms	= Total petroleum hydrocarbons as mineral spirits
DCE	= Dichloroethene
DCA	= Dichloroethane
TCA	= Trichloroethane
TCE	= Trichloroethene
PCE	= Tetrachloroethene
DCB	= Dichlorobenzene
TCFM	= Trichlorofluoromethane
Freon 12	= Dichlorodifluromethane
MCL	= Maximum contaminant level for primary drinking water constituents
NE	= Not Established
NS	= Not Sampled
-	= Not Detected

* The TPHms result is the result of an unknown hydrocarbon consisting of a single peak.
** This sample was collected prior to purging the monitor well.
*** Well MW-13 was sampled on 4/10/97. Analytical results were anomalous therefore, the well was resampled on 5/16/97.
Only compounds detected in one or more samples are included. See the laboratory reports for a complete list of analytes.

APPENDIX A

Field Data Sheets

DATE: 4/13/98 PROJECT: 70005-009-12 PROJECT # ____________

EVENT: QTLY SAMPLING SAMPLER: [illegible]

WELL OR LOCATION	TIME	MEASUREMENT					COMMENTS
		TOC	DTW	DTP	PT	ELEV	
MW-12	6:30		3.66				
MW-3	6:37		3.23				
MW-2	6:40		5.00				
MW-1	6:43		4.07				
MW-4	6:45		5.55				
MW-5	6:48		5.78				
MW-6	6:52		4.80				
MW-11	6:55		4.00				
MW-8	7:00		4.17				
MW-13	7:03		4.71				
MW-9	7:05		4.30				
RW-1	7:15		3.58	3.50			

CODES:
TOC - TOP OF CASING (FEET, RELATIVE TO MEAN SEA LEVEL)
DTW - DEPTH TO WATER (FEET)
DTP - DEPTH TO PRODUCT (FEET)
PT - PRODUCT THICKNESS (FEET)
ELEV - GROUNDWATER ELEVATION (FEET, RELATIVE TO MEAN SEA LEVEL)

SECOR International Incorporated

WATER SAMPLE FIELD DATA SHEET

Project #: 70005-004 Purged By: NR Well I.D.: MW-1

Client Name: SL Sampled By: NR Sample I.D.: MW-1

Location: DAIC QA Samples: _____

Date Purged 4/13/98 Start (2400hr) 8:20 End (2400hr) 8:30

Date Sampled 4/13/98 Sample Time (2400hr) 8:40

Sample Type: ☒ Groundwater ☐ Other

Casing Diameter 2" / 3" _____ 4" _____ 5" _____ 6" _____ 8" _____ Other _____

Depth to Bottom (feet) = _____ Purge (gal) = 1 GL

Depth to Water (feet) = 4.07 Purge Rate (☐ gal or ☐ liter/min) _____

FIELD MEASUREMENTS

Date	Time (2400hr)	Volume (gal)	Temp. (degrees C)	Conductivity (µmhos/cm)	pH (units)	Color (visual)	Turbidity (NTU)	D.O. (mg/l)	Depth (ft)
4/13	8:20	–	14.1	50.2	6.28	CLR	3	0.96	4.07
"	–	–	15.4	51.6	5.25	"	3	0.60	–
"	–	–	15.7	52.2	5.50	"	3	0.41	–
"	–	–	15.8	52.8	5.87	"	3	0.29	–
"	8:30	1.0	16.0	53.2	5.70	"	3	0.27	5.00

SAMPLE INFORMATION

Sample Depth to Water: _____ Sample Turbidity: _____

Odor: _____ Analyses: _____

Sample Vessel/Preservative: _____

PURGING EQUIPMENT

___Bladder Pump ___Bailer (Teflon)

___Centrifugal Pump ___Bailer (PVC)

___Submersible Pump ___Bailer (Stainless Steel)

/ Peristaltic Pump ___Dedicated _____

Other: _____

Pump Depth: _____

SAMPLING EQUIPMENT

___Bladder Pump ___Bailer (Teflon)

___Centrifugal Pump ___Bailer (PVC or disposable)

___Submersible Pump ___Bailer (Stainless Steel)

/ Peristaltic Pump ___Dedicated _____

Other: _____

Well Integrity: _____ Lock #: _____

Remarks: _____

NOTE: Sample after three consecutive roadings are within:

pH - ± 0.1, turbidity and DO = ± 10%, conductivity = ± 3%.

Signature: NR

SECOR International Incorporated

WATER SAMPLE FIELD DATA SHEET

Project #: 70005.004 Purged By: AA Well I.D.: MW-2

Client Name: SIL Sampled By: AA Sample I.D.: MW-2

Location: OAK QA Samples: _____

Date Purged 4/13/98 Start (2400hr) 7:58 End (2400hr) 8:05

Date Sampled 4/13/98 Sample Time (2400hr) 8:15

Sample Type: ☐ Groundwater ☐ Other

Casing Diameter 2" _____ 3" _____ 4" _____ 5" _____ 6" _____ 8" _____ Other _____

Depth to Bottom (feet) = _____ Purge (gal) = 1.5

Depth to Water (feet) = 5.00 Purge Rate (☐ gal or ☐ liter/min) _____

FIELD MEASUREMENTS

Date	Time (2400hr)	Volume (gal)	Temp. (degrees C)	Conductivity (μmhos/cm)	pH (units)	Color (visual)	Turbidity (NTU)	D.O. (mg/l)	Depth (ft)
4/13	7:58	—	15.7	31	6.01	CLR	37	4.69	5.00
"	—	—	16.4	31	5.27	"	32	4.37	—
"	—	—	16.6	31	5.54	"	39	4.26	—
"	—	—	16.7	31	5.73	"	46	4.18	—
"	8:05	1.5	16.8	31	5.82	"	43	4.17	5.50

SAMPLE INFORMATION

Sample Depth to Water: _____ Sample Turbidity: _____

Odor: _____ Analyses: _____

Sample Vessel/Preservative: _____

PURGING EQUIPMENT

___Bladder Pump ___Bailer (Teflon)

___Centrifugal Pump ___Bailer (PVC)

___Submersible Pump ___Bailer (Stainless Steel)

/ Peristaltic Pump ___Dedicated _____

Other: _____

Pump Depth: _____

SAMPLING EQUIPMENT

___Bladder Pump ___Bailer (Teflon)

___Centrifugal Pump ___Bailer (PVC or disposabl

___Submersible Pump ___Bailer (Stainless Steel)

/ Peristaltic Pump ___Dedicated _____

Other: _____

Well Integrity: _____ Lock #: _____

Remarks: _____

NOTE: Sample after three consecutive roadings are within:

pH - ± 0.1, turbidity and DO = ± 10%, conductivity = ± 3%.

Signature: AA

SECOR International Incorporated

WATER SAMPLE FIELD DATA SHEET

Project #: 70005-009 Purged By: AA Well I.D.: MW-3

Client Name: SIL Sampled By: AA Sample I.D.: MW-3

Location: OAK QA Samples: _____

Date Purged 4/13/98 Start (2400hr) 7:25 End (2400hr) 9:35

Date Sampled 4/13/98 Sample Time (2400hr) 7:45

Sample Type: ☑ Groundwater ☐ Other

Casing Diameter 2" ✓ 3" _____ 4" _____ 5" _____ 6" _____ 8" _____ Other _____

Depth to Bottom (feet) = _____ Purge (gal) = 1.5

Depth to Water (feet) = 3.23 Purge Rate (☐ gal or ☐ liter/min) _____

FIELD MEASUREMENTS

Date	Time (2400hr)	Volume (gal)	Temp. (degrees C)	Conductivity (µmhos/cm)	pH (units)	Color (visual)	Turbidity (NTU)	D.O. (mg/l)	Depth (ft)
4/13	7:25	—	15.2	10	6.83	CLR	293	1.97	3.23
"	"	—	15.8	10	5.21	"	256	1.70	—
"	—	—	16.0	9.4	5.36	"	239	1.35	—
"	—	—	16.1	9.2	5.50	"	277	1.18	—
"	7:35	1.5	16.2	9.2	5.67	"	289	1.10	4.08
"									

SAMPLE INFORMATION

Sample Depth to Water: _____ Sample Turbidity: _____

Analyses: _____

Odor: _____ Sample Vessel/Preservative: _____

PURGING EQUIPMENT

___Bladder Pump ___Bailer (Teflon)

___Centrifugal Pump ___Bailer (PVC)

___Submersible Pump ___Bailer (Stainless Steel)

✓ Peristaltic Pump ___Dedicated _____

Other: _____

Pump Depth: _____

SAMPLING EQUIPMENT

___Bladder Pump ___Bailer (Teflon)

___Centrifugal Pump ___Bailer (PVC or disposable)

___Submersible Pump ___Bailer (Stainless Steel)

✓ Peristaltic Pump ___Dedicated _____

Other: _____

Well Integrity: _____ Lock #: _____

Remarks: _____

NOTE: Sample after three consecutive roadings are within:

pH - ± 0.1, turbidity and DO = ± 10%, conductivity = ± 3%.

Signature: AA

SECOR International Incorporated

WATER SAMPLE FIELD DATA SHEET

Project #: 70005-004 | Purged By: AA | Well I.D.: MW-4

Client Name: SC | Sampled By: AA | Sample I.D.: MW-4

Location: DAU | QA Samples: _____

Date Purged 4/13/98 | Start (2400hr) 8:56 | End (2400hr) 9:05

Date Sampled 4/13/98 | Sample Time (2400hr) 9:15

Sample Type: ☑ Groundwater ☐ Other

Casing Diameter 2" / 3" _____ 4" _____ 5" _____ 6" _____ 8" _____ Other _____

Depth to Bottom (feet) = _____ | Purge (gal) = 1.5

Depth to Water (feet) = 5.55 | Purge Rate (☐ gal or ☐ liter/min) _____

FIELD MEASUREMENTS

Date	Time (2400hr)	Volume (gal)	Temp. (degrees C)	Conductivity (µmhos/cm)	pH (units)	Color (visual)	Turbidity (NTU)	D.O. (mg/l)	Depth (ft)
4/13	8:56	–	14.8	173	5.34	DAU	217	5.24	5.55
"	–	–	15.2	174	5.35	"	217	5.14	–
"	–	–	15.4	175	5.43	"	217	5.11	–
"	9:05	1.5	15.5	176	5.52	"	216	5.17	5.95

SAMPLE INFORMATION

Sample Depth to Water: _____ | Sample Turbidity: _____

Odor: _____ | Analyses: _____

Sample Vessel/Preservative: _____

PURGING EQUIPMENT

___Bladder Pump ___Bailer (Teflon)

___Centrifugal Pump ___Bailer (PVC)

___Submersible Pump ___Bailer (Stainless Steel)

___Peristaltic Pump ___Dedicated _____

Other: _____

Pump Depth: _____

SAMPLING EQUIPMENT

___Bladder Pump ___Bailer (Teflon)

___Centrifugal Pump ___Bailer (PVC or disposable)

___Submersible Pump ___Bailer (Stainless Steel)

___Peristaltic Pump ___Dedicated _____

Other: _____

Well Integrity: _____ | Lock #: _____

Remarks: SOME ROAD WORK IN THE MEDIAN.

NOTE: Sample after three consecutive roadings are within:

pH - ± 0.1, turbidity and DO = ± 10%, conductivity = ± 3%.

Signature: AA

SECOR International Incorporated

WATER SAMPLE FIELD DATA SHEET

Project #: 70005-004 | Purged By: NN | Well I.D.: MW-5

Client Name: SL | Sampled By: NN | Sample I.D.: MW-5

Location: OAK | QA Samples: _____

Date Purged 4/13/98 | Start (2400hr) 10:20 | End (2400hr) 10:37

Date Sampled 4/13/98 | Sample Time (2400hr) 10:45

Sample Type: ☑ Groundwater ☐ Other

Casing Diameter 2" ✓ 3" _____ 4" _____ 5" _____ 6" _____ 8" _____ Other _____

Depth to Bottom (feet) = _____ | Purge (gal) = 1.75

Depth to Water (feet) = 5.78 | Purge Rate (☐ gal or ☐ liter/min) _____

FIELD MEASUREMENTS

Date	Time (2400hr)	Volume (gal)	Temp. (degrees C)	Conductivity (μmhos/cm)	pH (units)	Color (visual)	Turbidity (NTU)	D.O. (mg/l)	Depth (ft)
4/13	10:20	—	14.3	62.7	6.07	MJ	176	2.13	5.78
〃	—	—	15.2	62.1	5.25	〃	179	1.98	—
〃	—	—	15.6	61.8	5.57	〃	170	1.38	—
〃	—	—	15.8	61.6	5.84	〃	176	1.28	—
〃	10:37	1.75	15.9	61.5	5.94	〃	176	1.35	5.90

SAMPLE INFORMATION

Sample Depth to Water: _____ | Sample Turbidity: _____

Odor: _____ | Analyses: _____

Sample Vessel/Preservative: _____

PURGING EQUIPMENT

___ Bladder Pump	___ Bailer (Teflon)
___ Centrifugal Pump	___ Bailer (PVC)
___ Submersible Pump	___ Bailer (Stainless Steel)
✓ Peristaltic Pump	___ Dedicated _____

Other: _____

Pump Depth: _____

SAMPLING EQUIPMENT

___ Bladder Pump	___ Bailer (Teflon)
___ Centrifugal Pump	___ Bailer (PVC or disposable
___ Submersible Pump	___ Bailer (Stainless Steel)
✓ Peristaltic Pump	___ Dedicated _____

Other: _____

Well Integrity: _____ | Lock #: _____

Remarks: _____

NOTE: Sample after three consecutive roadings are within:

pH - ± 0.1, turbidity and DO = ± 10%, conductivity = ± 3%.

Signature: NN

SECOR International Incorporated
WATER SAMPLE FIELD DATA SHEET

Project #: 70005-009 Purged By: RN Well I.D.: MW-6
Client Name: SW Sampled By: RN Sample I.D.: MW-6
Location: OAK QA Samples: _____

Date Purged 4/13/98 Start (2400hr) 11:20 End (2400hr) 12:05
Date Sampled 4/13/98 Sample Time (2400hr) 12:15
Sample Type: ☐ Groundwater ☐ Other

Casing Diameter 2" / 3" ____ 4" ____ 5" ____ 6" ____ 8" ____ Other ____

Depth to Bottom (feet) = _____ Purge (gal) = 1.95
Depth to Water (feet) = 4.80 Purge Rate (☐ gal or ☐ liter/min) _____

FIELD MEASUREMENTS

Date	Time (2400hr)	Volume (gal)	Temp. (degrees C)	Conductivity (μmhos/cm)	pH (units)	Color (visual)	Turbidity (NTU)	D.O. (mg/l)	Depth (ft)
4/13	11:20	—	15.8	27.3	4.87	Clr	0	4.94	4.80
"	—	—	16.0	27.5	5.28	"	0	4.64	—
"	—	—	16.2	27.3	5.54	"	0	4.50	—
"	12:05	1.75	16.3	27.1	5.68	"	0	4.44	4.88

SAMPLE INFORMATION

Sample Depth to Water: _____ Sample Turbidity: _____

Odor: _____ Analyses: _____
Sample Vessel/Preservative: _____

PURGING EQUIPMENT

___Bladder Pump ___Bailer (Teflon)
___Centrifugal Pump ___Bailer (PVC)
___Submersible Pump ___Bailer (Stainless Steel)
/ Peristaltic Pump ___Dedicated _____
Other: _____
Pump Depth: _____

SAMPLING EQUIPMENT

___Bladder Pump ___Bailer (Teflon)
___Centrifugal Pump ___Bailer (PVC or disposable)
___Submersible Pump ___Bailer (Stainless Steel)
/ Peristaltic Pump ___Dedicated _____
Other: _____

Well Integrity: _____ Lock #: _____

Remarks: _____

NOTE: Sample after three consecutive roadings are within:
pH - ± 0.1, turbidity and DO = ± 10%, conductivity = ± 3%.

Signature: RN Page ___ of ___

SECOR International Incorporated

WATER SAMPLE FIELD DATA SHEET

Project #: 30005-009 Purged By: NL Well I.D.: MW-8

Client Name: SIL Sampled By: NN Sample I.D.: MW-8

Location: OAK QA Samples: _____

Date Purged 4/13/98 Start (2400hr) 13:35 End (2400hr) 13:42

Date Sampled 4/13/98 Sample Time (2400hr) 13:50

Sample Type: ☑ Groundwater ☐ Other

Casing Diameter 2" / 3" ____ 4" ____ 5" ____ 6" ____ 8" ____ Other ____

Depth to Bottom (feet) = _____ Purge (gal) = 1.75

Depth to Water (feet) = 4.17 Purge Rate (☐ gal or ☐ liter/min) _____

FIELD MEASUREMENTS

Date	Time (2400hr)	Volume (gal)	Temp. (degrees C)	Conductivity (µmhos/cm)	pH (units)	Color (visual)	Turbidity (NTU)	D.O. (mg/l)	Depth (ft)
4/13	13:35	—	16.8	62.5	6.14	BRN	326	1.45	4.17
"	—	—	16.9	61.2	6.29	TAN	350	1.02	—
"	—	—	17.4	60.7	6.41	"	340	0.83	—
"	13:42	1.75	17.5	60.1	6.50	"	341	0.74	4.37

SAMPLE INFORMATION

Sample Depth to Water: _____ Sample Turbidity: _____

Odor: _____ Analyses: _____

Sample Vessel/Preservative: _____

PURGING EQUIPMENT

___Bladder Pump ___Bailer (Teflon)

___Centrifugal Pump ___Bailer (PVC)

___Submersible Pump ___Bailer (Stainless Steel)

/ Peristaltic Pump ___Dedicated _____

Other: _____

Pump Depth: _____

SAMPLING EQUIPMENT

___Bladder Pump ___Bailer (Teflon)

___Centrifugal Pump ___Bailer (PVC or disposable

___Submersible Pump ___Bailer (Stainless Steel)

/ Peristaltic Pump ___Dedicated _____

Other: _____

Well Integrity: _____ Lock #: _____

Remarks: _____

NOTE: Sample after three consecutive roadings are within:

pH - ± 0.1, turbidity and DO = ± 10%, conductivity = ± 3%.

Signature: NN

SECOR International Incorporated
WATER SAMPLE FIELD DATA SHEET

Project #: 70005.009 Purged By: AN Well I.D.: MW-9
Client Name: SL Sampled By: AN Sample I.D.: MW-9
Location: OAK QA Samples: _____

Date Purged 4/13/98 Start (2400hr) 14:30 End (2400hr) 14:35
Date Sampled 4/13/98 Sample Time (2400hr) 14:45
Sample Type: ☑ Groundwater ☐ Other

Casing Diameter 2" ** 3" _____ 4" / 5" _____ 6" _____ 8" _____ Other _____

Depth to Bottom (feet) = _____ Purge (gal) = 2GL
Depth to Water (feet) = 4.30 Purge Rate (☐ gal or ☐ liter/min) _____

FIELD MEASUREMENTS

Date	Time (2400hr)	Volume (gal)	Temp. (degrees C)	Conductivity (μmhos/cm)	pH (units)	Color (visual)	Turbidity (NTU)	D.O. (mg/l)	Depth (ft)
4/13	14:30	—	17.9	70.8	7.82	CLR	50	1.30	4.30
"	—	—	17.8	70.4	7.22	"	42	1.29	—
"	—	—	17.8	70.7	7.45	"	37	1.10	—
"	14:35	2	17.8	70.6	7.61	"	41	1.00	4.90

SAMPLE INFORMATION

Sample Depth to Water: _____ Sample Turbidity: _____

Odor: _____ Analyses: _____
Sample Vessel/Preservative: _____

PURGING EQUIPMENT

___Bladder Pump ___Bailer (Teflon)
___Centrifugal Pump ___Bailer (PVC)
___Submersible Pump ___Bailer (Stainless Steel)
___Peristaltic Pump ___Dedicated _____
Other: _____
Pump Depth: _____

SAMPLING EQUIPMENT

___Bladder Pump ___Bailer (Teflon)
___Centrifugal Pump ___Bailer (PVC or disposabl
___Submersible Pump ___Bailer (Stainless Steel)
___Peristaltic Pump ___Dedicated _____
Other: _____

Well Integrity: _____ Lock #: _____

Remarks: SAND SHEEN IN WATER
NOTE: Sample after three consecutive roadings are within:
pH - ± 0.1, turbidity and DO = ± 10%, conductivity = ± 3%.

Signature: AN Page ___ of ___

GM3

SECOR International Incorporated

WATER SAMPLE FIELD DATA SHEET

Project #: 70005-009 Purged By: RN Well I.D.: MW-12

Client Name: SL Sampled By: MN Sample I.D.: MW-12

Location: OAK QA Samples: _____

Date Purged 4/13/98 Start (2400hr) 6:40 End (2400hr) 7:10

Date Sampled 4/13/98 Sample Time (2400hr) 7:20

Sample Type: ☑ Groundwater ☐ Other

Casing Diameter 2" / 3" _____ 4" _____ 5" _____ 6" _____ 8" _____ Other _____

Depth to Bottom (feet) = _____ Purge (gal) = 1.5 GLS --

Depth to Water (feet) = 3.66 Purge Rate (☐ gal or ☐ liter/min) _____

FIELD MEASUREMENTS

Date	Time (2400hr)	Volume (gal)	Temp. (degrees C)	Conductivity (μmhos/cm)	pH (units)	Color (visual)	Turbidity (NTU)	D.O. (mg/l)	Depth (ft)
4/13	6:40	—	14.6	78	5.92	CLR	225	0.30	3.66
"	—	—	15.3	78	5.62	"	245	0.56	—
"	—	—	16.2	77	5.25	"	237	0.42	—
"	7:10	1.5	16.6	79	5.93	"	236	0.38	3.92

SAMPLE INFORMATION

Sample Depth to Water: _____ Sample Turbidity: _____

Analyses: _____

Odor: _____ Sample Vessel/Preservative: _____

PURGING EQUIPMENT

___Bladder Pump ___Bailer (Teflon)

___Centrifugal Pump ___Bailer (PVC)

___Submersible Pump ___Bailer (Stainless Steel)

___Peristaltic Pump ___Dedicated _____

Other: _____

Pump Depth: _____

SAMPLING EQUIPMENT

___Bladder Pump ___Bailer (Teflon)

___Centrifugal Pump ___Bailer (PVC or disposable)

___Submersible Pump ___Bailer (Stainless Steel)

___Peristaltic Pump ___Dedicated _____

Other: _____

Well Integrity: _____ Lock #: _____

Remarks: _____

NOTE: Sample after three consecutive roadings are within:

pH - ± 0.1, turbidity and DO = ± 10%, conductivity = ± 3%.

Signature: MN

SECOR International Incorporated

WATER SAMPLE FIELD DATA SHEET

Project #: 70005-004 | Purged By: NN | Well I.D.: MW-13

Client Name: SC | Sampled By: NN | Sample I.D.: MW-13

Location: OAK | QA Samples: _____

Date Purged 4/13/98 | Start (2400hr) 15:58 | End (2400hr) 16:30

Date Sampled 4/13/98 | Sample Time (2400hr) 16:40

Sample Type: ☑ Groundwater ☐ Other

Casing Diameter 2" _____ 3" _____ 4" ✓ 5" _____ 6" _____ 8" _____ Other _____

Depth to Bottom (feet) = 69.00 | Purge (gal) = 129.58

Depth to Water (feet) = 4.71 | Purge Rate (☐ gal or ☐ liter/min) _____

FIELD MEASUREMENTS

Date	Time (2400hr)	Volume (gal)	Temp. (degrees C)	Conductivity (µmhos/cm)	pH (units)	Color (visual)	Turbidity (NTU)	D.O. (mg/l)	Depth (ft)
4/13	16:07	44	18.3	56.5	8.32	TAN	13	3.58	–
"	16:16	88	17.7	58.9	8.94	"	11	2.13	–
"	16:25	130	16.3	56.0	8.76	"	3	3.66	–

SAMPLE INFORMATION

Sample Depth to Water: _____ | Sample Turbidity: _____

Odor: _____ | Analyses: _____

Sample Vessel/Preservative: _____

PURGING EQUIPMENT

___Bladder Pump ___Bailer (Teflon)

___Centrifugal Pump ___Bailer (PVC)

✓ Submersible Pump ___Bailer (Stainless Steel)

___Peristaltic Pump ___Dedicated _____

Other: _____

Pump Depth: _____

SAMPLING EQUIPMENT

___Bladder Pump ✓ Bailer (Teflon)

___Centrifugal Pump ___Bailer (PVC or disposable)

___Submersible Pump ___Bailer (Stainless Steel)

___Peristaltic Pump ___Dedicated _____

Other: _____

Well Integrity: _____ | Lock #: _____

Remarks: purging 0.5 gpm

NOTE: Sample after three consecutive roadings are within:

pH - ± 0.1, turbidity and DO = ± 10%, conductivity = ± 3%.

Signature: NN

APPENDIX B

Laboratory Reports - Soil Vapor Extraction System Samples

Entech Analytical Labs, Inc.

CA ELAP# 2224

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

RECEIVED
JUN - 9 1998
By_____

Attn: Greg Hoehn
Secor International
1390 Willow Pass Road, Suite 360
Concord, CA 94520

Date:	6/5/98
Date Received:	5/29/98
Date Analyzed:	5/29/98
Project Name:	Safety Kleen
Project #:	70005-009
Sampled By:	Client

Certified Analytical Report

Vapor Sample Analysis:

Sample ID	Sample Date	Sample Time	Lab #	DF	TPH-Mineral Spirits	Benzene	Toluene	Ethyl Benzene	Xylene
INF	5/28/98	11:00	E10255	1	**21**	**ND**	**ND**	**ND**	**ND**
EFF	5/28/98	10:50	E10256	1	**ND**	**ND**	**0.24**	**ND**	**0.65**

1. DLR=DF x PQL
2. Analysis performed by Entech Analytical Labs, Inc (CA ELAP #2224)

Summary of Methods and Detection Limits:

	TPH-Gas	Benzene	Toluene	Ethylbenzene	Xylenes
EPA Method #	8015M	8020	8020	8020	8020
Units	mg/m^3	mg/m^3	mg/m^3	mg/m^3	mg/m^3
PQL	10 mg/m^3	0.10 mg/m^3	0.10 mg/m^3	0.10 mg/m^3	0.30 mg/m^3

Michael N. Golden, Lab Director

DF=Dilution Factor
DLR=Detection Reporting Limit

PQL=Practical Quantitation Limit
ND=None Detected at or above DLR

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

CA ELAP# 2224

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

June 5, 1998

Greg Hoehn
Secor International
1390 Willow Pass Rd. Suite #360
Concord, CA 94520

Subject	2 Air Samples
Lab #'s:	E10255, E10256
Project Name:	
Project Number:	70005-009
Method(s):	EPA 8010

Dear Greg Hoehn,

Chemical analysis on the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. USEPA protocols for sample storage and preservation were followed.

Entech Analytical Labs, Inc. is certified by the State of California (#2224). If you have any questions regarding procedures or results, please call me at 408-735-1550.

Sincerely,

Michael N. Golden
Lab Director

Entech Analytical Labs, Inc.

CA ELAP# 2224

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

Certified Analytical Report
Purgeable Halocarbons by EPA Method 8010

Client: Secor
Sample Matrix: Air
Sample Date/Time: 5/28/98 11:00
Lab #: E10255
Client ID: INF

Date Reported: 6/5/98
Date Received: 5/29/98
Date Analyzed: 5/29/98
Dilution Factor: 1

Compound	Value	PQL	DLR	Compound	Value	PQL	DLR
Bromodichloromethane	ND	0.014	0.014	trans-1,2-Dichloroethene	ND	0.023	0.023
Bromoform	ND	0.018	0.018	1,2-Dichloropropane	ND	0.02	0.02
Bromomethane	ND	0.047	0.047	cis-1,3-Dichloropropene	ND	0.02	0.02
Carbon Tetrachloride	ND	0.015	0.015	trans-1,3-Dichloropropene	ND	0.02	0.02
Chlorobenzene	ND	0.02	0.02	Methylene Chloride	ND	0.016	0.016
Chloroethane	ND	0.069	0.069	1,1,2,2-Tetrachloroethane	ND	0.013	0.013
Chloroform	ND	0.038	0.038	Tetrachloroethene	1.4	0.014	0.014
Chloromethane	ND	0.044	0.044	1,1,1-Trichloroethane	1.5	0.017	0.017
Dibromochloromethane	ND	0.022	0.022	1,1,2-Trichloroethane	ND	0.017	0.017
Dichlorodifluoromethane	ND	0.019	0.019	Trichloroethene	ND	0.017	0.017
1,2- Dichlorobenzene	ND	0.015	0.015	Trichlorofluoromethane	ND	0.016	0.016
1,3- Dichlorobenzene	ND	0.015	0.015	Vinyl Chloride	ND	0.036	0.036
1,4- Dichlorobenzene	ND	0.015	0.015				
1,1-Dichloroethane	ND	0.023	0.023				
1,2-Dichloroethane	ND	0.023	0.023				
1,1-Dichloroethene	ND	0.023	0.023				
cis-1,2-Dichloroethene	ND	0.023	0.023				

Surrogate	Recovery (%)
2-Bromo-1-Chloropropane	129

1. Results are reported in ppmV
2. DLR= DF x PQL
3. Analysis performed by Entech Analytical Labs, Inc. (CAELAP #2224)

Michael N. Golden, Lab Director

ND: None Detected at or above DLR
DLR: Detection Reporting Limit

PQL: Practical Quantitation Limit
DF: Dilution Factor

Entech Analytical Labs, Inc.

CA ELAP# 2224

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

Certified Analytical Report
Purgeable Halocarbons by EPA Method 8010

Client: Secor
Sample Matrix: Air
Sample Date/Time: 5/28/98 10:50
Lab #: E10256
Client ID: EFF

Date Reported: 6/5/98
Date Received: 5/29/98
Date Analyzed: 5/29/98
Dilution Factor: 1

Compound	Value	PQL	DLR	Compound	Value	PQL	DLR
Bromodichloromethane	ND	0.014	0.014	trans-1,2-Dichloroethene	ND	0.023	0.023
Bromoform	ND	0.018	0.018	1,2-Dichloropropane	ND	0.02	0.02
Bromomethane	ND	0.047	0.047	cis-1,3-Dichloropropene	ND	0.02	0.02
Carbon Tetrachloride	ND	0.015	0.015	trans-1,3-Dichloropropene	ND	0.02	0.02
Chlorobenzene	ND	0.02	0.02	Methylene Chloride	ND	0.016	0.016
Chloroethane	ND	0.069	0.069	1,1,2,2-Tetrachloroethane	ND	0.013	0.013
Chloroform	ND	0.038	0.038	Tetrachloroethene	ND	0.014	0.014
Chloromethane	ND	0.044	0.044	1,1,1-Trichloroethane	ND	0.017	0.017
Dibromochloromethane	ND	0.022	0.022	1,1,2-Trichloroethane	ND	0.017	0.017
Dichlorodifluoromethane	ND	0.019	0.019	Trichloroethene	ND	0.017	0.017
1,2- Dichlorobenzene	ND	0.015	0.015	Trichlorofluoromethane	ND	0.016	0.016
1,3- Dichlorobenzene	ND	0.015	0.015	Vinyl Chloride	ND	0.036	0.036
1,4- Dichlorobenzene	ND	0.015	0.015				
1,1-Dichloroethane	ND	0.023	0.023				
1,2-Dichloroethane	ND	0.023	0.023				
1,1-Dichloroethene	ND	0.023	0.023				
cis-1,2-Dichloroethene	ND	0.023	0.023				

Surrogate	Recovery (%)
2-Bromo-1-Chloropropane	130

1. Results are reported in ppmV
2. DLR= DF x PQL
3. Analysis performed by Entech Analytical Labs, Inc. (CAELAP #2224)

Michael N. Golden, Lab Director

ND: None Detected at or above DLR
DLR: Detection Reporting Limit

PQL: Practical Quantitation Limit
DF: Dilution Factor

Entech Analytical Labs, Inc.

525 Del Rey Avenue, Suite E
Sunnyvale, CA 94086

QUALITY CONTROL RESULTS SUMMARY

METHOD: Gas Chromatography

QC Batch #: GBG2980529
Matrix: Water
Units: ug/L

Date Analyzed: 05/29/98
Quality Control Sample: E10305

PARAMETER	Method #	MB ug/L	SA ug/L	SR ug/L	SP ug/L	SP % R	SPD ug/L	SPD %R	RPD	QC LIMITS RPD	QC LIMITS %R
Benzene	8020	<0.50	80	ND	82	**103**	79	**99**	3.7	25	76-112
Toluene	8020	<0.50	80	ND	83	**104**	81	**101**	2.4	25	77-111
Ethyl Benzene	8020	<0.50	80	ND	80	**100**	82	**103**	2.5	25	77-112
Xylenes	8020	<0.50	240	ND	243	**101**	240	**100**	1.2	25	79-111
Gasoline	8015	<50.0	1000	ND	920	**92**	910	**91**	1.1	25	58-127

Note: LCS and LCSD results reported for the following Parameters:
All

Acceptable LCS and LCSD results are reported when matrix interferences cause MS and MSD results to fall outside established QC limits.

Definition of Terms:

na: Not Analyzed in QC batch
MB: Method Blank
SA: Spike Added
SR: Sample Result
RPD(%): Duplicate Analysis - Relative Percent Difference
SP: Spike Result
SP (%R): Spike % Recovery
SPD: Spike Duplicate Result
SPD (%R): Spike % Recovery
NC: Not Calculated

Entech Analytical Labs, Inc.

525 Del Rey Avenue, Suite E
Sunnyvale, CA 94086

QUALITY CONTROL RESULTS SUMMARY

METHOD: Gas Chromatography - Volatile Organics

QC Batch #: VOC2W980529
Matrix: Water
Units: µg/L

Date Analyzed: 05/29/98
Quality Control Sample: E10258

PARAMETER	Method #	SA µg/L	SR µg/L	SP µg/L	SP % R	SPD µg/L	SPD %R	RPD	QC LIMITS RPD	QC LIMITS %R
Benzene	602	40	ND	39	98	38	96	2.1	25	88-109
Chlorobenzene	601	40	ND	39	97	42	104	7.0	25	76-121
1,1-Dichloroethane	601	40	ND	40	99	40	99	0.3	25	73-124
Toluene	602	40	ND	39	98	38	96	2.1	25	87-110
Trichloroethene	601	40	ND	39	98	40	99	0.8	25	69-131

Note: LCS and LCSD results reported for the following Parameters:
None

Acceptable LCS and LCSD results are reported when matrix interferences cause MS and MSD results to fall outside established QC limits.

Definition of Terms:

na: Not Analyzed in QC batch
SA: Spike Added
SR: Sample Result
RPD(%): Duplicate Analysis - Relative Percent Difference
SP: Spike Result
SP (%R): Spike % Recovery
SPD: Spike Duplicate Result
SPD (%R): Spike Duplicate % Recovery
NC: Not Calculated

Chain-of Custody Number:

SECOR Chain-of Custody Record

Field Office: SECOR
Address: 1390 Willow Pass Road 360
Concord CA

☐ Additional documents are attached, and are a part of this Record.

Job Name: SAFety Klean
Location: 400 MARKet Street
Oakland CA

Project # 70005-009 Task #
Project Manager Greg Hoehn
Laboratory Entech
Turnaround Time STandard

Sampler's Name GARY CLIFT
Sampler's Signature

Analysis Request

Sample ID	Date	Time	Matrix	HCID	TPHg/BTEX/WTPH-G 8015 (modified)/8020	TPHd/WTPH-D 8015 (modified)	TPH 418.1/WTPH 418.1	Aromatic Volatiles 602/8020	Volatile Organics 624/8240 (GC/MS)	Halogenated Volatiles 601/8010	Semi-volatile Organics 625/8270 (GC/MS)	Pesticides/PCBs 608/8080	Total Lead 7421	Priority Pollutant Metals (13)	TCLP Metals	TPh AS MS	BTEX	Comments/ Instructions	Number of Containers
INF 81025S	5/28	11:00	AIR							X						X	X		
EFF 81025S	5/28	10:50	AIR							X						X	X		

Special Instructions/Comments:

Relinquished by: SECOR
Sign
Print GARY R CLIFT
Company SECOR
Time 8:00 Date 5/29/98

Received by:
Sign
Print B. Goff
Company Entech
Time 8:41 Date 5/29

Relinquished by:
Sign
Print
Company
Time Date

Received by:
Sign
Print
Company
Time Date

Sample Receipt

Total no. of containers:	2
Chain of custody seals:	
Rec'd. in good condition/cold:	
Conforms to record:	

Client: SECOR
Client Contact: Greg Hoehn
Client Phone: (510) 686-9780

SECOR CUSTREC Rev. 1/95

Date: 5, 29, 98 Page 1 of 1

Entech Analytical Labs, Inc.

CA ELAP# 2224

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

Attn: Greg Hoehn
Secor International
1390 Willow Pass Road
Concord, CA 94520

Date:	6/4/98
Date Received:	4/29/98
Date Analyzed:	4/30/98
Project Name:	Safety Kleen
Project #:	70005-009
Sampled By:	Client

Certified Analytical Report

Vapor Sample Analysis:

Sample ID	Sample Date	Sample Time	Lab #	DF	TPH-Mineral Spirits	Benzene	Toluene	Ethyl Benzene	Xylene
Eff	4/28/98	9:00	E8005	1	10	ND	ND	ND	ND
Inf	4/28/98	10:00	E8006	1	70	ND	0.50	0.29	2.4

1. DLR=DF x PQL
2. Analysis performed by Entech Analytical Labs, Inc (CA ELAP #2224)

Summary of Methods and Detection Limits:

	TPH-Mineral Spirits	Benzene	Toluene	Ethylbenzene	Xylenes
EPA Method #	8015M	8020	8020	8020	8020
Units	mg/m^3	mg/m^3	mg/m^3	mg/m^3	mg/m^3
PQL	10 mg/m^3	0.10 mg/m^3	0.10 mg/m^3	0.10 mg/m^3	0.30 mg/m^3

Michael N. Golden, Lab Director

DF=Dilution Factor
DLR=Detection Reporting Limit

PQL=Practical Quantitation Limit
ND=None Detected at or above DLR

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

525 Del Rey Avenue, Suite E
Sunnyvale, CA 94086

QUALITY CONTROL RESULTS SUMMARY

METHOD: Gas Chromatography

QC Batch #: GBG2980430
Matrix: Water
Units: ug/L

Date Analyzed: 04/30/98
Quality Control Sample: E8217

PARAMETER	Method #	MB ug/L	SA ug/L	SR ug/L	SP ug/L	SP % R	SPD ug/L	SPD %R	RPD	QC LIMITS RPD	QC LIMITS %R
Benzene	8020	<0.50	40	ND	40	**101**	41	**104**	2.6	25	76-112
Toluene	8020	<0.50	40	1.5	40	**95**	41	**99**	4.0	25	77-111
Ethyl Benzene	8020	<0.50	40	ND	40	**100**	41	**103**	3.4	25	77-112
Xylenes	8020	<0.50	120	0.98	118	**97**	122	**101**	3.6	25	79-111
Gasoline	8015	<50.0	1000	ND	940	**94**	930	**93**	1.1	25	58-127

Note: LCS and LCSD results reported for the following Parameters:
None

Acceptable LCS and LCSD results are reported when matrix interferences cause MS and MSD results to fall outside established QC limits.

Definition of Terms:

na: Not Analyzed in QC batch
MB: Method Blank
SA: Spike Added
SR: Sample Result
RPD(%): Duplicate Analysis - Relative Percent Difference
SP: Spike Result
SP (%R): Spike % Recovery
SPD: Spike Duplicate Result
SPD (%R): Spike % Recovery
NC: Not Calculated

E+8010 - Per G. Hoehn CANCELLED [illegible] is expired prior to analysis

Chain-of-Custody Number:

SECOR Chain-of-Custody Record

☐ Additional documents are attached, and are a part of this Record.

Field Office:

Address: 1390 Willow Pass Rd, Concord, CA 94520

Job Name: SK

Location: 400 Market St., Oakland, CA

Project # 70005-009 Task #

Project Manager: Greg Hoehn

Laboratory

Turnaround Time: Standard

Sampler's Name: R. Mayer

Sampler's Signature: [signature]

Analysis Request

Sample ID	Date	Time	Matrix	HCID	TPHg/BTEX/WTPH-G 8015 (modified)/8020	TPHd/WTPH-D 8015 (modified)	TPH 418.1/WTPH 418.1	Aromatic Volatiles 602/8020	Volatile Organics 624/8240 (GC/MS)	Halogenated Volatiles 601/8010	Semi-volatile Organics 625/8270 (GC/MS)	Pesticides/PCBs 608/8080	Total Lead 7421	Priority Pollutant Metals (13)	TCLP Metals	TPH as Mineral Spirits	BTEX	Comments/ Instructions	Number of Containers
Eff E8005	4/28/98	9:00	Air							X						X	X		1
INF E8006	"	10:00	"							X						X	X		1

Special Instructions/Comments:

Relinquished by:
Sign [signature]
Print R. Mayer
Company Secor
Time 8:40 Date 4/28/98

Received by: [signature]
Sign
Print Brenda Goff
Company Entech
Time 8:40 Date 4/28/98

Relinquished by:
Sign
Print
Company
Time Date

Received by:
Sign
Print
Company
Time Date

Sample Receipt
Total no. of containers:
Chain of custody seals:
Rec'd. in good condition/cold:
Conforms to record:

Client: Secor
Client Contact: Greg Hoehn
Client Phone: (925) 686-9780

SECOR CUSTREC Rev. 1/95

Date: 4/28/98 Page 1 of 1

Entech Analytical Labs, Inc.

CA ELAP# 2224

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

March 26, 1998

Greg Hoehn
Secor
1390 Willow Pass Road, Suite 360
Concord, CA 94520

Subject	2 Vapor Samples
Lab #'s:	E5497, E5498
Project Name:	Safety Kleen
Project Number:	70005-009
Method(s):	EPA 8010
	EPA 8015M
	EPA 8020

Dear Greg Hoehn,

Chemical analysis on the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. USEPA protocols for sample storage and preservation were followed.

Entech Analytical Labs, Inc. is certified by the State of California (#2224). If you have any questions regarding procedures or results, please call me at 408-735-1550.

Sincerely,

Michael N. Golden
Lab Director

Entech Analytical Labs, Inc.

CA ELAP# 2224

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

Attn: Greg Hoehn
Secor
1390 Willow Pass Road, Suite 360
Concord, CA 94520

Date:	3/26/98
Date Received:	3/19/98
Date Analyzed:	3/19/98
Project Name:	Safety Kleen
Project #:	70005-009
Sampled By:	Client

Certified Analytical Report

Vapor Sample Analysis:

Sample ID	Sample Date	Sample Time	Lab #	DF	TPH-Mineral Spirits	Benzene	Toluene	Ethyl Benzene	Xylene
INF	3/17/98	15:10	E5497	1	78	ND	0.12	ND	0.68
EFF	3/17/98	15:00	E5498	1	12	ND	ND	ND	ND

1. DLR=DF x PQL
2. Analysis performed by Entech Analytical Labs, Inc (CA ELAP #2224)

Summary of Methods and Detection Limits:

	TPH-Mineral Spirits	Benzene	Toluene	Ethylbenzene	Xylenes
EPA Method #	8015M	8020	8020	8020	8020
Units	mg/m^3	mg/m^3	mg/m^3	mg/m^3	mg/m^3
PQL	10 mg/m^3	0.10 mg/m^3	0.10 mg/m^3	0.10 mg/m^3	0.30 mg/m^3

Michael N. Golden, Lab Director

DF=Dilution Factor
DLR=Detection Reporting Limit

PQL=Practical Quantitation Limit
ND=None Detected at or above DLR

Entech Analytical Labs, Inc.

CA ELAP# 2224

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

Certified Analytical Report: EPA Method #8010

Client:	Secor
Sample Matrix:	Vapor
Lab #:	E5497
Sample Date/Time:	3/17/98, 15:10
Sample ID:	INF

Date:	3/26/98
Date Received:	3/19/98
Date Analyzed	3/19/98
Dilution Factor	1

Compound	*Concentration Found*	*PQL*	*Compound*	*Concentration Found*	*PQL*
Bromodichloromethane	**ND**	0.1 mg/m^3	**cis-1,2-Dichloroethene**	**ND**	0.1 mg/m^3
Bromoform	**ND**	0.2 mg/m^3	**trans-1,2-Dichloroethene**	**ND**	0.1 mg/m^3
Bromomethane	**ND**	0.2 mg/m^3	**1,2-Dichloropropane**	**ND**	0.1 mg/m^3
Carbon Tetrachloride	**ND**	0.1 mg/m^3	**cis-1,3-Dichloropropene**	**ND**	0.1 mg/m^3
Chlorobenzene	**ND**	0.1 mg/m^3	**trans-1,3-Dichloropropene**	**ND**	0.1 mg/m^3
Chloroethane	**ND**	0.2 mg/m^3	**Methylene Chloride**	**ND**	0.6 mg/m^3
Chloroform	**ND**	0.2 mg/m^3	**1,1,2,2-Tetrachloroethane**	**ND**	0.1 mg/m^3
Chloromethane	**ND**	0.1 mg/m^3	**Tetrachloroethene**	**0.5**	0.1 mg/m^3
Dibromochloromethane	**ND**	0.2 mg/m^3	**1,1,1-Trichloroethane**	**2.1**	0.1 mg/m^3
Dichlorodifluoromethane	**ND**	0.1 mg/m^3	**1,1,2-Trichloroethane**	**ND**	0.1 mg/m^3
1,2-Dichlorobenzene	**ND**	0.1 mg/m^3	**Trichloroethene**	**ND**	0.1 mg/m^3
1,3-Dichlorobenzene	**ND**	0.1 mg/m^3	**Trichlorofluoromethane**	**ND**	0.1 mg/m^3
1,4-Dichlorobenzene	**ND**	0.1 mg/m^3	**Vinyl Chloride**	**ND**	0.1 mg/m^3
1,1-Dichloroethane	**ND**	0.1 mg/m^3			
1,2-Dichloroethane	**ND**	0.1 mg/m^3			
1,1-Dichloroethene	**ND**	0.1 mg/m^3			

Surrogate	**Recovery (%)**
2-Bromo-1-Chloropropane	105

1. DLR=DF x PQL
2. Analysis performed by Entech Analytical Labs, Inc. (CAELAP #2224)
3. This worksheet is an integral part of the Certified Analytical Report for Lab #E5497 and should not be reproduced except in full without the written consent of Entech Analytical Labs, Inc.

Michael N. Golden, Lab Director

DF=Dilution Factor
DLR=Detection Reporting Limit

PQL=Practical Quantitation Limit
ND=None Detected at or above DLR

Entech Analytical Labs, Inc.

CA ELAP# 2224

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

Certified Analytical Report: EPA Method #8010

Client:	Secor
Sample Matrix:	Vapor
Lab #:	E5498
Sample Date/Time:	3/17/98, 15:00
Sample ID:	EFF

Date:	3/26/98
Date Received:	3/19/98
Date Analyzed	3/19/98
Dilution Factor	1

Compound	*Concentration Found*	*PQL*	*Compound*	*Concentration Found*	*PQL*
Bromodichloromethane	**ND**	0.1 mg/m^3	**cis-1,2-Dichloroethene**	**ND**	0.1 mg/m^3
Bromoform	**ND**	0.2 mg/m^3	**trans-1,2-Dichloroethene**	**ND**	0.1 mg/m^3
Bromomethane	**ND**	0.2 mg/m^3	**1,2-Dichloropropane**	**ND**	0.1 mg/m^3
Carbon Tetrachloride	**ND**	0.1 mg/m^3	**cis-1,3-Dichloropropene**	**ND**	0.1 mg/m^3
Chlorobenzene	**ND**	0.1 mg/m^3	**trans-1,3-Dichloropropene**	**ND**	0.1 mg/m^3
Chloroethane	**ND**	0.2 mg/m^3	**Methylene Chloride**	**ND**	0.6 mg/m^3
Chloroform	**ND**	0.2 mg/m^3	**1,1,2,2-Tetrachloroethane**	**ND**	0.1 mg/m^3
Chloromethane	**ND**	0.1 mg/m^3	**Tetrachloroethene**	**ND**	0.1 mg/m^3
Dibromochloromethane	**ND**	0.2 mg/m^3	**1,1,1-Trichloroethane**	**ND**	0.1 mg/m^3
Dichlorodifluoromethane	**ND**	0.1 mg/m^3	**1,1,2-Trichloroethane**	**ND**	0.1 mg/m^3
1,2-Dichlorobenzene	**ND**	0.1 mg/m^3	**Trichloroethene**	**ND**	0.1 mg/m^3
1,3-Dichlorobenzene	**ND**	0.1 mg/m^3	**Trichlorofluoromethane**	**ND**	0.1 mg/m^3
1,4-Dichlorobenzene	**ND**	0.1 mg/m^3	**Vinyl Chloride**	**ND**	0.1 mg/m^3
1,1-Dichloroethane	**ND**	0.1 mg/m^3			
1,2-Dichloroethane	**ND**	0.1 mg/m^3			
1,1-Dichloroethene	**ND**	0.1 mg/m^3			

Surrogate	**Recovery (%)**
2-Bromo-1-Chloropropane	105

1. DLR=DF x PQL
2. Analysis performed by Entech Analytical Labs, Inc. (CAELAP #2224)
3. This worksheet is an integral part of the Certified Analytical Report for Lab #E5498 and should not be reproduced except in full without the written consent of Entech Analytical Labs, Inc.

Michael N. Golden, Lab Director

DF=Dilution Factor
DLR=Detection Reporting Limit

PQL=Practical Quantitation Limit
ND=None Detected at or above DLR

Entech Analytical Labs, Inc.

525 Del Rey Avenue, Suite E
Sunnyvale, CA 94086

QUALITY CONTROL RESULTS SUMMARY

METHOD: Gas Chromatography

QC Batch #: GBG2980319
Matrix: Water
Units: ug/L

Date Analyzed: 03/19/98
Quality Control Sample: E5420

PARAMETER	Method #	MB ug/L	SA ug/L	SR ug/L	SP ug/L	SP % R	SPD ug/L	SPD %R	RPD	QC LIMITS (ADVISORY) RPD	QC LIMITS (ADVISORY) %R
Benzene	8020	<0.50	40	ND	35	**88**	35	**87**	1.3	25	50-150
Toluene	8020	<0.50	40	ND	35	**88**	36	**90**	1.8	25	50-150
Ethyl Benzene	8020	<0.50	40	ND	36	**89**	35	**88**	1.2	25	50-150
Xylenes	8020	<0.50	120	ND	110	**91**	110	**91**	0.1	25	50-150
Gasoline	8015	<50.0	500	ND	461	**92**	478	**96**	3.6	25	50-150

Note: LCS and LCSD results reported for the following Parameters:
None

Acceptable LCS and LCSD results are reported when matrix interferences cause MS and MSD results to fall outside established QC limits.

Definition of Terms:

na: Not Analyzed in QC batch
MB: Method Blank
SA: Spike Added
SR: Sample Result
RPD(%): Duplicate Analysis - Relative Percent Difference
SP: Spike Result
SP (%R): Spike % Recovery
SPD: Spike Duplicate Result
SPD (%R): Spike % Recovery
NC: Not Calculated

Entech Analytical Labs, Inc.

525 Del Rey Avenue, Suite E
Sunnyvale, CA 94086

QUALITY CONTROL RESULTS SUMMARY

METHOD: Gas Chromatography - Volatile Organics

QC Batch #: VOCW980319
Matrix: Water
Units: µg/L

Date Analyzed: 03/19/98
Quality Control Sample: E5343

PARAMETER	Method #	SA µg/L	SR µg/L	SP µg/L	SP % R	SPD µg/L	SPD %R	RPD	QC LIMITS (ADVISORY) RPD	QC LIMITS (ADVISORY) %R
Benzene	602	40	ND	38	**96**	39	**97**	0.8	25	50-150
Chlorobenzene	601	40	ND	36	**91**	36	**90**	1.4	25	50-150
1,1-Dichloroethane	601	40	ND	37	**91**	37	**93**	1.4	25	50-150
Toluene	602	40	ND	38	**96**	38	**96**	0.0	25	50-150
Trichloroethene	601	40	ND	38	**94**	36	**91**	3.5	25	50-150

Definition of Terms:

na: Not Analyzed in QC batch
SA: Spike Added
SR: Sample Result
RPD(%): Duplicate Analysis - Relative Percent Difference
SP: Spike Result
SP (%R): Spike % Recovery
SPD: Spike Duplicate Result
SPD (%R): Spike Duplicate % Recovery
NC: Not Calculated

Chain-of Custody Number:

SECOR Chain-of Custody Record

Field Office: SECOR

Address: 1390 Willow Pass Road 360
Concord CA

☐ Additional documents are attached, and are a part of this Record.

Job Name: Safety Kleen

Location: 400 Market St
Oakland CA

Project # 70005-009 Task #

Project Manager Greg Hoehn

Laboratory Entech

Turnaround Time Standard

Sampler's Name GARY CLIFT

Sampler's Signature

Analysis Request

Sample ID	Date	Time	Matrix	HCID	TPHg/BTEX/WTPH-G 8015 (modified)/8020	TPHd/WTPH-D 8015 (modified)	TPH 418.1/WTPH 418.1	Aromatic Volatiles 602/8020	Volatile Organics 624/8240 (GC/MS)	Halogenated Volatiles 601/8010	Semi-volatile Organics 625/8270 (GC/MS)	Pesticides/PCBs 608/8080	Total Lead 7421	Priority Pollutant Metals (13)	TCLP Metals	TPH As MS BTEX		Comments/ Instructions	Number of Containers
INF	3/17	15:10	AIR							X						X		E5497	1
EFF	3/17	15:00	AIR							X						X		E5498	1

Special Instructions/Comments:

Relinquished by: SECOR
Sign
Print GARY CLIFT
Company SECOR
Time 8:00 Date 3/18/98

Received by: Entech
Sign
Print Brenda Goff
Company Entech
Time 8:00 Date 3/19/98

Sample Receipt
Total no. of containers: 2
Chain of custody seals:
Rec'd. in good condition/cold:
Conforms to record:

Relinquished by:
Sign
Print
Company
Time Date

Received by:
Sign
Print
Company
Time Date

Client: SECOR
Client Contact: Greg Hoehn
Client Phone: (510) 686-9780

SECOR CUSTREC Rev. 1/95

Date: 3/18/98 Page 1 of 1

APPENDIX C

Laboratory Reports - Groundwater Samples

safety-kleen ®
Allan A. Manteuffel Technical Center

April 27, 1998

Mr. Greg Hoehn
Secor International
1390 Willow Pass Road
Suite 360
Concord, CA 94520

Re: SK Lab Project #98-109
Project ID Name: Oakland, CA

Dear Greg:

Enclosed please find the analytical results for the sample received by SK Environmental Laboratory on 4/15/98.

A formal Quality Control/Quality Assurance program is maintained by Safety-Kleen, which is designed to meet or exceed the EPA requirements. This information is available upon request.

This report may not be reproduced except in its entirety.

If you have any questions concerning this analysis, or if we can be of further assistance, please contact me at 773-825-7351.

Sincerely,

Richard H. Cook
Environmental Section Leader

P.O. Box 92050
Elk Grove Village, IL
60009-2050

12555 W. Old Higgins Road
Elk Grove Village, IL 60007
Telephone: 773/694-2700
Fax: 773/825-7850

Project ID #: 70005-009
Project ID Name: Oakland, CA
SK Lab Project #: 98-109
Date Reported: 4/24/98

ANALYTICAL RESULTS

Total Petroleum Hydrocarbons as Mineral Spirits in Water

Modified EPA Method 8015

Reporting Limit: 50.0

Work Order #	Collector's Sample #	Date Sampled	Date Analyzed	Concentration ug/L
01 *	MW-5	4/13/98	4/22/98	<50
02 *	MW-4	4/13/98	4/22/98	<50
03 *	MW-1	4/13/98	4/22/98	<50
04 *	MW-2	4/13/98	4/22/98	<50
05 *	MW-3	4/13/98	4/22/98	<50
06 *	MW-12	4/13/98	4/22/98	<50
07 *	MW-6	4/13/98	4/22/98	<50
08 *	MW-8	4/13/98	4/22/98	<50
09 *	MW-9	4/13/98	4/22/98	**927**
10 *	MW-13	4/13/98	4/22/98	<50

* Analysis performed by Suburban Laboratories, Hillside, IL.

Analytical Review / Date: [signature] 4/27/98

Project ID #: 70005-009
Project ID Name: Oakland, CA
SK Lab Project #: 98-109
Date Reported: 4/24/98

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8010

Work Order #		01	02	03	04	05
Collector's Sample #		MW-5	MW-4	MW-1	MW-2	MW-3
Date Sampled		4/13/98	4/13/98	4/13/98	4/13/98	4/13/98
Date Analyzed		4/17/98	4/17/98	4/17/98	4/17/98	4/17/98
Dilution Factor		1	1	1	1	1
Analyte	Report Limit µg/L	Concentration µg/L				
Benzyl Chloride	1	<1	<1	<1	<1	<1
Bromobenzene	1	<1	<1	<1	<1	<1
Bromodichloromethane	1	<1	<1	<1	<1	<1
Bromoform	1	<1	<1	<1	<1	<1
Bromomethane	1	<1	<1	<1	<1	<1
Carbon Tetrachloride	1	<1	<1	<1	<1	<1
Chlorobenzene	1	<1	<1	<1	<1	<1
Chloroethane	1	<1	<1	<1	<1	<1
Chloroform	1	<1	<1	<1	<1	<1
Chloromethane	1	<1	<1	<1	<1	<1
Chlorotoluene	1	<1	<1	<1	<1	<1
Dibromochloromethane	1	<1	<1	<1	<1	<1
Dibromomethane	1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	1	<1	<1	<1	<1	<1
1,1-Dichloroethane	1	<1	<1	<1	<1	<1
1,2-Dichloroethane	1	<1	<1	<1	<1	<1
1,1-Dichloroethylene	1	<1	<1	<1	<1	<1

Project ID #: 70005-009
Project ID Name: Oakland, CA
SK Lab Project #: 98-109
Date Reported: 4/24/98

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8010

Work Order #		01	02	03	04	05
Collector's Sample #		MW-5	MW-4	MW-1	MW-2	MW-3
Date Sampled		4/13/98	4/13/98	4/13/98	4/13/98	4/13/98
Date Analyzed		4/17/98	4/17/98	4/17/98	4/17/98	4/17/98
Dilution Factor		1	1	1	1	1
Analyte	Report Limit ug/L	Concentration µg/L				
cis-1,2-Dichloroethylene	1	<1	**2.0**	<1	<1	<1
trans-1,2-Dichloroethylene	1	<1	<1	<1	<1	<1
Dichloromethane	1	<1	<1	<1	<1	<1
1,2-Dichloropropane	1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropylene	1	<1	<1	<1	<1	<1
1,1,1,2-Tetrachloroethane	1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	1	<1	<1	<1	<1	<1
Tetrachloroethylene	1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	1	<1	<1	<1	<1	<1
Trichloroethylene	1	<1	**30.9 ****	<1	<1	<1
Trichlorofluoromethane	1	<1	<1	<1	<1	<1
Trichloropropane	1	<1	<1	<1	<1	<1
Vinyl Chloride	1	<1	<1	<1	<1	<1

** Diluted so result is within the calibration curve.

Analytical Review / Date: 4/21/98

Project ID #: 70005-009
Project ID Name: Oakland, CA
SK Lab Project #: 98-109
Date Reported: 4/24/98

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8020

Work Order #		01	02	03	04	05
Collector's Sample #		MW-5	MW-4	MW-1	MW-2	MW-3
Date Sampled		4/13/98	4/13/98	4/13/98	4/13/98	4/13/98
Date Analyzed		4/17/98	4/17/98	4/17/98	4/17/98	4/17/98
Dilution Factor		1	1	1	1	1
Analyte	Report Limit ug/L	Concentration µg/L				
Benzene	1	<1	<1	<1	<1	<1
Toluene	1	<1	<1	<1	<1	<1
Ethylbenzene	1	<1	<1	<1	<1	<1
Xylenes (Total)	1	<1	<1	<1	<1	<1

Analytical Review / Date: [signature] 4/27/98

Project ID #: 70005-009
Project ID Name: Oakland, CA
SK Lab Project #: 98-109
Date Reported: 4/24/98

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8010

Work Order #		06	07	08	09	10
Collector's Sample #		MW-12	MW-6	MW-8	MW-9	MW-13
Date Sampled		4/13/98	4/13/98	4/13/98	4/13/98	4/13/98
Date Analyzed		4/21/98	4/21/98	4/21/98	4/21/98	4/21/98
Dilution Factor		1	1	1	1	1
Analyte	Report Limit µg/L	Concentration µg/L				
Benzyl Chloride	1	<1	<1	<1	<1	<1
Bromobenzene	1	<1	<1	<1	<1	<1
Bromodichloromethane	1	<1	<1	<1	<1	<1
Bromoform	1	<1	<1	<1	<1	<1
Bromomethane	1	<1	<1	<1	<1	<1
Carbon Tetrachloride	1	<1	<1	<1	<1	<1
Chlorobenzene	1	<1	<1	<1	**30.0 ****	<1
Chloroethane	1	<1	<1	<1	**1.4**	<1
Chloroform	1	<1	<1	<1	<1	<1
Chloromethane	1	<1	<1	<1	<1	<1
Chlorotoluene	1	<1	<1	<1	**10.0**	<1
Dibromochloromethane	1	<1	<1	<1	<1	<1
Dibromomethane	1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	1	<1	<1	<1	**68.2 ****	<1
1,3-Dichlorobenzene	1	<1	<1	<1	**2.6**	<1
1,4-Dichlorobenzene	1	<1	<1	<1	**14.6**	<1
Dichlorodifluoromethane	1	**1.6**	<1	<1	<1	<1
1,1-Dichloroethane	1	**3.3**	<1	<1	**36.8 ****	<1
1,2-Dichloroethane	1	**1.5**	<1	<1	**4.5**	<1
1,1-Dichloroethylene	1	<1	<1	<1	<1	<1

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8010

Work Order #		06	07	08	09	10
Collector's Sample #		MW-12	MW-6	MW-8	MW-9	MW-13
Date Sampled		4/13/98	4/13/98	4/13/98	4/13/98	4/13/98
Date Analyzed		4/21/98	4/21/98	4/21/98	4/21/98	4/21/98
Dilution Factor		1	1	1	1	1
Analyte	Report Limit ug/L	Concentration µg/L				
cis-1,2-Dichloroethylene	1	<1	<1	<1	**51.4 ****	<1
trans-1,2-Dichloroethylene	1	<1	<1	<1	<1	<1
Dichloromethane	1	<1	<1	<1	<1	<1
1,2-Dichloropropane	1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropylene	1	<1	<1	<1	<1	<1
1,1,1,2-Tetrachloroethane	1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	1	<1	<1	<1	<1	<1
Tetrachloroethylene	1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	1	<1	<1	<1	**3.3**	<1
1,1,2-Trichloroethane	1	<1	<1	<1	<1	<1
Trichloroethylene	1	**12.6**	<1	**8.0**	**36.0 ****	<1
Trichlorofluoromethane	1	<1	<1	<1	<1	<1
Trichloropropane	1	<1	<1	<1	**1.8**	<1
Vinyl Chloride	1	<1	<1	<1	**273 ****	<1

** Diluted so result is within the calibration curve.

Analytical Review / Date: 4/21/98

Project ID #: 70005-009
Project ID Name: Oakland, CA
SK Lab Project #: 98-109
Date Reported: 4/24/98

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8020

Work Order #	06	07	08	09	10
Collector's Sample #	MW-12	MW-6	MW-8	MW-9	MW-13
Date Sampled	4/13/98	4/13/98	4/13/98	4/13/98	4/13/98
Date Analyzed	4/21/98	4/21/98	4/21/98	4/21/98	4/21/98
Dilution Factor	1	1	1	1	1
Analyte	Report Limit ug/L	Concentration µg/L				
Benzene	1	<1	<1	<1	**15.5**	<1
Toluene	1	<1	<1	<1	**10.3**	<1
Ethylbenzene	1	<1	<1	<1	**12.4**	<1
Xylenes (Total)	1	<1	<1	<1	**64.9 ****	<1

** Diluted so result is within the calibration curve.

Analytical Review / Date: [signature] 4/27/98

Project ID #: 70005-009
Project ID Name: Oakland, CA
SK Lab Project #: 98-109
Date Reported: 4/24/98

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8010

Work Order #	11
Collector's Sample #	Trip Blank
Date Sampled	NA
Date Analyzed	4/20/98
Dilution Factor	1

Analyte	Report Limit ug/L	Concentration ug/L
Benzyl Chloride	1	<1
Bromobenzene	1	<1
Bromodichloromethane	1	<1
Bromoform	1	<1
Bromomethane	1	<1
Carbon Tetrachloride	1	<1
Chlorobenzene	1	<1
Chloroethane	1	<1
Chloroform	1	<1
Chloromethane	1	<1
Chlorotoluene	1	<1
Dibromochloromethane	1	<1
Dibromomethane	1	<1
1,2-Dichlorobenzene	1	<1
1,3-Dichlorobenzene	1	<1
1,4-Dichlorobenzene	1	<1
Dichlorodifluoromethane	1	<1
1,1-Dichloroethane	1	<1
1,2-Dichloroethane	1	<1
1,1-Dichloroethylene	1	<1

Project ID #: 70005-009
Project ID Name: Oakland, CA
SK Lab Project #: 98-109
Date Reported: 4/24/98

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8010

Work Order #:	11
Collector's Sample #:	Trip Blank
Date Sampled:	NA
Date Analyzed:	4/20/98
Dilution Factor:	1

Analyte	Report Limit ug/L	Concentration ug/L
cis-1,2-Dichloroethylene	1	<1
trans-1,2-Dichloroethylene	1	<1
Dichloromethane	1	<1
1,2-Dichloropropane	1	<1
trans-1,3-Dichloropropylene	1	<1
1,1,1,2-Tetrachloroethane	1	<1
1,1,2,2-Tetrachloroethane	1	<1
Tetrachloroethylene	1	<1
1,1,1-Trichloroethane	1	<1
1,1,2-Trichloroethane	1	<1
Trichloroethylene	1	<1
Trichlorofluoromethane	1	<1
Trichloropropane	1	<1
Vinyl Chloride	1	<1

Analytical Review / Date:

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8020

Work Order #	11
Collector's Sample #	Trip Blank
Date Sampled	NA
Date Analyzed	4/20/98
Dilution Factor	1

Analyte	Report Limit ug/L	Concentration ug/L
Benzene	1	<1
Toluene	1	<1
Ethylbenzene	1	<1
Xylenes (Total)	1	<1

Analytical Review / Date: [signature] 4/27/98

[redacted] Cha[redacted] Cu[redacted]y N[redacted]er: [redacted]

NOIDE & TAT (VOA)

SEC[redacted] Chain-of Custody Record

☐ Additional documents are attached, and are a part of this Record.

Field Office: CONCORD
Address: 1390 Willow Pass Rd
CONCORD, CA. 94520

Job Name: SAFETY KLEEN
Location: 400 MARKET ST.
OAKLAND, CA.

Project # 7005-009 Task # ______
Project Manager GREG HIEHN
Laboratory SAFETY KLEEN
Turnaround Time STANDARD

Sampler's Name R. AVERO
Sampler's Signature [signature]

Analysis Request

Sample ID	Date	Time	Matrix	HCID	TPHg/BTEX/WTPH-G 8015 (modified)/8020	TPHd/WTPH-D 8015 (modified)	TPH 418.1/WTPH 418.1	Aromatic Volatiles 602/8020	Volatile Organics 624/8240 (GC/MS)	Halogenated Volatiles 601/8010	Semi-volatile Organics 625/8270 (GC/MS)	Pesticides/PCBs 608/8080	Total Lead 7421	Priority Pollutant Metals (13)	TCLP Metals	TPH as mineral spirits 8015 + ...	BTEX - 8020	Comments/ Instructions	Number of Containers
01 MW-5	4/13/98	10:45	Water							X						X	X	9802912	5 VOA's
02 MW-4		9:15								X						X	X	2914	5
03 MW-1		8:40								X						X	X	2915	5
04 MW-2		8:15								X						X	X	2919	5
05 MW-3		7:45								X						X	X	2920	5
06 MW-12		7:20								X						X	X	2921	5
07 MW-6		12:15								X						X	X	2922	5
08 MW-8		13:50								X						X	X	2923	5
09 MW-9		14:45								X						X	X	2924	5
10 MW-13		16:40								X						X	X	2926	5

Special Instructions/Comments:
11 ALSO INCLUDING A TRIP BLANK - 3 VOA's 8010/8020 & 9802927

Relinquished by:
Sign [signature]
Print R. AVERO
Company SECOR
Time 15:00 Date 4/13/98

Received by: [signature]
Sign
Print 7°C
Company
Time 11:30A Date 4/15/98

Sample Receipt
Total no. of containers:
Chain of custody seals:
Rec'd. in good condition/cold:
Conforms to record:

Relinquished by:
Sign
Print
Company
Time ______ Date ______

Received by:
Sign
Print
Company
Time ______ Date ______

Client: SECOR
Client Contact: GREG HIEHN
Client Phone: (510) 686-9780

SECOR CUSTREC Rev. 1/95

ALL VIALS REC'D PH < 2 4/15/98 JD

Date: 4/13/98 Page 1 of 1

Cost proj 98-010