December 23, 1998

Via Certified Mail No. Z103265584

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

98 DEC 31 PM 3:28

Re: **Quarterly Progress Report**
September - November 1998
Safety-Kleen Systems, Inc., Service Center
400 Market Street
Oakland, California

Dear Mr. Senga:

Enclosed are three copies of the Quarterly Progress Report which summarizes the groundwater monitoring and vapor extraction activities conducted at the above-referenced facility. This report covers the period from September through November 1998. Safety-Kleen Systems, Inc. (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.

In a letter to the DTSC dated October 8, 1998, Safety-Kleen requested the groundwater sampling schedule be changed from quarterly to semi-annual. In a letter from Alameda County Environmental Health Services dated November 17, 1998, the change was approved with the exception that monitoring well MW-9 continue to be sampled quarterly. As requested by Alameda County, Safety-Kleen will sample monitoring well MW-9 quarterly as long as no sheen or measurable product is present in the well.

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 Systems, Inc.
2720 Girard NE
Albuquerque, New Mexico 87107

Enclosure

cc: Scott Davies, Safety-Kleen
Marty White, Safety-Kleen
Branch Environmental File (999)
Larry Seto, Alameda County Environmental Health Services
Loretta Barsamian, California Regional Water Quality Control Board
Greg Hoehn, SECOR International Incorporated

A:\OAKLAND8.L12 - WP6.1
December 23, 1998
SECOR Job No. 70005-009-08

SECOR
International Incorporated

QUARTERLY PROGRESS REPORT
SEPTEMBER - NOVEMBER 1998
SAFETY-KLEEN SYSTEMS, INC. SERVICE CENTER
400 MARKET STREET
OAKLAND, CALIFORNIA
EPA ID No. CAD053044053

SECOR Job No. 70005-009-08

Prepared For:
Safety-Kleen Systems, Inc.
2720 Girard NE
Albuquerque, New Mexico 87107

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

December 23, 1998

Prepared By:

Nyree Hagopian
Assistant Geologist

Expires 5/31/99

Reviewed By:

Thomas W. Crosby, C.Hg. #257
Principal Engineering Geologist

Greg D. Hoehn
Principal Geologist

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1.0 INTRODUCTION

This Quarterly Progress Report has been prepared in accordance with the Safety-Kleen Systems, Inc. (Safety-Kleen) Hazardous Waste Facility Permit's reporting requirements. This report presents the results of groundwater monitoring and sampling activities conducted for the quarter of September through November 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. On August 5, 1998, the passive recovery skimmer was removed and oxygen releasing compound was suspended in RW-1 in an effort to enhance site remediation by oxidizing residual impacts in the vicinity of the USTS.

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 correspondence dated February 23, 1996. The RFI Work Plan summarized site characterization work conducted at the site to 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 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 is well defined and that the site characterization activities have adequately assessed the subsurface in the vicinity of the USTs and the 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 letter 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 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 the sampling of six groundwater monitoring wells, as specified in the quarterly sampling schedule. SVE activities conducted during this quarter consisted of the operation and maintenance of the SVE system and quarterly 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 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 November 11, 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 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. On August 5, 1998, the passive recovery skimmer was removed and oxygen releasing compound was suspended in recovery well RW-1 in an effort to enhance site remediation by oxidizing residual impacts in the vicinity of the USTs. Mineral spirits recovered from monitoring well MW-9 are emptied directly to the waste mineral spirits UST at the site and are 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 October 12, 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-4, MW-8, and MW-12 for laboratory analysis. Monitoring wells MW-7 and MW-10 have been abandoned. Monitoring well MW-11 is no longer

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 an equipment blank were analyzed for quality assurance and quality control (QA/QC) 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 submersible 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, and conductivity had stabilized. 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. An equipment blank was collected from the decontaminated pump for QA/QC 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 TPHms by EPA Method 8015 (modified) and for VOCs by EPA Method 8260.

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 on September 10, through November 11, 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 November 11, 1998. The results of analytical testing are summarized on Table 2.

The analysis of the influent sample collected on November 11, 1998, detected TPHms at a concentration of 100 milligrams per cubic meter (mg/m^3). The system effluent sample contained xylenes at a concentration of 1 mg/m^3 for the same date.

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 3 summarizes the estimated SVE system mineral spirits removal to date. Data collected from initial start-up through November 11, 1998, indicate a total of approximately 5,400 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. The skimmer in recovery well RW-1 has been removed to facilitate the installation of oxygen releasing compounds in the well. No product accumulated in the skimmer in monitoring well MW-9 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 October 12, 1998, event are presented in Table 4. The average water-table elevation on October 12, 1998 was 2.15 feet above mean sea level (amsl), a decrease of 0.54 feet since the July 1998 event. A groundwater potentiometric surface map prepared with this 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 0.0046 feet/foot (ft/ft) across the site as measured between monitoring wells MW-4 and MW-2. The hydraulic gradient is consistent with previous data for the site. A summary of groundwater elevations since January 1993 is provided as Table 5.

4.4 Groundwater Conditions

A semi-annual groundwater sampling event of monitoring wells MW-1, MW-2, MW-3, MW-4, MW-8, and MW-12 was performed on October 12, 1998. No analytes (TPHms or VOCs) were detected in the groundwater samples analyzed from monitoring wells MW-2 or MW-12. TPHms was detected in monitoring well MW-3 at 56 μg/L. Toluene was detected in monitoring wells MW-3 and MW-4 at 9.2 μg/L and 5.1 μg/L, respectively. Xylenes were detected in monitoring wells MW-1, MW-3, and MW-4 at 10.8 μg/L, 26.6 μg/L, and 9.0 μg/L, respectively.

The compound 1,1-dichloroethene (1,1-DCE) was detected above the maximum contaminant level (MCL) of 6 μg/L in monitoring well MW-4 at 14.3 μg/L and 1,1-dichloroethane (1,1-DCA) was detected above the MCL of 5 μg/L in monitoring well MW-8 at 6 μg/L. The compound *cis*-1,2-dichloroethene (*cis*-1,2-DCE) was detected above the MCL of 6 μg/L in monitoring wells MW-3, MW-4 and MW-8 at 8.3 μg/L, 12.8 μg/L, and 36.6 μg/L, respectively. Trichloroethene (TCE) was detected above the MCL of 5 μg/L in monitoring wells MW-1, MW-3, MW-4, and MW-8 at 27.6 μg/L, 73.3 μg/L, 121 μg/L, and 177 μg/L, respectively. Vinyl chloride was detected above the MCL of 0.5 μg/L in monitoring well MW-8 at a concentration of 11.7 μg/L. Chlorobenzene and 1,2-dichlorobenzene (1,2-DCB) were detected in monitoring well MW-8 at 5.6 μg/L and 13.8 μg/L, respectively.

Figure 5 depicts the chemical distribution in the groundwater samples collected on October 12, 1998. A summary of analytical test results showing compounds detected since the April 1993 sampling event are presented in Table 6. Copies of the groundwater laboratory analytical reports are included in Appendix C.

5.0 CERTIFICATION STATEMENT

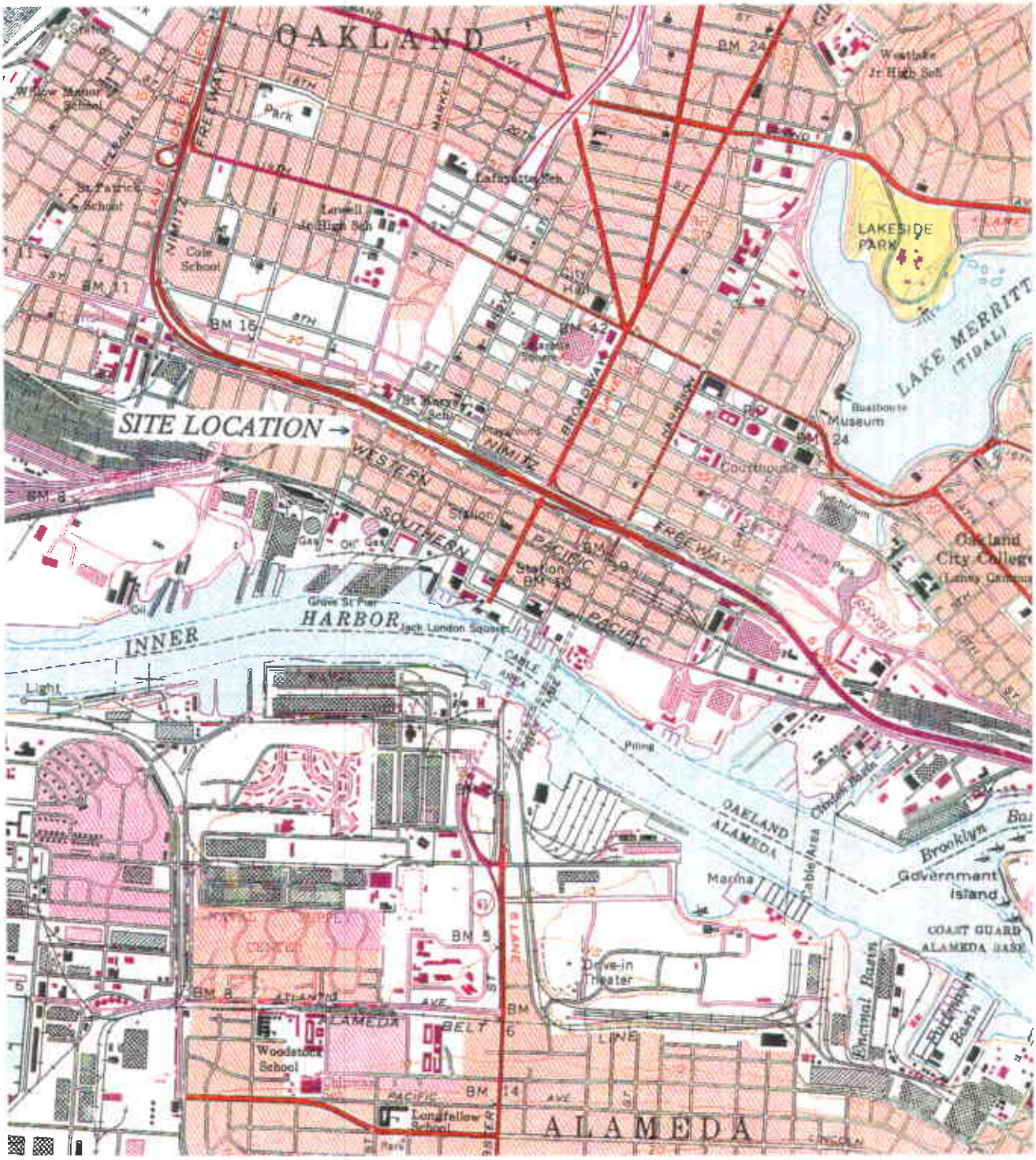
Quarterly Progress Report
Safety-Kleen Systems, Inc., Service Center
Oakland, California
CAD 053044053

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sara C. Brothers, CPG
Safety-Kleen Systems, Inc.
Senior Project Manager - Remediation

12/18/98
Date

OAKLAND WEST QUADRANGLE
California
7.5 Minute Series (Topographic)



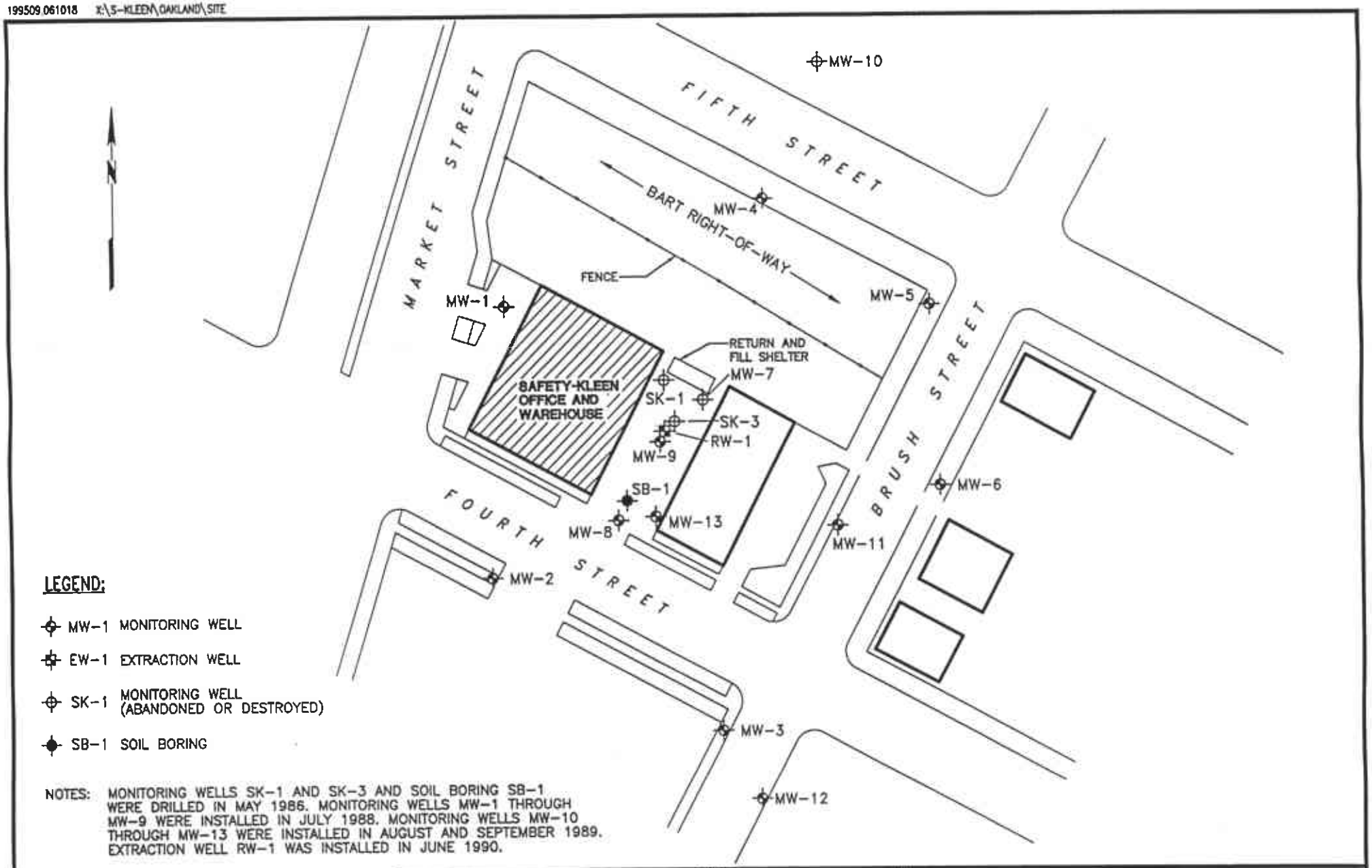
SCALE 1:24000

1 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

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
- EW-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.

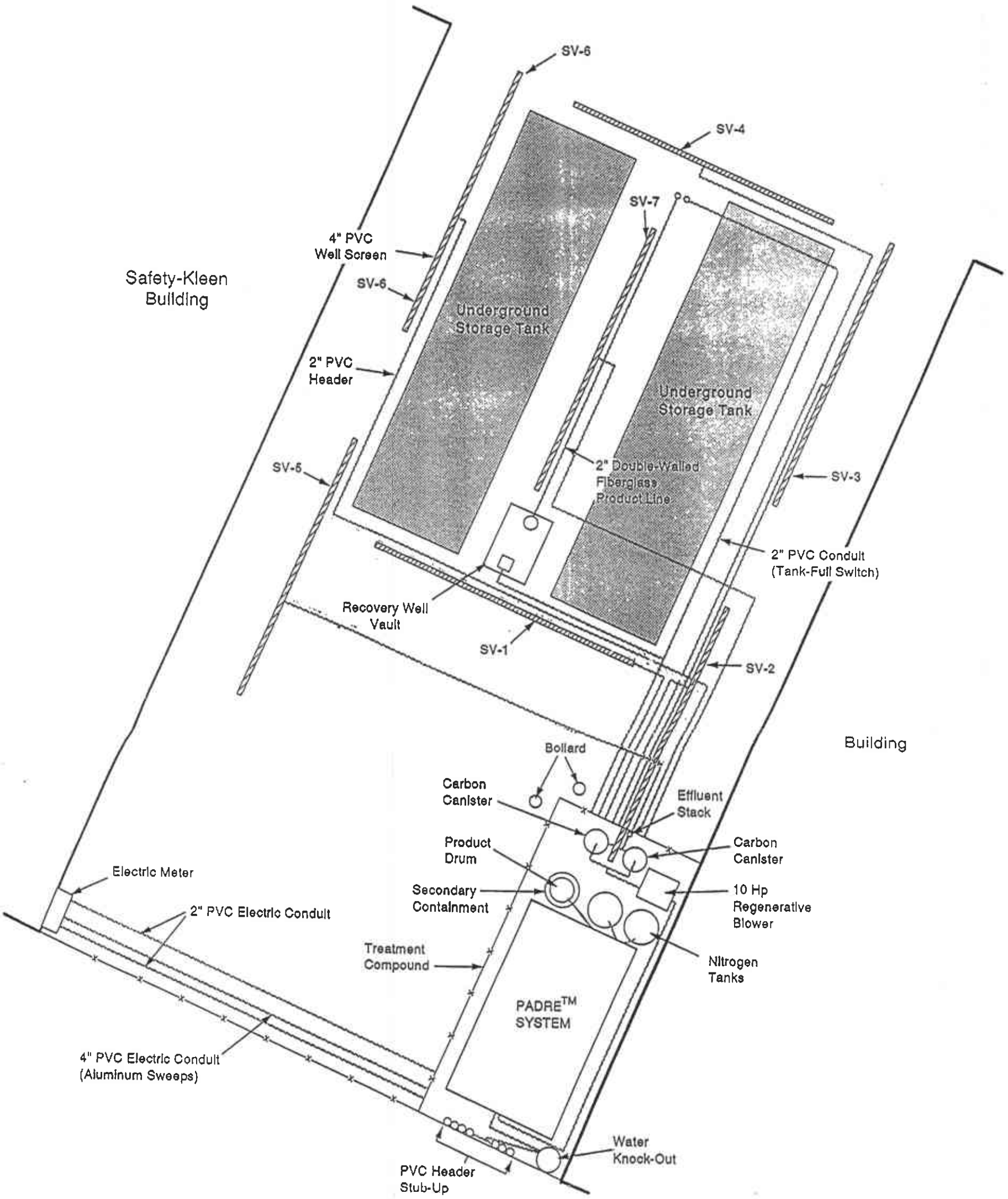
0 80 160
SCALE FEET

SECOR
INTERNATIONAL
INCORPORATED

DRAWN	CCR
APPR	GH
DATE	05SEP95
JOB NO.	70005-009

FIGURE 2
SAFETY-KLEEN
400 MARKET STREET
OAKLAND, CALIFORNIA

SITE PLAN

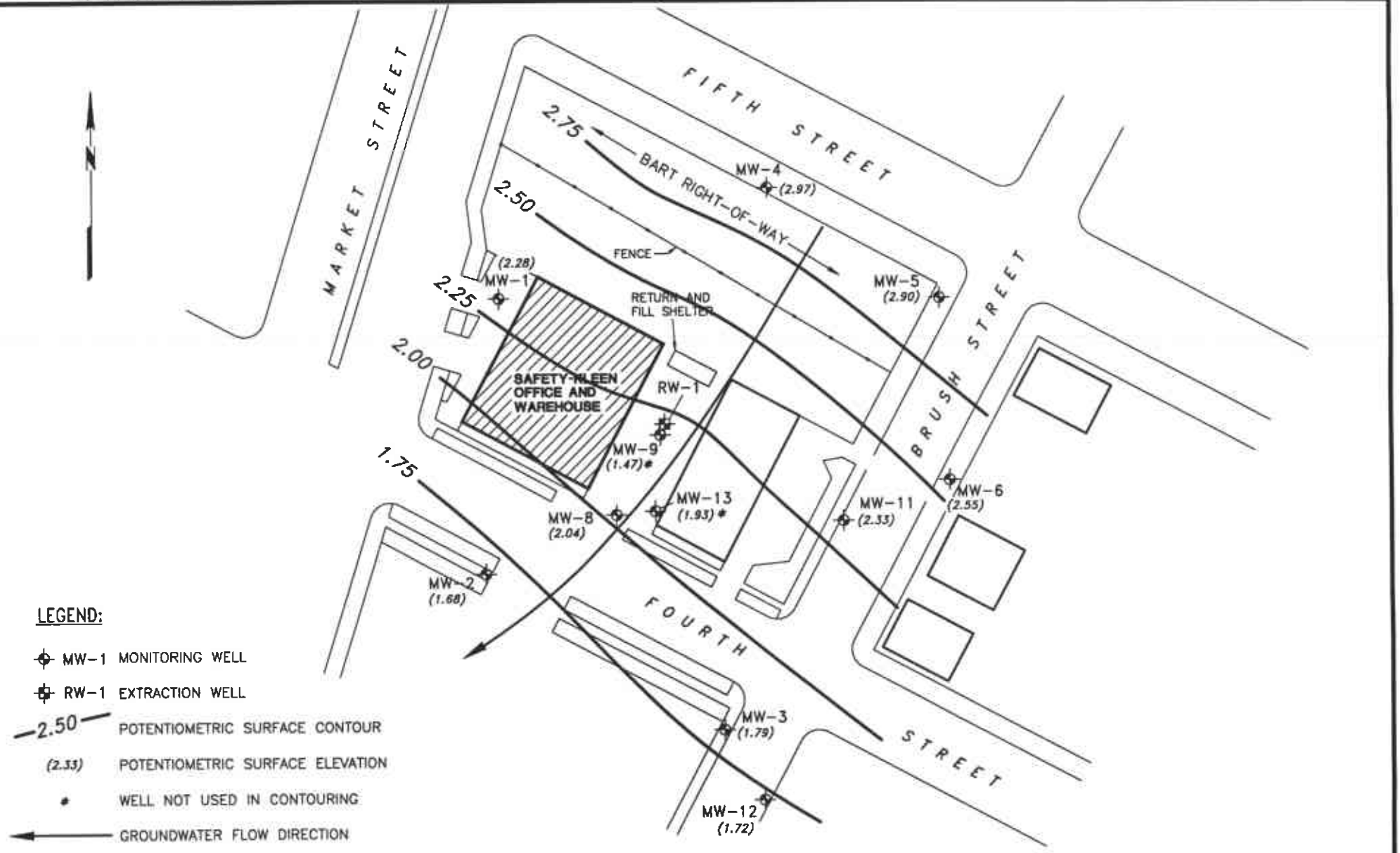


N

0 10 Feet

DRAFTED BY: DH	CHECKED BY:	PROJECT NO. 70005-009	FIGURE 3	SECOR INTERNATIONAL INCORPORATED
DRWG. DATE:	REV. DATE:	Safety-Kleen Service Center 400 Market Street Oakland, California	Soil Vapor Extraction System Layout	
FILE NAME:				

199812.121314 X:\S-KLEEN\OAKLAND\SURFAC15



SECOR INTERNATIONAL INCORPORATED

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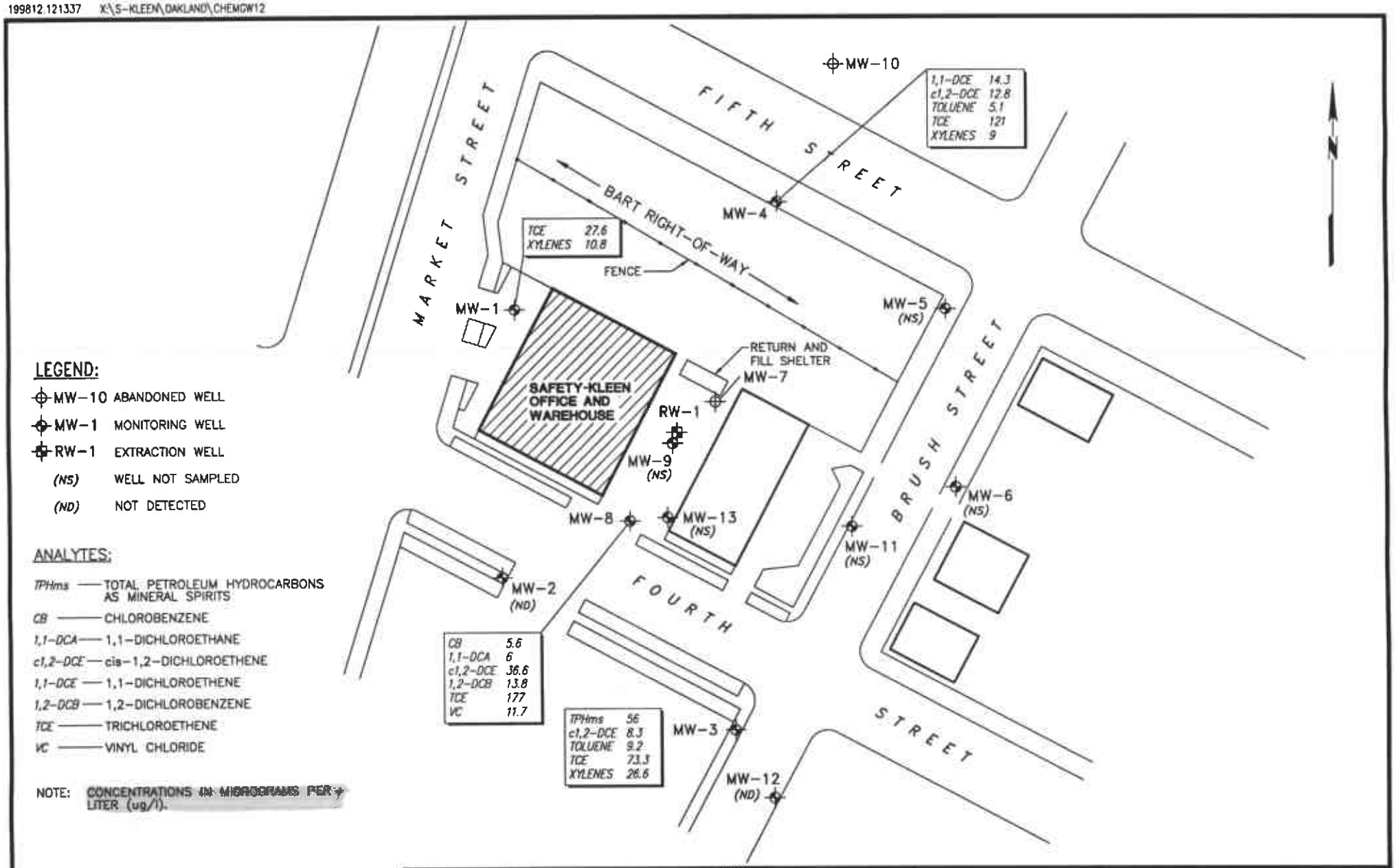
DATE	14DEC98
JOB NO.	70005-009

FIGURE 4

SAFETY-KLEEN SERVICE CENTER
400 MARKET STREET
OAKLAND, CALIFORNIA

POTENTIOMETRIC SURFACE MAP
OCTOBER 12, 1998

199812.121337 X:\S-KLEEN\OAKLAND\CHEMGW12



LEGEND:

- MW-10 ABANDONED WELL
- MW-1 MONITORING WELL
- RW-1 EXTRACTION WELL
- (NS) WELL NOT SAMPLED
- (ND) NOT DETECTED

ANALYTES:

- TPHms — TOTAL PETROLEUM HYDROCARBONS AS MINERAL SPIRITS
- CB — CHLOROBENZENE
- 1,1-DCA — 1,1-DICHLOROETHANE
- c1,2-DCE — cis-1,2-DICHLOROETHENE
- 1,1-DCE — 1,1-DICHLOROETHENE
- 1,2-DCB — 1,2-DICHLOROBENZENE
- TCE — TRICHLOROETHENE
- VC — VINYL CHLORIDE

NOTE: CONCENTRATIONS IN MICROGRAMS PER LITER (ug/l).

0 80 160
SCALE FEET

SECOR
INTERNATIONAL INCORPORATED

DRAWN	CCR
APPR	DEM/GH
DATE	14DEC98
JOB NO.	70005-009

FIGURE 5
SAFETY-KLEEN SYSTEMS, INC.
400 MARKET STREET
OAKLAND, CALIFORNIA
CHEMICAL DISTRIBUTION IN GROUNDWATER
OCTOBER 12, 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
06/12/98	16090	40	51	10000	196	3	3	2	0	Shutdown system
06/25/98	16091	7.5	9	NM	-	3	3	2	0	Restart system

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
07/10/98	16452	1.5	9	NM	-	3	0	0	0	Shutdown system
07/21/98	16453	1	8	NM	-	2	0	0	0	Restart system
08/05/98	16809	7	2.5	NM	-	3	0	0	0	Shutdown system
08/20/98	16809	30	30	10000	202	17	1	0	0	Restart system
09/10/98	17316	20	30	10000	207	10	4	2	0	System left running
10/02/98	17839	27	31	10000	203	1	1	0	0	Shutdown system
10/26/98	17839	22	32	10000	206	15	6	3	0	Restart system
11/11/98	18226	24	32	10000	205	5	2	1	1	Shutdown system

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

Table 2
Safety-Kleen Service Center
400 Market Street
Oakland, California

Sample ID	Date DRL/PQL	TPHms 10 mg/m^3	Toluene 0.10 mg/m^3	Ethylbenzene 0.10 mg/m^3	Xylenes 0.30 mg/m^3	1,1,1-TCA 0.10 mg/m^3
INF	6/25/98	29	0.18	0.11	1	-
	7/21/98	95	-	-	0.5	-
	8/21/98	-	-	-	0.3	0.1
	11/11/98	100	-	-	-	-
EFF	6/25/98	-	-	-	0.49	-
	7/21/98	-	-	-	-	-
	8/21/98	-	-	-	0.32	-
	11/11/98	-	-	-	1	-

TPHms = total petroleum hydrocarbons as mineral spirits
TCA = trichloroethane
DRL = detection reporting limit
PQL = practical quantitation limit
INF = influent at system influent point
EFF = effluent at system effluent point
\- = Not Detected

Table 3
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	
06/05/97	11798	358	165	910	13.4	4915	Began pulsing system.

Table 3
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
06/30/97	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	
06/25/98	16091	360	*214*	29	0.6	5269	
07/21/98	16453	362	*217*	95	1.8	5297	
08/20/98	16809	356	202	13	0.2	5300	
11/11/98	18226	1417	205	100	1.8	5408	

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

Table 4
Groundwater Monitoring Data
October 12, 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	5.71	-	-	2.28
MW-2	8.20	6.52	-		1.68
MW-3	6.66	4.87	-	-	1.79
MW-4	10.32	7.35	-	-	2.97
MW-5	10.28	7.38	-	-	2.90
MW-6	8.97	6.42	-	-	2.55
MW-7*	-	-	-	-	-
MW-8	7.80	5.76	-	-	2.04
MW-9	8.21	6.74	-	-	1.47
MW-10**	-	-	-	-	-
MW-11	7.91	5.58	-	-	2.33
MW-12	6.74	5.02	-	-	1.72
MW-13	8.08	6.15	-	-	1.93
RW-1	-	NM	-	-	-

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 5
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 5
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
07/21/98	2.79	2.15	2.13	3.37	3.37	3.05	2.5	2.71	-	2.85	2.21	2.35
10/12/98	2.28	1.68	1.79	2.97	2.9	2.55	2.04	1.47	-	2.33	1.72	1.93

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

- = Not measured

Table 6
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	Acetone	Vinyl chloride
MCL		*NE*	*1.0*	*150.0*	*700.0*	*1750.0*	*6.0*	*5.0*	*0.5*	*6.0*	*10.0*	*NE*	*200.0*	*5.0*	*5.0*	*70.0*	*5.0*	*600.0*	*NE*	*5*	*150.0*	*NE*	*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	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	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	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	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	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	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	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	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	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	NS
	Apr-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-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	NS
	Oct-98	-	-	-	-	**10.8**	-	-	-	-	-	-	-	**27.6**	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**30.2**	-
	Oct-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 6
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	Acetone	Vinyl chloride
MCL		*NE*	*1.0*	*150.0*	*700.0*	*1750.0*	*6.0*	*5.0*	*0.5*	*6.0*	*10.0*	*NE*	*200.0*	*5.0*	*5.0*	*70.0*	*5.0*	*600.0*	*NE*	*5*	*150.0*	*NE*	*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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-98	56.0	-	9.2	-	26.6	-	-	-	8.2	-	-	-	73.3	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	1.0	-	-	440	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-95	-	-	-	-	-	5.2	-	-	11.8	3.2	-	-	247.0	-	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-95	-	-	-	-	-	4	-	-	-	3	3	-	202	-	-	-	-	-	-	-	-	-	-	-	-	1
	Jan-96	-	-	-	-	-	3	-	-	17	4	6	-	157	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-96	-	-	-	-	-	6.0	-	-	10.0	1.7	1.3	-	140.0	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-96	-	-	-	-	-	4.8	-	-	11.3	1.2	1.8	-	224.0	-	-	-	-	-	-	-	-	-	-	-	-	-
	Nov-96**	-	-	-	-	-	5.1	-	-	5.1	-	1.6	1.1	242.4	-	1.2	-	-	-	-	-	-	-	-	-	-	-
	Nov-96	-	-	-	-	-	5.0	-	-	9.2	1.2	1.8	-	269.0	-	-	-	-	-	-	-	-	-	-	-	-	-
	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	-	1.0	-	163.0	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-98	-	-	-	-	-	-	-	-	2.0	-	-	-	30.9	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-98	-	-	-	-	-	-	-	-	7.8	-	-	-	57.3	-	-	-	-	-	-	-	-	-	-	-	31.3	-
	Oct-98	-	-	5.1	-	9.0	14.3	-	-	12.8	-	-	-	121.0	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 6
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	Acetone	Vinyl chloride
MCL		*NE*	*1.0*	*150.0*	*700.0*	*1750.0*	*6.0*	*5.0*	*0.5*	*6.0*	*10.0*	*NE*	*200.0*	*5.0*	*5.0*	*70.0*	*5.0*	*600.0*	*NE*	*5*	*150.0*	*NE*	*NE*	*NE*	*NE*	*NE*	*0.5*
MW-5	Apr-93	-	-	-	-	-	1.5	-	-	-	-	-	4.0	-	-	-	-	-	-	-	18.0	-	-	-	-	-	-
	Jul-93	-	-	-	-	-	0.6	-	-	-	-	-	6.0	-	-	-	-	-	-	-	19.0	-	-	-	-	-	-
	Oct-93	-	-	-	-	-	-	-	-	-	-	-	12.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	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	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	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	NS
	Apr-95	-	-	-	-	-	-	-	-	-	-	-	9.1	-	-	-	-	-	-	-	-	-	-	-	-	-	16.0
	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	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	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	NS
	Apr-96	-	-	-	-	-	-	-	-	-	-	1.4	-	8.7	-	-	-	-	-	-	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	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	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	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	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	NS
	Apr-97**	-	-	-	-	-	-	-	-	-	-	3.2	-	3.6	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-97	-	-	-	-	-	-	-	-	-	-	2.9	-	3.0	-	-	-	-	-	-	-	-	-	-	-	-	-
	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	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	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	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	NS
	Apr-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-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	NS
	Oct-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	NS
MW-6	Apr-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-93	-	-	-	-	-	-	-	-	-	-	-	5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-93	-	-	-	-	-	-	-	-	-	-	-	1.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jan-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-94	-	-	-	-	-	-	-	-	-	-	-	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	NS
	Apr-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-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	NS
	Oct-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	NS

Table 6
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	Acetone	Vinyl chloride
MCL		*NE*	*1.0*	*150.0*	*700.0*	*1750.0*	*6.0*	*5.0*	*0.5*	*6.0*	*10.0*	*NE*	*200.0*	*5.0*	*5.0*	*70.0*	*5.0*	*600.0*	*NE*	*5*	*150.0*	*NE*	*NE*	*NE*	*NE*	*NE*	*0.5*
MW-8	Apr-93	-	-	-	-	-	-	3.4	7.4	-	-	-	-	14.0	1.8	11.0	0.6	2.6	-	-	-	-	-	-	-	-	-
	Jul-93	-	-	-	-	-	-	-	5.0	-	1.0	-	-	31.0	-	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-93	-	-	-	-	-	-	-	5.2	-	-	-	-	15.0	-	5.4	-	-	-	-	-	-	-	-	-	-	-
	Jan-94	* 60	-	-	-	-	-	8.6	11.0	-	-	-	2.5	22.0	2.0	16.0	-	4.8	-	-	-	-	-	-	-	-	-
	Apr-94	-	-	-	-	-	-	3.7	7.1	-	-	-	1.5	18.0	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	NS
	Oct-94	-	-	-	-	-	-	5.5	-	-	-	-	-	23.0	-	2.4	-	-	-	-	-	-	-	-	-	-	-
	Jan-95	-	-	-	-	-	-	-	-	-	-	-	-	2.6	-	1.2	-	-	-	-	-	-	-	-	-	-	-
	Apr-95	-	-	-	-	-	-	-	-	-	-	-	-	15.0	0.4	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-95	-	-	-	-	-	3.5	6.2	9.8	25.6	2.3	-	-	163.0	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	63.0	2.9	-	-	569.0	1.1	3.3	-	2.0	-	-	-	-	-	-	-	-	1.6
	Jul-96	-	-	-	-	-	-	-	-	-	-	-	1.3	1352.0	2.0	-	-	-	-	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	3.0	24.4	-	3.9	-	-	-	-	-	-	9.8
	Nov-96	-	-	-	-	-	1.3	4.3	6.0	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	13.0	1.2	-	1.4	-	-	-	-	-	-	-	-	-
	Apr-97**	-	-	-	-	-	-	3.6	2.1	17.0	-	-	-	95.0	4.9	3.4	-	3.3	-	-	-	-	-	-	-	-	-
	Apr-97	-	-	-	-	-	-	4.8	3.4	50.0	-	-	-	241.9	4.8	4.6	-	4.5	-	-	-	-	-	-	-	-	-
	Jul-97**	-	-	-	-	-	-	-	3.5	38.6	2.3	3.2	-	803.0	1.2	1.3	-	1.4	-	-	-	-	-	-	-	-	-
	Jul-97	-	-	-	-	-	1.2	1.0	3.5	42.4	2.3	2.6	-	792.0	1.2	1.7	-	1.7	-	-	-	-	-	-	-	-	-
	Oct-97	-	-	-	-	-	-	-	3.5	43.5	2.4	1.5	-	920.0	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jan-98	-	-	-	-	-	-	-	-	5.8	-	-	-	19.5	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-98	-	-	-	-	-	-	-	-	-	-	-	-	8.0	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-98	-	-	-	-	-	-	-	-	23.8	-	-	-	180.0	-	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-98	-	-	-	-	-	6.0	-	-	36.6	-	-	-	177.0	-	5.6	-	13.8	-	-	-	-	-	-	-	-	11.7
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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	NS
	Apr-97**	1536.0	13.9	13.3	13.5	12.3	-	48.0	8.2	41.9	-	-	10.7	12.5	-	28.6	1.6	77.2	4.6	17.2	-	-	2.0	9.9	4.6	-	131.7
	Apr-97	1846.0	12.1	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	-	-	2.0	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	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	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	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	NS
	Apr-98	927.0	15.5	10.3	12.4	64.9	-	36.8	4.5	51.4	-	-	3.3	36.0	-	30.0	-	68.2	2.6	14.6	-	-	1.4	10.0	1.8	-	273.0
	Jul-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	NS
	Oct-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	NS

Table 6
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	Acetone	Vinyl chloride
MCL		*NE*	*1.0*	*150.0*	*700.0*	*1750.0*	*6.0*	*5.0*	*0.5*	*6.0*	*10.0*	*NE*	*200.0*	*5.0*	*5.0*	*70.0*	*5.0*	*600.0*	*NE*	*5*	*150.0*	*NE*	*NE*	*NE*	*NE*	*NE*	*0.5*
MW-10	Apr-93	-	-	-	-	-	-	-	-	-	-	1.2	-	45.0	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-93	-	-	-	-	-	2.0	-	-	-	17.0	0.5	0.8	54.0	-	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-93	-	-	-	-	-	-	-	-	-	3.0	-	-	42.0	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jan-94	-	-	-	-	-	-	-	-	-	0.4	-	-	67.0	-	-	-	-	-	-	-	-	-	-	-	-	-
	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	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	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	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	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	NS
	Jul-95	Well Destroyed July 1995																									
MW-11	Apr-93	-	-	-	-	-	-	-	-	-	-	-	-	9.1	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-93	-	-	-	-	-	2.0	-	-	-	3.0	-	2.0	36.0	-	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-93	-	-	-	-	-	-	-	-	-	-	-	-	11.0	-	-	-	-	-	-	-	-	-	-	-	-	-
	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	NS
	Jul-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	NS
	Oct-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	NS
MW-12	Apr-93	-	-	-	-	-	-	2.6	-	-	-	-	-	17.0	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-93	-	-	-	-	-	-	2.0	2.0	-	3.0	-	-	30.0	-	-	-	-	-	-	-	-	-	-	-	-	-
	Oct-93	-	-	-	-	-	-	-	-	-	-	-	-	34.0	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jan-94	-	-	-	-	-	-	2.3	1.9	-	-	-	-	11.0	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-94	-	-	-	-	-	-	1.7	1.9	-	-	-	-	44.0	-	-	-	-	-	-	-	-	-	-	-	-	-
	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	NS
	Oct-94	-	-	-	-	-	-	1.6	-	-	-	-	-	24.0	-	-	-	-	-	-	-	-	-	-	-	-	-
	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	NS
	Apr-95	-	-	-	-	-	-	3.8	-	-	-	-	-	89.0	-	-	-	-	-	-	-	-	-	-	-	-	-
	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	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	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	NS

Table 6
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	Acetone	Vinyl chloride
MCL		*NE*	*1.0*	*150.0*	*700.0*	*1750.0*	*6.0*	*5.0*	*0.5*	*6.0*	*10.0*	*NE*	*200.0*	*5.0*	*5.0*	*70.0*	*5.0*	*600.0*	*NE*	*5*	*150.0*	*NE*	*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	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	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	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	NS
	Apr-97**	-	-	-	-	-	-	6.2	3.5	1.1	-	-	-	9.5	-	-	-	-	-	-	-	-	-	-	-	-	-
	Apr-97	-	-	-	-	-	-	6.3	3.5	1.4	-	-	-	9.4	-	-	-	-	-	-	-	-	-	-	-	-	-
	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	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	NS
	Oct-97	-	-	-	-	-	-	4.5	2.6	2.1	-	-	-	11.9	-	-	-	-	-	-	-	-	-	-	-	-	-
	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	NS
	Apr-98	-	-	-	-	-	-	3.3	1.5	-	-	-	-	12.6	-	-	-	-	-	-	-	1.6	-	-	-	-	-
	Jul-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	NS
	Oct-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	NS
	Apr-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jul-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	NS
	Oct-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	NS

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
NE = Not Established
MCL = Maximum contaminant level for primary drinking water constituents
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

SECOR

HYDROLOGIC DATA SHEET

PROJECT:	SAFETY-KLEEN 400 MARKET STREET OAKLAND, CALIFORNIA	**PROJECT NO.:** 70005-009-07 **TASK:** 001	
DATE: 10/12/98	**TIME START:** 9:30	**TIME END:** 9:50	
EVENT:	QUARTERLY/SEMI-ANNUAL/ANNUAL MONITORING AND SAMPLING	**PERSONNEL:** GARY CL/PT	

WELL ID	TOC	DTW	DTP	PT	TD	ELEV.	COMMENTS
MW-1	7.99	5.71	-	-			2"
MW-2	8.20	6.52	-	-			2"
MW-3	6.66	4.87	-	-			2"
MW-4	10.32	7.35	-	-			2"
MW-5	10.28	7.38	-	-			2"
MW-6	8.97	6.42	-	-			2"
Dup → MW-8	7.80	5.76	-	-			2"
MW-9	8.21	6.74	-	-			4"
MW-11	7.91	5.58	-	-			2"
MW-12	6.74	5.02	-	-			2"
MW-13	8.08	6.15	-	-			4"(deep well)
RW-1	-	4.95					10"

NOTES: S-K Laboratory P.O. Number - E11819

Equip Blank

TOC = TOP OF CASING (FEET RELATIVE TO MEAN SEA LEVEL)
DTW = DEPTH TO WATER (FEET)
DTP = DEPTH TO PRODUCT (FEET)
PT = PRODUCT THICKNESS (FEET)
TD = TOTAL DEPTH (FEET)
ELEV. = GROUNDWATER ELEVATION (FEET RELATIVE TO MEAN SEA LEVEL)

SECOR International Incorporated

WATER SAMPLE FIELD DATA SHEET

Project #: 70005-009-07 Purged By: GRC Well I.D.: MW-12

Client Name: Safety Kleen Sampled By: GRC Sample I.D.: MW-12

Location: 400 Market Street Oakland CA QA Samples: None

Date Purged 10/12/98 Start (2400hr) 14:15 End (2400hr) 14:35

Date Sampled 10/12/98 Sample Time (2400hr) 14:50

Sample Type: ☒ Groundwater ☐ Other

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

Depth to Bottom (feet) = ____ Purge (gal) = 1.0

Depth to Water (feet) = 5.02 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)
10/12	14:20	—	19.8	730	6.68	clear	10	9.47	5.02
10/12	14:23	—	19.6	727	6.70	clear	9	8.62	—
10/12	14:26	—	19.6	725	6.71	clear	9	8.57	—
10/12	14:30	1.0	19.7	722	6.71	clear	8	8.51	5.18

SAMPLE INFORMATION

Sample Depth to Water: 5.10 Sample Turbidity: 8

Analyses: TPH As MS

Odor: None Sample Vessel/Preservative: 4 HCL VOCs —

PURGING EQUIPMENT

____Bladder Pump ____Bailer (Teflon)

____Centrifugal Pump ____Bailer (PVC)

X Submersible Pump ____Bailer (Stainless Steel)

____Peristaltic Pump ____Dedicated ____

Other: ____

Pump Depth: 8'

SAMPLING EQUIPMENT

____Bladder Pump ____Bailer (Teflon)

____Centrifugal Pump X Bailer (PVC or disposable)

____Submersible Pump ____Bailer (Stainless Steel)

____Peristaltic Pump ____Dedicated ____

Other: ____

Well Integrity: Good Lock #: 0909

Remarks: Well under CAP had to wait till it moved

NOTE: Sample after three consecutive readings are within:

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

Signature: GRC

SECOR International Incorporated

WATER SAMPLE FIELD DATA SHEET

Project #: 70005-009-07 Purged By: GRC Well I.D.: MW-8

Client Name: Safety Kleen Sampled By: GRC Sample I.D.: MW-8

Location: 400 Market Street Oakland CA 13:30 QA Samples: MW-8D

Date Purged 10/12/98 Start (2400hr) 13:20 End (2400hr) 13:45

Date Sampled 10/12/98 Sample Time (2400hr) 13:55

Sample Type: ☒ Groundwater ☐ Other

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

Depth to Bottom (feet) = ____ Purge (gal) = 1.50

Depth to Water (feet) = 5.76 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)
10/12	13:23	—	20.6	748	6.93	TAN	513	7.79	5.76
10/12	13:26	—	20.1	698	6.55	TAN	118	1.44	—
10/12	13:29	—	20.1	688	6.53	TAN	136	1.13	—
10/12	13:33	—	20.3	686	6.48	TAN	131	1.14	—
10/12	13:38	—	20.1	685	6.48	TAN	126	1.22	—
10/12	13:41	—	20.2	685	6.47	TAN	130	1.20	—
10/12	13:45	1.5	20.1	688	6.47	TAN	129	1.24	5.79

SAMPLE INFORMATION

Sample Depth to Water: 5.79 Sample Turbidity: 130

Analyses: TPH As MS

Odor: NoM Sample Vessel/Preservative: 8 HCL VOAs —

PURGING EQUIPMENT

____ Bladder Pump ____ Bailer (Teflon)

____ Centrifugal Pump ____ Bailer (PVC)

X Submersible Pump ____ Bailer (Stainless Steel)

____ Peristaltic Pump ____ Dedicated ____

Other: ____

Pump Depth: 9'

SAMPLING EQUIPMENT

____ Bladder Pump ____ Bailer (Teflon)

____ Centrifugal Pump X Bailer (PVC or disposable)

____ Submersible Pump ____ Bailer (Stainless Steel)

____ Peristaltic Pump ____ Dedicated ____

Other: ____

Well Integrity: Good Lock #: 0909

Remarks: Dup - MW-8D

NOTE: Sample after three consecutive readings are within:

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

Signature: GRC

SECOR International Incorporated

WATER SAMPLE FIELD DATA SHEET

Project #: 70005-009-07 Purged By: GRC Well I.D.: MW-2

Client Name: SAFety Kleen Sampled By: GRC Sample I.D.: MW-2

Location: 400 MARKet Street Oakland CA QA Samples: None

Date Purged 10/12/98 Start (2400hr) 12:25 End (2400hr) 12:45

Date Sampled 10/12/98 Sample Time (2400hr) 12:55

Sample Type: ☒ Groundwater ☐ Other

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

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

Depth to Water (feet) = 6.52 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)
10/12	12:27	—	21.7	589	6.77	Clear	21	8.02	6.52
10/12	12:30	—	21.1	596	6.74	Cldy	224	8.34	—
10/12	12:35	—	21.0	599	6.78	Cldy	422	8.32	—
10/12	12:39	—	21.2	597	6.70	Cldy	457	8.30	—
10/12	12:43	—	21.6	599	6.74	Cldy	437	8.19	—
10/12	12:45	1.5	21.7	597	6.72	Cldy	440	8.22	6.70

SAMPLE INFORMATION

Sample Depth to Water: 6.70 Sample Turbidity: 440

Analyses: TPH AS MS

Odor: None Sample Vessel/Preservative: 4 HCL VOAs —

PURGING EQUIPMENT

____ Bladder Pump ____ Bailer (Teflon)

____ Centrifugal Pump ____ Bailer (PVC)

X Submersible Pump ____ Bailer (Stainless Steel)

____ Peristaltic Pump ____ Dedicated ____

Other: ____

Pump Depth: 9'

SAMPLING EQUIPMENT

____ Bladder Pump ____ Bailer (Teflon)

____ Centrifugal Pump X Bailer (PVC or disposable)

____ Submersible Pump ____ Bailer (Stainless Steel)

____ Peristaltic Pump ____ Dedicated ____

Other: ____

Well Integrity: Good Lock #: None

Remarks: ____

NOTE: Sample after three consecutive readings are within:

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

Signature: GRC

SECOR International Incorporated

WATER SAMPLE FIELD DATA SHEET

Project #: 70005-009-07 Purged By: GRC Well I.D.: MW-3

Client Name: SAFety Kleen Sampled By: GRC Sample I.D.: MW-3

Location: 400 MARKet Street Oakland CA QA Samples: None

Date Purged 10/12/98 Start (2400hr) 11:45 End (2400hr) 12:05

Date Sampled 10/12/98 Sample Time (2400hr) 12:10

Sample Type: ☒ Groundwater ☐ Other

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

Depth to Bottom (feet) = ____ Purge (gal) = 1.50

Depth to Water (feet) = 4.87 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)
10/12	11:47	~	20.0	805	6.71	TAN	7999	1.99	4.87
10/12	11:52	—	20.0	805	6.72	TAN	7999	1.82	—
10/12	11:55	—	20.0	804	6.74	TAN	7999	1.79	—
10/12	11:57	—	20.0	804	6.72	TAN	7999	1.75	—
10/12	12:02	—	19.8	804	6.72	TAN	7999	1.75	—
10/12	12:05	1.5	19.9	803	6.72	TAN	7999	1.70	5.02
10/12	12:30	Sample							

SAMPLE INFORMATION

Sample Depth to Water: 5.02 Sample Turbidity: 7999

Odor: None Analyses: TPH AS MS

Sample Vessel/Preservative: 4 HCL VOAs —

PURGING EQUIPMENT

___ Bladder Pump ___ Bailer (Teflon)

___ Centrifugal Pump ___ Bailer (PVC)

X Submersible Pump ___ Bailer (Stainless Steel)

___ Peristaltic Pump ___ Dedicated ____

Other: ____

Pump Depth: 12'

SAMPLING EQUIPMENT

___ Bladder Pump ___ Bailer (Teflon)

___ Centrifugal Pump X Bailer (PVC or disposable)

___ Submersible Pump ___ Bailer (Stainless Steel)

___ Peristaltic Pump ___ Dedicated ____

Other: ____

Well Integrity: Good Lock #: 0909

Remarks: ____

NOTE: Sample after three consecutive readings are within:

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

Signature: GRC

SECOR International Incorporated

WATER SAMPLE FIELD DATA SHEET

Project #: 70005-009-07 | Purged By: GRC | Well I.D.: MW-4

Client Name: Safety Kleen | Sampled By: GRC | Sample I.D.: MW-4

Location: 400 Market Street Oakland CA | QA Samples: None

Date Purged 10/12/98 | Start (2400hr) 10:50 | End (2400hr) 11:10

Date Sampled 10/12/98 | Sample Time (2400hr) 11:25

Sample Type: ☒ Groundwater ☐ Other

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

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

Depth to Water (feet) = 7.35 | 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)
10/12	10:51	1	19.2	527	6.99	Cloudy	7999	2.77	7.35
10/12	10:53	—	19.2	529	7.00	Cldy	7999	3.93	—
10/12	10:58	—	19.2	555	7.06	Cldy	7999	4.11	—
10/12	10:59	—	19.2	562	7.05	Cldy	7999	4.27	—
10/12	11:05	—	19.2	563	7.03	Cldy	7999	4.32	—
10/12	~~11:05~~ 11:10	1.75	19.2	563	7.00	Cldy	7999	4.36	7.45

SAMPLE INFORMATION

Sample Depth to Water: 7.45 | Sample Turbidity: 7999

Analyses: TPH As MS

Odor: None | Sample Vessel/Preservative: 4 HCl VOAs —

PURGING EQUIPMENT

___ Bladder Pump ___ Bailer (Teflon)

___ Centrifugal Pump ___ Bailer (PVC)

X Submersible Pump ___ Bailer (Stainless Steel)

___ Peristaltic Pump ___ Dedicated ____

Other: ____

Pump Depth: 13'

SAMPLING EQUIPMENT

___ Bladder Pump ___ Bailer (Teflon)

___ Centrifugal Pump X Bailer (PVC or disposable)

___ Submersible Pump ___ Bailer (Stainless Steel)

___ Peristaltic Pump ___ Dedicated ____

Other: ____

Well Integrity: Good | Lock #: 0909

Remarks: ____

NOTE: Sample after three consecutive readings are within:

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

Signature: GRC

SECOR International Incorporated

WATER SAMPLE FIELD DATA SHEET

Project #: 70005-009-07 Purged By: GRC Well I.D.: MW-1

Client Name: Safety Kleen Sampled By: GRC Sample I.D.: MW-1

Location: 400 Market Street Oakland CA QA Samples: None

Date Purged 10/12/98 Start (2400hr) 9:50 End (2400hr) 10:15

Date Sampled 10/12/98 Sample Time (2400hr) 10:30

Sample Type: ☒ Groundwater ☐ Other

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

Depth to Bottom (feet) = [illegible] Purge (gal) = 1.75

Depth to Water (feet) = 5.71 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)
10/12	9:53	~	17.8	1.83	6.79	BRN	7999	4.21	5.71
10/12	9:55	~	17.6	1.82	6.79	BRN	7999	3.87	—
10/12	9:57	~	17.9	1.82	6.79	BRN	7999	1.22	—
10/12	10:00	~	17.9	1.66	6.80	BRN	7999	1.01	—
10/12	10:05	~	17.9	1.40	6.79	BRN	813	1.12	—
10/12	10:07	~	17.9	1.02	6.80	BRN	816	1.11	—
10/12	10:09	~	17.8	1.02	6.82	BRN	779	1.16	—
10/12	10:12	1.75	17.8	1.08	6.80	BRN	788	1.13	5.73

SAMPLE INFORMATION

Sample Depth to Water: 5.73 Sample Turbidity: 788

Analyses: TPH AS MS

Odor: None Sample Vessel/Preservative: 4 VOAs —

PURGING EQUIPMENT

___ Bladder Pump ___ Bailer (Teflon)

___ Centrifugal Pump ___ Bailer (PVC)

X Submersible Pump ___ Bailer (Stainless Steel)

___ Peristaltic Pump ___ Dedicated ____

Other: ____

Pump Depth: 12'

SAMPLING EQUIPMENT

___ Bladder Pump ___ Bailer (Teflon)

___ Centrifugal Pump X Bailer (PVC or disposable)

___ Submersible Pump ___ Bailer (Stainless Steel)

___ Peristaltic Pump ___ Dedicated ____

Other: ____

Well Integrity: Good Lock #: 0909

Remarks: ____

NOTE: Sample after three consecutive readings are within:

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

Signature: GRC

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

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

Date: 11/19/98
Date Received: 11/12/98
Project: Safety Kleen
PO #:
Sampled By: Client

Certified Analytical Report

Vapor Sample Analysis:

Sample ID	EFF			INF							
Sample Date	11/11/98			11/11/98							
Sample Time	11:30			11:40							
Lab #	E20339			E20340							
	Result	DF	DLR	Result	DF	DLR				PQL	Method
Results in mg/m^3:											
Analysis Date	11/13/98			11/13/98							
Mineral Spirits	**ND**	1.0	10	**100**	1.0	10				10	8015M

DF=Dilution Factor ND= None Detected above DLR PQL=Practical Quantitation Limit DLR=Detection Reporting Limit

· Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2224)

Michelle L. Anderson, Lab Director

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

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

Date: 11/19/98
Date Received: 11/12/98
Project: Safety Kleen
PO #:
Sampled By: Client

Certified Analytical Report

Vapor Sample Analysis:

Sample ID	EFF			INF							
Sample Date	11/11/98			11/11/98							
Sample Time	11:30			11:40							
Lab #	E20339			E20340							
	Result	DF	DLR	Result	DF	DLR				PQL	Method
Results in ppmV:											
Analysis Date	11/13/98			11/13/98							
Mineral Spirits	**ND**	1.0	2.4	**ND**	1.0	2.4				2.4	8015M

DF=Dilution Factor ND= None Detected above DLR PQL=Practical Quantitation Limit DLR=Detection Reporting Limit

· Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2224)

Michelle L. Anderson, Lab Director

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

November 19, 1998

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

Subject:	2 Air Samples
Lab #'s:	E20339 and E20340
Project Name:	Safety Kleen
Project Number:	
Method(s):	EPA 601/602

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,

Michelle L. Anderson
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
Volatile Organic Compounds by EPA Method 601/602

Client: SECOR
Sample Matrix: Air
Sample Date/Time: 11/11/98 11:30
Lab #: 20339
Client ID: EFF

Date Reported: 11/19/98
Date Received: 11/12/98
Date Analyzed: 11/12/98
Dilution Factor: 1

Compound	Value	PQL	DLR	Compound	Value	PQL	DLR
Bromodichloromethane	ND	0.1	0.1	trans-1,2-Dichloroethene	ND	0.1	0.1
Bromoform	ND	0.2	0.2	1,2-Dichloropropane	ND	0.1	0.1
Bromomethane	ND	0.2	0.2	cis-1,3-Dichloropropene	ND	0.1	0.1
Carbon Tetrachloride	ND	0.1	0.1	trans-1,3-Dichloropropene	ND	0.1	0.1
Chlorobenzene	ND	0.1	0.1	Methylene Chloride	ND	0.1	0.1
Chloroethane	ND	0.2	0.2	1,1,2,2-Tetrachloroethane	ND	0.1	0.1
Chloroform	ND	0.2	0.2	Tetrachloroethene	ND	0.1	0.1
Chloromethane	ND	0.1	0.1	1,1,1-Trichloroethane	ND	0.1	0.1
Dibromochloromethane	ND	0.2	0.2	1,1,2-Trichloroethane	ND	0.1	0.1
Dichlorodifluoromethane	ND	0.1	0.1	Trichloroethene	ND	0.1	0.1
1,2- Dichlorobenzene	ND	0.1	0.1	Trichlorofluoromethane	ND	0.1	0.1
1,3- Dichlorobenzene	ND	0.1	0.1	Vinyl Chloride	ND	0.1	0.1
1,4- Dichlorobenzene	ND	0.1	0.1				
1,1-Dichloroethane	ND	0.1	0.1	Benzene	ND	0.5	0.5
1,2-Dichloroethane	ND	0.1	0.1	Toluene	ND	0.5	0.5
1,1-Dichloroethene	ND	0.1	0.1	Ethyl Benzene	ND	0.5	0.5
cis-1,2-Dichloroethene	ND	0.1	0.1	Xylenes	1.0	0.5	0.5

Surrogate	Recovery (%)
2-Bromo-1-Chloropropane	108
a,a,a-Trifluorotoluene	100

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

Michelle L. Anderson, 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
Volatile Organic Compounds by EPA Method 601/602

Client: SECOR
Sample Matrix: Air
Sample Date/Time: 11/11/98 11:40
Lab #: 20340
Client ID: INF

Date Reported: 11/19/98
Date Received: 11/12/98
Date Analyzed: 11/12/98
Dilution Factor: 1

Compound	Value	PQL	DLR	Compound	Value	PQL	DLR
Bromodichloromethane	ND	0.1	0.1	trans-1,2-Dichloroethene	ND	0.1	0.1
Bromoform	ND	0.2	0.2	1,2-Dichloropropane	ND	0.1	0.1
Bromomethane	ND	0.2	0.2	cis-1,3-Dichloropropene	ND	0.1	0.1
Carbon Tetrachloride	ND	0.1	0.1	trans-1,3-Dichloropropene	ND	0.1	0.1
Chlorobenzene	ND	0.1	0.1	Methylene Chloride	ND	0.1	0.1
Chloroethane	ND	0.2	0.2	1,1,2,2-Tetrachloroethane	ND	0.1	0.1
Chloroform	ND	0.2	0.2	Tetrachloroethene	ND	0.1	0.1
Chloromethane	ND	0.1	0.1	1,1,1-Trichloroethane	ND	0.1	0.1
Dibromochloromethane	ND	0.2	0.2	1,1,2-Trichloroethane	ND	0.1	0.1
Dichlorodifluoromethane	ND	0.1	0.1	Trichloroethene	ND	0.1	0.1
1,2- Dichlorobenzene	ND	0.1	0.1	Trichlorofluoromethane	ND	0.1	0.1
1,3- Dichlorobenzene	ND	0.1	0.1	Vinyl Chloride	ND	0.1	0.1
1,4- Dichlorobenzene	ND	0.1	0.1				
1,1-Dichloroethane	ND	0.1	0.1	Benzene	ND	0.5	0.5
1,2-Dichloroethane	ND	0.1	0.1	Toluene	ND	0.5	0.5
1,1-Dichloroethene	ND	0.1	0.1	Ethyl Benzene	ND	0.5	0.5
cis-1,2-Dichloroethene	ND	0.1	0.1	Xylenes	ND	0.5	0.5

Surrogate	Recovery (%)
2-Bromo-1-Chloropropane	104
a,a,a-Trifluorotoluene	99

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

Michelle L. Anderson, 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 #: GBG2981112
Matrix: Water
Units: µg/L

Date Analyzed: 11/12/98
Quality Control Sample: Blank Spike

PARAMETER	Method #	MB µg/L	SA µg/L	SR µg/L	SP µg/L	SP % R	SPD µg/L	SPD %R	RPD	QC LIMITS RPD	QC LIMITS %R
Benzene	8020	<0.50	40	ND	38	**95**	37	**93**	2.7	25	75-113
Toluene	8020	<0.50	40	ND	39	**98**	38	**95**	3.0	25	76-113
Ethyl Benzene	8020	<0.50	40	ND	40	**99**	41	**102**	3.0	25	75-115
Xylenes	8020	<0.50	120	ND	122	**102**	120	**100**	1.9	25	77-115
Gasoline	8015	<50.0	500	ND	507	**101**	520	**104**	2.5	25	76-112

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 #: VOC2W981111
Matrix: Water
Units: µg/L

Date Analyzed: 11/11/98
Quality Control Sample: Blank Spike

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	602/8020	40	ND	38	96	40	99	3.3	25	87-108
Chlorobenzene	601/8010	40	ND	40	99	39	97	2.3	25	83-119
1,1-Dichloroethane	601/8010	40	ND	38	96	38	95	0.5	25	76-134
Toluene	602/8020	40	ND	39	97	39	99	1.8	25	88-109
Trichloroethene	601/8010	40	ND	40	99	40	101	1.3	25	73-126
2-Bromo-1-chloropropane	601/8010		105%	107%		108%				75-125
aaa-Trifluorotoluene	602/8020		98%	95%		97%				75-125

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
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 Suite 360
Concord CA 94520

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

Job Name: SAFety Kleen
Location: 400 MArket Street
Oakland CA

Project # _____ Task # _____
Project Manager Greg Hoehn
Laboratory Entech
Turnaround Time Standard

Sampler's Name GARY CLIFT
Sampler's Signature Gary R Clift

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 M.S.	Comments/ Instructions	Number of Containers
EFF E20339	11/11	11:30	AIR					X		X						X		1
INF E20340	11/11	11:40	AIR					X		X						X		1

Special Instructions/Comments:
Please Call Greg Hoehn @ X35 to Confirm Analysis's
Thanks
OK per Greg Hoehn.
(AD) 11/12/98

Relinquished by: SECOR
Sign Gary R Clift
Print GARY R CLIFT
Company SECOR
Time 8100 Date 11/12/98

Received by: _____
Sign 595 MIKE
Print WORLD COURIER
Company _____
Time 0900 Date 11-12

Relinquished by: _____
Sign 595 MIKE
Print WORLD COURIER
Company _____
Time _____ Date 11-12

Received by: _____
Sign Jennifer Durkin
Print Jennifer Durkin
Company Entech
Time 12:02 Date 11/12/98

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 (925)6869780

SECOR CUSTREC Rev. 1/95

Date: 11/12/98 Page 1 of 1

APPENDIX C

Laboratory Reports - Groundwater Samples

safety-kleen ®

Allan A. Manteuffel Technical Center

October 28, 1998

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

Re: SK Lab Project #98-249
Project ID Name: Oakland, CA

Dear Greg:

Enclosed please find the analytical results for the sample received by SK Environmental Laboratory on 10/14/98.

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 #: 70005-009-07
Project ID Name: Oakland, CA
SK Lab Project #: 98-249
Date Reported: 10/29/98

ANALYTICAL RESULTS

Total Petroleum Hydrocarbons as Mineral Spirits in Water

Modified EPA Method 8015

Report Limit: 50

Work Order #	Collector's Sample #	Date Sampled	Date Analyzed	Concentration ug/L
01	Trip Blank	10/12/98	10/20/98	<50
02	E.B.	10/12/98	10/20/98	<50
03	MW-12	10/12/98	10/20/98	<50
04	MW-8	10/12/98	10/20/98	<50
05	MW-8D	10/12/98	10/20/98	<50
06	MW-2	10/12/98	10/20/98	<50
07	MW-3	10/12/98	10/20/98	**56**
08	MW-4	10/12/98	10/20/98	<50
09	MW-1	10/12/98	10/20/98	<50

Analytical Review / Date: 10/28/98

Project ID #: 70005-009-07
Project ID Name: Oakland, CA
SK Lab Project #: 98-249
Date Reported: 10/29/98

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8260

Work Order #		01	02	03	04
Collector's Sample #		Trip Blank	E.B.	MW-12	MW-8
Date Sampled		10/12/98	10/12/98	10/12/98	10/12/98
Date Analyzed		10/26/98	10/26/98	10/16/98	10/16/98
Dilution Factor		1	1	1	1
Analyte	Report Limit ug/L	Concentration µg/L			
Acetone	25	<25	<25	<25	<25
Acrylonitrile	25	<25	<25	<25	<25
Benzene	5	<5	<5	<5	<5
Bromobenzene	5	<5	<5	<5	<5
Bromochloromethane	10	<10	<10	<10	<10
Bromodichloromethane	5	<5	<5	<5	<5
Bromoform	5	<5	<5	<5	<5
Bromomethane	10	<10	<10	<10	<10
2-Butanone	25	<25	<25	<25	<25
n-Butylbenzene	5	<5	<5	<5	<5
sec-Butylbenzene	5	<5	<5	<5	<5
tert-Butylbenzene	5	<5	<5	<5	<5
Carbon Tetrachloride	5	<5	<5	<5	<5
Chlorobenzene	5	<5	<5	<5	**5.6**
Chlorodibromomethane	5	<5	<5	<5	<5
Chloroethane	10	<10	<10	<10	<10
Chloroform	5	<5	**6.2**	<5	<5
Chloromethane	10	<10	<10	<10	<10
2-Chlorotoluene	5	<5	<5	<5	<5
4-Chlorotoluene	5	<5	<5	<5	<5
1,2-Dibromo-3-chloropropane	5	<5	<5	<5	<5
1,2-Dibromoethane	5	<5	<5	<5	<5

Project ID #: 70005-009-07
Project ID Name: Oakland, CA
SK Lab Project #: 98-249
Date Reported: 10/29/98

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8260

Work Order #		01	02	03	04
Collector's Sample #		Trip Blank	E.B.	MW-12	MW-8
Date Sampled		10/12/98	10/12/98	10/12/98	10/12/98
Date Analyzed		10/26/98	10/26/98	10/16/98	10/16/98
Dilution Factor		1	1	1	1
Analyte	Report Limit µg/L	Concentration µg/L			
Dibromomethane	5	<5	<5	<5	<5
1,2-Dichlorobenzene	5	<5	<5	<5	**13.8**
1,3-Dichlorobenzene	5	<5	<5	<5	<5
1,4-Dichlorobenzene	5	<5	<5	<5	<5
Dichlorodifluoromethane	5	<5	<5	<5	<5
1,1-Dichloroethane	5	<5	<5	<5	**6.0**
1,2-Dichloroethane	5	<5	<5	<5	<5
1,1-Dichloroethene	5	<5	<5	<5	<5
cis-1,2-Dichloroethene	5	<5	<5	<5	**36.6**
trans-1,2-Dichloroethene	5	<5	<5	<5	<5
1,2-Dichloropropane	5	<5	<5	<5	<5
1,3-Dichloropropane	5	<5	<5	<5	<5
2,2-Dichloropropane	5	<5	<5	<5	<5
cis-1,3-Dichloropropene	5	<5	<5	<5	<5
trans-1,3-Dichloropropene	5	<5	<5	<5	<5
Ethylbenzene	5	<5	<5	<5	<5
2-Hexanone	25	<25	<25	<25	<25
Hexachlorobutadiene	5	<5	<5	<5	<5
Iodomethane	15	<15	<15	<15	<15
Isopropylbenzene	5	<5	<5	<5	<5
p-Isopropyltoluene	5	<5	<5	<5	<5
Methyl Isobutyl Ketone	25	<25	<25	<25	<25

Project ID #: 70005-009-07
Project ID Name: Oakland, CA
SK Lab Project #: 98-249
Date Reported: 10/29/98

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8260

Work Order #		01	02	03	04
Collector's Sample #		Trip Blank	E.B.	MW-12	MW-8
Date Sampled		10/12/98	10/12/98	10/12/98	10/12/98
Date Analyzed		10/26/98	10/26/98	10/16/98	10/16/98
Dilution Factor		1	1	1	1
Analyte	Report Limit µg/L	Concentration µg/L			
Methylene Chloride	5	<5	<5	<5	<5
Methyl-tert-butyl ether	5	<5	<5	<5	<5
Naphthalene	5	<5	<5	<5	<5
n-Propylbenzene	5	<5	<5	<5	<5
Styrene	5	<5	<5	<5	<5
1,1,1,2-Tetrachloroethane	5	<5	<5	<5	<5
1,1,2,2-Tetrachloroethane	5	<5	<5	<5	<5
Tetrachloroethene	5	<5	<5	<5	<5
Toluene	5	<5	<5	<5	<5
1,2,3-Trichlorobenzene	5	<5	<5	<5	<5
1,2,4-Trichlorobenzene	5	<5	<5	<5	<5
1,1,1-Trichloroethane	5	<5	<5	<5	<5
1,1,2-Trichloroethane	5	<5	<5	<5	<5
Trichloroethene	5	<5	<5	<5	**177 ***
Trichlorofluoromethane	5	<5	<5	<5	<5
1,2,3-Trichloropropane	10	<10	<10	<10	<10
1,2,4-Trimethylbenzene	5	<5	<5	<5	<5
1,3,5-Trimethylbenzene	5	<5	<5	<5	<5
Vinyl Chloride	5	<5	<5	<5	**11.7**
Xylenes (Total)	5	<5	<5	<5	<5

* Diluted so result is within the calibration curve.

Analytical Review / Date: 10/28/98

Project ID #: 70005-009-07
Project ID Name: Oakland, CA
SK Lab Project #: 98-249
Date Reported: 10/29/98

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8260

Work Order #		05	06	07	08
Collector's Sample #		MW-8D	MW-2	MW-3	MW-4
Date Sampled		10/12/98	10/12/98	10/12/98	10/12/98
Date Analyzed		10/16/98	10/16/98	10/16/98	10/21/98
Dilution Factor		1	1	1	1
Analyte	Report Limit µg/L	Concentration µg/L			
Acetone	25	<25	<25	<25	<25
Acrylonitrile	25	<25	<25	<25	<25
Benzene	5	<5	<5	<5	<5
Bromobenzene	5	<5	<5	<5	<5
Bromochloromethane	10	<10	<10	<10	<10
Bromodichloromethane	5	<5	<5	<5	<5
Bromoform	5	<5	<5	<5	<5
Bromomethane	10	<10	<10	<10	<10
2-Butanone	25	<25	<25	<25	<25
n-Butylbenzene	5	<5	<5	<5	<5
sec-Butylbenzene	5	<5	<5	<5	<5
tert-Butylbenzene	5	<5	<5	<5	<5
Carbon Tetrachloride	5	<5	<5	<5	<5
Chlorobenzene	5	**5.6**	<5	<5	<5
Chlorodibromomethane	5	<5	<5	<5	<5
Chloroethane	10	<10	<10	<10	<10
Chloroform	5	<5	<5	<5	<5
Chloromethane	10	<10	<10	<10	<10
2-Chlorotoluene	5	<5	<5	<5	<5
4-Chlorotoluene	5	<5	<5	<5	<5
1,2-Dibromo-3-chloropropane	5	<5	<5	<5	<5
1,2-Dibromoethane	5	<5	<5	<5	<5

Project ID #: 70005-009-07
Project ID Name: Oakland, CA
SK Lab Project #: 98-249
Date Reported: 10/29/98

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8260

Work Order #		05	06	07	08
Collector's Sample #		MW-8D	MW-2	MW-3	MW-4
Date Sampled		10/12/98	10/12/98	10/12/98	10/12/98
Date Analyzed		10/16/98	10/16/98	10/16/98	10/21/98
Dilution Factor		1	1	1	1
Analyte	Report Limit ug/L	Concentration µg/L			
Dibromomethane	5	<5	<5	<5	<5
1,2-Dichlorobenzene	5	**10.0**	<5	<5	<5
1,3-Dichlorobenzene	5	<5	<5	<5	<5
1,4-Dichlorobenzene	5	<5	<5	<5	<5
Dichlorodifluoromethane	5	<5	<5	<5	<5
1,1-Dichloroethane	5	**5.7**	<5	<5	<5
1,2-Dichloroethane	5	<5	<5	<5	<5
1,1-Dichloroethene	5	<5	<5	<5	**14.3**
cis-1,2-Dichloroethene	5	**34.6**	<5	**8.3**	**12.8**
trans-1,2-Dichloroethene	5	<5	<5	<5	<5
1,2-Dichloropropane	5	<5	<5	<5	<5
1,3-Dichloropropane	5	<5	<5	<5	<5
2,2-Dichloropropane	5	<5	<5	<5	<5
cis-1,3-Dichloropropene	5	<5	<5	<5	<5
trans-1,3-Dichloropropene	5	<5	<5	<5	<5
Ethylbenzene	5	<5	<5	<5	<5
2-Hexanone	25	<25	<25	<25	<25
Hexachlorobutadiene	5	<5	<5	<5	<5
Iodomethane	15	<15	<15	<15	<15
Isopropylbenzene	5	<5	<5	<5	<5
p-Isopropyltoluene	5	<5	<5	<5	<5
Methyl Isobutyl Ketone	25	<25	<25	<25	<25

Project ID #: 70005-009-07
Project ID Name: Oakland, CA
SK Lab Project #: 98-249
Date Reported: 10/29/98

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8260

Work Order #		05	06	07	08
Collector's Sample #		MW-8D	MW-2	MW-3	MW-4
Date Sampled		10/12/98	10/12/98	10/12/98	10/12/98
Date Analyzed		10/16/98	10/16/98	10/16/98	10/21/98
Dilution Factor		1	1	1	1
Analyte	**Report Limit µg/L**	**Concentration µg/L**			
Methylene Chloride	5	<5	<5	<5	<5
Methyl-tert-butyl ether	5	<5	<5	<5	<5
Naphthalene	5	<5	<5	<5	<5
n-Propylbenzene	5	<5	<5	<5	<5
Styrene	5	<5	<5	<5	<5
1,1,1,2-Tetrachloroethane	5	<5	<5	<5	<5
1,1,2,2-Tetrachloroethane	5	<5	<5	<5	<5
Tetrachloroethene	5	<5	<5	<5	<5
Toluene	5	<5	<5	**9.2**	**5.1**
1,2,3-Trichlorobenzene	5	<5	<5	<5	<5
1,2,4-Trichlorobenzene	5	<5	<5	<5	<5
1,1,1-Trichloroethane	5	<5	<5	<5	<5
1,1,2-Trichloroethane	5	<5	<5	<5	<5
Trichloroethene	5	**192**	<5	**73.3**	**121**
Trichlorofluoromethane	5	<5	<5	<5	<5
1,2,3-Trichloropropane	10	<10	<10	<10	<10
1,2,4-Trimethylbenzene	5	<5	<5	<5	<5
1,3,5-Trimethylbenzene	5	<5	<5	<5	<5
Vinyl Chloride	5	**9.8**	<5	<5	<5
Xylenes (Total)	5	<5	<5	**26.6**	**9.0**

Analytical Review / Date: 10/28/98

Project ID #: 70005-009-07
Project ID Name: Oakland, CA
SK Lab Project #: 98-249
Date Reported: 10/29/98

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8260

Work Order #	09
Collector's Sample #	MW-1
Date Sampled	10/12/98
Date Analyzed	10/21/98
Dilution Factor	1

Analyte	Report Limit ug/L	Concentration ug/L
Acetone	25	<25
Acrylonitrile	25	<25
Benzene	5	<5
Bromobenzene	5	<5
Bromochloromethane	10	<10
Bromodichloromethane	5	<5
Bromoform	5	<5
Bromomethane	10	<10
2-Butanone	25	<25
n-Butylbenzene	5	<5
sec-Butylbenzene	5	<5
tert-Butylbenzene	5	<5
Carbon Tetrachloride	5	<5
Chlorobenzene	5	<5
Chlorodibromomethane	5	<5
Chloroethane	10	<10
Chloroform	5	<5
Chloromethane	10	<10
2-Chlorotoluene	5	<5
4-Chlorotoluene	5	<5
1,2-Dibromo-3-chloropropane	5	<5
1,2-Dibromoethane	5	<5

Project ID #: 70005-009-07
Project ID Name: Oakland, CA
SK Lab Project #: 98-249
Date Reported: 10/29/98

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8260

Work Order #	09
Collector's Sample #	MW-1
Date Sampled	10/12/98
Date Analyzed	10/21/98
Dilution Factor	1

Analyte	Report Limit ug/L	Concentration ug/L
Dibromomethane	5	<5
1,2-Dichlorobenzene	5	<5
1,3-Dichlorobenzene	5	<5
1,4-Dichlorobenzene	5	<5
Dichlorodifluoromethane	5	<5
1,1-Dichloroethane	5	<5
1,2-Dichloroethane	5	<5
1,1-Dichloroethene	5	<5
cis-1,2-Dichloroethene	5	<5
trans-1,2-Dichloroethene	5	<5
1,2-Dichloropropane	5	<5
1,3-Dichloropropane	5	<5
2,2-Dichloropropane	5	<5
cis-1,3-Dichloropropene	5	<5
trans-1,3-Dichloropropene	5	<5
Ethylbenzene	5	<5
2-Hexanone	25	<25
Hexachlorobutadiene	5	<5
Iodomethane	15	<15
Isopropylbenzene	5	<5
p-Isopropyltoluene	5	<5
Methyl Isobutyl Ketone	25	<25

Project ID #: 70005-009-07
Project ID Name: Oakland, CA
SK Lab Project #: 98-249
Date Reported: 10/29/98

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8260

Work Order #	09
Collector's Sample #	MW-1
Date Sampled	10/12/98
Date Analyzed	10/21/98
Dilution Factor	1

Analyte	Report Limit ug/L	Concentration ug/L
Methylene Chloride	5	<5
Methyl-tert-butyl ether	5	<5
Naphthalene	5	<5
n-Propylbenzene	5	<5
Styrene	5	<5
1,1,1,2-Tetrachloroethane	5	<5
1,1,2,2-Tetrachloroethane	5	<5
Tetrachloroethene	5	<5
Toluene	5	<5
1,2,3-Trichlorobenzene	5	<5
1,2,4-Trichlorobenzene	5	<5
1,1,1-Trichloroethane	5	<5
1,1,2-Trichloroethane	5	<5
Trichloroethene	5	**27.6**
Trichlorofluoromethane	5	<5
1,2,3-Trichloropropane	10	<10
1,2,4-Trimethylbenzene	5	<5
1,3,5-Trimethylbenzene	5	<5
Vinyl Chloride	5	<5
Xylenes (Total)	5	**10.8**

Analytical Review / Date: 10/28/98

VOA 98-249 TAT normal

Chain-of Custody Number:

SECOR Chain-of Custody Record

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

Field Office: SECOR

Address: 1390 Willow Pass Road Suite 360
Concord, CA 94520

Job Name: SAFety Klean

Location: 400 MARKet Street
Oakland, CA

Project # 70005-009.07 Task # 001

Project Manager Greg Hoehn

Laboratory SAFety Klean

Turnaround Time STandard

Sampler's Name GARY R. CLIFT

Sampler's Signature Gary R Clift

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 M.S. by Purge & Trap 8260		Comments/ Instructions	Number of Containers
																		t° 5.3		
01	Trip Blank	10/12	—	H2O				9	8	0	7	1	0	8			X			1
02	E.B.	10/12	9:30	H2O							7	1	1	1			X			3
03	MW-12	10/12	14:50	H2O									1	2			X	X		4
04	MW-8	10/12	13:55	H2O									1	4			X	X		4
05	MW-8D	10/12	13:30	H2O									1	6			X	X		4
06	MW-2	10/12	12:55	H2O									1	8			X	X		4
07	MW-3	10/12	12:10	H2O									2	0			X	X		4
08	MW-4	10/12	11:25	H2O									2	2			X	X		4
09	MW-1	10/12	10:30	H2O									2	3			X	X		4

Special Instructions/Comments:

Relinquished by: SECOR
Sign Gary R Clift
Print GARY R. CLIFT
Company SECOR
Time 8:00 Date 10/13/98

Received by: T Cook
Sign T Cook
Print
Company FLX
Time 7:30 Date 10/13/98

Relinquished by:
Sign
Print
Company
Time Date

Received by: MN
Sign Maria Nguyen
Print
Company
Time 10:30 Date 10/14/98

Sample Receipt

Total no. of containers:	32
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: 10, 13, 98 Page 1 of 1