safety-kleen®

January 9, 1998

Via Certified Mail No. P563534537

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

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

Dear Mr. Senga:

Enclosed is the [redacted] monitoring and sampling report for [redacted] which summarizes the groundwater monitoring and vapor extraction activities conducted at the above-referenced facility. This report covers the period from September 1997 through November 1997. 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.

If you have any questions, please call me at (503) 655-2769.

Sincerely,

Chip Prokop
Senior Project Manager - Remediation
Safety-Kleen Corp.

Enclosure

cc: Keith Marcott, Safety-Kleen Corp.
Scott Davies, Safety-Kleen Corp.
Branch Environmental File (7-178-01)
Jennifer Eberle, Alameda County - Department of Environmental Health
Loretta Barsamian, California Regional Water Quality Control Board
Greg Hoehn, SECOR International Incorporated

OAKLAND7.L23 - WP6.1
January 9, 1998
SECOR Job No. 70005-009-07

1000 NORTH RANDALL ROAD ELGIN, ILLINOIS 60123-7857 PHONE 847/697-8460 FAX 847/468-8500

SECOR
International Incorporated

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

SECOR Job No. 70005-009-07

Prepared For:
Safety-Kleen Corp.
16540 S.E. 130th Avenue
Clackamas, Oregon 97015

Jan 9, 98

Submitted By:
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January 9, 1998

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Kirsten L. Duey
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EXP. 9/30/00
CIVIL
STATE OF CALIFORNIA

Reviewed By:

Thomas J. Bergin, P.E., #48806
Principal Civil Engineer

Greg D. Hoehn
Principal Geologist

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1.0 INTRODUCTION

This report presents the results of groundwater monitoring and sampling activities conducted for the quarter of September 1997 through November 1997 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. A description of the sample methods used is detailed in Section 3.3 and a discussion of the results of the study is included in Section 4.4 of this report.

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

The SVE system consists of seven horizontal vapor extraction lines 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 lines and the vapor treatment system.

3.0 SCOPE OF WORK

Groundwater monitoring work conducted during this quarter consisted of the monitoring of ten groundwater monitoring wells and one recovery well, and the sampling of six groundwater monitoring wells as specified by the quarterly sampling schedule. SVE activities conducted during this quarter consisted of the operation and maintenance of the SVE system. 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 the seven horizontal vapor extraction lines. The SVE system was operated this quarter in a pulsed mode in an attempt to improve removal efficiency. The system operated in approximately two-week cycles. 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 September 24, 1997, and October 23, 1997. The vapor samples were submitted to a state-certified analytical laboratory under chain-of-custody manifest and analyzed for total petroleum hydrocarbons as mineral spirits (TPHms) by U.S. Environmental Protection Agency (EPA) Method 8015(modified) and for volatile organic compounds (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 is 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 (Figure 2) at that time. Mineral spirits recovered from recovery well RW-1 and monitoring well MW-9 is emptied directly to the waste mineral spirits UST at the site and is incorporated into the Safety-Kleen recycling process. The amount of recovered product is recorded each time the skimmer is emptied. Product has not been present in the skimmers since July 1996.

3.3 Groundwater Monitoring and Sampling

On October 8, 1997, on- and off-site monitoring wells were monitored for depth-to-water and groundwater samples were collected from monitoring wells MW-1, MW-2, MW-3, MW-4, MW-8, and MW-12 for laboratory analysis. Monitoring well MW-11 was not monitored or sampled because tree roots have grown through the well casing and are obstructing the well. Blind duplicate samples were collected from monitoring well MW-8 for quality assurance and quality control purposes. The duplicate sample is labeled as MW-18 on the attached laboratory reports and chain-of-custody documents.

All accessible monitoring wells were monitored for depth-to-water using a water level indicator calibrated to 0.01-foot. The depth-to-water measurements were used with well survey data to prepare a groundwater potentiometric surface map (Figure 4). Prior to collecting groundwater samples, the wells were purged using a low flow pump with dedicated tubing. In-line water quality indicator parameters were continuously monitored and water levels were taken during purging in order to adjust the flow rate for a minimal drawdown. Samples were collected after pH, temperature, conductivity, and turbidity had stabilized for at least three successive readings. The samples were placed into laboratory supplied sample containers in the same manner as the pre-purge samples, labeled, placed on ice in an insulated cooler, and logged onto the chain-of-custody document. 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 benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8020, for TPHms by EPA Method 8015(modified), and for halogenated VOCs by EPA Method 8010.

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

4.0 RESULTS

4.1 Soil Vapor Extraction System

The results of SVE system monitoring conducted through November 26, 1997 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. For this quarter, SVE system influent and effluent vapor samples were collected on September 24, 1997, and October 23, 1997. No TPHms, VOC, or BTEX constituents were detected in either of the effluent samples collected during the quarter. Xylenes were detected in the SVE system influent samples on September 24 1997 at 3.2 $\mu g/\ell$, and on October 23, 1997 at 2.4 $\mu g/\ell$. The laboratory noted that there was a greater than 25 percent difference for detected concentrations of xylenes between the two GC columns in the October 23, 1997 sampling indicating the samples did pass quality assurance/quality control criteria. Toluene concentrations were below laboratory reporting limits in the SVE system influent sample collected on September 24, 1997, and 2.0 $\mu g/\ell$ collected on October 23, 1997. VOCs consisting of dichloromethane, 1,1,1-trichloroethane, trichloroethene, and tetrachloroethene were detected in the influent samples collected this quarter. TPHms were detected in the influent samples on September 24, 1997, and October 23, 1997 at 350 $\mu g/\ell$ and 220 $\mu g/\ell$, respectively. Based on the analytical data, the SVE system has continued to meet air permit requirements. Copies of soil vapor extraction system analytical reports are included as Appendix B.

In an attempt to improve system efficiency, Safety-Kleen operated the SVE system this quarter in a pulsed (on-off) mode of approximately two-week cycles. Table 1 summarizes the dates when the SVE system was shut down and restarted. Table 2 summarizes the estimated SVE system mineral spirits removal to date. The SVE system removed an estimated 125 pounds of mineral spirits from August 28 through October 23, 1997. Data collected through October 23, 1997, indicate a total of 5489 pounds of mineral spirits have been removed from the subsurface by the SVE system.

4.2 Mineral Spirits Recovery

Mineral spirits product is collected in monitoring well MW-9 and recovery well RW-1 via passive recovery skimmers and by hand bailing at the time of SVE monitoring and groundwater sampling. No product was accumulated in the skimmers during this reporting period. The total volume of mineral spirits product removed from the subsurface to date is approximately 444.25 gallons.

4.3 Groundwater Elevations

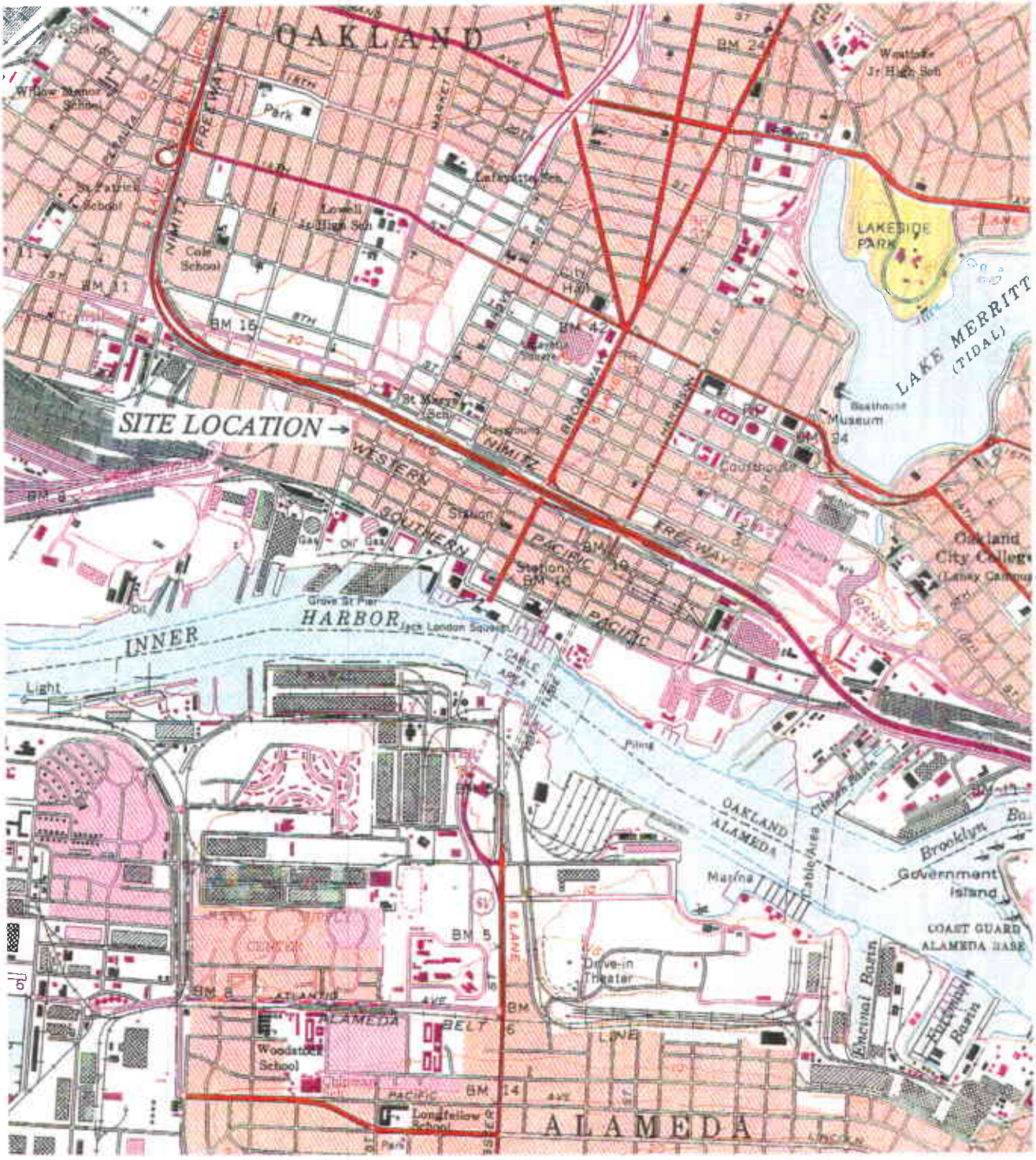
Groundwater elevations and depth-to-water measurements for the October 8, 1997, event are presented in Table 3. The average water table elevation on October 8, 1997, was 1.28 feet above mean sea level, a decrease of 0.27 feet since the July 1997 event. A groundwater potentiometric surface map prepared with the October 8, 1997, data is presented as Figure 4.

As shown in Figure 4, the groundwater flow direction remains to the southwest, consistent with historic site data. The hydraulic gradient was 0.005 feet/foot (ft/ft) across the site as measured between monitoring wells MW-4 and MW-2. The gradient is consistent with previous data for the site. A summary of groundwater elevations since January 1993 is provided as Table 4.

4.4 Groundwater Conditions

No TPHms or BTEX were detected in any of the groundwater samples collected on October 8, 1997. In addition, no VOCs were detected in the groundwater samples from monitoring well MW-1. Laboratory analyses of groundwater samples from monitoring wells MW-2 and MW-3 detected only chlorobenzene above laboratory reporting limits. Groundwater samples collected from monitoring wells MW-4, MW-8, and MW-12 contained concentrations of several VOCs above laboratory reporting limits including 1,1-dichloroethane, 1,2-dichloroethane, *cis*-1,2-dichloroethene. *trans*-1,2-dichloroethene, chloroform, chloromethane, and trichloroethene. Figure 5 depicts the chemical distribution in the groundwater samples collected on October 8, 1997. A summary of analytical test results showing compounds detected since the April 1993 sampling event are presented in Table 5. Copies of the groundwater laboratory analytical reports are included in Appendix C.

OAKLAND WEST QUADRANGLE
California
7.5 Minute Series (Topographic)



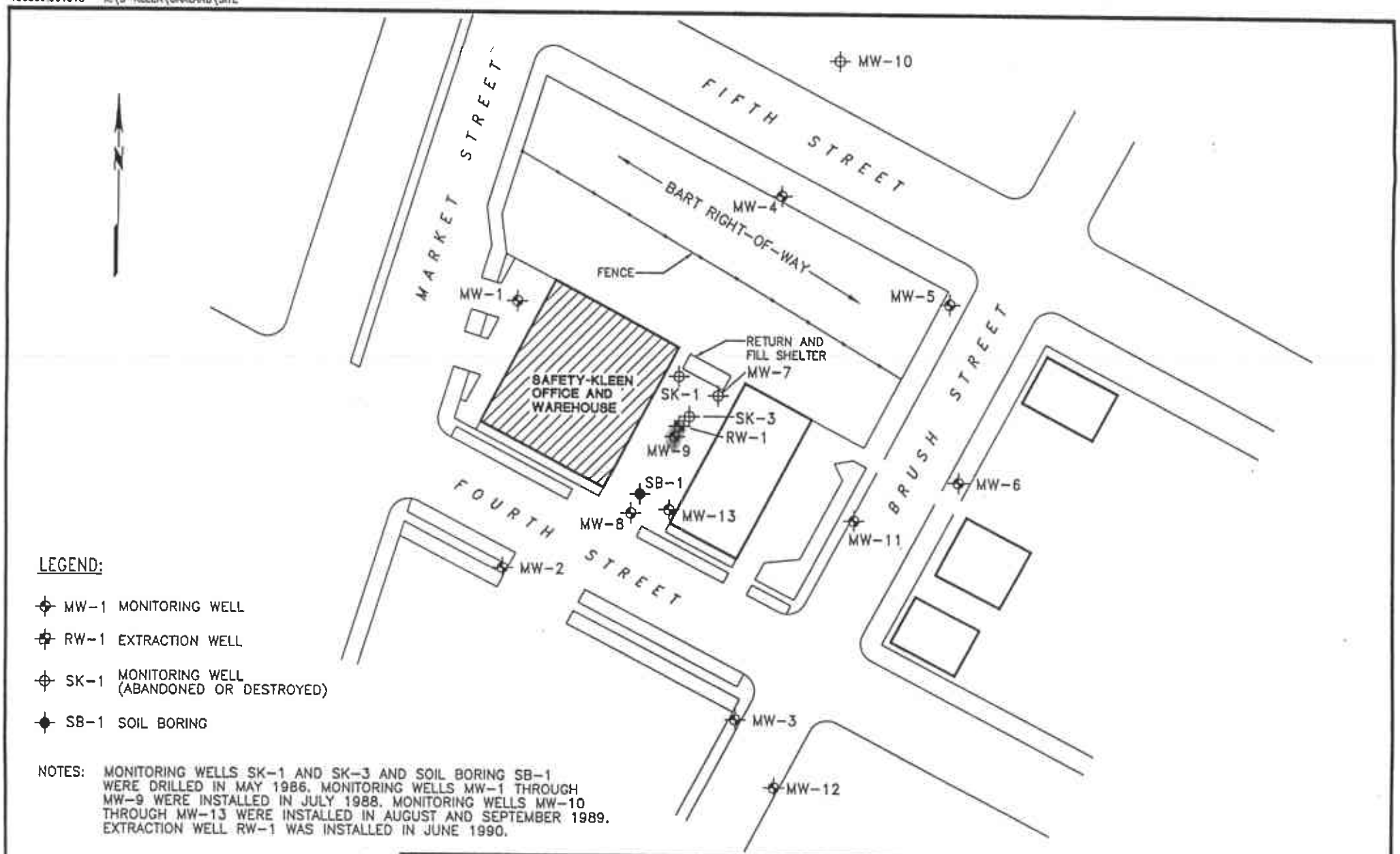
SCALE 1:24000

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



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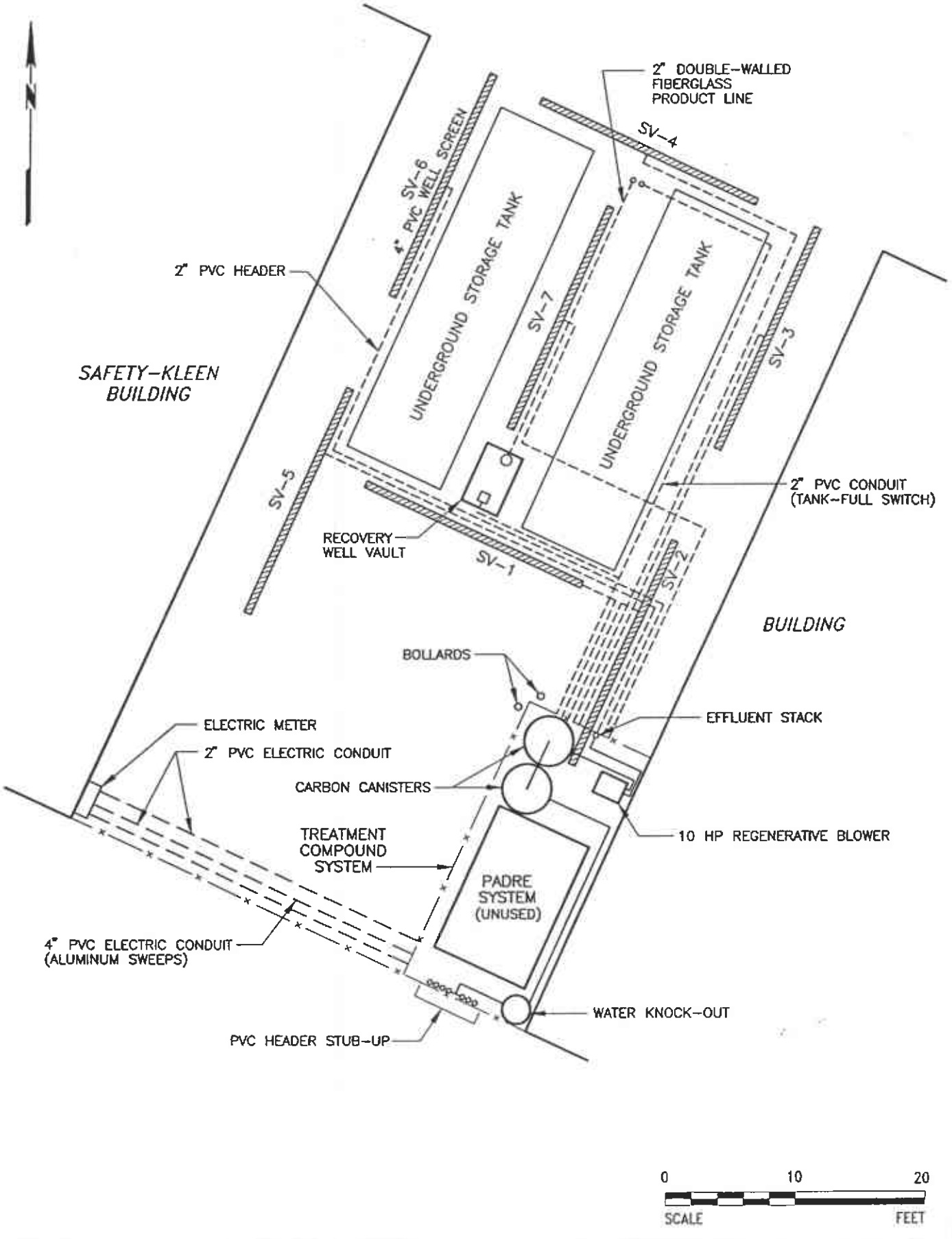
APPR	RR/GH
DATE	26NOV96
JOB NO.	70005-009

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

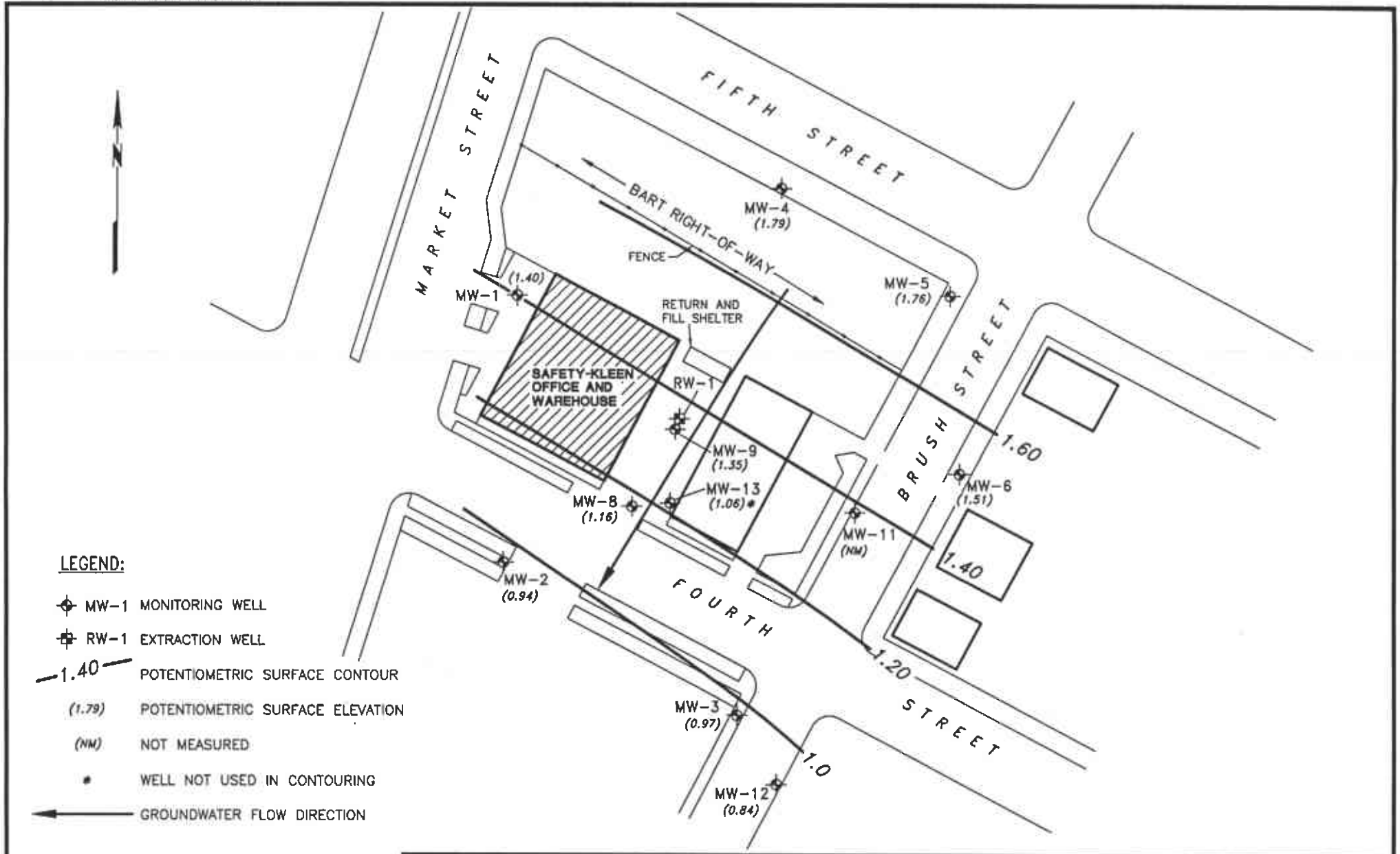
SITE PLAN



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

1995\2.071928 X:\SK-KLEEN\OAKLAND1S\FIG2

199712.091045 X:\S-KLEEN\OAKLAND\SURFAC11



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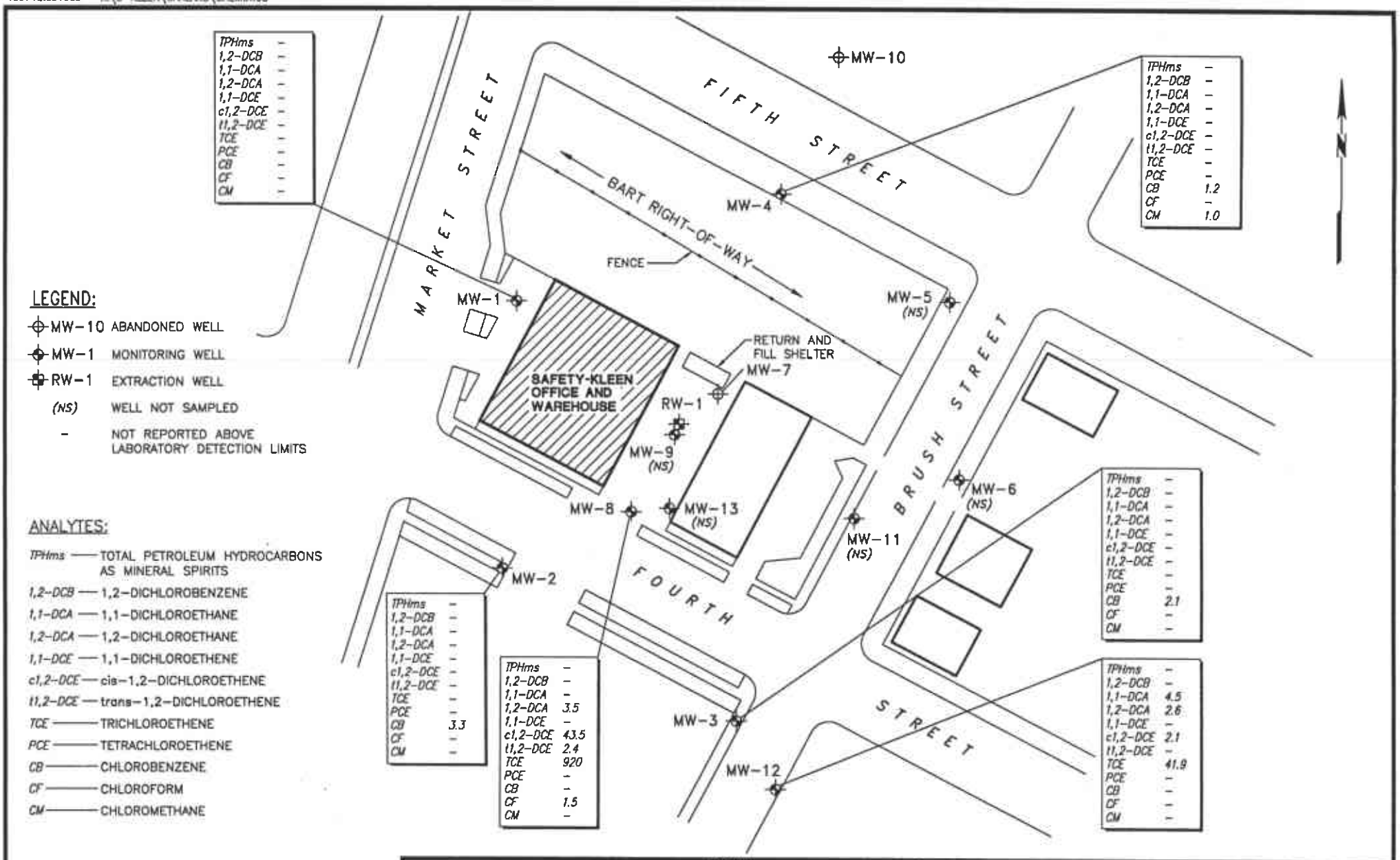
DATE	09DEC97
JOB NO.	70005-009

FIGURE 4
SAFETY-KLEEN SERVICE CENTER
400 MARKET STREET
OAKLAND, CALIFORNIA

POTENTIOMETRIC SURFACE MAP
OCTOBER 8, 1997

199712.091033 X:\S-KLEEN\OAKLAND\CHEMGW08



LEGEND:

- MW-10 ABANDONED WELL
- MW-1 MONITORING WELL
- RW-1 EXTRACTION WELL
- (NS) WELL NOT SAMPLED
- – NOT REPORTED ABOVE LABORATORY DETECTION LIMITS

ANALYTES:

- TPHms — TOTAL PETROLEUM HYDROCARBONS AS MINERAL SPIRITS
- 1,2-DCB — 1,2-DICHLOROBENZENE
- 1,1-DCA — 1,1-DICHLOROETHANE
- 1,2-DCA — 1,2-DICHLOROETHANE
- 1,1-DCE — 1,1-DICHLOROETHENE
- c1,2-DCE — cis-1,2-DICHLOROETHENE
- t1,2-DCE — trans-1,2-DICHLOROETHENE
- TCE — TRICHLOROETHENE
- PCE — TETRACHLOROETHENE
- CB — CHLOROBENZENE
- CF — CHLOROFORM
- CM — CHLOROMETHANE

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

0 80 160
SCALE FEET

SECOR INTERNATIONAL INCORPORATED

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APPR	KW/GH
DATE	09DEC97
JOB NO.	70005-009

FIGURE 5
SAFETY-KLEEN SERVICE CENTER
400 MARKET STREET
OAKLAND, CALIFORNIA

CHEMICAL DISTRIBUTION IN GROUNDWATER
OCTOBER 8, 1997

Table 1

Soil Vapor Extraction System Monitoring Data

Safety-Kleen Service Center
400 Market Street
Oakland, California

Date	Elapsed Time*	Well Extraction Vacuum	KO Vacuum	Extraction Flow Rate		System Influent	#1 Carbon Effluent	#2 Carbon Effluent	System Effluent	Notes
	(hours)	(inches H20)	(inches H20)	(ft/min)	(scfm)	(PID/FID units)	(PID/FID units)	(PID/FID units)	(PID/FID units)	
12/08/95	363	6.5	22	5000	107	413	3.1	4.6	6.4	* System restarted using carbon adsorption on 11/28/95.
12/21/95	677	6	20	5000	107	79.5	36.2	1.2	1.2	Influent and Effluent samples collected
01/09/96	1134	9	22	5000	106	169	42.4	2.8	1.7	Influent and Effluent samples collected
01/24/95	1489	5.5	17	2200	47	43	43.2	24.2	6.1	
02/06/96	1803	5	16	6000	129	63.4	61.1	33.4	16.1	Influent and Effluent samples collected
02/21/96	2158	8	20	5500	117	60.1	48	38.2	8.4	
03/08/96	2540	10	23	5000	106	183.7	52.3	44.8	15.5	Influent and Effluent samples collected
03/20/96	2635	12	23	5000	106	430	362.1	311.4	22.4	
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	NA	24	5000	109	109.3	44.5	0.2	0.2	Influent and Effluent samples collected
05/16/96	3934	NA	23	5000	109	117.3	150.9	3.2	1	
05/31/96	4289	0.15	25	5000	109	53.7	61	0.7	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	1.4	1.4	0	Influent and Effluent samples collected
09/03/96	5760	0.15	16	3500	76	131.2	0	0	0	
09/26/96	6316	8	15	3550	76	165	30	1.2	2.2	Influent and Effluent samples collected
10/03/96	6478	8	15	3000	64	231	70	42	13	
10/10/96	6645	8	15	3500	75	269.4	189	20.5	12.5	Influent and Effluent samples collected
10/22/96	6939	7	15	3000	64	480	442	1.8	1.2	Influent and Effluent samples collected
10/29/96	71040	8	16	4000	85	148.8	142.7	7.5	1.2	
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	60.3	52.6	0	0	
12/18/96	8299	0.14	26	5500	120	50.5	55.1	5	4.7	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	306.4	111.2	3.6	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	1.5	
04/10/97	10941	19	34	4000	83	15.4	32.5	3.9	3.2	
05/01/97	11440	23	30	3000	62	5.2	2.9	1.3	0.08	Influent and Effluent samples collected
05/14/97	11752	31	38	2000	40	18.7	17.4	8.9	0.4	
05/16/97	11798	NA	NA	NA	NA	NA	NA	NA	NA	System shutdown for carbon changeout
06/05/97	11798	20	30	8000	165	35.2	16.8	2	2	Carbon Changeout, Restart System, Influent and Effluent samples collected
06/17/97	12090	NM	30	8500	185	22.6	0	0	0	Shutdown system
06/30/97	12091	NM	29	4200	91	110.1	0.5	0.2	0	Restart system, Influent and Effluent samples collected
07/17/97	12496	NM	28	4800	104	6.4	0	0	0	Shutdown system
07/30/97	12497	NM	28	8000	174	19.4	0	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*	Well Extraction Vacuum	KO Vacuum	Extraction Flow Rate		System Influent	#1 Carbon Effluent	#2 Carbon Effluent	System Effluent	Notes
	(hours)	(inches H20)	(inches H20)	(ft/min)	(scfm)	(PID/FID units)	(PID/FID units)	(PID/FID units)	(PID/FID units)	
08/13/97	12837	NM	27	8500	185	12.4	0	0	0	Shutdown system
08/28/97	12837	18	30	8000	166	35	2.2	1	0	Restart system, Influent and Effluent samples collected
09/10/97	13148	>1	29	8250	179	8.8	0	0	0	Shutdown system
09/24/97	13149	NM	27	4000	87	24.6	0	0	0	Restart system, Influent and Effluent samples collected
10/08/97	13488	NM	26	8000	174	8.8	0	0	0	Shutdown system
10/23/97	13488	16	29	8000	167	25	3.5	0	0	Restart system, Influent and Effluent samples collected
11/14/97	14018	NM	28	8000	174	68.1	0	0	0	Shutdown system
11/26/97	14020	10	29	8000	170	6	2.2	0	0	Restart system

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

Table 2
Soil Vapor Extraction System
Mineral Spirits Removal
Safety-Kleen Service Center
400 Market Street
Oakland, California

Sample Date	Elapsed Time (hours)	Run Time This Period (hours)	Extraction Flow Rate (scfm)	TPHms Influent (ug/L)	Removal Rate (lbs./day)	TPHms Removed (lbs.)	Notes
11/28/95	Carbon adsorbtion system start-up					1798.4	TPHms removed by prior system.
12/21/95	677	677	109	823	8.07	2026.0	
01/09/96	1134	457	109	1116	10.95	2234.5	
02/06/96	1803	669	131	999	11.75	2562.1	
03/08/96	2540	737	109	1821	17.86	3110.5	
04/03/96	2906	366	109	1116	10.95	3277.4	
05/02/96	3594	688	109	1586	15.56	3723.4	
05/31/96	4289	695	109	1234	12.10	4073.9	
07/01/96	5039	750	109	82	0.81	4099.1	
08/22/96	5470	431	65	500	2.94	4151.9	
09/26/96	6316	846	77	1300	9.05	4470.7	
10/10/96	6645	329	76	880	6.04	4553.6	
10/22/96	6939	294	65	670	3.94	4601.9	
11/13/96	7467	528	109	460	4.51	4701.1	
12/18/96	8299	833	120	220	2.37	4783.5	
01/17/97	8950	651	82	69	0.51	4797.2	
02/10/97	9523	573	72	98	0.63	4812.4	
03/07/97	10124	601	83	ND (<50)	0.00	4812.4	
05/01/97	11440	1316	62	ND (<50)	0.00	4812.4	
06/05/97	11798	358	165	910	13.50	5013.7	
06/30/97	12091	293	91	550	4.50	5068.7	
07/30/97	12497	406	174	150	2.35	5108.4	
08/28/97	12837	746	166	550	8.21	5363.6	
09/24/97	13149	311	87	350	2.74	5399.1	
10/23/97	13488	651	167	220	3.30	5488.6	

Notes: cfm = cubic feet per minute
ug/L = micrograms per liter
lbs = pounds

Table 3
Groundwater Monitoring Data
October 8, 1997
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	6.59	-	-	1.40
MW-2	8.20	7.26	-		0.94
MW-3	6.66	5.69	-	-	0.97
MW-4	10.32	8.53	-	-	1.79
MW-5	10.28	8.52	-	-	1.76
MW-6	8.97	7.46	-	-	1.51
MW-8	7.80	6.64	-	-	1.16
MW-9	8.21	6.88	6.86	0.02	1.35
MW-10*	-	-	-	-	-
MW-11	7.91	NM	-	-	-
MW-12	6.74	5.90	-	-	0.84
MW-13	8.08	7.02	-	-	1.06
RW-1	-	NM	-	-	-

Notes:
TOC = Top of casing
DTW = Depth-to-water
DTP = Depth-to-product
PT = Product thickness
ft msl = Feet (ft) relative to mean sea level (msl)
* Well destroyed in July 1995
NM = Well not accessible

Table 4

Historical Summary of Groundwater Elevations

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
Jan-93	1.29	1.00	0.86	1.57	1.48	1.27	1.08	1.15	1.73	1.16	0.44	0.58
Apr-93	1.09	0.51	0.38	1.52	1.42	1.08	0.74	0.95	1.85	0.90	0.10	0.40
Jul-93	0.27	-0.23	-0.27	0.68	0.62	0.37	-0.01	-0.68	0.99	0.20	-0.72	-0.15
Oct-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
Jan-94	-0.01	-0.52	-0.77	0.33	0.48	-0.10	-0.37	-0.49	0.60	-0.14	-1.05	-0.65
Apr-94	0.55	0.05	-0.09	0.85	0.74	0.46	0.22	0.33	-	0.34	-0.76	-0.09
Jul-94	0.25	-0.20	-0.31	0.62	0.55	0.23	-0.03	0.08	0.90	0.09	-0.70	-0.22
Oct-94	0.08	-0.33	-0.44	0.41	0.38	0.12	-0.15	0.01	-	0.01	-0.59	-0.33
Jan-95	1.95	1.53	1.64	2.41	2.49	2.24	1.79	1.85	-	2.06	1.44	1.33
Apr-95	3.09	2.46	2.49	3.71	3.73	3.42	2.79	2.95	-	3.18	2.22	1.98
Jul-95	2.04	1.53	1.53	2.54	2.50	2.26	1.76	1.93	-	2.01	1.33	1.53
Oct-95	1.38	0.94	1.01	1.81	1.27	1.56	1.15	1.32	-	1.42	0.94	1.06
Jan-96	1.82	1.40	0.64	2.21	2.21	2.04	1.61	1.54	-	1.85	-	1.51
Apr-96	2.81	2.40	2.46	3.33	3.36	3.17	2.58	2.51	-	2.91	2.24	2.38
Jul-96	2.16	1.70	1.75	2.67	2.63	2.35	1.90	1.93	-	2.18	-	1.84
Nov-96	1.09	0.70	0.75	1.47	1.47	1.18	0.90	0.86	-	-	-	0.78
Jan-97	2.89	2.39	2.58	3.48	3.52	3.34	2.70	2.57	-	-	-	2.50
Apr-97	2.43	1.89	1.99	2.92	2.86	2.53	2.18	2.19	-	2.45	1.71	1.99
Jul-97	1.70	1.19	1.25	2.15	2.12	1.86	1.44	1.29	-	-	1.12	1.35
Oct-97	1.40	0.94	0.97	1.79	1.76	1.51	1.16	1.35	-	-	0.84	1.06

Notes:
Groundwater elevations are realative to mean sea-level datum
- = Not measured

Table 5
Summary of Groundwater Analytical Results
Detected Compounds
Safety-Kleen Service Center
400 Market Street
Oakland, California

Well No.	MW-1																							
Date		04-93	07-93	10-93	01-94	04-94	07-94	10-94	01-95	04-95	07-95	10-95	01-96	04-96	07-96	11-96		1-97		4-97		7-97		10-97
Compound	MCL	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)
TPH-mineral spirits	NE	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-	NS	NS	-
Benzene	1	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-	NS	NS	-
Toluene	150	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-	NS	NS	-
Ethyl-benzene	700	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-	NS	NS	-
Xylenes	1750	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-	NS	NS	-
1,1-Dichloroethene	6	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-	NS	NS	-
1,1-Dichloroethane	5	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-	NS	NS	-
1,2-Dichloroethane	0.5	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-	NS	NS	-
cis-1,2-Dichloroethene	6	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-	NS	NS	-
trans-1,2-Dichloroethene	10	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-	NS	NS	-
Chloroform	NE	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-	NS	NS	-
1,1,1-Trichloroethane	200	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-	NS	NS	-
Trichloroethene	5	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-	NS	NS	-
Tetrachloroethene	5	-	-	-	-	-	NS	-	NS	0.7	NS	-	NS	-	NS	-	-	NS	NS	-	-	NS	NS	-
Chlorobenzene	70	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-	NS	NS	-
1,2-Dichloropropane	5	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-	NS	NS	-
1,2-Dichlorobenzene	600	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-	NS	NS	-
1,4-Dichlorobenzene	5	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-	NS	NS	-
Trichlorofluoromethane	150	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-	NS	NS	-
Dichlorodifluoromethane	NE	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-	NS	NS	-
Chloroethane	NE	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-	NS	NS	-
Chlorotoluene	NE	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-	NS	NS	-
1,3-Dichlorobenzene	NE	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-	NS	NS	-
Trichloropropane	NE	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-	NS	NS	-
Vinyl chloride	0.5	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-	NS	NS	-

Well No.	MW-2																							
Date		04-93	07-93	10-93	01-94	04-94	07-94	10-94	01-95	04-95	07-95	10-95	01-96	04-96	07-96	11-96		1-97		4-97		7-97		10-97
Compound	MCL	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)
TPH-mineral spirits	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethyl-benzene	700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylenes	1750	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorobenzene	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.3
1,2-Dichloropropane	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane	150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroethane	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorotoluene	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloropropane	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 5
Summary of Groundwater Analytical Results
Detected Compounds
Safety-Kleen Service Center
400 Market Street
Oakland, California

Well No.	MW-3																						
Date		04-93	07-93	10-93	01-94	04-94	07-94	10-94	01-95	04-95	07-95	10-95	01-96	04-96	07-96	11-96		1-97		4-97		7-97		10-97
Compound	MCL	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)
TPH-mineral spirits	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethyl-benzene	700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylenes	1750	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	6	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene	5	0.7	-	-	-	-	-	-	-	-	-	-	-	-	-	1.6	4.9	-	-	-	-	-	-	-
Tetrachloroethene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.1
Chlorobenzene	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane	150	-	-	-	-	1.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroethane	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorotoluene	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloropropane	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Well No.	MW-4																						
Date		04-93	07-93	10-93	01-94	04-94	07-94	10-94	01-95	04-95	07-95	10-95	01-96	04-96	07-96	11-96		1-97		4-97		7-97		10-97 (note 1)
Compound	MCL	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)
TPH-mineral spirits	NE	-	-	* 400	* 270	* 760	* 200	* 330	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	150	-	-	-	-	-	-	-	-	1.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethyl-benzene	700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylenes	1750	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	6	-	-	-	-	-	-	-	0.7	0.8	5.2	4	3	6	4.8	5.1	5	5.7	6.4	5.6	5.7	6.7	6.8	-
1,1-Dichloroethane	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	6	-	-	-	-	-	-	-	-	-	11.8	-	17	10	11.3	5.1	9.2	4.4	7.2	7.5	9.7	6.6	6.5	-
trans-1,2-Dichloroethene	10	-	53	0.6	1.1	1.7	-	-	1.4	1	3.2	3	4	1.7	1.2	-	1.2	-	-	-	-	-	-	-
Chloroform	NE	7.6	-	1.9	-	5.0	-	-	-	-	-	3	6	1.3	1.8	1.6	1.8	1.9	2.3	1.5	1.4	2.5	1.7	-
1,1,1-Trichloroethane	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.1	-	1.2	1.2	1.4	-	1.6	-	-
Trichloroethene	5	2400	1100	-	790	1600	410	650	700	440	247	207	157	140	224	242.4	269	156.2	188.7	152.6	215.9	136.8	161.7	-
Tetrachloroethene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.1	-	-	-	-	-
Chlorobenzene	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.2	-	-	-	-	-	-	-	1.2
1,2-Dichloropropane	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane	150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroethane	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorotoluene	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloropropane	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	0.5	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-

Table 5
Summary of Groundwater Analytical Results
Detected Compounds
Safety-Kleen Service Center
400 Market Street
Oakland, California

Well No.	MW-5																							
Date		04-93	07-93	10-93	01-94	04-94	07-94	10-94	01-95	04-95	07-95	10-95	01-96	04-96	07-96	11-96		1-97		4-97		7-97		10-97
Compound	MCL	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)
TPH-mineral spirits	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Benzene	1	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Toluene	150	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Ethyl-benzene	700	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Xylenes	1750	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
1,1-Dichloroethene	6	1.5	0.6	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
1,1-Dichloroethane	5	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
1,2-Dichloroethane	0.5	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
cis-1,2-Dichloroethene	6	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
trans-1,2-Dichloroethene	10	-	-	-	4.3	3.5	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Chloroform	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	1.4	NS	NS	NS	NS	NS	3.2	2.9	NS	NS	NS
1,1,1-Trichloroethane	200	4	6	12	-	7.2	NS	NS	NS	9.1	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Trichloroethene	5	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	8.7	NS	NS	NS	NS	NS	3.6	3	NS	NS	NS
Tetrachloroethene	5	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Chlorobenzene	70	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
1,2-Dichloropropane	5	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
1,2-Dichlorobenzene	600	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
1,4-Dichlorobenzene	5	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Trichlorofluoromethane	150	18	19	-	-	7.9	NS	NS	NS	-	NS	NS	NS	4.5	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Dichlorodifluoromethane	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Chloroethane	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Chlorotoluene	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
1,3-Dichlorobenzene	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Trichloropropane	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Vinyl chloride	0.5	-	-	-	-	-	NS	NS	NS	16	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS

Well No.	MW-6																							
Date		04-93	07-93	10-93	01-94	04-94	07-94	10-94	01-95	04-95	07-95	10-95	01-96	04-96	07-96	11-96		1-97		4-97		7-97		10-97
Compound	MCL	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)
TPH-mineral spirits	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Benzene	1	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Toluene	150	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Ethyl-benzene	700	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Xylenes	1750	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
1,1-Dichloroethene	6	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
1,1-Dichloroethane	5	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
1,2-Dichloroethane	0.5	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
cis-1,2-Dichloroethene	6	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
trans-1,2-Dichloroethene	10	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Chloroform	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
1,1,1-Trichloroethane	200	-	5	1.3	-	1	NS	NS	NS	0.4	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Trichloroethene	5	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Tetrachloroethene	5	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Chlorobenzene	70	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
1,2-Dichloropropane	5	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
1,2-Dichlorobenzene	600	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
1,4-Dichlorobenzene	5	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Trichlorofluoromethane	150	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Dichlorodifluoromethane	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Chloroethane	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Chlorotoluene	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
1,3-Dichlorobenzene	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Trichloropropane	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Vinyl chloride	0.5	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS

Table 5
Summary of Groundwater Analytical Results
Detected Compounds
Safety-Kleen Service Center
400 Market Street
Oakland, California

Well No.		MW-8																						
Date		04-93	07-93	10-93	01-94	04-94	07-94	10-94	01-95	04-95	07-95	10-95	01-96	04-96	07-96	11-96		1-97		4-97		7-97		10-97
Compound	MCL	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)
TPH-mineral spirits	NE	-	-	-	* 60	-	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	1	-	-	-	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	150	-	-	-	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethyl-benzene	700	-	-	-	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylenes	1750	-	-	-	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	6	-	-	-	-	-	NS	-	-	-	3.5	7	19	7.2	-	3.2	1.3	-	-	-	-	-	1.2	-
1,1-Dichloroethane	5	3.4	-	-	8.6	3.7	NS	5.5	-	-	6.2	5	7	2.9	-	16.7	4.3	-	-	3.6	4.8	-	1.0	-
1,2-Dichloroethane	0.5	7.4	5	5.2	11	7.1	NS	-	-	-	9.8	10	11	5.1	-	9.5	6	-	2.1	2.1	3.4	3.5	3.5	3.5
cis-1,2-Dichloroethene	6	-	-	-	-	-	NS	-	-	-	25.57	63	56	63	-	44.5	60.6	1.2	22.6	17	50	38.6	42.4	43.5
trans-1,2-Dichloroethene	10	-	1	-	-	-	NS	-	-	-	2.3	6	4	2.9	-	1.1	2.9	-	1.3	-	-	2.3	2.3	2.4
Chloroform	NE	-	-	-	-	-	NS	-	-	-	-	-	13	-	-	1.7	3.9	-	1.4	-	-	3.2	2.6	1.5
1,1,1-Trichloroethane	200	-	-	-	2.5	1.5	NS	-	-	-	-	-	-	-	1.3	2.5	-	-	-	-	-	-	-	-
Trichloroethene	5	14	31	15	22	18	NS	23	2.6	15	163	557	486	569	1352	339.2	1156.8	2.9	500.3	95	241.9	803	792	920
Tetrachloroethene	5	1.8	-	-	2	0.8	NS	-	-	0.4	3.2	2	2	1.1	2	3.4	1.6	22.5	13	4.9	4.8	1.2	1.2	-
Chlorobenzene	70	11	-	5.4	16	-	NS	2.4	1.2	-	6.9	4	6	3.3	-	23.3	5.8	-	1.2	3.4	4.6	1.3	1.7	-
1,2-Dichloropropane	5	0.6	-	-	-	0.8	NS	-	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	600	2.6	-	-	4.8	-	NS	-	-	-	3.8	3	5	2	-	24.4	5.7	-	1.4	3.3	4.5	1.4	1.7	-
1,4-Dichlorobenzene	5	-	-	-	-	-	NS	-	-	-	-	-	-	-	1.1	3.9	1.1	-	-	-	-	-	-	-
Trichlorofluoromethane	150	-	-	-	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane	NE	-	-	-	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroethane	NE	-	-	-	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorotoluene	NE	-	-	-	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	NE	-	-	-	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloropropane	NE	-	-	-	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	0.5	-	-	-	-	-	NS	-	-	-	2.6	4	5	1.6	6.3	9.8	3.5	-	-	-	-	-	-	-

Well No.		MW-9																						
Date		04-93	07-93	10-93	01-94	04-94	07-94	10-94	01-95	04-95	07-95	10-95	01-96	04-96	07-96	11-96		1-97		4-97		7-97		10-97
Compound	MCL	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)
TPH-mineral spirits	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1536	1846	NS	NS	NS
Benzene	1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	14.9	17.4	NS	NS	NS
Toluene	150	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	13.3	17.2	NS	NS	NS
Ethyl-benzene	700	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	13.5	23.2	NS	NS	NS
Xylenes	1750	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	12.3	19.3	NS	NS	NS
1,1-Dichloroethene	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	-	NS	NS	NS
1,1-Dichloroethane	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	48	56.6	NS	NS	NS
1,2-Dichloroethane	0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	8.2	7.6	NS	NS	NS
cis-1,2-Dichloroethene	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	41.9	47.1	NS	NS	NS
trans-1,2-Dichloroethene	10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Chloroform	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	-	NS	NS	NS
1,1,1-Trichloroethane	200	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10.7	13.8	NS	NS	NS
Trichloroethene	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	12.5	16.1	NS	NS	NS
Tetrachloroethene	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Chlorobenzene	70	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	28.6	44.5	NS	NS	NS
1,2-Dichloropropane	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.6	1.4	NS	NS	NS
1,2-Dichlorobenzene	600	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	77.2	131.8	NS	NS	NS
1,4-Dichlorobenzene	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	17.2	34.4	NS	NS	NS
Trichlorofluoromethane	150	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Dichlorodifluoromethane	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Chloroethane	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2	2	NS	NS	NS
Chlorotoluene	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	9.9	19.2	NS	NS	NS
1,3-Dichlorobenzene	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4.6	4.2	NS	NS	NS
Trichloropropane	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4.6	4.2	NS	NS	NS
Vinyl chloride	0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	131.7	135.6	NS	NS	NS

Table 5
Summary of Groundwater Analytical Results
Detected Compounds
Safety-Kleen Service Center
400 Market Street
Oakland, California

Well No.	MW-10	(Abandoned)																					
Date		04-93	07-93	10-93	01-94	04-94	07-94	10-94	01-95	04-95	07-95	10-95	01-96	04-96	07-96	11-96		1-97		4-97		7-97		10-97
Compound	MCL	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)
TPH-mineral spirits	NE	-	-	-	-	NS	NS	NS	NS	NS	NS	Well Destroyed July 1995												
Benzene	1	-	-	-	-	NS	NS	NS	NS	NS	NS													
Toluene	150	-	-	-	-	NS	NS	NS	NS	NS	NS													
Ethyl-benzene	700	-	-	-	-	NS	NS	NS	NS	NS	NS													
Xylenes	1750	-	-	-	-	NS	NS	NS	NS	NS	NS													
1,1-Dichloroethene	6	-	2	-	-	NS	NS	NS	NS	NS	NS													
1,1-Dichloroethane	5	-	-	-	-	NS	NS	NS	NS	NS	NS													
1,2-Dichloroethane	0.5	-	-	-	-	NS	NS	NS	NS	NS	NS													
cis-1,2-Dichloroethene	6	-	-	-	-	NS	NS	NS	NS	NS	NS													
trans-1,2-Dichloroethene	10	-	17	3	0.4	NS	NS	NS	NS	NS	NS													
Chloroform	NE	1.2	0.5	-	-	NS	NS	NS	NS	NS	NS													
1,1,1-Trichloroethane	200	-	0.8	-	-	NS	NS	NS	NS	NS	NS													
Trichloroethene	5	45	54	42	67	NS	NS	NS	NS	NS	NS													
Tetrachloroethene	5	-	-	-	-	NS	NS	NS	NS	NS	NS													
Chlorobenzene	70	-	-	-	-	NS	NS	NS	NS	NS	NS													
1,2-Dichloropropane	5	-	-	-	-	NS	NS	NS	NS	NS	NS													
1,2-Dichlorobenzene	600	-	-	-	-	NS	NS	NS	NS	NS	NS													
1,4-Dichlorobenzene	5	-	-	-	-	NS	NS	NS	NS	NS	NS													
Trichlorofluoromethane	150	-	-	-	-	NS	NS	NS	NS	NS	NS													
Dichlorodifluoromethane	NE	-	-	-	-	NS	NS	NS	NS	NS	NS													
Chloroethane	NE	-	-	-	-	NS	NS	NS	NS	NS	NS													
Chlorotoluene	NE	-	-	-	-	NS	NS	NS	NS	NS	NS													
1,3-Dichlorobenzene	NE	-	-	-	-	NS	NS	NS	NS	NS	NS													
Trichloropropane	NE	-	-	-	-	NS	NS	NS	NS	NS	NS													
Vinyl chloride	0.5	-	-	-	-	NS	NS	NS	NS	NS	NS													

Well No.	MW-11																							
Date		04-93	07-93	10-93	01-94	04-94	07-94	10-94	01-95	04-95	07-95	10-95	01-96	04-96	07-96	11-96		1-97		4-97		7-97		10-97
Compound	MCL	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)
TPH-mineral spirits	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	1	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Toluene	150	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethyl-benzene	700	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Xylenes	1750	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethene	6	-	2	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethane	5	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloroethane	0.5	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
cis-1,2-Dichloroethene	6	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
trans-1,2-Dichloroethene	10	-	3	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chloroform	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,1-Trichloroethane	200	-	2	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Trichloroethene	5	9.1	36	11	2.6	3.1	NS	NS	NS	3.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Tetrachloroethene	5	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chlorobenzene	70	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloropropane	5	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	600	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	5	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Trichlorofluoromethane	150	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dichlorodifluoromethane	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chloroethane	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chlorotoluene	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3-Dichlorobenzene	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Trichloropropane	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Vinyl chloride	0.5	-	-	-	-	-	NS	NS	NS	1.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 5
Summary of Groundwater Analytical Results
Detected Compounds
Safety-Kleen Service Center
400 Market Street
Oakland, California

Well No.	MW-12																							
Date		04-93	07-93	10-93	01-94	04-94	07-94	10-94	01-95	04-95	07-95	10-95	01-96	04-96	07-96	11-96		1-97		4-97		7-97		10-97
Compound	MCL	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)
TPH-mineral spirits	NE	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	-
Benzene	1	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	-
Toluene	150	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	-
Ethyl-benzene	700	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	-
Xylenes	1750	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	-
1,1-Dichloroethene	6	-	-	-	-	-	NS	-	NS	-	NS	2	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	-
1,1-Dichloroethane	5	2.6	2	-	2.3	1.7	NS	1.6	NS	3.8	NS	4	NS	2.9	NS	NS	NS	NS	NS	6.2	6.3	NS	NS	4.5
1,2-Dichloroethane	0.5	-	2	-	1.2	1.9	NS	-	NS	-	NS	3	NS	1.6	NS	NS	NS	NS	NS	3.5	3.5	NS	NS	2.6
cis-1,2-Dichloroethene	6	-	-	-	-	-	NS	-	NS	-	NS	5	NS	-	NS	NS	NS	NS	NS	1.1	1.4	NS	NS	2.1
trans-1,2-Dichloroethene	10	-	3	-	-	-	NS	-	NS	-	NS	2	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	-
Chloroform	NE	-	-	-	-	-	NS	-	NS	-	NS	-	NS	1.1	NS	NS	NS	NS	NS	-	-	NS	NS	-
1,1,1-Trichloroethane	200	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	-
Trichloroethene	5	17	30	34	11	44	NS	24	NS	59	NS	95	NS	7.5	NS	NS	NS	NS	NS	9.5	24.3	NS	NS	41.9
Tetrachloroethene	5	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	-
Chlorobenzene	70	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	-
1,2-Dichloropropane	5	-	-	-	-	-	NS	-	NS	-	NS	2	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	-
1,2-Dichlorobenzene	600	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	-
1,4-Dichlorobenzene	5	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	-
Trichlorofluoromethane	150	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	-
Dichlorodifluoromethane	NE	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	-
Chloroethane	NE	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	-
Chlorotoluene	NE	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	-
1,3-Dichlorobenzene	NE	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	-
Trichloropropane	NE	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	-
Vinyl chloride	0.5	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	-

Well No.	MW-13																							
Date		01-93	07-93	10-93	01-94	04-94	07-94	10-94	01-95	04-95	07-95	10-95	01-96	04-96	07-96	11-96		1-97		5-97***		7-97		10-97
Compound	MCL	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)
TPH-mineral spirits	NE	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Benzene	1	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Toluene	150	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Ethyl-benzene	700	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Xylenes	1750	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
1,1-Dichloroethene	6	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
1,1-Dichloroethane	5	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
1,2-Dichloroethane	0.5	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
cis-1,2-Dichloroethene	6	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
trans-1,2-Dichloroethene	10	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Chloroform	NE	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
1,1,1-Trichloroethane	200	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Trichloroethene	5	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Tetrachloroethene	5	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Chlorobenzene	70	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
1,2-Dichloropropane	5	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
1,2-Dichlorobenzene	600	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
1,4-Dichlorobenzene	5	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Trichlorofluoromethane	150	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Dichlorodifluoromethane	NE	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Chloroethane	NE	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Chlorotoluene	NE	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
1,3-Dichlorobenzene	NE	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Trichloropropane	NE	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS
Vinyl chloride	0.5	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-	NS	NS	NS

Table 5
Summary of Groundwater Analytical Results
Detected Compounds
Safety-Kleen Service Center
400 Market Street
Oakland, California

LEGEND

MCL = Maximum contaminant level for primary drinking water constituents
NE = Not Established
NS = Not Sampled
- = Not Detected
* The TPH as mineral spirits 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.

NOTES:

(1) In addition to the constituents listed, chloromethane was detected at 1.0 ug/l.

APPENDIX A

Field Data Sheets

DATE: 10/8/97 PROJECT: SIL OAK PROJECT # 70005-009

EVENT: QTY Sampling SAMPLER: RR

WELL OR LOCATION	TIME	MEASUREMENT					COMMENTS
		TOC	DTW	DTP	PT	ELEV	
MW-12	6:40		5.90				
MW-3	6:43		5.69				
MW-2	6:50		7.26				
MW-1	6:52		6.59				
MW-4	6:59		8.53				
MW-5	7:03		8.52				
MW-6	7:07		7.46				
MW-11	7:10		—				OBSPWG80.
MW-8	7:17		6.64				
MW-13	7:23		7.02				
MW-9	7:30		6.86	6.85	0.02		
RW-1	7:35		—				Thick on top--

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

SECOR International Incorporated

WATER SAMPLE FIELD DATA SHEET

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

Client Name: SL Sampled By: NN Sample I.D.: MW-4

Location: OAK QA Samples: _____

Date Purged 10/8/97 Start (2400hr) 10:07 End (2400hr) 10:15

Date Sampled 10/8/97 Sample Time (2400hr) 10:15

Sample Type: ☑ Groundwater ☐ Other

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

Depth to Bottom (feet) = — Purge (gal) = 1 GL - -

Depth to Water (feet) = 8.53 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)
10/8	10:07	—	19.4	88.5	6.93	MW	10	1.72	8.53
"	—	—	19.7	89.6	6.91	"	9	1.75	—
"	—	—	19.5	89.7	6.90	"	10	1.61	—
"	—	—	19.9	89.6	6.90	"	10	1.26	—
"	—	—	20.1	89.4	6.90	"	10	0.98	—
"	10:15	10 GAL	20.2	89.2	6.89	"	10	0.96	8.68

SAMPLE INFORMATION

Sample Depth to Water: _____ Sample Turbidity: _____

Analyses: _____

Odor: _____ Sample Vessel/Preservative: _____

PURGING EQUIPMENT

___Bladder Pump ___Bailer (Teflon)

___Centrifugal Pump ___Bailer (PVC)

___Submersible Pump ___Bailer (Stainless Steel)

✓ Peristaltic Pump ___Dedicated _____

Other: _____

Pump Depth: _____

SAMPLING EQUIPMENT

___Bladder Pump ___Bailer (Teflon)

___Centrifugal Pump ___Bailer (PVC or disposable)

___Submersible Pump ___Bailer (Stainless Steel)

✓ Peristaltic Pump ___Dedicated _____

Other: _____

Well Integrity: OK Lock #: _____

Remarks: _____

NOTE: Sample after three consecutive roadings are within:

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

Signature: NN

SECOR International Incorporated

WATER SAMPLE FIELD DATA SHEET

Project #: 70005-004 Purged By: NA Well I.D.: MW-8

Client Name: SL Sampled By: NA Sample I.D.: MW-8

Location: OAK QA Samples: MW-18

Date Purged 10/8/97 Start (2400hr) 10:38 End (2400hr) 10:49

Date Sampled 10/8/97 Sample Time (2400hr) 10:50 / 11:50

Sample Type: ☑ Groundwater ☐ Other

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

Depth to Bottom (feet) = ____ Purge (gal) = 1 GAL

Depth to Water (feet) = 6.64 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)
10/8			18.7	82F	6.96	PW	10	0.81	
"			19.3	84.4	6.94		10	0.54	
"			19.3	84.6	6.94		60	0.59	
			19.4	84.7	6.94		10	0.53	
		10:49	19.4	84.9	6.94		10	0.50	6.75

SAMPLE INFORMATION

Sample Depth to Water: ____ Sample Turbidity: ____

Analyses: ____

Odor: ____ Sample Vessel/Preservative: ____

PURGING EQUIPMENT

____Bladder Pump ____Bailer (Teflon)

____Centrifugal Pump ____Bailer (PVC)

____Submersible Pump ____Bailer (Stainless Steel)

✓ Peristaltic Pump ____Dedicated ____

Other: ____

Pump Depth: ____

SAMPLING EQUIPMENT

____Bladder Pump ____Bailer (Teflon)

____Centrifugal Pump ____Bailer (PVC or disposable)

____Submersible Pump ____Bailer (Stainless Steel)

✓ Peristaltic Pump ____Dedicated ____

Other: ____

Well Integrity: OK Lock #: NO

Remarks: ____

NOTE: Sample after three consecutive roadings are within:

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

Signature: NA

SECOR International Incorporated

WATER SAMPLE FIELD DATA SHEET

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

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

Location: OAK | QA Samples: _____

Date Purged 10/8/97 | Start (2400hr) 8:13 | End (2400hr) 8:17

Date Sampled 10/8/97 | Sample Time (2400hr) 8:20

Sample Type: ☑ Groundwater ☐ Other

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

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

Depth to Water (feet) = 5.69 | 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)
10/8	8:13	—	19.7	2.35	7.38	MW	90	3.80	5.69
"	—	—	20.1	2.32	7.31	"	70	2.94	—
"	—	—	20.5	22.7	7.22	"	68	2.10	—
"	—	—	20.6	22.6	7.20	"	74	2.10	—
"	8:17	1.5	21.0	22.5	7.18	"	80	2.30	6.90
"									

SAMPLE INFORMATION

Sample Depth to Water: _____ | Sample Turbidity: _____

Analyses: _____

Odor: _____ | Sample Vessel/Preservative: _____

PURGING EQUIPMENT

___Bladder Pump ___Bailer (Teflon)

___Centrifugal Pump ___Bailer (PVC)

___Submersible Pump ___Bailer (Stainless Steel)

✓ Peristaltic Pump ___Dedicated _____

Other: _____

Pump Depth: _____

SAMPLING EQUIPMENT

___Bladder Pump ___Bailer (Teflon)

___Centrifugal Pump ___Bailer (PVC or disposable)

___Submersible Pump ___Bailer (Stainless Steel)

✓ Peristaltic Pump ___Dedicated _____

Other: _____

Well Integrity: OK | Lock #: _____

Remarks: _____

NOTE: Sample after three consecutive roadings are within:

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

Signature: AA | Page 1 of 1

SECOR International Incorporated

WATER SAMPLE FIELD DATA SHEET

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

Client Name: SIL Sampled By: AN Sample I.D.: MW-1

Location: OAK QA Samples: _____

Date Purged 10/8/97 Start (2400hr) 9:21 End (2400hr) 9:26

Date Sampled 10/8/97 Sample Time (2400hr) 9:30

Sample Type: ☑ Groundwater ☐ Other

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

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

Depth to Water (feet) = 6.59 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)
10/8	9:21	—	19.1	57.80	7.47	NM	9	2.75	6.59
"	—	—	19.3	56.1	7.45	"	10	1.89	—
"	—	—	19.3	56.1	7.43	"	10	1.68	—
"	—	—	19.3	56.0	7.41	"	10	1.35	—
"	9:26	1 GL	19.3	55.8	7.40	"	10	1.30	6.95

SAMPLE INFORMATION

Sample Depth to Water: _____ Sample Turbidity: _____

Analyses: _____

Odor: _____ Sample Vessel/Preservative: _____

PURGING EQUIPMENT

___Bladder Pump ___Bailer (Teflon)

___Centrifugal Pump ___Bailer (PVC)

___Submersible Pump ___Bailer (Stainless Steel)

✓ Peristaltic Pump ___Dedicated _____

Other: _____

Pump Depth: _____

SAMPLING EQUIPMENT

___Bladder Pump ___Bailer (Teflon)

___Centrifugal Pump ___Bailer (PVC or disposable)

___Submersible Pump ___Bailer (Stainless Steel)

✓ Peristaltic Pump ___Dedicated _____

Other: _____

Well Integrity: OK Lock #: NO

Remarks: SEEMS LIKE TURBIDITY METER IS NOT WORKING OK

NOTE: Sample after three consecutive roadings are within:

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

Signature: AN

SECOR International Incorporated

WATER SAMPLE FIELD DATA SHEET

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

Client Name: SIL Sampled By: AA Sample I.D.: MW-12

Location: OAK QA Samples: _____

Date Purged 10/8/97 Start (2400hr) 7:36 End (2400hr) 7:40

Date Sampled 10/8/97 Sample Time (2400hr) 7:40

Sample Type: ☑ Groundwater ☐ Other

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

Depth to Bottom (feet) = — Purge (gal) = 1

Depth to Water (feet) = 5.90 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)
10/8	7:36	—	19.3	158	6.78	CLEAR	10	1.71	5.90
"	—	—	19.4	103	6.79	"	10	1.27	—
"	—	—	19.5	102	6.85	"	10	0.87	—
"	—	—	19.5	102	6.89	"	10	0.71	—
"	—	—	19.5	102	6.91	"	10	0.63	—
"	7:40	1.0	19.6	101	6.93	"	10	0.62	5.98

SAMPLE INFORMATION

Sample Depth to Water: _____ Sample Turbidity: _____

Analyses: _____

Odor: _____ Sample Vessel/Preservative: _____

PURGING EQUIPMENT

___Bladder Pump ___Bailer (Teflon)

___Centrifugal Pump ___Bailer (PVC)

___Submersible Pump ___Bailer (Stainless Steel)

✓ Peristaltic Pump ___Dedicated _____

Other: _____

Pump Depth: _____

SAMPLING EQUIPMENT

___Bladder Pump ___Bailer (Teflon)

___Centrifugal Pump ___Bailer (PVC or disposable)

___Submersible Pump ___Bailer (Stainless Steel)

✓ Peristaltic Pump ___Dedicated _____

Other: _____

Well Integrity: OK Lock #: _____

Remarks: _____

NOTE: Sample after three consecutive roadings are within:

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

Signature: AA

SECOR International Incorporated

WATER SAMPLE FIELD DATA SHEET

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

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

Location: OAK QA Samples: _____

Date Purged 10/8/97 Start (2400hr) 8:49 End (2400hr) 8:54

Date Sampled 10/8/97 Sample Time (2400hr) 9:00

Sample Type: ☑ Groundwater ☐ Other

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

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

Depth to Water (feet) = 7.26 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)
10/8			20.7	66.5	7.10	CLR	10	1.19	
"			21.2	66.2	7.10		9	0.98	
			21.3	65.8	7.11		10	0.92	
			21.3	65.9	7.10		10	0.94	
	8:54	1 GL	21.5	65.8	7.10		10	0.97	9.60

SAMPLE INFORMATION

Sample Depth to Water: _____ Sample Turbidity: _____

Analyses: _____

Odor: _____ Sample Vessel/Preservative: _____

PURGING EQUIPMENT

___Bladder Pump ___Bailer (Teflon)

___Centrifugal Pump ___Bailer (PVC)

___Submersible Pump ___Bailer (Stainless Steel)

✓ Peristaltic Pump ___Dedicated _____

Other: _____

Pump Depth: _____

SAMPLING EQUIPMENT

___Bladder Pump ___Bailer (Teflon)

___Centrifugal Pump ___Bailer (PVC or disposable)

___Submersible Pump ___Bailer (Stainless Steel)

✓ Peristaltic Pump ___Dedicated _____

Other: _____

Well Integrity: OK Lock #: _____

Remarks: _____

NOTE: Sample after three consecutive roadings are within:

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

Signature: AA Page ___ of ___

Chain-of Custody Number:

SECOR Chain-of Custody Record

Field Office: Oxnard

Address: 1390 Willow Pass Rd, Suite 360
Concord CA. 94520

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

Job Name: Safeway Kleen

Location: 400 Market St.
Oakland, CA.

Project # 7025-009 Task #

Project Manager Mark Hughes

Laboratory SK

Turnaround Time Standard

Sampler's Name R. Nagao

Sampler's Signature

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 Diesel & Motor Oil		Comments/ Instructions	Number of Containers
Trip Blank	10/8/97	7:00	W							X						X			1
MW-1	"	9:30	"							X						X			5
MW-2	"	9:00	"							X						X			5
MW-3	"	9:20	"							X						X			5
MW-4	"	10:15	"							X						X			5
MW-5	"	10:50	"							X						X			5
MW-12	"	9:40	"							X						X			5
MW-13	"	11:50	"							X						X			5

Special Instructions/Comments:

Relinquished by:
Sign
Print R. Nagao
Company SECOR
Time 14:02 Date 10/8/97

Received by:
Sign
Print
Company
Time Date

Relinquished by:
Sign
Print
Company
Time Date

Received by:
Sign
Print
Company
Time Date

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

Client: SECOR
Client Contact: Kristy
Client Phone: (510) 686-9780

SECOR CUSTREC Rev. 1/95

Date: 10/8/97 Page 1 of 1

APPENDIX B

Laboratory Reports - Soil Vapor Extraction System Samples

Superior Analytical Laboratory

SECOR
1390 WILLOW PASS RD, STE. 360
CONCORD, CA 94520

Attn: GREG HOEHN

Date: October 7, 1997

Laboratory Number : 23236

Project Number/Name : 70005-009
Facility/Site : SAFETY KLEEN CORP.
400 ~~NAVIGET~~ MAHER ST.
OAKLAND, CA

Dear GREG HOEHN:

Attached is Superior Analytical Laboratory report for the samples received on September 24, 1997. This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety. Following the cover letter is the Case Narrative detailing sample receipt and analysis. Also enclosed is a copy of the original Chain-of-Custody record confirming receipt of samples.

Please note that any unused portion of the sample will be discarded after October 24, 1997, unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions, please contact our Laboratory at (510) 313-0850.

Sincerely,

Afsaneh Salimpour
Project Manager

Sanjay Panda
QA/QC Manager

Superior
Analytical Laboratory

CASE NARRATIVE

SECOR
Project Number/Name: 70005-009
Laboratory Number: 23236

Sample Receipt

Two air samples were received by
Superior Analytical Laboratory on September 24, 1997.

No abnormalities were noted with sample recieving.

Sample Analysis

The samples were analyzed for methods 8010, 8015M and 8020.

Superior
Analytical Laboratory

SE .
Attn: GREG HOEHN

Project 70005-009
Reported on September 26, 1997

Halogenated Volatile Organics by EPA SW-846 Methods 5030/8010

Chronology

Laboratory Number 23236

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
EFF	09/24/97	09/24/97	09/24/97	09/24/97	DI241.07	01
INF	09/24/97	09/24/97	09/24/97	09/24/97	DI241.07	02

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
DI241.07-01	Method Blank	MB	Water	09/24/97	09/24/97
DI241.07-02	Laboratory Spike	LS	Water	09/24/97	09/24/97
DI241.07-03	Laboratory Spike Duplicate	LSD	Water	09/24/97	09/24/97
DI241.07-04	SAMPLE @ 08:30AM	MS 23216-01	Water	09/24/97	09/24/97
DI241.07-05	SAMPLE @ 08:30AM	MSD 23216-01	Water	09/24/97	09/24/97

Superior Analytical Laboratory

SE
Attn: GREG HOEHN

Project 70005-009
Reported on September 26, 1997

Halogenated Volatile Organics by EPA SW-846 Methods 5030/8010

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
23236-01	EFF	Air	1.0	-
23236-02	INF	Air	1.0	-

R E S U L T S O F A N A L Y S I S

Compound	23236-01 Conc. PPB (V/V)	RL	23236-02 Conc. PPB (V/V)	RL
Chloromethane	ND	480	ND	480
Vinyl Chloride	ND	390	ND	390
Bromomethane	ND	250	ND	250
Chloroethane	ND	270	ND	270
Trichlorofluoromethane	ND	88	ND	88
1,1-Dichloroethene	ND	120	ND	120
Dichloromethane	250	140	ND	140
t 2-Dichloroethene	ND	120	ND	120
1,1-Dichloroethane	ND	120	ND	120
c-1,2-Dichloroethene	ND	120	ND	120
Chloroform	ND	100	ND	100
1,1,1-Trichloroethane	ND	90	ND	90
Carbon tetrachloride	ND	78	ND	78
1,2-Dichloroethane	ND	120	ND	120
Trichloroethene	ND	92	ND	92
c-1,3-Dichloropropene	ND	110	ND	110
1,2-Dichloropropane	ND	110	ND	110
t-1,3-Dichloropropene	ND	110	ND	110
Bromodichloromethane	ND	68	ND	68
1,1,2-Trichloroethane	ND	90	ND	90
Tetrachloroethene	ND	73	ND	73
Dibromochloromethane	ND	58	ND	58
Chlorobenzene	ND	110	ND	110
Bromoform	ND	48	ND	48
1,1,2,2-Tetrachloroethane	ND	72	ND	72
1,3-Dichlorobenzene	ND	82	ND	82
1,2-Dichlorobenzene	ND	82	ND	82
1,4-Dichlorobenzene	ND	82	ND	82
>> Surrogate Recoveries (%) <<				
Bromochloromethane	98		94	

Superior
Analytical Laboratory

SE R
Attn: GREG HOEHN

Project 70005-009
Reported on September 26, 1997

Halogenated Volatile Organics by EPA SW-846 Methods 5030/8010

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
23236-01	EFF	Air	1.0	-
23236-02	INF	Air	1.0	-

RESULTS OF ANALYSIS

Compound	23236-01 Conc. PPB (V/V)	RL	23236-02 Conc. PPB (V/V)	RL
4-Bromofluorobenzene	99		94	

Superior
Analytical Laboratory

Halogenated Volatile Organics by EPA SW-846 Methods 5030/8010

Quality Assurance and Control Data

Laboratory Number: 23236
Method Blank(s)

	DI241.07-01 Conc. ug/L	RL
Chloromethane	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	0.5
Chloroethane	ND	0.5
Trichlorofluoromethane	ND	0.5
1,1-Dichloroethene	ND	0.5
Dichloromethane	ND	0.5
t-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
c-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Trichloroethene	ND	0.5
c-1,3-Dichloropropene	ND	0.5
1,2-Dichloropropane	ND	0.5
t-1,3-Dichloropropene	ND	0.5
Bromodichloromethane	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5

>> Surrogate Recoveries (%) <<

Bromochloromethane	89
4-Bromofluorobenzene	91

Superior Analytical Laboratory

Halogenated Volatile Organics by EPA SW-846 Methods 5030/8010

Quality Assurance and Control Data

Laboratory Number: 23236

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
		For Water Matrix (ug/L)				
		DI241.07 02 / 03 - Laboratory Control Spikes				
1,1-Dichloroethene		20	18/18	90/90	70-130	0
Trichloroethene		20	19/19	95/95	60-130	0
Chlorobenzene		20	20/21	100/105	75-130	5
>> Surrogate Recoveries (%) <<						
Bromochloromethane				104/106	70-120	
4-Bromofluorobenzene				114/111	60-125	
		For Water Matrix (ug/L)				
		DI241.07 04 / 05 - Sample Spiked: 23216 - 01				
1,1-Dichloroethene	ND	20	18/19	90/95	70-130	5
Trichloroethene	ND	20	19/19	95/95	60-130	0
Chlorobenzene	ND	20	20/21	100/105	75-130	5
>> Surrogate Recoveries (%) <<						
Bromochloromethane				104/108	70-120	
4-Bromofluorobenzene				110/114	60-125	

Definitions:
ND = Not Detected
RL = Reporting Limit
NA = Not Analysed
RPD = Relative Percent Difference
ug/L = parts per billion (ppb)
mg/L = parts per million (ppm)
ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

Superior
Analytical Laboratory

SE[illegible]R
At GREG HOEHN

Project 70005-009
Reported on October 7, 1997

Total Volatile Petroleum Hydrocarbons by EPA SW-846 5030/8015M

Chronology

Laboratory Number 23236

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
EFF	09/24/97	09/24/97	09/24/97	09/24/97	DI242.37	01
INF	09/24/97	09/24/97	09/24/97	09/24/97	DI242.37	02

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
DI242.37-06	Method Blank	MB	Water	09/24/97	09/24/97
DI242.37-07	Laboratory Spike	LS	Water	09/24/97	09/24/97
DI242.37-08	0820 SS33-04	MS 23225-02	Water	09/24/97	09/24/97
DI242.37-09	0820 SS33-04	MSD 23225-02	Water	09/24/97	09/24/97

SE
Attn: GREG HOEHN

Project 70005-009
Reported on October 7, 1997

Total Volatile Petroleum Hydrocarbons by EPA SW-846 5030/8015M

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
23236-01	EFF	Air	1.0	-
23236-02	INF	Air	1.0	-

R E S U L T S O F A N A L Y S I S

Compound	23236-01 Conc. ug/L	RL	23236-02 Conc. ug/L	RL
Mineral Spirits	ND	50	350	50
>> Surrogate Recoveries (%) <<				
4-Bromofluorobenzene (SS)	90		117	

Superior
Analytical Laboratory

Total Volatile Petroleum Hydrocarbons by EPA SW-846 5030/8015M

Quality Assurance and Control Data

Laboratory Number: 23236
Method Blank(s)

	DI242.37-06 Conc.	RL
Mineral Spirits	ND	50
>> Surrogate Recoveries (%) <<		
4-Bromofluorobenzene (SS)	87	

Superior
Analytical Laboratory

SE
Attn: GREG HOEHN

Project 70005-009
Reported on October 7, 1997

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

Chronology

Laboratory Number 23236

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
EFF	09/24/97	09/24/97	09/24/97	09/24/97	DI242.37	01
INF	09/24/97	09/24/97	09/24/97	09/24/97	DI242.37	02

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
DI242.37-05	Method Blank	MB	Water	09/24/97	09/24/97
DI242.37-02	Laboratory Spike	LS	Water	09/24/97	09/24/97
DI242.37-03	0820 SS33-04	MS 23225-02	Water	09/24/97	09/24/97
DI242.37-04	0820 SS33-04	MSD 23225-02	Water	09/24/97	09/24/97

Superior
Analytical Laboratory

SE
Attn: GREG HOEHN

Project 70005-009
Reported on October 7, 1997

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
23236-01	EFF	Air	1.0	-
23236-02	INF	Air	1.0	-

R E S U L T S O F A N A L Y S I S

Compound	23236-01 Conc. ug/L	RL	23236-02 Conc. ug/L	RL
Benzene	ND	0.5	ND	0.5
Toluene	ND	0.5	ND	0.5
Ethyl Benzene	ND	0.5	ND	0.5
Xylenes	ND	0.5	3.2P	0.5
>> Surrogate Recoveries (%) <<				
Trifluorotoluene (SS)	93		101	

Superior
Analytical Laboratory

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

Quality Assurance and Control Data

Laboratory Number: 23236
Method Blank(s)

	DI242.37-05 Conc. ug/L	RL
Benzene	ND	0.5
Toluene	ND	0.5
Ethyl Benzene	ND	0.5
Xylenes	ND	0.5
>> Surrogate Recoveries (%) <<		
Trifluorotoluene (SS)	101	

Superior
Analytical Laboratory

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

Quality Assurance and Control Data

Laboratory Number: 23236

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L)						
DI242.37 02 / - Laboratory Control Spikes						
Benzene		20	21	105	65-135	
Toluene		20	22	110	65-135	
Ethyl Benzene		20	22	110	65-135	
Xylenes		60	64	107	65-135	
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				109	50-150	
For Water Matrix (ug/L)						
DI242.37 03 / 04 - Sample Spiked: 23225 - 02						
Benzene	ND	20	22/22	110/110	65-135	0
Toluene	ND	20	22/22	110/110	65-135	0
Ethyl Benzene	ND	20	22/22	110/110	65-135	0
Xylenes	ND	60	67/65	112/108	65-135	4
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				104/102	50-150	

P - There is a greater than 25% difference for detected concentration between the two GC columns.

Definitions:

ND = Not Detected
RL = Reporting Limit
NA = Not Analysed
RPD = Relative Percent Difference
ug/L = parts per billion (ppb)
mg/L = parts per million (ppm)
ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

Superior
Analytical Laboratory

Total Volatile Petroleum Hydrocarbons by EPA SW-846 5030/8015M

Quality Assurance and Control Data

Laboratory Number: 23236

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L)						
DI242.37 07 / - Laboratory Control Spikes						
Gasoline		2000	2100	105	65-135	
>> Surrogate Recoveries (%) <<						
4-Bromofluorobenzene (SS)				116	50-150	
For Water Matrix (ug/L)						
DI242.37 08 / 09 - Sample Spiked: 23225 - 02						
Gasoline	ND	2000	2000/2000	100/100	65-135	0
>> Surrogate Recoveries (%) <<						
4-Bromofluorobenzene (SS)				114/112	50-150	

Definitions:
ND = Not Detected
RL = Reporting Limit
NA = Not Analysed
RPD = Relative Percent Difference
ug/L = parts per billion (ppb)
mg/L = parts per million (ppm)

ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

53236 Chain-of Custody Number:

SECOR Chain-of Custody Record

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

Field Office: CONCORD
Address: 1390 Willow Pass Rd., Suite 360
CONCORD, CA.

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

Project # 70005-009 Task #
Project Manager GREG HOEAN
Laboratory SUPERIOR
Turnaround Time STANDARD

Sampler's Name A. NAVEW
Sampler's Signature

Analysis Request

Sample ID	Date	Time	Matrix	HCID	TPHg/BTEX/WTPH-G 8015 (modified)/8020	TPHd/WTPH-D 8015 (modified)	TPH 418.1/WTPH 418.1	Aromatic Volatiles 602/8020	Volatile Organics 624/8240 (GC/MS)	Halogenated Volatiles 601/8010	Semi-volatile Organics 625/8270 (GC/MS)	Pesticides/PCBs 608/8080	Total Lead 7421	Priority Pollutant Metals (13)	TCLP Metals	TPH as mineral spirits		Comments/ Instructions	Number of Containers
EFF	9/24/97	9:00	AIR																1
INF	"	9:30	"																1

Special Instructions/Comments:

Relinquished by:	Received by:
Sign	Sign
Print A. NAVEW	Print
Company SECOR	Company
Time Date 9/24/97	Time Date

Relinquished by:	Received by:
Sign	Sign
Print	Print Polly Fulton
Company	Company SMT
Time Date	Time 9:45 Date 9/24/97

Sample Receipt

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

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

SECOR CUSTREC Rev. 1/95

Date: 9/24/97 Page 1 of 1

Superior
Analytical Laboratory

RECEIVED
NOV 12 1997

SECOR
1390 WILLOW PASS RD, STE. 360
CONCORD, CA 94520

Date: November 5, 1997

Attn: GREG HOEHN

Laboratory Number : 23401

Project Number/Name : 70005-069
Facility/Site : SAFETY CLEAN
400 MARKET ST
OAKLAND, CA

Dear GREG HOEHN:

Attached is Superior Analytical Laboratory report for the samples received on October 23, 1997. This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety. Following the cover letter is the Case Narrative detailing sample receipt and analysis. Also enclosed is a copy of the original Chain-of-Custody record confirming receipt of samples.

Please note that any unused portion of the sample will be discarded after November 22, 1997, unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions, please contact our Laboratory at (510) 313-0850.

Sincerely,

Afsaneh Salimpour
Project Manager

Sanjay Panda
QA/QC Manager

Superior
Analytical Laboratory

CASE NARRATIVE

SECOR
Project Number/Name: 70005-069
Laboratory Number: 23401

Sample Receipt

Two air samples were received by
Superior Analytical Laboratory on October 23, 1997.

No abnormalities were noted with sample recieving.

Sample Analysis

The samples were analyzed for methods 8010, 8015M and 8020.

8020/BTXE

P - There is a greater than 25% difference for detected
concentration between the two GC columns.

Superior
Analytical Laboratory

S[illegible]OR
A[illegible]: GREG HOEHN

Project 70005-069
Reported on November 4, 1997

Total Volatile Petroleum Hydrocarbons by EPA SW-846 5030/8015M

Chronology

Laboratory Number 23401

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
INF	10/23/97	10/23/97	10/24/97	10/24/97	DJ242.37	01
EFF	10/23/97	10/23/97	10/24/97	10/24/97	DJ242.37	02

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
DJ242.37-06	Method Blank	MB	Water	10/24/97	10/24/97
DJ242.37-07	Laboratory Spike	LS	Water	10/24/97	10/24/97
DJ242.37-08	MW-23	MS 23391-02	Water	10/24/97	10/24/97
DJ242.37-09	MW-23	MSD 23391-02	Water	10/24/97	10/24/97

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Project 70005-069
Reported on November 4, 1997

Total Volatile Petroleum Hydrocarbons by EPA SW-846 5030/8015M

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
23401-01	INF	Air	1.0	-
23401-02	EFF	Air	1.0	-

R E S U L T S O F A N A L Y S I S

Compound	23401-01 Conc. ug/L	RL	23401-02 Conc. ug/L	RL
Mineral Spirits	220	50	ND	50
>> Surrogate Recoveries (%) <<				
4-Bromofluorobenzene (SS)	101		92	

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Total Volatile Petroleum Hydrocarbons by EPA SW-846 5030/8015M

Quality Assurance and Control Data

Laboratory Number: 23401
Method Blank(s)

	DJ242.37-06	
	Conc.	RL
Mineral Spirits	ND	50
>> Surrogate Recoveries (%) <<		
4-Bromofluorobenzene (SS)	85	

Superior Analytical Laboratory

Total Volatile Petroleum Hydrocarbons by EPA SW-846 5030/8015M

Quality Assurance and Control Data

Laboratory Number: 23401

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L) DJ242.37 07 / - Laboratory Control Spikes						
Gasoline		2000	2000	100	65-135	
>> Surrogate Recoveries (%) << 4-Bromofluorobenzene (SS)				99	50-150	
For Water Matrix (ug/L) DJ242.37 08 / 09 - Sample Spiked: 23391 - 02						
Gasoline	ND	2000	1900/1900	95/95	65-135	0
>> Surrogate Recoveries (%) << 4-Bromofluorobenzene (SS)				90/91	50-150	

Definitions:
ND = Not Detected
RL = Reporting Limit
NA = Not Analysed
RPD = Relative Percent Difference
ug/L = parts per billion (ppb)
mg/L = parts per million (ppm)
ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

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A[illegible]: GREG HOEHN

Project 70005-069
Reported on November 4, 1997

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

Laboratory Number 23401

Chronology

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
INF	10/23/97	10/23/97	10/24/97	10/24/97	DJ242.37	01
EFF	10/23/97	10/23/97	10/24/97	10/24/97	DJ242.37	02

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
DJ242.37-05	Method Blank	MB	Water	10/24/97	10/24/97
DJ242.37-02	Laboratory Spike	LS	Water	10/24/97	10/24/97
DJ242.37-03	MW-23	MS 23391-02	Water	10/24/97	10/24/97
DJ242.37-04	MW-23	MSD 23391-02	Water	10/24/97	10/24/97

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Project 70005-069
Reported on November 4, 1997

Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
23401-01	INF	Air	1.0	-
23401-02	EFF	Air	1.0	-

R E S U L T S O F A N A L Y S I S

Compound	23401-01 Conc. ug/L	RL	23401-02 Conc. ug/L	RL
Benzene	ND	0.5	ND	0.5
Toluene	2.0	0.5	ND	0.5
Ethyl Benzene	ND	0.5	ND	0.5
Xylenes	2.4P	0.5	ND	0.5
>> Surrogate Recoveries (%) <<				
Trifluorotoluene (SS)	97		103	

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Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

Quality Assurance and Control Data

Laboratory Number: 23401
Method Blank(s)

	DJ242.37-05 Conc. ug/L	 RL
Benzene	ND	0.5
Toluene	ND	0.5
Ethyl Benzene	ND	0.5
Xylenes	ND	0.5
>> Surrogate Recoveries (%) <<		
Trifluorotoluene (SS)	95	

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Volatile Aromatic Hydrocarbons by EPA SW-846 Method 5030/8020

Quality Assurance and Control Data

Laboratory Number: 23401

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L) DJ242.37 02 / - Laboratory Control Spikes						
Benzene		20	21	105	65-135	
Toluene		20	21	105	65-135	
Ethyl Benzene		20	21	105	65-135	
Xylenes		60	64	107	65-135	
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				95	50-150	
For Water Matrix (ug/L) DJ242.37 03 / 04 - Sample Spiked: 23391 - 02						
Benzene	ND	20	21/21	105/105	65-135	0
Toluene	ND	20	21/21	105/105	65-135	0
Ethyl Benzene	ND	20	22/21	110/105	65-135	5
Xylenes	ND	60	64/64	107/107	65-135	0
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				93/91	50-150	

? - There is a greater than 25% difference for detected concentration between the two GC columns.

Definitions:

ND	=	Not Detected			
RL	=	Reporting Limit			
NA	=	Not Analysed			
RPD	=	Relative Percent Difference			
ug/L	=	parts per billion (ppb)	ug/kg	=	parts per billion (ppb)
mg/L	=	parts per million (ppm)	mg/kg	=	parts per million (ppm)

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Project 70005-069
Reported on October 27, 1997

Attn: GREG HOEHN

Halogenated Volatile Organics by EPA SW-846 Methods 5030/8010

Chronology

Laboratory Number 23401

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
INF	10/23/97	10/23/97	10/24/97	10/24/97	DJ241.08	01
EFF	10/23/97	10/23/97	10/24/97	10/24/97	DJ241.08	02

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
DJ241.08-01	Method Blank	MB	Water	10/24/97	10/24/97
DJ241.08-02	Laboratory Spike	LS	Water	10/24/97	10/24/97
DJ241.08-03	Laboratory Spike Duplicate	LSD	Water	10/24/97	10/24/97
DJ241.08-04	RI5-WATER	MS 23396-02	Water	10/24/97	10/24/97
DJ241.08-05	RI5-WATER	MSD 23396-02	Water	10/24/97	10/24/97

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Project 70005-069
Reported on October 27, 1997

Halogenated Volatile Organics by EPA SW-846 Methods 5030/8010

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
23401-01	INF	Air	1.0	-
23401-02	EFF	Air	1.0	-

R E S U L T S O F A N A L Y S I S

Compound	23401-01 Conc. PPB (V/V)	RL	23401-02 Conc. PPB (V/V)	RL
Chloromethane	ND	480	ND	480
Vinyl Chloride	ND	390	ND	390
Bromomethane	ND	250	ND	250
Chloroethane	ND	270	ND	270
Trichlorofluoromethane	ND	88	ND	88
1,1-Dichloroethene	ND	120	ND	120
Dichloromethane	140	140	ND	140
t 2-Dichloroethene	ND	120	ND	120
1,1-Dichloroethane	ND	120	ND	120
c-1,2-Dichloroethene	ND	120	ND	120
Chloroform	ND	100	ND	100
1,1,1-Trichloroethane	500	90	ND	90
Carbon tetrachloride	ND	78	ND	78
1,2-Dichloroethane	ND	120	ND	120
Trichloroethene	150	92	ND	92
c-1,3-Dichloropropene	ND	110	ND	110
1,2-Dichloropropane	ND	110	ND	110
t-1,3-Dichloropropene	ND	110	ND	110
Bromodichloromethane	ND	68	ND	68
1,1,2-Trichloroethane	ND	90	ND	90
Tetrachloroethene	88	73	ND	73
Dibromochloromethane	ND	58	ND	58
Chlorobenzene	ND	110	ND	110
Bromoform	ND	48	ND	48
1,1,2,2-Tetrachloroethane	ND	72	ND	72
1,3-Dichlorobenzene	ND	82	ND	82
1,2-Dichlorobenzene	ND	82	ND	82
1,4-Dichlorobenzene	ND	82	ND	82
-> Surrogate Recoveries (%) <<				
Bromochloromethane	89		88	
4-Bromofluorobenzene	87		88	

Superior
Analytical Laboratory

Halogenated Volatile Organics by EPA SW-846 Methods 5030/8010

Quality Assurance and Control Data

Laboratory Number: 23401
Method Blank(s)

	DJ241.08-01 Conc. ug/L	RL
Chloromethane	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	0.5
Chloroethane	ND	0.5
Trichlorofluoromethane	ND	0.5
1,1-Dichloroethene	ND	0.5
Dichloromethane	ND	0.5
t-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
c-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon tetrachloride	ND	0.5
-Dichloroethane	ND	0.5
chloroethene	ND	0.5
c-1,3-Dichloropropene	ND	0.5
1,2-Dichloropropane	ND	0.5
t-1,3-Dichloropropene	ND	0.5
Bromodichloromethane	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
>> Surrogate Recoveries (%) <<		
Bromochloromethane	87	
4-Bromofluorobenzene	92	

Superior
Analytical Laboratory

Halogenated Volatile Organics by EPA SW-846 Methods 5030/8010

Quality Assurance and Control Data

Laboratory Number: 23401

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L)						
DJ241.08 02 / 03 - Laboratory Control Spikes						
1,1-Dichloroethene		20	19/19	95/95	70-130	0
Trichloroethene		20	19/18	95/90	60-130	5
Chlorobenzene		20	19/20	95/100	75-130	5
>> Surrogate Recoveries (%) <<						
Bromochloromethane				93/98	70-120	
4-Bromofluorobenzene				94/100	60-125	
For Water Matrix (ug/L)						
DJ241.08 04 / 05 - Sample Spiked: 23396 - 02						
1,1-Dichloroethene	ND	20	20/18	100/90	70-130	11
Trichloroethene	ND	20	18/18	90/90	60-130	0
Chlorobenzene	ND	20	19/19	95/95	75-130	0
>> Surrogate Recoveries (%) <<						
Bromochloromethane				96/97	70-120	
4-Bromofluorobenzene				109/101	60-125	

)efinitions:
ID = Not Detected
:L = Reporting Limit
:A = Not Analysed
:PD = Relative Percent Difference
ug/L = parts per billion (ppb)
ug/L = parts per million (ppm)
ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

L3401

Chain-of Custody Number:

SECOR Chain-of Custody Record

Field Office: SECOR
Address: 1390 Willow Pass Road Suite 360
Concord, CA 94519

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

Job Name: SAFety Kleen
Location: 400 MARKet St.
OAKLAND CA

Project # 70005-059 Task #
Project Manager Greg Hoehn
Laboratory Superior
Turnaround Time STandard

Sampler's Name GARY CIVFT
Sampler's Signature Gary Civft

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.	BTEX	Comments/ Instructions	Number of Containers
INF	10/23	11:30	AIR							X						X	X		1
EFF	10/23	11:00	AIR							X						X	X		1

Special Instructions/Comments:
Please Initial: PT
Samples Stored in Ice: No
Appropriate containers: Yes
Samples preserved: No
VOA's without headspace: NO
Comments: In Room Temp

Relinquished by: SECOR
Sign Gary Civft
Print GARY R. CIVFT
Company SECOR
Time 13:30 Date 10/23

Received by: SAL
Sign
Print Paul S. Silvas
Company SAL
Time 13:30 Date 10/23

Relinquished by:
Sign
Print
Company
Time Date

Received by:
Sign
Print
Company
Time Date

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

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

SECOR CUSTREC Rev. 1/95

Date: 10 / 23 / 97 Page 1 of 1

APPENDIX C

Laboratory Reports - Groundwater Samples

safety-kleen ®

Allan A. Manteuffel Technical Center

October 27, 1997

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

Re: SK Lab Project #97-315
Project ID Name: Oakland, CA

Dear Greg:

Enclosed please find the analytical results for the sample received by SK Environmental Laboratory on 10/9/97/.

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 included.

This report may not be reproduced except in its entirety.

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

Sincerely,

Richard H. Cook
Environmental Section Leader

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

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

Project ID #: 70005-009
Project ID Name: Oakland, CA
SK Lab Project #: 97-315
Date Reported: 10/27/97

ANALYTICAL RESULTS

Total Petroleum Hydrocarbons as Mineral Spirits in Water

Modified EPA Method 8015

Reporting Limit: 50.0

Work Order #	Collector's Sample #	Date Sampled	Date Analyzed	Concentration µg/L
01	Trip Blank	10/8/97	10/17/97	<50
02	MW-1	10/8/97	10/13/97	<50
03	MW-2	10/8/97	10/13/97	<50
04	MW-3	10/8/97	10/13/97	<50
05	MW-4	10/8/97	10/13/97	<50
06	MW-8	10/8/97	10/13/97	<50
07	MW-12	10/8/97	10/13/97	<50
08	MW-18	10/8/97	10/13/97	<50

Analytical Review / Date: 10/27/97

Project ID #: 70005-009
Project ID Name: Oakland, CA
SK Lab Project #: 97-315
Date Reported: 10/27/97

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8010

Work Order #		01	02	03	04
Collector's Sample #		Trip Blank	MW-1	MW-2	MW-3
Date Sampled		10/8/97	10/8/97	10/8/97	10/8/97
Date Analyzed		10/20/97	10/15/97	10/15/97	10/15/97
Dilution Factor		1	1	1	1
Analyte	Report Limit µg/L	Concentration µg/L			
Benzyl Chloride	1	<1	<1	<1	<1
Bromobenzene	1	<1	<1	<1	<1
Bromodichloromethane	1	<1	<1	<1	<1
Bromoform	1	<1	<1	<1	<1
Bromomethane	1	<1	<1	<1	<1
Carbon Tetrachloride	1	<1	<1	<1	<1
Chlorobenzene	1	<1	<1	3.3	2.1
Chloroethane	1	<1	<1	<1	<1
Chloroform	1	<1	<1	<1	<1
Chloromethane	1	<1	<1	<1	<1
Chlorotoluene	1	<1	<1	<1	<1
Dibromochloromethane	1	<1	<1	<1	<1
Dibromomethane	1	<1	<1	<1	<1
1,2-Dichlorobenzene	1	<1	<1	<1	<1
1,3-Dichlorobenzene	1	<1	<1	<1	<1
1,4-Dichlorobenzene	1	<1	<1	<1	<1
Dichlorodifluoromethane	1	<1	<1	<1	<1
1,1-Dichloroethane	1	<1	<1	<1	<1
1,2-Dichloroethane	1	<1	<1	<1	<1
1,1-Dichloroethylene	1	<1	<1	<1	<1
cis-1,2-Dichloroethylene	1	<1	<1	<1	<1
trans-1,2-Dichloroethylene	1	<1	<1	<1	<1

Project ID #: 70005-009
Project ID Name: Oakland, CA
SK Lab Project #: 97-315
Date Reported: 10/27/97

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8010

Work Order #		01	02	03	04
Collector's Sample #		Trip Blank	MW-1	MW-2	MW-3
Date Sampled		10/8/97	10/8/97	10/8/97	10/8/97
Date Analyzed		10/20/97	10/15/97	10/15/97	10/15/97
Dilution Factor		1	1	1	1
Analyte	Report Limit ug/L	Concentration ug/L			
Dichloromethane	1	<1	<1	<1	<1
1,2-Dichloropropane	1	<1	<1	<1	<1
trans-1,3-Dichloropropylene	1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	1	<1	<1	<1	<1
1,1,1,2-Tetrachloroethane	1	<1	<1	<1	<1
Tetrachloroethylene	1	<1	<1	<1	<1
1,1,1-Trichloroethane	1	<1	<1	<1	<1
1,1,2-Trichloroethane	1	<1	<1	<1	<1
Trichloroethylene	1	<1	<1	<1	<1
Trichlorofluoromethane	1	<1	<1	<1	<1
Trichloropropane	1	<1	<1	<1	<1
Vinyl Chloride	1	<1	<1	<1	<1

Analytical Review / Date: 10/27/97

Project ID #: 70005-009
Project ID Name: Oakland, CA
SK Lab Project #: 97-315
Date Reported: 10/27/97

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8020

Work Order #		01	02	03	04
Collector's Sample #		Trip Blank	MW-1	MW-2	MW-3
Date Sampled		10/8/97	10/8/97	10/8/97	10/8/97
Date Analyzed		10/20/97	10/15/97	10/15/97	10/15/97
Dilution Factor		1	1	1	1
Analyte	Report Limit µg/L	Concentration µg/L			
Benzene	1	<1	<1	<1	<1
Toluene	1	<1	<1	<1	<1
Ethylbenzene	1	<1	<1	<1	<1
Xylenes	1	<1	<1	<1	<1

Analytical Review / Date: 10/27/97

Project ID #: 70005-009
Project ID Name: Oakland, CA
SK Lab Project #: 97-315
Date Reported: 10/27/97

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8010

Work Order #		05	06	07	08
Collector's Sample #		MW-4	MW-8	MW-12	MW-18
Date Sampled		10/8/97	10/8/97	10/8/97	10/8/97
Date Analyzed		10/15/97	10/21/97	10/21/97	10/17/97
Dilution Factor		1	1	1	1
Analyte	Report Limit ug/L	Concentration µg/L			
Benzyl Chloride	1	<1	<1	<1	<1
Bromobenzene	1	<1	<1	<1	<1
Bromodichloromethane	1	<1	<1	<1	<1
Bromoform	1	<1	<1	<1	<1
Bromomethane	1	<1	<1	<1	<1
Carbon Tetrachloride	1	<1	<1	<1	<1
Chlorobenzene	1	**1.2**	<1	<1	<1
Chloroethane	1	<1	<1	<1	<1
Chloroform	1	<1	**1.5**	<1	**1.7**
Chloromethane	1	**1.0**	<1	<1	<1
Chlorotoluene	1	<1	<1	<1	<1
Dibromochloromethane	1	<1	<1	<1	<1
Dibromomethane	1	<1	<1	<1	<1
1,2-Dichlorobenzene	1	<1	<1	<1	<1
1,3-Dichlorobenzene	1	<1	<1	<1	<1
1,4-Dichlorobenzene	1	<1	<1	<1	<1
Dichlorodifluoromethane	1	<1	<1	<1	<1
1,1-Dichloroethane	1	<1	<1	**4.5**	<1
1,2-Dichloroethane	1	<1	**3.5**	**2.6**	**2.8**
1,1-Dichloroethylene	1	<1	<1	<1	<1
cis-1,2-Dichloroethylene	1	<1	**43.5 ***	**2.1**	**38.1 ***
trans-1,2-Dichloroethylene	1	<1	**2.4**	<1	**3.2**

Project ID #: 70005-009
Project ID Name: Oakland, CA
SK Lab Project #: 97-315
Date Reported: 10/27/97

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8010

Work Order #		05	06	07	08
Collector's Sample #		MW-4	MW-8	MW-12	MW-18
Date Sampled		10/8/97	10/8/97	10/8/97	10/8/97
Date Analyzed		10/15/97	10/21/97	10/21/97	10/17/97
Dilution Factor		1	1	1	1
Analyte	Report Limit ug/L	Concentration ug/L			
Dichloromethane	1	<1	<1	<1	<1
1,2-Dichloropropane	1	<1	<1	<1	<1
trans-1,3-Dichloropropylene	1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	1	<1	<1	<1	<1
1,1,1,2-Tetrachloroethane	1	<1	<1	<1	<1
Tetrachloroethylene	1	<1	<1	<1	<1
1,1,1-Trichloroethane	1	<1	<1	<1	<1
1,1,2-Trichloroethane	1	<1	<1	<1	<1
Trichloroethylene	1	<1	920 *	41.9 *	952 *
Trichlorofluoromethane	1	<1	<1	<1	<1
Trichloropropane	1	<1	<1	<1	<1
Vinyl Chloride	1	<1	<1	<1	<1

* Diluted so result is within the calibration curve.

Analytical Review / Date: 10/27/97

Project ID #: 70005-009
Project ID Name: Oakland, CA
SK Lab Project #: 97-315
Date Reported: 10/27/97

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8020

Work Order #		05	06	07	08
Collector's Sample #		MW-4	MW-8	MW-12	MW-18
Date Sampled		10/8/97	10/8/97	10/8/97	10/8/97
Date Analyzed		10/15/97	10/21/97	10/21/97	10/17/97
Dilution Factor		1	1	1	1
Analyte	Report Limit µg/L	Concentration µg/L			
Benzene	1	<1	<1	<1	<1
Toluene	1	<1	<1	<1	<1
Ethylbenzene	1	<1	<1	<1	<1
Xylenes	1	<1	<1	<1	<1

Analytical Review / Date: 10/27/97

Project ID #: 70005-009
Project ID Name: Oakland, CA
SK Lab Project #: 97-315
Date Reported: 10/27/97

METHOD BLANK SUMMARY

Total Petroleum Hydrocarbons as Mineral Spirits in Water

Modified EPA Method 8015

Lab Blank #	Date Extracted	Date Analyzed	Concentration µg/L
LBKL	10/17/97	10/17/97	<25

Review / Date: [signature] 10/27/97

Project ID #: 70005-009
Project ID Name: Oakland, CA
SK Lab Project #: 97-315
Date Reported: 10/27/97

MATRIX SPIKE (MS) & MATRIX SPIKE DUPLICATE (MSD) SUMMARY

PERCENT RECOVERY & RELATIVE PERCENT DIFFERENCE (RPD)

Total Petroleum Hydrocarbons as Mineral Spirits in Water

Modified EPA Method 8015

Acceptability Limits %

RPD: 25

Analyte: SK-150 % Recovery: 80 - 146

Work Order #	Collector's Sample #	Spike Added ug/L	Sample Conc. ug/L	MS Conc. ug/L	MSD Conc. ug/L	MS % Recovery	MSD % Recovery	RPD %
9707625	EFF-100897	33.9	<25	34.3	34.6	101	102	1

Review / Date: 10/27/97

Project ID Name: Oakland, CA

SK Lab Project #: 97-315

Date Reported: 10/27/97

SURROGATE RECOVERY SUMMARY

Volatile Organics in Water

EPA Method 8010/8020

Work Order #	Collector's Sample #	Percent Recovery
		Fluorobenzene
01	Trip Blank	106
02	MW-1	124
03	MW-2	125
04	MW-3	117
05	MW-4	135
06	MW-8	95
07	MW-12	91
08	MW-18	106

Surrogates	Recovery Limits
S1 Fluorobenzene	70-130

Review / Date: 10/27/97

Project ID #: 70005-009
Project ID Name: Oakland, CA
SK Lab Project #: 97-315
Date Reported: 10/27/97

METHOD BLANK SUMMARY

Volatile Organics in Water

EPA Method 8010/8020

Lab Blank #	Lblk102097	Lblk101697
Date Analyzed	10/20/97	10/16/97
Analyte	Concentration µg/L	
Benzyl Chloride	<1	<1
Bromobenzene	<1	<1
Bromodichloromethane	<1	<1
Bromoform	<1	<1
Bromomethane	<1	<1
Carbon Tetrachloride	<1	<1
Chlorobenzene	<1	<1
Chloroethane	<1	<1
Chloroform	<1	<1
Chloromethane	<1	<1
Chlorotoluene	<1	<1
Dibromochloromethane	<1	<1
Dibromomethane	<1	<1
1,2-Dichlorobenzene	<1	<1
1,3-Dichlorobenzene	<1	<1
1,4-Dichlorobenzene	<1	<1
Dichlorodifluoromethane	<1	<1
1,1-Dichloroethane	<1	<1
1,2-Dichloroethane	<1	<1
1,1-Dichloroethylene	<1	<1
cis-1,2-Dichloroethylene	<1	<1
trans-1,2-Dichloroethylene	<1	<1

METHOD BLANK SUMMARY

Volatile Organics in Water

EPA Method 8010/8020

Lab Blank #	Lblk102097	Lblk101697
Date Analyzed	10/20/97	10/16/97
Analyte	Concentration µg/L	
Dichloromethane	<1	<1
1,2-Dichloropropane	<1	<1
trans-1,3-Dichloropropylene	<1	<1
1,1,2,2-Tetrachloroethane	<1	<1
1,1,1,2-Tetrachloroethane	<1	<1
Tetrachloroethylene	<1	<1
1,1,1-Trichloroethane	<1	<1
1,1,2-Trichloroethane	<1	<1
Trichloroethylene	<1	<1
Trichlorofluoromethane	<1	<1
Trichloropropane	<1	<1
Vinyl Chloride	<1	<1
Benzene	<1	<1
Toluene	<1	<1
Ethylbenzene	<1	<1
Xylenes	<1	<1

MATRIX SPIKE (MS) & MATRIX SPIKE DUPLICATE (MSD) SUMMARY

PERCENT RECOVERY & RELATIVE PERCENT DIFFERENCE (RPD)

Volatile Organics in Soil

EPA Method 8240

Work Order #: 9707543

Collector's Sample #: NA

Analyte	Spike Added ug/L	Sample Conc. ug/L	MS Conc. ug/L	MSD Conc. ug/L	MS % Recover	MSD % Recovery	RPD %	Acceptability Limits % RPD	Acceptability Limits % % Recovery
Benzene	1	<1	1.2	1.04	120	104	16	20	76 - 127
Chlorobenzene	1	<1	1.21	0.99	121	99	22	20	75 - 110
1,1-Dichloroethylene	1	<1	0.94	1.09	94	109	16	20	61 - 145
Toluene	1	<1	1.24	1.17	124	117	7	20	76 - 125
Tetrachloroethylene	1	<1	1.01	1.23	101	123	22	20	71 - 120

Work Order #: 9707583

Collector's Sample #: NA

Analyte	Spike Added mg/Kg	Sample Conc.	MS Conc. mg/Kg	MSD Conc. mg/Kg	MS % Recover	MSD % Recovery	RPD %	Acceptability Limits % RPD	Acceptability Limits % % Recovery
Benzene	1	<1	1.16	1.14	116	114	2	20	76 - 127
Chlorobenzene	1	<1	1.19	1.15	119	115	4	20	75 - 110
1,1-Dichloroethylene	1	<1	1.11	1.08	111	108	3	20	61 - 145
Toluene	1	<1	1.18	1.1	118	110	8	20	76 - 125
Tetrachloroethylene	1	<1	1.18	1.15	118	115	3	20	71 - 120

Review / Date: 10/27/97

Chain-of-Custody Number: [redacted] TA

SECOR Chain of Custody Record

VOA

Field Office: CONCORD

Address: 1390 WILLOW PASS RD., SUITE 300
CONCORD, CA. 94520

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

Job Name: SAFETY KLEEN

Location: 400 MARKET ST.
OAKLAND, CA.

Project # 70005-009 Task #

Project Manager CHRIS HOEHN

Laboratory SK

Turnaround Time STANDARD

Sampler's Name R. RIVERA

Sampler's Signature

	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 8020	Semi-volatile Organics 625/8270 (GC/MS)	Pesticides/PCBs 608/8080	Total Lead 7421	Priority Pollutant Metals (13)	TCLP Metals	TPHmodified (8015) by purge & trap 8015	Comments/ Instructions	Number of Containers
01	TRIP BLANK	10/8/97	700	WATER							X						X	97075584 VOA'S	1
02	MW-1	"	9:30	"							X						X	75585	5
03	MW-2	"	900	"							X						X	75586	5
04	MW-3	"	8:20	"							X						X	75587	5
05	MW-4	"	10:15	"							X						X	75588	5
06	MW-8	"	10:50	"							X						X	75589	5
07	MW-12	"	7:40	"							X						X	75590	5
08	MW-18	"	11:50	"							X						X	75591	5

Special Instructions/Comments:

Vials recd pH <2 OK 10/10/97

Relinquished by:
Sign
Print R. RIVERA
Company SECOR
Time 14:00 Date 10/8/97

Received by:
Sign
Print SC
Company
Time 11:30A Date 10/09/97

Relinquished by:
Sign
Print
Company
Time Date

Received by:
Sign
Print
Company
Time Date

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

Client: SECOR
Client Contact: KIRSTEN
Client Phone: (510) 686-9780

SECOR CUSTREC Rev. 1/95

last proj 97-232

Date: 10/8/97 Page 1 of 1