



July 8, 1996

Via Certified Mail No. P193223569

Mr. Robert M. Senga
Facility Permitting Branch
Environmental Protection Agency
Department of Toxic Substances Control, Region 4
245 West Broadway, Suite 350
Long Beach, California 90802-4444

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

Dear Mr. Senga:

Enclosed is the second quarter monitoring and sampling report for 1996 which summarizes the groundwater monitoring and vapor extraction activities conducted at the above-referenced facility. This report covers the period from March through May 1996. 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,

A handwritten signature in black ink, appearing to read "Greg Hoehn". To the left of the signature, there is a small handwritten mark that looks like the letters "fmr".

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

Enclosure

ENVIRONMENTAL
PROTECTION AGENCY

96 JUL - 9 PM 3:02

cc: Keith Marcott, Safety-Kleen Corp.
Scott Davies, Safety-Kleen Corp.
Branch Environmental File (7-178-01)
Jennifer Eberle, Department of Environmental Health
Steven Ritchie, California Regional Water Quality Control Board
Scott Comiso, Bay Area Air Quality Management District
Greg Hoehn, SECOR

OAKLAND7.L14
July 8, 1996
SECOR Job No. 70005-009-07

**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:
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16540 S.E. 130th Avenue
Clackamas, Oregon 97015

July 8, 96

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July 8, 1996

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1.0 INTRODUCTION

This report presents the results of groundwater monitoring and sampling activities conducted for the quarter of March through May 1996 at the Safety-Kleen Service Center located at 400 Market Street in Oakland, California (Figures 1 and 2). Also included are the results of soil vapor extraction (SVE) system monitoring and sampling for the period.

2.0 PROJECT BACKGROUND INFORMATION

The Safety-Kleen Oakland Service Center is a local distribution center for Safety-Kleen products. Three single-walled underground storage tanks (USTs) were removed and replaced with two new 12,000-gallons 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 resarted 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 product recovery and the monitoring of ten groundwater monitoring wells and one recovery well and the sampling of nine 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 had not operated since November 1994 when it was shut down by a system fault. Subsequently, the system piping was damaged during the installation of UST cathodic protection. The damage to SVE piping was repaired in December 1994; however, the system remained non-operational pending modification to a carbon adsorption treatment system. The modifications to the system were completed in November 1995 and the system was re-started. The SVE system now consists of two 1,500 pound granular active carbon vessels connected in series to a manifold attached to the seven horizontal vapor extraction lines.

SVE system monitoring occurs bi-weekly and consists of measuring influent and effluent concentrations using a photo-ionization detector (PID). SVE system influent and effluent vapor samples are collected monthly. SVE system influent and effluent vapor samples were collected on March 8, April 3, May 2, and May 31, 1996. 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 modified U.S. Environmental Protection Agency (EPA) Method 8015 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.

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. The results of mineral spirits recovery are presented in Section 4.2.

3.3 Groundwater Monitoring and Sampling

On April 2, 1996, on-site and off-site 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 construct a potentiometric surface map (Figure 4).

On April 2, 1996, subsequent to collecting depth-to-water measurements, monitoring wells MW-2, MW-3, MW-4, MW-5, MW-6, MW-8, MW-12 and MW-13 were purged by hand-bailing until a minimum of three well volumes of groundwater had been removed or until measurements of pH, temperature, and conductivity had stabilized. Monitoring well MW-9 was not purged for sampling due to the presence of floating product. Within two hours of completing well purging, the groundwater levels had recovered to at least 80 percent of the original level in the wells and groundwater samples were collected using single-use disposable samplers. The samples were placed into laboratory supplied sample containers, labeled with the date, time, and sample number, and placed on ice in an insulated cooler. 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 modified EPA Method 8015, and for halogenated VOCs by EPA Method 8010.

Prior to using any non-single-use equipment in a groundwater monitoring well, the 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 May 31, 1996, are summarized on Table 1. Table 1 presents data on the system flow rate and PID measurements from the SVE system influent, the effluent after each carbon adsorption vessel, and the system effluent. With the exception of two events, the results of system effluent monitoring verify that the system operated within the Bay Area Air Quality Management District (BAAQMD) permit requirements of a maximum emission reading of 10 parts per million by volume (ppmv) at a maximum flow rate of 150 standard cubic feet per minute (scfm). Effluent PID readings indicated 15.5 ppmv on March 8, 1996, and the PID readings indicated 22.4 ppmv on March 20, 1996. A system effluent vapor sample was collected during the March 8, 1996 event and the subsequent laboratory analytical report showed no detectable concentrations for all analytes. No vapor samples were collected for laboratory analysis during the March 20, 1996 event. Based on the analytical data and subsequent monitoring data, it appears the GAC system is sufficiently removing organic vapors to below the 10 ppmv permit requirement. In order to confirm compliance, the carbon was replaced in both canisters on March 26, 1996.

SVE system influent and effluent vapor samples were collected on March 8, April 3 and May 2, 1996. No TPHms, BTEX, or VOC analytes were detected in the any of the system effluent samples collected during this quarter. The laboratory analyses of system influent samples detected TPHms concentrations of 1,586 $\mu\text{g}/\ell$ on March 8, 1,116 $\mu\text{g}/\ell$ on April 3, and 1,821 $\mu\text{g}/\ell$ on May 2. Results of the March 8, 1996, BTEX and purgeable halocarbon analyses of system influent samples were 1.8 $\mu\text{g}/\ell$ ethylbenzene, 13.7 $\mu\text{g}/\ell$ xylenes, 1.1 $\mu\text{g}/\ell$ dichloromethane, and 1.0 $\mu\text{g}/\ell$ tetrachloroethene (PCE). Results of the April 3, 1996, BTEX and purgeable halocarbon analyses of influent samples were 1.3 $\mu\text{g}/\ell$ ethylbenzene, 4.9 $\mu\text{g}/\ell$ xylenes, 0.92 $\mu\text{g}/\ell$ toluene, 2.3 $\mu\text{g}/\ell$ dichloromethane, 0.78 $\mu\text{g}/\ell$ 1,1,1-trichloroethane, and 0.97 $\mu\text{g}/\ell$ PCE. Results of the May 2, 1996, BTEX and purgeable halocarbon analyses of influent samples indicated only 5.74 $\mu\text{g}/\ell$ xylenes. Xylenes were detected at 1.06 $\mu\text{g}/\ell$ and TPHms at 1234 $\mu\text{g}/\ell$ on the May 31, 1996 sample event. Copies of vapor analytical reports are included as Appendix B.

The system monitoring data were used to calculate system mineral spirits removal rates and a cumulative mass of mineral spirits removed via vapor extraction. As shown on Table 2, the removal rate for each of the sampling events was estimated to range from 10.95 pounds per day (lbs/day) to 17.86 lbs/day. Data collected through May 31, 1996, indicate 4073.6 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 wells MW-9 and recovery well RW-1 via passive recovery skimmers and by hand bailing at the time of SVE monitoring and groundwater sampling. Approximately 1.38 gallons of mineral spirits product were recovered during this reporting period. The total volume of mineral spirits product removed from the subsurface to date is approximately 144.23 gallons. The mineral spirits recovery data is shown in Table 3.

4.3 Groundwater Elevations

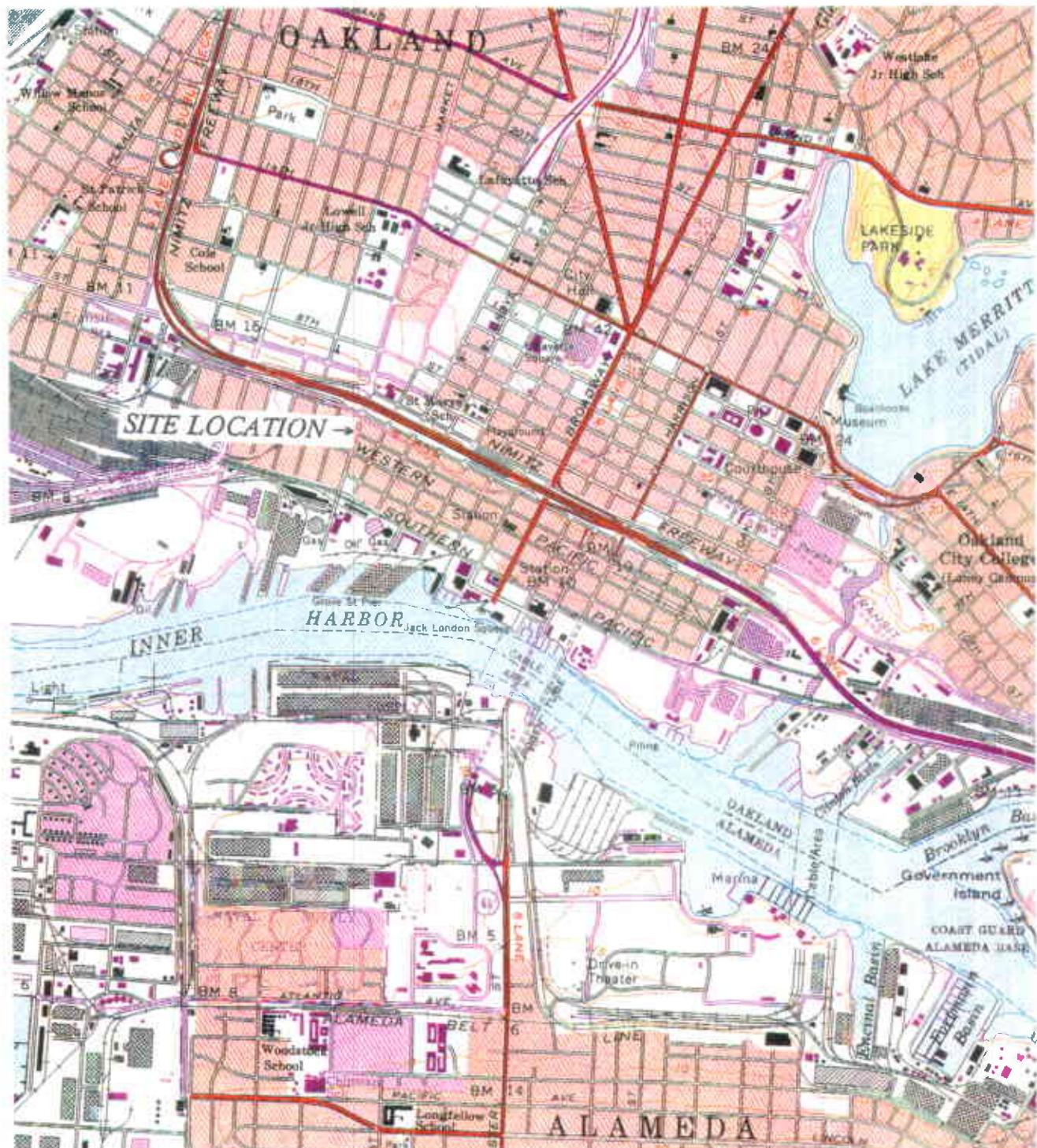
Groundwater elevations and depth-to-water measurements for the April 2, 1996, event are presented in Table 4. The average water table elevation on April 2, 1996, was 2.74 feet above mean sea level, an increase of 1.06 feet since the January 9, 1996, event. A potentiometric surface map prepared with the April 2, 1996, data is presented as Figure 4.

As shown in Figure 4, the groundwater flow direction remains to the south and southwest, consistent with historic site data. The hydraulic gradient was 0.003 feet/foot (ft/ft) across the site as measured between monitoring wells MW-4 and MW-3. The gradient is 0.002 ft/ft less than that measured during the last event, however it is consistent with previous data for the site. A summary of groundwater elevations since January 1993 is provided as Table 5.

4.4 Groundwater Conditions

No concentrations of TPHms or BTEX were detected above the laboratory detection limits in any of the groundwater samples collected on April 2, 1996. Laboratory analyses of groundwater samples show that VOCs exist at concentrations exceeding the detection limits in monitoring wells MW-4, MW-5, MW-8, and MW-12. The compounds detected were *cis*-1,2-dichloroethene (DCE), *trans*-1,2-DCE, 1,1-DCE, 1,1-dichloroethane (DCA), 1,2-DCA, trichloroethene (TCE), tetrachloroethene (PCE), chloroform, trichlorofluoromethane, vinyl chloride, chlorobenzene, and 1,2-dichlorobenzene (DCB). The groundwater sample from monitoring well MW-4 contained *cis*-1,2-DCE at 10 µg/l, *trans*-1,2-DCE at 1.7 µg/l, TCE at 140 µg/l, 1,1-DCE at 6 µg/l, and chloroform at 1.3 µg/l. The groundwater sample from monitoring well MW-5 contained TCE at 8.7 µg/l, chloroform at 1.4 µg/l, and trichlorofluoromethane at 4.5 µg/l. The groundwater sample from monitoring well MW-8 contained TCE at 569 µg/l, *cis*-1,2-DCE at 63 µg/l, *trans*-1,2-DCE at 2.9 µg/l, 1,1-DCE at 7.2 µg/l, 1,1-DCA at 2.9 µg/l, 1,2-DCA at 5.1 µg/l, vinyl chloride at 1.6 µg/l, chlorobenzene at 3.3 µg/l, 1,2-DCB at 2 µg/l, and PCE at 1.1 µg/l. The groundwater sample from monitoring well MW-12 contained TCE at 7.5 µg/l, 1,1-DCA at 2.9 µg/l, 1,2-DCA at 1.6 µg/l, and chloroform at 1.1 µg/l. Analytical test results showing compounds detected since the April 20, 1993, sampling event are presented in Table 6. Copies of the groundwater laboratory analytical reports are included in Appendix C.

OAKLAND WEST QUADRANGLE
California
7.5 Minute Series (Topographic)



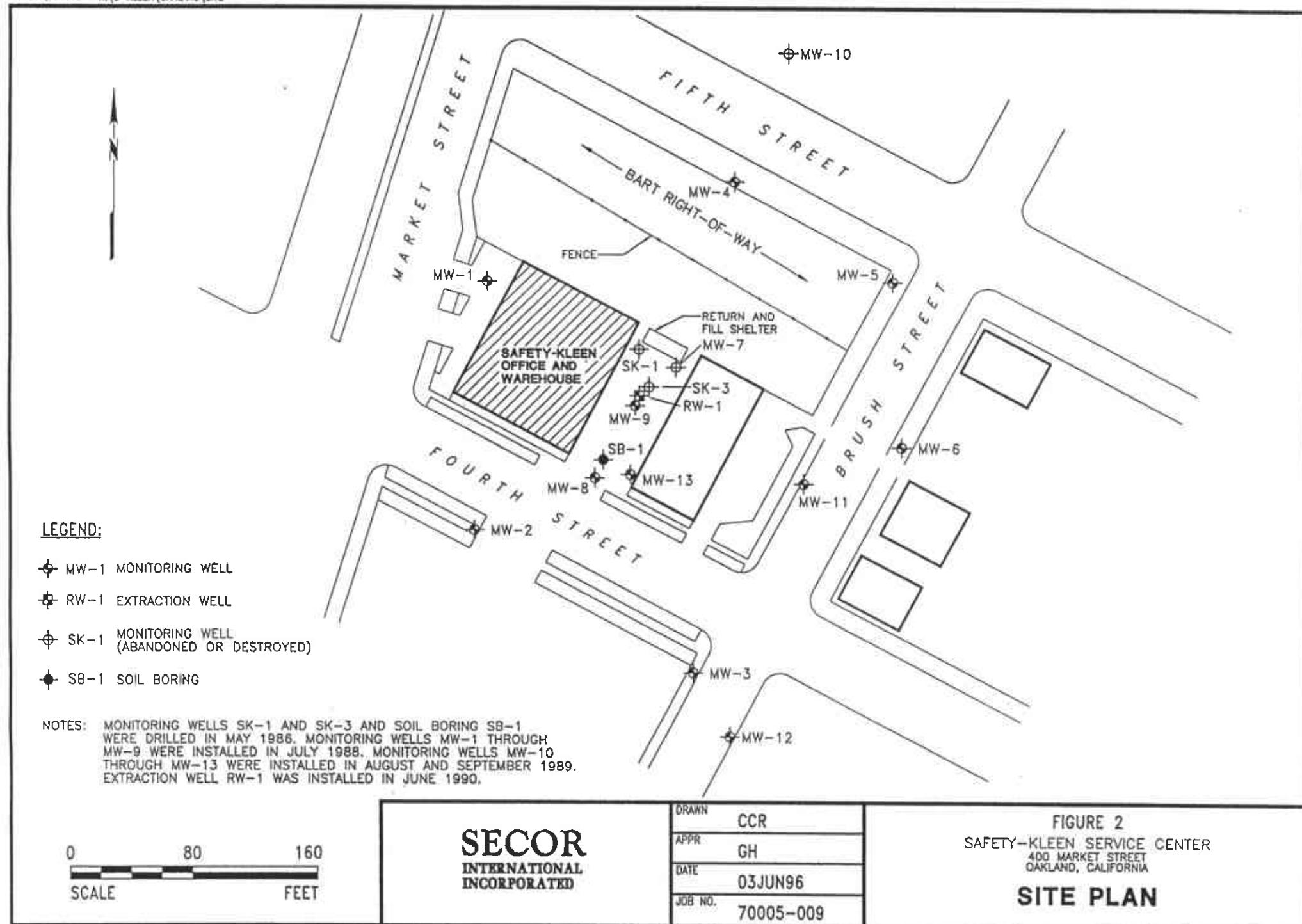
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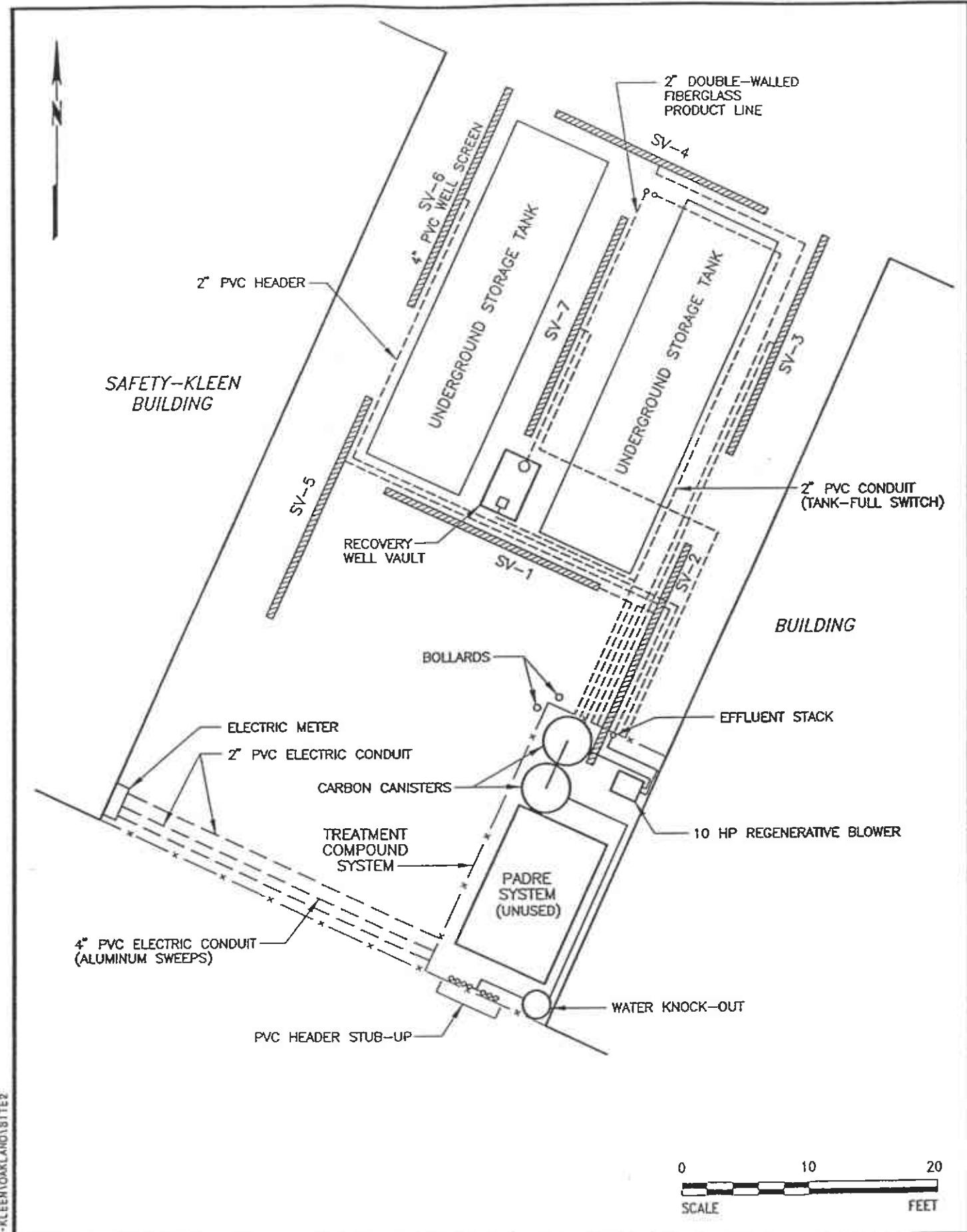
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1 MILE

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				





199512.071926 X-15-KLEEN/OAKLAND/SITE2

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**

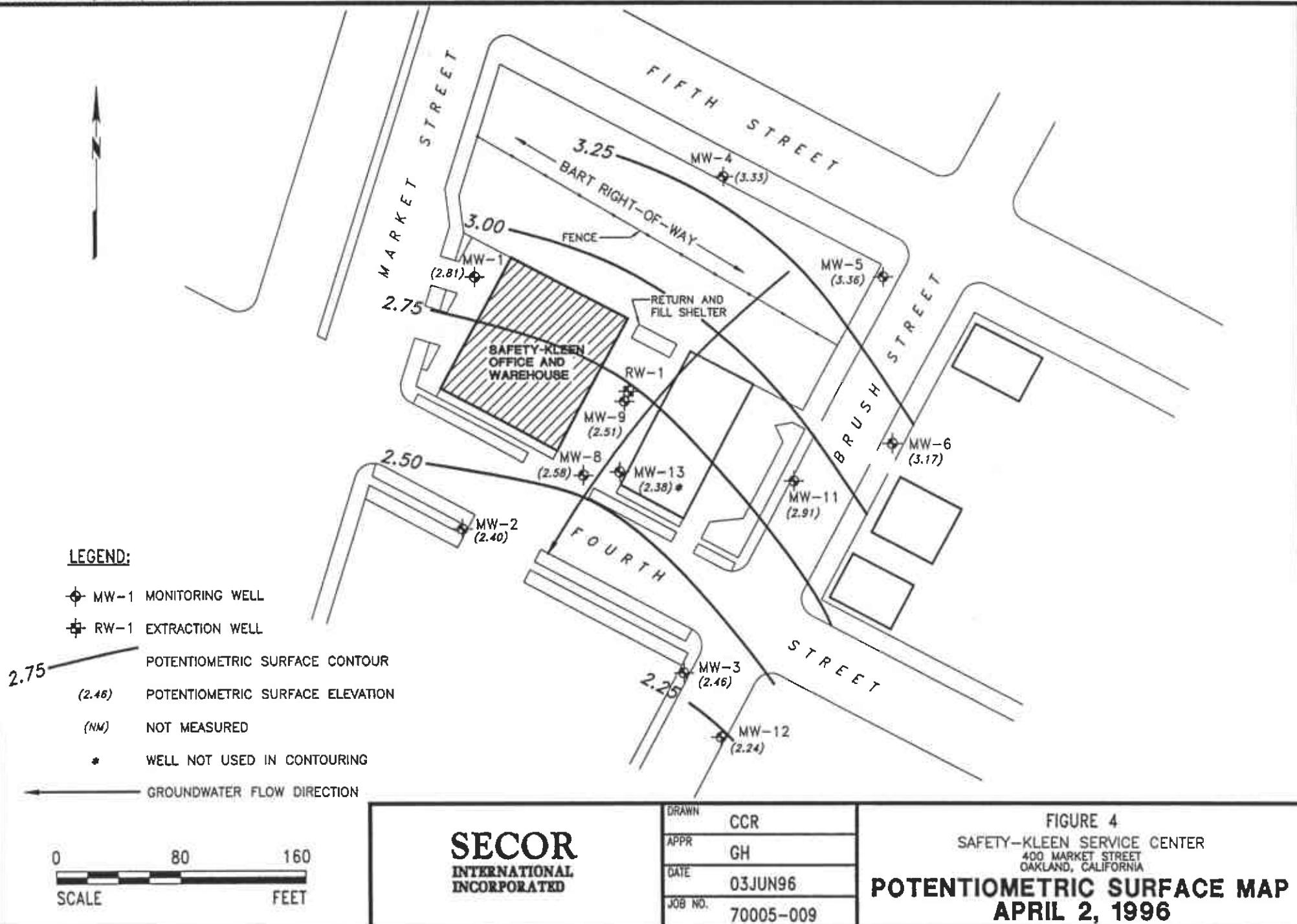


Table 1**Soil Vapor Extraction System Monitoring Data**

Safety-Kleen Service Center
 400 Market Street
 Oakland, California

Date	Elapsed Time*	SV-1 Extraction Vacuum (inches H2O)	KO Vacuum (inches H2O)	Extraction Flow Rate		System Influent (PID units)	#1 Carbon Effluent (PID units)	#2 Carbon Effluent (PID units)	System Effluent (PID units)	Notes
				(ft/min)	(scfm)					
12/08/95	362.6	6.5	22	5000	107	413	3.1	4.6	6.4	* System restarted using carbon adsorption on 11/28/95.
12/21/95	677.2	6	20	5000	107	79.5	36.2	1.2	1.2	Influent and Effluent samples collected
01/09/96	1134.2	9	22	5000	106	169	42.4	2.8	1.7	Influent and Effluent samples collected
01/24/96	1488.75	5.5	17	2200	47	43	43.2	24.2	6.1	
02/06/96	1803.3	5	16	6000	129	63.4	61.1	33.4	16.1	Influent and Effluent samples collected
02/21/96	2157.55	8	20	5500	117	60.1	48	38.2	8.4	
03/08/96	2540.1	10	23	5000	106	183.7	52.3	44.8	15.5	Influent and Effluent samples collected
03/20/96	2635.2	12	23	5000	106	430	362.1	311.4	22.4	
04/03/96	2905.9	12	25	5000	106	290	45	32	2	FID used, Influent and Effluent samples collected, Carbon changed
04/18/96	3267.7	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	3934.3	NA	23	5000	109	117.3	150.9	3.2	1	
05/31/96	4289.2	0.15	25	5000	109	53.7	61	0.7	0	Influent and Effluent samples collected

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	Run Time This Period	Extraction Flow Rate	TPHms Influent	Removal Rate	TPHms Removed	Notes
	(hours)	(hours)	(cfm)	(ug/L)	(lbs./day)	(lbs.)	
11/28/95	Carbon adsorbtion system start-up					1798.4	TPHms removed by prior system.
12/21/95	677.2	677.2	109.1	823	8.07	2026.0	
01/09/96	1134.2	457	109.1	1116	10.95	2234.4	
02/06/96	1803.3	669.1	130.9	999	11.75	2562.1	
03/08/96	2540.1	736.8	109.1	1821	17.86	3110.4	
04/03/96	2905.9	365.8	109.1	1116	10.95	3277.2	
05/02/96	3594	688.1	109.1	1586	15.56	3723.2	
05/31/96	4289.2	695.2	109.1	1234	12.10	4073.6	

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

TABLE 3
Product Recovery Data

Date	Product Recovered This Period (gallons)	Cumulative Product Recovered (gallons)
01-19-93	-0-	-0-
02-25-93	6.5	6.5
05-20-93	4.3	10.8
08-27-93	-0-	10.8
10-24-93	10.3	21.1
02-28-94	22.6	43.7
05-31-94	16.6	60.3
08-31-94	16.4	76.7
11-30-94	16.2	92.9
02-28-95	16.0	108.9
05-31-95	16.6	125.5
08-31-95	16.6	142.1
11-30-95	-0-	142.1
01-09-96	0.75	142.85
03-20-96	0.75	143.6
05-02-96	0.03	143.63
05-16-96	0.55	144.18
05-31-96	0.05	144.23

TABLE 4
Groundwater Monitoring Data
April 2, 1996

Well I.D.	TOC Elevation (ft msl)	DTW (ft)	DTP (ft)	PT (ft)	Adjusted Elevation (ft msl)
MW-1	7.99	5.18	-	-	2.81
MW-2	8.20	5.80	-	-	2.40
MW-3	6.66	4.20	-	-	2.46
MW-4	10.32	6.99	-	-	3.33
MW-5	10.28	6.92	-	-	3.36
MW-6	8.97	5.80	-	-	3.17
MW-8	7.80	5.22	-	-	2.58
MW-9	8.21	5.84	5.61	0.23	2.51
MW-10*	-	-	-	-	-
MW-11	7.91	5.00	-	-	2.91
MW-12	6.74	4.50	-	-	2.24
MW-13	8.08	5.70	-	-	2.38
RW-1	-	4.37	4.35	0.02	-

TOC	=	Top of casing
DTW	=	Depth-to-water
DTP	=	Depth-to-product (separate-phase hydrocarbons)
PT	=	product thickness
Elevation	=	Adjusted groundwater elevation
ft msl	=	Measurement in feet (ft) relative to mean sea level (msl)
*	=	Well destroyed July 1995
NM	=	Well not accessible

Table 5
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

Notes: Elevations are given in feet above mean sea level.
 - = Not Measured

TABLE 6
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
DETECTED COMPOUNDS

Safety-Kleen Service Center
400 Market Street
Oakland, California

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

TABLE 6
**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
Compound	MCL	(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	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	5	-	-	-	-	-	-	-	-	-	-	-	-
Chlorobenzene	70	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	5	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	600	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane	150	-	-	-	-	1.8	-	-	-	-	-	-	-
Dichlorodifluoromethane	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
Compound	MCL	(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
1,1-Dichloroethane	5	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	0.5	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	6	-	-	-	-	-	-	-	-	-	11.8	-	17
trans-1,2-Dichloroethene	10	-	53	0.6	1.1	1.7	-	-	1.4	1	3.2	3	4
Chloroform	NE	7.6	-	1.9	-	5.0	-	-	-	-	-	3	6
1,1,1-Trichloroethane	200	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene	5	2400	1100	-	790	1600	410	650	700	440	247	207	157
Tetrachloroethene	5	-	-	-	-	-	-	-	-	-	-	-	-
Chlorobenzene	70	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	5	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	600	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane	150	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane	NE	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	0.5	-	-	-	-	-	-	-	-	-	-	1	-

TABLE 6
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
Compound	MCL	(ug/l)												
TPH-mineral spirits	NE	-	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS
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	1.5	0.6	-	-	-	-	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	-	-	-	-	4.3	3.5	NS	NS	NS	-	NS	NS	NS
Chloroform	NE	-	-	-	-	-	-	NS	NS	NS	-	NS	NS	1.4
1,1,1-Trichloroethane	200	4	6	12	-	7.2	NS	NS	NS	9.1	NS	NS	NS	-
Trichloroethene	5	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	8.7
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	-
Trichlorofluoromethane	150	18	19	-	-	7.9	NS	NS	NS	-	NS	NS	NS	4.5
Dichlorodifluoromethane	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-
Vinyl chloride	0.5	-	-	-	-	-	NS	NS	NS	16	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
Compound	MCL	(ug/l)												
TPH-mineral spirits	NE	-	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS
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	-	-	-	-	-	-	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	-	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS
Chloroform	NE	-	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS
1,1,1-Trichloroethane	200	-	5	1.3	-	1	NS	NS	NS	0.4	NS	NS	NS	-
Trichloroethene	5	-	-	-	-	-	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	-
Trichlorofluoromethane	150	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-
Dichlorodifluoromethane	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-
Vinyl chloride	0.5	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-

TABLE 6
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	
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)	
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	
1,1-Dichloroethane	5	3.4	-	-	8.6	3.7	NS	5.5	-	-	6.2	5	7	2.9	
1,2-Dichloroethane	0.5	7.4	5	5.2	11	7.1	NS	-	-	-	9.8	10	11	5.1	
cis-1,2-Dichloroethene	6	-	-	-	-	-	NS	-	-	-	25.57	63	56	63	
trans-1,2-Dichloroethene	10	-	1	-	-	-	NS	-	-	-	2.3	6	4	2.9	
Chloroform	NE	-	-	-	-	-	NS	-	-	-	-	-	13	-	
1,1,1-Trichloroethane	200	-	-	-	2.5	1.5	NS	-	-	-	-	-	-	-	
Trichloroethene	5	14	31	15	22	18	NS	23	2.6	15	163	557	486	569	
Tetrachloroethene	5	1.8	-	-	2	0.8	NS	-	-	0.4	3.2	2	2	1.1	
Chlorobenzene	70	11	-	5.4	16	-	NS	2.4	1.2	-	6.9	4	6	3.3	
1,2-Dichloropropane	5	0.6	-	-	-	0.8	NS	-	-	-	-	-	-	-	
1,2-Dichlorobenzene	600	2.6	-	-	4.8	-	NS	-	-	-	3.8	3	5	2	
Trichlorofluoromethane	150	-	-	-	-	-	NS	-	-	-	-	-	-	-	
Dichlorodifluoromethane	NE	-	-	-	-	-	NS	-	-	-	-	-	-	-	
Vinyl chloride	0.5	-	-	-	-	-	NS	-	-	-	2.6	4	5	1.6	
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	
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)	
TPH-mineral spirits	NE	-	-	-	-	NS									
Benzene	1	-	-	-	-	NS	Well Destroyed July 1995								
Toluene	150	-	-	-	-	NS									
Ethyl-benzene	700	-	-	-	-	NS									
Xylenes	1750	-	-	-	-	NS									
1,1-Dichloroethene	6	-	2	-	-	NS									
1,1-Dichloroethane	5	-	-	-	-	NS									
1,2-Dichloroethane	0.5	-	-	-	-	NS									
cis-1,2-Dichloroethene	6	-	-	-	-	NS									
trans-1,2-Dichloroethene	10	-	17	3	0.4	NS									
Chloroform	NE	1.2	0.5	-	-	NS									
1,1,1-Trichloroethane	200	-	0.8	-	-	NS									
Trichloroethene	5	45	54	42	67	NS									
Tetrachloroethene	5	-	-	-	-	NS									
Chlorobenzene	70	-	-	-	-	NS									
1,2-Dichloropropane	5	-	-	-	-	NS									
1,2-Dichlorobenzene	600	-	-	-	-	NS									
Trichlorofluoromethane	150	-	-	-	-	NS									
Dichlorodifluoromethane	NE	-	-	-	-	NS									
Vinyl chloride	0.5	-	-	-	-	NS									

TABLE 6
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
DETECTED COMPOUNDS

Safety-Kleen Service Center
400 Market Street
Oakland, California

Well No.		MW-11												
Date	MCL	04-93 (ug/l)	07-93 (ug/l)	10-93 (ug/l)	01-94 (ug/l)	04-94 (ug/l)	07-94 (ug/l)	10-94 (ug/l)	01-95 (ug/l)	04-95 (ug/l)	07-95 (ug/l)	10-95 (ug/l)	01-96 (ug/l)	04-96 (ug/l)
Compound														
TPH-mineral spirits	NE	-	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS
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	-	3	-	-	-	-	NS	NS	NS	-	NS	NS	NS
Chloroform	NE	-	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS
1,1,1-Trichloroethane	200	-	2	-	-	-	-	NS	NS	NS	-	NS	NS	NS
Trichloroethene	5	9.1	36	11	2.6	3.1	-	NS	NS	NS	3.4	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
Trichlorofluoromethane	150	-	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS
Dichlorodifluoromethane	NE	-	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS
Vinyl chloride	0.5	-	-	-	-	-	-	NS	NS	NS	1.4	NS	NS	NS
Well No.		MW-12												
Date	MCL	04-93 (ug/l)	07-93 (ug/l)	10-93 (ug/l)	01-94 (ug/l)	04-94 (ug/l)	07-94 (ug/l)	10-94 (ug/l)	01-95 (ug/l)	04-95 (ug/l)	07-95 (ug/l)	10-95 (ug/l)	01-96 (ug/l)	04-96 (ug/l)
Compound														
TPH-mineral spirits	NE	-	-	-	-	-	-	NS	-	NS	-	NS	-	NS
Benzene	1	-	-	-	-	-	-	NS	-	NS	-	NS	-	NS
Toluene	150	-	-	-	-	-	-	NS	-	NS	-	NS	-	NS
Ethyl-benzene	700	-	-	-	-	-	-	NS	-	NS	-	NS	-	NS
Xylenes	1750	-	-	-	-	-	-	NS	-	NS	-	NS	-	NS
1,1-Dichloroethene	6	-	-	-	-	-	-	NS	-	NS	-	NS	2	NS
1,1-Dichloroethane	5	2.6	2	-	2.3	1.7	NS	1.6	NS	3.8	NS	4	NS	2.9
1,2-Dichloroethane	0.5	-	2	-	1.2	1.9	NS	-	NS	-	NS	3	NS	1.6
cis-1,2-Dichloroethene	6	-	-	-	-	-	NS	-	NS	-	NS	5	NS	-
trans-1,2-Dichloroethene	10	-	3	-	-	-	NS	-	NS	-	NS	2	NS	-
Chloroform	NE	-	-	-	-	-	NS	-	NS	-	NS	-	NS	1.1
1,1,1-Trichloroethane	200	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-
Trichloroethene	5	17	30	34	11	44	NS	24	NS	59	NS	95	NS	7.5
Tetrachloroethene	5	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-
Chlorobenzene	70	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-
1,2-Dichloropropane	5	-	-	-	-	-	NS	-	NS	-	NS	2	NS	-
1,2-Dichlorobenzene	600	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-
Trichlorofluoromethane	150	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-
Dichlorodifluoromethane	NE	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-
Vinyl chloride	0.5	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-

TABLE 6
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
DETECTED COMPOUNDS

Safety-Kleen Service Center
400 Market Street
Oakland, California

Well No.	MW-13													
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
Compound	MCL	(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	-
Trichloroethylene	5	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-
Tetrachloroethylene	5	-	NS	NS	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	-
Trichlorofluoromethane	150	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-
Dichlorodifluoromethane	NE	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-
Vinyl chloride	0.5	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-

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.

NOTE

Only compounds detected in one or more samples are included. See the laboratory reports for a complete list of analytes.

SECOR**HYDROLOGIC DATA SHEET**

PROJECT: SAFETY-KLEEN 400 MARKET STREET OAKLAND, CALIFORNIA			PROJECT NO.: 70005-009-07 TASK: 001				
DATE: 4/7/96		TIME START: 12:00			TIME END: 2:00		
EVENT: QUARTERLY/SEMI-ANNUAL/ANNUAL MONITORING AND SAMPLING					PERSONNEL:		
WELL ID	TOC	DTW	DTP	PT	TD	ELEV.	COMMENTS
MW-1	7.99	5.18	-	-	21.48	2.81	2"
MW-2	8.20	5.80	-	-	29.21	2.40	2"
MW-3	6.66	4.20	-	-	24.20	2.46	2"
MW-4	10.32	6.99	-	-	25.40	3.33	2"
MW-5	10.28	6.92	-	-	28.98	3.36	2"
MW-6	8.97	5.80	-	-	28.97	3.17	2"
MW-8	7.80	5.22	-	-	28.93	2.58	2"
MW-9	8.21	5.84	5.61	0.23	28.50	2.51	4"
MW-11	7.91	5.00	-	-	28.50	2.91	2"
MW-12	6.74	4.50	-	-	25.38	2.24	2"
MW-13	8.08	5.70	-	-	29.00	2.38	4"(deep well)
RW-1	-	4.37	4.35	.02			10"
NOTES: S-K Laboratory P.O. Number - E11819							

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

SECOR International Inc.
WATER SAMPLE FIELD DATA SHEET

PROJECT #: 700c5-009-07
CLIENT NAME: SAFETY KLEEN
LOCATION: OAKLAND, CA

PURGED BY: GL
SAMPLER BY: GL

WELL I.D.: MW-1
SAMPLE I.D.: MW-1
QA SAMPLES: None

DATE PURGED	4-2-96	START (2400hr)	12:55	END (2400hr)	13:10
DATE SAMPLED	4-2-96	SAMPLE TIME (2400hr)	13:15		

SAMPLE TYPE: Groundwater Surface Water Treatment Effluent Other

CASING DIAMETER: 2" X 3" _____ 4" _____ 5" _____ 6" _____ 8" _____ Other _____
Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ()

DEPTH TO BOTTOM (feet) = 71.49 Casing volume (gal) = 2.72
8.31

DEPTH TO WATER (feet) = 5.18 CALCULATED PURGE (gal) = 8.5

WATER COLUMN HEIGHT (feet) = 16.3 ACTUAL PURGE (gal) = 8.50

FIELD MEASUREMENTS

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: _____

SAMPLE TURBIDITY: _____

80% RECHARGE: YES NO

ANALYSES: _____

ODOR: None

SAMPLE VESSEL / PRESERVATIVE: 3 HCl VOAS

PURGING EQUIPMENT	SAMPLING EQUIPMENT
<input type="checkbox"/> Bladder Pump	<input type="checkbox"/> Bailer (Teflon)
<input type="checkbox"/> Centrifugal Pump	<input checked="" type="checkbox"/> Bailer (PVC)
<input type="checkbox"/> Submersible Pump	<input type="checkbox"/> Bailer (Stainless Steel)
<input type="checkbox"/> Peristaltic Pump	<input checked="" type="checkbox"/> Dedicated DISPOS.
Other: _____	Bladder Pump <input type="checkbox"/>
Pump Depth: _____	Centrifugal Pump <input checked="" type="checkbox"/>
	Submersible Pump <input type="checkbox"/>
	Peristaltic Pump <input type="checkbox"/>
	Dedicated _____
	Bailer (Teflon) <input type="checkbox"/>
	Bailer (PVC or <input checked="" type="checkbox"/> disposable) <input checked="" type="checkbox"/>
	Bailer (Stainless Steel) <input type="checkbox"/>
	Dedicated _____
	Other: _____

WELL INTEGRITY: GOOD

LOCK#: _____

REMARKS: _____

SIGNATURE: GRC

SECOR International Inc.
WATER SAMPLE FIELD DATA SHEET

PROJECT #: 70005-009-07 PURGED BY: GC WELL I.D.: MW-3
CLIENT NAME: SAFETY Kleen SAMPLED BY: GC SAMPLE I.D.: MW-3
LOCATION: Oakland, CA QA SAMPLES: No 12

DATE PURGED	4-2-96	START (2400hr)	15:50	END (2400hr)	16:20
DATE SAMPLED	4-2-96	SAMPLE TIME (2400hr)	16:20		

SAMPLE TYPE: Groundwater X Surface Water _____ Treatment Effluent _____ Other _____

CASING DIAMETER: 2" X 3" _____ 4" _____ 5" _____ 6" _____ 8" _____ Other _____
 Casing Volume: (gallons per foot) (0.17) (0.38) (0.67) (1.02) (1.50) (2.60) ()

DEPTH TO BOTTOM (feet) = 26.20 Casing Volume (gal) = 3.74

DEPTH TO WATER (feet) = 4.20 CALCULATED PURGE (gal) = 11.22

WATER COLUMN HEIGHT (feet) = 22.00 ACTUAL PURGE (gal) = 11.50

FIELD MEASUREMENTS

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER:

SAMPLE TURBIDITY: _____

80% RECHARGE: X YES NO

ANALYSES:

ODOR: None

ANALYSES:

ODOR: None - SAMPLE VESSEL / PRESERVATIVE: 4 HCl Vials

PURGING EQUIPMENT

- Bladder Pump
 - Centrifugal Pump
 - Submersible Pump
 - Peristaltic Pump

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: _____

[View Details](#) | [Edit](#) | [Delete](#)

SIGNATURE: gpc Page 1 of 1

SECOR International Inc.
WATER SAMPLE FIELD DATA SHEET

PROJECT #:	70005-004-07	PURGED BY:	GL	WELL I.D.:	MW-4		
CLIENT NAME:	Safety Kleen	SAMPLED BY:	GL	SAMPLE I.D.:	MW-4		
LOCATION:	Oakland, CA	QA SAMPLES:			Noce		
DATE PURGED	4-2-96	START (2400hr)	13:20	END (2400hr)	13:37		
DATE SAMPLED	4-2-96	SAMPLE TIME (2400hr)	13:40				
SAMPLE TYPE:	Groundwater <input checked="" type="checkbox"/>	Surface Water		Treatment Effluent		Other	
CASING DIAMETER:	2" <input checked="" type="checkbox"/>	3" <input type="checkbox"/>	4" <input type="checkbox"/>	5" <input type="checkbox"/>	6" <input type="checkbox"/>	8" <input type="checkbox"/>	Other <input type="checkbox"/>
Casing Volume: (gallons per foot)	(0.17)	(0.38)	(0.67)	(1.02)	(1.50)	(2.60)	()
DEPTH TO BOTTOM (feet) =	25.40		CASING VOLUME (gal) =			3.12	
DEPTH TO WATER (feet) =	6.99		CALCULATED PURGE (gal) =			9.38	
WATER COLUMN HEIGHT (feet) =	18.41		ACTUAL PURGE (gal) =			9.50	

FIELD MEASUREMENTS

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: _____

SAMPLE TURBIDITY: _____

80% RECHARGE: YES NO

ANALYSES: _____

DDOB: No 48

SAMPLE VESSEL / PRESERVATIVE: 5 mL vials

PURGING EQUIPMENT	SAMPLING EQUIPMENT
<input type="checkbox"/> Bladder Pump	<input type="checkbox"/> Bailer (Teflon)
<input type="checkbox"/> Centrifugal Pump	<input checked="" type="checkbox"/> Bailer (PVC)
<input type="checkbox"/> Submersible Pump	<input type="checkbox"/> Bailer (Stainless Steel)
<input type="checkbox"/> Peristaltic Pump	<input checked="" type="checkbox"/> Dedicated <u>DISPOS</u>
Other: _____	Other: _____
Pump Depth: _____	

WELL INTEGRITY: Good

LOCK#: _____

REMARKS: _____

SIGNATURE: JRC

Page 1 of 1

SECOR International Inc.
WATER SAMPLE FIELD DATA SHEET

PROJECT #: 70005-009-07	PURGED BY: GC	WELL I.D.: MW-5					
CLIENT NAME: SAFETY Kleen	SAMPLED BY: GC	SAMPLE I.D.: MW5					
LOCATION: Oakland, CA		QA SAMPLES: None					
DATE PURGED 4-2-96	START (2400hr) 13:50	END (2400hr) 14:10					
DATE SAMPLED 4-2-96	SAMPLE TIME (2400hr) 14:15						
SAMPLE TYPE: Groundwater X	Surface Water	Treatment Effluent	Other				
CASING DIAMETER: 2"	X	3"	4"	5"	6"	8"	Other ()
Casing Volume: (gallons per foot)	(0.17)	(0.38)	(0.67)	(1.02)	(1.50)	(2.60)	()
DEPTH TO BOTTOM (feet) = 28.98		CASING VOLUME (gal) = 3.75					
DEPTH TO WATER (feet) = 6.92		CALCULATED PURGE (gal) = 11.25					
WATER COLUMN HEIGHT (feet) = 22.06		ACTUAL PURGE (gal) = 11.50					

FIELD MEASUREMENTS

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: —

SAMPLE TURBIDITY: _____

80% RECHARGE: X YES NO

ANALYSES: _____

OPDR: None

SAMPLE VESSEL / PRESERVATIVE: 5 HCl VOAS

PURGING EQUIPMENT	SAMPLING EQUIPMENT
<input type="checkbox"/> Bladder Pump	<input type="checkbox"/> Bailer (Teflon)
<input checked="" type="checkbox"/> Centrifugal Pump	<input checked="" type="checkbox"/> Bailer (PVC)
<input type="checkbox"/> Submersible Pump	<input type="checkbox"/> Bailer (Stainless Steel)
<input type="checkbox"/> Peristaltic Pump	<input checked="" type="checkbox"/> Dedicated <u>Dispos</u>
Other: _____	Other: _____
Pump Depth: _____	

WELL INTEGRITY: Good

LOCK#: _____

REMARKS: _____

SIGNATURE: J. M. L.

SECOR International Inc.
WATER SAMPLE FIELD DATA SHEET

PROJECT #:	70005-009-07	PURGED BY:	GC	WELL I.D.:	MW-6		
CLIENT NAME:	Safety Kleen	SAMPLED BY:	GC	SAMPLE I.D.:	MW-6		
LOCATION:	Oakland, CA	QA SAMPLES:			None		
DATE PURGED	4-2-96	START (2400hr)	15:00	END (2400hr)	15:20		
DATE SAMPLED	4-2-96	SAMPLE TIME (2400hr)	15:25				
SAMPLE TYPE:	Groundwater <input checked="" type="checkbox"/>	Surface Water <input type="checkbox"/>	Treatment Effluent <input type="checkbox"/>	Other <input type="checkbox"/>			
CASING DIAMETER:	2" <input checked="" type="checkbox"/>	3" <input type="checkbox"/>	4" <input type="checkbox"/>	5" <input type="checkbox"/>	6" <input type="checkbox"/>	8" <input type="checkbox"/>	Other <input type="checkbox"/>
Casing Volume: (gallons per foot)	(0.17)	(0.38)	(0.67)	(1.02)	(1.50)	(2.60)	()
DEPTH TO BOTTOM (feet) =	28.97	CASING VOLUME (gal) =			3.43		
DEPTH TO WATER (feet) =	5.80	CALCULATED PURGE (gal) =			11.81		
WATER COLUMN HEIGHT (feet) =	23.17	ACTUAL PURGE (gal) =			12.00		

FIELD MEASUREMENTS

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: 1

SAMPLE TURBIDITY:

80% RECHARGE: X YES NO

ANALYSES: _____

ODOR: None

SAMPLE VESSEL / PRESERVATIVE: 4 Fix - 0023

PURGING EQUIPMENT	SAMPLING EQUIPMENT
<input type="checkbox"/> Bladder Pump	<input type="checkbox"/> Bailer (Teflon)
<input type="checkbox"/> Centrifugal Pump	<input checked="" type="checkbox"/> Bailer (PVC)
<input type="checkbox"/> Submersible Pump	<input type="checkbox"/> Bailer (Stainless Steel)
<input type="checkbox"/> Peristaltic Pump	<input checked="" type="checkbox"/> Dedicated <u>Dispos.</u>
Other: _____	Other: _____
Pump Depth: _____	

WELL INTEGRITY: Good

LOCK#: _____

REMARKS: _____

SIGNATURE: ggs

Page 1 of 1

SECOR International Inc.

WATER SAMPLE FIELD DATA SHEET

PROJECT #:	70005-009-07	PURGED BY:	GC	WELL I.D.:	MW-0		
CLIENT NAME:	Safety Klean	SAMPLED BY:	GC	SAMPLE I.D.:	MW-5		
LOCATION:	Oakland, CA	QA SAMPLES:	None				
DATE PURGED	4-2-96	START (2400hr)	17:15	END (2400hr)	17:35		
DATE SAMPLED	4-2-96	SAMPLE TIME (2400hr)	17:40				
SAMPLE TYPE:	Groundwater <input checked="" type="checkbox"/>	Surface Water <input type="checkbox"/>	Treatment Effluent <input type="checkbox"/>	Other <input type="checkbox"/>			
CASING DIAMETER:	2" <input checked="" type="checkbox"/>	3" <input type="checkbox"/>	4" <input type="checkbox"/>	5" <input type="checkbox"/>	6" <input type="checkbox"/>	8" <input type="checkbox"/>	Other <input type="checkbox"/>
Casing Volume: (gallons per foot)	(0.17)	(0.38)	(0.67)	(1.02)	(1.50)	(2.60)	()
DEPTH TO BOTTOM (feet) =	28.93		CASING VOLUME (gal) =		4.03		
DEPTH TO WATER (feet) =	5.22		CALCULATED PURGE (gal) =		12.09		
WATER COLUMN HEIGHT (feet) =	23.71		ACTUAL PURGE (gal) =		12.50		

FIELD MEASUREMENTS

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: _____

SAMPLE TURBIDITY: _____

80% RECHARGE: YES NO

ANALYSES:

ODOR: None

SAMPLE VESSEL / PRESERVATIVE: 4 HCl Vials

PURGING EQUIPMENT

- Bladder Pump
 - Centrifugal Pump
 - Submersible Pump
 - Peristaltic Pump

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: 600

LOCK#: _____

REMARKS:

SIGNATURE: JRC

SECOR International Inc.
WATER SAMPLE FIELD DATA SHEET

PROJECT #: 70005-009-07	PURGED BY: GC	WELL I.D.: MW-12					
CLIENT NAME: SAFETY Kleen	SAMPLED BY: GC	SAMPLE I.D.: MW-12					
LOCATION: OAKLAND - CA		QA SAMPLES: None					
DATE PURGED 4-2-96	START (2400hr) 16:22	END (2400hr) 16:50					
DATE SAMPLED 4-2-96	SAMPLE TIME (2400hr) 16:55						
SAMPLE TYPE: Groundwater X	Surface Water	Treatment Effluent	Other				
CASING DIAMETER: 2"	X	3"	4"	5"	6"	8"	Other ()
Casing Volume: (gallons per foot)	(0.17)	(0.38)	(0.67)	(1.02)	(1.50)	(2.60)	()
DEPTH TO BOTTOM (feet) = 25.38		CASING VOLUME (gal) = 3.54					
DEPTH TO WATER (feet) = 4.50		CALCULATED PURGE (gal) = 10.64					
WATER COLUMN HEIGHT (feet) = 20.88		ACTUAL PURGE (gal) = 11.00					

FIELD MEASUREMENTS

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: —

SAMPLE TURBIDITY: _____

80% RECHARGE: X YES NO

ANALYSES:

OPOR: №№

SAMPLE VESSEL / PRESERVATIVE: HgCl₂ V045

PURGING EQUIPMENT	SAMPLING EQUIPMENT
Bladder Pump	Bailer (Teflon)
Centrifugal Pump	<input checked="" type="checkbox"/> Bailer (PVC)
Submersible Pump	Bailer (Stainless Steel)
Peristaltic Pump	<input checked="" type="checkbox"/> Dedicated <u>DISPOS</u>
Other: _____	Other: _____
Pump Depth:	

WELL INTEGRITY: 600

LOCK#: _____

REMARKS: _____

SIGNATURE: DLC



DATE: 4-3-96

ENVIRONMENTAL CHAIN OF CUSTODY



SAFETY Kleen Oakland 400 Market Street Oakland, CA.	Greg Hoehn	(510) 686-9780 (510) 686-3099 FAX	PROJECT # 70005-009-07
GENERATOR SITE & ADDRESS	PROJECT MANAGER(S)	PHONE & FAX	AUTHORIZATION #

SAMPLER'S NAME	ANALYSIS REQUESTED		
----------------	--------------------	--	--

FIELD SAMPLE ID #	SAMPLE MATRIX	DATE/TIME SAMPLED	# OF CONTAINERS	PRESERVATION METHOD	TPH (8015) Mineral Spirits <input checked="" type="checkbox"/> Methanol <input type="checkbox"/>	Paint <input checked="" type="checkbox"/>	Sulfide <input type="checkbox"/>	TOTAL Volatiles (8240) <input type="checkbox"/> <input checked="" type="checkbox"/> (8241)	SEM-VOA(8270) <input type="checkbox"/> <input checked="" type="checkbox"/> (825)	TCLP Metals <input type="checkbox"/> VOA <input checked="" type="checkbox"/> BNA <input type="checkbox"/>	IGNITABILITY (D001) <input type="checkbox"/>	CORROSIVITY (D002) <input type="checkbox"/>	REACTIVITY (D003) <input type="checkbox"/>	SPECIFIC GRAVITY <input type="checkbox"/>	C.O.D.(410.4) <input type="checkbox"/> <input checked="" type="checkbox"/> B.O.D.(405.1) <input type="checkbox"/>	TOTAL METALS <input type="checkbox"/>	PHENOLS (420.1) <input type="checkbox"/>	PCB's (6080) <input type="checkbox"/>	BTEX (8240) <input type="checkbox"/>	PAH (8210) <input type="checkbox"/>	TOTAL SUSPENDED SOLID (160.2) <input type="checkbox"/>	OIL & GREASE (413.2) <input type="checkbox"/> <input checked="" type="checkbox"/> (9305) <input type="checkbox"/>	Halogenated Volatiles 8021 <input type="checkbox"/>
MW-2	H ₂ O	4-2 / 18:50	4	HCl / Ice	X																		
MW-8	H ₂ O	4-2 / 17:40	4	HCl / Ice	X																		
MW-12	H ₂ O	4-2 / 16:55	4	HCl / Ice	X																		
MW-3	H ₂ O	4-2 / 16:20	4	HCl / Ice	X																		
MW-6	H ₂ O	4-2 / 15:25	4	HCl / Ice	X																		
MW-5	H ₂ O	4-2 / 14:15	4	HCl / Ice	X																		
MW-4	H ₂ O	4-2 / 13:40	4	HCl / ICE	X																		
MW-1	H ₂ O	4-2 / 13:15	4	HCl / ICE	X																		
MW-13	H ₂ O	4-3 / 14:25	4	HCl / ICE	X																		
TSS	H ₂ O	4-3 / 13:00	1	Ice																	X		

COMMENTS/REMARKS:

REQUESTED TAT

SAMPLE TRANSFER RECORD

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE
SIGNATURE OF COLLECTOR: <u>Glenn M. Riehl</u>	4-3-96	4:30		

SK TCLP LAB USE ONLY

TEMPERATURE WHEN RECEIVED _____ °C	SHIPPED VIA	UPS	<input checked="" type="checkbox"/> FED EX	OTHER
SAMPLE KIT OPENED AND CHECKED IN BY _____	AT	ON		
C.O.C. SEALS SIGNED, DATED, AND INTACT ON ALL SAMPLE JARS? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>				
IF NO, EXPLAIN _____				

APPENDIX B

Laboratory Reports - Vapor



Superior

Analytical Laboratory

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

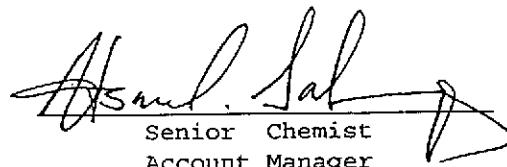
Attn: GREG HOEHN

Date: March 18, 1996

Laboratory Number : 20995

Project Number/Name : 70005-009

This report has been reviewed and
approved for release.



Asml. Sal
Senior Chemist
Account Manager

Customer Service: (800) 521-6109 • Laboratory: (510) 313-0850 • Facsimile: (510) 229-0916
Post Office Box 2648 • 835 Arnold Drive • Suite #106 • Martinez, California 94553
1555 Burke Street • Suite A • San Francisco, California 94124



Superior

Analytical Laboratory

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

Laboratory No.: 20995

Client: SECOR

Client Job No.: 70005-009

Date Received: March 8, 1996

Date Reported: March 18, 1996

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

#	Sample ID	Date Sampled	Date Analyzed	Analyte	Conc.	RL	Unit
01	EFF	03/08/96	03/08/96	Benzene	ND	0.085	ppm-v
				Toluene	ND	0.25	ppm-v
				Ethyl Benzene	ND	0.065	ppm-v
				Xylenes	ND	0.25	ppm-v
02	INF	03/08/96	03/08/96	Benzene	ND	0.085	ppm-v
				Toluene	ND	0.25	ppm-v
				Ethyl Benzene	0.41	0.065	ppm-v
				Xylenes	3.1	0.25	ppm-v
QC	Method Blank	Air	03/08/96	Benzene	ND	0.085	ppm-v
				Toluene	ND	0.25	ppm-v
				Ethyl Benzene	ND	0.065	ppm-v
				Total Xylenes	ND	0.25	ppm-v

QAQC Summary for : Water

QC Batch : CC081.05

Benzene	MS/MSD % Recovery = 100/105	Duplicate RPD = 5 %	20970-04
Toluene	MS/MSD % Recovery = 100/110	Duplicate RPD = 10 %	20970-04
Ethyl Benzene	MS/MSD % Recovery = 100/100	Duplicate RPD = 0 %	20970-04
Xylenes	MS/MSD % Recovery = 102/103	Duplicate RPD = 1 %	20970-04

ND = Not Detected

NA = Not Applicable

RL = Reporting Limit



Superior

Analytical Laboratory

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

Laboratory No.: 20995

Date Received: March 8, 1996

Client: SECOR

Date Reported: March 18, 1996

Client Job No.: 70005-009

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

#	Sample ID	Date Sampled	Date Analyzed	Analyte	Conc.	RL	Unit
01	EFF	03/08/96	03/08/96	Gasoline Mineral Spirits	ND ND	30 30	ppm-v ppm-v
02	INF	03/08/96	03/08/96	Gasoline Mineral Spirits	ND 310	30 30	ppm-v ppm-v
QC	Method Blank	Air	03/08/96	Gasoline Mineral Spirits	ND ND	30 30	ppm-v ppm-v

QC Summary for : Water

QC Batch : CC081.05

Gasoline_Range MS/MSD % Recovery = 100/100 Duplicate RPD = 0 % 20970-04

ND = Not Detected

NA = Not Applicable

RL = Reporting Limit



Analytical Laboratory

ScCOR
Attn: GREG HOEHN

Project 70005-009
Reported on March 11, 1996

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

Chronology

Laboratory Number 20995

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
EFF	03/08/96	03/08/96	03/10/96	03/10/96	CC101.08	01
INF			03/10/96	03/10/96	CC101.08	02

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CC101.08-10	Method Blank	MB	Air	03/10/96	03/10/96
CC101.08-11	Laboratory Spike	LS	Water	03/10/96	03/10/96
CC101.08-12	Laboratory Spike Duplicate	LSD	Water	03/10/96	03/10/96
CC101.08-13	DW-2	MS 20991-10	Water	03/10/96	03/10/96
CC101.08-14	DW-2	MSD 20991-10	Water	03/10/96	03/10/96



Superior

Analytical Laboratory

SECOR
Attn: GREG HOEHN

Project 70005-009
Reported on March 11, 1996

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

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
20995-01	EFF	Air	1.0	-
20995-02	INF	Air	1.0	-

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

Compound	20995-01	20995-02
	Conc. RL	Conc. RL
	PPB (V/V)	PPB (V/V)

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
Chloromethane	ND	140	310	140
1,1,2-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	150	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	92	97
--------------------	----	----



Superior

Analytical Laboratory

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

Quality Assurance and Control Data

Laboratory Number: 20995
Method Blank(s)

CC101.08-10

Conc. RL

PPB (V/V)

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



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Analytical Laboratory

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

Quality Assurance and Control Data

Laboratory Number: 20995

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
----------	--------------	-----------	------------	------------	----------	-------

For Water Matrix (ug/L)

CC101.08 11 / 12 - Laboratory Control Spikes

1,1-Dichloroethene	20	17/18	85/90	50-189	6
Trichloroethene	20	20/20	100/100	53-161	0
Chlorobenzene	20	20/20	100/100	57-171	0
>> Surrogate Recoveries (%) <<					
Bromochloromethane			103/101	50-125	

For Water Matrix (ug/L)

CC101.08 13 / 14 - Sample Spiked: 20991 - 10

1,1-Dichloroethene	ND	20	17/17	85/85	50-189	0
Trichloroethene	ND	20	20/21	100/105	53-161	5
Chlorobenzene	ND	20	20/20	100/100	57-171	0
>> Surrogate Recoveries (%) <<						
Bromochloromethane			97/96	50-125		

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

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

Date: April 10, 1996

Attn: GREG HOEHN

Laboratory Number : 21154

Project Number/Name : 70005-009-08

This report has been reviewed and
approved for release.



A handwritten signature in black ink, appearing to read "Alan Salas". To the right of the signature is a large, thin-lined arrow pointing to the right. Below the signature, the text "Project Manager" is written in a smaller, printed font.

Customer Service: (800) 521-6109 • Laboratory: (510) 313-0850 • Facsimile: (510) 229-0916
Post Office Box 2648 • 835 Arnold Drive • Suite #106 • Martinez, California 94553
1555 Burke Street • Suite A • San Francisco, California 94124



Superior

Analytical Laboratory

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

Laboratory No.: 21154

Date Received: April 3, 1996

Client: SECOR

Date Reported: April 10, 1996

Client Job No.: 70005-009-08

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

#	Sample ID	Date Sampled	Date Analyzed	Analyte	Conc.	RL	Unit
01	INF	04/03/96	04/04/96	Benzene	ND	0.085	ppm-v
				Toluene	0.24	0.25	ppm-v
				Ethyl Benzene	0.30	0.065	ppm-v
				Xylenes	1.1	0.25	ppm-v
02	EFF	04/03/96	04/04/96	Benzene	ND	0.085	ppm-v
				Toluene	ND	0.25	ppm-v
				Ethyl Benzene	ND	0.065	ppm-v
				Xylenes	ND	0.25	ppm-v
QC	Method Blank	Water	04/04/96	Benzene	ND	0.5	ug/L
				Toluene	ND	0.5	ug/L
				Ethyl Benzene	ND	0.5	ug/L
				Total Xylenes	ND	0.5	ug/L

QAQC Summary for : Water

QC Batch : CD041.37

Benzene	MS/MSD % Recovery = 100/100	Duplicate RPD = 0 %	21140-01
Toluene	MS/MSD % Recovery = 96/ 96	Duplicate RPD = 0 %	21140-01
Ethyl Benzene	MS/MSD % Recovery = 100/100	Duplicate RPD = 0 %	21140-01
Xylenes	MS/MSD % Recovery = 88/ 90	Duplicate RPD = 2 %	21140-01

ND = Not Detected

NA = Not Applicable

RL = Reporting Limit



Superior

Analytical Laboratory

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

Laboratory No.: 21154

Date Received: April 3, 1996

Client: SECOR

Date Reported: April 10, 1996

Client Job No.: 70005-009-08

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

#	Sample ID	Date Sampled	Date Analyzed	Analyte	Conc.	RL	Unit
01	INF	04/03/96	04/04/96	Gasoline Mineral Spirits	NA 190	30 30	ppm-v ppm-v
02	EFF	04/03/96	04/04/96	Gasoline Mineral Spirits	NA ND	30 30	ppm-v ppm-v
QC	Method Blank	Water	04/04/96	Gasoline_Range Mineral Spirits Ran	ND ND	50 50	ug/L ug/L

QC Summary for : Water

QC Batch : CD041.37

Gasoline_Range MS/MSD % Recovery = 90/ 90 Duplicate RPD = 0 % 21140-01

ND = Not Detected
NA = Not Applicable
RL = Reporting Limit



Superior

Analytical Laboratory

TO:
ATTN: GREG HOEHN

Project 70005-009-08
Reported on April 4, 1996

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

Chronology

Laboratory Number 21154

Sample ID

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
-----------	---------	----------	----------	----------	----------	-------

INF	04/03/96	04/03/96	04/03/96	04/03/96	CD031.08	01
EFF	04/03/96	04/03/96	04/03/96	04/03/96	CD031.08	02

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CD031.08-02	Laboratory Spike	LS	Water	04/03/96	04/03/96
CD031.08-03	Laboratory Spike Duplicate	LSD	Water	04/03/96	04/03/96
CD031.08-04	MW2	MS 21133-03	Water	04/03/96	04/03/96
CD031.08-05	MW2	MSD 21133-03	Water	04/03/96	04/03/96
CD031.08-06	Method Blank	MB	Air	04/03/96	04/03/96



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Analytical Laboratory

SUPERIOR
Attn: GREG HOEHN

Project 70005-009-08
Reported on April 4, 1996

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

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
21154-01	INF	Air	1.0	-
21154-02	EFF	Air	1.0	-

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

Compound	21154-01	21154-02	
	Conc. RL	Conc. RL	
	PPB (V/V)	PPB (V/V)	
Chloromethane	ND	480	ND
Vinyl Chloride	ND	390	ND
Bromomethane	ND	250	ND
Chloroethane	ND	270	ND
Trichlorofluoromethane	ND	88	ND
1,1-Dichloroethene	ND	120	ND
1-chloromethane	650	140	ND
1,2-Dichloroethene	ND	120	ND
1,1-Dichloroethane	ND	120	ND
c-1,2-Dichloroethene	ND	120	ND
Chloroform	ND	100	ND
1,1,1-Trichloroethane	140	90	ND
Carbon tetrachloride	ND	78	ND
1,2-Dichloroethane	ND	120	ND
Trichloroethene	ND	92	ND
c-1,3-Dichloropropene	ND	110	ND
1,2-Dichloropropane	ND	110	ND
t-1,3-Dichloropropene	ND	110	ND
Bromodichloromethane	ND	68	ND
1,1,2-Trichloroethane	ND	90	ND
Tetrachloroethene	140	73	ND
Dibromochloromethane	ND	58	ND
Chlorobenzene	ND	110	ND
Bromoform	ND	48	ND
1,1,2,2-Tetrachloroethane	ND	72	ND
1,3-Dichlorobenzene	ND	82	ND
1,2-Dichlorobenzene	ND	82	ND
1,4-Dichlorobenzene	ND	82	ND
>> Surrogate Recoveries (%) <<			
Bromochloromethane	107	100	



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Analytical Laboratory

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

Quality Assurance and Control Data

Laboratory Number: 21154
Method Blank(s)

CD031.08-06

Conc. RL
PPB (V/V)

Chloromethane	ND	480
Vinyl Chloride	ND	390
Bromomethane	ND	250
Chloroethane	ND	270
Trichlorofluoromethane	ND	88
1,1-Dichloroethene	ND	120
Dichloromethane	ND	140
t-1,2-Dichloroethene	ND	120
1,1-Dichloroethane	ND	120
c-1,2-Dichloroethene	ND	120
Chloroform	ND	100
1,1,1-Trichloroethane	ND	90
Carbon tetrachloride	ND	78
2-Dichloroethane	ND	120
Trichloroethene	ND	92
c-1,3-Dichloropropene	ND	110
1,2-Dichloropropene	ND	110
t-1,3-Dichloropropene	ND	110
Bromodichloromethane	ND	68
1,1,2-Trichloroethane	ND	90
Tetrachloroethene	ND	73
Dibromochloromethane	ND	58
Chlorobenzene	ND	110
Bromoform	ND	48
1,1,2,2-Tetrachloroethane	ND	72
1,3-Dichlorobenzene	ND	82
1,2-Dichlorobenzene	ND	82
1,4-Dichlorobenzene	ND	82
>> Surrogate Recoveries (%) <<		
Bromochloromethane		102



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Analytical Laboratory

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

Quality Assurance and Control Data

Laboratory Number: 21154

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L)						
CD031.08 02 / 03 - Laboratory Control Spikes						
1,1-Dichloroethene	20	20	20/20	100/100	50-189	0
Trichloroethene	20	20	20/21	100/105	53-161	5
Chlorobenzene	20	20	20/20	100/100	57-171	0
>> Surrogate Recoveries (%) <<						
Bromochloromethane				105/105	50-125	
For Water Matrix (ug/L)						
CD031.08 04 / 05 - Sample Spiked: 21133 - 03						
1,1-Dichloroethene	ND	20	20/21	100/105	50-189	5
Trichloroethene	ND	20	21/22	105/110	53-161	5
Chlorobenzene	ND	20	21/21	105/105	57-171	0
>> Surrogate Recoveries (%) <<						
Bromochloromethane				103/101	50-125	

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)

31154

Chain-of-Custody Number:

SECOR Chain-of Custody Record

Field Office: Concord
Address: 1390 Willowpass Road Suite 360
Concord, CA 94520

Project # 70005-007-08 Task # 001
Project Manager Greg Horna
Laboratory Superior
Turnaround Time Standard

Sampler's Name GARY CLIFF
Sampler's Signature Gary Cliff

Special Instructions/Comments:

Mr.
W.H.

Relinquished by: SERUR
Sign M. J. Clegg
Print GARY STIFT
Company SERUR
Time 5:00 Date 4.3.96

Relinquished by: _____
Sign _____
Print _____
Company _____
Time _____ Date _____

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

Job Name: Safety Kleen
Location: 400 MARKET ST.
OAKLAND, CA



Superior

Analytical Laboratory

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

Date: May 9, 1996

Attn: GREG HOEHN

Laboratory Number : 21287

Project Number/Name : 70005-009-08
Facility/Site : 400 MARKET ST.
OAKLAND, CA

This report has been reviewed and
approved for release.



Project Manager

Customer Service: (800) 521-6109 • Laboratory: (510) 313-0850 • Facsimile: (510) 229-0916
Post Office Box 2648 • 835 Arnold Drive • Suite #106 • Martinez, California 94553
1555 Burke Street • Suite A • San Francisco, California 94124



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Analytical Laboratory

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

Laboratory No.: 21287

Date Received: May 2, 1996

Client: SECOR

Date Reported: May 3, 1996

Client Job No.: 70005-009-08

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

#	Sample ID	Date Sampled	Date Analyzed	Analyte	Conc.	RL	Unit
01	EFF	05/02/96	05/03/96	Gasoline Mineral Spirits	NA ND	30 30	ppm-v ppm-v
02	INF	05/02/96	05/03/96	Gasoline Mineral Spirits	NA 270	30 30	ppm-v ppm-v
QC	Method Blank	Air	05/03/96	Gasoline Mineral Spirits	NA ND	30 30	ppm-v ppm-v

QAQC Summary for : Water

QC Batch : CE021.05

Gasoline_Range

MS/MSD % Recovery = 90/ 95 Duplicate RPD = 5 % 21256-01

ND = Not Detected

NA = Not Applicable

RL = Reporting Limit



Superior

Analytical Laboratory

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

Laboratory No.: 21287

Client: SECOR

Client Job No.: 70005-009-08

Date Received: May 2, 1996

Date Reported: May 9, 1996

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

#	Sample ID	Date Sampled	Date Analyzed	Analyte	Conc.	RL	Unit
01	EFF	05/02/96	05/03/96	Benzene	ND	0.085	ppm-v
				Toluene	ND	0.25	ppm-v
				Ethyl Benzene	ND	0.065	ppm-v
				Xylenes	ND	0.25	ppm-v
02	INF	05/02/96	05/03/96	Benzene	ND	0.085	ppm-v
				Toluene	ND	0.25	ppm-v
				Ethyl Benzene	ND	0.065	ppm-v
				Xylenes	1.3	0.25	ppm-v
QC	Method Blank	Air	05/03/96	Benzene	ND	0.085	ppm-v
				Toluene	ND	0.250	ppm-v
				Ethyl Benzene	ND	0.065	ppm-v
				Total Xylenes	ND	0.250	ppm-v

QAQC Summary for : Water

QC Batch : CE021.05

Benzene	MS/MSD % Recovery = 100/100	Duplicate RPD = 0 %	21256-01
Toluene	MS/MSD % Recovery = 100/100	Duplicate RPD = 0 %	21256-01
Ethyl Benzene	MS/MSD % Recovery = 100/100	Duplicate RPD = 0 %	21256-01
Xylenes	MS/MSD % Recovery = 103/103	Duplicate RPD = 0 %	21256-01

ND = Not Detected

NA = Not Applicable

RL = Reporting Limit



Superior

Analytical Laboratory

.OR
Attn: GREG HOEHN

Project 70005-009-08
Reported on May 6, 1996

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

Chronology

Laboratory Number 21287

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
EFF	05/02/96	05/02/96	05/04/96	05/04/96	CE041.07	01
INF	05/02/96	05/02/96	05/04/96	05/04/96	CE041.07	02

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CE041.07-02	Laboratory Spike	LS	Water	05/04/96	05/04/96
CE041.07-03	Laboratory Spike Duplicate	LSD	Water	05/04/96	05/04/96
CE041.07-04	5601DCW-1	MS 21290-01	Water	05/04/96	05/04/96
CE041.07-05	5601DCW-1	MSD 21290-01	Water	05/04/96	05/04/96
CE041.07-06	Method Blank	MB	Air	05/04/96	05/04/96

**Superior****Analytical Laboratory**JOR
Attn: GREG HOEHNProject 70005-009-08
Reported on May 6, 1996**Halogenated Volatile Organics by EPA SW-846 Methods 5030/8010**

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
21287-01	EFF	Air	1.0	-
21287-02	INF	Air	1.0	-

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

Compound	21287-01	21287-02	
	Conc. RL	Conc. RL	
	PPB (V/V)	PPB (V/V)	
Chloromethane	ND	480	ND
Vinyl Chloride	ND	390	ND
Bromomethane	ND	250	ND
Chloroethane	ND	270	ND
Trichlorofluoromethane	ND	88	ND
1,1-Dichloroethene	ND	120	ND
Dichloromethane	ND	140	ND
1,2-Dichloroethene	ND	120	ND
1,1-Dichloroethane	ND	120	ND
c-1,2-Dichloroethene	ND	120	ND
Chloroform	ND	100	ND
1,1,1-Trichloroethane	ND	90	ND
Carbon tetrachloride	ND	78	ND
1,2-Dichloroethane	ND	120	ND
Trichloroethene	ND	92	ND
c-1,3-Dichloropropene	ND	110	ND
1,2-Dichloropropane	ND	110	ND
t-1,3-Dichloropropene	ND	110	ND
Bromodichloromethane	ND	68	ND
1,1,2-Trichloroethane	ND	90	ND
Tetrachloroethene	ND	73	ND
Dibromochloromethane	ND	58	ND
Chlorobenzene	ND	110	ND
Bromoform	ND	48	ND
1,1,2,2-Tetrachloroethane	ND	72	ND
1,3-Dichlorobenzene	ND	82	ND
1,2-Dichlorobenzene	ND	82	ND
1,4-Dichlorobenzene	ND	82	ND
>> Surrogate Recoveries (%) <<			
Bromochloromethane	75	75	



Superior

Analytical Laboratory

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

Quality Assurance and Control Data

Laboratory Number: 21287

Method Blank(s)

CE041.07-06

Conc. RL

PPB (V/V)

Chloromethane	ND	480
Vinyl Chloride	ND	390
Bromomethane	ND	250
Chloroethane	ND	270
Trichlorofluoromethane	ND	88
1,1-Dichloroethene	ND	120
Dichloromethane	ND	140
t-1,2-Dichloroethene	ND	120
1,1-Dichloroethane	ND	120
c-1,2-Dichloroethene	ND	120
Chloroform	ND	100
1,1,1-Trichloroethane	ND	90
Carbon tetrachloride	ND	78
2-Dichloroethane	ND	120
Trichloroethene	ND	92
c-1,3-Dichloropropene	ND	110
1,2-Dichloropropene	ND	110
t-1,3-Dichloropropene	ND	110
Bromodichloromethane	ND	68
1,1,2-Trichloroethane	ND	90
Tetrachloroethene	ND	73
Dibromochloromethane	ND	58
Chlorobenzene	ND	110
Bromoform	ND	48
1,1,2,2-Tetrachloroethane	ND	72
1,3-Dichlorobenzene	ND	82
1,2-Dichlorobenzene	ND	82
1,4-Dichlorobenzene	ND	82
>> Surrogate Recoveries (%) <<		
Bromochloromethane		123



Superior

Analytical Laboratory

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

Quality Assurance and Control Data

Laboratory Number: 21287

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L)						
CE041.07 02 / 03 - Laboratory Control Spikes						
1,1-Dichloroethene	20	24/20	120/100	50-189	18	
Trichloroethene	20	21/20	105/100	53-161	5	
Chlorobenzene	20	22/20	110/100	57-171	10	
>> Surrogate Recoveries (%) <<						
Bromochloromethane			77/90	50-125		
For Water Matrix (ug/L)						
CE041.07 04 / 05 - Sample Spiked: 21290 - 01						
1,1-Dichloroethene	ND	20	22/26	110/130	50-189	17
Trichloroethene	ND	20	20/18	100/90	53-161	11
Chlorobenzene	ND	20	20/18	100/90	57-171	11
>> Surrogate Recoveries (%) <<						
Bromochloromethane			96/89	50-125		

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)

31287

Chain-of Custody Number:

SECOR Chain-of Custody Record

Field Office: Concord
Address: 1390 Willow Pass Rd.
Concord, CA

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

Job Name: SK-187w

Location: 400 MARKET ST.
OAKLAND, CAL.

Project # 70005-009-08 Task # _____
Project Manager Ginger Hoeltz
Laboratory SUPPLIER
Turnaround Time 5 business days

Sampler's Name R. Novos A.M.
Sampler's Signature _____

Sample ID	Date	Time	Matrix
EFF	5/2	10:00	Air
INF	11	10:30	a

Please initial: JK
Sample stored in ice: NO

Samples Stored in Ico. No.

Apart from institutions/Committees:

Samples preserved _____

VCA's without headspace _____

Appropriate special instructions/Comments:
Samples preserved _____
VCA's without headspace _____
Comments: _____

Relinquished by:	<u>Season</u>
Sign	<u> </u>
Print	<u> </u>
Company	<u>Season</u>
Time	Date <u>5/2</u>
Relinquished by: _____	
Sign	<u> </u>
Print	<u> </u>
Company	<u> </u>
Time	Date <u> </u>

Received by Jim Morgan
Sign _____
Print Jim Morgan
Company SAC
Time 4:50 Date 5/2/6

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: <u>SECON</u>	
Client Contact: <u>GARY HETHER</u>	
Client Phone: <u>(510) 686-9780</u>	

APPENDIX C

Laboratory Reports - Groundwater



APR 19 1996

April 19, 1996

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

Re: SK Lab Project #96-078
Project ID Name: Oakland, CA

Dear Greg:

Enclosed please find the analytical results for the sample received by SK Environmental Laboratory on 4/04/96.

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

If you have any questions concerning this analysis, or if we can be of further assistance, please contact Rick Cook at 312-825-7351.

Sincerely,

A handwritten signature in black ink that appears to read "Mark A. Hartwig".

Mark A. Hartwig
Environmental Lab Manager

MAH:

Allan A. Manteuffel Technical Center

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

12555 W. Old Higgins Rd.
Elk Grove Village, IL 60007
Telephone: 312/694-2700
Fax: 312/825-7850

Project ID #: 70005-009-07

TPH

Page 1 of 1

Project ID Name: Oakland, CA

SK Lab Project #: 96-078

Date Reported: 4/20/96

ANALYTICAL RESULTS

Total Petroleum Hydrocarbons as Mineral Spirits in Water

Modified EPA Method 8015

Extraction By EPA Method 5030

Reporting Limit: 50.0

Work Order #	Collector's Sample #	Date Sampled	Date Analyzed	Concentration $\mu\text{g/L}$
01	MW-2	4/2/96	4/11/96	<50
02	MW-8	4/2/96	4/11/96	<50
03	MW-12	4/2/96	4/11/96	<50
04	MW-3	4/2/96	4/11/96	<50
05	MW-6	4/2/96	4/11/96	<50
06	MW-5	4/2/96	4/11/96	<50
07	MW-4	4/2/96	4/11/96	<50
08	MW-1	4/2/96	4/11/96	<50
09	MW-13	4/3/96	4/11/96	<50

Analytical Review / Date:

4/20/96

Project ID Name: Oakland, CA

SK Lab Project #: 96-078

Date Reported: 4/20/96

ANALYTICAL RESULTS**Volatile Organics in Water**

EPA Method 8021

Work Order #	01	02	03	04	05	06
Collector's Sample #	MW-2	MW-8	MW-12	MW-3	MW-6	MW-5
Date Sampled	4/2/96	4/2/96	4/2/96	4/2/96	4/2/96	4/2/96
Date Analyzed	4/12/96	4/10/96	4/11/96	4/11/96	4/11/96	4/11/96
Dilution Factor	1	1	1	1	1	1
Analyte	Report Limit ppb	Concentration / ppb				
Benzene	1	<1	<1	<1	<1	<1
Bromobenzene	1	<1	<1	<1	<1	<1
Bromo(chloromethane)	1	<1	<1	<1	<1	<1
Bromodichloromethane	1	<1	<1	<1	<1	<1
Bromoform	1	<1	<1	<1	<1	<1
Bromomethane	1	<1	<1	<1	<1	<1
n-Butylbenzene	1	<1	<1	<1	<1	<1
sec-Butylbenzene	1	<1	<1	<1	<1	<1
tert-Butylbenzene	1	<1	<1	<1	<1	<1
Carbon Tetrachloride	1	<1	<1	<1	<1	<1
Chlorobenzene	1	<1	3.3	<1	<1	<1
Chlorodibromomethane	1	<1	<1	<1	<1	<1
Chloroethane	1	<1	<1	<1	<1	<1
Chloroform	1	<1	<1	1.1	<1	<1
Chloromethane	1	<1	<1	<1	<1	<1
2-Chlorotoluene	1	<1	<1	<1	<1	<1
4-Chlorotoluene	1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	1	<1	<1	<1	<1	<1
1,2-Dibromoethane	1	<1	<1	<1	<1	<1
Dibromomethane	1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	1	<1	2	<1	<1	<1
1,3-Dichlorobenzene	1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	1	<1	<1	<1	<1	<1

Project ID Name: Oakland, CA

SK Lab Project #: 96-078

Date Reported: 4/20/96

ANALYTICAL RESULTS**Volatile Organics in Water**

EPA Method 8021

Work Order #	01	02	03	04	05	06
Collector's Sample #	MW-2	MW-8	MW-12	MW-3	MW-6	MW-5
Date Sampled	4/2/96	4/2/96	4/2/96	4/2/96	4/2/96	4/2/96
Date Analyzed	4/12/96	4/10/96	4/11/96	4/11/96	4/11/96	4/11/96
Dilution Factor	1	1	1	1	1	1
Analyte	Report Limit µg/L	Concentration /µg/L				
Dichlorodifluoromethane	1	<1	<1	<1	<1	<1
1,1-Dichloroethane	1	<1	2.9	2.9	<1	<1
1,2-Dichloroethane	1	<1	5.1	1.6	<1	<1
1,1-Dichloroethene	1	<1	7.2	<1	<1	<1
cis-1,2-Dichloroethene	1	<1	63**	<1	<1	<1
trans-1,2-Dichloroethene	1	<1	2.9	<1	<1	<1
1,2-Dichloropropane	1	<1	<1	<1	<1	<1
1,3-Dichloropropane	1	<1	<1	<1	<1	<1
2,2-Dichloropropane	1	<1	<1	<1	<1	<1
1,1-Dichloropropene	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	1	<1	<1	<1	<1	<1
trans-1,3-dichloropropene	1	<1	<1	<1	<1	<1
Ethylbenzene	1	<1	<1	<1	<1	<1
Hexachlorobutadiene	1	<1	<1	<1	<1	<1
Isopropylbenzene	1	<1	<1	<1	<1	<1
p-Isopropyltoluene	1	<1	<1	<1	<1	<1
Methylene Chloride	1	<1	<1	<1	<1	<1
Naphthalene	1	<1	<1	<1	<1	<1
n-Propylbenzene	1	<1	<1	<1	<1	<1
Styrene	1	<1	<1	<1	<1	<1
1,1,1,2-Tetrachloroethane	1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	1	<1	<1	<1	<1	<1

*1:10 Dilution

Project ID Name: Oakland, CA

SK Lab Project #: 96-078

Date Reported: 4/20/96

ANALYTICAL RESULTS**Volatile Organics in Water**

EPA Method 8021

Work Order #	01	02	03	04	05	06
Collector's Sample #	MW-2	MW-8	MW-12	MW-3	MW-6	MW-5
Date Sampled	4/2/96	4/2/96	4/2/96	4/2/96	4/2/96	4/2/96
Date Analyzed	4/12/96	4/10/96	4/11/96	4/11/96	4/11/96	4/11/96
Dilution Factor	1	1	1	1	1	1
Analyte	Report Limit ppm	Concentration ppb				
Tetrachloroethene	1	<1	1.1	<1	<1	<1
Toluene	1	<1	<1	<1	<1	<1
1,2,3-Trichlorobenzene	1	<1	<1	<1	<1	<1
1,2,4-Trichlorobenzene	1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	1	<1	<1	<1	<1	<1
Trichloroethene	1	<1	569*	7.5	<1	<1
Trichlorofluoromethane	1	<1	<1	<1	<1	4.5
1,2,3-Trichloropropane	1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	1	<1	<1	<1	<1	<1
Vinyl Chloride	1	<1	1.6	<1	<1	<1
Xylenes (Total)	1	<1	<1	<1	<1	<1

* 1:100 Dilution

Project ID Name: Oakland, CA

SK Lab Project #: 96-078

Date Reported: 4/20/96

ANALYTICAL RESULTS**Volatile Organics in Water**

EPA Method 8021

Work Order #	07	08	09	11
Collector's Sample #	MW-4	MW-1	MW-13	Trip Blank
Date Sampled	4/2/96	4/2/96	4/3/96	4/3/96
Date Analyzed	4/11/96	4/11/96	4/11/96	4/10/96
Dilution Factor	1	1	1	1
Analyte	Report Limit µg/L	Concentration µg/L		
Benzene	1	<1	<1	<1
Bromobenzene	1	<1	<1	<1
Bromochloromethane	1	<1	<1	<1
Bromodichloromethane	1	<1	<1	<1
Bromoform	1	<1	<1	<1
Bromomethane	1	<1	<1	<1
n-Butylbenzene	1	<1	<1	<1
sec-Butylbenzene	1	<1	<1	<1
tert-Butylbenzene	1	<1	<1	<1
Carbon Tetrachloride	1	<1	<1	<1
Chlorobenzene	1	<1	<1	<1
Chlorodibromomethane	1	<1	<1	<1
Chloroethane	1	<1	<1	<1
Chloroform	1	1.3	<1	<1
Chloromethane	1	<1	<1	<1
2-Chlorotoluene	1	<1	<1	<1
4-Chlorotoluene	1	<1	<1	<1
1,2-Dibromo-3-chloropropane	1	<1	<1	<1
1,2-Dibromoethane	1	<1	<1	<1
Dibromomethane	1	<1	<1	<1
1,2-Dichlorobenzene	1	<1	<1	<1
1,3-Dichlorobenzene	1	<1	<1	<1
1,4-Dichlorobenzene	1	<1	<1	<1

Project ID Name: Oakland, CA

SK Lab Project #: 96-078

Date Reported: 4/20/96

ANALYTICAL RESULTS**Volatile Organics in Water**

EPA Method 8021

Work Order #	07	08	09	11
Collector's Sample #	MW-4	MW-1	MW-13	Trip Blank
Date Sampled	4/2/96	4/2/96	4/3/96	4/3/96
Date Analyzed	4/11/96	4/11/96	4/11/96	4/10/96
Dilution Factor	1	1	1	1
Analyte	Report Limit µg/L	Concentration µg/L		
Dichlorodifluoromethane	1	<1	<1	<1
1,1-Dichloroethane	1	<1	<1	<1
1,2-Dichloroethane	1	<1	<1	<1
1,1-Dichloroethene	1	6	<1	<1
cis-1,2-Dichloroethene	1	10	<1	<1
trans-1,2-Dichloroethene	1	1.7	<1	<1
1,2-Dichloropropane	1	<1	<1	<1
1,3-Dichloropropane	1	<1	<1	<1
2,2-Dichloropropane	1	<1	<1	<1
1,1-Dichloropropene	1	<1	<1	<1
cis-1,3-dichloropropene	1	<1	<1	<1
trans-1,3-dichloropropene	1	<1	<1	<1
Ethylbenzene	1	<1	<1	<1
Hexachlorobutadiene	1	<1	<1	<1
Isopropylbenzene	1	<1	<1	<1
p-Isopropyltoluene	1	<1	<1	<1
Methylene Chloride	1	<1	<1	<1
Naphthalene	1	<1	<1	<1
n-Propylbenzene	1	<1	<1	<1
Styrene	1	<1	<1	<1
1,1,1,2-Tetrachloroethane	1	<1	<1	<1
1,1,2,2-Tetrachloroethane	1	<1	<1	<1

Project ID Name: Oakland, CA

SK Lab Project #: 96-078

Date Reported: 4/20/96

ANALYTICAL RESULTS**Volatile Organics in Water**

EPA Method 8021

Work Order #	07	08	09	11
Collector's Sample #	MW-4	MW-1	MW-13	Trip Blank
Date Sampled	4/2/96	4/2/96	4/3/96	4/3/96
Date Analyzed	4/11/96	4/11/96	4/11/96	4/10/96
Dilution Factor	1	1	1	1
Analyte	Report Limit ug/l	Concentration ug/l		
Tetrachloroethene	1	<1	<1	<1
Toluene	1	<1	<1	<1
1,2,3-Trichlorobenzene	1	<1	<1	<1
1,2,4-Trichlorobenzene	1	<1	<1	<1
1,1,1-Trichloroethane	1	<1	<1	<1
1,1,2-Trichloroethane	1	<1	<1	<1
Trichloroethene	1	140	<1	<1
Trichlorofluoromethane	1	<1	<1	<1
1,2,3-Trichloropropane	1	<1	<1	<1
1,2,4-Trimethylbenzene	1	<1	<1	<1
1,3,5-Trimethylbenzene	1	<1	<1	<1
Vinyl Chloride	1	<1	<1	<1
Xylenes (Total)	1	<1	<1	<1

Project ID #: 0005-009-07

Misc.

Project ID Name: Oakland, CA

Page 1 of 1

SK Lab Project #: 96-078

Date Reported: 4/20/96

ANALYTICAL RESULTS

Miscellaneous

Work Order #		10	
Collector's Sample #		TSS	
Date Sampled		4/3/96	
Analyte	Method	Date Analyzed	Result
Total suspended Solids	160.2	4/17/96	<10

Analytical Review / Date:

W.L. Clark 4/20/96