March 13, 1996

Via Certified Mail No. P273444474

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 first 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 December 1995 through February 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,

for 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, Department of Environmental Health
Steven Ritchie, California Regional Water Quality Control Board
Scott Comiso, Bay Area Air Quality Management District
Greg Hoehn, *SECOR*

OAKLAND7.L13
March 13, 1996
SECOR Job No. 70005-009-07

1000 NORTH RANDALL ROAD ELGIN, ILLINOIS 60123-7857 PHONE 708/697-8460 FAX 708/468-8500

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

3-13-96

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

March 13, 1996

Prepared By:

Gary Hennis
Project Scientist

Reviewed By:

Paul D. Horton, R.G.
Principal Hydrogeologist

Greg D. Hoehn
Principal Geologist

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FIGURES

TABLES

APPENDICES

1.0 INTRODUCTION

This report presents the results of groundwater monitoring and sampling activities conducted for the quarter of December 1995 through February 1996 at the Safety-Kleen Service Center located at 400 Market Street in Oakland, California (Figures 1 and 2). Additionally, the soil vapor extraction (SVE) system was modified to a carbon adsorption vapor abatement system and restarted this quarter. The report also includes soil vapor extraction (SVE) system monitoring and sampling results.

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. A system to extract and treat soil vapor began full-scale operation on June 1, 1993.

The SVE system currently consists of seven horizontal vapor extraction lines and a vapor treatment system consisting of granular activated carbon (GAC). 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 four groundwater monitoring wells. SVE activities conducted during this quarter consisted of the modification of the SVE treatment system and start-up, and operation and maintenance of the 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. The SVE system now consists of two 1500 pound granular active carbon vessels connected in series to a manifold attached to the seven horizontal vapor extraction lines. Operation of the SVE system was resumed on November 28, 1995. SVE system influent and effluent vapor samples were collected on December 21, 1995, and on January 9 and February 6, 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 during the previous reporting period. Mineral spirits passive recovery skimmers were placed in recovery well RW-1 and monitoring well MW-9 (Figure 2) on November 20, 1995. 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 is presented in Section 4.2.

3.3 Groundwater Monitoring and Sampling

On January 9, 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 January 9, 1996, subsequent to collecting depth-to-water measurements, monitoring wells MW-2, MW-3, MW-4, and MW-8 (according to the quarterly sampling schedule) 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. Within two hours of completing well purging, groundwater samples were collected using single-use disposable samplers. The groundwater levels had recovered to at least 80 percent of the original level in the wells. 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 SVE system resumed operation on November 28, 1995. The results of system monitoring conducted through February 21, 1996, are summarized on Table 1. Table 1 presents data on the system flow rate and photo-ionization detector (PID) measurements from the SVE system influent, the effluent after each carbon adsorption vessel, and system effluent. The results of monitoring from the system effluent verify 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), based on PID readings with the exception of the February 6, 1996, event. The PID reading for that event indicated 16.1 parts per million (ppm). Subsequent laboratory analysis of the effluent sample collected on the same day did not detect TPHms or VOCs. It is therefore likely that the PID was over sensitized, possibly due to the presence of water vapor, and gave a higher than normal reading.

SVE system influent and effluent samples are collected monthly. No TPHms 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 0.82 $\mu g/\ell$ on December 21, 1995, 1.12 $\mu g/\ell$ on January 9, 1996, and 1.00 $\mu g/\ell$ on February 6, 1996. Results of the December 21, 1995, BTEX and purgeable halocarbon analyses of system influent samples were 2.2 $\mu g/\ell$ ethylbenzene, 8.0 $\mu g/\ell$ xylenes, 0.72 $\mu g/\ell$ 1,1,1-trichloroethane, and 0.60 $\mu g/\ell$ tetrachloroethene (PCE). Results of the January 9, 1996, BTEX and purgeable halocarbon analyses of influent samples were 1.2 $\mu g/\ell$ ethylbenzene, 2.0 $\mu g/\ell$ xylenes, 0.0.61 $\mu g/\ell$ toluene, and 0.0.88 $\mu g/\ell$ dichloromethane. Results of the February 6, 1996, BTEX and purgeable halocarbon analyses of influent samples were 7.5 $\mu g/\ell$ xylenes and 0.90 $\mu g/\ell$ PCE. 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 be 0.01 pounds per day (lbs/day). Data collected through February 6, 1996, indicate 1420.4 pounds of mineral spirits (approximately 218.5 gallons) 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 sampling. Approximately 0.75 gallons of mineral spirits product was recovered during this reporting period. The total volume of mineral spirits product removed from the subsurface to date is approximately 142.79 gallons. The mineral spirits recovery data is shown in Table 3.

4.3 Groundwater Elevations

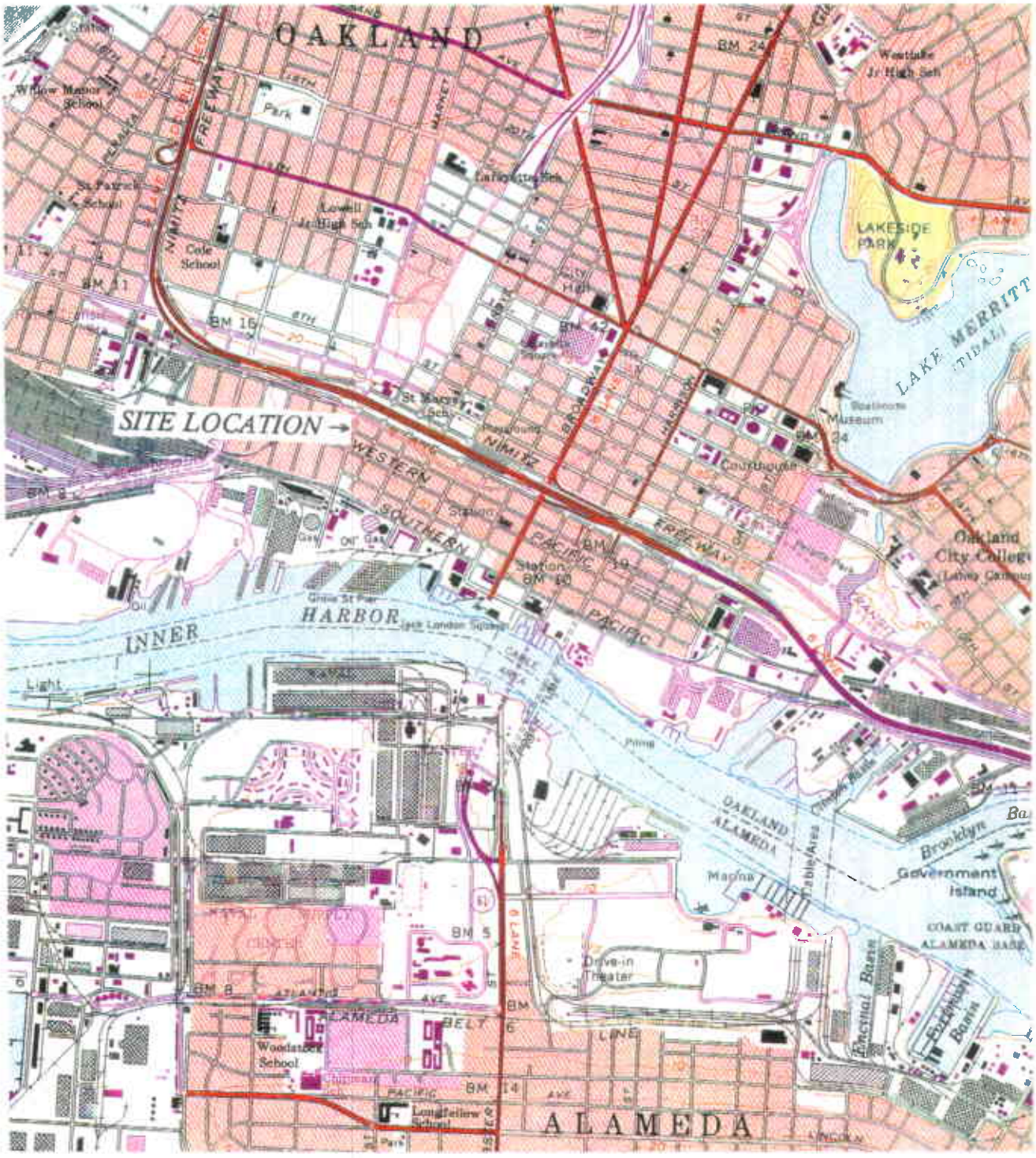
Groundwater elevations and depth-to-water measurements for the January 9, 1996, event are presented in Table 4. The average water table elevation on January 9, 1996, was 1.68 feet above mean sea level, a decrease of 0.09 feet since the October 12, 1995, event. A potentiometric surface map prepared with the January 9, 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 0.005 feet/foot (ft/ft) across the site as measured between monitoring wells MW-4 and MW-3. The gradient is 0.002 ft/ft greater than that measured during the last event and is consistent with previous data for the site.

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 January 9, 1996. Laboratory analyses of groundwater samples show that VOCs exist at concentrations exceeding the detection limits in monitoring wells MW-4 and MW-8. The groundwater sample from monitoring well MW-4 contained *cis*-1,2-dichloroethene (DCE) at 17 $\mu g/\ell$, trans-1,2-DCE at 4 $\mu g/\ell$, trichloroethene (TCE) at 157 $\mu g/\ell$, 1,1-DCE at 3 $\mu g/\ell$, and chloroform at 6 $\mu g/\ell$. The groundwater sample from monitoring well MW-8 contained TCE at 486 $\mu g/\ell$, cis-1,2-DCE at 56 $\mu g/\ell$, trans-1,2-DCE at 4 $\mu g/\ell$, 1,2-DCA at 11 $\mu g/\ell$, 1,1-DCE at 19 $\mu g/\ell$, 1,1-dichloroethane (DCA) at 7 $\mu g/\ell$, vinyl chloride at 5 $\mu g/\ell$, chlorobenzene at 6 $\mu g/\ell$, 1,2-dichlorobenzene (DCB) at 5 $\mu g/\ell$, tetrachloroethene (PCE) at 2 $\mu g/\ell$, and chloroform at 13 $\mu g/\ell$. Analytical test results showing compounds detected since the April 20, 1993, sampling event are presented in Table 5. Copies of the groundwater laboratory analytical reports are included in Appendix C.

OAKLAND WEST QUADRANGLE
California
7.5 Minute Series (Topographic)



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

199509.061018 X:\S-KLEEN\OAKLAND\SITE

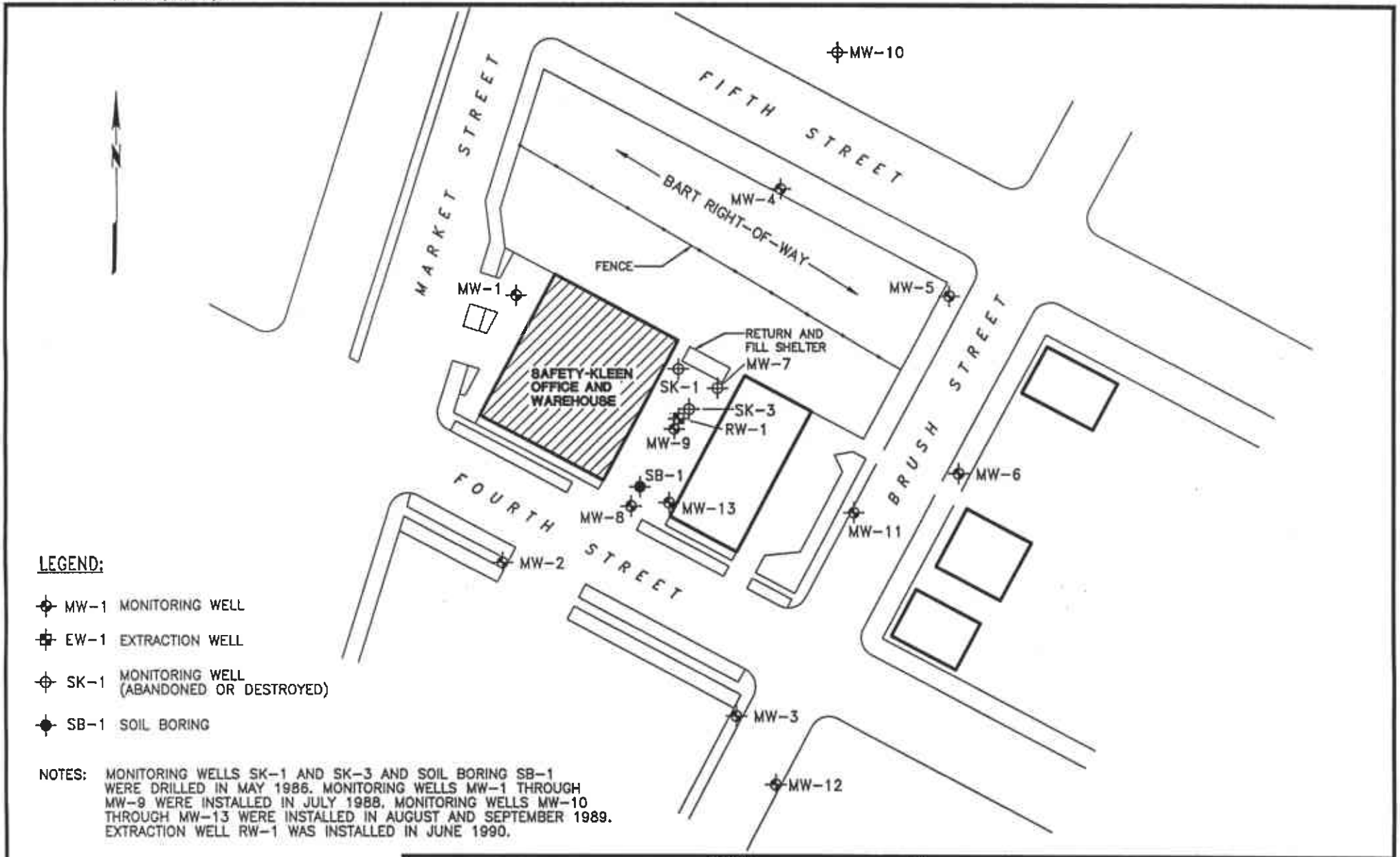


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FIGURE 2
SAFETY-KLEEN
400 MARKET STREET
OAKLAND, CALIFORNIA

SITE PLAN

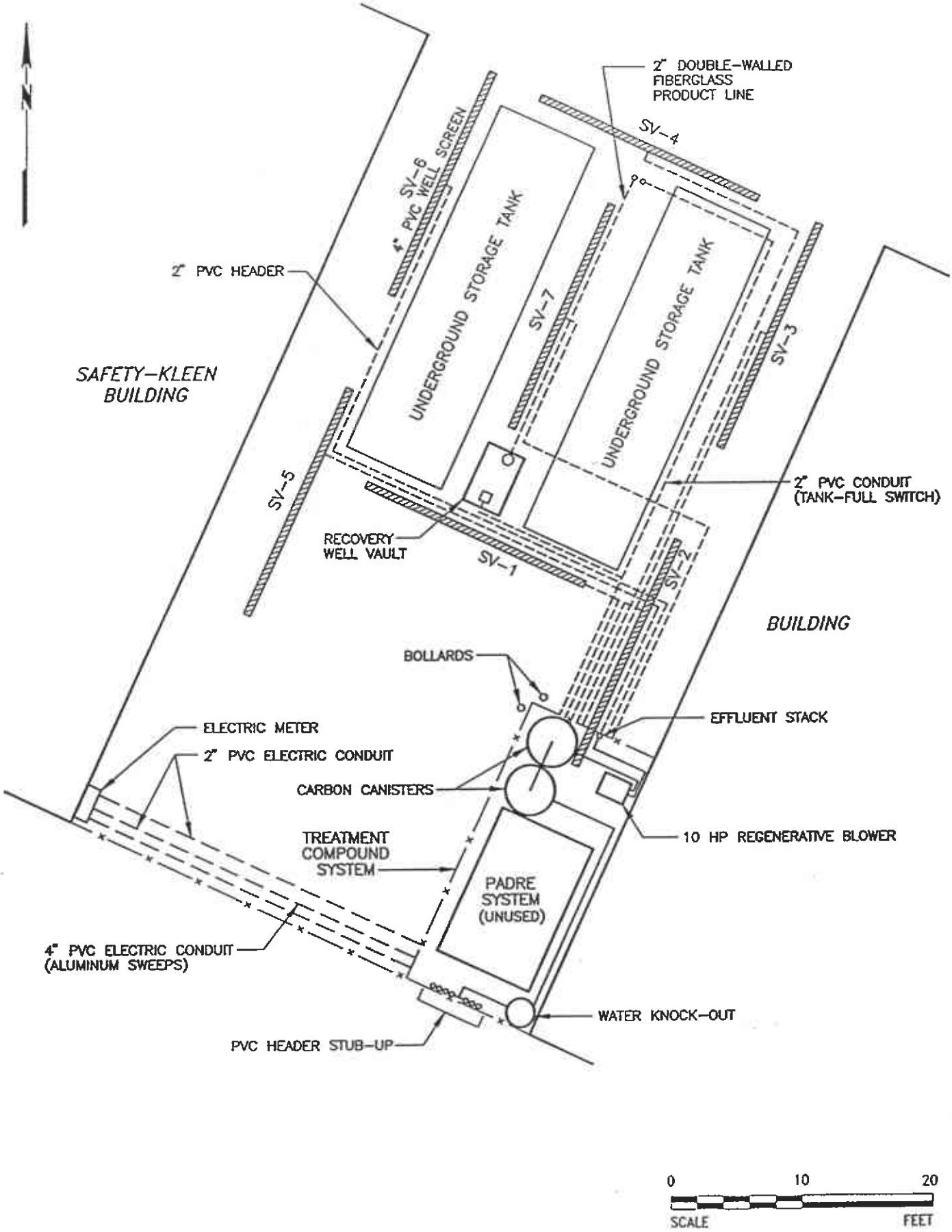

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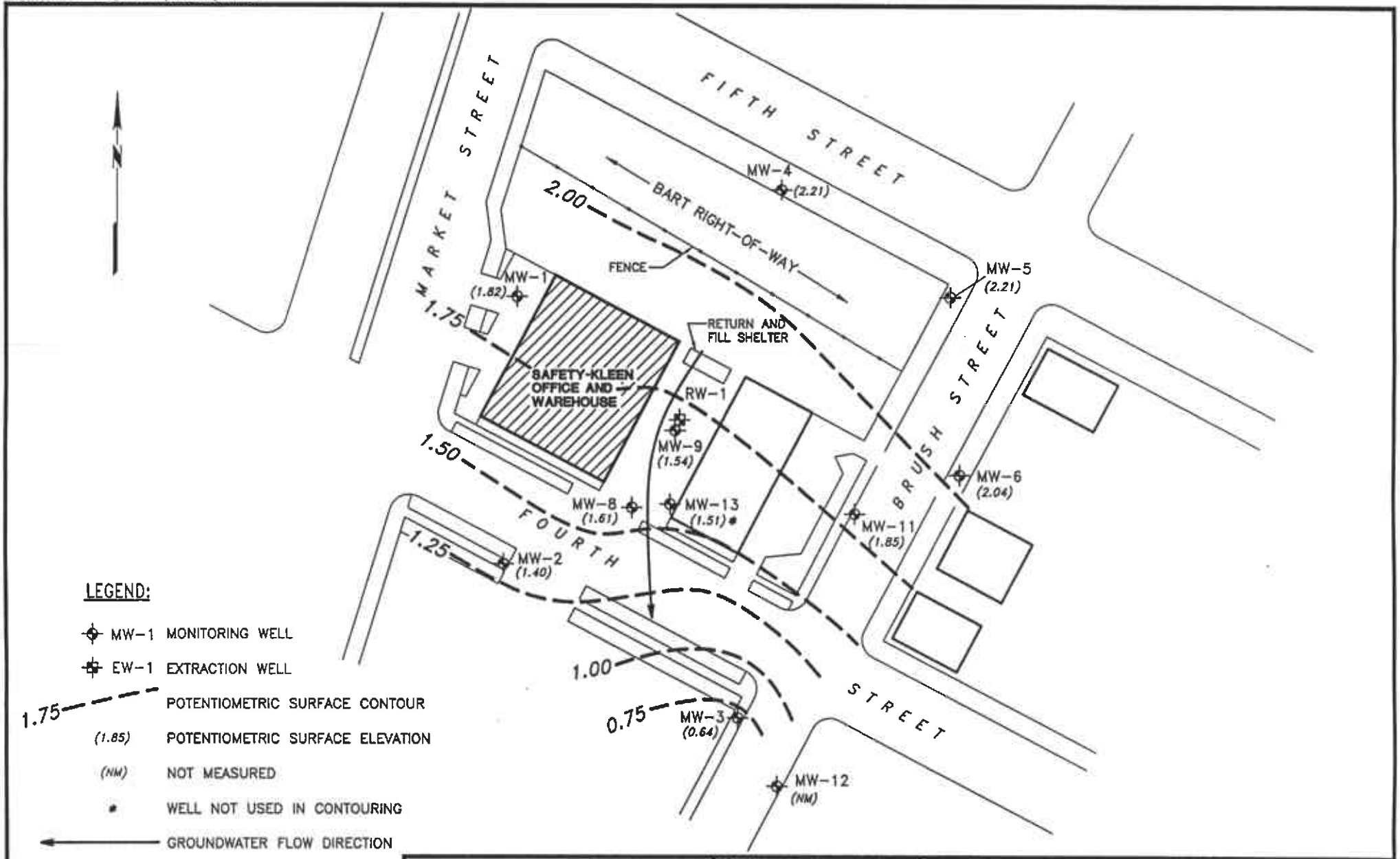
FIGURE 3
SAFETY-KLEEN SERVICE CENTER
400 MARKET STREET
OAKLAND, CALIFORNIA

SOIL VAPOR EXTRACTION SYSTEM LAYOUT

199512.071928 X:\SK-KLEEN\OAKLAND\SITE2

199603.071530 X:\S-KLEEN\OAKLAND\SURFACE4



LEGEND:

- MW-1 MONITORING WELL
- EW-1 EXTRACTION WELL
- 1.75 POTENTIOMETRIC SURFACE CONTOUR
- (1.85) POTENTIOMETRIC SURFACE ELEVATION
- (NM) NOT MEASURED
- * WELL NOT USED IN CONTOURING
- GROUNDWATER FLOW DIRECTION

0 80 160
SCALE FEET

SECOR INTERNATIONAL INCORPORATED

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DATE	07MAR96
JOB NO.	70005-009

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

POTENTIOMETRIC SURFACE MAP JANUARY 9, 1996

Table 1

Vapor Extraction System Monitoring Data

Safety-Kleen Service Center
400 Market Street
Oakland, California

Date	Elapsed Time (hours)	SV-1 Exctraction Vacuum (inches H20)	KO Vacuum (inches H20)	Exctraction Flow Rate (ft/min)	System Influent (PID units)	#1 Carbon Effluent (PID units)	#2 Carbon Effluent (PID units)	System Effluent (PID units)	Notes
12/08/95	362.6	6.5	22	5000	413	3.1	4.6	6.4	System restarted using carbon adsorption on 11/28/95.
12/21/95	677.2	6	20	5000	79.5	36.2	1.2	1.2	Influent and Effluent samples collected
01/09/96	1134.2	9	22	5000	169	42.4	2.8	1.7	Influent and Effluent samples collected
01/24/95	1488.75	5.5	17	2200	43	43.2	24.2	6.1	
02/06/96	1803.3	5	16	6000	63.4	61.1	33.4	16.1	Influent and Effluent samples collected
02/21/96	2157.55	8	20	5500	60.1	48	38.2	8.4	

Table 2

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)	Exctraction Flow Rate (CFM)	TPHms Influent (ug/L)	Removal Rate (lbs./day)	TPHms Removed (lbs.)	Notes
						1419.6	TPHms removed by prior system.
12/21/95	677.2	677.2	109.1	0.82	0.01	1419.8	
01/09/96	1134.2	457	109.1	1.12	0.01	1420.0	
02/06/96	1803.3	669.1	130.9	1.00	0.01	1420.4	

TABLE 3
Product Recovery Data

Date	Product Recovered This Period (gallons)	Cumulative Product Recovered (gallons)
01-19-93	-	-
02-25-93	6.5	6.5
05-20-93	4.3	10.8
08-27-93	-	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

TABLE 4
Groundwater Monitoring Data
January 9, 1996

Well I.D.	TOC Elevation (ft msl)	DTW (ft)	DTP (ft)	PT (ft)	Adjusted Elevation (ft msl)
MW-1	7.99	6.17	-	-	1.82
MW-2	8.20	6.80	-	-	1.40
MW-3	6.66	6.02	-	-	0.64
MW-4	10.32	8.11	-	-	2.21
MW-5	10.28	8.07	-	-	2.21
MW-6	8.97	6.93	-	-	2.04
MW-8	7.80	6.19	-	-	1.61
MW-9	8.21	6.75	6.65	.10	1.54
MW-10*	10.43	-	-	-	-
MW-11	7.91	6.06	-	-	1.85
MW-12	6.74	NM	-	-	-
MW-13	8.08	6.57	-	-	1.51
RW-1	-	5.61	5.44	0.17	-

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
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
DETECTED COMPOUNDS

Safety-Kleen Service Center
400 Market Street
Oakland, California

Semi ann

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
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)
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		04-93	07-93	10-93	01-94	04-94	07-94	10-94	01-95	04-95	07-95	10-95	01-96
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)
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 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
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)
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
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)
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 5
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
DETECTED COMPOUNDS

Safety-Kleen Service Center
400 Market Street
Oakland, California

ann

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
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)
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	NS
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
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
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
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)
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 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
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)
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
1,1-Dichloroethane	5	3.4	-	-	8.6	3.7	NS	5.5	-	-	6.2	5	7
1,2-Dichloroethane	0.5	7.4	5	5.2	11	7.1	NS	-	-	-	9.8	10	11
cis-1,2-Dichloroethene	6	-	-	-	-	-	NS	-	-	-	25.57	63	56
trans-1,2-Dichloroethene	10	-	1	-	-	-	NS	-	-	-	2.3	6	4
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	[redacted]
Tetrachloroethene	5	1.8	-	-	2	0.8	NS	-	-	0.4	3.2	2	2
Chlorobenzene	70	11	-	5.4	16	-	NS	2.4	1.2	-	6.9	4	6
1,2-Dichloropropane	5	0.6	-	-	-	0.8	NS	-	-	-	-	-	-
1,2-Dichlorobenzene	600	2.6	-	-	4.8	-	NS	-	-	-	3.8	3	5
Trichlorofluoromethane	150	-	-	-	-	-	NS	-	-	-	-	-	-
Dichlorodifluoromethane	NE	-	-	-	-	-	NS	-	-	-	-	-	-
Vinyl chloride	0.5	-	-	-	-	-	NS	-	-	-	2.6	4	5

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
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)
TPH-mineral spirits	NE	-	-	-	-	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	1	-	-	-	-	NS	NS	NS	NS	NS	NS	NS	NS
Toluene	150	-	-	-	-	NS	NS	NS	NS	NS	NS	NS	NS
Ethyl-benzene	700	-	-	-	-	NS	NS	NS	NS	NS	NS	NS	NS
Xylenes	1750	-	-	-	-	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethene	6	-	2	-	-	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethane	5	-	-	-	-	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloroethane	0.5	-	-	-	-	NS	NS	NS	NS	NS	NS	NS	NS
cis-1,2-Dichloroethene	6	-	-	-	-	NS	NS	NS	NS	NS	NS	NS	NS
trans-1,2-Dichloroethene	10	-	17	3	0.4	NS	NS	NS	NS	NS	NS	NS	NS
Chloroform	NE	1.2	0.5	-	-	NS	NS	NS	NS	NS	NS	NS	NS
1,1,1-Trichloroethane	200	-	0.8	-	-	NS	NS	NS	NS	NS	NS	NS	NS
Trichloroethene	5	45	54	42	67	NS	NS	NS	NS	NS	NS	NS	NS
Tetrachloroethene	5	-	-	-	-	NS	NS	NS	NS	NS	NS	NS	NS
Chlorobenzene	70	-	-	-	-	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloropropane	5	-	-	-	-	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	600	-	-	-	-	NS	NS	NS	NS	NS	NS	NS	NS
Trichlorofluoromethane	150	-	-	-	-	NS	NS	NS	NS	NS	NS	NS	NS
Dichlorodifluoromethane	NE	-	-	-	-	NS	NS	NS	NS	NS	NS	NS	NS
Vinyl chloride	0.5	-	-	-	-	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-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
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)
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		04-93	07-93	10-93	01-94	04-94	07-94	10-94	01-95	04-95	07-95	10-95	01-96
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)
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
1,2-Dichloroethane	0.5	-	2	-	1.2	1.9	NS	-	NS	-	NS	3	NS
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-Trichloroethane	200	-	-	-	-	-	NS	-	NS	-	NS	-	NS
Trichloroethene	5	17	30	34	11	44	NS	24	NS	59	NS	95	NS
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 5
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
DETECTED COMPOUNDS

Safety-Kleen Service Center
400 Market Street
Oakland, California

ann. deep well screened 65' bgs

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
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)
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	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.

APPENDIX A

Field Data Sheets

SECOR

HYDROLOGIC DATA SHEET

PROJECT:	SAFETY-KLEEN 400 MARKET STREET OAKLAND, CALIFORNIA	**PROJECT NO.:** 70005-009-07 **TASK:** 001	
DATE: JANUARY 9, 1996	**TIME START:** 0810	**TIME END:** 0930	
EVENT:	QUARTERLY MONITORING AND SAMPLING	**PERSONNEL:** GARY CLIFT	

WELL ID	TOC	DTW	DTP	PT	TD	ELEV.	COMMENTS
MW-1	7.99	6.17	-	-	19.91	1.82	2"
MW-2	8.20	6.80	-	-	29.20	1.40	2"
MW-3	6.66	6.02	-	-	29.34	0.64	2"
MW-4	10.32	8.11	-	-	25.45	2.21	2"
MW-5	10.28	8.07	-	-	-	2.21	2"
MW-6	8.97	6.93	-	-	-	2.04	2"
MW-8	7.80	6.19	-	-	28.90	1.61	2"
MW-9	8.21	6.75	6.65	0.10	-	1.54	4"
MW-11	7.91	6.06	-	-	-	1.85	2"
MW-12	6.74	NM	-	-	-	-	2"
MW-13	8.08	6.57	-	-	-	1.51	4"(deep well)
RW-1	-	5.61	5.44	0.17	-	-	10"

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

Well MW-12 could not be accessed.

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 #: 70005-004-07 | PURGED BY: GC | WELL I.D.: MW-2

CLIENT NAME: SAFety Kleen | SAMPLED BY: GC | SAMPLE I.D.: MW-2

LOCATION: Oakland | QA SAMPLES: —

DATE PURGED 1-9-96 | START (2400hr) 11:35 | END (2400hr) 11:50

DATE SAMPLED 1-9-96 | SAMPLE TIME (2400hr) 12:00

SAMPLE TYPE: Groundwater X | Surface Water ____ | Treatment Effluent ____ | Other ____

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

DEPTH TO BOTTOM (feet) = 29.20 | CASING VOLUME (gal) = 3.80

DEPTH TO WATER (feet) = 6.80 | CALCULATED PURGE (gal) = 11.42

WATER COLUMN HEIGHT (feet) = 22.40 | ACTUAL PURGE (gal) = 11.50

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (visual)
1-9	11:40	4	61.0	305	7.21	TAN	High
1-9	11:45	8	61.9	321	7.25	TAN	High
1-9	11:50	11.5	61.8	344	7.29	TAN	High

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: — | SAMPLE TURBIDITY: —

80% RECHARGE: X YES __ NO | ANALYSES: TPH as MS. 8015, BTEX 8021

ODOR: None | SAMPLE VESSEL / PRESERVATIVE: ____

PURGING EQUIPMENT		SAMPLING EQUIPMENT	
___ Bladder Pump	___ Bailer (Teflon)	___ Bladder Pump	___ Bailer (Teflon)
___ Centrifugal Pump	X Bailer (PVC)	___ Centrifugal Pump	X Bailer (___ PVC or X disposable)
___ Submersible Pump	___ Bailer (Stainless Steel)	___ Submersible Pump	___ Bailer (Stainless Steel)
___ Peristaltic Pump	X Dedicated Disp.	___ Peristaltic Pump	___ Dedicated ____
Other: ____		Other: ____	
Pump Depth: ____			

WELL INTEGRITY: Good | LOCK#: 0909

REMARKS: ____

SIGNATURE: JRC

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: —

DATE PURGED 1-9-96 START (2400hr) 11:00 END (2400hr) 11:20

DATE SAMPLED 1-9-96 SAMPLE TIME (2400hr) 11:30

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

CASING DIAMETER: 2" X (0.17) 3" ____ (0.38) 4" ____ (0.67) 5" ____ (1.02) 6" ____ (1.50) 8" ____ (2.60) Other ____ ( )

Casing Volume: (gallons per foot)

DEPTH TO BOTTOM (feet) = 29.34 CASING VOLUME (gal) = 3.96

DEPTH TO WATER (feet) = 6.02 CALCULATED PURGE (gal) = 11.89

WATER COLUMN HEIGHT (feet) = 23.32 ACTUAL PURGE (gal) = 12.00

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY (visual)
1-9	11:06	4	60.7	218	7.48	TAN	High
1-9	11:14	8	61.9	215	7.15	TAN	High
1-9	11:20	12	61.5	224	7.09	TAN	High

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: — SAMPLE TURBIDITY: —

80% RECHARGE: X YES ___ NO ANALYSES: TPH as IMS 8015, BTEX, 8021

ODOR: None SAMPLE VESSEL / PRESERVATIVE: 5 HCL VOAs

PURGING EQUIPMENT

___ Bladder Pump
___ Centrifugal Pump
___ Submersible Pump
___ Peristaltic Pump
___ Bailer (Teflon)
X Bailer (PVC)
___ Bailer (Stainless Steel)
X Dedicated Disp's

Other: ____

Pump Depth: ____

SAMPLING EQUIPMENT

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

Other: ____

WELL INTEGRITY: Good LOCK#: 0909

REMARKS: ____

SIGNATURE: JRC

SECOR International Inc.

WATER SAMPLE FIELD DATA SHEET

PROJECT #: 70005-009-07 PURGED BY: GC WELL I.D.: MW-4

CLIENT NAME: Safety Kleen SAMPLED BY: GC SAMPLE I.D.: MW-4

LOCATION: Oakland QA SAMPLES: —

DATE PURGED 1-9-96 START (2400hr) 10:30 END (2400hr) 10:50

DATE SAMPLED 1-9-96 SAMPLE TIME (2400hr) 10:55

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) = 25.45 CASING VOLUME (gal) = 2.94

DEPTH TO WATER (feet) = 8.11 CALCULATED PURGE (gal) = 8.84

WATER COLUMN HEIGHT (feet) = 17.34 ACTUAL PURGE (gal) = 9.00

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY ~~(NTU)~~ Visual
1-9	10:35	3	59.1	673	6.65	TAN	High
1-9	10:40	6	60.5	693	6.33	TAN	High
1-9	10:46	9	61.0	692	6.30	TAN	High

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: — SAMPLE TURBIDITY: —

80% RECHARGE: X YES ___ NO ANALYSES: TPH 8015 MS 8015, BTEX 8021

ODOR: None SAMPLE VESSEL / PRESERVATIVE: 5 HCL VOAs

PURGING EQUIPMENT

___ Bladder Pump
___ Centrifugal Pump
___ Submersible Pump
___ Peristaltic Pump
___ Bailer (Teflon)
X Bailer (PVC)
___ Bailer (Stainless Steel)
X Dedicated Disp.

Other: ____

Pump Depth: ____

SAMPLING EQUIPMENT

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

Other: ____

WELL INTEGRITY: Good LOCK#: 0909

REMARKS: ____

SIGNATURE: JRC

SECOR International Inc.

WATER SAMPLE FIELD DATA SHEET

PROJECT #: 70005-004-07 PURGED BY: GC WELL I.D.: MW-8

CLIENT NAME: Safety Kleen SAMPLED BY: GC SAMPLE I.D.: MW-8

LOCATION: Oakland, CA QA SAMPLES: —

DATE PURGED 1-9-96 START (2400hr) 9:55 END (2400hr) 10:12

DATE SAMPLED 1-9-96 SAMPLE TIME (2400hr) 10:20

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) = 28.90 CASING VOLUME (gal) = 3.86

DEPTH TO WATER (feet) = 6.19 CALCULATED PURGE (gal) = 11.58

WATER COLUMN HEIGHT (feet) = 22.71 ACTUAL PURGE (gal) = 12.50

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME (gal)	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)	TURBIDITY [redacted] Visual
1-9	9:59	4	62.7	637	6.14	Clear	low
1-9	10:05	8	62.6	632	6.58	Clear	low
1-9	10:10	12	62.1	629	6.69	Clear	low
1-9	10:12	12.5	62.3	620	6.56	Clear	low

SAMPLE INFORMATION

SAMPLE DEPTH TO WATER: — SAMPLE TURBIDITY: —

80% RECHARGE: X YES ___ NO ANALYSES: TPH as MS. 8015, BTEX, 8021

ODOR: None SAMPLE VESSEL / PRESERVATIVE: 5 HCL VOAs

PURGING EQUIPMENT

___ Bladder Pump
___ Centrifugal Pump
___ Submersible Pump
___ Peristaltic Pump
___ Bailer (Teflon)
X Bailer (PVC)
___ Bailer (Stainless Steel)
X Dedicated DISPOS

Other: ____

Pump Depth: ____

SAMPLING EQUIPMENT

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

Other: ____

WELL INTEGRITY: Good LOCK#: 0909

REMARKS: ____

SIGNATURE: JRC

ENVIRONMENTAL CHAIN OF CUSTODY

DATE: 1-9-96

SAFETY-Kleen	Greg Hachn		
400 MARKET St.	1390 willowPASS RD	(510) 686-9780	PROJECT #
Oakland, CA	Concord, CA 360	(510) 686-3099	AUTHORIZATION # E11819
GENERATOR SITE & ADDRESS	PROJECT MANAGER(S)	PHONE & FAX	

SAMPLER'S NAME: Gary Clift

ANALYSIS REQUESTED

FIELD SAMPLE ID #	SAMPLE MATRIX	DATE/TIME SAMPLED	# OF CONTAINERS	PRESERVATION METHOD	TPH (8015) Mineral Spirits by Purge & Trap Screen	TPH (8015) Mineral Spirits	TOTAL Cyanide 335.2	Sulfide	TOTAL Volatiles (8240)	(624)	(601)	SEMI-VOA (8270)	(625)	(602)	TCLP Metals	VOA	BNA	IGNITABILITY (D001)	CORROSIVITY (D002)	REACTIVITY (D003)	SPECIFIC GRAVITY	C.O.D. (410.4)	B.O.D. (405.1)	TOTAL Metals	PHENOLS (420.1)	PCB's (8080)	BTEX (8240)	PAH (8210)	TOTAL SUSPENDED SOLID (160.2)	OIL & GREASE (413.2)	(9909)	Halogenated volatiles (8010) by EPA 601
MW-2	H2O	1-9-96 11:00	5	HCL / Ice	X																											X
MW-3	H2O	1-9-96 11:30	5	HCL / Ice	X																											X
MW-4	H2O	1-9-96 10:55	5	HCL / Ice	X																											X
MW-9	H2O	1-9-96 10:20	5	HCL / Ice	X																											X
TRIP BLANK	H2O	1-9-96	1	Ice																												
TSS	H2O	1-9-96 12:15	1	Ice																										X		

COMMENTS/REMARKS:

REQUESTED TAT 10 day

SAMPLE TRANSFER RECORD

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE
SIGNATURE OF COLLECTOR:				
Gary Clift	1-9-96	5:00		

SK TCLP LAB USE ONLY

TEMPERATURE WHEN RECEIVED _____ °C

SHIPPED VIA: _____ UPS _____ 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 _____ NO _____

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: February 13, 1996

Laboratory Number : 20881

Project Number/Name : 70005-009
Facility/Site : SAFETY KLEEN

This report has been reviewed and

approved for release.

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

SECOR
Attn: GREG HOEHN

Project 70005-009
Reported on February 13, 1996

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

Chronology

Laboratory Number 20881

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
EFF	02/06/96	02/07/96	02/07/96	02/07/96	CB071.05	01
INF	02/06/96	02/07/96	02/07/96	02/07/96	CB071.05	02

QC Samples

QC Batch #	QC Sample ID	Type	Ref.	Matrix	Extract.	Analyzed
CB071.05-02	Laboratory Spike	LS		Water	02/07/96	02/07/96
CB071.05-16	WS-4-296	MS	20884-04	Water	02/07/96	02/07/96
CB071.05-17	WS-4-296	MSD	20884-04	Water	02/07/96	02/07/96
CB071.05-11	Method Blank	MB		Air	02/07/96	02/07/96

Superior Analytical Laboratory

SECOR
Attn: GREG HOEHN

Project 70005-009
Reported on February 13, 1996

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

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
20881-01	EFF	Air	1.0	-
20881-02	INF	Air	1.0	-

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

Compound	20881-01 Conc. ppm-v	RL	20881-02 Conc. ppm-v	RL
Benzene	ND	0.085	ND	0.085
Toluene	ND	0.25	ND	0.25
Ethyl Benzene	ND	0.065	ND	0.065
Xylenes	ND	0.25	1.7	0.25
>> Surrogate Recoveries (%) <<				
Trifluorotoluene (SS)	96		81	

Superior
Analytical Laboratory

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

Quality Assurance and Control Data

Laboratory Number: 20881
Method Blank(s)

	CB071.05-11 Conc. ppm-v	RL
Benzene	ND	0.085
Toluene	ND	0.25
Ethyl Benzene	ND	0.065
Xylenes	ND	0.25
>> Surrogate Recoveries (%) <<		
Trifluorotoluene (SS)	99	

Superior Analytical Laboratory

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

Quality Assurance and Control Data

Laboratory Number: 20881

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L)						
CB071.05 02 / - Laboratory Control Spikes						
Benzene		20	20	100	65-125	
Toluene		20	20	100	65-125	
Ethyl Benzene		20	20	100	65-125	
Xylenes		60	62	103	65-125	
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				95	50-150	
For Water Matrix (ug/L)						
CB071.05 16 / 17 - Sample Spiked: 20884 - 04						
Benzene	ND	20	21/20	105/100	65-125	5
Toluene	ND	20	22/20	110/100	65-125	10
Ethyl Benzene	ND	20	21/20	105/100	65-125	5
Xylenes	ND	60	64/59	107/98	65-125	9
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				96/91	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)

Superior
Analytical Laboratory

REDWOOD OIL
Attn: PETER VAN ALYEA

Project 3-542-03
Reported on November 15, 1995

Flashpoint by EPA Method 1010
60 degrees C = 140 degrees F

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
20483-01	SP-12 A,B,C,D	Soil	1.0	-
20483-02	SP 100 A,B,C,D	Soil	1.0	-
20483-03	SP-101 A,B,C,D	Soil	1.0	-

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

Compound	20483-01 Conc. °C	20483-01 RL	20483-02 Conc. °C	20483-02 RL	20483-03 Conc. °C	20483-03 RL
Flashpoint	>60	60	>60	60	>60	60

Superior Analytical Laboratory

SECOR
Attn: GREG HOEHN

Project 70005-009
Reported on February 13, 1996

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

Chronology

Laboratory Number 20881

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
EFF	02/06/96	02/07/96	02/08/96	02/08/96	CB081.08	01
INF	02/06/96	02/07/96	02/08/96	02/08/96	CB081.08	02

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CB081.08-01	Method Blank	MB	Water	02/08/96	02/08/96
CB081.08-02	Laboratory Spike	LS	Water	02/08/96	02/08/96
CB081.08-03	CARBON 3	MS 20844-01	Water	02/08/96	02/08/96
CB081.08-04	CARBON 3	MSD 20844-01	Water	02/08/96	02/08/96

SECOR
Attn: GREG HOEHN

Project 70005-009
Reported on February 13, 1996

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

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
20881-01	EFF	Air	1.0	-
20881-02	INF	Air	1.0	-

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

Compound	20881-01 Conc. PPB (V/V)	RL	20881-02 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	ND	140	ND	140
t-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	130	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 (%) <<				
4-Bromofluorobenzene	103		97	

Superior Analytical Laboratory

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

Quality Assurance and Control Data

Laboratory Number: 20881
Method Blank(s)

CB081.08-01

	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
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 (%) <<

4-Bromofluorobenzene	104

Superior Analytical Laboratory

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

Quality Assurance and Control Data

Laboratory Number: 20881

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L) CB081.08 02 / - Laboratory Control Spikes						
1,1-Dichloroethene		20	19	95	50-189	
Trichloroethene		20	19	95	53-161	
Chlorobenzene		20	20	100	57-171	
>> Surrogate Recoveries (%) <<						
4-Bromofluorobenzene				104	50-125	
For Water Matrix (ug/L) CB081.08 03 / 04 - Sample Spiked: 20844 - 01						
1,1-Dichloroethene	ND	20	18/17	90/85	50-189	6
Trichloroethene	ND	20	22/21	110/105	53-161	5
Chlorobenzene	ND	20	23/22	115/110	57-171	4
>> Surrogate Recoveries (%) <<						
4-Bromofluorobenzene				94/97	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
Attn: GREG HOEHN

Project 70005-009
Reported on February 13, 1996

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

Chronology

Laboratory Number 20881

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
EFF	02/06/96	02/07/96	02/07/96	02/07/96	CB071.05	01
INF	02/06/96	02/07/96	02/07/96	02/07/96	CB071.05	02

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CB071.05-11	Method Blank	MB	Air	02/07/96	02/07/96
CB071.05-04	Laboratory Spike	LS	Water	02/07/96	02/07/96
CB071.05-18	WS-4-296	MS 20884-04	Water	02/07/96	02/07/96
CB071.05-19	WS-4-296	MSD 20884-04	Water	02/07/96	02/07/96

Superior Analytical Laboratory

SECOR
Attn: GREG HOEHN

Project 70005-009
Reported on February 13, 1996

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

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
20881-01	EFF	Air	1.0	-
20881-02	INF	Air	1.0	-

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

Compound	20881-01 Conc. ppm-v	RL	20881-02 Conc. ppm-v	RL
Gasoline	NA	30	NA	30
Mineral Spirits	ND	30	170	30
>> Surrogate Recoveries (%) <<				
Trifluorotoluene (SS)	96		93	

Superior
Analytical Laboratory

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

Quality Assurance and Control Data

Laboratory Number: 20881
Method Blank(s)

	CB071.05-11 Conc.	 RL
	ppm-v	
Gasoline	ND	30
Mineral Spirits	ND	30
>> Surrogate Recoveries (%) <<		
Trifluorotoluene (SS)	99	

Superior Analytical Laboratory

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

Quality Assurance and Control Data

Laboratory Number: 20881

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L) CB071.05 04 / - Laboratory Control Spikes						
Gasoline		2000	1900	95	65-135	
For Water Matrix (ug/L) CB071.05 18 / 19 - Sample Spiked: 20884 - 04						
Gasoline	ND	2000	1900/1900	95/95	65-135	0

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)

Chain-of Custody Number: 20881

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

Project # 70005-009 Task #
Project Manager GREG HUDSON
Laboratory SEQUOIA
Turnaround Time STANDARD

Sampler's Name R. RANGEL
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 mineral spirits 8015		Comments/ Instructions	Number of Containers
EFF	2/6	1320	AIR							X						X			1
INF	2/6	1340	AIR							X						X			1

Special Instructions/Comments:
Please initial:
Samples Stored in ice NO R.T.
Appropriate containers Y NO
Samples preserved
VOA's without headspace N/A
Comments:

	Relinquished by:	Received by:
Sign		
Print	R. RANGEL	
Company	SECOR	
Time	Date 2/6	Time Date
Relinquished by:		Received by:
Sign		Sign
Print		Print Polly Farrow
Company		Company SECOR
Time	Date	Time 3:40 pm Date 2/6/96

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

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

SECOR COC1REC Rev. 1/93

Date: 2/6/96 Page 1 of 1

Superior Analytical Laboratory

RECEIVED
JAN 17 1996

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

Date: January 14, 1996

Attn: GREG HOEHN

Laboratory Number : 20745

Project Number/Name : 70005-009-08
Facility/Site : SAFETY KLEEN

This report has been reviewed and

approved for release.

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

SECOR
Attn: GREG HOEHN

Project 70005-009-08
Reported on January 14, 1996

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

Chronology

Laboratory Number 20745

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
INF	01/09/96	01/10/96	01/09/96	01/09/96	CA091.04	01
					CA091.04	
EFF	01/09/96	01/10/96	01/09/96	01/09/96	CA091.04	02
					CA091.04	

QC Samples

QC Batch #	QC Sample ID	Type	Ref.	Matrix	Extract.	Analyzed
CA091.04-02	Laboratory Spike	LS		Water	01/09/96	01/09/96
CA091.04-04	HT 2	MS	20726-02	Water	01/09/96	01/09/96
CA091.04-05	HT 2	MSD	20726-02	Water	01/09/96	01/09/96
CA091.04-01	Method Blank	MB		Water	01/09/96	01/09/96
CA091.04-11	Method Blank	MB		Air	01/09/96	01/09/96
CA091.04-03	Laboratory Spike	LS		Water	01/09/96	01/09/96
CA091.04-06	HT 2	MS	20726-02	Water	01/09/96	01/09/96
CA091.04-07	HT 2	MSD	20726-02	Water	01/09/96	01/09/96

Superior
Analytical Laboratory

SECOR
Attn: GREG HOEHN

Project 70005-009-08
Reported on January 14, 1996

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

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
20745-01	INF	Air	1.0	-
20745-02	EFF	Air	1.0	-

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

Compound	20745-01 Conc. ppm-v	RL	20745-02 Conc. ppm-v	RL
Benzene	ND	0.085	ND	0.085
Gasoline	ND	30	ND	30
Toluene	0.160	0.25	ND	0.25
Mineral Spirits	190	30	ND	30
Ethyl Benzene	0.270	0.065	ND	0.065
Xylenes	0.450	0.25	ND	0.25
>> Surrogate Recoveries (%) <<				
Trifluorotoluene (SS)	87		104	

Superior Analytical Laboratory

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

Quality Assurance and Control Data

Laboratory Number: 20745
Method Blank(s)

	CA091.04-01		CA091.04-11	
	Conc. ug/L	RL	Conc. ppm-v	RL
Benzene	ND	0.5	ND	0.085
Gasoline	ND	50	ND	30
Toluene	ND	0.5	ND	0.25
Mineral Spirits			ND	30
Ethyl Benzene	ND	0.5	ND	0.065
Xylenes	ND	0.5	ND	0.25
>> Surrogate Recoveries (%) <<				
Trifluorotoluene (SS)	106		106	

Superior Analytical Laboratory

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

Quality Assurance and Control Data

Laboratory Number: 20745

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L) CA091.04 02 / - Laboratory Control Spikes						
Benzene		20	21	105	65-125	
Toluene		20	22	110	65-125	
Ethyl Benzene		20	21	105	65-125	
Xylenes		60	62	103	65-125	
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				102	50-150	
For Water Matrix (ug/L) CA091.04 03 / - Laboratory Control Spikes						
Gasoline		2000	2000	100	65-135	
For Water Matrix (ug/L) CA091.04 04 / 05 - Sample Spiked: 20726 - 02						
Benzene	ND	20	21/20	105/100	65-125	5
Toluene	ND	20	22/21	110/105	65-125	5
Ethyl Benzene	ND	20	21/20	105/100	65-125	5
Xylenes	ND	60	61/61	102/102	65-125	0
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				106/100	50-150	
For Water Matrix (ug/L) CA091.04 06 / 07 - Sample Spiked: 20726 - 02						
Gasoline	ND	2000	1900/2000	95/100	65-135	5

Superior
Analytical Laboratory

Narrative:

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
Attn: GREG HOEHN

Project 70005-009-08
Reported on January 14, 1996

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

Chronology

Laboratory Number 20745

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
INF	01/09/96	01/10/96	01/09/96	01/09/96	CA091.08	01
EFF	01/09/96	01/10/96	01/09/96	01/09/96	CA091.08	02

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
CA091.08-02	Laboratory Spike	LS	Water	01/09/96	01/09/96
CA091.08-03	MW-6	MS 20719-02	Water	01/09/96	01/09/96
CA091.08-04	MW-6	MSD 20719-02	Water	01/09/96	01/09/96
CA091.08-05	Method Blank	MB	Air	01/09/96	01/09/96

SECOR
Attn: GREG HOEHN

Project 70005-009-08
Reported on January 14, 1996

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

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
20745-01 B	INF	Air	1.0	-
20745-02	EFF	Air	1.0	-

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

Compound	20745-01 Conc. PPB (V/V)	RL	20745-02 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	230	140	ND	140
t-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	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 (%) <<				
4-Bromofluorobenzene	110		105	

Superior Analytical Laboratory

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

Quality Assurance and Control Data

Laboratory Number: 20745
Method Blank(s)

CA091.08-05

	Conc. PPB (V/V)	RL
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-Dichloropropane	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 (%) <<		
4-Bromofluorobenzene	ND	

Superior Analytical Laboratory

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

Quality Assurance and Control Data

Laboratory Number: 20745

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L)						
CA091.08 02 / - Laboratory Control Spikes						
1,1-Dichloroethene		20	16	80	50-189	
Trichloroethene		20	16	80	53-161	
Chlorobenzene		20	15	75	57-171	
>> Surrogate Recoveries (%) <<						
4-Bromofluorobenzene				107	50-125	
For Water Matrix (ug/L)						
CA091.08 03 / 04 - Sample Spiked: 20719 - 02						
1,1-Dichloroethene	ND	20	15/15	75/75	50-189	0
Trichloroethene	ND	20	17/16	85/80	53-161	6
Chlorobenzene	ND	20	16/15	80/75	57-171	6
>> Surrogate Recoveries (%) <<						
4-Bromofluorobenzene				124/126	50-125	

Blank shows 1,4-DCB at 0.5ug/L, samples ND for 1,4-DCB.

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)

Chain-of Custody Number: 20745

SECOR Chain-of Custody Record

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

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

Job Name: SAFEWAY Klean
Location: Oakland, CA

Project # 70005-009-08 Task # 001
Project Manager Greg Hoehn
Laboratory Superior
Turnaround Time STANDARD

Sampler's Name GARY CLIFT
Sampler's Signature [signature]

Sample ID	Date	Time	Matrix
INF	1-9	2:25	Air
EFF	1-9	2:30	Air

Analysis Request

HCID	TPHg/BTEX/WTPH-G 8015 (modified)/8020	TPHd/WTPH-D 8015 (modified)	TPH 418.1/WTPH 418.1	Aromatic Volatiles 602/8020	Volatile Organics 624/8240 (GC/MS)	Halogenated Volatiles 601/8010	Semi-volatile Organics 625/8270 (GC/MS)	Pesticides/PCBs 608/8080	Total Lead 7421	Priority Pollutant Metals (13)	TCLP Metals	TPH as Mineral Spirits BTEX Method 8015	8020, Purgeable halocarbons 8010	Comments/ Instructions	Number of Containers
												X	X		1
												X	X		1

Special Instructions/Comments:
Please Initial: [initials]
Samples Stored in ice NO RT.
Appropriate containers Y
Samples preserved NO
VOA's without headspace N/A
Comments:

Relinquished by: SECOR
Sign [signature]
Print GARY CLIFT
Company SECOR
Time 3:55 Date 1-9-96

Relinquished by:
Sign
Print
Company
Time Date

Relinquished by:
Sign
Print
Company
Time Date

Relinquished by:
Sign [signature]
Print Patty Furrow
Company SAL
Time 3:55 Date 1/9/96

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. 9/94

Date: 1/9/96 Page 1 of 1

Superior Analytical Laboratory

RECEIVED
JAN - 5 1996

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

Date: December 29, 1995

Attn: GREG HOEHN

Laboratory Number : 20680

Project Number/Name : 70005-009

This report has been reviewed and

approved for release.

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

CERTIFICATE OF ANALYSIS

Laboratory No.: 20680
Client: SECOR
Client Job No.: 70005-009

Date Received: December 21, 1995
Date Reported: December 29, 1995

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

#	Sample ID	Date Sampled	Date Analyzed	Analyte	Conc.	RL	Unit
01	EFF	12/21/95	12/21/95	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	12/21/95	12/21/95	Benzene	ND	0.085	ppm-v
				Toluene	ND	0.25	ppm-v
				Ethyl Benzene	0.49	0.065	ppm-v
				Xylenes	1.8	0.25	ppm-v
QC	Method Blank	Air	12/21/95	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 : BL211.04

Benzene	MS/MSD % Recovery = 100/100	Duplicate RPD = 0 %	20654-02
Toluene	MS/MSD % Recovery = 105/110	Duplicate RPD = 5 %	20654-02
Ethyl Benzene	MS/MSD % Recovery = 100/100	Duplicate RPD = 0 %	20654-02
Xylenes	MS/MSD % Recovery = 98/102	Duplicate RPD = 4 %	20654-02

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

Superior Analytical Laboratory

CERTIFICATE OF ANALYSIS

Laboratory No.: 20680
Client: SECOR
Client Job No.: 70005-009

Date Received: December 21, 1995
Date Reported: December 29, 1995

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

#	Sample ID	Date Sampled	Date Analyzed	Analyte	Conc.	RL	Unit
01	EFF	12/21/95	12/21/95	Mineral Spirits	ND	30	ppm-v
02	INF	12/21/95	12/21/95	Mineral Spirits	140	30	ppm-v

QAQC Summary for : Water

QC Batch : BL211.04

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

Superior
Analytical Laboratory

SECOR
Attn: GREG HOEHN

Project 70005-009
Reported on December 26, 1995
Revised on January 2, 1996

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

Chronology

Laboratory Number 20680

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
EFF	12/21/95	12/21/95	12/21/95	12/21/95	BL211.07	01
INF	12/21/95	12/21/95	12/22/95	12/22/95	BL211.07	02

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
BL211.07-01	Method Blank	MB	Water	12/21/95	12/21/95
BL211.07-02	Laboratory Spike	LS	Water	12/21/95	12/21/95
BL211.07-03	MW-1	MS 20658-01	Water	12/21/95	12/21/95
BL211.07-04	MW-1	MSD 20658-01	Water	12/21/95	12/21/95

Superior Analytical Laboratory

SECOR
Attn: GREG HOEHN

Project 70005-009
Reported on December 26, 1995
Revised on January 2, 1996

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

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
20680-01	EFF	Air	1.0	-
20680-02	INF	Air	1.0	-

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

Compound	20680-01 Conc. PPB (V/V)	RL	20680-02 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	ND	140	ND	140
t-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	130	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	87	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 (%) <<

4-Bromofluorobenzene	101	114

Superior Analytical Laboratory

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

Quality Assurance and Control Data

Laboratory Number: 20680
Method Blank(s)

	BL211.07-01 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 (%) <<		
4-Bromofluorobenzene	79	

Superior Analytical Laboratory

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

Quality Assurance and Control Data

Laboratory Number: 20680

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L)						
BL211.07 02 / - Laboratory Control Spikes						
1,1-Dichloroethene		20	20	100	50-189	
Trichloroethene		20	21	105	53-161	
Chlorobenzene		20	22	110	57-171	
>> Surrogate Recoveries (%) <<						
4-Bromofluorobenzene				92	50-125	
For Water Matrix (ug/L)						
BL211.07 03 / 04 - Sample Spiked: 20658 - 01						
1,1-Dichloroethene	ND	20	21/21	105/105	50-189	0
Trichloroethene	ND	20	23/22	115/110	53-161	4
Chlorobenzene	ND	20	23/22	115/110	57-171	4
>> Surrogate Recoveries (%) <<						
4-Bromofluorobenzene				99/107	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)

Chain-of Custody Number: 20080

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: SAFETY KLEEN

Location: 400 MARKET ST
OAKLAND, CA.

Project # 70005-009 Task #

Project Manager CRAIG HOGAN

Laboratory SUBMON

Turnaround Time STANDARD

Sampler's Name R. RIVERA

Sampler's Signature

Sample ID	Date	Time	Matrix
Eff	12/21	13:15	Air
Inf	"	13.30	"

Analysis Request

HCID	TPHg/BTEX/WTPH-G 8015 (modified)/8020	TPHd/WTPH-D 8015 (modified)	TPH 418.1/WTPH 418.1	Aromatic Volatiles 602/8020	Volatile Organics 624/8240 (GC/MS)	Halogenated Volatiles 601/8010	Semi-volatile Organics 625/8270 (GC/MS)	Pesticides/PCBs 608/8080	Total Lead 7421	Priority Pollutant Metals (13)	TCLP Metals	TPH as Mineral Spirits 8015		Comments/ Instructions	Number of Containers
						X						X			2
						X						X			2

Special Instructions/Comments:

Relinquished by: SECOR
Sign
Print R. RIVERA
Company SECOR
Time Date 12/21

Relinquished by:
Sign
Print
Company
Time Date

Received by:
Sign
Print
Company
Time Date

Received by:
Sign
Print Polly FACCIOLI
Company SAIC
Time 2:30 Date 12/21/95

Sample Receipt

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

Client: SECOR

Client Contact: CRAIG HOGAN

Client Phone: (510)686-9780

SECOR CUSTREC Rev. 1/95

Date: 12/21/95 Page ____ of ____

APPENDIX C

Laboratory Reports - Groundwater

safety-kleen®

January 24, 1996

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

Re: SK Lab Project #96-003
Project ID Name: Oakland, CA

Dear Greg:

Enclosed please find the analytical results for the sample received by SK Environmental Laboratory on 1/10/96.

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,

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
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Project ID #: N/A
Project ID Name: Oakland, CA
SK Lab Project #: 96-003
Date Reported: 1/24/96

ANALYTICAL RESULTS

Total Petroleum Hydrocarbons as Mineral Spirits in Water

Modified EPA Method 8015

Extraction By EPA Method5030

Reporting Limit: 50.0

Work Order #	Collector's Sample #	Date Sampled	Date Extracted	Date Analyzed	Concentration µg/L
01	MW-2	1/9/96	1/15/96	1/15/96	<50
02	MW-3	1/9/96	1/15/96	1/15/96	<50
03	MW-4	1/9/96	1/15/96	1/15/96	<50
04	MW-8	1/9/96	1/15/96	1/15/96	<50

Analytical Review / Date: 1/24/96

Project ID #: N/A
Project ID Name: Oakland, CA
SK Lab Project #: 96-003
Date Reported: 1/24/96

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8021

Work Order #		01	02	03	04	05
Collector's Sample #		MW-2	MW-3	MW-4	MW-8	TRIP BLANK
Date Sampled		1/9/96	1/9/96	1/9/96	1/9/96	1/9/96
Date Analyzed		1/10/96	1/10/96	1/10/96	1/10/96	1/11/96
Dilution Factor		1	1	1	1	1
Analyte	Report Limit ppb	Concentration µg/L				
Benzene	1	<1	<1	<1	<1	<1
Bromobenzene	1	<1	<1	<1	<1	<1
Bromochloromethane	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	<1	<1	6	<1
Chlorodibromomethane	1	<1	<1	<1	<1	<1
Chloroethane	1	<1	<1	<1	<1	<1
Chloroform	1	<1	<1	6	13	<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	<1	<1	5	<1
1,3-Dichlorobenzene	1	<1	<1	<1	<1	<1

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ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8021

Work Order #		01	02	03	04	05
Collector's Sample #		MW-2	MW-3	MW-4	MW-8	TRIP BLANK
Date Sampled		1/9/96	1/9/96	1/9/96	1/9/96	1/9/96
Date Analyzed		1/10/96	1/10/96	1/10/96	1/10/96	1/11/96
Dilution Factor		1	1	1	1	1
Analyte	Report Limit ng/l	Concentration ng/L				
1,4-Dichlorobenzene	1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	1	<1	<1	<1	<1	<1
1,1-Dichloroethane	1	<1	<1	<1	7	<1
1,2-Dichloroethane	1	<1	<1	<1	11	<1
1,1-Dichloroethene	1	<1	<1	3	19	<1
cis-1,2-Dichloroethene	1	<1	<1	17	56	<1
trans-1,2-Dichloroethene	1	<1	<1	4	4	<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

Project ID #: N/A
Project ID Name: Oakland, CA
SK Lab Project #: 96-003
Date Reported: 1/24/96

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8021

Work Order #	01	02	03	04	05
Collector's Sample #	MW-2	MW-3	MW-4	MW-8	TRIP BLANK
Date Sampled	1/9/96	1/9/96	1/9/96	1/9/96	1/9/96
Date Analyzed	1/10/96	1/10/96	1/10/96	1/10/96	1/11/96
Dilution Factor	1	1	1	1	1
Analyte	Report Limit µg/l	Concentration µg/l				
1,1,1,2-Tetrachloroethane	1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	1	<1	<1	<1	<1	<1
Tetrachloroethene	1	<1	<1	<1	2	<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	<1	157	486	<1
Trichlorofluoromethane	1	<1	<1	<1	<1	<1
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	<1	5	<1
Xylenes (Total)	1	<1	<1	<1	<1	<1

Analytical Review / Date: [signature] 1/24/96

Project ID #:	N/A	Misc.
Project ID Name:	Oakland, CA	Page 1 of 1
SK Lab Project #:	96-003	0
Date Reported:	1/24/96	

ANALYTICAL RESULTS

Miscellaneous

		Work Order #	06
		Collector's Sample #	TSS
		Date Sampled	1/9/96
Analyte	Method	Date Analyzed	Result
Total Suspended Solids	160.2	1/17/96	265 mg/L

Analytical Review / Date: K Klinck 1/24/96