October 10, 1994 *VIA CERTIFIED MAIL*

Ms. Jennifer Eberle
Alameda County
Health Care Services Agency
UST Local Oversight Program
80 Swan Way, Room 200
Oakland, California 94621

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

Dear Ms. Eberle:

Enclosed is the quarterly report which summarizes the groundwater monitoring and vapor extraction activities conducted at the above-referenced facility. This report covers the period from June through August 1994. Also included is information regarding the product recovery system installed in January 1993.

As described in the letter submitted on July 13, 1994, and modified and approved by Alameda County in a response letter dated July 27, 1994, Safety-Kleen has implemented the modified groundwater sampling schedule beginning in July 1994.

If you have any questions, please call me at (310) 546-2082.

Sincerely,

Anne Lunt
Senior Project Manager - Remediation
Safety-Kleen Corp.

cc: Mr. Gary Long, Safety-Kleen Corp.
Mr. Scott Davies - Safety-Kleen Corp.
Branch Environmental File (7-178-01)
Mr. Alfred Wong, State of California Department of Health Services
Mr. Steven Ritchie, California Regional Water Quality Control Board
Mr. Scott Comiso, BAAQMD
Mr. Greg Hoehn, *SECOR*

OAKLAND6.L03
October 10, 1994
Job No. 70005-009-06

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

SECOR
Science & Engineering Analysis Corporation
Environmental Engineering

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

***SECOR* Job No. 70005-009-06**

Prepared For:
Ms. Anne Lunt 10/10/94
Safety-Kleen Corp.
P.O. Box 1447
Manhattan Beach, CA 90266

Submitted By:
Science & Engineering Analysis Corporation
1390 Willow Pass Road
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October 10, 1994

Prepared By:

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STATE OF CALIFORNIA

Greg D Hoehn
Greg D. Hoehn
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APPENDICES

1.0 INTRODUCTION

This report presents the results of groundwater monitoring and sampling activities conducted for the quarter of June 1994 through August 1994 at the Safety-Kleen Service Center located at 400 Market Street in Oakland, California (Figure 1 and Figure 2). Also included are the results of the soil vapor extraction (SVE) system operation.

2.0 PROJECT BACKGROUND INFORMATION

The Safety-Kleen Oakland Service Center is a local distribution center for Safety-Kleen products. Three single-walled underground storage tanks (USTs) were removed and replaced with two new 12,000 gallon double-walled tanks in June and July of 1990. Product and waste mineral spirits are currently stored in the two double-walled USTs at the site. One UST is used to consolidate waste mineral spirits prior to shipment to a Safety-Kleen Recycle Center and one UST is used for distribution of product mineral spirits 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. A system to extract and treat soil vapor began full-scale operation on June 1, 1993.

The SVE system consists of seven horizontal vapor extraction lines and a vapor treatment system consisting of a Padre™ regenerative adsorption system manufactured by Purus, Inc., followed by a granular activated carbon (GAC) polish. Figure 3 depicts the layout of the vapor extraction lines and the vapor treatment system. A detailed description of the SVE system can be found in the report entitled *Quarterly Groundwater Monitoring and Soil Vapor Extraction Report* dated October 1, 1993. Prior to June 30, 1993, the SVE system startup and operation was conducted in accordance with the Bay Area Air Quality Management District (BAAQMD) Authority to Construct Permit dated March 4, 1993. System operation since June 30, 1993 has been conducted in accordance with the Permit to Operate dated June 30, 1993 and amended October 21, 1993.

3.0 SCOPE OF WORK

Work conducted during this quarter consisted of SVE and vapor treatment system operation, and the monitoring and sampling of three groundwater monitor wells. The following sections provide a description of the work steps conducted.

3.1 Soil Vapor Extraction System

During each bi-weekly monitoring event, system influent, system effluent, stack effluent and each individual vapor extraction line were monitored with a photo-ionization detector (PID) to record system operating data and to document compliance with emission standards specified in the BAAQMD Permit. The soil vapor extraction (SVE) system layout is presented on Figure 3.

Vapor samples were collected on June 8, July 12 and August 10, 1994 from the system influent. The analytical data were used to calculate mineral spirits removal data. The vapor samples were collected in Tedlar bags and transported under chain-of-custody to a state-certified laboratory for analysis. Vapor samples were analyzed for benzene, toluene, ethylbenzene and xylenes (BTEX) by U.S. Environmental Protection Agency (EPA) Method 8020, total petroleum hydrocarbons as mineral spirits (TPHms) by modified EPA Method 8015, and purgeable halocarbons by EPA Method 8010.

3.2 RW-1 Mineral Spirits Recovery

The mineral spirits recovery skimming pump began operation on January 19, 1993. Mineral spirits recovered from well RW-1 (Figure 2) is pumped directly to the waste mineral spirits tank operated at the site and is incorporated into the Safety-Kleen recycling process.

3.3 Groundwater Monitoring and Sampling

On July 19, 1994, on- and off-site monitor 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 July 19, 1994, monitor wells MW-2 through MW-4 were purged by hand bailing until approximately three well volumes of groundwater had been removed, or until measurements of pH, temperature, and conductivity had stabilized. Following recovery of the groundwater levels in the wells, groundwater samples were collected using disposable samplers. The groundwater samples were placed into laboratory supplied sample containers. Field data sheets which include depth-to-water measurements and well purge data are included in Appendix A.

The groundwater samples were labeled, placed on ice, and delivered to a state-certified laboratory for analysis under chain-of-custody documentation. The groundwater samples were analyzed for the presence of BTEX by EPA Method 8020, for TPHms by modified EPA Method 8015 and for purgeable halocarbons by EPA Method 8010.

Prior to using any equipment in a groundwater monitor 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 the waste mineral spirits tank or in labeled containers pending proper disposal.

4.0 RESULTS

4.1 Soil Vapor Extraction System

The results of system monitoring conducted through August 25, 1994 are summarized on Table 1. Table 1 presents data on the system flow rate and PID measurements from the Padre™ system influent, effluent and stack effluent. The results of monitoring from the stack effluent document the system operated within the BAAQMD permit requirements of a maximum emission reading of 10 parts per million by volume (ppmv), based on PID readings.

The laboratory analyses of system influent samples detected TPHms concentrations of 460 $\mu g/\ell$ on June 8, 1994, 600 $\mu g/\ell$ on July 12, 1994, and 270 $\mu g/\ell$ on August 10, 1994. Results of BTEX and purgeable halocarbon analyses of system influent samples were 2.8 $\mu g/\ell$ toluene, 1.8 $\mu g/\ell$ ethylbenzene, 12 $\mu g/\ell$ xylenes, 3.8 $\mu g/\ell$ dichloromethane, 6.1 $\mu g/\ell$ 1,1,1-trichloroethane, and 2.6 $\mu g/\ell$ tetrachloroethene on June 8, 1994; 7.0 $\mu g/\ell$ xylenes, 1.3 $\mu g/\ell$ 1,1,1-trichloroethane, and 0.7 $\mu g/\ell$ trichloroethene on July 12, 1994; and 1.6 $\mu g/\ell$ xylenes on August 10, 1994. 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 on June 8, 1994 was calculated as 4.55 pounds per day (lbs/day), 5.93 lbs/day on July 12, 1994, and 2.86 lbs/day on August 10, 1994. Data collected through August 10, 1994 indicate 1,419.6 pounds of mineral spirits (approximately 218.4 gallons) have been removed from the subsurface by the SVE system.

4.2 RW-1 Mineral Spirits Recovery

The mineral spirits skimming pump recovery data was calculated to be 16.4 gallons during this reporting period. A total of 76.7 gallons of product have been removed since the pump was installed on January 19, 1993. Product recovery data are summarized on Table 3.

4.3 Groundwater Elevations

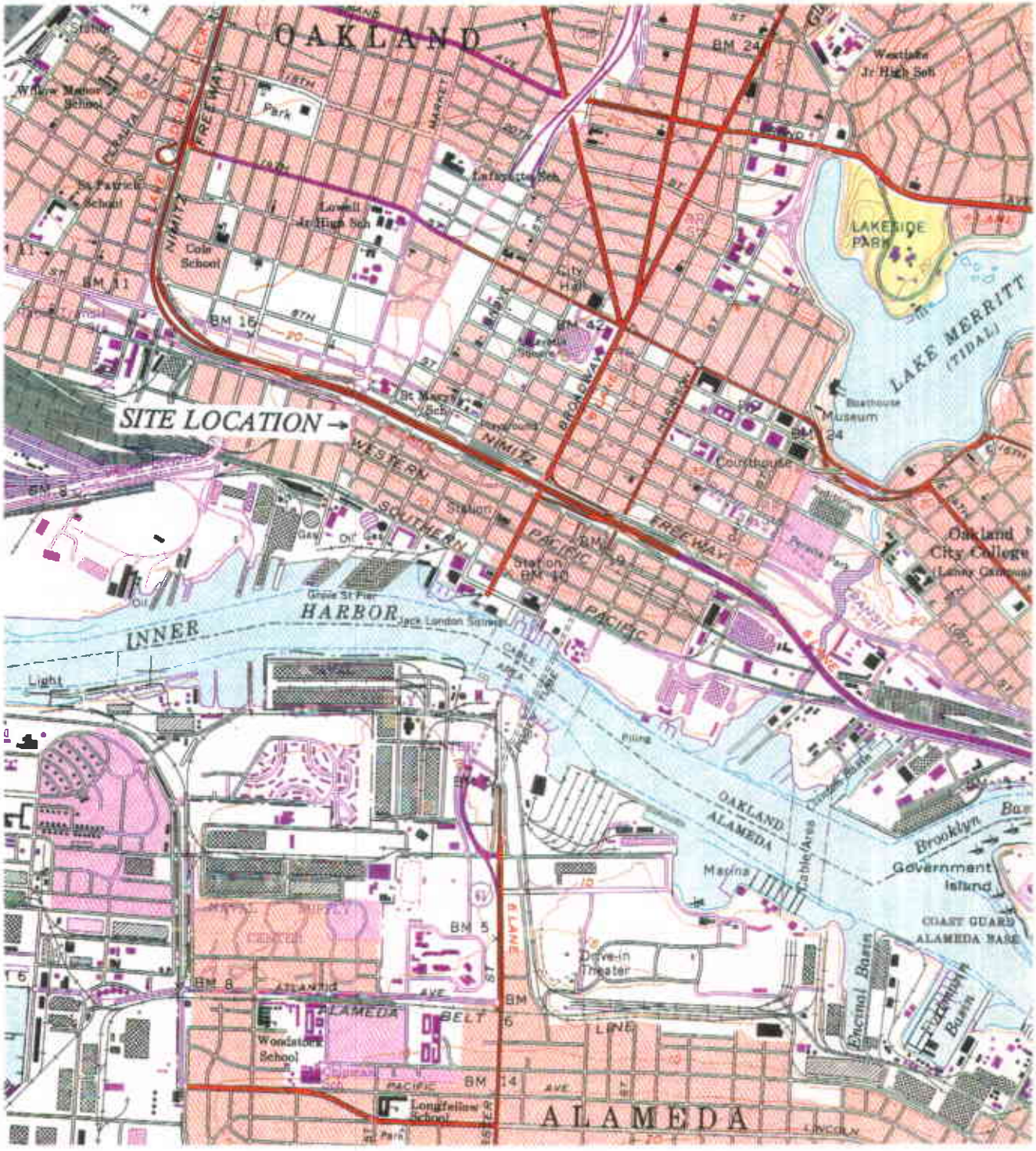
Groundwater elevations and depth-to-water readings as measured on July 19, 1994 are presented in Table 4. The average water table elevation decreased by an average of 0.23 feet since the April 20, 1994 monitoring and sampling event, except in well MW-12 where the groundwater elevation increased by 0.06 feet. A potentiometric surface map prepared with the July 19, 1994 data is presented as Figure 4. The

groundwater flow direction remains to the south, consistent with historic site data. The hydraulic gradient is an average of 0.003 feet/foot (ft/ft) across the site and 0.01 ft/ft between monitor wells MW-3 and MW-12. This gradient is similar to the previous quarter's data and is typical for the site.

4.4 Groundwater Conditions

No concentrations of BTEX were detected above the laboratory detection limits in any of the groundwater samples collected on July 19, 1994. TPHms was reported in the sample collected from well MW-4 at a concentration of 200 $\mu g/\ell$; however, the laboratory analytical report notes that the result reported as mineral spirits is an unknown hydrocarbon which consists of a single peak and no mineral spirits or fuel pattern was present. No concentrations of TPHms or volatile organic compounds (VOCs) were detected in wells MW-2 or MW-3. Trichloroethene (TCE) was the only VOC analyte detected in the groundwater sample collected from well MW-4 at a concentration of 410 $\mu g/\ell$. 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)



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DRAFTED BY: TS	CHECKED BY: GDH	PROJECT NO. 70005-009	FIGURE 1	*SEACOR* 1390 Willow Pass Road Suite 360 Concord, CA 94520
DWG. DATE: 04/05/94	REV. DATE: 04/05/94	Safety-Kleen Corp. 400 Market Street Oakland, California	Site Location Map	
FILE NAME: OAKLAND2.F01				

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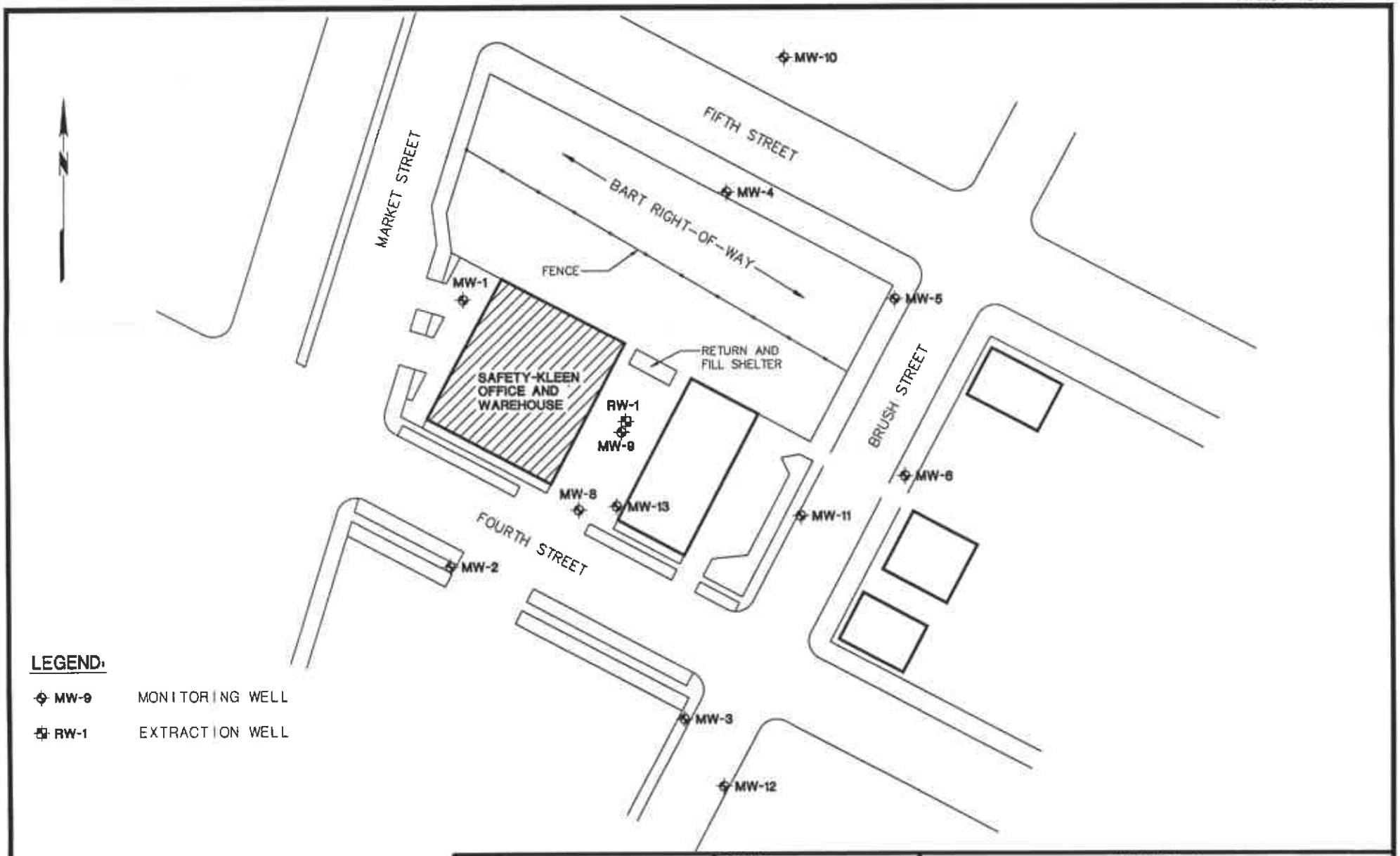

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ENVIRONMENTAL ENGINEERING

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DATE	14FEB94
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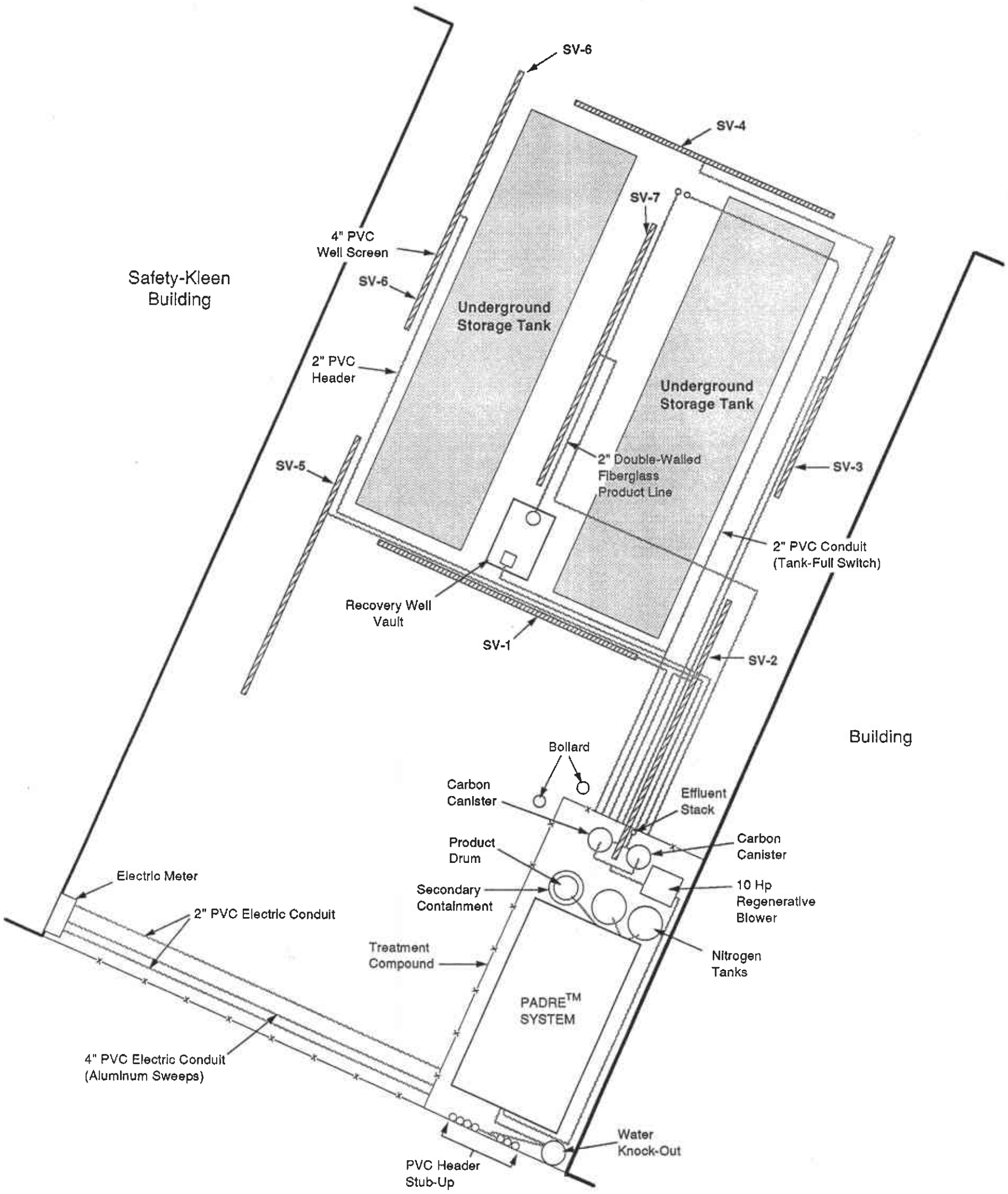
FIGURE 2
SAFETY-KLEEN
400 MARKET STREET
OAKLAND, CALIFORNIA

SITE PLAN



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0 10 Feet

DRAFTED BY: DH	CHECKED BY:	PROJECT NO. 70005-009	FIGURE 3	*SEACOR* 1390 Willow Pass Road Suite 360 Concord, CA 94520
DRWG. DATE:	REV. DATE:	**Safety-Kleen Service Center** 400 Market Street Oakland, California	**Soil Vapor Extraction System Layout**	
FILE NAME:				

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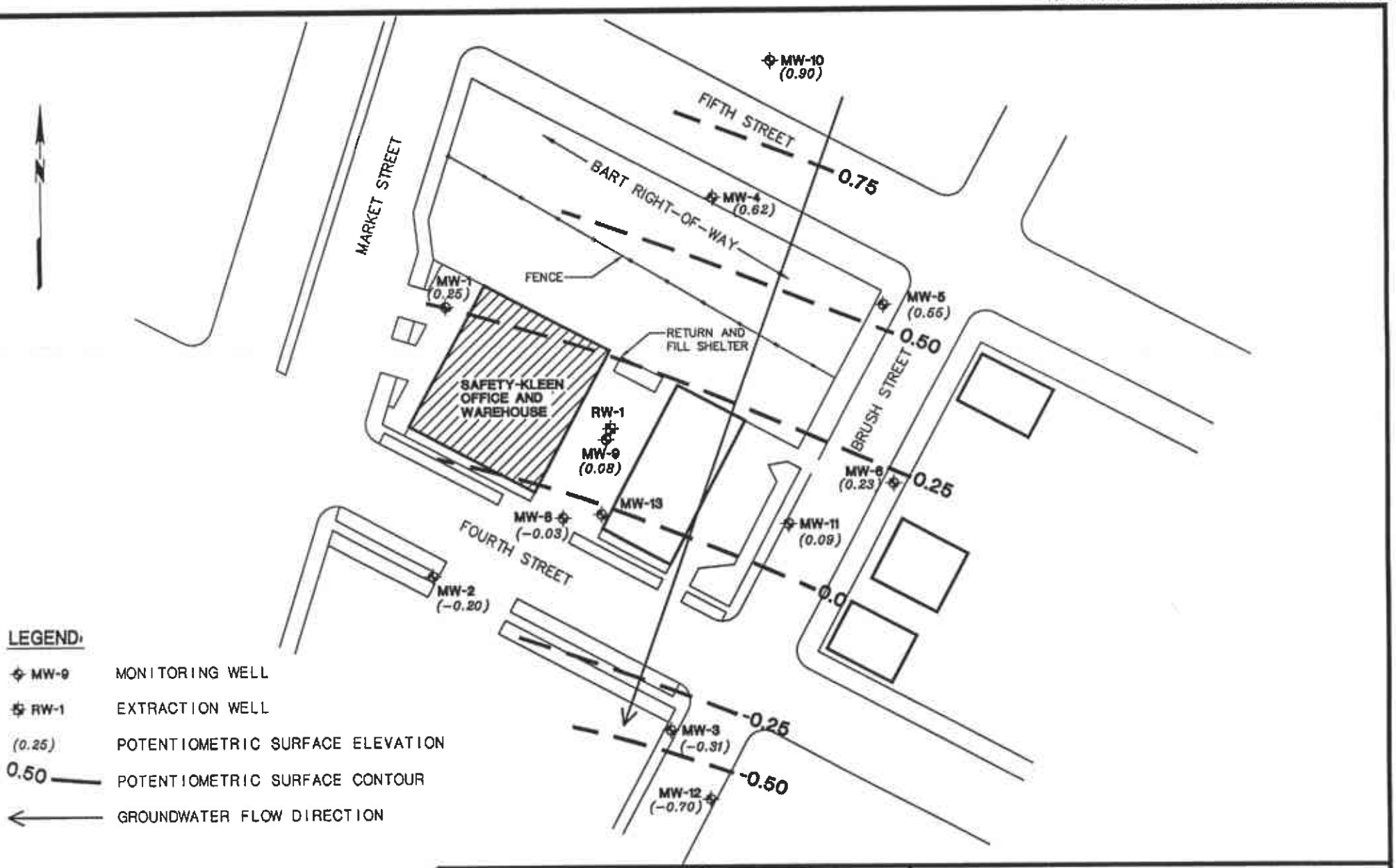

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ENVIRONMENTAL ENGINEERING

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DATE	26JUL94
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FIGURE 4
SAFETY-KLEEN
400 MARKET STREET
OAKLAND, CALIFORNIA
POTENTIOMETRIC SURFACE MAP
JULY 19, 1994

TABLE 1
VAPOR EXTRACTION SYSTEM MONITORING DATA

Date	Extraction Vacuum (in H_20)	Extraction Flow Rate (cfm)	KO Vacuum (in H_20)	Padre Influent (PID units)	Padre Effluent (PID units)	Stack Effluent (PID units)	Sampler	Notes
05-27-93	2	114	22	40	4	0	GGA	24 hours run from 5/27-28
06-01-93	2.3	122	16	450	3	0.5	GGA	
06-02-93	3.25	123	16	200	1.5	3	GGA	
06-03-93	10	114	22	70	4	1.1	GGA	
06-04-93	10.5	114	22.5	80	2.5	1.5	RAR	Shut down for weekend
06-07-93	12	113	34	120	1	0.5	GGA	
06-08-93	10	117	22	300	1.5	0	GGA	
06-09-93	7	117	20	375	29	2	NAB	
06-10-93	8	117	22	400	6	0	NAB	
06-11-93	8	118	18	320	8	0	NAB	Shut down for weekend
06-14-93	8.5	118	18	250	11.75	3	NAB	
06-15-93	7	118	19	250	0.75	1	NAB	
06-16-93	7	117	18	200	0	0	NAB	
06-17-93	7	117	18	200	0	0	NAB	
06-18-93	6	118	19	300	10	8.5	NAB	Shut down for weekend
06-21-93	5.5	117	18	250	0	0.75	NAB	
06-22-93	5.5	117	18	290	0.5	0	NAB	

TABLE 1 - Continued
Vapor Extraction System Monitoring Data
Page 2

Date	Extraction Vacuum (in H_20)	Extraction Flow Rate (cfm)	KO Vacuum (in H_20)	Padre Influent (PID units)	Padre Effluent (PID units)	Stack Effluent (PID units)	Sampler	Notes
06-23-93	5	118	18	210	0	0	NAB	
06-24-93	5	118	18	200	0	0	NAB	Shut down on 6/25 and weekend
06-28-93	5	120	18	190	0	0	NAB	38.8 gal. removed on 6/25
06-29-93	4.5	117	18	150	0	0	NAB	
06-30-93	4	117	18	150	0	0	NAB	
07-07-93	4	117	18	250	0.5	0	NAB	
07-08-93	4	117	18	200	0	0.5	NAB	
07-09-93	5	120	18	200	0	0	NAB	Shut down for weekend
07-12-93	5	120	18	190	0	0	NAB	
07-13-93	5	118	18	160	0	1	NAB	Weekly monitoring to begin on 7/23
07-23-93	6	118	20	230	9	1	GGA	55.2 gal. removed 7/23 (94.0 total)
07-27-93	6	120	19	300	3	3	NAB	
08-05-93	5.75	117	20	350	1.5	1	NAB	
08-11-93	5.8	118	24	125	6.4	7.6	RPR	Began monitoring with PID
08-20-93	6	118	24	113	12.6	9.3	RPR	35.5 gal. removed 8/19 (129.5 total)
08-24-93	5.75	117	24	128	6	7.3	RPR	

TABLE 1 - Continued
Vapor Extraction System Monitoring Data
Page 3

Date	Extraction Vacuum (in H_20)	Extraction Flow Rate (cfm)	KO Vacuum (in H_20)	Padre Influent (PID units)	Padre Effluent (PID units)	Stack Effluent (PID units)	Sampler	Notes
09-01-93	5	117	2.3	141	0	1.5	RPR	
09-09-93	5.25	117	24	103	27.2	3.4	RPR	
09-16-93	6.5	117	26.5	144	6	6	RPR	45.4 gal. removed 9/15 (174.9 total)
09-22-93	6.75	115	27.5	128	7	7	DEM	
09-30-93	7.5	115	27	129	6.8	4.6	RPR	29.7 gal. removed 9/30 (204.6 total)
10-06-93	7.25	115	28	125	2.5	2	RPR	
10-13-93	9.5	123	28	145	0	0	GDH	
10-20-93	8.5	115	28	108	0	0	RAR	
10-25-93	8.5	115	28	124	0	0	RAR	42.9 gal. removed 10/25 (247.5 total)
11-03-93	8.5	117	28	120	0	0	GDH	
11-10-93	7.75	115	27	104	1.2	0.8	RPR	
11-24-93	8.4	117	28.5	105	13	0	RPR	44.6 gal. removed 11/24 (292.1 total)
12-10-93	17.5	110	32.5	65	0	0	RPR	Modified sys.-vacuum on SV-1, SV-5
12-22-93	16.75	110	37.5	61	0	0	RPR	31.8 gal. removed 12/22 (323.9 total)
01-04-94	16.75	111	39	81	1.5	0	RAR	
01-19-94	15.5	110	38	87	0	0	RAR	31.4 gal. removed 01/19 (355.5 total)

TABLE 1 - Continued
Vapor Extraction System Monitoring Data
Page 4

Date	Extraction Vacuum (in H_20)	Extraction Flow Rate (cfm)	KO Vacuum (in H_20)	Padre Influent (PID units)	Padre Effluent (PID units)	Stack Effluent (PID units)	Sampler	Notes
02-02-94	17.25	111	38	65	3.2	0	RPR	
02-17-94	16.5	110	37	38	0.1	0.5	RPR	25.6 gal. removed 02/17 (380.9 total)
02-28-94	16.5	111	37	52	0.1	0.8	RPR	Modified sys.-vacuum on SV-3, SV-4, SV-5
03-10-94	12	117	33	129	0	0	RPR	
03-23-94	10.6	115	33	125	1	1	RPR	30.9 gal. removed 03/23 (411.9 total)
04-05-94	11.5	117	38	185	3.9	1.9	RPR	
04-11-94								System shut down pending Padre replacement
05-10-94								Start system with new Padre
05-11-94								29.7 gal. removed 05/11 (441.6 total)
05-25-94	15	110	32	137	2.3	1.1	DEM	
06-03-94							RPR	45.9 gal. removed 06/03 (487.5 total)
06-08-94	10	110	30	134	0.5	1.7	RPR	
06-22-94	-	110	32	107	12	4.0	GRC	46.2 gal. removed (533.7 total)
07-06-94								34.7 gal. removed (568.4 total)
07-12-94	9.0	110	30	201	5.1	7.4	GRC	

TABLE 1 - Continued
Vapor Extraction System Monitoring Data
Page 5

Date	Extraction Vacuum (in H_20)	Extraction Flow Rate (cfm)	KO Vacuum (in H_20)	Padre Influent (PID units)	Padre Effluent (PID units)	Stack Effluent (PID units)	Sampler	Notes
07-19-94	9.5	110	31	117	7.1	7.9	GRC	39.6 gal. removed (608 total)
07-27-94	9.5	110	33	189	4.1	3.4	GRC	
08-10-94	8.0	117	32	90.5	1.0	1.7	RAR	39.6 gal. removed (647.6 total)
08-25-94	9.7	110	32	90.5	1.0	1.7	GRC	37.1 gal. removed (684.7 total)

KO = Knockout Pot

TABLE 2
VAPOR EXTRACTION SYSTEM MINERAL SPIRITS REMOVAL DATA

Date	Elapsed Operating Time (hours)	TPHms Influent ($\mu g/\ell$)	Flow Rate (cfm)	Removal Rate (lbs/day)	TPHms Removed (lbs)
06-10-93	217	320	117	3.37	30.4
06-23-93	489.5	400	118	4.24	78.6
08-11-93	1339	570	118	6.05	292.6
09-09-93	1859	120	118	1.27	320.2
10-06-93	2381.5	410	115	4.24	412.5
11-10-93	3242.5	300	115	3.10	523.8
12-10-93	3727	170	110	1.68	557.7
01-04-94	4309.5	170	111	1.70	598.9
02-02-94	4893.5	1100	111	10.98	866.0
02-28-94	5576.5	234	111	2.33	932.4
04-05-94	6188	600	117	6.31	1093.2
04-11-94 *	6258	600	117	6.31	1111.6
05-25-94	6474.5	400	110	3.96	1147.3
06-08-94	6628	460	110	4.55	1176.4
07-12-94	7372	600	110	5.93	1360.2
08-10-94	7870.6	270	118	2.86	1419.6

NOTE: * Operating Parameters are from 04-05-94.

TPHms	=	total petroleum hydrocarbons as mineral spirits
$\mu g/\ell$	=	micrograms per liter, or parts per billion
cfm	=	cubic feet per minute
lbs	=	pounds

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October 10, 1994
Job No. 70005-009-06

TABLE 3
PRODUCT RECOVERY DATA
FROM WELL RW-1

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

TABLE 4
GROUNDWATER MONITORING DATA
JULY 19, 1994

Well I.D.	TOC Elevation (ft msl)	DTW (ft)	DTP (ft)	PT (ft)	ADJ Elevation (ft msl)
MW-1	7.99	7.74	-	-	0.25
MW-2	8.20	8.40	-	-	-0.20
MW-3	6.66	6.97	-	-	-0.31
MW-4	10.32	9.70	-	-	0.62
MW-5	10.28	9.73	-	-	0.55
MW-6	8.97	8.74	-	-	0.23
MW-8	7.80	7.83	-	-	-0.03
MW-9	8.21	9.02	7.91	1.11	0.08
MW-10	10.43	9.53	-	-	0.90
MW-11	7.91	7.82	-	-	0.09
MW-12	6.74	7.44	-	-	-0.70
MW-13	8.08	8.30	-	-	-0.22

TOC	=	Top of casing
DTW	=	Depth-to-water
DTP	=	Depth-to-product (separate-phase hydrocarbons)
PT	=	product thickness
ADJ ELEVATION	=	Adjusted groundwater elevation
ft msl	=	Measurement in feet (ft) relative to mean sea level (msl)
*	=	Well was not accessible due to Caltrans demolition work

SKOAKL6.T09
October 10, 1994
Job No. 70005-009-06

TABLE 5
SUMMARY OF ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
(Results in Parts Per Billion)

Compound	MW-1						MW-2					
	04/20/93	07/29/93	10/21/93	01/20/94	04/21/94	07/19/94	04/20/93	07/30/93	10/21/93	01/20/94	04/21/94	07/21/94
1,1-Dichloroethene	-	-	-	-	-	NS	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	NS	-	-	-	-	-	-
1,2-Dichloroethane	-	-	-	-	-	NS	-	-	-	-	-	-
Trans-1,2-Dichloroethene	-	-	-	-	-	NS	-	-	-	-	-	-
Chloroform	-	-	-	-	-	NS	-	-	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-	-	NS	-	-	-	-	-	-
Trichloroethene	-	-	-	-	-	NS	-	-	-	-	-	-
Chlorobenzene	-	-	-	-	-	NS	-	-	-	-	-	-
1,2-Dichloropropane	-	-	-	-	-	NS	-	-	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-	NS	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	NS	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	NS	-	-	-	-	-	-
Benzene	-	-	-	-	-	NS	-	-	-	-	-	-
Toluene	-	-	-	-	-	NS	-	-	-	-	-	-
Ethylbenzene	-	-	-	-	-	NS	-	-	-	-	-	-
Xylenes	-	-	-	-	-	NS	-	-	-	-	-	-
TPH as Mineral Spirits	-	-	-	-	-	NS	-	-	-	-	-	-

- = Not Detected NA = Not Analyzed NS = Not Sampled

TABLE 5 - Continued
Summary of Analytical Results of Groundwater Samples
(Results in Parts Per Billion)
Page 2

Compound	MW-3						MW-4					
	04/20/93	07/29/93	10/20/93	01/19/94	04/21/94	07/19/94	04/20/93	07/29/93	10/21/93	01/20/94	04/21/94	07/19/94
1,1-Dichloroethene	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	-	-	-	-	-	-	-	-	-	-	-	-
Trans-1,2-Dichloroethene	-	-	-	-	-	-	-	53	0.6	1.1	1.7	-
Chloroform	-	-	-	-	-	-	7.6	-	1.9	-	5.0	-
1,1,1-Trichloroethane	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene	0.7	-	-	-	-	-	2400	1100	-	790	1600	410
Chlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane	-	-	-	-	1.8	-	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	-	-	-	-	-	-	-	-	-	-	-	-
Xylenes	-	-	-	-	-	-	-	-	-	-	-	-
TPH as Mineral Spirits	-	-	-	-	-	-	-	-	* 400	* 270	* 760	* 200

- = Not Detected NA = Not Analyzed NS = Not Sampled

NOTE: * The TPH as mineral spirits result is the result of an unknown hydrocarbon(s).

TABLE 5 - Continued
Summary of Analytical Results of Groundwater Samples
(Results in Parts Per Billion)
Page 3

Compound	MW-5						MW-6					
	4/20/93	7/29/93	10/20/93	01/20/94	04/21/94	07/19/94	04/20/93	07/29/93	10/20/93	01/19/94	04/21/94	07/19/94
1,1-Dichloroethene	1.5	0.6	-	-	-	NS	-	-	-	-	-	NS
1,1-Dichloroethane	-	-	-	-	-	NS	-	-	-	-	-	NS
1,2-Dichloroethane	-	-	-	-	-	NS	-	-	-	-	-	NS
Trans-1,2-Dichloroethene	-	-	-	-	-	NS	-	-	-	-	-	NS
Chloroform	-	-	-	4.3	3.5	NS	-	-	-	-	-	NS
1,1,1-Trichloroethane	-	-	-	-	-	NS	-	-	-	-	-	NS
Trichloroethene	4.0	6.0	12	-	7.2	NS	-	5.0	1.3	-	1.0	NS
Chlorobenzene	-	-	-	-	-	NS	-	-	-	-	-	NS
1,2-Dichloropropane	-	-	-	-	-	NS	-	-	-	-	-	NS
Trichlorofluoromethane	18	19	-	-	7.9	NS	-	-	-	-	-	NS
Tetrachloroethene	-	-	-	-	-	NS	-	-	-	-	-	NS
1,2-Dichlorobenzene	-	-	-	-	-	NS	-	-	-	-	-	NS
Benzene	-	-	-	-	-	NS	-	-	-	-	-	NS
Toluene	-	-	-	-	-	NS	-	-	-	-	-	NS
Ethylbenzene	-	-	-	-	-	NS	-	-	-	-	-	NS
Xylenes	-	-	-	-	-	NS	-	-	-	-	-	NS
TPH as Mineral Spirits	-	-	-	-	-	NS	-	-	-	-	-	NS

- = Not Detected NA = Not Analyzed NS = Not Sampled

TABLE 5 - Continued
Summary of Analytical Results of Groundwater Samples
(Results in Parts Per Billion)
Page 4

Compound	MW-8						MW-10					
	04/20/93	07/30/93	10/21/93	01/20/94	04/21/94	07/19/94	04/20/93	07/21/93	10/21/93	01/19/94	04/21/94	07/19/94
1,1-Dichloroethene	-	-	-	-	-	NS	-	2.0	-	-	NS	NS
1,1-Dichloroethane	3.4	-	-	8.6	3.7	NS	-	-	-	-	NS	NS
1,2-Dichloroethane	7.4	5.0	5.2	11	7.1	NS	-	-	-	-	NS	NS
Trans-1,2-Dichloroethene	-	1.0	-	-	-	NS	-	17	3.0	0.4	NS	NS
Chloroform	-	-	-	-	-	NS	1.2	0.5	-	-	NS	NS
1,1,1-Trichloroethane	-	-	-	2.5	1.5	NS	-	0.8	-	-	NS	NS
Trichloroethene	14	31	15	22	18	NS	45	54	42	67	NS	NS
Chlorobenzene	11	-	5.4	16	-	NS	-	-	-	-	NS	NS
1,2-Dichloropropane	0.6	-	-	-	0.8	NS	-	-	-	-	NS	NS
Trichlorofluoromethane	-	-	-	-	-	NS	-	-	-	-	NS	NS
Tetrachloroethene	1.8	-	-	2.0	0.8	NS	-	-	-	-	NS	NS
1,2-Dichlorobenzene	2.6	-	-	4.8	-	NS	-	-	-	-	NS	NS
Benzene	-	-	-	-	-	NS	-	-	-	-	NS	NS
Toluene	-	-	-	-	-	NS	-	-	-	-	NS	NS
Ethylbenzene	-	-	-	-	-	NS	-	-	-	-	NS	NS
Xylenes	-	-	-	-	-	NS	-	-	-	-	NS	NS
TPH as Mineral Spirits	-	-	-	* 60	-	NS	-	-	-	-	NS	NS

- = Not Detected NA = Not Analyzed NS = Not Sampled

NOTE: * The TPH as mineral spirits result is the result of an unknown hydrocarbon(s).

TABLE 5 - Continued
Summary of Analytical Results of Groundwater Samples
(Results in Parts Per Billion)
Page 5

Compound	MW-11						MW-12					
	04/20/93	07/30/93	10/21/93	01/19/94	04/21/94	07/19/94	04/20/93	07/30/93	10/20/93	01/19/94	04/21/94	07/19/94
1,1-Dichloroethene	-	2.0	-	-	-	NS	-	-	-	-	-	NS
1,1-Dichloroethane	-	-	-	-	-	NS	2.6	2.0	-	2.3	1.7	NS
1,2-Dichloroethane	-	-	-	-	-	NS	-	2.0	-	1.2	1.9	NS
Trans-1,2-Dichloroethene	-	3.0	-	-	-	NS	-	3.0	-	-	-	NS
Chloroform	-	-	-	-	-	NS	-	-	-	-	-	NS
1,1,1-Trichloroethane	-	2.0	-	-	-	NS	-	-	-	-	-	NS
Trichloroethene	9.1	36	11	2.6	3.1	NS	17	30	34	11	44	NS
Chlorobenzene	-	-	-	-	-	NS	-	-	-	-	-	NS
1,2-Dichloropropane	-	-	-	-	-	NS	-	-	-	-	-	NS
Trichlorofluoromethane	-	-	-	-	-	NS	-	-	-	-	-	NS
Tetrachloroethene	-	-	-	-	-	NS	-	-	-	-	-	NS
1,2-Dichlorobenzene	-	-	-	-	-	NS	-	-	-	-	-	NS
Benzene	-	-	-	-	-	NS	-	-	-	-	-	NS
Toluene	-	-	-	-	-	NS	-	-	-	-	-	NS
Ethylbenzene	-	-	-	-	-	NS	-	-	-	-	-	NS
Xylenes	-	-	-	-	-	NS	-	-	-	-	-	NS
TPH as Mineral Spirits	-	-	-	-	-	NS	-	-	-	-	-	NS

- = Not Detected NA = Not Analyzed NS = Not Sampled

TABLE 5 - Continued
Summary of Analytical Results of Groundwater Samples
(Results in Parts Per Billion)

Compound	MW-13					
	04/20/93	07/29/93	10/20/93	01/20/94	04/21/94	07/19/94
1,1-Dichloroethene	-	NS	NS	NS	-	NS
1,1-Dichloroethane	-	NS	NS	NS	-	NS
1,2-Dichloroethane	-	NS	NS	NS	-	NS
Trans-1,2-Dichloroethene	-	NS	NS	NS	-	NS
Chloroform	-	NS	NS	NS	-	NS
1,1,1-Trichloroethane	-	NS	NS	NS	-	NS
Trichloroethene	-	NS	NS	NS	-	NS
Chlorobenzene	-	NS	NS	NS	-	NS
1,2-Dichloropropane	-	NS	NS	NS	-	NS
Trichlorofluoromethane	-	NS	NS	NS	-	NS
Tetrachloroethene	-	NS	NS	NS	-	NS
1,2-Dichlorobenzene	-	NS	NS	NS	-	NS
Benzene	-	NS	NS	NS	-	NS
Toluene	-	NS	NS	NS	-	NS
Ethylbenzene	-	NS	NS	NS	-	NS
Xylenes	-	NS	NS	NS	-	NS
TPH as Mineral Spirits	-	NS	NS	NS	-	NS

- = Not Detected NA = Not Analyzed NS = Not Sampled

APPENDIX A

FIELD DATA SHEETS

SEACOR

HYDROLOGIC DATA SHEET

PROJECT: SAFETY-KLEEN OAKLAND		**PROJECT NO.:** 70005-009-05 **TASK:** 001
DATE: July 19, 1994	**TIME START:** 0930	**TIME END:** -
EVENT: QUARTERLY MONITORING AND SAMPLING		**PERSONNEL:** G. Clift

WELL ID	TOC	DTW	DTP	PT	TD	ELEV.	COMMENTS
MW-1	7.99	7.74	-	-	21.84	0.25	
MW-2	8.20	8.40	-	-	29.40	-0.20	
MW-3	6.66	6.97	-	-	29.40	-0.31	
MW-4	10.32	9.70	-	-	25.55	0.62	
MW-5	10.28	9.73	-	-	28.14	0.55	
MW-6	8.97	8.74	-	-	29.05	0.23	
MW-8	7.80	7.83	-	-	29.10	-.0.03	
MW-9	8.21	9.02	7.91	1.11	25.65	0.08	
MW-10	10.43	9.53	-	-	29.55	0.90	
MW-11	7.91	7.82	-	-	23.10	0.09	
MW-12	6.74	7.44	-	-	28.55	-0.70	
MW-13	8.08	8.30	-	-	68.34	-0.22	
RW-1	-	7.40	7.02	0.38	19.80	-	

NOTES: NET Purchase Order Number - E10275

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)

SKOAKLAND.TBL
04-15-94

SEACOR
WATER SAMPLE FIELD DATA SHEET

PROJECT NO: 70005.009-05
PURGED BY: GRC
SAMPLED BY: GRC

WELL ID: MW-3
SAMPLE ID: MW-3
CLIENT NAME: S/K
LOCATION: Oakland

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

CASING DIAMETER (inches): 2 X 3 ____ 4 ____ 4.5 ____ 6 ____ Other ____

CASING ELEVATION: (feet/MSL):	-.09	VOLUME IN CASING (gal)	3.81
DEPTH TO WATER (feet):	6.97	CALCULATED PURGE (gal)	11.43
DEPTH OF WELL (feet):	29.40	ACTUAL PURGE VOL. (gal)	11.50

DATE PURGED: 7-19-94 Start (2400 Hr) 12:48 End (2400 Hr.) 13.25
DATE SAMPLED: 7-19-94 Sample time on bottle(s) (2400 Hr.) 13:30

FIELD QC SAMPLES COLLECTED AT THIS WELL (i.e. FB-1, X-DUP-1): ____

FIELD MEASUREMENTS

TIME (2400 Hr)	VOLUME (gal)	TEMPERATURE (°F)	pH (units)	E.C. (umhos/cm@25°C)	COLOR (visual)	TURBIDITY (visual)
12:56	4.0	74.0	7.83	434	BRN	7200
13:20	8.0	73.3	7.83	414	BRN	7200
13:25	11.50	72.9	7.31	404	BRN	7200

D.O. (ppm): ____ COLOR, COBALT (0-100): ____

Clear
Cloudy
Yellow
(Brown)

ODOR: None

PURGING EQUIPMENT

___	2" Bladder Pump	___	Bailer(Teflon®)
___	Centrifugal Pump	X	Bailer (PVC)
___	Submersible Pump	___	Bailer (Stainless Steel)
___	Well Wizard™	___	Dedicated

Other: ____

SAMPLING EQUIPMENT

___	2" Bladder Pump	___	Bailer(Teflon®)
___	DDL Sampler	X	Bailer (PVC)(disposable)
___	Submersible Pump	___	Bailer (Stainless Steel)
___	Well Wizard™	___	Dedicated

Other: ____

WELL INTEGRITY: Good LOCK #: 3210
REMARKS:
80% Recovered? (Yes) No

SIGNATURE: Darryl Hoo Page 1 of 1

SEACOR
WATER SAMPLE FIELD DATA SHEET

PROJECT NO: 70005-004-01
PURGED BY: GRC
SAMPLED BY: GRC

WELL ID: MW-4
SAMPLE ID: MW-4
CLIENT NAME: S/K
LOCATION: Oakland

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

CASING DIAMETER (inches): 2 X 3 ____ 4 ____ 4.5 ____ 6 ____ Other ____

CASING ELEVATION: (feet/MSL):	0.85	VOLUME IN CASING (gal.)	2.69
DEPTH TO WATER (feet):	9.70	CALCULATED PURGE (gal.)	8.08
DEPTH OF WELL (feet):	25.55	ACTUAL PURGE VOL. (gal.)	8.25

DATE PURGED: 7-19-94 Start (2400 Hr) 11:40 End (2400 Hr.) 12:06
DATE SAMPLED: 7-19-94 Sample time on bottle(s) (2400 Hr.) 12:15

FIELD QC SAMPLES COLLECTED AT THIS WELL (i.e. FB-1, X-DUP-1): ____

FIELD MEASUREMENTS

TIME (2400 Hr)	VOLUME (gal)	TEMPERATURE (°F)	pH (units)	E.C. (umhos/cm@25°C)	COLOR (visual)	TURBIDITY (NTU) Visual
11:53	3.0	70.2	5.86	829	BRN	7200
11:58	5.0	71.3	6.58	820	BRN	7200
12:03	7.0	73.0	6.57	813	BRN	7200
12:06	8.25	72.8	6.54	791	BRN	7200

D.O. (ppm): ____ COLOR, COBALT (0-100): ____

ODOR: None

Clear
Cloudy
Yellow
(Brown)

PURGING EQUIPMENT

___	2" Bladder Pump	___	Bailer(Teflon®)
___	Centrifugal Pump	X	Bailer (PVC)
___	Submersible Pump	___	Bailer (Stainless Steel)
___	Well Wizard™	___	Dedicated

Other: ____

SAMPLING EQUIPMENT

___	2" Bladder Pump	___	Bailer(Teflon®)
___	DDL Sampler	X	Bailer (PVC/disposable)
___	Submersible Pump	___	Bailer (Stainless Steel)
___	Well Wizard™	___	Dedicated

Other: ____

WELL INTEGRITY: Good LOCK #: 3310

REMARKS:
80% Recovered? (Yes) No

Lots of water

SIGNATURE: Gary R Clay

SEACOR
WATER SAMPLE FIELD DATA SHEET

PROJECT NO: 70005-009-05
PURGED BY: GRC
SAMPLED BY: GRC

WELL ID: MW-2
SAMPLE ID: MW-2
CLIENT NAME: S/K
LOCATION: Oakland

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

CASING DIAMETER (inches): 2 X 3 ____ 4 ____ 4.5 ____ 6 ____ Other ____

CASING ELEVATION: (feet/MSL):	0.05	VOLUME IN CASING (gal)	3.57
DEPTH TO WATER (feet):	8.40	CALCULATED PURGE (gal)	10.71
DEPTH OF WELL (feet):	29.40	ACTUAL PURGE VOL. (gal)	10.75

DATE PURGED: 7-19-94 Start (2400 Hr) 14:17 End (2400 Hr.) 14:42
DATE SAMPLED: 7-19-94 Sample time on bottle(s) (2400 Hr.) 14:50

FIELD QC SAMPLES COLLECTED AT THIS WELL (i.e. FB-1, X-DUP-1): ____

FIELD MEASUREMENTS

TIME (2400 Hr)	VOLUME (gal)	TEMPERATURE (°F)	pH (units)	E.C. (umhos/cm@25°C)	COLOR (visual)	TURBIDITY ~~(NTU)~~ visual
14:28	4.0	75.4	7.28	476	TAN	Med
14:35	7.0	74.7	7.31	528	TAN	Med
14:41	11.75	75.7	7.08	528	TAN	Med

D.O. (ppm): ____ COLOR, COBALT (0-100): ____

ODOR: None

Clear
(Cloudy)
Yellow
Brown

PURGING EQUIPMENT

___	2" Bladder Pump	___	Bailer(Teflon®)
___	Centrifugal Pump	X	Bailer (PVC)
___	Submersible Pump	___	Bailer (Stainless Steel)
___	Well Wizard™	___	Dedicated

Other: ____

SAMPLING EQUIPMENT

___	2" Bladder Pump	___	Bailer(Teflon®)
___	DDL Sampler	X	Bailer (PVC/disposable)
___	Submersible Pump	___	Bailer (Stainless Steel)
___	Well Wizard™	___	Dedicated

Other: ____

WELL INTEGRITY: Good LOCK #: 3310

REMARKS:

80% Recovered? (Yes) No

SIGNATURE: Gary R Clark

APPENDIX B

LABORATORY REPORTS - VAPOR

Superior Precision Analytical, Inc.
A member of ESSCON Environmental Support Service Consortium

CERTIFICATE OF ANALYSIS

Laboratory No.: 92314
Client : SEACOR
Client job No.: 70005-009

Date received : 08/10/94
Date reported : 08/15/94

ANALYSIS FOR MINERAL SPIRITS, BENZENE, TOLUENE, ETHYLBENZENE, & XYLENES
BY EPA SW-846 METHOD 5030/8015M/8020
Concentration in air is calculated based on 20 degrees C and 1 ATM. Assumed molecular weight of Mineral Spirit is same as decane. Reported as volume to volume.

Lab Sample ID	Date Sampled	Date Analyzed	Analyte	Conc.	RL	Unit
1 PADRE INF.	08/10/94	08/10/94	Mineral Spirit	40	30	ppm
			Benzene	130	85	ppb
			Toluene	ND	250	ppb
			Ethylbenzene	130	65	ppb
			Xylenes	700	250	ppb
QC METHOD BLANK	Air	08/10/94	Mineral Spirit	ND	30	ppm
			Benzene	ND	85	ppb
			Toluene	ND	250	ppb
			Ethylbenzene	ND	65	ppb
			Xylenes	ND	250	ppb

QAQC Summary:

Mineral Spirit	MS/MSD % Recovery = 120/95	Duplicate RPD = 23%
Benzene	MS/MSD % Recovery = 85/118	Duplicate RPD = 33%
Toluene	MS/MSD % Recovery = 72/100	Duplicate RPD = 33%
Ethylbenzene	MS/MSD % Recovery = 92/84	Duplicate RPD = 9%
Xylenes	MS/MSD % Recovery = 118/84	Duplicate RPD = 34%

ug/L = parts per billion (ppb)
mg/kg = parts per million (ppm)
ND = Not Detected
NA = Not Applicable
RL = Reporting Limit

Senior Chemist
Account Manager

Certified Laboratories
825 Arnold Dr., Suite 114 • Martinez, California 94553 • (510) 313-0850 / fax (510) 229-1526

Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

SEACOR
Attn: GREG HOEHN

Project 70005-009
Reported 19-August-1994

VOLATILE PETROLEUM HYDROCARBONS

Sample preparation by Purge and Trap (EPA SW-846 method 5030). Mineral Spirit analysis by SW-846 method 8015 modified.
Benzene, Toluene, Ethyl Benzene, and Xylenes analyses by EPA SW-846 method 8020.

Chronology

Laboratory Number 92314

Identification	Sampled	Received	Extracted	Analyzed	Run #	Lab #
PADRE INF.	08/10/94	08/10/94	08/10/94	08/10/94		1

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SEACOR
Attn: GREG HOEHN

Project 70005-009
Reported 19-August-1994

VOLATILE PETROLEUM HYDROCARBONS

Laboratory Number	Sample Identification	Matrix
92314- 1	PADRE INF.	Air

RESULTS OF ANALYSIS

Laboratory Number: 92314- 1

Mineral Spirit:	270
Benzene:	ND<0.5
Toluene:	ND<1.0
Ethyl Benzene:	ND<0.5
Total Xylenes:	1.6
Concentration:	ug/L

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Superior Precision Analytical, Inc.
A member of ESSCON Environmental Support Service Consortium

VOLATILE PETROLEUM HYDROCARBONS
Quality Assurance and Control Data - Air

Laboratory Number 92314

Compound	Method Blank (ug/L)	RL (ug/L)	Spike Recovery (%)	Limits (%)	RPD (%)
Mineral spirit:	ND<50	50	120/95	70-130	23%
Benzene:	ND<0.5	0.5	85/118	70-130	33%
Toluene:	ND<1.0	1.0	72/100	70-130	33%
Ethyl Benzene:	ND<0.5	0.5	92/84	70-130	9%
Total Xylenes:	ND<1.0	1.0	118/84	70-130	34%

Definitions:
ND = Not Detected
RPD = Relative Percent Difference
RL = Reporting Limit
ug/L = Parts per billion (ppb)
QC File No. 92314

Senior Chemist
Account Manager

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SEACOR
Attn: GREG HOEHN

Project 70005-009
Reported 15-August-1994

HALOGENATED VOLATILE ORGANICS by EPA SW-846 Methods 5030/8010.

Chronology

Laboratory Number 92314

Identification	Sampled	Received	Extracted	Analyzed	Run #	Lab #
PADRE INF.	08/10/94	08/10/94	08/11/94	08/11/94		1

Certified Laboratories

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SEACOR
Attn: GREG HOEHN

Project 70005-009
Reported 15-August-1994

HALOGENATED VOLATILE ORGANICS by EPA SW-846 Methods 5030/8010.

Laboratory Number	Sample Identification	Matrix
92314- 1	PADRE INF.	AIR

RESULTS OF ANALYSIS

Laboratory Number: 92314- 1

Chloromethane:	ND<0.5
Vinyl Chloride:	ND<0.5
Bromomethane:	ND<0.5
Chloroethane:	ND<0.5
Trichlorofluoromethane:	ND<1
1,1-Dichloroethene:	ND<0.5
Dichloromethane:	ND<1
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-Tetrachloroeth:	ND<0.5
1,3-Dichlorobenzene:	ND<0.5
1,2-Dichlorobenzene:	ND<0.5
1,4-Dichlorobenzene:	ND<0.5
Concentration:	ug/L

Certified Laboratories

825 Arnold Dr., Suite 114 • Martinez, California 94553 • (510) 313-0850 / fax (510) 229-1526

HALOGENATED VOLATILE ORGANICS by EPA SW-846 Methods 5030/8010.
Quality Assurance and Control Data - Air

Laboratory Number 92314

Compound	Method Blank (ug/L)	RL (ug/L)	Spike Recovery (%)	Limits (%)	RPD (%)
Chloromethane:	ND<0.5	0.5			
Vinyl Chloride:	ND<0.5	0.5			
Bromomethane:	ND<0.5	0.5			
Chloroethane:	ND<0.5	0.5			
Trichlorofluoromethane:	ND<1.0	1.0			
1,1-Dichloroethene:	ND<0.5	0.5	120/119	50-189	1%
Dichloromethane:	ND<1.0	1.0			
t-1,2-Dichloroethene:	ND<0.5	0.5			
1,1-Dichloroethane:	ND<0.5	0.5			
c-1,2-Dichloroethene:	ND<0.5	0.5			
Chloroform:	ND<0.5	0.5			
1,1,1-Trichloroethane:	ND<0.5	0.5			
Carbon tetrachloride:	ND<0.5	0.5			
1,2-Dichloroethane:	ND<0.5	0.5			
ichloroethene:	ND<0.5	0.5	85/75	53-161	13%
c-1,3-Dichloropropene:	ND<0.5	0.5			
1,2-Dichloropropane:	ND<0.5	0.5			
t-1,3-Dichloropropene:	ND<0.5	0.5			
Bromodichloromethane:	ND<0.5	0.5			
1,1,2-Trichloroethane:	ND<0.5	0.5			
Tetrachloroethene:	ND<0.5	0.5			
Dibromochloromethane:	ND<0.5	0.5			
Chlorobenzene:	ND<0.5	0.5	72/76	57-171	5%
Bromoform:	ND<0.5	0.5			
1,1,2,2-Tetrachloroeth:	ND<0.5	0.5			
1,3-Dichlorobenzene:	ND<0.5	0.5			
1,2-Dichlorobenzene:	ND<0.5	0.5			
1,4-Dichlorobenzene:	ND<0.5	0.5			

Definitions:
ND = Not Detected
RPD = Relative Percent Difference
RL = Reporting Limit
ug/L = Parts per billion (ppb)
QC File No. 92314

Senior Chemist
Account Manager

Certified Laboratories
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A member of ESSCON Environmental Support Service Consortium

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

LABORATORY NO. 92314
CLIENT: SEACOR

DATE RECEIVED: 08/10/94
DATE REPORTED: 08/15/94
PROJECT NO. : 70005-009

DATE SAMPLED : 08/10/94
DATE ANALYZED: 08/11/94

EPA SW-846 METHOD 8010 - VOLATILE ORGANICS

SAMPLE: PADRE INF

Compound	RL ppb (V/V)	
Chloromethane	480	ND
Bromomethane	250	ND
Vinyl Chloride	390	ND
Chloroethane	270	ND
Methylene Chloride	140	ND
Trichlorofluoromethane	88	ND
1,1-Dichloroethene	120	ND
1,1-Dichloroethane	120	ND
cis-1,2-Dichloroethene	120	ND
trans-1,2-Dichloroethene	120	ND
Chloroform	100	ND
1,2-Dichloroethane	120	ND
1,1,1-Trichloroethane	90	ND
Carbon Tetrachloride	78	ND
Bromodichloromethane	68	ND
1,2-Dichloropropane	110	ND
Cis-1,3-Dichloropropene	110	ND
Trichloroethene	92	ND
Dibromochloromethane	58	ND
1,1,2-Trichloroethane	90	ND

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

LABORATORY NO. 92314
CLIENT: SEACOR

DATE SAMPLED : 08/10/94
DATE ANALYZED: 08/11/94

DATE RECEIVED: 08/10/94
DATE REPORTED: 08/15/94
PROJECT NO. : 70005-009

EPA SW-846 METHOD 8010 - VOLATILE ORGANICS

SAMPLE: PADRE INF

Compound	RL ppb (V/V)	
Trans-1,3-Dichloropropene	110	ND
Bromoform	48	ND
Tetrachloroethene	73	ND
1,1,2,2-Tetrachloroethane	72	ND
Chlorobenzene	110	ND
1,3-Dichlorobenzene	82	ND
1,4-Dichlorobenzene	82	ND
1,2-Dichlorobenzene	82	ND
Freon 113	64	ND

RL = Reporting Limit
ND = ANALYTE NOT DETECTED ABOVE QUANTITATION LIMIT

Senior Chemist
Account Manager

Certified Laboratories
825 Arnold Dr., Suite 114 • Martinez, California 94553 • (510) 313-0850 / fax (510) 229-1526

Chain-of-Custody Number: A-81095

SEACOR Chain-of-Custody Record

Address
SEACOR
1390 WILLOW PASS RD.
CONCORD, CA 94520

SAFETY-KLEEN,
400 MARKET ST.
OAKLAND, CA.

Project # 70005-009 Task #
Project Manager GREG HOGAN
Laboratory SUPERIOR
Turn-around time: STANDARD
Sampler's Name: R. NAVERO
Sampler's Signature:

Analysis Request

Sample ID	Date	Time	Matrix	TPHg/BTEX 8015 (modified)/8020	TPHd 8015 (modified)	TPH 418.1	Aromatic Volatiles 602/8020	Volatile Organics 624/8240 (GC/MS)	Halogenated Volatiles 601/8010	Semi-volatile Organics 625/8270 (GC/MS)	Pesticides/PCB's 608/8080	Total Lead 7421	Priority Pollutant Metals (13)	TCLP Metals	TPH as mineral spirits GCA 8015	BTEX, GCA 8020		Comments/ Instructions	Number of Containers
PADNG INF. -	8/10	8:50	AIR						X						X	X			2

Please Initial: NM
Samples Stored in Ice: NM
Appropriate containers: YES
Samples preserved: N/A
Sufficient headspace: N/A
2 - ALL SAMPLES RECEIVED

Special Instructions/Comments:
REPORT RESULTS IN BOTH Mg/L AND PPM (G)V.

SUPERIOR QUOTE # 94-00518

Relinquished by:
Sign NM
Print R. NAVERO
Company SEACOR
Time 6:00 Date 8/10

Received by:
Sign
Print
Company
Time Date

Relinquished by:
Sign
Print
Company
Time Date

Received by:
Sign
Print MARK
Company
Time 6:00 P.M. Date 8/10/94

Sample Receipt

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

Client:
Client Contact:
Client Phone Number:

Date 08 / 10 / 94 Page ___ of ___

Superior Precision Analytical, Inc.
A member of ESSCON Environmental Support Service Consortium

SEACOR
Attn: GREG HOEHN

Project 70005-009
Reported 26-July-1994

VOLATILE PETROLEUM HYDROCARBONS

Sample preparation by Purge and Trap (EPA SW-846 method 5030). Mineral Spirits analysis by SW-846 method 8015 modified. Benzene, Toluene, Ethyl Benzene, and Xylenes analyses by EPA SW-846 method 8020.

Chronology — Laboratory Number 92083

Identification	Sampled	Received	Extracted	Analyzed	Run #	Lab #
PADRE INF	07/12/94	07/12/94	/ /	07/14/94		1

Certified Laboratories
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SEACOR
Attn: GREG HOEHN

Project 70005-009
Reported 26-July-1994

VOLATILE PETROLEUM HYDROCARBONS

Laboratory Number	Sample Identification	Matrix
92083- 1	PADRE INF	Air

RESULTS OF ANALYSIS

Laboratory Number: 92083- 1

Mineral Spirits :	600
Benzene:	ND<0.5
Toluene:	ND<0.5
Ethyl Benzene:	ND<0.5
Total Xylenes:	7.0
Concentration:	ug/L

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VOLATILE PETROLEUM HYDROCARBONS
Quality Assurance and Control Data - Water

Laboratory Number 92083

Compound	Method Blank (ug/L)	RL (ug/L)	Spike Recovery (%)	Limits (%)	RPD (%)
Mineral Spirits	ND<50	50	NA	NA	NA
Benzene:	ND<0.5	0.5	101/104	70-130	3%
Toluene:	ND<0.5	0.5	109/113	70-130	4%
Ethyl Benzene:	ND<0.5	0.5	102/108	70-130	6%
Total Xylenes:	ND<0.5	0.5	97/101	70-130	4%

Definitions:
ND = Not Detected
RPD = Relative Percent Difference
RL = Reporting Limit
ug/L = Parts per billion (ppb)
QC File No. 92083

Michael R. Verona
Senior Chemist
Account Manager

Certified Laboratories
825 Arnold Dr., Suite 114 • Martinez, California 94553 • (510) 313-0850 / fax (510) 229-1526

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A member of ESSCON Environmental Support Service Consortium

CERTIFICATE OF ANALYSIS

Laboratory No.: 92083
Client : SEACOR
Client job No.: 70005-009

Date received : 07/12/94
Date reported : 07/15/94

ANALYSIS FOR MINERAL SPIRITS, BENZENE, TOLUENE, ETHYLBENZENE, & XYLENES
BY EPA SW-846 METHOD 5030/8015M/8020
Concentration in air is calculated based on 20 degrees C and 1 ATM. Assumed molecular weight of mineral spirits is same as decane. Reported as volume to volume.

Lab	Sample ID	Date Sampled	Date Analyzed	Analyte	Conc.	RL	Unit
1	PADRE INF	07/12/94	07/14/94	Mineral Spt.	95	30	ppm
				Benzene	ND	85	ppb
				Toluene	ND	250	ppb
				Ethylbenzene	ND	65	ppb
				Xylenes	1600	250	ppb
QC	METHOD BLANK	NA	07/14/94	Mineral Spt.	ND	30	ppm
				Benzene	ND	85	ppb
				Toluene	ND	250	ppb
				Ethylbenzene	ND	65	ppb
				Xylenes	ND	250	ppb

QAQC Summary:

Gasoline	MS/MSD % Recovery = 121/127	Duplicate RPD = 5%
Benzene	MS/MSD % Recovery = 118/122	Duplicate RPD = 3%
Toluene	MS/MSD % Recovery = 117/123	Duplicate RPD = 5%
Ethylbenzene	MS/MSD % Recovery = 104/109	Duplicate RPD = 5%
Xylenes	MS/MSD % Recovery = 115/120	Duplicate RPD = 4%

ug/L = parts per billion (ppb)
mg/kg = parts per million (ppm)
ND = Not Detected
NA = Not Applicable
RL = Reporting Limit

Senior Chemist
Account Manager

Certified Laboratories
825 Arnold Dr., Suite 114 • Martinez, California 94553 • (510) 313-0850 / fax (510) 229-1526

Superior Precision Analytical, Inc.
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CERTIFICATE OF ANALYSIS

LABORATORY NO. 92083
CLIENT: SEACOR

DATE RECEIVED: 07/12/94
DATE REPORTED: 07/18/94
PROJECT NO. : 70005-009

DATE SAMPLED : 07/12/94
DATE ANALYZED: 07/14/94

EPA SW-846 METHOD 8010 - VOLATILE ORGANICS

SAMPLE: PARDE INF

Compound	RL ppb (V/V)	
Chloromethane	480	ND
Bromomethane	250	ND
Vinyl Chloride	390	ND
Chloroethane	270	ND
Methylene Chloride	140	ND
Trichlorofluoromethane	88	ND
1,1-Dichloroethene	120	ND
1,1-Dichloroethane	120	ND
cis-1,2-Dichloroethene	120	ND
trans-1,2-Dichloroethene	120	ND
Chloroform	100	ND
1,2-Dichloroethane	120	ND
1,1,1-Trichloroethane	90	230
Carbon Tetrachloride	78	ND
Bromodichloromethane	68	ND
1,2-Dichloropropane	110	ND
Cis-1,3-Dichloropropene	110	ND
Trichloroethene	92	130
Dibromochloromethane	58	ND
1,1,2-Trichloroethane	90	ND

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

LABORATORY NO. 92083
CLIENT: SEACOR

DATE RECEIVED: 07/12/94
DATE REPORTED: 07/18/94
PROJECT NO. : 70005-009

DATE SAMPLED : 07/12/94
DATE ANALYZED: 07/14/94

EPA SW-846 METHOD 8010 - VOLATILE ORGANICS

SAMPLE: PARDE INF

Compound	RL ppb (V/V)	
Trans-1,3-Dichloropropene	110	ND
Bromoform	48	ND
Tetrachloroethene	73	ND
1,1,2,2-Tetrachloroethane	72	ND
Chlorobenzene	110	ND
1,3-Dichlorobenzene	82	ND
1,4-Dichlorobenzene	82	ND
1,2-Dichlorobenzene	82	ND
Freon 113	64	ND

RL = Reporting Limit
ND = ANALYTE NOT DETECTED ABOVE QUANTITATION LIMIT

Michael R. Vivona
Senior Chemist
Account Manager

Certified Laboratories
825 Arnold Dr., Suite 114 • Martinez, California 94553 • (510) 313-0850 / fax (510) 229-1526

Superior Precision Analytical, Inc.
A member of ESSCON Environmental Support Service Consortium

SEACOR
Attn: GREG HOEHN

Project 70005-009
Reported 21-July-1994

HALOGENATED VOLATILE ORGANICS by EPA SW-846 Methods 5030/8010.

Chronology

Laboratory Number 92083

Identification	Sampled	Received	Extracted	Analyzed	Run #	Lab #
PADRE INF	07/12/94	07/12/94	/ /	07/14/94		1

Certified Laboratories
825 Arnold Dr., Suite 114 • Martinez, California 94553 • (510) 313-0850 / fax (510) 229-1526

SEACOR
Attn: GREG HOEHN

Project 70005-009
Reported 21-July-1994

HALOGENATED VOLATILE ORGANICS by EPA SW-846 Methods 5030/8010.

Laboratory Number	Sample Identification	Matrix
92083- 1	PADRE INF	Air

RESULTS OF ANALYSIS

Laboratory Number: 92083- 1

Chloromethane:	ND<0.5
Vinyl Chloride:	ND<0.5
Bromomethane:	ND<0.5
Chloroethane:	ND<0.5
Trichlorofluoromethane:	ND<1.0
1,1-Dichloroethene:	ND<0.5
Dichloromethane:	ND<1.0
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:	1.3
Carbon tetrachloride:	ND<0.5
1,2-Dichloroethane:	ND<0.5
Trichloroethene:	0.7
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-Tetrachloroeth:	ND<0.5
1,3-Dichlorobenzene:	ND<0.5
1,2-Dichlorobenzene:	ND<0.5
1,4-Dichlorobenzene:	ND<0.5

Concentration: ug/L

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Superior Precision Analytical, Inc.
A member of ESSCON Environmental Support Service Consortium

HALOGENATED VOLATILE ORGANICS by EPA SW-846 Methods 5030/8010.
Quality Assurance and Control Data - Water

Laboratory Number 92083

Compound	Method Blank (ug/L)	RL (ug/L)	Spike Recovery (%)	Limits (%)	RPD (%)
Chloromethane:	ND<0.5	0.5			
Vinyl Chloride:	ND<0.5	0.5			
Bromomethane:	ND<0.5	0.5			
Chloroethane:	ND<0.5	0.5			
Trichlorofluoromethane:	ND<1.0	1.0			
1,1-Dichloroethene:	ND<0.5	0.5	81/88	50-189	8%
Dichloromethane:	ND<1.0	1.0			
t-1,2-Dichloroethene:	ND<0.5	0.5			
1,1-Dichloroethane:	ND<0.5	0.5			
c-1,2-Dichloroethene:	ND<0.5	0.5			
Chloroform:	ND<0.5	0.5			
1,1,1-Trichloroethane:	ND<0.5	0.5			
Carbon tetrachloride:	ND<0.5	0.5			
1,2-Dichloroethane:	ND<0.5	0.5			
Trichloroethene:	ND<0.5	0.5	79/86	53-161	8%
c-1,3-Dichloropropene:	ND<0.5	0.5			
1,2-Dichloropropane:	ND<0.5	0.5			
t-1,3-Dichloropropene:	ND<0.5	0.5			
Bromodichloromethane:	ND<0.5	0.5			
1,1,2-Trichloroethane:	ND<0.5	0.5			
Tetrachloroethene:	ND<0.5	0.5			
Dibromochloromethane:	ND<0.5	0.5			
Chlorobenzene:	ND<0.5	0.5	80/78	57-171	3%
Bromoform:	ND<0.5	0.5			
1,1,2,2-Tetrachloroeth:	ND<0.5	0.5			
1,3-Dichlorobenzene:	ND<0.5	0.5			
1,2-Dichlorobenzene:	ND<0.5	0.5			
1,4-Dichlorobenzene:	ND<0.5	0.5			

ND = Not Detected
RPD = Relative Percent Difference
RL = Reporting Limit
ug/L = Parts per billion (ppb)
QC File No. 92083

Michael R. Veron
Senior Chemist
Account Manager

Certified Laboratories
825 Arnold Dr., Suite 114 • Martinez, California 94553 • (510) 313-0850 / fax (510) 229-1526

92083

Chain-of-Custody Number: A

SEACOR Chain-of-Custody Record

Address
SEACOR
1390 Willow Pass Road Suite 360
Concord CA 94520-5250

S/K. Oakland

Project # 70005-009 Task # _____
Project Manager Greg Hoen
Laboratory Superior
Turn-around time: _____

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

Analysis Request

Sample ID	Date	Time	Matrix	TPHg/BTEX 8015 (modified)/8020	TPHd 8015 (modified)	TPH 418.1	Aromatic Volatiles 602/8020	Volatile Organics 624/8240 (GC/MS)	Halogenated Volatiles 601/8010	Semi-volatile Organics 625/8270 (GC/MS)	Pesticides/PCB's 608/8080	Total Lead 7421	Priority Pollutant Metals (13)	TCLP Metals	mineral/BTEX	8010		Comments/ Instructions	Number of Containers
PADRE INF	7/12	14:00	AIR												X	X			2

Special Instructions/Comments:

Relinquished by:
Sign Gary R Clift
Print GARY R CLIFT
Company SEACOR
Time 15:00 Date 7/12/94

Received by:
Sign _____
Print _____
Company Superior
Time 15:00 Date 7/12/94

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

Received by:
Sign Simons
Print _____
Company _____
Time 7/12 Date 2255

Sample Receipt

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

SEACOR
Client:
Greg Hoen
Client Contact:
(510) 686-9780
Client Phone Number:

Date 7/12/94 Page 1 of 1

Superior Precision Analytical, Inc.
A member of ESSCON Environmental Support Service Consortium

RECEIVED
JUN 2 4 1994

CERTIFICATE OF ANALYSIS

Laboratory No.: 58210
Client : SEACOR
Client job No.: 70005-009

Date received : 06/09/94
Date reported : 06/14/94

ANALYSIS FOR MINERAL SPIRITS, BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES
BY EPA SW-846 METHOD 5030/8015M/8020
Concentration in air is calculated based on 20°C and 1 ATM. Assumed molecular weight of mineral spirits is same as decane. Reported as volume to volume.

Lab	Sample ID	Date Sampled	Date Analyzed	Analyte	Conc.	RL	Unit
1	PADRE INF	06/08/94	06/10/94	Mineral Spirits	77	30	ppm
				Benzene	ND	85	ppb
				Toluene	740	250	ppb
				Ethyl Benzene	420	65	ppb
				Xylenes	2800	250	ppb
QC	METHOD BLANK	Air	06/10/94	Mineral Spirits	ND	30	ppm
				Benzene	ND	85	ppb
				Toluene	ND	250	ppb
				Ethyl Benzene	ND	65	ppb
				Xylenes	ND	250	ppb

QAQC Summary:

Air	Gasoline	MS/MSD % Recovery = 71/77	Duplicate RPD = 8%
Air	Benzene	MS/MSD % Recovery = 79/78	Duplicate RPD = 1%
Air	Toluene	MS/MSD % Recovery = 85/82	Duplicate RPD = 4%
Air	Ethyl Benzene	MS/MSD % Recovery = 78/77	Duplicate RPD = 1%
Air	Xylenes	MS/MSD % Recovery = 81/80	Duplicate RPD = 1%

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

6/16/94
Senior Chemist
Account Manager

Certified Laboratories
1555 Burke St., Unit 1 • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

Superior Precision Analytical, Inc.
A member of ESSCON Environmental Support Service Consortium

SEACOR
Attn: GREG HOEHN

Project 70005-009
Reported 16-June-1994

Analysis for Mineral Spirits, Benzene, Toluene, Ethyl Benzene, and Xylenes by EPA SW-846 Modified Methods 5030/8015/8020.

Chronology

Laboratory Number 58210

Identification	Sampled	Received	Extracted	Analyzed	Run #	Lab #
PADRE INF	06/08/94	06/09/94	06/10/94	06/10/94		1

Certified Laboratories
1555 Burke St., Unit 1 • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

SEACOR
Attn: GREG HOEHN

Project 70005-009
Reported 16-June-1994

Analysis for Mineral Spirits, Benzene, Toluene, Ethyl Benzene, and Xylenes

Laboratory Number	Sample Identification	Matrix
58210- 1	PADRE INF	Air

RESULTS OF ANALYSIS

Laboratory Number: 58210- 1

Mineral Spirits:	460
Benzene:	ND<0.5
Toluene:	2.8
Ethyl Benzene:	1.8
Xylenes:	12
Concentration:	ug/L

Certified Laboratories
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Superior Precision Analytical, Inc.
A member of ESSCON Environmental Support Service Consortium

Analysis for Mineral Spirits, Benzene, Toluene, Ethyl Benzene, and Xylenes
Quality Assurance and Control Data - Air

Laboratory Number 58210

Compound	Method Blank (ug/L)	RL (ug/L)	Spike Recovery (%)	Limits (%)	RPD (%)
Gasoline:	ND<50	50	71/77	64-128	8%
Benzene:	ND<0.5	0.5	79/78	64-125	1%
Toluene:	ND<1.0	1.0	85/82	64-125	4%
Ethyl Benzene:	ND<0.5	0.5	78/77	64-125	1%
Xylenes:	ND<1.0	1.0	81/80	64-125	1%
Mineral Spirits:	ND<50	50			

Definitions:
ND = Not Detected
RPD = Relative Percent Difference
RL = Reporting Limit

QC File No. 58210

6/16/94
Senior Chemist
Account Manager

Certified Laboratories
1555 Burke St., Unit 1 • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

Superior Precision Analytical, Inc.
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SEACOR
Attn: GREG HOEHN

Project 70005-009
Reported 13-June-1994

HALOGENATED VOLATILE ORGANICS by EPA SW-846 Methods 5030/8010.

Chronology

Laboratory Number 58210

Identification	Sampled	Received	Extracted	Analyzed	Run #	Lab #
PADRE INF	06/08/94	06/09/94	06/09/94	06/09/64		1

Superior Precision Analytical, Inc.
1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

SEACOR
Attn: GREG HOEHN

Project 70005-009
Reported 13-June-1994

HALOGENATED VOLATILE ORGANICS by EPA SW-846 Methods 5030/8010.

Laboratory Number	Sample Identification	Matrix
58210- 1	PADRE INF	Water

RESULTS OF ANALYSIS

Laboratory Number: 58210- 1

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:	3.8
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:	6.1
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:	2.6
Dibromochloromethane:	ND<0.5
Chlorobenzene:	ND<0.5
Bromoform:	ND<0.5
1,1,2,2-Tetrachloroeth:	ND<0.5
1,3-Dichlorobenzene:	ND<0.5
1,2-Dichlorobenzene:	ND<0.5
1,4-Dichlorobenzene:	ND<0.5
Concentration:	ug/L

Superior Precision Analytical, Inc.
1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

HALOGENATED VOLATILE ORGANICS by EPA SW-846 Methods 5030/8010.
Quality Assurance and Control Data - Water

Laboratory Number 58210

Compound	Method Blank (ug/L)	RL (ug/L)	Spike Recovery (%)	Limits (%)	RPD (%)
Chloromethane:	ND<0.5	0.5			
Vinyl Chloride:	ND<0.5	0.5			
Bromomethane:	ND<0.5	0.5			
Chloroethane:	ND<0.5	0.5			
Trichlorofluoromethane:	ND<0.5	0.5			
1,1-Dichloroethene:	ND<0.5	0.5	149/146	71-163	2%
Dichloromethane:	ND<0.5	0.5			
t-1,2-Dichloroethene:	ND<0.5	0.5			
1,1-Dichloroethane:	ND<0.5	0.5			
c-1,2-Dichloroethene:	ND<0.5	0.5			
Chloroform:	ND<0.5	0.5			
1,1,1-Trichloroethane:	ND<0.5	0.5			
rbon tetrachloride:	ND<0.5	0.5			
,2-Dichloroethane:	ND<0.5	0.5			
Trichloroethene:	ND<0.5	0.5	105/109	82-131	4%
c-1,3-Dichloropropene:	ND<0.5	0.5			
1,2-Dichloropropane:	ND<0.5	0.5			
t-1,3-Dichloropropene:	ND<0.5	0.5			
Bromodichloromethane:	ND<0.5	0.5			
1,1,2-Trichloroethane:	ND<0.5	0.5			
Tetrachloroethene:	ND<0.5	0.5			
Dibromochloromethane:	ND<0.5	0.5			
Chlorobenzene:	ND<0.5	0.5	109/111	63-128	2%
Bromoform:	ND<0.5	0.5			
1,1,2,2-Tetrachloroeth:	ND<0.5	0.5			
1,3-Dichlorobenzene:	ND<0.5	0.5			
1,2-Dichlorobenzene:	ND<0.5	0.5			
1,4-Dichlorobenzene:	ND<0.5	0.5			

ND = Not Detected
RPD = Relative Percent Difference
RL = Reporting Limit
ug/L = Parts per billion (ppb)
QC File No. 58210

Senior Chemist
Account Manager

Superior Precision Analytical, Inc.
1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 821-7123

CERTIFICATE OF ANALYSIS

LABORATORY NO. 58210
CLIENT: SEACOR

DATE SAMPLED : 06/08/94
DATE ANALYZED: 06/09/94

DATE RECEIVED: 06/09/94
DATE REPORTED: 06/13/94
PROJECT NO. : 70005-009

EPA SW-846 METHOD 8010 - VOLATILE ORGANICS

SAMPLE: PADRE INF

Compound	RL ppb (V/V)	
Chloromethane	480	ND
Bromomethane	250	ND
Vinyl Chloride	390	ND
Chloroethane	270	ND
Methylene Chloride	140	1100
Trichlorofluoromethane	88	ND
1,1-Dichloroethene	120	ND
1,1-Dichloroethane	120	ND
cis-1,2-Dichloroethene	120	ND
trans-1,2-Dichloroethene	120	ND
Chloroform	100	ND
1,2-Dichloroethane	120	ND
1,1,1-Trichloroethane	90	1100
Carbon Tetrachloride	78	ND
Bromodichloromethane	68	ND
1,2-Dichloropropane	110	ND
Cis-1,3-Dichloropropene	110	ND
Trichloroethene	92	ND
Dibromochloromethane	58	ND
1,1,2-Trichloroethane	90	ND

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

LABORATORY NO. 58210
CLIENT: SEACOR

DATE SAMPLED : 06/08/94
DATE ANALYZED: 06/09/94

DATE RECEIVED: 06/09/94
DATE REPORTED: 06/13/94
PROJECT NO. : 70005-009

EPA SW-846 METHOD 8010 - VOLATILE ORGANICS

SAMPLE: PADRE INF

Compound	RL ppb (V/V)	
Trans-1,3-Dichloropropene	110	ND
Bromoform	48	ND
Tetrachloroethene	73	380
1,1,2,2-Tetrachloroethane	72	ND
Chlorobenzene	110	ND
1,3-Dichlorobenzene	82	ND
1,4-Dichlorobenzene	82	ND
1,2-Dichlorobenzene	82	ND
Freon 113	64	ND

RL = Reporting Limit
ND = ANALYTE NOT DETECTED ABOVE QUANTITATION LIMIT

Afsaneh Sadigh
Senior Chemist
Account Manager

Chain-of-Custody Number: A

SEACOR Chain-of-Custody Record

Address: 1390 Willow Pass Rd Ste 300
Concord CA 94520
(510) 686-9780

58210.

Project # 20005-009 Task #
Project Manager Greg Hoehn
Laboratory Superior
Turn-around time: Std.
Sampler's Name: Bob Robitaille
Sampler's Signature:

Analysis Request

Sample ID	Date	Time	Matrix	TPHg/BTEX 8015 (modified)/8020	TPHd 8015 (modified)	TPH 418.1	Aromatic Volatiles 602/8020	Volatile Organics 624/8240 (GC/MS)	Halogenated Volatiles 601/8010	Semi-volatile Organics 625/8270 (GC/MS)	Pesticides/PCB's 608/8080	Total Lead 7421	Priority Pollutant Metals (13)	TCLP Metals	BTEX/Mineral Spirits			Comments/ Instructions	Number of Containers
Padre Inf	6-8-94	1445	Air						X						X				2

Please initial: RP
Samples Stored in ice: NO 25°d
Appropriate containers: Yes
Samples preserved: NO
VOA's without headspace: N/A
Comments: OK

Special Instructions/Comments:
Safety Kleen
400 Market St.
Oakland CA
Quote # 94-00518
REPORT BOTH ug/L / ppmv

Relinquished by:
Sign
Print Bob Robitaille
Company SEACOR
Time 1625 Date 6-8-94

Received by:
Sign
Print D. Louie
Company AERO
Time 424 Date 6-8

Relinquished by:
Sign
Print
Company
Time 503 Date 6/9/94

Received by:
Sign
Print
Company
Time 503 Date 6/9/94

Sample Receipt

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

Client:
Client Contact:
Client Phone Number:

Date 6/8/94 Page 1 of 1

APPENDIX C

LABORATORY REPORTS - GROUNDWATER

NATIONAL ENVIRONMENTAL TESTING, INC.

Santa Rosa Division
435 Tesconi Circle
Santa Rosa, CA 95401
Tel: (707) 526-7200
Fax: (707) 526-9623

Ann Lunt
Safety-Kleen
PO Box 1447
Manhattan Beach, CA 90266

Date: 08/04/1994
NET Client Acct. No: 62100
NET Pacific Job No: 94.03127
Received: 07/21/1994

Client Reference Information

Project No: 70005-009-07

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Approved by:

Linda DeMartino
Project Coordinator

Jim Hoch
Operations Manager

cc: Greg Hoehn
Seacor
3190 Willow Pass Road, Ste 360
Concord, CA 94520

Enclosure(s)

Client Acct: 62100
Client Name: Safety-Kleen
NET Job No: 94.03127

Date: 08/04/1994
ELAP Certificate: 1386
Page: 2

Ref: Project No: 70005-009-07

SAMPLE DESCRIPTION: MW-2
Date Taken: 07/19/1994
Time Taken: 14:50
NET Sample No: 200803

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTXE,Liquid)							
METHOD 5030/M8015	--						07/27/1994
DILUTION FACTOR*	1						07/27/1994
as Mineral Spirits	ND		0.05	mg/L	5030		07/27/1994
METHOD 8020 (GC,Liquid)	--						07/27/1994
DILUTION FACTOR*	1						07/27/1994
Benzene	ND		0.5	ug/L	8020		07/27/1994
Toluene	ND		0.5	ug/L	8020		07/27/1994
Ethylbenzene	ND		0.5	ug/L	8020		07/27/1994
Xylenes (Total)	ND		0.5	ug/L	8020		07/27/1994
SURROGATE RESULTS	--						07/27/1994
Bromofluorobenzene (SURR)	76			% Rec.	5030		07/27/1994

Ref: Project No: 70005-009-07

SAMPLE DESCRIPTION: MW-2
Date Taken: 07/19/1994
Time Taken: 14:50
NET Sample No: 200803

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
METHOD 8010 (GC,Liquid)							
DILUTION FACTOR*	1						07/26/1994
Bromodichloromethane	ND		0.4	ug/L	8010		07/26/1994
Bromoform	ND		0.4	ug/L	8010		07/26/1994
Bromomethane	ND		0.4	ug/L	8010		07/26/1994
Carbon tetrachloride	ND		0.4	ug/L	8010		07/26/1994
Chlorobenzene	ND		0.4	ug/L	8010		07/26/1994
Chloroethane	ND		0.4	ug/L	8010		07/26/1994
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		07/26/1994
Chloroform	ND		0.4	ug/L	8010		07/26/1994
Chloromethane	ND		0.4	ug/L	8010		07/26/1994
Dibromochloromethane	ND		0.4	ug/L	8010		07/26/1994
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		07/26/1994
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		07/26/1994
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		07/26/1994
Dichlorodifluoromethane	ND		0.4	ug/L	8010		07/26/1994
1,1-Dichloroethane	ND		0.4	ug/L	8010		07/26/1994
1,2-Dichloroethane	ND		0.4	ug/L	8010		07/26/1994
1,1-Dichloroethene	ND		0.4	ug/L	8010		07/26/1994
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		07/26/1994
1,2-Dichloropropane	ND		0.4	ug/L	8010		07/26/1994
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		07/26/1994
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		07/26/1994
Methylene chloride	ND		10	ug/L	8010		07/26/1994
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		07/26/1994
Tetrachloroethene	ND		0.4	ug/L	8010		07/26/1994
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		07/26/1994
1,1,2-Trichloroethane	ND		1	ug/L	8010		07/26/1994
Trichloroethene	ND		0.4	ug/L	8010		07/26/1994
Trichlorofluoromethane	ND		0.4	ug/L	8010		07/26/1994
Vinyl chloride	ND		0.4	ug/L	8010		07/26/1994
SURROGATE RESULTS	--						07/26/1994
1,4-Difluorobenzene (SURR)	77			% Rec.			07/26/1994
Bromochloromethane (SURR)	77			% Rec.			07/26/1994

Ref: Project No: 70005-009-07

SAMPLE DESCRIPTION: MW-3
Date Taken: 07/19/1994
Time Taken: 13:30
NET Sample No: 200804

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTXE,Liquid)							
METHOD 5030/M8015	--						07/27/1994
DILUTION FACTOR*	1						07/27/1994
as Mineral Spirits	ND		0.05	mg/L	5030		07/27/1994
METHOD 8020 (GC,Liquid)	--						07/27/1994
DILUTION FACTOR*	1						07/27/1994
Benzene	ND		0.5	ug/L	8020		07/27/1994
Toluene	ND		0.5	ug/L	8020		07/27/1994
Ethylbenzene	ND		0.5	ug/L	8020		07/27/1994
Xylenes (Total)	ND		0.5	ug/L	8020		07/27/1994
SURROGATE RESULTS	--						07/27/1994
Bromofluorobenzene (SURR)	103			% Rec.	5030		07/27/1994

Ref: Project No: 70005-009-07

SAMPLE DESCRIPTION: MW-3
Date Taken: 07/19/1994
Time Taken: 13:30
NET Sample No: 200804

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
METHOD 8010 (GC,Liquid)							
DILUTION FACTOR*	1						07/26/1994
Bromodichloromethane	ND		0.4	ug/L	8010		07/26/1994
Bromoform	ND		0.4	ug/L	8010		07/26/1994
Bromomethane	ND		0.4	ug/L	8010		07/26/1994
Carbon tetrachloride	ND		0.4	ug/L	8010		07/26/1994
Chlorobenzene	ND		0.4	ug/L	8010		07/26/1994
Chloroethane	ND		0.4	ug/L	8010		07/26/1994
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		07/26/1994
Chloroform	ND		0.4	ug/L	8010		07/26/1994
Chloromethane	ND		0.4	ug/L	8010		07/26/1994
Dibromochloromethane	ND		0.4	ug/L	8010		07/26/1994
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		07/26/1994
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		07/26/1994
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		07/26/1994
Dichlorodifluoromethane	ND		0.4	ug/L	8010		07/26/1994
1,1-Dichloroethane	ND		0.4	ug/L	8010		07/26/1994
1,2-Dichloroethane	ND		0.4	ug/L	8010		07/26/1994
1,1-Dichloroethene	ND		0.4	ug/L	8010		07/26/1994
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		07/26/1994
1,2-Dichloropropane	ND		0.4	ug/L	8010		07/26/1994
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		07/26/1994
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		07/26/1994
Methylene chloride	ND		10	ug/L	8010		07/26/1994
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		07/26/1994
Tetrachloroethene	ND		0.4	ug/L	8010		07/26/1994
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		07/26/1994
1,1,2-Trichloroethane	ND		1	ug/L	8010		07/26/1994
Trichloroethene	ND		0.4	ug/L	8010		07/26/1994
Trichlorofluoromethane	ND		0.4	ug/L	8010		07/26/1994
Vinyl chloride	ND		0.4	ug/L	8010		07/26/1994
SURROGATE RESULTS	--						07/26/1994
1,4-Difluorobenzene (SURR)	75			% Rec.			07/26/1994
Bromochloromethane (SURR)	76			% Rec.			07/26/1994

Ref: Project No: 70005-009-07

SAMPLE DESCRIPTION: MW-4
Date Taken: 07/19/1994
Time Taken: 12:15
NET Sample No: 200805

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTXE,Liquid)							
METHOD 5030/M8015	--						07/27/1994
DILUTION FACTOR*	1						07/27/1994
as Mineral Spirits	0.20	G1	0.05	mg/L	5030		07/27/1994
METHOD 8020 (GC,Liquid)	--						07/27/1994
DILUTION FACTOR*	1						07/27/1994
Benzene	ND		0.5	ug/L	8020		07/27/1994
Toluene	ND		0.5	ug/L	8020		07/27/1994
Ethylbenzene	ND		0.5	ug/L	8020		07/27/1994
Xylenes (Total)	ND		0.5	ug/L	8020		07/27/1994
SURROGATE RESULTS	--						07/27/1994
Bromofluorobenzene (SURR)	101			% Rec.	5030		07/27/1994

G1 : The result for Mineral Spirits is an unk. HC which consists of a single peak.

Ref: Project No: 70005-009-07

SAMPLE DESCRIPTION: MW-4
Date Taken: 07/19/1994
Time Taken: 12:15
NET Sample No: 200805

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
METHOD 8010 (GC,Liquid)							
DILUTION FACTOR*	1						07/26/1994
Bromodichloromethane	ND		0.4	ug/L	8010		07/26/1994
Bromoform	ND		0.4	ug/L	8010		07/26/1994
Bromomethane	ND		0.4	ug/L	8010		07/26/1994
Carbon tetrachloride	ND		0.4	ug/L	8010		07/26/1994
Chlorobenzene	ND		0.4	ug/L	8010		07/26/1994
Chloroethane	ND		0.4	ug/L	8010		07/26/1994
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		07/26/1994
Chloroform	ND		0.4	ug/L	8010		07/26/1994
Chloromethane	ND		0.4	ug/L	8010		07/26/1994
Dibromochloromethane	ND		0.4	ug/L	8010		07/26/1994
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		07/26/1994
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		07/26/1994
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		07/26/1994
Dichlorodifluoromethane	ND		0.4	ug/L	8010		07/26/1994
1,1-Dichloroethane	ND		0.4	ug/L	8010		07/26/1994
1,2-Dichloroethane	ND		0.4	ug/L	8010		07/26/1994
1,1-Dichloroethene	ND		0.4	ug/L	8010		07/26/1994
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		07/26/1994
1,2-Dichloropropane	ND		0.4	ug/L	8010		07/26/1994
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		07/26/1994
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		07/26/1994
Methylene chloride	ND		10	ug/L	8010		07/26/1994
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		07/26/1994
Tetrachloroethene	ND		0.4	ug/L	8010		07/26/1994
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		07/26/1994
1,1,2-Trichloroethane	ND		1	ug/L	8010		07/26/1994
Trichloroethene	410	FC	0.4	ug/L	8010		07/26/1994
Trichlorofluoromethane	ND		0.4	ug/L	8010		07/26/1994
Vinyl chloride	ND		0.4	ug/L	8010		07/26/1994
SURROGATE RESULTS	--						07/26/1994
1,4-Difluorobenzene (SURR)	79			% Rec.			07/26/1994
Bromochloromethane (SURR)	85			% Rec.			07/26/1994

FC : Compound quantitated at a 10X dilution factor.

Ref: Project No: 70005-009-07

CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

Parameter	CCV Standard % Recovery	CCV Standard Amount Found	CCV Standard Amount Expected	Units	Date Analyzed	Analyst Initials
TPH (Gas/BTXE,Liquid)						
Benzene	95.0	4.75	5.00	ug/L	07/27/1994	asm
Toluene	91.4	4.57	5.00	ug/L	07/27/1994	asm
Ethylbenzene	95.2	4.76	5.00	ug/L	07/27/1994	asm
Xylenes (Total)	93.8	14.07	15.0	ug/L	07/27/1994	asm
Bromofluorobenzene (SURR)	99.0	99	100	% Rec.	07/27/1994	asm

Ref: Project No: 70005-009-07

CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

Parameter	CCV Standard % Recovery	CCV Standard Amount Found	CCV Standard Amount Expected	Units	Date Analyzed	Analyst Initials
METHOD 8010 (GC,Liquid)						
Bromodichloromethane	96.5	19.3	20.0	ug/L	07/26/1994	asm
Bromoform	101.5	20.3	20.0	ug/L	07/26/1994	asm
Bromomethane	90.0	18.0	20.0	ug/L	07/26/1994	asm
Carbon tetrachloride	98.5	19.7	20.0	ug/L	07/26/1994	asm
Chlorobenzene	96.5	19.3	20.0	ug/L	07/26/1994	asm
Chloroethane	93.0	18.6	20.0	ug/L	07/26/1994	asm
2-Chloroethylvinyl ether	100.0	20.0	20.0	ug/L	07/26/1994	asm
Chloroform	102.0	20.4	20.0	ug/L	07/26/1994	asm
Chloromethane	88.0	17.6	20.0	ug/L	07/26/1994	asm
Dibromochloromethane	100.0	20.0	20.0	ug/L	07/26/1994	asm
1,2-Dichlorobenzene	101.5	20.3	20.0	ug/L	07/26/1994	asm
1,3-Dichlorobenzene	96.5	19.3	20.0	ug/L	07/26/1994	asm
1,4-Dichlorobenzene	96.5	19.3	20.0	ug/L	07/26/1994	asm
Dichlorodifluoromethane	89.0	17.8	20.0	ug/L	07/26/1994	asm
1,1-Dichloroethane	97.0	19.4	20.0	ug/L	07/26/1994	asm
1,2-Dichloroethane	97.5	19.5	20.0	ug/L	07/26/1994	asm
1,1-Dichloroethene	95.0	19.0	20.0	ug/L	07/26/1994	asm
trans-1,2-Dichloroethene	96.0	19.2	20.0	ug/L	07/26/1994	asm
1,2-Dichloropropane	99.0	19.8	20.0	ug/L	07/26/1994	asm
cis-1,3-Dichloropropene	99.5	19.9	20.0	ug/L	07/26/1994	asm
trans-1,3-Dichloropropene	100.0	20.0	20.0	ug/L	07/26/1994	asm
Methylene chloride	100.0	20.0	20.0	ug/L	07/26/1994	asm
1,1,2,2-Tetrachloroethane	80.0	16.0	20.0	ug/L	07/26/1994	asm
Tetrachloroethene	80.0	16.0	20.0	ug/L	07/26/1994	asm
1,1,1-Trichloroethane	98.0	19.6	20.0	ug/L	07/26/1994	asm
1,1,2-Trichloroethane	100.0	20.0	20.0	ug/L	07/26/1994	asm
Trichloroethene	95.5	19.1	20.0	ug/L	07/26/1994	asm
Trichlorofluoromethane	95.0	19.0	20.0	ug/L	07/26/1994	asm
Vinyl chloride	89.0	17.8	20.0	ug/L	07/26/1994	asm
1,4-Difluorobenzene (SURR)	88.0	88	100	% Rec.	07/26/1994	asm
Bromochloromethane (SURR)	93.0	93	100	% Rec.	07/26/1994	asm

Ref: Project No: 70005-009-07

METHOD BLANK REPORT

Parameter	Method Blank Amount Found	Reporting Limit	Units	Date Analyzed	Analyst Initials
TPH (Gas/BTXE,Liquid)					
as Mineral Spirits	ND	0.05	mg/L	07/27/1994	asm
Benzene	ND	0.5	ug/L	07/27/1994	asm
Toluene	ND	0.5	ug/L	07/27/1994	asm
Ethylbenzene	ND	0.5	ug/L	07/27/1994	asm
Xylenes (Total)	ND	0.5	ug/L	07/27/1994	asm
Bromofluorobenzene (SURR)	102		% Rec.	07/27/1994	asm

Ref: Project No: 70005-009-07

METHOD BLANK REPORT

Parameter	Method Blank Amount Found	Reporting Limit	Units	Date Analyzed	Analyst Initials
METHOD 8010 (GC,Liquid)					
Bromodichloromethane	ND	0.4	ug/L	07/26/1994	asm
Bromoform	ND	0.4	ug/L	07/26/1994	asm
Bromomethane	ND	0.4	ug/L	07/26/1994	asm
Carbon tetrachloride	ND	0.4	ug/L	07/26/1994	asm
Chlorobenzene	ND	0.4	ug/L	07/26/1994	asm
Chloroethane	ND	0.4	ug/L	07/26/1994	asm
2-Chloroethylvinyl ether	ND	1.0	ug/L	07/26/1994	asm
Chloroform	ND	0.4	ug/L	07/26/1994	asm
Chloromethane	ND	0.4	ug/L	07/26/1994	asm
Dibromochloromethane	ND	0.4	ug/L	07/26/1994	asm
1,2-Dichlorobenzene	ND	0.4	ug/L	07/26/1994	asm
1,3-Dichlorobenzene	ND	0.4	ug/L	07/26/1994	asm
1,4-Dichlorobenzene	ND	0.4	ug/L	07/26/1994	asm
Dichlorodifluoromethane	ND	0.4	ug/L	07/26/1994	asm
1,1-Dichloroethane	ND	0.4	ug/L	07/26/1994	asm
1,2-Dichloroethane	ND	0.4	ug/L	07/26/1994	asm
1,1-Dichloroethene	ND	0.4	ug/L	07/26/1994	asm
trans-1,2-Dichloroethene	ND	0.4	ug/L	07/26/1994	asm
1,2-Dichloropropane	ND	0.4	ug/L	07/26/1994	asm
cis-1,3-Dichloropropene	ND	0.4	ug/L	07/26/1994	asm
trans-1,3-Dichloropropene	ND	0.4	ug/L	07/26/1994	asm
Methylene chloride	ND	10	ug/L	07/26/1994	asm
1,1,2,2-Tetrachloroethane	ND	0.4	ug/L	07/26/1994	asm
Tetrachloroethene	ND	0.4	ug/L	07/26/1994	asm
1,1,1-Trichloroethane	ND	0.4	ug/L	07/26/1994	asm
1,1,2-Trichloroethane	ND	0.4	ug/L	07/26/1994	asm
Trichloroethene	ND	0.4	ug/L	07/26/1994	asm
Trichlorofluoromethane	ND	0.4	ug/L	07/26/1994	asm
Vinyl chloride	ND	0.4	ug/L	07/26/1994	asm
1,4-Difluorobenzene (SURR)	83		% Rec.	07/26/1994	asm
Bromochloromethane (SURR)	83		% Rec.	07/26/1994	asm

Ref: Project No: 70005-009-07

MATRIX SPIKE / MATRIX SPIKE DUPLICATE

Parameter	Matrix Spike % Rec.	Matrix Spike Dup % Rec.	RPD	Spike Amount	Sample Conc.	Matrix Spike Conc.	Matrix Spike Dup. Conc.	Units	Date Analyzed	Analyst Initials
TPH (Gas/BTXE,Liquid)										
Benzene	110.0	109.4	0.5	31.0	ND	34.1	33.9	ug/L	07/27/1994	asm
Toluene	109.1	108.9	0.2	97.4	ND	106.3	106.1	ug/L	07/27/1994	asm

Ref: Project No: 70005-009-07

MATRIX SPIKE / MATRIX SPIKE DUPLICATE

Parameter	Matrix Spike % Rec.	Matrix Spike Dup % Rec.	RPD	Spike Amount	Sample Conc.	Matrix Spike Conc.	Matrix Spike Dup. Conc.	Units	Date Analyzed	Analyst Initials
METHOD 8010 (GC,Liquid)										
Chlorobenzene	105.0	105.5	0.5	20.0	ND	21.0	21.1	ug/L	07/26/1994	asm
1,1-Dichloroethene	102.5	101.0	1.5	20.0	ND	20.5	20.2	ug/L	07/26/1994	asm
Trichloroethene	103.5	102.5	1.0	20.0	ND	20.7	20.5	ug/L	07/26/1994	asm

KEY TO ABBREVIATIONS and METHOD REFERENCES

<	:	Less than; When appearing in results column indicates analyte not detected at the value following. This datum supercedes the listed Reporting Limit.
*	:	Reporting Limits are a function of the dilution factor for any given sample. Actual reporting limits and results have been multiplied by the listed dilution factor. Do not multiply the reporting limits or reported values by the dilution factor.
dw	:	Result expressed as dry weight.
mean	:	Average; sum of measurements divided by number of measurements.
mg/Kg (ppm)	:	Concentration in units of milligrams of analyte per kilogram of sample, wet-weight basis (parts per million).
mg/L	:	Concentration in units of milligrams of analyte per liter of sample.
mL/L/hr	:	Milliliters per liter per hour.
MPN/100 mL	:	Most probable number of bacteria per one hundred milliliters of sample.
N/A	:	Not applicable.
NA	:	Not analyzed.
ND	:	Not detected; the analyte concentration is less than the applicable listed reporting limit.
NTU	:	Nephelometric turbidity units.
RPD	:	Relative percent difference, 100 [Value 1 - Value 2]/mean value.
SNA	:	Standard not available.
ug/Kg (ppb)	:	Concentration in units of micrograms of analyte per kilogram of sample, wet-weight basis (parts per billion).
ug/L	:	Concentration in units of micrograms of analyte per liter of sample.
umhos/cm	:	Micromhos per centimeter.

Method References

Methods 100 through 493: see "Methods for Chemical Analysis of Water & Wastes", U.S. EPA, 600/4-79-020, Rev. 1983.

Methods 601 through 625: see "Guidelines Establishing Test Procedures for the Analysis of Pollutants" U.S. EPA, 40 CFR, Part 136, Rev. 1988.

Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", U.S. EPA SW-846, 3rd edition, 1986., Rev. 1, December 1987.

SM: see "Standard Methods for the Examination of Water & Wastewater, 17th Edition, APHA, 1989.

Revised September, 1993
abb.93

Chain-of-Custody Number: A

SEACOR Chain-of-Custody Record

1474

Address:
SEACOR
1390 willowPASS Road Suite 360
Concord, CA 94520-5250

Project # 70005-009-03 Task # 001
Project Manager Greg Hoehn
Laboratory NET
Turn-around time: STANDARD
Sampler's Name: GARY CLIFT
Sampler's Signature: Gary Clift

Analysis Request

Sample ID	Date	Time	Matrix	TPHg/BTEX 8015 (modified)/8020	TPHd 8015 (modified)	TPH 418.1	Aromatic Volatiles 602/8020	Volatile Organics 624/8240 (GC/MS)	Halogenated Volatiles 601/8010	Semi-volatile Organics 625/8270 (GC/MS)	Pesticides/PCB's 608/8080	Total Lead 7421	Priority Pollutant Metals (13)	TCLP Metals	BTEX Xylenes 1 SAMPLES			Comments/ Instructions	Number of Containers
MW-2	7/19	14:50	H2O	X	X				X						X				4
MW-3	7/19	13:30	H2O						X						X				4
MW-4	7/19	12:15	H2O						X						X				4

CUSTODY SEALED 7/20/94 @ 1605 BH

Temp Record: 7.5°C

Special Instructions/Comments:
Site: Safety-Kleen Corp.
400 Market Street
Oakland, CA

P.O.# E10275

Relinquished by:
Sign Greg Hoehn
Print Greg Hoehn
Company SEACOR
Time 1455 Date 7-20

Received by:
Sign Betty Harvey
Print BETTY HARVEY
Company NET
Time 1455 Date 7/20/94

Relinquished by:
Sign Betty Harvey
Print BETTY HARVEY
Company NET
Time 1605 Date 7/20/94

Received by: (LAB USE)
Sign K. Temple
Print K. Temple
Company NET
Time 0800 Date 7/21/94

Sample Receipt

Total no. of containers	12
Chain of custody seals:	Y
Rec'd good condition/cold:	Y
Conforms to record:	Y

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

Date 7 / 20 / 94 Page 1 of 1