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HAZMAT

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January 5, 1994

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

Re: **Submittal of the Quarterly Groundwater Monitoring and Soil Vapor Extraction Report**

Dear Ms. Eberle:

Enclosed is the quarterly report which summarizes the groundwater monitoring and vapor extraction activities conducted at the Safety-Kleen Service Center located at 400 Market Street in Oakland, California. This report covers the period from September through November 1993. Also included is information regarding the product recovery system installed in January 1993.

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

Sincerely,

for Anne Lunt
Senior Project Manager - Remediation
Safety-Kleen Corporation

cc: Ms. Jane Spetalnick, Safety-Kleen Corporation
Mr. Gary Long, Safety-Kleen Corporation
Mr. Ray Orlando, Safety-Kleen Corporation
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, SEACOR®

SKOAKL02.L11
01/05/94
Job No. 70005-009-02

**QUARTERLY GROUNDWATER
MONITORING AND SOIL VAPOR
EXTRACTION REPORT
400 MARKET STREET
OAKLAND, CALIFORNIA**

Job No. 70005-009-02

**Submitted by:
Science & Engineering Analysis Corporation**

1-5-94

for
Ms. Anne Lunt
Safety-Kleen Corp.
P.O. Box 1447
Manhattan Beach, CA 90266

January 5, 1994

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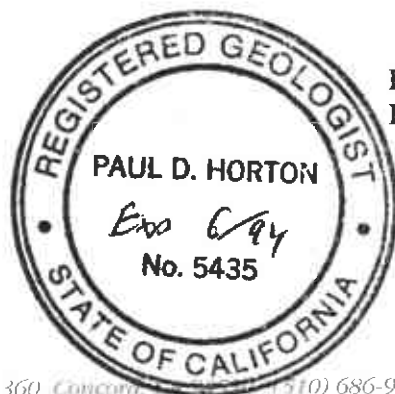


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1.0 INTRODUCTION

This report presents the results of groundwater monitoring and sampling activities conducted for the quarter of September through November 1993 at the Safety-Kleen Service Center located at 400 Market Street in Oakland, California (Figure 1 and Figure 2). Also included are the soil vapor extraction (SVE) system results of 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. Clean and spent mineral spirits are currently stored in the two double-walled USTs at the site. One UST is used to temporarily store spent mineral spirits prior to shipment to Safety-Kleen's recycling center in Reedley, California and one UST is used to store clean mineral spirits for 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 recovery 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.

3.0 SCOPE OF WORK

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

3.1 SOIL VAPOR EXTRACTION SYSTEM

The SVE 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, 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.

The SVE system was monitored on a weekly basis from July 23, until November 10, 1993. On October 21, 1993, an air permit modification was issued by the BAAQMD to reduce the frequency of system monitoring events to bi-weekly intervals. Bi-weekly system monitoring was initiated on November 17, 1993. During each 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 Permits.

Vapor samples were collected on September 9, October 6, and November 10, 1993 from the system influent. The analytical data are used to calculate mineral spirits removal data. All samples were collected in Tedlar bags and transported under chain-of-custody to GTEL Environmental Laboratories, Inc. in Concord, California 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 October 20 and 21, 1993, all on and off site monitor wells (12 total) were monitored for depth-to-water using a water level indicator calibrated to 0.01-foot (Figure 2). The depth-to-water measurements were used with well survey data to construct a potentiometric surface map. *11" EP on 10-20-93*

On October 20 and 21, 1993, the monitor wells were purged by hand bailing (except well MW-13 which is sampled on an annual basis and well MW-9 which contains floating mineral spirits) 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 bailers. 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 were 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 daily and weekly monitoring conducted through November 24, 1993 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 120 $\mu\text{g}/\ell$ on September 9, 410 $\mu\text{g}/\ell$ on October 6, and 300 $\mu\text{g}/\ell$ on November 10, 1993. Results of BTEX and purgeable halocarbon analyses of system influent samples were 2 $\mu\text{g}/\ell$ benzene, 3 $\mu\text{g}/\ell$ toluene, 3 $\mu\text{g}/\ell$ ethylbenzene, and 9 $\mu\text{g}/\ell$ xylenes on September 9; 4 $\mu\text{g}/\ell$ ethylbenzene, and 10 $\mu\text{g}/\ell$ xylenes on October 6; and 0.5 $\mu\text{g}/\ell$ toluene, 3 $\mu\text{g}/\ell$ ethylbenzene, 2 $\mu\text{g}/\ell$ xylenes, and 0.5 $\mu\text{g}/\ell$ 1,1,1-trichloroethane on November 10, 1993. 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, analytical data collected through November 10, 1993 indicate 523.8 pounds of mineral spirits have been removed.~~ Approximately 292.1 gallons of liquid have been removed by the Padre™ system and incorporated into the Safety-Kleen recycling process through November 24, 1993 (Table 3). Based on vapor stream analytical data versus liquid hydrocarbon recovery mass balance calculations, it appears that approximately 70% of the liquid recovered is water and 30% mineral spirits.

4.2 RW-1 MINERAL SPIRITS RECOVERY

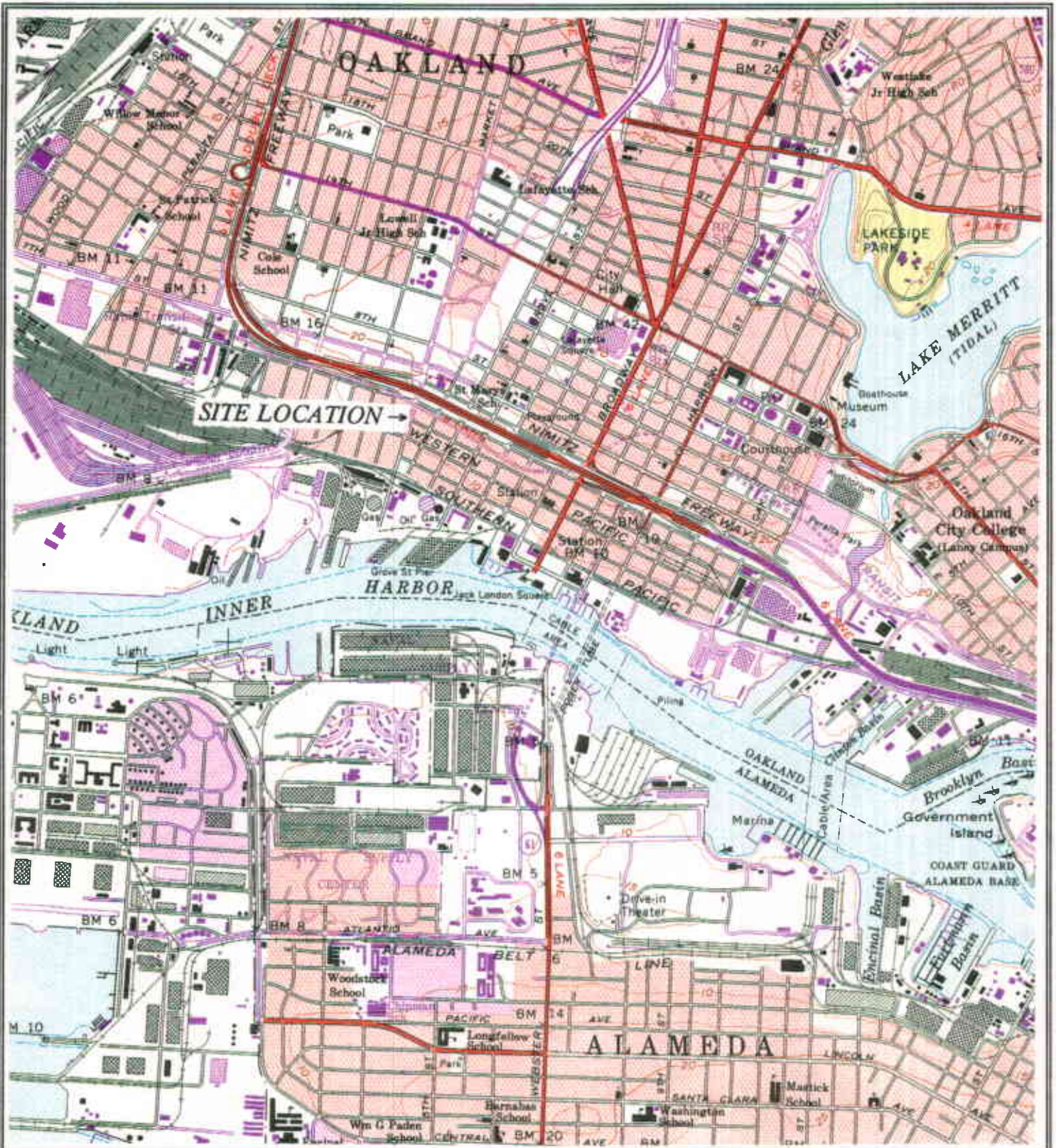
The mineral spirits recovery skimming pump was repaired and has been running since September 1993. Product recovery data has been calculated to be 10.3 gallons during this reporting period. A total of 21.1 gallons of product have been removed since the pump was installed on January 19, 1993. Product recovery data are summarized on Table 4.

4.3 GROUNDWATER ELEVATIONS

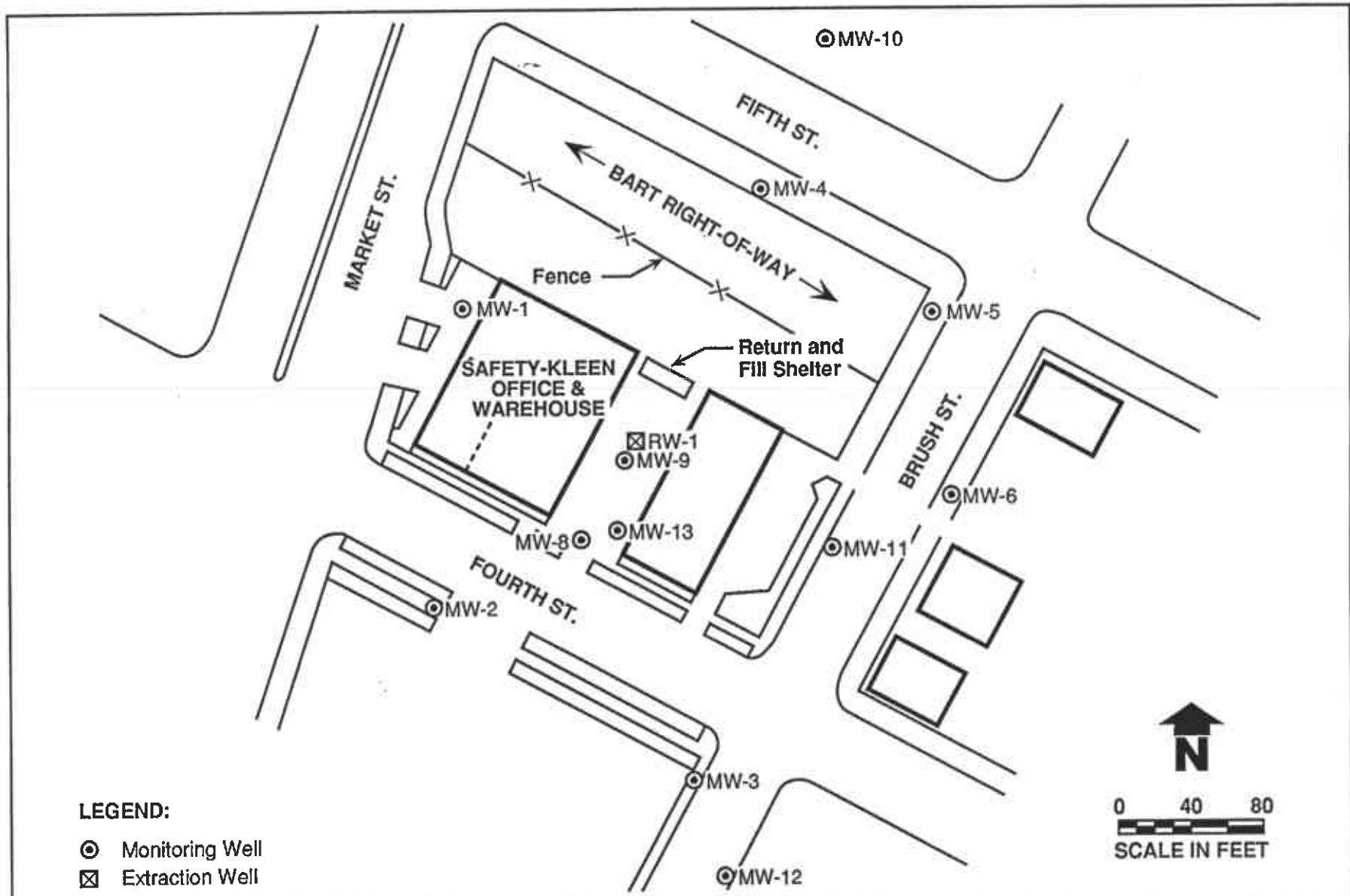
Groundwater elevations and depth-to-water readings as measured on October 20, 1993 are presented in Table 5. The average water table elevation at the site decreased by 0.36-feet since the July 29, 1993 monitoring and sampling event. A potentiometric surface map is presented as Figure 4. **The groundwater flow direction remains to the south, consistent with historic site data.** The hydraulic gradient is an average of 0.003 feet/foot across the site. This gradient is consistent with 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 ten groundwater samples collected on October 20 and 21, 1993. TPHms was reported in the sample collected from well MW-4 at a concentration of 400 $\mu\text{g}/\ell$; however, the laboratory analytical report notes that the result reported as mineral spirits is in fact an unknown hydrocarbon which consists of several peaks on the chromatogram. ~~No~~ concentrations of TPHms were detected in any of the remaining wells. Volatile organic compounds (VOCs) were detected in groundwater samples from seven wells (MW-4, MW-5, MW-6, MW-8, MW-10, MW-11 and MW-12). VOCs detected during this sampling event consisted of 1,2-dichloroethane (1,2-DCA), trichloroethene (TCE), chloroform, 1,2-dichloroethene (1,2-DCE), and chlorobenzene. The presence of TCE in upgradient wells has been interpreted as the result of an off-site plume with a source unrelated to activities at the Safety-Kleen facility. Analytical test results of the compounds detected this sampling event are summarized in Table 6. Copies of the groundwater laboratory analytical reports are included in Appendix C. Analytical test results showing compounds detected since the July 9, 1992 sampling event are presented in Table 7.



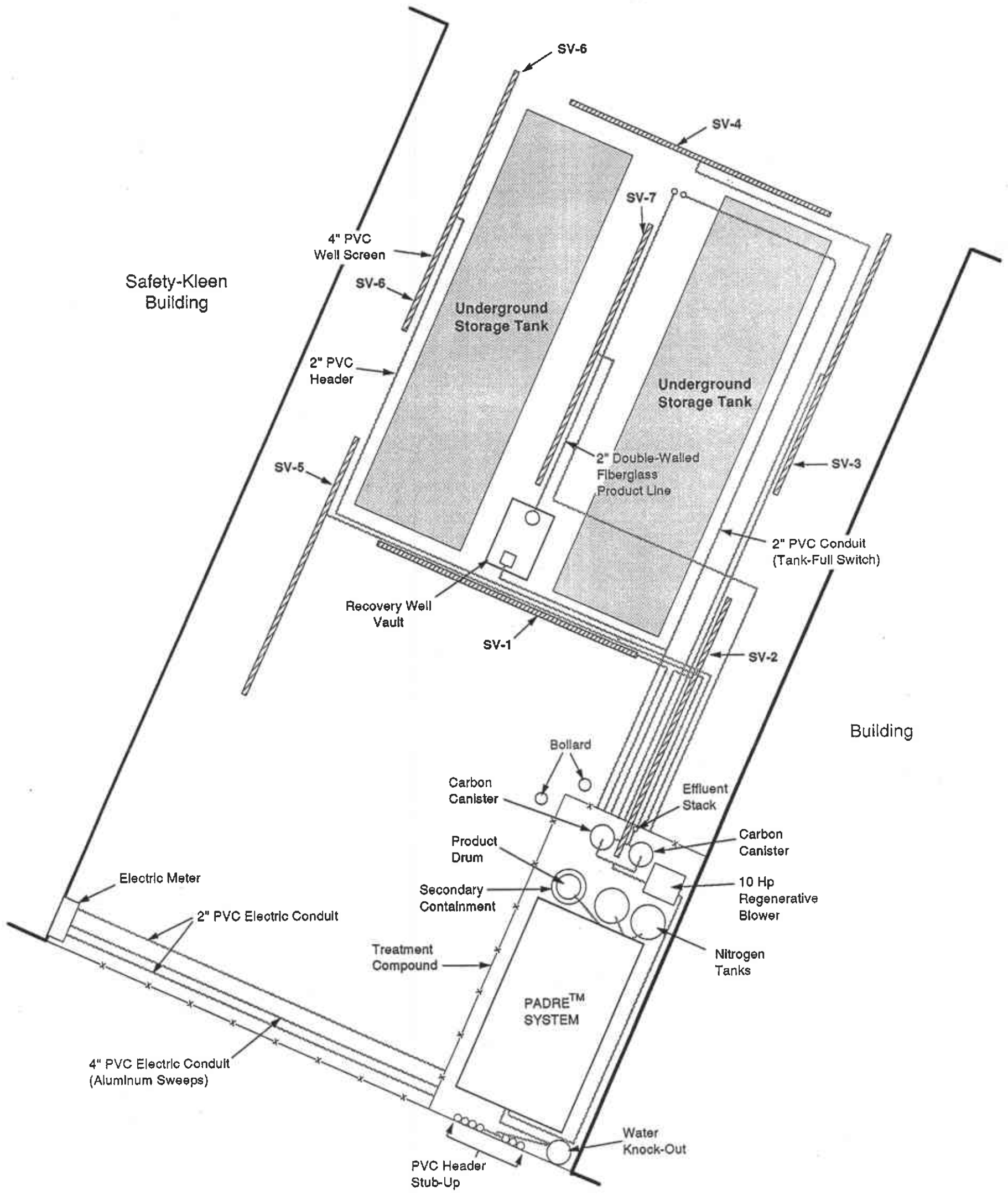
DRAFTED BY: TS	CHECKED BY: GDH	PROJECT NO. 70005-009-02	FIGURE 1	SEACOR 1390 Willow Pass Road Suite 360 Concord, CA 94520
DWG. DATE: 12/14/92	REV. DATE: 12/14/92			
FILE NAME: OAKLAND2.F01				



LEGEND:

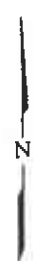
- ⊙ Monitoring Well
- ⊠ Extraction Well

DRAFTED BY: LC	CHECKED BY: GH	PROJECT NO. 70005-009	FIGURE 2	SEACOR 1390 Willow Pass Rd. Suite 360 Concord, CA 94520
DWG. DATE: 1/14/93	REV. DATE: 1/18/93	SAFETY-KLEEN CORPORATION	SITE PLAN	
FILE NAME: S/SK-OKLND/02		OAKLAND, CALIFORNIA		

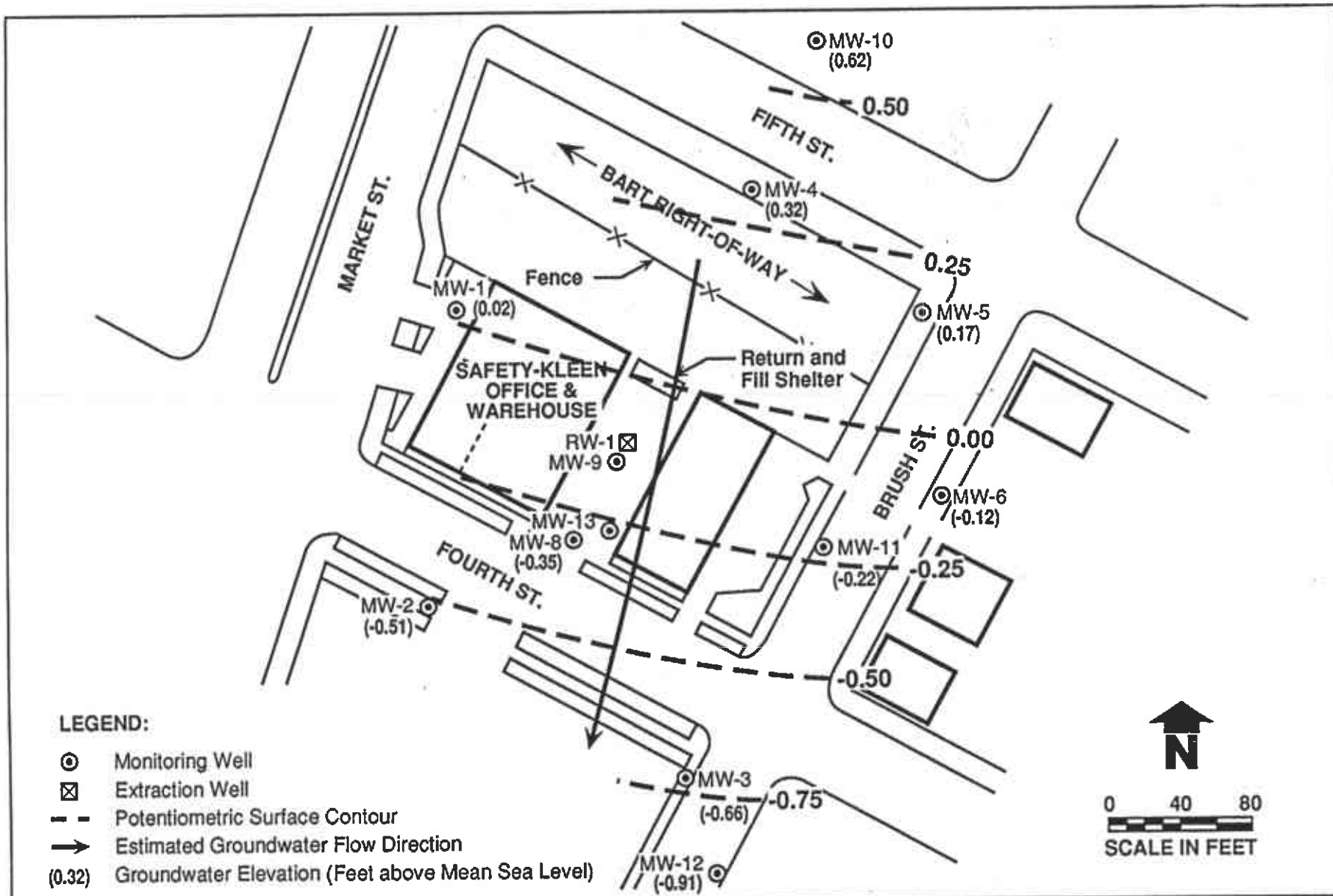


Safety-Kleen Building

Building



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:				



DRAFTED BY: LC	CHECKED BY: RR
DWG. DATE: 11/22/93	REV. DATE: 11/23/93
FILE NAME: S/SK-OKLND/06	

PROJECT NO. 70005-009
SAFETY-KLEEN CORPORATION
OAKLAND, CALIFORNIA

FIGURE 4
POTENTIOMETRIC SURFACE MAP
10-20-93

SEACOR
1390 Willow Pass Rd.
Suite 360
Concord, CA
94520

Table 1
Vapor Extraction System Monitoring Data

Date	Extraction Vacuum in. H2O	Extraction Flowrate scfm	KO Vacuum in. H2O(1)	Padre Influent (ppmv)	Padre Effluent (ppmv)	Stack Effluent (ppmv)	Sampler	Notes
05-27-93	2	114	22	40	4	0	GGA	24 hours run from 05/27-28
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	
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 gallons 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 gallons removed on 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 gallons removed on 8/19 (129.5 total)
08-24-93	5.75	117	24	128	6	7.3	RPR	

(1) Knockout Pot Effluent Vacuum.

Table 1
Vapor Extraction System Monitoring Data

Date	Extraction Vacuum in. H2O	Extraction Flowrate scfm	KO Vacuum in. H2O(1)	Padre Influent (ppmv)	Padre Effluent (ppmv)	Stack Effluent (ppmv)	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 gallons removed on 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 gallons removed on 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 gallons removed on 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 gallons removed on 11/24 (292.1 total)

(1) Knockout Pot Effluent Vacuum.

TABLE 2
Vapor Extraction System Mineral Spirits Removal Data

DATE	ELAPSED OPERATING TIME (hours)	TPHms INFLUENT (ug/l)	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

TPHms = total petroleum hydrocarbons as mineral spirits
 ug/l = micrograms per liter, or parts per billion
 cfm = cubic feet per minute
 lbs = pounds

TABLE 3
LIQUID RECOVERY DATA
From PADRE™ System

<i>Date</i>	<i>Liquid Recovered This Period (gallons)</i>	<i>Cummulative Liquid Recovered (gallons)</i>
June 25, 1993	38.8	38.8
July 23, 1993	55.2	94.0
August 19, 1993	35.5	129.5
September 15, 1993	45.4	129.5
September 30, 1930	29.7	204.6
October 25, 1993	42.9	247.5
November 24, 1993	44.6	292.1

TABLE 4
PRODUCT RECOVERY DATA
From Well RW-1

<i>Date</i>	<i>Product Recovered This Period (gallons)</i>	<i>Cummulative Product Recovered (gallons)</i>
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

**TABLE 5
GROUNDWATER MONITORING DATA
OCTOBER 20, 1993**

<i>Well I.D.</i>	<i>TOC Elevation (ft msl)</i>	<i>DTW (ft)</i>	<i>DTP (ft)</i>	<i>PT (ft)</i>	<i>ADJ Elevation (ft msl)</i>
MW-1	7.99	8.01	-	-	-0.02
MW-2	8.20	8.71	-	-	-0.51
MW-3	6.66	7.32	-	-	-0.66
MW-4	10.32	10.00	-	-	0.32
MW-5	10.28	10.11	-	-	0.17
MW-6	8.97	9.09	-	-	-0.12
MW-8	7.80	8.15	-	-	-0.35
MW-9	8.21	*8.81	9.55	0.92	*0.14
MW-10	10.43	9.81	-	-	0.62
MW-11	7.91	8.13	-	-	-0.22
MW-12	6.74	7.65	-	-	-0.91
MW-13	8.08	8.65	-	-	-0.57

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)
 * = Measurement is approximate due to emulsion layer between groundwater and product

TABLE 6
ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
OCTOBER 20 AND 21, 1993
(Results in parts per billion)

Well I.D.	1,2-DCA	Chloroform	TCE	1,2-DCE	Chlorobenzene	TPHms
MW-1	-	-	-	-	-	-
MW-2	-	-	-	-	-	-
MW-3	-	-	-	-	-	-
MW-4	-	1.9	-	0.6	-	* 400
MW-5	-	-	12	-	-	-
MW-6	-	-	1.3	-	-	-
MW-8	5.2	-	15	-	5.4	-
MW-10	-	-	42	3.0	-	-
MW-11	-	-	11	-	-	-
MW-12	-	-	34	-	-	-

ONLY DETECTED COMPOUNDS ARE LISTED. FOR A COMPLETE LIST OF ANALYTES SEE APPENDIX C.

- = Not Detected
 1,2-DCA = 1,2-dichloroethane
 TCE = trichloroethene
 1,2-DCE = 1,2-dichloroethene
 TPHms = total petroleum hydrocarbons as mineral spirits

NOTE: * = Laboratory report indicates the result for mineral spirits is an unknown hydrocarbon which consists of several peaks.

TABLE 7
SUMMARY OF ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
(Results in Parts Per Billion)

Compound	MW-1						MW-2					
	7/6/92	10/19/92	1/20/93	4/20/93	7/29/93	10/21/93	7/6/92	10/19/92	1/20/93	4/20/93	7/30/93	10/21/93
1,1-Dichloroethene	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethene	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene	-	1.5	-	-	-	-	-	-	-	-	-	-
Chlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	-	-	0.6	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	NA	NA	-	-	-	-	NA	NA	-	-	-	-
Toluene	NA	NA	-	-	-	-	NA	NA	-	-	-	-
Ethylbenzene	NA	NA	-	-	-	-	NA	NA	-	-	-	-
Xylenes	NA	NA	-	-	-	-	NA	NA	-	-	-	-

- = Not Detected

NA = Not Analyzed

NS = Not Sampled

TABLE 7 - Continued
SUMMARY OF ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
(Results in Parts Per Billion)

Compound	MW-3						MW-4					
	7/9/92	10/19/92	1/20/93	4/20/93	7/29/93	10/20/93	7/9/92	10/19/92	1/20/93	4/20/93	7/29/93	*10/21/93
1,1-Dichloroethene	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	-	2.7	2.0	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	1.5	1.8	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethene	-	-	-	-	-	-	40	-	-	-	53	0.6
Chloroform	-	-	-	-	-	-	-	1.8	-	7.6	-	1.9
1,1,1-Trichloroethane	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene	4.3	44	1.3	0.7	-	-	520	270	5500	2400	1100	-
Chlorobenzene	2.0	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	-	-	-	0.5	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	NA	NA	-	-	-	-	NA	NA	-	-	-	-
Toluene	NA	NA	-	-	-	-	NA	NA	-	-	-	-
Ethylbenzene	NA	NA	-	-	-	-	NA	NA	-	-	-	-
Xylenes	NA	NA	0.5	-	-	-	NA	NA	-	-	-	-

NOTE: * A TPH as mineral spirits result of 400 ppb was reported. The result is an unknown hydrocarbon which consists of several peaks.

- = Not Detected

NA = Not Analyzed

NS = Not Sampled

TABLE 7 - Continued
SUMMARY OF ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
 (Results in Parts Per Billion)

Compound	MW-5						MW-6					
	7/9/92	10/19/92	1/20/93	4/20/93	7/29/93	10/20/93	7/9/92	10/19/92	1/20/93	4/20/93	7/29/93	10/20/93
1,1-Dichloroethene	-	-	-	1.5	0.6	-	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethene	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	0.9	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene	4.6	3.7	11	4.0	6.0	12	-	1.5	1.8	-	5.0	1.3
Chlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane	-	-	-	18	19	-	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	NA	NA	-	-	-	-	NA	NA	-	-	-	-
Toluene	NA	NA	-	-	-	-	NA	NA	-	-	-	-
Ethylbenzene	NA	NA	-	-	-	-	NA	NA	-	-	-	-
Xylenes	NA	NA	-	-	-	-	NA	NA	-	-	-	-

- = Not Detected

NA = Not Analyzed

NS = Not Sampled

TABLE 7 - Continued
SUMMARY OF ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
(Results in Parts Per Billion)

Compound	MW-8						MW-10					
	7/9/92	10/19/92	1/20/93	4/20/93	7/30/93	10/21/93	7/9/92	10/19/92	1/20/93	4/20/93	7/30/93	10/21/93
1,1-Dichloroethene	-	-	-	-	-	-	-	1.4	-	-	2.0	-
1,1-Dichloroethane	2.4	0.7	-	3.4	-	-	-	-	-	-	-	-
1,2-Dichloroethane	4.8	3.3	-	7.4	5.0	5.2	-	-	-	-	-	-
1,2-Dichloroethene	1.8	-	-	-	1.0	-	25	-	-	-	17	3.0
Chloroform	-	-	-	-	-	-	1.0	1.1	-	1.2	0.5	-
1,1,1-Trichloroethane	-	-	-	-	-	-	-	-	-	-	0.8	-
Trichloroethene	19	14	1.4	14	31	15	70	86	53	45	54	42
Chlorobenzene	5.7	4.5	-	11	-	5.4	-	-	-	-	-	-
1,2-Dichloropropane	-	-	-	0.6	-	-	-	-	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	1.1	-	-	1.8	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	2.0	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	1.1	1.9	-	2.6	-	-	-	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-	-	0.83	-	-	-	-	-
Benzene	NA	NA	-	-	-	-	NA	NA	-	-	-	-
Toluene	NA	NA	-	-	-	-	NA	NA	-	-	-	-
Ethylbenzene	NA	NA	-	-	-	-	NA	NA	-	-	-	-
Xylenes	NA	NA	-	-	-	-	NA	NA	-	-	-	-

- = Not Detected

NA = Not Analyzed

NS = Not Sampled

TABLE 7 - Continued
SUMMARY OF ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
(Results in Parts Per Billion)

Compound	MW-11						MW-12					
	7/9/92	10/19/92	1/20/93	4/20/93	7/30/93	10/21/93	7/9/92	10/19/92	1/20/93	4/20/93	7/30/93	10/20/93
1,1-Dichloroethene	-	1.9	-	-	2.0	-	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-	2.4	2.9	-	2.6	2.0	-
1,2-Dichloroethane	-	-	-	-	-	-	1.3	1.5	-	-	2.0	-
1,2-Dichloroethene	7.3	14	-	-	3.0	-	2.9	-	-	-	3.0	-
Chloroform	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	-	1.2	-	-	2.0	-	-	-	-	-	-	-
Trichloroethene	50	77	47	9.1	36	11	18	4	22	17	30	34
Chlorobenzene	-	-	-	-	-	-	-	2.0	-	-	-	-
1,2-Dichloropropane	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl Chloride	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	NA	NA	-	-	-	-	NA	NA	-	-	-	-
Toluene	NA	NA	-	-	-	-	NA	NA	-	-	-	-
Ethylbenzene	NA	NA	-	-	-	-	NA	NA	-	-	-	-
Xylenes	NA	NA	-	-	-	-	NA	NA	-	-	-	-

- = Not Detected

NA = Not Analyzed

NS = Not Sampled

TABLE 7 - Continued
SUMMARY OF ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
(Results in Parts Per Billion)

Compound	MW-13											
	7/9/92	10/19/92	1/20/93	4/20/93	7/29/93	10/20/93						
1,1-Dichloroethene	-	-	-	-	NS	NS						
1,1-Dichloroethane	-	-	-	-	NS	NS						
1,2-Dichloroethane	-	-	-	-	NS	NS						
1,2-Dichloroethene	-	-	-	-	NS	NS						
Chloroform	-	-	-	-	NS	NS						
1,1,1-Trichloroethane	-	-	-	-	NS	NS						
Trichloroethene	-	-	-	-	NS	NS						
Chlorobenzene	-	-	-	-	NS	NS						
1,2-Dichloropropane	-	-	-	-	NS	NS						
Trichlorofluoromethane	-	-	-	-	NS	NS						
Tetrachloroethene	-	-	-	-	NS	NS						
1,4-Dichlorobenzene	-	-	-	-	NS	NS						
1,2-Dichlorobenzene	-	-	-	-	NS	NS						
Vinyl Chloride	-	-	-	-	NS	NS						
Benzene	NA	NA	0.5	-	NS	NS						
Toluene	NA	NA	0.4	-	NS	NS						
Ethylbenzene	NA	NA	0.3	-	NS	NS						
Xylenes	NA	NA	1	-	NS	NS						

- = Not Detected

NA = Not Analyzed

NS = Not Sampled

APPENDIX A
FIELD DATA SHEETS

SEACOR

HYDROLOGIC DATA SHEET

DATE: 10/20/93 PROJECT: Safety Valve, Oakland PROJECT # 70005-009-02

EVENT: Quaternary Sampling

SAMPLER: D. Nwelo

WELL OR LOCATION	TIME	MEASUREMENT					COMMENTS
		TOC	DTW	DTP	PT	ELEV	
MW-1	9:42		8.01				
MW-2	9:47		8.71				
MW-3	9:52		7.32				
MW-4	9:58		10.00				
MW-5	10:08		10.11				
MW-6	10:04		9.09				
MW-8	10:21		8.15				
MW-9	10:31		9.55				
MW-10	10:15		9.81				
MW-11	9:58		8.13				
MW-12	11:03		7.65				
MW-13	10:29		8.65				
RW-1	10:33		7.81				3/4" Gas Pressure

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

SEACOR WATER SAMPLE FIELD DATA SHEET

PROJECT NO: 70005-009-02
 PURGED BY: R. NAVELO
 SAMPLED BY: R. NAVELO

WELL ID: MW-1
 SAMPLE ID: MW-1
 CLIENT NAME: SAFETY KLEEN
 LOCATION: DALLAS, TX

TYPE: Groundwater Surface Water _____ Treatment Effluent _____ Other _____

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

CASING ELEVATION: (feet/MSL): _____	VOLUME IN CASING (gal) <u>1.94</u>
DEPTH TO WATER (feet): <u>8.01</u>	CALCULATED PURGE (gal) <u>5.82</u>
DEPTH OF WELL (feet): <u>19.91</u>	ACTUAL PURGE VOL. (gal) <u>7</u>

DATE PURGED: 10/21/93 Start (2400 Hr) 12:50 End (2400 Hr.) 13:08
 DATE SAMPLED: 10/21/93 Start (2400 Hr) 13:25 End (2400 Hr.) _____

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

FIELD MEASUREMENTS							
TIME (2400 Hr)	VOLUME (gal)	pH (units)	E.C. (umhos/cm@25°C)	TEMPERATURE (°F)	COLOR (visual)	TURBIDITY (NTU)	
<u>12:57</u>	<u>2.5</u>	<u>7.8</u>	<u>892</u>	<u>67.1</u>	<u>Yellow</u>	<u>Turbid</u>	
<u>13:03</u>	<u>5</u>	<u>7.6</u>	<u>798</u>	<u>66.8</u>	<u>"</u>	<u>"</u>	
<u>13:07</u>	<u>7</u>	<u>7.4</u>	<u>774</u>	<u>66.7</u>	<u>"</u>	<u>"</u>	
_____	_____	_____	_____	_____	_____	_____	
_____	_____	_____	_____	_____	_____	_____	

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

ODOR: NONE

PURGING EQUIPMENT				SAMPLING EQUIPMENT			
_____	2" Bladder Pump	_____	Bailer (Teflon®)	_____	2" Bladder Pump	_____	Bailer (Teflon®)
_____	Centrifugal Pump	<input checked="" type="checkbox"/>	Bailer (PVC)	_____	DDL Sampler	<input checked="" type="checkbox"/>	Bailer (PVC/disposable)
_____	Submersible Pump	_____	Bailer (Stainless Steel)	_____	Submersible Pump	_____	Bailer (Stainless Steel)
_____	Well Wizard™	_____	Dedicated	_____	Well Wizard™	_____	Dedicated
Other: _____				Other: _____			

WELL INTEGRITY: OK LOCK #: 3210

REMARKS:
A LOT OF SAND IN WATER
MEASURED DTW: 8.29 AT 13:17 pm.
I BAN FOR OPENING THE WELL.

SIGNATURE: [Signature] Page 1 of 1

**SEACOR
WATER SAMPLE FIELD DATA SHEET**

PROJECT NO: 70005-009-02
 PURGED BY: R. NAYLOR
 SAMPLED BY: R. NAYLOR

WELL ID: _____
 SAMPLE ID: _____
 CLIENT NAME: SALTY KLEEN
 LOCATION: DALLAS, TX

TYPE: Groundwater Surface Water _____ Treatment Effluent _____ Other _____

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

CASING ELEVATION: (feet/MSL): _____	VOLUME IN CASING (gal) <u>3.34</u>
DEPTH TO WATER (feet): <u>8.71</u>	CALCULATED PURGE (gal) <u>10.02</u>
DEPTH OF WELL (feet): <u>29.20</u>	ACTUAL PURGE VOL (gal) <u>12</u>

DATE PURGED: 10/21/93 Start (2400 Hr) 12:00 End (2400 Hr.) 12:19
 DATE SAMPLED: 10/21/93 Start (2400 Hr) 12:35 End (2400 Hr.) _____

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

FIELD MEASUREMENTS						
TIME (2400 Hr)	VOLUME (gal)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR (visual)	TURBIDITY (NTU)
<u>12:10</u>	<u>7.5</u>	<u>7.9</u>	<u>692</u>	<u>70.7</u>	<u>TAN</u>	<u>TURBID</u>
<u>12:15</u>	<u>10</u>	<u>7.7</u>	<u>663</u>	<u>70.4</u>	<u>"</u>	<u>"</u>
<u>12:18</u>	<u>12</u>	<u>7.4</u>	<u>635</u>	<u>70.5</u>	<u>"</u>	<u>"</u>
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

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

ODOR: NONE

PURGING EQUIPMENT		SAMPLING EQUIPMENT	
<input type="checkbox"/> 2" Bladder Pump	<input type="checkbox"/> Bailor (Teflon®)	<input type="checkbox"/> 2" Bladder Pump	<input type="checkbox"/> Bailor (Teflon®)
<input type="checkbox"/> Centrifugal Pump	<input checked="" type="checkbox"/> Bailor (PVC)	<input type="checkbox"/> DDL Sampler	<input checked="" type="checkbox"/> Bailor (PVC (disposable))
<input type="checkbox"/> Submersible Pump	<input type="checkbox"/> Bailor (Stainless Steel)	<input type="checkbox"/> Submersible Pump	<input type="checkbox"/> Bailor (Stainless Steel)
<input type="checkbox"/> Well Wizard™	<input type="checkbox"/> Dedicated	<input type="checkbox"/> Well Wizard™	<input type="checkbox"/> Dedicated
Other: _____		Other: _____	

WELL INTEGRITY: OK LOCK #: _____

REMARKS: _____

MEASUREMENT DTW: 9.31 AT 12:29 PM

NO LOCK

1 BAN LOW OPENING.

SIGNATURE: RM Page 1 of 1

SEACOR WATER SAMPLE FIELD DATA SHEET

PROJECT NO: 70005-009-02
 PURGED BY: R. NAVEO
 SAMPLED BY: R. NAVEO

WELL ID: MW-3
 SAMPLE ID: MW-3
 CLIENT NAME: SAFETY KLEEN
 LOCATION: DALLAS, TX

TYPE: Groundwater Surface Water _____ Treatment Effluent _____ Other _____
 CASING DIAMETER (inches): 2 3 _____ 4 _____ 4.5 _____ 6 _____ Other _____

CASING ELEVATION: (feet/MSL): _____	VOLUME IN CASING (gal): <u>3.59</u>
DEPTH TO WATER (feet): <u>7.32</u>	CALCULATED PURGE (gal): <u>10.97</u>
DEPTH OF WELL (feet): <u>29.34</u>	ACTUAL PURGE VOL. (gal): <u>12.5</u>

DATE PURGED: 10/20/93 Start (2400 Hr) 11:55 End (2400 Hr.) 12:22
 DATE SAMPLED: 10/20/93 Start (2400 Hr) 14:20 End (2400 Hr.) _____

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

FIELD MEASUREMENTS						
TIME (2400 Hr)	VOLUME (gal)	pH (units)	E.C. (µmhos/cm@25°C)	TEMPERATURE (°F)	COLOR (visual)	TURBIDITY (NTU)
<u>12:08</u>	<u>6.5</u>	<u>7.9</u>	<u>492</u>	<u>68.1</u>	<u>TAN</u>	<u>TURBID</u>
<u>12:13</u>	<u>9</u>	<u>7.6</u>	<u>571</u>	<u>66.9</u>	<u>"</u>	<u>"</u>
<u>12:17</u>	<u>11</u>	<u>7.6</u>	<u>485</u>	<u>67.3</u>	<u>"</u>	<u>"</u>
<u>12:20</u>	<u>12.5</u>	<u>7.6</u>	<u>486</u>	<u>67.7</u>	<u>"</u>	<u>"</u>
D.O. (ppm): _____		COLOR, COBALT (0-100): _____			Clear Cloudy Yellow Brown	
ODOR: <u>NONE</u>						
PURGING EQUIPMENT				SAMPLING EQUIPMENT		
<input type="checkbox"/> 2" Bladder Pump	<input type="checkbox"/> Centrifugal Pump	<input checked="" type="checkbox"/> Submersible Pump	<input type="checkbox"/> Well Wizard™	<input type="checkbox"/> 2" Bladder Pump	<input checked="" type="checkbox"/> DDL Sampler	<input type="checkbox"/> Submersible Pump
<input type="checkbox"/> Bladder (Teflon®)	<input type="checkbox"/> Bladder (PVC)	<input type="checkbox"/> Bladder (Stainless Steel)	<input type="checkbox"/> Dedicated	<input type="checkbox"/> Bladder (Teflon®)	<input type="checkbox"/> Bladder (PVC)(expandable)	<input type="checkbox"/> Bladder (Stainless Steel)
Other: _____				Other: _____		

WELL INTEGRITY: OK LOCK #: 3210
 REMARKS: _____

1 BAN PAN OPENING

SIGNATURE: RM Page 1 of 1

**SEACOR
WATER SAMPLE FIELD DATA SHEET**

PROJECT NO: 70005-009-02
 PURGED BY: D. NAVELO
 SAMPLED BY: D. NAVELO

WELL ID: MW-4
 SAMPLE ID: MW-4
 CLIENT NAME: SALVATI KLEEN
 LOCATION: DALLAS, TX

TYPE: Groundwater Surface Water _____ Treatment Effluent _____ Other _____

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

CASING ELEVATION: (feet/MSL): _____	VOLUME IN CASING (gal): <u>2.52</u>
DEPTH TO WATER (feet): <u>10.00</u>	CALCULATED PURGE (gal): <u>7.56</u>
DEPTH OF WELL (feet): <u>25.45</u>	ACTUAL PURGE VOL (gal): <u>8</u>

DATE PURGED: 10/21/93 Start (2400 Hr) 10:10 End (2400 Hr.) 10:29
 DATE SAMPLED: 10/21/93 Start (2400 Hr) 10:40 End (2400 Hr.) _____

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

FIELD MEASUREMENTS						
TIME (2400 Hr)	VOLUME (gal)	pH (units)	E.C. (umhos/cm@25°C)	TEMPERATURE (°F)	COLOR (visual)	TURBIDITY (NTU)
<u>10:18</u>	<u>4</u>	<u>7.8</u>	<u>875</u>	<u>64.7</u>	<u>TAN</u>	<u>TURBID</u>
<u>10:22</u>	<u>6</u>	<u>7.5</u>	<u>869</u>	<u>66.1</u>	<u>u</u>	<u>u</u>
<u>10:26</u>	<u>8</u>	<u>7.3</u>	<u>848</u>	<u>65.8</u>	<u>u</u>	<u>u</u>
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

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

ODOR: _____

PURGING EQUIPMENT		SAMPLING EQUIPMENT	
_____ 2" Bladder Pump	_____ Bailer (Teflon®)	_____ 2" Bladder Pump	_____ Bailer (Teflon®)
_____ Centrifugal Pump <input checked="" type="checkbox"/>	_____ Bailer (PVC)	_____ DDL Sampler <input checked="" type="checkbox"/>	_____ Bailer (PVC/Disposable)
_____ Submersible Pump	_____ Bailer (Stainless Steel)	_____ Submersible Pump	_____ Bailer (Stainless Steel)
_____ Well Wizard™	_____ Dedicated	_____ Well Wizard™	_____ Dedicated
Other: _____		Other: _____	

WELL INTEGRITY: OK LOCK #: 3210

REMARKS:
MEASURED DTW: 10.37 AT 10:31 AM.
T. BAN FOR OPENING.

SIGNATURE: DN Page 1 of 1

SEACOR WATER SAMPLE FIELD DATA SHEET

PROJECT NO: 70005-009-02
 PURGED BY: R. Naves
 SAMPLED BY: R. Naves

WELL ID: MW-5
 SAMPLE ID: MW-6
 CLIENT NAME: SABTY KLEIN
 LOCATION: DALLAS, TX

TYPE: Groundwater Surface Water _____ Treatment Effluent _____ Other _____

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

CASING ELEVATION: (feet/MSL): _____	VOLUME IN CASING (gal) <u>3.08</u>
DEPTH TO WATER (feet): <u>10.11</u>	CALCULATED PURGE (gal) <u>9.24</u>
DEPTH OF WELL (feet): <u>29.00</u>	ACTUAL PURGE VOL. (gal) <u>10</u>

DATE PURGED: 10/20/93 Start (2400 Hr) 13:25 End (2400 Hr.) 13:44
 DATE SAMPLED: 10/20/93 Start (2400 Hr) 15:05 End (2400 Hr.) _____

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

FIELD MEASUREMENTS						
TIME (2400 Hr)	VOLUME (gal)	pH (units)	E.C. (µmhos/cm@25°C)	TEMPERATURE (°F)	COLOR (visual)	TURBIDITY (NTU)
<u>13:33</u>	<u>5</u>	<u>7.7</u>	<u>945</u>	<u>69.1</u>	<u>792</u>	<u>Cloudy</u>
<u>13:38</u>	<u>7.5</u>	<u>7.5</u>	<u>923</u>	<u>66.5</u>	<u>"</u>	<u>"</u>
<u>13:43</u>	<u>10</u>	<u>7.2</u>	<u>924</u>	<u>66.4</u>	<u>"</u>	<u>"</u>
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

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

Clear
Cloudy
Yellow
Brown

ODOR: NONE

PURGING EQUIPMENT		SAMPLING EQUIPMENT	
_____ 2" Bladder Pump	_____ Bailor (Teflon®)	_____ 2" Bladder Pump	_____ Bailor (Teflon®)
_____ Centrifugal Pump <input checked="" type="checkbox"/>	_____ Bailor (PVC)	_____ DDL Sampler <input checked="" type="checkbox"/>	_____ Bailor (PVC/disposable)
_____ Submersible Pump	_____ Bailor (Stainless Steel)	_____ Submersible Pump	_____ Bailor (Stainless Steel)
_____ Well Wizard™	_____ Dedicated	_____ Well Wizard™	_____ Dedicated
Other: _____		Other: _____	

WELL INTEGRITY: OK LOCK #: 3210

REMARKS:
I had to open the well.
well cap broken.

SIGNATURE: AN Page 1 of 1

SEACOR WATER SAMPLE FIELD DATA SHEET

PROJECT NO: 70005-009-02
 PURGED BY: D. Navero
 SAMPLED BY: D. Navero

WELL ID: MW-6
 SAMPLE ID: MW-6
 CLIENT NAME: SAFETY KUBEN
 LOCATION: DALLAS, TX

TYPE: Groundwater Surface Water _____ Treatment Effluent _____ Other _____
 CASING DIAMETER (inches): 2 3 _____ 4 _____ 4.5 _____ 6 _____ Other _____

CASING ELEVATION: (feet/MSL): _____	VOLUME IN CASING (gal): <u>3.23</u>
DEPTH TO WATER (feet): <u>9.09</u>	CALCULATED PURGE (gal): <u>4.69</u>
DEPTH OF WELL (feet): <u>28.91</u>	ACTUAL PURGE VOL. (gal): <u>10</u>

DATE PURGED: 10/20/93 Start (2400 Hr) 12:40 End (2400 Hr.) 13:05
 DATE SAMPLED: 10/20/93 Start (2400 Hr) 14:40 End (2400 Hr.) _____

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

FIELD MEASUREMENTS						
TIME (2400 Hr)	VOLUME (gal)	pH (units)	E.C. (umhos/cm@25°C)	TEMPERATURE (°F)	COLOR (visual)	TURBIDITY (NTU)
<u>12:53</u>	<u>5</u>	<u>7.8</u>	<u>531</u>	<u>68.0</u>	<u>PNW</u>	<u>TURBID</u>
<u>12:58</u>	<u>7.5</u>	<u>7.8</u>	<u>528</u>	<u>67.1</u>	<u>"</u>	<u>"</u>
<u>13:04</u>	<u>10</u>	<u>7.7</u>	<u>493</u>	<u>68.1</u>	<u>"</u>	<u>"</u>
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

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

ODOR: NONE

PURGING EQUIPMENT		SAMPLING EQUIPMENT	
_____ 2" Bladder Pump	_____ Bailor (Teflon®)	_____ 2" Bladder Pump	_____ Bailor (Teflon®)
_____ Centrifugal Pump <input checked="" type="checkbox"/>	_____ Bailor (PVC)	_____ DDL Sampler <input checked="" type="checkbox"/>	_____ Bailor (PVC (disposable))
_____ Submersible Pump _____	_____ Bailor (Stainless Steel)	_____ Submersible Pump _____	_____ Bailor (Stainless Steel)
_____ Well Wizard™ _____	_____ Dedicated _____	_____ Well Wizard™ _____	_____ Dedicated _____
Other: _____		Other: _____	

WELL INTEGRITY: OK LOCK #: 3210
 REMARKS: _____

15/16 WAGENM TO OPEN WELLS

SIGNATURE: DN Page 1 of 1

**SEACOR
WATER SAMPLE FIELD DATA SHEET**

PROJECT NO: 70005-009-02
 PURGED BY: D. NAYRO
 SAMPLED BY: D. NAYRO

WELL ID: MW-8
 SAMPLE ID: MW-8
 CLIENT NAME: SAFETY KISS
 LOCATION: DALLAS, TX

TYPE: Groundwater Surface Water _____ Treatment Effluent _____ Other _____

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

CASING ELEVATION: (feet/MSL): _____	VOLUME IN CASING (gal) <u>3.38</u>
DEPTH TO WATER (feet): <u>8.15</u>	CALCULATED PURGE (gal) <u>10.15</u>
DEPTH OF WELL (feet): <u>28.90</u>	ACTUAL PURGE VOL (gal) <u>12</u>

DATE PURGED: 10/21/93 Start (2400 Hr) 11:06 End (2400 Hr) 11:30
 DATE SAMPLED: 10/21/93 Start (2400 Hr) 11:45 End (2400 Hr) _____

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

FIELD MEASUREMENTS						
TIME (2400 Hr)	VOLUME (gal)	pH (units)	EC (umho/cm@25°C)	TEMPERATURE (°F)	COLOR (visual)	TURBIDITY (NTU)
<u>11:18</u>	<u>7.5</u>	<u>7.9</u>	<u>446</u>	<u>67.1</u>	<u>TAN</u>	<u>CLOUDY</u>
<u>11:25</u>	<u>10</u>	<u>7.9</u>	<u>435</u>	<u>66.5</u>	<u>"</u>	<u>"</u>
<u>11:29</u>	<u>12</u>	<u>7.7</u>	<u>430</u>	<u>66.2</u>	<u>"</u>	<u>"</u>
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

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

ODOR: NONE

PURGING EQUIPMENT		SAMPLING EQUIPMENT	
_____ 2" Bladder Pump	_____ Bailor (Teflon®)	_____ 2" Bladder Pump	_____ Bailor (Teflon®)
_____ Centrifugal Pump <input checked="" type="checkbox"/>	_____ Bailor (PVC)	_____ DDL Sampler <input checked="" type="checkbox"/>	_____ Bailor (PVC/Disposable)
_____ Submersible Pump	_____ Bailor (Stainless Steel)	_____ Submersible Pump	_____ Bailor (Stainless Steel)
_____ Well Wizard™	_____ Dedicated	_____ Well Wizard™	_____ Dedicated
Other: _____		Other: _____	

WELL INTEGRITY: OK LOCK #: 3210

REMARKS:
OIL SHEEN IN WATER
MBASUABO DTW : 8.12 AT 11:39 AM
T BAN LOW OPENING THE WELL..

SIGNATURE: DN Page 1 of 1

SEACOR WATER SAMPLE FIELD DATA SHEET

PROJECT NO: 70005-009-02
 PURGED BY: D. Navero
 SAMPLED BY: D. Navero

WELL ID: MW-10
 SAMPLE ID: MW-10
 CLIENT NAME: SAFETY KLEEN
 LOCATION: DALLAS, TX

TYPE: Groundwater Surface Water _____ Treatment Effluent _____ Other _____
 CASING DIAMETER (inches): 2 3 _____ 4 _____ 4.5 _____ 6 _____ Other _____

CASING ELEVATION: (feet/MSL): _____	VOLUME IN CASING (gal) <u>3.19</u>
DEPTH TO WATER (feet): <u>9.81</u>	CALCULATED PURGE (gal) <u>9.57</u>
DEPTH OF WELL (feet): <u>29.38</u>	ACTUAL PURGE VOL (gal) <u>10</u>

DATE PURGED: 10/21/93 Start (2400 Hr) 9:20 End (2400 Hr) 9:37
 DATE SAMPLED: 10/21/93 Start (2400 Hr) 9:55 End (2400 Hr) _____

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

FIELD MEASUREMENTS						
TIME (2400 Hr)	VOLUME (gal)	pH (units)	E.C. (microhm/cm @ 25°C)	TEMPERATURE (°F)	COLOR (visual)	TURBIDITY (NTU)
<u>9:29</u>	<u>5</u>	<u>7.8</u>	<u>922</u>	<u>61.8</u>	<u>Brown</u>	<u>Turbid</u>
<u>9:32</u>	<u>7.5</u>	<u>7.6</u>	<u>931</u>	<u>62.6</u>	<u>"</u>	<u>"</u>
<u>9:36</u>	<u>10</u>	<u>7.3</u>	<u>952</u>	<u>62.9</u>	<u>"</u>	<u>"</u>

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

ODOR: _____

PURGING EQUIPMENT		SAMPLING EQUIPMENT	
<input type="checkbox"/> 2" Bladder Pump	<input type="checkbox"/> Bailor (Teflon®)	<input type="checkbox"/> 2" Bladder Pump	<input type="checkbox"/> Bailor (Teflon®)
<input type="checkbox"/> Centrifugal Pump <input checked="" type="checkbox"/>	<input type="checkbox"/> Bailor (PVC)	<input type="checkbox"/> DDL Sampler <input checked="" type="checkbox"/>	<input type="checkbox"/> Bailor (PVC/Disposable)
<input type="checkbox"/> Submersible Pump	<input type="checkbox"/> Bailor (Stainless Steel)	<input type="checkbox"/> Submersible Pump	<input type="checkbox"/> Bailor (Stainless Steel)
<input type="checkbox"/> Well Wizard™	<input type="checkbox"/> Dedicated	<input type="checkbox"/> Well Wizard™	<input type="checkbox"/> Dedicated
Other: _____		Other: _____	

WELL INTEGRITY: OK LOCK #: 3210

REMARKS:
MEASURED DTW: 9.85 AT 9:43 AM.
15/16 W/HEX TO OPEN THE WELL.

SIGNATURE: [Signature] Page 1 of 1

SEACOR
WATER SAMPLE FIELD DATA SHEET

PROJECT NO: 70005-009-02
 PURGED BY: R. Naveo
 SAMPLED BY: R. Naveo

WELL ID: MW-11
 SAMPLE ID: MW-11
 CLIENT NAME: SAFETY KILBEN
 LOCATION: DALLAS, TX

TYPE: Groundwater Surface Water _____ Treatment Effluent _____ Other _____

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

CASING ELEVATION: (feet/MSL): _____	VOLUME IN CASING (gal) <u>3.24</u>
DEPTH TO WATER (feet): <u>8.13</u>	CALCULATED PURGE (gal) <u>9.92</u>
DEPTH OF WELL (feet): <u>28.00</u>	ACTUAL PURGE VOL. (gal) <u>10</u>

DATE PURGED: 10/21/93 Start (2400 Hr) 8:20 End (2400 Hr) 8:45
 DATE SAMPLED: 10/21/93 Start (2400 Hr) 9:05 End (2400 Hr) _____

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

FIELD MEASUREMENTS						
TIME (2400 Hr)	VOLUME (gal)	pH (units)	E.C. (umhos/cm@25°C)	TEMPERATURE (°F)	COLOR (visual)	TURBIDITY (NTU)
<u>8:32</u>	<u>5</u>	<u>7.6</u>	<u>266</u>	<u>64.7</u>	<u>Brown</u>	<u>Turbid</u>
<u>8:38</u>	<u>7.5</u>	<u>7.5</u>	<u>239</u>	<u>64.6</u>	<u>u</u>	<u>u</u>
<u>8:42</u>	<u>10</u>	<u>7.4</u>	<u>241</u>	<u>65.1</u>	<u>u</u>	<u>u</u>
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

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

ODOR: NONE

Clear
Cloudy
Yellow
Brown

PURGING EQUIPMENT		SAMPLING EQUIPMENT	
_____ 2" Bladder Pump	_____ Bailer (Teflon®)	_____ 2" Bladder Pump	_____ Bailer (Teflon®)
_____ Centrifugal Pump <input checked="" type="checkbox"/>	_____ Bailer (PVC)	_____ DDL Sampler <input checked="" type="checkbox"/>	_____ Bailer (PVC/Disposable)
_____ Submersible Pump	_____ Bailer (Stainless Steel)	_____ Submersible Pump	_____ Bailer (Stainless Steel)
_____ Well Wizard™	_____ Dedicated	_____ Well Wizard™	_____ Dedicated
Other: _____		Other: _____	

WELL INTEGRITY: OK LOCK #: 3210

REMARKS:
checked DTW before sampling it was 8.19 at 8:50 Am.
15/10 was used to open well

SIGNATURE: MM Page 1 of 1

SEACOR WATER SAMPLE FIELD DATA SHEET

PROJECT NO: 70005-009-02
 PURGED BY: R. Niero
 SAMPLED BY: R. Niero

WELL ID: MW-12
 SAMPLE ID: MW-12
 CLIENT NAME: SABTY KLEIN
 LOCATION: DALLAS, TX

TYPE: Groundwater Surface Water _____ Treatment Effluent _____ Other _____
 CASING DIAMETER (inches): 2 3 _____ 4 _____ 4.5 _____ 6 _____ Other _____

CASING ELEVATION: (feet/MSL): _____	VOLUME IN CASING (gal): <u>3.40</u>
DEPTH TO WATER (feet): <u>7.65</u>	CALCULATED PURGE (gal): <u>10.18</u>
DEPTH OF WELL (feet): <u>28.48</u>	ACTUAL PURGE VOL. (gal): <u>12</u>

DATE PURGED: 10/20/93 Start (2400 Hr) 11:23 End (2400 Hr) 11:45
 DATE SAMPLED: 10/20/93 Start (2400 Hr) 14:05 End (2400 Hr) _____

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

FIELD MEASUREMENTS						
TIME (2400 Hr)	VOLUME (gal)	pH (units)	E.C. (umhos/cm@25°C)	TEMPERATURE (°F)	COLOR (visual)	TURBIDITY (NTU)
<u>11:30</u>	<u>6</u>	<u>7.7</u>	<u>859</u>	<u>67.8</u>	<u>TAN</u>	<u>Turbid</u>
<u>11:35</u>	<u>9</u>	<u>7.4</u>	<u>809</u>	<u>65.9</u>	<u>Yellow</u>	<u>u</u>
<u>11:40</u>	<u>12</u>	<u>7.3</u>	<u>802</u>	<u>64.9</u>	<u>u</u>	<u>u</u>
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

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

ODOR: NONE

PURGING EQUIPMENT		SAMPLING EQUIPMENT	
<input type="checkbox"/> 2' Bladder Pump	<input type="checkbox"/> Bailor (Teflon®)	<input type="checkbox"/> 2' Bladder Pump	<input type="checkbox"/> Bailor (Teflon®)
<input type="checkbox"/> Centrifugal Pump	<input checked="" type="checkbox"/> Bailor (PVC)	<input type="checkbox"/> DDL Sampler	<input checked="" type="checkbox"/> Bailor (PVC) (disposable)
<input type="checkbox"/> Submersible Pump	<input type="checkbox"/> Bailor (Stainless Steel)	<input type="checkbox"/> Submersible Pump	<input type="checkbox"/> Bailor (Stainless Steel)
<input type="checkbox"/> Well Wizard™	<input type="checkbox"/> Dedicated	<input type="checkbox"/> Well Wizard™	<input type="checkbox"/> Dedicated
Other: _____		Other: _____	

WELL INTEGRITY: OK LOCK #: 3210

REMARKS:
BROKEN WELL CAP -
15/16 WRENCH TO OPEN WELL -

SIGNATURE: RM Page 1 of 1

APPENDIX B
CERTIFIED LABORATORY RESULTS - VAPOR



ENVIRONMENTAL
LABORATORIES, INC.

4080 Pike Lane
Concord, CA 94520
(510) 685-7852
(800) 544-3422 Inside CA
(800) 423-7143 Outside CA
(510) 825-0720 FAX

Client Number: SEA02SFK01
Consultant Project Number: 70005-009-04
Project ID: Safety Kleen/Oakland
Work Order Number: C3-11-0171

November 17, 1993

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

Enclosed please find the analytical results for samples received by GTEL Environmental Laboratories, Inc. on 11/10/93, under chain of custody record A.

A formal Quality Assurance/Quality Control (QA/QC) program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project met QA/QC criteria, unless otherwise stated in the footnotes.

GTEL is certified by the California State Department of Health Services, Laboratory certification number E1075, to perform analyses for drinking water, wastewater, and hazardous waste materials according to EPA protocols.

If you have any questions concerning this analysis or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,
GTEL Environmental Laboratories, Inc.

Ron Martin
SVOA Manager for
Eileen F. Bullen
Laboratory Director

Client Number: SEA02SFK01
 Consultant Project Number: 70005-009-04
 Project ID: Safety Kleen/Oakland
 Work Order Number: C3-11-0171

Table 1
ANALYTICAL RESULTS
 Aromatic Volatile Organics and
 Total Petroleum Hydrocarbons as Mineral Spirits in Air
 Modified EPA Methods 8020 and 8015^a

GTEL Sample Number		01	111193E		
Client Identification		PADRE INF	METHOD BLANK		
Date Sampled		11/10/93	--		
Date Analyzed		11/11/93	11/11/93		
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.5	<0.5	<0.5		
Toluene	0.5	0.5	<0.5		
Ethylbenzene	0.5	3	<0.5		
Xylene, total	0.5	2	<0.5		
BTEX, total	--	6	--		
TPH as Mineral Spirits	10	300	<10		
Detection Limit Multiplier		1	1		
TFT surrogate, % recovery		97.4	77.1		

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. TFT surrogate recovery acceptability limits are 70-130%.

Table 1
ANALYTICAL RESULTS
Purgeable Halocarbons in Air
EPA Method 601^a

GTEL Sample Number		01	C111293		
Client Identification		PADRE INF	METHOD BLANK		
Date Sampled		11/10/93	-		
Date Analyzed		11/12/93	11/12/93		
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Chloromethane	0.5	<0.5	<0.5		
Bromomethane	0.5	<0.5	<0.5		
Vinyl chloride	1	<1	<1		
Chloroethane	0.5	<0.5	<0.5		
Methylene chloride	0.5	<0.5	<0.5		
1,1-Dichloroethene	0.5	<0.5	<0.5		
1,1-Dichloroethane	0.5	<0.5	<0.5		
1,2-Dichloroethene	0.5	<0.5	<0.5		
Chloroform	0.5	<0.5	<0.5		
1,2-Dichloroethane	0.5	<0.5	<0.5		
1,1,1-Trichloroethane	0.5	0.5	<0.5		
Carbon tetrachloride	0.5	<0.5	<0.5		
Bromodichloromethane	0.5	<0.5	<0.5		
1,2-Dichloropropane	0.5	<0.5	<0.5		
cis-1,3-Dichloropropene	0.5	<0.5	<0.5		
Trichloroethene	0.5	<0.5	<0.5		
Dichlorodifluoromethane	0.5	<0.5	<0.5		
Dibromochloromethane	0.5	<0.5	<0.5		
1,1,2-Trichloroethane	0.5	<0.5	<0.5		
trans-1,3-Dichloropropene	0.5	<0.5	<0.5		
2-Chloroethylvinyl ether	1	<1	<1		
Bromoform	0.5	<0.5	<0.5		
Tetrachloroethene	0.5	<0.5	<0.5		
1,1,2,2-Tetrachloroethane	0.5	<0.5	<0.5		
Chlorobenzene	0.5	<0.5	<0.5		
1,2-Dichlorobenzene	0.5	<0.5	<0.5		
1,3-Dichlorobenzene	0.5	<0.5	<0.5		
1,4-Dichlorobenzene	0.5	<0.5	<0.5		
Trichlorofluoromethane	0.5	<0.5	<0.5		
Detection Limit Multiplier		1	1		
BFB surrogate, % recovery		117	104		

a. Federal Register, Vol. 49, October 26, 1984. BFB surrogate recovery acceptability limits are 65-135%.

SEACOR Chain-of-Custody Record

Address: 1395 Willow Pass Rd Ste 360
 Concord CA 94502
 925-978-9780

Project: 70005-009-09 Task # SK13
 Project Manager: Greg Hoehn
 Laboratory: GTEL
 Turn-around time: Normal / 5 DAY
 Sampler's Name: Bob Robitaille
 Sampler's Signature: *[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-25 Metal Spirits	B/8020	8010	Comments/ Instructions
Padre Inf	11-10-93	15:00	air												X	X	X	

Special Instructions/Comments:
 Safety Kleen / Oakland
 Auth # RM 18120320 1973 A

 C3110171
 * Pre-scheduled by DEBBIE

Relinquished by:
 Sign *[Signature]*
 Print Bob Robitaille
 Company SEACOR
 Time 16:20 Date 11-10-93

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

Received by:
 Sign *[Signature]*
 Print RON JENSEN
 Company GTEL
 Time 16:20 Date 11/10/93

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

Sample Receipt
 Total no. of containers _____
 Chain of custody seals: _____
 Rec'd good condition/cold: _____
 Conforms to record: _____
 Client: _____
 Client Contact: _____
 Client Phone Number: _____



ENVIRONMENTAL
LABORATORIES, INC.

Northwest Region

4080 Pike Lane
Suite C
Concord, CA 94520
(510) 685-7852
(800) 544-3422 Inside CA
FAX (510) 825-0720

Client Number: SEA01SFK01
Consultant Project Number: 70005-009-04
Project ID: Safety Kleen/Oakland
Work Order Number: C3-10-0114

October 20, 1993

Greg Hoehn
SEACOR
1390 Willow Pass Rd., Ste. 360
Concord, CA 94520

Enclosed please find the analytical results for samples received by GTEL Environmental Laboratories, Inc. on 10/06/93.

A formal Quality Assurance/Quality Control (QA/QC) program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project met QA/QC criteria, unless otherwise stated in the footnotes.

GTEL is certified by the California State Department of Health Services, Laboratory certification number E1075, to perform analyses for drinking water, wastewater, and hazardous waste materials according to EPA protocols.

If you have any questions concerning this analysis or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,

GTEL Environmental Laboratories, Inc.

Asst Lab Director for
Eileen F. Bullen
Laboratory Director

Table 1
ANALYTICAL RESULTS
Aromatic Volatile Organics and
Total Petroleum Hydrocarbons as Mineral Spirits in Air
Modified EPA Methods 8020 and 8015^a

GTEL Sample Number		01	02	1007E	
Client Identification		PADRE-INF	PADRE-EFF	METHOD BLANK	
Date Sampled		10/06/93	10/06/93	--	
Date Analyzed		10/08/93	10/07/93	10/07/93	
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.5	<0.5	<0.5	<0.5	
Toluene	0.5	<0.5	<0.5	<0.5	
Ethylbenzene	0.5	4	<0.5	<0.5	
Xylene, total	0.5	10	<0.5	<0.5	
BTEX, total	--	14	--	--	
TPH as Mineral Spirits	10	410	<10	<10	
Detection Limit Multiplier		1	1	1	
BFB surrogate, % recovery		98.9	102	92.2	

- a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Modification for TPH as gasoline as per California State Water Resources Control Board LUFT Manual protocols, May 1988 revision. Bromofluorobenzene surrogate recovery acceptability limits are 70-130%.

Table 1
ANALYTICAL RESULTS
Purgeable Halocarbons in Air
EPA Method 601^a

GTEL Sample Number		01	02	C100793
Client Identification		PADRE-INF	PADRE-EFF	METHOD BLANK
Date Sampled		10/06/93	10/06/93	-
Date Analyzed		10/07/93	10/07/93	10/07/93
Analyte	Detection Limit, ug/L	Concentration, ug/L		
Chloromethane	0.5	<0.5	<0.5	<0.5
Bromomethane	0.5	<0.5	<0.5	<0.5
Vinyl chloride	1	<1	<1	<1
Chloroethane	0.5	<0.5	<0.5	<0.5
Methylene chloride	0.5	<0.5	<0.5	<0.5
1,1-Dichloroethene	0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	0.5	<0.5	<0.5	<0.5
1,2-Dichloroethene	0.5	<0.5	<0.5	<0.5
Chloroform	0.5	<0.5	<0.5	<0.5
1,2-Dichloroethane	0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	0.5	<0.5	<0.5	<0.5
Bromodichloromethane	0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	0.5	<0.5	<0.5	<0.5
cis-1,3-Dichloropropene	0.5	<0.5	<0.5	<0.5
Trichloroethene	0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane	0.5	<0.5	<0.5	<0.5
Dibromochloromethane	0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	0.5	<0.5	<0.5	<0.5
2-Chloroethylvinyl ether	1	<1	<1	<1
Bromoform	0.5	<0.5	<0.5	<0.5
Tetrachloroethene	0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	0.5	<0.5	<0.5	<0.5
Chlorobenzene	0.5	<0.5	<0.5	<0.5
1,2-Dichlorobenzene	0.5	<0.5	<0.5	<0.5
1,3-Dichlorobenzene	0.5	<0.5	<0.5	<0.5
1,4-Dichlorobenzene	0.5	<0.5	<0.5	<0.5
Trichlorofluoromethane	0.5	<0.5	<0.5	<0.5
Detection Limit Multiplier		1	1	1
BFB surrogate, % recovery		109	109	101

a. Federal Register, Vol. 49, October 26, 1984. BFB surrogate recovery acceptability limits are 65-135%.



Client Number: SEA02SFK01
Consultant Project Number: 70005-009-04
Project ID: Safety Kleen/Oakland
Work Order Number: C3-09-0154

Northwest Region

4080 Pike Lane
Suite C
Concord, CA 94520
(510) 685-7852
(800) 544-3422 Inside CA
FAX (510) 825-0720

September 13, 1993

Greg Hoehn
SEACOR
1390 Willow Pass Rd., Ste. 360
Concord, CA 94520

Enclosed please find the analytical results for samples received by GTEL Environmental Laboratories, Inc. on 09/09/93, under chain of custody record 8442.

A formal Quality Assurance/Quality Control (QA/QC) program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project met QA/QC criteria, unless otherwise stated in the footnotes.

GTEL is certified by the California State Department of Health Services, Laboratory certification number E1075, to perform analyses for drinking water, wastewater, and hazardous waste materials according to EPA protocols.

If you have any questions concerning this analysis or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,
GTEL Environmental Laboratories, Inc.

Eileen F. Bullen
Laboratory Director

Table 1
 ANALYTICAL RESULTS
 Purgeable Halocarbons in Air
 EPA Method 601a

GTEL Sample Number		01	02	C091093
Client Identification		P-EFF	P-INF	METHOD BLANK
Date Sampled		09/09/93	09/09/93	-
Date Analyzed		09/11/93	09/11/93	09/10/93
Analyte	Detection Limit, ug/L	Concentration, ug/L		
Chloromethane	0.5	<0.5	<0.5	<0.5
Bromomethane	0.5	<0.5	<0.5	<0.5
Vinyl chloride	1	<1	<1	<1
Chloroethane	0.5	<0.5	<0.5	<0.5
Methylene chloride	0.5	<0.5	<0.5	<0.5
1,1-Dichloroethene	0.5	<0.5	<0.5	<0.5
1,1-Dichloroethane	0.5	<0.5	<0.5	<0.5
1,2-Dichloroethene	0.5	<0.5	<0.5	<0.5
Chloroform	0.5	<0.5	<0.5	<0.5
1,2-Dichloroethane	0.5	<0.5	<0.5	<0.5
1,1,1-Trichloroethane	0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	0.5	<0.5	<0.5	<0.5
Bromodichloromethane	0.5	<0.5	<0.5	<0.5
1,2-Dichloropropane	0.5	<0.5	<0.5	<0.5
cis-1,3-Dichloropropene	0.5	<0.5	<0.5	<0.5
Trichloroethene	0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane	0.5	<0.5	<0.5	<0.5
Dibromochloromethane	0.5	<0.5	<0.5	<0.5
1,1,2-Trichloroethane	0.5	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	0.5	<0.5	<0.5	<0.5
2-Chloroethylvinyl ether	1	<1	<1	<1
Bromoform	0.5	<0.5	<0.5	<0.5
Tetrachloroethene	0.5	<0.5	<0.5	<0.5
1,1,2,2-Tetrachloroethane	0.5	<0.5	<0.5	<0.5
Chlorobenzene	0.5	<0.5	<0.5	<0.5
1,2-Dichlorobenzene	0.5	<0.5	<0.5	<0.5
1,3-Dichlorobenzene	0.5	<0.5	<0.5	<0.5
1,4-Dichlorobenzene	0.5	<0.5	<0.5	<0.5
Trichlorofluoromethane	0.5	<0.5	<0.5	<0.5
Detection Limit Multiplier		1	1	1
BFB surrogate, % recovery		99.8	88.2	100

a. Federal Register, Vol. 49, October 26, 1984. BFB surrogate recovery acceptability limits are 65-135%.

Client Number: SEA02SFK01
 Consultant Project Number: 70005-009-04
 Project ID: Safety Kleen/Oakland
 Work Order Number: C3-09-0154

Table 1
ANALYTICAL RESULTS
 Aromatic Volatile Organics and
 Total Petroleum Hydrocarbons as Mineral Spirits in Air
 Modified EPA Methods 8020 and 8015^a

GTEL Sample Number		01	02	E091193	
Client Identification		P-EFF	P-INF	METHOD BLANK	
Date Sampled		09/09/93	09/09/93	--	
Date Analyzed		09/11/93	09/11/93	09/11/93	
Analyte	Detection Limit, ug/L	Concentration, ug/L			
Benzene	0.5	<0.5	2	<0.5	
Toluene	0.5	<0.5	3	<0.5	
Ethylbenzene	0.5	0.9	3	<0.5	
Xylene, total	0.5	2	9	<0.5	
BTEX, total	--	3	17	--	
TPH as Mineral Spirits	10	39	120	<10	
Detection Limit Multiplier		1	1	1	
BFB surrogate, % recovery		92.3	94.9	87.2	

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986.

APPENDIX C
CERTIFIED LABORATORY RESULTS - GROUNDWATER



**NATIONAL
ENVIRONMENTAL
TESTING, INC.**

NET Pacific, Inc.
435 Tesconi Circle
Santa Rosa, CA 95401
Tel: (707) 526-7200
Fax: (707) 526-9623

Anne Lunt
Safety Kleen
PO Box 1447
Manhattan Beach, CA 90266


Date: 11/08/1993
NET Client Acct. No: 62102
NET Pacific Job No: 93.04699
Received: 10/23/1993

Client Reference Information

Project No. 70005-009-02

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. 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:


Jules Skamarack
Laboratory Manager

cc: Greg Hoehn
Seacor
1390 Willow Pass Road, Ste 360
Concord, CA 94520

Enclosure(s)



Client Acct: 62102
Client Name: Safety Kleen
NET Job No: 93.04699

Date: 11/08/1993
EIAF Certificate: 1386
Page: 2

Ref: Project No. 70005-009-02

SAMPLE DESCRIPTION: MW-1 ✓
Date Taken: 10/21/1993 ✓
Time Taken: 13:25
NET Sample No: 176941

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/ETXE, Liquid)							
METHOD 5030/M8015	--						10/26/1993
DILUTION FACTOR*	1						10/26/1993
as Mineral Spirits	ND	✓	0.05	ug/L	5030		10/26/1993
METHOD 8020 (GC, Liquid)	--						10/26/1993
DILUTION FACTOR*	1						10/26/1993
Benzene	ND		0.5	ug/L	8020		10/26/1993
Toluene	ND		0.5	ug/L	8020		10/26/1993
Ethylbenzene	ND		0.5	ug/L	8020		10/26/1993
Xylenes (Total)	ND	✓	0.5	ug/L	8020		10/26/1993
SURROGATE RESULTS	--						10/26/1993
Bromofluorobenzene (SURR)	95			± Rec.	5030		10/26/1993



Client Acct: 62102
Client Name: Safety Kleen
NET Job No: 93.04699

Date: 11/08/1993
ELAP Certificate: 1386
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Ref: Project No. 70005-009-02

SAMPLE DESCRIPTION: MW-1
Date Taken: 10/21/1993
Time Taken: 13:25
NET Sample No: 176941

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
METHOD 8010 (GC,Liquid)							
DILUTION FACTOR*	1						11/02/1993
Bromodichloromethane	ND		0.4	ug/L	8010		11/02/1993
Bromoform	ND		0.4	ug/L	8010		11/02/1993
Bromomethane	ND		0.4	ug/L	8010		11/02/1993
Carbon tetrachloride	ND		0.4	ug/L	8010		11/02/1993
Chlorobenzene	ND		0.4	ug/L	8010		11/02/1993
Chloroethane	ND		0.4	ug/L	8010		11/02/1993
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		11/02/1993
Chloroform	ND		0.4	ug/L	8010		11/02/1993
Chloromethane	ND		0.4	ug/L	8010		11/02/1993
Dibromochloromethane	ND		0.4	ug/L	8010		11/02/1993
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		11/02/1993
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		11/02/1993
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		11/02/1993
Dichlorodifluoromethane	ND		0.4	ug/L	8010		11/02/1993
1,1-Dichloroethane	ND		0.4	ug/L	8010		11/02/1993
1,2-Dichloroethane	ND		0.4	ug/L	8010		11/02/1993
1,1-Dichloroethene	ND		0.4	ug/L	8010		11/02/1993
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		11/02/1993
1,2-Dichloropropane	ND		0.4	ug/L	8010		11/02/1993
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		11/02/1993
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		11/02/1993
Methylene chloride	ND		10	ug/L	8010		11/02/1993
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		11/02/1993
Tetrachloroethene	ND		0.4	ug/L	8010		11/02/1993
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		11/02/1993
1,1,2-Trichloroethane	ND		1	ug/L	8010		11/02/1993
Trichloroethene	ND		0.4	ug/L	8010		11/02/1993
Trichlorofluoromethane	ND		0.4	ug/L	8010		11/02/1993
Vinyl chloride	ND		0.4	ug/L	8010		11/02/1993
SURROGATE RESULTS	--						11/02/1993
1,4-Difluorobenzene (SURR)	97			† Rec.			11/02/1993
1,4-Dichlorobutane (SURR)	83			† Rec.			11/02/1993



Client Acct: 62102
 Client Name: Safety Kleen
 NET Job No: 93.04699

Date: 11/08/1993
 ELAP Certificate: 1386
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Ref: Project No. 70005-009-02

SAMPLE DESCRIPTION: MW-2
 Date Taken: 10/21/1993
 Time Taken: 12:35
 NET Sample No: 176942

Parameter	Results	Flags	Reporting		Method	Date	Date
			Limit	Units		Extracted	Analyzed
TPH (Gas/BTEX, Liquid)							
METHOD 5030/M8015	--						10/26/1993
DILUTION FACTOR*	1						10/26/1993
as Mineral Spirits	ND	✓	0.05	mg/L	5030		10/26/1993
METHOD 8020 (GC, Liquid)	--						10/26/1993
DILUTION FACTOR*	1						10/26/1993
Benzene	ND		0.5	ug/L	8020		10/26/1993
Toluene	ND	✓	0.5	ug/L	8020		10/26/1993
Ethylbenzene	ND		0.5	ug/L	8020		10/26/1993
Xylenes (Total)	ND	✓	0.5	ug/L	8020		10/26/1993
SURROGATE RESULTS	--						10/26/1993
Bromofluorobenzene (SURRE)	88			µ Rec.	5030		10/26/1993



Client Acct: 62102
Client Name: Safety Kleen
NET Job No: 93.04699

Date: 11/08/1993
ELAP Certificate: 1386
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Ref: Project No. 70005-009-02

SAMPLE DESCRIPTION: MW-2
Date Taken: 10/21/1993
Time Taken: 12:35
NET Sample No: 176942

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
METHOD 8010 (GC,Liquid)							
DILUTION FACTOR*	1						11/02/1993
Bromodichloromethane	ND		0.4	ug/L	8010		11/02/1993
Bromoform	ND		0.4	ug/L	8010		11/02/1993
Bromomethane	ND		0.4	ug/L	8010		11/02/1993
Carbon tetrachloride	ND		0.4	ug/L	8010		11/02/1993
Chlorobenzene	ND		0.4	ug/L	8010		11/02/1993
Chloroethane	ND		0.4	ug/L	8010		11/02/1993
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		11/02/1993
Chloroform	ND		0.4	ug/L	8010		11/02/1993
Chloromethane	ND		0.4	ug/L	8010		11/02/1993
Dibromochloromethane	ND		0.4	ug/L	8010		11/02/1993
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		11/02/1993
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		11/02/1993
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		11/02/1993
Dichlorodifluoromethane	ND		0.4	ug/L	8010		11/02/1993
1,1-Dichloroethane	ND		0.4	ug/L	8010		11/02/1993
1,2-Dichloroethane	ND		0.4	ug/L	8010		11/02/1993
1,1-Dichloroethene	ND		0.4	ug/L	8010		11/02/1993
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		11/02/1993
1,2-Dichloropropane	ND		0.4	ug/L	8010		11/02/1993
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		11/02/1993
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		11/02/1993
Methylene chloride	ND		10	ug/L	8010		11/02/1993
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		11/02/1993
Tetrachloroethene	ND		0.4	ug/L	8010		11/02/1993
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		11/02/1993
1,1,2-Trichloroethane	ND		1	ug/L	8010		11/02/1993
Trichloroethene	ND		0.4	ug/L	8010		11/02/1993
Trichlorofluoromethane	ND		0.4	ug/L	8010		11/02/1993
Vinyl chloride	ND		0.4	ug/L	8010		11/02/1993
SURROGATE RESULTS	--						11/02/1993
1,4-Difluorobenzene (SURR)	89				† Rec.		11/02/1993
1,4-Dichlorobutane (SURR)	76				† Rec.		11/02/1993



Client Acct: 62102
Client Name: Safety Kleen
NET Job No: 93.04699

Date: 11/08/1993
ELAP Certificate: 1386
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Ref: Project No. 70005-009-02

SAMPLE DESCRIPTION: MW-3
Date Taken: 10/20/1993
Time Taken: 14:20
NET Sample No: 176943

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTEX, Liquid)							
METHOD 5030/M8015	--						10/26/1993
DILUTION FACTOR*	1						10/26/1993
as Mineral Spirits	ND	✓	0.05	mg/L	5030		10/26/1993
METHOD 8020 (GC, Liquid)	--						10/26/1993
DILUTION FACTOR*	1						10/26/1993
Benzene	ND	✓	0.5	ug/L	8020		10/26/1993
Toluene	ND		0.5	ug/L	8020		10/26/1993
Ethylbenzene	ND	✓	0.5	ug/L	8020		10/26/1993
Xylenes (Total)	ND		0.5	ug/L	8020		10/26/1993
SURROGATE RESULTS	--						10/26/1993
Bromofluorobenzene (SURR)	76			µ Rec.	5030		10/26/1993



Client Acct: 62102
Client Name: Safety Kleen
NET Job No: 93.04699

Date: 11/08/1993
ELAP Certificate: 1386
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Ref: Project No. 70005-009-02

SAMPLE DESCRIPTION: MW-3 ✓
Date Taken: 10/20/1993
Time Taken: 14:20
NET Sample No: 176943

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
METHOD 8010 (GC,Liquid)							
DILUTION FACTOR*	1						11/02/1993
Bromodichloromethane	ND		0.4	ug/L	8010		11/02/1993
Bromoform	ND		0.4	ug/L	8010		11/02/1993
Bromomethane	ND		0.4	ug/L	8010		11/02/1993
Carbon tetrachloride	ND		0.4	ug/L	8010		11/02/1993
Chlorobenzene	ND		0.4	ug/L	8010		11/02/1993
Chloroethane	ND		0.4	ug/L	8010		11/02/1993
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		11/02/1993
Chloroform	ND		0.4	ug/L	8010		11/02/1993
Chloromethane	ND		0.4	ug/L	8010		11/02/1993
Dibromochloromethane	ND		0.4	ug/L	8010		11/02/1993
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		11/02/1993
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		11/02/1993
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		11/02/1993
Dichlorodifluoromethane	ND		0.4	ug/L	8010		11/02/1993
1,1-Dichloroethane	ND		0.4	ug/L	8010		11/02/1993
1,2-Dichloroethane	ND		0.4	ug/L	8010		11/02/1993
1,1-Dichloroethene	ND		0.4	ug/L	8010		11/02/1993
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		11/02/1993
1,2-Dichloropropane	ND		0.4	ug/L	8010		11/02/1993
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		11/02/1993
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		11/02/1993
Methylene chloride	ND		10	ug/L	8010		11/02/1993
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		11/02/1993
Tetrachloroethene	ND		0.4	ug/L	8010		11/02/1993
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		11/02/1993
1,1,2-Trichloroethane	ND		1	ug/L	8010		11/02/1993
Trichloroethene	ND		0.4	ug/L	8010		11/02/1993
Trichlorofluoromethane	ND		0.4	ug/L	8010		11/02/1993
Vinyl chloride	ND		0.4	ug/L	8010		11/02/1993
SURROGATE RESULTS	--						11/02/1993
1,4-Difluorobenzene (SURR)	97				† Rec.		11/02/1993
1,4-Dichlorobutane (SURR)	78				† Rec.		11/02/1993



Client Acct: 62102
Client Name: Safety Kleen
NET Job No: 93.04699

Date: 11/08/1993
ELAP Certificate: 1386
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Ref: Project No. 70005-009-02

SAMPLE DESCRIPTION: MW-4
Date Taken: 10/21/1993
Time Taken: 10:40
NET Sample No: 176944

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTEX, Liquid)							
METHOD 5030/M8015	--						10/26/1993
DILUTION FACTOR*	1						10/26/1993
as Mineral Spirits	0.40	GX	0.05	ug/L	5030		10/26/1993
METHOD 8020 (GC, Liquid)	--						10/26/1993
DILUTION FACTOR*	1						10/26/1993
Benzene	ND		0.5	ug/L	8020		10/26/1993
Toluene	ND		0.5	ug/L	8020		10/26/1993
Ethylbenzene	ND		0.5	ug/L	8020		10/26/1993
Xylenes (Total)	ND		0.5	ug/L	8020		10/26/1993
SURROGATE RESULTS	--						10/26/1993
Bromofluorobenzene (SURR)	96			µ Rec.	5030		10/26/1993

GX : The result for Mineral Spirits is an unk. HC which consists of several peaks.



Client Acct: 62102
Client Name: Safety Kleen
NET Job No: 93.04699

Date: 11/08/1993
ELAP Certificate: 1386
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Ref: Project No. 70005-009-02

SAMPLE DESCRIPTION: MW-4
Date Taken: 10/21/1993
Time Taken: 10:40
NET Sample No: 176944

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
METHOD 8010 (GC,Liquid)							
DILUTION FACTOR*	1						11/02/1993
Bromodichloromethane	ND		0.4	ug/L	8010		11/02/1993
Bromoform	ND		0.4	ug/L	8010		11/02/1993
Bromomethane	ND		0.4	ug/L	8010		11/02/1993
Carbon tetrachloride	ND		0.4	ug/L	8010		11/02/1993
Chlorobenzene	ND		0.4	ug/L	8010		11/02/1993
Chloroethane	ND		0.4	ug/L	8010		11/02/1993
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		11/02/1993
Chloroform	1.9	✓	0.4	ug/L	8010		11/02/1993
Chloromethane	ND		0.4	ug/L	8010		11/02/1993
Dibromochloromethane	ND		0.4	ug/L	8010		11/02/1993
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		11/02/1993
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		11/02/1993
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		11/02/1993
Dichlorodifluoromethane	ND		0.4	ug/L	8010		11/02/1993
1,1-Dichloroethane	ND		0.4	ug/L	8010		11/02/1993
1,2-Dichloroethane	ND		0.4	ug/L	8010		11/02/1993
1,1-Dichloroethene	ND	✓	0.4	ug/L	8010		11/02/1993
trans-1,2-Dichloroethene	0.6	✓	0.4	ug/L	8010		11/02/1993
1,2-Dichloropropane	ND		0.4	ug/L	8010		11/02/1993
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		11/02/1993
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		11/02/1993
Methylene chloride	ND		10	ug/L	8010		11/02/1993
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		11/02/1993
Tetrachloroethene	ND		0.4	ug/L	8010		11/02/1993
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		11/02/1993
1,1,2-Trichloroethane	ND		1	ug/L	8010		11/02/1993
Trichloroethene	ND		0.4	ug/L	8010		11/02/1993
Trichlorofluoromethane	ND		0.4	ug/L	8010		11/02/1993
Vinyl chloride	ND		0.4	ug/L	8010		11/02/1993
SURROGATE RESULTS							
1,4-Difluorobenzene (SURR)	94				‡ Rec.		11/02/1993
1,4-Dichlorobutane (SURR)	80				‡ Rec.		11/02/1993



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SAMPLE DESCRIPTION: MW-5
Date Taken: 10/20/1993
Time Taken: 15:05
NET Sample No: 176945

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTEX, Liquid)							
METHOD 5030/M8015	--						10/26/1993
DILUTION FACTOR*	1						10/26/1993
as Mineral Spirits	ND	✓	0.05	ug/L	5030		10/26/1993
METHOD 8020 (GC, Liquid)	--						10/26/1993
DILUTION FACTOR*	1						10/26/1993
Benzene	ND	✓	0.5	ug/L	8020		10/26/1993
Toluene	ND	✓	0.5	ug/L	8020		10/26/1993
Ethylbenzene	ND	✓	0.5	ug/L	8020		10/26/1993
Xylenes (Total)	ND	✓	0.5	ug/L	8020		10/26/1993
SURROGATE RESULTS	--						10/26/1993
Bromofluorobenzene (SURR)	89			µ Rec.	5030		10/26/1993



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SAMPLE DESCRIPTION: MW-5
Date Taken: 10/20/1993 ✓
Time Taken: 15:05
NET Sample No: 176945

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
METHOD 8010 (GC,Liquid)							
DILUTION FACTOR*	1						11/02/1993
Bromodichloromethane	ND		0.4	ug/L	8010		11/02/1993
Bromoform	ND		0.4	ug/L	8010		11/02/1993
Bromomethane	ND		0.4	ug/L	8010		11/02/1993
Carbon tetrachloride	ND		0.4	ug/L	8010		11/02/1993
Chlorobenzene	ND		0.4	ug/L	8010		11/02/1993
Chloroethane	ND		0.4	ug/L	8010		11/02/1993
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		11/02/1993
Chloroform	ND		0.4	ug/L	8010		11/02/1993
Chloromethane	ND		0.4	ug/L	8010		11/02/1993
Dibromochloromethane	ND		0.4	ug/L	8010		11/02/1993
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		11/02/1993
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		11/02/1993
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		11/02/1993
Dichlorodifluoromethane	ND		0.4	ug/L	8010		11/02/1993
1,1-Dichloroethane	ND		0.4	ug/L	8010		11/02/1993
1,2-Dichloroethane	ND		0.4	ug/L	8010		11/02/1993
1,1-Dichloroethene	ND		0.4	ug/L	8010		11/02/1993
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		11/02/1993
1,2-Dichloropropane	ND		0.4	ug/L	8010		11/02/1993
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		11/02/1993
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		11/02/1993
Methylene chloride	ND		10	ug/L	8010		11/02/1993
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		11/02/1993
Tetrachloroethene	ND		0.4	ug/L	8010		11/02/1993
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		11/02/1993
1,1,2-Trichloroethane	ND		1	ug/L	8010		11/02/1993
Trichloroethene	12		0.4	ug/L	8010		11/02/1993
Trichlorofluoromethane	ND		0.4	ug/L	8010		11/02/1993
Vinyl chloride	ND		0.4	ug/L	8010		11/02/1993
SURROGATE RESULTS	--						11/02/1993
1,4-Difluorobenzene (SURR)	94				‡ Rec.		11/02/1993
1,4-Dichlorobutane (SURR)	75				‡ Rec.		11/02/1993



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SAMPLE DESCRIPTION: MW-6
Date Taken: 10/20/1993
Time Taken: 14:40
NET Sample No: 176946

Parameter	Results	Flags	Reporting			Date	Date
			Limit	Units	Method	Extracted	Analyzed
TPH (Gas/BTXE,Liquid)	--						
METHOD 5030/M8015	--						10/26/1993
DILUTION FACTOR*	1						10/26/1993
as Mineral Spirits	ND	✓	0.05	mg/L	5030		10/26/1993
METHOD 8020 (GC,Liquid)	--						10/26/1993
DILUTION FACTOR*	1						10/26/1993
Benzene	ND		0.5	ug/L	8020		10/26/1993
Toluene	ND	✓	0.5	ug/L	8020		10/26/1993
Ethylbenzene	ND	✓	0.5	ug/L	8020		10/26/1993
Xylenes (Total)	ND	✓	0.5	ug/L	8020		10/26/1993
SURROGATE RESULTS	--						10/26/1993
Bromofluorobenzene (SURR)	92			† Rec.	5030		10/26/1993



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SAMPLE DESCRIPTION: MW-6
 Date Taken: 10/20/1993
 Time Taken: 14:40
 NET Sample No: 176946

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
METHOD 8010 (GC,Liquid)							
DILUTION FACTOR*	1						11/02/1993
Bromodichloromethane	ND		0.4	ug/L	8010		11/02/1993
Bromoform	ND		0.4	ug/L	8010		11/02/1993
Bromomethane	ND		0.4	ug/L	8010		11/02/1993
Carbon tetrachloride	ND		0.4	ug/L	8010		11/02/1993
Chlorobenzene	ND		0.4	ug/L	8010		11/02/1993
Chloroethane	ND		0.4	ug/L	8010		11/02/1993
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		11/02/1993
Chloroform	ND		0.4	ug/L	8010		11/02/1993
Chloromethane	ND		0.4	ug/L	8010		11/02/1993
Dibromochloromethane	ND		0.4	ug/L	8010		11/02/1993
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		11/02/1993
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		11/02/1993
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		11/02/1993
Dichlorodifluoromethane	ND		0.4	ug/L	8010		11/02/1993
1,1-Dichloroethane	ND		0.4	ug/L	8010		11/02/1993
1,2-Dichloroethane	ND		0.4	ug/L	8010		11/02/1993
1,1-Dichloroethene	ND		0.4	ug/L	8010		11/02/1993
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		11/02/1993
1,2-Dichloropropane	ND		0.4	ug/L	8010		11/02/1993
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		11/02/1993
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		11/02/1993
Methylene chloride	ND		10	ug/L	8010		11/02/1993
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		11/02/1993
Tetrachloroethene	ND		0.4	ug/L	8010		11/02/1993
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		11/02/1993
1,1,2-Trichloroethane	ND		1	ug/L	8010		11/02/1993
Trichloroethene	1.3	✓	0.4	ug/L	8010		11/02/1993
Trichlorofluoromethane	ND		0.4	ug/L	8010		11/02/1993
Vinyl chloride	ND		0.4	ug/L	8010		11/02/1993
SURROGATE RESULTS	--						11/02/1993
1,4-Difluorobenzene (SURR)	88				‡ Rec.		11/02/1993
1,4-Dichlorobutane (SURR)	69				‡ Rec.		11/02/1993



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SAMPLE DESCRIPTION: MW-8 ✓
Date Taken: 10/21/1993
Time Taken: 11:45
NET Sample No: 176947

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTEX, Liquid)							
METHOD 5030/M8015	--						10/26/1993
DILUTION FACTOR*	1						10/26/1993
as Mineral Spirits	ND		0.05	ug/L	5030		10/26/1993
METHOD 8020 (GC, Liquid)	--						10/26/1993
DILUTION FACTOR*	1						10/26/1993
Benzene	ND		0.5	ug/L	8020		10/26/1993
Toluene	ND		0.5	ug/L	8020		10/26/1993
Ethylbenzene	ND		0.5	ug/L	8020		10/26/1993
Xylenes (Total)	ND		0.5	ug/L	8020		10/26/1993
SURROGATE RESULTS	--						10/26/1993
Bromofluorobenzene (SURR)	88			* Rec.	5030		10/26/1993



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SAMPLE DESCRIPTION: MW-8 ✓
Date Taken: 10/21/1993
Time Taken: 11:45
NET Sample No: 176947

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
METHOD 8010 (GC,Liquid)							
DILUTION FACTOR*	1						11/02/1993
Bromodichloromethane	ND		0.4	ug/L	8010		11/02/1993
Bromoform	ND		0.4	ug/L	8010		11/02/1993
Bromomethane	ND		0.4	ug/L	8010		11/02/1993
Carbon tetrachloride	ND		0.4	ug/L	8010		11/02/1993
Chlorobenzene	5.4		0.4	ug/L	8010		11/02/1993
Chloroethane	ND		0.4	ug/L	8010		11/02/1993
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		11/02/1993
Chloroform	ND		0.4	ug/L	8010		11/02/1993
Chloromethane	ND		0.4	ug/L	8010		11/02/1993
Dibromochloromethane	ND		0.4	ug/L	8010		11/02/1993
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		11/02/1993
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		11/02/1993
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		11/02/1993
Dichlorodifluoromethane	ND		0.4	ug/L	8010		11/02/1993
1,1-Dichloroethane	ND		0.4	ug/L	8010		11/02/1993
1,2-Dichloroethane	5.2		0.4	ug/L	8010		11/02/1993
1,1-Dichloroethene	ND		0.4	ug/L	8010		11/02/1993
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		11/02/1993
1,2-Dichloropropane	ND		0.4	ug/L	8010		11/02/1993
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		11/02/1993
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		11/02/1993
Methylene chloride	ND		10	ug/L	8010		11/02/1993
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		11/02/1993
Tetrachloroethene	ND		0.4	ug/L	8010		11/02/1993
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		11/02/1993
1,1,2-Trichloroethane	ND		1	ug/L	8010		11/02/1993
Trichloroethene	15		0.4	ug/L	8010		11/02/1993
Trichlorofluoromethane	ND		0.4	ug/L	8010		11/02/1993
Vinyl chloride	ND		0.4	ug/L	8010		11/02/1993
SURROGATE RESULTS							
1,4-Difluorobenzene (SURR)	82				‡ Rec.		11/02/1993
1,4-Dichlorobutane (SURR)	66				‡ Rec.		11/02/1993



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SAMPLE DESCRIPTION: MW-10
Date Taken: 10/21/1993
Time Taken: 09:55
NET Sample No: 176948

Parameter	Results	Flags	Reporting			Date	Date
			Limit	Units	Method	Extracted	Analyzed
TPH (Gas/BTEX, Liquid)							
METHOD 5030/M8015	--						10/27/1993
DILUTION FACTOR*	1						10/27/1993
as Mineral Spirits	ND		0.05	ug/L	5030		10/27/1993
METHOD 8020 (GC, Liquid)	--						10/27/1993
DILUTION FACTOR*	1						10/27/1993
Benzene	ND		0.5	ug/L	8020		10/27/1993
Toluene	ND		0.5	ug/L	8020		10/27/1993
Ethylbenzene	ND		0.5	ug/L	8020		10/27/1993
Xylenes (Total)	ND		0.5	ug/L	8020		10/27/1993
SURROGATE RESULTS	--						10/27/1993
Bromofluorobenzene (SURR)	102			% Rec.	5030		10/27/1993



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SAMPLE DESCRIPTION: MW-10
 Date Taken: 10/21/1993
 Time Taken: 09:55
 NET Sample No: 176948

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
METHOD 8010 (GC,Liquid)							
DILUTION FACTOR*	1						11/02/1993
Bromodichloromethane	ND		0.4	ug/L	8010		11/02/1993
Bromoform	ND		0.4	ug/L	8010		11/02/1993
Bromomethane	ND		0.4	ug/L	8010		11/02/1993
Carbon tetrachloride	ND		0.4	ug/L	8010		11/02/1993
Chlorobenzene	ND		0.4	ug/L	8010		11/02/1993
Chloroethane	ND		0.4	ug/L	8010		11/02/1993
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		11/02/1993
Chloroform	ND		0.4	ug/L	8010		11/02/1993
Chloromethane	ND		0.4	ug/L	8010		11/02/1993
Dibromochloromethane	ND		0.4	ug/L	8010		11/02/1993
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		11/02/1993
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		11/02/1993
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		11/02/1993
Dichlorodifluoromethane	ND		0.4	ug/L	8010		11/02/1993
1,1-Dichloroethane	ND		0.4	ug/L	8010		11/02/1993
1,2-Dichloroethane	ND		0.4	ug/L	8010		11/02/1993
1,1-Dichloroethene	ND		0.4	ug/L	8010		11/02/1993
trans-1,2-Dichloroethene	3.0		0.4	ug/L	8010		11/02/1993
1,2-Dichloropropane	ND		0.4	ug/L	8010		11/02/1993
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		11/02/1993
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		11/02/1993
Methylene chloride	ND		10	ug/L	8010		11/02/1993
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		11/02/1993
Tetrachloroethene	ND		0.4	ug/L	8010		11/02/1993
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		11/02/1993
1,1,2-Trichloroethane	ND		1	ug/L	8010		11/02/1993
Trichloroethene	42		0.4	ug/L	8010		11/02/1993
Trichlorofluoromethane	ND		0.4	ug/L	8010		11/02/1993
Vinyl chloride	ND		0.4	ug/L	8010		11/02/1993
SURROGATE RESULTS	--						11/02/1993
1,4-Difluorobenzene (SURR)	77				& Rec.		11/02/1993
1,4-Dichlorobutane (SURR)	62				& Rec.		11/02/1993



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SAMPLE DESCRIPTION: MW-11
Date Taken: 10/21/1993
Time Taken: 09:05
NET Sample No: 176949

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTEX, Liquid)							
METHOD 5030/M8015	--						10/26/1993
DILUTION FACTOR*	1						10/26/1993
as Mineral Spirits	ND		0.05	ug/L	5030		10/26/1993
METHOD 8020 (GC, Liquid)	--						10/26/1993
DILUTION FACTOR*	1						10/26/1993
Benzene	ND		0.5	ug/L	8020		10/26/1993
Toluene	ND		0.5	ug/L	8020		10/26/1993
Ethylbenzene	ND		0.5	ug/L	8020		10/26/1993
Xylenes (Total)	ND		0.5	ug/L	8020		10/26/1993
SURROGATE RESULTS	--						10/26/1993
Bromofluorobenzene (SURR)	89			† Rec.	5030		10/26/1993



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Client Name: Safety Kleen
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Ref: Project No. 70005-009-02

SAMPLE DESCRIPTION: MW-11
Date Taken: 10/21/1993
Time Taken: 09:05
NET Sample No: 176949

Parameter	Results	Flags	Reporting		Method	Date	Date
			Limit	Units		Extracted	Analyzed
METHOD 8010 (GC,Liquid)							
DILUTION FACTOR*	1						11/02/1993
Bromodichloromethane	ND		0.4	ug/L	8010		11/02/1993
Bromoform	ND		0.4	ug/L	8010		11/02/1993
Bromomethane	ND		0.4	ug/L	8010		11/02/1993
Carbon tetrachloride	ND		0.4	ug/L	8010		11/02/1993
Chlorobenzene	ND		0.4	ug/L	8010		11/02/1993
Chloroethane	ND		0.4	ug/L	8010		11/02/1993
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		11/02/1993
Chloroform	ND		0.4	ug/L	8010		11/02/1993
Chloromethane	ND		0.4	ug/L	8010		11/02/1993
Dibromochloromethane	ND		0.4	ug/L	8010		11/02/1993
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		11/02/1993
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		11/02/1993
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		11/02/1993
Dichlorodifluoromethane	ND		0.4	ug/L	8010		11/02/1993
1,1-Dichloroethane	ND		0.4	ug/L	8010		11/02/1993
1,2-Dichloroethane	ND		0.4	ug/L	8010		11/02/1993
1,1-Dichloroethene	ND		0.4	ug/L	8010		11/02/1993
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		11/02/1993
1,2-Dichloropropane	ND		0.4	ug/L	8010		11/02/1993
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		11/02/1993
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		11/02/1993
Methylene chloride	ND		10	ug/L	8010		11/02/1993
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		11/02/1993
Tetrachloroethene	ND		0.4	ug/L	8010		11/02/1993
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		11/02/1993
1,1,2-Trichloroethane	ND		1	ug/L	8010		11/02/1993
Trichloroethene	11	C	0.4	ug/L	8010		11/02/1993
Trichlorofluoromethane	ND		0.4	ug/L	8010		11/02/1993
Vinyl chloride	ND		0.4	ug/L	8010		11/02/1993
SURROGATE RESULTS	--						11/02/1993
1,4-Difluorobenzene (SURR)	102			µg Rec.			11/02/1993
1,4-Dichlorobutane (SURR)	73			µg Rec.			11/02/1993

C : Positive result confirmed by secondary column or GC/MS analysis.



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Client Name: Safety Kleen
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SAMPLE DESCRIPTION: MW-12
Date Taken: 10/20/1993
Time Taken: 14:05
NET Sample No: 176950

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTKB, Liquid)							
METHOD 5030/M8015	--						10/26/1993
DILUTION FACTOR*	1						10/26/1993
as Mineral Spirits	ND		0.05	mg/L	5030		10/26/1993
METHOD 8020 (GC, Liquid)	--						10/26/1993
DILUTION FACTOR*	1						10/26/1993
Benzene	ND		0.5	ug/L	8020		10/26/1993
Toluene	ND		0.5	ug/L	8020		10/26/1993
Ethylbenzene	ND		0.5	ug/L	8020		10/26/1993
Xylenes (Total)	ND		0.5	ug/L	8020		10/26/1993
SURROGATE RESULTS	--						10/26/1993
Bromofluorobenzene (SURR)	97			µ Rec.	5030		10/26/1993



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SAMPLE DESCRIPTION: MW-12
Date Taken: 10/20/1993
Time Taken: 14:05
NET Sample No: 176950

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
METHOD 8010 (GC,Liquid)							
DILUTION FACTOR*	1						11/02/1993
Bromodichloromethane	ND		0.4	ug/L	8010		11/02/1993
Bromoform	ND		0.4	ug/L	8010		11/02/1993
Bromomethane	ND		0.4	ug/L	8010		11/02/1993
Carbon tetrachloride	ND		0.4	ug/L	8010		11/02/1993
Chlorobenzene	ND		0.4	ug/L	8010		11/02/1993
Chloroethane	ND		0.4	ug/L	8010		11/02/1993
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		11/02/1993
Chloroform	ND		0.4	ug/L	8010		11/02/1993
Chloromethane	ND		0.4	ug/L	8010		11/02/1993
Dibromochloromethane	ND		0.4	ug/L	8010		11/02/1993
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		11/02/1993
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		11/02/1993
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		11/02/1993
Dichlorodifluoromethane	ND		0.4	ug/L	8010		11/02/1993
1,1-Dichloroethane	ND		0.4	ug/L	8010		11/02/1993
1,2-Dichloroethane	ND		0.4	ug/L	8010		11/02/1993
1,1-Dichloroethene	ND		0.4	ug/L	8010		11/02/1993
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		11/02/1993
1,2-Dichloropropane	ND		0.4	ug/L	8010		11/02/1993
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		11/02/1993
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		11/02/1993
Methylene chloride	ND		10	ug/L	8010		11/02/1993
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		11/02/1993
Tetrachloroethene	ND		0.4	ug/L	8010		11/02/1993
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		11/02/1993
1,1,2-Trichloroethane	ND		1	ug/L	8010		11/02/1993
Trichloroethene	34	C	0.4	ug/L	8010		11/02/1993
Trichlorofluoromethane	ND		0.4	ug/L	8010		11/02/1993
Vinyl chloride	ND		0.4	ug/L	8010		11/02/1993
SURROGATE RESULTS	--						11/02/1993
1,4-Difluorobenzene (SURR)	79				‡ Rec.		11/02/1993
1,4-Dichlorobutane (SURR)	62				‡ Rec.		11/02/1993

C : Positive result confirmed by secondary column or GC/MS analysis.



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CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

Parameter	CCV	CCV	CCV	Units	Date Analyzed	Analyst Initials
	Standard % Recovery	Standard Amount Found	Standard Amount Expected			
TPH (Gas/BTEX, Liquid)						
Benzene	97.4	4.87	5.00	ug/L	10/26/1993	vin
Toluene	86.0	4.30	5.00	ug/L	10/26/1993	vin
Ethylbenzene	87.6	4.38	5.00	ug/L	10/26/1993	vin
Xylenes (Total)	89.3	13.40	15.0	ug/L	10/26/1993	vin
Bromofluorobenzene (SURR)	93.0	93	100	% Rec.	10/26/1993	vin
TPH (Gas/BTEX, Liquid)						
Benzene	89.4	4.47	5.00	ug/L	10/27/1993	vin
Toluene	100.0	5.00	5.00	ug/L	10/27/1993	vin
Ethylbenzene	100.0	5.00	5.00	ug/L	10/27/1993	vin
Xylenes (Total)	95.4	14.31	15.0	ug/L	10/27/1993	vin
Bromofluorobenzene (SURR)	90.0	90	100	% Rec.	10/27/1993	vin
METHOD 6010 (GC, Liquid)						
Bromodichloromethane	100.5	20.1	20.0	ug/L	11/02/1993	asm
Bromoform	90.5	18.1	20.0	ug/L	11/02/1993	asm
Bromomethane	87.0	17.4	20.0	ug/L	11/02/1993	asm
Carbon tetrachloride	102.5	20.5	20.0	ug/L	11/02/1993	asm
Chlorobenzene	101.0	20.2	20.0	ug/L	11/02/1993	asm
Chloroethane	87.0	17.4	20.0	ug/L	11/02/1993	asm
2-Chloroethylvinyl ether	116.0	23.2	20.0	ug/L	11/02/1993	asm
Chloroform	105.0	21.0	20.0	ug/L	11/02/1993	asm
Chloromethane	121.5	24.3	20.0	ug/L	11/02/1993	asm
Dibromochloromethane	94.5	18.9	20.0	ug/L	11/02/1993	asm
1,2-Dichlorobenzene	103.5	20.7	20.0	ug/L	11/02/1993	asm
1,3-Dichlorobenzene	104.0	20.8	20.0	ug/L	11/02/1993	asm
1,4-Dichlorobenzene	104.5	20.9	20.0	ug/L	11/02/1993	asm
1,1-Dichloroethane	104.0	20.8	20.0	ug/L	11/02/1993	asm
1,2-Dichloroethane	104.5	20.9	20.0	ug/L	11/02/1993	asm
1,1-Dichloroethene	78.5	15.7	20.0	ug/L	11/02/1993	asm
trans-1,2-Dichloroethene	87.0	17.4	20.0	ug/L	11/02/1993	asm
1,2-Dichloropropane	106.5	21.3	20.0	ug/L	11/02/1993	asm
cis-1,3-Dichloropropene	106.5	21.3	20.0	ug/L	11/02/1993	asm
trans-1,3-Dichloropropene	106.0	21.2	20.0	ug/L	11/02/1993	asm
Methylene chloride	104.5	20.9	20.0	ug/L	11/02/1993	asm
1,1,2,2-Tetrachloroethane	106.0	21.2	20.0	ug/L	11/02/1993	asm
Tetrachloroethene	105.5	21.1	20.0	ug/L	11/02/1993	asm
1,1,1-Trichloroethane	105.5	21.1	20.0	ug/L	11/02/1993	asm
1,1,2-Trichloroethane	111.0	22.2	20.0	ug/L	11/02/1993	asm
Trichloroethene	105.5	21.1	20.0	ug/L	11/02/1993	asm
Trichlorofluoromethane	83.5	16.7	20.0	ug/L	11/02/1993	asm
Vinyl chloride	121.5	24.3	20.0	ug/L	11/02/1993	asm
1,4-Difluorobenzene (SURR)	98.0	98	100	% Rec.	11/02/1993	asm
1,4-Dichlorobutane (SURR)	103.0	103	100	% Rec.	11/02/1993	asm



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METHOD BLANK REPORT

Parameter	Method Blank Amount Found	Reporting Limit	Units	Date Analyzed	Analyst Initials
TPH (Gas/BTEX,Liquid)					
as Mineral Spirits	ND	0.05	mg/L	10/26/1993	vin
Benzene	ND	0.5	ug/L	10/26/1993	vin
Toluene	ND	0.5	ug/L	10/26/1993	vin
Ethylbenzene	ND	0.5	ug/L	10/26/1993	vin
Xylenes (Total)	ND	0.5	ug/L	10/26/1993	vin
Bromofluorobenzene (SURR)	93		‡ Rec.	10/26/1993	vin
TPH (Gas/BTEX,Liquid)					
as Mineral Spirits	ND	0.05	mg/L	10/27/1993	vin
Benzene	ND	0.5	ug/L	10/27/1993	vin
Toluene	ND	0.5	ug/L	10/27/1993	vin
Ethylbenzene	ND	0.5	ug/L	10/27/1993	vin
Xylenes (Total)	ND	0.5	ug/L	10/27/1993	vin
Bromofluorobenzene (SURR)	82		‡ Rec.	10/27/1993	vin
METHOD 8010 (GC,Liquid)					
Bromodichloromethane	ND	0.4	ug/L	11/02/1993	asm
Bromoform	ND	0.4	ug/L	11/02/1993	asm
Bromomethane	ND	0.4	ug/L	11/02/1993	asm
Carbon tetrachloride	ND	0.4	ug/L	11/02/1993	asm
Chlorobenzene	ND	0.4	ug/L	11/02/1993	asm
Chloroethane	ND	0.4	ug/L	11/02/1993	asm
2-Chloroethylvinyl ether	ND	1.0	ug/L	11/02/1993	asm
Chloroform	ND	0.4	ug/L	11/02/1993	asm
Chloromethane	ND	0.4	ug/L	11/02/1993	asm
Dibromochloromethane	ND	0.4	ug/L	11/02/1993	asm
1,2-Dichlorobenzene	ND	0.4	ug/L	11/02/1993	asm
1,3-Dichlorobenzene	ND	0.4	ug/L	11/02/1993	asm
1,4-Dichlorobenzene	ND	0.4	ug/L	11/02/1993	asm
Dichlorodifluoromethane	ND	0.4	ug/L	11/02/1993	asm
1,1-Dichloroethane	ND	0.4	ug/L	11/02/1993	asm
1,2-Dichloroethane	ND	0.4	ug/L	11/02/1993	asm
1,1-Dichloroethene	ND	0.4	ug/L	11/02/1993	asm
trans-1,2-Dichloroethene	ND	0.4	ug/L	11/02/1993	asm
1,2-Dichloropropane	ND	0.4	ug/L	11/02/1993	asm
cis-1,3-Dichloropropene	ND	0.4	ug/L	11/02/1993	asm
trans-1,3-Dichloropropene	ND	0.4	ug/L	11/02/1993	asm
Methylene chloride	ND	10	ug/L	11/02/1993	asm
1,1,2,2-Tetrachloroethane	ND	0.4	ug/L	11/02/1993	asm
Tetrachloroethene	ND	0.4	ug/L	11/02/1993	asm
1,1,1-Trichloroethane	ND	0.4	ug/L	11/02/1993	asm
1,1,2-Trichloroethane	ND	0.4	ug/L	11/02/1993	asm
Trichloroethene	ND	0.4	ug/L	11/02/1993	asm
Trichlorofluoromethane	ND	0.4	ug/L	11/02/1993	asm
Vinyl chloride	ND	0.4	ug/L	11/02/1993	asm
1,4-Difluorobenzene (SURR)	84		‡ Rec.	11/02/1993	asm
1,4-Dichlorobutane (SURR)	83		‡ Rec.	11/02/1993	asm



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MATRIX SPIKE / MATRIX SPIKE DUPLICATE

Parameter	Matrix Spike			Spike Amount	Sample Conc.	Matrix Spike		Units	Date Analyzed	Analyst Initials
	Spike % Rec.	Dup % Rec.	RPD			Spike Conc.	Dup. Conc.			
TPH (Gas/BTXE,Liquid)										
Benzene	70.4	83.2	16.7	45.3	ND	31.9	37.7	ug/L	10/26/1993	vin
Toluene	90.3	100.3	10.4	78.4	ND	70.8	78.6	ug/L	10/26/1993	vin
Bromofluorobenzene (SURR)	105	129		100	95			% Rec.	10/26/1993	vin
TPH (Gas/BTXE,Liquid)										
Benzene	93.4	92.9	0.5	43.9	ND	41.0	40.8	ug/L	10/27/1993	vin
Toluene	97.0	97.0	0.0	77.6	ND	75.3	75.3	ug/L	10/27/1993	vin
Bromofluorobenzene (SURR)	133	132		100	102			% Rec.	10/27/1993	vin
METHOD 8010 (GC,Liquid)										
Chlorobenzene	104.5	108.0	3.3	20.0	ND	20.9	21.6	ug/L	11/02/1993	asm
1,1-Dichloroethene	90.0	96.0	6.5	20.0	ND	18.0	19.2	ug/L	11/02/1993	asm
Trichloroethene	105.0	111.0	5.6	20.0	ND	21.0	22.2	ug/L	11/02/1993	asm
1,4-Difluorobenzene (SURR)	94	96		100	99			% Rec.	11/02/1993	asm
1,4-Dichlorobutane (SURR)	99	100		100	95			% Rec.	11/02/1993	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, $100 \text{ [Value 1 - Value 2] / mean value}$.
- 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.

SEACOR Chain-of-Custody Record

Address SEACOR
1390 Willow Pass Rd. #360
CONCORD, CA. - 94520

6511

NET
(707) 526-9200

Project # 70005-009-02 Task # _____
 Project Manager G. HOEHN
 Laboratory NET
 Turn-around time: NORMAL
 Sampler's Name: D. Navero
 Sampler's Signature: [Signature]

Analysis Request

Sample ID	Date	Time	Matrix	TPHg/BTEX 8015 (modified)/8020	TPHg 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/BTEX Mercury Spreads	Comments/Instructions	Number of Containers
MW-1	10/21/93	13:25	W						X						X		6
MW-2	10/21/93	12:35	W						X						X		6
MW-3	10/20/93	14:20	W						X						X		6
MW-4	10/21/93	10:40	W						X						X		6
MW-5	10/20/93	15:05	W						X						X		6
MW-6	10/20/93	14:40	W						X						X		6
MW-8	10/21/93	11:45	W						X						X		6
MW-10	10/21/93	9:55	W						X						X		6
MW-11	10/21/93	9:05	W						X						X		6
MW-12	10/20/93	14:05	W						X						X		6

CUSTOMER SEALED
 10/22/93
 [Signature]
 Seal intact

Special Instructions/Comments:
Bill to:
SAFETY KLEEN COMP.
AUTH.# RM 541638347551..

Relinquished by: [Signature]
 Sign [Signature]
 Print D. Navero
 Company SEACOR
 Time 10:50 Date 10/22/93

Received by: [Signature]
 Sign [Signature]
 Print G.P. Lumbrae
 Company NET
 Time 10:50 Date 10/22/93

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

Relinquished by: [Signature]
 Sign [Signature]
 Print G.P. Lumbrae
 Company NET
 Time 1700 Date 10/22/93

Received by: [Signature]
 Sign [Signature]
 Print K. Temple
 Company NET SR
 Time 1000 Date 10/23/93

SEACOR
 Client: G. HOEHN
 Client Contact: _____
 Client Phone Number: (510) 686-9980

Via NCS