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QUARTERLY GROUNDWATER MONITORING AND SOIL VAPOR EXTRACTION REPORT SAFETY-KLEEN SERVICE CENTER

400 MARKET STREET
OAKLAND, CALIFORNIA

Job No. 70005-009-06

Prepared For: 7-13-94
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1.0 INTRODUCTION

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

2.0 PROJECT BACKGROUND INFORMATION

The Safety-Kleen Oakland Service Center is a local distribution center for Safety-Kleen products. Three single-walled underground storage tanks (USTs) were removed and replaced with two new 12,000 gallon double-walled tanks in June and July of 1990. Product and waste mineral spirits are currently stored in the two double-walled USTs at the site. One UST is used to consolidate waste mineral spirits prior to shipment to Safety-Kleen's recycling center in Reedley, California and one UST is used for distribution of product mineral spirits to Safety-Kleen customers.

During the single-walled tank removal, mineral spirits impacted soil was excavated from the tank pit as allowable by site conditions. Additionally, a product recovery well and a vapor extraction system withdrawal network were installed in the tank pit area. Tank removal and excavation activities are documented in the *Report of Underground Storage Tank Replacement Activities* dated September 1990. The product pumping system installed in recovery well (RW-1) to remove separate-phase product from the water table began operation on January 19, 1993. A system to extract and treat soil vapor began full-scale operation on June 1, 1993.

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

3.0 SCOPE OF WORK

Work conducted during this quarter consisted of SVE and vapor treatment system operation, and the monitoring and sampling of groundwater monitor wells. The SVE system did not operate from April 11 to May 10, 1994, pending replacement of the Padre™ system by Purus, Inc. The following sections provide a description of the work steps conducted.

3.1 SOIL VAPOR EXTRACTION SYSTEM

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

Vapor samples were collected on April 5 and May 25, 1994 from the system influent. The analytical data were used to calculate mineral spirits removal data. The vapor samples were collected in Tedlar bags and transported under chain-of-custody to a state-certified laboratory for analysis. Vapor samples were analyzed for benzene, toluene, ethylbenzene and xylenes (BTEX) by U.S. Environmental Protection Agency (EPA) Method 8020, total petroleum hydrocarbons as mineral spirits (TPHms) by modified EPA Method 8015, and purgeable halocarbons by EPA Method 8010.

3.2 RW-1 MINERAL SPIRITS RECOVERY

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

3.3 GROUNDWATER MONITORING AND SAMPLING

On April 20, 1994, on- and off-site monitor wells (except well MW-10 which was not accessible due to Caltrans demolition work) were monitored for depth-to-water using a water level indicator calibrated to 0.01-foot. The depth-to-water measurements were used with well survey data to construct a potentiometric surface map.

On April 20 and 21, 1994, the monitor wells were purged by hand bailing (except well MW-13 which was purged by pumping, well MW-9 which contains floating mineral spirits, and well MW-10 which was not accessible) until approximately three well volumes of groundwater had been removed, or until

measurements of pH, temperature, and conductivity had stabilized. Following recovery of the groundwater levels in the wells, groundwater samples were collected using disposable samplers. The groundwater samples were placed into laboratory supplied sample containers. Field data sheets which include depth-to-water measurements and well purge data are included in Appendix A.

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

Prior to using any equipment in a groundwater monitor well, the equipment was decontaminated by double-washing with a laboratory grade detergent in clean water, and triple-rinsed using deionized water. Purge water and decontamination water generated during well purging and sampling was placed in the waste mineral spirits tank or in labeled containers pending proper disposal.

4.0 RESULTS

4.1 SOIL VAPOR EXTRACTION SYSTEM

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

The laboratory analyses of system influent samples detected TPHms concentrations of 600 $\mu g/\ell$ on April 5, 1994 and 400 $\mu g/\ell$ on May 25, 1994. Results of BTEX and purgeable halocarbon analyses of system influent samples were 12 $\mu g/\ell$ xylenes and 0.8 $\mu g/\ell$ 1,1,1-trichloroethane on April 5, 1994; and 4.6 $\mu g/\ell$ xylenes, 1.3 $\mu g/\ell$ ethylbenzene, 1.2 $\mu g/\ell$ toluene, 0.3 $\mu g/\ell$ benzene, 1.6 $\mu g/\ell$ methylene chloride, 3.7 $\mu g/\ell$ 1,1,1-trichloroethane, 0.5 $\mu g/\ell$ trichloroethene, and 1.9 $\mu g/\ell$ tetrachloroethene on May 25, 1994. Copies of vapor analytical reports are included as Appendix B.

The system monitoring data were used to calculate system mineral spirits removal rates and a cumulative mass of mineral spirits removed via vapor extraction. As shown on Table 2, the removal rate on April 5, 1994 was calculated as 6.31 pounds per day (lbs/day) and 3.96 lbs/day on May 25, 1994. Data collected through May 25, 1994 indicate 1,147.3 pounds of mineral spirits (approximately 176.5 gallons) have been removed from the subsurface by the SVE system.

4.2 RW-1 MINERAL SPIRITS RECOVERY

The mineral spirits skimming pump recovery data was calculated to be 16.6 gallons during this reporting period. A total of 60.3 gallons of product have been removed since the pump was installed on January 19, 1993. Product recovery data are summarized on Table 3.

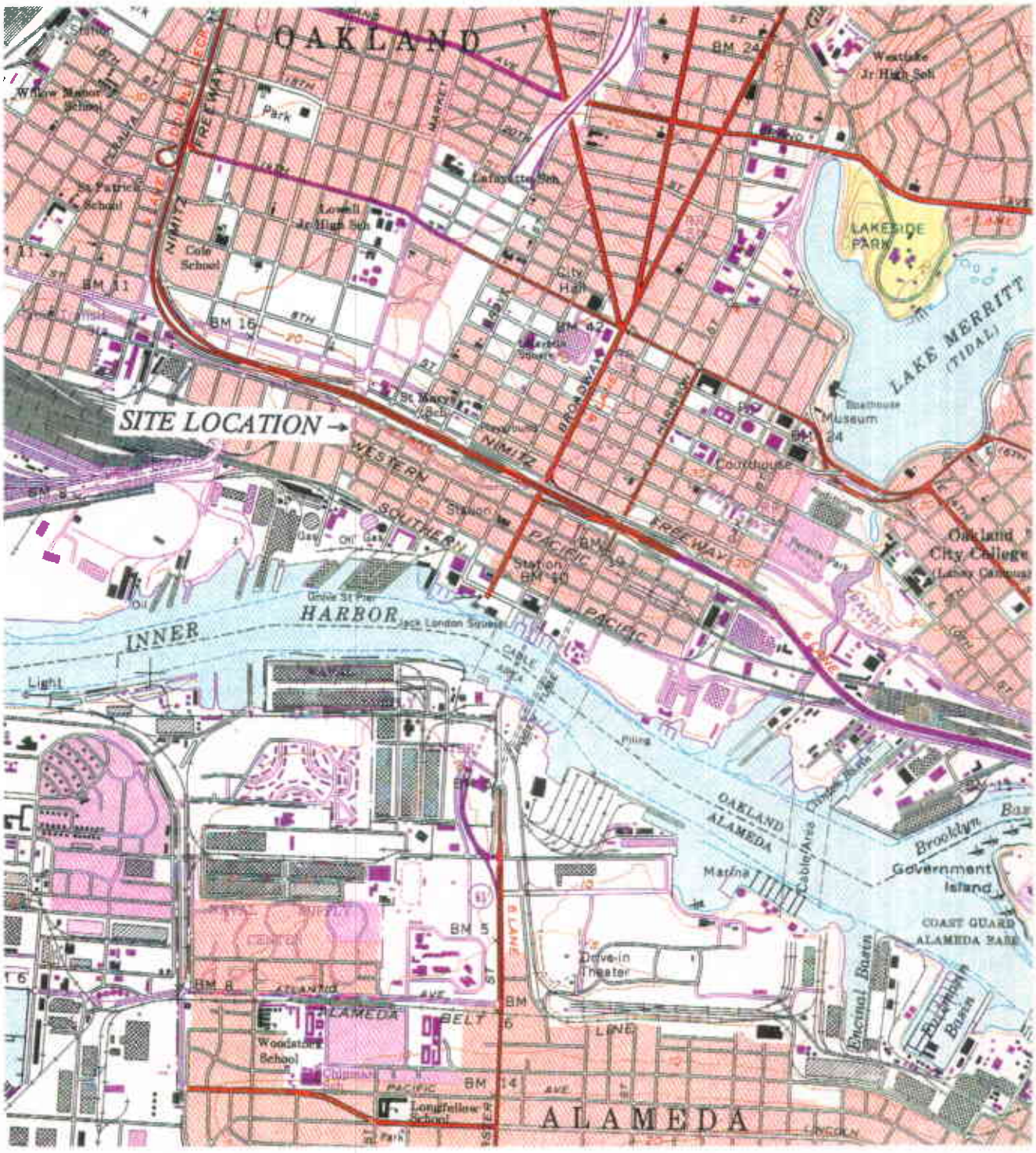
4.3 GROUNDWATER ELEVATIONS

Groundwater elevations and depth-to-water readings as measured on April 20, 1994 are presented in Table 4. The average water table elevation increased by 0.46 feet since the January 19, 1993 monitoring and sampling event. A potentiometric surface map prepared with the April 20, 1994 data is presented as Figure 4. The groundwater flow direction remains to the south, consistent with historic site data. The hydraulic gradient is an average of 0.003 feet/foot (ft/ft) across the site and 0.02 ft/ft between monitor wells MW-3 and MW-12. This gradient is similar to the previous quarter's data and is typical for the site.

4.4 GROUNDWATER CONDITIONS

No concentrations of BTEX were detected above the laboratory detection limits in any of the groundwater samples collected on April 21, 1994. TPHms was reported in the sample collected from well MW-4 at a concentration of 760 $\mu g/\ell$; however, the laboratory analytical report notes that the result reported as mineral spirits is an unknown hydrocarbon which consists of a single peak and no mineral spirits or fuel pattern was present. No concentrations of TPHms were detected in any of the remaining wells. Volatile organic compounds (VOCs) were detected in groundwater samples collected from seven wells (MW-3, MW-4, MW-5, MW-6, MW-8, MW-11 and MW-12). VOCs detected during this sampling event consisted of 1,1-dichloroethane (1,1-DCA), 1,2-dichloroethane (1,2-DCA), trichloroethene (TCE), chloroform, trans-1,2-dichloroethene (trans-1,2-DCE), 1,1,1-trichloroethane (1,1,1-TCA), tetrachloroethene (PCE), trichlorofluoromethane and 1,2-dichloropropane. 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 showing compounds detected since the January 20, 1993 sampling event are presented in Table 5. Copies of the groundwater laboratory analytical reports are included in Appendix C.

OAKLAND WEST QUADRANGLE
CALIFORNIA
7.5 MINUTE SERIES (TOPOGRAPHIC)



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

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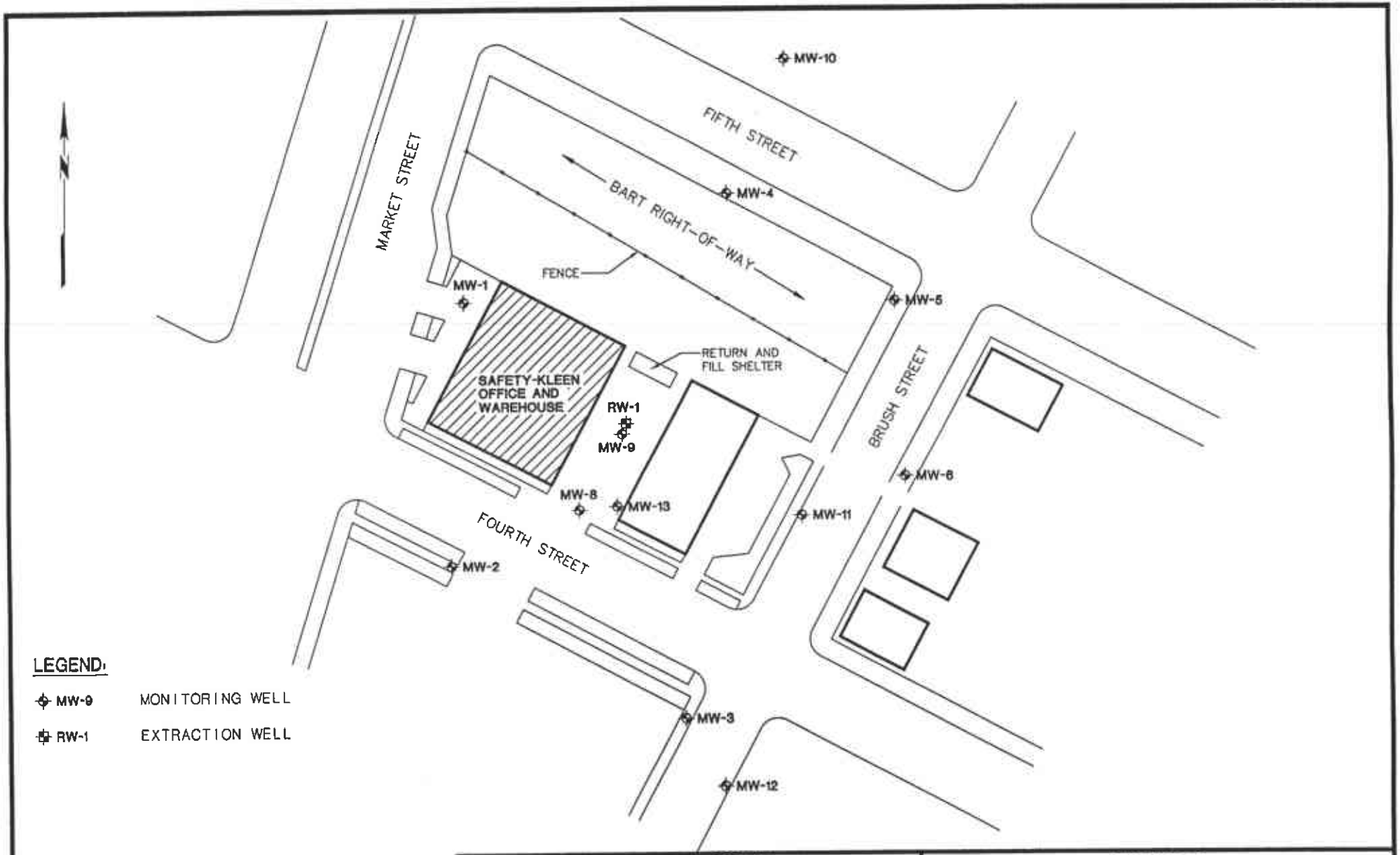
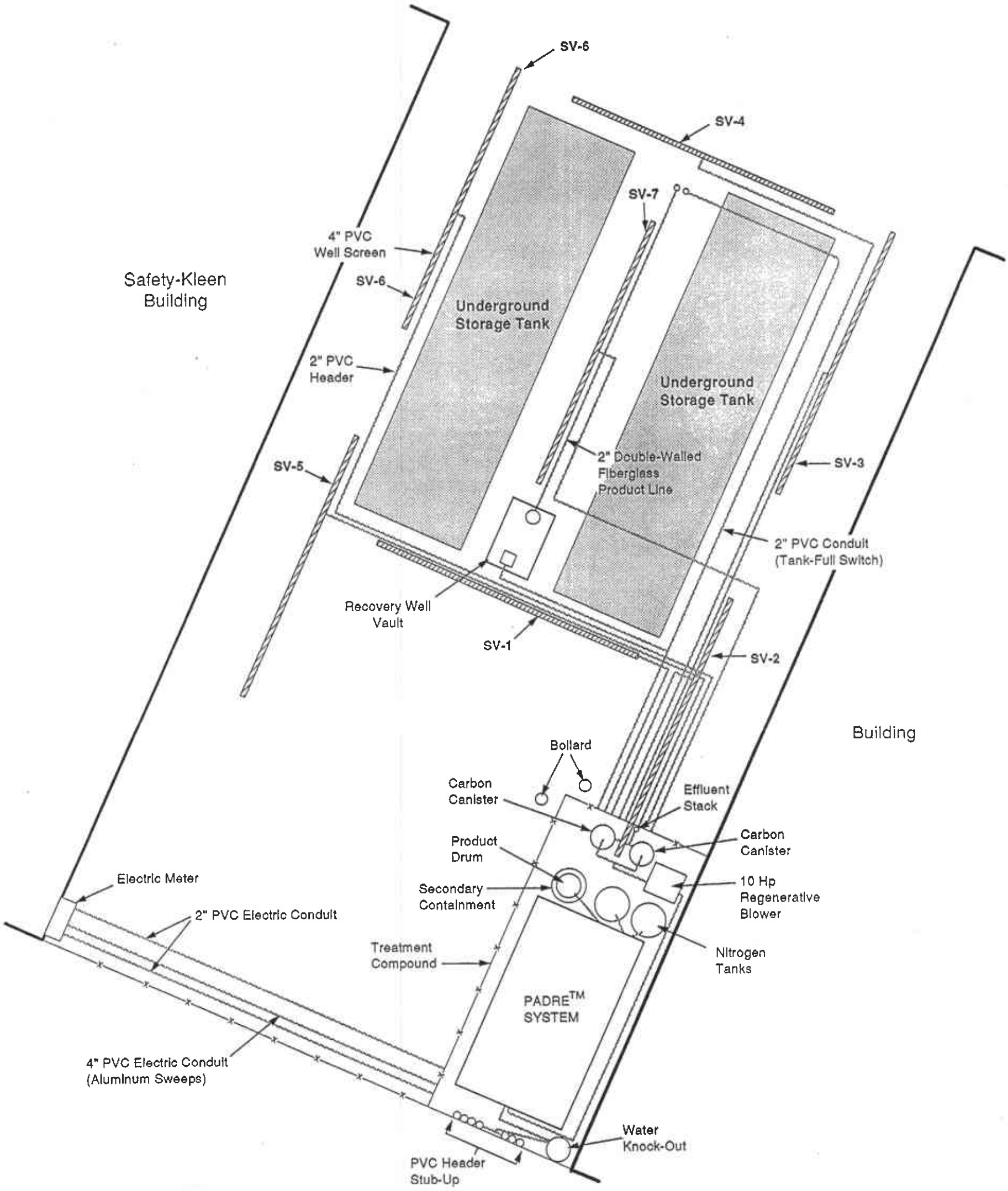


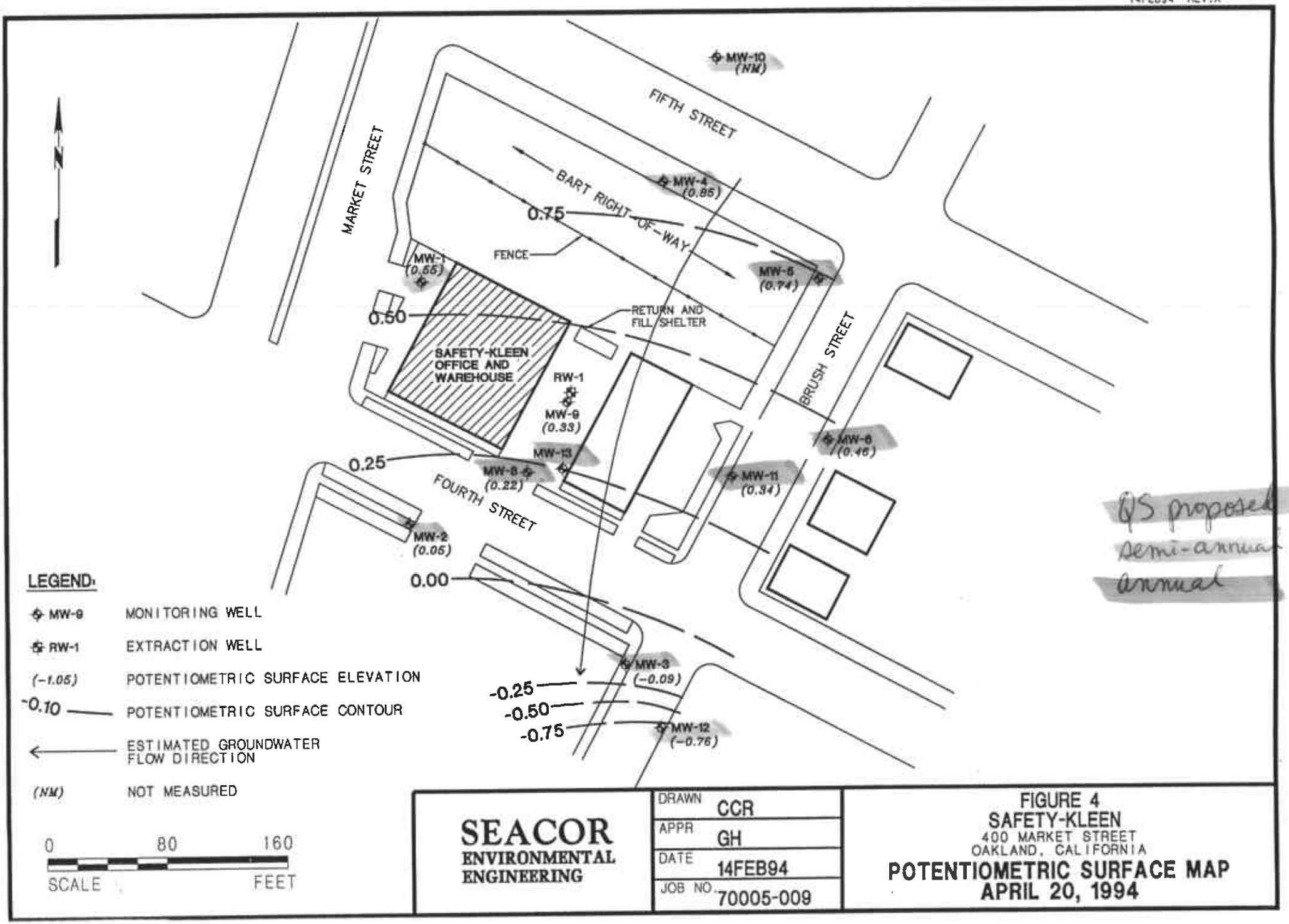
SEACOR ENVIRONMENTAL ENGINEERING	DRAWN CCR
	APPR GH
	DATE 14FEB94
	JOB NO. 70005-009

FIGURE 2
SAFETY-KLEEN
400 MARKET STREET
OAKLAND, CALIFORNIA
SITE PLAN



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:				

C:\S-KLEEN\OAK\SURFACE
14FEB94 REV.A



QS proposed
semi-annual
annual

SEACOR ENVIRONMENTAL ENGINEERING	DRAWN CCR APPR GH DATE 14FEB94 JOB NO. 70005-009

FIGURE 4
SAFETY-KLEEN
400 MARKET STREET
OAKLAND, CALIFORNIA
POTENTIOMETRIC SURFACE MAP
APRIL 20, 1994

TABLE 1
VAPOR EXTRACTION SYSTEM MONITORING DATA

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

TABLE 1 - Continued
VAPOR EXTRACTION SYSTEM MONITORING DATA

Date	Extraction Vacuum in H_20	Extraction Flow Rate scfm	KO Vacuum in H_20	Padre Influent (PID units)	Padre Effluent (PID units)	Stack Effluent (PID units)	Sampler	Notes
06-23-93	5	118	18	210	0	0	NAB	
06-24-93	5	118	18	200	0	0	NAB	Shut down on 6/25 and weekend
06-28-93	5	120	18	190	0	0	NAB	38.8 gal. removed on 6/25
06-29-93	4.5	117	18	150	0	0	NAB	
06-30-93	4	117	18	150	0	0	NAB	
07-07-93	4	117	18	250	0.5	0	NAB	
07-08-93	4	117	18	200	0	0.5	NAB	
07-09-93	5	120	18	200	0	0	NAB	Shut down for weekend
07-12-93	5	120	18	190	0	0	NAB	
07-13-93	5	118	18	160	0	1	NAB	Weekly monitoring to begin on 7/23
07-23-93	6	118	20	230	9	1	GGA	55.2 gal. removed 7/23 (94.0 total)
07-27-93	6	120	19	300	3	3	NAB	
08-05-93	5.75	117	20	350	1.5	1	NAB	
08-11-93	5.8	118	24	125	6.4	7.6	RPR	Began monitoring with PID
08-20-93	6	118	24	113	12.6	9.3	RPR	35.5 gal. removed 8/19 (129.5 total)
08-24-93	5.75	117	24	128	6	7.3	RPR	
09-01-93	5	117	2.3	141	0	1.5	RPR	

TABLE 1 - Continued
VAPOR EXTRACTION SYSTEM MONITORING DATA

Date	Extraction Vacuum in H_20	Extraction Flow Rate scfm	KO Vacuum in H_20	Padre Influent (PID units)	Padre Effluent (PID units)	Stack Effluent (PID units)	Sampler	Notes
09-09-93	5.25	117	24	103	27.2	3.4	RPR	
09-16-93	6.5	117	26.5	144	6	6	RPR	45.4 gal. removed 9/15 (174.9 total)
09-22-93	6.75	115	27.5	128	7	7	DEM	
09-30-93	7.5	115	27	129	6.8	4.6	RPR	29.7 gal. removed 9/30 (204.6 total)
10-06-93	7.25	115	28	125	2.5	2	RPR	
10-13-93	9.5	123	28	145	0	0	GDH	
10-20-93	8.5	115	28	108	0	0	RAR	
10-25-93	8.5	115	28	124	0	0	RAR	42.9 gal. removed 10/25 (247.5 total)
11-03-93	8.5	117	28	120	0	0	GDH	
11-10-93	7.75	115	27	104	1.2	0.8	RPR	
11-24-93	8.4	117	28.5	105	13	0	RPR	44.6 gal. removed 11/24 (292.1 total)
12-10-93	17.5	110	32.5	65	0	0	RPR	Modified sys.-vacuum on SV-1, SV-5
12-22-93	16.75	110	37.5	61	0	0	RPR	31.8 gal. removed 12/22 (323.9 total)
01-04-94	16.75	111	39	81	1.5	0	RAR	
01-19-94	15.5	110	38	87	0	0	RAR	31.4 gal. removed 01/19 (355.5 total)
02-02-94	17.25	111	38	65	3.2	0	RPR	
02-17-94	16.5	110	37	38	0.1	0.5	RPR	25.6 gal. removed 02/17 (380.9 total)

TABLE 1 - Continued
VAPOR EXTRACTION SYSTEM MONITORING DATA

Date	Extraction Vacuum in H_20	Extraction Flow Rate scfm	KO Vacuum in H_20	Padre Influent (PID units)	Padre Effluent (PID units)	Stack Effluent (PID units)	Sampler	Notes
02-28-94	16.5	111	37	52	0.1	0.8	RPR	Modified sys.-vacuum on SV-3, SV-4, SV-5
03-10-94	12	117	33	129	0	0	RPR	
03-23-94	10.6	115	33	125	1	1	RPR	30.9 gal. removed 03/23 (411.9 total)
04-05-94	11.5	117	38	185	3.9	1.9	RPR	
04-11-94								System shut down pending Padre replacement
05-10-94								Start system with new Padre
05-11-94								29.7 gal. removed 05/11 (441.6 total)
05-25-94	15	110	32	137	2.3	1.1	DEM	

KO = Knockout Pot

TABLE 2
VAPOR EXTRACTION SYSTEM MINERAL SPIRITS REMOVAL DATA

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

NOTE: * OPERATING PARAMETERS ARE FROM 04-05-94.

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

SKOAKL6.T02
July 13, 1994
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TABLE 3
PRODUCT RECOVERY DATA
From Well RW-1

Date	Product Recovered This Period (gallons)	Cumulative Product Recovered (gallons)
01-19-93	-	
02-25-93	6.5	6.5
05-20-93	4.3	10.8
08-27-93	-	10.8
10-24-93	10.3	21.1
02-28-94	22.6	43.7
05-31-94	16.6	60.3

SKOAKL6.T03
July 13, 1994
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TABLE 4
GROUNDWATER MONITORING DATA
April 20, 1994

Well I.D.	TOC Elevation (ft msl)	DTW (ft)	DTP (ft)	PT (ft)	ADJ Elevation (ft msl)
MW-1	7.99	7.44	-	-	0.55
MW-2	8.20	8.15	-	-	0.05
MW-3	6.66	6.75	-	-	-0.09
MW-4	10.32	9.47	-	-	0.85
MW-5	10.28	9.54	-	-	0.74
MW-6	8.97	8.51	-	-	0.46
MW-8	7.80	7.58	-	-	0.22
MW-9	8.21	8.62	7.70	0.92	0.33
MW-10	10.43	-*	-	-	-
MW-11	7.91	0.34	-	-	0.34
MW-12	6.74	-0.76	-	-	-0.76
MW-13	8.08	-0.09	-	-	-0.09

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

SKOAKL6.T04
July 13, 1994
Job No. 70005-009-06

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

Compound	MW-1						MW-2					
	1/20/93	4/20/93	7/29/93	10/21/93	01/20/94	04/21/94	1/20/93	4/20/93	7/30/93	10/21/93	01/20/94	04/21/94
1,1-Dichloroethene	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	-	-	-	-	-	-	-	-	-	-	-	-
Trans-1,2-Dichloroethene	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene	-	-	-	-	-	-	-	-	-	-	-	-
Chlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	0.6	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	-	-	-	-	-	-	-	-	-	-	-	-
Xylenes	-	-	-	-	-	-	-	-	-	-	-	-
TPH as Mineral Spirits	-	-	-	-	-	-	-	-	-	-	-	-

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

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

Compound	MW-3						MW-4					
	1/20/93	4/20/93	7/29/93	10/20/93	01/19/94	04/22/94	1/20/93	4/20/93	7/29/93	10/21/93	01/20/94	04/21/94
1,1-Dichloroethene	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	2.0	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	-	-	-	-	-	-	-	-	-	-	-	-
Trans-1,2-Dichloroethene	-	-	-	-	-	-	-	-	53	0.6	1.1	1.7
Chloroform	-	-	-	-	-	-	-	7.6	-	1.9	-	5.0
1,1,1-Trichloroethane	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene	1.3	0.7	-	-	-	-	5500	2400	1100	-	790	1600
Chlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-	1.8	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	-	0.5	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	-	-	-	-	-	-	-	-	-	-	-	-
Xylenes	0.5	-	-	-	-	-	-	-	-	-	-	-
TPH as Mineral Spirits	-	-	-	-	-	-	-	-	-	* 400	* 270	* 760

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

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

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

Compound	MW-5						MW-6					
	1/20/93	4/20/93	7/29/93	10/20/93	01/20/94	04/21/94	1/20/93	4/20/93	7/29/93	10/20/93	01/19/94	04/21/94
1,1-Dichloroethene	-	1.5	0.6	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	-	-	-	-	-	-	-	-	-	-	-	-
Trans-1,2-Dichloroethene	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform	-	-	-	-	4.3	3.5	-	-	-	-	-	-
1,1,1-Trichloroethane	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene TCE	11	4.0	6.0	12	-	7.2	1.8	-	5.0	1.3	-	1.0
Chlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane	-	18	19	-	-	7.9	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	-	-	-	-	-	-	-	-	-	-	-	-
Xylenes	-	-	-	-	-	-	-	-	-	-	-	-
TPH as Mineral Spirits	-	-	-	-	-	-	-	-	-	-	-	-

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

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

Compound	MW-8						MW-10					
	1/20/93	4/20/93	7/30/93	10/21/93	01/20/94	04/21/94	1/20/93	4/20/93	7/30/93	10/21/93	01/19/94	04/21/94
1,1-Dichloroethene	-	-	-	-	-	-	-	-	2.0	-	-	NS
1,1-Dichloroethane	-	3.4	-	-	8.6	3.7	-	-	-	-	-	NS
1,2-Dichloroethane	-	7.4	5.0	5.2	11	7.1	-	-	-	-	-	NS
Trans-1,2-Dichloroethene	-	-	1.0	-	-	-	-	-	17	3.0	0.4	NS
Chloroform	-	-	-	-	-	-	-	1.2	0.5	-	-	NS
1,1,1-Trichloroethane	-	-	-	-	2.5	1.5	-	-	0.8	-	-	NS
Trichloroethene TCE	1.4	14	31	15	22	18	53	45	54	42	67	NS
Chlorobenzene	-	11	-	5.4	16	-	-	-	-	-	-	NS
1,2-Dichloropropane	-	0.6	-	-	-	0.8	-	-	-	-	-	NS
Trichlorofluoromethane	-	-	-	-	-	-	-	-	-	-	-	NS
Tetrachloroethene	-	1.8	-	-	2.0	0.8	-	-	-	-	-	NS
1,2-Dichlorobenzene	-	2.6	-	-	4.8	-	-	-	-	-	-	NS
Benzene	-	-	-	-	-	-	-	-	-	-	-	NS
Toluene	-	-	-	-	-	-	-	-	-	-	-	NS
Ethylbenzene	-	-	-	-	-	-	-	-	-	-	-	NS
Xylenes	-	-	-	-	-	-	-	-	-	-	-	NS
TPH as Mineral Spirits	-	-	-	-	* 60	-	-	-	-	-	-	NS

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

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

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

Compound	MW-11						MW-12					
	1/20/93	4/20/93	7/30/93	10/21/93	01/19/94	4/21/93	1/20/93	4/20/93	7/30/93	10/20/93	01/19/94	04/21/94
1,1-Dichloroethene	-	-	2.0	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	-	-	-	-	-	-	-	2.6	2.0	-	2.3	1.7
1,2-Dichloroethane	-	-	-	-	-	-	-	-	2.0	-	1.2	1.9
Trans-1,2-Dichloroethene	-	-	3.0	-	-	-	-	-	3.0	-	-	-
Chloroform	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	-	-	2.0	-	-	-	-	-	-	-	-	-
Trichloroethene TCE	47	9.1	36	11	2.6	3.1	22	17	30	34	11	44
Chlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	-	-	-	-	-	-	-	-	-	-	-	-
Xylenes	-	-	-	-	-	-	-	-	-	-	-	-
TPH as Mineral Spirits	-	-	-	-	-	-	-	-	-	-	-	-

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

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

Compound	MW-13											
	1/20/93	4/20/93	7/29/93	10/20/93	01/20/94	04/21/94						
1,1-Dichloroethene	-	-	NS	NS	NS	-						
1,1-Dichloroethane	-	-	NS	NS	NS	-						
1,2-Dichloroethane	-	-	NS	NS	NS	-						
Trans-1,2-Dichloroethene	-	-	NS	NS	NS	-						
Chloroform	-	-	NS	NS	NS	-						
1,1,1-Trichloroethane	-	-	NS	NS	NS	-						
Trichloroethene	-	-	NS	NS	NS	-						
Chlorobenzene	-	-	NS	NS	NS	-						
1,2-Dichloropropane	-	-	NS	NS	NS	-						
Trichlorofluoromethane	-	-	NS	NS	NS	-						
Tetrachloroethene	-	-	NS	NS	NS	-						
1,2-Dichlorobenzene	-	-	NS	NS	NS	-						
Benzene	0.5	-	NS	NS	NS	-						
Toluene	0.4	-	NS	NS	NS	-						
Ethylbenzene	0.3	-	NS	NS	NS	-						
Xylenes	1	-	NS	NS	NS	-						
TPH as Mineral Spirits	-	-	NS	NS	NS	-						

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

APPENDIX A
FIELD DATA SHEETS

SEACOR

HYDROLOGIC DATA SHEET

PROJECT: SAFETY-KLEEN OAKLAND		PROJECT NO.: 70005-009-05 TASK: 001
DATE: APRIL 20, 1994	TIME START: 0930	TIME END: 1100
EVENT: QUARTERLY MONITORING AND SAMPLING		PERSONNEL: ROBITAILLE

WELL ID	TOC	DTW	DTP	PT	TD	ELEV.	COMMENTS
MW-1	7.99	7.44	-	-	21.49	0.55	
MW-2	8.20	8.15	-	-	29.21	0.05	
MW-3	6.66	6.75	-	-	26.20	-0.09	
MW-4	10.32	9.47	-	-	25.40	0.85	
MW-5	10.28	9.54	-	-	28.98	0.74	
MW-6	8.97	8.51	-	-	28.97	0.46	
MW-8	7.80	7.58	-	-	28.93	0.22	
MW-9	8.21	8.62	7.70	0.92	-	0.33	
MW-10	10.43	-	-	-	-	-	Not accessible due to Caltrans work
MW-11	7.91	7.57	-	-	27.50	0.34	
MW-12	6.74	7.50	-	-	25.38	-0.76	
MW-13	8.08	8.17	-	-	69.00	-0.09	
RW-1	-	7.29	6.87	0.42	-	-	Measured 4-21-94

NOTES: NET Purchase Order Number - E10275

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

OAKLAND01.TBL
04-22-94

SEACOR
WATER SAMPLE FIELD DATA SHEET

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

WELL ID: MW1
SAMPLE ID: MW1
CLIENT NAME: Safety Kleen
LOCATION: Oakland

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

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

CASING ELEVATION: (feet/MSL):		VOLUME IN CASING (gal.)	2.39
DEPTH TO WATER (feet):	7.44	CALCULATED PURGE (gal.)	7.2
DEPTH OF WELL (feet):	21.49 (1405)	ACTUAL PURGE VOL. (gal.)	7.5

DATE PURGED: 4-20-94 Start (2400 Hr) 1145 End (2400 Hr.) 1206
DATE SAMPLED: 4-21-94 Start (2400 Hr) 0905 End (2400 Hr.) —

FIELD QC SAMPLES COLLECTED AT THIS WELL (i.e. FB-1, X-DUP-1): None

FIELD MEASUREMENTS

TIME (2400 Hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm@25°C)	TEMPERATURE (°F)	COLOR (visual)	TURBIDITY (NTU)
1150	2.5	7.4	1179	62.8	yel/brn	low
1201	6	7.4	1155	62.8	"	"
1206	7	7.4	1141	62.3	"	"

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

Clear
Cloudy
Yellow
Brown

ODOR: None

PURGING EQUIPMENT

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

Other: ____

SAMPLING EQUIPMENT

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

Other: ____

WELL INTEGRITY: ____ LOCK #: ____

REMARKS: ____

SIGNATURE: ____

SEACOR
WATER SAMPLE FIELD DATA SHEET

PROJECT NO: 70005-009-05
PURGED BY: BGR
SAMPLED BY: BR

WELL ID: MW2
SAMPLE ID: MW2
CLIENT NAME: Safety Kleen
LOCATION: Oakland

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

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

CASING ELEVATION: (feet/MSL):		VOLUME IN CASING (gal)	3.58
DEPTH TO WATER (feet):	8.15	CALCULATED PURGE (gal)	10.7
DEPTH OF WELL (feet):	29.21 (2100)	ACTUAL PURGE VOL. (gal)	10.2

DATE PURGED: 4-20-94 Start (2400 Hr) 1245 End (2400 Hr.) 1252
DATE SAMPLED: 4-21-94 Start (2400 Hr) 1020 End (2400 Hr.) ____

FIELD QC SAMPLES COLLECTED AT THIS WELL (i.e. FB-1, X-DUP-1): None

FIELD MEASUREMENTS

TIME (2400 Hr)	VOLUME (gal)	pH (units)	E.C. (umhos/cm@25°C)	TEMPERATURE (°F)	COLOR (visual)	TURBIDITY (NTU)
1252	5	8.02	610	67.1	clr	low
1256	7.5	7.6	665	67.8	"	"
1300	10	7.6	683	68.9	cldy	"

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

Clear
Cloudy
Yellow
Brown

ODOR: None

PURGING EQUIPMENT

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

Other: ____

SAMPLING EQUIPMENT

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

Other: ____

WELL INTEGRITY: ____ LOCK #: ____

REMARKS: ____

SIGNATURE: ____

SEACOR
WATER SAMPLE FIELD DATA SHEET

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

WELL ID: MW3
SAMPLE ID: MW3
CLIENT NAME: Safety Kleen
LOCATION: Oakland

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

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

CASING ELEVATION: (feet/MSL):		VOLUME IN CASING (gal.)	3.31
DEPTH TO WATER (feet):	6.75	CALCULATED PURGE (gal.)	9.9
DEPTH OF WELL (feet):	26.20 (19.45)	ACTUAL PURGE VOL. (gal.)	10

DATE PURGED: 4-20-94 Start (2400 Hr) 1317 End (2400 Hr.) 13:41
DATE SAMPLED: 4-21-94 Start (2400 Hr) 09:58 End (2400 Hr.) ____

FIELD QC SAMPLES COLLECTED AT THIS WELL (i.e. FB-1, X-DUP-1): None

FIELD MEASUREMENTS

TIME (2400 Hr)	VOLUME (gal)	pH (units)	E.C. (umhos/cm@25°C)	TEMPERATURE (°F)	COLOR (visual)	TURBIDITY (NTU)
13:28	5	8.1	478	66.6	Brn	mod
13:34	7.5	7.4	461	65.2	"	"
13:38	9	7.2	535	64.9	"	"
13:41	10	7.3	538	65.1	"	"

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

Clear
Cloudy
Yellow
Brown

ODOR: None

PURGING EQUIPMENT

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

Other: ____

SAMPLING EQUIPMENT

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

Other: ____

WELL INTEGRITY: ____ LOCK #: ____

REMARKS: ____

SIGNATURE: [signature] Page 3 of 10

SEACOR
WATER SAMPLE FIELD DATA SHEET

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

WELL ID: MW-4
SAMPLE ID: MW-4
CLIENT NAME: Safety Kleen
LOCATION: Oakland

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

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

CASING ELEVATION: (feet/MSL):		VOLUME IN CASING (gal.)	2.71
DEPTH TO WATER (feet):	9.47	CALCULATED PURGE (gal.)	8.1
DEPTH OF WELL (feet):	25.40 (15.93)	ACTUAL PURGE VOL. (gal.)	8.5

DATE PURGED: 4-20-94 Start (2400 Hr) 15:18 End (2400 Hr.) 15:35
DATE SAMPLED: 4-21-94 Start (2400 Hr) 09:15 End (2400 Hr.) —

FIELD QC SAMPLES COLLECTED AT THIS WELL (i.e. FB-1, X-DUP-1): None

FIELD MEASUREMENTS

TIME (2400 Hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm@25°C)	TEMPERATURE (°F)	COLOR (visual)	TURBIDITY (NTU)
1525	5	7.2	1032	64.4	Brn/lw	mod
15:30	7.5	7.1	983	61.6	"	"
15:34	8.5	7.2	990	61.5	"	"

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

Clear
Cloudy
Yellow
Brown

ODOR: None

PURGING EQUIPMENT

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

Other: ____

SAMPLING EQUIPMENT

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

Other: ____

WELL INTEGRITY: ____ LOCK #: ____

REMARKS: ____

SIGNATURE: ____

SEACOR
WATER SAMPLE FIELD DATA SHEET

PROJECT NO: 20005-009-05
PURGED BY: BR
SAMPLED BY: BR

WELL ID: MW5
SAMPLE ID: MW5
CLIENT NAME: Safety Klean
LOCATION: Oakland

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

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

CASING ELEVATION: (feet/MSL):		VOLUME IN CASING (gal)	3.30
DEPTH TO WATER (feet):	9.54	CALCULATED PURGE (gal)	9.9
DEPTH OF WELL (feet):	28.98 (19.44)	ACTUAL PURGE VOL. (gal)	9.9

DATE PURGED: 4-20-94 Start (2400 Hr) 15:47 End (2400 Hr.) 1610
DATE SAMPLED: 4-21-94 Start (2400 Hr) 09:25 End (2400 Hr.) —

FIELD QC SAMPLES COLLECTED AT THIS WELL (i.e. FB-1, X-DUP-1): None

FIELD MEASUREMENTS

TIME (2400 Hr)	VOLUME (gal)	pH (units)	E.C. (umhos/cm@25°C)	TEMPERATURE (°F)	COLOR (visual)	TURBIDITY (NTU)
15:55	5	6.8	975	63.0	Brwn	mod
16:03	8.5	7.3	1029	62.9	"	"
16:08	9.5	7.2	1029	62.7	"	"

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

Clear
Cloudy
Yellow
Brown

ODOR: None

PURGING EQUIPMENT

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

Other: ____

SAMPLING EQUIPMENT

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

Other: ____

WELL INTEGRITY: ____ LOCK #: ____

REMARKS: ____

SIGNATURE: ____

SEACOR
WATER SAMPLE FIELD DATA SHEET

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

WELL ID: MW6
SAMPLE ID: mw6
CLIENT NAME: Safety Kleen
LOCATION: Oakland

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

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

CASING ELEVATION: (feet/MSL):		VOLUME IN CASING (gal)	3.48
DEPTH TO WATER (feet):	8.51	CALCULATED PURGE (gal)	10.4
DEPTH OF WELL (feet):	28.97 (20.46)	ACTUAL PURGE VOL. (gal)	10.5

DATE PURGED: 4-20-94 Start (2400 Hr) 14:05 End (2400 Hr.) ____
DATE SAMPLED: 4-21-94 Start (2400 Hr) 09:35 End (2400 Hr.) ____

FIELD QC SAMPLES COLLECTED AT THIS WELL (i.e. FB-1, X-DUP-1): None

FIELD MEASUREMENTS

TIME (2400 Hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm@25°C)	TEMPERATURE (°F)	COLOR (visual)	TURBIDITY (NTU)
14:13	5	7.8	619	66.5	Brn	mod
1421	9	7.0	6055	66.7	"	"
1425	10.5	6.9	656	66.4	"	"

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

Clear
Cloudy
Yellow
Brown

ODOR: none

PURGING EQUIPMENT

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

Other: ____

SAMPLING EQUIPMENT

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

Other: ____

WELL INTEGRITY: ____ LOCK #: ____
REMARKS: ____

SIGNATURE: [signature] Page 6 of 10

SEACOR
WATER SAMPLE FIELD DATA SHEET

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

WELL ID: MW8
SAMPLE ID: MW8
CLIENT NAME: Safety Kleen
LOCATION: Oakland

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

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

CASING ELEVATION: (feet/MSL):		VOLUME IN CASING (gal)	3.63
DEPTH TO WATER (feet):	7.58	CALCULATED PURGE (gal)	10.9
DEPTH OF WELL (feet):	28.93 (21.35)	ACTUAL PURGE VOL. (gal)	11

DATE PURGED: 4-21-94 Start (2400 Hr) 1040 End (2400 Hr.) 1105
DATE SAMPLED: 4-21-94 Start (2400 Hr) 1300 End (2400 Hr.) ____

FIELD QC SAMPLES COLLECTED AT THIS WELL (i.e. FB-1, X-DUP-1): None

FIELD MEASUREMENTS

TIME (2400 Hr)	VOLUME (gal)	pH (units)	E.C. (umhos/cm@25°C)	TEMPERATURE (°F)	COLOR (visual)	TURBIDITY (NTU)
10:48	5	7.7	795	67.2	clr	mod
10:59	8.5	7.6	1072	62.6	"	"
11:03	10	7.6	782	66.9	"	"
11:05	11	7.6	778	68.0	"	"

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

Clear
Cloudy
Yellow
Brown

ODOR: None

PURGING EQUIPMENT

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

Other: ____

SAMPLING EQUIPMENT

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

Other: ____

WELL INTEGRITY: ____ LOCK #: ____

REMARKS: ____

SIGNATURE: ____

SEACOR
WATER SAMPLE FIELD DATA SHEET

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

WELL ID: MW11
SAMPLE ID: MW11
CLIENT NAME: Safety Kleen
LOCATION: Oakland

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

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

CASING ELEVATION: (feet/MSL):	____	VOLUME IN CASING (gal.)	3.39
DEPTH TO WATER (feet):	7.57	CALCULATED PURGE (gal.)	10.2
DEPTH OF WELL (feet):	27.50 (1993)	ACTUAL PURGE VOL. (gal.)	10.5

DATE PURGED: 4-20-94 Start (2400 Hr) 14:33 End (2400 Hr.) 1452
DATE SAMPLED: 4-21-94 Start (2400 Hr) 09:45 End (2400 Hr.) ____

FIELD QC SAMPLES COLLECTED AT THIS WELL (i.e. FB-1, X-DUP-1): None

FIELD MEASUREMENTS

TIME (2400 Hr)	VOLUME (gal.)	pH (units)	E.C. (umhos/cm@25°C)	TEMPERATURE (°F)	COLOR (visual)	TURBIDITY (NTU)
1439	5	7.0	967	68.0	Brn	mod
1447	9	6.6	927	65.1	"	"
1452	10.5	6.7	930	64.9	"	"

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

Clear
Cloudy
Yellow
Brown

ODOR: None

PURGING EQUIPMENT

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

Other: ____

SAMPLING EQUIPMENT

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

Other: ____

WELL INTEGRITY: ____ LOCK #: ____

REMARKS: ____

SIGNATURE: [signature] Page 8 of 10

SEACOR
WATER SAMPLE FIELD DATA SHEET

WELL ID: MW-12
SAMPLE ID: MW-12
CLIENT NAME: Safety Kleen
LOCATION: Oakland

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

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

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

CASING ELEVATION: (feet/MSL):	____	VOLUME IN CASING (gal.)	3.04
DEPTH TO WATER (feet):	7.50	CALCULATED PURGE (gal.)	9.1
DEPTH OF WELL (feet):	25.38 (17.88)	ACTUAL PURGE VOL. (gal.)	____

DATE PURGED: 4-20-94 Start (2400 Hr) 16:20 End (2400 Hr.) 1640
DATE SAMPLED: 4-21-94 Start (2400 Hr) 10:10 End (2400 Hr.) —

FIELD QC SAMPLES COLLECTED AT THIS WELL (i.e. FB-1, X-DUP-1): None

FIELD MEASUREMENTS

TIME (2400 Hr)	VOLUME (gal)	pH (units)	E.C. (umhos/cm@25°C)	TEMPERATURE (°F)	COLOR (visual)	TURBIDITY (NTU)
1628	0	5.5	987	62.0	cly	med
1635	8	5.5	979	61.8	"	"
1640	9.5	5.9	985	62.1	"	"

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

Clear
Cloudy
Yellow
Brown

ODOR: None

PURGING EQUIPMENT

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

Other: ____

SAMPLING EQUIPMENT

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

Other: ____

WELL INTEGRITY: ____ LOCK #: ____

REMARKS: ____

SIGNATURE: ____

SEACOR
WATER SAMPLE FIELD DATA SHEET

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

WELL ID: MW13
SAMPLE ID: MW13
CLIENT NAME: Safety Kleen
LOCATION: Oakland

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

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

CASING ELEVATION: (feet/MSL):		VOLUME IN CASING (gal) (X0.83)	50.49
DEPTH TO WATER (feet):	8.17	CALCULATED PURGE (gal)	151.5
DEPTH OF WELL (feet):	69.00 (60.83)	ACTUAL PURGE VOL. (gal)	121

DATE PURGED: 4-21-94 Start (2400 Hr) 1220 End (2400 Hr.) 1510
DATE SAMPLED: 4-21-94 Start (2400 Hr) 1520 End (2400 Hr.) —

FIELD QC SAMPLES COLLECTED AT THIS WELL (i.e. FB-1, X-DUP-1): None

FIELD MEASUREMENTS

TIME (2400 Hr)	VOLUME (gal)	pH (units)	E.C. (umhos/cm@25°C)	TEMPERATURE (°F)	COLOR (visual)	TURBIDITY (NTU)
1232	45	7.0	817	70.6	Clr	V. low
1315	55	8.16	806	66.8	"	"
1346	75	9.2	827	68.2	"	"
1447	110	8.14	886	69.2	"	"
1507	120	8.0	862	70.1	"	"

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

Clear
Cloudy
Yellow
Brown

ODOR: None

PURGING EQUIPMENT

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

Other: ____

SAMPLING EQUIPMENT

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

Other: ____

WELL INTEGRITY: ____ LOCK #: ____

REMARKS: Dry at 45gals (1232 hrs), Dry 10g more (1255-1258), dropped pumping rate to <1gpm

SIGNATURE: [signature]

APPENDIX B
LABORATORY REPORTS - VAPOR

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

RECEIVED
JUN 10 1994

SEACOR
Attn: GREG HOEHN

Project 70005-009-06
Reported 05/30/94

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed	Matrix
91722- 1	PADNE INF	05/25/94	05/26/94	Air

RESULTS OF ANALYSIS

Laboratory Number: 91722- 1

Benzene:	0.3
Toluene:	1.2
Ethyl Benzene:	1.3
Total Xylenes:	4.6
Concentration:	ug/L
Mineral Spt.:	0.4
Concentration:	mg/L

Superior Precision Analytical, Inc.
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C E R T I F I C A T E O F A N A L Y S I S

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

QA/QC INFORMATION
SET: 91722

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
mg/L = parts per million (ppm)
ug/L = parts per billion (ppb)

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Mineral Spt in Air: 0.05 ppm

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Air:

BENZENE	0.3	ppb
TOLUENE	0.3	ppb
ETHYL BENZENE	0.3	ppb
TOTAL XYLENES	0.3	ppb
MINERAL SPIRITS	0.05	ppm

ANALYTE	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Benzene:	122/120	2%	75-125
Toluene:	124/122	2%	75-125
Ethyl Benzene:	110/109	1%	75-125
Total Xylenes:	121/119	2%	75-125
Mineral Spt.:	99/104	5%	75-125

Michael R. Vivons
Senior Chemist

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

SEACOR
Attn: GREG HOEHN

Project 70005-009-06
Reported 05/30/94

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed	Matrix
91722- 1	PADNE INF	05/25/94	05/26/94	Air

RESULTS OF ANALYSIS

Laboratory Number: 91722- 1

Benzene:	88
Toluene:	310
Ethyl Benzene:	290
Total Xylenes:	1000
Mineral Spt.:	68
Concentration:	V/V

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

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

QA/QC INFORMATION
SET: 91722

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
mg/L = parts per million (ppm)
ug/L = parts per billion (ppb)

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Mineral Spt in Air: 15 V/V(ppm)

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Air:

BENZENE	160 V/V(ppb)
TOLUENE	130 V/V(ppb)
ETHYL BENZENE	120 V/V(ppb)
TOTAL XYLENES	120 V/V(ppb)
MINERAL SPIRITS	30 V/V(ppm)

ANALYTE	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Benzene:	122/120	2%	75-125
Toluene:	124/122	2%	75-125
Ethyl Benzene:	110/109	1%	75-125
Total Xylenes:	121/119	2%	75-125
Mineral Spt.:	99/104	5%	75-125

Mukul R. Vuoora
Senior Chemist

Superior Precision Analytical, Inc.
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DILUTION FACTOR: 1

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

LABORATORY NO. 91722
CLIENT: SEACOR

DATE SAMPLED : 05/25/94
DATE ANALYZED: 05/26/94

DATE RECEIVED: 05/25/94
DATE REPORTED: 05/31/94
PROJECT NO. : 70005-009-06

EPA SW-846 METHOD 8010 - VOLATILE ORGANICS

SAMPLE: PADNE INF

Compound	RL	ug/L
Chloromethane	480	ND
Bromomethane	250	ND
Vinyl Chloride	390	ND
Chloroethane	270	ND
Methylene Chloride	140	1.6
Trichlorofluoromethane	88	ND
1,1-Dichloroethene	120	ND
1,1-Dichloroethane	120	ND
cis-1,2-Dichloroethene	120	ND
trans-1,2-Dichloroethene	120	ND
Chloroform	100	ND
1,2-Dichloroethane	120	ND
1,1,1-Trichloroethane	90	3.7
Carbon Tetrachloride	78	ND
Bromodichloromethane	68	ND
1,2-Dichloropropane	110	ND
Cis-1,3-Dichloropropene	110	ND
Trichloroethene	92	0.5
Dibromochloromethane	58	ND
1,1,2-Trichloroethane	90	ND

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

LABORATORY NO. 91722
CLIENT: SEACOR

DATE RECEIVED: 05/25/94
DATE REPORTED: 05/31/94
PROJECT NO. : 70005-009-06

DATE SAMPLED : 05/25/94
DATE ANALYZED: 05/26/94

EPA SW-846 METHOD 8010 - VOLATILE ORGANICS
by Gas Chromatography/ Mass Spectrometry

SAMPLE: PADNE INF

Compound	RL	ug/L
Trans-1,3-Dichloropropene	110	ND
Bromoform	48	ND
Tetrachloroethene	73	1.9
1,1,2,2-Tetrachloroethane	72	ND
Chlorobenzene	110	ND
1,3-Dichlorobenzene	82	ND
1,4-Dichlorobenzene	82	ND
1,2-Dichlorobenzene	82	ND
Freon 113	64	ND

ug/L = Weight/Volume
ND = ANALYTE NOT DETECTED ABOVE QUANTITATION LIMIT

Comments:

Michael R. Veron
Senior Chemist
Account Manager

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

CERTIFICATE OF ANALYSIS

LABORATORY NO. 91722
CLIENT: SEACOR

DATE RECEIVED: 05/25/94
DATE REPORTED: 05/31/94
PROJECT NO. : 70005-009

DATE SAMPLED : 05/25/94
DATE ANALYZED: 05/26/94

EPA SW-846 METHOD 8010 - VOLATILE ORGANICS

SAMPLE: PADNE INF

Compound	RL ppb (V/V)	
Chloromethane	480	ND
Bromomethane	250	ND
Vinyl Chloride	390	ND
Chloroethane	270	ND
Methylene Chloride	140	450
Trichlorofluoromethane	88	ND
1,1-Dichloroethene	120	ND
1,1-Dichloroethane	120	ND
cis-1,2-Dichloroethene	120	ND
trans-1,2-Dichloroethene	120	ND
Chloroform	100	ND
1,2-Dichloroethane	120	ND
1,1,1-Trichloroethane	90	670
Carbon Tetrachloride	78	ND
Bromodichloromethane	68	ND
1,2-Dichloropropane	110	ND
Cis-1,3-Dichloropropene	110	ND
Trichloroethene	92	92
Dibromochloromethane	58	ND
1,1,2-Trichloroethane	90	ND

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

LABORATORY NO. 91722
CLIENT: SEACOR

DATE RECEIVED: 05/25/94
DATE REPORTED: 05/31/94
PROJECT NO. : 70005-009

DATE SAMPLED : 05/25/94
DATE ANALYZED: 05/26/94

EPA SW-846 METHOD 8010 - VOLATILE ORGANICS

SAMPLE: PADNE INF

Compound	RL ppb (V/V)	
Trans-1,3-Dichloropropene	110	ND
Bromoform	48	ND
Tetrachloroethene	73	280
1,1,2,2-Tetrachloroethane	72	ND
Chlorobenzene	110	ND
1,3-Dichlorobenzene	82	ND
1,4-Dichlorobenzene	82	ND
1,2-Dichlorobenzene	82	ND
Freon 113	64	ND

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

Michael R. Veeon
Senior Chemist
Account Manager

Job # 917-2

Chain-of-Custody Number: A

SEACOR Chain-of-Custody Record

Address: 1390 Willow Pass Rd., Ste. 360, Concord, CA 94520, 510-686-9780

Safety-Kleen Oakland
400 Market St.
Oakland, CA

Project # 2005-009-06 Task # 002
Project Manager Greg Hoehn
Laboratory Superior Quote #94-00518
Turn-around time: Standard
Sampler's Name: Dan Madsen
Sampler's Signature: Dan Madsen

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 MS (mod 8015)			Comments/ Instructions	Number of Containers
Pacline Inf.	5/25	12:45	A				X		X						X				2

Val N Em yes N/A

Special Instructions/Comments:

Relinquished by:	Received by:
Sign Dan Madsen	Sign
Print Dan Madsen	Print
Company SEACOR	Company
Time 1:22 Date 5/25/94	Time Date

Relinquished by:	Received by:
Sign	Sign Val Ogamba
Print	Print VAL OGAMBA
Company	Company
Time Date	Time 122pm Date 5/25/94

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

Client:
Client Contact:
Client Phone Number:

Date 5/25/94 Page 1 of 1

Superior Precision Analytical, Inc.
1555 Burke, Unit I • San Francisco, California 94124 • (415) 647-2081 / fax (415) 82 -7123

RECEIVED
APR 25 1994

CERTIFICATE OF ANALYSIS

Laboratory No.: 91424
Client : SEACOR
Client job No.: 70005-009

Date received : 04/05/94
Date reported : 04/07/94

ANALYSIS FOR MINERAL SPIRITS, BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES BY EPA SW-846 METHOD 5030/8015M/8020

Lab Sample ID	Date Sampled	Date Analyzed	Analyte	Conc.	RL	Unit
1 PADRE INF.	04/05/94	04/06/94	Benzene	ND	0.5	ug/L
			Toluene	ND	1.0	ug/L
			Ethyl Benzene	ND	0.5	ug/L
			Xylenes	12	1.0	ug/L
			Mineral Spirits	600	50	ug/L
QC METHOD BLANK	Air	04/06/94	Benzene	ND	0.5	ug/L
			Toluene	ND	1.0	ug/L
			Ethyl Benzene	ND	0.5	ug/L
			Xylenes	ND	1.0	ug/L
			Mineral Spirits	ND	50	ug/L

QAQC Summary:

Air	Benzene	MS/MSD % Recovery = 89/97	Duplicate RPD = 9%
Air	Toluene	MS/MSD % Recovery = 90/99	Duplicate RPD = 10%
Air	Ethyl Benzene	MS/MSD % Recovery = 89/97	Duplicate RPD = 9%
Air	Xylenes	MS/MSD % Recovery = 96/105	Duplicate RPD = 9%

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

Cecilia Y. Joaquin
Senior Chemist
Account Manager

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

CERTIFICATE OF ANALYSIS

Laboratory No.: 91424
Client : SEACOR
Client job No.: 70005-009

Date received : 04/05/94
Date reported : 04/07/94

ANALYSIS FOR MINERAL SPIRITS, BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES BY EPA SW-846 METHOD 5030/8015M/8020

Concentration in air is calculated based on 20°C and 1 ATM. Assumed molecular weight of mineral spirits is same as decane. Reported as volume to volume.

Lab	Sample ID	Date Sampled	Date Analyzed	Analyte	Conc.	RL	Unit
1	PADRE INF.	04/05/94	04/06/94	Benzene	ND	85	ppb
				Toluene	ND	250	ppb
				Ethyl Benzene	ND	65	ppb
				Xylenes	2600	250	ppb
				Mineral Spirits	100	15	ppm
QC	METHOD BLANK	Air	04/06/94	Benzene	ND	85	ppb
				Toluene	ND	250	ppb
				Ethyl Benzene	ND	65	ppb
				Xylenes	ND	250	ppb
				Mineral Spirits	ND	15	ppm

QAQC Summary:

Air	Benzene	MS/MSD % Recovery = 89/97	Duplicate RPD = 9%
Air	Toluene	MS/MSD % Recovery = 90/99	Duplicate RPD = 10%
Air	Ethyl Benzene	MS/MSD % Recovery = 89/97	Duplicate RPD = 9%
Air	Xylenes	MS/MSD % Recovery = 96/105	Duplicate RPD = 9%

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

Cecilia G. Joaquin
Senior Chemist
Account Manager

Certified Laboratories

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

CERTIFICATE OF ANALYSIS

Laboratory No.: 91424
Client : SEACOR
Client job No.: 70005-009

Date received : 04/05/94
Date reported : 04/13/94

Lab Sample ID	Date Sampled	Date Analyzed	Analyte	Conc.	RL	Unit
1 PADRE INF	04/05/94	04/07/94	Chloromethane	ND	0.5	ug/L
			Vinyl Chloride	ND	0.5	ug/L
			Bromomethane	ND	0.5	ug/L
			Chloroethane	ND	0.5	ug/L
			Trichlorofluorometha	ND	0.5	ug/L
			1,1-Dichloroethene	ND	0.5	ug/L
			Dichloromethane	ND	0.5	ug/L
			t-1,2-Dichloroethene	ND	0.5	ug/L
			1,1-Dichloroethane	ND	0.5	ug/L
			c-1,2-Dichloroethene	ND	0.5	ug/L
			Chloroform	ND	0.5	ug/L
			1,1,1-Trichloroethan	0.8	0.5	ug/L
			Carbon tetrachloride	ND	0.5	ug/L
			1,2-Dichloroethane	ND	0.5	ug/L
			Trichloroethene	ND	0.5	ug/L
			c-1,3-Dichloropropen	ND	0.5	ug/L
			1,2-Dichloropropane	ND	0.5	ug/L
			t-1,3-Dichloropropen	ND	0.5	ug/L
			Bromodichloromethane	ND	0.5	ug/L
			1,1,2-Trichloroethan	ND	0.5	ug/L
			Tetrachloroethene	ND	0.5	ug/L
			Dibromochloromethane	ND	0.5	ug/L
			Chlorobenzene	ND	0.5	ug/L
			Bromoform	ND	0.5	ug/L
			1,1,2,2-Tetrachloroe	ND	0.5	ug/L
			1,3-Dichlorobenzene	ND	0.5	ug/L
			1,2-Dichlorobenzene	ND	0.5	ug/L
			1,4-Dichlorobenzene	ND	0.5	ug/L
			Surrogate Recovery %	82		%

Water	1,1-Dichloroethene	MS/MSD % Recovery = 131/150	Duplicate RPD =14%
Water	Trichloroethene	MS/MSD % Recovery = 115/120	Duplicate RPD = 4%
Water	Chlorobenzene	MS/MSD % Recovery = 106/114	Duplicate RPD = 7%

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

4/13/94
Senior Chemist
Account Manager

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

CERTIFICATE OF ANALYSIS

LABORATORY NO. 91424
CLIENT: SEACOR

DATE SAMPLED : 04/05/94
DATE ANALYZED: 04/06/94

DATE RECEIVED: 04/05/94
DATE REPORTED: 04/07/94
PROJECT NO. : 70005-009

EPA SW-846 METHOD 8010 - VOLATILE ORGANICS

SAMPLE: INFFLUENT

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

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

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

LABORATORY NO. 91424
CLIENT: SEACOR

DATE RECEIVED: 04/05/94
DATE REPORTED: 04/07/94
PROJECT NO. : 70005-009

DATE SAMPLED : 04/05/94
DATE ANALYZED: 04/06/94

EPA SW-846 METHOD 8010 - VOLATILE ORGANICS

SAMPLE: INFFLUENT

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

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

4/13/94
Senior Chemist
Account Manager

424

Chain-of-Custody Number: A 70005 Civil A

SEACOR Chain-of-Custody Record

Address:
1390 Willow Pass Rd
Ste 360
Concord CA 94520

Project # 70005-009 Task #
Project Manager Greg Hoehn
Laboratory Superior
Turn-around time: Std
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-MS BTEX			Comments/ Instructions	Number of Containers
Padre Inf.	4-5-94	1100	Air						X						X				2

Please Initial: SS
Samples Stored in ice. ✓
Appropriate containers ✓
Samples preserved
VOA's without headspace
Comments: air Samples. (2)

Special Instructions/Comments:
Safety Kleen site
400 Market St.
Oakland, CA

Please include results in both ppmv and ug/l

Relinquished by:
Sign [signature]
Print Bob Robitaille
Company SEACOR
Time 1830 Date 4-5-94

Received by:
Sign [signature]
Print SAJID
Company SPA · MTZ
Time 18:35 Date 4/5/94

Relinquished by:
Sign
Print
Company
Time Date

Received by:
Sign
Print
Company
Time Date

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

Client:
Client Contact:
Client Phone Number:

Date 4 / 5 / 94 Page 1 of 1

APPENDIX C
LABORATORY REPORTS - GROUNDWATER

NATIONAL ENVIRONMENTAL® TESTING, INC.

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

RECEIVED
MAY - 9 1994

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

Date: 05/06/1994
NET Client Acct. No: 62100
NET Pacific Job No: 94.01615
Received: 04/23/1994

Client Reference Information

Project No. 70005-009-05

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

Approved by:

Linda DeMartino
Project Coordinator

Jim Hoch
Operations Manager

cc: Greg Hoehn
Seacor
1390 Willow Pass Rd.
Suite 360
Concord, CA 94520

Enclosure(s)

Client Acct: 62100
Client Name: Safety-Kleen
NET Job No: 94.01615

Date: 05/06/1994
ELAP Certificate: 1386
Page: 2

Ref: Project No. 70005-009-05

SAMPLE DESCRIPTION: MW1
Date Taken: 04/21/1994
Time Taken: 09:05
NET Sample No: 192153

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTXE,Liquid)							
METHOD 5030/M8015	--						04/26/1994
DILUTION FACTOR*	1						04/26/1994
as Mineral Spirits	ND		0.05	mg/L	5030		04/26/1994
METHOD 8020 (GC,Liquid)	--						04/26/1994
DILUTION FACTOR*	1						04/26/1994
Benzene	ND		0.5	ug/L	8020		04/26/1994
Toluene	ND		0.5	ug/L	8020		04/26/1994
Ethylbenzene	ND		0.5	ug/L	8020		04/26/1994
Xylenes (Total)	ND		0.5	ug/L	8020		04/26/1994
SURROGATE RESULTS	--						04/26/1994
Bromofluorobenzene (SURR)	72			% Rec.	5030		04/26/1994

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Project No. 70005-009-05

SAMPLE DESCRIPTION: MW1
Date Taken: 04/21/1994
Time Taken: 09:05
NET Sample No: 192153

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
METHOD 8010 (GC,Liquid)							
DILUTION FACTOR*	1						04/27/1994
Bromodichloromethane	ND		0.4	ug/L	8010		04/27/1994
Bromoform	ND		0.4	ug/L	8010		04/27/1994
Bromomethane	ND		0.4	ug/L	8010		04/27/1994
Carbon tetrachloride	ND		0.4	ug/L	8010		04/27/1994
Chlorobenzene	ND		0.4	ug/L	8010		04/27/1994
Chloroethane	ND		0.4	ug/L	8010		04/27/1994
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		04/27/1994
Chloroform	ND		0.4	ug/L	8010		04/27/1994
Chloromethane	ND		0.4	ug/L	8010		04/27/1994
Dibromochloromethane	ND		0.4	ug/L	8010		04/27/1994
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		04/27/1994
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		04/27/1994
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		04/27/1994
Dichlorodifluoromethane	ND		0.4	ug/L	8010		04/27/1994
1,1-Dichloroethane	ND		0.4	ug/L	8010		04/27/1994
1,2-Dichloroethane	ND		0.4	ug/L	8010		04/27/1994
1,1-Dichloroethene	ND		0.4	ug/L	8010		04/27/1994
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		04/27/1994
1,2-Dichloropropane	ND		0.4	ug/L	8010		04/27/1994
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		04/27/1994
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		04/27/1994
Methylene chloride	ND		10	ug/L	8010		04/27/1994
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		04/27/1994
Tetrachloroethene	ND		0.4	ug/L	8010		04/27/1994
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		04/27/1994
1,1,2-Trichloroethane	ND		1	ug/L	8010		04/27/1994
Trichloroethene	ND		0.4	ug/L	8010		04/27/1994
Trichlorofluoromethane	ND		0.4	ug/L	8010		04/27/1994
Vinyl chloride	ND		0.4	ug/L	8010		04/27/1994
SURROGATE RESULTS	--						04/27/1994
1,4-Difluorobenzene (SURR)	112			% Rec.			04/27/1994
1,4-Dichlorobutane (SURR)	94			% Rec.			04/27/1994

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Client Acct: 62100
Client Name: Safety-Kleen
NET Job No: 94.01615

Date: 05/06/1994
ELAP Certificate: 1386
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Ref: Project No. 70005-009-05

SAMPLE DESCRIPTION: MW4
Date Taken: 04/21/1994
Time Taken: 09:15
NET Sample No: 192154

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTXE,Liquid)							
METHOD 5030/M8015	--						04/28/1994
DILUTION FACTOR*	1						04/28/1994
as Mineral Spirits	0.76	G1	0.05	mg/L	5030		04/28/1994
METHOD 8020 (GC,Liquid)	--						04/28/1994
DILUTION FACTOR*	1						04/28/1994
Benzene	ND		0.5	ug/L	8020		04/28/1994
Toluene	ND		0.5	ug/L	8020		04/28/1994
Ethylbenzene	ND		0.5	ug/L	8020		04/28/1994
Xylenes (Total)	ND		0.5	ug/L	8020		04/28/1994
SURROGATE RESULTS	--						04/28/1994
Bromofluorobenzene (SURR)	95			% Rec.	5030		04/28/1994

G1 : The result for Mineral Spirits is an unk. HC which consists of a single peak. No Mineral Spirits nor any other fuel patterns are present in this analysis.

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Project No. 70005-009-05

SAMPLE DESCRIPTION: MW4
Date Taken: 04/21/1994
Time Taken: 09:15
NET Sample No: 192154

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
METHOD 8010 (GC,Liquid)							
DILUTION FACTOR*	1						04/27/1994
Bromodichloromethane	ND		0.4	ug/L	8010		04/27/1994
Bromoform	ND		0.4	ug/L	8010		04/27/1994
Bromomethane	ND		0.4	ug/L	8010		04/27/1994
Carbon tetrachloride	ND		0.4	ug/L	8010		04/27/1994
Chlorobenzene	ND		0.4	ug/L	8010		04/27/1994
Chloroethane	ND		0.4	ug/L	8010		04/27/1994
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		04/27/1994
Chloroform	5.0		0.4	ug/L	8010		04/27/1994
Chloromethane	ND		0.4	ug/L	8010		04/27/1994
Dibromochloromethane	ND		0.4	ug/L	8010		04/27/1994
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		04/27/1994
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		04/27/1994
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		04/27/1994
Dichlorodifluoromethane	ND		0.4	ug/L	8010		04/27/1994
1,1-Dichloroethane	ND		0.4	ug/L	8010		04/27/1994
1,2-Dichloroethane	ND		0.4	ug/L	8010		04/27/1994
1,1-Dichloroethene	ND		0.4	ug/L	8010		04/27/1994
trans-1,2-Dichloroethene	1.7		0.4	ug/L	8010		04/27/1994
1,2-Dichloropropane	ND		0.4	ug/L	8010		04/27/1994
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		04/27/1994
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		04/27/1994
Methylene chloride	ND		10	ug/L	8010		04/27/1994
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		04/27/1994
Tetrachloroethene	ND		0.4	ug/L	8010		04/27/1994
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		04/27/1994
1,1,2-Trichloroethane	ND		1	ug/L	8010		04/27/1994
Trichloroethene	1,600	FF	0.4	ug/L	8010		04/27/1994
Trichlorofluoromethane	ND		0.4	ug/L	8010		04/27/1994
Vinyl chloride	ND		0.4	ug/L	8010		04/27/1994
SURROGATE RESULTS	--						04/27/1994
1,4-Difluorobenzene (SURR)	119			% Rec.			04/27/1994
1,4-Dichlorobutane (SURR)	110			% Rec.			04/27/1994

FF : Compound quantitated at a 100X dilution factor.

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Client Acct: 62100
Client Name: Safety-Kleen
NET Job No: 94.01615

Date: 05/06/1994
ELAP Certificate: 1386
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Ref: Project No. 70005-009-05

SAMPLE DESCRIPTION: MW5
Date Taken: 04/21/1994
Time Taken: 09:25
NET Sample No: 192155

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTXE,Liquid)							
METHOD 5030/M8015	--						04/26/1994
DILUTION FACTOR*	1						04/26/1994
as Mineral Spirits	ND		0.05	mg/L	5030		04/26/1994
METHOD 8020 (GC,Liquid)	--						04/26/1994
DILUTION FACTOR*	1						04/26/1994
Benzene	ND		0.5	ug/L	8020		04/26/1994
Toluene	ND		0.5	ug/L	8020		04/26/1994
Ethylbenzene	ND		0.5	ug/L	8020		04/26/1994
Xylenes (Total)	ND		0.5	ug/L	8020		04/26/1994
SURROGATE RESULTS	--						04/26/1994
Bromofluorobenzene (SURR)	101			% Rec.	5030		04/26/1994

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Client Acct: 62100
Client Name: Safety-Kleen
NET Job No: 94.01615

Date: 05/06/1994
ELAP Certificate: 1386
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Ref: Project No. 70005-009-05

SAMPLE DESCRIPTION: MW5
Date Taken: 04/21/1994
Time Taken: 09:25
NET Sample No: 192155

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
METHOD 8010 (GC,Liquid)							
DILUTION FACTOR*	1						04/27/1994
Bromodichloromethane	ND		0.4	ug/L	8010		04/27/1994
Bromoform	ND		0.4	ug/L	8010		04/27/1994
Bromomethane	ND		0.4	ug/L	8010		04/27/1994
Carbon tetrachloride	ND		0.4	ug/L	8010		04/27/1994
Chlorobenzene	ND		0.4	ug/L	8010		04/27/1994
Chloroethane	ND		0.4	ug/L	8010		04/27/1994
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		04/27/1994
Chloroform	3.5		0.4	ug/L	8010		04/27/1994
Chloromethane	ND		0.4	ug/L	8010		04/27/1994
Dibromochloromethane	ND		0.4	ug/L	8010		04/27/1994
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		04/27/1994
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		04/27/1994
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		04/27/1994
Dichlorodifluoromethane	ND		0.4	ug/L	8010		04/27/1994
1,1-Dichloroethane	ND		0.4	ug/L	8010		04/27/1994
1,2-Dichloroethane	ND		0.4	ug/L	8010		04/27/1994
1,1-Dichloroethene	ND		0.4	ug/L	8010		04/27/1994
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		04/27/1994
1,2-Dichloropropane	ND		0.4	ug/L	8010		04/27/1994
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		04/27/1994
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		04/27/1994
Methylene chloride	ND		10	ug/L	8010		04/27/1994
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		04/27/1994
Tetrachloroethene	ND		0.4	ug/L	8010		04/27/1994
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		04/27/1994
1,1,2-Trichloroethane	ND		1	ug/L	8010		04/27/1994
Trichloroethene	7.2		0.4	ug/L	8010		04/27/1994
Trichlorofluoromethane	7.9		0.4	ug/L	8010		04/27/1994
Vinyl chloride	ND		0.4	ug/L	8010		04/27/1994
SURROGATE RESULTS	--						04/27/1994
1,4-Difluorobenzene (SURR)	105			% Rec.			04/27/1994
1,4-Dichlorobutane (SURR)	94			% Rec.			04/27/1994

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Project No. 70005-009-05

SAMPLE DESCRIPTION: MW6
Date Taken: 04/21/1994
Time Taken: 09:35
NET Sample No: 192156

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTXE,Liquid)							
METHOD 5030/M8015	--						04/26/1994
DILUTION FACTOR*	1						04/26/1994
as Mineral Spirits	ND		0.05	mg/L	5030		04/26/1994
METHOD 8020 (GC,Liquid)	--						04/26/1994
DILUTION FACTOR*	1						04/26/1994
Benzene	ND		0.5	ug/L	8020		04/26/1994
Toluene	ND		0.5	ug/L	8020		04/26/1994
Ethylbenzene	ND		0.5	ug/L	8020		04/26/1994
Xylenes (Total)	ND		0.5	ug/L	8020		04/26/1994
SURROGATE RESULTS	--						04/26/1994
Bromofluorobenzene (SURR)	102			% Rec.	5030		04/26/1994

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Project No. 70005-009-05

SAMPLE DESCRIPTION: MW6
Date Taken: 04/21/1994
Time Taken: 09:35
NET Sample No: 192156

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
METHOD 8010 (GC,Liquid)							
DILUTION FACTOR*	1						04/27/1994
Bromodichloromethane	ND		0.4	ug/L	8010		04/27/1994
Bromoform	ND		0.4	ug/L	8010		04/27/1994
Bromomethane	ND		0.4	ug/L	8010		04/27/1994
Carbon tetrachloride	ND		0.4	ug/L	8010		04/27/1994
Chlorobenzene	ND		0.4	ug/L	8010		04/27/1994
Chloroethane	ND		0.4	ug/L	8010		04/27/1994
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		04/27/1994
Chloroform	ND		0.4	ug/L	8010		04/27/1994
Chloromethane	ND		0.4	ug/L	8010		04/27/1994
Dibromochloromethane	ND		0.4	ug/L	8010		04/27/1994
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		04/27/1994
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		04/27/1994
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		04/27/1994
Dichlorodifluoromethane	ND		0.4	ug/L	8010		04/27/1994
1,1-Dichloroethane	ND		0.4	ug/L	8010		04/27/1994
1,2-Dichloroethane	ND		0.4	ug/L	8010		04/27/1994
1,1-Dichloroethene	ND		0.4	ug/L	8010		04/27/1994
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		04/27/1994
1,2-Dichloropropane	ND		0.4	ug/L	8010		04/27/1994
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		04/27/1994
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		04/27/1994
Methylene chloride	ND		10	ug/L	8010		04/27/1994
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		04/27/1994
Tetrachloroethene	ND		0.4	ug/L	8010		04/27/1994
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		04/27/1994
1,1,2-Trichloroethane	ND		1	ug/L	8010		04/27/1994
Trichloroethene	1.0		0.4	ug/L	8010		04/27/1994
Trichlorofluoromethane	ND		0.4	ug/L	8010		04/27/1994
Vinyl chloride	ND		0.4	ug/L	8010		04/27/1994
SURROGATE RESULTS	--						04/27/1994
1,4-Difluorobenzene (SURR)	106			% Rec.			04/27/1994
1,4-Dichlorobutane (SURR)	93			% Rec.			04/27/1994

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Project No. 70005-009-05

SAMPLE DESCRIPTION: MW11
Date Taken: 04/21/1994
Time Taken: 09:45
NET Sample No: 192157

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTXE,Liquid)							
METHOD 5030/M8015	--						04/28/1994
DILUTION FACTOR*	1						04/28/1994
as Mineral Spirits	ND		0.05	mg/L	5030		04/28/1994
METHOD 8020 (GC,Liquid)	--						04/28/1994
DILUTION FACTOR*	1						04/28/1994
Benzene	ND		0.5	ug/L	8020		04/28/1994
Toluene	ND		0.5	ug/L	8020		04/28/1994
Ethylbenzene	ND		0.5	ug/L	8020		04/28/1994
Xylenes (Total)	ND		0.5	ug/L	8020		04/28/1994
SURROGATE RESULTS	--						04/28/1994
Bromofluorobenzene (SURR)	94			% Rec.	5030		04/28/1994

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Project No. 70005-009-05

SAMPLE DESCRIPTION: MW11
Date Taken: 04/21/1994
Time Taken: 09:45
NET Sample No: 192157

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
METHOD 8010 (GC,Liquid)							
DILUTION FACTOR*	1						04/27/1994
Bromodichloromethane	ND		0.4	ug/L	8010		04/27/1994
Bromoform	ND		0.4	ug/L	8010		04/27/1994
Bromomethane	ND		0.4	ug/L	8010		04/27/1994
Carbon tetrachloride	ND		0.4	ug/L	8010		04/27/1994
Chlorobenzene	ND		0.4	ug/L	8010		04/27/1994
Chloroethane	ND		0.4	ug/L	8010		04/27/1994
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		04/27/1994
Chloroform	ND		0.4	ug/L	8010		04/27/1994
Chloromethane	ND		0.4	ug/L	8010		04/27/1994
Dibromochloromethane	ND		0.4	ug/L	8010		04/27/1994
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		04/27/1994
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		04/27/1994
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		04/27/1994
Dichlorodifluoromethane	ND		0.4	ug/L	8010		04/27/1994
1,1-Dichloroethane	ND		0.4	ug/L	8010		04/27/1994
1,2-Dichloroethane	ND		0.4	ug/L	8010		04/27/1994
1,1-Dichloroethene	ND		0.4	ug/L	8010		04/27/1994
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		04/27/1994
1,2-Dichloropropane	ND		0.4	ug/L	8010		04/27/1994
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		04/27/1994
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		04/27/1994
Methylene chloride	ND		10	ug/L	8010		04/27/1994
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		04/27/1994
Tetrachloroethene	ND		0.4	ug/L	8010		04/27/1994
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		04/27/1994
1,1,2-Trichloroethane	ND		1	ug/L	8010		04/27/1994
Trichloroethene	3.1		0.4	ug/L	8010		04/27/1994
Trichlorofluoromethane	ND		0.4	ug/L	8010		04/27/1994
Vinyl chloride	ND		0.4	ug/L	8010		04/27/1994
SURROGATE RESULTS	--						04/27/1994
1,4-Difluorobenzene (SURR)	111			% Rec.			04/27/1994
1,4-Dichlorobutane (SURR)	95			% Rec.			04/27/1994

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Project No. 70005-009-05

SAMPLE DESCRIPTION: MW3
Date Taken: 04/21/1994
Time Taken: 09:55
NET Sample No: 192158

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTXE,Liquid)							
METHOD 5030/M8015	--						04/26/1994
DILUTION FACTOR*	1						04/26/1994
as Mineral Spirits	ND		0.05	mg/L	5030		04/26/1994
METHOD 8020 (GC,Liquid)	--						04/26/1994
DILUTION FACTOR*	1						04/26/1994
Benzene	ND		0.5	ug/L	8020		04/26/1994
Toluene	ND		0.5	ug/L	8020		04/26/1994
Ethylbenzene	ND		0.5	ug/L	8020		04/26/1994
Xylenes (Total)	ND		0.5	ug/L	8020		04/26/1994
SURROGATE RESULTS	--						04/26/1994
Bromofluorobenzene (SURR)	100			% Rec.	5030		04/26/1994

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Project No. 70005-009-05

SAMPLE DESCRIPTION: MW3
Date Taken: 04/21/1994
Time Taken: 09:55
NET Sample No: 192158

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
METHOD 8010 (GC,Liquid)							
DILUTION FACTOR*	1						04/27/1994
Bromodichloromethane	ND		0.4	ug/L	8010		04/27/1994
Bromoform	ND		0.4	ug/L	8010		04/27/1994
Bromomethane	ND		0.4	ug/L	8010		04/27/1994
Carbon tetrachloride	ND		0.4	ug/L	8010		04/27/1994
Chlorobenzene	ND		0.4	ug/L	8010		04/27/1994
Chloroethane	ND		0.4	ug/L	8010		04/27/1994
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		04/27/1994
Chloroform	ND		0.4	ug/L	8010		04/27/1994
Chloromethane	ND		0.4	ug/L	8010		04/27/1994
Dibromochloromethane	ND		0.4	ug/L	8010		04/27/1994
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		04/27/1994
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		04/27/1994
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		04/27/1994
Dichlorodifluoromethane	ND		0.4	ug/L	8010		04/27/1994
1,1-Dichloroethane	ND		0.4	ug/L	8010		04/27/1994
1,2-Dichloroethane	ND		0.4	ug/L	8010		04/27/1994
1,1-Dichloroethene	ND		0.4	ug/L	8010		04/27/1994
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		04/27/1994
1,2-Dichloropropane	ND		0.4	ug/L	8010		04/27/1994
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		04/27/1994
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		04/27/1994
Methylene chloride	ND		10	ug/L	8010		04/27/1994
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		04/27/1994
Tetrachloroethene	ND		0.4	ug/L	8010		04/27/1994
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		04/27/1994
1,1,2-Trichloroethane	ND		1	ug/L	8010		04/27/1994
Trichloroethene	ND		0.4	ug/L	8010		04/27/1994
Trichlorofluoromethane	1.8		0.4	ug/L	8010		04/27/1994
Vinyl chloride	ND		0.4	ug/L	8010		04/27/1994
SURROGATE RESULTS	--						04/27/1994
1,4-Difluorobenzene (SURR)	110			% Rec.			04/27/1994
1,4-Dichlorobutane (SURR)	91			% Rec.			04/27/1994

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Project No. 70005-009-05

SAMPLE DESCRIPTION: MW12
Date Taken: 04/21/1994
Time Taken: 10:10
NET Sample No: 192159

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTXE,Liquid)							
METHOD 5030/M8015	--						04/26/1994
DILUTION FACTOR*	1						04/26/1994
as Mineral Spirits	ND		0.05	mg/L	5030		04/26/1994
METHOD 8020 (GC,Liquid)	--						04/26/1994
DILUTION FACTOR*	1						04/26/1994
Benzene	ND		0.5	ug/L	8020		04/26/1994
Toluene	ND		0.5	ug/L	8020		04/26/1994
Ethylbenzene	ND		0.5	ug/L	8020		04/26/1994
Xylenes (Total)	ND		0.5	ug/L	8020		04/26/1994
SURROGATE RESULTS	--						04/26/1994
Bromofluorobenzene (SURR)	101			% Rec.	5030		04/26/1994

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Project No. 70005-009-05

SAMPLE DESCRIPTION: MW12
Date Taken: 04/21/1994
Time Taken: 10:10
NET Sample No: 192159

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
METHOD 8010 (GC,Liquid)							
DILUTION FACTOR*	1						04/27/1994
Bromodichloromethane	ND		0.4	ug/L	8010		04/27/1994
Bromoform	ND		0.4	ug/L	8010		04/27/1994
Bromomethane	ND		0.4	ug/L	8010		04/27/1994
Carbon tetrachloride	ND		0.4	ug/L	8010		04/27/1994
Chlorobenzene	ND		0.4	ug/L	8010		04/27/1994
Chloroethane	ND		0.4	ug/L	8010		04/27/1994
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		04/27/1994
Chloroform	ND		0.4	ug/L	8010		04/27/1994
Chloromethane	ND		0.4	ug/L	8010		04/27/1994
Dibromochloromethane	ND		0.4	ug/L	8010		04/27/1994
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		04/27/1994
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		04/27/1994
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		04/27/1994
Dichlorodifluoromethane	ND		0.4	ug/L	8010		04/27/1994
1,1-Dichloroethane	1.7		0.4	ug/L	8010		04/27/1994
1,2-Dichloroethane	1.9		0.4	ug/L	8010		04/27/1994
1,1-Dichloroethene	ND		0.4	ug/L	8010		04/27/1994
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		04/27/1994
1,2-Dichloropropane	ND		0.4	ug/L	8010		04/27/1994
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		04/27/1994
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		04/27/1994
Methylene chloride	ND		10	ug/L	8010		04/27/1994
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		04/27/1994
Tetrachloroethene	ND		0.4	ug/L	8010		04/27/1994
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		04/27/1994
1,1,2-Trichloroethane	ND		1	ug/L	8010		04/27/1994
Trichloroethene	44		0.4	ug/L	8010		04/27/1994
Trichlorofluoromethane	ND		0.4	ug/L	8010		04/27/1994
Vinyl chloride	ND		0.4	ug/L	8010		04/27/1994
SURROGATE RESULTS	--						04/27/1994
1,4-Difluorobenzene (SURR)	109			% Rec.			04/27/1994
1,4-Dichlorobutane (SURR)	90			% Rec.			04/27/1994

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Project No. 70005-009-05

SAMPLE DESCRIPTION: MW2
Date Taken: 04/21/1994
Time Taken: 10:20
NET Sample No: 192160

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTXE,Liquid)							04/26/1994
METHOD 5030/M8015	--						04/26/1994
DILUTION FACTOR*	1						04/26/1994
as Mineral Spirits	ND		0.05	mg/L	5030		04/26/1994
METHOD 8020 (GC,Liquid)	--						04/26/1994
DILUTION FACTOR*	1						04/26/1994
Benzene	ND		0.5	ug/L	8020		04/26/1994
Toluene	ND		0.5	ug/L	8020		04/26/1994
Ethylbenzene	ND		0.5	ug/L	8020		04/26/1994
Xylenes (Total)	ND		0.5	ug/L	8020		04/26/1994
SURROGATE RESULTS	--						04/26/1994
Bromofluorobenzene (SURR)	100			% Rec.	5030		04/26/1994

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Project No. 70005-009-05

SAMPLE DESCRIPTION: MW2
Date Taken: 04/21/1994
Time Taken: 10:20
NET Sample No: 192160

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
METHOD 8010 (GC,Liquid)							
DILUTION FACTOR*	1						04/28/1994
Bromodichloromethane	ND		0.4	ug/L	8010		04/28/1994
Bromoform	ND		0.4	ug/L	8010		04/28/1994
Bromomethane	ND		0.4	ug/L	8010		04/28/1994
Carbon tetrachloride	ND		0.4	ug/L	8010		04/28/1994
Chlorobenzene	ND		0.4	ug/L	8010		04/28/1994
Chloroethane	ND		0.4	ug/L	8010		04/28/1994
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		04/28/1994
Chloroform	ND		0.4	ug/L	8010		04/28/1994
Chloromethane	ND		0.4	ug/L	8010		04/28/1994
Dibromochloromethane	ND		0.4	ug/L	8010		04/28/1994
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		04/28/1994
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		04/28/1994
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		04/28/1994
Dichlorodifluoromethane	ND		0.4	ug/L	8010		04/28/1994
1,1-Dichloroethane	ND		0.4	ug/L	8010		04/28/1994
1,2-Dichloroethane	ND		0.4	ug/L	8010		04/28/1994
1,1-Dichloroethene	ND		0.4	ug/L	8010		04/28/1994
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		04/28/1994
1,2-Dichloropropane	ND		0.4	ug/L	8010		04/28/1994
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		04/28/1994
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		04/28/1994
Methylene chloride	ND		10	ug/L	8010		04/28/1994
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		04/28/1994
Tetrachloroethene	ND		0.4	ug/L	8010		04/28/1994
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		04/28/1994
1,1,2-Trichloroethane	ND		1	ug/L	8010		04/28/1994
Trichloroethene	ND		0.4	ug/L	8010		04/28/1994
Trichlorofluoromethane	ND		0.4	ug/L	8010		04/28/1994
Vinyl chloride	ND		0.4	ug/L	8010		04/28/1994
SURROGATE RESULTS	--						04/28/1994
1,4-Difluorobenzene (SURR)	104			% Rec.			04/28/1994
1,4-Dichlorobutane (SURR)	84			% Rec.			04/28/1994

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Project No. 70005-009-05

SAMPLE DESCRIPTION: MW8
Date Taken: 04/21/1994
Time Taken: 13:00
NET Sample No: 192161

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTXE,Liquid)							
METHOD 5030/M8015	--						04/26/1994
DILUTION FACTOR*	1						04/26/1994
as Mineral Spirits	ND		0.05	mg/L	5030		04/26/1994
METHOD 8020 (GC,Liquid)	--						04/26/1994
DILUTION FACTOR*	1						04/26/1994
Benzene	ND		0.5	ug/L	8020		04/26/1994
Toluene	ND		0.5	ug/L	8020		04/26/1994
Ethylbenzene	ND		0.5	ug/L	8020		04/26/1994
Xylenes (Total)	ND		0.5	ug/L	8020		04/26/1994
SURROGATE RESULTS	--						04/26/1994
Bromofluorobenzene (SURR)	105			% Rec.	5030		04/26/1994

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Project No. 70005-009-05

SAMPLE DESCRIPTION: MW8
Date Taken: 04/21/1994
Time Taken: 13:00
NET Sample No: 192161

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
METHOD 8010 (GC,Liquid)							
DILUTION FACTOR*	1						04/27/1994
Bromodichloromethane	ND		0.4	ug/L	8010		04/27/1994
Bromoform	ND		0.4	ug/L	8010		04/27/1994
Bromomethane	ND		0.4	ug/L	8010		04/27/1994
Carbon tetrachloride	ND		0.4	ug/L	8010		04/27/1994
Chlorobenzene	ND		0.4	ug/L	8010		04/27/1994
Chloroethane	ND		0.4	ug/L	8010		04/27/1994
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		04/27/1994
Chloroform	ND		0.4	ug/L	8010		04/27/1994
Chloromethane	ND		0.4	ug/L	8010		04/27/1994
Dibromochloromethane	ND		0.4	ug/L	8010		04/27/1994
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		04/27/1994
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		04/27/1994
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		04/27/1994
Dichlorodifluoromethane	ND		0.4	ug/L	8010		04/27/1994
1,1-Dichloroethane	3.7		0.4	ug/L	8010		04/27/1994
1,2-Dichloroethane	7.1		0.4	ug/L	8010		04/27/1994
1,1-Dichloroethene	ND		0.4	ug/L	8010		04/27/1994
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		04/27/1994
1,2-Dichloropropane	0.8		0.4	ug/L	8010		04/27/1994
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		04/27/1994
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		04/27/1994
Methylene chloride	ND		10	ug/L	8010		04/27/1994
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		04/27/1994
Tetrachloroethene	0.8		0.4	ug/L	8010		04/27/1994
1,1,1-Trichloroethane	1.5		0.4	ug/L	8010		04/27/1994
1,1,2-Trichloroethane	ND		1	ug/L	8010		04/27/1994
Trichloroethene	18		0.4	ug/L	8010		04/27/1994
Trichlorofluoromethane	ND		0.4	ug/L	8010		04/27/1994
Vinyl chloride	ND		0.4	ug/L	8010		04/27/1994
SURROGATE RESULTS	--						04/27/1994
1,4-Difluorobenzene (SURR)	100			% Rec.			04/27/1994
1,4-Dichlorobutane (SURR)	87			% Rec.			04/27/1994

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Project No. 70005-009-05

SAMPLE DESCRIPTION: MW13
Date Taken: 04/21/1994
Time Taken: 15:20
NET Sample No: 192162

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTXE,Liquid)							
METHOD 5030/M8015	--						04/26/1994
DILUTION FACTOR*	1						04/26/1994
as Mineral Spirits	ND		0.05	mg/L	5030		04/26/1994
METHOD 8020 (GC,Liquid)	--						04/26/1994
DILUTION FACTOR*	1						04/26/1994
Benzene	ND		0.5	ug/L	8020		04/26/1994
Toluene	ND		0.5	ug/L	8020		04/26/1994
Ethylbenzene	ND		0.5	ug/L	8020		04/26/1994
Xylenes (Total)	ND		0.5	ug/L	8020		04/26/1994
SURROGATE RESULTS	--						04/26/1994
Bromofluorobenzene (SURR)	100			% Rec.	5030		04/26/1994

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Project No. 70005-009-05

SAMPLE DESCRIPTION: MW13
Date Taken: 04/21/1994
Time Taken: 15:20
NET Sample No: 192162

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
METHOD 8010 (GC,Liquid)							
DILUTION FACTOR*	1						04/27/1994
Bromodichloromethane	ND		0.4	ug/L	8010		04/27/1994
Bromoform	ND		0.4	ug/L	8010		04/27/1994
Bromomethane	ND		0.4	ug/L	8010		04/27/1994
Carbon tetrachloride	ND		0.4	ug/L	8010		04/27/1994
Chlorobenzene	ND		0.4	ug/L	8010		04/27/1994
Chloroethane	ND		0.4	ug/L	8010		04/27/1994
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		04/27/1994
Chloroform	ND		0.4	ug/L	8010		04/27/1994
Chloromethane	ND		0.4	ug/L	8010		04/27/1994
Dibromochloromethane	ND		0.4	ug/L	8010		04/27/1994
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		04/27/1994
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		04/27/1994
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		04/27/1994
Dichlorodifluoromethane	ND		0.4	ug/L	8010		04/27/1994
1,1-Dichloroethane	ND		0.4	ug/L	8010		04/27/1994
1,2-Dichloroethane	ND		0.4	ug/L	8010		04/27/1994
1,1-Dichloroethene	ND		0.4	ug/L	8010		04/27/1994
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		04/27/1994
1,2-Dichloropropane	ND		0.4	ug/L	8010		04/27/1994
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		04/27/1994
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		04/27/1994
Methylene chloride	ND		10	ug/L	8010		04/27/1994
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		04/27/1994
Tetrachloroethene	ND		0.4	ug/L	8010		04/27/1994
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		04/27/1994
1,1,2-Trichloroethane	ND		1	ug/L	8010		04/27/1994
Trichloroethene	ND		0.4	ug/L	8010		04/27/1994
Trichlorofluoromethane	ND		0.4	ug/L	8010		04/27/1994
Vinyl chloride	ND		0.4	ug/L	8010		04/27/1994
SURROGATE RESULTS	--						04/27/1994
1,4-Difluorobenzene (SURR)	118			% Rec.			04/27/1994
1,4-Dichlorobutane (SURR)	98			% Rec.			04/27/1994

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Project No. 70005-009-05

CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

Parameter	CCV Standard % Recovery	CCV Standard Amount Found	CCV Standard Amount Expected	Units	Date Analyzed	Analyst Initials
TPH (Gas/BTXE,Liquid)						
Benzene	114.6	5.73	5.00	ug/L	04/26/1994	aal
Toluene	109.6	5.48	5.00	ug/L	04/26/1994	aal
Ethylbenzene	108.0	5.40	5.00	ug/L	04/26/1994	aal
Xylenes (Total)	108.0	16.2	15.0	ug/L	04/26/1994	aal
Bromofluorobenzene (SURR)	98.0	98	100	% Rec.	04/26/1994	aal
TPH (Gas/BTXE,Liquid)						
Benzene	108.0	5.40	5.00	ug/L	04/28/1994	aal
Toluene	104.2	5.21	5.00	ug/L	04/28/1994	aal
Ethylbenzene	99.6	4.98	5.00	ug/L	04/28/1994	aal
Xylenes (Total)	100.0	15.0	15.0	ug/L	04/28/1994	aal
Bromofluorobenzene (SURR)	98.0	98	100	% Rec.	04/28/1994	aal
TPH (Gas/BTXE,Liquid)						
Benzene	112.0	5.60	5.00	ug/L	05/03/1994	klh
Toluene	109.2	5.46	5.00	ug/L	05/03/1994	klh
Ethylbenzene	105.2	5.26	5.00	ug/L	05/03/1994	klh
Xylenes (Total)	104.0	15.6	15.0	ug/L	05/03/1994	klh
Bromofluorobenzene (SURR)	97.0	97	100	% Rec.	05/03/1994	klh

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Project No. 70005-009-05

CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

Parameter	CCV Standard % Recovery	CCV Standard Amount Found	CCV Standard Amount Expected	Units	Date Analyzed	Analyst Initials
METHOD 8010 (GC,Liquid)						
Bromodichloromethane	102.5	20.5	20.0	ug/L	04/27/1994	asm
Bromoform	102.0	20.4	20.0	ug/L	04/27/1994	asm
Bromomethane	88.0	17.6	20.0	ug/L	04/27/1994	asm
Carbon tetrachloride	111.0	22.2	20.0	ug/L	04/27/1994	asm
Chlorobenzene	102.5	20.5	20.0	ug/L	04/27/1994	asm
Chloroethane	88.0	17.6	20.0	ug/L	04/27/1994	asm
2-Chloroethylvinyl ether	111.5	22.3	20.0	ug/L	04/27/1994	asm
Chloroform	110.5	22.1	20.0	ug/L	04/27/1994	asm
Chloromethane	67.5	13.5	20.0	ug/L	04/27/1994	asm
Dibromochloromethane	104.0	20.8	20.0	ug/L	04/27/1994	asm
1,2-Dichlorobenzene	108.0	21.6	20.0	ug/L	04/27/1994	asm
1,3-Dichlorobenzene	109.0	21.8	20.0	ug/L	04/27/1994	asm
1,4-Dichlorobenzene	108.5	21.7	20.0	ug/L	04/27/1994	asm
Dichlorodifluoromethane	91.0	18.2	20.0	ug/L	04/27/1994	asm
1,1-Dichloroethane	106.0	21.2	20.0	ug/L	04/27/1994	asm
1,2-Dichloroethane	106.0	21.2	20.0	ug/L	04/27/1994	asm
1,1-Dichloroethene	85.0	17.0	20.0	ug/L	04/27/1994	asm
trans-1,2-Dichloroethene	87.5	17.5	20.0	ug/L	04/27/1994	asm
1,2-Dichloropropane	106.5	21.3	20.0	ug/L	04/27/1994	asm
cis-1,3-Dichloropropene	114.5	22.9	20.0	ug/L	04/27/1994	asm
trans-1,3-Dichloropropene	111.5	22.3	20.0	ug/L	04/27/1994	asm
Methylene chloride	67.5	13.5	20.0	ug/L	04/27/1994	asm
1,1,2,2-Tetrachloroethane	126.5	25.3	20.0	ug/L	04/27/1994	asm
Tetrachloroethene	109.5	21.9	20.0	ug/L	04/27/1994	asm
1,1,1-Trichloroethane	112.0	22.4	20.0	ug/L	04/27/1994	asm
1,1,2-Trichloroethane	113.5	22.7	20.0	ug/L	04/27/1994	asm
Trichloroethene	107.0	21.4	20.0	ug/L	04/27/1994	asm
Trichlorofluoromethane	100.0	20.0	20.0	ug/L	04/27/1994	asm
Vinyl chloride	109.5	21.9	20.0	ug/L	04/27/1994	asm
1,4-Difluorobenzene (SURR)	118.0	118	100	% Rec.	04/27/1994	asm
1,4-Dichlorobutane (SURR)	114.0	114	100	% Rec.	04/27/1994	asm

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Project No. 70005-009-05

CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

Parameter	CCV Standard % Recovery	CCV Standard Amount Found	CCV Standard Amount Expected	Units	Date Analyzed	Analyst Initials
METHOD 8010 (GC,Liquid)						
Bromodichloromethane	100.0	20.0	20.0	ug/L	04/28/1994	asm
Bromoform	97.0	19.4	20.0	ug/L	04/28/1994	asm
Bromomethane	118.0	23.6	20.0	ug/L	04/28/1994	asm
Carbon tetrachloride	109.0	21.8	20.0	ug/L	04/28/1994	asm
Chlorobenzene	99.0	19.8	20.0	ug/L	04/28/1994	asm
Chloroethane	118.0	23.6	20.0	ug/L	04/28/1994	asm
2-Chloroethylvinyl ether	88.5	17.7	20.0	ug/L	04/28/1994	asm
Chloroform	105.5	21.1	20.0	ug/L	04/28/1994	asm
Chloromethane	80.5	16.1	20.0	ug/L	04/28/1994	asm
Dibromochloromethane	100.5	20.1	20.0	ug/L	04/28/1994	asm
1,2-Dichlorobenzene	101.5	20.3	20.0	ug/L	04/28/1994	asm
1,3-Dichlorobenzene	102.5	20.5	20.0	ug/L	04/28/1994	asm
1,4-Dichlorobenzene	103.5	20.7	20.0	ug/L	04/28/1994	asm
Dichlorodifluoromethane	92.5	18.5	20.0	ug/L	04/28/1994	asm
1,1-Dichloroethane	103.0	20.6	20.0	ug/L	04/28/1994	asm
1,2-Dichloroethane	105.5	21.1	20.0	ug/L	04/28/1994	asm
1,1-Dichloroethene	85.0	17.0	20.0	ug/L	04/28/1994	asm
trans-1,2-Dichloroethene	89.5	17.9	20.0	ug/L	04/28/1994	asm
1,2-Dichloropropane	103.5	20.7	20.0	ug/L	04/28/1994	asm
cis-1,3-Dichloropropene	104.5	20.9	20.0	ug/L	04/28/1994	asm
trans-1,3-Dichloropropene	105.5	21.1	20.0	ug/L	04/28/1994	asm
Methylene chloride	79.5	15.9	20.0	ug/L	04/28/1994	asm
1,1,2,2-Tetrachloroethane	124.0	24.8	20.0	ug/L	04/28/1994	asm
Tetrachloroethene	102.0	20.4	20.0	ug/L	04/28/1994	asm
1,1,1-Trichloroethane	108.0	21.6	20.0	ug/L	04/28/1994	asm
1,1,2-Trichloroethane	109.0	21.8	20.0	ug/L	04/28/1994	asm
Trichloroethene	104.5	20.9	20.0	ug/L	04/28/1994	asm
Trichlorofluoromethane	105.5	21.1	20.0	ug/L	04/28/1994	asm
Vinyl chloride	116.5	23.3	20.0	ug/L	04/28/1994	asm
1,4-Difluorobenzene (SURR)	116.0	116	100	% Rec.	04/28/1994	asm
1,4-Dichlorobutane (SURR)	109.0	109	100	% Rec.	04/28/1994	asm

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Ref: Project No. 70005-009-05

METHOD BLANK REPORT

Parameter	Method Blank Amount Found	Reporting Limit	Units	Date Analyzed	Analyst Initials
TPH (Gas/BTXE,Liquid)					
as Mineral Spirits	--	0.05	mg/L	04/26/1994	aal
Benzene	ND	0.5	ug/L	04/26/1994	aal
Toluene	ND	0.5	ug/L	04/26/1994	aal
Ethylbenzene	ND	0.5	ug/L	04/26/1994	aal
Xylenes (Total)	ND	0.5	ug/L	04/26/1994	aal
Bromofluorobenzene (SURR)	100		% Rec.	04/26/1994	aal
TPH (Gas/BTXE,Liquid)					
as Mineral Spirits	--	0.05	mg/L	04/28/1994	aal
Benzene	ND	0.5	ug/L	04/28/1994	aal
Toluene	ND	0.5	ug/L	04/28/1994	aal
Ethylbenzene	ND	0.5	ug/L	04/28/1994	aal
Xylenes (Total)	ND	0.5	ug/L	04/28/1994	aal
Bromofluorobenzene (SURR)	99		% Rec.	04/28/1994	aal
TPH (Gas/BTXE,Liquid)					
as Mineral Spirits	--	0.05	mg/L	05/03/1994	klh
Benzene	ND	0.5	ug/L	05/03/1994	klh
Toluene	ND	0.5	ug/L	05/03/1994	klh
Ethylbenzene	ND	0.5	ug/L	05/03/1994	klh
Xylenes (Total)	ND	0.5	ug/L	05/03/1994	klh
Bromofluorobenzene (SURR)	101		% Rec.	05/03/1994	klh

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Project No. 70005-009-05

METHOD BLANK REPORT

Parameter	Method Blank Amount Found	Reporting Limit	Units	Date Analyzed	Analyst Initials
METHOD 8010 (GC,Liquid)					
Bromodichloromethane	ND	0.4	ug/L	04/27/1994	asm
Bromoform	ND	0.4	ug/L	04/27/1994	asm
Bromomethane	ND	0.4	ug/L	04/27/1994	asm
Carbon tetrachloride	ND	0.4	ug/L	04/27/1994	asm
Chlorobenzene	ND	0.4	ug/L	04/27/1994	asm
Chloroethane	ND	0.4	ug/L	04/27/1994	asm
2-Chloroethylvinyl ether	ND	1.0	ug/L	04/27/1994	asm
Chloroform	ND	0.4	ug/L	04/27/1994	asm
Chloromethane	ND	0.4	ug/L	04/27/1994	asm
Dibromochloromethane	ND	0.4	ug/L	04/27/1994	asm
1,2-Dichlorobenzene	ND	0.4	ug/L	04/27/1994	asm
1,3-Dichlorobenzene	ND	0.4	ug/L	04/27/1994	asm
1,4-Dichlorobenzene	ND	0.4	ug/L	04/27/1994	asm
Dichlorodifluoromethane	ND	0.4	ug/L	04/27/1994	asm
1,1-Dichloroethane	ND	0.4	ug/L	04/27/1994	asm
1,2-Dichloroethane	ND	0.4	ug/L	04/27/1994	asm
1,1-Dichloroethene	ND	0.4	ug/L	04/27/1994	asm
trans-1,2-Dichloroethene	ND	0.4	ug/L	04/27/1994	asm
1,2-Dichloropropane	ND	0.4	ug/L	04/27/1994	asm
cis-1,3-Dichloropropene	ND	0.4	ug/L	04/27/1994	asm
trans-1,3-Dichloropropene	ND	0.4	ug/L	04/27/1994	asm
Methylene chloride	ND	10	ug/L	04/27/1994	asm
1,1,2,2-Tetrachloroethane	ND	0.4	ug/L	04/27/1994	asm
Tetrachloroethene	ND	0.4	ug/L	04/27/1994	asm
1,1,1-Trichloroethane	ND	0.4	ug/L	04/27/1994	asm
1,1,2-Trichloroethane	ND	0.4	ug/L	04/27/1994	asm
Trichloroethene	ND	0.4	ug/L	04/27/1994	asm
Trichlorofluoromethane	ND	0.4	ug/L	04/27/1994	asm
Vinyl chloride	ND	0.4	ug/L	04/27/1994	asm
1,4-Difluorobenzene (SURR)	115		% Rec.	04/27/1994	asm
1,4-Dichlorobutane (SURR)	97		% Rec.	04/27/1994	asm

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Project No. 70005-009-05

METHOD BLANK REPORT

Parameter	Method Blank Amount Found	Reporting Limit	Units	Date Analyzed	Analyst Initials
METHOD 8010 (GC,Liquid)					
Bromodichloromethane	ND	0.4	ug/L	04/28/1994	asm
Bromoform	ND	0.4	ug/L	04/28/1994	asm
Bromomethane	ND	0.4	ug/L	04/28/1994	asm
Carbon tetrachloride	ND	0.4	ug/L	04/28/1994	asm
Chlorobenzene	ND	0.4	ug/L	04/28/1994	asm
Chloroethane	ND	0.4	ug/L	04/28/1994	asm
2-Chloroethylvinyl ether	ND	1.0	ug/L	04/28/1994	asm
Chloroform	ND	0.4	ug/L	04/28/1994	asm
Chloromethane	ND	0.4	ug/L	04/28/1994	asm
Dibromochloromethane	ND	0.4	ug/L	04/28/1994	asm
1,2-Dichlorobenzene	ND	0.4	ug/L	04/28/1994	asm
1,3-Dichlorobenzene	ND	0.4	ug/L	04/28/1994	asm
1,4-Dichlorobenzene	ND	0.4	ug/L	04/28/1994	asm
Dichlorodifluoromethane	ND	0.4	ug/L	04/28/1994	asm
1,1-Dichloroethane	ND	0.4	ug/L	04/28/1994	asm
1,2-Dichloroethane	ND	0.4	ug/L	04/28/1994	asm
1,1-Dichloroethene	ND	0.4	ug/L	04/28/1994	asm
trans-1,2-Dichloroethene	ND	0.4	ug/L	04/28/1994	asm
1,2-Dichloropropane	ND	0.4	ug/L	04/28/1994	asm
cis-1,3-Dichloropropene	ND	0.4	ug/L	04/28/1994	asm
trans-1,3-Dichloropropene	ND	0.4	ug/L	04/28/1994	asm
Methylene chloride	ND	10	ug/L	04/28/1994	asm
1,1,2,2-Tetrachloroethane	ND	0.4	ug/L	04/28/1994	asm
Tetrachloroethene	ND	0.4	ug/L	04/28/1994	asm
1,1,1-Trichloroethane	ND	0.4	ug/L	04/28/1994	asm
1,1,2-Trichloroethane	ND	0.4	ug/L	04/28/1994	asm
Trichloroethene	ND	0.4	ug/L	04/28/1994	asm
Trichlorofluoromethane	ND	0.4	ug/L	04/28/1994	asm
Vinyl chloride	ND	0.4	ug/L	04/28/1994	asm
1,4-Difluorobenzene (SURR)	101		% Rec.	04/28/1994	asm
1,4-Dichlorobutane (SURR)	80		% Rec.	04/28/1994	asm

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Client Acct: 62100
Client Name: Safety-Kleen
NET Job No: 94.01615

Date: 05/06/1994
ELAP Certificate: 1386
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Ref: Project No. 70005-009-05

MATRIX SPIKE / MATRIX SPIKE DUPLICATE

Parameter	Matrix Spike % Rec.	Matrix Spike Dup % Rec.	RPD	Spike Amount	Sample Conc.	Matrix Spike Conc.	Matrix Spike Dup. Conc.	Units	Date Analyzed	Analyst Initials
TPH (Gas/BTXE,Liquid)										
Benzene	98.1	98.8	0.7	42.5	ND	41.7	42.0	ug/L	04/28/1994	aal
Toluene	99.1	99.1	0.0	106	ND	105	105	ug/L	04/28/1994	aal
TPH (Gas/BTXE,Liquid)										
Benzene	101.6	100.5	1.1	37.7	ND	38.3	37.9	ug/L	05/02/1994	aal
Toluene	101.9	100.2	1.7	105.1	ND	107.1	105.3	ug/L	05/02/1994	aal
TPH (Gas/BTXE,Liquid)										
Benzene	100.0	96.4	3.6	36.0	ND	36.0	34.7	ug/L	04/26/1994	aal
Toluene	99.1	95.6	3.6	100.5	ND	99.6	96.1	ug/L	04/26/1994	aal

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Client Acct: 62100
Client Name: Safety-Kleen
NET Job No: 94.01615

Date: 05/06/1994
ELAP Certificate: 1386
Page: 29

Ref: Project No. 70005-009-05

MATRIX SPIKE / MATRIX SPIKE DUPLICATE

Parameter	Matrix Spike % Rec.	Matrix Spike Dup % Rec.	RPD	Spike Amount	Sample Conc.	Matrix Spike Conc.	Matrix Spike Dup. Conc.	Units	Date Analyzed	Analyst Initials
METHOD 8010 (GC,Liquid)										
Chlorobenzene	109.0	102.5	6.1	20.0	ND	21.8	20.5	ug/L	04/27/1994	asm
1,1-Dichloroethene	86.5	78.0	10.3	20.0	ND	17.3	15.6	ug/L	04/27/1994	asm
Trichloroethene	112.5	106.5	5.5	20.0	ND	22.5	21.3	ug/L	04/27/1994	asm

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.

Ref: Project No. 70005-009-05

MATRIX SPIKE / MATRIX SPIKE DUPLICATE

Parameter	Matrix Spike % Rec.	Matrix Spike Dup % Rec.	RPD	Spike Amount	Sample Conc.	Matrix Spike Conc.	Matrix Spike Dup. Conc.	Units	Date Analyzed	Analyst Initials
METHOD 8010 (GC,Liquid)										
Chlorobenzene	103.0	94.0	9.0	20.0	ND	20.6	18.8	ug/L	04/28/1994	asm
1,1-Dichloroethene	85.5	79.0	7.9	20.0	ND	17.1	15.8	ug/L	04/28/1994	asm
Trichloroethene	108.5	100.0	8.2	20.0	ND	21.7	20.0	ug/L	04/28/1994	asm

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NET®

KEY TO ABBREVIATIONS and METHOD REFERENCES

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

Method References

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

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

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

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

Revised September, 1993
abb.93

Chain-of-Custody Number: A

SEACOR Chain-of-Custody Record

8947

Address
1390 Willow Pass Rd. Ste 360
Concord CA 94520
(510) 686-9780

Project # 20005-009-05 Task # ____
Project Manager Greg Hoeum
Laboratory NET
Turn-around time: Std

Sampler's Name: Bob Robitaille
Sampler's Signature:

Analysis Request

Sample ID	Date	Time	Matrix	TPHg/BTEX 8015 (modified)/8020	TPHd 8015 (modified)	TPH 418.1	Aromatic Volatiles 602/8020	Volatile Organics 624/8240 (GC/MS)	Halogenated Volatiles 601/8010	Semi-volatile Organics 625/8270 (GC/MS)	Pesticides/PCB's 608/8080	Total Lead 7421	Priority Pollutant Metals (13)	TCLP Metals		BTEX / TPH-as-Mineral Spirits		Comments/ Instructions	Number of Containers
MW1	4-21-94	0905	GW						X							X			4
MW4		0915							X							X			4
MW5		0925							X							X			4
MW6		0935							X							X		seals intact AL CUSTODY SEALED 4/22/94 @	4
MW11		0945							X							X			4
MW3		0955							X							X			4
MW12		1010							X							X			4
MW2		1020							X							X			4
MW8		1300							X							X			4
MW13	↓	1520	↓						X							X			4

Special Instructions/Comments:
Safety Kleen
400 Market St.
Oakland CA.
P.O.# E10275
cooler temp. 7.5°C

Relinquished by:
Sign
Print Bob Robitaille
Company SEACOR
Time 0924 Date 4-22-94

Received by:
Sign
Print G P Lumbre
Company NET
Time 0924 Date 4/22/94

Relinquished by:
Sign
Print G P LUMBRE
Company NET
Time 16:00 Date 4/22/94

Received by: via NCS
Sign
Print Andy Lopez
Company NET
Time 11:00 Date 4/23/94

Sample Receipt

Total no. of containers	40
Chain of custody seals:	Y
Rec'd good condition/cold:	Y
Conforms to record:	Y

Client:
Client Contact:
Client Phone Number:

Date ___ / ___ / ___ Page ___ of ___