



December 22, 1994

VIA CERTIFIED MAIL NO. Z 090 233 819

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

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

24 DEC 21 AM 9:42
HAZMAT

Dear Ms. Eberle:

Enclosed is the quarterly report which summarizes the groundwater monitoring and vapor extraction activities conducted at the above-referenced facility. This report covers the period from September through November 1994.

As described in the letter submitted on July 13, 1994, and modified and approved by Alameda County in a response letter dated July 27, 1994, Safety-Kleen is following the modified groundwater sampling schedule. The October 19, 1994 groundwater sampling was a semi-annual event.

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

Sincerely,

for

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

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

OAKLAND7.L02
December 22, 1994
Job No. 70005-009-07



December 22, 1994

VIA CERTIFIED MAIL NO. Z 090 233 820

Mr. Steven Ritchie
Executive Officer
California Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, California 94612

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

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Scott Comiso, BAAQMD
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OAKLAND7.L03
December 22, 1994
Job No. 70005-009-07

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

SECOR Job No. 70005-009-07

12-22-94

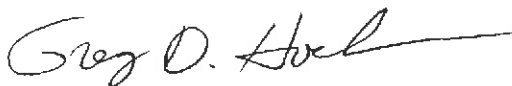
Prepared For:
Ms. Anne Lunt
Safety-Kleen Corp.
P.O. Box 1447
Manhattan Beach, California 90266

54 DEC 24 11 51 AM '94
JAN 17 1995


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

December 22, 1994

Prepared By:


Greg D. Hoehn
Principal Geologist

Reviewed By:


Paul D. Horton, R.G.
Principal Hydrogeologist

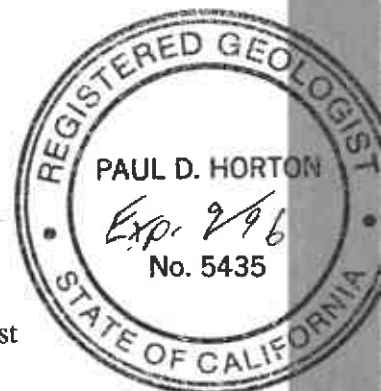


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1.0 INTRODUCTION

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

2.0 PROJECT BACKGROUND INFORMATION

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

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

The SVE system consists of seven horizontal vapor extraction lines and a vapor treatment system consisting of a Padre™ regenerative adsorption system manufactured by Purus, Inc., followed by a granular activated carbon (GAC) polish. Figure 3 depicts the layout of the vapor extraction lines and the vapor treatment system. A detailed description of the SVE system can be found in the report entitled *Quarterly Groundwater Monitoring and Soil Vapor Extraction Report* dated October 1, 1993. Prior to June 30, 1993, the SVE system startup and operation was conducted in accordance with the Bay Area Air Quality Management District (BAAQMD) Authority to Construct Permit dated March 4, 1993. System operation since June 30, 1993 has been conducted in accordance with the Permit to Operate dated June 30, 1993 and amended October 20, 1994 to modify the monitoring schedule to monthly.

The SVE system operation was discontinued on November 24, 1994 due to a system fault. In addition, the system has been down for installation of UST cathodic protection. During excavation for the cathodic protection, the SVE piping (PVC) was damaged. Operation of the SVE system will be resumed when Safety-Kleen has completed the installation of the UST cathodic protection and the SVE line has been repaired.

3.0 SCOPE OF WORK

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

3.1 Soil Vapor Extraction System

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

Vapor samples were collected on September 12, October 5 and November 3, 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 October 19, 1994, on- and off-site monitoring wells were monitored for depth-to-water using a water level indicator calibrated to 0.01-foot. The depth-to-water measurements were used with well survey data to construct a potentiometric surface map (Figure 4).

Subsequent to collecting depth-to-water measurements on October 19, 1994, monitoring wells MW-1 through MW-4, MW-8 and MW-12 (in accordance with the semi-annual sampling schedule) were purged by hand bailing until approximately three well volumes of groundwater had been removed, or until measurements of pH, temperature, and conductivity had stabilized. Monitoring well MW-10 was not monitored or sampled due to access being restricted by Caltrans by the presence of a fence located around

property north of Fifth Street (Figure 2). 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 monitoring well, the equipment was decontaminated by double-washing with a laboratory grade detergent in clean water, and triple-rinsed using deionized water. Purge water and decontamination water generated during well purging and sampling was placed in 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 November 17, 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 250 $\mu\text{g}/\ell$ on September 12, 400 $\mu\text{g}/\ell$ on October 5, and 610 $\mu\text{g}/\ell$ on November 3, 1994. Results of BTEX and purgeable halocarbon analyses of system influent samples detected 0.9 $\mu\text{g}/\ell$ xylenes on September 12, 1994. On October 5, 1994, 2.1 $\mu\text{g}/\ell$ toluene, 0.6 $\mu\text{g}/\ell$ xylenes, 4.9 $\mu\text{g}/\ell$ dichloromethane, 6.5 $\mu\text{g}/\ell$ 1,1,1-trichloroethane and 3.8 $\mu\text{g}/\ell$ tetrachloroethene were detected. On November 3, 1994, 0.5 $\mu\text{g}/\ell$ ethylbenzene and 3.2 $\mu\text{g}/\ell$ xylenes were detected. 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 September 12, 1994 was calculated as 2.47 pounds per day (lbs/day), 3.96 lbs/day on October 5, 1994, and 6.03 lbs/day on November 3, 1994. Data collected on November 3, 1994 were extrapolated through November 24, 1994 (last recorded date the SVE system was operating) which indicate 1,798.4 pounds of mineral spirits (approximately 276.7 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 16.2 gallons during this reporting period. A total of 92.9 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

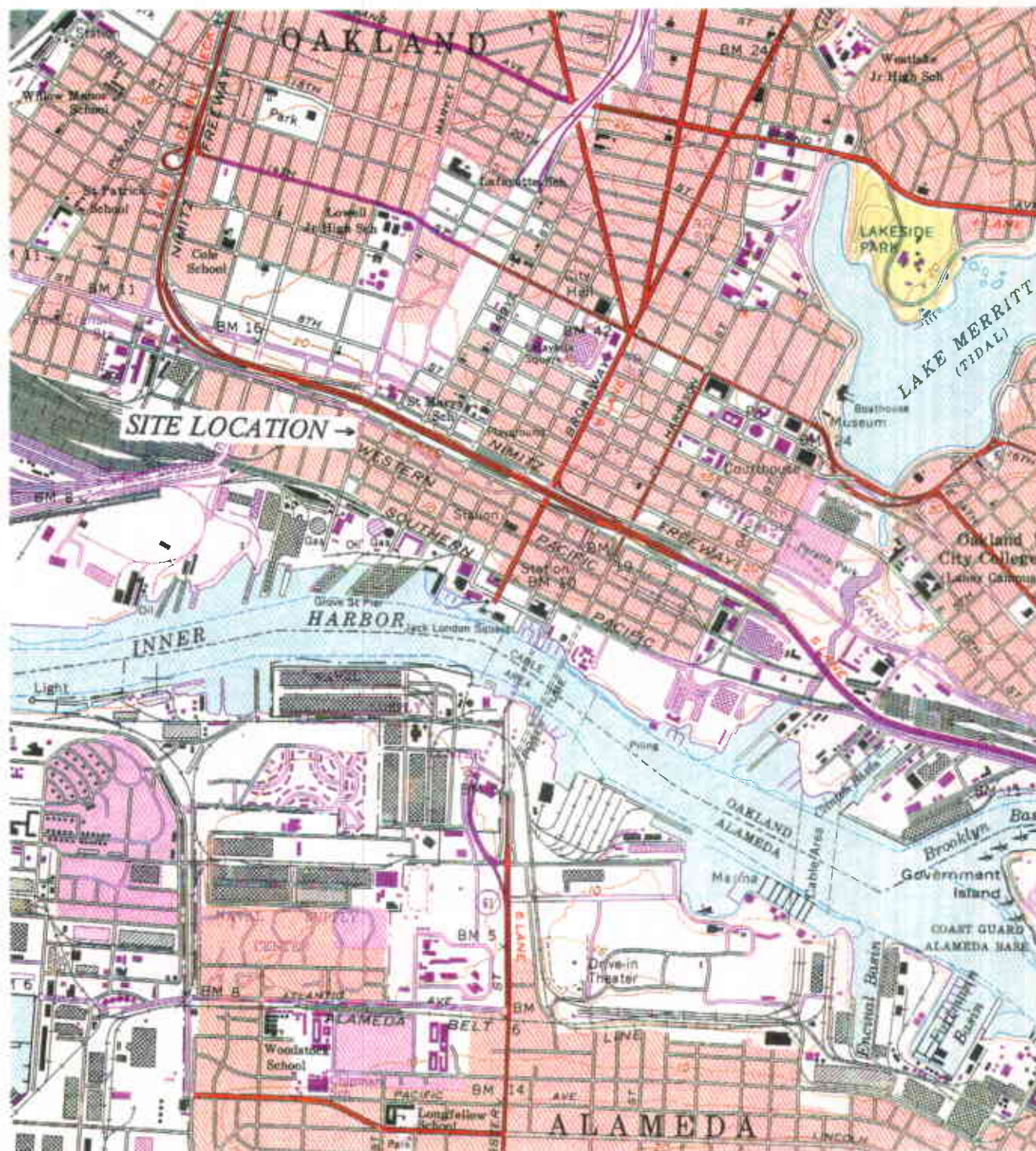
Groundwater elevations and depth-to-water readings as measured on October 19, 1994 are presented in Table 4. The average water table elevation decreased by an average of 0.18 feet since the July 19, 1994 monitoring and sampling event, except in well MW-12 where the groundwater elevation increased by 0.11 feet. A potentiometric surface map prepared with the October 19, 1994 data is presented as Figure 4.

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

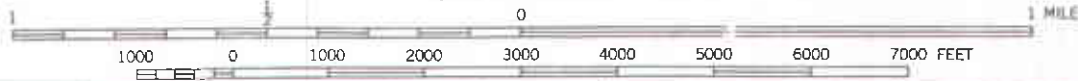
4.4 Groundwater Conditions

No concentrations of BTEX were detected above the laboratory detection limits in any of the groundwater samples collected on October 19, 1994. TPHms was reported in the sample collected from well MW-4 at a concentration of 330 $\mu\text{g}/\ell$; however, the laboratory analytical report notes that the result reported as mineral spirits is an unknown hydrocarbon which consists of a single peak and no mineral spirits or fuel pattern was present. No concentrations of TPHms or volatile organic compounds (VOCs) were detected in wells MW-1, MW-2 or MW-3. Trichloroethene (TCE) was the only VOC analyte detected in the groundwater sample collected from well MW-4 at a concentration of 650 $\mu\text{g}/\ell$. The analysis of the sample from well MW-8 detected 1,1-dichloroethane (DCA) at 5.5 $\mu\text{g}/\ell$, TCE at 23 $\mu\text{g}/\ell$ and chlorobenzene at 2.4 $\mu\text{g}/\ell$. The sample analyzed from well MW-12 detected 1,1-DCA at 1.6 $\mu\text{g}/\ell$ and TCE at 24 $\mu\text{g}/\ell$. Analytical test results showing compounds detected since the April 20, 1993 sampling event are presented in Table 5. Copies of the groundwater laboratory analytical reports are included in Appendix C.

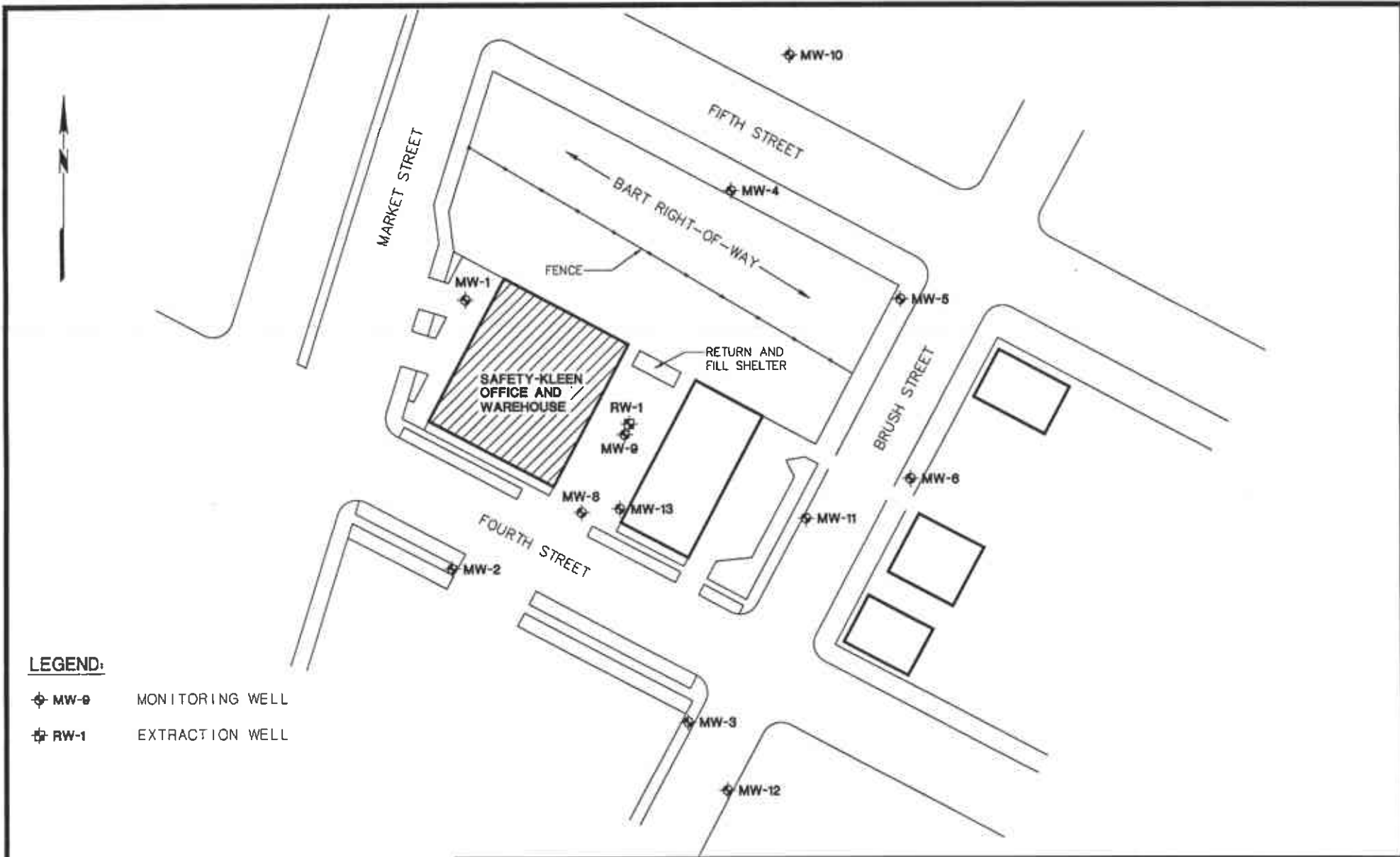
OAKLAND WEST QUADRANGLE
 CALIFORNIA
 7.5 MINUTE SERIES (TOPOGRAPHIC)



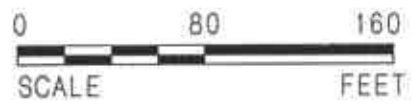
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DRAFTED BY: TS	CHECKED BY: GDH	PROJECT NO. 70005-009 Safety-Kleen Corp. 400 Market Street Oakland, California	FIGURE 1 Site Location Map	SEACOR 1390 Willow Pass Road Suite 360 Concord, CA 94520
DWG. DATE: 04/05/94	REV. DATE: 04/05/94			
FILE NAME: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

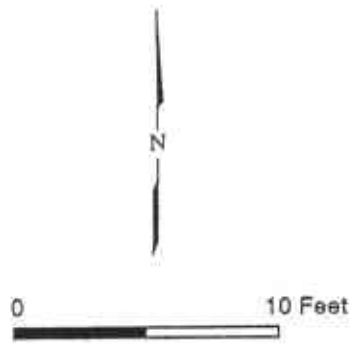
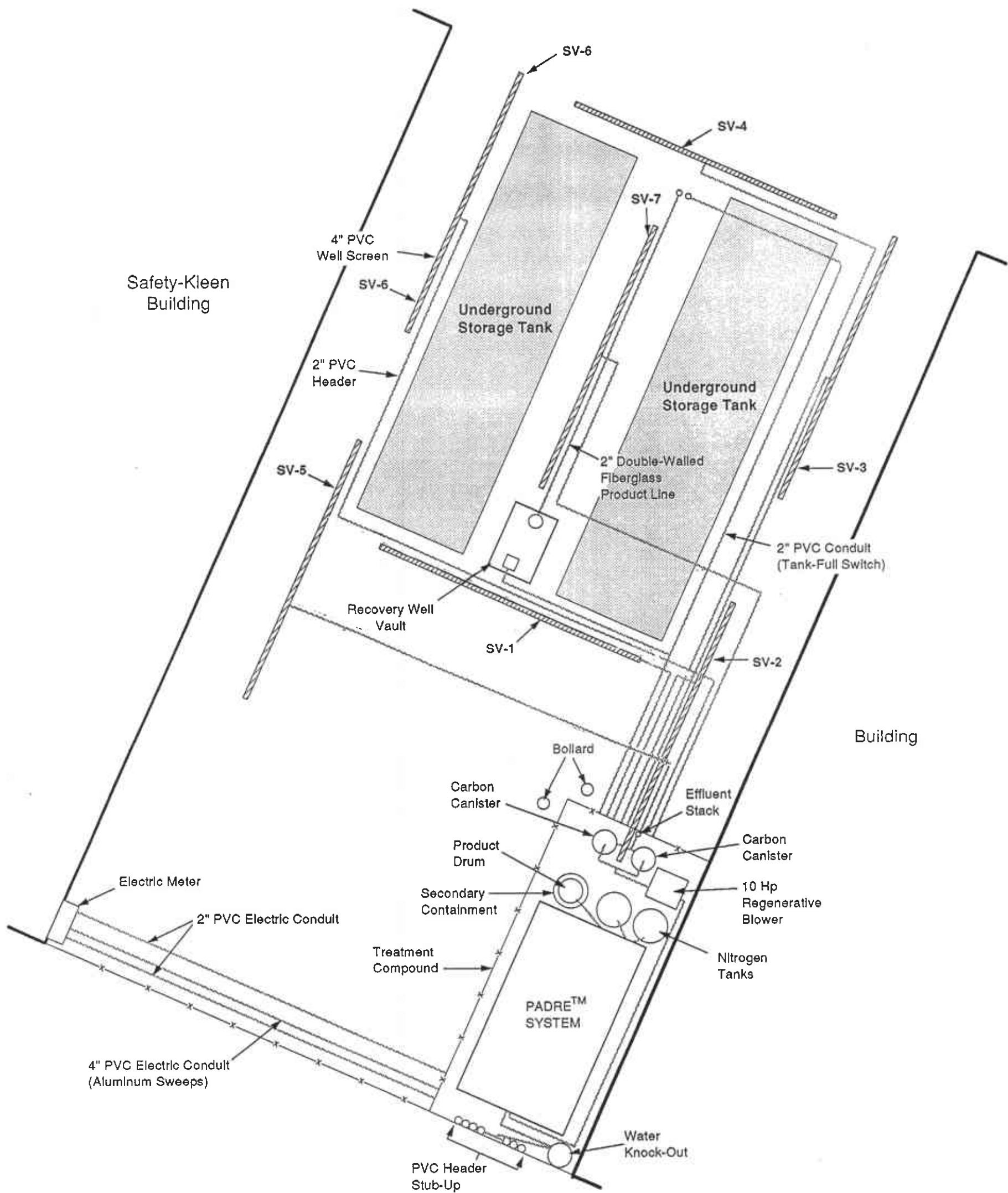


LEGEND:
 ⊕ MW-9 MONITORING WELL
 ⊕ RW-1 EXTRACTION WELL

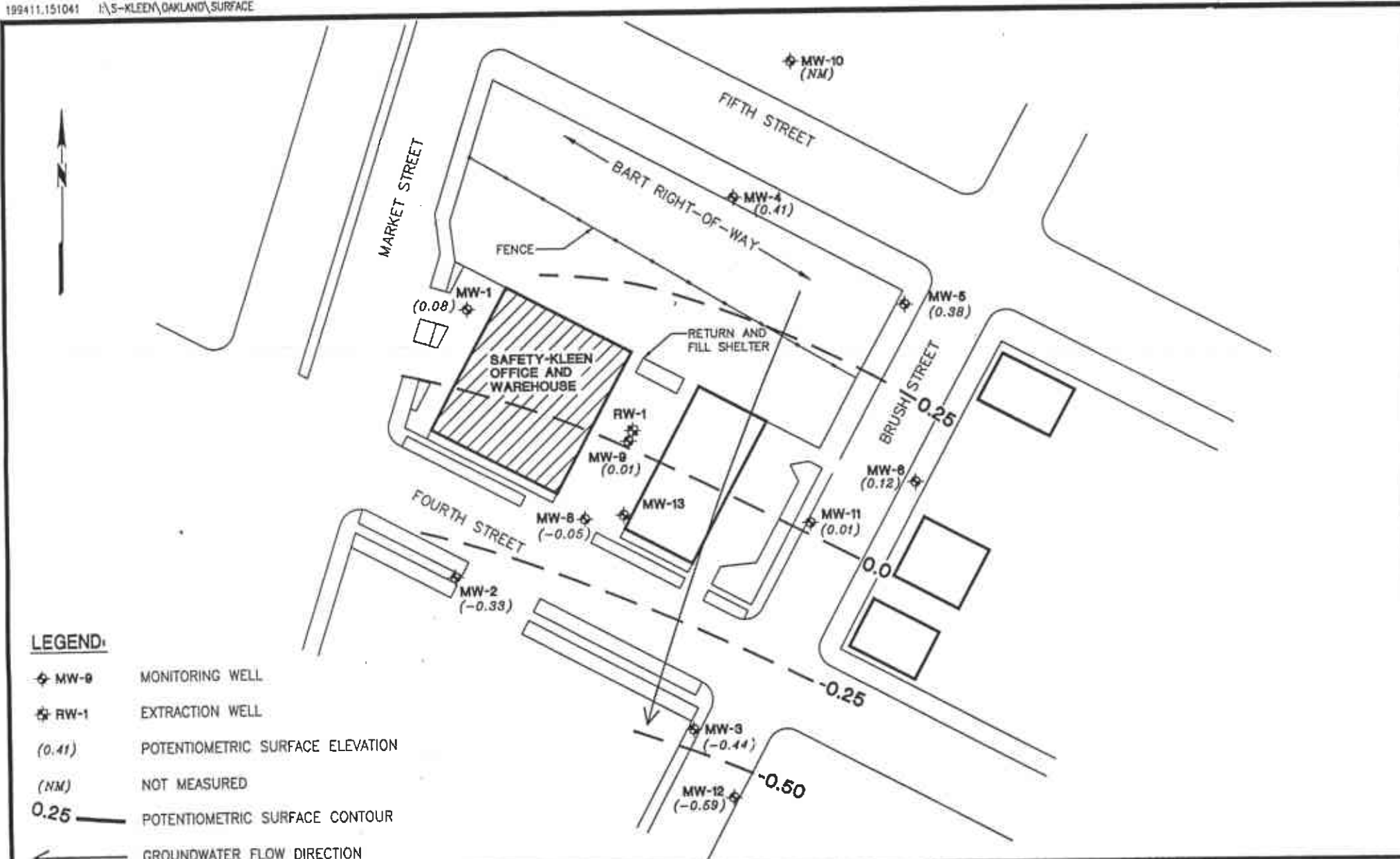


SECOR INTERNATIONAL INCORPORATED	DRAWN	CCR
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	DATE	14FEB94
	JOB NO.	70005-009

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

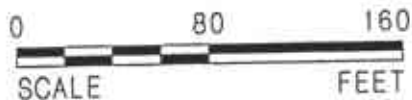


DRAFTED BY: DH	CHECKED BY:	PROJECT NO. 70005-009	FIGURE 3	SECOR INTERNATIONAL INCORPORATED
DRWG. DATE:	REV. DATE:	Safety-Kleen Service Center 400 Market Street Oakland, California	Soil Vapor Extraction System Layout	
FILB NAME:				



LEGEND:

- ◆ MW-# MONITORING WELL
- ◆ RW-1 EXTRACTION WELL
- (0.41) POTENTIOMETRIC SURFACE ELEVATION
- (NM) NOT MEASURED
- 0.25 — POTENTIOMETRIC SURFACE CONTOUR
- ← GROUNDWATER FLOW DIRECTION



**SECOR
INTERNATIONAL
INCORPORATED**

DRAWN	CCR
APPR	GH
DATE	15NOV94
JOB NO.	70005-009

**FIGURE 4
SAFETY-KLEEN
400 MARKET STREET
OAKLAND, CALIFORNIA
POTENTIOMETRIC SURFACE MAP
OCTOBER 19, 1994**

Table 1
Vapor Extraction System Monitoring Data

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

Table 1 - Continued
Vapor Extraction System Monitoring Data
Page 2

Date	Extraction Vacuum (in H ₂ O)	Extraction Flow Rate (cfm)	KO Vacuum (in H ₂ O)	Padre Influent (PID units)	Padre Effluent (PID units)	Stack Effluent (PID units)	Sampler	Notes
06-23-93	5	118	18	210	0	0	NAB	
06-24-93	5	118	18	200	0	0	NAB	Shut down on 6/25 and weekend
06-28-93	5	120	18	190	0	0	NAB	38.8 gal. removed on 6/25
06-29-93	4.5	117	18	150	0	0	NAB	
06-30-93	4	117	18	150	0	0	NAB	
07-07-93	4	117	18	250	0.5	0	NAB	
07-08-93	4	117	18	200	0	0.5	NAB	
07-09-93	5	120	18	200	0	0	NAB	Shut down for weekend
07-12-93	5	120	18	190	0	0	NAB	
07-13-93	5	118	18	160	0	1	NAB	Weekly monitoring to begin on 7/23
07-23-93	6	118	20	230	9	1	GGA	55.2 gal. removed 7/23 (94.0 total)
07-27-93	6	120	19	300	3	3	NAB	
08-05-93	5.75	117	20	350	1.5	1	NAB	
08-11-93	5.8	118	24	125	6.4	7.6	RPR	Began monitoring with PID
08-20-93	6	118	24	113	12.6	9.3	RPR	35.5 gal. removed 8/19 (129.5 total)
08-24-93	5.75	117	24	128	6	7.3	RPR	

Table 1 - Continued
Vapor Extraction System Monitoring Data
Page 3

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

Table 1 - Continued
 Vapor Extraction System Monitoring Data
 Page 4

Date	Extraction Vacuum (in H ₂ O)	Extraction Flow Rate (cfm)	KO Vacuum (in H ₂ O)	Padre Influent (PID units)	Padre Effluent (PID units)	Stack Effluent (PID units)	Sampler	Notes
02-02-94	17.25	111	38	65	3.2	0	RPR	
02-17-94	16.5	110	37	38	0.1	0.5	RPR	25.6 gal. removed 02/17 (380.9 total)
02-28-94	16.5	111	37	52	0.1	0.8	RPR	Modified sys.-vacuum on SV-3, SV-4, SV-5
03-10-94	12	117	33	129	0	0	RPR	
03-23-94	10.6	115	33	125	1	1	RPR	30.9 gal. removed 03/23 (411.9 total)
04-05-94	11.5	117	38	185	3.9	1.9	RPR	
04-11-94								System shut down pending Padre replacement
05-10-94								Start system with new Padre
05-11-94								29.7 gal. removed 05/11 (441.6 total)
05-25-94	15	110	32	137	2.3	1.1	DEM	
06-03-94							RPR	45.9 gal. removed 06/03 (487.5 total)
06-08-94	10	110	30	134	0.5	1.7	RPR	
06-22-94	-	110	32	107	12	4.0	GRC	46.2 gal. removed (533.7 total)
07-06-94								34.7 gal. removed (568.4 total)
07-12-94	9.0	110	30	201	5.1	7.4	GRC	

Table 1 - Continued
Vapor Extraction System Monitoring Data
Page 5

Date	Extraction Vacuum (in H ₂ O)	Extraction Flow Rate (cfm)	KO Vacuum (in H ₂ O)	Padre Influent (PID units)	Padre Effluent (PID units)	Stack Effluent (PID units)	Sampler	Notes
07-19-94	9.5	110	31	117	7.1	7.9	GRC	39.6 gal. removed (608 total)
07-27-94	9.5	110	33	189	4.1	3.4	GRC	
08-10-94	8.0	117	32	90.5	1.0	1.7	RAR	39.6 gal. removed (647.6 total)
08-25-94	9.7	110	32	90.5	1.0	1.7	GRC	37.1 gal. removed (684.7 total)
09-12-94	10.0	110	30	135	2.0	2.9	GRC	39.6 gal. removed (724.3 total)
09-21-94	5.5	110	30	73	7.0	4.5	RAR	
10-05-94	5.0	110	32	79.5	0	0	RAR	39.6 gal. removed (763.9 total)
10-19-94	5.5	110	32	60.9	2.3	0	RAR	26.5 gal. removed (790.4 total)
11-03-94	8.5	110	32	76	0	0	GDH	Implemented monthly monitoring
11-24-94	-	-	-	-	-	-	-	System operation discontinued

KO = Knockout Pot

Table 2
Vapor Extraction System Mineral Spirits Removal Data

Date	Elapsed Operating Time (hours)	TPHms Influent ($\mu\text{g}/\ell$)	Flow Rate (cfm)	Removal Rate (lbs/day)	TPHms Removed (lbs)
06-10-93	217	320	117	3.37	30.4
06-23-93	489.5	400	118	4.24	78.6
08-11-93	1339	570	118	6.05	292.6
09-09-93	1859	120	118	1.27	320.2
10-06-93	2381.5	410	115	4.24	412.5
11-10-93	3242.5	300	115	3.10	523.8
12-10-93	3727	170	110	1.68	557.7
01-04-94	4309.5	170	111	1.70	598.9
02-02-94	4893.5	1100	111	10.98	866.0
02-28-94	5576.5	234	111	2.33	932.4
04-05-94	6188	600	117	6.31	1093.2
04-11-94 *	6258	600	117	6.31	1111.6
05-25-94	6474.5	400	110	3.96	1147.3
06-08-94	6628	460	110	4.55	1176.4
07-12-94	7372	600	110	5.93	1360.2
08-10-94	7870.6	270	118	2.86	1419.6
09-12-94	8535.4	250	110	2.47	1488.0
10-05-94	8997.6	400	110	3.96	1564.3
11-03-94	9570.1	610	110	6.03	1708.1
11-24-94 **	9929.6	610	110	6.03	1798.4

NOTE: * Operating Parameters are from 04-05-94.
** Operating Parameters are for 11-03-94.

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

Table 3
Product Recovery Data
from Well RW-1

Date	Product Recovered This Period (gallons)	Cumulative Product Recovered (gallons)
01-19-93	-	-
02-25-93	6.5	6.5
05-20-93	4.3	10.8
08-27-93	-	10.8
10-24-93	10.3	21.1
02-28-94	22.6	43.7
05-31-94	16.6	60.3
08-31-94	16.4	76.7
11-30-94	16.2	92.9

Table 4
Groundwater Monitoring Data
October 19, 1994

Well I.D.	TOC Elevation (ft msl)	DTW (ft)	DTP (ft)	PT (ft)	ADJ Elevation (ft msl)
MW-1	7.99	7.91	-	-	0.08
MW-2	8.20	8.53	-	-	-0.33
MW-3	6.66	7.10	-	-	-0.44
MW-4	10.32	9.91	-	-	0.41
MW-5	10.28	9.90	-	-	0.38
MW-6	8.97	8.85	-	-	0.12
MW-8	7.80	7.95	-	-	-0.15
MW-9	8.21	8.83	8.04	0.79	0.01
MW-10	10.43	NM	-	-	-
MW-11	7.91	7.90	-	-	0.01
MW-12	6.74	7.33	-	-	-0.59
MW-13	8.08	8.41	-	-	-0.33

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
 NM = Not Measured *inaccessible*

Table 5
Summary of Analytical Results of Groundwater Samples
(Results in Parts Per Billion)

Well No.	Date	TPHms	B	T	E	X	1,1-DCE	1,1-DCA	1,2-DCA	trans-1,2-DCE	Chloroform	1,1,1-TCA	TCE	PCE	CB	1,2-DCP	1,2-DCB	TCFM
MW-1	04-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07-94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-2	04-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MCL	NE	1.0	150	700	1750	6.0	5.0	0.5	10.0	NE	200	5.0	5.0	70	5.0	600	150	

Semi Ann

TPHms = total petroleum hydrocarbons as mineral spirits
 B = Benzene
 T = Toluene
 E = Ethylbenzene
 X = Xylenes

DCE = Dichloroethene
 DCA = Dichloroethane
 TCA = Trichloroethane
 TCE = Trichloroethene
 PCE = Tetrachloroethene

CB = Chlorobenzene
 DCP = Dichloropropane
 DCB = Dichlorobenzene
 TCFM = Trichlorofluoromethane
 MCL = Maximum contaminant level for primary drinking water constituents

NE = Not Established
 NS = Not Sampled
 - = Not Detected

NOTES:

Only compounds detected in one or more samples are included. See the laboratory reports for a complete list of analytes.
 * The TPH as mineral spirits result is the result of an unknown hydrocarbon consisting of a single peak.

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

Well No.	Date	TPHms	B	T	E	X	1,1-DCE	1,1-DCA	1,1-DCA	trans-1,2-DCE	Chloroform	1,1,1-TCA	TCE	PCE	CB	1,2-DCP	1,2-DCB	TCFM
MW-3	04-93	-	-	-	-	-	-	-	-	-	-	-	0.7	-	-	-	-	-
	07-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	01-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	04-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8
	07-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-4	04-93	-	-	-	-	-	-	-	-	-	7.6	-	2400	-	-	-	-	-
	07-93	-	-	-	-	-	-	-	-	53	-	-	1100	-	-	-	-	-
	10-93	* 400	-	-	-	-	-	-	-	0.6	1.9	-	-	-	-	-	-	-
	01-94	* 270	-	-	-	-	-	-	-	1.1	-	-	790	-	-	-	-	-
	04-94	* 760	-	-	-	-	-	-	-	1.7	5.0	-	1600	-	-	-	-	-
	07-94	* 200	-	-	-	-	-	-	-	-	-	-	410	-	-	-	-	-
	10-94	* 330	-	-	-	-	-	-	-	-	-	-	600	-	-	-	-	-
MCL	NE	1.0	150	700	1750	6.0	5.0	0.5	10.0	NE	200	5.0	5.0	70	5.0	600	150	

TPHms = total petroleum hydrocarbons as mineral spirits
 B = Benzene
 T = Toluene
 E = Ethylbenzene
 X = Xylenes

DCE = Dichloroethene
 DCA = Dichloroethane
 TCA = Trichloroethane
 TCE = Trichloroethene
 PCE = Tetrachloroethene

CB = Chlorobenzene
 DCP = Dichloropropane
 DCB = Dichlorobenzene
 TCFM = Trichlorofluoromethane
 MCL = Maximum contaminant level for primary drinking water constituents

NE = Not Established
 NS = Not Sampled
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NOTES:

Only compounds detected in one or more samples are included. See the laboratory reports for a complete list of analytes.
 * The TPH as mineral spirits result is the result of an unknown hydrocarbon consisting of a single peak.

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

Well No.	Date	TPHms	B	T	E	X	1,1-DCE	1,1-DCA	1,1-DCA	trans-1,2-DCE	Chlorobenz	1,1,1-TCA	TCE	PCE	CB	1,2-DCP	1,2-DCB	TCFM	
MW-5	04-93	-	-	-	-	-	1.5	-	-	-	-	-	4.0	-	-	-	-	18	
	07-93	-	-	-	-	-	0.6	-	-	-	-	-	6.0	-	-	-	-	19	
	10-93	-	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-	-	
	01-94	-	-	-	-	-	-	-	-	-	4.3	-	-	-	-	-	-	-	
	04-94	-	-	-	-	-	-	-	-	-	3.5	-	7.2	-	-	-	-	7.9	
	07-94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10-94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6	04-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	07-93	-	-	-	-	-	-	-	-	-	-	-	5.0	-	-	-	-	-	
	10-93	-	-	-	-	-	-	-	-	-	-	-	1.3	-	-	-	-	-	
	01-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	04-94	-	-	-	-	-	-	-	-	-	-	-	1.0	-	-	-	-	-	
	07-94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10-94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MCL	NE	1.0	150	700	1750	6.0	5.0	0.5	10.0	NE	200	5.0	5.0	70	5.0	600	150		

Ann.

TPHms = total petroleum hydrocarbons as mineral spirits
 B = Benzene
 T = Toluene
 E = Ethylbenzene
 X = Xylenes

DCE = Dichloroethene
 DCA = Dichloroethane
 TCA = Trichloroethane
 TCE = Trichloroethene
 PCE = Tetrachloroethene

CB = Chlorobenzene
 DCP = Dichloropropane
 DCB = Dichlorobenzene
 TCFM = Trichlorofluoromethane
 MCL = Maximum contaminant level for primary drinking water constituents

NE = Not Established
 NS = Not Sampled
 - = Not Detected

NOTES:
 Only compounds detected in one or more samples are included. See the laboratory reports for a complete list of analytes.
 * The TPH as mineral spirits result is the result of an unknown hydrocarbon consisting of a single peak.

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

Well No.	Date	TPHms	B	T	E	X	1,1-DCE	1,1-DCA	1,2-DCA	trans-1,2-DCE	Chloroform	1,1,1-TCA	TCE	PCE	CB	1,2-DCP	1,2-DCB	TCFM	
MW-8	04-93	-	-	-	-	-	-	3.4	7.4	-	-	-	14	1.8	11	0.6	2.6	-	
	07-93	-	-	-	-	-	-	-	5.0	1.0	-	-	31	-	-	-	-	-	
	10-93	-	-	-	-	-	-	-	5.2	-	-	-	15	-	5.4	-	-	-	
	01-94	* 60	-	-	-	-	-	8.6	11	-	-	2.5	22	2.0	16	-	4.8	-	
	04-94	-	-	-	-	-	-	3.7	7.1	-	-	1.5	18	0.8	-	0.8	-	-	
	07-94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10-94	-	-	-	-	-	-	5.5	-	-	-	-	-	23	-	2.4	-	-	
MW-10	04-93	-	-	-	-	-	-	-	-	-	1.2	-	45	-	-	-	-	-	
	07-93	-	-	-	-	-	2.0	-	-	17	0.5	0.8	54	-	-	-	-	-	
	10-93	-	-	-	-	-	-	-	-	3.0	-	-	42	-	-	-	-	-	
	01-94	-	-	-	-	-	-	-	-	0.4	-	-	67	-	-	-	-	-	
	04-94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	07-94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10-94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MCL	NE	1.0	150	700	1750	6.0	5.0	0.5	10.0	NE	200	5.0	5.0	70	5.0	600	150		

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- | | | | |
|---|-------------------------|---|----------------------|
| TPHms = total petroleum hydrocarbons as mineral spirits | DCE = Dichloroethene | CB = Chlorobenzene | NE = Not Established |
| B = Benzene | DCA = Dichloroethane | DCP = Dichloropropane | NS = Not Sampled |
| T = Toluene | TCA = Trichloroethane | DCB = Dichlorobenzene | - = Not Detected |
| E = Ethylbenzene | TCE = Trichloroethene | TCFM = Trichlorofluoromethane | |
| X = Xylenes | PCE = Tetrachloroethene | MCL = Maximum contaminant level for primary drinking water constituents | |

NOTES:
 Only compounds detected in one or more samples are included. See the laboratory reports for a complete list of analytes.
 * The TPH as mineral spirits result is the result of an unknown hydrocarbon consisting of a single peak.

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

Well No.	Date	TPHms	B	T	E	X	1,1-DCE	1,1-DCA	1,1-DCA	trans-1,2-DCE	Chloroform	1,1,1-TCA	TCE	PCE	CB	1,1-DCP	1,1-DCB	TCFM
Ann MW-11	04-93	-	-	-	-	-	-	-	-	-	-	-	9.1	-	-	-	-	-
	07-93	-	-	-	-	-	2.0	-	-	3.0	-	2.0	36	-	-	-	-	-
	10-93	-	-	-	-	-	-	-	-	-	-	-	11	-	-	-	-	-
	01-94	-	-	-	-	-	-	-	-	-	-	-	2.6	-	-	-	-	-
	04-94	-	-	-	-	-	-	-	-	-	-	-	3.1	-	-	-	-	-
	07-94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10-94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Semi-Ann MW-12	04-93	-	-	-	-	-	-	2.6	-	-	-	-	17	-	-	-	-	-
	07-93	-	-	-	-	-	-	2.0	2.0	3.0	-	-	30	-	-	-	-	-
	10-93	-	-	-	-	-	-	-	-	-	-	-	34	-	-	-	-	-
	01-94	-	-	-	-	-	-	2.3	1.2	-	-	-	11	-	-	-	-	-
	04-94	-	-	-	-	-	-	1.7	1.9	-	-	-	44	-	-	-	-	-
	07-94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10-94	-	-	-	-	-	-	1.6	-	-	-	-	24	-	-	-	-	-
MCL	NE	1.0	150	700	1750	6.0	5.0	0.5	10.0	NE	200	5.0	5.0	70	5.0	600	150	

TPHms = total petroleum hydrocarbons as mineral spirits
 B = Benzene
 T = Toluene
 E = Ethylbenzene
 X = Xylenes

DCE = Dichloroethene
 DCA = Dichloroethane
 TCA = Trichloroethane
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 PCE = Tetrachloroethene

CB = Chlorobenzene
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 DCB = Dichlorobenzene
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 MCL = Maximum contaminant level for primary drinking water constituents

NE = Not Established
 NS = Not Sampled
 - = Not Detected

NOTES:

Only compounds detected in one or more samples are included. See the laboratory reports for a complete list of analytes.
 * The TPH as mineral spirits result is the result of an unknown hydrocarbon consisting of a single peak.

Table 5 - Continued
 Summary of Analytical Results of Groundwater Samples
 (Results in Parts Per Billion)
 Page 6

Well No.	Date	TPHms	B	T	E	X	1,1-DCE	1,1-DCA	1,2-DCA	trans-1,2-DCE	Chloroform	1,1,1-TCA	TCE	PCE	CB	1,2-DCP	1,2-DCB	TCFM
Ann - MW-13	04-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07-93	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10-93	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	01-94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	04-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	07-94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10-94	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MCL	NE	1.0	150	700	1750	6.0	5.0	0.5	10.0	NE	200	5.0	5.0	70	5.0	600	150	

TPHms = total petroleum hydrocarbons as mineral spirits
 B = Benzene
 T = Toluene
 E = Ethylbenzene
 X = Xylenes

DCE = Dichloroethene
 DCA = Dichloroethane
 TCA = Trichloroethane
 TCE = Trichloroethene
 PCE = Tetrachloroethene

CB = Chlorobenzene
 DCP = Dichloropropane
 DCB = Dichlorobenzene
 TCFM = Trichlorofluoromethane
 MCL = Maximum contaminant level for primary drinking water constituents

NE = Not Established
 NS = Not Sampled
 - = Not Detected

NOTES:

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

* The TPH as mineral spirits result is the result of an unknown hydrocarbon consisting of a single peak.

APPENDIX A

FIELD DATA SHEETS

HYDROLOGIC DATA SHEET

PROJECT: SAFETY-KLEEN OAKLAND				PROJECT NO.: 70005-009-07 TASK: 001			
DATE: October 19, 1994		TIME START: 0710		TIME END: 0856			
EVENT: QUARTERLY MONITORING AND SAMPLING					PERSONNEL: R. Ravelo		
WELL ID	TOC	DTW	DTP	PT	TD	ELEV.	COMMENTS
MW-1	7.99	7.91				0.08	
MW-2	8.20	8.53				-0.33	
MW-3	6.66	7.10				-0.44	
MW-4	10.32	9.91				0.41	
MW-5	10.28	9.90				0.38	
MW-6	8.97	8.85				0.12	
MW-8	7.80	7.95				-0.15	
MW-9	8.21	8.83	8.04	0.79		0.01	
MW-10	10.43	NM				-	Could not access well
MW-11	7.91	7.90				0.01	
MW-12	6.74	7.33				-0.59	
MW-13	8.08	8.41				-0.33	
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)

SEACOR WATER SAMPLE FIELD DATA SHEET

PROJECT NO: 70005-011
 PURGED BY: RL
 SAMPLED BY: RL

WELL ID: MW-1
 SAMPLE ID: MW-1
 CLIENT NAME: SK
 LOCATION: DAKLAND

TYPE: Groundwater Surface Water _____ Treatment Effluent _____ Other _____

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

CASING ELEVATION: (feet/MSL): _____	VOLUME IN CASING (gal): <u>2.21</u>
DEPTH TO WATER (feet): <u>7.91</u>	CALCULATED PURGE (gal): <u>6.67</u>
DEPTH OF WELL (feet): <u>21.49</u>	ACTUAL PURGE VOL (gal): <u>7</u>

DATE PURGED: 10/19/94 Start (2400 Hr) 12:34 End (2400 Hr.) 12:49
 DATE SAMPLED: 10/19/94 Sample time on bottle(s) (2400 Hr.) 13:10

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

FIELD MEASUREMENTS

TIME (2400 Hr)	VOLUME (gal)	TEMPERATURE (°F)	pH (exact)	E.C. (µmhos/cm@25°C)	COLOR (Visual)	TURBIDITY (NTU) VISUAL
<u>12:39</u>	<u>2.5</u>	<u>64.4</u>	<u>8.1</u>	<u>402</u>	<u>TRN</u>	<u>SLIGHT</u>
<u>12:43</u>	<u>5</u>	<u>64.5</u>	<u>7.8</u>	<u>385</u>	<u>4</u>	<u>4</u>
<u>12:48</u>	<u>7</u>	<u>64.5</u>	<u>7.7</u>	<u>385</u>	<u>4</u>	<u>4</u>
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

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

Clear
 Cloudy
 Yellow
 Brown

ODOR: _____

PURGING EQUIPMENT

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

Other: _____

SAMPLING EQUIPMENT

2" Bladder Pump
 DDL Sampler
 Submersible Pump
 Well Wizard™
 Baller (Teflon®)
 Baller (PVC/Disposable)
 Baller (Stainless Steel)
 Dedicated

Other: _____

WELL INTEGRITY: OK LOCK #: 2310

REMARKS: _____

80% Recovered? Yes No

SIGNATURE: RL Page 1 of 1

SEACOR WATER SAMPLE FIELD DATA SHEET

PROJECT NO: 70005-011
 PURGED BY: ML
 SAMPLED BY: ML

WELL ID: MW-2
 SAMPLE ID: MW-2
 CLIENT NAME: SH
 LOCATION: CAKLAND

TYPE: Groundwater Surface Water _____ Treatment Effluent _____ Other _____

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

CASING ELEVATION: (feet/MSL): _____	VOLUME IN CASING (gal): <u>339</u>
DEPTH TO WATER (feet): <u>8.53</u>	CALCULATED PURGE (gal): <u>10.11</u>
DEPTH OF WELL (feet): <u>29.21</u>	ACTUAL PURGE VOL. (gal): <u>11</u>

DATE PURGED: 10/19/94 Start (2400 Hr) 11:22 End (2400 Hr.) 11:40
 DATE SAMPLED: 10/19/94 Sample time on bottle(s) (2400 Hr.) 11:50

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

FIELD MEASUREMENTS

TIME (2400 Hr)	VOLUME (gal)	TEMPERATURE (°F)	pH (value)	E.C. (micro/cm @ 25°C)	COLOR (Nephel)	TURBIDITY (NTU) USMC
<u>11:27</u>	<u>3</u>	<u>63.5</u>	<u>7.9</u>	<u>316</u>	<u>DA</u>	<u>SLIGHT</u>
<u>11:31</u>	<u>6</u>	<u>65.9</u>	<u>7.9</u>	<u>332</u>	<u>n</u>	<u>y</u>
<u>11:39</u>	<u>11</u>	<u>67.5</u>	<u>7.9</u>	<u>369</u>	<u>n</u>	<u>y</u>
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

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

ODOR: _____

- Clear
- Cloudy
- Yellow
- Brown

PURGING EQUIPMENT

- 2" Bladder Pump
- Centrifugal Pump
- Submersible Pump
- Well Wizard™
- Baller (Teflon®)
- Baller (PVC)
- Baller (Stainless Steel)
- Dedicated

Other: _____

SAMPLING EQUIPMENT

- 2" Bladder Pump
- DDL Sampler
- Submersible Pump
- Well Wizard™
- Baller (Teflon®)
- Baller (PVC (disposable))
- Baller (Stainless Steel)
- Dedicated

Other: _____

WELL INTEGRITY: NO WORKING CAP LOCK #: NO LOCK

REMARKS: _____
 80% Recovered? Yes No

SIGNATURE: ML Page 1 of 1

SEACOR WATER SAMPLE FIELD DATA SHEET

PROJECT NO: 70005-011
 PURGED BY: NA
 SAMPLED BY: NA

WELL ID: MW-3
 SAMPLE ID: MW-3
 CLIENT NAME: SIL
 LOCATION: PAK LAND

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

CASING ELEVATION: (feet/MSL): _____	VOLUME IN CASING (gal): <u>3.11</u>
DEPTH TO WATER (feet): <u>7.10</u>	CALCULATED PURGE (gal): <u>9.34</u>
DEPTH OF WELL (feet): <u>26.20</u>	ACTUAL PURGE VOL. (gal): <u>10</u>

DATE PURGED: 10/19/04 Start (2400 Hr) 9:42 End (2400 Hr.) 10:03
 DATE SAMPLED: 10/19/04 Sample time on bottle(s) (2400 Hr.) 10:20

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

FIELD MEASUREMENTS

TIME (2400 Hr)	VOLUME (gal)	TEMPERATURE (°F)	pH (static)	EC (microhm/cm@25°C)	COLOR (Visual)	TURBIDITY (NTU) - VISUAL
<u>9:47</u>	<u>3</u>	<u>58.9</u>	<u>7.3</u>	<u>241</u>	<u>Brown</u>	<u>MODERATE</u>
<u>9:58</u>	<u>6.5</u>	<u>59.7</u>	<u>7.6</u>	<u>248</u>	<u>u</u>	<u>u</u>
<u>10:02</u>	<u>10</u>	<u>60.8</u>	<u>7.5</u>	<u>252</u>	<u>u</u>	<u>u</u>
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

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

Clear
 Cloudy
 Yellow
 Brown

ODOR: _____

PURGING EQUIPMENT

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

Other: _____

SAMPLING EQUIPMENT

2" Bladder Pump Baller (Teflon®)
 DDL Sampler Baller (PVC/Disposable)
 Submersible Pump Baller (Stainless Steel)
 Well Wizard™ Dedicated

Other: _____

WELL INTEGRITY: OK LOCK #: 2310

REMARKS:
 80% Recovered? Yes No

SIGNATURE: AM Page 1 of 1

SEACOR WATER SAMPLE FIELD DATA SHEET

PROJECT NO: 70005-011
 PURGED BY: NA
 SAMPLED BY: NA

WELL ID: MW-17
 SAMPLE ID: MW-12
 CLIENT NAME: Sik
 LOCATION: OKLAHOMA

TYPE: Groundwater Surface Water _____ Treatment Effluent _____ Other _____

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

CASING ELEVATION: (feet/MSL): _____	VOLUME IN CASING (gal): <u>2.94</u>
DEPTH TO WATER (feet): <u>7.33</u>	CALCULATED PURGE (gal): <u>8.82</u>
DEPTH OF WELL (feet): <u>25.38</u>	ACTUAL PURGE VOL. (gal): <u>9</u>

DATE PURGED: 10/19/94 Start (2400 Hr) 9:30 End (2400 Hr.) 10:44
 DATE SAMPLED: 10/19/94 Sample time on bottle(s) (2400 Hr.) 10:55

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

FIELD MEASUREMENTS

TIME (2400 Hr)	VOLUME (gal)	TEMPERATURE (°F)	pH (value)	EC (microhm/cm @ 25°C)	COLOR (Pt-Co)	TURBIDITY (NTU) VISUAL
<u>10:35</u>	<u>3</u>	<u>60.2</u>	<u>7.5</u>	<u>467</u>	<u>Brown</u>	<u>MODERATE</u>
<u>10:39</u>	<u>6</u>	<u>62.2</u>	<u>7.4</u>	<u>489</u>	<u>u</u>	<u>u</u>
<u>10:43</u>	<u>9</u>	<u>62.7</u>	<u>7.2</u>	<u>491</u>	<u>u</u>	<u>u</u>
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

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

- Clear
- Cloudy
- Yellow
- Brown

ODOR: _____

PURGING EQUIPMENT

- | | |
|---|--|
| <input type="checkbox"/> 2" Bladder Pump
<input type="checkbox"/> Centrifugal Pump
<input type="checkbox"/> Submersible Pump
<input type="checkbox"/> Well Wizard™ | <input type="checkbox"/> Baller (Teflon®)
<input checked="" type="checkbox"/> Baller (PVC)
<input type="checkbox"/> Baller (Stainless Steel)
<input type="checkbox"/> Dedicated |
|---|--|

Other: _____

SAMPLING EQUIPMENT

- | | |
|--|---|
| <input type="checkbox"/> 2" Bladder Pump
<input type="checkbox"/> DOL Sampler
<input type="checkbox"/> Submersible Pump
<input type="checkbox"/> Well Wizard™ | <input type="checkbox"/> Baller (Teflon®)
<input checked="" type="checkbox"/> Baller (PVC/disposable)
<input type="checkbox"/> Baller (Stainless Steel)
<input type="checkbox"/> Dedicated |
|--|---|

Other: _____

WELL INTEGRITY: OK LOCK #: 2310

REMARKS:
 80% Recovered? Yes No

SIGNATURE: ME Page 1 of 1

SEACOR WATER SAMPLE FIELD DATA SHEET

PROJECT NO: 70005-011
 PURGED BY: RA
 SAMPLED BY: RA

WELL ID: 111-8
 SAMPLE ID: 111-8
 CLIENT NAME: SL
 LOCATION: DAKLAND

TYPE: Groundwater Surface Water _____ Treatment Effluent _____ Other _____

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

CASING ELEVATION: (feet/MSL): _____	VOLUME IN CASING (gal) <u>3.42</u>
DEPTH TO WATER (feet): <u>7.95</u>	CALCULATED PURGE (gal) <u>10.26</u>
DEPTH OF WELL (feet): <u>28.93</u>	ACTUAL PURGE VOL. (gal) <u>11</u>

DATE PURGED: 10/19/94 Start (2400 Hr) 13:24 End (2400 Hr.) 13:39
 DATE SAMPLED: 10/19/94 Sample time on bottle(s) (2400 Hr.) 13:55

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

FIELD MEASUREMENTS

TIME (2400 Hr)	VOLUME (gal)	TEMPERATURE (°F)	pH (water)	E.C. (µmhos/cm@25°C)	COLOR (Pt-Co)	TURBIDITY (NTU) VISUAL
<u>13:29</u>	<u>3</u>	<u>67.9</u>	<u>8.4</u>	<u>274</u>	<u>TAN</u>	<u>SLIGHT</u>
<u>13:32</u>	<u>7</u>	<u>67.3</u>	<u>7.8</u>	<u>269</u>	<u>U</u>	<u>U</u>
<u>13:38</u>	<u>11</u>	<u>67.0</u>	<u>7.8</u>	<u>266</u>	<u>U</u>	<u>U</u>
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

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

Clear
 Cloudy
 Yellow
 Brown

ODOR: _____

PURGING EQUIPMENT

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

Other: _____

SAMPLING EQUIPMENT

2" Bladder Pump
 DDL Sampler
 Submersible Pump
 Well Wizard™
 Baller (Teflon®)
 Baller (PVC/Disposable)
 Baller (Stainless Steel)
 Dedicated

Other: _____

WELL INTEGRITY: OK LOCK #: 2310

REMARKS:
 80% Recovered? Yes No

SIGNATURE: RA Page 1 of 1

SEACOR WATER SAMPLE FIELD DATA SHEET

PROJECT NO: 70005-011
 PURGED BY: HL
 SAMPLED BY: HL

WELL ID: MW-4
 SAMPLE ID: Y/W-4
 CLIENT NAME: SK
 LOCATION: OKLAHOMA

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

CASING ELEVATION: (feet/MSL): _____	VOLUME IN CASING (gal): <u>2.52</u>
DEPTH TO WATER (feet): <u>9.91</u>	CALCULATED PURGE (gal): <u>9.59</u>
DEPTH OF WELL (feet): <u>25.40</u>	ACTUAL PURGE VOL. (gal): <u>8</u>

DATE PURGED: 10/19/94 Start (2400 Hr) 9:06 End (2400 Hr) 9:19
 DATE SAMPLED: 10/19/94 Sample time on bottle(s) (2400 Hr.) 9:30

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

FIELD MEASUREMENTS						
TIME (2400 Hr)	VOLUME (gal)	TEMPERATURE (°F)	pH (value)	E.C. (µmhos/cm@25°C)	COLOR (visual)	TURBIDITY (NTU) <i>Visual</i>
<u>9:10</u>	<u>2.5</u>	<u>61.9</u>	<u>7.3</u>	<u>509</u>	<u>Brown</u>	<u>NOODENAGE</u>
<u>9:15</u>	<u>5</u>	<u>60.6</u>	<u>7.3</u>	<u>491</u>	<u>n</u>	<u>n</u>
<u>9:18</u>	<u>8</u>	<u>61.4</u>	<u>7.2</u>	<u>496</u>	<u>n</u>	<u>n</u>

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

ODOR: _____

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

WELL INTEGRITY: OK LOCK #: 2310
 REMARKS: _____
 80% Recovered? Yes No

SIGNATURE: HL Page 1 of 1

APPENDIX B

LABORATORY REPORTS - VAPOR



SECOR - CONCORD OFFICE
Attn: GREG HOEHN

Project 70005-009
Reported 15-September-1994

VOLATILE PETROLEUM HYDROCARBONS

Sample preparation by Purge and Trap (EPA SW-846 method 5030). Gasoline analysis by SW-846 method 8015 modified. Gasoline range quantified as all compounds between C6 and C10. Benzene, Toluene, Ethyl Benzene, and Xylenes analyses by EPA SW-846 method 8020.

Chronology

Laboratory Number 92542

Identification	Sampled	Received	Extracted	Analyzed	Run #	Lab #
INF 70005	09/12/94	09/12/94	09/12/94	09/12/94		1

Certified Laboratories



Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

SECOR - CONCORD OFFICE
Attn: GREG HOEHN

Project 70005-009
Reported 15-September-1994

VOLATILE PETROLEUM HYDROCARBONS

Laboratory Number	Sample Identification	Matrix
92542- 1	INF 70005	AIR

RESULTS OF ANALYSIS

Laboratory Number: 92542- 1

Mineral Spirits: 250
Benzene: ND<0.5
Toluene: ND<0.5
Ethyl Benzene: ND<0.5
Total Xylenes: 0.9

Concentration: ug/L

-- Surrogate % Recoveries --
Trifluorotoluene (SS): 96



Superior Precision Analytical, Inc.

A member of ESSECON Environmental Support Service Consortium
VOLATILE PETROLEUM HYDROCARBONS

Quality Assurance and Control Data - Air

Laboratory Number 92542

Compound	Method Blank (ug/L)	RL (ug/L)	Spike Recovery (%)	Limits (%)	RPD (%)
Mineral Spirits:	ND<50	50	-----	-----	--
Benzene:	ND<0.5	0.5	88/87	59-149	1%
Toluene:	ND<0.5	0.5	91/102	59-149	11%
Ethyl Benzene:	ND<0.5	0.5	101/93	59-149	8%
Total Xylenes:	ND<0.5	0.5	102/106	59-149	4%

Definitions:

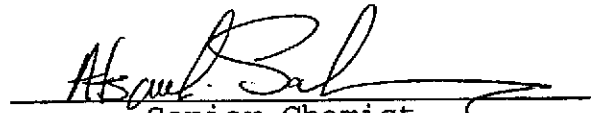
ND = Not Detected

RPD = Relative Percent Difference

RL = Reporting Limit

ug/L = Parts per billion (ppb)

QC File No. 92542


 Senior Chemist
 Account Manager



SECOR - CONCORD OFFICE
Attn: GREG HOEHN

Project 70005-009
Reported 15-September-1994

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

Chronology

Laboratory Number 92542

Identification	Sampled	Received	Extracted	Analyzed	Run #	Lab #
INF 70005	09/12/94	09/12/94	09/13/94	09/13/94		1



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SECOR - CONCORD OFFICE
Attn: GREG HOEHN

Project 70005-009
Reported 15-September-1994

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

Laboratory Number	Sample Identification	Matrix
92542- 1	INF 70005	Air

RESULTS OF ANALYSIS

Laboratory Number: 92542- 1

Chloromethane:	ND<0.5
Vinyl Chloride:	ND<0.5
Bromomethane:	ND<0.5
Chloroethane:	ND<0.5
Trichlorofluoromethane:	ND<1.0
1,1-Dichloroethene:	ND<0.5
Dichloromethane:	ND<1.0
t-1,2-Dichloroethene:	ND<0.5
1,1-Dichloroethane:	ND<0.5
c-1,2-Dichloroethene:	ND<0.5
Chloroform:	ND<0.5
1,1,1-Trichloroethane:	ND<0.5
Carbon tetrachloride:	ND<0.5
1,2-Dichloroethane:	ND<0.5
Trichloroethene:	ND<0.5
c-1,3-Dichloropropene:	ND<0.5
1,2-Dichloropropane:	ND<0.5
t-1,3-Dichloropropene:	ND<0.5
Bromodichloromethane:	ND<0.5
1,1,2-Trichloroethane:	ND<0.5
Tetrachloroethene:	ND<0.5
Dibromochloromethane:	ND<0.5
Chlorobenzene:	ND<0.5
Bromoform:	ND<0.5
1,1,2,2-Tetrachloroeth:	ND<0.5
1,3-Dichlorobenzene:	ND<0.5
1,2-Dichlorobenzene:	ND<0.5
1,4-Dichlorobenzene:	ND<0.5

Concentration: ug/L

Certified Laboratories

825 Arnold Dr., Suite 114
Martinez, California 94553
(510) 229-1512 / fax (510) 229-1526

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

309 S. Cloverdale St., Suite B-24
Seattle, Washington 98108
(206) 763-2992 / fax (206) 763-8429



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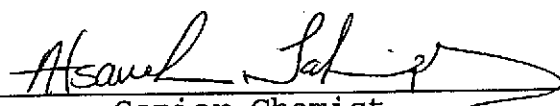
HALOGENATED VOLATILE ORGANICS by EPA SW-846 Methods 5030/8010. Quality Assurance and Control Data - Water

Laboratory Number 92542

Compound	Method Blank (ug/L)	RL (ug/L)	Spike Recovery (%)	Limits (%)	RPD (%)
Chloromethane:	ND<0.5	0.5			
Vinyl Chloride:	ND<0.5	0.5			
Bromomethane:	ND<0.5	0.5			
Chloroethane:	ND<0.5	0.5			
Trichlorofluoromethane:	ND<1.0	1.0			
1,1-Dichloroethene:	ND<0.5	0.5	111/111	50-189	0%
Dichloromethane:	ND<1.0	1.0			
trans-1,2-Dichloroethene:	ND<0.5	0.5			
1,1-Dichloroethane:	ND<0.5	0.5			
trans-1,2-Dichloroethene:	ND<0.5	0.5			
Chloroform:	ND<0.5	0.5			
1,1,1-Trichloroethane:	ND<0.5	0.5			
Carbon tetrachloride:	ND<0.5	0.5			
1,2-Dichloroethane:	ND<0.5	0.5			
Trichloroethene:	ND<0.5	0.5	83/81	53-161	2%
cis-1,3-Dichloropropene:	ND<0.5	0.5			
1,2-Dichloropropane:	ND<0.5	0.5			
trans-1,3-Dichloropropene:	ND<0.5	0.5			
Bromodichloromethane:	ND<0.5	0.5			
1,1,2-Trichloroethane:	ND<0.5	0.5			
Tetrachloroethene:	ND<0.5	0.5			
Dibromochloromethane:	ND<0.5	0.5			
Chlorobenzene:	ND<0.5	0.5	90/86	57-171	5%
Bromoform:	ND<0.5	0.5			
1,1,2,2-Tetrachloroeth:	ND<0.5	0.5			
1,3-Dichlorobenzene:	ND<0.5	0.5			
1,2-Dichlorobenzene:	ND<0.5	0.5			
1,4-Dichlorobenzene:	ND<0.5	0.5			

Definitions:

- ND = Not Detected
- RPD = Relative Percent Difference
- RL = Reporting Limit
- /L = Parts per billion (ppb)
- File No. 92542


Senior Chemist
Account Manager

Certified Laboratories

825 Arnold Dr., Suite 114
Martinez, California 94553
(510) 229-1512 / fax (510) 229-1526

Page 3 of 3
1555 Burke St., Unit 1
San Francisco, California 94124
(415) 647-2081 / fax (415) 821-7123

309 S. Cloverdale St., Suite B-24
Seattle, Washington 98108
(206) 763-2992 / fax (206) 763-8429

92542

Chain-of-Custody Number: A

SEACOR Chain-of-Custody Record

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

Safety-Kleen
 400 Market St.
 Oakland, CA

Analysis Request

Project # 70005-009 Task # _____
 Project Manager Greg Hoehn
 Laboratory Superior
 Turn-around time: Standard
 Sampler's Name: GARY CLIFT
 Sampler's Signature: [Signature]

Sample ID	Date	Time	Matrix	TPHg/BTEX 8015 (modified)/8020	TPHd 8015 (modified)	TPH 418.1	Aromatic Volatiles 602/8020	Volatile Organics 624/8240 (GC/MS)	Halogenated Volatiles 601/8010	Semi-volatile Organics 625/8270 (GC/MS)	Pesticides/PCB's 608/8080	Total Lead 7421	Priority Pollutant Metals (13)	TCLP Metals	TPH as Mineral Spirits	EPA 8015	BTEX EPA 8020	Comments/Instructions	Number of Containers
INF 70005	9/12	11:30	VAPOR						X						X	X			2

Please Initial: P
 Samples Stored in ice: Room Temp
 Appropriate containers: Air Sample
 Samples preserved: _____
 VOA's without lag: _____
 Comments: 2 containers

Special Instructions/Comments:
Results in ug/L
Quote # 94-00518

Relinquished by:
 Sign [Signature]
 Print GARY CLIFT
 Company SECOR
 Time 13:25 Date 9/12/94

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

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

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

Received by:
 Sign [Signature]
 Print _____
 Company _____
 Time 1:20 PM Date 9-12-94

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



Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

OCT 18 1994

SECOR - CONCORD OFFICE
Attn: GREG HOEHN

Project 70005-009
Reported 14-October-1994

ANALYSIS FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, & MINERAL SPIRITS
by EPA Method SW-846 5030/8020 & Mod8015

Chronology

Laboratory Number 92731

Identification	Sampled	Received	Extracted	Analyzed	Run #	Lab #
INF	10/05/94	10/05/94	10/06/94	10/06/94		1



Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

SECOR - CONCORD OFFICE
Attn: GREG HOEHN

Project 70005-009
Reported 14-October-1994

ANALYSIS FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, & MINERAL SPIRITS

Laboratory Number	Sample Identification	Matrix
92731- 1	INF	Air

RESULTS OF ANALYSIS
Laboratory Number: 92731- 1

Mineral Spirits: 400
Benzene: ND<0.5
Toluene: 2.1
Ethyl Benzene: ND<0.5
Total Xylenes: 0.6

Concentration: ug/L

-- Surrogate % Recoveries --
Trifluorotoluene (SS): 99



Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

ANALYSIS FOR BENZENE, TOLUENE, ETHYLBENZENE, XYLENES & MINERAL SPIRITS Quality Assurance and Control Data

Laboratory Number 92731

Compound	Method Blank (ug/L)	RL (ug/L)	Spike Recovery (%)	Limits (%)	RPD (%)
Benzene:	ND<0.5	0.5	94/86	59-149	9%
Toluene:	ND<0.5	0.5	98/92	59-149	6%
Ethyl Benzene:	ND<0.5	0.5	99/94	59-149	5%
Total Xylenes:	ND<0.5	0.5	102/98	59-149	4%

Definitions:

ND = Not Detected

RPD = Relative Percent Difference

RL = Reporting Limit

ug/L = Parts per billion (ppb)

QC File No. 92731

Senior Chemist
Account Manager



Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

SECOR - CONCORD OFFICE
Attn: GREG HOEHN

Project 70005-009
Reported 14-October-1994

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

Chronology

Laboratory Number 92731

Identification	Sampled	Received	Extracted	Analyzed	Run #	Lab #
INF	10/05/94	10/05/94	10/06/94	10/06/94		1

Page 1 of 3

Certified Laboratories

825 Arnold Dr., Suite 114
Martinez, California 94553
(510) 229-1512 / fax (510) 229-1526

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

309 S. Cloverdale St., Suite B-24
Seattle, Washington 98108
(206) 763-2992 / fax (206) 763-8429



SECOR - CONCORD OFFICE
Attn: GREG HOEHN

Project 70005-009
Reported 14-October-1994

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

Laboratory Number	Sample Identification	Matrix
92731- 1	INF	Air

RESULTS OF ANALYSIS

Laboratory Number: 92731- 1

Chloromethane:	ND<0.5
Vinyl Chloride:	ND<0.5
Bromomethane:	ND<0.5
Chloroethane:	ND<0.5
Trichlorofluoromethane:	ND<0.5
1,1-Dichloroethene:	ND<0.5
Dichloromethane:	4.9
t-1,2-Dichloroethene:	ND<0.5
1,1-Dichloroethane:	ND<0.5
c-1,2-Dichloroethene:	ND<0.5
Chloroform:	ND<0.5
1,1,1-Trichloroethane:	6.5
Carbon tetrachloride:	ND<0.5
1,2-Dichloroethane:	ND<0.5
Trichloroethene:	ND<0.5
c-1,3-Dichloropropene:	ND<0.5
1,2-Dichloropropane:	ND<0.5
t-1,3-Dichloropropene:	ND<0.5
Bromodichloromethane:	ND<0.5
1,1,2-Trichloroethane:	ND<0.5
Tetrachloroethene:	3.8
Dibromochloromethane:	ND<0.5
Chlorobenzene:	ND<0.5
Bromoform:	ND<0.5
1,1,2,2-Tetrachloroeth:	ND<0.5
1,3-Dichlorobenzene:	ND<0.5
1,2-Dichlorobenzene:	ND<0.5
1,4-Dichlorobenzene:	ND<0.5

Concentration: ug/L



Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

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

Laboratory Number 92731

Compound	Method Blank (ug/L)	RL (ug/L)	Spike Recovery (%)	Limits (%)	RPD (%)
Chloromethane:	ND<0.5	0.5			
Vinyl Chloride:	ND<0.5	0.5			
Bromomethane:	ND<0.5	0.5			
Chloroethane:	ND<0.5	0.5			
Trichlorofluoromethane:	ND<0.5	0.5			
1,1-Dichloroethene:	ND<0.5	0.5	88/98	50-189	11%
Dichloromethane:	ND<1.0	1.0			
t-1,2-Dichloroethene:	ND<0.5	0.5			
1,1-Dichloroethane:	ND<0.5	0.5			
c-1,2-Dichloroethene:	ND<0.5	0.5			
Chloroform:	ND<0.5	0.5			
1,1-Trichloroethane:	ND<0.5	0.5			
Carbon tetrachloride:	ND<0.5	0.5			
1,2-Dichloroethane:	ND<0.5	0.5			
Trichloroethene:	ND<0.5	0.5	89/96	53-161	8%
c-1,3-Dichloropropene:	ND<0.5	0.5			
1,2-Dichloropropane:	ND<0.5	0.5			
t-1,3-Dichloropropene:	ND<0.5	0.5			
Bromodichloromethane:	ND<0.5	0.5			
1,1,2-Trichloroethane:	ND<0.5	0.5			
Tetrachloroethene:	ND<0.5	0.5			
Dibromochloromethane:	ND<0.5	0.5			
Chlorobenzene:	ND<0.5	0.5	109/117	57-171	7%
Bromoform:	ND<0.5	0.5			
1,1,2,2-Tetrachloroeth:	ND<0.5	0.5			
1,3-Dichlorobenzene:	ND<0.5	0.5			
1,2-Dichlorobenzene:	ND<0.5	0.5			
1,4-Dichlorobenzene:	ND<0.5	0.5			

Definitions:

ND = Not Detected

RPD = Relative Percent Difference

RL = Reporting Limit

ug/L = Parts per billion (ppb)

QC File No. 92731

Senior Chemist
Account Manager

92731

Chain-of-Custody Number: A10596

SEACOR Chain-of-Custody Record

Address
 SEACON
 1390 Willow Pass Rd.
 Concord, CA

Analysis Request

Project # 70005-009 Task # _____
 Project Manager Chris Horton
 Laboratory Sipman
 Turn-around time: STANDARD
 Sampler's Name: D. Navers
 Sampler's Signature: [Signature]

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	Comments/Instructions	Number of Containers
INF.	10/5	14:55	AIR						X						PH AS INSTRUCT SPAN / BTEX	2

Special Instructions/Comments:
 Results in Mg/l
 Quote # 94-00518

Relinquished by:
 Sign [Signature]
 Print D. Navers
 Company SEACON
 Time _____ Date 10/5

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

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

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

Received by:
 Sign [Signature]
 Print Greg Howell
 Company SPANTZ
 Time 4:00 PM Date 11/5/14

Client: _____
 Client Contact: _____
 Client Phone Number: _____



Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

SECOR - CONCORD OFFICE
Attn: GREG HOEHN

Project 70005-009-08
Reported 16-November-1994

Chronology

Laboratory Number 92966

Identification	Sampled	Received	Extracted	Analyzed	Run #	Lab #
INFLUENT	11/03/94	11/03/94	/ /	11/03/94		1



Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

SECOR - CONCORD OFFICE
Attn: GREG HOEHN

Project 70005-009-08
Reported 16-November-1994

Laboratory Number	Sample Identification	Matrix
92966- 1	INFLUENT	Air

RESULTS OF ANALYSIS

Laboratory Number: 92966- 1

Mineral Spirits:	610
Benzene:	ND<0.5
Toluene:	ND<0.5
Ethylbenzene:	0.5
Xylenes:	3.2

Concentration: ug/L



Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

Quality Assurance and Control Data - Water

Laboratory Number 92966

Compound	Method Blank (ppm)	RL (ppm)	Spike Recovery (%)	Limits (%)	RPD (%)
Gasoline:	ND<50	50	118/101		16%
Benzene:	ND<0.5	0.5	93/98		5%
Toluene:	ND<0.5	0.5	94/94		0%
Ethylbenzene:	ND<0.5	0.5	95/95		0%
Xylenes:	ND<0.5	0.5	102/99		3%

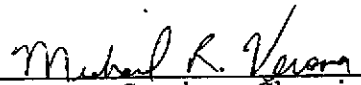
Definitions:

ND = Not Detected

RPD = Relative Percent Difference

RL = Reporting Limit

QC File No. 92966


 Senior Chemist
 Account Manager



Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

SECOR - CONCORD OFFICE
Attn: GREG HOEHN

Project 70005-009-08
Reported 16-November-1994

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

Chronology	Laboratory Number 92966					
Identification	Sampled	Received	Extracted	Analyzed	Run #	Lab #
INFLUENT	11/03/94	11/03/94	11/04/94	11/04/94		1



Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

SECOR - CONCORD OFFICE
Attn: GREG HOEHN

Project 70005-009-08
Reported 16-November-1994

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

Laboratory Number	Sample Identification	Matrix
92966- 1	INFLUENT	Air

RESULTS OF ANALYSIS

Laboratory Number: 92966- 1

Chloromethane:	ND<0.5
Vinyl Chloride:	ND<0.5
Bromomethane:	ND<0.5
Chloroethane:	ND<0.5
Trichlorofluoromethane:	ND<0.5
1,1-Dichloroethene:	ND<0.5
Dichloromethane:	ND<1.0
t-1,2-Dichloroethene:	ND<0.5
1,1-Dichloroethane:	ND<0.5
c-1,2-Dichloroethene:	ND<0.5
Chloroform:	ND<0.5
1,1,1-Trichloroethane:	ND<0.5
Carbon tetrachloride:	ND<0.5
1,2-Dichloroethane:	ND<0.5
Trichloroethene:	ND<0.5
c-1,3-Dichloropropene:	ND<0.5
1,2-Dichloropropane:	ND<0.5
t-1,3-Dichloropropene:	ND<0.5
Bromodichloromethane:	ND<0.5
1,1,2-Trichloroethane:	ND<0.5
Tetrachloroethene:	ND<0.5
Dibromochloromethane:	ND<0.5
Chlorobenzene:	ND<0.5
Bromoform:	ND<0.5
1,1,2,2-Tetrachloroeth:	ND<0.5
1,3-Dichlorobenzene:	ND<0.5
1,2-Dichlorobenzene:	ND<0.5
1,4-Dichlorobenzene:	ND<0.5

Concentration: ug/L



Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

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

Laboratory Number 92966

Compound	Method Blank (ug/L)	RL (ug/L)	Spike Recovery (%)	Limits (%)	RPD (%)
Chloromethane:	ND<0.5	0.5			
Vinyl Chloride:	ND<0.5	0.5			
Bromomethane:	ND<0.5	0.5			
Chloroethane:	ND<0.5	0.5			
Trichlorofluoromethane:	ND<0.5	0.5			
1,1-Dichloroethene:	ND<0.5	0.5	96/92	48-189	4%
Dichloromethane:	ND<1.0	1.0			
c-1,2-Dichloroethene:	ND<0.5	0.5			
1,1-Dichloroethane:	ND<0.5	0.5			
c-1,2-Dichloroethene:	ND<0.5	0.5			
Chloroform:	ND<0.5	0.5			
1,1-Trichloroethane:	ND<0.5	0.5			
Carbon tetrachloride:	ND<0.5	0.5			
1,2-Dichloroethane:	ND<0.5	0.5			
Trichloroethene:	ND<0.5	0.5	95/88	63-150	8%
c-1,3-Dichloropropene:	ND<0.5	0.5			
1,2-Dichloropropane:	ND<0.5	0.5			
c-1,3-Dichloropropene:	ND<0.5	0.5			
Bromodichloromethane:	ND<0.5	0.5			
1,1,2-Trichloroethane:	ND<0.5	0.5			
Tetrachloroethene:	ND<0.5	0.5			
Dibromochloromethane:	ND<0.5	0.5			
Chlorobenzene:	ND<0.5	0.5	108/102	70-158	6%
Bromoform:	ND<0.5	0.5			
1,1,2,2-Tetrachloroeth:	ND<0.5	0.5			
1,3-Dichlorobenzene:	ND<0.5	0.5			
1,2-Dichlorobenzene:	ND<0.5	0.5			
1,4-Dichlorobenzene:	ND<0.5	0.5			

Definitions:

- ND = Not Detected
- RPD = Relative Percent Difference
- RL = Reporting Limit
- ug/L = Parts per billion (ppb)
- QC File No. 92966

Michael R. Vuong
 Senior Chemist
 Account Manager



Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

CERTIFICATE OF ANALYSIS

Laboratory No.: 92966
Client : SECOR - CONCORD OFFICE
Client job No.: 70005-009-08

Date received : 11/03/94
Date reported : 11/07/94

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

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

Lab Sample ID	Date Sampled	Date Analyzed	Analyte	Conc.	RL	Unit
1 INFLUENT	11/03/94	11/03/94	Mineral Spirits	110	30	ppm
			Benzene	ND	85	ppb
			Toluene	ND	250	ppb
			Ethylbenzene	100	65	ppb
			Xylenes	720	250	ppb
QC METHOD BLANK	Water	11/03/94	Mineral Spirits	ND	30	ppm
			Benzene	ND	85	ppb
			Toluene	ND	250	ppb
			Ethylbenzene	ND	65	ppb
			Xylenes	ND	250	ppb

QAQC Summary:

Gasoline	MS/MSD % Recovery = 118/101	Duplicate RPD = 16%
Benzene	MS/MSD % Recovery = 93/98	Duplicate RPD = 5%
Toluene	MS/MSD % Recovery = 94/94	Duplicate RPD = 0%
Ethylbenzene	MS/MSD % Recovery = 95/95	Duplicate RPD = 0%
Xylenes	MS/MSD % Recovery = 102/99	Duplicate RPD = 3%

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

Atsavel Saf
Senior Chemist
Account Manager

Certified Laboratories

825 Arnold Dr., Suite 114
Martinez, California 94553
(510) 229-1512 / fax (510) 229-1526

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

309 S. Cloverdale St., Suite B-24
Seattle, Washington 98108
(206) 763-2992 / fax (206) 763-8429



RECEIVED

NOV 14 1994

CERTIFICATE OF ANALYSIS

LABORATORY NO. 92966
CLIENT: SEACOR

DATE RECEIVED: 11/03/94
DATE REPORTED: 11/07/94
PROJECT NO. : 70005-009-08

DATE SAMPLED : 11/03/94
DATE ANALYZED: 11/04/94

EPA SW-846 METHOD 8010 - VOLATILE ORGANICS

SAMPLE: INF

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



Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

CERTIFICATE OF ANALYSIS

LABORATORY NO. 92966
CLIENT: SEACOR

DATE RECEIVED: 11/03/94
DATE REPORTED: 11/07/94
PROJECT NO. : 70005-009-08

DATE SAMPLED : 11/03/94
DATE ANALYZED: 11/04/94

EPA SW-846 METHOD 8010 - VOLATILE ORGANICS

SAMPLE: INF

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

RL = Reporting Limit

ND = ANALYTE NOT DETECTED ABOVE QUANTITATION LIMIT

Alsaueh. Saf
Senior Chemist
Account Manager

Page 2 of 2

Certified Laboratories

825 Arnold Dr., Suite 114
Martinez, California 94553
(510) 229-1512 / fax (510) 229-1526

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

309 S. Cloverdale St., Suite B-24
Seattle, Washington 98108
(206) 763-2992 / fax (206) 763-8429

Chain of Custody and Analysis Request

Company: SECOR
 Address: 1390 Willow Pass Road, Ste 360
 City, State, Zip: Concord, CA 94520
 Phone: 686-9750 Fax: 686-3099
 Project Manager: G. Huehn
 Alternate Contact:
 Project No.: 7005-009-08 P.O. No. -

TURN AROUND TIME
 (circle one)
 Same Day 72 Hrs.
 24 Hrs. 48 Hrs.
 Normal 5 Day

Superior Precision Analytical Inc.
 P.O. Box 1545
92900 Martinez, California 94553
 Martinez I: (510) 229-1512
 Martinez II: (510) 229-0166
 San Francisco: (415) 647-2081

Section II: Analysis Request

Sampler:
 Regulatory Agency:

Sample Identification	S - Soil A - Air W - Water Matrix	8015M (gas)	8015M/8020 TRH 45 SPX 10 / BTEX	8015M (diesel)	8020	8010	8240	8270	418.1	6520F	8030	Metals	Date Sampled	Time Sampled	# of Containers	Preservatives (yes or no)	Sampling Remarks
																	Bioremediation UST Monitoring Recent Contamination Unknown Compounds COMMENTS:
1 Influent	A		X			X									2		
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	

Relinquished By:
 Organization: SECOR

Relinquished By:
 Organization:

Relinquished By:
 Organization:

Date/Time: 11/3 1:50

Date/Time:

Date/Time:

Received By:
 Organization:

Received By:
 Organization:

Received By:
 Laboratory:

Date/Time:

Date/Time:

Date/Time: 11/3/00 1310

Lab: Please initial the following:

Samples Stored in Ice: NA

Appropriate Containers:

Samples Preserved: NA

VOAs without headspace:

Comments:

APPENDIX C

LABORATORY REPORTS - GROUNDWATER



NATIONAL
ENVIRONMENTAL
TESTING, INC.

RECEIVED

NOV - 2 1994

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

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

Date: 10/31/1994
NET Client Acct. No: 62100
NET Pacific Job No: 94.04979
Received: 10/21/1994

Client Reference Information

400 Market St. Oakland

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 Road, Ste. 360
Concord, CA 94520

Enclosure(s)





Client Name: Safety-Kleen
 Client Acct: 62100
 NET Job No: 94.04979

Date: 10/31/1994
 ELAP Cert: 1386
 Page: 2

Ref: 400 Market St. Oakland

SAMPLE DESCRIPTION: MW-8
 Date Taken: 10/19/1994
 Time Taken: 13:55
 NET Sample No: 220114

Parameter	Results	Flags	Reporting		Method	Date	Date	Run
			Limit	Units		Extracted	Analyzed	Batch No.
TPH (Gas/BTXE, Liquid)								
METHOD 5030/M8015	--						10/22/1994	2236
DILUTION FACTOR*	1						10/22/1994	2236
as Mineral Spirits	ND	✓	0.05	mg/L	5030		10/22/1994	2236
METHOD 8020 (GC, Liquid)	--						10/22/1994	2236
DILUTION FACTOR*	1						10/22/1994	2236
Benzene	ND	✓	0.5	ug/L	8020		10/22/1994	2236
Toluene	ND	✓	0.5	ug/L	8020		10/22/1994	2236
Ethylbenzene	ND	✓	0.5	ug/L	8020		10/22/1994	2236
Xylenes (Total)	ND	✓	0.5	ug/L	8020		10/22/1994	2236
SURROGATE RESULTS	--						10/22/1994	2236
Bromofluorobenzene (SURR)	106			% Rec.	5030		10/22/1994	2236

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



Client Name: Safety-Kleen
Client Acct: 62100
NET Job No: 94.04979

Date: 10/31/1994
ELAP Cert: 1386
Page: 3

Ref: 400 Market St. Oakland

SAMPLE DESCRIPTION: MW-8
Date Taken: 10/19/1994
Time Taken: 13:55
NET Sample No: 220114

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 8010 (GC,Liquid)								
DILUTION FACTOR*	1						10/25/1994	737
Bromodichloromethane	ND		0.4	ug/L	8010		10/25/1994	737
Bromoform	ND		0.4	ug/L	8010		10/25/1994	737
Bromomethane	ND		0.4	ug/L	8010		10/25/1994	737
Carbon tetrachloride	ND		0.4	ug/L	8010		10/25/1994	737
Chlorobenzene	2.4		0.4	ug/L	8010		10/25/1994	737
Chloroethane	ND		0.4	ug/L	8010		10/25/1994	737
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		10/25/1994	737
Chloroform	ND		0.4	ug/L	8010		10/25/1994	737
Chloromethane	ND		0.4	ug/L	8010		10/25/1994	737
Dibromochloromethane	ND		0.4	ug/L	8010		10/25/1994	737
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		10/25/1994	737
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		10/25/1994	737
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		10/25/1994	737
Dichlorodifluoromethane	ND		0.4	ug/L	8010		10/25/1994	737
1,1-Dichloroethane	ND		0.4	ug/L	8010		10/25/1994	737
1,2-Dichloroethane	5.5		0.4	ug/L	8010		10/25/1994	737
1,1-Dichloroethene	ND		0.4	ug/L	8010		10/25/1994	737
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		10/25/1994	737
1,2-Dichloropropane	ND		0.4	ug/L	8010		10/25/1994	737
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		10/25/1994	737
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		10/25/1994	737
Methylene chloride	ND		10	ug/L	8010		10/25/1994	737
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		10/25/1994	737
Tetrachloroethene	ND		0.4	ug/L	8010		10/25/1994	737
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		10/25/1994	737
1,1,2-Trichloroethane	ND		1	ug/L	8010		10/25/1994	737
Trichloroethene	23		0.4	ug/L	8010		10/25/1994	737
Trichlorofluoromethane	ND		0.4	ug/L	8010		10/25/1994	737
Vinyl chloride	ND		0.4	ug/L	8010		10/25/1994	737
SURROGATE RESULTS	--						10/25/1994	737
1,4-Difluorobenzene (SURR)	74				‡ Rec.		10/25/1994	737
Bromochloromethane (SURR)	72				‡ Rec.		10/25/1994	737

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



Client Name: Safety-Kleen
 Client Acct: 62100
 NET Job No: 94.04979

Date: 10/31/1994
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Ref: 400 Market St. Oakland

SAMPLE DESCRIPTION: MW-1
 Date Taken: 10/19/1994
 Time Taken: 13:10
 NET Sample No: 220115

Parameter	Results	Flags	Reporting			Date Extracted	Date Analyzed	Run Batch No.
			Limit	Units	Method			
TPH (Gas/BTEX,Liquid)								
METHOD 5030/M8015	--						10/22/1994	2236
DILUTION FACTOR*	1						10/22/1994	2236
as Mineral Spirits	ND	✓	0.05	mg/L	5030		10/22/1994	2236
METHOD 8020 (GC,Liquid)	--						10/22/1994	2236
DILUTION FACTOR*	1						10/22/1994	2236
Benzene	ND	✓	0.5	ug/L	8020		10/22/1994	2236
Toluene	ND	✓	0.5	ug/L	8020		10/22/1994	2236
Ethylbenzene	ND	✓	0.5	ug/L	8020		10/22/1994	2236
Xylenes (Total)	ND	✓	0.5	ug/L	8020		10/22/1994	2236
SURROGATE RESULTS	--						10/22/1994	2236
Bromofluorobenzene (SURR)	116			* Rec.	5030		10/22/1994	2236

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



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Client Acct: 62100
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Ref: 400 Market St. Oakland

SAMPLE DESCRIPTION: MW-1

Date Taken: 10/19/1994

Time Taken: 13:10

NET Sample No: 220115

Parameter	Results	Flags	Reporting		Method	Date	Date	Run
			Limit	Units		Extracted	Analyzed	Batch No.
METHOD 8010 (GC,Liquid)								
DILUTION FACTOR*	1						10/25/1994	737
Bromodichloromethane	ND		0.4	ug/L	8010		10/25/1994	737
Bromoform	ND		0.4	ug/L	8010		10/25/1994	737
Bromomethane	ND		0.4	ug/L	8010		10/25/1994	737
Carbon tetrachloride	ND		0.4	ug/L	8010		10/25/1994	737
Chlorobenzene	ND		0.4	ug/L	8010		10/25/1994	737
Chloroethane	ND		0.4	ug/L	8010		10/25/1994	737
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		10/25/1994	737
Chloroform	ND		0.4	ug/L	8010		10/25/1994	737
Chloromethane	ND		0.4	ug/L	8010		10/25/1994	737
Dibromochloromethane	ND		0.4	ug/L	8010		10/25/1994	737
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		10/25/1994	737
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		10/25/1994	737
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		10/25/1994	737
Dichlorodifluoromethane	ND		0.4	ug/L	8010		10/25/1994	737
1,1-Dichloroethane	ND		0.4	ug/L	8010		10/25/1994	737
1,2-Dichloroethane	ND		0.4	ug/L	8010		10/25/1994	737
1,1-Dichloroethene	ND		0.4	ug/L	8010		10/25/1994	737
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		10/25/1994	737
1,2-Dichloropropane	ND		0.4	ug/L	8010		10/25/1994	737
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		10/25/1994	737
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		10/25/1994	737
Methylene chloride	ND		10	ug/L	8010		10/25/1994	737
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		10/25/1994	737
Tetrachloroethene	ND		0.4	ug/L	8010		10/25/1994	737
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		10/25/1994	737
1,1,2-Trichloroethane	ND		1	ug/L	8010		10/25/1994	737
Trichloroethene	ND		0.4	ug/L	8010		10/25/1994	737
Trichlorofluoromethane	ND		0.4	ug/L	8010		10/25/1994	737
Vinyl chloride	ND		0.4	ug/L	8010		10/25/1994	737
SURROGATE RESULTS	--						10/25/1994	737
1,4-Difluorobenzene (SURR)	75				† Rec.		10/25/1994	737
Bromochloromethane (SURR)	88				† Rec.		10/25/1994	737

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SAMPLE DESCRIPTION: MW-12
 Date Taken: 10/19/1994
 Time Taken: 10:55
 NET Sample No: 220116

Parameter	Results	Flags	Reporting		Method	Date	Date	Run
			Limit	Units		Extracted	Analyzed	Batch No.
TPH (Gas/BTEXE,Liquid)								
METHOD 5030/M8015	--						10/22/1994	2236
DILUTION FACTOR*	1						10/22/1994	2236
as Mineral Spirits	ND		0.05	mg/L	5030		10/22/1994	2236
METHOD 8020 (GC,Liquid)	--						10/22/1994	2236
DILUTION FACTOR*	1						10/22/1994	2236
Benzene	ND		0.5	ug/L	8020		10/22/1994	2236
Toluene	ND		0.5	ug/L	8020		10/22/1994	2236
Ethylbenzene	ND		0.5	ug/L	8020		10/22/1994	2236
Xylenes (Total)	ND		0.5	ug/L	8020		10/22/1994	2236
SURROGATE RESULTS	--						10/22/1994	2236
Bromofluorobenzene (SURR)	114			† Rec.	5030		10/22/1994	2236

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



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 Client Acct: 62100
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Ref: 400 Market St. Oakland

SAMPLE DESCRIPTION: MW-12

Date Taken: 10/19/1994

Time Taken: 10:55

NET Sample No: 220116

Parameter	Results	Flags	Reporting		Method	Date	Date	Run
			Limit	Units		Extracted	Analyzed	Batch No.
METHOD 8010 (GC,Liquid)								
DILUTION FACTOR*	1						10/25/1994	737
Bromodichloromethane	ND		0.4	ug/L	8010		10/25/1994	737
Bromoform	ND		0.4	ug/L	8010		10/25/1994	737
Bromomethane	ND		0.4	ug/L	8010		10/25/1994	737
Carbon tetrachloride	ND		0.4	ug/L	8010		10/25/1994	737
Chlorobenzene	ND		0.4	ug/L	8010		10/25/1994	737
Chloroethane	ND		0.4	ug/L	8010		10/25/1994	737
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		10/25/1994	737
Chloroform	ND		0.4	ug/L	8010		10/25/1994	737
Chloromethane	ND		0.4	ug/L	8010		10/25/1994	737
Dibromochloromethane	ND		0.4	ug/L	8010		10/25/1994	737
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		10/25/1994	737
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		10/25/1994	737
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		10/25/1994	737
Dichlorodifluoromethane	ND		0.4	ug/L	8010		10/25/1994	737
1,1-Dichloroethane	1.6		0.4	ug/L	8010		10/25/1994	737
1,2-Dichloroethane	ND		0.4	ug/L	8010		10/25/1994	737
1,1-Dichloroethene	ND		0.4	ug/L	8010		10/25/1994	737
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		10/25/1994	737
1,2-Dichloropropane	ND		0.4	ug/L	8010		10/25/1994	737
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		10/25/1994	737
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		10/25/1994	737
Methylene chloride	ND		10	ug/L	8010		10/25/1994	737
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		10/25/1994	737
Tetrachloroethene	ND		0.4	ug/L	8010		10/25/1994	737
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		10/25/1994	737
1,1,2-Trichloroethane	ND		1	ug/L	8010		10/25/1994	737
Trichloroethene	24		0.4	ug/L	8010		10/25/1994	737
Trichlorofluoromethane	ND		0.4	ug/L	8010		10/25/1994	737
Vinyl chloride	ND		0.4	ug/L	8010		10/25/1994	737
SURROGATE RESULTS								
1,4-Difluorobenzene (SURR)	74				‡ Rec.		10/25/1994	737
Bromochloromethane (SURR)	80				‡ Rec.		10/25/1994	737

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SAMPLE DESCRIPTION: MW-2
 Date Taken: 10/19/1994
 Time Taken: 11:50
 NET Sample No: 220117

Parameter	Results	Flags	Reporting		Method	Date	Date	Run
			Limit	Units		Extracted	Analyzed	Batch No.
TPH (Gas/BTXE,Liquid)								
METHOD 5030/M8015	--						10/22/1994	2236
DILUTION FACTOR*	1						10/22/1994	2236
as Mineral Spirits	ND	✓	0.05	mg/L	5030		10/22/1994	2236
METHOD 8020 (GC,Liquid)	--						10/22/1994	2236
DILUTION FACTOR*	1						10/22/1994	2236
Benzene	ND	✓	0.5	ug/L	8020		10/22/1994	2236
Toluene	ND	✓	0.5	ug/L	8020		10/22/1994	2236
Ethylbenzene	ND	✓	0.5	ug/L	8020		10/22/1994	2236
Xylenes (Total)	ND	✓	0.5	ug/L	8020		10/22/1994	2236
SURROGATE RESULTS	--						10/22/1994	2236
Bromofluorobenzene (SURR)	100			† Rec.	5030		10/22/1994	2236

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



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NET Job No: 94.04979

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Ref: 400 Market St. Oakland

SAMPLE DESCRIPTION: MW-2

Date Taken: 10/19/1994

Time Taken: 11:50

NET Sample No: 220117

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed	Run Batch No.
METHOD 8010 (GC,Liquid)								
DILUTION FACTOR*	1						10/25/1994	737
Bromodichloromethane	ND		0.4	ug/L	8010		10/25/1994	737
Bromoform	ND		0.4	ug/L	8010		10/25/1994	737
Bromomethane	ND		0.4	ug/L	8010		10/25/1994	737
Carbon tetrachloride	ND		0.4	ug/L	8010		10/25/1994	737
Chlorobenzene	ND		0.4	ug/L	8010		10/25/1994	737
Chloroethane	ND		0.4	ug/L	8010		10/25/1994	737
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		10/25/1994	737
Chloroform	ND		0.4	ug/L	8010		10/25/1994	737
Chloromethane	ND		0.4	ug/L	8010		10/25/1994	737
Dibromochloromethane	ND		0.4	ug/L	8010		10/25/1994	737
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		10/25/1994	737
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		10/25/1994	737
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		10/25/1994	737
Dichlorodifluoromethane	ND		0.4	ug/L	8010		10/25/1994	737
1,1-Dichloroethane	ND		0.4	ug/L	8010		10/25/1994	737
1,2-Dichloroethane	ND		0.4	ug/L	8010		10/25/1994	737
1,1-Dichloroethene	ND		0.4	ug/L	8010		10/25/1994	737
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		10/25/1994	737
1,2-Dichloropropane	ND		0.4	ug/L	8010		10/25/1994	737
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		10/25/1994	737
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		10/25/1994	737
Methylene chloride	ND		10	ug/L	8010		10/25/1994	737
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		10/25/1994	737
Tetrachloroethene	ND		0.4	ug/L	8010		10/25/1994	737
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		10/25/1994	737
1,1,2-Trichloroethane	ND		1	ug/L	8010		10/25/1994	737
Trichloroethene	ND		0.4	ug/L	8010		10/25/1994	737
Trichlorofluoromethane	ND		0.4	ug/L	8010		10/25/1994	737
Vinyl chloride	ND		0.4	ug/L	8010		10/25/1994	737
SURROGATE RESULTS	--						10/25/1994	737
1,4-Difluorobenzene (SURR)	72				% Rec.		10/25/1994	737
Bromochloromethane (SURR)	78				% Rec.		10/25/1994	737

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



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Ref: 400 Market St. Oakland

SAMPLE DESCRIPTION: MW-3
 Date Taken: 10/19/1994
 Time Taken: 10:20
 NET Sample No: 220118

Parameter	Results	Flags	Reporting			Date	Date	Run
			Limit	Units	Method	Extracted	Analyzed	Batch No.
TPH (Gas/BTXE,Liquid)								
METHOD 5030/M8015	--						10/22/1994	2236
DILUTION FACTOR*	1						10/22/1994	2236
as Mineral Spirits	ND		0.05	mg/L	5030		10/22/1994	2236
METHOD 8020 (GC,Liquid)	--						10/22/1994	2236
DILUTION FACTOR*	1						10/22/1994	2236
Benzene	ND		0.5	ug/L	8020		10/22/1994	2236
Toluene	ND		0.5	ug/L	8020		10/22/1994	2236
Ethylbenzene	ND		0.5	ug/L	8020		10/22/1994	2236
Xylenes (Total)	ND		0.5	ug/L	8020		10/22/1994	2236
SURROGATE RESULTS	--						10/22/1994	2236
Bromofluorobenzene (SURR)	97			% Rec.	5030		10/22/1994	2236

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



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Ref: 400 Market St. Oakland

SAMPLE DESCRIPTION: MW-3

Date Taken: 10/19/1994

Time Taken: 10:20

NET Sample No: 220118

Parameter	Results	Flags	Reporting		Method	Date	Date	Run
			Limit	Units		Extracted	Analyzed	Batch No.
METHOD 8010 (GC,Liquid)								
DILUTION FACTOR*	1						10/25/1994	737
Bromodichloromethane	ND		0.4	ug/L	8010		10/25/1994	737
Bromoform	ND		0.4	ug/L	8010		10/25/1994	737
Bromomethane	ND		0.4	ug/L	8010		10/25/1994	737
Carbon tetrachloride	ND		0.4	ug/L	8010		10/25/1994	737
Chlorobenzene	ND		0.4	ug/L	8010		10/25/1994	737
Chloroethane	ND		0.4	ug/L	8010		10/25/1994	737
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		10/25/1994	737
Chloroform	ND		0.4	ug/L	8010		10/25/1994	737
Chloromethane	ND		0.4	ug/L	8010		10/25/1994	737
Dibromochloromethane	ND		0.4	ug/L	8010		10/25/1994	737
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		10/25/1994	737
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		10/25/1994	737
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		10/25/1994	737
Dichlorodifluoromethane	ND		0.4	ug/L	8010		10/25/1994	737
1,1-Dichloroethane	ND		0.4	ug/L	8010		10/25/1994	737
1,2-Dichloroethane	ND		0.4	ug/L	8010		10/25/1994	737
1,1-Dichloroethene	ND		0.4	ug/L	8010		10/25/1994	737
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		10/25/1994	737
1,2-Dichloropropane	ND		0.4	ug/L	8010		10/25/1994	737
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		10/25/1994	737
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		10/25/1994	737
Methylene chloride	ND		10	ug/L	8010		10/25/1994	737
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		10/25/1994	737
Tetrachloroethene	ND		0.4	ug/L	8010		10/25/1994	737
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		10/25/1994	737
1,1,2-Trichloroethane	ND		1	ug/L	8010		10/25/1994	737
Trichloroethene	ND		0.4	ug/L	8010		10/25/1994	737
Trichlorofluoromethane	ND		0.4	ug/L	8010		10/25/1994	737
Vinyl chloride	ND		0.4	ug/L	8010		10/25/1994	737
SURROGATE RESULTS	--						10/25/1994	737
1,4-Difluorobenzene (SURR)	73				‡ Rec.		10/25/1994	737
Bromochloromethane (SURR)	77				‡ Rec.		10/25/1994	737

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SAMPLE DESCRIPTION: MW-4
 Date Taken: 10/19/1994
 Time Taken: 09:30
 NET Sample No: 220119

Parameter	Results	Flags	Reporting		Method	Date	Date	Run
			Limit	Units		Extracted	Analyzed	Batch No.
TPH (Gas/BTXE,Liquid)	--							
METHOD 5030/M8015	--						10/22/1994	2236
DILUTION FACTOR*	1						10/22/1994	2236
as Mineral Spirits	0.33	G1	0.05	mg/L	5030		10/22/1994	2236
METHOD 8020 (GC,Liquid)	--						10/22/1994	2236
DILUTION FACTOR*	1						10/22/1994	2236
Benzene	ND		0.5	ug/L	8020		10/22/1994	2236
Toluene	ND		0.5	ug/L	8020		10/22/1994	2236
Ethylbenzene	ND		0.5	ug/L	8020		10/22/1994	2236
Xylenes (Total)	ND		0.5	ug/L	8020		10/22/1994	2236
SURROGATE RESULTS	--						10/22/1994	2236
Bromofluorobenzene (SURR)	102			† Rec.	5030		10/22/1994	2236

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

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 Client Acct: 62100
 NET Job No: 94.04979

Date: 10/31/1994
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Ref: 400 Market St. Oakland

SAMPLE DESCRIPTION: MW-4
 Date Taken: 10/19/1994
 Time Taken: 09:30
 NET Sample No: 220119

Parameter	Results	Flags	Reporting		Method	Date	Date	Run
			Limit	Units		Extracted	Analyzed	Batch No.
METHOD 8010 (GC,Liquid)								
DILUTION FACTOR*	1						10/25/1994	737
Bromodichloromethane	ND		0.4	ug/L	8010		10/25/1994	737
Bromoform	ND		0.4	ug/L	8010		10/25/1994	737
Bromomethane	ND		0.4	ug/L	8010		10/25/1994	737
Carbon tetrachloride	ND		0.4	ug/L	8010		10/25/1994	737
Chlorobenzene	ND		0.4	ug/L	8010		10/25/1994	737
Chloroethane	ND		0.4	ug/L	8010		10/25/1994	737
2-Chloroethylvinyl ether	ND		1.0	ug/L	8010		10/25/1994	737
Chloroform	ND		0.4	ug/L	8010		10/25/1994	737
Chloromethane	ND		0.4	ug/L	8010		10/25/1994	737
Dibromochloromethane	ND		0.4	ug/L	8010		10/25/1994	737
1,2-Dichlorobenzene	ND		0.4	ug/L	8010		10/25/1994	737
1,3-Dichlorobenzene	ND		0.4	ug/L	8010		10/25/1994	737
1,4-Dichlorobenzene	ND		0.4	ug/L	8010		10/25/1994	737
Dichlorodifluoromethane	ND		0.4	ug/L	8010		10/25/1994	737
1,1-Dichloroethane	ND		0.4	ug/L	8010		10/25/1994	737
1,2-Dichloroethane	ND		0.4	ug/L	8010		10/25/1994	737
1,1-Dichloroethene	ND		0.4	ug/L	8010		10/25/1994	737
trans-1,2-Dichloroethene	ND		0.4	ug/L	8010		10/25/1994	737
1,2-Dichloropropane	ND		0.4	ug/L	8010		10/25/1994	737
cis-1,3-Dichloropropene	ND		0.4	ug/L	8010		10/25/1994	737
trans-1,3-Dichloropropene	ND		0.4	ug/L	8010		10/25/1994	737
Methylene chloride	ND		10	ug/L	8010		10/25/1994	737
1,1,2,2-Tetrachloroethane	ND		0.4	ug/L	8010		10/25/1994	737
Tetrachloroethene	ND		0.4	ug/L	8010		10/25/1994	737
1,1,1-Trichloroethane	ND		0.4	ug/L	8010		10/25/1994	737
1,1,2-Trichloroethane	ND		1	ug/L	8010		10/25/1994	737
Trichloroethene	650	FC	0.4	ug/L	8010		10/25/1994	737
Trichlorofluoromethane	ND		0.4	ug/L	8010		10/25/1994	737
Vinyl chloride	ND		0.4	ug/L	8010		10/25/1994	737
SURROGATE RESULTS								
1,4-Difluorobenzene (SURR)	71						10/25/1994	737
Bromochloromethane (SURR)	74						10/25/1994	737

FC : Compound quantitated at a 10X dilution factor.

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CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

<u>Parameter</u>	CCV	CCV	<u>Units</u>	<u>Date Analyzed</u>	<u>Analyst Initials</u>
	<u>Standard</u>	<u>Standard</u>			
	<u>% Recovery</u>	<u>Amount Found</u>	<u>Expected</u>		
TPH (Gas/BTXE, Liquid)					
Benzene	101.0	5.05	5.00	ug/L	10/22/1994 dfw
Toluene	104.4	5.22	5.00	ug/L	10/22/1994 dfw
Ethylbenzene	105.4	5.27	5.00	ug/L	10/22/1994 dfw
Xylenes (Total)	105.4	15.81	15.0	ug/L	10/22/1994 dfw
Bromofluorobenzene (SURR)	105.0	105	100	% Rec.	10/22/1994 dfw

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CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

Parameter	CCV	CCV	CCV	Units	Date Analyzed	Analyst Initials
	Standard % Recovery	Standard Amount Found	Standard Amount Expected			
METHOD 8010 (GC,Liquid)						
Bromodichloromethane	106.0	21.2	20.0	ug/L	10/25/1994	ltg
Bromoform	103.0	20.6	20.0	ug/L	10/25/1994	ltg
Bromomethane	99.5	19.9	20.0	ug/L	10/25/1994	ltg
Carbon tetrachloride	111.0	22.2	20.0	ug/L	10/25/1994	ltg
Chlorobenzene	111.0	22.2	20.0	ug/L	10/25/1994	ltg
Chloroethane	112.0	22.4	20.0	ug/L	10/25/1994	ltg
2-Chloroethylvinyl ether	62.0	12.4	20.0	ug/L	10/25/1994	ltg
Chloroform	106.0	21.2	20.0	ug/L	10/25/1994	ltg
Chloromethane	87.0	17.4	20.0	ug/L	10/25/1994	ltg
Dibromochloromethane	112.0	22.4	20.0	ug/L	10/25/1994	ltg
1,2-Dichlorobenzene	107.5	21.5	20.0	ug/L	10/25/1994	ltg
1,3-Dichlorobenzene	106.5	21.3	20.0	ug/L	10/25/1994	ltg
1,4-Dichlorobenzene	106.5	21.3	20.0	ug/L	10/25/1994	ltg
Dichlorodifluoromethane	108.5	21.7	20.0	ug/L	10/25/1994	ltg
1,1-Dichloroethane	110.5	22.1	20.0	ug/L	10/25/1994	ltg
1,2-Dichloroethane	107.0	21.4	20.0	ug/L	10/25/1994	ltg
1,1-Dichloroethene	99.0	19.8	20.0	ug/L	10/25/1994	ltg
trans-1,2-Dichloroethene	103.0	20.6	20.0	ug/L	10/25/1994	ltg
1,2-Dichloropropane	104.0	20.8	20.0	ug/L	10/25/1994	ltg
cis-1,3-Dichloropropene	102.0	20.4	20.0	ug/L	10/25/1994	ltg
trans-1,3-Dichloropropene	112.0	22.4	20.0	ug/L	10/25/1994	ltg
Methylene chloride	95.0	19.0	20.0	ug/L	10/25/1994	ltg
1,1,2,2-Tetrachloroethane	107.0	21.4	20.0	ug/L	10/25/1994	ltg
Tetrachloroethene	107.0	21.4	20.0	ug/L	10/25/1994	ltg
1,1,1-Trichloroethane	110.0	22.0	20.0	ug/L	10/25/1994	ltg
1,1,2-Trichloroethane	112.0	22.4	20.0	ug/L	10/25/1994	ltg
Trichloroethene	104.5	20.9	20.0	ug/L	10/25/1994	ltg
Trichlorofluoromethane	111.5	22.3	20.0	ug/L	10/25/1994	ltg
Vinyl chloride	108.5	21.7	20.0	ug/L	10/25/1994	ltg
1,4-Difluorobenzene (SURR)	93.0	93.0	100	% Rec.	10/25/1994	ltg
Bromochloromethane (SURR)	89.0	89.0	100	% Rec.	10/25/1994	ltg

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METHOD BLANK REPORT

Parameter	Method	Reporting		Date	Analyst
	Blank	Amount Found	Limit	Analyzed	Initials
TPH (Gas/BTKE, Liquid)					
as Mineral Spirits	ND	0.05	mg/L	10/22/1994	dfw
Benzene	ND	0.5	ug/L	10/22/1994	dfw
Toluene	ND	0.5	ug/L	10/22/1994	dfw
Ethylbenzene	ND	0.5	ug/L	10/22/1994	dfw
Xylenes (Total)	ND	0.5	ug/L	10/22/1994	dfw
Bromofluorobenzene (SDRR)	92		‡ Rec.	10/22/1994	dfw

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METHOD BLANK REPORT

Parameter	Method	Reporting	Units	Date	Analyst
	Blank				
	Amount	Limit		Analyzed	Initials
	Found				
METHOD 8010 (GC,Liquid)					
Bromodichloromethane	ND	0.4	ug/L	10/25/1994	lss
Bromoform	ND	0.4	ug/L	10/25/1994	lss
Bromomethane	ND	0.4	ug/L	10/25/1994	lss
Carbon tetrachloride	ND	0.4	ug/L	10/25/1994	lss
Chlorobenzene	ND	0.4	ug/L	10/25/1994	lss
Chloroethane	ND	0.4	ug/L	10/25/1994	lss
2-Chloroethylvinyl ether	ND	1.0	ug/L	10/25/1994	lss
Chloroform	ND	0.4	ug/L	10/25/1994	lss
Chloromethane	ND	0.4	ug/L	10/25/1994	lss
Dibromochloromethane	ND	0.4	ug/L	10/25/1994	lss
1,2-Dichlorobenzene	ND	0.4	ug/L	10/25/1994	lss
1,3-Dichlorobenzene	ND	0.4	ug/L	10/25/1994	lss
1,4-Dichlorobenzene	ND	0.4	ug/L	10/25/1994	lss
Dichlorodifluoromethane	ND	0.4	ug/L	10/25/1994	lss
1,1-Dichloroethane	ND	0.4	ug/L	10/25/1994	lss
1,2-Dichloroethane	ND	0.4	ug/L	10/25/1994	lss
1,1-Dichloroethene	ND	0.4	ug/L	10/25/1994	lss
trans-1,2-Dichloroethene	ND	0.4	ug/L	10/25/1994	lss
1,2-Dichloropropane	ND	0.4	ug/L	10/25/1994	lss
cis-1,3-Dichloropropene	ND	0.4	ug/L	10/25/1994	lss
trans-1,3-Dichloropropene	ND	0.4	ug/L	10/25/1994	lss
Methylene chloride	ND	10	ug/L	10/25/1994	lss
1,1,2,2-Tetrachloroethane	ND	0.4	ug/L	10/25/1994	lss
Tetrachloroethene	ND	0.4	ug/L	10/25/1994	lss
1,1,1-Trichloroethane	ND	0.4	ug/L	10/25/1994	lss
1,1,2-Trichloroethane	ND	0.4	ug/L	10/25/1994	lss
Trichloroethene	ND	0.4	ug/L	10/25/1994	lss
Trichlorofluoromethane	ND	0.4	ug/L	10/25/1994	lss
Vinyl chloride	ND	0.4	ug/L	10/25/1994	lss
1,4-Difluorobenzene (SRR)	79		% Rec.	10/25/1994	lss
Bromochloromethane (SRR)	72		% Rec.	10/25/1994	lss

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MATRIX SPIKE / MATRIX SPIKE DUPLICATE

Parameter	Matrix Spike			Spike Amount	Sample Conc.	Matrix Spike		Units	Date Analyzed	Analyst Initials
	Matrix Spike % Rec.	Spike Dup % Rec.	RPD			Matrix Spike Conc.	Spike Dup. Conc.			
TPH (Gas/BTEX, Liquid)										
Benzene	98.3	97.2	1.1	36.3	ND	35.7	35.3	ug/L	10/22/1994	dfw
Toluene	95.6	94.7	0.9	114	ND	109	108	ug/L	10/22/1994	dfw

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MATRIX SPIKE / MATRIX SPIKE DUPLICATE

Parameter	Matrix Spike		RPD	Spike Amount	Sample Conc.	Matrix Spike		Units	Date Analyzed	Analyst Initials
	% Rec.	% Rec.				Spike Conc.	Dup. Conc.			
METHOD 8010 (GC,Liquid)										
Chlorobenzene	107.0	110.0	2.8	20.0	2.41	23.8	24.4	ug/L	10/25/1994	ltg
1,1-Dichloroethene	102.0	101.5	0.5	20.0	ND	20.4	20.3	ug/L	10/25/1994	ltg
Trichloroethene	103.0	102.5	0.5	20.0	22.9	43.5	43.4	ug/L	10/25/1994	ltg

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® KEY TO ABBREVIATIONS and METHOD REFERENCES

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

Method References

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

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

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

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