August 1, 1997

Via Certified Mail No. P563448328

ENVIRONMENTAL PROTECTION
97 AUG -4 PM 4:39

Mr. Robert M. Senga, Unit Chief
California Environmental Protection Agency
Department of Toxic Substances Control
Facility Permitting Branch
1011 N. Grandview Avenue
Glendale, California 90302

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

Dear Mr. Senga:

Enclosed is the second quarter monitoring and sampling report for [redacted] which summarizes the groundwater monitoring and vapor extraction activities conducted at the above-referenced facility. This report covers the period from March through May 1997. Safety-Kleen is following the modified groundwater sampling schedule as described in the letter submitted on July 13, 1994, and as modified and approved by Alameda County in a response letter dated July 27, 1994. A comparison of laboratory analytical results of groundwater samples collected prior to purging the wells versus the standard post-purge results is also included in the report.

If you have any questions, please call me at (503) 655-2769.

Sincerely,

Chip Prokop
Senior Project Manager - Remediation
Safety-Kleen Corp.

Enclosure

cc: Keith Marcott, Safety-Kleen Corp.
Scott Davies, Safety-Kleen Corp.
Branch Environmental File (7-178-01)
Jennifer Eberle, Alameda County - Department of Environmental Health
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OAKLAND7.L21 - 6.1
August 1, 1997
SECOR Job No. 70005-009-07

1000 NORTH RANDALL ROAD ELGIN, ILLINOIS 60123-7857 PHONE 847/697-8460 FAX 847/468-8500

SECOR
International Incorporated

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

SECOR Job No. 70005-009-07

Prepared For:
Safety-Kleen Corp.
16540 S.E. 130th Avenue
Clackamas, Oregon 97015
Aug 1, 97

Submitted By:
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1390 Willow Pass Road
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Concord, California 94520

August 1, 1997

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1.0 INTRODUCTION

This report presents the results of groundwater monitoring and sampling activities conducted for the quarter of March through May 1997 at the Safety-Kleen Service Center located at 400 Market Street in Oakland, California (Figures 1 and 2). Also included are the results of soil vapor extraction (SVE) system monitoring and sampling for the period. In addition to the normal quarterly groundwater sampling activities, a second set of groundwater samples were collected during this event to compare the analytical results of groundwater samples collected after completing low flow purge methods with those of groundwater samples collected prior to purging the wells. A description of the sample methods used is detailed in Section 3.3 and a discussion of the results of the study is included in Section 4.4 of this report.

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 storage of product mineral spirits prior to distribution to Safety-Kleen customers.

During the single-walled tank removal, mineral spirits-impacted soil was excavated from the tank pit as allowable by site conditions. Additionally, a product recovery well and a vapor extraction system withdrawal network were installed in the tank pit area. Tank removal and excavation activities are documented in the Report of Underground Storage Tank Replacement Activities dated September 1990. The product pumping system installed in recovery well RW-1 to remove separate-phase product from the water table began operation on January 19, 1993. The product pumping system was removed on November 20, 1995, and replaced with a passive hydrocarbon skimming device which is capable of removing product thickness within the well to a sheen.

The SVE system consists of seven horizontal vapor extraction lines and a vapor extraction and treatment system. A system to extract and treat soil vapor utilizing regenerative polymer adsorption began full-scale operation on June 1, 1993. The SVE system was modified and restarted on November 28, 1995, utilizing the current granular activated carbon (GAC) treatment system. Figure 3 depicts the layout of the vapor extraction lines and the vapor treatment system.

3.0 SCOPE OF WORK

Groundwater monitoring work conducted during this quarter consisted of the monitoring of 10 groundwater monitoring wells and one recovery well, and the sampling of 10 groundwater monitoring wells as specified by the quarterly sampling schedule. SVE activities conducted during this quarter consisted of the operation and maintenance of the SVE system. The following sections provide a description of the work steps conducted.

3.1 Soil Vapor Extraction System

The SVE system consists of two 1,500-pound GAC vessels connected in series to a manifold attached to the seven horizontal vapor extraction lines. While the SVE system is operating, monitoring occurs biweekly and consists of measuring influent and effluent concentrations using a photo-ionization detector (PID) or a flame-ionization detector (FID). During this quarter, SVE system influent and effluent vapor samples were collected on March 7 and May 1, 1997. The vapor samples were submitted to a state-certified analytical laboratory under chain-of-custody manifest and analyzed for total petroleum hydrocarbons as mineral spirits (TPHms) by modified Environmental Protection Agency (EPA) Method 8015 and for volatile organic compounds (VOCs) by EPA Method 8010. The results of the SVE system operation and sampling are presented in Section 4.1.

The SVE system was shut down on May 16, 1997, pending carbon change-out of the first GAC vessel. The carbon was replaced and the system was restarted on June 5, 1997. Subsequent operation and SVE monitoring activities will be reported in the next quarterly monitoring report.

3.2 Mineral Spirits Recovery

The mineral spirits recovery pump that was located in recovery well RW-1 failed and was replaced by a passive recovery skimmer in November 1995. A passive recovery skimmer was also placed in monitoring well MW-9 (Figure 2) at that time. Mineral spirits recovered from recovery well RW-1 and monitoring well MW-9 is emptied directly to the waste mineral spirits UST at the site and is incorporated into the Safety-Kleen recycling process. The amount of recovered product is recorded each time the skimmer is emptied. Product has not been present in the skimmers since July 1996. The results of mineral spirits recovery are presented in Section 4.2.

3.3 Groundwater Monitoring and Sampling

On April 10, 1997, on- and off-site monitoring wells were monitored for depth-to-water, and groundwater samples were collected from monitoring wells MW-1 through MW-6, MW-8, MW-9, MW-12, and MW-13. Monitoring well MW-11 was not monitored or sampled because tree roots have grown through the well casing and are obstructing the well.

For this event, two sets of groundwater samples were collected in order to compare the results of laboratory analytical results of samples collected using low flow purge methods with those of samples collected prior to purging the wells. Blind duplicate samples were collected from monitoring well MW-8 for quality assurance and quality control purposes. The duplicate samples are labeled as MW-18 on the attached laboratory reports and chain-of-custody documents. Pre-purge and post-purge groundwater samples were collected using the following procedures:

All accessible monitoring wells were monitored for depth-to-water using a water level indicator calibrated to 0.01-foot. During depth-to-water monitoring, care was taken to not splash or over immerse the probe. Depth-to-bottom measurements were not made prior to pre-purge groundwater sample collection. 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 and prior to purging, monitoring wells MW-1 through MW-6, MW-8, MW-9, MW-12, and MW-13 were sampled. Groundwater samples were collected using a low flow pump and dedicated tubing, carefully lowered to the midpoint of the screened interval. Pre-purge groundwater samples were transferred from the tubing into laboratory supplied sample vessels. The samples were then labeled, placed on ice in an insulated cooler, and logged onto the chain-of-custody manifest.

Subsequent to collecting the pre-purge samples, the wells were purged using the low flow pump. In-line water quality indicator parameters were continuously monitored and water levels were taken during purging in order to adjust the flow rate for a minimal drawdown. Samples were collected after pH, temperature, conductivity, and turbidity had stabilized for at least three successive readings. The samples were placed into laboratory supplied sample containers in the same manner as the pre-purge samples, labeled, placed on ice in an insulated cooler, and logged onto the chain-of-custody manifest. Field data sheets that include depth-to-water measurements and well purge data are included in Appendix A.

The groundwater samples were delivered to a state-certified laboratory for analysis under chain-of-custody documentation. The groundwater samples were analyzed for the presence of benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8020, for TPHms by modified EPA Method 8015, and for halogenated VOCs by EPA Method 8010.

Prior to use and between each well, all non-single-use equipment was decontaminated by double-washing with a laboratory grade detergent in clean water and triple-rinsed using deionized water. Purge water and decontamination water generated during well purging and sampling was placed in labeled containers pending transport for treatment at a Safety-Kleen facility.

4.0 RESULTS

4.1 Soil Vapor Extraction System

The results of SVE system monitoring conducted through May 16, 1997, are summarized on Table 1. Table 1 presents data on the system flow rate and PID measurements from the SVE system influent, the effluent after each carbon adsorption vessel, and the system effluent. For this quarter, SVE system influent and effluent vapor samples were collected on March 7 and May 10, 1997. No analytes were detected in any of the influent or effluent samples collected during the quarter. Based on the analytical data, the SVE system has continued to meet air permit requirements. Copies of soil vapor extraction system analytical reports are included as Appendix B. PID/FID readings measured this quarter indicated that the first carbon vessel had reached saturation. The system was subsequently shut down on May 16, 1997, pending carbon replacement.

Because mineral spirits concentrations were below laboratory detection limits during this quarter, no mass of mineral spirits was estimated to have been removed via vapor extraction. In an attempt to improve system efficiency, Safety-Kleen will operate the SVE system in a pulsed mode when the system is restarted following the carbon change-out. Table 2 summarizes the estimated SVE system mineral spirits removal to date. Data collected through February 10, 1997, indicate 4812.4 pounds of mineral spirits have been removed from the subsurface by the SVE system.

4.2 Mineral Spirits Recovery

Mineral spirits product is collected in monitoring well MW-9 and recovery well RW-1 via passive recovery skimmers and by hand bailing at the time of SVE monitoring and groundwater sampling. No product was accumulated in the skimmers during this reporting period. The total volume of mineral spirits product removed from the subsurface to date is approximately 444.25 gallons. The mineral spirits recovery data is shown in Table 3.

4.3 Groundwater Elevations

Groundwater elevations and depth-to-water measurements for the April 10, 1997, event are presented in Table 4. The average water table elevation on April 10, 1997, was 2.27 feet above mean sea level, a decrease of 0.62 feet since the January 1997 event. A potentiometric surface map prepared with the April 10, 1997, data is presented as Figure 4.

As shown in Figure 4, the groundwater flow direction remains to the southwest, consistent with historic site data. The hydraulic gradient was 0.003 feet/foot (ft/ft) across the site as measured between monitoring wells MW-5 and MW-2. The gradient is consistent with previous data for the site. A summary of groundwater elevations since January 1993 is provided as Table 5.

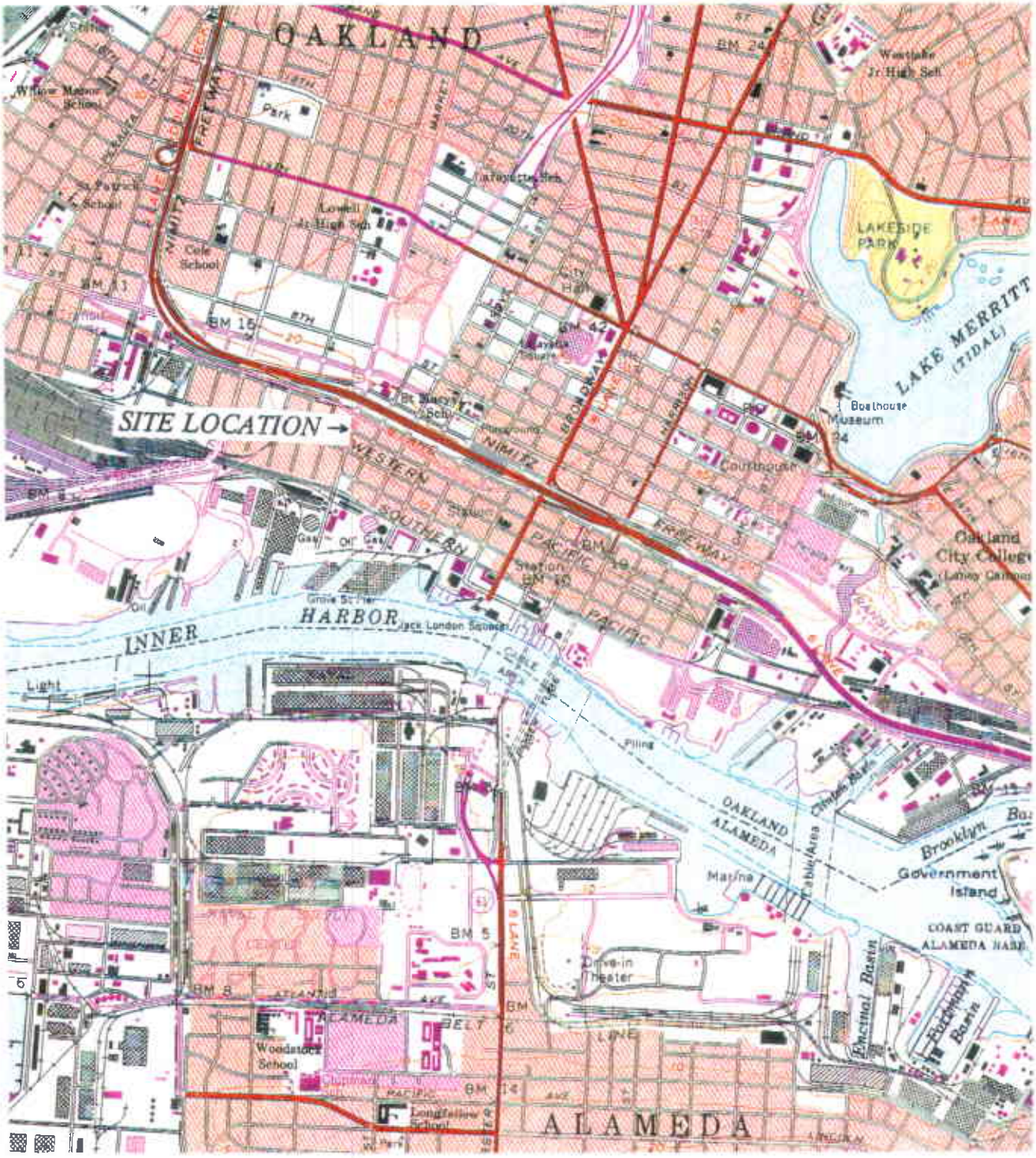
4.4 Groundwater Conditions

For consistency with historical data, this discussion of groundwater conditions at the site is based on the results of analysis of post-purge samples. A comparison of post-purge versus pre-purge sample analytical data is provided later in this section. Concentrations of TPHms and BTEX were detected above the laboratory detection limits in groundwater samples collected from monitoring well MW09 at 1,846 $\mu g/\ell$, 17.4 $\mu g/\ell$, 17.2 $\mu g/\ell$, 23.2 $\mu g/\ell$, and 19.3 $\mu g/\ell$, respectively. No TPHms or BTEX were detected in any other samples collected on April 10, 1997. In addition, no VOCs were detected in the groundwater samples from monitoring wells MW-1, MW-2, MW-3, or MW-6. Laboratory analyses of post-purge groundwater samples from monitoring wells MW-4, MW-5, MW-8, and MW-9 detected several VOCs including: 1,2-dichlorobenzene (DCB), 1,4-DCB, 1,1-dichloroethane (DCA), 1,2-DCA, 1,1-dichloroethene (DCE), *cis*-1,2-DCE, 1,1,1-trichloroethane (1,1,1-TCA), trichloroethene (TCE), tetrachloroethene (PCE), chlorobenzene, 1,2-dichloropropane (1,2-DCP), vinyl chloride, chloroform, chloroethane, chlorotoluene, 1,3-DCB, and trichloropropane. Figure 5 depicts the chemical distribution in the post-purge samples collected on April 10, 1997. A summary of analytical test results showing compounds detected since the April 1993 sampling event are presented in Table 6. Copies of the groundwater laboratory analytical reports are included in Appendix C.

The laboratory results of the sample collected from monitoring well MW-13 indicated that BTEX constituents were present in the sample, which is anomalous based on historical data. The well was subsequently sampled as described in Section 3.3 above on May 13, 1997. Laboratory analysis of the samples collected from monitoring well MW-13 confirmed historical data, which indicates that no TPHms, BTEX, or VOC constituents are present.

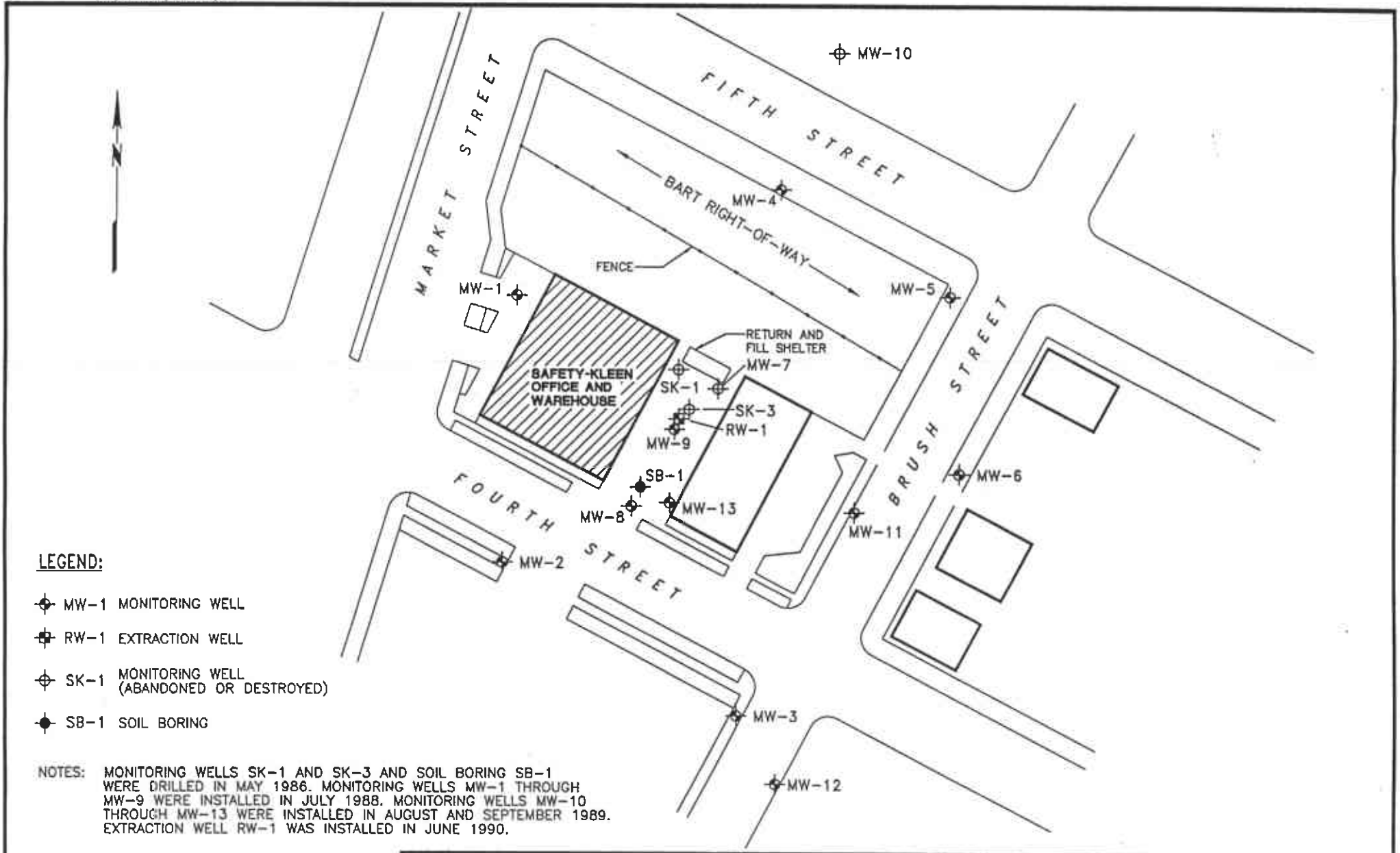
Two sets of groundwater samples were collected during this event in order to compare the results of laboratory analytes of pre-purge and post-purge groundwater samples. The results of analysis of pre-purge and post-purge samples are summarized in Table 7. The table lists the analytes detected in each sample and shows a relative percent difference (RPD) calculation for each sample pair. As shown in the table, the types and concentrations of analytes are consistent in most cases. Of the 36 detection pairs, 26 of the post-purge detections contained higher concentrations as compared to pre-purge detections. Consistent with last quarter, the relative percent difference between sample pairs was high in several data pairs from monitoring well MW-8. A more thorough analysis of the statistical significance of pre-purge and post-purge sample pair analyses will be presented after the next quarterly sample event has been performed.

OAKLAND WEST QUADRANGLE
California
7.5 Minute Series (Topographic)



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

199509.061018 X:\S-KLEEN\OAKLAND\SITE



LEGEND:

- MW-1 MONITORING WELL
- RW-1 EXTRACTION WELL
- SK-1 MONITORING WELL (ABANDONED OR DESTROYED)
- SB-1 SOIL BORING

NOTES: MONITORING WELLS SK-1 AND SK-3 AND SOIL BORING SB-1 WERE DRILLED IN MAY 1986. MONITORING WELLS MW-1 THROUGH MW-9 WERE INSTALLED IN JULY 1988. MONITORING WELLS MW-10 THROUGH MW-13 WERE INSTALLED IN AUGUST AND SEPTEMBER 1989. EXTRACTION WELL RW-1 WAS INSTALLED IN JUNE 1990.

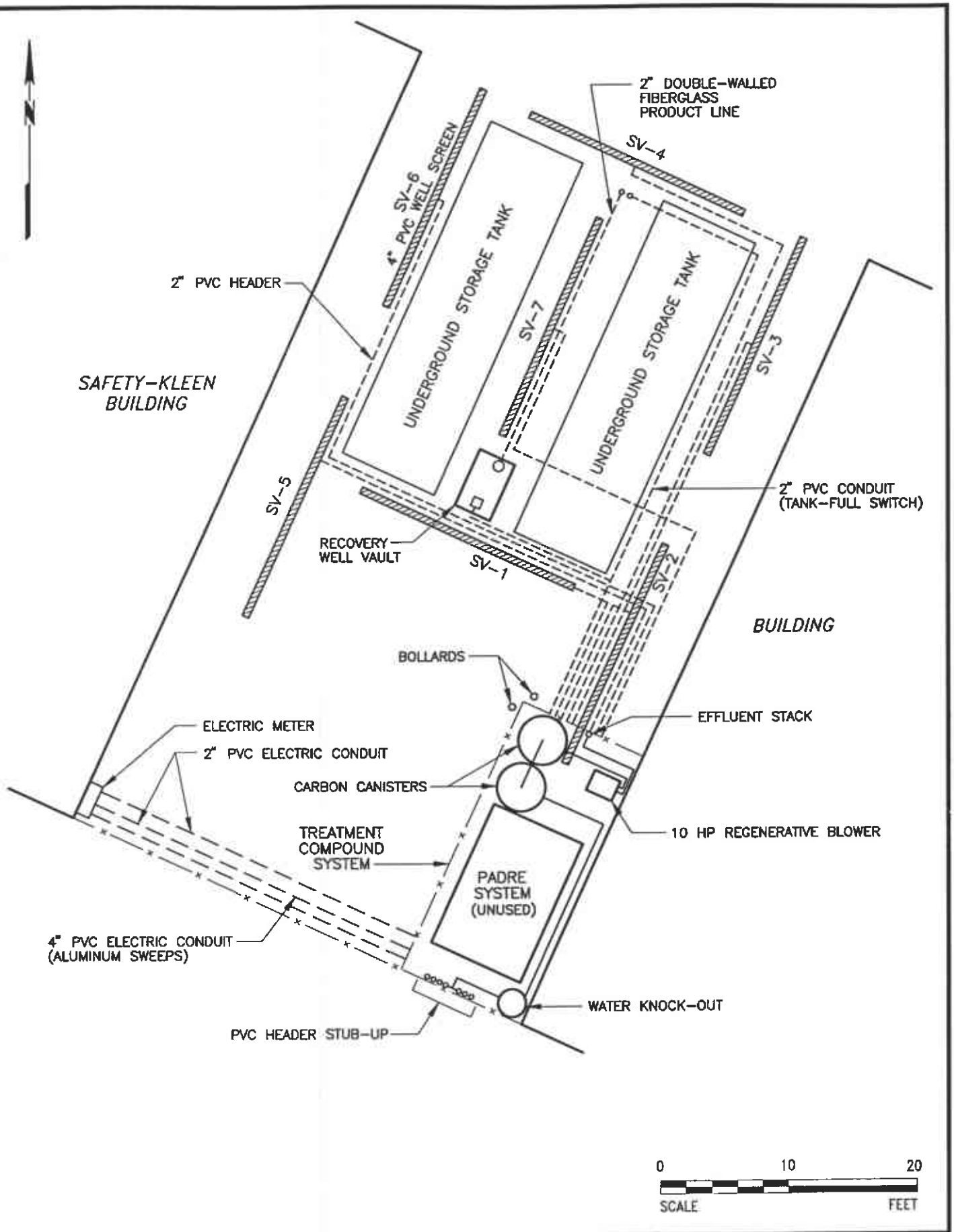
0 80 160
SCALE FEET

SECOR
INTERNATIONAL
INCORPORATED

DRAWN	CCR
APPR	RR/GH
DATE	26NOV96
JOB NO.	70005-009

FIGURE 2
SAFETY-KLEEN SERVICE CENTER
400 MARKET STREET
OAKLAND, CALIFORNIA

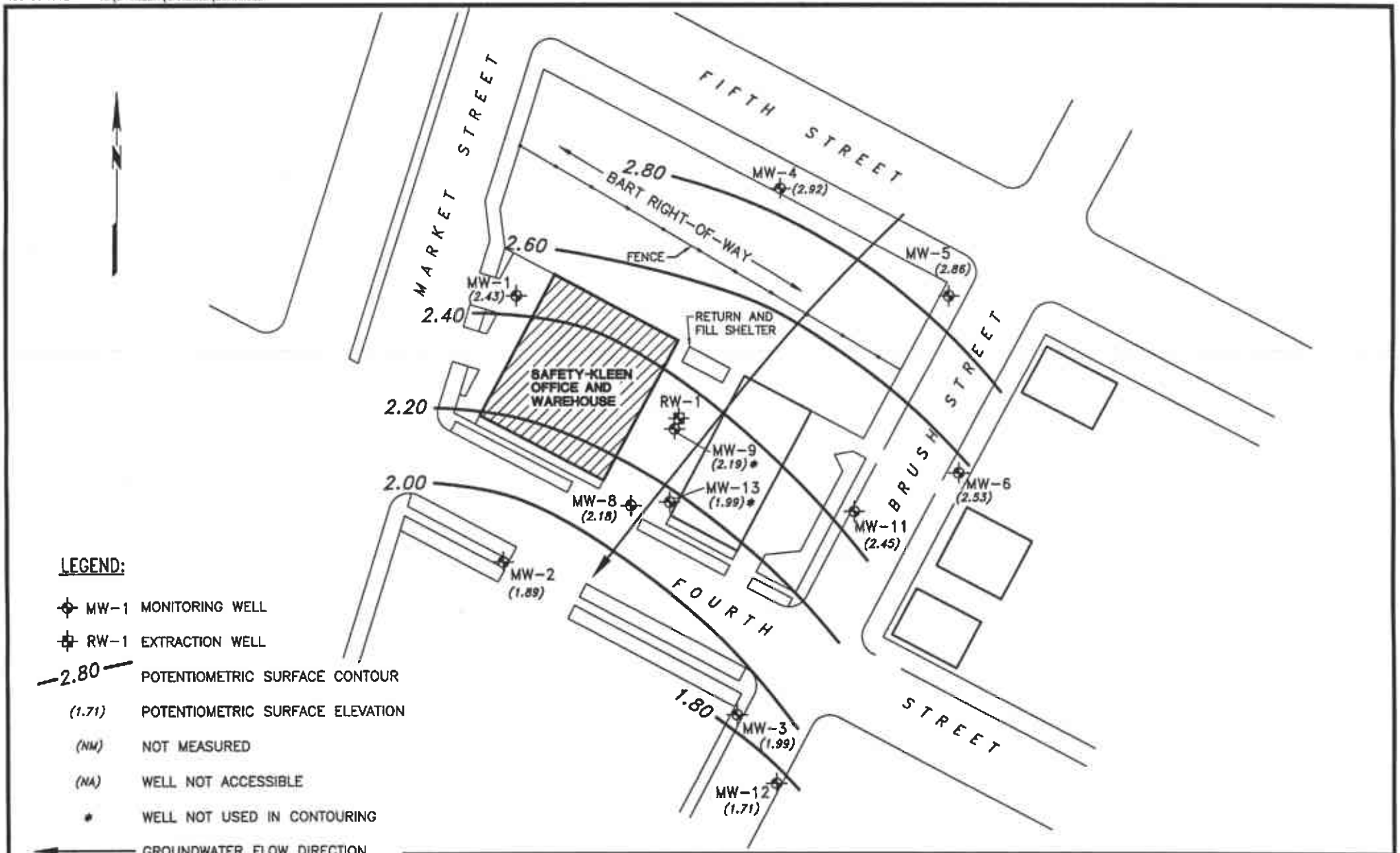
SITE PLAN



SECOR INTERNATIONAL INCORPORATED	DRAWN: CCR APPR: GH DATE: 08DEC95 JOB NO.: 70005-009	FIGURE 3 SAFETY-KLEEN SERVICE CENTER 400 MARKET STREET OAKLAND, CALIFORNIA **SOIL VAPOR EXTRACTION SYSTEM LAYOUT**

199512.071928 X:\IS-KLEEN\OAKLAND\SITE2

199706.171247 X:\S-KLEEN\OAKLAND\SURFACE9



LEGEND:

- MW-1 MONITORING WELL
- RW-1 EXTRACTION WELL
- 2.80 POTENTIOMETRIC SURFACE CONTOUR
- (1.71) POTENTIOMETRIC SURFACE ELEVATION
- (NM) NOT MEASURED
- (NA) WELL NOT ACCESSIBLE
- * WELL NOT USED IN CONTOURING
- GROUNDWATER FLOW DIRECTION

0 80 160
SCALE FEET

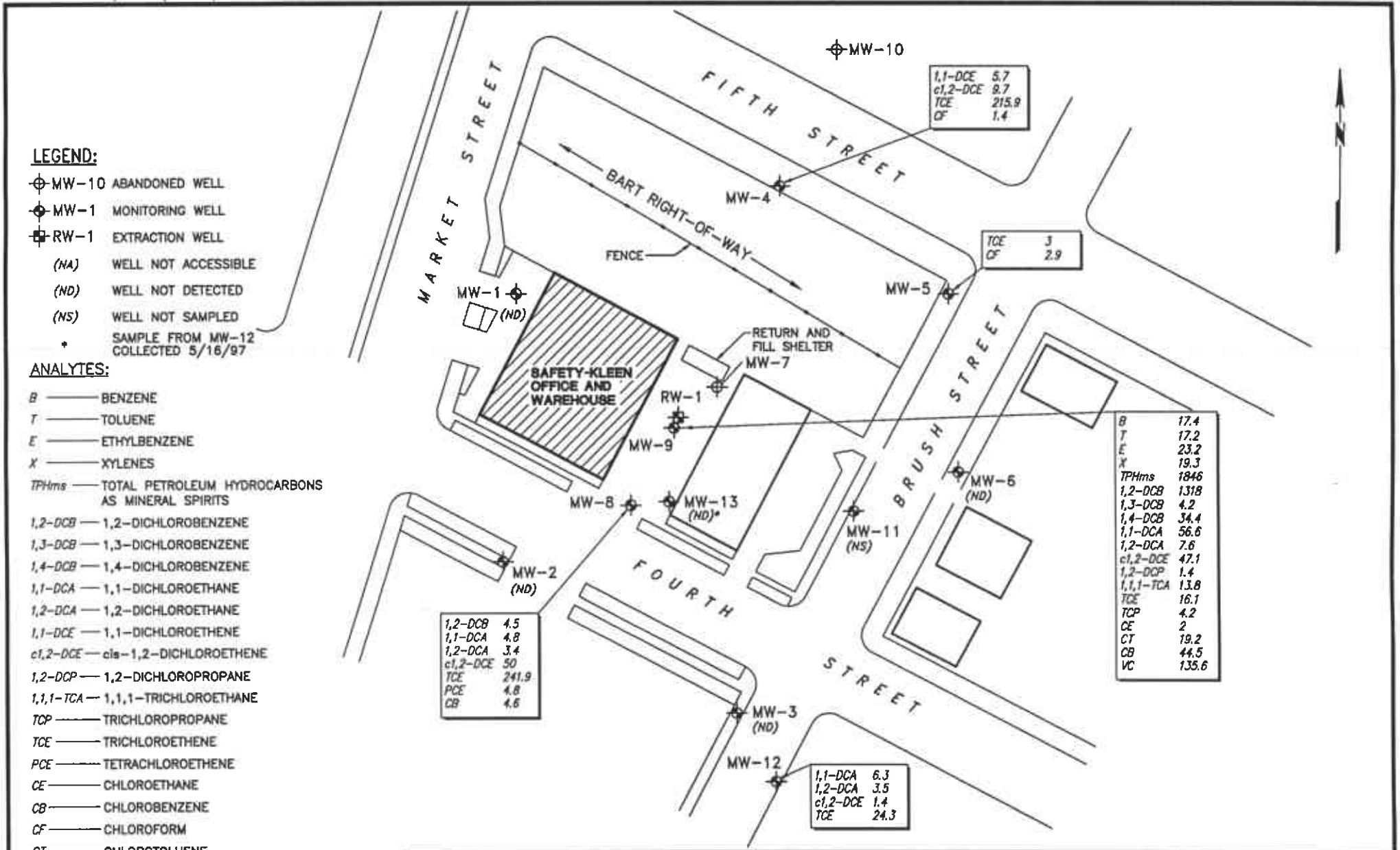
SECOR
INTERNATIONAL
INCORPORATED

DRAWN	CCR
APPR	KW/GH
DATE	17JUN97
JOB NO.	70005-009

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

POTENTIOMETRIC SURFACE MAP APRIL 10, 1997

199706.171127 X:\S-KLEEN\OAKLAND\CHEMGW06



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INTERNATIONAL INCORPORATED

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DATE	17JUN97
JOB NO.	70005-009

FIGURE 5
SAFETY-KLEEN SERVICE CENTER
400 MARKET STREET
OAKLAND, CALIFORNIA

CHEMICAL DISTRIBUTION IN GROUNDWATER
POST PURGE APRIL 10, 1997

Table 1

Soil Vapor Extraction System Monitoring Data

Safety-Kleen Service Center
400 Market Street
Oakland, California

Date	Elapsed Time*	Well Extraction Vacuum	KO Vacuum	Extraction Flow Rate		System Influent	#1 Carbon Effluent	#2 Carbon Effluent	System Effluent	Notes
	(hours)	(inches H20)	(inches H20)	(ft/min)	(scfm)	(PID/FID units)	(PID/FID units)	(PID/FID units)	(PID/FID units)	
12/08/95	362.6	6.5	22	5000	107	413	3.1	4.6	6.4	* System restarted using carbon adsorption on 11/28/95.
12/21/95	677.2	6	20	5000	107	79.5	36.2	1.2	1.2	Influent and Effluent samples collected
01/09/96	1134.2	9	22	5000	106	169	42.4	2.8	1.7	Influent and Effluent samples collected
01/24/95	1488.75	5.5	17	2200	47	43	43.2	24.2	6.1	
02/06/96	1803.3	5	16	6000	129	63.4	61.1	33.4	16.1	Influent and Effluent samples collected
02/21/96	2157.55	8	20	5500	117	60.1	48	38.2	8.4	
03/08/96	2540.1	10	23	5000	106	183.7	52.3	44.8	15.5	Influent and Effluent samples collected
03/20/96	2635.2	12	23	5000	106	430	362.1	311.4	22.4	
04/03/96	2905.9	12	25	5000	106	290	45	32	2	FID used, Influent and Effluent samples collected, Carbon changed.
04/18/96	3267.7	11	24	5000	106	500	30	9	3	FID used.
05/02/96	3594	NA	24	5000	109	109.3	44.5	0.2	0.2	Influent and Effluent samples collected
05/16/96	3934.3	NA	23	5000	109	117.3	150.9	3.2	1	
05/31/96	4289.2	0.15	25	5000	109	53.7	61	0.7	0	Influent and Effluent samples collected
07/01/96	5038.8	11	23	5000	106	325	150	75	37	Influent and Effluent samples collected
07/17/96	5421.7	10	24	5000	106	159	160	163	33	System shut down for carbon replacement
08/20/96	5423.6	7	17	3200	68	300	0	0	0	System restarted with new carbon
08/22/96	5469.5	7	17	3000	64	300	1.4	1.4	0	Influent and Effluent samples collected
09/03/96	5760.1	0.15	16	3500	76	131.2	0	0	0	
09/26/96	6315.5	8	15	3550	76	165	30	1.2	2.2	Influent and Effluent samples collected
10/03/96	6478.1	8	15	3000	64	231	70	42	13	
10/10/96	6644.7	8	15	3500	75	269.4	189	20.5	12.5	Influent and Effluent samples collected
10/22/96	6938.9	7	15	3000	64	480	442	1.8	1.2	Influent and Effluent samples collected
10/29/96	71040	8	16	4000	85	148.8	142.7	7.5	1.2	
11/13/96	7466.6	8	16	3500	75	120	90	40	8	Influent and Effluent samples collected
12/03/96	7943.7	0.19	25	5000	109	60.3	52.6	0	0	
12/18/96	8299.1	0.14	26	5500	120	50.5	55.1	5	4.7	Influent and Effluent samples collected
01/06/97	8684.2	24	38	4000	82	40	17	6	4	
01/17/97	8949.7	24	36	4000	82	147	153	83	7	Influent and Effluent samples collected
01/30/97	9258.9	24	37	3000	61	20	7	7	2	
02/10/97	9522.7	24	35	3500	72	192	306.4	111.2	3.6	Influent and Effluent samples collected
02/25/97	9887.3	22	34	3500	72	50	20	10	2	
03/07/97	10123.6	20	35	4000	83	40	9	5	2	Influent and Effluent samples collected
03/26/97	10586.8	22	35	3500	72	72	191	82	1.5	
04/10/97	10941	19	34	4000	83	15.4	32.5	3.9	3.2	
05/01/97	11440	23	30	3000	62	5.2	2.9	1.3	0.08	Influent and Effluent samples collected
05/14/97	11752	31	38	2000	40	18.7	17.4	8.9	0.4	
05/16/97	11798	NA	NA	NA	NA	NA	NA	NA	NA	System shutdown for carbon changeout

Notes: ft/min = feet per minute
scfm = standard cubic feet per minute assuming ambient temperature and ideal gas
NA = not available

Table 2
Soil Vapor Extraction System
Mineral Spirits Removal
Safety-Kleen Service Center
400 Market Street
Oakland, California

Sample Date	Elapsed Time (hours)	Run Time This Period (hours)	Exctraction Flow Rate (scfm)	TPHms Influent (ug/L)	Removal Rate (lbs./day)	TPHms Removed (lbs.)	Notes
11/28/95	Carbon adsorbtion system start-up					1798.4	TPHms removed by prior system.
12/21/95	677.2	677.2	109.1	823	8.07	2026.0	
01/09/96	1134.2	457	109.1	1116	10.95	2234.5	
02/06/96	1803.3	669.1	130.9	999	11.75	2562.1	
03/08/96	2540.1	736.8	109.1	1821	17.86	3110.5	
04/03/96	2905.9	365.8	109.1	1116	10.95	3277.4	
05/02/96	3594	688.1	109.1	1586	15.56	3723.4	
05/31/96	4289.2	695.2	109.1	1234	12.10	4073.9	
07/01/96	5038.8	749.6	109.1	82	0.81	4099.1	
08/22/96	5469.5	430.7	65.4	500	2.94	4151.9	
09/26/96	6315.5	846	77.4	1300	9.05	4470.7	
10/10/96	6644.7	329.2	76.4	880	6.04	4553.6	
10/22/96	6938.9	294.2	65.4	670	3.94	4601.9	
11/13/96	7466.6	527.7	109.1	460	4.51	4701.1	
12/18/96	8299.1	832.5	120.0	220	2.37	4783.5	
01/17/97	8949.7	650.6	82.0	69	0.51	4797.2	
02/10/97	9522.7	573	72.0	98	0.63	4812.4	
03/07/97	10123.6	600.9	83.0	ND (<50)	0.00	4812.4	
05/01/97	11440	1316.4	62.0	ND (<50)	0.00	4812.4	

Notes: cfm = cubic feet per minute
ug/L = micrograms per liter
lbs = pounds

Table 3
Free Product Recovery System
Mineral Spirits Removal Summary
Safety-Kleen Service Center
400 Market Street
Oakland, California

Date	Product Recovery		
	This Period	Total	
	(gallons)	(gallons)	(pounds)
01/01/89	15	30.0	196.5
01/31/89	15	45.0	294.8
03/02/89	15	60.0	393.0
04/01/89	15	75.0	491.3
05/01/89	15	90.0	589.5
05/31/89	15	105.0	687.8
06/30/89	15	120.0	786.0
07/30/89	15	135.0	884.3
08/29/89	15	150.0	982.5
09/28/89	15	165.0	1080.8
10/28/89	15	180.0	1179.0
11/27/89	15	195.0	1277.3
12/27/89	15	210.0	1375.5
01/26/90	15	225.0	1473.8
02/25/90	15	240.0	1572.0
03/27/90	15	255.0	1670.3
04/26/90	15	270.0	1768.5
05/26/90	15	285.0	1866.8
06/25/90	15	300.0	1965.0
01/19/93	0	300	1965.0
02/25/93	6.5	306.5	2007.6
05/20/93	4.3	310.8	2035.7
08/27/93	0	310.8	2035.7
10/24/93	10.3	321.1	2103.2
02/28/94	22.6	343.7	2251.2
05/31/94	16.6	360.3	2360.0
08/31/94	16.4	376.7	2467.4
11/30/94	16.2	392.9	2573.5
02/28/95	16	408.9	2678.3
05/31/95	16.6	425.5	2787.0
08/31/95	16.6	442.1	2895.8
11/30/95	0	442.1	2895.8
01/09/96	0.75	442.85	2900.7
03/20/96	0.75	443.6	2905.6
05/02/96	0.03	443.63	2905.8
05/16/96	0.55	444.18	2909.4
05/31/96	0.05	444.23	2909.7
07/01/96	0.02	444.25	2909.8
09/03/96	0	444.25	2909.8
10/10/96	0	444.18	2909.4
10/29/96	0	444.18	2909.4
11/01/96	0	444.18	2909.4
12/18/96	0	444.25	2909.8
01/17/97	0	444.25	2909.8
02/10/97	0	444.25	2909.8
02/25/97	0	444.25	2909.8
03/07/97	0	444.25	2909.8
03/26/97	0	444.25	2909.8
04/10/97	0	444.25	2909.8

Note: Data shown in smaller text is estimated based on previous reports.

Table 4
Groundwater Monitoring Data
April 10, 1997
Safety-Kleen Service Center
400 Market Street
Oakland, California

Well I.D.	TOC Elevation (ft msl)	DTW (ft)	DTP (ft)	PT (ft)	Adjusted Elevation (ft msl)
MW-1	7.99	5.56	-	-	2.43
MW-2	8.20	6.31	-		1.89
MW-3	6.66	4.67	-	-	1.99
MW-4	10.32	7.40	-	-	2.92
MW-5	10.28	7.42	-	-	2.86
MW-6	8.97	6.44	-	-	2.53
MW-8	7.80	5.62	-	-	2.18
MW-9	8.21	6.04	6.02	0.02	2.19
MW-10*	-	-	-	-	-
MW-11	7.91	5.46	-	-	2.45
MW-12	6.74	5.03	-	-	1.71
MW-13	8.08	6.09	-	-	1.99
RW-1	-	4.86	4.85	0.01	-

Notes:
TOC = Top of casing
DTW = Depth-to-water
DTP = Depth-to-product
PT = Product thickness
ft msl = Feet (ft) relative to mean sea level (msl)
* Well destroyed in July 1995
NM = Well not accessible

Table 5
Historical Summary of Groundwater Elevations
Safety-Kleen Service Center
400 Market Street
Oakland, California

Date	Well Identification											
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-8	MW-9	MW-10	MW-11	MW-12	MW-13
Jan-93	1.29	1.00	0.86	1.57	1.48	1.27	1.08	1.15	1.73	1.16	0.44	0.58
Apr-93	1.09	0.51	0.38	1.52	1.42	1.08	0.74	0.95	1.85	0.90	0.10	0.40
Jul-93	0.27	-0.23	-0.27	0.68	0.62	0.37	-0.01	-0.68	0.99	0.20	-0.72	-0.15
Oct-93	-0.02	-0.51	-0.66	0.32	0.17	-0.12	-0.35	0.14	0.62	-0.22	-0.91	-0.57
Jan-94	-0.01	-0.52	-0.77	0.33	0.48	-0.10	-0.37	-0.49	0.60	-0.14	-1.05	-0.65
Apr-94	0.55	0.05	-0.09	0.85	0.74	0.46	0.22	0.33	-	0.34	-0.76	-0.09
Jul-94	0.25	-0.20	-0.31	0.62	0.55	0.23	-0.03	0.08	0.90	0.09	-0.70	-0.22
Oct-94	0.08	-0.33	-0.44	0.41	0.38	0.12	-0.15	0.01	-	0.01	-0.59	-0.33
Jan-95	1.95	1.53	1.64	2.41	2.49	2.24	1.79	1.85	-	2.06	1.44	1.33
Apr-95	3.09	2.46	2.49	3.71	3.73	3.42	2.79	2.95	-	3.18	2.22	1.98
Jul-95	2.04	1.53	1.53	2.54	2.50	2.26	1.76	1.93	-	2.01	1.33	1.53
Oct-95	1.38	0.94	1.01	1.81	1.27	1.56	1.15	1.32	-	1.42	0.94	1.06
Jan-96	1.82	1.40	0.64	2.21	2.21	2.04	1.61	1.54	-	1.85	-	1.51
Apr-96	2.81	2.40	2.46	3.33	3.36	3.17	2.58	2.51	-	2.91	2.24	2.38
Jul-96	2.16	1.70	1.75	2.67	2.63	2.35	1.90	1.93	-	2.18	-	1.84
Nov-96	1.09	0.70	0.75	1.47	1.47	1.18	0.90	0.86	-	-	-	0.78
Jan-97	2.89	2.39	2.58	3.48	3.52	3.34	2.70	2.57	-	-	-	2.50
Apr-97	2.43	1.89	1.99	2.92	2.86	2.53	2.18	2.19	-	2.45	1.71	1.99

Notes:
Groundwater elevations are realative to mean sea-level datum
- = Not measured

Table 6
Summary of Groundwater Analytical Results
Detected Compounds
Safety-Kleen Service Center
400 Market Street
Oakland, California

Well No.		MW-1																				
Date		04-93	07-93	10-93	01-94	04-94	07-94	10-94	01-95	04-95	07-95	10-95	01-96	04-96	07-96	11-96		1-97		4-97	
Compound	MCL	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)
TPH-mineral spirits	NE	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-
Benzene	1	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-
Toluene	150	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-
Ethyl-benzene	700	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-
Xylenes	1750	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-
1,1-Dichloroethene	6	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-
1,1-Dichloroethane	5	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-
1,2-Dichloroethane	0.5	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-
cis-1,2-Dichloroethene	6	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-
trans-1,2-Dichloroethene	10	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-
Chloroform	NE	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-
1,1,1-Trichloroethane	200	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-
Trichloroethene	5	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-
Tetrachloroethene	5	-	-	-	-	-	NS	-	NS	0.7	NS	-	NS	-	NS	-	-	NS	NS	-	-
Chlorobenzene	70	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-
1,2-Dichloropropane	5	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-
1,2-Dichlorobenzene	600	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-
1,4-Dichlorobenzene	5	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-
Trichlorofluoromethane	150	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-
Dichlorodifluoromethane	NE	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-
Chloroethane	NE	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-
Chlorotoluene	NE	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-
1,3-Dichlorobenzene	NE	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-
Trichloropropane	NE	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-
Vinyl chloride	0.5	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	-	-	NS	NS	-	-

Well No.		MW-2																				
Date		04-93	07-93	10-93	01-94	04-94	07-94	10-94	01-95	04-95	07-95	10-95	01-96	04-96	07-96	11-96		1-97		4-97	
Compound	MCL	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)
TPH-mineral spirits	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethyl-benzene	700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylenes	1750	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorobenzene	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane	150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroethane	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorotoluene	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloropropane	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Well No.		MW-3																				
Date		04-93	07-93	10-93	01-94	04-94	07-94	10-94	01-95	04-95	07-95	10-95	01-96	04-96	07-96	11-96		1-97		4-97	
Compound	MCL	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)
TPH-mineral spirits	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethyl-benzene	700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylenes	1750	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	6	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroform	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloroethene	5	0.7	-	-	-	-	-	-	-	-	-	-	-	-	-	1.6	4.9	-	-	-	-
Tetrachloroethene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorobenzene	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane	150	-	-	-	-	1.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroethane	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorotoluene	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloropropane	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Well No.		MW-4																				
Date		04-93	07-93	10-93	01-94	04-94	07-94	10-94	01-95	04-95	07-95	10-95	01-96	04-96	07-96	11-96		1-97		4-97	
Compound	MCL	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)
TPH-mineral spirits	NE	-	-	* 400	* 270	* 760	* 200	* 330	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	150	-	-	-	-	-	-	-	-	1.2	-	-	-	-	-	-	-	-	-	-	-
Ethyl-benzene	700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylenes	1750	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	6	-	-	-	-	-	-	-	0.7	0.8	5.2	4	3	6	4.8	5.1	5	5.7	6.4	5.6	5.7
1,1-Dichloroethane	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	6	-	-	-	-	-	-	-	-	-	11.8	-	17	10	11.3	5.1	9.2	4.4	7.2	7.5	9.7
trans-1,2-Dichloroethene	10	-	53	0.6	1.1	1.7	-	-	1.4	1	3.2	3	4	1.7	1.2	-	1.2	-	-	-	-
Chloroform	NE	7.6	-	1.9	-	5.0	-	-	-	-	-	3	6	1.3	1.8	1.6	1.8	1.9	2.3	1.5	1.4
1,1,1-Trichloroethane	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.1	-	1.2	1.2	1.4	-
Trichloroethene	5	2400	1100	-	790	1600	410	650	700	440	247	207	157	140	224	242.4	269	156.2	188.7	152.6	215.9
Tetrachloroethene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.1	-	-
Chlorobenzene	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.2	-	-	-	-	-
1,2-Dichloropropane	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichlorofluoromethane	150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroethane	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorotoluene	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloropropane	NE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	0.5	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-

Well No.		MW-5																				
Date		04-93	07-93	10-93	01-94	04-94	07-94	10-94	01-95	04-95	07-95	10-95	01-96	04-96	07-96	11-96		1-97		4-97	
Compound	MCL	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)
TPH-mineral spirits	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Benzene	1	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Toluene	150	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Ethyl-benzene	700	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Xylenes	1750	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
1,1-Dichloroethene	6	1.5	0.6	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
1,1-Dichloroethane	5	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
1,2-Dichloroethane	0.5	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
cis-1,2-Dichloroethene	6	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
trans-1,2-Dichloroethene	10	-	-	-	4.3	3.5	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Chloroform	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	1.4	NS	NS	NS	NS	NS	3.2	2.9
1,1,1-Trichloroethane	200	4	6	12	-	7.2	NS	NS	NS	9.1	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Trichloroethene	5	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	8.7	NS	NS	NS	NS	NS	3.6	3
Tetrachloroethene	5	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Chlorobenzene	70	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
1,2-Dichloropropane	5	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
1,2-Dichlorobenzene	600	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
1,4-Dichlorobenzene	5	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Trichlorofluoromethane	150	18	19	-	-	7.9	NS	NS	NS	-	NS	NS	NS	4.5	NS	NS	NS	NS	NS	-	-
Dichlorodifluoromethane	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Chloroethane	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Chlorotoluene	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
1,3-Dichlorobenzene	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Trichloropropane	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Vinyl chloride	0.5	-	-	-	-	-	NS	NS	NS	16	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-

Well No.		MW-6																				
Date		04-93	07-93	10-93	01-94	04-94	07-94	10-94	01-95	04-95	07-95	10-95	01-96	04-96	07-96	11-96		1-97		1-97	
Compound	MCL	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)
TPH-mineral spirits	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Benzene	1	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Toluene	150	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Ethyl-benzene	700	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Xylenes	1750	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
1,1-Dichloroethene	6	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
1,1-Dichloroethane	5	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
1,2-Dichloroethane	0.5	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
cis-1,2-Dichloroethene	6	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
trans-1,2-Dichloroethene	10	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Chloroform	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
1,1,1-Trichloroethane	200	-	5	1.3	-	1	NS	NS	NS	0.4	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Trichloroethene	5	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Tetrachloroethene	5	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Chlorobenzene	70	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
1,2-Dichloropropane	5	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
1,2-Dichlorobenzene	600	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
1,4-Dichlorobenzene	5	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Trichlorofluoromethane	150	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Dichlorodifluoromethane	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Chloroethane	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Chlorotoluene	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
1,3-Dichlorobenzene	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Trichloropropane	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Vinyl chloride	0.5	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-

Well No.		MW-8																			
Date		04-93	07-93	10-93	01-94	04-94	07-94	10-94	01-95	04-95	07-95	10-95	01-96	04-96	07-96	11-96		1-97		4-97	
Compound	MCL	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)
TPH-mineral spirits	NE	-	-	-	* 60	-	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Benzene	1	-	-	-	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	150	-	-	-	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethyl-benzene	700	-	-	-	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Xylenes	1750	-	-	-	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,1-Dichloroethene	6	-	-	-	-	-	NS	-	-	-	3.5	7	19	7.2	-	3.2	1.3	-	-	-	-
1,1-Dichloroethane	5	3.4	-	-	8.6	3.7	NS	5.5	-	-	6.2	5	7	2.9	-	16.7	4.3	-	-	3.6	4.8
1,2-Dichloroethane	0.5	7.4	5	5.2	11	7.1	NS	-	-	-	9.8	10	11	5.1	-	9.5	6	-	2.1	2.1	3.4
cis-1,2-Dichloroethene	6	-	-	-	-	-	NS	-	-	-	25.57	63	56	63	-	44.5	60.6	1.2	22.6	17	50
trans-1,2-Dichloroethene	10	-	1	-	-	-	NS	-	-	-	2.3	6	4	2.9	-	1.1	2.9	-	1.3	-	-
Chloroform	NE	-	-	-	-	-	NS	-	-	-	-	-	13	-	-	1.7	3.9	-	1.4	-	-
1,1,1-Trichloroethane	200	-	-	-	2.5	1.5	NS	-	-	-	-	-	-	-	1.3	2.5	-	-	-	-	-
Trichloroethene	5	14	31	15	22	18	NS	23	2.6	15	163	557	486	569	1352	339.2	1156.8	2.9	500.3	95	241.9
Tetrachloroethene	5	1.8	-	-	2	0.8	NS	-	-	0.4	3.2	2	2	1.1	2	3.4	1.6	22.5	13	4.9	4.8
Chlorobenzene	70	11	-	5.4	16	-	NS	2.4	1.2	-	6.9	4	6	3.3	-	23.3	5.8	-	1.2	3.4	4.6
1,2-Dichloropropane	5	0.6	-	-	-	0.8	NS	-	-	-	-	-	-	-	-	3	-	-	-	-	-
1,2-Dichlorobenzene	600	2.6	-	-	4.8	-	NS	-	-	-	3.8	3	5	2	-	24.4	5.7	-	1.4	3.3	4.5
1,4-Dichlorobenzene	5	-	-	-	-	-	NS	-	-	-	-	-	-	-	1.1	3.9	1.1	-	-	-	-
Trichlorofluoromethane	150	-	-	-	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane	NE	-	-	-	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chloroethane	NE	-	-	-	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorotoluene	NE	-	-	-	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	NE	-	-	-	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichloropropane	NE	-	-	-	-	-	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vinyl chloride	0.5	-	-	-	-	-	NS	-	-	-	2.6	4	5	1.6	6.3	9.8	3.5	-	-	-	-

Well No.		MW-9																			
Date		04-93	07-93	10-93	01-94	04-94	07-94	10-94	01-95	04-95	07-95	10-95	01-96	04-96	07-96	11-96		1-97		4-97	
Compound	MCL	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)
TPH-mineral spirits	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1536	1846
Benzene	1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	14.9	17.4
Toluene	150	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	13.3	17.2
Ethyl-benzene	700	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	13.5	23.2
Xylenes	1750	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	12.3	19.3
1,1-Dichloroethene	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	-
1,1-Dichloroethane	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	48	56.6
1,2-Dichloroethane	0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	8.2	7.6
cis-1,2-Dichloroethene	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	41.9	47.1
trans-1,2-Dichloroethene	10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	-
Chloroform	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	-
1,1,1-Trichloroethane	200	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	10.7	13.8
Trichloroethene	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	12.5	16.1
Tetrachloroethene	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	-
Chlorobenzene	70	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	28.6	44.5
1,2-Dichloropropane	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1.6	1.4
1,2-Dichlorobenzene	600	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	77.2	131.8
1,4-Dichlorobenzene	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	17.2	34.4
Trichlorofluoromethane	150	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	-
Dichlorodifluoromethane	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	-	-
Chloroethane	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	2	2
Chlorotoluene	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	9.9	19.2
1,3-Dichlorobenzene	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4.6	4.2
Trichloropropane	NE	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	4.6	4.2
Vinyl chloride	0.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	131.7	135.6

Well No.		MW-10 (Abandoned)																			
Date		04-93	07-93	10-93	01-94	04-94	07-94	10-94	01-95	04-95	07-95	10-95	01-96	04-96	07-96	11-96		1-97		4-97	
Compound	MCL	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)
TPH-mineral spirits	NE	-	-	-	-	NS	NS	NS	NS	NS	NS	Well Destroyed July 1995									
Benzene	1	-	-	-	-	NS	NS	NS	NS	NS	NS										
Toluene	150	-	-	-	-	NS	NS	NS	NS	NS	NS										
Ethyl-benzene	700	-	-	-	-	NS	NS	NS	NS	NS	NS										
Xylenes	1750	-	-	-	-	NS	NS	NS	NS	NS	NS										
1,1-Dichloroethene	6	-	2	-	-	NS	NS	NS	NS	NS	NS										
1,1-Dichloroethane	5	-	-	-	-	NS	NS	NS	NS	NS	NS										
1,2-Dichloroethane	0.5	-	-	-	-	NS	NS	NS	NS	NS	NS										
cis-1,2-Dichloroethene	6	-	-	-	-	NS	NS	NS	NS	NS	NS										
trans-1,2-Dichloroethene	10	-	17	3	0.4	NS	NS	NS	NS	NS	NS										
Chloroform	NE	1.2	0.5	-	-	NS	NS	NS	NS	NS	NS										
1,1,1-Trichloroethane	200	-	0.8	-	-	NS	NS	NS	NS	NS	NS										
Trichloroethene	5	45	54	42	67	NS	NS	NS	NS	NS	NS										
Tetrachloroethene	5	-	-	-	-	NS	NS	NS	NS	NS	NS										
Chlorobenzene	70	-	-	-	-	NS	NS	NS	NS	NS	NS										
1,2-Dichloropropane	5	-	-	-	-	NS	NS	NS	NS	NS	NS										
1,2-Dichlorobenzene	600	-	-	-	-	NS	NS	NS	NS	NS	NS										
1,4-Dichlorobenzene	5	-	-	-	-	NS	NS	NS	NS	NS	NS										
Trichlorofluoromethane	150	-	-	-	-	NS	NS	NS	NS	NS	NS										
Dichlorodifluoromethane	NE	-	-	-	-	NS	NS	NS	NS	NS	NS										
Chloroethane	NE	-	-	-	-	NS	NS	NS	NS	NS	NS										
Chlorotoluene	NE	-	-	-	-	NS	NS	NS	NS	NS	NS										
1,3-Dichlorobenzene	NE	-	-	-	-	NS	NS	NS	NS	NS	NS										
Trichloropropane	NE	-	-	-	-	NS	NS	NS	NS	NS	NS										
Vinyl chloride	0.5	-	-	-	-	NS	NS	NS	NS	NS	NS										

Well No.		MW-11																			
Date		04-93	07-93	10-93	01-94	04-94	07-94	10-94	01-95	04-95	07-95	10-95	01-96	04-96	07-96	11-96		1-97		4-97	
Compound	MCL	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)
TPH-mineral spirits	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	1	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Toluene	150	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethyl-benzene	700	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Xylenes	1750	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethene	6	-	2	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethane	5	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloroethane	0.5	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
cis-1,2-Dichloroethene	6	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
trans-1,2-Dichloroethene	10	-	3	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chloroform	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,1-Trichloroethane	200	-	2	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Trichloroethene	5	9.1	36	11	2.6	3.1	NS	NS	NS	3.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Tetrachloroethene	5	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chlorobenzene	70	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloropropane	5	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	600	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	5	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Trichlorofluoromethane	150	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dichlorodifluoromethane	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chloroethane	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chlorotoluene	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3-Dichlorobenzene	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Trichloropropane	NE	-	-	-	-	-	NS	NS	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Vinyl chloride	0.5	-	-	-	-	-	NS	NS	NS	1.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Well No.		MW-12																				
Date		04-93	07-93	10-93	01-94	04-94	07-94	10-94	01-95	04-95	07-95	10-95	01-96	04-96	07-96	11-96		1-97		4-97	
Compound	MCL	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)
TPH-mineral spirits	NE	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	NS	NS	NS	NS	-	-
Benzene	1	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	NS	NS	NS	NS	-	-
Toluene	150	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	NS	NS	NS	NS	-	-
Ethyl-benzene	700	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	NS	NS	NS	NS	-	-
Xylenes	1750	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	NS	NS	NS	NS	-	-
1,1-Dichloroethene	6	-	-	-	-	-	NS	-	NS	-	NS	2	NS	-	NS	NS	NS	NS	NS	-	-
1,1-Dichloroethane	5	2.6	2	-	2.3	1.7	NS	1.6	NS	3.8	NS	4	NS	2.9	NS	NS	NS	NS	NS	6.2	6.3
1,2-Dichloroethane	0.5	-	2	-	1.2	1.9	NS	-	NS	-	NS	3	NS	1.6	NS	NS	NS	NS	NS	3.5	3.5
cis-1,2-Dichloroethene	6	-	-	-	-	-	NS	-	NS	-	NS	5	NS	-	NS	NS	NS	NS	NS	1.1	1.4
trans-1,2-Dichloroethene	10	-	3	-	-	-	NS	-	NS	-	NS	2	NS	-	NS	NS	NS	NS	NS	-	-
Chloroform	NE	-	-	-	-	-	NS	-	NS	-	NS	-	NS	1.1	NS	NS	NS	NS	NS	-	-
1,1,1-Trichloroethane	200	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	NS	NS	NS	NS	-	-
Trichloroethene	5	17	30	34	11	44	NS	24	NS	59	NS	95	NS	7.5	NS	NS	NS	NS	NS	9.5	24.3
Tetrachloroethene	5	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	NS	NS	NS	NS	-	-
Chlorobenzene	70	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	NS	NS	NS	NS	-	-
1,2-Dichloropropane	5	-	-	-	-	-	NS	-	NS	-	NS	2	NS	-	NS	NS	NS	NS	NS	-	-
1,2-Dichlorobenzene	600	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	NS	NS	NS	NS	-	-
1,4-Dichlorobenzene	5	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	NS	NS	NS	NS	-	-
Trichlorofluoromethane	150	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	NS	NS	NS	NS	-	-
Dichlorodifluoromethane	NE	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	NS	NS	NS	NS	-	-
Chloroethane	NE	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	NS	NS	NS	NS	-	-
Chlorotoluene	NE	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	NS	NS	NS	NS	-	-
1,3-Dichlorobenzene	NE	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	NS	NS	NS	NS	-	-
Trichloropropane	NE	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	NS	NS	NS	NS	-	-
Vinyl chloride	0.5	-	-	-	-	-	NS	-	NS	-	NS	-	NS	-	NS	NS	NS	NS	NS	-	-

Well No.		MW-13																				
Date		04-93	07-93	10-93	01-94	04-94	07-94	10-94	01-95	04-95	07-95	10-95	01-96	04-96	07-96	11-96		1-97		5-97***	
Compound	MCL	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)	(ug/l)**	(ug/l)
TPH-mineral spirits	NE	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Benzene	1	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Toluene	150	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Ethyl-benzene	700	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Xylenes	1750	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
1,1-Dichloroethene	6	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
1,1-Dichloroethane	5	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
1,2-Dichloroethane	0.5	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
cis-1,2-Dichloroethene	6	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
trans-1,2-Dichloroethene	10	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Chloroform	NE	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
1,1,1-Trichloroethane	200	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Trichloroethene	5	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Tetrachloroethene	5	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Chlorobenzene	70	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
1,2-Dichloropropane	5	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
1,2-Dichlorobenzene	600	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
1,4-Dichlorobenzene	5	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Trichlorofluoromethane	150	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Dichlorodifluoromethane	NE	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Chloroethane	NE	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Chlorotoluene	NE	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
1,3-Dichlorobenzene	NE	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Trichloropropane	NE	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-
Vinyl chloride	0.5	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-	NS	NS	NS	NS	NS	-	-

LEGEND

MCL = Maximum contaminant level for primary drinking water constituents

NE = Not Established

NS = Not Sampled

- = Not Detected

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

** This sample was collected prior to purging the monitor well.

*** Well MW-13 was sampled on 4/10/97. Analytical results were anomalous therefore the well was resampled on 5/16/97.

NOTE

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

Table 7
Comparison of Pre-Purge and Post-Purge Groundwater Analytical Data
April 10, 1997
Safety-Kleen Service Center
400 Market Street
Oakland, California

Sample Name	Analyte																					
	TPHms	1,2-DCB	1,4-DCB	1,1-DCA	1,2-DCA	1,1-DCE	c1,2-DCE	1,1,1-TCA	TCE	PCE	CB	1,2-DCP	VC	CF	Benzene	Toluene	Ethylbenz	Xylenes	CE	CT	13DCB	TCP
	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
MW-1 Pre-Purge	<50	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<2
MW-1 Post Purge	<50	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<2
RPD	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
MW-2 Pre-Purge	<50	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<2
MW-2 Post Purge	<50	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<2
RPD	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
MW-3 Pre-Purge	<50	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<2
MW-3 Post Purge	<50	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<2
RPD	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
MW-4 Pre-Purge	<50	<1	<1	<1	<1	5.6	7.5	1.4	152.6	<1	<1	<1	<2	1.5	<1	<1	<1	<1	<1	<1	<1	<2
MW-4 Post Purge	<50	<1	<1	<1	<1	5.7	9.7	<1	215.9	<1	<1	<1	<2	1.4	<1	<1	<1	<1	<1	<1	<1	<2
RPD	0%	0%	0%	0%	0%	-2%	-26%	33%	-34%	0%	0%	0%	0%	7%	0%	0%	0%	0%	0%	0%	0%	0%
MW-5 No Purge	<50	<1	<1	<1	<1	<1	<1	<1	3.6	<1	<1	<1	<2	3.2	<1	<1	<1	<1	<1	<1	<1	<2
MW-5 Post Purge	<50	<1	<1	<1	<1	<1	<1	<1	3	<1	<1	<1	<2	2.9	<1	<1	<1	<1	<1	<1	<1	<2
RPD	0%	0%	0%	0%	0%	0%	0%	0%	18%	0%	0%	0%	0%	10%	0%	0%	0%	0%	0%	0%	0%	0%
MW-6 No Purge	<50	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<2
MW-6 Post Purge	<50	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<2
RPD	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
MW-8 Pre-Purge	<50	3.3	<1	3.6	2.1	<1	17	<1	95	4.9	3.4	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<2
MW-8 Post Purge	<50	4.5	<1	4.8	3.4	<1	50	<1	241.9	4.8	4.6	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<2
RPD	0%	-31%	0%	-29%	-47%	0%	-99%	0%	-87%	2%	-30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
MW-9 Pre-Purge	1536	77.2	17.2	48	8.2	<1	41.9	10.7	12.5	<1	28.6	1.6	131.7	<1	14.9	13.3	13.5	12.3	2	9.9	4.6	4.6
MW-9 Post Purge	1846	131.8	34.4	56.6	7.6	<1	47.1	13.8	16.1	<1	44.5	1.4	135.6	<1	17.4	17.2	23.2	19.3	2	19.2	4.2	4.2
RPD	-18%	-52%	-67%	-16%	8%	0%	-12%	-25%	-25%	0%	-44%	13%	-3%	0%	-15%	-26%	-53%	-44%	0%	-64%	9%	9%
MW-11 No Purge MW-11 Post Purge RPD	Not Sampled																					
MW-12 No Purge	<50	<1	<1	6.2	3.5	<1	1.1	<1	9.5	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<2
MW-12 Post Purge	<50	<1	<1	6.3	3.5	<1	1.4	<1	24.3	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<2
RPD	0%	0%	0%	0%	0%	0%	0%	0%	-88%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
MW-13 No Purge*	<50	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<2
MW-13 Post Purge*	<50	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<2
RPD	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
DUPLICATES:																						
MW-8A Pre-Purge	<50	3	<1	3.8	2.1	<1	17.8	<1	97	4.7	3.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2
MW-8A Post Purge	<50	4.6	<1	5.1	3.8	<1	52.5	<1	273.7	4.6	4.6	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2

Notes:
TPHms = Total Petroleum Hydrocarbons as Mineral Spirits
DCB = Dichlorobenzene
DCA = Dichloroethane
DCE = Dichloroethene
TCA = Trichloroethane
TCE = Trichloroethene
PCE = Tetrachloroethene
CB = Chlorobenzene
DCP = Dichloropropane
VC = Vinyl Chloride
CF = Chloroform
RPD = Relative Percent Difference = [(A-B) / { A+B) / 2}] *100
Ethylbenz = Ethylbenzene
CE = Chloroethane
CT = Chlorotoluene
13DCB = 1,3-Dichlorobenzene
TCP = Trichloropropane
* Sample collected May 16, 1997

APPENDIX A

Field Data Sheets

SECOR

HYDROLOGIC DATA SHEET

PROJECT:	SAFETY-KLEEN 400 MARKET STREET OAKLAND, CALIFORNIA	**PROJECT NO.:** 70005-009-07 **TASK:** 001	
DATE: 4/10/97	**TIME START:** 7:25	**TIME END:**	
EVENT:	QUARTERLY/SEMI-ANNUAL/ANNUAL MONITORING AND SAMPLING	**PERSONNEL:**	Gary & RAF

	WELL ID	TOC	DTW	DTP	PT	TD	ELEV.	COMMENTS
✓	MW-1	7.99	5.56	-	-	21.49	2.81	2"
✓	MW-2	8.20	6.31	-	-	29.21	2.40	2"
✓	MW-3	6.66	4.67	-	-	26.20	2.46	2"
✓	MW-4	10.32	7.40	-	-	25.40	3.33	2"
✓	MW-5	10.28	7.42	-	-	28.98	3.36	2"
✓	MW-6	8.97	6.44	-	-	28.97	3.17	2"
Dup ✓	MW-8	7.80	5.62	-	-	28.93	2.58	MW-18 2" Dup
✓	MW-9	8.21	6.04	6.02	.02		2.51	4"
✓	MW-11	7.91	5.46	-	-	6.50	2.91	Buried 2"
✓	MW-12	6.74	5.03	-	-	25.38	2.24	2"
	MW-13	8.08	6.09	-	-	6900	2.38	4"(deep well)
✓	RW-1	-	4.86	4.85	0.01			10"

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

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

SECOR International Incorporated

WATER SAMPLE FIELD DATA SHEET

Project #: 70005-009-07 | Purged By: GC, RR | Well I.D.: MW-9

Client Name: Safety Kleen | Sampled By: GC, RR | Sample I.D.: MW-9

Location: Oakland, CA | QA Samples: None

Date Purged 4-10-97 | Start (2400hr) 13:03 | End (2400hr) 13:10

Date Sampled 4-10-97 | Sample Time (2400hr) 13:10

Sample Type: ☒ Groundwater ☐ Other

Casing Diameter 2" X 3" ____ 4" ____ 5" ____ 6" ____ 8" ____ Other ____

Depth to Bottom (feet) = ____ | Purge (gal) = 1.0

Depth to Water (feet) = 6.04 | Purge Rate (☒ gal or ☐ liter/min) .10

FIELD MEASUREMENTS

Date	Time (2400hr)	Volume (gal)	Temp. (degrees C)	Conductivity (µmhos/cm)	pH (units)	Color (visual)	Turbidity (NTU)	D.O. (mg/l)	Depth (ft)
4-10	13:05	–	22.1	891	7.10	Brn	63	1.59	6.04
4-10	13:06	–	21.7	838	7.14	"	64	1.13	
4-10	13:07	–	21.3	848	7.14	"	71	0.87	6.25
4-10	13:08	–	20.9	853	7.14	"	71	0.75	
4-10	13:10	1.0	20.6	858	7.14	"	74	0.74	6.25

SAMPLE INFORMATION

Sample Depth to Water: 6.25 | Sample Turbidity: 74

Analyses: ____

Odor: Yes | Sample Vessel/Preservative: 8 HCL VOAs

PURGING EQUIPMENT

____ Bladder Pump ____ Bailer (Teflon)

____ Centrifugal Pump ____ Bailer (PVC)

____ Submersible Pump ____ Bailer (Stainless Steel)

X Peristaltic Pump ____ Dedicated ____

Other: ____

Pump Depth: ____

SAMPLING EQUIPMENT

____ Bladder Pump ____ Bailer (Teflon)

____ Centrifugal Pump ____ Bailer (PVC or disposable)

____ Submersible Pump ____ Bailer (Stainless Steel)

X Peristaltic Pump ____ Dedicated ____

Other: ____

Well Integrity: Good | Lock #: No

Remarks: Pre MW-9 12:55, Post MW-9 13:10

NOTE: Sample after three consecutive readings are within:

pH - ± 0.1, turbidity and DO = ± 10%, conductivity = ± 3%.

Signature: [signature] | Page 1 of 1

SECOR International Incorporated

WATER SAMPLE FIELD DATA SHEET

Project #: 70005-009-07 | Purged By: GL, RR | Well I.D.: MW-13

Client Name: SAFETY Kleen | Sampled By: GL RR | Sample I.D.: MW-13

Location: Oakland | QA Samples: None

Date Purged 4-10-97 | Start (2400hr) 14:03 | End (2400hr) 14:10

Date Sampled 4-10-97 | Sample Time (2400hr) 14:15

Sample Type: ☒ Groundwater ☐ Other

Casing Diameter 2" ____ 3" ____ 4" X 5" ____ 6" ____ 8" ____ Other ____

Depth to Bottom (feet) = 69.00 | Purge (gal) = 2

Depth to Water (feet) = 6.09 | Purge Rate (☑ gal or ☐ liter/min) 0.20

FIELD MEASUREMENTS

Date	Time (2400hr)	Volume (gal)	Temp. (degrees C)	Conductivity (µmhos/cm)	pH (units)	Color (visual)	Turbidity (NTU)	D.O. (mg/l)	Depth (ft)
4-10	14:03	—	20.9	697	8.02	CLEAR	16	2.70	—
4-10	14:04	—	20.9	688	8.13	"	14	2.12	—
4-10	14:35	—	21.0	680	8.26	"	12	1.12	12.35
4-10	14:22	—	21.5	679	8.28	"	10	0.94	—
4-10	14:10	2	21.9	694	8.30	"	9	0.86	12.90

SAMPLE INFORMATION

Sample Depth to Water: 12.90 | Sample Turbidity: 9

Analyses: ____

Odor: None | Sample Vessel/Preservative: 8 HCL VOAs

PURGING EQUIPMENT

____ Bladder Pump ____ Bailer (Teflon)

____ Centrifugal Pump ____ Bailer (PVC)

X Submersible Pump ____ Bailer (Stainless Steel)

____ Peristaltic Pump ____ Dedicated ____

Other: ____

Pump Depth: ____

SAMPLING EQUIPMENT

____ Bladder Pump ____ Bailer (Teflon)

____ Centrifugal Pump ____ Bailer (PVC or disposable)

X Submersible Pump ____ Bailer (Stainless Steel)

____ Peristaltic Pump ____ Dedicated ____

Other: ____

Well Integrity: Good | Lock #: None

Remarks: Pre MW-13 13:50 Post MW-13 – 14.15

NOTE: Sample after three consecutive roadings are within:

pH - ± 0.1, turbidity and DO = ± 10%, conductivity = ± 3%.

Signature: RR AM

SECOR International Incorporated

WATER SAMPLE FIELD DATA SHEET

Project #: 70005-009-07 | Purged By: GC, RR | Well I.D.: MW-8

Client Name: SAFETY Kleen | Sampled By: GC, RR | Sample I.D.: MW-8

Location: Oakland, CA | Dup | QA Samples: MW-18

Date Purged 4-10-97 | Start (2400hr) 12:00 | End (2400hr) 12:19

Date Sampled 4-10-97 | Sample Time (2400hr) 12:20

Sample Type: ☒ Groundwater ☐ Other

Casing Diameter 2" X 3" ____ 4" ____ 5" ____ 6" ____ 8" ____ Other ____

Depth to Bottom (feet) = 28.93 | Purge (gal) = 1.0

Depth to Water (feet) = 5.62 | Purge Rate (☒ gal or ☐ liter/min) .10

FIELD MEASUREMENTS

Date	Time (2400hr)	Volume (gal)	Temp. (degrees C)	Conductivity (µmhos/cm)	pH (units)	Color (visual)	Turbidity (NTU)	D.O. (mg/l)	Depth (ft)
4-10	12:03	-	18.2	514	6.54	Clear	9	1.91	5.62
4-10	12:06	-	18.2	521	6.54	Clear	9	1.39	5.71
4-10	12:09	-	18.2	523	6.59	Clear	9	.89	5.73
4-10	12:12	-	18.2	531	6.59	Clear	7	.69	5.73
4-10	12:15	-	18.2	530	6.60	Clear	8	.68	5.74
4-10	12:19	1.0	18.2	536	6.60	Clear	7	.59	5.74

SAMPLE INFORMATION

Sample Depth to Water: 5.74 | Sample Turbidity: 7

Analyses: ____

Odor: None | Sample Vessel/Preservative: 16 HCL VOAs

PURGING EQUIPMENT

____ Bladder Pump ____ Bailer (Teflon)

____ Centrifugal Pump ____ Bailer (PVC)

____ Submersible Pump ____ Bailer (Stainless Steel)

X Peristaltic Pump ____ Dedicated ____

Other: ____

Pump Depth: ____

SAMPLING EQUIPMENT

____ Bladder Pump ____ Bailer (Teflon)

____ Centrifugal Pump ____ Bailer (PVC or disposable)

____ Submersible Pump ____ Bailer (Stainless Steel)

X Peristaltic Pump ____ Dedicated ____

Other: ____

Well Integrity: Good | Lock #: MASTER

Remarks: PRE MW-8 - 12:00 pre MW-18 - 14:00 post MW-8 - 12:20 post MW-18 14:20

NOTE: Sample after three consecutive roadings are within:

pH - ± 0.1, turbidity and DO = ± 10%, conductivity = ± 3%.

Signature: JRC RM

SECOR International Incorporated

WATER SAMPLE FIELD DATA SHEET

Project #: 70005-009-07 Purged By: GC RR Well I.D.: MW-6

Client Name: Safety Kleen Sampled By: GC RR Sample I.D.: MW-6

Location: Oakland QA Samples: None

Date Purged 4-10-97 Start (2400hr) 11:00 End (2400hr) 11:20

Date Sampled 4-10-97 Sample Time (2400hr) 11:20

Sample Type: ☒ Groundwater ☐ Other

Casing Diameter 2" X 3" ____ 4" ____ 5" ____ 6" ____ 8" ____ Other ____

Depth to Bottom (feet) = 28.97 Purge (gal) = 2 GLS

Depth to Water (feet) = 6.44 Purge Rate (☒ gal or ☐ liter/min) .10

FIELD MEASUREMENTS

Date	Time (2400hr)	Volume (gal)	Temp. (degrees C)	Conductivity (µmhos/cm)	pH (units)	Color (visual)	Turbidity (NTU)	D.O. (mg/l)	Depth (ft)
4-10	11:07	-	17.8	357	6.36	Clear	3	3.54	6.54
4-10	11:10	-	17.8	350	6.34	Clear	3	3.40	6.54
4-10	11:13	-	17.8	349	6.36	Clear	2	3.43	6.57
4-10	11:17	-	17.8	342	6.38	Clear	3	3.39	6.57
4-10	11:20	2 GLS	17.8	339	6.39	Clear	2	3.39	6.57

SAMPLE INFORMATION

Sample Depth to Water: 6.57 Sample Turbidity: 2

Analyses: ____

Odor: None Sample Vessel/Preservative: 8 HCL VOAS

PURGING EQUIPMENT

____Bladder Pump ____Bailer (Teflon)

____Centrifugal Pump ____Bailer (PVC)

____Submersible Pump ____Bailer (Stainless Steel)

X Peristaltic Pump ____Dedicated ____

Other: ____

Pump Depth: ____

SAMPLING EQUIPMENT

____Bladder Pump ____Bailer (Teflon)

____Centrifugal Pump ____Bailer (PVC or disposable)

____Submersible Pump ____Bailer (Stainless Steel)

X Peristaltic Pump ____Dedicated ____

Other: ____

Well Integrity: Good Lock #: MASTER

Remarks: pre MW-6 11:00 post MW-6 11:20

NOTE: Sample after three consecutive roadings are within:

pH - ± 0.1, turbidity and DO = ± 10%, conductivity = ± 3%.

Signature: JRC JM

SECOR International Incorporated

WATER SAMPLE FIELD DATA SHEET

Project #: 70005-004-07 | Purged By: GC RR | Well I.D.: MW-5

Client Name: Safety Kleen | Sampled By: GC RR | Sample I.D.: MW-5

Location: Oakland CA | QA Samples: None

Date Purged 4-10-97 | Start (2400hr) 10:32 | End (2400hr) 10:50

Date Sampled 4-10-97 | Sample Time (2400hr) 10:50

Sample Type: ☒ Groundwater ☐ Other

Casing Diameter 2" X 3" ____ 4" ____ 5" ____ 6" ____ 8" ____ Other ____

Depth to Bottom (feet) = 28.98 | Purge (gal) = 0.75 GLS.

Depth to Water (feet) = 7.42 | Purge Rate (☒ gal or ☐ liter/min) 1.0

FIELD MEASUREMENTS

Date	Time (2400hr)	Volume (gal)	Temp (degrees C)	Conductivity (µmhos/cm)	pH (units)	Color (visual)	Turbidity (NTU)	D.O. (mg/l)	Depth (ft)
4-10	10:41	—	17.3	778	6.37	Clear	20	8.80	7.42
4-10	10:42	—	17.3	725	6.33	Clear	22	8.73	—
4-10	10:44	—	17.3	722	6.29	Clear	24	8.64	7.48
4-10	10:45	—	17.3	719	6.26	"	21	8.41	—
4-10	10:50	0.75	17.4	719	6.27	"	20	8.36	7.50

SAMPLE INFORMATION

Sample Depth to Water: 7.50 | Sample Turbidity: 20

Analyses: ____

Odor: None | Sample Vessel/Preservative: 8 HCL

PURGING EQUIPMENT

____ Bladder Pump ____ Bailer (Teflon)

____ Centrifugal Pump ____ Bailer (PVC)

____ Submersible Pump ____ Bailer (Stainless Steel)

X Peristaltic Pump ____ Dedicated ____

Other: ____

Pump Depth: ____

SAMPLING EQUIPMENT

____ Bladder Pump ____ Bailer (Teflon)

____ Centrifugal Pump ____ Bailer (PVC or disposable)

____ Submersible Pump ____ Bailer (Stainless Steel)

X Peristaltic Pump ____ Dedicated ____

Other: ____

Well Integrity: Good | Lock #: Master

Remarks: Pre Purge MW-5 10:35 Post MW-5 10:50

NOTE: Sample after three consecutive readings are within:

pH - ± 0.1, turbidity and DO = ± 10%, conductivity = ± 3%.

Signature: GRC RM

SECOR International Incorporated

WATER SAMPLE FIELD DATA SHEET

Project #: 70005-009-07 | Purged By: GC RR | Well I.D.: MW-4

Client Name: Safety Kleen | Sampled By: GC RR | Sample I.D.: MW-4

Location: Oakland, CA | QA Samples: None

Date Purged 4-10-97 | Start (2400hr) 10:12 | End (2400hr) 10:24

Date Sampled 4-10-97 | Sample Time (2400hr) 10:25

Sample Type: ☒ Groundwater ☐ Other

Casing Diameter 2" X 3" ____ 4" ____ 5" ____ 6" ____ 8" ____ Other ____

Depth to Bottom (feet) = 25.40 | Purge (gal) = 3/4

Depth to Water (feet) = 7.40 | Purge Rate (☒ gal or ☐ liter/min) .10

FIELD MEASUREMENTS

Date	Time (2400hr)	Volume (gal)	Temp. (degrees C)	Conductivity (µmhos/cm)	pH (units)	Color (visual)	Turbidity (NTU)	D.O. (mg/l)	Depth (ft)
4-10	10:13	–	17.4	915	6.35	Clear	10	2.25	7.60
4-10	10:16	–	17.4	909	6.28	Clear	8	1.90	7.60
4-10	10:19	–	17.4	900	6.25	Clear	8	1.75	7.60
4-10	10:21	–	17.4	895	6.24	Clear	7	1.65	7.60
4-10	10:24	.75							

SAMPLE INFORMATION

Sample Depth to Water: 7.60 | Sample Turbidity: 7

Analyses: ____

Odor: None | Sample Vessel/Preservative: 8 HCL VOAS

PURGING EQUIPMENT

____Bladder Pump ____Bailer (Teflon)

____Centrifugal Pump ____Bailer (PVC)

____Submersible Pump ____Bailer (Stainless Steel)

X Peristaltic Pump ____Dedicated ____

Other: ____

Pump Depth: ____

SAMPLING EQUIPMENT

____Bladder Pump ____Bailer (Teflon)

____Centrifugal Pump ____Bailer (PVC or disposable)

____Submersible Pump ____Bailer (Stainless Steel)

X Peristaltic Pump ____Dedicated ____

Other: ____

Well Integrity: Good | Lock #: Master

Remarks: pre MW-4 -10:10 post MW-4 -10:25

NOTE: Sample after three consecutive roadings are within:

pH - ± 0.1, turbidity and DO = ± 10%, conductivity = ± 3%.

Signature: GRC AM

SECOR International Incorporated

WATER SAMPLE FIELD DATA SHEET

Project #: 70005-005 | Purged By: GC/AA | Well I.D.: MW-1

Client Name: SLC | Sampled By: GC/AA | Sample I.D.: Pre-MW-1 Post-MW-1

Location: OAKLAND | QA Samples: None

Date Purged 4/10/97 | Start (2400hr) 9:40 | End (2400hr) 9:56

Date Sampled 4/10/97 | Sample Time (2400hr) Post MW-1 10:00

Sample Type: ☑ Groundwater ☐ Other

Casing Diameter 2" / 3" ____ 4" ____ 5" ____ 6" ____ 8" ____ Other ____

Depth to Bottom (feet) = 21.49 | Purge (gal) = 1.0

Depth to Water (feet) = 5.56 | Purge Rate (☑ gal or ☐ liter/min) 0.10 GL/min

FIELD MEASUREMENTS

Date	Time (2400hr)	Volume (gal)	Temp. (degrees C)	Conductivity (µmhos/cm)	pH (units)	Color (visual)	Turbidity (NTU)	D.O. (mg/l)	Depth (ft)
4/10	9:44	-	16.8	1300	7.11	clear	13	9.53	5.86
"	9:47	-	16.8	1300	6.97	Clear	9	1.96	6.06
"	9:50	-	16.7	1300	6.88	Clear	4	1.62	6.08
"	9:53	-	16.7	1300	6.83	Clear	5	1.47	6.10
4/10	9:56	1.0	16.7	1290	6.79	Clear	4	1.48	6.14

SAMPLE INFORMATION

Sample Depth to Water: 6.14 | Sample Turbidity: 4

Odor: None | Analyses: ____ | Sample Vessel/Preservative: 8 HCL VOAs

PURGING EQUIPMENT

____Bladder Pump ____Bailer (Teflon)

____Centrifugal Pump ____Bailer (PVC)

____Submersible Pump ____Bailer (Stainless Steel)

X Peristaltic Pump ____Dedicated ____

Other: ____

Pump Depth: ____

SAMPLING EQUIPMENT

____Bladder Pump ____Bailer (Teflon)

____Centrifugal Pump ____Bailer (PVC or disposable)

____Submersible Pump ____Bailer (Stainless Steel)

X Peristaltic Pump ____Dedicated ____

Other: ____

Well Integrity: Good | Lock #: Master

Remarks: Pre-MW-1 9:40 Post MW-1 10:00

NOTE: Sample after three consecutive roadings are within:

pH - ± 0.1, turbidity and DO = ± 10%, conductivity = ± 3%.

Signature: GC AA

SECOR International Incorporated

WATER SAMPLE FIELD DATA SHEET

Project #: 70005-004-07 Purged By: GC RR Well I.D.: MW-2

Client Name: S/K Sampled By: GC RR Sample I.D.: MW-2

Location: OAKLAND CA QA Samples: None

Date Purged 4-10-97 Start (2400hr) 8:52 End (2400hr) 9:18

Date Sampled 4-10-97 Sample Time (2400hr) 9:20 Post Purge

Sample Type: ☑ Groundwater ☐ Other

Casing Diameter 2" X 3" ____ 4" ____ 5" ____ 6" ____ 8" ____ Other ____

Depth to Bottom (feet) = 29.21 Purge (gal) = 1.0

Depth to Water (feet) = 6.31 Purge Rate (☑ gal or ☐ liter/min) .10

FIELD MEASUREMENTS

Date	Time (2400hr)	Volume (gal)	Temp. (degrees C)	Conductivity (μmhos/cm)	pH (units)	Color (visual)	Turbidity (NTU)	D.O. (mg/l)	Depth (ft)
4-10	9:01	-	18.2	327	6.98	Clear	23	9.80	6.80
4-10	9:04	-	18.2	331	6.90	clear	24	9.73	6.80
4-10	9:07	-	18.3	331	6.83	Clear	25	6.01	6.84
4-10	9:11	-	18.2	337	6.80	Clear	29	3.17	6.84
4-10	9:15	-	18.2	338	6.79	clear	30	3.43	6.90
4-10	9:17	1.0	18.2	347	6.79	clear	33	3.18	6.90

SAMPLE INFORMATION

Sample Depth to Water: 6.86 Sample Turbidity: 33

Analyses: ____

Odor: None Sample Vessel/Preservative: 8 HCL VOAs

PURGING EQUIPMENT

____Bladder Pump ____Bailer (Teflon)

____Centrifugal Pump ____Bailer (PVC)

____Submersible Pump ____Bailer (Stainless Steel)

X Peristaltic Pump ____Dedicated ____

Other: ____

Pump Depth: ____

SAMPLING EQUIPMENT

____Bladder Pump ____Bailer (Teflon)

____Centrifugal Pump ____Bailer (PVC or disposable)

____Submersible Pump ____Bailer (Stainless Steel)

X Peristaltic Pump ____Dedicated ____

Other: ____

Well Integrity: Good Lock #: None

Remarks: Pre MW-2 - 8:50 Post MW-2

NOTE: Sample after three consecutive roadings are within:

pH - ± 0.1, turbidity and DO = ± 10%, conductivity = ± 3%.

Signature: [signature] Page 1 of 1

SECOR International Incorporated

WATER SAMPLE FIELD DATA SHEET

Project #: 70005-009-07 Purged By: GC RR Well I.D.: MW-3

Client Name: SIK Sampled By: GC RR Sample I.D.: MW-3

Location: Oakland QA Samples: No.e

Date Purged 4-10-97 Start (2400hr) 8:25 End (2400hr) 8:40

Date Sampled 4-10-97 Sample Time (2400hr) Post MW-3 8:40

Sample Type: ☒ Groundwater ☐ Other Pre-MW-3 8:20

Casing Diameter 2" X 3" ____ 4" ____ 5" ____ 6" ____ 8" ____ Other ____

Depth to Bottom (feet) = 26.20 Purge (gal) = 1.6

Depth to Water (feet) = 4.67 Purge Rate (☒ gal or ☐ liter/min) .10

FIELD MEASUREMENTS

Date	Time (2400hr)	Volume (gal)	Temp. (degrees C)	Conductivity (µmhos/cm)	pH (units)	Color (visual)	Turbidity (NTU)	D.O. (mg/l)	Depth (ft)
4-10	8:28	-	16.5	343	6.67	clear	10	8.39	4.67
4-10	8:29	-	16.7	313	6.55	"	11	8.31	-
4-10	8:30	-	16.9	288	6.48	"	16	8.26	-
4-10	8:31	-	16.9	273	6.42	"	25	8.16	5.36
4-10	8:32	-	17.0	251	6.38	"	32	8.13	-
"	8:34	-	17.0	238	6.35	"	41	8.09	-
"	8:38	-	17.1	230	6.32	"	47	8.05	-
"	8:40	1.5	17.1	227	6.34	"	59	8.03	5.39

SAMPLE INFORMATION

Sample Depth to Water: 5.39 Sample Turbidity: 59

Odor: None Analyses: ____

Sample Vessel/Preservative: 8 HCL VOAs

PURGING EQUIPMENT

____ Bladder Pump ____ Bailer (Teflon)

____ Centrifugal Pump ____ Bailer (PVC)

____ Submersible Pump ____ Bailer (Stainless Steel)

X Peristaltic Pump ____ Dedicated ____

Other: ____

Pump Depth: ____

SAMPLING EQUIPMENT

____ Bladder Pump ____ Bailer (Teflon)

____ Centrifugal Pump ____ Bailer (PVC or disposable)

____ Submersible Pump ____ Bailer (Stainless Steel)

X Peristaltic Pump ____ Dedicated ____

Other: ____

Well Integrity: Good Lock #: None

Remarks: Pre Purge Sample 8:20

NOTE: Sample after three consecutive roadings are within:

pH - ± 0.1, turbidity and DO = ± 10%, conductivity = ± 3%.

Signature: [signature] Page 1 of 1

SECOR International Incorporated

WATER SAMPLE FIELD DATA SHEET

Project #: 7005-004-07 Purged By: GC / RN Well I.D.: MW-12

Client Name: SIL Sampled By: GC / RN Sample I.D.: MW-12 MS

Location: OAKLAND. QA Samples: _____

Date Purged 4/10/97 Start (2400hr) 7:45 End (2400hr) 7:55

Date Sampled 4/10/97 Sample Time (2400hr) 8:00 post

Sample Type: ☑ Groundwater ☐ Other MS MW-12 7:35

Casing Diameter 2" ✓ 3" _____ 4" _____ 5" _____ 6" _____ 8" _____ Other _____

Depth to Bottom (feet) = 25.38 Purge (gal) = 1.0

Depth to Water (feet) = 5.03 Purge Rate (☒ gal or ■ liter/min) .10

FIELD MEASUREMENTS

Date	Time (2400hr)	Volume (gal)	Temp. (degrees C)	Conductivity (µmhos/cm)	pH (units)	Color (visual)	Turbidity (NTU)	D.O. (mg/l)	Depth (ft)
4/10	7:45	–	16.3	1,240	6.53	CLOW	17	7.98	5.05
4	7:50	–	16.5	1,230	6.44	"	15	7.89	5.12
4	7155	–	16.7	1,220	6.82	4	14	7.73	–
4	8:00	16L	16.8	1,210	6.84	"	14	7.61	5.12

SAMPLE INFORMATION

Sample Depth to Water: 5.12 Sample Turbidity: 14 NTU

Analyses: _____

Odor: NONE Sample Vessel/Preservative: 8 HCL VOAs

PURGING EQUIPMENT

___Bladder Pump ___Bailer (Teflon)

___Centrifugal Pump ___Bailer (PVC)

___Submersible Pump ___Bailer (Stainless Steel)

✓ Peristaltic Pump ___Dedicated _____

Other: _____

Pump Depth: _____

SAMPLING EQUIPMENT

___Bladder Pump ___Bailer (Teflon)

___Centrifugal Pump ___Bailer (PVC or disposable)

___Submersible Pump ___Bailer (Stainless Steel)

✓ Peristaltic Pump ___Dedicated _____

Other: _____

Well Integrity: OK Lock #: MASTER

Remarks: _____

NOTE: Sample after three consecutive roadings are within:

pH - ± 0.1, turbidity and DO = ± 10%, conductivity = ± 3%.

Signature: JRC RN

Chain-of-Custody Number:

SECOR Chain-of-Custody Record

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

Field Office: SECOR
Address: 1390 Willow Pass Road Suite 560
Concord, CA 94520

Job Name: Safety Kleen
Location: 400 Market St.
Oakland, CA

Project # 70005-009-07 Task # 001
Project Manager Greg Hoehn
Laboratory Safety Kleen
Turnaround Time Standard

Sampler's Name Gary Cliff
Sampler's Signature [signature]

Analysis Request

Sample ID	Date	Time	Matrix	HCID	TPHg/BTEX/WTPH-G 8015 (modified)/8020	TPHd/WTPH-D 8015 (modified)	TPH 418.1/WTPH 418.1	Aromatic Volatiles 602/8020	Volatile Organics 624/8240 (GC/MS)	Halogenated Volatiles 601/8010	Semi-volatile Organics 625/8270 (GC/MS)	Pesticides/PCBs 608/8080	Total Lead 7421	Priority Pollutant Metals (13)	TCLP Metals	[illegible] 8015	[illegible] 8020	Comments/ Instructions	Number of Containers
Post MW-9	4-10	13:10	H2O							X						X	X		4
Pre MW-13	4-10	13:50	H2O							X						X	X		4
Post MW-13	4-10	14:15	H2O							X						X	X		4

Special Instructions/Comments:

Relinquished by: SECOR	Received by: [signature]	Sample Receipt	
Sign [signature]	Sign	Total no. of containers:	12
Print G. Cliff / A. [illegible]	Print	Chain of custody seals:	
Company SECOR	Company FedEx	Rec'd. in good condition/cold:	
Time 15:54 Date 4/10/97	Time 15:54 Date 4-10-97	Conforms to record:	
Relinquished by:	Received by:	Client: SECOR	
Sign	Sign	Client Contact: Greg Hoehn	
Print	Print	Client Phone: (510) 686-9780	
Company	Company		
Time Date	Time Date		

Chain-of Custody Number:

SECOR Chain-of Custody Record

Field Office: SECOR
Address: 1390 Willow Pass Road Suite 360
Concord CA 94520

☐ Additional documents are attached, and are a part of this Record.
Job Name: Safety Kleen
Location: 400 Market Street
Oakland, CA

Project # 70005-009-07 Task # 001
Project Manager Greg Hoehn
Laboratory Safety Kleen
Turnaround Time Standard

Sampler's Name Mary Cliff
Sampler's Signature [illegible]

Analysis Request

Sample ID	Date	Time	Matrix	HCID	TPHg/BTEX/WTPH-G 8015 (modified)/8020	TPHd/WTPH-D 8015 (modified)	TPH 418.1/WTPH 418.1	Aromatic Volatiles 602/8020	Volatile Organics 624/8240 (GC/MS)	Halogenated Volatiles 601/8010	Semi-volatile Organics 625/8270 (GC/MS)	Pesticides/PCBs 608/8080	Total Lead 7421	Priority Pollutant Metals (13)	TCLP Metals	TPH as MS 8015 Purge [illegible]	BTEX [illegible] Method 8020	Comments/ Instructions	Number of Containers
Post MW-4	4-10	1025	H2O							X						X	X		4
Pre MW-5	4-10	10:35	H2O							X						X	X		4
Post MW-5	4-10	10:50	H2O							X						X	X		4
Pre MW-6	4-10	11:00	H2O							X						X	X		4
Post MW-6	4-10	11:20	H2O							X						X	X		4
Pre MW-8	4-10	12:00	H2O							X						X	X		4
Post MW-8	4-10	12:20	H2O							X						X	X		4
Pre MW-18	4-10	14:00	H2O							X						X	X		4
Post MW-18	4-10	14:20	H2O							X						X	X		4
Pre MW-9	4-10	12:55	H2O							X						X	X		4

Special Instructions/Comments:

Relinquished by: SECOR
Sign [illegible]
Print G. Cliff / R. [illegible]
Company SECOR
Time 15:54 Date 4/10/97

Received by: [illegible]
Sign [illegible]
Print
Company FedEx
Time 15:54 Date 4-10-97

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

Relinquished by:
Sign
Print
Company
Time Date

Received by:
Sign
Print
Company
Time Date

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

SECOR CUSTREC Rev. 1/95

Date: 4/10/97 Page 2 of 3

Chain-of Custody Number:

SECOR Chain-of Custody Record

Field Office: SECOR
Address: 1390 Willow Pass Road Suite 360
Concord, CA 94520

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

Job Name: Safety Kleen
Location: 400 Market Street
Oakland CA

Project # 70005-009-07 Task # 001
Project Manager Greg Hoehn
Laboratory Safety Kleen
Turnaround Time Standard

Sampler's Name [illegible]
Sampler's Signature [illegible]

Analysis Request

Sample ID	Date	Time	Matrix	HCID	TPHg/BTEX/WTPH-G 8015 (modified)/8020	TPHd/WTPH-D 8015 (modified)	TPH 418.1/WTPH 418.1	Aromatic Volatiles 602/8020	Volatile Organics 624/8240 (GC/MS)	Halogenated Volatiles 601/8010	Semi-volatile Organics 625/8270 (GC/MS)	Pesticides/PCBs 608/8080	Total Lead 7421	Priority Pollutant Metals (13)	TCLP Metals	TPH as GAS 8015 Purge + TRAP	BTEX by [illegible] 8020	Comments/ Instructions	Number of Containers
Pre MW-12	4-10	7:35	W							X						X	X		4
Post MW-12	4-10	8:00	"							X						X	X		4
Pre MW-3	4-10	8:20	"							X						X	X		4
Post MW-3	4-10	8:40	"							X						X	X		4
Pre MW-2	4-10	8:50	"							X						X	X		4
Post MW-2	4-10	9:20	"							X						X	X		4
Pre - MW-1	4-10	9:40	"							X						X	X		4
Post MW-1	4-10	10:00	"							X						X	X		4
Pre MW-4	4-10	10:10	"							X						X	X		4
Trip Blank																			2

Special Instructions/Comments:

Relinquished by: SECOR	Received by: [illegible]	Sample Receipt	
Sign [signature]	Sign [signature]	Total no. of containers:	38
Print G. Clark [illegible]	Print	Chain of custody seals:	
Company SECOR	Company Fed Ex	Rec'd. in good condition/cold:	
Time 15:54 Date 4/10/97	Time 15:54 Date 4-10-97	Conforms to record:	

Relinquished by:	Received by:	
Sign	Sign	Client: SECOR
Print	Print	Client Contact: Greg Hoehn
Company	Company	
Time Date	Time Date	Client Phone: (510) 686-9780

SECOR CUSTREC Rev. 1/95

Date: 4 / 10 / 97 Page 1 of 3

APPENDIX B

Laboratory Reports - Soil Vapor Extraction System Samples

Superior Analytical Laboratory

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

Attn: GREG HOEHN

Date: March 17, 1997

Laboratory Number : 22516

Project Number/Name : 70005-0098-08
Facility/Site : SAFTEY KLEEN
400 MARKET STREET
OAKLAND CA

Dear GREG HOEHN:

Attached is Superior Analytical Laboratory report for the samples received on March 7, 1997. This report has been reviewed and approved for release. Following the cover letter is the Case Narrative detailing sample receipt and analysis. Also enclosed is a copy of the original Chain-of-Custody record confirming receipt of samples.

Please note that any unused portion of the sample will be discarded after April 6, 1997, unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions, please contact our Laboratory at (510) 313-0850.

Sincerely,

Afsaneh Salimpour
Project Manager

Superior
Analytical Laboratory

CASE NARRATIVE

SECOR
Project Number/Name: 70005-0098-08
Laboratory Number: 22516

Sample Receipt

Two air samples were received by
Superior Analytical Laboratory on March 7, 1997.

Cooler temperature was R.T.°C

No abnormalities were noted with sample recieving.

Sample Analysis

The samples were analysed for methods 8010, 8015M and 8020.

Customer Service: (800) 521-6109 • Laboratory: (510) 313-0850 • Facsimile: (510) 229-0916
Post Office Box 2648 • 835 Arnold Drive • Suite #106 • Martinez, California 94553
1555 Burke Street • Suite A • San Francisco, California 94124

Superior
Analytical Laboratory

SE..R
Attn: GREG HOEHN

Project 70005-0098-08
Reported on March 17, 1997

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

Chronology

Laboratory Number 22516

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
INF	03/07/97	03/07/97	03/10/97	03/10/97	DC102.37	01
EFF	03/07/97	03/07/97	03/10/97	03/10/97	DC102.37	02

QC Samples

QC Batch #	QC Sample ID	Type	Ref.	Matrix	Extract.	Analyzed
DC102.37-02	Laboratory Spike	LS		Water	03/10/97	03/10/97
DC102.37-07	CPC-3	MS	22522-03	Water	03/10/97	03/10/97
DC102.37-08	CPC-3	MSD	22522-03	Water	03/10/97	03/10/97
DC102.37-09	Method Blank	MB		Water	03/10/97	03/10/97

Superior Analytical Laboratory

SE
Attn: GREG HOEHN

Project 70005-0098-08
Reported on March 17, 1997

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

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22516-01	INF	Air	1.0	-
22516-02	EFF	Air	1.0	-

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

Compound	22516-01 Conc. ug/L	RL	22516-02 Conc. ug/L	RL
Benzene	ND	0.5	ND	0.5
Toluene	ND	0.5	ND	0.5
Ethyl Benzene	ND	0.5	ND	0.5
Xylenes	ND	0.5	ND	0.5
>> Surrogate Recoveries (%) <<				
Trifluorotoluene (SS)	103		101	

Superior
Analytical Laboratory

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

Quality Assurance and Control Data

Laboratory Number: 22516
Method Blank(s)

	DC102.37-09 Conc. ug/L	RL
Benzene	ND	0.5
Toluene	ND	0.5
Ethyl Benzene	ND	0.5
Xylenes	ND	0.5
>> Surrogate Recoveries (%) <<		
Trifluorotoluene (SS)	90	

Superior
Analytical Laboratory

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

Quality Assurance and Control Data

Laboratory Number: 22516

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L)						
DC102.37 02 / - Laboratory Control Spikes						
Benzene		20	20	100	65-125	
Toluene		20	20	100	65-125	
Ethyl Benzene		20	19	95	65-125	
Xylenes		60	59	98	65-125	
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				90	50-150	
For Water Matrix (ug/L)						
DC102.37 07 / 08 - Sample Spiked: 22522 - 03						
Benzene	ND	20	20/19	100/95	65-125	5
Toluene	ND	20	20/19	100/95	65-125	5
Ethyl Benzene	ND	20	19/19	95/95	65-125	0
Xylenes	ND	60	58/56	97/93	65-125	4
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				98/81	50-150	

Definitions:

ND = Not Detected
RL = Reporting Limit
NA = Not Analysed
RPD = Relative Percent Difference
ug/L = parts per billion (ppb)
mg/L = parts per million (ppm)
ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

Superior

Analytical Laboratory

SE[illegible]
At[illegible] GREG HOEHN

Project 70005-0098-08
Reported on March 17, 1997

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

Chronology

Laboratory Number 22516

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
INF	03/07/97	03/07/97	03/10/97	03/10/97	DC102.37	01
EFF	03/07/97	03/07/97	03/10/97	03/10/97	DC102.37	02

QC Samples

QC Batch #	QC Sample ID	Type	Ref.	Matrix	Extract.	Analyzed
DC102.37-03	Method Blank	MB		Water	03/10/97	03/10/97
DC102.37-04	Laboratory Spike	LS		Water	03/10/97	03/10/97
DC102.37-05	CPC-3	MS	22522-03	Water	03/10/97	03/10/97
DC102.37-15	CPC-3	MSD	22522-03	Water	03/10/97	03/10/97

Superior Analytical Laboratory

Sl
Attn: GREG HOEHN

Project 70005-0098-08
Reported on March 17, 1997

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

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22516-01	INF	Air	1.0	-
22516-02	EFF	Air	1.0	-

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

Compound	22516-01 Conc. ug/L	RL	22516-02 Conc. ug/L	RL
Gasoline	ND	50	ND	50
Mineral Spirits	ND	50	ND	50
>> Surrogate Recoveries (%) <<				
Trifluorotoluene (SS)	103		101	

Superior
Analytical Laboratory

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

Quality Assurance and Control Data

Laboratory Number: 22516
Method Blank(s)

DC102.37-03

	Conc.	RL
Gasoline	ND	50
Mineral Spirits	ND	8.5
>> Surrogate Recoveries (%) <<		
Trifluorotoluene (SS)	90	

Superior
Analytical Laboratory

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

Quality Assurance and Control Data

Laboratory Number: 22516

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L)						
DC102.37 04 / - Laboratory Control Spikes						
Gasoline		2000	2000	100	65-135	
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				90	50-150	
For Water Matrix (ug/L)						
DC102.37 05 / 15 - Sample Spiked: 22522 - 03						
Gasoline	ND	2000	2100/2100	105/105	65-135	0
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				98/81	50-150	

Definitions:

ND = Not Detected
RL = Reporting Limit
NA = Not Analysed
RPD = Relative Percent Difference
ug/L = parts per billion (ppb)
mg/L = parts per million (ppm)
ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

Superior
Analytical Laboratory

SL R
Attn: GREG HOEHN

Project 70005-0098-08
Reported on March 10, 1997

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

Chronology

Laboratory Number 22516

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
INF	03/07/97	03/07/97	03/07/97	03/07/97	DC072.06	01
EFF	03/07/97	03/07/97	03/07/97	03/07/97	DC072.06	02

QC Samples

QC Batch #	QC Sample ID	Type	Ref.	Matrix	Extract.	Analyzed
DC072.06-01	Method Blank	MB		Water	03/07/97	03/07/97
DC072.06-02	Laboratory Spike	LS		Water	03/07/97	03/07/97
DC072.06-03	BC14-B	MS	22514-01	Water	03/07/97	03/07/97
DC072.06-04	BC14-B	MSD	22514-01	Water	03/07/97	03/07/97
DC072.06-05	Method Blank	MB		Air	03/07/97	03/07/97

Superior Analytical Laboratory

SL .R
Attn: GREG HOEHN

Project 70005-0098-08
Reported on March 10, 1997

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

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22516-01	INF	Air	1.0	-
22516-02	EFF	Air	1.0	-

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

Compound	22516-01 Conc. PPB (V/V)	RL	22516-02 Conc. PPB (V/V)	RL
Chloromethane	ND	480	ND	480
Vinyl Chloride	ND	390	ND	390
Bromomethane	ND	250	ND	250
Chloroethane	ND	270	ND	270
Trichlorofluoromethane	ND	88	ND	88
1,1-Dichloroethene	ND	120	ND	120
Dichloromethane	ND	140	ND	140
2-Dichloroethene	ND	120	ND	120
1,1-Dichloroethane	ND	120	ND	120
c-1,2-Dichloroethene	ND	120	ND	120
Chloroform	ND	100	ND	100
1,1,1-Trichloroethane	ND	90	ND	90
Carbon tetrachloride	ND	78	ND	78
1,2-Dichloroethane	ND	120	ND	120
Trichloroethene	ND	92	ND	92
c-1,3-Dichloropropene	ND	110	ND	110
1,2-Dichloropropane	ND	110	ND	110
t-1,3-Dichloropropene	ND	110	ND	110
Bromodichloromethane	ND	68	ND	68
1,1,2-Trichloroethane	ND	90	ND	90
Tetrachloroethene	ND	73	ND	73
Dibromochloromethane	ND	58	ND	58
Chlorobenzene	ND	110	ND	110
Bromoform	ND	48	ND	48
1,1,2,2-Tetrachloroethane	ND	72	ND	72
1,3-Dichlorobenzene	ND	82	ND	82
1,2-Dichlorobenzene	ND	82	ND	82
1,4-Dichlorobenzene	ND	82	ND	82
>> Surrogate Recoveries (%) <<				
Bromochloromethane	93		88	

Superior
Analytical Laboratory

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

Quality Assurance and Control Data

Laboratory Number: 22516
Method Blank(s)

	DC072.06-01		DC072.06-05	
	Conc. ug/L	RL	Conc. PPB (V/V)	RL
Chloromethane	ND	0.5	ND	480
Vinyl Chloride	ND	0.5	ND	390
Bromomethane	ND	0.5	ND	250
Chloroethane	ND	0.5	ND	270
Trichlorofluoromethane	ND	0.5	ND	88
1,1-Dichloroethene	ND	0.5	ND	120
Dichloromethane	ND	0.5	ND	140
t-1,2-Dichloroethene	ND	0.5	ND	120
1,1-Dichloroethane	ND	0.5	ND	120
c-1,2-Dichloroethene	ND	0.5	ND	120
Chloroform	ND	0.5	ND	100
1,1,1-Trichloroethane	ND	0.5	ND	90
Carbon tetrachloride	ND	0.5	ND	78
1 Dichloroethane	ND	0.5	ND	120
Trichloroethene	ND	0.5	ND	92
c-1,3-Dichloropropene	ND	0.5	ND	110
1,2-Dichloropropane	ND	0.5	ND	110
t-1,3-Dichloropropene	ND	0.5	ND	110
Bromodichloromethane	ND	0.5	ND	68
1,1,2-Trichloroethane	ND	0.5	ND	90
Tetrachloroethene	ND	0.5	ND	73
Dibromochloromethane	ND	0.5	ND	58
Chlorobenzene	ND	0.5	ND	110
Bromoform	ND	0.5	ND	48
1,1,2,2-Tetrachloroethane	ND	0.5	ND	72
1,3-Dichlorobenzene	ND	0.5	ND	82
1,2-Dichlorobenzene	ND	0.5	ND	82
1,4-Dichlorobenzene	ND	0.5	ND	82
>> Surrogate Recoveries (%) <<				
Bromochloromethane	91		91	

Superior
Analytical Laboratory

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

Quality Assurance and Control Data

Laboratory Number: 22516

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L) DC072.06 02 / - Laboratory Control Spikes						
1,1-Dichloroethene		20	22	110	50-189	
Trichloroethene		20	21	105	53-161	
Chlorobenzene		20	22	110	57-171	
>> Surrogate Recoveries (%) <<						
Bromochloromethane				92	50-125	
For Water Matrix (ug/L) DC072.06 03 / 04 - Sample Spiked: 22514 - 01						
1,1-Dichloroethene	ND	20	22/23	110/115	50-189	4
Trichloroethene	ND	20	20/21	100/105	53-161	5
Chlorobenzene	ND	20	21/19	105/95	57-171	10
>> Surrogate Recoveries (%) <<						
Bromochloromethane				91/93	50-125	

Definitions:
ND = Not Detected
RL = Reporting Limit
NA = Not Analysed
RPD = Relative Percent Difference
ug/L = parts per billion (ppb)
mg/L = parts per million (ppm)
ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

225/6

Chain-of Custody Number:

SECOR Chain-of Custody Record

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

Field Office: SECOR
Address: 1390 willow PASS Road
Concord, CA 94520

Job Name: SAFety Kleen
Location: 400 MARket Street
oakland CA

Project # 70005-009-08 Task # 01
Project Manager Greg Horhn
Laboratory Superior
Turnaround Time STAndard

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

Analysis Request

Sample ID	Date	Time	Matrix	HCID	TPHg/BTEX/WTPH-G 8015 (modified)/8020	TPHd/WTPH-D 8015 (modified)	TPH 418.1/WTPH 418.1	Aromatic Volatiles 602/8020	Volatile Organics 624/8240 (GC/MS)	Halogenated Volatiles 601/8010	Semi-volatile Organics 625/8270 (GC/MS)	Pesticides/PCBs 608/8080	Total Lead 7421	Priority Pollutant Metals (13)	TCLP Metals	TPh AS MS BTEX		Comments/ Instructions	Number of Containers
INF	3/7	11:30	Air							X						X			1
EFF	3/7	11:20	Air							X						X			1

Special Instructions/Comments:

Please Initial: ND - P.J.
Samples Stored in ice. yes
Appropriate containers yes
Samples preserved NC
VOA's without headspace N/A
Comments:

Relinquished by: SECOR
Sign Gary R Clift
Print GARY CLIFT
Company SECOR
Time 11:45 Date 3-7-97

Received by: Superior
Sign Polly Fuller
Print Polly Fuller
Company Superior
Time 11:45 Date 3/7/97

Relinquished by:
Sign
Print
Company
Time Date

Received by:
Sign
Print
Company
Time Date

Sample Receipt

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

Client: SECOR
Client Contact: Greg Horhn
Client Phone: (510) 686-9780

SECOR CUSTREC Rev. 1/95

Date: 3/7/97 Page 1 of 1

Superior Analytical Laboratory

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

Attn: GREG HOEHN

Date: May 15, 1997

Laboratory Number : 22725

Project Number/Name : 70005-007-08 TASK#005

Dear GREG HOEHN:

Attached is Superior Analytical Laboratory report for the samples received on May 2, 1997. This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety. Following the cover letter is the Case Narrative detailing sample receipt and analysis. Also enclosed is a copy of the original Chain-of-Custody record confirming receipt of samples.

Please note that any unused portion of the sample will be discarded after June 1, 1997, unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions, please contact our Laboratory at (510) 313-0850.

Sincerely,

Afsaneh Salimpour
Project Manager

Superior
Analytical Laboratory

CASE NARRATIVE

SECOR
Project Number/Name: 70005-007-08 TASK#005
Laboratory Number: 22725

Sample Receipt

Two air samples were received by
Superior Analytical Laboratory on May 2, 1997.

Cooler temperature was NA°C

No abnormalities were noted with sample recieving.

Sample Analysis

The samples were analysed for methods 8010, 8015M and 8020.

Customer Service: (800) 521-6109 • Laboratory: (510) 313-0850 • Facsimile: (510) 229-0916
Post Office Box 2648 • 835 Arnold Drive • Suite #106 • Martinez, California 94553
1555 Burke Street • Suite A • San Francisco, California 94124

Superior
Analytical Laboratory

S[illegible] R
Attn: GREG HOEHN

Project 70005-007-08 TASK#005
Reported on May 15, 1997

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

Chronology

Laboratory Number 22725

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
INF	05/01/97	05/02/97	05/02/97	05/02/97	DE022.37	01
EFF	05/01/97	05/02/97	05/02/97	05/02/97	DE022.37	02

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
DE022.37-01	Method Blank	MB	Water	05/02/97	05/02/97
DE022.37-02	Laboratory Spike	LS	Water	05/02/97	05/02/97
DE022.37-03	MW-9	MS 22715-02	Water	05/02/97	05/02/97
DE022.37-04	MW-9	MSD 22715-02	Water	05/02/97	05/02/97

S. .R
Attn: GREG HOEHN

Project 70005-007-08 TASK#005
Reported on May 15, 1997

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

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22725-01	INF	Air	1.0	-
22725-02	EFF	Air	1.0	-

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

Compound	22725-01 Conc. ug/L	RL	22725-02 Conc. ug/L	RL
Benzene	ND	0.5	ND	0.5
Toluene	ND	0.5	ND	0.5
Ethyl Benzene	ND	0.5	ND	0.5
Xylenes	ND	0.5	ND	0.5
>> Surrogate Recoveries (%) <<				
Trifluorotoluene (SS)	109		109	

Superior
Analytical Laboratory

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

Quality Assurance and Control Data

Laboratory Number: 22725
Method Blank(s)

	DE022.37-01 Conc. ug/L	RL
Benzene	ND	0.5
Toluene	ND	0.5
Ethyl Benzene	ND	0.5
Xylenes	ND	0.5
>> Surrogate Recoveries (%) <<		
Trifluorotoluene (SS)	103	

Superior Analytical Laboratory

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

Quality Assurance and Control Data

Laboratory Number: 22725

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L)						
DE022.37 02 / - Laboratory Control Spikes						
Benzene		20	20	100	65-125	
Toluene		20	20	100	65-125	
Ethyl Benzene		20	20	100	65-125	
Xylenes		60	60	100	65-125	
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				103	50-150	
For Water Matrix (ug/L)						
DE022.37 03 / 04 - Sample Spiked: 22715 - 02						
Benzene	ND	20	20/20	100/100	65-125	0
Toluene	ND	20	20/20	100/100	65-125	0
Ethyl Benzene	ND	20	20/20	100/100	65-125	0
Xylenes	ND	60	59/59	98/98	65-125	0
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				106/92	50-150	

Definitions:

ND = Not Detected
RL = Reporting Limit
NA = Not Analysed
RPD = Relative Percent Difference
ug/L = parts per billion (ppb)
mg/L = parts per million (ppm)
ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

Superior
Analytical Laboratory

SF[illegible]OR
A[illegible]: GREG HOEHN

Project 70005-007-08 TASK#005
Reported on May 15, 1997

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

Chronology

Laboratory Number 22725

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
INF	05/01/97	05/02/97	05/02/97	05/02/97	DE022.37	01
EFF	05/01/97	05/02/97	05/02/97	05/02/97	DE022.37	02

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
DE022.37-05	Method Blank	MB	Water	05/02/97	05/02/97
DE022.37-06	Laboratory Spike	LS	Water	05/02/97	05/02/97
DE022.37-07	MW-9	MS 22715-02	Water	05/02/97	05/02/97
DE022.37-08	MW-9	MSD 22715-02	Water	05/02/97	05/02/97

Superior
Analytical Laboratory

S. R
Attn: GREG HOEHN

Project 70005-007-08 TASK#005
Reported on May 15, 1997

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

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22725-01	INF	Air	1.0	-
22725-02	EFF	Air	1.0	-

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

Compound	22725-01 Conc. ug/L	RL	22725-02 Conc. yg/L	RL
Mineral Spirits	ND	50	ND	50
>> Surrogate Recoveries (%) <<				
4-Bromofluorobenzene (SS)	99		106	

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

Quality Assurance and Control Data

Laboratory Number: 22725
Method Blank(s)

DE022.37-05

	Conc.	RL
Mineral Spirits	ND	50
>> Surrogate Recoveries (%) <<		
4-Bromofluorobenzene (SS)	97	

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

Quality Assurance and Control Data

Laboratory Number: 22725

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L) DE022.37 06 / - Laboratory Control Spikes						
Gasoline		2000	2100	105	65-135	
>> Surrogate Recoveries (%) <<						
4-Bromofluorobenzene (SS)				107	50-150	
For Water Matrix (ug/L) DE022.37 07 / 08 - Sample Spiked: 22715 - 02						
Gasoline	ND	2000	1900/1900	95/95	65-135	0
>> Surrogate Recoveries (%) <<						
4-Bromofluorobenzene (SS)				83/98	50-150	

Definitions:
ND = Not Detected
RL = Reporting Limit
NA = Not Analysed
RPD = Relative Percent Difference
ug/L = parts per billion (ppb)
mg/L = parts per million (ppm)
ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

Superior
Analytical Laboratory

SF[illegible]R
A .: GREG HOEHN

Project 70005-007-08 TASK#005
Reported on May 5, 1997

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

Chronology

Laboratory Number 22725

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
INF	05/01/97	05/02/97	05/02/97	05/02/97	DE022.06	01
EFF	05/01/97	05/02/97	05/02/97	05/02/97	DE022.06	02

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
DE022.06-01	Method Blank	MB	Water	05/02/97	05/02/97
DE022.06-02	Laboratory Spike	LS	Water	05/02/97	05/02/97
DE022.06-03	Laboratory Spike Duplicate	LSD	Water	05/02/97	05/02/97
DE022.06-04	MW-5	MS 22719-02	Water	05/02/97	05/02/97
DE022.06-05	MW-5	MSD 22719-02	Water	05/02/97	05/02/97
DE022.06-06	Method Blank	MB	Air	05/02/97	05/02/97

SL ,R
Attn: GREG HOEHN

Project 70005-007-08 TASK#005
Reported on May 5, 1997

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

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22725-01	INF	Air	1.0	-
22725-02	EFF	Air	1.0	-

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

Compound	22725-01 Conc. PPB (V/V)	RL	22725-02 Conc. PPB (V/V)	RL
Chloromethane	ND	480	ND	480
Vinyl Chloride	ND	390	ND	390
Bromomethane	ND	250	ND	250
Chloroethane	ND	270	ND	270
Trichlorofluoromethane	ND	88	ND	88
1,1-Dichloroethene	ND	120	ND	120
Dichloromethane	ND	140	ND	140
,2-Dichloroethene	ND	120	ND	120
1,1-Dichloroethane	ND	120	ND	120
c-1,2-Dichloroethene	ND	120	ND	120
Chloroform	ND	100	ND	100
1,1,1-Trichloroethane	ND	90	ND	90
Carbon tetrachloride	ND	78	ND	78
1,2-Dichloroethane	ND	120	ND	120
Trichloroethene	ND	92	ND	92
c-1,3-Dichloropropene	ND	110	ND	110
1,2-Dichloropropane	ND	110	ND	110
t-1,3-Dichloropropene	ND	110	ND	110
Bromodichloromethane	ND	68	ND	68
1,1,2-Trichloroethane	ND	90	ND	90
Tetrachloroethene	ND	73	ND	73
Dibromochloromethane	ND	58	ND	58
Chlorobenzene	ND	110	ND	110
Bromoform	ND	48	ND	48
1,1,2,2-Tetrachloroethane	ND	72	ND	72
1,3-Dichlorobenzene	ND	82	ND	82
1,2-Dichlorobenzene	ND	82	ND	82
1,4-Dichlorobenzene	ND	82	ND	82
>> Surrogate Recoveries (%) <<				
Bromochloromethane	100		99	

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Analytical Laboratory

S. ,R
Attn: GREG HOEHN

Project 70005-007-08 TASK#005
Reported on May 5, 1997

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

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
22725-01	INF	Air	1.0	-
22725-02	EFF	Air	1.0	-

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

Compound	22725-01 Conc. PPB (V/V)	RL	22725-02 Conc. PPB (V/V)	RL
4-Bromofluorobenzene	92		90	

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

Quality Assurance and Control Data

Laboratory Number: 22725
Method Blank(s)

	DE022.06-01		DE022.06-06	
	Conc.	RL	Conc.	RL
	ug/L		PPB (V/V)	
Chloromethane	ND	0.5	ND	480
Vinyl Chloride	ND	0.5	ND	390
Bromomethane	ND	0.5	ND	250
Chloroethane	ND	0.5	ND	270
Trichlorofluoromethane	ND	0.5	ND	88
1,1-Dichloroethene	ND	0.5	ND	120
Dichloromethane	ND	0.5	ND	140
t-1,2-Dichloroethene	ND	0.5	ND	120
1,1-Dichloroethane	ND	0.5	ND	120
c-1,2-Dichloroethene	ND	0.5	ND	120
Chloroform	ND	0.5	ND	100
1,1,1-Trichloroethane	ND	0.5	ND	90
Carbon tetrachloride	ND	0.5	ND	78
-Dichloroethane	ND	0.5	ND	120
richloroethene	ND	0.5	ND	92
c-1,3-Dichloropropene	ND	0.5	ND	110
1,2-Dichloropropane	ND	0.5	ND	110
t-1,3-Dichloropropene	ND	0.5	ND	110
Bromodichloromethane	ND	0.5	ND	68
1,1,2-Trichloroethane	ND	0.5	ND	90
Tetrachloroethene	ND	0.5	ND	73
Dibromochloromethane	ND	0.5	ND	58
Chlorobenzene	ND	0.5	ND	110
Bromoform	ND	0.5	ND	48
1,1,2,2-Tetrachloroethane	ND	0.5	ND	72
1,3-Dichlorobenzene	ND	0.5	ND	82
1,2-Dichlorobenzene	ND	0.5	ND	82
1,4-Dichlorobenzene	ND	0.5	ND	82
>> Surrogate Recoveries (%) <<				
Bromochloromethane	97		97	
4-Bromofluorobenzene	89		89	

Superior Analytical Laboratory

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

Quality Assurance and Control Data

Laboratory Number: 22725

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Water Matrix (ug/L) DE022.06 02 / 03 - Laboratory Control Spikes						
1,1-Dichloroethene		20	20/22	100/110	50-189	10
Trichloroethene		20	18/18	90/90	53-161	0
Chlorobenzene		20	21/20	105/100	57-171	5
>> Surrogate Recoveries (%) <<						
Bromochloromethane				101/99	50-125	
4-Bromofluorobenzene				95/90	50-150	
For Water Matrix (ug/L) DE022.06 04 / 05 - Sample Spiked: 22719 - 02						
1,1-Dichloroethene	ND	20	20/22	100/110	50-189	10
Trichloroethene	ND	20	19/19	95/95	53-161	0
Chlorobenzene	ND	20	22/21	110/105	57-171	5
>> Surrogate Recoveries (%) <<						
Bromochloromethane				107/99	50-125	
4-Bromofluorobenzene				97/91	50-150	

Definitions:
ND = Not Detected
RL = Reporting Limit
NA = Not Analysed
RPD = Relative Percent Difference
ug/L = parts per billion (ppb)
mg/L = parts per million (ppm)
ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

Chain-of Custody Number: 22725

SECOR Chain-of Custody Record

Field Office: SECOR
Address: 1390 Willowpass Road Suite 360
Concord, CA 94520

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

Job Name: Safety Kleen
Location: 400 Market Street
Oakland, CA

Project # 70005-007-08 Task # 005
Project Manager Greg Hoehn
Laboratory Superior
Turnaround Time Standard

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

Sample ID	Date	Time	Matrix	HCID	TPHg/BTEX/WTPH-G 8015 (modified)/8020	TPHd/WTPH-D 8015 (modified)	TPH 418.1/WTPH 418.1	Aromatic Volatiles 602/8020	Volatile Organics 624/8240 (GC/MS)	Halogenated Volatiles 601/8010	Semi-volatile Organics 625/8270 (GC/MS)	Pesticides/PCBs 608/8080	Total Lead 7421	Priority Pollutant Metals (13)	TCLP Metals	TPH as IMS BTEX		Comments/ Instructions	Number of Containers
INF	5/1	8:55	Air							X						X			1
EFF	5/1	8:30	Air							X						X			1

Analysis Request

Special Instructions/Comments:

Relinquished by: SECOR
Sign [signature]
Print GARY CRIFT
Company SECOR
Time 12:50 Date 5/2/97

Received by: Superior
Sign [signature]
Print KRISTEN ZINK
Company SAL
Time 12:50 Date 5/2/97

Relinquished by:
Sign
Print
Company
Time Date

Received by:
Sign
Print
Company
Time Date

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

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

SECOR CUSTREC Rev. 1/95

Date: 5, 2, 97 Page 1 of 1

APPENDIX C

Laboratory Reports - Groundwater Samples

safety-kleen ®

Allan A. Manteuffel Technical Center

April 25, 1997

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

Re: SK Lab Project #97-120
Project ID Name: Oakland, CA

Dear Greg:

Enclosed please find the analytical results for the sample received by SK Environmental Laboratory on 4/11/97.

A formal Quality Control/Quality Assurance program is maintained by Safety-Kleen, which is designed to meet or exceed the EPA requirements. This information is available upon request.

If you have any questions concerning this analysis, or if we can be of further assistance, please contact me at 773-825-7351.

Sincerely,

Richard H. Cook
Environmental Section Leader

P.O. Box 92050
Elk Grove Village, IL
60009-2050

12555 W. Old Higgins Road
Elk Grove Village, IL 60007
Telephone: 773/694-2700
Fax: 773/825-7850

Project ID #: 70005-009-07
Project ID Name: Oakland, CA
SK Lab Project #: 97-120
Date Reported: 4/25/97

ANALYTICAL RESULTS

Total Petroleum Hydrocarbons as Mineral Spirits in Water

Modified EPA Method 8015

Reporting Limit: 50.0

Work Order #	Collector's Sample #	Date Sampled	Date Analyzed	Concentration ug/L
01	Pre MW-12	4/10/97	4/15/97	<50
02	Post MW-12	4/10/97	4/15/97	<50
03	Pre MW-3	4/10/97	4/15/97	<50
04	Post MW-3	4/10/97	4/16/97	<50
05	Pre MW-2	4/10/97	4/15/97	<50
06	Post MW-2	4/10/97	4/15/97	<50
07	Pre MW-1	4/10/97	4/15/97	<50
08	Post MW-1	4/10/97	4/15/97	<50
09	Pre MW-4	4/10/97	4/15/97	<50
11	Post MW-4	4/10/97	4/16/97	<50
12	Pre MW-5	4/10/97	4/16/97	<50
13	Post MW-5	4/10/97	4/16/97	<50
14	Pre MW-6	4/10/97	4/16/97	<50
15	Post MW-6	4/10/97	4/18/97	<50
16	Pre MW-8	4/10/97	4/16/97	<50
17	Post MW-8	4/10/97	4/16/97	<50
18	Pre MW-18	4/10/97	4/16/97	<50
19	Post MW-18	4/10/97	4/16/97	<50
20	Pre MW-9	4/10/97	4/18/97	**1536**
21	Post MW-9	4/10/97	4/21/97	**1846**
22	Pre MW-13	4/10/97	4/18/97	<50
23	Post MW-13	4/10/97	4/18/97	<50

Analytical Review / Date: 4/25/97

Project ID #: 70005-009-07
Project ID Name: Oakland, CA
SK Lab Project #: 97-120
Date Reported: 4/25/97

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8010

Work Order #		01	02	03	04	05	06
Collector's Sample #		Pre MW-12	Post MW-12	Pre MW-3	Post MW-3	Pre MW-2	Post MW-2
Date Sampled		4/10/97	4/10/97	4/10/97	4/10/97	4/10/97	4/10/97
Date Analyzed		4/16/97	4/16/97	4/16/97	4/16/97	4/16/97	4/16/97
Dilution Factor		1	1	1	1	1	1
Analyte	Report Limit ug/L	Concentration µg/L					
Benzyl Chloride	1	<1	<1	<1	<1	<1	<1
Bromobenzene	1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	1	<1	<1	<1	<1	<1	<1
Bromoform	2	<2	<2	<2	<2	<2	<2
Bromomethane	2	<2	<2	<2	<2	<2	<2
Carbon Tetrachloride	1	<1	<1	<1	<1	<1	<1
Chlorobenzene	1	<1	<1	<1	<1	<1	<1
Chloroethane	1	<1	<1	<1	<1	<1	<1
Chloroform	1	<1	<1	<1	<1	<1	<1
Chloromethane	1	<1	<1	<1	<1	<1	<1
Chlorotoluene	2	<2	<2	<2	<2	<2	<2
Dibromochloromethane	2	<2	<2	<2	<2	<2	<2
Dibromomethane	1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	1	**6.2**	**6.3**	<1	<1	<1	<1
1,2-Dichloroethane	1	**3.5**	**3.5**	<1	<1	<1	<1
1,1-Dichloroethylene	1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethylene	1	**1.1**	**1.4**	<1	<1	<1	<1
trans-1,2-Dichloroethylene	1	<1	<1	<1	<1	<1	<1

Project ID #: 70005-009-07
Project ID Name: Oakland, CA
SK Lab Project #: 97-120
Date Reported: 4/25/97

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8010

Work Order #		01	02	03	04	05	06
Collector's Sample #		Pre MW-12	Post MW-12	Pre MW-3	Post MW-3	Pre MW-2	Post MW-2
Date Sampled		4/10/97	4/10/97	4/10/97	4/10/97	4/10/97	4/10/97
Date Analyzed		4/16/97	4/16/97	4/16/97	4/16/97	4/16/97	4/16/97
Dilution Factor		1	1	1	1	1	1
Analyte	Report Limit µg/L	Concentration µg/L					
Dichloromethane	2	<2	<2	<2	<2	<2	<2
1,2-Dichloropropane	1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropylene	1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	2	<2	<2	<2	<2	<2	<2
1,1,1,2-Tetrachloroethane	1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	1	<1	<1	<1	<1	<1	<1
Trichloroethylene	1	9.5	24.3 *	<1	<1	<1	<1
Trichlorofluoromethane	1	<1	<1	<1	<1	<1	<1
Trichloropropane	2	<2	<2	<2	<2	<2	<2
Vinyl Chloride	2	<2	<2	<2	<2	<2	<2

* Diluted so result is within the calibration curve.

Analytical Review / Date: 4/25/97

Project ID #: 70005-009-07
Project ID Name: Oakland, CA
SK Lab Project #: 97-120
Date Reported: 4/25/97

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8020

Work Order #		01	02	03	04	05	06
Collector's Sample #		Pre MW-12	Post MW-12	Pre MW-3	Post MW-3	Pre MW-2	Post MW-2
Date Sampled		4/10/97	4/10/97	4/10/97	4/10/97	4/10/97	4/10/97
Date Analyzed		4/16/97	4/16/97	4/16/97	4/16/97	4/16/97	4/16/97
Dilution Factor		1	1	1	1	1	1
Analyte	Report Limit µg/L	Concentration µg/L					
Benzene	1	<1	<1	<1	<1	<1	<1
Ethylbenzene	1	<1	<1	<1	<1	<1	<1
Toluene	1	<1	<1	<1	<1	<1	<1
Xylenes	1	<1	<1	<1	<1	<1	<1

Analytical Review / Date: 4/25/97

Project ID #: 70005-009-07
Project ID Name: Oakland, CA
SK Lab Project #: 97-120
Date Reported: 4/25/97

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8010

Work Order #		07	08	09	10	11	12
Collector's Sample #		Pre MW-1	Post MW-1	Pre MW-4	Trip Blank	Post MW-4	Pre MW-5
Date Sampled		4/10/97	4/10/97	4/10/97	NA	4/10/97	4/10/97
Date Analyzed		4/18/97	4/18/97	4/18/97	4/15/97	4/19/97	4/19/97
Dilution Factor		1	1	1	1	1	1
Analyte	Report Limit µg/L	Concentration µg/L					
Benzyl Chloride	1	<1	<1	<1	<1	<1	<1
Bromobenzene	1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	1	<1	<1	<1	<1	<1	<1
Bromoform	2	<2	<2	<2	<2	<2	<2
Bromomethane	2	<2	<2	<2	<2	<2	<2
Carbon Tetrachloride	1	<1	<1	<1	<1	<1	<1
Chlorobenzene	1	<1	<1	<1	<1	<1	<1
Chloroethane	1	<1	<1	<1	<1	<1	<1
Chloroform	1	<1	<1	**1.5**	<1	**1.4**	**3.2**
Chloromethane	1	<1	<1	<1	<1	<1	<1
Chlorotoluene	2	<2	<2	<2	<2	<2	<2
Dibromochloromethane	2	<2	<2	<2	<2	<2	<2
Dibromomethane	1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	1	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethylene	1	<1	<1	**5.6**	<1	**5.7**	<1
cis-1,2-Dichloroethylene	1	<1	<1	**7.5**	<1	**9.7**	<1
trans-1,2-Dichloroethylene	1	<1	<1	<1	<1	<1	<1

Project ID #: 70005-009-07
Project ID Name: Oakland, CA
SK Lab Project #: 97-120
Date Reported: 4/25/97

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8010

Work Order #	07	08	09	10	11	12
Collector's Sample #	Pre MW-1	Post MW-1	Pre MW-4	Trip Blank	Post MW-4	Pre MW-5
Date Sampled	4/10/97	4/10/97	4/10/97	NA	4/10/97	4/10/97
Date Analyzed	4/18/97	4/18/97	4/18/97	4/15/97	4/19/97	4/19/97
Dilution Factor	1	1	1	1	1	1
Analyte	Report Limit µg/L	Concentration µg/L					
Dichloromethane	2	<2	<2	<2	<2	<2	<2
1,2-Dichloropropane	1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropylene	1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	2	<2	<2	<2	<2	<2	<2
1,1,1,2-Tetrachloroethane	1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	1	<1	<1	**1.4**	<1	<1	<1
1,1,2-Trichloroethane	1	<1	<1	<1	<1	<1	<1
Trichloroethylene	1	<1	<1	**152.6 ***	<1	**215.9 ***	**3.6**
Trichlorofluoromethane	1	<1	<1	<1	<1	<1	<1
Trichloropropane	2	<2	<2	<2	<2	<2	<2
Vinyl Chloride	2	<2	<2	<2	<2	<2	<2

* Diluted so result is within the calibration curve.

Analytical Review / Date: 4/25/97

Project ID #: 70005-009-07
Project ID Name: Oakland, CA
SK Lab Project #: 97-120
Date Reported: 4/25/97

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8020

Work Order #		07	08	09	10	11	12
Collector's Sample #		Pre MW-1	Post MW-1	Pre MW-4	Trip Blank	Post MW-4	Pre MW-5
Date Sampled		4/10/97	4/10/97	4/10/97	NA	4/10/97	4/10/97
Date Analyzed		4/18/97	4/18/97	4/18/97	4/15/97	4/19/97	4/19/97
Dilution Factor		1	1	1	1	1	1
Analyte	Report Limit µg/L	Concentration µg/L					
Benzene	1	<1	<1	<1	<1	<1	<1
Ethylbenzene	1	<1	<1	<1	<1	<1	<1
Toluene	1	<1	<1	<1	<1	<1	<1
Xylenes	1	<1	<1	<1	<1	<1	<1

Analytical Review / Date: 4/25/97

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8010

Work Order #		13	14	15	16	17	18
Collector's Sample #		Post MW-5	Pre MW-6	Post MW-6	Pre MW-8	Post MW-8	Pre MW-18
Date Sampled		4/10/97	4/10/97	4/10/97	4/10/97	4/10/97	4/10/97
Date Analyzed		4/19/97	4/19/97	4/19/97	4/19/97	4/19/97	4/19/97
Dilution Factor		1	1	1	1	1	1
Analyte	Report Limit µg/L	Concentration µg/L					
Benzyl Chloride	1	<1	<1	<1	<1	<1	<1
Bromobenzene	1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	1	<1	<1	<1	<1	<1	<1
Bromoform	2	<2	<2	<2	<2	<2	<2
Bromomethane	2	<2	<2	<2	<2	<2	<2
Carbon Tetrachloride	1	<1	<1	<1	<1	<1	<1
Chlorobenzene	1	<1	<1	<1	**3.4**	**4.6**	**3.4**
Chloroethane	1	<1	<1	<1	<1	<1	<1
Chloroform	1	**2.9**	<1	<1	<1	<1	<1
Chloromethane	1	<1	<1	<1	<1	<1	<1
Chlorotoluene	2	<2	<2	<2	<2	<2	<2
Dibromochloromethane	2	<2	<2	<2	<2	<2	<2
Dibromomethane	1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	1	<1	<1	<1	**3.3**	**4.5**	**3.0**
1,3-Dichlorobenzene	1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	1	<1	<1	<1	**3.6**	**4.8**	**3.8**
1,2-Dichloroethane	1	<1	<1	<1	**2.1**	**3.4**	**2.1**
1,1-Dichloroethylene	1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethylene	1	<1	<1	<1	**17.0 ***	**50.0 ***	**17.8 ***
trans-1,2-Dichloroethylene	1	<1	<1	<1	<1	<1	<1

Project ID #: 70005-009-07
Project ID Name: Oakland, CA
SK Lab Project #: 97-120
Date Reported: 4/25/97

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8010

Work Order #		13	14	15	16	17	18
Collector's Sample #		Post MW-5	Pre MW-6	Post MW-6	Pre MW-8	Post MW-8	Pre MW-18
Date Sampled		4/10/97	4/10/97	4/10/97	4/10/97	4/10/97	4/10/97
Date Analyzed		4/19/97	4/19/97	4/19/97	4/19/97	4/19/97	4/19/97
Dilution Factor		1	1	1	1	1	1
Analyte	Report Limit µg/L	Concentration µg/L					
Dichloromethane	2	<2	<2	<2	<2	<2	<2
1,2-Dichloropropane	1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropylene	1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	2	<2	<2	<2	<2	<2	<2
1,1,1,2-Tetrachloroethane	1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	1	<1	<1	<1	**4.9**	**4.8**	**4.7**
1,1,1-Trichloroethane	1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	1	<1	<1	<1	<1	<1	<1
Trichloroethylene	1	**3.0**	<1	<1	**95.0 ***	**241.9 ***	**97.0 ***
Trichlorofluoromethane	1	<1	<1	<1	<1	<1	<1
Trichloropropane	2	<2	<2	<2	<2	<2	<2
Vinyl Chloride	2	<2	<2	<2	<2	<2	<2

* Diluted so result is within the calibration curve.

Analytical Review / Date: 4/25/97

Project ID #: 70005-009-07
Project ID Name: Oakland, CA
SK Lab Project #: 97-120
Date Reported: 4/25/97

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8020

Work Order #		13	14	15	16	17	18
Collector's Sample #		Post MW-5	Pre MW-6	Post MW-6	Pre MW-8	Post MW-8	Pre MW-18
Date Sampled		4/10/97	4/10/97	4/10/97	4/10/97	4/10/97	4/10/97
Date Analyzed		4/19/97	4/19/97	4/19/97	4/19/97	4/19/97	4/19/97
Dilution Factor		1	1	1	1	1	1
Analyte	Report Limit µg/L	Concentration µg/L					
Benzene	1	<1	<1	<1	<1	<1	<1
Ethylbenzene	1	<1	<1	<1	<1	<1	<1
Toluene	1	<1	<1	<1	<1	<1	<1
Xylenes	1	<1	<1	<1	<1	<1	<1

Analytical Review / Date: 4/25/97

Project ID #: 70005-009-07
Project ID Name: Oakland, CA
SK Lab Project #: 97-120
Date Reported: 4/25/97

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8010

Work Order #		19	20	21	22	23
Collector's Sample #		Post MW-18	Pre MW-9	Post MW-9	Pre MW-13	Post MW-13
Date Sampled		4/10/97	4/10/97	4/10/97	4/10/97	4/10/97
Date Analyzed		4/19/97	4/22/97	4/22/97	4/22/97	4/22/97
Dilution Factor		1	1	1	1	1
Analyte	Report Limit µg/L	Concentration µg/L				
Benzyl Chloride	1	<1	<1	<1	<1	<1
Bromobenzene	1	<1	<1	<1	<1	<1
Bromodichloromethane	1	<1	<1	<1	<1	<1
Bromoform	2	<2	<2	<2	<2	<2
Bromomethane	2	<2	<2	<2	<2	<2
Carbon Tetrachloride	1	<1	<1	<1	<1	<1
Chlorobenzene	1	**4.6**	**28.6 ***	**44.5 ***	<1	<1
Chloroethane	1	<1	**2.0**	**2.0**	<1	<1
Chloroform	1	<1	<1	<1	**3.8**	**1.5**
Chloromethane	1	<1	<1	<1	<1	<1
Chlorotoluene	2	<2	**9.9 ***	**19.2 ***	<2	<2
Dibromochloromethane	2	<2	<2	<2	<2	<2
Dibromomethane	1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	1	**4.6**	**77.2 ***	**131.8 ***	**1.6**	**1.4**
1,3-Dichlorobenzene	1	<1	**4.6**	**4.2**	<1	<1
1,4-Dichlorobenzene	1	<1	**17.2 ***	**34.4 ***	<1	<1
Dichlorodifluoromethane	1	<1	<1	<1	<1	<1
1,1-Dichloroethane	1	**5.1**	**48.0 ***	**56.6 ***	<1	<1
1,2-Dichloroethane	1	**3.8**	**8.2**	**7.6**	<1	<1
1,1-Dichloroethylene	1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethylene	1	**52.5 ***	**41.9 ***	**47.1 ***	<1	<1
trans-1,2-Dichloroethylene	1	<1	<1	<1	<1	<1

Project ID #: 70005-009-07
Project ID Name: Oakland, CA
SK Lab Project #: 97-120
Date Reported: 4/25/97

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8010

Work Order #		19	20	21	22	23
Collector's Sample #		Post MW-18	Pre MW-9	Post MW-9	Pre MW-13	Post MW-13
Date Sampled		4/10/97	4/10/97	4/10/97	4/10/97	4/10/97
Date Analyzed		4/19/97	4/22/97	4/22/97	4/22/97	4/22/97
Dilution Factor		1	1	1	1	1
Analyte	Report Limit ug/L	Concentration ug/L				
Dichloromethane	2	<2	<2	<2	<2	<2
1,2-Dichloropropane	1	<1	**1.6**	**1.4**	<1	<1
trans-1,3-Dichloropropylene	1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	2	<2	<2	<2	<2	<2
1,1,1,2-Tetrachloroethane	1	<1	<1	<1	<1	<1
Tetrachloroethylene	1	**4.6**	<1	<1	<1	<1
1,1,1-Trichloroethane	1	<1	**10.7 ***	**13.8 ***	<1	<1
1,1,2-Trichloroethane	1	<1	<1	<1	<1	<1
Trichloroethylene	1	**273.7 ***	**12.5 ***	**16.1 ***	<1	<1
Trichlorofluoromethane	1	<1	<1	<1	<1	<1
Trichloropropane	2	<2	**4.6**	**4.2**	<2	<2
Vinyl Chloride	2	<2	**131.7 ***	**135.6 ***	<2	<2

* Diluted so result is within the calibration curve.

Analytical Review / Date: 4/25/97

Project ID #: 70005-009-07
Project ID Name: Oakland, CA
SK Lab Project #: 97-120
Date Reported: 4/25/97

ANALYTICAL RESULTS

Volatile Organics in Water

EPA Method 8020

Work Order #		19	20	21	22	23
Collector's Sample #		Post MW-18	Pre MW-9	Post MW-9	Pre MW-13	Post MW-13
Date Sampled		4/10/97	4/10/97	4/10/97	4/10/97	4/10/97
Date Analyzed		4/19/97	4/22/97	4/22/97	4/22/97	4/22/97
Dilution Factor		1	1	1	1	1
Analyte	Report Limit µg/l	Concentration µg/L				
Benzene	1	<1	**14.9 ***	**17.4 ***	**6.7**	**6.9**
Ethylbenzene	1	<1	**13.5 ***	**23.2 ***	**1.8**	**1.8**
Toluene	1	<1	**13.3 ***	**17.2 ***	**9.2**	**8.9**
Xylenes	1	<1	**12.3 ***	**19.3 ***	**4.0**	**4.1**

Analytical Review / Date: 4/25/97

Chain-of Custody Number: 97-120(copy)

SECOR Chain-of Custody Record

Field Office: SECOR

Address: 1390 Willow Pass Road Suite 360
Concord, CA 94520

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

Job Name: SAFety Kleen

Location: 400 MARKet Street
Oakland CA

Project # 70005-009-07 Task # 001
Project Manager Greg Hoehn
Laboratory SAFety Kleen
Turnaround Time STandard

Sampler's Name GREYCLIFT
Sampler's Signature

Analysis Request

	Sample ID	Date	Time	Matrix	HCID	TPHg/BTEX/WTPH-G 8015 (modified)/8020	TPHd/WTPH-D 8015 (modified)	TPH 418.1/WTPH 418.1	Aromatic Volatiles 602/8020	Volatile Organics 624/8240 (GC/MS)	Halogenated Volatiles 601/8010	Semi-volatile Organics 625/8270 (GC/MS)	Pesticides/PCBs 608/8080	Total Lead 7421	Priority Pollutant Metals (13)	TCLP Metals	TPH as MS 8015 Purge & Trap	BTEX BY EPA Method 8020	Comments/ Instructions	Number of Containers
01	Pre MW-12	4-10	7:35	W							X						X	X	97-02459	4
02	Post MW-12	4-10	8:00	"							X						X	X	2460	4
03	Pre MW-3	4-10	8:20	"							X						X	X	2461	4
04	Post MW-3	4-10	8:40	"							X						X	X	2462	4
05	Pre MW-2	4-10	8:50	"							X						X	X	2463	4
06	Post MW-2	4-10	9:20	"							X						X	X	2464	4
07	Pre MW-1	4-10	9:40	"							X						X	X	2465	4
08	Post MW-1	4-10	10:00	"							X						X	X	2466	4
09	Pre MW-4	4-10	10:10	"							X						X	X	2467	4
10	Trip Blank										X							X	2468	2

VOA

Special Instructions/Comments:
All Vials Received Acidic
4/11/97

Relinquished by: SECOR
Sign
Print G. Cliff/R. Lewis
Company SECOR
Time 15:57 Date 4/10/97

Received by:
Sign
Print
Company Fed EX
Time 15:54 Date 4-10-97

Relinquished by:
Sign
Print
Company
Time Date

Received by: C Smith
Sign 60C
Print 4/11/97 11AM
Company
Time Date

Sample Receipt
Total no. of containers: 38
Chain of custody seals:
Rec'd. in good condition/cold:
Conforms to record:

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

SECOR CUSTREC Rev. 1/95

Date: 4, 10, 97 Page 1 of 3

Chain-of Custody Number:

SECOR Chain-of Custody Record

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

Field Office: SECOR
Address: 1390 willow PASS Road Suite 360
Concord CA 94520

Job Name: SAFety Kleen
Location: 410 MARket Street
OAKland, CA

Project # 70005009-07 Task # 001
Project Manager Greg Hoehn
Laboratory Safety Kleen
Turnaround Time Standard

Sampler's Name Mary CLIFT
Sampler's Signature

	Sample ID	Date	Time	Matrix	HCID	TPHg/BTEX/WTPH-G 8015 (modified)/8020	TPH-d/WTPH-D 8015 (modified)	TPH 418.1/WTPH 418.1	Aromatic Volatiles 602/8020	Volatile Organics 624/8240 (GC/MS)	Halogenated Volatiles 601/8010	Semi-volatile Organics 625/8270 (GC/MS)	Pesticides/PCBs 608/8080	Total Lead 7421	Priority Pollutant Metals (13)	TCLP Metals	TPH As MS EOIS Purge & TRAP	Other by EPA Method 8010	Comments/ Instructions	Number of Containers
11	Post MW-4	4-10	10:25	H2O							X						X	X	2469	4
12	Pre. MW-5	4-10	10:35	H2O							X						X	X	2470	4
13	post MW-5	4-10	10:50	H2O							X						X	X	2471	4
14	pre MW-6	4-10	11:00	H2O							X						X	X	2472	4
15	post MW-6	4-10	11:20	H2O							X						X	X	2473	4
16	pre MW-8	4-10	12:00	H2O							X						X	X	2474	4
17	post MW-8	4-10	12:20	H2O							X						X	X	2475	4
18	pre MW-18	4-10	14:00	H2O							X						X	X	2476	4
19	post MW-18	4-10	14:20	H2O							X						X	X	2477	4
20	pre MW-9	4-10	12:55	H2O							X						X	X	2478	4

Special Instructions/Comments:

Relinquished by: SECOR
Sign
Print G. CLIFT / N. MAGNO
Company SECOR
Time 15:57 Date 4/10/97

Relinquished by:
Sign
Print
Company
Time Date

Received by:
Sign
Print
Company FedEX
Time 15:54 Date 4/10/97

Received by:
Sign
Print
Company
Time Date

Sample Receipt

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

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

SECOR CUSTREC Rev. 1/95

Date: 4/10/97 Page 2 of 3

Chain-of Custody Number:

SECOR Chain-of Custody Record

Field Office: SECOR

Address: 1390 Willow Pass Road Suite 360
Concord, CA 94520

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

Job Name: Safety Kleen

Location: 400 Market St.
Oakland, CA

Project # 70005-009-07 Task # 001
Project Manager Greg Hoehn
Laboratory Safety Kleen
Turnaround Time Standard

Sampler's Name Gary Clift
Sampler's Signature Gary Clift

Analysis Request

	Sample ID	Date	Time	Matrix	HCID	TPHg/BTEX/WTPH-G 8015 (modified)/8020	TPHd/WTPH-D 8015 (modified)	TPH 418.1/WTPH 418.1	Aromatic Volatiles 602/8020	Volatile Organics 624/8240 (GC/MS)	Halogenated Volatiles 601/8010	Semi-volatile Organics 625/8270 (GC/MS)	Pesticides/PCBs 608/8080	Total Lead 7421	Priority Pollutant Metals (13)	TCLP Metals	TPH As MS 8015 Purge & Trap	BTEX by EPA Method 8020	Comments/ Instructions	Number of Containers
21	Post MW-9	4-10	13:10	H2O							X						X	X	2479	4
22	Pre MW-13	4-10	13:50	H2O							X						X	X	2480 (2 vials broke)	4
23	Post MW-13	4-10	14:15	H2O							X						X	X	2481	4

Special Instructions/Comments:

Relinquished by: SECOR
Sign
Print G. Clift / A. Navarro
Company SECOR
Time 15:54 Date 4/10/97

Received by:
Sign
Print
Company FedEx
Time 15:54 Date 4-10-97

Relinquished by:
Sign
Print
Company
Time Date

Received by:
Sign
Print
Company
Time Date

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

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

SECOR CUSTREC Rev. 1/95

Date: 4, 10, 97 Page 3 of 3