

QUARTERLY PROGRESS REPORT

MARCH - MAY 1999

SAFETY-KLEEN SYSTEMS, INC. SERVICE CENTER
400 MARKET STREET
OAKLAND, CALIFORNIA
EPA ID No. CAD 053044053

SECOR Job No. 70005-009-08

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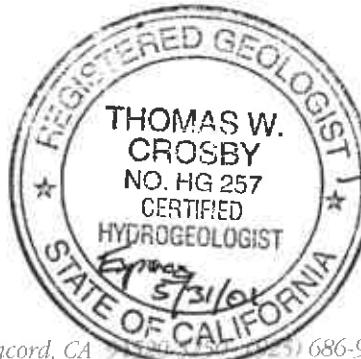


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1.0 INTRODUCTION

This Quarterly Progress Report has been prepared in accordance with the Safety-Kleen Systems, Inc. (Safety-Kleen) Hazardous Waste Facility Permit's reporting requirements. This report presents the results of groundwater monitoring and sampling activities conducted for the quarter of March through May 1999 at the Safety-Kleen Service Center located at 400 Market Street in Oakland, California (Figures 1 and 2). Also included are the results of the soil vapor extraction (SVE) system monitoring and sampling for the period.

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.

A product pumping system was installed in recovery well RW-1 to remove separate-phase product from the water table and 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. On August 5, 1998, the passive recovery skimmer was removed and oxygen releasing compound was suspended in RW-1 in an effort to enhance site remediation by oxidizing residual impacts in the vicinity of the USTs.

The SVE system consists of seven horizontal vapor extraction perforated pipelines 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 pipelines and the vapor treatment system.

2.1 Regulatory Status

The Safety-Kleen Oakland facility operates under a Hazardous Waste Facility Permit (Part B Permit; ID No. CAD 053044053) which became effective on March 29, 1992. A RCRA Facility Assessment (RFA) performed by the Department of Toxic Substances Control (DTSC) identified three solid waste management units (SWMUs) and one area of concern (AOC) at the facility. The results of the RFA were transmitted in the RFA Report dated June 1993. The Corrective Action Module of the Part B Permit (Section V) specified the need to submit a RCRA Facility Investigation (RFI) Work Plan to assess impacts related to the three SWMUs and the AOC. The RFI Work Plan was submitted on February 1, 1996. The DTSC approved the RFI Work Plan in correspondence dated February 23, 1996. The RFI Work Plan summarized site characterization work conducted at the site to February 1996 for the AOC and SWMUs identified in the RFA.

Subsequent to approval of the RFI Work Plan, an RFI Report was submitted to the DTSC on March 27, 1996, and was approved by that agency in correspondence dated May 20, 1996. The RFI Report states that the extent of total petroleum hydrocarbons as mineral spirits (TPHms) and volatile organic compound (VOC) impact at the facility is well defined and that the site characterization activities have adequately assessed the subsurface in the vicinity of the USTs and the return and fill shelter. The investigations have determined that soil impact is present immediately adjacent to the UST pit and has migrated along the capillary fringe as far as monitoring well MW-8 (see Figure 2).

In a letter dated September 20, 1996, the California Environmental Protection Agency (Cal-EPA) - DTSC requested that Safety-Kleen prepare a Corrective Measures (CM) Report for the Oakland facility. Safety-Kleen submitted the CM Report on December 2, 1996. The purpose of the CM Report is to: (1) document the corrective measures which have been taken at the site, (2) evaluate the effectiveness of the corrective measures currently in use, and (3) provide an assessment of potential alternative methods. The CM Report is pending agency review.

Safety-Kleen is following the modified groundwater sampling schedule as described in the letter submitted on October 8, 1998, and as modified and approved by Alameda County Environmental Health Services in a response letter dated November 17, 1998. With the exception that monitoring well MW-9 continue to be sampled quarterly if no sheen or product is present in the well, the modified groundwater sampling schedule is to sample six wells semi-annually, all wells annually, and continue to collect depth-to-groundwater data quarterly.

3.0 SCOPE-OF-WORK

SVE activities conducted during this quarter consisted of the pulsed operation and maintenance of the SVE system. Groundwater monitoring work conducted during this quarter consisted of measuring depth-to-water in 11 groundwater monitoring wells and the recovery well (RW-1), and the sampling of 10 of the 11 groundwater monitoring wells, as specified in the modified quarterly sampling schedule, approved by Alameda County Health Care Services in a correspondence dated November 17, 1998. The following sections provide a description of the activities 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 seven horizontal vapor extraction perforated pipelines (see Figure 3). The SVE system operated in approximately two-week cycles this quarter in an attempt to improve removal efficiency. While the SVE system is operating, monitoring occurs biweekly and consists of measuring influent and effluent vapor concentrations using a photo-ionization detector (PID) or a flame-ionization detector (FID). The results of the SVE system operation is presented in Section 4.1 and the monitoring data are summarized in Table 1. The SVE system samples are collected for laboratory analysis at the influent and system effluent points; the results are discussed in Section 4.1 and presented on Table 2.

3.2 Groundwater Monitoring and Sampling

On April 14, 1999, all monitoring wells were monitored for depth-to-water, and groundwater samples were collected from monitoring wells MW-1 through MW-6, MW-8 through MW-9, MW-12, and MW-13 for laboratory analysis. Monitoring wells MW-7 and MW-10 have been abandoned. Monitoring well MW-11 can no longer be sampled because tree roots have grown through the well casing and are obstructing the well. A trip blank accompanied the samples from the site to the laboratory and an equipment blank collected from the decontaminated pump was analyzed for quality assurance and quality control (QA/QC) purposes.

All accessible monitoring wells were monitored for depth-to-water using a water-level indicator calibrated to 0.01-foot. The depth-to-water measurements were used with well survey data to prepare a groundwater potentiometric surface map (Figure 4). Prior to collecting groundwater samples, the wells were purged using a low-flow submersible 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 minimal drawdown. Samples were collected after pH, temperature, conductivity, and dissolved oxygen had stabilized. The samples were placed into laboratory supplied sample containers, labeled, placed on ice in an insulated cooler, and logged onto the chain-of-custody manifests. 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 TPHms by EPA Method 8015 (modified) and for VOCs by EPA Method 8260.

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 the waste mineral spirits UST pending transport for treatment at a Safety-Kleen recycle facility.

4.0 RESULTS

4.1 Soil Vapor Extraction System

The results of SVE system monitoring conducted on March 3 through May 25, 1999, are summarized on Table 1. Table 1 presents data on the system flow rate and PID measurements from the SVE system vapor influent, the vapor effluent after each carbon adsorption vessel, and the system final vapor effluent. Based on the system monitoring data, the SVE system has continued to meet the Bay Area Air Quality Management District (BAAQMD) permit limits of 10 parts per million per unit volume (ppmv) in the system effluent based on PID or FID readings. For this quarter, SVE system influent and effluent vapor samples were collected on March 3 and May 25, 1999. The results of analytical testing are summarized on Table 2.

The analysis of the influent sample collected on March 3, 1999, detected TPHms at a concentration of 13 milligrams per cubic meter (mg/m^3) with no VOCs detected. The system effluent sample did not detect any analytes for the same date. The analysis of the sample collected on May 25, 1999, detected TPHms at a concentration of 50 mg/m^3 and tetrachloroethane (PCA) at a concentration of 0.2 mg/m^3 . The system effluent sample did not detect any analytes for the same date.

In an attempt to improve system efficiency, Safety-Kleen continued operating the SVE system this quarter in a pulsed (on/off) mode of approximately two-week cycles. Table 3 summarizes the estimated SVE system mineral spirits removal to date. Data collected from initial start-up through May 25, 1999, indicate a total of approximately 5453 pounds of mineral spirits have been removed from the subsurface by the SVE system. Copies of SVE system analytical reports are included as Appendix B.

4.2 Groundwater Elevations

Groundwater elevations and depth-to-water measurements for the April 14, 1999, event are presented in Table 4. The average monitoring well water-table elevation (excluding monitoring well MW-13, which has a different screen interval than the other monitoring wells) on April 14, 1999 was 3.09 feet above mean sea level (amsl), an increase of 0.85 feet since the January 1999 event. A groundwater potentiometric surface map prepared with the April 14, 1999, data is presented as Figure 4.

As shown in Figure 4, the on- and off-site groundwater flow direction remains to the southwest, consistent with historic site data. The hydraulic gradient was 0.005 feet/foot (ft/ft) across the site as measured between monitoring wells MW-4 and MW-12. The hydraulic gradient is consistent with previous data for the site. A summary of groundwater elevations since January 1993 is provided as Table 5.

4.3 Groundwater Conditions

A semi-annual groundwater sampling event of monitoring wells MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-8, MW-9, MW-12 and MW-13 was performed on April 14, 1999. No analytes (TPHms or VOCs) were detected in the groundwater samples analyzed from monitoring wells MW-1, MW-2, MW-3, MW-5 or MW-6. Benzene was detected in MW-9 above the maximum contaminant level (MCL) of 1.0 µg/L at a concentration of 11.8 µg/L. The compound 1,1-dichloroethane (1,1-DCA) was detected above the MCL of 5 µg/L in monitoring wells MW-8 and MW-9 at 9.1 µg/L and 27.8 µg/L, respectively. The compound 1,2-dichloroethane (1,2 -DCA) was detected above the MCL of 0.5 µg/L in monitoring wells MW-8, MW-9 and MW-12 at 5.6 µg/L, 4.7 µg/L, and 0.8 µg/L, respectively. The compound *cis*-1,2-dichloroethene (*cis*-1,2-DCE) was detected above the MCL of 6 µg/L in monitoring wells MW-4, MW-8 and MW-9 at 16.8 µg/L, 33.8 µg/L, and 23.5 µg/L, respectively. Trichloroethene (TCE) was detected above the MCL of 5 µg/L in monitoring wells MW-4, MW-8, and MW-9 at 92.9 µg/L, 51.3 µg/L, and 14.5 µg/L, respectively. Vinyl chloride was detected above the MCL of 0.5 µg/L in monitoring wells MW-4, MW-8 and MW-9 at concentrations of 1.0 µg/L, 23.1 µg/L and 124 µg/L, respectively. The compound 1,4-dichlorobenzene (1,4-DCB) was detected in monitoring well MW-9 above the MCL of 5.0 µg/L at a concentration of 13.3 µg/L.

The following compounds were detected below the established MCL or do not have an established MCL:

- TPHms was detected in monitoring well MW-9
- Toluene was detected in monitoring wells MW-8, MW-9, MW-12, and MW-13
- Ethylbenzene was detected in monitoring well MW-9
- Xylenes were detected in monitoring wells MW-8 and MW-9
- Chlorobenzene was detected in monitoring wells MW-8 and MW-9
- 1,2-dichlorobenzene (1,2-DCB) was detected in monitoring wells MW-8 and MW-9
- Naphthalene was detected in monitoring well MW-9
- n-propylbenzene was detected in monitoring well MW-9
- 2-chlorotoluene was detected in monitoring well MW-9
- 1,2,4-trimethylbenzene (1,2,4-TMB) was detected in monitoring well MW-9

A duplicate sample (Dup-1) was collected from monitoring well MW-8. The compounds 1,1-DCA, 1,2-DCA, 1,2-DCB, *cis*-1,2-DCE, toluene, TCE, and vinyl chloride were detected in the duplicate sample at concentrations within 12.9 µg/L of the sample from monitoring well MW-8. Chlorobenzene was detected in monitoring well MW-8 at a concentration of 7.1 µg/L, but not detected in Dup-1, and acetone was detected in Dup-1 at a concentration of 33.5 µg/L, but not detected in monitoring well MW-8. The equipment blank and the trip blank did not have any compounds detected.

Figure 5 depicts the chemical distribution in the groundwater samples collected on April 14, 1999. 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.

5.0 ACTIVITIES SCHEDULED FOR JUNE THROUGH AUGUST 1999

The following activities have been or are scheduled to be performed next quarter:

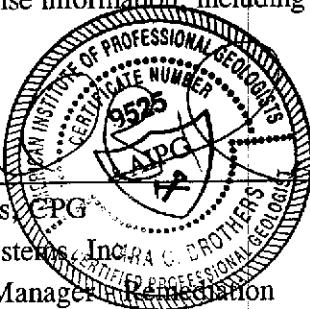
- On March 8, 1999, an *In Situ* Chemical Oxidation Work Plan was submitted for RWQCB review and approval. The Work Plan details pilot test procedures which will be performed to evaluate the feasibility of using chemical oxidation to remediate residual VOC-impacts in groundwater at the facility. Safety-Kleen is proposing to perform this pilot study under the existing voluntary interim remedial activities being conducted at the site. Safety-Kleen will implement the Work Plan within one month of receiving approval from the Regional Water Quality Control Board (RWQCB) and/or Alameda County. The DTSC has verbally indicated that they will neither approve nor disapprove the plan, but they will not object if Safety-Kleen proceeds with the pilot test as a voluntary measure.
- Continue to operate the SVE system in a pulsed mode with site operation and maintenance visits approximately every two weeks.
- Monitor depth-to-water and collect a sample from monitoring well MW-9 if no sheen is present.

6.0 CERTIFICATION STATEMENT

Quarterly Progress Report
Safety-Kleen Systems, Inc., Service Center
400 Market Street
Oakland, California
CAD 053044053

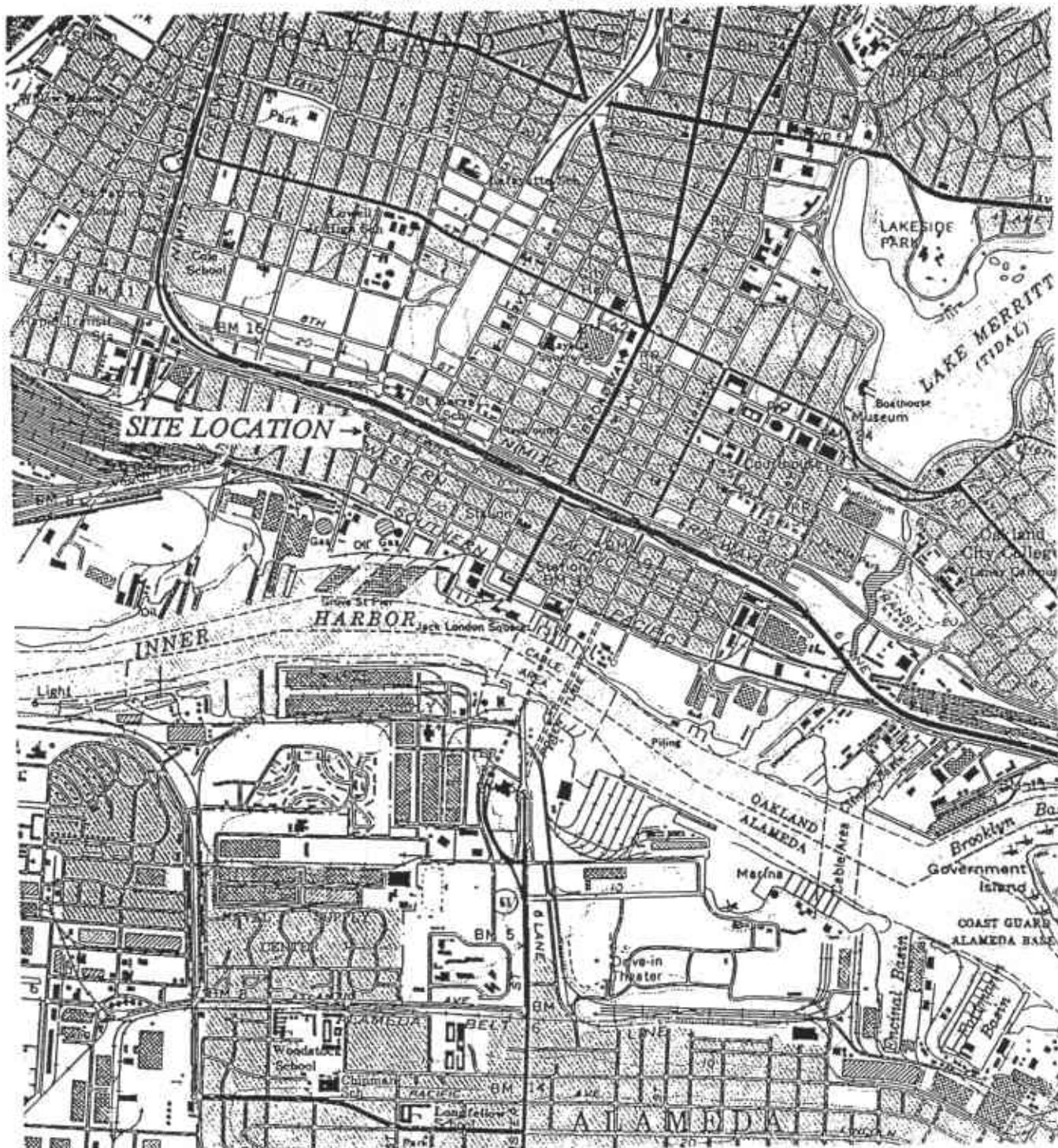
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sara C. Brothers CPG
Safety-Kleen Systems, Inc.
Senior Project Manager - Remediation



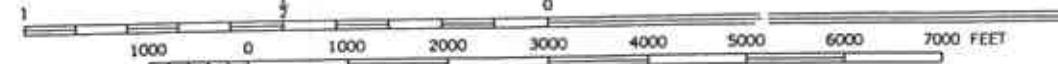
6/16/99
Date

OAKLAND WEST QUADRANGLE
California
7.5 Minute Series (Topographic)

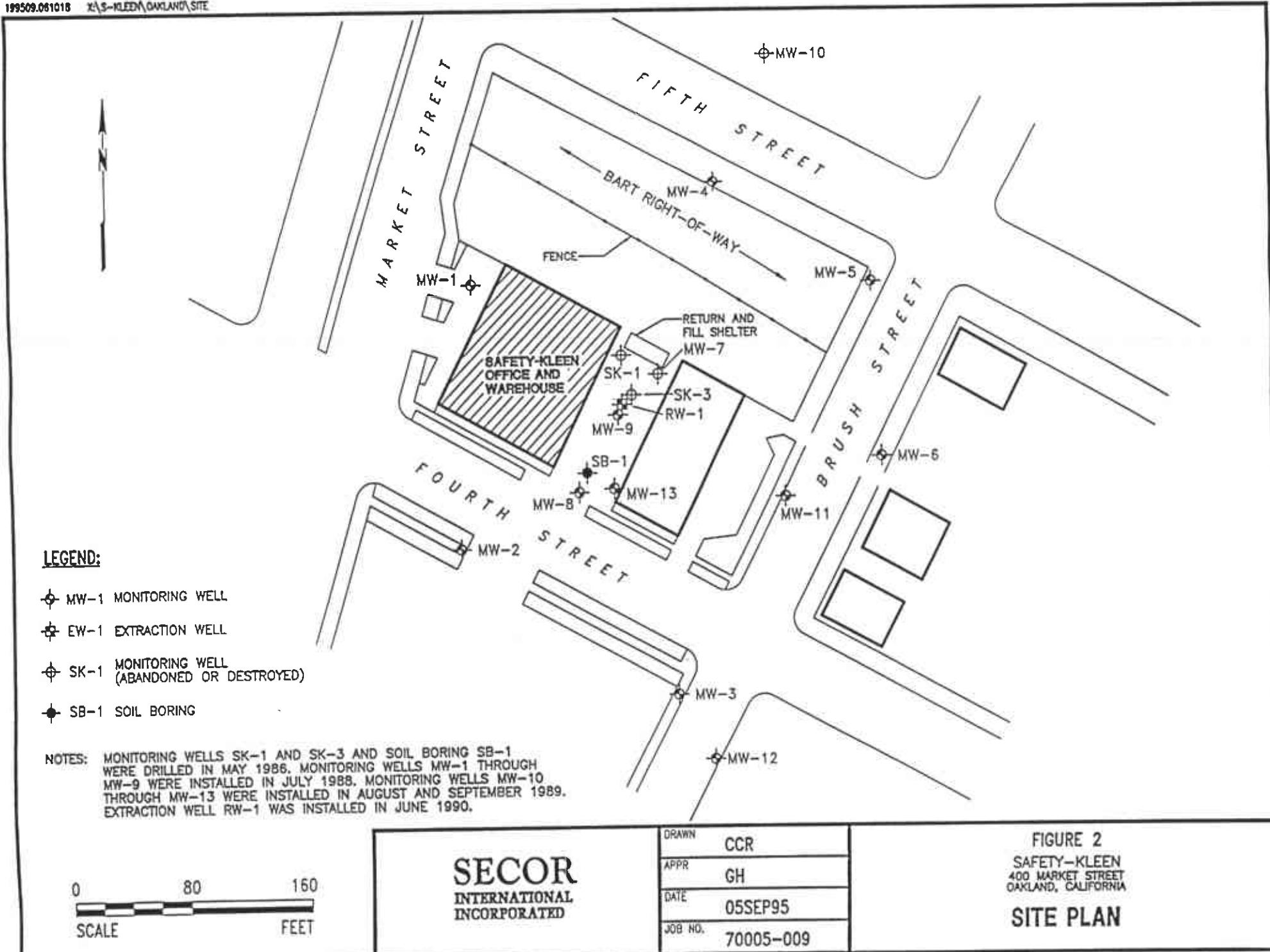


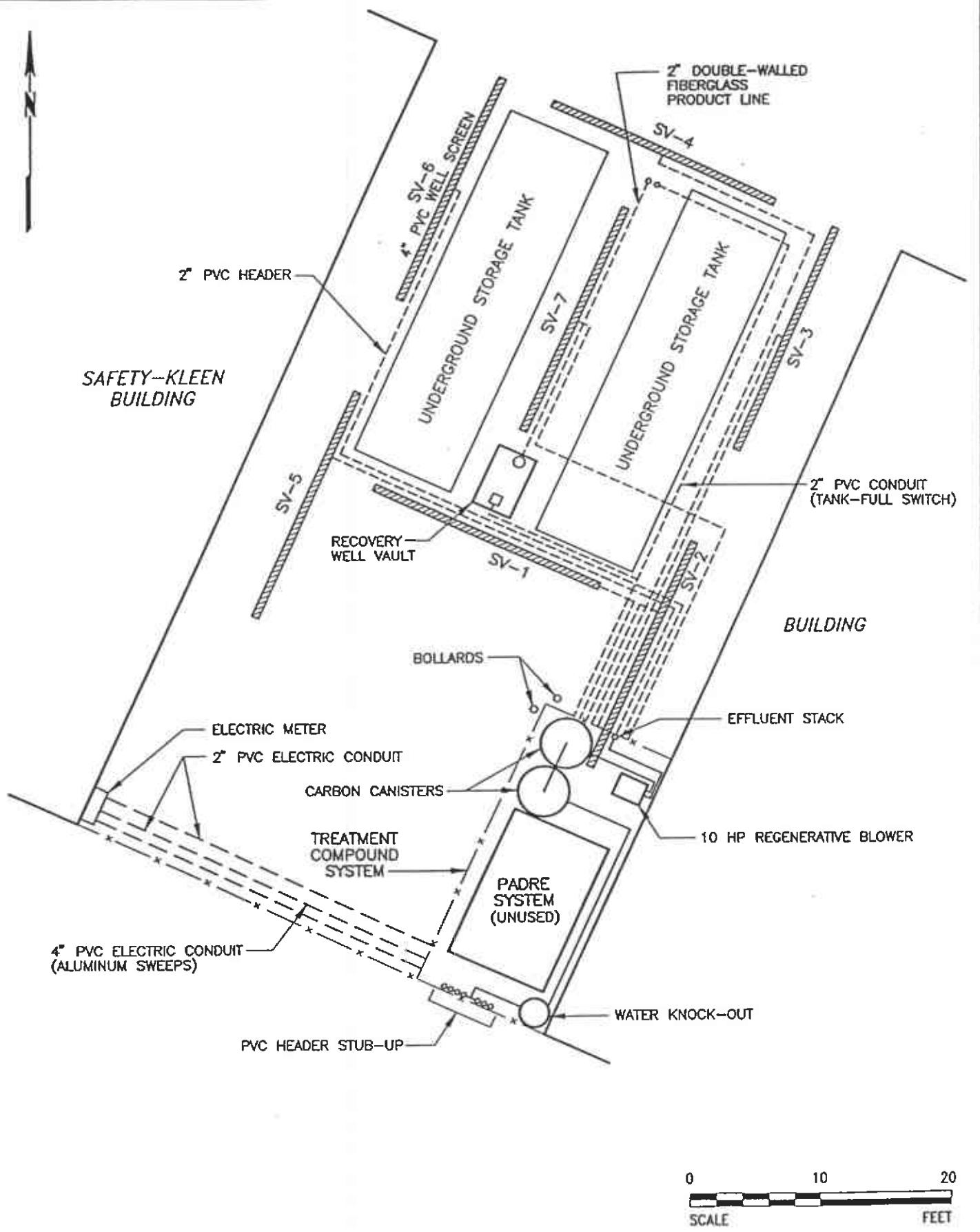
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1 MILE



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				

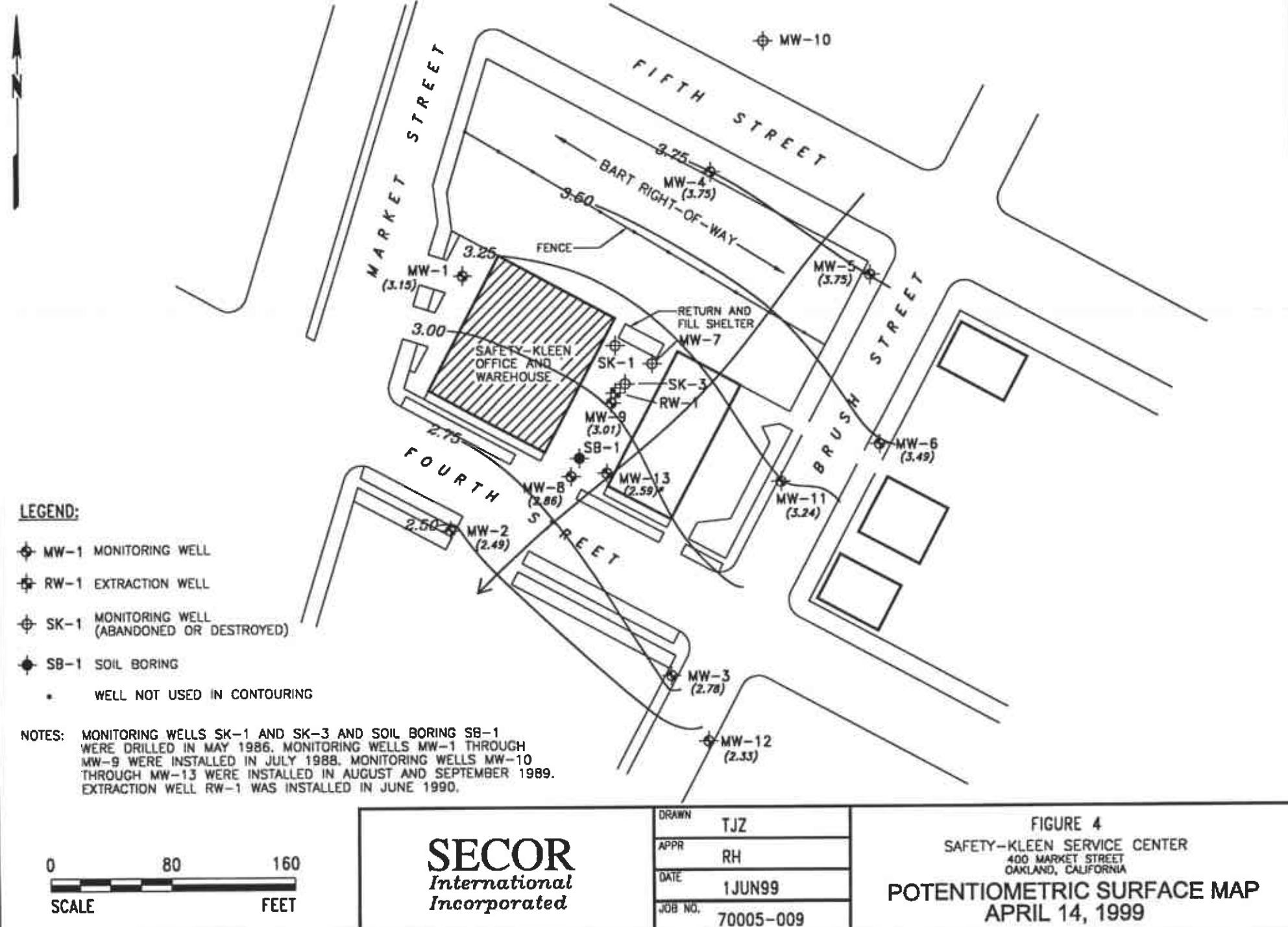




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JOB NO.	70005-009

FIGURE 3
SAFETY-KLEEN SERVICE CENTER
400 MARKET STREET
OAKLAND, CALIFORNIA
**SOIL VAPOR EXTRACTION
SYSTEM LAYOUT**



LEGEND:

- ◆ MW-10 ABANDONED WELL
- ◆ MW-1 EXTRACTION WELL
- ◆ RW-1 MONITORING WELL
- ◆ SB-1 SOIL BORING

TPHms	944
1,2,4-TMB	62.4
TCE	14.5
cis-1,2-DCE	23.5
1,1-DCA	27.8
BENZENE	11.8
CHLOROBENZENE	17.8
2-CHLORTOLUENE	6.6
ETHYLBENZENE	9.2
NAPHTHALENE	15.5
n-PROPYLBENZENE	6.9
TOLUENE	14.0
1,2-DCA	4.7
1,2-DCB	49.7
1,4-DCB	13.3
XYLENES	31.9
VINYL CHLORIDE	124

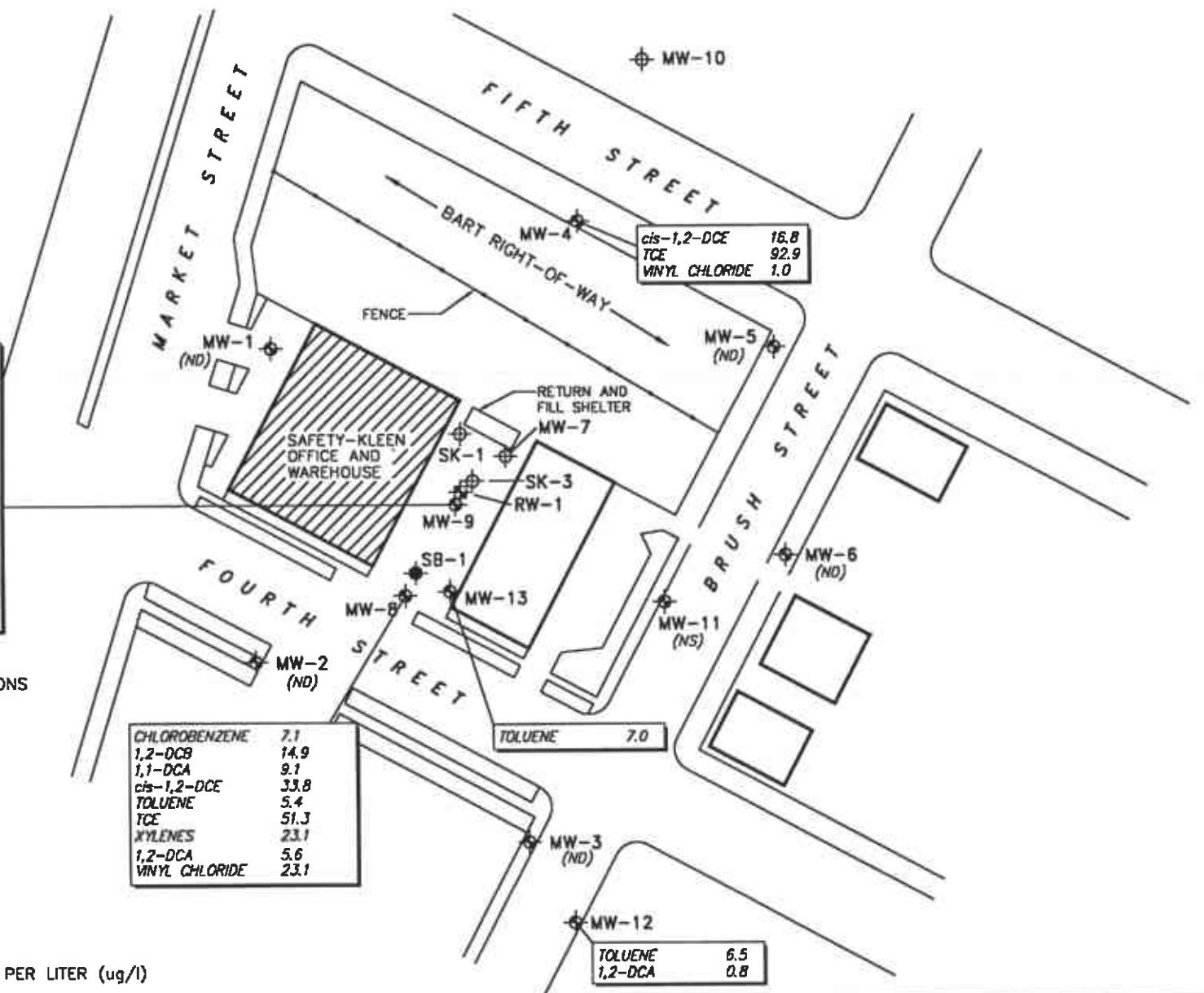
ANALYTICS:

- TPHms — TOTAL PETROLEUM HYDROCARBONS
 AS MINERAL SPIRITS
 TMB — TRIMETHYLBENZENE
 TCE — TRICHLOROETHENE
 DCE — DICHLOROETHENE
 DCA — DICHLOROETHANE
 DCB — DICHLOROBENZENE
 ND — NOT DETECTED
 NS — NOT SAMPLED

NOTE: CONCENTRATIONS IN MICROGRAMS PER LITER (ug/l)

0 80 160

SCALE FEET



DRAWN TJZ
 APPR RH
 DATE 1JUN99
 JOB NO. 70005-009

SECOR
International
Incorporated

FIGURE 5
SAFETY-KLEEN SERVICE CENTER
 400 MARKET STREET
 OAKLAND, CALIFORNIA
 TPHms AND VOC DISTRIBUTION IN GROUNDWATER
 APRIL 14, 1999

Table 1
Soil Vapor Extraction System Monitoring Data

Safety-Kleen Systems, Inc. Service Center
 400 Market Street
 Oakland, California

Date	Elapsed Time*	Well Extraction Vacuum (inches H2O)	KO Vacuum (inches H2O)	Extraction Flow Rate (ft/min)	System Influent (PID/FID units)	#1 Carbon Effluent (PID/FID units)	#2 Carbon Effluent (PID/FID units)	System Effluent (PID/FID units)	Notes
12/08/95	363	6.5	22	5000	107	413	3	6	* System restarted using carbon adsorption on 11/28/95.
12/21/95	677	6	20	5000	107	80	36	1	Influent and Effluent samples collected
01/09/96	1134	9	22	5000	106	169	42	3	Influent and Effluent samples collected
01/24/95	1489	5.5	17	2200	47	43	43	6	
02/06/96	1803	5	16	6000	129	63	61	16	Influent and Effluent samples collected
02/21/96	2188	8	20	5500	117	60	48	8	
03/08/96	2540	10	23	5000	106	184	52	16	Influent and Effluent samples collected
03/20/96	2635	12	23	5000	106	430	362	22	
04/03/96	2906	12	25	5000	106	290	45	2	FID used, Influent and Effluent samples collected, Carbon changed.
04/18/96	3268	11	24	5000	106	500	30	3	FID used.
05/02/96	3594	NM	24	5000	109	109	45	0	Influent and Effluent samples collected
05/16/96	3934	NM	23	5000	109	117	151	3	1
05/31/96	4289	0.15	25	5000	109	54	61	1	Influent and Effluent samples collected
07/01/96	5039	11	23	5000	106	325	150	75	37
07/17/96	5422	10	24	5000	106	159	160	163	33 System shut down for carbon replacement
08/20/96	5424	7	17	3200	68	300	0	0	System restarted with new carbon
08/22/96	5470	7	17	3000	64	300	1	0	Influent and Effluent samples collected
09/03/96	5760	0.15	16	3500	76	131	0	0	0
09/26/96	6316	8	15	3550	76	165	30	1	2 Influent and Effluent samples collected
10/03/96	6478	8	15	3000	64	231	70	42	13
10/10/96	6645	8	15	3500	75	269	189	21	13 Influent and Effluent samples collected

Table 1
Soil Vapor Extraction System Monitoring Data

Safety-Kleen Systems, Inc. Service Center
 400 Market Street
 Oakland, California

Date	Elapsed Time*	Well Extraction Vacuum (inches H2O)	KO Vacuum (inches H2O)	Extraction Flow Rate (ft/min)	(scfm)	System Influent (PID/FID units)	#1 Carbon Effluent (PID/FID units)	#2 Carbon Effluent (PID/FID units)	System Effluent (PID/FID units)	Notes
10/22/96	6939	7	15	3000	64	480	442	2	1	Influent and Effluent samples collected
10/29/96	71040	8	16	4000	85	149	143	8	1	
11/13/96	7467	8	16	3500	75	120	90	40	8	Influent and Effluent samples collected
12/03/96	7944	0.19	25	5000	109	60	53	0	0	
12/18/96	8299	0.14	26	5500	120	51	55	5	5	Influent and Effluent samples collected
01/06/97	8684	24	38	4000	82	40	17	6	4	
01/17/97	8950	24	36	4000	82	147	153	83	7	Influent and Effluent samples collected
01/30/97	9259	24	37	3000	61	20	7	7	2	
02/10/97	9523	24	35	3500	72	192	306	111	4	Influent and Effluent samples collected
02/25/97	9887	22	34	3500	72	50	20	10	2	
03/07/97	10124	20	35	4000	83	40	9	5	2	Influent and Effluent samples collected
03/26/97	10587	22	35	3500	72	72	191	82	2	
04/10/97	10941	19	34	4000	83	15	33	4	3	
05/01/97	11440	23	30	3000	62	5	3	1	0	Influent and Effluent samples collected
05/14/97	11752	31	38	2000	40	19	17	9	0	
05/16/97	11798	NM	NM	NM	NM	NM	NM	NM	NM	System shutdown for carbon changeout
06/05/97	11798	20	30	8000	165	35	17	2	2	Carbon Changeout, Restart System, Influent and Effluent samples collected
06/17/97	12090	NM	30	8500	185	23	0	0	0	Shutdown system
06/30/97	12091	NM	29	4200	91	110	1	0	0	Restart system, Influent and Effluent samples collected
07/17/97	12496	NM	28	4800	104	6	0	0	0	Shutdown system
07/30/97	12497	NM	28	8000	174	19	0	0	0	Restart system, Influent and Effluent samples collected

Table 1
Soil Vapor Extraction System Monitoring Data

Safety-Kleen Systems, Inc. Service Center
400 Market Street
Oakland, California

Date	Elapsed Time*	Well Extraction Vacuum (inches H2O)	KO Vacuum (inches H2O)	Extraction Flow Rate (ft/min)	System Influent (scfm)	#1 Carbon Effluent (PID/FID units)	#2 Carbon Effluent (PID/FID units)	System Effluent (PID/FID units)	Notes
08/13/97	12837	NM	27	8500	185	12	0	0	Shutdown system
08/28/97	12837	18	30	8000	166	35	2	1	Restart system, Influent and Effluent samples collected
09/10/97	13148	>1	29	8250	179	9	0	0	Shutdown system
09/24/97	13149	NM	27	4000	87	25	0	0	Restart system, Influent and Effluent samples collected
10/08/97	13488	NM	26	8000	174	9	0	0	Shutdown system
10/23/97	13488	16	29	8000	167	25	4	0	Restart system, Influent and Effluent samples collected
11/14/97	14018	NM	28	8000	174	68	0	0	Shutdown system
11/26/97	14020	10	29	8000	170	6	22	0	Restart system
12/11/97	14377	15	30	10000	210	0	0	0	Influent and Effluent samples collected, Shutdown system
12/22/97	14378	18	30	10000	208	20	1	1	Restart system, Influent and Effluent samples collected
01/06/98	14742	6.5	28	NM	-	2	0	0	Shutdown system
03/17/98	14743	58	42	10000	187	0	0	0	Restart system, Influent and Effluent samples collected
04/06/98	15222	24	30	10000	205	33	4	4	1
04/28/98	15222	6.5	23	NM	-	17	2	2	0
05/19/98	15731	>1	43	NM	-	3	2	3	0
05/28/98	15731	34	40	10000	199	4	1	0	Restart system, Influent and Effluent samples collected
06/12/98	16090	40	51	10000	196	3	3	2	0
06/25/98	16091	7.5	9	NM	-	3	3	2	0
07/10/98	16452	1.5	9	NM	-	3	0	0	Shutdown system
07/21/98	16453	1	8	NM	-	2	0	0	Restart system
08/05/98	16809	7	2.5	NM	-	3	0	0	Shutdown system

Table 1
Soil Vapor Extraction System Monitoring Data

Safety-Kleen Systems, Inc. Service Center
400 Market Street
Oakland, California

Date	Elapsed Time*	Well Extraction Vacuum (inches H2O)	KO Vacuum (inches H2O)	Extraction Flow Rate (ft/min)	System Influent (scfm)	#1 Carbon Effluent (PID/FID units)	#2 Carbon Effluent (PID/FID units)	System Effluent (PID/FID units)	Notes
08/20/98	16809	30	30	10000	202	17	1	0	Restart system
09/10/98	17316	20	30	10000	207	10	4	2	System left running
10/02/98	17839	27	31	10000	203	1	1	0	Shutdown system
10/26/98	17839	22	32	10000	206	15	6	3	Restart system
11/11/98	18226	24	32	10000	205	5	2	1	Shutdown system
12/11/98	18226	28	35	10000	203	8	2	1	Restarted system
12/22/98	18491	26	35	10000	204	12	2	1	1
01/05/99	18825	24	37	10000	205	1	1	1	Shutdown system
01/22/99	18827	28	40	10000	203	17	3	1	Restarted system
02/16/99	19423	36	47	10000	198	67	3	3	Shutdown system
03/03/99	19423	35	46	10000	199	8	1	1	Restarted system
03/12/99	19638	30	40	10000	202	1	1	0	Shutdown system
03/30/99	19640	30	38	10000	202	7	1	1	Restarted system
04/14/99	19998	28	35	10000	203	2	1	0	Shutdown system
04/27/99	19999	30	39	10000	202	1	1	0	Restarted system
05/13/99	20361	30	36	10000	202	2	1	1	Shutdown system
05/25/99	20361	51	56	10000	190	16	1	0	Restarted system

Notes:

ft/min = feet per minute

scfm = standard cubic feet per minute assuming ambient temperature and ideal gas

NM = not measured

Table 2
Summary of Soil Vapor Analytical Results
Safety-Kleen Systems, Inc. Service Center
400 Market Street
Oakland, California

Sample ID	Date DRL/PQL	TPHms 10 mg/m ³	Toluene 0.10 mg/m ³	Ethylbenzene 0.10 mg/m ³	Xylenes 0.30 mg/m ³	1,1,1-TCA 0.10 mg/m ³	PCA 0.10 mg/m ³
INF	6/25/98	29	0.18	0.11	1	-	-
	7/21/98	95	-	-	0.5	-	-
	8/21/98	-	-	-	0.3	0.1	-
	11/11/98	100	-	-	-	-	-
	3/3/99	13	-	-	-	-	-
	5/25/99	50	-	-	-	-	0.2
EFF	6/25/98	-	-	-	0.49	-	-
	7/21/98	-	-	-	-	-	-
	8/21/98	-	-	-	0.32	-	-
	11/11/98	-	-	-	1	-	-
	3/3/99	-	-	-	-	-	-
	5/25/99	-	-	-	-	-	-

TPHms = total petroleum hydrocarbons as mineral spirits
 TCA = trichloroethane
 PCA = tetrachloroethane
 DRL = detection reporting limit
 PQL = practical quantitation limit
 INF = system influent point
 EFF = system effluent point
 - = Not Detected

Table 3
Soil Vapor Extraction System
Mineral Spirits Removal

Safety-Kleen Systems, Inc. Service Center
400 Market Street
Oakland, California

Sample Date	Elapsed Time (hours)	Run Time This Period (hours)	Extraction Flow Rate (scfm)	TPHms Influent ($\mu\text{g/L}$)	Removal Rate (lbs/day)	Cummulative TPHms Removed (lbs)	Notes
11/28/95			Carbon adsorbtion system start-up			1798	TPHms removed by prior system.
12/21/95	677	677	107	823	7.9	2020	
01/09/96	1134	457	106	1116	10.6	2221	
02/06/96	1803	669	129	999	11.5	2542	
03/08/96	2540	737	106	1821	17.2	3071	
04/03/96	2906	366	106	1116	10.6	3232	
05/02/96	3594	688	109	1586	15.4	3675	
05/31/96	4289	695	109	1234	12.0	4023	
07/01/96	5039	750	106	82	0.8	4047	
08/22/96	5470	431	64	500	2.9	4098	
09/26/96	6316	846	76	1300	8.8	4409	
10/10/96	6645	329	75	880	5.9	4490	
10/22/96	6939	294	64	670	3.8	4537	
11/13/96	7467	528	75	460	3.1	4604	
12/18/96	8299	833	120	220	2.4	4686	
01/17/97	8950	651	82	69	0.5	4700	
02/10/97	9523	573	72	98	0.6	4715	
03/07/97	10124	601	83	ND (< 50)	0	4715	
05/01/97	11440	1316	62	ND (< 50)	0	4715	
06/05/97	11798	358	165	910	13.4	4915	Began pulsing system.

Table 3
Soil Vapor Extraction System
Mineral Spirits Removal

Safety-Kleen Systems, Inc. Service Center
400 Market Street
Oakland, California

Sample Date	Elapsed Time (hours)	Run Time This Period (hours)	Extraction Flow Rate (scfm)	TPHms Influent ($\mu\text{g}/\text{L}$)	Removal Rate (lbs/day)	Cummulative TPHms Removed (lbs)	Notes
06/30/97	12091	293	91	550	4.5	4969	
07/30/97	12497	406	174	150	2.3	5009	
08/28/97	12837	340	166	550	8.2	5124	
09/24/97	13149	311	87	350	2.7	5160	
10/23/97	13488	340	167	220	3.3	5206	
12/11/97	14377	889	210	ND (< 50)	0	5206	
12/22/97	14378	1	208	ND (< 50)	0	5206	
03/17/98	14743	365	187	78	1.3	5226	
04/28/98	15222	479	214	70	1.3	5253	
05/28/98	15731	509	199	21	0.4	5261	
06/25/98	16091	360	214	29	0.6	5269	
07/21/98	16453	362	217	95	1.8	5297	
08/20/98	16809	356	202	13	0.2	5300	
11/11/98	18226	1417	205	100	1.8	5408	
03/03/99	19423	1197	199	13	0.2	5420	
05/25/99	20361	938	190	50	0.8	5453	

Notes:

scfm = cubic feet per minute
 $\mu\text{g}/\text{L}$ = micrograms per liter
 lbs = pounds

Table 4
Groundwater Monitoring Data
April 14, 1999

Safety-Kleen Systems, Inc. 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	4.84	-	-	3.15
MW-2	8.20	5.71	-	-	2.49
MW-3	6.66	3.88	-	-	2.78
MW-4	10.32	6.57	-	-	3.75
MW-5	10.28	6.53	-	-	3.75
MW-6	8.97	5.48	-	-	3.49
MW-7*	-	-	-	-	-
MW-8	7.80	4.94	-	-	2.86
MW-9	8.21	5.20	-	-	3.01
MW-10**	-	-	-	-	-
MW-11	7.91	4.67	-	-	3.24
MW-12	6.74	4.41	-	-	2.33
MW-13	8.08	5.49	-	-	2.59
RW-1	-	4.16	-	-	-

Notes:

* Well destroyed in May 1990.

** Well destroyed in July 1995.

TOC	= Top-of-casing
DTW	= Depth-to-water
DTP	= Depth-to-product
PT	= Product thickness
ft msl	= Feet relative to mean sea level

Table 5
Historical Summary of Groundwater Elevations
(in feet relative to mean sea level)

Safety-Kleen Systems, Inc. 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
01/20/93	1.29	1.00	0.86	1.57	1.48	1.27	1.08	1.15	1.73	1.16	0.44	0.58
04/20/93	1.09	0.51	0.38	1.52	1.42	1.08	0.74	0.95	1.85	0.90	0.10	0.40
07/20/93	0.27	-0.23	-0.27	0.68	0.62	0.37	-0.01	-0.68	0.99	0.20	-0.72	-0.15
10/20/93	-0.02	-0.51	-0.66	0.32	0.17	-0.12	-0.35	0.14	0.62	-0.22	-0.91	-0.57
01/19/94	-0.01	-0.52	-0.77	0.33	0.48	-0.10	-0.37	-0.49	0.60	-0.14	-1.05	-0.65
04/20/94	0.55	0.05	-0.09	0.85	0.74	0.46	0.22	0.33	-	0.34	-0.76	-0.09
07/19/94	0.25	-0.20	-0.31	0.62	0.55	0.23	-0.03	0.08	0.90	0.09	-0.70	-0.22
10/19/94	0.08	-0.33	-0.44	0.41	0.38	0.12	-0.15	0.01	-	0.01	-0.59	-0.33
01/04/95	1.95	1.53	1.64	2.41	2.49	2.24	1.79	1.85	-	2.06	1.44	1.33
04/10/95	3.09	2.46	2.49	3.71	3.73	3.42	2.79	2.95	-	3.18	2.22	1.98
07/11/95	2.04	1.53	1.53	2.54	2.50	2.26	1.76	1.93	-	2.01	1.33	1.53
10/12/95	1.38	0.94	1.01	1.81	1.27	1.56	1.15	1.32	-	1.42	0.94	1.06
01/09/96	1.82	1.40	0.64	2.21	2.21	2.04	1.61	1.54	-	1.85	-	1.51
04/02/96	2.81	2.40	2.46	3.33	3.36	3.17	2.58	2.51	-	2.91	2.24	2.38
07/01/96	2.16	1.70	1.75	2.67	2.63	2.35	1.90	1.93	-	2.18	-	1.84

Table 5
Historical Summary of Groundwater Elevations
(in feet relative to mean sea level)

Safety-Kleen Systems, Inc. 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
11/01/96	1.09	0.70	0.75	1.47	1.47	1.18	0.90	0.86	-	-	-	0.78
01/17/97	2.89	2.39	2.58	3.48	3.52	3.34	2.70	2.57	-	-	-	2.50
04/10/97	2.43	1.89	1.99	2.92	2.86	2.53	2.18	2.19	-	2.45	1.71	1.99
07/17/97	1.70	1.19	1.25	2.15	2.12	1.86	1.44	1.29	-	-	1.12	1.35
10/08/97	1.40	0.94	0.97	1.79	1.76	1.51	1.16	1.35	-	-	0.84	1.06
01/12/98	3.02	2.99	3.12	3.45	3.49	3.34	2.89	2.63	-	3.15	2.50	2.48
04/13/98	3.92	3.20	3.43	4.77	4.50	4.17	3.63	3.91	-	3.91	3.08	3.37
07/21/98	2.79	2.15	2.13	3.37	3.37	3.05	2.50	2.71	-	2.85	2.21	2.35
10/12/98	2.28	1.68	1.79	2.97	2.90	2.55	2.04	1.47	-	2.33	1.72	1.93
01/22/99	2.30	1.78	2.06	2.81	2.82	2.51	2.10	1.88	-	2.41	1.71	1.76
04/14/99	3.15	2.49	2.78	3.75	3.75	3.49	2.86	3.01	-	3.24	2.33	2.59

Notes:

Groundwater elevations are in feet relative to mean sea-level datum.

- = Not measured

Table 6
Summary of Groundwater Analytical Results
Detected Compounds (Results in µg/L)

Safety-Kleen Service Center
 400 Market Street
 Oakland, California

Well No.	Date	VPHms	Benzene	Toluene	Ethylbenzene		Xylenes	1,1-DCE	1,1-DCA	1,2-DCA	m-1,2-DCE	1,2-DCE	Chloroform	1,1,1-TCA	TCE	PCE	Chlorobenzene	Dichloropropane	1,2-DCB	1,3-DCB	1,4-DCB	1,2,4-TMB	TCFM	Freon 12	n-Propylbenzene	Naphthalene	Chloroethane	2-Chlorotoluene	Chlorotoluene	Trichloropropane	Acetone	Vinyl chloride
					MCL	NE	1.0	150.0	700.0	1750.0	6.0	3.0	0.5	6.0	10.0	NE	200.0	5.0	5.0	70.0	5.0	600.0	NE	5	NE	150.0	NE	NE	NE	NE	NE	
MW-1	Apr-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Jul-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Oct-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Jan-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Apr-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Jul-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Oct-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Jan-95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Apr-95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Jul-95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Oct-95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Jan-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Apr-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Jul-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Nov-96**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Nov-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Jan-97**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Jan-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Apr-97**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Apr-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Jul-97**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Oct-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Jan-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Apr-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Jul-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Oct-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Apr-99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
MW-2	Apr-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Jul-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Oct-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Jan-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Apr-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Jul-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Oct-94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Jan-95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Apr-95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Jul-95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Oct-95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Jan-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Apr-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Jul-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Nov-96**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Nov-96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Jan-97**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Jan-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Apr-97**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Apr-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Jul-97**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Oct-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Jan-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Apr-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Jul-98	-	-																													

Table 6
Summary of Groundwater Analytical Results
Detected Compounds (Results in $\mu\text{g/L}$)

Components present in plasma

City-Kleen Service Center
400 Market Street
Philadelphia, Pa.

Table 6
Summary of Groundwater Analytical Results
Detected Compounds (Results in $\mu\text{g/L}$)

City-Kleen Service Center
400 Market Street
Oakland, California

Table 6
Summary of Groundwater Analytical Results
Detected Compounds (Results in µg/L)

Safety-Kleen Service Center
490 Market Street
Oakland, California

Table 6
Summary of Groundwater Analytical Results
Detected Compounds (Results in $\mu\text{g/L}$)

Compounds (Results in $\mu\text{g/L}$)

Jette-Klein Service Center

400 Market Street

Table 6
Summary of Groundwater Analytical Results
Detected Compounds (Results in µg/L)

Safety-Kleen Service Center
 400 Market Street
 Oakland, California

Well No.	Date	TPHms	Benzene	Toluene	Ethybenzene	Xylenes	1,1-DCE	1,1-DCA	1,2-DCA	cis-1,2-DCE	trans-1,2-DCE	Chloform	1,1,1-TCA	TCE	PCE	Chlorobenzene	Dichloropropane	1,2-DCB	1,3-DCB	1,4-DCB	1,2,4-TMB	TCFM	Freon 12	p-Propylbenzene	Naphthalene	Chloroethane	2-Chlorotoluene	Chlorotoluene	Trichloropropane	Acetone	Vinyl chloride
			MCL	NE	1.0	150.0	700.0	1750.0	6.0	5.0	0.5	6.0	10.0	NE	200.0	5.0	5.0	70.0	5.0	500.0	NE	5	NE	150.0	NE	NE	NE	NE	NE	0.5	
MW-13	Nov-96**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS		
	(Continued)	Nov-96	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS		
	Jan-97**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS		
	Jan-97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS		
	Apr-97**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Apr-97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Jul-97**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS		
	Jul-97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS		
	Oct-97	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS		
	Jan-98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS		
	Apr-98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Jul-98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS		
	Oct-98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS		
	Apr-99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

Note:

Concentrations of compounds detected equal to or greater than the MCL are shaded.

(1) In addition to the constituents listed, chloromethane was detected at 1.0 µg/L.

TPHms = Total petroleum hydrocarbons as mineral spirits TCE = Trichloroethene TCFM = Trichlorofluoromethane MCL = Maximum contaminant level for primary drinking water constituents
 DCE = Dichloroethene PCE = Tetrachloroethene Freon 12 = Dichlorodifluoromethane NS = Not Sampled
 DCA = Dichloroacetae DCB = Dichlorobenzene NE = Not Established = Not Detected
 TCA = Trichloroethane TMB = Trimethylbenzene

* The TPHms 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.

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

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: 4-14-99		TIME START: 9:30			TIME END: 10:30		
EVENT: QUARTERLY/SEMI-ANNUAL/ANNUAL MONITORING AND SAMPLING					PERSONNEL: <i>C. Melencon</i>		
WELL ID	TOC	DTW	DTP	PT	TD	ELEV.	COMMENTS
MW-1	7.99	4.84	-	-			2"
MW-2	8.20	5.71	-	-			2"
MW-3	6.66	3.88	-	-			2"
MW-4	10.32	6.57	-	-			2"
MW-5	10.28	6.53	-	-			2"
MW-6	8.97	5.48	-	-			2"
MW-8	7.80	4.94	-	-			2"
MW-9	8.21	5.20		<i>Shreen</i>			4"
MW-11	7.91	4.67	-	-			2"
MW-12	6.74	4.41	-	-			2"
MW-13	8.08	5.49	-	<i>Shreen</i>			4"(deep well)
RW-1	-	4.16		<i>Shreen</i>			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 #: 70005-009-08

Client Name: Safety-Kleen

Location: 404 Market St, Oakland

Purged By: CM

Sampled By: CM

Well I.D.: MW-4

Sample I.D.: MW-4

QA Samples: _____

Date Purged 4-14-99

Start (2400hr) 5:25

End (2400hr) 5:45

Date Sampled 4-14-99

Sample Time (2400hr) 5:50

Sample Type: Groundwater Other

Casing Diameter 2" X 3" _____

4" _____ 5" _____ 6" _____ 8" _____ Other _____

Depth to Bottom (feet) = _____

Purge (gal) = 3.0

Depth to Water (feet) = 6.57

Purge Rate (gal or liter/min) _____

FIELD MEASUREMENTS

Date	Time (2400hr)	Volume (gal)	Temp. (degrees C)	Conductivity (μ mhos/cm)	pH	Color (visual)	Turbidity (NTU)	D.O. (mg/l)	Depth (ft)
<u>4-14</u>	<u>5:25</u>	<u>1.0</u>	<u>19.71</u>	<u>1064</u>	<u>6.41</u>	<u>Cloudy</u>	<u>low</u>	<u>2.52</u>	<u>6.57</u>
"	<u>5:27</u>	<u>1.25</u>	<u>19.73</u>	<u>1031</u>	<u>6.42</u>	"	"	<u>2.38</u>	
"	<u>5:30</u>	<u>1.50</u>	<u>19.78</u>	<u>1042</u>	<u>6.42</u>	<u>clear</u>	<u>low</u>	<u>2.23</u>	
"	<u>5:33</u>	<u>1.75</u>	<u>19.81</u>	<u>1041</u>	<u>6.42</u>	"	"	<u>2.17</u>	
"	<u>5:35</u>	<u>2.0</u>	<u>19.86</u>	<u>1040</u>	<u>6.42</u>	"	"	<u>2.13</u>	
"	<u>5:38</u>	<u>2.25</u>	<u>19.88</u>	<u>1044</u>	<u>6.42</u>	"	"	<u>2.10</u>	
"	<u>5:40</u>	<u>2.50</u>	<u>19.89</u>	<u>1046</u>	<u>6.42</u>	"	"	<u>2.05</u>	
"	<u>5:42</u>	<u>2.75</u>	<u>19.93</u>	<u>1042</u>	<u>6.42</u>	"	"	<u>2.03</u>	
"	<u>5:45</u>	<u>3.0</u>	<u>19.95</u>	<u>1041</u>	<u>6.42</u>	"	"	<u>2.00</u>	<u>6.81</u>

SAMPLE INFORMATION

Sample Depth to Water: _____

Sample Turbidity: low

Analyses: 8260 2 TPH-MS

Odor: none

Sample Vessel/Preservative: 5 VOCs / HCL

PURGING EQUIPMENT

- Bladder Pump
 - Centrifugal Pump
 - Submersible Pump
 - Peristaltic Pump
 - Other: _____
- Pump Depth: 9.5

SAMPLING EQUIPMENT

- Bladder Pump
 - Centrifugal Pump
 - Submersible Pump
 - Peristaltic Pump
 - Other: _____
- Bailer (Teflon)
 Bailer (PVC or disposable)
 Bailer (Stainless Steel)
 Dedicated _____

Well Integrity: good

Lock #: 0909

Remarks: _____

NOTE: Sample after three consecutive readings are within:

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

Signature: John Miller

Page 1 of 1

SECOR International Incorporated
WATER SAMPLE FIELD DATA SHEET

Project #: 70005-009-08

Client Name: Safety-Kleen

Location: 404 Market St, Oakland

Purged By: CM

Sampled By: CM

Well I.D.: MW-9

Sample I.D.: MW-9

QA Samples: _____

Date Purged 4-14-99

Start (2400hr) 6:05

End (2400hr) 6:25

Date Sampled 4-14-99

Sample Time (2400hr) 6:30

Sample Type: Groundwater Other

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

Depth to Bottom (feet) = _____

Purge (gal) = 3.0

Depth to Water (feet) = 5.20

Purge Rate (gal or liter/min) _____

FIELD MEASUREMENTS

Date	Time (2400hr)	Volume (gal)	Temp. (degrees C)	Conductivity (μ mhos/cm)	pH	Color (visual)	Turbidity (NTU)	D.O. (mg/l)	Depth (ft)
<u>4-14</u>	<u>6:05</u>	<u>1.0</u>	<u>19.86</u>	<u>872</u>	<u>6.74</u>	<u>Cloudy</u>	<u>low</u>	<u>1.97</u>	<u>5.20</u>
"	<u>6:08</u>	<u>1.25</u>	<u>19.55</u>	<u>872</u>	<u>6.79</u>	<u>clear</u>	<u>"</u>	<u>1.68</u>	
"	<u>6:10</u>	<u>1.50</u>	<u>19.46</u>	<u>884</u>	<u>6.78</u>	<u>"</u>	<u>"</u>	<u>1.37</u>	
"	<u>6:12</u>	<u>1.75</u>	<u>19.69</u>	<u>893</u>	<u>6.78</u>	<u>"</u>	<u>"</u>	<u>1.26</u>	
"	<u>6:15</u>	<u>2.0</u>	<u>19.73</u>	<u>896</u>	<u>6.78</u>	<u>"</u>	<u>"</u>	<u>1.21</u>	
"	<u>6:18</u>	<u>2.25</u>	<u>19.72</u>	<u>898</u>	<u>6.78</u>	<u>"</u>	<u>"</u>	<u>1.17</u>	
"	<u>6:20</u>	<u>2.50</u>	<u>19.73</u>	<u>878</u>	<u>6.78</u>	<u>"</u>	<u>"</u>	<u>1.12</u>	
"	<u>6:23</u>	<u>2.75</u>	<u>19.74</u>	<u>899</u>	<u>6.78</u>	<u>"</u>	<u>"</u>	<u>1.11</u>	
"	<u>6:25</u>	<u>3.0</u>	<u>19.74</u>	<u>900</u>	<u>6.78</u>	<u>"</u>	<u>"</u>	<u>1.09</u>	<u>5.53</u>

SAMPLE INFORMATION

Sample Depth to Water: _____

Sample Turbidity: low

Analyses: 8260 2 TPH-MS

Odor: H₂S odor

Sample Vessel/Preservative: 5 Vials / HCl

PURGING EQUIPMENT

- Bladder Pump
 - Centrifugal Pump
 - Submersible Pump
 - Peristaltic Pump
 - Other: _____
- Pump Depth: 8'

SAMPLING EQUIPMENT

- Bladder Pump
 - Centrifugal Pump
 - Submersible Pump
 - Peristaltic Pump
 - Other: _____
- Bailer (Teflon)
 Bailer (PVC or disposable)
 Bailer (Stainless Steel)
 Dedicated _____

Well Integrity: good

Lock #: 0909

Remarks: Sheen on water, Skinner in well

NOTE: Sample after three consecutive readings are within:

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

Signature: Rick Clark

Page _____ of _____

SECOR International Incorporated
WATER SAMPLE FIELD DATA SHEET

Project #: 70005-009-08

Client Name: Safety-Kleen

Location: 404 Market St, Oakland

Purged By: CM

Sampled By: CM

Well I.D.: MW-12

Sample I.D.: MW-12

QA Samples: _____

Date Purged 4-14-99

Start (2400hr) 4:40

End (2400hr) 5:00

Date Sampled 4-14-99

Sample Time (2400hr) 5:00

Sample Type: Groundwater Other

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

Depth to Bottom (feet) = _____

Purge (gal) = 3.0

Depth to Water (feet) = 4.41

Purge Rate (gal or liter/min) _____

FIELD MEASUREMENTS

Date	Time (2400hr)	Volume (gal)	Temp. (degrees C)	Conductivity (μ mhos/cm)	pH (units)	Color (visual)	Turbidity (NTU)	D.O. (mg/l)	Depth (ft)
<u>4-14</u>	<u>4:40</u>	<u>1.0</u>	<u>18.89</u>	<u>826</u>	<u>6.45</u>	<u>Clear</u>	<u>low</u>	<u>2.61</u>	<u>4.41</u>
"	<u>4:43</u>	<u>1.25</u>	<u>18.76</u>	<u>823</u>	<u>6.57</u>	"	"	<u>1.72</u>	
"	<u>4:45</u>	<u>1.50</u>	<u>19.18</u>	<u>825</u>	<u>6.57</u>	"	"	<u>1.62</u>	
"	<u>4:48</u>	<u>1.75</u>	<u>19.26</u>	<u>825</u>	<u>6.58</u>	"	"	<u>1.54</u>	
"	<u>4:50</u>	<u>2.0</u>	<u>19.41</u>	<u>827</u>	<u>6.58</u>	"	"	<u>1.44</u>	
"	<u>4:53</u>	<u>2.25</u>	<u>19.51</u>	<u>828</u>	<u>6.59</u>	"	"	<u>1.36</u>	
"	<u>4:55</u>	<u>2.5</u>	<u>19.58</u>	<u>828</u>	<u>6.60</u>	"	"	<u>1.33</u>	
"	<u>4:58</u>	<u>2.75</u>	<u>19.61</u>	<u>829</u>	<u>6.60</u>	"	"	<u>1.28</u>	
"	<u>5:00</u>	<u>3.0</u>	<u>19.66</u>	<u>829</u>	<u>6.60</u>	"	"	<u>1.23</u>	<u>4.69</u>

SAMPLE INFORMATION

Sample Depth to Water: _____

Sample Turbidity: low

Analyses: 8260 & TPH-IMS

Odor: none

Sample Vessel/Preservative: 5 Vials / HCl

PURGING EQUIPMENT

- Bladder Pump
 - Centrifugal Pump
 - Submersible Pump
 - Peristaltic Pump
 - Other: _____
- Pump Depth: 8'

SAMPLING EQUIPMENT

- Bladder Pump
 - Centrifugal Pump
 - Submersible Pump
 - Peristaltic Pump
 - Other: _____
- Bailer (Teflon)
 Bailer (PVC or disposable)
 Bailer (Stainless Steel)
 Dedicated _____

Well Integrity: good

Lock #: 0909

Remarks: _____

NOTE: Sample after three consecutive readings are within:

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

Signature: Elaine Magill

Page ____ of ____

SECOR International Incorporated
WATER SAMPLE FIELD DATA SHEET

Project #: 70005-009-08

Purged By: CM

Well I.D.: MW-13

Client Name: Safety-Kleen

Sampled By: CM

Sample I.D.: MW-13

Location: 404 Market St. Oakland

QA Samples: _____

Date Purged 4-14-99

Start (2400hr) 11:50

End (2400hr) 12:12

Date Sampled 4-14-99

Sample Time (2400hr) 12:20

Sample Type: Groundwater

Other

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

Depth to Bottom (feet) = _____

Purge (gal) = 3.5

Depth to Water (feet) = 5.49

Purge Rate (gal or liter/min) _____

FIELD MEASUREMENTS

Date	Time (2400hr)	Volume (gal)	Temp. (degrees C)	Conductivity (μmhos/cm)	pH	Color (visual)	Turbidity (NTU)	D.O. (mg/l)	Depth (ft)
<u>4-14</u>	<u>11:55</u>	<u>1</u>	<u>19.21</u>	<u>699</u>	<u>8.33</u>	<u>clear</u>	<u>low</u>	<u>1.90</u>	<u>5.49</u>
"	<u>11:58</u>	<u>1.25</u>	<u>19.38</u>	<u>697</u>	<u>8.61</u>	"	"	<u>1.69</u>	
"	<u>12:00</u>	<u>1.50</u>	<u>19.46</u>	<u>698</u>	<u>8.64</u>	"	"	<u>1.51</u>	
"	<u>12:02</u>	<u>2.0</u>	<u>19.54</u>	<u>698</u>	<u>8.67</u>	"	"	<u>1.38</u>	
"	<u>12:04</u>	<u>2.25</u>	<u>19.68</u>	<u>698</u>	<u>8.69</u>	"	"	<u>1.27</u>	
"	<u>12:06</u>	<u>2.75</u>	<u>19.77</u>	<u>697</u>	<u>8.69</u>	"	"	<u>1.20</u>	
"	<u>12:10</u>	<u>3.0</u>	<u>19.93</u>	<u>699</u>	<u>8.69</u>	"	"	<u>1.13</u>	
"	<u>12:12</u>	<u>3.5</u>	<u>20.07</u>	<u>697</u>	<u>8.70</u>	"	"	<u>1.10</u>	<u>5.57</u>

SAMPLE INFORMATION

Sample Depth to Water: _____

Sample Turbidity: low

Odor: none

Analyses: 8260 2 TPH-MS

Sample Vessel/Preservative: 5 Vogs / HCL

PURGING EQUIPMENT

- Bladder Pump Bailer (Teflon)
- Centrifugal Pump Bailer (PVC)
- Submersible Pump Bailer (Stainless Steel)
- Peristaltic Pump Dedicated _____

Other: _____

Pump Depth: 68'

Well Integrity: good

SAMPLING EQUIPMENT

- Bladder Pump Bailer (Teflon)
- Centrifugal Pump Bailer (PVC or disposable)
- Submersible Pump Bailer (Stainless Steel)
- Peristaltic Pump Dedicated _____

Other: _____

Lock #: 0909

Remarks: Expansion cap does not fit very tight

NOTE: Sample after three consecutive readings are within:

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

Signature: John Weller

Page of

APPENDIX B

Laboratory Reports - Soil Vapor Extraction System Samples

Entech Analytical Labs, Inc.

CA ELAP# I-2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

SECOR International
1390 Willow Pass Road, Suite 360
Concord, CA 94520
Attn: Greg Hoehn

Date: 3/11/99
Date Received: 3/4/99
Project: 70005-009
PO #:
Sampled By: Client

Certified Analytical Report

Vapor Sample Analysis:

Sample ID	INF		EFF						PQL	Method
Sample Date	3/3/99		3/3/99							
Sample Time	9:30		9:15							
Lab #	G5515		G5516							
	Result	DF	DLR	Result	DF	DLR				
Results in mg/m ³ :										
Analysis Date	3/4/99			3/4/99						
Mineral Spirits	13	1.0	10	ND	1.0	10			10	8015M
Benzene	ND	1.0	0.10	ND	1.0	0.10			0.10	8020
Toluene	ND	1.0	0.10	ND	1.0	0.10			0.10	8020
Ethyl Benzene	ND	1.0	0.10	ND	1.0	0.10			0.10	8020
Xylenes	ND	1.0	0.30	ND	1.0	0.30			0.30	8020

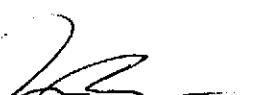
DF=Dilution Factor

ND= None Detected above DLR

PQL=Practical Quantitation Limit

DLR=Detection Reporting Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #I-2346)



Michelle L. Anderson, Lab Director

Entech Analytical Labs, Inc.

CA ELAP# I-2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

SECOR International
1390 Willow Pass Road, Suite 360
Concord, CA 94520
Attn: Greg Hoehn

Date: 3/11/99
Date Received: 3/4/99
Project: 70005-009
PO #:
Sampled By: Client

Certified Analytical Report

Vapor Sample Analysis:

Sample ID	INF			EFF							
Sample Date	3/3/99			3/3/99							
Sample Time	9:30			9:15							
Lab #	G5515			G5516							
	Result	DF	DLR	Result	DF	DLR				PQL	Method
Results in ppmV:											
Analysis Date	3/4/99			3/4/99							
Mineral Spirits	3.1	1.0	2.4	ND	1.0	2.4				2.4	8015M
Benzene	ND	1.0	0.029	ND	1.0	0.029				0.029	8020
Toluene	ND	1.0	0.024	ND	1.0	0.024				0.024	8020
Ethyl Benzene	ND	1.0	0.021	ND	1.0	0.021				0.021	8020
Xylenes	ND	1.0	0.063	ND	1.0	0.063				0.063	8020

DF=Dilution Factor

ND= None Detected above DLR

PQL=Practical Quantitation Limit

DLR=Detection Reporting Limit

• Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #I-2346)



Michelle L. Anderson, Lab Director

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

CA ELAP# I-2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

March 11, 1999

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

Subject: 2 Air Samples
Lab #'s: G5515-G5516
Project Name: Safety Kleen
Project Number: 70005-009
Method(s): EPA 8010

Dear Greg Hoehn,

Chemical analysis on the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. USEPA protocols for sample storage and preservation were followed.

Entech Analytical Labs, Inc. is certified by the State of California (#I-2346). If you have any questions regarding procedures or results, please call me at 408-735-1550.

Sincerely,



Michelle L. Anderson
Lab Director

Entech Analytical Labs, Inc.

CA ELAP# I-2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

Certified Analytical Report Purgeable Halocarbons by EPA Method 8010

Client: SECOR International
Sample Matrix: Air
Sample Date/Time: 3/3/99
Lab #: G5515
Client ID: INF

9:30

Date Reported: 3/11/99
Date Received: 3/4/99
Date Analyzed: 3/5/99
Dilution Factor: 1

Compound	Value	PQL	DLR	Compound	Value	PQL	DLR
Bromodichloromethane	ND	0.1	0.1	trans-1,2-Dichloroethene	ND	0.1	0.1
Bromoform	ND	0.2	0.2	1,2-Dichloropropane	ND	0.1	0.1
Bromomethane	ND	0.2	0.2	cis-1,3-Dichloropropene	ND	0.1	0.1
Carbon Tetrachloride	ND	0.1	0.1	trans-1,3-Dichloropropene	ND	0.1	0.1
Chlorobenzene	ND	0.1	0.1	Methylene Chloride	ND	0.5	0.5
Chloroethane	ND	0.2	0.2	1,1,2,2-Tetrachloroethane	ND	0.1	0.1
Chloroform	ND	0.2	0.2	Tetrachloroethene	ND	0.1	0.1
Chloromethane	ND	0.1	0.1	1,1,1-Trichloroethane	ND	0.1	0.1
Dibromochloromethane	ND	0.2	0.2	1,1,2-Trichloroethane	ND	0.1	0.1
Dichlorodifluoromethane	ND	0.1	0.1	Trichloroethene	ND	0.1	0.1
1,2- Dichlorobenzene	ND	0.1	0.1	Trichlorofluoromethane	ND	0.1	0.1
1,3- Dichlorobenzene	ND	0.1	0.1	Vinyl Chloride	ND	0.1	0.1
1,4- Dichlorobenzene	ND	0.1	0.1				
1,1- Dichloroethane	ND	0.1	0.1				
1,2- Dichloroethane	ND	0.1	0.1				
1,1- Dichloroethene	ND	0.1	0.1				
cis-1,2- Dichloroethene	ND	0.1	0.1				

Surrogate Recovery (%)
2-Bromo-1-Chloropropane 90

1. Results are reported in mg/m³
2. DLR = DF x PQL
3. Analysis performed by Entech Analytical Labs, Inc. (CAELAP #I-2346)



Michelle L. Anderson, Lab Director

ND: None Detected at or above DLR
DLR: Detection Reporting Limit

PQL: Practical Quantitation Limit
DF: Dilution Factor

Entech Analytical Labs, Inc.

CA ELAP# I-2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

Certified Analytical Report Purgeable Halocarbons by EPA Method 8010

Client: SECOR International
Sample Matrix: Air
Sample Date/Time: 3/3/99 9:15
Lab #: G5516
Client ID: EFF

Date Reported: 3/11/99
Date Received: 3/4/99
Date Analyzed: 3/5/99
Dilution Factor: 1

Compound	Value	PQL	DLR	Compound	Value	PQL	DLR
Bromodichloromethane	ND	0.1	0.1	trans-1,2-Dichloroethene	ND	0.1	0.1
Bromoform	ND	0.2	0.2	1,2-Dichloropropane	ND	0.1	0.1
Bromomethane	ND	0.2	0.2	cis-1,3-Dichloropropene	ND	0.1	0.1
Carbon Tetrachloride	ND	0.1	0.1	trans-1,3-Dichloropropene	ND	0.1	0.1
Chlorobenzene	ND	0.1	0.1	Methylene Chloride	ND	0.5	0.5
Chloroethane	ND	0.2	0.2	1,1,2,2-Tetrachloroethane	ND	0.1	0.1
Chloroform	ND	0.2	0.2	Tetrachloroethene	ND	0.1	0.1
Chloromethane	ND	0.1	0.1	1,1,1-Trichloroethane	ND	0.1	0.1
Dibromochloromethane	ND	0.2	0.2	1,1,2-Trichloroethane	ND	0.1	0.1
Dichlorodifluoromethane	ND	0.1	0.1	Trichloroethene	ND	0.1	0.1
1,2- Dichlorobenzene	ND	0.1	0.1	Trichlorofluoromethane	ND	0.1	0.1
1,3- Dichlorobenzene	ND	0.1	0.1	Vinyl Chloride	ND	0.1	0.1
1,4- Dichlorobenzene	ND	0.1	0.1				
1,1-Dichloroethane	ND	0.1	0.1				
1,2-Dichloroethane	ND	0.1	0.1				
1,1-Dichloroethene	ND	0.1	0.1				
cis-1,2-Dichloroethene	ND	0.1	0.1				

Surrogate Recovery (%)
2-Bromo-1-Chloropropane 96

1. Results are reported in mg/m³
2. DLR= DF x PQL
3. Analysis performed by Entech Analytical Labs, Inc. (CAELAP #I-2346)



Michelle L. Anderson, Lab Director

ND: None Detected at or above DLR
DLR: Detection Reporting Limit

PQL: Practical Quantitation Limit
DF: Dilution Factor

Entech Analytical Labs, Inc.

CA ELAP# I-2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

Certified Analytical Report Purgeable Halocarbons by EPA Method 8010

Client: SECOR International
Sample Matrix: Air
Sample Date/Time: 3/3/99 9:30
Lab #: G5515
Client ID: INF

Date Reported: 3/11/99
Date Received: 3/4/99
Date Analyzed: 3/5/99
Dilution Factor: 1

Compound	Value	PQL	DLR	Compound	Value	PQL	DLR
Bromodichloromethane	ND	0.014	0.014	trans-1,2-Dichloroethene	ND	0.023	0.023
Bromoform	ND	0.018	0.018	1,2-Dichloropropane	ND	0.02	0.02
Bromomethane	ND	0.047	0.047	cis-1,3-Dichloropropene	ND	0.02	0.02
Carbon Tetrachloride	ND	0.015	0.015	trans-1,3-Dichloropropene	ND	0.02	0.02
Chlorobenzene	ND	0.02	0.02	Methylene Chloride	ND	0.016	0.016
Chloroethane	ND	0.069	0.069	1,1,2,2-Tetrachloroethane	ND	0.013	0.013
Chloroform	ND	0.038	0.038	Tetrachloroethene	ND	0.014	0.014
Chloromethane	ND	0.044	0.044	1,1,1-Trichloroethane	ND	0.017	0.017
Dibromochloromethane	ND	0.022	0.022	1,1,2-Trichloroethane	ND	0.017	0.017
Dichlorodifluoromethane	ND	0.019	0.019	Trichloroethene	ND	0.017	0.017
1,2- Dichlorobenzene	ND	0.015	0.015	Trichlorofluoromethane	ND	0.016	0.016
1,3- Dichlorobenzene	ND	0.015	0.015	Vinyl Chloride	ND	0.036	0.036
1,4- Dichlorobenzene	ND	0.015	0.015				
1,1-Dichloroethane	ND	0.023	0.023				
1,2-Dichloroethane	ND	0.023	0.023				
1,1-Dichloroethene	ND	0.023	0.023				
cis-1,2-Dichloroethene	ND	0.023	0.023				

Surrogate Recovery (%)
2-Bromo-1-Chloropropane 90

1. Results are reported in ppmV
2. DLR= DF x PQL
3. Analysis performed by Entech Analytical Labs, Inc. (CAELAP #I-2346)


Michelle L. Anderson, Lab Director

ND: None Detected at or above DLR
DLR: Detection Reporting Limit

PQL: Practical Quantitation Limit
DF: Dilution Factor

Entech Analytical Labs, Inc.

CA ELAP# I-2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

Certified Analytical Report Purgeable Halocarbons by EPA Method 8010

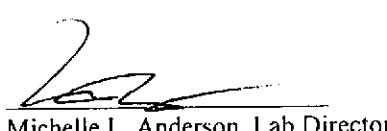
Client: SECOR International
Sample Matrix: Air
Sample Date/Time: 3/3/99 9:15
Lab #: G5516
Client ID: EFF

Date Reported: 3/11/99
Date Received: 3/4/99
Date Analyzed: 3/5/99
Dilution Factor: 1

Compound	Value	PQL	DLR	Compound	Value	PQL	DLR
Bromodichloromethane	ND	0.014	0.014	trans-1,2-Dichloroethene	ND	0.023	0.023
Bromoform	ND	0.018	0.018	1,2-Dichloropropane	ND	0.02	0.02
Bromomethane	ND	0.047	0.047	cis-1,3-Dichloropropene	ND	0.02	0.02
Carbon Tetrachloride	ND	0.015	0.015	trans-1,3-Dichloropropene	ND	0.02	0.02
Chlorobenzene	ND	0.02	0.02	Methylene Chloride	ND	0.016	0.016
Chloroethane	ND	0.069	0.069	1,1,2,2-Tetrachloroethane	ND	0.013	0.013
Chloroform	ND	0.038	0.038	Tetrachloroethene	ND	0.014	0.014
Chloromethane	ND	0.044	0.044	1,1,1-Trichloroethane	ND	0.017	0.017
Dibromochloromethane	ND	0.022	0.022	1,1,2-Trichloroethane	ND	0.017	0.017
Dichlorodifluoromethane	ND	0.019	0.019	Trichloroethene	ND	0.017	0.017
1,2- Dichlorobenzene	ND	0.015	0.015	Trichlorofluoromethane	ND	0.016	0.016
1,3- Dichlorobenzene	ND	0.015	0.015	Vinyl Chloride	ND	0.036	0.036
1,4- Dichlorobenzene	ND	0.015	0.015				
1,1-Dichloroethane	ND	0.023	0.023				
1,2-Dichloroethane	ND	0.023	0.023				
1,1-Dichloroethene	ND	0.023	0.023				
cis-1,2-Dichloroethene	ND	0.023	0.023				

Surrogate Recovery (%)
2-Bromo-1-Chloropropane 96

1. Results are reported in ppmV
2. DLR = DF x PQL
3. Analysis performed by Entech Analytical Labs, Inc. (CAELAP #I-2346)



Michelle L. Anderson, Lab Director

ND: None Detected at or above DLR
DLR: Detection Reporting Limit

PQL: Practical Quantitation Limit
DF: Dilution Factor

Entech Analytical Labs, Inc.

525 Del Rey Avenue, Suite E
Sunnyvale, CA 94086

QUALITY CONTROL RESULTS SUMMARY

METHOD: Gas Chromatography

QC Batch #: GBG4990304

Date Analyzed: 03/04/99

Matrix: Water

Quality Control Sample: Blank Spike

Units: $\mu\text{g/L}$

PARAMETER	Method #	MB $\mu\text{g/L}$	SA $\mu\text{g/L}$	SR $\mu\text{g/L}$	SP $\mu\text{g/L}$	SP % R	SPD $\mu\text{g/L}$	SPD %R	RPD	QC LIMITS RPD	QC LIMITS %R
Benzene	8020	<0.50	40	ND	39	97	39	98	0.8	25	82-110
Toluene	8020	<0.50	40	ND	39	98	40	99	1.5	25	80-111
Ethyl Benzene	8020	<0.50	40	ND	38	95	40	100	4.7	25	81-111
Xylenes	8020	<0.50	120	ND	114	95	119	100	5	25	81-111
Gasoline	8015	<50.0	500	ND	509	102	547	109	7.1	25	70-132

Note: LCS and LCSD results reported for the following Parameters:

All

Definition of Terms:

na: Not Analyzed in QC batch

MB: Method Blank

SA: Spike Added

SR: Sample Result

RPD(%): Duplicate Analysis - Relative Percent Difference

SP: Spike Result

SP (%R): Spike % Recovery

SPD: Spike Duplicate Result

SPD (%R): Spike % Recovery

NC: Not Calculated

Entech Analytical Labs, Inc.

525 Del Rey Avenue, Suite E
Sunnyvale, CA 94086**QUALITY CONTROL RESULTS SUMMARY**

METHOD: Gas Chromatography - Volatile Organics

QC Batch #: VOC2W990305

Matrix: Water

Units: $\mu\text{g/L}$

Date Analyzed:

03/05/99

Quality Control Sample:

Blank Spike

PARAMETER	Method #	SA	SR	SP	SP	SPD	SPD	RPD	QC LIMITS	
		$\mu\text{g/L}$	$\mu\text{g/L}$	$\mu\text{g/L}$	% R	$\mu\text{g/L}$	%R	RPD	RPD	%R
Benzene	602/8020	40	ND	38	96	38	95	0.5	25	83-112
Chlorobenzene	601/8010	40	ND	46	114	44	111	2.4	25	83-117
1,1-Dichloroethane	601/8010	40	ND	42	106	42	105	0.7	25	85-124
Toluene	602/8020	40	ND	39	97	39	98	0.5	25	80-120
Trichloroethylene	601/8010	40	ND	46	114	45	112	2.2	25	76-127
2-Bromo-1-chloropropane	601/8010			97%	110%		106%			75-125
aaa-Trifluorotoluene	602/8020			100%	101%		104%			75-125

Note: LCS and LCSD results reported for the following Parameters:

All

Definition of Terms:

na: Not Analyzed in QC batch

SA: Spike Added

SR: Sample Result

RPD(%): Duplicate Analysis - Relative Percent Difference

SP: Spike Result

SP (%R): Spike % Recovery

SPD: Spike Duplicate Result

SPD (%R): Spike Duplicate % Recovery

NC: Not Calculated

Chain-of Custody Number:

SECOR Chain-of Custody Record

Field Office: SECOR
Address: 1390 Willowpass Road 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 Task #

Project Manager Greg Hoehn

Laboratory Eotech

Turnaround Time STANDARD

Sampler's Name GARY R. CLIFT

Sampler's Name _____
Sampler's Signature _____

Sample ID	Date	Time	Matrix
-----------	------	------	--------

FALE (無) 3/3 9:30 AIR

EEE (55516) 3/3 9:15 AM

Analysis Request															
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 M. S.	BTEX	Comments/ Instructions	Number of Containers
			X X							X X		X X			—

Special Instructions/Comments:

Relinquished by: SECOR
Sign MARY CLIFT
Print GARY R CLIFT
Company SECOR
Time 8:00 Date 3/4/99

Received by: _____
Sign 595 MIKE
Print _____
Company WORLD COURIER
Time 808, Date 3-4

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

Relinquished by: _____
Sign SAS MIKE
Print _____
Company WORLD COPIER
Time _____ Date 3-4

Received by: Andrea Edwards
Sign _____
Print Andrea Edwards
Company _____
Time 9:55 AM Date 3/4/99

Client: SECOR
Client Contact: Greg Hoehn
Client Phone: _____

Entech Analytical Labs, Inc.

CA ELAP# I-2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

June 3, 1999

Greg Hoehn
SECOR International
1390 Willowpass Road, Suite 360
Concord, CA 94520

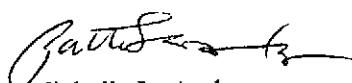
Subject: 2 Air Samples
Lab #'s: G11945 through G11946
Project Name: Safety Kleen
Project Number: 70005-009
Method(s): EPA 601

Dear Greg Hoehn,

Chemical analysis on the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. USEPA protocols for sample storage and preservation were followed.

Entech Analytical Labs, Inc. is certified by the State of California (#I-2346). If you have any questions regarding procedures or results, please call me at 408-735-1550.

Sincerely,



Michelle L. Anderson
Lab Director

Entech Analytical Labs, Inc.

CA ELAP# I-2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

SECOR International
1390 Willow Pass Road, Suite 360
Concord, CA 94520
Attn: Greg Hoehn

Date: 6/3/99
Date Received: 5/26/99
Project: 70005-009
PO #:
Sampled By: Client

Certified Analytical Report

Vapor Sample Analysis:

Sample ID	INF			EFF							
Sample Date	5/25/99			5/25/99							
Sample Time	16:35			16:30							
Lab #	G11945			G11946							
	Result	DF	DLR	Result	DF	DLR				PQL	Method
Results in mg/m ³ :											
Analysis Date	5/26/99			5/26/99							
Mineral Spirits	50	1.0	10	ND	1.0	10				10	8015M
Benzene	ND	1.0	0.10	ND	1.0	0.10				0.10	8020
Toluene	ND	1.0	0.10	ND	1.0	0.10				0.10	8020
Ethyl Benzene	ND	1.0	0.10	ND	1.0	0.10				0.10	8020
Xylenes (total)	ND	1.0	0.30	ND	1.0	0.30				0.30	8020

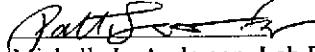
DF=Dilution Factor

ND= None Detected above DLR

PQL=Practical Quantitation Limit

DLR=Detection Reporting Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #I-2346)



Michelle L. Anderson, Lab Director

Entech Analytical Labs, Inc.

CA ELAP# I-2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

SECOR International
1390 Willow Pass Road, Suite 360
Concord, CA 94520
Attn: Greg Hoehn

Date: 6/3/99
Date Received: 5/26/99
Project: 70005-009
PO #:
Sampled By: Client

Certified Analytical Report

Vapor Sample Analysis:

Sample ID	INF		EFF							
Sample Date	5/25/99		5/25/99							
Sample Time	16:35		16:30							
Lab #	G11945		G11946							
	Result	DF	DLR	Result	DF	DLR			PQL	Method
Results in ppmV:										
Analysis Date	5/26/99			5/26/99						
Mineral Spirits	12	1.0	2.4	ND	1.0	2.4			2.4	8015M
Benzene	ND	1.0	0.029	ND	1.0	0.029			0.029	8020
Toluene	ND	1.0	0.024	ND	1.0	0.024			0.024	8020
Ethyl Benzene	ND	1.0	0.021	ND	1.0	0.021			0.021	8020
Xylenes (total)	ND	1.0	0.063	ND	1.0	0.063			0.063	8020

DF=Dilution Factor

ND= None Detected above DLR

PQL=Practical Quantitation Limit

DLR=Detection Reporting Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #I-2346)



Michelle L. Anderson, Lab Director

Entech Analytical Labs, Inc.

CA ELAP# I-2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

Certified Analytical Report Purgeable Halocarbons by EPA Method 601

Client: Secor
Sample Matrix: Air
Sample Date/Time: 5/25/99
Lab #: G11945
Client ID: INF

16:35

Date Reported: 6/3/99
Date Received: 5/26/99
Date Analyzed: 5/26/99
Dilution Factor: 1

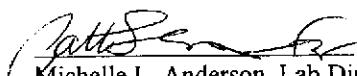
Compound	Value	PQL	DLR	Compound	Value	PQL	DLR
Bromodichloromethane	ND	0.1	0.1	trans-1,2-Dichloroethene	ND	0.1	0.1
Bromoform	ND	0.2	0.2	1,2-Dichloropropane	ND	0.1	0.1
Bromomethane	ND	0.2	0.2	cis-1,3-Dichloropropene	ND	0.1	0.1
Carbon Tetrachloride	ND	0.1	0.1	trans-1,3-Dichloropropene	ND	0.1	0.1
Chlorobenzene	ND	0.1	0.1	Methylene Chloride	ND	0.2	0.2
Chloroethane	ND	0.2	0.2	1,1,2,2-Tetrachloroethane	ND	0.1	0.1
Chloroform	ND	0.2	0.2	Tetrachloroethene	0.2	0.1	0.1
Chloromethane	ND	0.1	0.1	1,1,1-Trichloroethane	ND	0.1	0.1
Dibromochloromethane	ND	0.2	0.2	1,1,2-Trichloroethane	ND	0.1	0.1
Dichlorodifluoromethane	ND	0.1	0.1	Trichloroethene	ND	0.1	0.1
1,2-Dichlorobenzene	ND	0.1	0.1	Trichlorofluoromethane	ND	0.1	0.1
1,3-Dichlorobenzene	ND	0.1	0.1	Vinyl Chloride	ND	0.1	0.1
1,4-Dichlorobenzene	ND	0.1	0.1				
1,1-Dichloroethane	ND	0.1	0.1				
1,2-Dichloroethane	ND	0.1	0.1				
1,1-Dichloroethene	ND	0.1	0.1				
cis-1,2-Dichloroethene	ND	0.1	0.1				

Surrogate Recovery (%)
2-Bromo-1-Chloropropane 89

1. Results are reported in mg/m³

2. DLR = DF x PQL

3. Analysis performed by Entech Analytical Labs, Inc. (CAELAP #I-2346)


Michelle L. Anderson, Lab Director

ND: None Detected at or above DLR
DLR: Detection Reporting Limit

PQL: Practical Quantitation Limit
DF: Dilution Factor

Entech Analytical Labs, Inc.

CA ELAP# I-2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

Certified Analytical Report Purgeable Halocarbons by EPA Method 601

Client: Secor
Sample Matrix: Air
Sample Date/Time: 5/25/99
Lab #: G11945
Client ID: INF

16:35

Date Reported: 6/3/99
Date Received: 5/26/99
Date Analyzed: 5/26/99
Dilution Factor: 1

Compound	Value	PQL	DLR	Compound	Value	PQL	DLR
Bromodichloromethane	ND	0.014	0.014	trans-1,2-Dichloroethene	ND	0.023	0.023
Bromoform	ND	0.018	0.018	1,2-Dichloropropane	ND	0.02	0.02
Bromomethane	ND	0.047	0.047	cis-1,3-Dichloropropene	ND	0.02	0.02
Carbon Tetrachloride	ND	0.015	0.015	trans-1,3-Dichloropropene	ND	0.02	0.02
Chlorobenzene	ND	0.02	0.02	Methylene Chloride	ND	0.016	0.016
Chloroethane	ND	0.069	0.069	1,1,2,2-Tetrachloroethane	ND	0.013	0.013
Chloroform	ND	0.038	0.038	Tetrachloroethene	0.027	0.014	0.014
Chloromethane	ND	0.044	0.044	1,1,1-Trichloroethane	ND	0.017	0.017
Dibromochloromethane	ND	0.022	0.022	1,1,2-Trichloroethane	ND	0.017	0.017
Dichlorodifluoromethane	ND	0.019	0.019	Trichloroethene	ND	0.017	0.017
1,2- Dichlorobenzene	ND	0.015	0.015	Trichlorofluoromethane	ND	0.016	0.016
1,3- Dichlorobenzene	ND	0.015	0.015	Vinyl Chloride	ND	0.036	0.036
1,4- Dichlorobenzene	ND	0.015	0.015				
1,1-Dichloroethane	ND	0.023	0.023				
1,2-Dichloroethane	ND	0.023	0.023				
1,1-Dichloroethene	ND	0.023	0.023				
cis-1,2-Dichloroethene	ND	0.023	0.023				

Surrogate Recovery (%)
2-Bromo-1-Chloropropane 89

1. Results are reported in ppmV
2. DLR= DF x PQL
3. Analysis performed by Entech Analytical Labs, Inc. (CAELAP #I-2346)


Michelle L. Anderson, Lab Director

ND: None Detected at or above DLR
DLR: Detection Reporting Limit

PQL: Practical Quantitation Limit
DF: Dilution Factor

Entech Analytical Labs, Inc.

CA ELAP# I-2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

Certified Analytical Report Purgeable Halocarbons by EPA Method 601

Client: Secor
Sample Matrix: Air
Sample Date/Time: 5/25/99
Lab #: G11946
Client ID: EFF

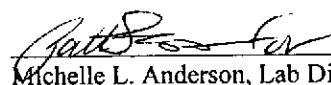
16:30

Date Reported: 6/3/99
Date Received: 5/26/99
Date Analyzed: 5/26/99
Dilution Factor: 1

Compound	Value	PQL	DLR	Compound	Value	PQL	DLR
Bromodichloromethane	ND	0.1	0.1	trans-1,2-Dichloroethene	ND	0.1	0.1
Bromoform	ND	0.2	0.2	1,2-Dichloropropane	ND	0.1	0.1
Bromomethane	ND	0.2	0.2	cis-1,3-Dichloropropene	ND	0.1	0.1
Carbon Tetrachloride	ND	0.1	0.1	trans-1,3-Dichloropropene	ND	0.1	0.1
Chlorobenzene	ND	0.1	0.1	Methylene Chloride	ND	0.2	0.2
Chloroethane	ND	0.2	0.2	1,1,2,2-Tetrachloroethane	ND	0.1	0.1
Chloroform	ND	0.2	0.2	Tetrachloroethene	ND	0.1	0.1
Chloromethane	ND	0.1	0.1	1,1,1-Trichloroethane	ND	0.1	0.1
Dibromochloromethane	ND	0.2	0.2	1,1,2-Trichloroethane	ND	0.1	0.1
Dichlorodifluoromethane	ND	0.1	0.1	Trichloroethene	ND	0.1	0.1
1,2-Dichlorobenzene	ND	0.1	0.1	Trichlorofluoromethane	ND	0.1	0.1
1,3-Dichlorobenzene	ND	0.1	0.1	Vinyl Chloride	ND	0.1	0.1
1,4-Dichlorobenzene	ND	0.1	0.1				
1,1-Dichloroethane	ND	0.1	0.1				
1,2-Dichloroethane	ND	0.1	0.1				
1,1-Dichloroethene	ND	0.1	0.1				
cis-1,2-Dichloroethene	ND	0.1	0.1				

Surrogate Recovery (%)
2-Bromo-1-Chloropropane 102

1. Results are reported in mg/m³
2. DLR = DF x PQL
3. Analysis performed by Entech Analytical Labs, Inc. (CAELAP #I-2346)


Michelle L. Anderson, Lab Director

ND: None Detected at or above DLR
DLR: Detection Reporting Limit

PQL: Practical Quantitation Limit
DF: Dilution Factor

Entech Analytical Labs, Inc.

CA ELAP# I-2346

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

Certified Analytical Report Purgeable Halocarbons by EPA Method 601

Client: Secor
Sample Matrix: Air
Sample Date/Time: 5/25/99
Lab #: G11946
Client ID: EFF

16:30

Date Reported: 6/3/99
Date Received: 5/26/99
Date Analyzed: 5/26/99
Dilution Factor: 1

Compound	Value	PQL	DLR	Compound	Value	PQL	DLR
Bromodichloromethane	ND	0.014	0.014	trans-1,2-Dichloroethene	ND	0.023	0.023
Bromoform	ND	0.018	0.018	1,2-Dichloropropane	ND	0.02	0.02
Bromomethane	ND	0.047	0.047	cis-1,3-Dichloropropene	ND	0.02	0.02
Carbon Tetrachloride	ND	0.015	0.015	trans-1,3-Dichloropropene	ND	0.02	0.02
Chlorobenzene	ND	0.02	0.02	Methylene Chloride	ND	0.016	0.016
Chloroethane	ND	0.069	0.069	1,1,2,2-Tetrachloroethane	ND	0.013	0.013
Chloroform	ND	0.038	0.038	Tetrachloroethene	ND	0.014	0.014
Chloromethane	ND	0.044	0.044	1,1,1-Trichloroethane	ND	0.017	0.017
Dibromochloromethane	ND	0.022	0.022	1,1,2-Trichloroethane	ND	0.017	0.017
Dichlorodifluoromethane	ND	0.019	0.019	Trichloroethene	ND	0.017	0.017
1,2- Dichlorobenzene	ND	0.015	0.015	Trichlorofluoromethane	ND	0.016	0.016
1,3- Dichlorobenzene	ND	0.015	0.015	Vinyl Chloride	ND	0.036	0.036
1,4- Dichlorobenzene	ND	0.015	0.015				
1,1-Dichloroethane	ND	0.023	0.023				
1,2-Dichloroethane	ND	0.023	0.023				
1,1-Dichloroethene	ND	0.023	0.023				
cis-1,2-Dichloroethene	ND	0.023	0.023				

Surrogate Recovery (%)
2-Bromo-1-Chloropropane 102

1. Results are reported in ppmV
2. DLR= DF x PQL
3. Analysis performed by Entech Analytical Labs, Inc. (CAELAP #I-2346)


Michelle L. Anderson, Lab Director

ND: None Detected at or above DLR
DLR: Detection Reporting Limit

PQL: Practical Quantitation Limit
DF: Dilution Factor

Entech Analytical Labs, Inc.

525 Del Rey Avenue, Suite E
Sunnyvale, CA 94086

QUALITY CONTROL RESULTS SUMMARY

METHOD: Gas Chromatography - Volatile Organics

QC Batch #: VOC2W990526

Matrix: Water

Units: $\mu\text{g/L}$

Date Analyzed: 05/26/99

Quality Control Sample: Blank Spike

PARAMETER	Method #	SA	SR	SP	SP	SPD	SPD	RPD	QC LIMITS	
		$\mu\text{g/L}$	$\mu\text{g/L}$	$\mu\text{g/L}$	% R	$\mu\text{g/L}$	%R	RPD	RPD	%R
Benzene	602/8020	40	ND	41	102	40	101	1.2	25	82-112
Chlorobenzene	601/8010	40	ND	45	113	44	109	3.8	25	81-122
1,1-Dichloroethane	601/8010	40	ND	37	93	37	92	1.3	25	82-131
Toluene	602/8020	40	ND	37	92	36	90	1.9	25	80-120
Trichloroethylene	601/8010	40	ND	34	84	34	84	0.3	25	76-124
2-Bromo-1-chloropropane	601/8010		79%	91%		80%				75-125
aaa-Trifluorotoluene	602/8020		105%	108%		105%				75-125

Note: LCS and LCSD results reported for the following Parameters:

All

Definition of Terms:

na: Not Analyzed in QC batch

SA: Spike Added

SR: Sample Result

RPD(%): Duplicate Analysis - Relative Percent Difference

SP: Spike Result

SP (%R): Spike % Recovery

SPD: Spike Duplicate Result

SPD (%R): Spike Duplicate % Recovery

NC: Not Calculated

Entech Analytical Labs, Inc.

525 Del Rey Avenue, Suite E
Sunnyvale, CA 94086

QUALITY CONTROL RESULTS SUMMARY

METHOD: Gas Chromatography

QC Batch #: GBG4990521

Matrix: Water

Units: $\mu\text{g/L}$

Date Analyzed: 05/21/99

Quality Control Sample: Blank Spike

PARAMETER	Method #	MB $\mu\text{g/L}$	SA $\mu\text{g/L}$	SR $\mu\text{g/L}$	SP $\mu\text{g/L}$	SP % R	SPD $\mu\text{g/L}$	SPD %R	RPD	QC LIMITS	
										RPD	%R
Benzene	8020	<0.50	40	ND	38	95	37	93	2.6	25	83-110
Toluene	8020	<0.50	40	ND	38	95	37	94	1.9	25	65-112
Ethyl Benzene	8020	<0.50	40	ND	38	94	37	92	2.4	25	82-110
Xylenes	8020	<0.50	120	ND	113	94	113	94	0	25	83-110
Gasoline	8015	<50.0	500	ND	508	102	531	106	4.4	25	73-126
<i>aaa-TFT(S.S.)-PID</i>	8020				94%	93%		91%			65-135
<i>aaa-TFT(S.S.)-FID</i>	8015				100%	92%		93%			65-135

Note: LCS and LCSD results reported for the following Parameters:

All

Definition of Terms:

na: Not Analyzed in QC batch

MB: Method Blank

SA: Spike Added

SR: Sample Result

RPD(%): Duplicate Analysis - Relative Percent Difference

SP: Spike Result

SP (%R): Spike % Recovery

SPD: Spike Duplicate Result

SPD (%R): Spike % Recovery

NC: Not Calculated

Chain-of Custody Number:

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 St.
 Oakland, CA

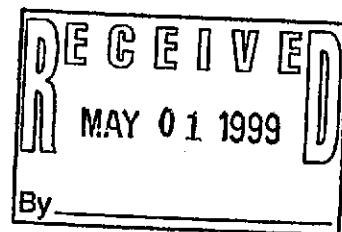
Special Instructions/Comments:	Relinquished by: <u>SECOR</u> Sign <u>GARY CHAPMAN</u> Print <u>GARY CHAPMAN</u> Company <u>SECOR</u> Time <u>8:00</u> Date <u>5/26/99</u>	Received by: <u>SOS MIKE</u> Sign <u>SOS MIKE</u> Print <u>WORLD COURIER</u> Company <u></u> Time <u>8:08</u> Date <u>5-26</u>	Sample Receipt Total no. of containers: <u>2</u> Chain of custody seals: Rec'd. in good condition/cold: Conforms to record:
	Relinquished by: <u></u> Sign <u>SOS MIKE</u> Print <u>WORLD COURIER</u> Company <u></u> Time <u></u> Date <u>S-26</u>	Received by: <u>Entech</u> Sign <u>Jennifer Durkin</u> Print <u>Jennifer Durkin</u> Company <u>Entech</u> Time <u>5/26/99</u> Date <u>10:00</u>	Client: <u>SECOR</u> Client Contact: <u>Greg Hoehn</u> Client Phone <u>(925)686-9780</u>

APPENDIX C

Laboratory Reports - Groundwater Samples



Allan A. Manteuffel Technical Center



April 23, 1999

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

Re: SK Lab Project #99-092
Project ID Name: Oakland, CA

Dear Greg:

Enclosed please find the analytical results for the sample received by SK Environmental Laboratory on 4/16/99.

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.

This report may not be reproduced except in its entirety.

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Richard H. Cook'.

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 Name: Oakland, CA

SK Lab Project #: 99-092

Date Reported: 4/23/99

ANALYTICAL RESULTS**Volatile Organics in Water**

EPA Method 8260B

Special Reporting List, Special Reporting Limits

Work Order #	01	02	03	04
Collector's Sample #	MW-1	MW-2	MW-3	MW-4
Date Sampled	4/14/99	4/14/99	4/14/99	4/14/99
Date Analyzed	4/16/99	4/16/99	4/16/99	4/16/99
Dilution Factor	1	1	1	1
Analyte	Report Limit ppb	Concentration ppb		
Acetone	25	<25	<25	<25
Acrylonitrile	25	<25	<25	<25
Benzene	1*	<1	<1	<1
Bromobenzene	5	<5	<5	<5
Bromochloromethane	10	<10	<10	<10
Bromodichloromethane	5	<5	<5	<5
Bromoform	5	<5	<5	<5
Bromomethane	10	<10	<10	<10
2-Butanone	25	<25	<25	<25
n-Butylbenzene	5	<5	<5	<5
sec-Butylbenzene	5	<5	<5	<5
tert-Butylbenzene	5	<5	<5	<5
Carbon Tetrachloride	0.5*	<0.5	<0.5	<0.5
Chlorobenzene	5	<5	<5	<5
Chlorodibromomethane	5	<5	<5	<5
Chloroethane	10	<10	<10	<10
Chloroform	5	<5	<5	<5
Chloromethane	10	<10	<10	<10
2-Chlorotoluene	5	<5	<5	<5

Project ID Name: Oakland, CA

SK Lab Project #: 99-092

Date Reported: 4/23/99

ANALYTICAL RESULTS**Volatile Organics in Water**

EPA Method 8260B

Special Reporting List, Special Reporting Limits

Work Order #	01	02	03	04
Collector's Sample #	MW-1	MW-2	MW-3	MW-4
Date Sampled	4/14/99	4/14/99	4/14/99	4/14/99
Date Analyzed	4/16/99	4/16/99	4/16/99	4/16/99
Dilution Factor	1	1	1	1
Analyte	Report Limit µg/L	Concentration µg/L		
4-Chlorotoluene	5	<5	<5	<5
1,2-Dibromo-3-chloropropane	5	<5	<5	<5
1,2-Dibromoethane	5	<5	<5	<5
Dibromomethane	5	<5	<5	<5
1,2-Dichlorobenzene	5	<5	<5	<5
1,3-Dichlorobenzene	5	<5	<5	<5
1,4-Dichlorobenzene	5	<5	<5	<5
Dichlorodifluoromethane	5	<5	<5	<5
1,1-Dichloroethane	5	<5	<5	<5
1,1-Dichloroethene	5	<5	<5	<5
cis-1,2-Dichloroethene	5	<5	<5	<5
trans-1,2-Dichloroethene	5	<5	<5	<5
1,2-Dichloropropane	5	<5	<5	<5
1,3-Dichloropropane	5	<5	<5	<5
2,2-Dichloropropane	5	<5	<5	<5
cis-1,3-Dichloropropene	0.5*	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	0.5*	<0.5	<0.5	<0.5
Ethylbenzene	5	<5	<5	<5
2-Hexanone	25	<25	<25	<25

Project ID Name: Oakland, CA

SK Lab Project #: 99-092

Date Reported: 4/23/99

ANALYTICAL RESULTS**Volatile Organics in Water**

EPA Method 8260B

Special Reporting List, Special Reporting Limits

Work Order #	01	02	03	04
Collector's Sample #	MW-1	MW-2	MW-3	MW-4
Date Sampled	4/14/99	4/14/99	4/14/99	4/14/99
Date Analyzed	4/16/99	4/16/99	4/16/99	4/16/99
Dilution Factor	1	1	1	1
Analyte	Report Limit ppm	Concentration µg/L		
Hexachlorobutadiene	5	<5	<5	<5
Iodomethane	15	<15	<15	<15
Isopropylbenzene	5	<5	<5	<5
p-Isopropyltoluene	5	<5	<5	<5
Methyl Isobutyl Ketone	25	<25	<25	<25
Methylene Chloride	5	<5	<5	<5
Methyl-tert-butyl ether	5	<5	<5	<5
Naphthalene	5	<5	<5	<5
n-Propylbenzene	5	<5	<5	<5
Styrene	5	<5	<5	<5
1,1,1,2-Tetrachloroethane	5	<5	<5	<5
1,1,2,2-Tetrachloroethane	1*	<1	<1	<1
Tetrachloroethene	5	<5	<5	<5
Toluene	5	<5	<5	<5
1,2,3-Trichlorobenzene	5	<5	<5	<5
1,2,4-Trichlorobenzene	5	<5	<5	<5
1,1,1-Trichloroethane	5	<5	<5	<5
1,1,2-Trichloroethane	5	<5	<5	<5
Trichloroethene	5	<5	<5	92.9

Project ID Name: Oakland, CA

SK Lab Project #: 99-092

Date Reported: 4/23/99

ANALYTICAL RESULTS**Volatile Organics in Water**

EPA Method 8260B

Special Reporting List, Special Reporting Limits

Work Order #	01	02	03	04
Collector's Sample #	MW-1	MW-2	MW-3	MW-4
Date Sampled	4/14/99	4/14/99	4/14/99	4/14/99
Date Analyzed	4/16/99	4/16/99	4/16/99	4/16/99
Dilution Factor	1	1	1	1
Analyte	Report Limit ug/L	Concentration ug/L		
Trichlorofluoromethane	5	<5	<5	<5
1,2,3-Trichloropropane	10	<10	<10	<10
1,1,2-Trichloro-1,2,2-Trifluoroethane	5	<5	<5	<5
1,2,4-Trimethylbenzene	5	<5	<5	<5
1,3,5-Trimethylbenzene	5	<5	<5	<5
Xylenes (Total)	5	<5	<5	<5

* Compound reported at the MDL level.

Analytical Review / Date:

Kelsh

4/23/99

Project ID Name: Oakland, CA

SK Lab Project #: 99-092

Date Reported: 4/23/99

ANALYTICAL RESULTS**Volatile Organics in Water**

EPA Method 8021B

Special Reporting List, Special Reporting Limits

Work Order #	01	02	03	04
Collector's Sample #	MW-1	MW-2	MW-3	MW-4
Date Sampled	4/14/99	4/14/99	4/14/99	4/14/99
Date Analyzed	4/20/99	4/20/99	4/20/99	4/20/99
Dilution Factor	1	1	1	1
Analyte	Report Limit µg/L	Concentration µg/L		
1,2-Dichloroethane	0.5	<0.5	<0.5	<0.5
Vinyl Chloride	0.5	<0.5	<0.5	<0.5
				1.0

Analytical Review / Date:

Clark 4/23/99

Project ID Name: Oakland, CA

SK Lab Project #: 99-092

Date Reported: 4/23/99

ANALYTICAL RESULTS**Volatile Organics in Water**

EPA Method 8260B

Special Reporting List, Special Reporting Limits

Work Order #	05	06	07	08
Collector's Sample #	MW-5	MW-6	MW-8	MW-9
Date Sampled	4/14/99	4/14/99	4/14/99	4/14/99
Date Analyzed	4/20/99	4/21/99	4/21/99	4/21/99
Dilution Factor	1	1	1	1
Analyte	Report Limit µg/L	Concentration µg/L		
Acetone	25	<25	<25	<25
Acrylonitrile	25	<25	<25	<25
Benzene	1*	<1	<1	<1
Bromobenzene	5	<5	<5	<5
Bromochloromethane	10	<10	<10	<10
Bromodichloromethane	5	<5	<5	<5
Bromoform	5	<5	<5	<5
Bromomethane	10	<10	<10	<10
2-Butanone	25	<25	<25	<25
n-Butylbenzene	5	<5	<5	<5
sec-Butylbenzene	5	<5	<5	<5
tert-Butylbenzene	5	<5	<5	<5
Carbon Tetrachloride	0.5*	<0.5	<0.5	<0.5
Chlorobenzene	5	<5	<5	7.1
Chlorodibromomethane	5	<5	<5	<5
Chloroethane	10	<10	<10	<10
Chloroform	5	<5	<5	<5
Chloromethane	10	<10	<10	<10
2-Chlorotoluene	5	<5	<5	6.6

Project ID Name: Oakland, CA

SK Lab Project #: 99-092

Date Reported: 4/23/99

ANALYTICAL RESULTS**Volatile Organics in Water**

EPA Method 8260B

Special Reporting List, Special Reporting Limits

Work Order #	05	06	07	08
Collector's Sample #	MW-5	MW-6	MW-8	MW-9
Date Sampled	4/14/99	4/14/99	4/14/99	4/14/99
Date Analyzed	4/20/99	4/21/99	4/21/99	4/21/99
Dilution Factor	1	1	1	1
Analyte	Report Limit µg/L	Concentration µg/L		
4-Chlorotoluene	5	<5	<5	<5
1,2-Dibromo-3-chloropropane	5	<5	<5	<5
1,2-Dibromoethane	5	<5	<5	<5
Dibromomethane	5	<5	<5	<5
1,2-Dichlorobenzene	5	<5	<5	14.9
1,3-Dichlorobenzene	5	<5	<5	<5
1,4-Dichlorobenzene	5	<5	<5	13.3
Dichlorodifluoromethane	5	<5	<5	<5
1,1-Dichloroethane	5	<5	<5	9.1
1,1-Dichloroethene	5	<5	<5	<5
cis-1,2-Dichloroethene	5	<5	<5	33.8
trans-1,2-Dichloroethene	5	<5	<5	<5
1,2-Dichloropropane	5	<5	<5	<5
1,3-Dichloropropane	5	<5	<5	<5
2,2-Dichloropropane	5	<5	<5	<5
cis-1,3-Dichloropropene	0.5*	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	0.5*	<0.5	<0.5	<0.5
Ethylbenzene	5	<5	<5	<5
2-Hexanone	25	<25	<25	<25

Project ID Name: Oakland, CA

SK Lab Project #: 99-092

Date Reported: 4/23/99

ANALYTICAL RESULTS**Volatile Organics in Water**

EPA Method 8260B

Special Reporting List, Special Reporting Limits

Work Order #	05	06	07	08
Collector's Sample #	MW-5	MW-6	MW-8	MW-9
Date Sampled	4/14/99	4/14/99	4/14/99	4/14/99
Date Analyzed	4/20/99	4/21/99	4/21/99	4/21/99
Dilution Factor	1	1	1	1
Analyte	Report Limit ug/L	Concentration ug/L		
Hexachlorobutadiene	5	<5	<5	<5
Iodomethane	15	<15	<15	<15
Isopropylbenzene	5	<5	<5	<5
p-Isopropyltoluene	5	<5	<5	<5
Methyl Isobutyl Ketone	25	<25	<25	<25
Methylene Chloride	5	<5	<5	<5
Methyl-tert-butyl ether	5	<5	<5	<5
Naphthalene	5	<5	<5	15.5
n-Propylbenzene	5	<5	<5	6.9
Styrene	5	<5	<5	<5
1,1,1,2-Tetrachloroethane	5	<5	<5	<5
1,1,2,2-Tetrachloroethane	1*	<1	<1	<1
Tetrachloroethene	5	<5	<5	<5
Toluene	5	<5	<5	5.4
1,2,3-Trichlorobenzene	5	<5	<5	<5
1,2,4-Trichlorobenzene	5	<5	<5	<5
1,1,1-Trichloroethane	5	<5	<5	<5
1,1,2-Trichloroethane	5	<5	<5	<5
Trichloroethene	5	<5	<5	51.3
				14.5

Project ID Name: Oakland, CA

SK Lab Project #: 99-092

Date Reported: 4/23/99

ANALYTICAL RESULTS**Volatile Organics in Water**

EPA Method 8260B

Special Reporting List, Special Reporting Limits

Work Order #	05	06	07	08
Collector's Sample #	MW-5	MW-6	MW-8	MW-9
Date Sampled	4/14/99	4/14/99	4/14/99	4/14/99
Date Analyzed	4/20/99	4/21/99	4/21/99	4/21/99
Dilution Factor	1	1	1	1
Analyte	Report Limit µg/L	Concentration µg/L		
Trichlorofluoromethane	5	<5	<5	<5
1,2,3-Trichloropropane	10	<10	<10	<10
1,1,2-Trichloro-1,2,2-Trifluoroethane	5	<5	<5	<5
1,2,4-Trimethylbenzene	5	<5	<5	62.4
1,3,5-Trimethylbenzene	5	<5	<5	<5
Xylenes (Total)	5	<5	<5	31.9
Vinyl Chloride	1.1 *	NA	NA	23.1
				124

* Compound reported at the MDL level.

Analytical Review / Date:

4/23/99

Project ID Name: Oakland, CA

SK Lab Project #: 99-092

Date Reported: 4/23/99

ANALYTICAL RESULTS**Volatile Organics in Water**

EPA Method 8021B

Special Reporting List, Special Reporting Limits

Work Order #	05	06	07	08
Collector's Sample #	MW-5	MW-6	MW-8	MW-9
Date Sampled	4/14/99	4/14/99	4/14/99	4/14/99
Date Analyzed	4/20/99	4/20/99	4/20/99	4/20/99
Dilution Factor	1	1	1	1
Analyte	Report Limit ug/L	Concentration ug/L		
1,2-Dichloroethane	0.5	<0.5	<0.5	5.6
Vinyl Chloride	0.5	<0.5	<0.5	NA **
				NA **

** For the Vinyl Chloride concentration for Collector's Samples # MW-8 and MW-9, please refer to the Method 8260B results.

Analytical Review / Date:

 4/23/99

Project ID Name: Oakland, CA

SK Lab Project #: 99-092

Date Reported: 4/23/99

ANALYTICAL RESULTS**Volatile Organics in Water**

EPA Method 8260B

Special Reporting List, Special Reporting Limits

Work Order #	09	10	11	12
Collector's Sample #	MW-12	MW-13	Dup 1	EB-1
Date Sampled	4/14/99	4/14/99	4/14/99	4/14/99
Date Analyzed	4/21/99	4/21/99	4/21/99	4/21/99
Dilution Factor	1	1	1	1
Analyte	Report Limit µg/L	Concentration µg/L		
Acetone	25	<25	<25	33.5
Acrylonitrile	25	<25	<25	<25
Benzene	1*	<1	<1	<1
Bromobenzene	5	<5	<5	<5
Bromochloromethane	10	<10	<10	<10
Bromodichloromethane	5	<5	<5	<5
Bromoform	5	<5	<5	<5
Bromomethane	10	<10	<10	<10
2-Butanone	25	<25	<25	<25
n-Butylbenzene	5	<5	<5	<5
sec-Butylbenzene	5	<5	<5	<5
tert-Butylbenzene	5	<5	<5	<5
Carbon Tetrachloride	0.5*	<0.5	<0.5	<0.5
Chlorobenzene	5	<5	<5	<5
Chlorodibromomethane	5	<5	<5	<5
Chloroethane	10	<10	<10	<10
Chloroform	5	<5	<5	<5
Chloromethane	10	<10	<10	<10
2-Chlorotoluene	5	<5	<5	<5

Project ID Name: Oakland, CA

SK Lab Project #: 99-092

Date Reported: 4/23/99

ANALYTICAL RESULTS**Volatile Organics in Water**

EPA Method 8260B

Special Reporting List, Special Reporting Limits

Work Order #	09	10	11	12
Collector's Sample #	MW-12	MW-13	Dup 1	EB-1
Date Sampled	4/14/99	4/14/99	4/14/99	4/14/99
Date Analyzed	4/21/99	4/21/99	4/21/99	4/21/99
Dilution Factor	1	1	1	1
Analyte	Report Limit ug/L	Concentration ug/L		
4-Chlorotoluene	5	<5	<5	<5
1,2-Dibromo-3-chloropropane	5	<5	<5	<5
1,2-Dibromoethane	5	<5	<5	<5
Dibromomethane	5	<5	<5	<5
1,2-Dichlorobenzene	5	<5	<5	9.9
1,3-Dichlorobenzene	5	<5	<5	<5
1,4-Dichlorobenzene	5	<5	<5	<5
Dichlorodifluoromethane	5	<5	<5	<5
1,1-Dichloroethane	5	<5	<5	6.3
1,1-Dichloroethene	5	<5	<5	<5
cis-1,2-Dichloroethene	5	<5	<5	22.3
trans-1,2-Dichloroethene	5	<5	<5	<5
1,2-Dichloropropane	5	<5	<5	<5
1,3-Dichloropropane	5	<5	<5	<5
2,2-Dichloropropane	5	<5	<5	<5
cis-1,3-Dichloropropene	0.5*	<0.5	<0.5	<0.5
trans-1,3-Dichloropropene	0.5*	<0.5	<0.5	<0.5
Ethylbenzene	5	<5	<5	<5
2-Hexanone	25	<25	<25	<25

Project ID Name: Oakland, CA

SK Lab Project #: 99-092

Date Reported: 4/23/99

ANALYTICAL RESULTS**Volatile Organics in Water**

EPA Method 8260B

Special Reporting List, Special Reporting Limits

Work Order #	09	10	11	12
Collector's Sample #	MW-12	MW-13	Dup 1	EB-1
Date Sampled	4/14/99	4/14/99	4/14/99	4/14/99
Date Analyzed	4/21/99	4/21/99	4/21/99	4/21/99
Dilution Factor	1	1	1	1
Analyte	Report Limit µg/L	Concentration µg/L		
Hexachlorobutadiene	5	<5	<5	<5
Iodomethane	15	<15	<15	<15
Isopropylbenzene	5	<5	<5	<5
p-Isopropyltoluene	5	<5	<5	<5
Methyl Isobutyl Ketone	25	<25	<25	<25
Methylene Chloride	5	<5	<5	<5
Methyl-tert-butyl ether	5	<5	<5	<5
Naphthalene	5	<5	<5	<5
n-Propylbenzene	5	<5	<5	<5
Styrene	5	<5	<5	<5
1,1,1,2-Tetrachloroethane	5	<5	<5	<5
1,1,2,2-Tetrachloroethane	1*	<1	<1	<1
Tetrachloroethene	5	<5	<5	<5
Toluene	5	6.5	7.0	6.1
1,2,3-Trichlorobenzene	5	<5	<5	<5
1,2,4-Trichlorobenzene	5	<5	<5	<5
1,1,1-Trichloroethane	5	<5	<5	<5
1,1,2-Trichloroethane	5	<5	<5	<5
Trichloroethene	5	<5	<5	38.4

Project ID Name: Oakland, CA

SK Lab Project #: 99-092

Date Reported: 4/23/99

ANALYTICAL RESULTS**Volatile Organics in Water**

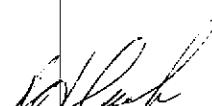
EPA Method 8260B

Special Reporting List, Special Reporting Limits

Work Order #	09	10	11	12
Collector's Sample #	MW-12	MW-13	Dup 1	EB-1
Date Sampled	4/14/99	4/14/99	4/14/99	4/14/99
Date Analyzed	4/21/99	4/21/99	4/21/99	4/21/99
Dilution Factor	1	1	1	1
Analyte	Report Limit ug/L	Concentration ug/L		
Trichlorofluoromethane	5	<5	<5	<5
1,2,3-Trichloropropane	10	<10	<10	<10
1,1,2-Trichloro-1,2,2-Trifluoroethane	5	<5	<5	<5
1,2,4-Trimethylbenzene	5	<5	<5	<5
1,3,5-Trimethylbenzene	5	<5	<5	<5
Xylenes (Total)	5	<5	<5	<5
Vinyl Chloride	1.1 *	NA	NA	13.6

* Compound reported at the MDL level.

Analytical Review / Date:

 4/23/99

Project ID Name: Oakland, CA

SK Lab Project #: 99-092

Date Reported: 4/23/99

ANALYTICAL RESULTS**Volatile Organics in Water**

EPA Method 8021B

Special Reporting List, Special Reporting Limits

Work Order #	09	10	11	12
Collector's Sample #	MW-12	MW-13	Dup 1	EB-1
Date Sampled	4/14/99	4/14/99	4/14/99	4/14/99
Date Analyzed	4/20/99	4/20/99	4/20/99	4/20/99
Dilution Factor	1	1	1	1
Analyte	Report Limit µg/L	Concentration µg/L		
1,2-Dichloroethane	0.5	0.8	<0.5	5.4
Vinyl Chloride	0.5	<0.5	<0.5	NA **
				<0.5

** For the Vinyl Chloride concentration for Collector's Sample # Dup-1, please refer to the Method 8260B results.

Analytical Review / Date:

Millash 4/23/99

Project ID Name: Oakland, CA

SK Lab Project #: 99-092

Date Reported: 4/23/99

ANALYTICAL RESULTS**Volatile Organics in Water**

EPA Method 8260B

Special Reporting List, Special Reporting Limits

Work Order #	13	
Collector's Sample #	Trip Blank	
Date Sampled	NA	
Date Analyzed	4/21/99	
Dilution Factor	1	
Analyte	Report Limit ug/l	Concentration ug/l
Acetone	25	<25
Acrylonitrile	25	<25
Benzene	1*	<1
Bromobenzene	5	<5
Bromoform	5	<5
Bromochloromethane	10	<10
Bromodichloromethane	5	<5
Bromomethane	10	<10
2-Butanone	25	<25
n-Butylbenzene	5	<5
sec-Butylbenzene	5	<5
tert-Butylbenzene	5	<5
Carbon Tetrachloride	0.5*	<0.5
Chlorobenzene	5	<5
Chlorodibromomethane	5	<5
Chloroethane	10	<10
Chloroform	5	<5
Chloromethane	10	<10
2-Chlorotoluene	5	<5

Project ID Name: Oakland, CA

SK Lab Project #: 99-092

Date Reported: 4/23/99

ANALYTICAL RESULTS**Volatile Organics in Water**

EPA Method 8260B

Special Reporting List, Special Reporting Limits

Work Order #	13	
Collector's Sample #	Trip Blank	
Date Sampled	NA	
Date Analyzed	4/21/99	
Dilution Factor	1	
Analyte	Report Limit µg/L	Concentration µg/L
4-Chlorotoluene	5	<5
1,2-Dibromo-3-chloropropane	5	<5
1,2-Dibromoethane	5	<5
Dibromomethane	5	<5
1,2-Dichlorobenzene	5	<5
1,3-Dichlorobenzene	5	<5
1,4-Dichlorobenzene	5	<5
Dichlorodifluoromethane	5	<5
1,1-Dichloroethane	5	<5
1,1-Dichloroethene	5	<5
cis-1,2-Dichloroethene	5	<5
trans-1,2-Dichloroethene	5	<5
1,2-Dichloropropane	5	<5
1,3-Dichloropropane	5	<5
2,2-Dichloropropane	5	<5
cis-1,3-Dichloropropene	0.5*	<0.5
trans-1,3-Dichloropropene	0.5*	<0.5
Ethylbenzene	5	<5
2-Hexanone	25	<25

Project ID Name: Oakland, CA

SK Lab Project #: 99-092

Date Reported: 4/23/99

ANALYTICAL RESULTS**Volatile Organics in Water**

EPA Method 8260B

Special Reporting List, Special Reporting Limits

Work Order #	13	
Collector's Sample #	Trip Blank	
Date Sampled	NA	
Date Analyzed	4/21/99	
Dilution Factor	1	
Analyte	Report Limit ug/L	Concentration ug/L
Hexachlorobutadiene	5	<5
Iodomethane	15	<15
Isopropylbenzene	5	<5
p-Isopropyltoluene	5	<5
Methyl Isobutyl Ketone	25	<25
Methylene Chloride	5	<5
Methyl-tert-butyl ether	5	<5
Naphthalene	5	<5
n-Propylbenzene	5	<5
Styrene	5	<5
1,1,1,2-Tetrachloroethane	5	<5
1,1,2,2-Tetrachloroethane	1*	<1
Tetrachloroethene	5	<5
Toluene	5	<5
1,2,3-Trichlorobenzene	5	<5
1,2,4-Trichlorobenzene	5	<5
1,1,1-Trichloroethane	5	<5
1,1,2-Trichloroethane	5	<5
Trichloroethene	5	<5

Project ID Name: Oakland, CA

SK Lab Project #: 99-092

Date Reported: 4/23/99

ANALYTICAL RESULTS**Volatile Organics in Water**

EPA Method 8260B

Special Reporting List, Special Reporting Limits

Work Order #	13	
Collector's Sample #	Trip Blank	
Date Sampled	NA	
Date Analyzed	4/21/99	
Dilution Factor	1	
Analyte	Report Limit µg/l	Concentration µg/l
Trichlorofluoromethane	5	<5
1,2,3-Trichloropropane	10	<10
1,1,2-Trichloro-1,2,2-Trifluoroethane	5	<5
1,2,4-Trimethylbenzene	5	<5
1,3,5-Trimethylbenzene	5	<5
Xylenes (Total)	5	<5

* Compound reported at the MDL level.

Analytical Review / Date:*M Clark* 4/23/99

Project ID Name: Oakland, CA

SK Lab Project #: 99-092

Date Reported: 4/23/99

ANALYTICAL RESULTS**Volatile Organics in Water**

EPA Method 8021B

Special Reporting List, Special Reporting Limits

Work Order #	13	
Collector's Sample #	Trip Blank	
Date Sampled	NA	
Date Analyzed	4/20/99	
Dilution Factor	1	
Analyte	Report Limit ug/l	Concentration ug/l
1,2-Dichloroethane	0.5	<0.5
Vinyl Chloride	0.5	<0.5

Analytical Review / Date:

Keller 4/23/99

Project ID #: 70005-009-08

TPH Page 1 of 1

Project ID Name: Oakland, CA

SK Lab Project #: 99-092

Date Reported: 4/23/99

ANALYTICAL RESULTS

Total Petroleum Hydrocarbons as Mineral Spirits in Water

Modified EPA Method 8015B

Report Limit: 50 ug/L

Work Order #	Collector's Sample #	Date Sampled	Date Analyzed	Concentration ug/L
01	MW-1	4/14/99	4/20/99	<50
02	MW-2	4/14/99	4/20/99	<50
03	MW-3	4/14/99	4/20/99	<50
04	MW-4	4/14/99	4/20/99	<50
05	MW-5	4/14/99	4/20/99	<50
06	MW-6	4/14/99	4/20/99	<50
07	MW-8	4/14/99	4/20/99	<50
08	MW-9	4/14/99	4/22/99	944 ***
09	MW-12	4/14/99	4/20/99	<50
10	MW-13	4/14/99	4/20/99	<50
11	Dup-1	4/14/99	4/20/99	<50
12	EB-1	4/14/99	4/20/99	<50
13	Trip Blank	NA	4/20/99	<50

*** Diluted so result is within the calibration curve.

Analytical Review / Date:

Kathleen 4/23/99

SECOR Chain-of Custody Record

Field Office: Concord
 Address: 1390 Willow Pass Rd., Ste. 360
Concord, CA 94520

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

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

Project # 70005-009-08 Task # 007
 Project Manager Greg Hopkin
 Laboratory _____
 Turnaround Time _____

				Analysis Request										Number of Containers	
	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 600/8000	Total Lead 7421	Priority Pollutant Metals (13)	TCLP Metals VOC's	TPH, mineral spirits, triglycerides 800 - Vaseline oil 1000 - kerosene	Comments/ Instructions	Number of Containers
01	MW-1	4-14-99	13:00	Water								X	X X 9914189	VPA	5
02	MW-2		15:05									X	X X 9914193		5
03	MW-3		14:20									X	XX 4296		5
04	MW-4		17:50									X	XX 4299		5
05	MW-5		16:00									X	XX 4306		5
06	MW-6		13:50									X	XX 4308		5
07	MW-8		17:40									X	XX 4310		5
08	MW-9		18:30									X	XX 4313		5
09	MW-12		17:00									X	XX 4323		5
10	MW-13	✓	12:20	✓								X	XX 4325		5

Special Instructions/Comments:

Temp .50CpH 4.2

Relinquished by: Charles Meluncan
 Sign Charles Meluncan
 Print Charles Meluncan
 Company SECOR
 Time 8:30 Date 4-15-99

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

Received by: J Cook
 Sign J Cook
 Print _____
 Company FEDEX
 Time 11:00 Date 4-15-99

Received by: Maria Norcia
 Sign Maria Norcia
 Print _____
 Company Safety-Kleen
 Time 11:00 Date 4-16-99

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

Client: _____
 Client Contact: _____
 Client Phone: _____

Chain-of Custody Number:

SECOR Chain-of Custody Record

Field Office: Concord
 Address: 1390 Willow Pass Rd. Ste. 360
Concord, CA 94520

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

Job Name: Safety - Klein (Oakland)
 Location: 400 Market St,
Oakland, CA

Project # 70005-009-08 Task # 007
 Project Manager Greg Hoehn
 Laboratory _____
 Turnaround Time _____

Sampler's Name Charles Meloncon
 Sampler's Signature Charles Meloncon

Sample ID	Date	Time	Matrix	Analysis Request								Comments/ Instructions	Number of Containers		
				HCID	TPHg/BTEX/WTPH-G 8015 (modified) 8020	TPHd/WTPH-D 8015 (modified)	TPH 4:8.1/WTPH 4:8.1	Aromatic Volatiles 6028020	Volatile Organics 6248240 (GC/MS)	Halogenated Volatiles 6018010	Semi-volatile Organics 6258270 (GC/MS)	Pesticides/PCBs 6098080	Total Lead 7421	Priority Pollutant Metals (13)	TCLP Metals
11 Dup 1	4-14-99		Water										X X X	4/14/99	5
12 E3-1	4-14-99		Water										X X X	4/14/99	4
13 T-ip Blk/t													X X X	4/14/99	1

Special Instructions/Comments:	Relinquished by: <u>Charles Meloncon</u> Sign _____ Print <u>Charles Meloncon</u> Company <u>SECOR</u> Time <u>8:30</u> Date <u>4-15-99</u>	Received by: <u>J Cook</u> Sign <u>J Cook</u> Print _____ Company <u>FED EX</u> Time <u>11-21</u> Date <u>4-15-99</u>	Sample Receipt
			Total no. of containers: _____ 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: _____ Client Contact: _____ Client Phone: _____