safety-kleen ®



October 8, 1998

*Via Certified Mail No. Z103265565*

SOW 3229
LS

Mr. Robert M. Senga, Unit Chief
California Environmental Protection Agency
Department of Toxic Substances Control
Southern California Region
Facility Permitting Branch
1011 N. Grandview Avenue
Glendale, California 91201

Re: **Quarterly Progress Report**
**Safety-Kleen Systems, Inc., Service Center**
**400 Market Street**
**Oakland, California**
**June - August 1998**

Dear Mr. Senga:

Enclosed is the Quarterly Progress Report which summarizes the groundwater monitoring and vapor extraction activities conducted at the above-referenced facility. This report covers the period from June 1998 through August 1998. Safety-Kleen Systems, Inc. (Safety-Kleen), is following the modified groundwater sampling schedule as described in the letter submitted on July 13, 1994, and as modified and approved by Alameda County in a response letter dated July 27, 1994.

The wells at this site have been sampled quarterly since 1993. The site is well characterized and conditions have not changed significantly. Safety-Kleen, therefore, requests permission to reduce the sampling events to a semiannual basis, with continued quarterly fluid-level measurements. If you have any questions, please call me at (505) 888-3952.

Sincerely,

Greg Hoehn for

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

Enclosure

cc: Scott Davies, Safety-Kleen
Marty White, Safety-Kleen
Branch Environmental File (999)
Jennifer Eberle, Alameda County - Department of Environmental Health
Loretta Barsamian, California Regional Water Quality Control Board
Greg Hoehn, SECOR International Incorporated



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BRINKMAN WAY

SECOR
International Incorporated

# QUARTERLY PROGRESS REPORT
# JUNE - AUGUST 1998
# SAFETY-KLEEN SERVICE CENTER
# 400 MARKET STREET
# OAKLAND, CALIFORNIA

**SECOR Job No. 70005-009-08**

**Prepared For:**
Safety-Kleen Systems, Inc.
2720 Girard NE
Albuquerque, New Mexico 87107

9-8-98

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

October 8, 1998

**Prepared By:**

Nyree Hagopian
Assistant Geologist

REGISTERED GEOLOGIST
THOMAS W. CROSBY
NO. HG 257
CERTIFIED HYDROGEOLOGIST
Expires 5/31/99
STATE OF CALIFORNIA

**Reviewed By:**

Thomas W. Crosby, C.Hg. #257
Principal Engineering Geologist

Greg D. Hoehn
Principal Geologist

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# 1.0 INTRODUCTION

This report presents the results of groundwater monitoring and sampling activities conducted for the quarter of June through August 1998 at the Safety-Kleen Service Center located at 400 Market Street in Oakland, California (Figures 1 and 2). Also included are the results of soil vapor extraction (SVE) system monitoring and sampling for the period.

# 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.

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. CAD053044053) 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 (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 to date, 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.

# 3.0 SCOPE OF WORK

Groundwater monitoring work conducted during this quarter consisted of measuring depth-to-water in 11 groundwater monitoring wells, and the sampling of four groundwater monitoring wells, as specified in the quarterly sampling schedule. SVE activities conducted during this quarter consisted of the operation and maintenance of the SVE system and monthly influent and effluent vapor sampling. The following sections provide a description of the work steps conducted.

## 3.1 Soil Vapor Extraction System

The SVE system consists of two 1,500-pound granular activated carbon (GAC) vessels connected in series to a manifold attached to seven horizontal vapor extraction perforated pipelines (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). During this quarter, SVE system influent and effluent vapor samples were collected on June 25, July 21, and August 20, 1998. The vapor samples were submitted to a state-certified analytical laboratory under chain-of-custody manifest and analyzed for TPHms by U.S. Environmental Protection Agency (EPA) Method 8015 (modified), for benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8020, and for halogenated VOCs by EPA Method 8010. The results of the SVE system operation and sampling are presented in Section 4.1 and SVE system monitoring data are summarized in Table 1.

## 3.2 Mineral Spirits Recovery

The mineral spirits recovery pump that was located in recovery well RW-1 failed and was replaced by a passive recovery skimmer in November 1995. A passive recovery skimmer was also placed in monitoring well MW-9 (Figure 2) at that time. On August 5, 1998, the passive recovery skimmer was removed and oxygen releasing compound (ORC) was suspended in recovery well RW-1 in an effort to enhance site remediation by oxidizing residual impacts in the vicinity of the USTs. Mineral spirits recovered from monitoring well MW-9 are emptied directly to the waste mineral spirits UST at the site and are incorporated into the Safety-Kleen recycling process. The amount of recovered product is recorded each time the skimmer is emptied. Measurable product has not been present in the skimmers since July 1996.

## 3.3 Groundwater Monitoring and Sampling

On July 21, 1998, on- and off-site monitoring wells were monitored for depth-to-water, and groundwater samples were collected from monitoring wells MW-2 through MW-4 and MW-8 for laboratory analysis. Monitoring wells MW-7 and MW-10 have been abandoned. Monitoring well MW-11 is no longer 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 was analyzed for quality assurance and quality control 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 with dedicated tubing. 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, and conductivity 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 document. An equipment blank was collected from the decontaminated pump for quality assurance and quality control purposes. 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 through August 20, 1998 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 June 25, July 21, and August 20, 1998.The results of analytical testing are summarized on Table 2.

The analysis of the influent sample collected on June 25, 1998, detected TPHms at a concentration of 29 milligrams per cubic meter ($mg/m^3$), toluene at 0.18 $mg/m^3$, ethylbenzene at 0.11 $mg/m^3$, and xylenes at 1.0 $mg/m^3$. The June 25, 1998 system effluent sample was found to contain only xylenes at a concentration of 0.49 $mg/m^3$.

The analysis of the influent sample collected on July 21, 1998, detected TPHms at 95 $mg/m^3$ and xylenes at 0.5 $mg/m^3$. The July 21, 1998 effluent sample reported no concentrations of TPHms, BTEX, or halogenated VOCs.

The influent sample collected on August 20, 1998, contained TPHms at a concentration of 13 $mg/m^3$, xylenes at 0.30 $mg/m^3$, and 1,1,1-TCA at a concentration of 0.10 $mg/m^3$. The August 20, 1998 effluent sample reportedly contained a concentration of total xylenes at 0.32 $mg/m^3$.

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 August 20, 1998, indicate a total of approximately 5300 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 Mineral Spirits Recovery

Mineral spirits product has been collected in monitoring well MW-9 and recovery well RW-1 via passive recovery skimmers and by hand bailing at the time of groundwater monitoring and sampling. The skimmer in recovery well RW-1 has been removed to facilitate the installation of ORC in the well. No product accumulated in the skimmer in MW-9 during this reporting period although a thin (0.01 ft.) thick layer of floating product was found during water level monitoring on July 21, 1998. The last measurable product recovered was in July 1996. The total volume of mineral spirits product removed from the subsurface to

date is approximately 444 gallons.

## 4.3 Groundwater Elevations

Groundwater elevations and depth-to-water measurements for the July 21, 1998 event are presented in Table 4. The average water-table elevation on July 21, 1998 was 2.69 feet above mean sea level (amsl), a decrease of 1.42 feet since the April 1998 event. A groundwater potentiometric surface map prepared with this 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 0.004 feet/foot (ft/ft) across the site as measured between monitoring wells MW-4 and MW-2. The gradient is consistent with previous data for the site. A summary of groundwater elevations since January 1993 is provided as Table 5.

## 4.4 Groundwater Conditions

A quarterly groundwater sampling event of monitoring wells MW-2, MW-3, MW-4 and MW-8 was performed on July 21, 1998. No analytes (TPHms or VOCs) were detected in the groundwater samples analyzed from MW-3. Trichloroethene (TCE) was detected above the maximum contaminant level (MCL) of 5 $\mu$g/L in MW-4 at 57.3 $\mu$g/L and in MW-8 at 180 $\mu$g/L. The compound cis-1,2-dichloroethene (cis-1,2-DCE) was detected above the MCL of 5 $\mu$g/L in MW-4 at 7.8 $\mu$g/L and in MW-8 at 23.8 $\mu$g/L. Acetone was detected in MW-2 at 30.2 $\mu$g/L and in MW-4 at 31.3 $\mu$g/L. There is no established MCL for acetone.

During water level monitoring this quarter, a thin (0.01 ft) layer of floating product was measured in well MW-9.

Figure 5 depicts the chemical distribution in the groundwater samples collected on July 21, 1998. 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 CERTIFICATION STATEMENT

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

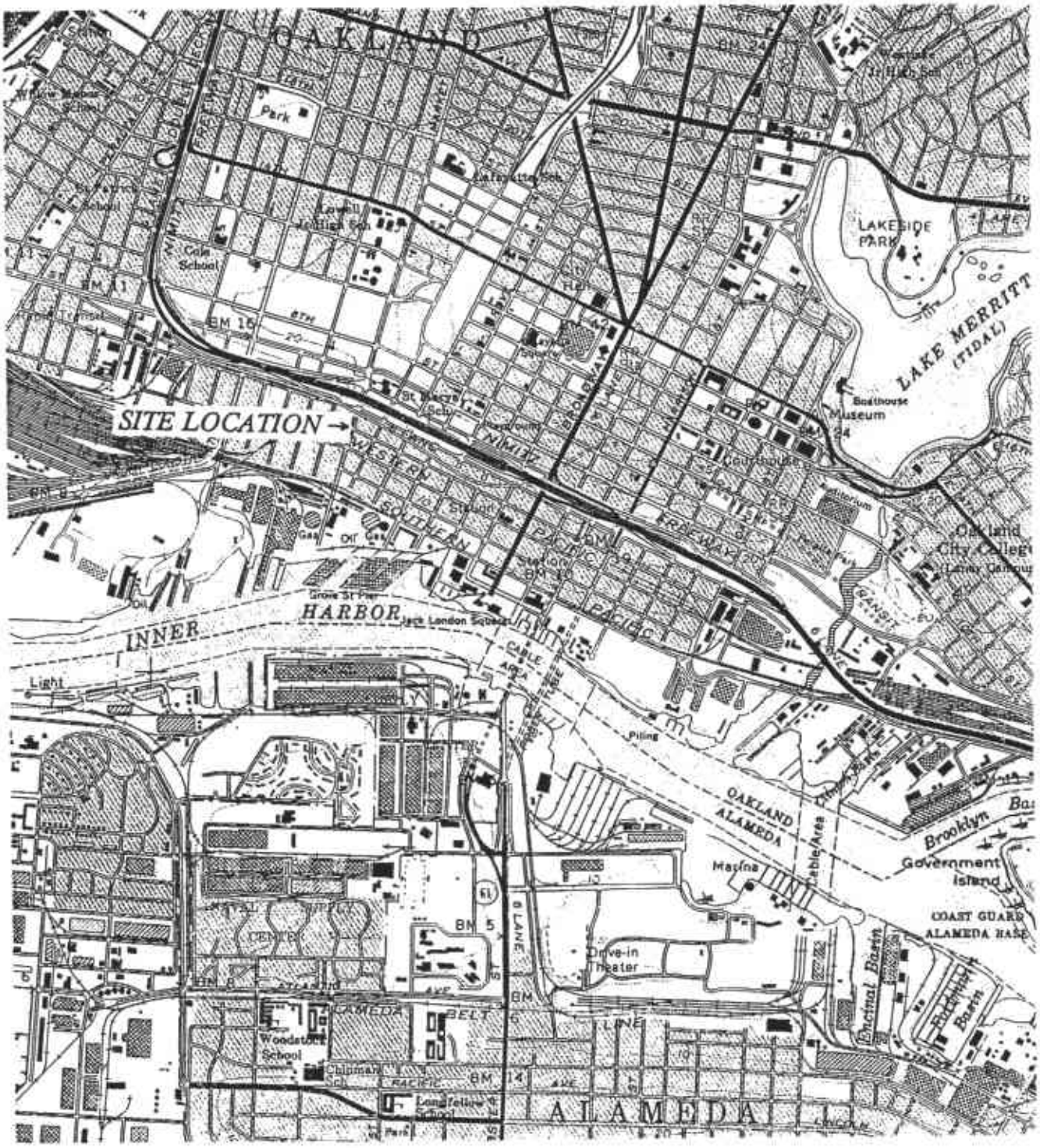
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage 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.

10/1/98

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

Date

**OAKLAND WEST QUADRANGLE**
**California**
**7.5 Minute Series (Topographic)**

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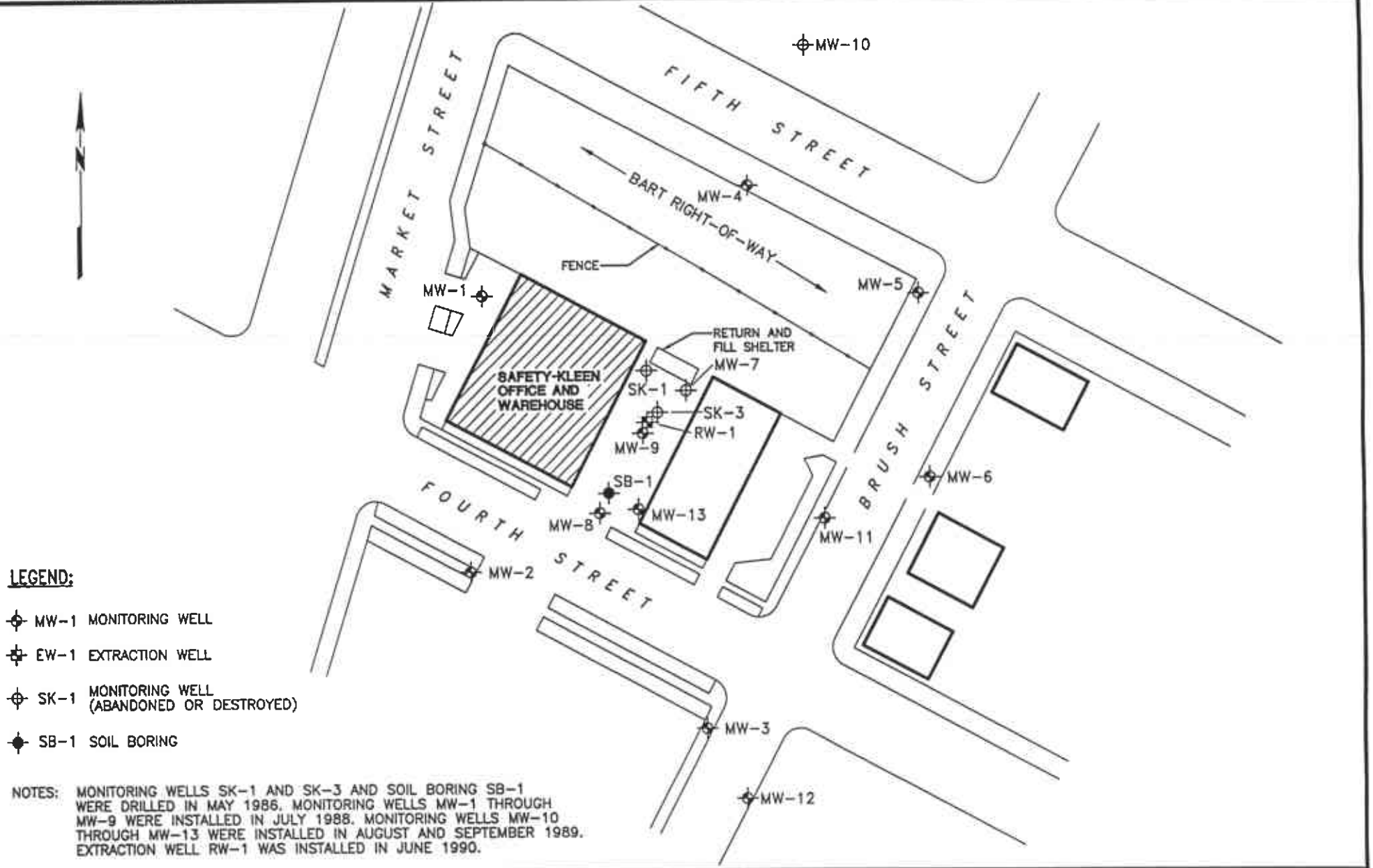
|---|---|---|---|---|
| DRAFTED BY: TS | CHECKED BY: GDH | PROJECT NO. 70005-009 | FIGURE 1 | *SECOR*<br>1390 Willow Pass Road<br>Suite 360<br>Concord, CA<br>94520 |
| DWG. DATE: 04-05-94 | REV. DATE: 06-15-95 | Safety-Kleen Corp.<br>400 Market Street<br>Oakland, California | Site Location Map | |
|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

199509.061018 X:\S-KLEEN\OAKLAND\SITE

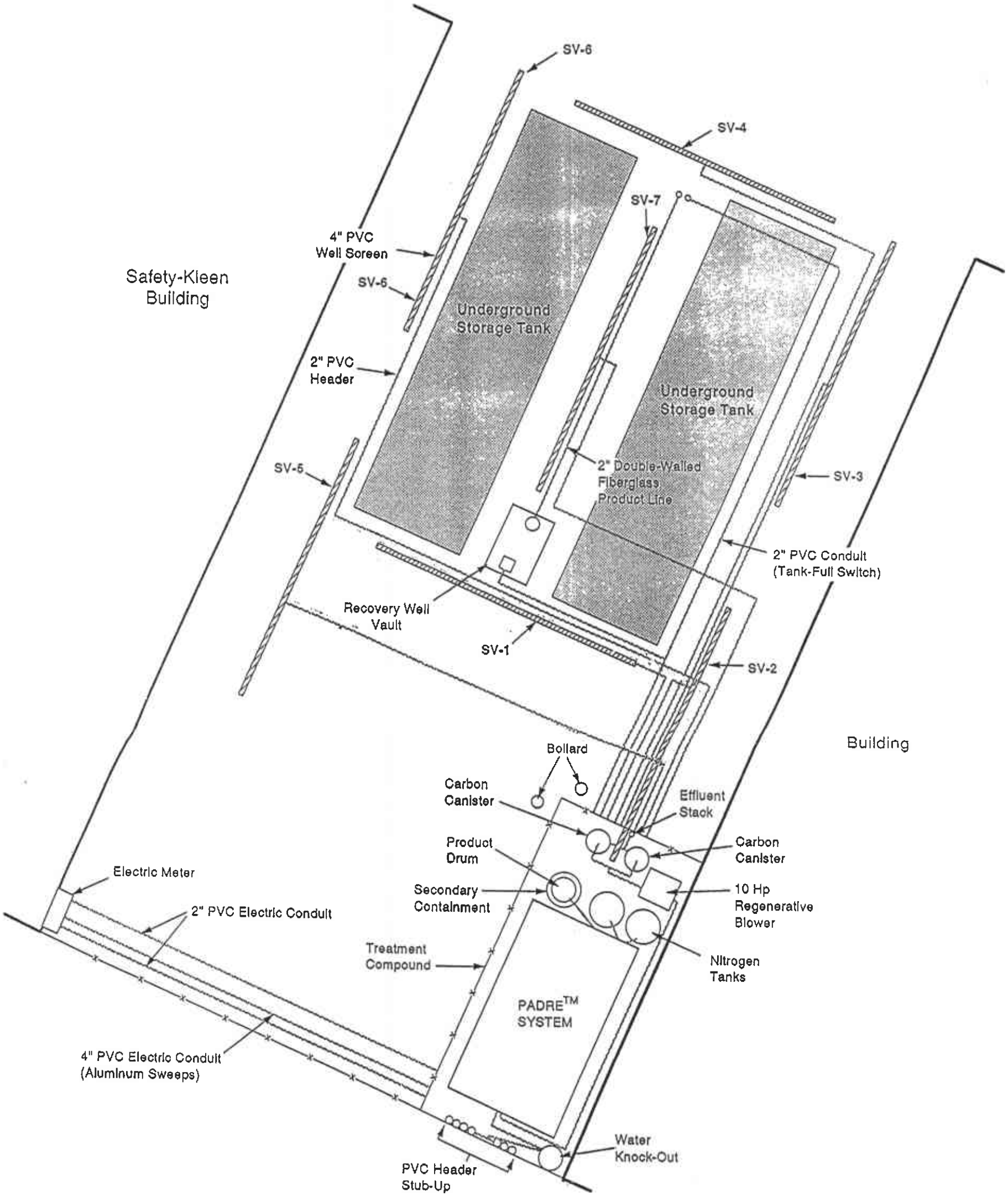



SECOR
INTERNATIONAL
INCORPORATED

| | |
|---|---|
| DRAWN | CCR |
| APPR | GH |
| DATE | 05SEP95 |
| JOB NO. | 70005-009 |

FIGURE 2
SAFETY-KLEEN
400 MARKET STREET
OAKLAND, CALIFORNIA

**SITE PLAN**

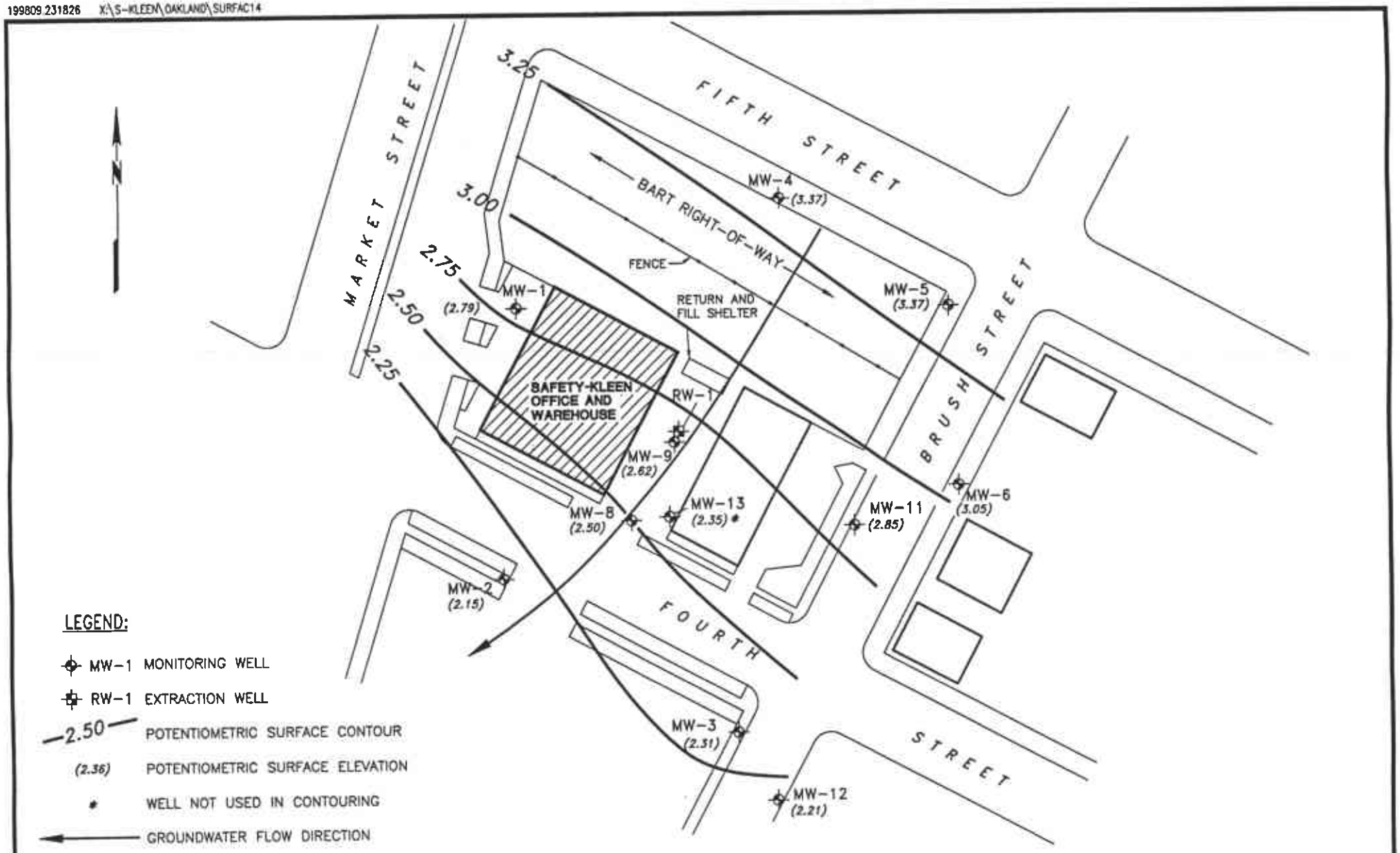



N

0 10 Feet

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

199809 231826 X:\S-KLEEN\OAKLAND\SURFAC14

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|---|---|
| SECOR INTERNATIONAL INCORPORATED | |
| DRAWN | CCR |
| APPR | DEM/GH |
| DATE | 7OCT98 |
| JOB NO. | 70005-009 |

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

**POTENTIOMETRIC SURFACE MAP**
**JULY 21, 1998**

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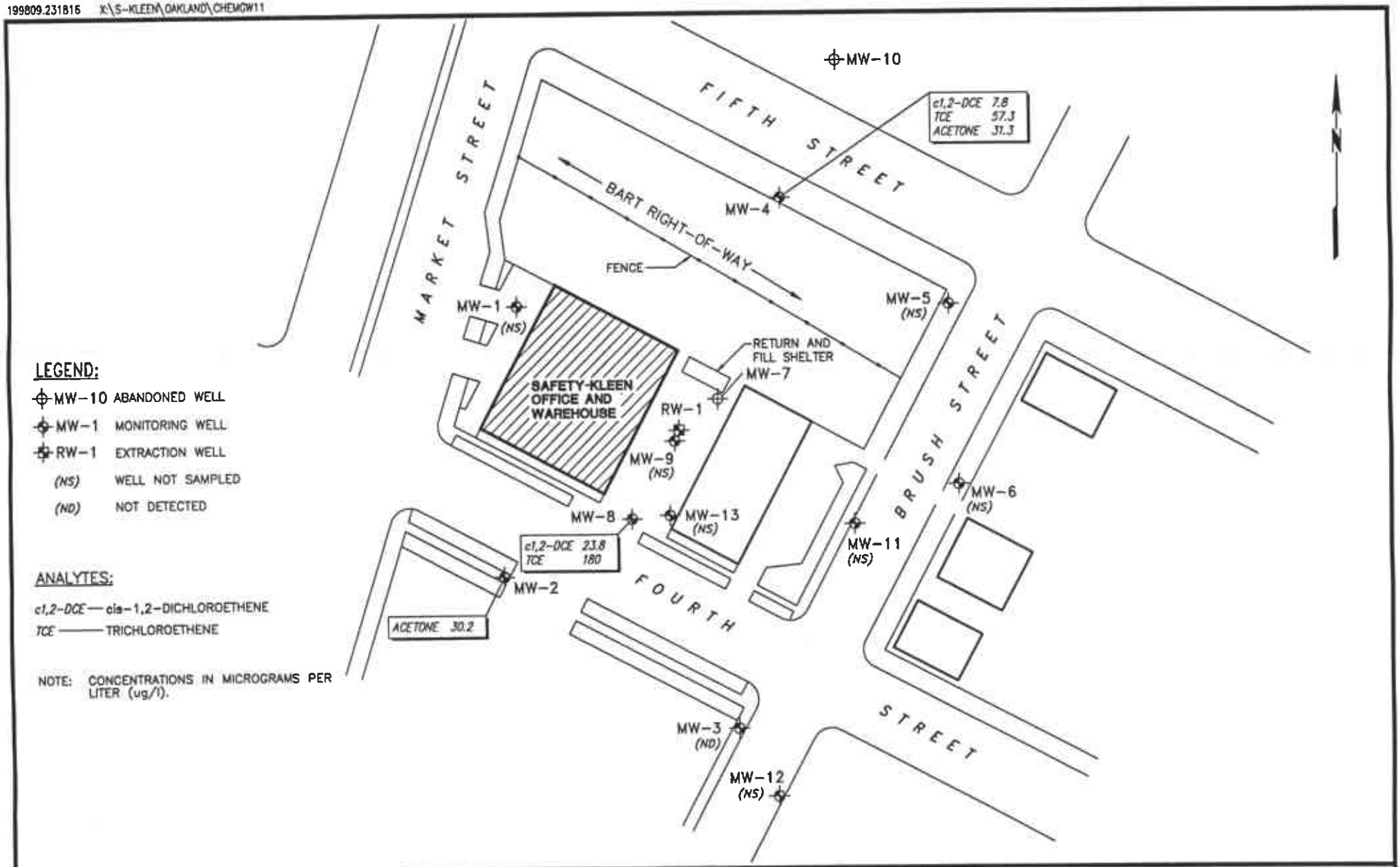


**LEGEND:**

- MW-10 ABANDONED WELL
- MW-1 MONITORING WELL
- RW-1 EXTRACTION WELL
- (NS) WELL NOT SAMPLED
- (ND) NOT DETECTED

**ANALYTES:**

c1,2-DCE — cis-1,2-DICHLOROETHENE
TCE — TRICHLOROETHENE

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

0 80 160
SCALE FEET

**SECOR**
**INTERNATIONAL INCORPORATED**

| | |
|---|---|
| DRAWN | CCR |
| APPR | DEM/GH |
| DATE | 7OCT98 |
| JOB NO. | 70005-009 |

FIGURE 5
SAFETY-KLEEN SERVICE CENTER
400 MARKET STREET
OAKLAND, CALIFORNIA
**CHEMICAL DISTRIBUTION IN GROUNDWATER**
**JULY 21, 1998**

**Table 1**
**Soil Vapor Extraction System Monitoring Data**

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

| Date | Elapsed Time* (hours) | Well Extraction Vacuum (inches H20) | KO Vacuum (inches H20) | 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 |
|---|---|---|---|---|---|---|---|---|---|---|
| 12/08/95 | 363 | 6.5 | 22 | 5000 | 107 | 413 | 3 | 5 | 6 | * System restarted using carbon adsorption on 11/28/95. |
| 12/21/95 | 677 | 6 | 20 | 5000 | 107 | 80 | 36 | 1 | 1 | Influent and Effluent samples collected |
| 01/09/96 | 1134 | 9 | 22 | 5000 | 106 | 169 | 42 | 3 | 2 | Influent and Effluent samples collected |
| 01/24/95 | 1489 | 5.5 | 17 | 2200 | 47 | 43 | 43 | 24 | 6 | |
| 02/06/96 | 1803 | 5 | 16 | 6000 | 129 | 63 | 61 | 33 | 16 | Influent and Effluent samples collected |
| 02/21/96 | 2158 | 8 | 20 | 5500 | 117 | 60 | 48 | 38 | 8 | |
| 03/08/96 | 2540 | 10 | 23 | 5000 | 106 | 184 | 52 | 45 | 16 | Influent and Effluent samples collected |
| 03/20/96 | 2635 | 12 | 23 | 5000 | 106 | 430 | 362 | 311 | 22 | |
| 04/03/96 | 2906 | 12 | 25 | 5000 | 106 | 290 | 45 | 32 | 2 | FID used, Influent and Effluent samples collected, Carbon changed. |
| 04/18/96 | 3268 | 11 | 24 | 5000 | 106 | 500 | 30 | 9 | 3 | FID used. |
| 05/02/96 | 3594 | NM | 24 | 5000 | 109 | 109 | 45 | 0 | 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 | 0 | Influent and Effluent samples collected |
| 07/01/96 | 5039 | 11 | 23 | 5000 | 106 | 325 | 150 | 75 | 37 | Influent and Effluent samples collected |
| 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 | 0 | System restarted with new carbon |
| 08/22/96 | 5470 | 7 | 17 | 3000 | 64 | 300 | 1 | 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 | |

**Table 1**
**Soil Vapor Extraction System Monitoring Data**

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

| Date | Elapsed Time* (hours) | Well Extraction Vacuum (inches H20) | KO Vacuum (inches H20) | Extraction Flow Rate (ft/min) | Extraction Flow Rate (scfm) | System Influent (PID/FID units) | #1 Carbon Effluent (PID/FID units) | #2 Carbon Effluent (PID/FID units) | System Effluent (PID/FID units) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| 10/10/96 | 6645 | 8 | 15 | 3500 | 75 | 269 | 189 | 21 | 13 | Influent and Effluent samples collected |
| 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 |

**Table 1**
**Soil Vapor Extraction System Monitoring Data**

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

| Date | Elapsed Time* (hours) | Well Extraction Vacuum (inches H20) | KO Vacuum (inches H20) | Extraction Flow Rate (ft/min) | Extraction Flow Rate (scfm) | System Influent (PID/FID units) | #1 Carbon Effluent (PID/FID units) | #2 Carbon Effluent (PID/FID units) | System Effluent (PID/FID units) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| 08/13/97 | 12837 | NM | 27 | 8500 | 185 | 12 | 0 | 0 | 0 | Shutdown system |
| 08/28/97 | 12837 | 18 | 30 | 8000 | 166 | 35 | 2 | 1 | 0 | Restart system, Influent and Effluent samples collected |
| 09/10/97 | 13148 | >1 | 29 | 8250 | 179 | 9 | 0 | 0 | 0 | Shutdown system |
| 09/24/97 | 13149 | NM | 27 | 4000 | 87 | 25 | 0 | 0 | 0 | Restart system, Influent and Effluent samples collected |
| 10/08/97 | 13488 | NM | 26 | 8000 | 174 | 9 | 0 | 0 | 0 | Shutdown system |
| 10/23/97 | 13488 | 16 | 29 | 8000 | 167 | 25 | 4 | 0 | 0 | Restart system, Influent and Effluent samples collected |
| 11/14/97 | 14018 | NM | 28 | 8000 | 174 | 68 | 0 | 0 | 0 | Shutdown system |
| 11/26/97 | 14020 | 10 | 29 | 8000 | 170 | 6 | 22 | 0 | 0 | Restart system |
| 12/11/97 | 14377 | 15 | 30 | 10000 | 210 | 0 | 0 | 0 | 0 | Influent and Effluent samples collected, Shutdown system |
| 12/22/97 | 14378 | 18 | 30 | 10000 | 208 | 20 | 1 | 1 | 1 | Restart system, Influent and Effluent samples collected |
| 01/06/98 | 14742 | 6.5 | 28 | NM | - | 2 | 0 | 0 | 0 | Shutdown system |
| 03/17/98 | 14743 | 58 | 42 | 10000 | 187 | 0 | 0 | 0 | 0 | Restart system |
| 04/06/98 | 15222 | 24 | 30 | 10000 | 205 | 33 | 4 | 4 | 1 | Shutdown system |
| 04/28/98 | 15222 | 6.5 | 23 | NM | - | 17 | 2 | 2 | 0 | Restart system, Influent and Effluent samples collected |
| 05/19/98 | 15731 | >1 | 43 | NM | - | 3 | 2 | 3 | 0 | Shutdown system |
| 05/28/98 | 15731 | 34 | 40 | 10000 | 199 | 4 | 1 | 0 | 0 | Restart system, Influent and Effluent samples collected |
| 06/12/98 | 16090 | 40 | 51 | 10,000 | 196 | 3 | 3 | 2 | 0 | Shutdown system |
| 06/25/98 | 16091 | 7.5 | 9 | NM | - | 3 | 3 | 2 | 0 | Restart system |

**Table 1**
**Soil Vapor Extraction System Monitoring Data**

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

| Date | Elapsed Time* (hours) | Well Extraction Vacuum (inches H20) | KO Vacuum (inches H20) | 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 |
|---|---|---|---|---|---|---|---|---|---|---|
| 07/10/98 | 16452 | 1.5 | 9 | NM | - | 3 | 0 | 0 | 0 | Shutdown system |
| 07/21/98 | 16453 | 1 | 8 | NM | - | 2 | 0 | 0 | 0 | Restart system |
| 08/05/98 | 16809 | 7 | 2.5 | NM | - | 3 | 0 | 0 | 0 | Shutdown system |
| 08/20/98 | 16809 | 30 | 30 | 10000 | 202 | 17 | 1 | 0 | 0 | Restart system |

Notes:
ft/min = feet per minute
scfm = standard cubic feet per minute assuming ambient temperature and ideal gas
NM = not measured
KO = knockout tank vaccum

**Table 2**
**Summary of Soil Vapor Analytical Results**

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

| Sample ID | Date | TPHms | Toluene | Ethyl Benzene | Xylenes | 1,1,1-TCA |
|---|---|---|---|---|---|---|
| | MCL/PQL | 10 mg/m$^3$ | 0.10 mg/m$^3$ | 0.10 mg/m$^3$ | 0.30 mg/m$^3$ | 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 |
| EFF | 6/25/98 | - | - | - | 0.49 | - |
| | 7/21/98 | - | - | - | - | - |
| | 8/21/98 | - | - | - | 0.32 | - |

TPHms = total petroleum hydrocarbons as mineral spirits
TCA = trichloroethane
MCL = maxium contaminant level
PQL = practical quantitation limit
INF = Influent at system influent point
EFF = Effluent at system effluent point

**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 (µg/L) | Removal Rate (lbs/day) | 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 | |
| 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 | |

**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 (µg/L) | Removal Rate (lbs/day) | TPHms Removed (lbs) | Notes |
|---|---|---|---|---|---|---|---|
| 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 | |

Notes:
scfm = cubic feet per minute
µg/L = micrograms per liter
lbs = pounds
Values in italics are estimated.

**Table 4**
**Groundwater Monitoring Data**
**July 21, 1998**

**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 | 5.20 | - | - | 2.79 |
| MW-2 | 8.20 | 6.05 | - | | 2.15 |
| MW-3 | 6.66 | 4.35 | - | - | 2.31 |
| MW-4 | 10.32 | 6.95 | - | - | 3.37 |
| MW-5 | 10.28 | 6.91 | - | - | 3.37 |
| MW-6 | 8.97 | 5.92 | - | - | 3.05 |
| MW-7* | - | - | - | - | - |
| MW-8 | 7.80 | 5.30 | - | - | 2.50 |
| MW-9 | 8.21 | 5.59 | 5.58 | 0.01 | 2.62 |
| MW-10** | - | - | - | - | - |
| MW-11 | 7.91 | 5.06 | - | - | 2.85 |
| MW-12 | 6.74 | 4.53 | - | - | 2.21 |
| MW-13 | 8.08 | 5.73 | - | - | 2.35 |
| RW-1 | - | NM | - | - | - |

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**

**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 | 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 | 0.9 | 0.1 | 0.4 |
| 07/20/93 | 0.27 | -0.23 | -0.27 | 0.68 | 0.62 | 0.37 | -0.01 | -0.68 | 0.99 | 0.2 | -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 | -0.1 | -0.37 | -0.49 | 0.6 | -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 | -0.2 | -0.31 | 0.62 | 0.55 | 0.23 | -0.03 | 0.08 | 0.9 | 0.09 | -0.7 | -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 | 2.5 | 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 | 1.4 | 0.64 | 2.21 | 2.21 | 2.04 | 1.61 | 1.54 | - | 1.85 | - | 1.51 |

**Table 5**
**Historical Summary of Groundwater Elevations**

**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 |
| 04/02/96 | 2.81 | 2.4 | 2.46 | 3.33 | 3.36 | 3.17 | 2.58 | 2.51 | - | 2.91 | 2.24 | 2.38 |
| 07/01/96 | 2.16 | 1.7 | 1.75 | 2.67 | 2.63 | 2.35 | 1.9 | 1.93 | - | 2.18 | - | 1.84 |
| 11/01/96 | 1.09 | 0.7 | 0.75 | 1.47 | 1.47 | 1.18 | 0.9 | 0.86 | - | - | - | 0.78 |
| 01/17/97 | 2.89 | 2.39 | 2.58 | 3.48 | 3.52 | 3.34 | 2.7 | 2.57 | - | - | - | 2.5 |
| 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 | 1.7 | 1.19 | 1.25 | 2.15 | 2.12 | 1.86 | 1.44 | 1.29 | - | - | 1.12 | 1.35 |
| 10/08/97 | 1.4 | 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 | 2.5 | 2.48 |
| 04/13/98 | 3.92 | 3.2 | 3.43 | 4.77 | 4.5 | 4.17 | 3.63 | 3.91 | - | 3.91 | 3.08 | 3.37 |
| 07/21/98 | 2.79 | 2.15 | 2.31 | 3.37 | 3.37 | 3.05 | 2.5 | 2.71 | - | 2.85 | 2.21 | 2.35 |

Notes:
Groundwater elevations are realative to mean sea-level datum.

- = Not measured

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

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

| Well No. | Date | TPHms | Benzene | Toluene | Ethyl-benzene | Xylenes | 1,1-DCE | 1,1-DCA | 1,2-DCA | cis-1,2-DCE | trans-1,2-DCE | Chloroform | 1,1,1-TCA | TCE | PCE | Chloro-benzene | Dichloro-propane | 1,2-DCB | 1,3-DCB | 1,4-DCB | TCFM | Freon 12 | Chloro-ethane | Chloro-toluene | Trichloro-propane | Acetone | Vinyl chloride |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MCL | | *NE* | *1* | *150* | *700* | *1750* | *6* | *5* | *0.5* | *6* | *10* | *NE* | *200* | *5* | *5* | *70* | *5* | *600* | *NE* | *5* | *150* | *NE* | *NE* | *NE* | *NE* | *NE* | *0.5* |
| MW-1 | Apr-93 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jul-93 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Oct-93 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jan-94 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Apr-94 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jul-94 | 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-94 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jan-95 | 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-95 | - | - | - | - | - | - | - | - | - | - | - | - | - | 0.7 | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jul-95 | 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-95 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jan-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 |
| | Apr-96 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jul-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 |
| | Nov-96** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Nov-96 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 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 |
| | 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 |
| | 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 |
| | 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 |
| | Oct-97 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 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 |
| | 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 |
| 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** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jul-97 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Oct-97 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 3.3 | - | - | - | - | - | - | - | - | - | - | - |
| | Jan-98 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Apr-98 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jul-98 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 30.2 | - |

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

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

| Well No. | Date | TPH as | Benzene | Toluene | Ethyl-benzene | Xylenes | 1,1-DCE | 1,1-DCA | 1,2-DCA | cis-1,2-DCE | trans-1,2-DCE | Chloroform | 1,1,1-TCA | TCE | PCE | Chloro-benzene | Dichloro-propane | 1,2-DCB | 1,3-DCB | 1,4-DCB | TCFM | Freon 12 | Chloro-ethane | Chloro-toluene | Trichloro-propane | Acetone | Vinyl chloride |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MCL | | *NE* | *1* | *150* | *700* | *1750* | *6* | *5* | *0.5* | *6* | *10* | *NE* | *200* | *5* | *5* | *70* | *5* | *600* | *NE* | *5* | *150* | *NE* | *NE* | *NE* | *NE* | *NE* | *0.5* |
| MW-3 | Apr-93 | - | - | - | - | - | - | - | - | - | - | - | - | 0.7 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jul-93 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Oct-93 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jan-94 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Apr-94 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1.8 | - | - | - | - | - | - |
| | Jul-94 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Oct-94 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jan-95 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Apr-95 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jul-95 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Oct-95 | - | - | - | - | - | - | - | - | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jan-96 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Apr-96 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jul-96 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Nov-96** | - | - | - | - | - | - | - | - | - | - | - | - | 1.6 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Nov-96 | - | - | - | - | - | - | - | - | - | - | - | - | 4.9 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jan-97** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jan-97 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Apr-97** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Apr-97 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jul-97** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jul-97 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Oct-97 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2.1 | - | - | - | - | - | - | - | - | - | - | - |
| | Jan-98 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Apr-98 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jul-98 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| MW-4 | Apr-93 | - | - | - | - | - | - | - | - | - | - | 7.6 | - | 2400 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jul-93 | - | - | - | - | - | - | - | - | - | 51 | - | - | 1100 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Oct-93 | * 400 | - | - | - | - | - | - | - | - | 0.6 | 1.9 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jan-94 | * 270 | - | - | - | - | - | - | - | - | 1.1 | - | - | 790 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Apr-94 | * 760 | - | - | - | - | - | - | - | - | 1.7 | 5.0 | - | 1600 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jul-94 | * 200 | - | - | - | - | - | - | - | - | - | - | - | 810 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Oct-94 | * 330 | - | - | - | - | - | - | - | - | - | - | - | 650 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jan-95 | - | - | - | - | - | 0.7 | - | - | - | 1.4 | - | - | 700 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Apr-95 | - | - | 1.2 | - | - | 0.8 | - | - | - | 1 | - | - | 340 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jul-95 | - | - | - | - | - | 5.2 | - | - | 13.3 | 3.2 | - | - | 247 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Oct-95 | - | - | - | - | - | 4 | - | - | - | 3 | 3 | - | 287 | - | - | - | - | - | - | - | - | - | - | - | - | 1 |
| | Jan-96 | - | - | - | - | - | 3 | - | - | 17 | 4 | 6 | - | 157 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Apr-96 | - | - | - | - | - | 6.1 | - | - | 10 | 1.7 | 1.3 | - | 140 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jul-96 | - | - | - | - | - | 4.8 | - | - | 11.5 | 1.2 | 1.8 | - | 224 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Nov-96** | - | - | - | - | - | 5.1 | - | - | 5.1 | - | 1.6 | 1.1 | 243.4 | - | 1.2 | - | - | - | - | - | - | - | - | - | - | - |
| | Nov-96 | - | - | - | - | - | 5 | - | - | 9.2 | 1.2 | 1.8 | - | 269 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jan-97** | - | - | - | - | - | 5.7 | - | - | 4.4 | - | 1.9 | 1.2 | 154.2 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jan-97 | - | - | - | - | - | 6.1 | - | - | 7.2 | - | 2.3 | 1.2 | 188.7 | 1.1 | - | - | - | - | - | - | - | - | - | - | - | - |
| | Apr-97** | - | - | - | - | - | 5.6 | - | - | 9.5 | - | 1.5 | 1.4 | 152.8 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Apr-97 | - | - | - | - | - | 5.7 | - | - | 8.7 | - | 1.4 | - | 215.9 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jul-97** | - | - | - | - | - | 4.7 | - | - | 4.3 | - | 2.5 | 1.6 | 156.5 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jul-97 | - | - | - | - | - | 6.8 | - | - | 6.5 | - | 1.7 | - | 181.9 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Oct-97 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1.2 | - | - | - | - | - | - | - | - | - | - | - |
| | Jan-98 | - | - | - | - | - | 11.7 | - | - | 15.5 | - | 1 | - | 163 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Apr-98 | - | - | - | - | - | - | - | - | 2 | - | - | - | 30.9 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jul-98 | - | - | - | - | - | - | - | - | 7.8 | - | - | - | 57.3 | - | - | - | - | - | - | - | - | - | - | - | 31.3 | - |

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

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

| Well No. | Date | TPH:ns | Benzene | Toluene | Ethyl-benzene | Xylenes | 1,1-DCE | 1,1-DCA | 1,2-DCA | cis-1,2-DCE | trans-1,2-DCE | Chloroform | 1,1,1-TCA | TCE | PCE | Chloro-benzene | Dichloro-propane | 1,2-DCB | 1,3-DCB | 1,4-DCB | TCFM | Freon 12 | Chloro-ethane | Chloro-toluene | Trichloro-propane | Acetone | Vinyl chloride |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MCL | | *NE* | *1* | *150* | *700* | *1750* | *6* | *5* | *0.5* | *6* | *10* | *NE* | *200* | *5* | *5* | *70* | *5* | *600* | *NE* | *5* | *150* | *NE* | *NE* | *NE* | *NE* | *NE* | *0.5* |
| MW-5 | Apr-93 | - | - | - | - | - | 1.5 | - | - | - | - | - | 4 | - | - | - | - | - | - | - | 18 | - | - | - | - | - | - |
| | Jul-93 | - | - | - | - | - | 0.6 | - | - | - | - | - | 6 | - | - | - | - | - | - | - | 19 | - | - | - | - | - | - |
| | Oct-93 | - | - | - | - | - | - | - | - | - | - | - | 12 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jan-94 | - | - | - | - | - | - | - | - | - | 4.3 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Apr-94 | - | - | - | - | - | - | - | - | - | 3.5 | - | 7.2 | - | - | - | - | - | - | - | 7.9 | - | - | - | - | - | - |
| | Jul-94 | 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-94 | 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-95 | 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-95 | - | - | - | - | - | - | - | - | - | - | - | 9.1 | - | - | - | - | - | - | - | - | - | - | - | - | - | [redacted] |
| | Jul-95 | 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-95 | 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-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 |
| | Apr-96 | - | - | - | - | - | - | - | - | - | - | 1.4 | - | [redacted] | - | - | - | - | - | - | 4.5 | - | - | - | - | - | - |
| | Jul-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 |
| | 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 |
| | 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 |
| | 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 |
| | 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 |
| | Apr-97** | - | - | - | - | - | - | - | - | - | - | 3.2 | - | 3.6 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Apr-97 | - | - | - | - | - | - | - | - | - | - | 2.9 | - | 3 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 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 |
| | 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 |
| | 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 |
| | 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 |
| | 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 |
| MW-6 | Apr-93 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jul-93 | - | - | - | - | - | - | - | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Oct-93 | - | - | - | - | - | - | - | - | - | - | - | 1.3 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jan-94 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Apr-94 | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jul-94 | 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-94 | 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-95 | 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-95 | - | - | - | - | - | - | - | - | - | - | - | 0.4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jul-95 | 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-95 | 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-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 |
| | Apr-96 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jul-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 |
| | 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 |
| | 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 |
| | 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 |
| | 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 |
| | 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 |
| | 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 |
| | 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 |
| | 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 |
| | 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 |

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

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

| Well No. | Date | TPHmo | Benzene | Toluene | Ethyl-benzene | Xylenes | 1,1-DCE | 1,1-DCA | 1,2-DCA | cis-1,2-DCE | trans-1,2-DCE | Chloroform | 1,1,1-TCA | TCE | PCE | Chloro-benzene | Dichloro-propane | 1,2-DCB | 1,3-DCB | 1,4-DCB | TCFM | Freon 12 | Chloro-ethane | Chloro-toluene | Trichloro-propane | Acetone | Vinyl chloride |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MCL | | *NE* | *1* | *150* | *700* | *1750* | *6* | *5* | *0.5* | *6* | *10* | *NE* | *200* | *5* | *5* | *70* | *5* | *600* | *NE* | *5* | *150* | *NE* | *NE* | *NE* | *NE* | *NE* | *0.5* |
| MW-8 | Apr-93 | - | - | - | - | - | - | 3.4 | 7.4 | - | - | - | - | 14 | 1.8 | 11 | 0.6 | 2.6 | - | - | - | - | - | - | - | - | - |
| | Jul-93 | - | - | - | - | - | - | - | 5 | - | 1 | - | - | 51 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Oct-93 | - | - | - | - | - | - | - | 5.2 | - | - | - | - | 15 | - | 5.4 | - | - | - | - | - | - | - | - | - | - | - |
| | Jan-94 | * 60 | - | - | - | - | - | 8.6 | 11 | - | - | - | 2.5 | 22 | 2 | 16 | - | 4.8 | - | - | - | - | - | - | - | - | - |
| | Apr-94 | - | - | - | - | - | - | 3.7 | 7.1 | - | - | - | 1.5 | 14 | 0.8 | - | 0.8 | - | - | - | - | - | - | - | - | - | - |
| | Jul-94 | 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-94 | - | - | - | - | - | - | 5.5 | - | - | - | - | - | 23 | - | 2.4 | - | - | - | - | - | - | - | - | - | - | - |
| | Jan-95 | - | - | - | - | - | - | - | - | - | - | - | - | 2.6 | - | 1.2 | - | - | - | - | - | - | - | - | - | - | - |
| | Apr-95 | - | - | - | - | - | - | - | - | - | - | - | - | 15 | 0.4 | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jul-95 | - | - | - | - | - | 3.5 | 6.2 | 9.8 | 25.57 | 2.3 | - | - | 163 | 3.2 | 6.9 | - | 3.8 | - | - | - | - | - | - | - | - | 2.8 |
| | Oct-95 | - | - | - | - | - | 7 | 5 | 10 | 63 | 6 | - | - | 557 | 2 | 4 | - | 3 | - | - | - | - | - | - | - | - | 4 |
| | Jan-96 | - | - | - | - | - | 19 | 7 | 11 | 56 | 4 | 13 | - | 486 | 2 | 6 | - | 5 | - | - | - | - | - | - | - | - | 5 |
| | Apr-96 | - | - | - | - | - | 7.2 | 2.9 | 5.1 | 63 | 2.9 | - | - | 569 | 1.1 | 3.3 | - | 2 | - | - | - | - | - | - | - | - | 1.6 |
| | Jul-96 | - | - | - | - | - | - | - | - | - | - | - | 1.3 | 1352 | 2 | - | - | - | - | 1.1 | - | - | - | - | - | - | 6.3 |
| | Nov-96** | - | - | - | - | - | 3.2 | 10.7 | 9.5 | 44.5 | 1.1 | 1.7 | 2.5 | 339.2 | 3.4 | 23.3 | 3 | 24.4 | - | 3.9 | - | - | - | - | - | - | 9.8 |
| | Nov-96 | - | - | - | - | - | 1.3 | 4.3 | 6 | 80.6 | 2.9 | 3.9 | - | 1156.8 | 1.6 | 5.8 | - | 5.7 | - | 1.1 | - | - | - | - | - | - | 3.5 |
| | Jan-97** | - | - | - | - | - | - | - | - | 1.2 | - | - | - | 2.9 | 22.5 | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jan-97 | - | - | - | - | - | - | - | 2.1 | 22.6 | 1.3 | 1.4 | - | 500.4 | 13.5 | 1.2 | - | 1.4 | - | - | - | - | - | - | - | - | - |
| | Apr-97** | - | - | - | - | - | - | 3.6 | 2.1 | 17 | - | - | - | 95 | 4.9 | 3.4 | - | 3.3 | - | - | - | - | - | - | - | - | - |
| | Apr-97 | - | - | - | - | - | - | 4.8 | 3.4 | 50 | - | - | - | 241.9 | 4.8 | 4.6 | - | 4.5 | - | - | - | - | - | - | - | - | - |
| | Jul-97** | - | - | - | - | - | - | - | 3.5 | 38.6 | 2.3 | 3.2 | - | 803 | 1.2 | 1.3 | - | 1.4 | - | - | - | - | - | - | - | - | - |
| | Jul-97 | - | - | - | - | - | 1.2 | 1 | 3.5 | 42.4 | 2.3 | 2.6 | - | 791 | 1.2 | 1.7 | - | 1.7 | - | - | - | - | - | - | - | - | - |
| | Oct-97 | - | - | - | - | - | - | - | 3.5 | 43.5 | 2.4 | 1.5 | - | 920 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jan-98 | - | - | - | - | - | - | - | - | 5.8 | - | - | - | 19.5 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Apr-98 | - | - | - | - | - | - | - | - | - | - | - | - | 8 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jul-98 | - | - | - | - | - | - | - | - | 23.3 | - | - | - | 180 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| MW-9 | Apr-93 | 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-93 | 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-93 | 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-94 | 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-94 | 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-94 | 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-94 | 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-95 | 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-95 | 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-95 | 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-95 | 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-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 |
| | Apr-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 |
| | Jul-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 |
| | 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 |
| | 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 |
| | 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 |
| | 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 |
| | Apr-97** | 1536 | 14.9 | 13.3 | 13.5 | 12.3 | - | 40 | 8.2 | 41.9 | - | - | 10.7 | 45.7 | - | 28.6 | 1.6 | 77.2 | 4.6 | 14.3 | - | - | 2 | 9.9 | 4.6 | - | 131.7 |
| | Apr-97 | 1846 | 17.4 | 17.2 | 23.2 | 19.3 | - | 56.6 | 7.6 | 47.1 | - | - | 13.8 | 53.5 | - | 44.5 | 1.4 | 131.8 | 4.2 | 23.1 | - | - | 2 | 19.2 | 4.2 | - | 435.6 |
| | 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 |
| | 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 |
| | 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 |
| | 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 |
| | Apr-98 | 927 | 15.5 | 10.3 | 12.4 | 64.9 | - | 36.8 | 4.5 | 51.4 | - | - | 3.3 | 36 | - | 30 | - | 68.2 | 2.6 | 14.6 | - | - | 1.4 | 10 | 1.8 | - | 27.1 |
| | 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 |

[redacted] Table [redacted]
Summary of Groundwater Analytical Results
Detected Compounds (Results in µg/L)

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

| Well No. | Date | TPHgas | Benzene | Toluene | Ethyl-benzene | Xylenes | 1,1-DCE | 1,1-DCA | 1,2-DCA | cis-1,2-DCE | trans-1,2-DCE | Chloroform | 1,1,1-TCA | TCE | PCE | Chloro-benzene | Dichloro-propane | 1,2-DCB | 1,3-DCB | 1,4-DCB | TCFM | Freon 12 | Chloro-ethane | Chloro-toluene | Trichloro-propane | Acetone | Vinyl chloride |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MCL | | *NE* | *1* | *150* | *700* | *1750* | *6* | *5* | *0.5* | *6* | *10* | *NE* | *200* | *5* | *5* | *70* | *5* | *600* | *NE* | *5* | *150* | *NE* | *NE* | *NE* | *NE* | *NE* | *0.5* |
| MW-10 | Apr-93 | - | - | - | - | - | - | - | - | - | - | 1.2 | - | [redacted] | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jul-93 | - | - | - | - | - | 2 | - | - | - | [redacted] | 0.5 | 0.8 | [redacted] | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Oct-93 | - | - | - | - | - | - | - | - | - | 3 | - | - | [redacted] | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jan-94 | - | - | - | - | - | - | - | - | - | 0.4 | - | - | [redacted] | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Apr-94 | 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-94 | 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-94 | 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-95 | 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-95 | 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-95 | Well Destroyed July 1995 | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW-11 | Apr-93 | - | - | - | - | - | - | - | - | - | - | - | - | [redacted] | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jul-93 | - | - | - | - | - | 2 | - | - | - | 3 | - | 2 | [redacted] | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Oct-93 | - | - | - | - | - | - | - | - | - | - | - | - | [redacted] | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jan-94 | - | - | - | - | - | - | - | - | - | - | - | - | 2.6 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Apr-94 | - | - | - | - | - | - | - | - | - | - | - | - | 3.1 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jul-94 | 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-94 | 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-95 | 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-95 | - | - | - | - | - | - | - | - | - | - | - | - | 3.4 | - | - | - | - | - | - | - | - | - | - | - | - | [redacted] |
| | Jul-95 | 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-95 | 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-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 |
| | Apr-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 |
| | Jul-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 |
| | 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 |
| | 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 |
| | 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 |
| | 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 |
| | Apr-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 |
| | Apr-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 |
| | 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 |
| | 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 |
| | 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 |
| | 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 |
| | Apr-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 |
| | 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 |
| MW-12 | Apr-93 | - | - | - | - | - | - | 2.6 | - | - | - | - | - | [redacted] | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jul-93 | - | - | - | - | - | - | 2 | [redacted] | - | 3 | - | - | [redacted] | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Oct-93 | - | - | - | - | - | - | - | - | - | - | - | - | [redacted] | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jan-94 | - | - | - | - | - | - | 2.3 | [redacted] | - | - | - | - | [redacted] | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Apr-94 | - | - | - | - | - | - | 1.7 | [redacted] | - | - | - | - | [redacted] | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jul-94 | 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-94 | - | - | - | - | - | - | 1.6 | - | - | - | - | - | [redacted] | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jan-95 | 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-95 | - | - | - | - | - | - | 3.8 | - | - | - | - | - | [redacted] | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jul-95 | 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-95 | - | - | - | - | - | 2 | 4 | [redacted] | 5 | 2 | - | - | [redacted] | - | - | 2 | - | - | - | - | - | - | - | - | - | - | - |
| | Jan-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 |
| | Apr-96 | - | - | - | - | - | - | 2.9 | [redacted] | - | - | 1.1 | - | [redacted] | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jul-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 |

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

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

| Well No. | Date | TPHms | Benzene | Toluene | Ethyl-benzene | Xylenes | 1,1-DCE | 1,1-DCA | 1,2-DCA | cis-1,2-DCE | trans-1,2-DCE | Chloroform | 1,1,1-TCA | TCE | PCE | Chloro-benzene | Dichloro-propane | 1,2-DCB | 1,3-DCB | 1,4-DCB | TCFM | Freon 12 | Chloro-ethane | Chloro-toluene | Trichloro-propane | Acetone | Vinyl chloride |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MCL | *NE* | *1* | *150* | *700* | *1750* | *6* | *5* | *0.5* | *6* | *10* | *NE* | *200* | *5* | *5* | *70* | *5* | *600* | *NE* | *5* | *150* | *NE* | *NE* | *NE* | *NE* | *NE* | *0.5* |
| MW-12 (Cont.) | 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 |
| | 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 |
| | 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 |
| | 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 |
| | Apr-97** | - | - | - | - | - | - | 6.2 | 3.5 | 1.1 | - | - | - | 7.1 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Apr-97 | - | - | - | - | - | - | 6.3 | 3.5 | 1.4 | - | - | - | 7.6 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 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 |
| | 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 |
| | Oct-97 | - | - | - | - | - | - | 4.5 | 2.6 | 2.1 | - | - | - | 7.1 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 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 |
| | Apr-98 | - | - | - | - | - | - | 3.3 | 1.5 | - | - | - | - | 12.6 | - | - | - | - | - | - | - | 1.6 | - | - | - | - | - |
| | 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 |
| MW-13 | Apr-93 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jul-93 | 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-93 | 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-94 | 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-94 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jul-94 | 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-94 | 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-95 | 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-95 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jul-95 | 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-95 | 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-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 |
| | Apr-96 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Jul-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 |
| | 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 |
| | 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 |
| | 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 |
| | 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 |
| | 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 |
| | 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 |
| | 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 |
| | 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 |
| | 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 |

[redacted] Table [redacted]
Summary of Groundwater Analytical Results
Detected Compounds (Results in µg/L)

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

| Well No. | Date | TPHms | Benzene | Toluene | Ethyl-benzene | Xylenes | 1,1-DCE | 1,1-DCA | 1,2-DCA | cis-1,2-DCE | trans-1,2-DCE | Chloroform | 1,1,1-TCA | TCE | PCE | Chloro-benzene | Dichloro-propane | 1,2-DCB | 1,3-DCB | 1,4-DCB | TCFM | Freon 12 | Chloro-ethane | Chloro-toluene | Trichloro-propane | Acetone | Vinyl chloride |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MCL | | *NE* | *1* | *150* | *700* | *1750* | *6* | *5* | *0.5* | *6* | *10* | *NE* | *200* | *5* | *5* | *70* | *5* | *600* | *NE* | *5* | *150* | *NE* | *NE* | *NE* | *NE* | *NE* | *0.5* |

Notes:
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
DCE = Dichloroethene
DCA = Dichloroethane
TCA = Trichloroethane
TCE = Trichloroethene
PCE = Tetrachloroethene
DCB = Dichlorobenzene
TCFM = Trichlorofluoromethane
Freon 12 = Dichlorodifluoromethane
MCL = Maximum contaminant level for primary drinking water constituents
NE = Not Established
NS = Not Sampled
- = Not Detected

* 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<br>400 MARKET STREET<br>OAKLAND, CALIFORNIA | **PROJECT NO.:** 70005-009-07<br>**TASK:** 001 | |
| **DATE:** 7/21/98 | **TIME START:** 6:00 | **TIME END:** | |
| **EVENT:** | QUARTERLY/SEMI-ANNUAL/ANNUAL MONITORING AND SAMPLING | **PERSONNEL:** R. Hayes | |

| WELL ID | TOC | DTW | DTP | PT | TD | ELEV. | COMMENTS |
|---|---|---|---|---|---|---|---|
| MW-1 | 7.99 | 5.20 | - | - | | 2.79 | 2" |
| MW-2 | 8.20 | 6.05 | - | - | | 2.15 | 2" |
| MW-3 | 6.66 | 4.35 | - | - | | 2.31 | 2" |
| MW-4 | 10.32 | 6.95 | - | - | | 3.37 | 2" |
| MW-5 | 10.28 | 6.91 | - | - | | 3.37 | 2" |
| MW-6 | 8.97 | 5.92 | - | - | | 3.05 | 2" |
| MW-8 | 7.80 | 5.30 | - | - | | 2.60 | 2" |
| MW-9 | 8.21 | 5.59 | 5.58 | 0.01 | | 2.62 | 4" |
| MW-11 | 7.91 | 5.06 | - | - | | 2.85 | 2" |
| MW-12 | 6.74 | 4.53 | - | - | | 2.21 | 2" |
| MW-13 | 8.08 | 5.73 | - | - | | 2.35 | 4"(deep well) |
| RW-1 | - | NM | | | | | 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 | Purged By: A. NAVEDO | Well I.D.: MW-8

Client Name: SK | Sampled By: A. NAVEDO | Sample I.D.: MW8

Location: OAK | QA Samples: _____

Date Purged 7/21/98 | Start (2400hr) 8:30 | End (2400hr) 9:00

Date Sampled 7/21/98 | Sample Time (2400hr) 9:15

Sample Type: ☒ Groundwater ☐ Other

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

Depth to Bottom (feet) = — | Purge (gal) = 4.25

Depth to Water (feet) = 6.05 | Purge Rate (☐ gal or ☐ liter/min) _____

FIELD MEASUREMENTS

| Date | Time (2400hr) | Volume (gal) | Temp. (degrees C) | Conductivity (µmhos/cm) | pH (units) | Color (visual) | Turbidity (NTU) | D.O. (mg/l) | Depth (ft) |
|---|---|---|---|---|---|---|---|---|---|
| 7/21 | 8:30 | — | 17.2 | 11 | 7.09 | CLR | 54 | 7.21 | 6.05 |
| " | — | — | 19.4 | 25 | 6.84 | " | 145 | 6.75 | — |
| " | — | — | 19.6 | 35 | 6.83 | MW | 170 | 4.45 | — |
| " | — | — | 17.3 | 32 | 6.84 | " | 190 | 3.42 | — |
| " | 9:00 | 1.25 | 17.9 | 34 | 6.83 | " | 200 | 3.30 | 6.30 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

SAMPLE INFORMATION

Sample Depth to Water: _____ | Sample Turbidity: _____

Analyses: _____

Odor: _____ | Sample Vessel/Preservative: _____

PURGING EQUIPMENT

___ Bladder Pump ___ Bailer (Teflon)

___ Centrifugal Pump ___ Bailer (PVC)

✓ Submersible Pump ___ Bailer (Stainless Steel)

___ Peristaltic Pump ___ Dedicated _____

Other: _____

Pump Depth: _____

SAMPLING EQUIPMENT

___ Bladder Pump ✓ Bailer (Teflon)

___ Centrifugal Pump ___ Bailer (PVC or disposable)

___ Submersible Pump ___ Bailer (Stainless Steel)

___ Peristaltic Pump ___ Dedicated _____

Other: _____

Well Integrity: _____ | Lock #: _____

Remarks: _____

NOTE: Sample after three consecutive roadings are within:

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

Signature: AN | Page 1 of 1

SECOR International Incorporated

WATER SAMPLE FIELD DATA SHEET

Project #: 70005-009 Purged By: R NAVES Well I.D.: MW-3

Client Name: SL Sampled By: R NAVES Sample I.D.: MW-3

Location: OAK QA Samples: _____

Date Purged 7/21/93 Start (2400hr) 7:42 End (2400hr) 7:50

Date Sampled 7/21/93 Sample Time (2400hr) 800

Sample Type: ☑ Groundwater ☐ Other

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

Depth to Bottom (feet) = _____ Purge (gal) = 1.5

Depth to Water (feet) = 4.35 Purge Rate (☐ gal or ☐ liter/min) _____

FIELD MEASUREMENTS

| Date | Time (2400hr) | Volume (gal) | Temp. (degrees C) | Conductivity (µmhos/cm) | pH (units) | Color (visual) | Turbidity (NTU) | D.O. (mg/l) | Depth (ft) |
|---|---|---|---|---|---|---|---|---|---|
| 7/21 | 7:42 | – | 17.5 | 57 | 6.45 | DK | 172 | 7.62 | 4.35 |
| " | – | – | 17.9 | 94 | 6.04 | " | 200 | 5.56 | – |
| " | – | – | 17.8 | 113 | 5.93 | " | 200 | 3.49 | – |
| " | – | – | 17.7 | 124 | 5.90 | " | 197 | 2.11 | – |
| " | – | – | 17.7 | 131 | 5.94 | " | 203 | 1.41 | – |
| " | 7:50 | 1.5 | 17.7 | 135 | 5.93 | " | 210 | 1.40 | 5.40 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

SAMPLE INFORMATION

Sample Depth to Water: _____ Sample Turbidity: _____

Analyses: _____

Odor: _____ Sample Vessel/Preservative: _____

PURGING EQUIPMENT

___Bladder Pump ___Bailer (Teflon)

___Centrifugal Pump ___Bailer (PVC)

✓ Submersible Pump ___Bailer (Stainless Steel)

___Peristaltic Pump ___Dedicated _____

Other: _____

Pump Depth: _____

SAMPLING EQUIPMENT

___Bladder Pump ✓ Bailer (Teflon)

___Centrifugal Pump ___Bailer (PVC or disposable)

___Submersible Pump ___Bailer (Stainless Steel)

___Peristaltic Pump ___Dedicated _____

Other: _____

Well Integrity: OK Lock #: _____

Remarks: _____

NOTE: Sample after three consecutive roadings are within:

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

Signature: _____ Page ___ of ___

SECOR International Incorporated

WATER SAMPLE FIELD DATA SHEET

Project #: 70005-004 Purged By: R. MARCO Well I.D.: MW-4

Client Name: SK Sampled By: R. MARCO Sample I.D.: MW-4

Location: OAK QA Samples: _____

Date Purged 7/21/98 Start (2400hr) 9:45 End (2400hr) 10:01

Date Sampled 7/21/98 Sample Time (2400hr) 10:20

Sample Type: ☑ Groundwater ☐ Other

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

Depth to Bottom (feet) = _____ Purge (gal) = 1.5

Depth to Water (feet) = 6.95 Purge Rate (☐ gal or ☐ liter/min) _____

FIELD MEASUREMENTS

| Date | Time (2400hr) | Volume (gal) | Temp. (degrees C) | Conductivity (µmhos/cm) | pH (units) | Color (visual) | Turbidity (NTU) | D.O. (mg/l) | Depth (ft) |
|---|---|---|---|---|---|---|---|---|---|
| 7/21 | 9:45 | — | 17.2 | 543 | 6.81 | brown | 999 | 4.40 | 6.95 |
| " | — | — | 17.8 | 906 | 6.62 | " | " | 2.26 | — |
| " | — | — | 17.9 | 929 | 6.60 | " | " | 1.56 | — |
| " | — | — | 17.8 | 944 | 6.59 | " | " | 1.08 | — |
| " | 10:01 | 1.5 | 17.9 | 950 | 6.58 | " | " | 1.05 | 6.65 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

SAMPLE INFORMATION

Sample Depth to Water: _____ Sample Turbidity: _____

Analyses: _____

Odor: _____ Sample Vessel/Preservative: _____

PURGING EQUIPMENT

___ Bladder Pump ___ Bailer (Teflon)

___ Centrifugal Pump ___ Bailer (PVC)

✓ Submersible Pump ___ Bailer (Stainless Steel)

___ Peristaltic Pump ___ Dedicated _____

Other: _____

Pump Depth: _____

SAMPLING EQUIPMENT

___ Bladder Pump ✓ Bailer (Teflon)

___ Centrifugal Pump ___ Bailer (PVC or disposable)

___ Submersible Pump ___ Bailer (Stainless Steel)

___ Peristaltic Pump ___ Dedicated _____

Other: _____

Well Integrity: OK Lock #: _____

Remarks: _____

NOTE: Sample after three consecutive roadings are within:

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

Signature: _____ Page 1 of 1

SECOR International Incorporated

WATER SAMPLE FIELD DATA SHEET

Project #: 70005-004 | Purged By: A. NAVEDO | Well I.D.: MW-8

Client Name: SK | Sampled By: A. NAVEDO | Sample I.D.: MW-8

Location: OAK | QA Samples: _____

Date Purged 7/21/98 | Start (2400hr) 10:50 | End (2400hr) 11:12

Date Sampled 7/21/98 | Sample Time (2400hr) 11:30

Sample Type: ☑ Groundwater ☐ Other

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

Depth to Bottom (feet) = _____ | Purge (gal) = 1.5

Depth to Water (feet) = 5.30 | Purge Rate (☐ gal or ☐ liter/min) _____

FIELD MEASUREMENTS

| Date | Time (2400hr) | Volume (gal) | Temp. (degrees C) | Conductivity (µmhos/cm) | pH (units) | Color (visual) | Turbidity (NTU) | D.O. (mg/l) | Depth (ft) |
|---|---|---|---|---|---|---|---|---|---|
| 7/21 | 10:50 | – | 16.6 | 308 | 7.24 | MW | 64 | 8.05 | 5.30 |
| " | – | – | 16.9 | 394 | 6.75 | Brown | 265 | 7.45 | – |
| " | – | – | 17.1 | 570 | 6.56 | " | 282 | 6.63 | – |
| " | – | – | 17.2 | 628 | 6.51 | " | 345 | 5.84 | – |
| " | – | – | 17.4 | 661 | 6.51 | " | 344 | 4.67 | – |
| " | – | – | 17.4 | 680 | 6.49 | " | 349 | 3.90 | – |
| " | 11:12 | 1.5 | 17.4 | 685 | 6.49 | " | 340 | 3.50 | 5.40 |
| | | | | | | | | | |
| | | | | | | | | | |

SAMPLE INFORMATION

Sample Depth to Water: _____ | Sample Turbidity: _____

Analyses: _____

Odor: _____ | Sample Vessel/Preservative: _____

PURGING EQUIPMENT

___ Bladder Pump ___ Bailer (Teflon)

___ Centrifugal Pump ___ Bailer (PVC)

✓ Submersible Pump ___ Bailer (Stainless Steel)

___ Peristaltic Pump ___ Dedicated _____

Other: _____

Pump Depth: _____

SAMPLING EQUIPMENT

___ Bladder Pump ✓ Bailer (Teflon)

___ Centrifugal Pump ___ Bailer (PVC or disposable)

___ Submersible Pump ___ Bailer (Stainless Steel)

___ Peristaltic Pump ___ Dedicated _____

Other: _____

Well Integrity: OK | Lock #: _____

Remarks: _____

NOTE: Sample after three consecutive roadings are within:

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

Signature: _____

*APPENDIX B*

*Laboratory Reports - Soil Vapor Extraction System Samples*

# Entech Analytical Labs, Inc.

CA ELAP# 2224

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




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

| | |
|---|---|
| Date: | 7/2/98 |
| Date Received: | 6/25/98 |
| Date Analyzed: | 6/26/98 |
| Project Name: | Safety Kleen |
| Project #: | 70005-009 |
| Sampled By: | Client |

## Certified Analytical Report

**Vapor Sample Analysis:**

| Sample ID | Sample Date | Sample Time | Lab # | DF | TPH-Mineral Spirits | Benzene | Toluene | Ethyl Benzene | Xylene |
|---|---|---|---|---|---|---|---|---|---|
| *INF* | 6/25/98 | 12:00 | E12270 | 1 | **29** | **ND** | **0.18** | **0.11** | **1.0** |
| *EFF* | 6/25/98 | 12:30 | E12271 | 1 | **ND** | **ND** | **ND** | **ND** | **0.49** |

1. DLR=DF x PQL
2. Analysis performed by Entech Analytical Labs, Inc (CA ELAP #2224)

**Summary of Methods and Detection Limits:**

| | TPH-Mineral Spirits | Benzene | Toluene | Ethylbenzene | Xylenes |
|---|---|---|---|---|---|
| EPA Method # | 8015M | 8020 | 8020 | 8020 | 8020 |
| Units | $mg/m^3$ | $mg/m^3$ | $mg/m^3$ | $mg/m^3$ | $mg/m^3$ |
| PQL | 10 $mg/m^3$ | 0.10 $mg/m^3$ | 0.10 $mg/m^3$ | 0.10 $mg/m^3$ | 0.30 $mg/m^3$ |

Michael N. Golden, Lab Director

DF=Dilution Factor
DLR=Detection Reporting Limit

PQL=Practical Quantitation Limit
ND=None Detected at or above DLR

# Entech Analytical Labs, Inc.

CA ELAP# 2224

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



July 2, 1998

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

| | |
|---|---|
| Subject | 2 Vapor Samples |
| Lab #'s: | E12270-E12271 |
| 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 (#2224). If you have any questions regarding procedures or results, please call me at 408-735-1550.

Sincerely,

Michael N. Golden
Lab Director

# Entech Analytical Labs, Inc.

CA ELAP# 2224

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




## Certified Analytical Report: EPA Method #8010

| | |
|---|---|
| Client: | SECOR |
| Sample Matrix: | Air |
| Lab #: | E12270 |
| Sample ID: | EFF |

| | |
|---|---|
| Date: | 7/2/98 |
| Date Received: | 6/25/98 |
| Date Analyzed | 6/26/98 |
| Dilution Factor | 1 |

| *Compound* | *Concentration Found* | *PQL* | *Compound* | *Concentration Found* | *PQL* |
|---|---|---|---|---|---|
| **Bromodichloromethane** | **ND** | 0.1 mg/m$^3$ | **cis-1,2-Dichloroethene** | **ND** | 0.1 mg/m$^3$ |
| **Bromoform** | **ND** | 0.2 mg/m$^3$ | **trans-1,2-Dichloroethene** | **ND** | 0.1 mg/m$^3$ |
| **Bromomethane** | **ND** | 0.2 mg/m$^3$ | **1,2-Dichloropropane** | **ND** | 0.1 mg/m$^3$ |
| **Carbon Tetrachloride** | **ND** | 0.1 mg/m$^3$ | **cis-1,3-Dichloropropene** | **ND** | 0.1 mg/m$^3$ |
| **Chlorobenzene** | **ND** | 0.1 mg/m$^3$ | **trans-1,3-Dichloropropene** | **ND** | 0.1 mg/m$^3$ |
| **Chloroethane** | **ND** | 0.2 mg/m$^3$ | **Methylene Chloride** | **ND** | 0.6 mg/m$^3$ |
| **Chloroform** | **ND** | 0.2 mg/m$^3$ | **1,1,2,2-Tetrachloroethane** | **ND** | 0.1 mg/m$^3$ |
| **Chloromethane** | **ND** | 0.1 mg/m$^3$ | **Tetrachloroethene** | **ND** | 0.1 mg/m$^3$ |
| **Dibromochloromethane** | **ND** | 0.2 mg/m$^3$ | **1,1,1-Trichloroethane** | **ND** | 0.1 mg/m$^3$ |
| **Dichlorodifluoromethane** | **ND** | 0.1 mg/m$^3$ | **1,1,2-Trichloroethane** | **ND** | 0.1 mg/m$^3$ |
| **1,2-Dichlorobenzene** | **ND** | 0.1 mg/m$^3$ | **Trichloroethene** | **ND** | 0.1 mg/m$^3$ |
| **1,3-Dichlorobenzene** | **ND** | 0.1 mg/m$^3$ | **Trichlorofluoromethane** | **ND** | 0.1 mg/m$^3$ |
| **1,4-Dichlorobenzene** | **ND** | 0.1 mg/m$^3$ | **Vinyl Chloride** | **ND** | 0.1 mg/m$^3$ |
| **1,1-Dichloroethane** | **ND** | 0.1 mg/m$^3$ | | | |
| **1,2-Dichloroethane** | **ND** | 0.1 mg/m$^3$ | | | |
| **1,1-Dichloroethene** | **ND** | 0.1 mg/m$^3$ | | | |

| **Surrogate** | **Recovery (%)** |
|---|---|
| 2-Bromo-1-Chloropropane | 91 |

1. DLR=DF x PQL
2. Analysis performed by Entech Analytical Labs, Inc. (CAELAP #2224)
3. This worksheet is an integral part of the Certified Analytical Report and should not be reproduced except in full without the written consent of Entech Analytical Labs, Inc.

Michael N. Golden, Lab Director

DF=Dilution Factor
DLR=Detection Reporting Limit

PQL=Practical Quantitation Limit
ND=None Detected at or above DLR

# Entech Analytical Labs, Inc.

CA ELAP# 2224

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


## Certified Analytical Report: EPA Method #8010

| | |
|---|---|
| Client: | SECOR |
| Sample Matrix: | Air |
| Lab #: | E12271 |
| Sample ID: | INF |

| | |
|---|---|
| Date: | 7/2/98 |
| Date Received: | 6/25/98 |
| Date Analyzed | 6/26/98 |
| Dilution Factor | 1 |

| *Compound* | *Concentration Found* | *PQL* | *Compound* | *Concentration Found* | *PQL* |
|---|---|---|---|---|---|
| **Bromodichloromethane** | **ND** | 0.1 mg/m$^3$ | **cis-1,2-Dichloroethene** | **ND** | 0.1 mg/m$^3$ |
| **Bromoform** | **ND** | 0.2 mg/m$^3$ | **trans-1,2-Dichloroethene** | **ND** | 0.1 mg/m$^3$ |
| **Bromomethane** | **ND** | 0.2 mg/m$^3$ | **1,2-Dichloropropane** | **ND** | 0.1 mg/m$^3$ |
| **Carbon Tetrachloride** | **ND** | 0.1 mg/m$^3$ | **cis-1,3-Dichloropropene** | **ND** | 0.1 mg/m$^3$ |
| **Chlorobenzene** | **ND** | 0.1 mg/m$^3$ | **trans-1,3-Dichloropropene** | **ND** | 0.1 mg/m$^3$ |
| **Chloroethane** | **ND** | 0.2 mg/m$^3$ | **Methylene Chloride** | **ND** | 0.6 mg/m$^3$ |
| **Chloroform** | **ND** | 0.2 mg/m$^3$ | **1,1,2,2-Tetrachloroethane** | **ND** | 0.1 mg/m$^3$ |
| **Chloromethane** | **ND** | 0.1 mg/m$^3$ | **Tetrachloroethene** | **ND** | 0.1 mg/m$^3$ |
| **Dibromochloromethane** | **ND** | 0.2 mg/m$^3$ | **1,1,1-Trichloroethane** | **ND** | 0.1 mg/m$^3$ |
| **Dichlorodifluoromethane** | **ND** | 0.1 mg/m$^3$ | **1,1,2-Trichloroethane** | **ND** | 0.1 mg/m$^3$ |
| **1,2-Dichlorobenzene** | **ND** | 0.1 mg/m$^3$ | **Trichloroethene** | **ND** | 0.1 mg/m$^3$ |
| **1,3-Dichlorobenzene** | **ND** | 0.1 mg/m$^3$ | **Trichlorofluoromethane** | **ND** | 0.1 mg/m$^3$ |
| **1,4-Dichlorobenzene** | **ND** | 0.1 mg/m$^3$ | **Vinyl Chloride** | **ND** | 0.1 mg/m$^3$ |
| **1,1-Dichloroethane** | **ND** | 0.1 mg/m$^3$ | | | |
| **1,2-Dichloroethane** | **ND** | 0.1 mg/m$^3$ | | | |
| **1,1-Dichloroethene** | **ND** | 0.1 mg/m$^3$ | | | |

| Surrogate | Recovery (%) |
|---|---|
| 2-Bromo-1-Chloropropane | 93 |

1. DLR=DF x PQL
2. Analysis performed by Entech Analytical Labs, Inc. (CAELAP #2224)
3. This worksheet is an integral part of the Certified Analytical Report and should not be reproduced except in full without the written consent of Entech Analytical Labs, Inc.

Michael N. Golden, Lab Director

DF=Dilution Factor
DLR=Detection Reporting Limit

PQL=Practical Quantitation Limit
ND=None Detected at or above DLR

*Environmental Analysis Since 1983*

**Entech Analytical Labs, Inc.**

**525 Del Rey Avenue, Suite E**
**Sunnyvale, CA 94086**

## QUALITY CONTROL RESULTS SUMMARY

METHOD: Gas Chromatography

QC Batch #: GBG2980626
Matrix: Water
Units: ug/L

Date Analyzed: 06/26/98
Quality Control Sample: E12137

| PARAMETER | Method # | MB ug/L | SA ug/L | SR ug/L | SP ug/L | SP % R | SPD ug/L | SPD %R | RPD | QC LIMITS RPD | QC LIMITS %R |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 8020 | <0.50 | 40 | ND | 34 | **85** | 33 | **82** | 3.3 | 25 | 77-111 |
| Toluene | 8020 | <0.50 | 40 | ND | 36 | **90** | 35 | **87** | 2.8 | 25 | 78-110 |
| Ethyl Benzene | 8020 | <0.50 | 40 | ND | 37 | **93** | 36 | **91** | 2.7 | 25 | 78-112 |
| Xylenes | 8020 | <0.50 | 120 | ND | 113 | **94** | 110 | **92** | 2.9 | 25 | 79-112 |
| Gasoline | 8015 | <50.0 | 1000 | ND | 1000 | **100** | 1010 | **101** | 1.0 | 25 | 60-125 |

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

*Acceptable LCS and LCSD results are reported when matrix interferences cause MS and MSD results to fall outside established QC limits.*

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 #: VOC2W980626
Matrix: Water
Units: µg/L

Date Analyzed: 06/26/98
Quality Control Sample: E12226

| PARAMETER | Method # | SA µg/L | SR µg/L | SP µg/L | SP % R | SPD µg/L | SPD %R | RPD | QC LIMITS RPD | QC LIMITS %R |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 602 | 40 | ND | 40 | **101** | 39 | **98** | 2.5 | 25 | 87-109 |
| Chlorobenzene | 601 | 40 | ND | 43 | **108** | 39 | **98** | 9.2 | 25 | 77-120 |
| 1,1-Dichloroethane | 601 | 40 | ND | 40 | **101** | 38 | **95** | 5.9 | 25 | 73-123 |
| Toluene | 602 | 40 | ND | 41 | **103** | 39 | **98** | 4.7 | 25 | 86-110 |
| Trichloroethene | 601 | 40 | ND | 38 | **95** | 38 | **94** | 1.3 | 25 | 70-129 |

*Note: LCS and LCSD results reported for the following Parameters:*
*None*

*Acceptable LCS and LCSD results are reported when matrix interferences cause MS and MSD results to fall outside established QC limits.*

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

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

Field Office: CONCORD
Address: 1340 WILLOW PASS RD, STE 360
CONCORD, CA. 94520

Job Name: SAFETY KLEEN CORP.
Location: 400 MARKET ST.
OAKLAND, CA.

Project # 70005-009 Task #
Project Manager GREG HOETHN
Laboratory ENTECH
Turnaround Time STANDARD

Sampler's Name R. NAVEDO
Sampler's Signature

Analysis Request

| Sample ID | Date | Time | Matrix | HCID | TPHg/BTEX/WTPH-G 8015 (modified)/8020 | TPHd/WTPH-D 8015 (modified) | TPH 418.1/WTPH 418.1 | Aromatic Volatiles 602/8020 | Volatile Organics 624/8240 (GC/MS) | Halogenated Volatiles 601/8010 | Semi-volatile Organics 625/8270 (GC/MS) | Pesticides/PCBs 608/8080 | Total Lead 7421 | Priority Pollutant Metals (13) | TCLP Metals | TPH mixture strings | BTEX | Comments/ Instructions | Number of Containers |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EFF E12270 | 6/25/98 | 12:00 | AIR | | | | | | | X | | | | | | X | X | | 1 |
| INF E12271 | " | 12:30 | " | | | | | | | X | | | | | | X | X | | 1 |
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Special Instructions/Comments:

Relinquished by:
Sign
Print R. NAVEDO
Company SECOR
Time 1:55 Date 6/25/98

Relinquished by: FRANK WONG
Sign
Print
Company WORLD COURIER
Time 2:55 Date 6-25-98

Received by:
Sign
Print FRANK WONG
Company WORLD COURIER
Time 1:55 Date 6-25-98

Received by J. DERBYSHIRE
Sign
Print J. DERBYSHIRE
Company ENTECH
Time 3 pm Date 6/25/98

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

Client: SECOR
Client Contact: GREG
Client Phone: (925) 686-9780

SECOR CUSTREC Rev. 1/95

Date: 6/25/98 Page 1 of 1

# Entech Analytical Labs, Inc.

CA ELAP# 2224

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

RECEIVED
JUL 31 1998
By

Attn: Greg Hoehn
Secor International
1390 Willow Pass Rd., Ste 360
Concord, CA 94526

| | |
|---|---|
| Date: | 7/29/98 |
| Date Received: | 7/21/98 |
| Date Analyzed: | 7/22/98 |
| Project Name: | Safety Kleen |
| Project #: | 70005-009 |
| Sampled By: | Client |

## Certified Analytical Report

**Vapor Sample Analysis:**

| Sample ID | Sample Date | Sample Time | Lab # | DF | TPH-Mineral Spirits | Benzene | Toluene | Ethyl Benzene | Xylene |
|---|---|---|---|---|---|---|---|---|---|
| *Eff* | 7/21/98 | 14:00 | E13468 | 1 | ND | ND | ND | ND | ND |
| *Inf* | 7/21/98 | 14:30 | E13469 | 1 | 95 | ND | ND | ND | 0.50 |

1. DLR=DF x PQL
2. Analysis performed by Entech Analytical Labs, Inc (CA ELAP #2224)

**Summary of Methods and Detection Limits:**

| | TPH-Mineral Spirits | Benzene | Toluene | Ethylbenzene | Xylenes |
|---|---|---|---|---|---|
| EPA Method # | 8015M | 8020 | 8020 | 8020 | 8020 |
| Units | $mg/m^3$ | $mg/m^3$ | $mg/m^3$ | $mg/m^3$ | $mg/m^3$ |
| PQL | 10 $mg/m^3$ | 0.10 $mg/m^3$ | 0.10 $mg/m^3$ | 0.10 $mg/m^3$ | 0.30 $mg/m^3$ |

Michael N. Golden, Lab Director

DF=Dilution Factor
DLR=Detection Reporting Limit

PQL=Practical Quantitation Limit
ND=None Detected at or above DLR

*Environmental Analysis Since 1983*

# Entech Analytical Labs, Inc.

CA ELAP# 2224

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


July 29, 1998

Greg Hoehn
SECOR
1390 Willow Pass Road, Suite 360
Concord, CA 94526

| | |
|---|---|
| Subject | 2 Vapor Samples |
| Lab #'s: | E13468, E13469 |
| 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 (#2224). If you have any questions regarding procedures or results, please call me at 408-735-1550.

Sincerely,

Michael N. Golden
Lab Director

# Entech Analytical Labs, Inc.

CA ELAP# 2224

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


## Certified Analytical Report: EPA Method #8010

| | |
|---|---|
| Client: | Secor International |
| Sample Matrix: | Air |
| Lab #: | E13468 |
| Sample ID: | Eff |

| | |
|---|---|
| Date: | 7/29/98 |
| Date Received: | 7/21/98 |
| Date Analyzed | 7/22/98 |
| Dilution Factor | 1 |

| *Compound* | *Concentration Found* | *PQL* | *Compound* | *Concentration Found* | *PQL* |
|---|---|---|---|---|---|
| **Bromodichloromethane** | **ND** | 0.1 mg/m$^3$ | **cis-1,2-Dichloroethene** | **ND** | 0.1 mg/m$^3$ |
| **Bromoform** | **ND** | 0.2 mg/m$^3$ | **trans-1,2-Dichloroethene** | **ND** | 0.1 mg/m$^3$ |
| **Bromomethane** | **ND** | 0.2 mg/m$^3$ | **1,2-Dichloropropane** | **ND** | 0.1 mg/m$^3$ |
| **Carbon Tetrachloride** | **ND** | 0.1 mg/m$^3$ | **cis-1,3-Dichloropropene** | **ND** | 0.1 mg/m$^3$ |
| **Chlorobenzene** | **ND** | 0.1 mg/m$^3$ | **trans-1,3-Dichloropropene** | **ND** | 0.1 mg/m$^3$ |
| **Chloroethane** | **ND** | 0.2 mg/m$^3$ | **Methylene Chloride** | **ND** | 0.6 mg/m$^3$ |
| **Chloroform** | **ND** | 0.2 mg/m$^3$ | **1,1,2,2-Tetrachloroethane** | **ND** | 0.1 mg/m$^3$ |
| **Chloromethane** | **ND** | 0.1 mg/m$^3$ | **Tetrachloroethene** | **ND** | 0.1 mg/m$^3$ |
| **Dibromochloromethane** | **ND** | 0.2 mg/m$^3$ | **1,1,1-Trichloroethane** | **ND** | 0.1 mg/m$^3$ |
| **Dichlorodifluoromethane** | **ND** | 0.1 mg/m$^3$ | **1,1,2-Trichloroethane** | **ND** | 0.1 mg/m$^3$ |
| **1,2-Dichlorobenzene** | **ND** | 0.1 mg/m$^3$ | **Trichloroethene** | **ND** | 0.1 mg/m$^3$ |
| **1,3-Dichlorobenzene** | **ND** | 0.1 mg/m$^3$ | **Trichlorofluoromethane** | **ND** | 0.1 mg/m$^3$ |
| **1,4-Dichlorobenzene** | **ND** | 0.1 mg/m$^3$ | **Vinyl Chloride** | **ND** | 0.1 mg/m$^3$ |
| **1,1-Dichloroethane** | **ND** | 0.1 mg/m$^3$ | | | |
| **1,2-Dichloroethane** | **ND** | 0.1 mg/m$^3$ | | | |
| **1,1-Dichloroethene** | **ND** | 0.1 mg/m$^3$ | | | |

| **Surrogate** | **Recovery (%)** |
|---|---|
| 2-Bromo-1-Chloropropane | 83 |

1. DLR=DF x PQL
2. Analysis performed by Entech Analytical Labs, Inc. (CAELAP #2224)
3. This worksheet is an integral part of the Certified Analytical Report and should not be reproduced except in full without the written consent of Entech Analytical Labs, Inc.

Michael N. Golden, Lab Director

DF=Dilution Factor
DLR=Detection Reporting Limit

PQL=Practical Quantitation Limit
ND=None Detected at or above DLR

# Entech Analytical Labs, Inc.

CA ELAP# 2224

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


## Certified Analytical Report: EPA Method #8010

| | |
|---|---|
| Client: | Secor International |
| Sample Matrix: | Air |
| Lab #: | E13469 |
| Sample ID: | Inf |

| | |
|---|---|
| Date: | 7/29/98 |
| Date Received: | 7/21/98 |
| Date Analyzed | 7/22/98 |
| Dilution Factor | 1 |

| *Compound* | *Concentration Found* | *PQL* | *Compound* | *Concentration Found* | *PQL* |
|---|---|---|---|---|---|
| **Bromodichloromethane** | **ND** | 0.1 mg/m$^3$ | **cis-1,2-Dichloroethene** | **ND** | 0.1 mg/m$^3$ |
| **Bromoform** | **ND** | 0.2 mg/m$^3$ | **trans-1,2-Dichloroethene** | **ND** | 0.1 mg/m$^3$ |
| **Bromomethane** | **ND** | 0.2 mg/m$^3$ | **1,2-Dichloropropane** | **ND** | 0.1 mg/m$^3$ |
| **Carbon Tetrachloride** | **ND** | 0.1 mg/m$^3$ | **cis-1,3-Dichloropropene** | **ND** | 0.1 mg/m$^3$ |
| **Chlorobenzene** | **ND** | 0.1 mg/m$^3$ | **trans-1,3-Dichloropropene** | **ND** | 0.1 mg/m$^3$ |
| **Chloroethane** | **ND** | 0.2 mg/m$^3$ | **Methylene Chloride** | **ND** | 0.6 mg/m$^3$ |
| **Chloroform** | **ND** | 0.2 mg/m$^3$ | **1,1,2,2-Tetrachloroethane** | **ND** | 0.1 mg/m$^3$ |
| **Chloromethane** | **ND** | 0.1 mg/m$^3$ | **Tetrachloroethene** | **ND** | 0.1 mg/m$^3$ |
| **Dibromochloromethane** | **ND** | 0.2 mg/m$^3$ | **1,1,1-Trichloroethane** | **ND** | 0.1 mg/m$^3$ |
| **Dichlorodifluoromethane** | **ND** | 0.1 mg/m$^3$ | **1,1,2-Trichloroethane** | **ND** | 0.1 mg/m$^3$ |
| **1,2-Dichlorobenzene** | **ND** | 0.1 mg/m$^3$ | **Trichloroethene** | **ND** | 0.1 mg/m$^3$ |
| **1,3-Dichlorobenzene** | **ND** | 0.1 mg/m$^3$ | **Trichlorofluoromethane** | **ND** | 0.1 mg/m$^3$ |
| **1,4-Dichlorobenzene** | **ND** | 0.1 mg/m$^3$ | **Vinyl Chloride** | **ND** | 0.1 mg/m$^3$ |
| **1,1-Dichloroethane** | **ND** | 0.1 mg/m$^3$ | | | |
| **1,2-Dichloroethane** | **ND** | 0.1 mg/m$^3$ | | | |
| **1,1-Dichloroethene** | **ND** | 0.1 mg/m$^3$ | | | |

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

1. DLR=DF x PQL
2. Analysis performed by Entech Analytical Labs, Inc. (CAELAP #2224)
3. This worksheet is an integral part of the Certified Analytical Report and should not be reproduced except in full without the written consent of Entech Analytical Labs, Inc.

Michael N. Golden, Lab Director

DF=Dilution Factor
DLR=Detection Reporting Limit

PQL=Practical Quantitation Limit
ND=None Detected at or above DLR

*Environmental Analysis Since 1983*

**Entech Analytical Labs, Inc.**

**525 Del Rey Avenue, Suite E**
**Sunnyvale, CA 94086**

## QUALITY CONTROL RESULTS SUMMARY

METHOD: Gas Chromatography - Volatile Organics
Matrix Spike and Matrix Spike Duplicate

QC Batch #: VOC2W980722
Matrix: Water
Units: µg/L

Date Analyzed: 07/22/98
Quality Control Sample: E13264

| PARAMETER | Method # | SA µg/L | SR µg/L | SP µg/L | SP % R | SPD µg/L | SPD %R | RPD | QC LIMITS RPD | QC LIMITS %R |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 602 | 40 | ND | 38 | **95** | 38 | **96** | 1.0 | 25 | 87-109 |
| Chlorobenzene | 601 | 40 | ND | 40 | **100** | 40 | **101** | 1.0 | 25 | 78-119 |
| 1,1-Dichloroethane | 601 | 40 | ND | 42 | **104** | 40 | **101** | 2.9 | 25 | 75-123 |
| Toluene | 602 | 40 | ND | 39 | **98** | 40 | **100** | 2.3 | 25 | 86-112 |
| Trichloroethene | 601 | 40 | ND | 39 | **98** | 39 | **96** | 1.8 | 25 | 72-127 |

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 #: GBG2980722
Matrix: Water
Units: ug/L

Date Analyzed: 07/22/98
Quality Control Sample: E13426

| PARAMETER | Method # | MB ug/L | SA ug/L | SR ug/L | SP ug/L | SP % R | SPD ug/L | SPD %R | RPD | QC LIMITS RPD | QC LIMITS %R |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 8020 | <0.50 | 80 | ND | 80 | **100** | 81 | **101** | 0.7 | 25 | 78-111 |
| Toluene | 8020 | <0.50 | 80 | ND | 79 | **99** | 79 | **99** | 0.1 | 25 | 79-110 |
| Ethyl Benzene | 8020 | <0.50 | 80 | ND | 87 | **108** | 88 | **109** | 1.1 | 25 | 78-113 |
| Xylenes | 8020 | <0.50 | 240 | ND | 251 | **104** | 259 | **108** | 3.3 | 25 | 79-114 |
| Gasoline | 8015 | <50.0 | 1000 | ND | 990 | **99** | 1040 | **104** | 4.9 | 25 | 62-126 |

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

*Acceptable LCS and LCSD results are reported when matrix interferences cause MS and MSD results to fall outside established QC limits.*

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

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

Field Office: _____

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

Job Name: Safety Kleen

Location: 4400 Market St
Oakland, CA

Project # 70005-029 Task # _____

Project Manager Greg Hoban

Laboratory Entech

Turnaround Time Standard

Sampler's Name _____

Sampler's Signature _____

| Sample ID | Date | Time | Matrix | HCID | TPHg/BTEX/WTPH-G 8015 (modified)/8020 | TPHd/WTPH-D 8015 (modified) | TPH 418.1/WTPH 418.1 | Aromatic Volatiles 602/8020 | Volatile Organics 624/8240 (GC/MS) | Halogenated Volatiles 601/8010 | Semi-volatile Organics 625/8270 (GC/MS) | Pesticides/PCBs 608/8080 | Total Lead 7421 | Priority Pollutant Metals (13) | TCLP Metals | TPH as mineral spirits | BTEX | Comments/ Instructions | Number of Containers |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BFF E13468 | 7/21/98 | 1400 | Air | | | | | | | X | | | | | | X | X | | 1 |
| INF E13469 | " | 14:30 | " | | | | | | | X | | | | | | X | X | | 1 |
| | | | | | | | | | | | | | | | | | | | |
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Analysis Request

Special Instructions/Comments:

Relinquished by: _____
Sign _____
Print R. Rivera
Company Secor
Time _____ Date 7/21/98

Received by: Brenda Goff
Sign _____
Print Brenda Goff
Company Entech
Time 9:10 Date 7/22

Relinquished by: Brenda Goff
Sign _____
Print Brenda Goff
Company Entech
Time 2:30 Date 7/22

Received by: _____
Sign _____
Print V. Tirado
Company Entech
Time 2:40 pm Date 7/21/98

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

Client: Secor
Client Contact: Greg
Client Phone: (925) 686-9780

SECOR CUSTREC Rev. 1/95

Date: 7/21/98 Page 1 of 1

# Entech Analytical Labs, Inc.

CA ELAP# 2224

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




Attn: Greg Hoehn
Secor International
1390 Willow Pass Rd., Suite 360
Concord, CA 94520

| | |
|---|---|
| Date: | 8/27/98 |
| Date Received: | 8/21/98 |
| Date Analyzed: | 8/21/98 |
| Project Name: | Safety Kleen |
| Project #: | 70005-009 |
| Sampled By: | Client |

## Certified Analytical Report

**Vapor Sample Analysis:**

| Sample ID | Sample Date | Sample Time | Lab # | DF | TPH-Mineral Spirits | Benzene | Toluene | Ethyl Benzene | Xylene |
|---|---|---|---|---|---|---|---|---|---|
| INF | 8/20/98 | 12:30 | E15359 | 1 | 13 | ND | ND | ND | 0.30 |
| EFF | 8/20/98 | 11:55 | E15360 | 1 | ND | ND | ND | ND | 0.32 |

1. DLR=DF x PQL
2. Analysis performed by Entech Analytical Labs, Inc (CA ELAP #2224)

**Summary of Methods and Detection Limits:**

| | TPH-Mineral Spirits | Benzene | Toluene | Ethylbenzene | Xylenes |
|---|---|---|---|---|---|
| EPA Method # | 8015M | 8020 | 8020 | 8020 | 8020 |
| Units | $mg/m^3$ | $mg/m^3$ | $mg/m^3$ | $mg/m^3$ | $mg/m^3$ |
| PQL | 10 $mg/m^3$ | 0.10 $mg/m^3$ | 0.10 $mg/m^3$ | 0.10 $mg/m^3$ | 0.30 $mg/m^3$ |

Michael N. Golden, Lab Director

DF=Dilution Factor
DLR=Detection Reporting Limit

PQL=Practical Quantitation Limit
ND=None Detected at or above DLR

*Environmental Analysis Since 1983*

# Entech Analytical Labs, Inc.

CA ELAP# 2224

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

**Attn: Greg Hoehn**
**Secor International**
**1390 Willow Pass Rd., Suite 360**
**Concord, CA 94520**

| | |
|---|---|
| Date: | 8/28/98 |
| Date Received: | 8/21/98 |
| Date Analyzed: | 8/21/98 |
| Project: | Safety Kleen |
| P.O.#: | 70005-009 |
| Sampled By: | Client |

## Certified Analytical Report

**Vapor Sample Analysis:**

| Sample ID | Sample Date | Sample Time | Lab # | DF | TPH-Mineral Spirits | Benzene | Toluene | Ethyl Benzene | Xylene |
|---|---|---|---|---|---|---|---|---|---|
| INF | 8/20/98 | 12:30 | E15359 | 1 | **3.1** | **ND** | **ND** | **ND** | **0.063** |
| EFF | 8/20/98 | 11:55 | E15360 | 1 | **ND** | **ND** | **ND** | **ND** | **0.068** |

1. DLR=Dilution Factor x PQL
2. Analysis performed by Entech Analytical Labs, Inc. (CAELAP #2224)

**Summary of Methods and Detection Limits:**

| | TPH-Gas | Benzene | Toluene | Ethylbenzene | Xylenes |
|---|---|---|---|---|---|
| EPA Method # | 8015M | 8020 | 8020 | 8020 | 8020 |
| Units | ppmV | ppmV | ppmV | ppmV | ppmV |
| PQL | 2.4 ppmV | 0.029 ppmV | 0.024 ppmV | 0.021 ppmV | 0.063 ppmV |

Michael N. Golden, Lab Director

DF=Dilution Factor
DLR=Detection Reporting Limit

PQL=Practical Quantitation Limit
ND=None Detected at or above DLR

# Entech Analytical Labs, Inc.

CA ELAP# 2224

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


August 28, 1998

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

| | |
|---|---|
| Subject | 2 Vapor Samples |
| Lab #'s: | E15359-E15360 |
| 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 (#2224). If you have any questions regarding procedures or results, please call me at 408-735-1550.

Sincerely,

Michael N. Golden
Lab Director

# Entech Analytical Labs, Inc.

CA ELAP# 2224

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


## Certified Analytical Report: EPA Method #8010

| | |
|---|---|
| Client: | SECOR |
| Sample Matrix: | Air |
| Lab #: | E15359 |
| Sample ID: | INF |

| | |
|---|---|
| Date: | 8/28/98 |
| Date Received: | 8/21/98 |
| Date Analyzed | 8/21/98 |
| Dilution Factor | 1 |

| *Compound* | *Concentration Found* | *PQL* | *Compound* | *Concentration Found* | *PQL* |
|---|---|---|---|---|---|
| **Bromodichloromethane** | ND | 0.1 mg/m$^3$ | **cis-1,2-Dichloroethene** | ND | 0.1 mg/m$^3$ |
| **Bromoform** | ND | 0.2 mg/m$^3$ | **trans-1,2-Dichloroethene** | ND | 0.1 mg/m$^3$ |
| **Bromomethane** | ND | 0.2 mg/m$^3$ | **1,2-Dichloropropane** | ND | 0.1 mg/m$^3$ |
| **Carbon Tetrachloride** | ND | 0.1 mg/m$^3$ | **cis-1,3-Dichloropropene** | ND | 0.1 mg/m$^3$ |
| **Chlorobenzene** | ND | 0.1 mg/m$^3$ | **trans-1,3-Dichloropropene** | ND | 0.1 mg/m$^3$ |
| **Chloroethane** | ND | 0.2 mg/m$^3$ | **Methylene Chloride** | ND | 0.6 mg/m$^3$ |
| **Chloroform** | ND | 0.2 mg/m$^3$ | **1,1,2,2-Tetrachloroethane** | ND | 0.1 mg/m$^3$ |
| **Chloromethane** | ND | 0.1 mg/m$^3$ | **Tetrachloroethene** | ND | 0.1 mg/m$^3$ |
| **Dibromochloromethane** | ND | 0.2 mg/m$^3$ | **1,1,1-Trichloroethane** | 0.10 | 0.1 mg/m$^3$ |
| **Dichlorodifluoromethane** | ND | 0.1 mg/m$^3$ | **1,1,2-Trichloroethane** | ND | 0.1 mg/m$^3$ |
| **1,2-Dichlorobenzene** | ND | 0.1 mg/m$^3$ | **Trichloroethene** | ND | 0.1 mg/m$^3$ |
| **1,3-Dichlorobenzene** | ND | 0.1 mg/m$^3$ | **Trichlorofluoromethane** | ND | 0.1 mg/m$^3$ |
| **1,4-Dichlorobenzene** | ND | 0.1 mg/m$^3$ | **Vinyl Chloride** | ND | 0.1 mg/m$^3$ |
| **1,1-Dichloroethane** | ND | 0.1 mg/m$^3$ | | | |
| **1,2-Dichloroethane** | ND | 0.1 mg/m$^3$ | | | |
| **1,1-Dichloroethene** | ND | 0.1 mg/m$^3$ | | | |

| Surrogate | Recovery (%) |
|---|---|
| 2-Bromo-1-Chloropropane | 94 |

1. DLR=DF x PQL
2. Analysis performed by Entech Analytical Labs, Inc. (CAELAP #2224)
3. This worksheet is an integral part of the Certified Analytical Report and should not be reproduced except in full without the written consent of Entech Analytical Labs, Inc.

Michael N. Golden, Lab Director

DF=Dilution Factor
DLR=Detection Reporting Limit

PQL=Practical Quantitation Limit
ND=None Detected at or above DLR

*Environmental Analysis Since 1983*

# Entech Analytical Labs, Inc.

CA ELAP# 2224

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


## Certified Analytical Report: EPA Method #8010

| | |
|---|---|
| Client: | SECOR |
| Sample Matrix: | Air |
| Lab #: | E15360 |
| Sample ID: | EFF |

| | |
|---|---|
| Date: | 8/28/98 |
| Date Received: | 8/21/98 |
| Date Analyzed | 8/21/98 |
| Dilution Factor | 1 |

| *Compound* | *Concentration Found* | *PQL* | *Compound* | *Concentration Found* | *PQL* |
|---|---|---|---|---|---|
| **Bromodichloromethane** | ND | 0.1 mg/m$^3$ | **cis-1,2-Dichloroethene** | ND | 0.1 mg/m$^3$ |
| **Bromoform** | ND | 0.2 mg/m$^3$ | **trans-1,2-Dichloroethene** | ND | 0.1 mg/m$^3$ |
| **Bromomethane** | ND | 0.2 mg/m$^3$ | **1,2-Dichloropropane** | ND | 0.1 mg/m$^3$ |
| **Carbon Tetrachloride** | ND | 0.1 mg/m$^3$ | **cis-1,3-Dichloropropene** | ND | 0.1 mg/m$^3$ |
| **Chlorobenzene** | ND | 0.1 mg/m$^3$ | **trans-1,3-Dichloropropene** | ND | 0.1 mg/m$^3$ |
| **Chloroethane** | ND | 0.2 mg/m$^3$ | **Methylene Chloride** | ND | 0.6 mg/m$^3$ |
| **Chloroform** | ND | 0.2 mg/m$^3$ | **1,1,2,2-Tetrachloroethane** | ND | 0.1 mg/m$^3$ |
| **Chloromethane** | ND | 0.1 mg/m$^3$ | **Tetrachloroethene** | ND | 0.1 mg/m$^3$ |
| **Dibromochloromethane** | ND | 0.2 mg/m$^3$ | **1,1,1-Trichloroethane** | ND | 0.1 mg/m$^3$ |
| **Dichlorodifluoromethane** | ND | 0.1 mg/m$^3$ | **1,1,2-Trichloroethane** | ND | 0.1 mg/m$^3$ |
| **1,2-Dichlorobenzene** | ND | 0.1 mg/m$^3$ | **Trichloroethene** | ND | 0.1 mg/m$^3$ |
| **1,3-Dichlorobenzene** | ND | 0.1 mg/m$^3$ | **Trichlorofluoromethane** | ND | 0.1 mg/m$^3$ |
| **1,4-Dichlorobenzene** | ND | 0.1 mg/m$^3$ | **Vinyl Chloride** | ND | 0.1 mg/m$^3$ |
| **1,1-Dichloroethane** | ND | 0.1 mg/m$^3$ | | | |
| **1,2-Dichloroethane** | ND | 0.1 mg/m$^3$ | | | |
| **1,1-Dichloroethene** | ND | 0.1 mg/m$^3$ | | | |

| Surrogate | Recovery (%) |
|---|---|
| 2-Bromo-1-Chloropropane | 93 |

1. DLR=DF x PQL
2. Analysis performed by Entech Analytical Labs, Inc. (CAELAP #2224)
3. This worksheet is an integral part of the Certified Analytical Report and should not be reproduced except in full without the written consent of Entech Analytical Labs, Inc.

Michael N. Golden, Lab Director

DF=Dilution Factor
DLR=Detection Reporting Limit

PQL=Practical Quantitation Limit
ND=None Detected at or above DLR

*Environmental Analysis Since 1983*

# Entech Analytical Labs, Inc.

CA ELAP# 2224

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:** 8/20/98 12:30
**Lab #:** E15359
**Client ID:** INF

**Date Reported:** 8/28/98
**Date Received:** 8/21/98
**Date Analyzed:** 8/21/98
**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 | 94 |

1. Results are reported in ppmV
2. DLR= DF x PQL
3. Analysis performed by Entech Analytical Labs, Inc. (CAELAP #2224)

Michael N. Golden, 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# 2224

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:** 8/20/98 11:55
**Lab #:** E15360
**Client ID:** EFF

**Date Reported:** 8/28/98
**Date Received:** 8/21/98
**Date Analyzed:** 8/21/98
**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 | 93 |

1. Results are reported in ppmV
2. DLR= DF x PQL
3. Analysis performed by Entech Analytical Labs, Inc. (CAELAP #2224)

Michael N. Golden, 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 #: VOC2W980821
Matrix: Water
Units: µg/L

Date Analyzed: 08/21/98
Quality Control Sample: Blank Spike

| PARAMETER | Method # | SA µg/L | SR µg/L | SP µg/L | SP % R | SPD µg/L | SPD %R | RPD | QC LIMITS RPD | QC LIMITS %R |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 602/8020 | 40 | ND | 41 | **103** | 41 | **101** | 1.7 | 25 | 87-108 |
| Chlorobenzene | 601/8010 | 40 | ND | 41 | **102** | 41 | **102** | 0.7 | 25 | 80-118 |
| 1,1-Dichloroethane | 601/8010 | 40 | ND | 43 | **106** | 42 | **105** | 1.7 | 25 | 76-123 |
| Toluene | 602/8020 | 40 | ND | 41 | **102** | 40 | **101** | 1.7 | 25 | 86-111 |
| Trichloroethene | 601/8010 | 40 | ND | 38 | **95** | 38 | **95** | 0.3 | 25 | 68-129 |
| 2-Bromo-1-chloropropane | 601/8010 | | 95% | 95% | | 94% | | | | 75-125 |
| aaa-Trifluorotoluene | 602/8020 | | 98% | 97% | | 97% | | | | 75-125 |

*Note: LCS and LCSD results reported for the following Parameters:*
*None*

*Acceptable LCS and LCSD results are reported when matrix interferences cause MS and MSD results to fall outside established QC limits.*

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 #: GBG2980821
Matrix: Water
Units: ug/L

Date Analyzed: 08/21/98
Quality Control Sample: Blank Spike

| PARAMETER | Method # | MB ug/L | SA ug/L | SR ug/L | SP ug/L | SP % R | SPD ug/L | SPD %R | RPD | QC LIMITS RPD | QC LIMITS %R |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 8020 | <0.50 | 80 | ND | 78 | 97 | 79 | 99 | 1.9 | 25 | 78-112 |
| Toluene | 8020 | <0.50 | 80 | ND | 78 | 97 | 79 | 99 | 1.9 | 25 | 79-111 |
| Ethyl Benzene | 8020 | <0.50 | 80 | ND | 79 | 98 | 80 | 100 | 1.8 | 25 | 78-114 |
| Xylenes | 8020 | <0.50 | 240 | ND | 245 | 102 | 246 | 102 | 0.2 | 25 | 79-115 |
| Gasoline | 8015 | <50.0 | 1000 | ND | 930 | 93 | 930 | 93 | 0.0 | 25 | 63-127 |

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

*Acceptable LCS and LCSD results are reported when matrix interferences cause MS and MSD results to fall outside established QC limits.*

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 Willow Pass Road 360
Concord CA 94520

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

Job Name: SAFety Klean
Location: 400 MARKet St.
Oakland CA

Project # 70005-009 Task #
Project Manager Greg Hoehn
Laboratory Entech
Turnaround Time Standard

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

| Sample ID | Date | Time | Matrix |
|---|---|---|---|
| INF E15359 | 8/20 | 12:30 | AIR |
| EFF E15360 | 8/20 | 11:55 | AIR |

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 MS | BTEX | Comments/ Instructions | Number of Containers |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | X | | | | | | X | X | | 1 |
| | | | | | | X | | | | | | X | X | | 1 |

Special Instructions/Comments:

Relinquished by: SECOR
Sign Gary R Clift
Print GARY R CLIFT
Company SECOR
Time 8:00 Date 8/21/98

Received by:
Sign
Print Brenda Goff
Company Entech
Time 8:00 Date 8/21/98

Relinquished by:
Sign
Print Brenda Goff
Company Entech
Time 2:30 Date 8/21/98

Received by:
Sign
Print
Company Entech
Time 2:30p Date 8/21

Sample Receipt

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

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

SECOR CUSTREC Rev. 1/95

Date: 8, 21, 98 Page 1 of 1

*APPENDIX C*

*Laboratory Reports - Groundwater Samples*

safety-kleen ®
Allan A. Manteuffel Technical Center



July 30, 1998

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

Re: SK Lab Project #98-190
Project ID Name: Concord, CA

Dear Greg:

Enclosed please find the analytical results for the sample received by SK Environmental Laboratory on 7/22/98.

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,

Richard H. Cook
Environmental Section Leader

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

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

Project ID #: 70005-009
Project ID Name: Oakland, CA
SK Lab Project #: 98-190
Date Reported: 7/30/98

# ANALYTICAL RESULTS

## Total Petroleum Hydrocarbons as Mineral Spirits in Water

Modified EPA Method 8015

Reporting Limit: 50

| Work Order # | Collector's Sample # | Date Sampled | Date Analyzed | Concentration ug/L |
|---|---|---|---|---|
| 01 | Trip Blank | 7/21/98 | 7/23/98 | <50 |
| 02 | EQ. Blank | 7/21/98 | 7/23/98 | <50 |
| 03 | MW-2 | 7/21/98 | 7/23/98 | <50 |
| 04 | MW-3 | 7/21/98 | 7/23/98 | <50 |
| 05 | MW-4 | 7/21/98 | 7/23/98 | <50 |
| 06 | MW-8 | 7/21/98 | 7/23/98 | <50 |

**Analytical Review / Date:** 7/30/98

Project ID #: 70005-009
Project ID Name: Oakland, CA
SK Lab Project #: 98-190
Date Reported: 7/30/98

# ANALYTICAL RESULTS

## Volatile Organics in Water

EPA Method 8260

| Work Order # | | 01 | 02 | 03 | 04 |
|---|---|---|---|---|---|
| Collector's Sample # | | Trip Blank | EQ. Blank | MW-2 | MW-3 |
| Date Sampled | | 7/21/98 | 7/21/98 | 7/21/98 | 7/21/98 |
| Date Analyzed | | 7/27/98 | 7/27/98 | 7/27/98 | 7/27/98 |
| Dilution Factor | | 1 | 1 | 1 | 1 |
| Analyte | Report Limit ug/L | Concentration µg/L | | | |
| Acetone | 25 | <25 | <25 | **30.2** | <25 |
| Acrylonitrile | 25 | <25 | <25 | <25 | <25 |
| Benzene | 5 | <5 | <5 | <5 | <5 |
| Bromobenzene | 5 | <5 | <5 | <5 | <5 |
| Bromochloromethane | 10 | <10 | <10 | <10 | <10 |
| Bromodichloromethane | 5 | <5 | <5 | <5 | <5 |
| Bromoform | 5 | <5 | <5 | <5 | <5 |
| Bromomethane | 10 | <10 | <10 | <10 | <10 |
| 2-Butanone | 25 | <25 | <25 | <25 | <25 |
| n-Butylbenzene | 5 | <5 | <5 | <5 | <5 |
| sec-Butylbenzene | 5 | <5 | <5 | <5 | <5 |
| tert-Butylbenzene | 5 | <5 | <5 | <5 | <5 |
| Carbon Tetrachloride | 5 | <5 | <5 | <5 | <5 |
| Chlorobenzene | 5 | <5 | <5 | <5 | <5 |
| Chlorodibromomethane | 5 | <5 | <5 | <5 | <5 |
| Chloroethane | 10 | <10 | <10 | <10 | <10 |
| Chloroform | 5 | <5 | **15.1** | <5 | <5 |
| Chloromethane | 10 | <10 | <10 | <10 | <10 |
| 2-Chlorotoluene | 5 | <5 | <5 | <5 | <5 |
| 4-Chlorotoluene | 5 | <5 | <5 | <5 | <5 |
| 1,2-Dibromo-3-chloropropane | 5 | <5 | <5 | <5 | <5 |
| 1,2-Dibromoethane | 5 | <5 | <5 | <5 | <5 |

Project ID #: 70005-009
Project ID Name: Oakland, CA
SK Lab Project #: 98-190
Date Reported: 7/30/98

# ANALYTICAL RESULTS

## Volatile Organics in Water

EPA Method 8260

| Work Order # | | 01 | 02 | 03 | 04 |
|---|---|---|---|---|---|
| Collector's Sample # | | Trip Blank | EQ. Blank | MW-2 | MW-3 |
| Date Sampled | | 7/21/98 | 7/21/98 | 7/21/98 | 7/21/98 |
| Date Analyzed | | 7/27/98 | 7/27/98 | 7/27/98 | 7/27/98 |
| Dilution Factor | | 1 | 1 | 1 | 1 |
| Analyte | Report Limit ug/L | Concentration ug/L | | | |
| Dibromomethane | 5 | <5 | <5 | <5 | <5 |
| 1,2-Dichlorobenzene | 5 | <5 | <5 | <5 | <5 |
| 1,3-Dichlorobenzene | 5 | <5 | <5 | <5 | <5 |
| 1,4-Dichlorobenzene | 5 | <5 | <5 | <5 | <5 |
| Dichlorodifluoromethane | 5 | <5 | <5 | <5 | <5 |
| 1,1-Dichloroethane | 5 | <5 | <5 | <5 | <5 |
| 1,2-Dichloroethane | 5 | <5 | <5 | <5 | <5 |
| 1,1-Dichloroethene | 5 | <5 | <5 | <5 | <5 |
| cis-1,2-Dichloroethene | 5 | <5 | <5 | <5 | <5 |
| trans-1,2-Dichloroethene | 5 | <5 | <5 | <5 | <5 |
| 1,2-Dichloropropane | 5 | <5 | <5 | <5 | <5 |
| 1,3-Dichloropropane | 5 | <5 | <5 | <5 | <5 |
| 2,2-Dichloropropane | 5 | <5 | <5 | <5 | <5 |
| cis-1,3-Dichloropropene | 5 | <5 | <5 | <5 | <5 |
| trans-1,3-Dichloropropene | 5 | <5 | <5 | <5 | <5 |
| Ethylbenzene | 5 | <5 | <5 | <5 | <5 |
| 2-Hexanone | 25 | <25 | <25 | <25 | <25 |
| Hexachlorobutadiene | 5 | <5 | <5 | <5 | <5 |
| Iodomethane | 15 | <15 | <15 | <15 | <15 |
| Isopropylbenzene | 5 | <5 | <5 | <5 | <5 |
| p-Isopropyltoluene | 5 | <5 | <5 | <5 | <5 |
| Methyl Isobutyl Ketone | 25 | <25 | <25 | <25 | <25 |

Project ID #: 70005-009
Project ID Name: Oakland, CA
SK Lab Project #: 98-190
Date Reported: 7/30/98

# ANALYTICAL RESULTS

## Volatile Organics in Water

EPA Method 8260

| Work Order # | | 01 | 02 | 03 | 04 |
|---|---|---|---|---|---|
| Collector's Sample # | | Trip Blank | EQ. Blank | MW-2 | MW-3 |
| Date Sampled | | 7/21/98 | 7/21/98 | 7/21/98 | 7/21/98 |
| Date Analyzed | | 7/27/98 | 7/27/98 | 7/27/98 | 7/27/98 |
| Dilution Factor | | 1 | 1 | 1 | 1 |
| Analyte | Report Limit ug/L | Concentration ug/L | | | |
| Methylene Chloride | 5 | <5 | <5 | <5 | <5 |
| Methyl-tert-butyl ether | 5 | <5 | <5 | <5 | <5 |
| Naphthalene | 5 | <5 | <5 | <5 | <5 |
| n-Propylbenzene | 5 | <5 | <5 | <5 | <5 |
| Styrene | 5 | <5 | <5 | <5 | <5 |
| 1,1,1,2-Tetrachloroethane | 5 | <5 | <5 | <5 | <5 |
| 1,1,2,2-Tetrachloroethane | 5 | <5 | <5 | <5 | <5 |
| Tetrachloroethene | 5 | <5 | <5 | <5 | <5 |
| Toluene | 5 | <5 | <5 | <5 | <5 |
| 1,2,3-Trichlorobenzene | 5 | <5 | <5 | <5 | <5 |
| 1,2,4-Trichlorobenzene | 5 | <5 | <5 | <5 | <5 |
| 1,1,1-Trichloroethane | 5 | <5 | <5 | <5 | <5 |
| 1,1,2-Trichloroethane | 5 | <5 | <5 | <5 | <5 |
| Trichloroethene | 5 | <5 | <5 | <5 | <5 |
| Trichlorofluoromethane | 5 | <5 | <5 | <5 | <5 |
| 1,2,3-Trichloropropane | 10 | <10 | <10 | <10 | <10 |
| 1,2,4-Trimethylbenzene | 5 | <5 | <5 | <5 | <5 |
| 1,3,5-Trimethylbenzene | 5 | <5 | <5 | <5 | <5 |
| Vinyl Chloride | 5 | <5 | <5 | <5 | <5 |
| Xylenes (Total) | 5 | <5 | <5 | <5 | <5 |

**Analytical Review / Date:** 7/30/98

Project ID #: 70005-009
Project ID Name: Oakland, CA
SK Lab Project #: 98-190
Date Reported: 7/30/98

# ANALYTICAL RESULTS

## Volatile Organics in Water

EPA Method 8260

| | Work Order # | 05 | 06 |
|---|---|---|---|
| | Collector's Sample # | MW-4 | MW-8 |
| | Date Sampled | 7/21/98 | 7/21/98 |
| | Date Analyzed | 7/27/98 | 7/24/98 |
| | Dilution Factor | 1 | 1 |
| Analyte | Report Limit µg/L | Concentration µg/L | |
| Acetone | 25 | **31.3** | <25 |
| Acrylonitrile | 25 | <25 | <25 |
| Benzene | 5 | <5 | <5 |
| Bromobenzene | 5 | <5 | <5 |
| Bromochloromethane | 10 | <10 | <10 |
| Bromodichloromethane | 5 | <5 | <5 |
| Bromoform | 5 | <5 | <5 |
| Bromomethane | 10 | <10 | <10 |
| 2-Butanone | 25 | <25 | <25 |
| n-Butylbenzene | 5 | <5 | <5 |
| sec-Butylbenzene | 5 | <5 | <5 |
| tert-Butylbenzene | 5 | <5 | <5 |
| Carbon Tetrachloride | 5 | <5 | <5 |
| Chlorobenzene | 5 | <5 | <5 |
| Chlorodibromomethane | 5 | <5 | <5 |
| Chloroethane | 10 | <10 | <10 |
| Chloroform | 5 | <5 | <5 |
| Chloromethane | 10 | <10 | <10 |
| 2-Chlorotoluene | 5 | <5 | <5 |
| 4-Chlorotoluene | 5 | <5 | <5 |
| 1,2-Dibromo-3-chloropropane | 5 | <5 | <5 |
| 1,2-Dibromoethane | 5 | <5 | <5 |

Project ID #: 70005-009
Project ID Name: Oakland, CA
SK Lab Project #: 98-190
Date Reported: 7/30/98

# ANALYTICAL RESULTS

## Volatile Organics in Water

EPA Method 8260

| | Work Order # | 05 | 06 |
|---|---|---|---|
| | Collector's Sample # | MW-4 | MW-8 |
| | Date Sampled | 7/21/98 | 7/21/98 |
| | Date Analyzed | 7/27/98 | 7/24/98 |
| | Dilution Factor | 1 | 1 |
| Analyte | Report Limit ug/L | Concentration µg/L | |
| Dibromomethane | 5 | <5 | <5 |
| 1,2-Dichlorobenzene | 5 | <5 | <5 |
| 1,3-Dichlorobenzene | 5 | <5 | <5 |
| 1,4-Dichlorobenzene | 5 | <5 | <5 |
| Dichlorodifluoromethane | 5 | <5 | <5 |
| 1,1-Dichloroethane | 5 | <5 | <5 |
| 1,2-Dichloroethane | 5 | <5 | <5 |
| 1,1-Dichloroethene | 5 | <5 | <5 |
| cis-1,2-Dichloroethene | 5 | **7.8** | **23.8** |
| trans-1,2-Dichloroethene | 5 | <5 | <5 |
| 1,2-Dichloropropane | 5 | <5 | <5 |
| 1,3-Dichloropropane | 5 | <5 | <5 |
| 2,2-Dichloropropane | 5 | <5 | <5 |
| cis-1,3-Dichloropropene | 5 | <5 | <5 |
| trans-1,3-Dichloropropene | 5 | <5 | <5 |
| Ethylbenzene | 5 | <5 | <5 |
| 2-Hexanone | 25 | <25 | <25 |
| Hexachlorobutadiene | 5 | <5 | <5 |
| Iodomethane | 15 | <15 | <15 |
| Isopropylbenzene | 5 | <5 | <5 |
| p-Isopropyltoluene | 5 | <5 | <5 |
| Methyl Isobutyl Ketone | 25 | <25 | <25 |

Project ID #: 70005-009
Project ID Name: Oakland, CA
SK Lab Project #: 98-190
Date Reported: 7/30/98

# ANALYTICAL RESULTS

## Volatile Organics in Water

EPA Method 8260

| | | | |
|---|---|---|---|
| **Work Order #** | | 05 | 06 |
| **Collector's Sample #** | | MW-4 | MW-8 |
| **Date Sampled** | | 7/21/98 | 7/21/98 |
| **Date Analyzed** | | 7/27/98 | 7/24/98 |
| **Dilution Factor** | | 1 | 1 |
| **Analyte** | **Report Limit µg/L** | **Concentration µg/L** | |
| Methylene Chloride | 5 | <5 | <5 |
| Methyl-tert-butyl ether | 5 | <5 | <5 |
| Naphthalene | 5 | <5 | <5 |
| n-Propylbenzene | 5 | <5 | <5 |
| Styrene | 5 | <5 | <5 |
| 1,1,1,2-Tetrachloroethane | 5 | <5 | <5 |
| 1,1,2,2-Tetrachloroethane | 5 | <5 | <5 |
| Tetrachloroethene | 5 | <5 | <5 |
| Toluene | 5 | <5 | <5 |
| 1,2,3-Trichlorobenzene | 5 | <5 | <5 |
| 1,2,4-Trichlorobenzene | 5 | <5 | <5 |
| 1,1,1-Trichloroethane | 5 | <5 | <5 |
| 1,1,2-Trichloroethane | 5 | <5 | <5 |
| Trichloroethene | 5 | **57.3** | **180** |
| Trichlorofluoromethane | 5 | <5 | <5 |
| 1,2,3-Trichloropropane | 10 | <10 | <10 |
| 1,2,4-Trimethylbenzene | 5 | <5 | <5 |
| 1,3,5-Trimethylbenzene | 5 | <5 | <5 |
| Vinyl Chloride | 5 | <5 | <5 |
| Xylenes (Total) | 5 | <5 | <5 |

**Analytical Review / Date:** 1/30/98

Chain-of Custody Number: 98-110

# SECOR Chain-of Custody Record

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

Field Office: _____

Address: 1340 Willow Pass Rd. Ste 360
Concord, CA. 94520

Job Name: Safety Kleen

Location: 400 Market St.
Oakland, CA.

Project # 70005-009 Task # _____
Project Manager Chris Hoehn
Laboratory Safety Kleen
Turnaround Time 5pm 24-0

Sampler's Name R. Nuño
Sampler's Signature RN

| | Sample ID | Date | Time | Matrix | HCID | TPHg/BTEX/WTPH-G 8015 (modified)/8020 | TPHd/WTPH-D 8015 (modified) | TPH 418.1/WTPH 418.1 | Aromatic Volatiles 602/8020 | Volatile Organics 624/8240 (GC/MS) | Halogenated Volatiles 601/8010 | Semi-volatile Organics 625/8270 (GC/MS) | Pesticides/PCBs 608/8080 | Total Lead 7421 | Priority Pollutant Metals (13) | TCLP Metals | VOC's 624 or 8260 | TPH as minivan 5030 | Comments/ Instructions | Number of Containers |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01 | Trip Blank | 7/21/98 | 7:00 | W | | | | 9 | 8 | 0 | 5 | 3 | 9 | 0 | | | X | X | | 2 |
| 02 | Eq. Blank | " | 7:30 | " | | | | | | | | | 9 | 1 | | | X | X | | 6 |
| 03 | MW-2 | " | 9:15 | " | | | | | | | | | 9 | 2 | | | X | X | | 6 |
| 04 | MW-3 | " | 8:00 | " | | | | | | | | | 9 | 3 | | | X | X | | 6 |
| 05 | MW-4 | " | 10:20 | " | | | | | | | | | 9 | 4 | | | X | X | | 6 |
| 06 | MW-8 | " | 11:30 | " | | | | | | | | | 9 | 5 | | | X | X | | 6 |

Special Instructions/Comments:
4° C 6.0
TAT normal
~~BA~~ for all VOA pH < 2

Relinquished by: RN
Sign RN
Print R. Nuño
Company Secor
Time _____ Date 7/21/98

Received by: MN
Sign Mona Nguyen
Print _____
Company _____
Time 10:50 Date 7/22/98

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

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

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

Client: Secor
Client Contact: Chris
Client Phone: (925) 686-9780

SOR CUSTREC Rev. 1/95

Date: 7/21/98 Page 1 of 1