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Field Investigation Report  
Rifkin Property, 4525-4563 Horton Street  
Emeryville, California

LF 3042.00-000  
May 19, 1994

Prepared for  
The Sherwin-Williams Company  
101 Prospect Avenue Northwest  
Cleveland, Ohio 44115



**LEVINE·FRICKE**



# LEVINE•FRICKE

ENGINEERS, HYDROGEOLOGISTS & APPLIED SCIENTISTS

May 19, 1994

LF 3042.00-000

Mr. Sumadhu Arigala  
San Francisco Bay Region  
California Regional Water Quality Control Board  
2101 Webster Street, Suite 500  
Oakland, California 94612

**Subject:** Field Investigation Report, Rifkin Property,  
4525-4563 Horton Street, Emeryville, California

Dear Mr. Arigala:

On behalf of The Sherwin-Williams Company, Levine-Fricke is submitting the enclosed field investigation report for a portion of the Rifkin Property at 4525-4563 Horton Street, Emeryville, California. The work was conducted as outlined in Levine-Fricke's February 16, 1994 "Revised Work Plan for Field Investigation at the Rifkin Property at 4525-4563 Horton Street, Emeryville, California" ("the Work Plan"). This revised work plan expanded the scope of our January 6, 1994 work plan, which was approved by the Regional Water Quality Control Board, San Francisco Bay Region in a January 11, 1994 letter. The work plans were submitted in response to your September 22, 1993 letter to Mr. Mark Knox of Levine-Fricke.

This report includes analytical results from soil and ground-water samples collected from eight soil boring locations. The chemical analyses included arsenic, total petroleum hydrocarbons as gasoline and as diesel, and volatile organic compounds. Based on these results, recommendations for additional work are presented.

If you have any questions, please call Dave Gustafson of Sherwin-Williams (216-566-3144) or either of the undersigned.

Sincerely,

Jo Ann T. Weber, R.G.  
Senior Project Hydrogeologist

Mark D. Knox, P.E.  
Chief Engineer

Enclosures

1900 Powell Street, 12th Floor  
Emeryville, California 94608  
(510) 652-4500  
Fax (510) 652-2246

cc: Larry Mencin, The Sherwin-Williams Company  
Dave Gustafson, The Sherwin-Williams Company  
Allen Danzig, Esq., The Sherwin-Williams Company  
Frank McHugh, The Sherwin-Williams Company  
Ignacio Dayrit, City of Emeryville (3 copies)  
Jay Grover, Chiron  
Susan Hugo, Alameda County Agency of Environmental Health  
Frank Satterwhite, Receiver (3 copies)

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CERTIFICATION

All engineering information, conclusions, and recommendations in this report have been prepared under the supervision of and reviewed by a Levine-Fricke California Professional Engineer.

Mark D. Knox

Mark D. Knox  
Principal Engineer  
California Professional Engineer (No. 33194)

5/19/94  
Date

May 19, 1994

LF 3042.00-000

**FIELD INVESTIGATION  
RIFKIN PROPERTY, 4525-4563 HORTON STREET  
EMERYVILLE, CALIFORNIA**

**1.0 INTRODUCTION**

This field investigation report for the Rifkin Property, located at 4525-4563 Horton Street, Emeryville, California ("the Site"), is being submitted by Levine·Fricke on behalf of The Sherwin-Williams Company ("Sherwin-Williams"). The investigation was conducted as outlined in Levine·Fricke's February 16, 1994 "Revised Work Plan for Field Investigation at the Rifkin Property at 4525-4563 Horton Street, Emeryville, California" ("the Work Plan"). This revised work plan expanded the scope of our January 6, 1994 work plan, which was approved by the Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) in a January 11, 1994 letter. The work plans were submitted in response to a September 22, 1993 letter from Mr. Sumadhu Arigala of the RWQCB to Mr. Mark Knox of Levine·Fricke.

The April 1994 field investigation was conducted primarily in the southern portion of the Site, which is located immediately north and west of the Sherwin-Williams Emeryville facility. Sherwin-Williams is currently completing a remedial program under the direction of the RWQCB on its Emeryville facility at 1450 Sherwin Avenue.

Results are presented for soil and ground-water samples collected from seven temporary soil borings on the Site and one soil boring on the Sherwin-Williams facility, drilled to depths of 16 to 25 feet below ground surface (bgs). Additionally, recommendations for additional field activities are provided.

**2.0 OBJECTIVE**

The field investigation was conducted to further evaluate chemical-affected soil and shallow ground water in the southern portion of the Site, to determine whether and to what extent, if any, contamination has migrated from the Sherwin-Williams facility. Chemical data previously were collected at the Site by Erler and Kalinowski in 1993, as summarized below. Eight additional borings (SB-1 through SB-8) were drilled to collect additional data. The boring locations were selected to assess the following:



- the northern lateral extent of arsenic-affected soil and ground water (SB-1 through SB-4)
- the concentration of hydrocarbons in soil and ground water in the southern portion of the Site
- soil and ground-water quality downgradient from former UST locations (SB-4 and SB-5)
- unsaturated soil quality and the lateral extent of hydrocarbons in the southwestern portion of the Site (SB-6 and SB-7)
- soil and shallow ground-water quality on the Sherwin-Williams property next to the southwestern corner of the Site (SB-8)

### 3.0 BACKGROUND

#### 3.1 History

According to a previous report discussing historical site use (Harding-Lawson Associates, October 20, 1992), previous owners or users of the Site included the following:

- The Oakland Trotting Park and North California Jockey Club Race Track occupied the Site from approximately 1889 until at least 1911 or 1912.
- Pacific Galvanizing occupied the Site in 1925.
- Rotary Oil Company occupied the Site in the 1920s.
- Rheem Manufacturing occupied the Site in 1930.
- The California Container Corporation (later the Container Corporation of America) began manufacturing corrugated containers in the existing building beginning in approximately 1937.
- California Container Corporation occupied the Site until approximately 1978.
- Rifkin Investments obtained the property from Container Corporation of America in 1978.

In addition to the above reported historical site users, East Bay Chemical Company also occupied the Site in the 1920s based on historical site area maps.

### 3.2 Previous Data

Erler & Kalinowski, Inc., on behalf of Chiron of Emeryville, California, submitted a preliminary site characterization report for the Site, dated October 27, 1993. Ground water was encountered by Erler & Kalinowski at approximately 12.5 bgs. Arsenic concentrations in three grab ground-water samples (4525-8, 4525-7, and 4543-B; Figure 1) collected in the southern portion of the Site, next to the Sherwin-Williams facility, exceeded the California Department of Health Services maximum contaminant level (MCL) in drinking water of 0.05 milligram per liter (mg/l). Additionally, composited soil samples from the same sampling locations contained arsenic at concentrations ranging from 120 to 3,600 milligrams per kilogram (mg/kg). The remaining ground-water samples collected at the Site contained no concentrations of arsenic above MCLs, and the remaining soil samples contained no concentrations of arsenic above detection limits.

Additionally, hydrocarbons, including total petroleum hydrocarbons as gasoline (TPHg) and as diesel (TPHd) and volatile organic compounds (VOCs) such as acetone, methyl ethyl ketone, and 4-methyl-2-pentanone, were reported by Erler & Kalinowski in soil or ground-water samples collected from boring locations 4525-6 and 4525-7 (Figure 1). TPHg or TPHd or the common constituents of gasoline (benzene, toluene, ethylbenzene, and xylenes [BTEX]) were detected in soil or ground water at many sample locations (e.g., CPT-1 through CPT-5, 4543-B, 4543-C, and 4525-6 through 4525-8). Locations CPT-1 through CPT-5 were upgradient from both the Sherwin-Williams facility and the Site.

The highest concentrations of petroleum hydrocarbons and BTEX (up to 325 mg/l in ground water) were generally detected in soil and shallow ground-water samples from locations 4543-C and 4525-6 through 4525-8. These sample locations were located in the southern portion of the Site and in the vicinity of Rifkin's former underground storage tank (UST) locations (Figure 1). The UST locations on the Site are upgradient from the sampling areas in the southern portion. Additionally, Erler & Kalinowski reported that degreasing operations currently occur near sample location 4525-6. These data indicate that arsenic and the hydrocarbons acetone, methyl ethyl ketone, and 4-methyl-2-pentanone are limited to a small area in the southwestern part of the Site; however, the

Erler & Kalinowski data did not fully define the extent of arsenic or the hydrocarbons in soil or ground water in this area.

Levine·Fricke's field investigation did not address the issue of the elevated concentration of 0.61 mg/l of trichloroethene (TCE) in the shallow ground water reported by Erler & Kalinowski at sample location 4563-A, located in the northwestern corner of the Rifkin building, because TCE is not associated with shallow ground water in the southwest portion of the Site. Therefore, a local source for TCE may be present on the Site in the vicinity of sample location 4563-A.

#### 4.0 SOIL AND GRAB GROUND-WATER SAMPLING

A total of 43 soil and 9 grab ground-water samples were collected and submitted for chemical analysis. Figure 1 shows the temporary soil boring locations (SB-1 through SB-8). Soil borings SB-1 through SB-7 were on the Site, and boring SB-8 was on the Sherwin-Williams facility, within the containment side of the slurry wall.

##### 4.1 Methodology

Based on the Work Plan, soil and grab ground-water samples were collected on April 4 and 5, 1994, from eight borings (SB-1 through SB-8) at locations illustrated on Figure 1. Levine·Fricke retained Precision Sampling of San Rafael to conduct the drilling. Levine·Fricke personnel supervised the field work and collected the soil and grab ground-water samples. Mr. Mark Youngkin of TMC Environmental, Incorporated, was present during field activities on behalf of the receiver for the Site, Mr. Frank Satterwhite. Details of the field investigation procedures are provided in Appendix A.

##### 4.2 Lithology

Eight soil borings were completed to a depth of 16 to 25 feet bgs. Lithologic logs of the soil borings are included in Appendix B. Subsurface soils consisted of predominantly silt, silty to clayey sand, and clay. Beneath the concrete floor and underlying aggregate rock base, a silt (or clayey to sandy silt) was encountered to a depth of 5 to 11 feet bgs. Beneath the silt, a clayey or silty sand approximately 2 to 5 feet thick was encountered in all borings, except SB-7 and SB-8. In boring SB-7, a gravelly silty sand was encountered beneath the upper silt interval. In boring SB-8, a lens of gravelly sand was encountered between the upper silt and lower silty

sand intervals. Ground water generally was encountered in this silty sand interval at an approximate depth of 9 to 12.5 feet bgs. A saturated silty to sandy clay or sandy silt was encountered beneath the clayey or silty sand interval to the bottom of the borings, at 16 feet bgs.

Boring SB-4 (the only boring more than 16 feet deep) was completed at a depth of 25 feet bgs. A gravelly sand interval approximately 6 feet thick was encountered in boring SB-4 below 16 feet bgs. Beneath the gravelly sand interval, a sandy silty clay that graded to a silty clay was encountered to the bottom of boring, at 25 feet bgs.

#### **4.3 Analytical Results for Soil Samples**

A total of 43 soil samples were collected and submitted to American Environmental Network of Pleasant Hill, California.

Twenty of the 43 soil samples collected were used by the laboratory to make 8 composite samples. The laboratory composited soil from two or three locations in the unsaturated zone from each sample location, for a total of eight composite samples. Additionally, one soil sample from the capillary fringe of each of the eight boring locations was collected. Each soil composite and each soil sample collected from the capillary fringe (a total of 16 soil samples) was analyzed for arsenic using EPA Method 7060.

The 15 remaining soil samples were submitted for analysis of TPHg using modified EPA Method 8015, TPHd using EPA Methods 3550/8015, and VOCs using EPA Method 8240. The 15 soil samples submitted for organic chemical analysis consisted of two soil samples from each boring, except SB-7 (one from the unsaturated and one from the capillary-fringe zones). The soil sample collected for arsenic analysis from the capillary-fringe zone in boring SB-7 also was analyzed for organic compounds using the analytical methods described above.

Table 1 presents the analytical results for the soil samples. Figures 1 and 2 present arsenic and TPH analytical data for soils. Laboratory certificates are provided in Appendix C.

##### **4.3.1 Arsenic in Soil**

Analytical results for composited, unsaturated-zone soil samples collected in borings at the Site indicated arsenic concentrations ranging from 4 milligrams per kilogram (mg/kg) in boring SB-7 (composite of sample SB-7-2.5 and SB-7-3.5), to 180 mg/kg in boring SB-6 (composite of sample SB-6-7.5 and

SB-6-8.5). A concentration of 8,500 mg/kg was detected in the composite soil sample collected from the unsaturated zone of boring SB-8 (composite of samples SB-8-2.0, SB-8-4.0, and SB-8-6.5), located on the Sherwin-Williams property (Figure 1).

Chemical concentrations in soil samples collected from the capillary-fringe zone, located just above the ground-water zone, typically indicate residual chemicals originating from the capillary rise of the ground water or a previous rise in the ground-water level. In soil samples collected from the capillary-fringe zone on the Site, arsenic concentrations ranged from 5 mg/kg in sample SB-1-11.0 to 33 mg/kg in SB-7-9.5. A concentration of 1,900 mg/kg of arsenic was detected in the sample collected from the capillary fringe in boring SB-8 (sample SB-8-10).

#### 4.3.2 Petroleum Hydrocarbons in Soil

TPHg concentrations were detected in five of the eight soil samples collected from the unsaturated zone (Figure 2). Concentrations of TPHg detected ranged from 0.3 mg/kg (sample SB-6-7.0) to 3,200 mg/kg (sample SB-8-7.0) in the unsaturated zone.

TPHg concentrations were detected in three of the eight soil samples collected from the capillary-fringe zone (Figure 2). Concentrations of TPHg detected were 0.3 mg/kg in sample SB-3-10.0, 1.1 mg/kg in sample SB-7-11.0, and 8,000 mg/kg in sample SB-8-9.5.

TPHd concentrations were detected in four of the eight soil samples collected from the unsaturated zone (Figure 2). TPHd concentrations detected ranged from 1 mg/kg in soil sample SB-2-4.0 to 17 mg/kg in SB-7-3.0.

TPHd concentrations were detected in six of the eight soil samples collected from the capillary-fringe zone (Figure 2). Concentrations of TPHd detected ranged from 7.0 mg/kg (sample SB-2-11.5) to 5,000 mg/kg (sample SB-6-10.0).

#### 4.3.3 Other Organic Chemicals in Soil

Toluene was detected in all of the soil samples collected and submitted for analysis from the unsaturated zone. Toluene concentrations ranged from 0.006 mg/kg in sample SB-4-7 to 280 mg/kg in sample SB-8-7.0.

Toluene was detected in five of the eight soil samples collected and submitted for analysis from the capillary-fringe zone. Toluene concentrations ranged from 0.005 mg/kg in sample SB-2-11.5 to 1,400 mg/kg in sample SB-8-9.5.

Xylenes were detected in five of the eight soil samples collected and submitted for analysis from the unsaturated zone. Xylene concentration ranged from 0.01 mg/kg in sample SB-2-4 to 360 mg/kg in sample SB-8-7.0.

Xylenes were detected in three of the eight soil samples collected and submitted for analysis from the capillary-fringe zone. The concentrations of xylenes detected were 0.32 mg/kg in sample SB-7-11.0, 3 mg/kg in sample SB-6-10, and 670 mg/kg in sample SB-8-9.5.

Acetone (up to 110 mg/kg at 11 feet bgs), methyl ethyl ketone (up to 3.8 mg/kg at 11 feet bgs), ethylbenzene (up to 1.2 mg/kg at 3 feet bgs), 2-hexanone (up to 0.12 mg/kg at 11 feet bgs) and methyl isobutyl ketone (up to 13 mg/kg at 3 feet bgs) were only detected in soil samples collected from boring SB-7 located on the Site. Acetone (1,100 mg/kg) and ethylbenzene (62 mg/kg) were detected in the unsaturated soil samples collected from boring SB-8. The laboratory reported elevated detection limits (500 to 1,000 mg/kg) for methyl ethyl ketone, 2-hexanone, and methyl isobutyl ketone for soil samples collected from boring SB-8 and submitted for analysis using EPA Method 8240.

#### 4.4 Analytical Results for Grab Ground-Water Samples

Nine grab ground-water samples (eight ground-water samples, one replicate ground-water sample) were collected from borings SB-1 through SB-8. Samples were submitted for analysis of arsenic using EPA Method 7060, for TPHg using modified EPA Method 8015, TPHd using EPA Methods 3550/8015, and VOCs using EPA Method 8240. Ground-water samples collected for analysis of arsenic were filtered through a 0.45-micron filter by the laboratory and then preserved with nitric acid. Analytical results for grab ground-water samples collected from borings SB-1 through SB-8 are presented in Table 2 and Figures 3 and 4. Based on historical data collected at the Sherwin-Williams facility, the shallow ground-water flow direction in the site vicinity is approximately toward the northwest and San Francisco Bay.

**4.4.1 Arsenic in Ground Water**

Concentrations of arsenic in the ground-water samples collected from borings at the Site ranged from 0.015 milligrams per liter (mg/l) in sample SB-3-GW to 0.2 mg/l in sample SB-4-GW. Arsenic at a concentration of ~~430 mg/l~~ was detected in the grab ground-water sample collected from soil boring SB-8 (Figure 3).

**4.4.2 Petroleum Hydrocarbons in Ground Water**

TPHg was detected at two locations. A concentration of 0.9 mg/l TPHg was detected in grab ground-water samples from boring SB-4, and a concentration of 280 mg/l of TPHg was detected in the grab ground-water sample collected from boring SB-8 (Figure 4).

Concentrations of TPHd detected in the eight grab ground-water samples collected ranged from 0.4 mg/l to 51 mg/l.

**4.4.3 Other Organic Chemicals in Ground Water**

Toluene and xylenes were detected in four of the eight grab ground-water samples collected. Toluene concentrations ranged from 0.07 to 210 mg/l. Concentrations of xylenes ranged from 0.013 to 0.20 mg/l.

Benzene (0.022 mg/l), acetone (5 mg/l), methyl ethyl ketone (0.62 mg/l), 1,2-dichloroethane (0.008 mg/l), ethylbenzene (0.068 mg/l) and trichloroethene (0.007 mg/l) were each detected once in one of the seven grab ground-water samples collected from the Site. Methyl isobutyl ketone was detected in two of the seven grab ground-water samples collected from the Site. These compounds were not detected in the grab ground-water sample collected from location SB-8. However, the laboratory reported elevated detection limits (from 10 to 100 mg/l) for these chemicals in the grab ground-water sample collected from location SB-8 on the Sherwin-Williams property.

**5.0 CONCLUSIONS**

Soil and grab ground-water samples were collected from seven boring locations at the Site to further evaluate the lateral extent of chemically affected soil and shallow ground water in the southern portion of the Site. Additionally, soil and grab ground-water samples were collected from one boring location on the Sherwin-Williams property.

## 5.1 Lateral Extent of Chemical-Affected Soil

### 5.1.1 Arsenic

Inorganic chemicals, such as arsenic, occur naturally in soil. Background arsenic concentrations for the Western United States, as estimated by the United States Geological Survey (USGS) (Shacklette and Boerngen 1984), indicate a concentration range for arsenic from <0.10 to 97 mg/kg, with an arithmetic mean value of 7 mg/kg. Based on the results of soil samples collected from the Site, only the arsenic concentration of 180 mg/kg detected in the shallow composited soil sample collected from boring SB-6 exceeded the background concentration maximum range reported by the USGS.

The lateral extent of arsenic-affected soil in the southern portion of the Site is minimal (Figure 1). Arsenic in naturally occurring concentrations was detected in all soil samples, except in one sample collected from boring SB-6 (180 mg/kg in composite of SB-6-7.5 and SB-6-8.5).

### 5.1.2 Petroleum Hydrocarbons

Typically, regulatory agencies consider soils with a total TPH (as gasoline and diesel) concentration exceeding 100 mg/kg to have the potential to leach and degrade the quality of underlying ground water. Localized concentrations of total TPH in excess of 100 mg/kg were detected in soil samples collected from borings SB-4 (150 mg/kg of TPHd in SB-4-12.5) and SB-6 (5,000 mg/kg of TPHd in SB-6-10.0) (Figure 2).

Historical releases of TPH compounds from former USTs located in the proximity of boring SB-4 may be the potential source for the TPH detected in soils at boring SB-4. These USTs reportedly have leaked, according to TMC Environmental personnel. An environmental investigation currently is being conducted by TMC Environmental, on behalf of the site receiver, to address environmental conditions related to these former USTs. The source of TPH in soil collected from boring SB-6 may be on the Site. Low TPHd concentrations were detected in soil samples collected from boring SB-8.

### 5.1.3 Other Organic Chemicals

Total VOC concentrations (excluding TPH) in soil samples collected from borings SB-6 and SB-7 exceeded 1 mg/kg, a soil cleanup level typically used by regulatory agencies. These results indicate that the lateral extent of soil containing VOC concentrations above the RWQCB 1 mg/kg soil remedial goal



has been assessed and that VOC-affected soil is isolated to a relatively small triangular area in the southwestern corner of the Site.

## 5.2 Lateral Extent of Chemical-Affected Ground Water

Although shallow ground water in the site area is not used as drinking water, regulatory agencies typically use drinking water standards (i.e., MCLs) to evaluate water quality.

### 5.2.1 Arsenic

Three of the six grab ground-water samples collected from the Site contained arsenic concentrations that exceeded the 0.05 mg/l MCL for arsenic. Data from SB-1 and SB-3 are inconsistent with (higher) arsenic data from locations SB-2, SB-4, and SB-5 (Figure 3). Based on this observation, the complete lateral extent of arsenic in shallow ground water underlying the Site was not determined in the vicinity of sample locations SB-4 (0.2 mg/l), SB-5 (0.052 mg/l), and SB-2 (0.11 mg/l). However, the lateral extent of arsenic has been determined at locations SB-1 and SB-3.

As indicated in Figure 3, ground-water flow is toward the northwest. Arsenic-affected ground water may have migrated from the Sherwin-Williams facility prior to completion of the cement-bentonite slurry wall in September 1993. This cement-bentonite slurry subsurface wall is located near the northern boundary between the Sherwin-Williams facility and the Site (Figure 3). The design of the slurry wall and the planned pump and treat system will effectively control chemical migration from the Sherwin-Williams property onto the Site in the future.

### 5.2.2 Petroleum Hydrocarbons

The lateral extent of petroleum hydrocarbons in shallow ground water was assessed using grab ground-water samples collected from borings SB-1 through SB-4 (Figure 4). Because no regulatory standards exist for TPHd and TPHg in drinking water, concentrations of other components of fuel, such as benzene, toluene, ethylbenzene and xylenes, are typically reviewed to assess if further action is necessary. The source of the petroleum-affected ground water may be related to releases from former on-site USTs or another source or sources in the southeastern portion of the Site (Figure 4).

**5.2.3 Other Organic Chemicals**

The lateral extent of VOCs in shallow ground water at the Site was adequately assessed using grab ground-water samples collected from borings SB-1 through SB-7. The extent of VOC contamination at the Site appears to be limited to the area south of the line of borings SB-3, SB-2, and SB-4. SB-1 has contaminants in the form of chlorinated compounds (trichloroethene and 1,2-dichloroethane) that were not detected in the other ground-water samples and therefore may originate from localized site sources and/or other upgradient sources.

The detected concentrations of VOCs in the shallow grab ground-water samples collected did not exceed MCLs for toluene, ethylbenzene, and xylenes. The MCLs for benzene (0.001 mg/l), 1,2-dichloroethane (0.0005 mg/l), and trichloroethene (0.005 mg/l) were each exceeded. There are no MCLs for acetone, methyl ethyl ketone, or methyl isobutyl ketone in drinking water.

**6.0 RECOMMENDATIONS**

Arsenic concentrations in the soil above background levels were detected in only one location at the Site (boring SB-6). Therefore, additional characterization of soils on the Site for arsenic is not recommended.

Levine·Fricke recommends no further work to assess the lateral extent of TPH and VOCs in soil and ground water on the Site. VOCs detected in soil and shallow ground water in the southern portion of the Site appear to be bounded within the extent of arsenic-affected ground water.

The complete lateral extent of arsenic in shallow ground water was not determined at the Site and we recommend the following additional investigation. Five shallow ground-water monitoring wells (RF-1 through RF-5) are proposed to be installed in the vicinity of soil borings SB-1 through SB-4 (Figure 5) to further assess the lateral extent of arsenic in ground water. Additionally, ground-water elevations from newly installed wells will be used to assess ground-water flow direction. Also, water elevations from well LF-7 on the Sherwin-Williams facility and well MW-1 that TMC Environmental is scheduled to replace on the Site will be used to assess the shallow ground-water flow direction.

## LEVINE·FRICKE

We propose to use the same methods for drilling, well installation, and sampling as those described in the RWQCB-approved Work Plan entitled "Work Plan for Installation of Additional Ground-Water Monitoring and Extraction Wells, The Sherwin-Williams Plant, 1450 Sherwin Avenue, Emeryville, California," which was prepared by Levine·Fricke on October 26, 1993. Ground-water samples collected from proposed ground-water monitoring wells RF-1 through RF-5 will be analyzed for arsenic using EPA Method 7160.

A schedule for the proposed additional ground-water investigation, including the installation of five wells, is presented in Figure 6.

REFERENCES

Erler & Kalinowski, Inc. 1993. Preliminary Site Characterization Report Summarizing Investigations Performed at the Rifkin Property, Chiron Corporation, Emeryville, California. October 27.

Harding-Lawson Associates. 1992. Preliminary Site Assessment, 4525-4563 Horton Street, Emeryville, California. October 20.

Shacklette, H. T., and J. G. Boerngen. 1984. Element concentrations in soils and other surficial materials in the conterminous United States. USGS professional paper 1270. U.S. Geological Survey.

TABLE 1  
 CHEMICALS DETECTED IN SOIL SAMPLES  
 RIFKIN PROPERTY, EMERYVILLE, CALIFORNIA  
 (concentrations reported in milligrams per kilogram (mg/kg))

Sample ID	Sample Date	Depth (feet bgs)	Volatile Organic Compounds										
			As	TPHg	TPHd	Acetone	MEK	Ethyl-benzene	2-Hexanone	MIBK	Toluene	Xylenes	
SB-1-2.0, SB-1-3.5, SB-1-6.5	05-Apr-94	C	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-1-4.0	05-Apr-94	4.0	NA	1	<1	<0.5	<0.5	0.033	<0.3	<0.3	0.048	0.14	NA
SB-1-11.0	05-Apr-94	11.0	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-1-11.5	05-Apr-94	11.5	NA	<6	14	<0.1	<0.1	<0.005	<0.05	<0.05	<0.005	<0.010	NA
SB-2-2.0, SB-2-3, SB-2-6.5	05-Apr-94	C	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-2-4.0	05-Apr-94	4.0	NA	0.4	1	<0.1	<0.1	<0.005	<0.05	<0.05	0.01	0.01	NA
SB-2-11.5	05-Apr-94	11.5	NA	<0.2	7	<0.1	<0.1	<0.005	<0.05	<0.05	0.005	<0.010	NA
SB-2-12.0	05-Apr-94	12.0	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-3-3.5, SB-3-7.0	04-Apr-94	C	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-3-4.0	04-Apr-94	4.0	NA	<0.2	<1	<0.1	<0.1	<0.005	<0.05	<0.05	0.011	<0.010	NA
SB-3-9.5	04-Apr-94	9.5	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-3-10.0	04-Apr-94	10.0	NA	0.3	<1	<0.1	<0.1	<0.005	<0.05	<0.05	<0.005	<0.010	NA
SB-4-2.0, SB-4-4.0, SB-4-6.5	05-Apr-94	C	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-4-7.0	05-Apr-94	7.0	NA	<0.2	<1	<0.1	<0.1	<0.005	<0.05	<0.05	0.006	<0.010	NA
SB-4-12.0	05-Apr-94	12.0	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-4-12.5	05-Apr-94	12.5	NA	<4	NA	<0.1	<0.1	<0.005	<0.05	<0.05	0.01	<0.010	NA
SB-5-4.0, SB-5-7.0	05-Apr-94	C	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-5-6.5	05-Apr-94	6.5	NA	<0.2	<1	<0.1	<0.1	<0.005	<0.05	<0.05	0.007	<0.010	NA
SB-5-9.5	05-Apr-94	9.5	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-5-10.0	05-Apr-94	10.0	NA	<2	<1	<0.1	<0.1	<0.005	<0.05	<0.05	<0.005	<0.010	NA
SB-6-7.0	04-Apr-94	7.0	NA	0.3	5	<5	<5	<0.3	<3	<3	13	0.92	NA
<del>SB-6-7.5, SB-6-8.5</del>	04-Apr-94	C	<del>NA</del>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-6-9.5	04-Apr-94	9.5	71	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-6-10.0	04-Apr-94	10.0	NA	<50	NA	<5	<5	<0.3	<3	<3	2	2	NA
SB-7-2.5, SB-7-3.5	04-Apr-94	C	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-7-3.0	04-Apr-94	3.0	NA	43	17	NA	<10	1.2	<5	13	4.3	6	NA
SB-7-11.0	04-Apr-94	11.0	33	1.1	17	42	NA	0.1	0.12	4.1	0.6	0.32	NA
<del>SB-8-2.0, SB-8-4, SB-8-6.5</del>	05-Apr-94	C	<del>5500</del>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-8-7.0	05-Apr-94	7.0	NA	3200	7	NA	NA	62	NA	<500	880	360	NA
SB-8-9.5	05-Apr-94	9.5	NA	5000	3	<1000	NA	130	NA	<500	1400	670	NA
<del>SB-8-10.0</del>	05-Apr-94	10.0	1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Data entered by MEK/20 Apr 94 Data proofed by don QA/QC by JTU

Analyses performed by American Environmental Network, Pleasant Hill, California.  
 TPH(g) analyzed using EPA Method 8015; TPH(d) analyzed using EPA Methods 3550/8015; arsenic analyzed using EPA Method 7060; and volatile organic compounds analyzed using EPA Method 8240.  
 If not listed, analyte was not present above laboratory detection limits.

- As - arsenic
- MEK - methyl ethyl ketone (2-Butanone)
- MIBK - methyl isobutyl ketone (4-Methyl-2-pentanone)
- TPHd - total petroleum hydrocarbons as diesel
- TPHg - total petroleum hydrocarbons as gasoline
- NA - Not Analyzed
- C - Composite soil sample
- bgs - below ground surface

Soil boring SB-8 was located on Sherwin Williams property

TABLE 2  
 CHEMICALS DETECTED IN GROUND-WATER SAMPLES  
 RIFKIN PROPERTY, EMERYVILLE, CALIFORNIA  
 (concentrations reported in parts per million (ppm))

Sample ID	Sample Date	As	TPHg	TPHd	Acetone	Benzene	Toluene	Xylenes	MEK	1,2-DCA	Ethyl-benzene	MIBK	TCE
SB-1-GW	05-Apr-94	0.018	4	5.3	<0.1	<0.005	<0.005	<0.01	<0.1	0.008	<0.005	<0.05	0.007
SB-2-GW	05-Apr-94	0.11	4	NA	<0.1	<0.005	<0.005	<0.01	<0.1	<0.005	<0.005	<0.05	<0.005
Replicate	05-Apr-94	0.11	4	NA	<0.1	<0.005	<0.005	<0.01	<0.1	<0.005	<0.005	<0.05	<0.005
SB-3-GW	05-Apr-94	0.015	<0.4	NA	<0.1	<0.005	<0.005	<0.01	<0.1	<0.005	<0.005	<0.05	<0.005
SB-4-GW	05-Apr-94	0.2	<5	4.2	<0.1	<0.005	<0.005	<0.01	<0.1	<0.005	<0.005	<0.05	<0.005
SB-5-GW	05-Apr-94	0.052	NA	0.4	<0.5	<0.03	NA	0.014	<0.5	<0.03	<0.03	<0.3	<0.03
SB-6-GW	04-Apr-94	0.03	<2	28	<0.1	0.022	NA	0.015	<0.1	<0.005	<0.005	0.05	<0.005
SB-7-GW	04-Apr-94	NA	NA	51	NA	<0.03	0.028	0.012	NA	<0.03	0.008	0.094	<0.03
SB-8-GW	05-Apr-94	NA	NA	0.4	NA	<10	0.010	NA	NA	NA	<10	<100	NA

Data entered by MEK/20 Apr 94 Data proofed by AW QA/QC by JTW

Analyses performed by American Environmental Network, Pleasant Hill, California.  
 TPH(g) analyzed using EPA Method 8015; TPH(d) analyzed using EPA Methods 3550/8015; arsenic analyzed using EPA Method 7060; and  
 volatile organic compounds analyzed using EPA Method 8240.  
 If not listed, analyte was not present above laboratory detection limits.

As - arsenic  
 MEK - methyl ethyl ketone (2-Butanone)  
 MIBK - methyl isobutyl ketone (4-Methyl-2-pentanone)  
 TPHd - total petroleum hydrocarbons as diesel  
 TPHg - total petroleum hydrocarbons as gasoline  
 1,2-DCA - 1,2-dichloroethane  
 TCE - trichloroethene

NA - Not Analyzed

Soil boring SB-8 was located on Sherwin Williams property

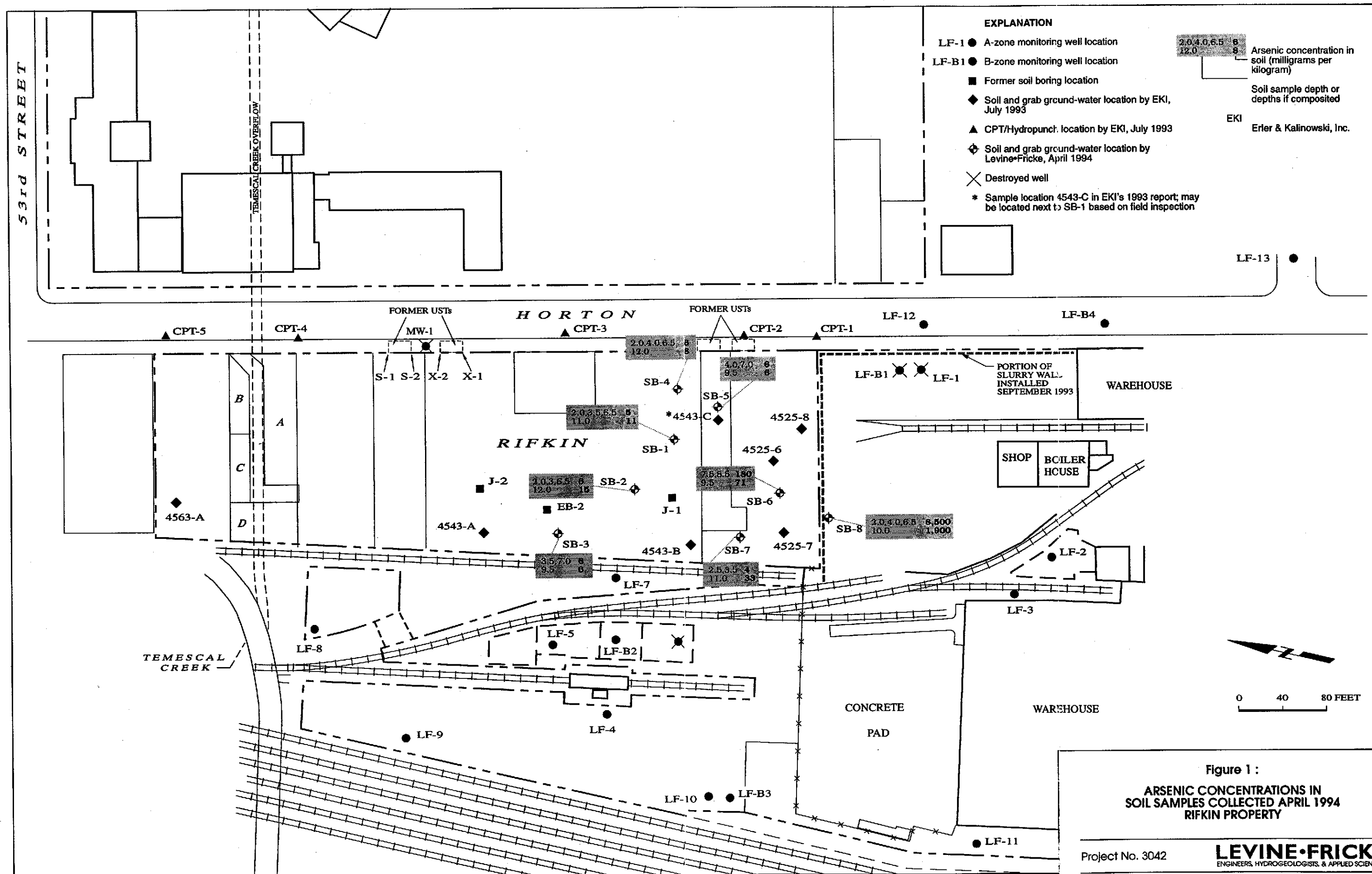
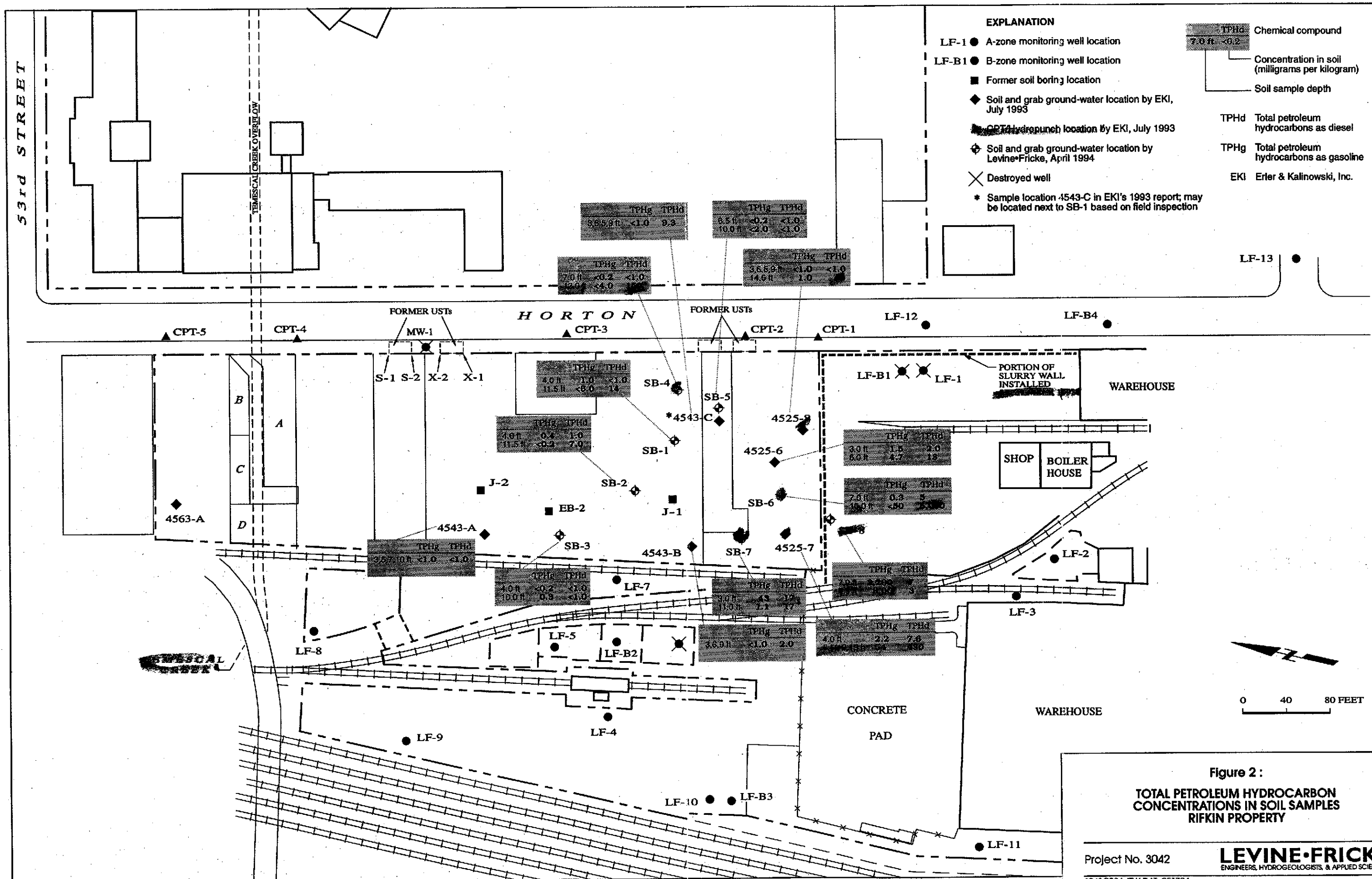


Figure 1 :  
**ARSENIC CONCENTRATIONS IN  
 SOIL SAMPLES COLLECTED APRIL 1994  
 RIFKIN PROPERTY**





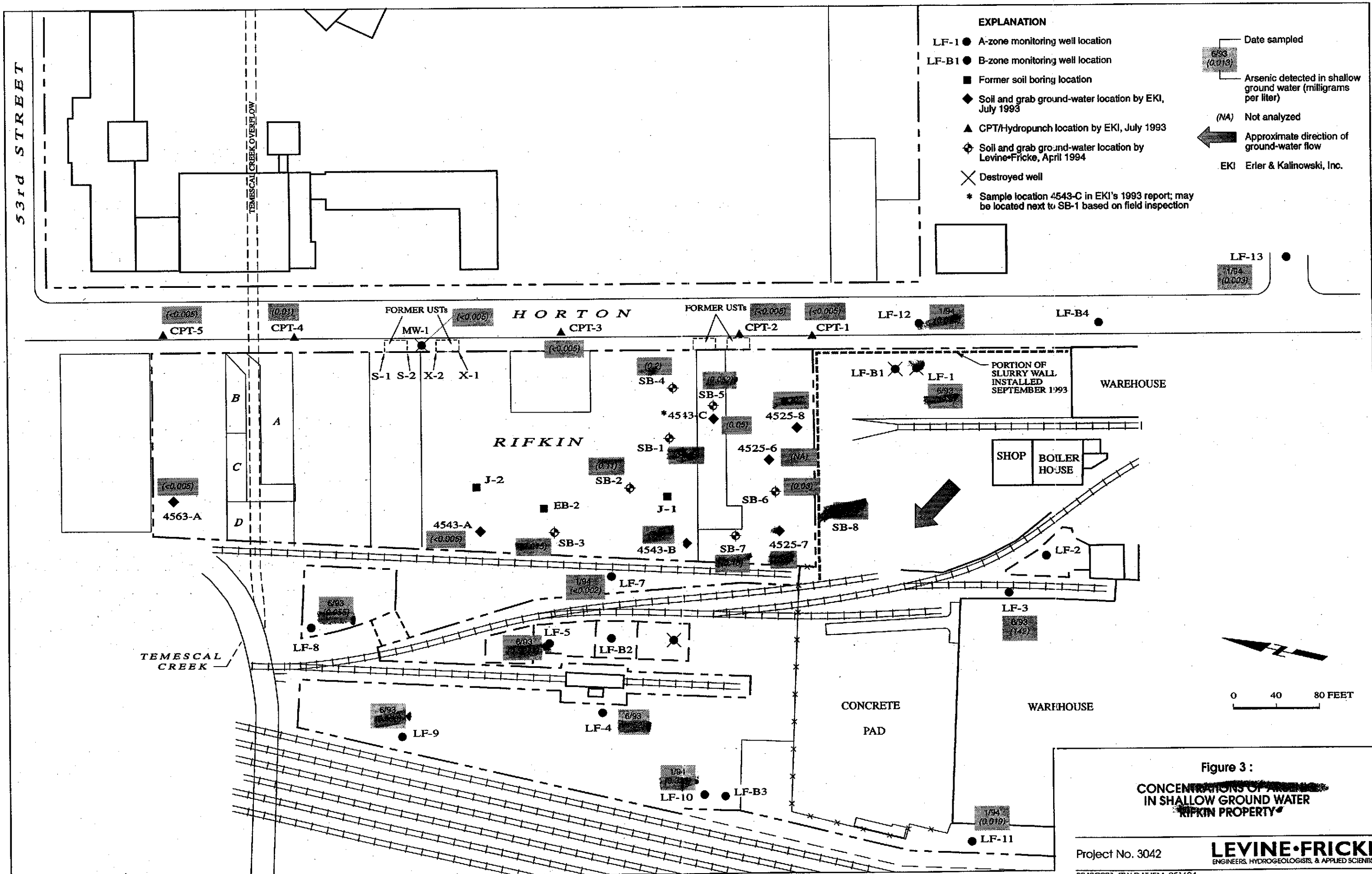


Figure 3:  
 CONCENTRATIONS OF ARSENIC  
 IN SHALLOW GROUND WATER  
 RIFKIN PROPERTY

Project No. 3042

**LEVINE-FRICKE**  
 ENGINEERS, HYDROGEOLOGISTS, & APPLIED SCIENTISTS

3042C001.JTW:DAT/EM 051694

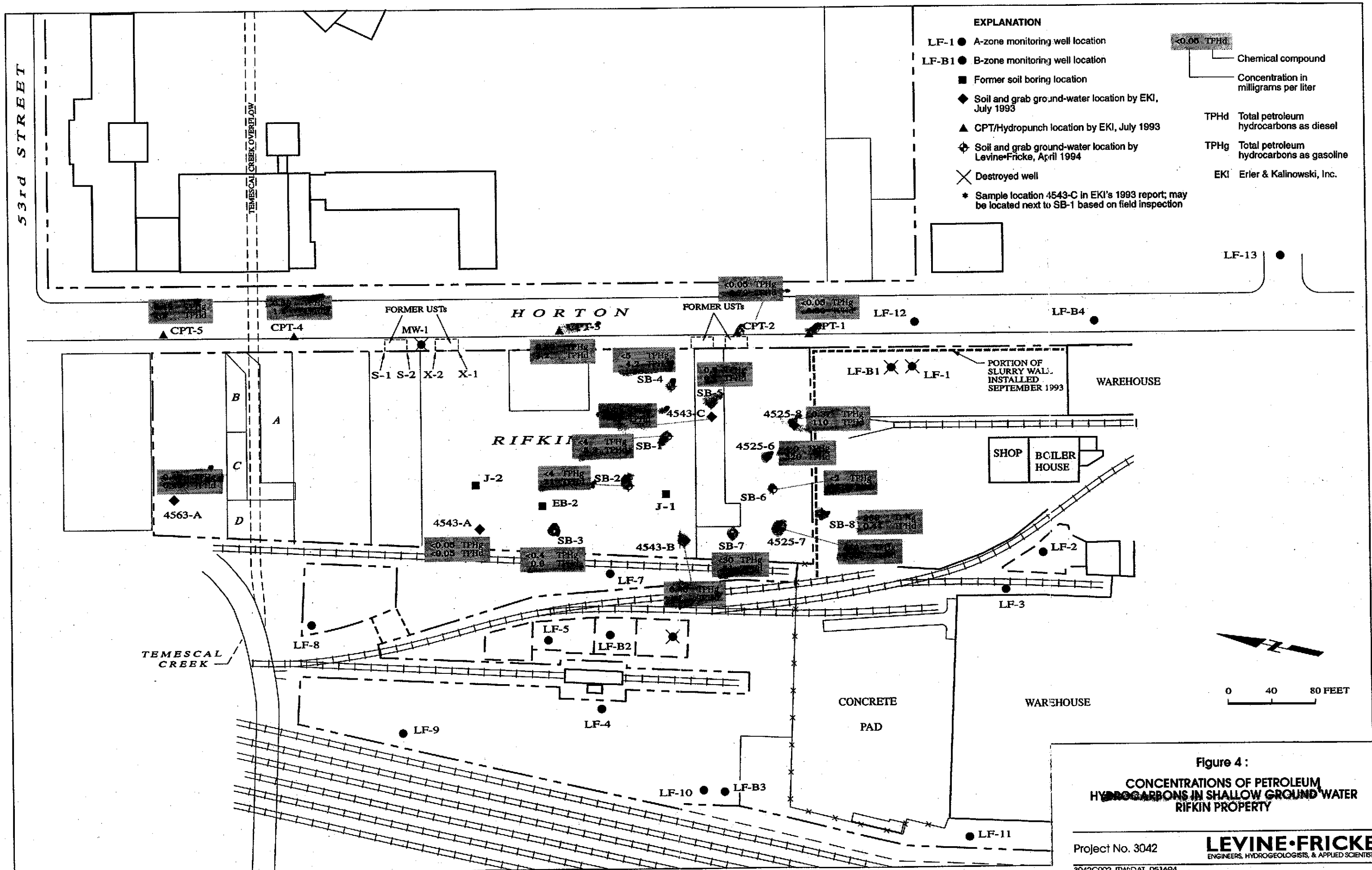
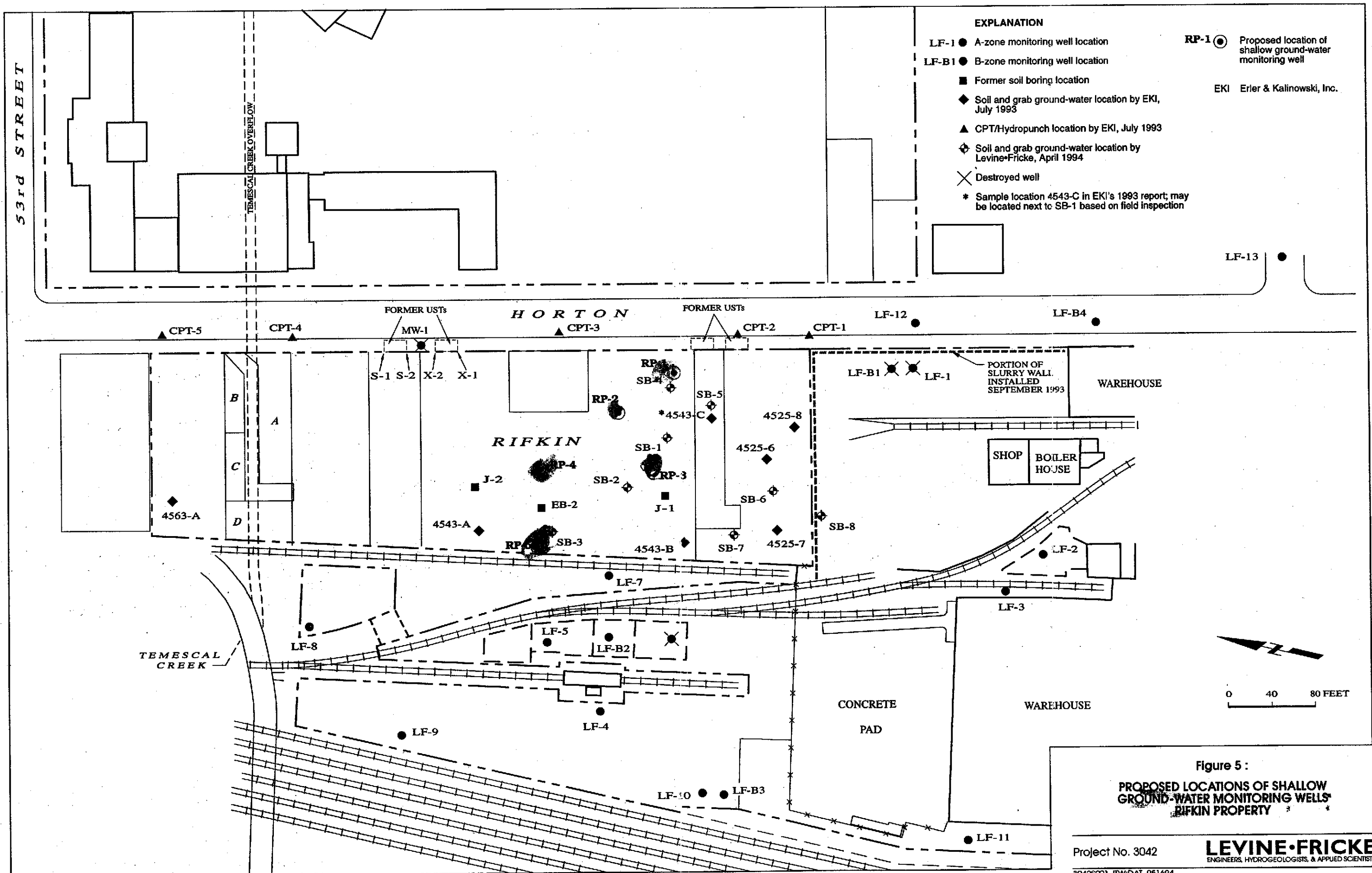


Figure 4:  
 CONCENTRATIONS OF PETROLEUM  
 HYDROCARBONS IN SHALLOW GROUND WATER  
 RIFKIN PROPERTY



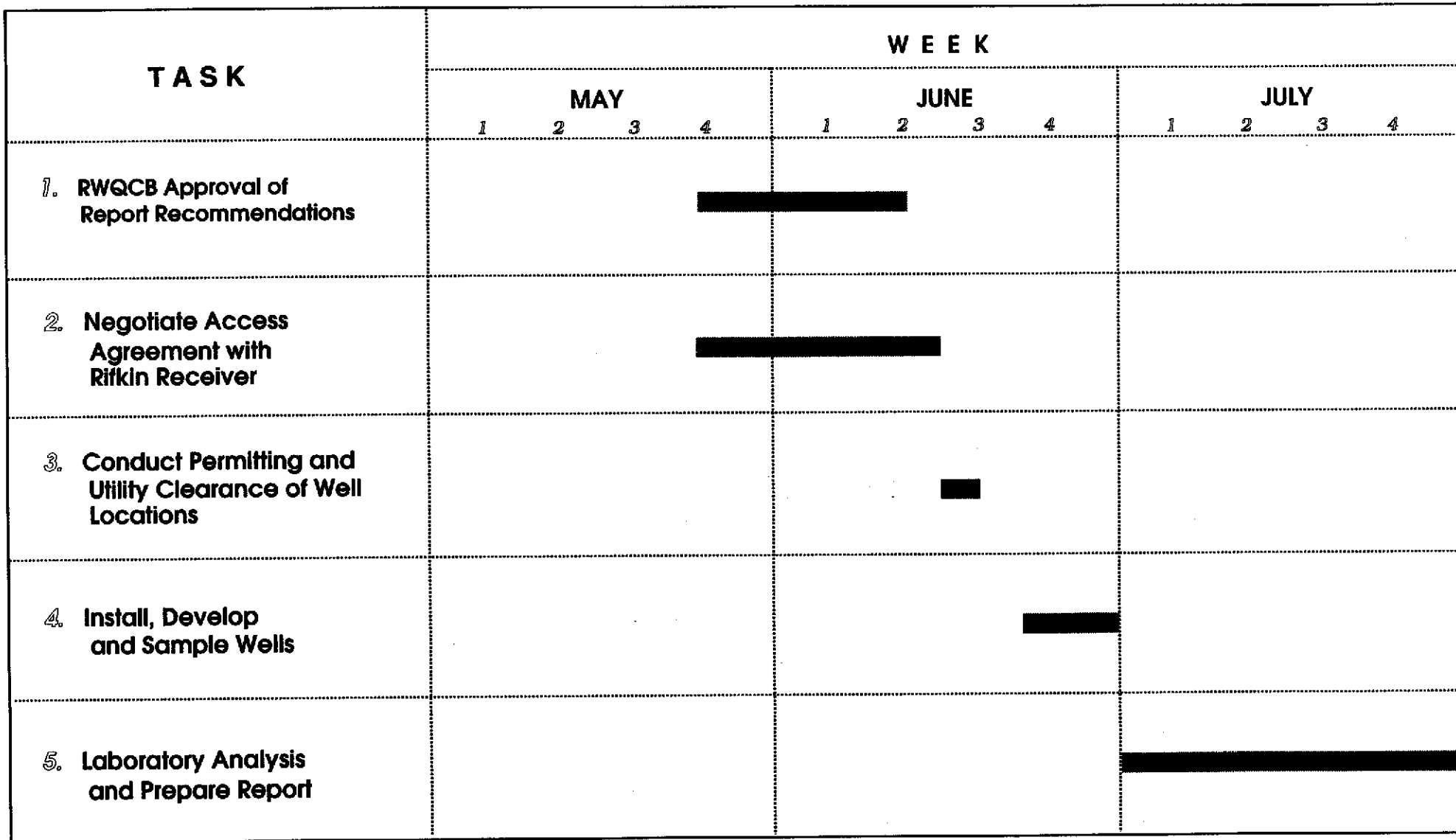


Figure 6: PROPOSED SCHEDULE FOR INSTALLATION OF GROUND-WATER MONITORING WELLS RF-1 THROUGH RF-5

**APPENDIX A**  
**FIELD METHODOLOGY**

**Grab Ground-Water Sample Collection**

To obtain ground-water samples, the 1-1/2-inch rods were removed from the boring. A 1-inch-diameter polyvinyl chloride (PVC) casing with a 5- or 10-foot-long screened interval was inserted and the 1-5/8-inch-diameter rods were removed. A PVC bailer was lowered into the temporary PVC casing to collect the ground-water sample. If there was adequate ground-water recharge, three volumes of ground water were purged before a ground-water sample was collected.

The ground-water samples were collected by slowly pouring ground water from a bailer into 40-milliliter volatile organic analysis vials supplied by the analytical laboratory. Additionally, 1-liter sample bottles were filled for analysis of TPHd and a plastic bottle was filled for analysis of arsenic.

After sample collection, the completed boreholes were backfilled to the ground surface with neat cement grout containing a maximum of 3 to 5 percent bentonite.

All downhole testing and sampling equipment was decontaminated between locations using a steam cleaner.

Wastewater generated during steam cleaning and borehole purging was temporarily stored in a 55-gallon drum on the Site.

**Laboratory Analysis**

Filled sample bottles were labeled, stored on ice in a cooler, and submitted to the analytical laboratory. Chain-of-custody forms accompanied the shipment of samples.

Sixteen soil samples for organic analysis (two from each boring), eight composite soils for arsenic analysis (one from each boring) and nine ground-water samples (one from each boring, one replicate) were submitted to American Environmental Network of Pleasant Hill, a California-certified laboratory, for chemical analysis on a standard laboratory turnaround schedule of two weeks. Organic analyses included TPHg using EPA Method 5030 GCFID, TPHd using EPA Method 3510/3550, and VOCs using EPA Method 8240. Soil and ground water were analyzed for arsenic using EPA Method 6000/7000 series.

# LEVINE·FRICKE

## FIELD METHODS

### Soil and Grab Ground-Water Collection Procedures

On April 4 and 5, 1994, Precision Sampling, Inc. ("Precision"), of San Rafael, California, drilled eight soil borings to collect soil samples and "grab" ground-water samples under the direction of a Levine·Fricke geologist. The locations of the borings are shown in Figure 1 (SB-1 through SB-8). Before the field investigation began, a private utility locator company, The Cruz Brothers of San Jose, checked that no underground utilities were located in the vicinity of the proposed boring locations.

### Drilling and Soil Sample Collection

Boreholes were advanced by hydraulically driving a 1-1/2-inch-diameter core-rod, lined with brass tubes inside a 1-5/8-inch-diameter hollow steel sampling tube, to depths of approximately 2 to 3 feet below the ground-water surface (i.e., 8 to 12 feet below grade). This sampling system allows soil samples to be collected on a continuous basis. Upon removal of the sampler, the lowermost sample was preserved by placing aluminum foil-lined plastic caps over the ends of the brass tubes; the samples were then stored in a chilled cooler. Each sample was labeled with the borehole identification and depth of the sample, the time and date of sample collection, the analysis requested, and the name of the individual who collected the sample.

The adjacent soil sample from the sampler was lithologically described using the Unified Soil Classification System. Lithologic descriptions will be recorded in the field on borehole log forms. Soil samples collected from the well borings for lithologic description were field screened, using an organic vapor meter (OVM), for the presence of VOCs. Additional soil samples will be collected for possible chemical analysis based on visible staining and/or high OVM measurements. Levine·Fricke collected several soil samples from the unsaturated sediments at each soil boring, to be composited by the laboratory for chemical analysis of arsenic. At a minimum, one sample from the unsaturated zone and one from the capillary fringe at each boring location was collected for possible chemical analysis. Lithologic logs for the soil borings are provided in Appendix B.

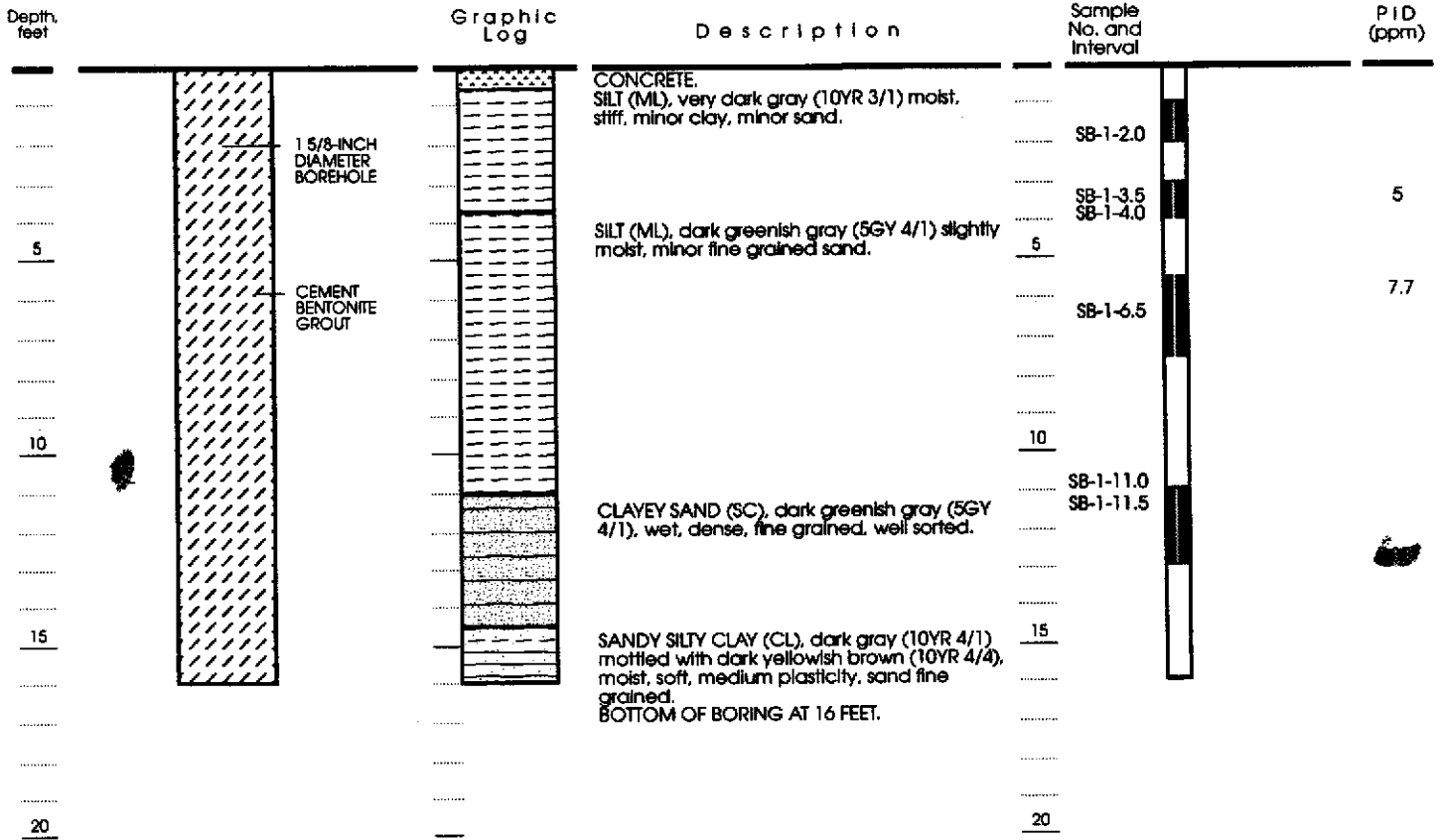
**APPENDIX B**  
**LITHOLOGIC LOGS**



LITHOLOGY








SAMPLE DATA

HEADSPACE MEASUREMENTS



Well Permit No: 94132  
 Date boring drilled: April 5, 1994  
 Drilling Company: Precision Sampling  
 Drilling method: Continuous Core  
 Geologist: Kenton Gee

EXPLANATION

-  Clay
-  Silt
-  Sand
-  Gravel
-  Continuous Core
-  Depth first water was encountered in borehole
-  PID (ppm) Photolization detector in parts per million

Approved by: *[Signature]* RG 4592

Figure B-1 : LITHOLOGY AND SAMPLE DATA FOR SOIL BORING

LITHOLOGY





SAMPLE DATA




HEADSPACE MEASUREMENTS

Depth, feet	Graphic Log	Description	Sample No. and Interval	PID (ppm)
		CONCRETE.		
		SILT (ML), very dark gray (10YR 3/1) slightly moist, stiff, medium sand, fine grained.	SB-2-2.0	1.5
			SB-2-3.5 SB-2-4.0	4.7
5		SANDY SILT (M), very dark grayish brown (10YR 3/2), slightly moist, stiff, sand fine grained.	5	
			SB-2-6.5	4.0
10		SILTY SAND (SM), dark greenish gray (5GY 4/1), wet, loose, medium to coarse grained, poorly sorted.	10	0.8
			SB-2-11.5 SB-2-12.0	
15		SANDY CLAYEY SILT (ML), dark yellowish brown (10YR 4/6), mottled with dark gray (10YR 4/1), wet, stiff, low plasticity, sand fine to medium grained.	15	
		BOTTOM OF BORING AT 16 FEET.		
20			20	

Well Permit No: 94132  
 Date boring drilled: April 5, 1994  
 Drilling Company: Precision Sampling  
 Drilling method: Continuous Core  
 Geologist: Kenton Gee

EXPLANATION

-  Clay
-  Silt
-  Sand
-  Gravel

-  Continuous Core
-  Depth first water was encountered in borehole
-  PID (ppm) Photoionization detector in parts per million

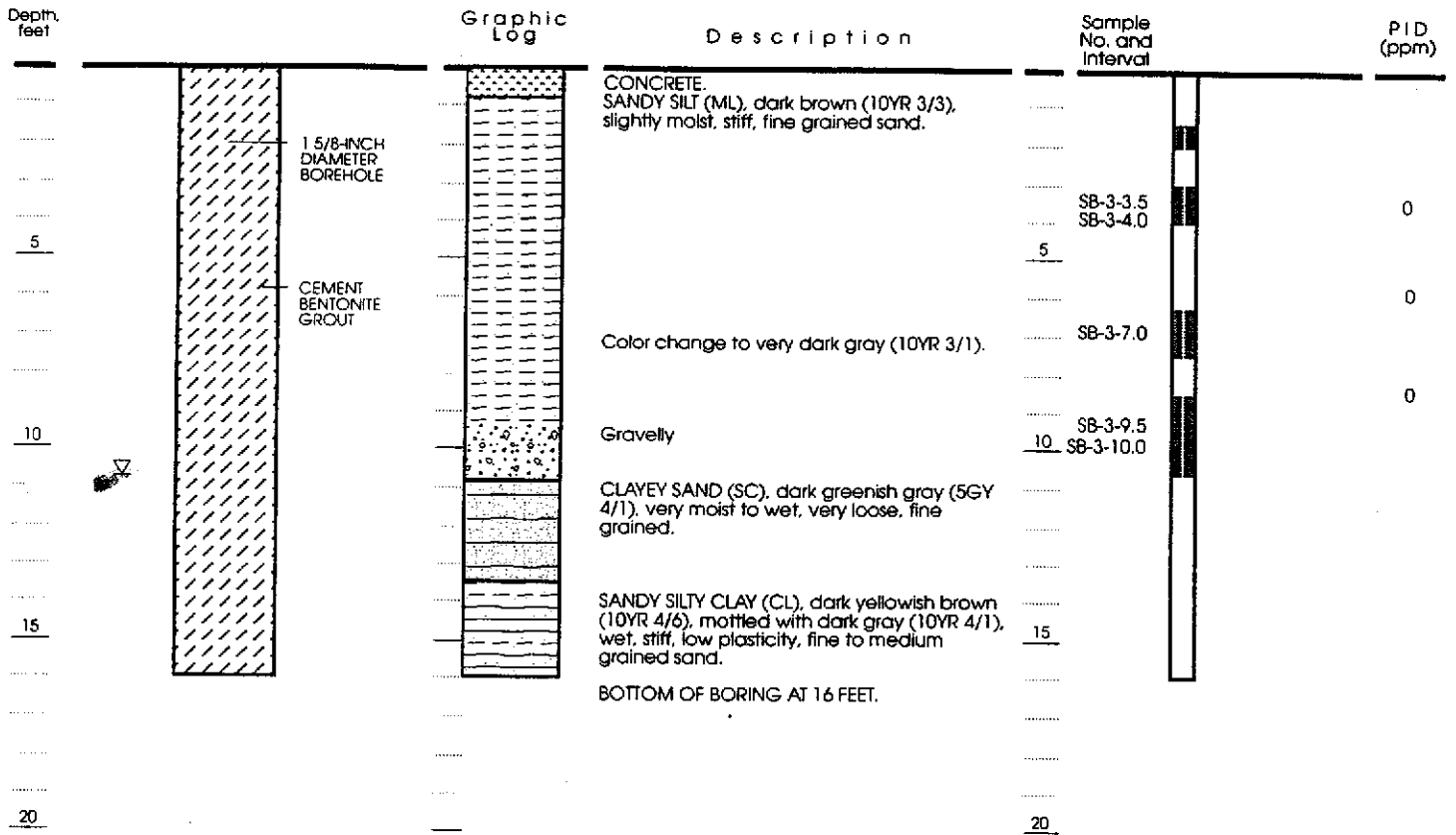
Approved by: *ALZ* RG 4592

Figure B-2 : LITHOLOGY AND SAMPLE DATA FOR SOIL BORING

LITHOLOGY





SAMPLE DATA




HEADSPACE MEASUREMENTS



Well Permit No: 94132  
 Date boring drilled: April 4, 1994  
 Drilling Company: Precision Sampling  
 Drilling method: Continuous Core  
 Geologist: Kenton Gee

EXPLANATION

-  Clay
-  Silt
-  Sand
-  Gravel

-  Continuous Core
-  Depth first water was encountered in borehole
-  PID (ppm) Photoionization detector in parts per million

Approved by: *[Signature]* EG 4592

Figure B-3 : LITHOLOGY AND SAMPLE DATA FOR SOIL BORING

LITHOLOGY






SAMPLE DATA

HEADSPACE MEASUREMENTS

Depth, feet	Graphic Log	Description	Sample No. and Interval	PID (ppm)
		CONCRETE.		
		SILT (ML), very dark gray (10YR 4/1), slightly moist, stiff, minor clay.	SB-4-2.0	
5	1 5/8-INCH DIAMETER BOREHOLE		SB-4-4.0	18
	CEMENT BENTONITE GROUT		SB-4-6.5 SB-4-7.0	6
10	▽	CLAYEY SAND (SC), very dark gray (10YR 3/1), wet, dense, medium to coarse grained, poorly sorted.	SB-4-12.0 SB-4-12.5	1
15		SANDY CLAY (CL), dark yellowish brown (10YR 4/4) mottled with dark gray (10YR 4/1), wet, soft, medium plasticity, fine grained sand. Increase in sand.		
20		SAND (SW), dark greenish gray (5GY 4/1), wet, coarse grained, gravel up to 1/2-inch diameter.		
		SANDY SILTY CLAY (CL), dark yellowish brown (10YR 3/6), mottled with gray (10YR 5/1), wet, soft, low plasticity, sand medium to coarse grained.		
25		SILTY CLAY (CL), dark yellowish brown (10YR 3/6), mottled with gray (10YR 5/1), stiff, medium plasticity, minor fine grained sand.		
		BOTTOM OF BORING		

Well Permit No: 94132  
 Date boring drilled: April 5, 1994  
 Drilling Company: Precision Sampling  
 Drilling method: Continuous Core  
 Geologist: Kenton Gee

EXPLANATION

-  Clay
-  Silt
-  Sand
-  Gravel
-  Continuous Core
- ▽ Depth first water was encountered in borehole
- PID (ppm) Photoionization detector in parts per million

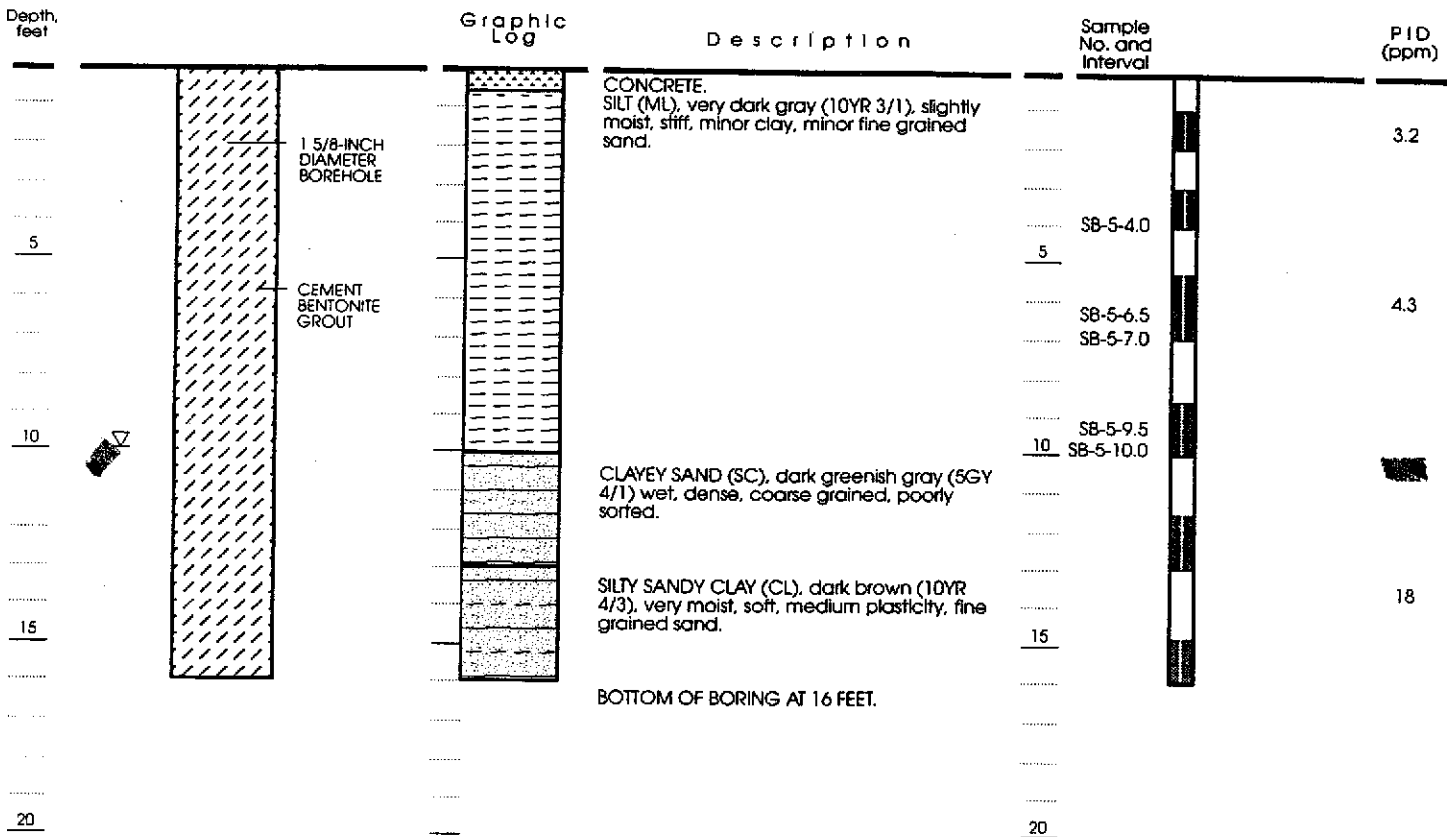
Approved by: *[Signature]* RG 4592

Figure B-4 : LITHOLOGY AND SAMPLE DATA FOR SOIL BORING

LITHOLOGY

SAMPLE DATA

HEADSPACE MEASUREMENTS



Well Permit No: 94132  
 Date boring drilled: April 5, 1994  
 Drilling Company: Precision Sampling  
 Drilling method: Continuous Core  
 Geologist: Kenton Gee

EXPLANATION

- Clay
- Silt
- Sand
- Gravel
- Continuous Core
- Depth first water was encountered in borehole
- PID (ppm) Photoionization detector in parts per million

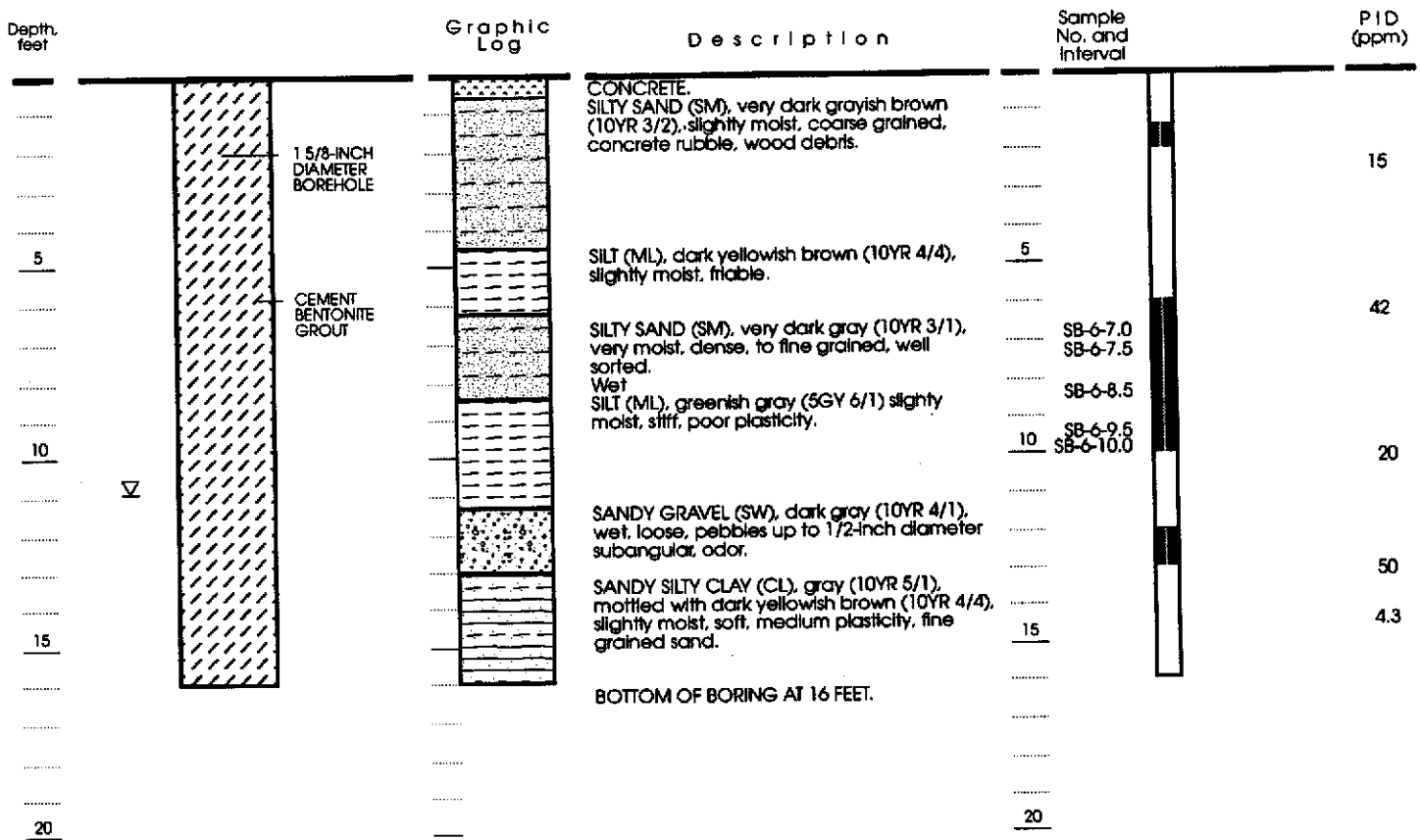
Approved by: *And Z [Signature]* R 6 4592

Figure B-5 : LITHOLOGY AND SAMPLE DATA FOR SOIL BORING SB-5

LITHOLOGY

SAMPLE DATA

HEADSPACE MEASUREMENTS



Well Permit No: 94132  
 Date boring drilled: April 4, 1994  
 Drilling Company: Precision Sampling  
 Drilling method: Continuous Core  
 Geologist: Kenton Gee

EXPLANATION

- Clay
- Silt
- Sand
- Gravel
- Continuous Core
- Depth first water was encountered in borehole
- PID (ppm) Photolization detector in parts per million

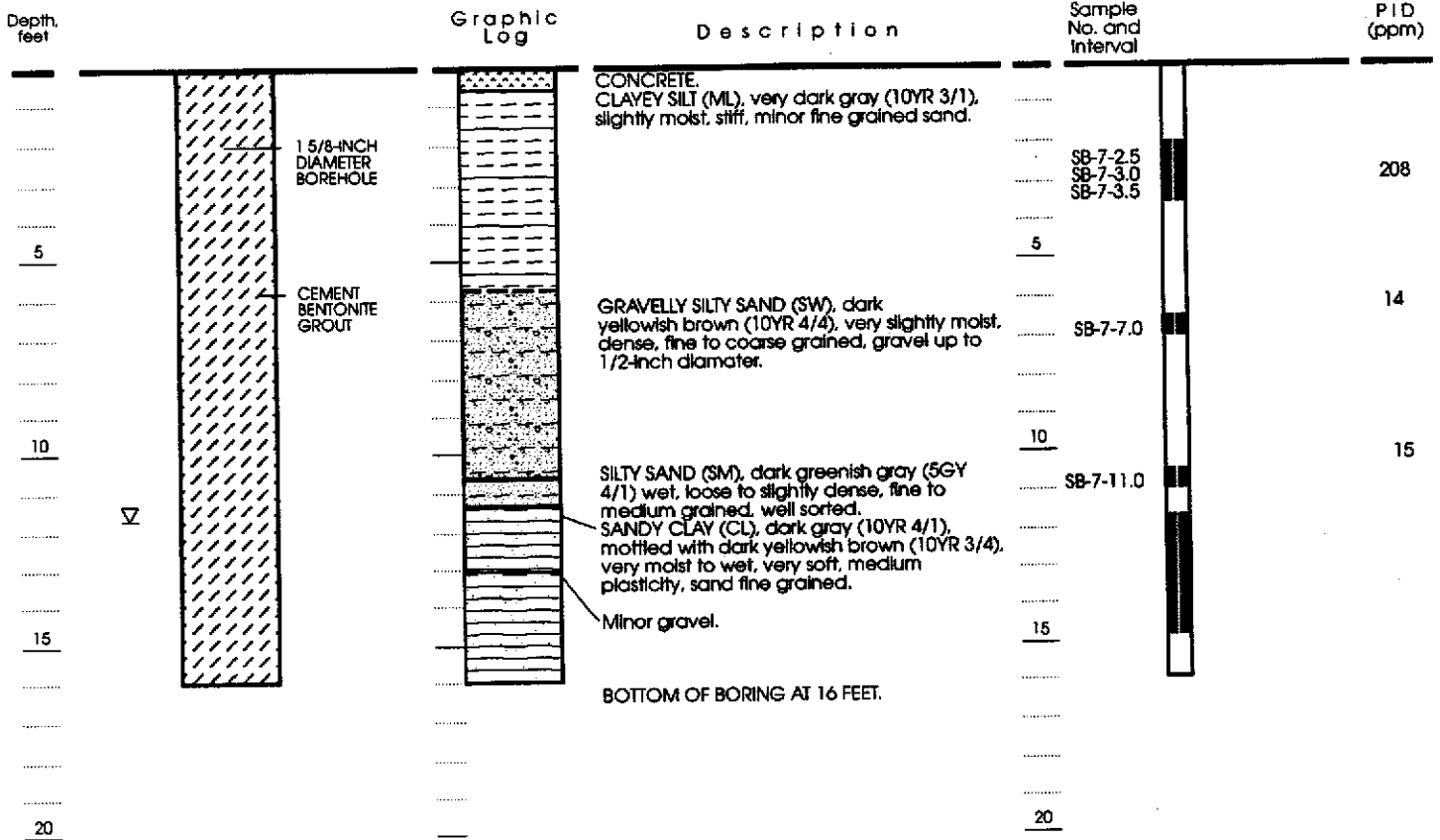
Approved by: *AL Z...* RG 4592

Figure B-6 : LITHOLOGY AND SAMPLE DATA FOR SOIL BORING SB-6

LITHOLOGY

SAMPLE DATA

HEADSPACE MEASUREMENTS



Well Permit No: 94132  
 Date boring drilled: April 4, 1994  
 Drilling Company: Precision Sampling  
 Drilling method: Continuous Core  
 Geologist: Kenton Gee

EXPLANATION

- Clay
- Silt
- Sand
- Gravel

Continuous Core

Depth first water was encountered in borehole

PID (ppm) Photolization detector in parts per million

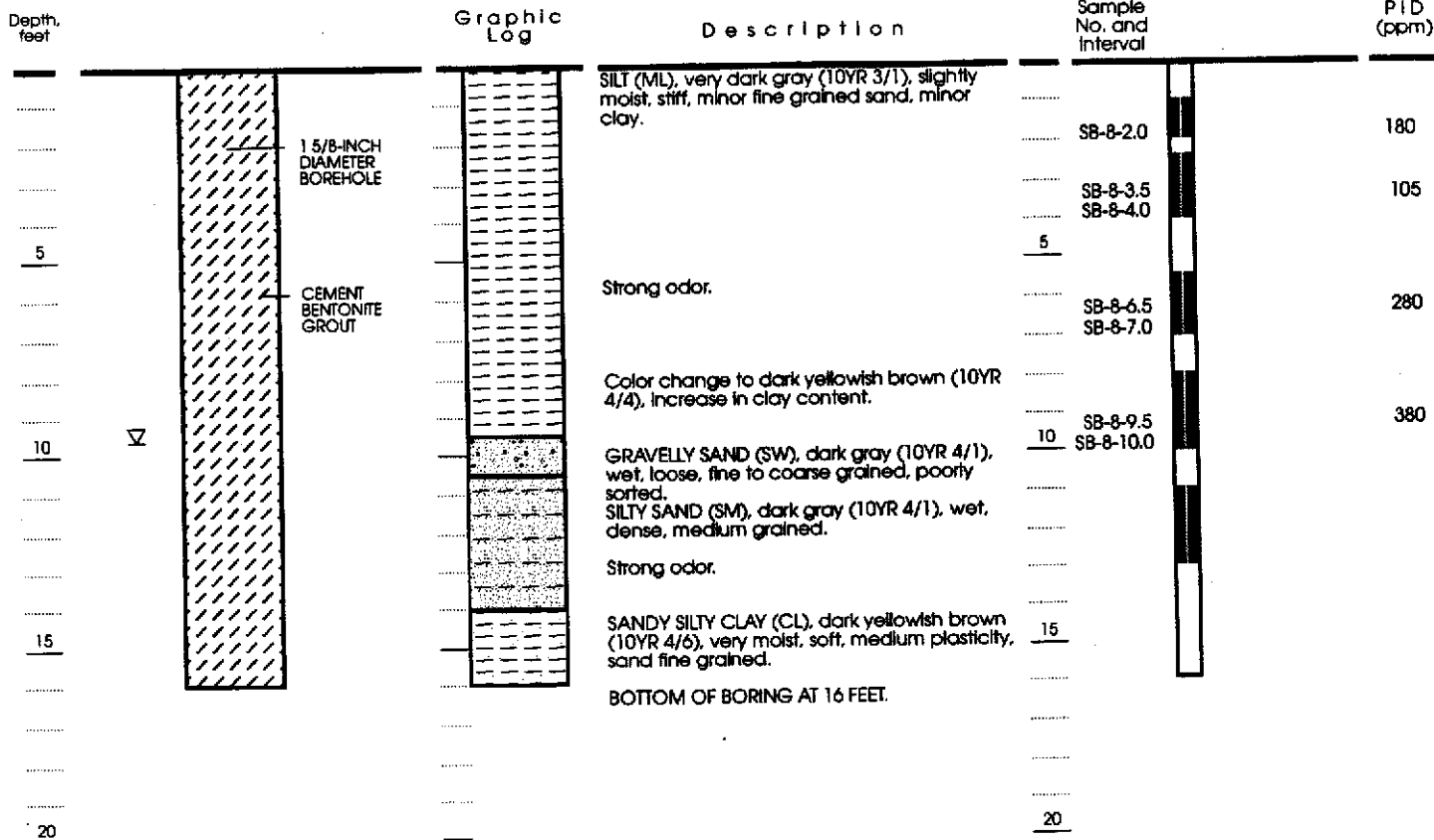
Approved by: *Ad L W 2* 26 4592

Figure B-7 : LITHOLOGY AND SAMPLE DATA FOR SOIL BORING SB-7

LITHOLOGY








SAMPLE DATA

HEADSPACE MEASUREMENTS



Well Permit No: 94132  
 Date boring drilled: April 5, 1994  
 Drilling Company: Precision Sampling  
 Drilling method: Continuous Core  
 Geologist: Kenton Gee

EXPLANATION

-  Clay
-  Silt
-  Sand
-  Gravel
-  Continuous Core
-  Depth first water was encountered in borehole
-  PID (ppm) Photoionization detector in parts per million

Approved by: *Ad Z [Signature]* RQ 4592

Figure B-8 : LITHOLOGY AND SAMPLE DATA FOR SOIL BORING SB-8



**APPENDIX C**  
**LABORATORY CERTIFICATES**

# American Environmental Network

## Certificate of Analysis

DOHS Certification: 1172

AIHA Accreditation: 11134

PAGE 1

LEVINE-FRICKE  
1900 POWELL ST. 12TH FL.  
EMERYVILLE, CA 94608

ATTN: KENTON GEE  
CLIENT PROJ. ID: 3042  
CLIENT PROJ. NAME: RIFKIN  
C.O.C. NUMBER: 12448,12450,12452

REPORT DATE: 04/18/94

DATE(S) SAMPLED: 04/04/94-04/05/94

DATE RECEIVED: 04/06/94

AEN WORK ORDER: 9404058


### PROJECT SUMMARY:

On April 6, 1994, this laboratory received 34 soil sample(s).

Client requested twenty (20) samples be composited into eight (8) samples. The eight (8) composite samples and twenty-four (24) discrete samples were analyzed for inorganic and organic parameters. Two (2) samples were placed on hold. Sample identification, methodologies, results and dates analyzed are summarized on the following pages.

Please see quality control report for a summary of QC data pertaining to this project.

If you have any questions, please contact Client Services at (510) 930-9090.

  
Larry Klein  
General Manager



COPY

## LEVINE-FRICKE

SAMPLE ID: SB-7-3.0  
 AEN LAB NO: 9404058-01  
 AEN WORK ORDER: 9404058  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/04/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in Soil	5030 GC-FID	43 *	0.2	mg/kg	04/10/94
#Extraction for Diesel/Oil	EPA 3550	-		Extrn Date	04/07/94
TPH as Diesel	GC-FID	17 *	1	mg/kg	04/09/94
VOCs in Soil by 8240	EPA 8240				
Acetone	67-64-1	110,000 *	10000	ug/kg	04/13/94
Benzene	71-43-2	ND	500	ug/kg	04/13/94
Bromodichloromethane	75-27-4	ND	500	ug/kg	04/13/94
Bromoform	75-25-2	ND	500	ug/kg	04/13/94
Bromomethane	74-83-9	ND	1000	ug/kg	04/13/94
2-Butanone	78-93-3	ND	10000	ug/kg	04/13/94
Carbon Disulfide	75-15-0	ND	1000	ug/kg	04/13/94
Carbon Tetrachloride	56-23-5	ND	500	ug/kg	04/13/94
Chlorobenzene	108-90-7	ND	500	ug/kg	04/13/94
Chloroethane	75-00-3	ND	1000	ug/kg	04/13/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	1000	ug/kg	04/13/94
Chloroform	67-66-3	ND	500	ug/kg	04/13/94
Chloromethane	74-87-3	ND	1000	ug/kg	04/13/94
Dibromochloromethane	124-48-1	ND	500	ug/kg	04/13/94
1,1-Dichloroethane	75-43-3	ND	500	ug/kg	04/13/94
1,2-Dichloroethane	107-06-2	ND	500	ug/kg	04/13/94
1,1-Dichloroethene	75-35-4	ND	500	ug/kg	04/13/94
cis-1,2-Dichloroethene	156-59-2	ND	500	ug/kg	04/13/94
trans-1,2-Dichloroethene	156-60-5	ND	500	ug/kg	04/13/94
1,2-Dichloropropane	78-87-5	ND	500	ug/kg	04/13/94
cis-1,3-Dichloropropene	10061-01-5	ND	500	ug/kg	04/13/94
trans-1,3-Dichloropropene	10061-02-6	ND	500	ug/kg	04/13/94
Ethylbenzene	100-41-4	1,200 *	500	ug/kg	04/13/94
2-Hexanone	591-78-6	ND	5000	ug/kg	04/13/94
Methylene Chloride	75-09-2	ND	500	ug/kg	04/13/94
4-Methyl-2-pentanone	108-10-1	13,000 *	5000	ug/kg	04/13/94
Styrene	100-42-5	ND	500	ug/kg	04/13/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	500	ug/kg	04/13/94
Tetrachloroethene	127-18-4	ND	500	ug/kg	04/13/94
Toluene	108-88-3	4,300 *	500	ug/kg	04/13/94
1,1,1-Trichloroethane	71-55-6	ND	500	ug/kg	04/13/94
1,1,2-Trichloroethane	79-00-5	ND	500	ug/kg	04/13/94
Trichloroethene	79-01-6	ND	500	ug/kg	04/13/94
Vinyl Acetate	108-05-4	ND	5000	ug/kg	04/13/94
Vinyl Chloride	75-01-4	ND	1000	ug/kg	04/13/94

## LEVINE-FRICKE

SAMPLE ID: SB-7-3.0  
AEN LAB NO: 9404058-01  
AEN WORK ORDER: 9404058  
CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/04/94  
DATE RECEIVED: 04/06/94  
REPORT DATE: 04/18/94

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Xylenes Total	1330-20-7	6.000 *	1000	ug/kg	04/13/94

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See quality control report summary for comments about this sample.

ND = Not detected at or above the reporting limit  
\* = Value above reporting limit

## LEVINE - FRICKE

SAMPLE ID: SB-7-11.0  
 AEN LAB NO: 9404058-03  
 AEN WORK ORDER: 9404058  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/04/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in Soil	5030 GC-FID	1.1 *	0.2	mg/kg	04/08/94
#Extraction for Diesel/Oil	EPA 3550	-		Extrn Date	04/07/94
TPH as Diesel	GC-FID	17 *	1	mg/kg	04/09/94
VOCs in Soil by 8240	EPA 8240				
Acetone	67-64-1	42,000 *	100	ug/kg	04/13/94
Benzene	71-43-2	ND	5	ug/kg	04/12/94
Bromodichloromethane	75-27-4	ND	5	ug/kg	04/12/94
Bromoform	75-25-2	ND	5	ug/kg	04/12/94
Bromomethane	74-83-9	ND	10	ug/kg	04/12/94
2-Butanone	78-93-3	3,800 *	100	ug/kg	04/13/94
Carbon Disulfide	75-15-0	ND	10	ug/kg	04/12/94
Carbon Tetrachloride	56-23-5	ND	5	ug/kg	04/12/94
Chlorobenzene	108-90-7	ND	5	ug/kg	04/12/94
Chloroethane	75-00-3	ND	10	ug/kg	04/12/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/kg	04/12/94
Chloroform	67-66-3	ND	5	ug/kg	04/12/94
Chloromethane	74-87-3	ND	10	ug/kg	04/12/94
Dibromochloromethane	124-48-1	ND	5	ug/kg	04/12/94
1,1-Dichloroethane	75-43-3	ND	5	ug/kg	04/12/94
1,2-Dichloroethane	107-06-2	ND	5	ug/kg	04/12/94
1,1-Dichloroethene	75-35-4	ND	5	ug/kg	04/12/94
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/kg	04/12/94
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/kg	04/12/94
1,2-Dichloropropane	78-87-5	ND	5	ug/kg	04/12/94
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/kg	04/12/94
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/kg	04/12/94
Ethylbenzene	100-41-4	100 *	5	ug/kg	04/12/94
2-Hexanone	591-78-6	120 *	50	ug/kg	04/12/94
Methylene Chloride	75-09-2	ND	5	ug/kg	04/12/94
4-Methyl-2-pentanone	108-10-1	4,100 *	50	ug/kg	04/13/94
Styrene	100-42-5	ND	5	ug/kg	04/12/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/kg	04/12/94
Tetrachloroethene	127-18-4	ND	5	ug/kg	04/12/94
Toluene	108-88-3	600 *	5	ug/kg	04/13/94
1,1,1-Trichloroethane	71-55-6	ND	5	ug/kg	04/12/94
1,1,2-Trichloroethane	79-00-5	ND	5	ug/kg	04/12/94
Trichloroethene	79-01-6	ND	5	ug/kg	04/12/94
Vinyl Acetate	108-05-4	ND	50	ug/kg	04/12/94
Vinyl Chloride	75-01-4	ND	10	ug/kg	04/12/94

LEVINE-FRICKE

SAMPLE ID: SB-7-11.0  
AEN LAB NO: 9404058.03  
AEN WORK ORDER: 9404058  
CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/04/94  
DATE RECEIVED: 04/06/94  
REPORT DATE: 04/18/94

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Xylenes Total	1330-20-7	320 *	10	ug/kg	04/12/94

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See quality control report summary for comments about this sample.

ND = Not detected at or above the reporting limit  
\* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: SB-7-2.5, SB-7-3.5  
 AEN LAB NO: 9404058-04  
 AEN WORK ORDER: 9404058  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/04/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Arsenic	EPA 7060	4 *	1	mg/kg	04/14/94
#Digestion	EPA 3050	-		Prep Date	04/13/94

ND = Not detected at or above the reporting limit  
 \* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: SB-7-11.0  
AEN LAB NO: 9404058-05  
AEN WORK ORDER: 9404058  
CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/04/94  
DATE RECEIVED: 04/06/94  
REPORT DATE: 04/18/94

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Arsenic	EPA 7060	33 *	1	mg/kg	04/15/94
#Digestion	EPA 3050	-		Prep Date	04/13/94

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ND = Not detected at or above the reporting limit  
\* = Value above reporting limit



## LEVINE-FRICKE

SAMPLE ID: SB-6-7.0  
 AEN LAB NO: 9404058.06  
 AEN WORK ORDER: 9404058  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/04/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in Soil	5030 GC-FID	0.3 *	0.2	mg/kg	04/08/94
#Extraction for Diesel/Oil	EPA 3550	-		Extrn Date	04/07/94
TPH as Diesel	GC-FID	5 *	1	mg/kg	04/09/94
VOCs in Soil by 8240	EPA 8240				
Acetone	67-64-1	ND	5000	ug/kg	04/13/94
Benzene	71-43-2	ND	300	ug/kg	04/13/94
Bromodichloromethane	75-27-4	ND	300	ug/kg	04/13/94
Bromoform	75-25-2	ND	300	ug/kg	04/13/94
Bromomethane	74-83-9	ND	500	ug/kg	04/13/94
2-Butanone	78-93-3	ND	5000	ug/kg	04/13/94
Carbon Disulfide	75-15-0	ND	500	ug/kg	04/13/94
Carbon Tetrachloride	56-23-5	ND	300	ug/kg	04/13/94
Chlorobenzene	108-90-7	ND	300	ug/kg	04/13/94
Chloroethane	75-00-3	ND	500	ug/kg	04/13/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	500	ug/kg	04/13/94
Chloroform	67-66-3	ND	300	ug/kg	04/13/94
Chloromethane	74-87-3	ND	500	ug/kg	04/13/94
Dibromochloromethane	124-48-1	ND	300	ug/kg	04/13/94
1,1-Dichloroethane	75-43-3	ND	300	ug/kg	04/13/94
1,2-Dichloroethane	107-06-2	ND	300	ug/kg	04/13/94
1,1-Dichloroethene	75-35-4	ND	300	ug/kg	04/13/94
cis-1,2-Dichloroethene	156-59-2	ND	300	ug/kg	04/13/94
trans-1,2-Dichloroethene	156-60-5	ND	300	ug/kg	04/13/94
1,2-Dichloropropane	78-87-5	ND	300	ug/kg	04/13/94
cis-1,3-Dichloropropene	10061-01-5	ND	300	ug/kg	04/13/94
trans-1,3-Dichloropropene	10061-02-6	ND	300	ug/kg	04/13/94
Ethylbenzene	100-41-4	ND	300	ug/kg	04/13/94
2-Hexanone	591-78-6	ND	3000	ug/kg	04/13/94
Methylene Chloride	75-09-2	ND	500	ug/kg	04/13/94
4-Methyl-2-pentanone	108-10-1	ND	3000	ug/kg	04/13/94
Styrene	100-42-5	ND	300	ug/kg	04/13/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	300	ug/kg	04/13/94
Tetrachloroethene	127-18-4	ND	300	ug/kg	04/13/94
Toluene	108-88-3	13.000 *	300	ug/kg	04/13/94
1,1,1-Trichloroethane	71-55-6	ND	300	ug/kg	04/13/94
1,1,2-Trichloroethane	79-00-5	ND	300	ug/kg	04/13/94
Trichloroethene	79-01-6	ND	300	ug/kg	04/13/94
Vinyl Acetate	108-05-4	ND	3000	ug/kg	04/13/94
Vinyl Chloride	75-01-4	ND	500	ug/kg	04/13/94

LEVINE-FRICKE

SAMPLE ID: SB-6-7.0  
AEN LAB NO: 9404058-06  
AEN WORK ORDER: 9404058  
CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/04/94  
DATE RECEIVED: 04/06/94  
REPORT DATE: 04/18/94

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Xylenes Total	1330-20-7	920 *	500	ug/kg	04/13/94

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See quality control report summary for comments about this sample.

ND = Not detected at or above the reporting limit

\* = Value above reporting limit

## LEVINE-FRICKE

SAMPLE ID: SB-6-10.0  
 AEN LAB NO: 9404058-07  
 AEN WORK ORDER: 9404058  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/04/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in Soil	5030 GC-FID	ND	50	mg/kg	04/10/94
#Extraction for Diesel/Oil	EPA 3550	-		Extrn Date	04/07/94
TPH as Diesel	GC-FID	5,000 *	1	mg/kg	04/10/94
VOCs in Soil by 8240	EPA 8240				
Acetone	67-64-1	ND	5000	ug/kg	04/14/94
Benzene	71-43-2	ND	300	ug/kg	04/14/94
Bromodichloromethane	75-27-4	ND	300	ug/kg	04/14/94
Bromoform	75-25-2	ND	300	ug/kg	04/14/94
Bromomethane	74-83-9	ND	500	ug/kg	04/14/94
2-Butanone	78-93-3	ND	5000	ug/kg	04/14/94
Carbon Disulfide	75-15-0	ND	500	ug/kg	04/14/94
Carbon Tetrachloride	56-23-5	ND	300	ug/kg	04/14/94
Chlorobenzene	108-90-7	ND	300	ug/kg	04/14/94
Chloroethane	75-00-3	ND	500	ug/kg	04/14/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	500	ug/kg	04/14/94
Chloroform	67-66-3	ND	300	ug/kg	04/14/94
Chloromethane	74-87-3	ND	500	ug/kg	04/14/94
Dibromochloromethane	124-48-1	ND	300	ug/kg	04/14/94
1,1-Dichloroethane	75-43-3	ND	300	ug/kg	04/14/94
1,2-Dichloroethane	107-06-2	ND	300	ug/kg	04/14/94
1,1-Dichloroethene	75-35-4	ND	300	ug/kg	04/14/94
cis-1,2-Dichloroethene	156-59-2	ND	300	ug/kg	04/14/94
trans-1,2-Dichloroethene	156-60-5	ND	300	ug/kg	04/14/94
1,2-Dichloropropane	78-87-5	ND	300	ug/kg	04/14/94
cis-1,3-Dichloropropene	10061-01-5	ND	300	ug/kg	04/14/94
trans-1,3-Dichloropropene	10061-02-6	ND	300	ug/kg	04/14/94
Ethylbenzene	100-41-4	ND	300	ug/kg	04/14/94
2-Hexanone	591-78-6	ND	3000	ug/kg	04/14/94
Methylene Chloride	75-09-2	ND	300	ug/kg	04/14/94
4-Methyl-2-pentanone	108-10-1	ND	3000	ug/kg	04/14/94
Styrene	100-42-5	ND	300	ug/kg	04/14/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	300	ug/kg	04/14/94
Tetrachloroethene	127-18-4	ND	300	ug/kg	04/14/94
Toluene	108-88-3	2,000 *	300	ug/kg	04/14/94
1,1,1-Trichloroethane	71-55-6	ND	300	ug/kg	04/14/94
1,1,2-Trichloroethane	79-00-5	ND	300	ug/kg	04/14/94
Trichloroethene	79-01-6	ND	300	ug/kg	04/14/94
Vinyl Acetate	108-05-4	ND	3000	ug/kg	04/14/94
Vinyl Chloride	75-01-4	ND	500	ug/kg	04/14/94

LEVINE-FRICKE

SAMPLE ID: SB-6-10.0  
AEN LAB NO: 9404058-07  
AEN WORK ORDER: 9404058  
CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/04/94  
DATE RECEIVED: 04/06/94  
REPORT DATE: 04/18/94

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Xylenes Total	1330-20-7	2,000 *	500	ug/kg	04/14/94

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See quality control report summary for comments about this sample. RL elevated for gasoline due to hydrocarbon interference in the diesel/kerosene range.

ND = Not detected at or above the reporting limit  
\* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: SB-6-7.5, SB-6-8.5  
 AEN LAB NO: 9404058-08  
 AEN WORK ORDER: 9404058  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/04/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Arsenic	EPA 7060	180 *	1	mg/kg	04/15/94
#Digestion	EPA 3050	-		Prep Date	04/13/94

ND = Not detected at or above the reporting limit  
 \* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: SB-6-9.5  
AEN LAB NO: 9404058-09  
AEN WORK ORDER: 9404058  
CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/04/94  
DATE RECEIVED: 04/06/94  
REPORT DATE: 04/18/94

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Arsenic	EPA 7060	71 *	1	mg/kg	04/15/94
#Digestion	EPA 3050	-		Prep Date	04/13/94

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ND = Not detected at or above the reporting limit  
\* = Value above reporting limit

## LEVINE-FRICKE

SAMPLE ID: SB-3-4.0  
 AEN LAB NO: 9404058-10  
 AEN WORK ORDER: 9404058  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/04/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in Soil	5030 GC-FID	ND	0.2	mg/kg	04/08/94
#Extraction for Diesel/Oil	EPA 3550	-		Extrn Date	04/07/94
TPH as Diesel	GC-FID	ND	1	mg/kg	04/09/94
VOCs in Soil by 8240	EPA 8240				
Acetone	67-64-1	ND	100	ug/kg	04/13/94
Benzene	71-43-2	ND	5	ug/kg	04/13/94
Bromodichloromethane	75-27-4	ND	5	ug/kg	04/13/94
Bromoform	75-25-2	ND	5	ug/kg	04/13/94
Bromomethane	74-83-9	ND	10	ug/kg	04/13/94
2-Butanone	78-93-3	ND	100	ug/kg	04/13/94
Carbon Disulfide	75-15-0	ND	10	ug/kg	04/13/94
Carbon Tetrachloride	56-23-5	ND	5	ug/kg	04/13/94
Chlorobenzene	108-90-7	ND	5	ug/kg	04/13/94
Chloroethane	75-00-3	ND	10	ug/kg	04/13/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/kg	04/13/94
Chloroform	67-66-3	ND	5	ug/kg	04/13/94
Chloromethane	74-87-3	ND	10	ug/kg	04/13/94
Dibromochloromethane	124-48-1	ND	5	ug/kg	04/13/94
1,1-Dichloroethane	75-43-3	ND	5	ug/kg	04/13/94
1,2-Dichloroethane	107-06-2	ND	5	ug/kg	04/13/94
1,1-Dichloroethene	75-35-4	ND	5	ug/kg	04/13/94
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/kg	04/13/94
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/kg	04/13/94
1,2-Dichloropropane	78-87-5	ND	5	ug/kg	04/13/94
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/kg	04/13/94
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/kg	04/13/94
Ethylbenzene	100-41-4	ND	5	ug/kg	04/13/94
2-Hexanone	591-78-6	ND	50	ug/kg	04/13/94
Methylene Chloride	75-09-2	ND	5	ug/kg	04/13/94
4-Methyl-2-pentanone	108-10-1	ND	50	ug/kg	04/13/94
Styrene	100-42-5	ND	5	ug/kg	04/13/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/kg	04/13/94
Tetrachloroethene	127-18-4	ND	5	ug/kg	04/13/94
Toluene	108-88-3	11 *	5	ug/kg	04/13/94
1,1,1-Trichloroethane	71-55-6	ND	5	ug/kg	04/13/94
1,1,2-Trichloroethane	79-00-5	ND	5	ug/kg	04/13/94
Trichloroethene	79-01-6	ND	5	ug/kg	04/13/94
Vinyl Acetate	108-05-4	ND	50	ug/kg	04/13/94
Vinyl Chloride	75-01-4	ND	10	ug/kg	04/13/94

LEVINE-FRICKE

SAMPLE ID: SB-3-4.0  
AEN LAB NO: 9404058-10  
AEN WORK ORDER: 9404058  
CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/04/94  
DATE RECEIVED: 04/06/94  
REPORT DATE: 04/18/94

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Xylenes Total	1330-20-7	ND	10	ug/kg	04/13/94

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ND = Not detected at or above the reporting limit  
\* = Value above reporting limit



## LEVINE-FRICKE

SAMPLE ID: SB-3-10.0  
 AEN LAB NO: 9404058-11  
 AEN WORK ORDER: 9404058  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/04/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in Soil	5030 GC-FID	0.3 *	0.2	mg/kg	04/09/94
#Extraction for Diesel/Oil	EPA 3550	-		Extrn Date	04/07/94
TPH as Diesel	GC-FID	ND	1	mg/kg	04/09/94
VOCs in Soil by 8240	EPA 8240				
Acetone	67-64-1	ND	100	ug/kg	04/12/94
Benzene	71-43-2	ND	5	ug/kg	04/12/94
Bromodichloromethane	75-27-4	ND	5	ug/kg	04/12/94
Bromoform	75-25-2	ND	5	ug/kg	04/12/94
Bromomethane	74-83-9	ND	10	ug/kg	04/12/94
2-Butanone	78-93-3	ND	100	ug/kg	04/12/94
Carbon Disulfide	75-15-0	ND	10	ug/kg	04/12/94
Carbon Tetrachloride	56-23-5	ND	5	ug/kg	04/12/94
Chlorobenzene	108-90-7	ND	5	ug/kg	04/12/94
Chloroethane	75-00-3	ND	10	ug/kg	04/12/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/kg	04/12/94
Chloroform	67-66-3	ND	5	ug/kg	04/12/94
Chloromethane	74-87-3	ND	10	ug/kg	04/12/94
Dibromochloromethane	124-48-1	ND	5	ug/kg	04/12/94
1,1-Dichloroethane	75-43-3	ND	5	ug/kg	04/12/94
1,2-Dichloroethane	107-06-2	ND	5	ug/kg	04/12/94
1,1-Dichloroethene	75-35-4	ND	5	ug/kg	04/12/94
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/kg	04/12/94
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/kg	04/12/94
1,2-Dichloropropane	78-87-5	ND	5	ug/kg	04/12/94
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/kg	04/12/94
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/kg	04/12/94
Ethylbenzene	100-41-4	ND	5	ug/kg	04/12/94
2-Hexanone	591-78-6	ND	50	ug/kg	04/12/94
Methylene Chloride	75-09-2	ND	5	ug/kg	04/12/94
4-Methyl-2-pentanone	108-10-1	ND	50	ug/kg	04/12/94
Styrene	100-42-5	ND	5	ug/kg	04/12/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/kg	04/12/94
Tetrachloroethene	127-18-4	ND	5	ug/kg	04/12/94
Toluene	108-88-3	ND	5	ug/kg	04/12/94
1,1,1-Trichloroethane	71-55-6	ND	5	ug/kg	04/12/94
1,1,2-Trichloroethane	79-00-5	ND	5	ug/kg	04/12/94
Trichloroethene	79-01-6	ND	5	ug/kg	04/12/94
Vinyl Acetate	108-05-4	ND	50	ug/kg	04/12/94
Vinyl Chloride	75-01-4	ND	10	ug/kg	04/12/94

LEVINE-FRICKE

SAMPLE ID: SB-3-10.0  
AEN LAB NO: 9404058-11  
AEN WORK ORDER: 9404058  
CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/04/94  
DATE RECEIVED: 04/06/94  
REPORT DATE: 04/18/94

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Xylenes Total	1330-20-7	ND	10	ug/kg	04/12/94

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ND = Not detected at or above the reporting limit  
\* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: SB-3-3.5, SB-3-7.0  
AEN LAB NO: 9404058-12  
AEN WORK ORDER: 9404058  
CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/04/94  
DATE RECEIVED: 04/06/94  
REPORT DATE: 04/18/94

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Arsenic	EPA 7060	6 *	1	mg/kg	04/14/94
#Digestion	EPA 3050	-		Prep Date	04/13/94

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ND = Not detected at or above the reporting limit  
\* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: SB-3-9.5  
AEN LAB NO: 9404058-13  
AEN WORK ORDER: 9404058  
CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/04/94  
DATE RECEIVED: 04/06/94  
REPORT DATE: 04/18/94

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Arsenic	EPA 7060	6 *	1	mg/kg	04/14/94
#Digestion	EPA 3050	-		Prep Date	04/13/94

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ND = Not detected at or above the reporting limit  
\* = Value above reporting limit

## LEVINE-FRICKE

SAMPLE ID: SB-2-4.0  
 AEN LAB NO: 9404058.14  
 AEN WORK ORDER: 9404058  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in Soil	5030 GC-FID	0.4 *	0.2	mg/kg	04/09/94
#Extraction for Diesel/Oil	EPA 3550	-		Extrn Date	04/07/94
TPH as Diesel	GC-FID	1 *	1	mg/kg	04/09/94
VOCs in Soil by 8240	EPA 8240				
Acetone	67-64-1	ND	100	ug/kg	04/12/94
Benzene	71-43-2	ND	5	ug/kg	04/12/94
Bromodichloromethane	75-27-4	ND	5	ug/kg	04/12/94
Bromoform	75-25-2	ND	5	ug/kg	04/12/94
Bromomethane	74-83-9	ND	10	ug/kg	04/12/94
2-Butanone	78-93-3	ND	100	ug/kg	04/12/94
Carbon Disulfide	75-15-0	ND	10	ug/kg	04/12/94
Carbon Tetrachloride	56-23-5	ND	5	ug/kg	04/12/94
Chlorobenzene	108-90-7	ND	5	ug/kg	04/12/94
Chloroethane	75-00-3	ND	10	ug/kg	04/12/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/kg	04/12/94
Chloroform	67-66-3	ND	5	ug/kg	04/12/94
Chloromethane	74-87-3	ND	10	ug/kg	04/12/94
Dibromochloromethane	124-48-1	ND	5	ug/kg	04/12/94
1,1-Dichloroethane	75-43-3	ND	5	ug/kg	04/12/94
1,2-Dichloroethane	107-06-2	ND	5	ug/kg	04/12/94
1,1-Dichloroethene	75-35-4	ND	5	ug/kg	04/12/94
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/kg	04/12/94
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/kg	04/12/94
1,2-Dichloropropane	78-87-5	ND	5	ug/kg	04/12/94
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/kg	04/12/94
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/kg	04/12/94
Ethylbenzene	100-41-4	ND	5	ug/kg	04/12/94
2-Hexanone	591-78-6	ND	50	ug/kg	04/12/94
Methylene Chloride	75-09-2	ND	5	ug/kg	04/12/94
4-Methyl-2-pentanone	108-10-1	ND	50	ug/kg	04/12/94
Styrene	100-42-5	ND	5	ug/kg	04/12/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/kg	04/12/94
Tetrachloroethene	127-18-4	ND	5	ug/kg	04/12/94
Toluene	108-88-3	10 *	5	ug/kg	04/12/94
1,1,1-Trichloroethane	71-55-6	ND	5	ug/kg	04/12/94
1,1,2-Trichloroethane	79-00-5	ND	5	ug/kg	04/12/94
Trichloroethene	79-01-6	ND	5	ug/kg	04/12/94
Vinyl Acetate	108-05-4	ND	50	ug/kg	04/12/94
Vinyl Chloride	75-01-4	ND	10	ug/kg	04/12/94

LEVINE-FRICKE

SAMPLE ID: SB-2-4.0  
AEN LAB NO: 9404058-14  
AEN WORK ORDER: 9404058  
CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
DATE RECEIVED: 04/06/94  
REPORT DATE: 04/18/94

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Xylenes Total	1330-20-7	10 *	10	ug/kg	04/12/94

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ND = Not detected at or above the reporting limit  
\* = Value above reporting limit

## LEVINE-FRICKE

SAMPLE ID: SB-2-11.5  
 AEN LAB NO: 9404058-15  
 AEN WORK ORDER: 9404058  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in Soil	5030 GC-FID	ND	0.2	mg/kg	04/09/94
#Extraction for Diesel/Oil	EPA 3550	-		Extrn Date	04/07/94
TPH as Diesel	GC-FID	7 *	1	mg/kg	04/09/94
VOCs in Soil by 8240	EPA 8240				
Acetone	67-64-1	ND	100	ug/kg	04/12/94
Benzene	71-43-2	ND	5	ug/kg	04/12/94
Bromodichloromethane	75-27-4	ND	5	ug/kg	04/12/94
Bromoform	75-25-2	ND	5	ug/kg	04/12/94
Bromomethane	74-83-9	ND	10	ug/kg	04/12/94
2-Butanone	78-93-3	ND	100	ug/kg	04/12/94
Carbon Disulfide	75-15-0	ND	10	ug/kg	04/12/94
Carbon Tetrachloride	56-23-5	ND	5	ug/kg	04/12/94
Chlorobenzene	108-90-7	ND	5	ug/kg	04/12/94
Chloroethane	75-00-3	ND	10	ug/kg	04/12/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/kg	04/12/94
Chloroform	67-66-3	ND	5	ug/kg	04/12/94
Chloromethane	74-87-3	ND	10	ug/kg	04/12/94
Dibromochloromethane	124-48-1	ND	5	ug/kg	04/12/94
1,1-Dichloroethane	75-43-3	ND	5	ug/kg	04/12/94
1,2-Dichloroethane	107-06-2	ND	5	ug/kg	04/12/94
1,1-Dichloroethene	75-35-4	ND	5	ug/kg	04/12/94
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/kg	04/12/94
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/kg	04/12/94
1,2-Dichloropropane	78-87-5	ND	5	ug/kg	04/12/94
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/kg	04/12/94
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/kg	04/12/94
Ethylbenzene	100-41-4	ND	5	ug/kg	04/12/94
2-Hexanone	591-78-6	ND	50	ug/kg	04/12/94
Methylene Chloride	75-09-2	ND	5	ug/kg	04/12/94
4-Methyl-2-pentanone	108-10-1	ND	50	ug/kg	04/12/94
Styrene	100-42-5	ND	5	ug/kg	04/12/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/kg	04/12/94
Tetrachloroethene	127-18-4	ND	5	ug/kg	04/12/94
Toluene	108-88-3	5 *	5	ug/kg	04/12/94
1,1,1-Trichloroethane	71-55-6	ND	5	ug/kg	04/12/94
1,1,2-Trichloroethane	79-00-5	ND	5	ug/kg	04/12/94
Trichloroethene	79-01-6	ND	5	ug/kg	04/12/94
Vinyl Acetate	108-05-4	ND	50	ug/kg	04/12/94
Vinyl Chloride	75-01-4	ND	10	ug/kg	04/12/94

LEVINE-FRICKE

SAMPLE ID: SB-2-11.5  
AEN LAB NO: 9404058-15  
AEN WORK ORDER: 9404058  
CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
DATE RECEIVED: 04/06/94  
REPORT DATE: 04/18/94

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Xylenes Total	1330-20-7	ND	10	ug/kg	04/12/94

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ND = Not detected at or above the reporting limit  
\* = Value above reporting limit



LEVINE-FRICKE

SAMPLE ID: SB-2-2.0,SB-2-3.5,SB-2-6.5  
AEN LAB NO: 9404058-16  
AEN WORK ORDER: 9404058  
CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
DATE RECEIVED: 04/06/94  
REPORT DATE: 04/18/94

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Arsenic	EPA 7060	6 *	1	mg/kg	04/14/94
#Digestion	EPA 3050	-		Prep Date	04/13/94

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ND = Not detected at or above the reporting limit  
\* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: SB-2-12.0  
AEN LAB NO: 9404058-17  
AEN WORK ORDER: 9404058  
CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
DATE RECEIVED: 04/06/94  
REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Arsenic	EPA 7060	15 *	1	mg/kg	04/14/94
#Digestion	EPA 3050	-		Prep Date	04/13/94

ND = Not detected at or above the reporting limit  
\* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: SB-1-11.5  
 AEN LAB NO: 9404058-19  
 AEN WORK ORDER: 9404058  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Xylenes Total	1330-20-7	ND	10	ug/kg	04/13/94

RL limit elevated for methylene chloride due to back-ground contamination. RL elevated for gasoline due to hydrocarbon interference in the diesel/kerosene range.

ND = Not detected at or above the reporting limit  
 \* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: SB-1-2.0,SB-1-3.5,SB-1-6.5  
 AEN LAB NO: 9404058-20  
 AEN WORK ORDER: 9404058  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Arsenic	EPA 7060	5 *	1	mg/kg	04/14/94
#Digestion	EPA 3050	-		Prep Date	04/13/94

ND = Not detected at or above the reporting limit  
 \* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: SB-1-11.0  
AEN LAB NO: 9404058-21  
AEN WORK ORDER: 9404058  
CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
DATE RECEIVED: 04/06/94  
REPORT DATE: 04/18/94

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Arsenic	EPA 7060	5 *	1	mg/kg	04/14/94
#Digestion	EPA 3050	-		Prep Date	04/13/94

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ND = Not detected at or above the reporting limit  
\* = Value above reporting limit

## LEVINE-FRICKE

SAMPLE ID: SB-4-7.0  
 AEN LAB NO: 9404058-22  
 AEN WORK ORDER: 9404058  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in Soil	5030 GC-FID	ND	0.2	mg/kg	04/10/94
#Extraction for Diesel/Oil	EPA 3550	-		Extrn Date	04/07/94
TPH as Diesel	GC-FID	ND	1	mg/kg	04/09/94
VOCs in Soil by 8240	EPA 8240				
Acetone	67-64-1	ND	100	ug/kg	04/13/94
Benzene	71-43-2	ND	5	ug/kg	04/13/94
Bromodichloromethane	75-27-4	ND	5	ug/kg	04/13/94
Bromoform	75-25-2	ND	5	ug/kg	04/13/94
Bromomethane	74-83-9	ND	10	ug/kg	04/13/94
2-Butanone	78-93-3	ND	100	ug/kg	04/13/94
Carbon Disulfide	75-15-0	ND	10	ug/kg	04/13/94
Carbon Tetrachloride	56-23-5	ND	5	ug/kg	04/13/94
Chlorobenzene	108-90-7	ND	5	ug/kg	04/13/94
Chloroethane	75-00-3	ND	10	ug/kg	04/13/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/kg	04/13/94
Chloroform	67-66-3	ND	5	ug/kg	04/13/94
Chloromethane	74-87-3	ND	10	ug/kg	04/13/94
Dibromochloromethane	124-48-1	ND	5	ug/kg	04/13/94
1,1-Dichloroethane	75-43-3	ND	5	ug/kg	04/13/94
1,2-Dichloroethane	107-06-2	ND	5	ug/kg	04/13/94
1,1-Dichloroethene	75-35-4	ND	5	ug/kg	04/13/94
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/kg	04/13/94
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/kg	04/13/94
1,2-Dichloropropane	78-87-5	ND	5	ug/kg	04/13/94
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/kg	04/13/94
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/kg	04/13/94
Ethylbenzene	100-41-4	ND	5	ug/kg	04/13/94
2-Hexanone	591-78-6	ND	50	ug/kg	04/13/94
Methylene Chloride	75-09-2	ND	20	ug/kg	04/13/94
4-Methyl-2-pentanone	108-10-1	ND	50	ug/kg	04/13/94
Styrene	100-42-5	ND	5	ug/kg	04/13/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/kg	04/13/94
Tetrachloroethene	127-18-4	ND	5	ug/kg	04/13/94
Toluene	108-88-3	6 *	5	ug/kg	04/13/94
1,1,1-Trichloroethane	71-55-6	ND	5	ug/kg	04/13/94
1,1,2-Trichloroethane	79-00-5	ND	5	ug/kg	04/13/94
Trichloroethene	79-01-6	ND	5	ug/kg	04/13/94
Vinyl Acetate	108-05-4	ND	50	ug/kg	04/13/94
Vinyl Chloride	75-01-4	ND	10	ug/kg	04/13/94

LEVINE-FRICKE

SAMPLE ID: SB-4-7.0  
AEN LAB NO: 9404058-22  
AEN WORK ORDER: 9404058  
CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
DATE RECEIVED: 04/06/94  
REPORT DATE: 04/18/94

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Xylenes Total	1330-20-7	ND	10	ug/kg	04/13/94

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Reporting limit elevated for methylene chloride due to background contamination.

ND = Not detected at or above the reporting limit  
\* = Value above reporting limit

## LEVINE - FRICKE

SAMPLE ID: SB-4-12.5  
 AEN LAB NO: 9404058-23  
 AEN WORK ORDER: 9404058  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in Soil	5030 GC-FID	ND	4	mg/kg	04/11/94
#Extraction for Diesel/Oil	EPA 3550	-		Extrn Date	04/07/94
TPH as Diesel	GC-FID	150 *	1	mg/kg	04/09/94
VOCs in Soil by 8240	EPA 8240				
Acetone	67-64-1	ND	100	ug/kg	04/14/94
Benzene	71-43-2	ND	5	ug/kg	04/14/94
Bromodichloromethane	75-27-4	ND	5	ug/kg	04/14/94
Bromoform	75-25-2	ND	5	ug/kg	04/14/94
Bromomethane	74-83-9	ND	10	ug/kg	04/14/94
2-Butanone	78-93-3	ND	100	ug/kg	04/14/94
Carbon Disulfide	75-15-0	ND	10	ug/kg	04/14/94
Carbon Tetrachloride	56-23-5	ND	5	ug/kg	04/14/94
Chlorobenzene	108-90-7	ND	5	ug/kg	04/14/94
Chloroethane	75-00-3	ND	10	ug/kg	04/14/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/kg	04/14/94
Chloroform	67-66-3	ND	5	ug/kg	04/14/94
Chloromethane	74-87-3	ND	10	ug/kg	04/14/94
Dibromochloromethane	124-48-1	ND	5	ug/kg	04/14/94
1,1-Dichloroethane	75-43-3	ND	5	ug/kg	04/14/94
1,2-Dichloroethane	107-06-2	ND	5	ug/kg	04/14/94
1,1-Dichloroethene	75-35-4	ND	5	ug/kg	04/14/94
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/kg	04/14/94
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/kg	04/14/94
1,2-Dichloropropane	78-87-5	ND	5	ug/kg	04/14/94
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/kg	04/14/94
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/kg	04/14/94
Ethylbenzene	100-41-4	ND	5	ug/kg	04/14/94
2-Hexanone	591-78-6	ND	50	ug/kg	04/14/94
Methylene Chloride	75-09-2	ND	5	ug/kg	04/14/94
4-Methyl-2-pentanone	108-10-1	ND	50	ug/kg	04/14/94
Styrene	100-42-5	ND	5	ug/kg	04/14/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/kg	04/14/94
Tetrachloroethene	127-18-4	ND	5	ug/kg	04/14/94
Toluene	108-88-3	10 *	5	ug/kg	04/14/94
1,1,1-Trichloroethane	71-55-6	ND	5	ug/kg	04/14/94
1,1,2-Trichloroethane	79-00-5	ND	5	ug/kg	04/14/94
Trichloroethene	79-01-6	ND	5	ug/kg	04/14/94
Vinyl Acetate	108-05-4	ND	50	ug/kg	04/14/94
Vinyl Chloride	75-01-4	ND	10	ug/kg	04/14/94



LEVINE-FRICKE

SAMPLE ID: SB-4-12.5  
 AEN LAB NO: 9404058-23  
 AEN WORK ORDER: 9404058  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Xylenes Total	1330-20-7	ND	10	ug/kg	04/14/94

Reporting limit elevated for gasoline due to hydrocarbon interference in the diesel/kerosene range.

ND = Not detected at or above the reporting limit  
 \* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: SB-4-12.0  
 AEN LAB NO: 9404058-24  
 AEN WORK ORDER: 9404058  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Arsenic	EPA 7060	8 *	1	mg/kg	04/14/94
#Digestion	EPA 3050	-		Prep Date	04/13/94

ND = Not detected at or above the reporting limit  
 \* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: SB-4-2.0,SB-4-4.0,SB-4-6.5  
AEN LAB NO: 9404058-25  
AEN WORK ORDER: 9404058  
CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
DATE RECEIVED: 04/06/94  
REPORT DATE: 04/18/94

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Arsenic	EPA 7060	6 *	1	mg/kg	04/14/94
#Digestion	EPA 3050	-		Prep Date	04/13/94

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ND = Not detected at or above the reporting limit  
\* = Value above reporting limit

## LEVINE-FRICKE

SAMPLE ID: SB-8-7.0  
 AEN LAB NO: 9404058.27  
 AEN WORK ORDER: 9404058  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in Soil	5030 GC-FID	3,200 *	0.2	mg/kg	04/13/94
#Extraction for Diesel/Oil	EPA 3550	-		Extrn Date	04/07/94
TPH as Diesel	GC-FID	7 *	1	mg/kg	04/09/94
VOCs in Soil by 8240	EPA 8240				
Acetone	67-64-1	1,100,000 *	1000000	ug/kg	04/13/94
Benzene	71-43-2	ND	50000	ug/kg	04/13/94
Bromodichloromethane	75-27-4	ND	50000	ug/kg	04/13/94
Bromoform	75-25-2	ND	50000	ug/kg	04/13/94
Bromomethane	74-83-9	ND	100000	ug/kg	04/13/94
2-Butanone	78-93-3	ND	1000000	ug/kg	04/13/94
Carbon Disulfide	75-15-0	ND	100000	ug/kg	04/13/94
Carbon Tetrachloride	56-23-5	ND	50000	ug/kg	04/13/94
Chlorobenzene	108-90-7	ND	50000	ug/kg	04/13/94
Chloroethane	75-00-3	ND	100000	ug/kg	04/13/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	100000	ug/kg	04/13/94
Chloroform	67-66-3	ND	50000	ug/kg	04/13/94
Chloromethane	74-87-3	ND	100000	ug/kg	04/13/94
Dibromochloromethane	124-48-1	ND	50000	ug/kg	04/13/94
1,1-Dichloroethane	75-43-3	ND	50000	ug/kg	04/13/94
1,2-Dichloroethane	107-06-2	ND	50000	ug/kg	04/13/94
1,1-Dichloroethene	75-35-4	ND	50000	ug/kg	04/13/94
cis-1,2-Dichloroethene	156-59-2	ND	50000	ug/kg	04/13/94
trans-1,2-Dichloroethene	156-60-5	ND	50000	ug/kg	04/13/94
1,2-Dichloropropane	78-87-5	ND	50000	ug/kg	04/13/94
cis-1,3-Dichloropropene	10061-01-5	ND	50000	ug/kg	04/13/94
trans-1,3-Dichloropropene	10061-02-6	ND	50000	ug/kg	04/13/94
Ethylbenzene	100-41-4	62,000 *	50000	ug/kg	04/13/94
2-Hexanone	591-78-6	ND	500000	ug/kg	04/13/94
Methylene Chloride	75-09-2	ND	50000	ug/kg	04/13/94
4-Methyl-2-pentanone	108-10-1	ND	500000	ug/kg	04/13/94
Styrene	100-42-5	ND	50000	ug/kg	04/13/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	50000	ug/kg	04/13/94
Tetrachloroethene	127-18-4	ND	50000	ug/kg	04/13/94
Toluene	108-88-3	880,000 *	50000	ug/kg	04/13/94
1,1,1-Trichloroethane	71-55-6	ND	50000	ug/kg	04/13/94
1,1,2-Trichloroethane	79-00-5	ND	50000	ug/kg	04/13/94
Trichloroethene	79-01-6	ND	50000	ug/kg	04/13/94
Vinyl Acetate	108-05-4	ND	500000	ug/kg	04/13/94
Vinyl Chloride	75-01-4	ND	100000	ug/kg	04/13/94

## LEVINE-FRICKE

SAMPLE ID: SB-8-7.0  
AEN LAB NO: 9404058-27  
AEN WORK ORDER: 9404058  
CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
DATE RECEIVED: 04/06/94  
REPORT DATE: 04/18/94

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Xylenes Total	1330-20-7	360.000 *	100000	ug/kg	04/13/94

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See quality control report summary for comments about this sample.

ND = Not detected at or above the reporting limit

\* = Value above reporting limit

## LEVINE-FRICKE

SAMPLE ID: SB-8-9.5  
 AEN LAB NO: 9404058-28  
 AEN WORK ORDER: 9404058  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in Soil	5030 GC-FID	8,000 *	0.2	mg/kg	04/13/94
#Extraction for Diesel/Oil	EPA 3550	-		Extrn Date	04/07/94
TPH as Diesel	GC-FID	3 *	1	mg/kg	04/09/94
VOCs in Soil by 8240	EPA 8240				
Acetone	67-64-1	ND	1000000	ug/kg	04/13/94
Benzene	71-43-2	ND	50000	ug/kg	04/13/94
Bromodichloromethane	75-27-4	ND	50000	ug/kg	04/13/94
Bromoform	75-25-2	ND	50000	ug/kg	04/13/94
Bromomethane	74-83-9	ND	100000	ug/kg	04/13/94
2-Butanone	78-93-3	ND	1000000	ug/kg	04/13/94
Carbon Disulfide	75-15-0	ND	100000	ug/kg	04/13/94
Carbon Tetrachloride	56-23-5	ND	50000	ug/kg	04/13/94
Chlorobenzene	108-90-7	ND	50000	ug/kg	04/13/94
Chloroethane	75-00-3	ND	100000	ug/kg	04/13/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	100000	ug/kg	04/13/94
Chloroform	67-66-3	ND	50000	ug/kg	04/13/94
Chloromethane	74-87-3	ND	100000	ug/kg	04/13/94
Dibromochloromethane	124-48-1	ND	50000	ug/kg	04/13/94
1,1-Dichloroethane	75-43-3	ND	50000	ug/kg	04/13/94
1,2-Dichloroethane	107-06-2	ND	50000	ug/kg	04/13/94
1,1-Dichloroethene	75-35-4	ND	50000	ug/kg	04/13/94
cis-1,2-Dichloroethene	156-59-2	ND	50000	ug/kg	04/13/94
trans-1,2-Dichloroethene	156-60-5	ND	50000	ug/kg	04/13/94
1,2-Dichloropropane	78-87-5	ND	50000	ug/kg	04/13/94
cis-1,3-Dichloropropene	10061-01-5	ND	50000	ug/kg	04/13/94
trans-1,3-Dichloropropene	10061-02-6	ND	50000	ug/kg	04/13/94
Ethylbenzene	100-41-4	130,000 *	50000	ug/kg	04/13/94
2-Hexanone	591-78-6	ND	500000	ug/kg	04/13/94
Methylene Chloride	75-09-2	ND	50000	ug/kg	04/13/94
4-Methyl-2-pentanone	108-10-1	ND	500000	ug/kg	04/13/94
Styrene	100-42-5	ND	50000	ug/kg	04/13/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	50000	ug/kg	04/13/94
Tetrachloroethene	127-18-4	ND	50000	ug/kg	04/13/94
Toluene	108-88-3	1,400,000 *	50000	ug/kg	04/13/94
1,1,1-Trichloroethane	71-55-6	ND	50000	ug/kg	04/13/94
1,1,2-Trichloroethane	79-00-5	ND	50000	ug/kg	04/13/94
Trichloroethene	79-01-6	ND	50000	ug/kg	04/13/94
Vinyl Acetate	108-05-4	ND	500000	ug/kg	04/13/94
Vinyl Chloride	75-01-4	ND	100000	ug/kg	04/13/94

## LEVINE-FRICKE

SAMPLE ID: SB-8-9.5  
AEN LAB NO: 9404058-28  
AEN WORK ORDER: 9404058  
CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
DATE RECEIVED: 04/06/94  
REPORT DATE: 04/18/94

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Xylenes Total	1330-20-7	670.000 *	100000	ug/kg	04/13/94

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See quality control report summary for comments about  
this sample.

ND = Not detected at or above the reporting limit

\* = Value above reporting limit

## LEVINE-FRICKE

SAMPLE ID: SB-5-6.5  
 AEN LAB NO: 9404058-29  
 AEN WORK ORDER: 9404058  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in Soil	5030 GC-FID	ND	0.2	mg/kg	04/11/94
#Extraction for Diesel/Oil	EPA 3550	-		Extrn Date	04/07/94
TPH as Diesel	GC-FID	ND	1	mg/kg	04/09/94
VOCs in Soil by 8240	EPA 8240				
Acetone	67-64-1	ND	100	ug/kg	04/13/94
Benzene	71-43-2	ND	5	ug/kg	04/13/94
Bromodichloromethane	75-27-4	ND	5	ug/kg	04/13/94
Bromoform	75-25-2	ND	5	ug/kg	04/13/94
Bromomethane	74-83-9	ND	10	ug/kg	04/13/94
2-Butanone	78-93-3	ND	100	ug/kg	04/13/94
Carbon Disulfide	75-15-0	ND	10	ug/kg	04/13/94
Carbon Tetrachloride	56-23-5	ND	5	ug/kg	04/13/94
Chlorobenzene	108-90-7	ND	5	ug/kg	04/13/94
Chloroethane	75-00-3	ND	10	ug/kg	04/13/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/kg	04/13/94
Chloroform	67-66-3	ND	5	ug/kg	04/13/94
Chloromethane	74-87-3	ND	10	ug/kg	04/13/94
Dibromochloromethane	124-48-1	ND	5	ug/kg	04/13/94
1,1-Dichloroethane	75-43-3	ND	5	ug/kg	04/13/94
1,2-Dichloroethane	107-06-2	ND	5	ug/kg	04/13/94
1,1-Dichloroethene	75-35-4	ND	5	ug/kg	04/13/94
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/kg	04/13/94
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/kg	04/13/94
1,2-Dichloropropane	78-87-5	ND	5	ug/kg	04/13/94
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/kg	04/13/94
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/kg	04/13/94
Ethylbenzene	100-41-4	ND	5	ug/kg	04/13/94
2-Hexanone	591-78-6	ND	50	ug/kg	04/13/94
Methylene Chloride	75-09-2	ND	5	ug/kg	04/13/94
4-Methyl-2-pentanone	108-10-1	ND	50	ug/kg	04/13/94
Styrene	100-42-5	ND	5	ug/kg	04/13/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/kg	04/13/94
Tetrachloroethene	127-18-4	ND	5	ug/kg	04/13/94
Toluene	108-88-3	7 *	5	ug/kg	04/13/94
1,1,1-Trichloroethane	71-55-6	ND	5	ug/kg	04/13/94
1,1,2-Trichloroethane	79-00-5	ND	5	ug/kg	04/13/94
Trichloroethene	79-01-6	ND	5	ug/kg	04/13/94
Vinyl Acetate	108-05-4	ND	50	ug/kg	04/13/94
Vinyl Chloride	75-01-4	ND	10	ug/kg	04/13/94



LEVINE-FRICKE

SAMPLE ID: SB-5-6.5  
AEN LAB NO: 9404058-29  
AEN WORK ORDER: 9404058  
CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
DATE RECEIVED: 04/06/94  
REPORT DATE: 04/18/94

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Xylenes Total	1330-20-7	ND	10	ug/kg	04/13/94

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ND = Not detected at or above the reporting limit  
\* = Value above reporting limit

## LEVINE-FRICKE

SAMPLE ID: SB-5-10.0  
 AEN LAB NO: 9404058-30  
 AEN WORK ORDER: 9404058  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas in Soil	5030 GC-FID	ND	2	mg/kg	04/13/94
#Extraction for Diesel/Oil	EPA 3550	-		Extrn Date	04/07/94
TPH as Diesel	GC-FID	ND	1	mg/kg	04/09/94
VOCs in Soil by 8240	EPA 8240				
Acetone	67-64-1	ND	100	ug/kg	04/13/94
Benzene	71-43-2	ND	5	ug/kg	04/13/94
Bromodichloromethane	75-27-4	ND	5	ug/kg	04/13/94
Bromoform	75-25-2	ND	5	ug/kg	04/13/94
Bromomethane	74-83-9	ND	10	ug/kg	04/13/94
2-Butanone	78-93-3	ND	100	ug/kg	04/13/94
Carbon Disulfide	75-15-0	ND	10	ug/kg	04/13/94
Carbon Tetrachloride	56-23-5	ND	5	ug/kg	04/13/94
Chlorobenzene	108-90-7	ND	5	ug/kg	04/13/94
Chloroethane	75-00-3	ND	10	ug/kg	04/13/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/kg	04/13/94
Chloroform	67-66-3	ND	5	ug/kg	04/13/94
Chloromethane	74-87-3	ND	10	ug/kg	04/13/94
Dibromochloromethane	124-48-1	ND	5	ug/kg	04/13/94
1,1-Dichloroethane	75-43-3	ND	5	ug/kg	04/13/94
1,2-Dichloroethane	107-06-2	ND	5	ug/kg	04/13/94
1,1-Dichloroethene	75-35-4	ND	5	ug/kg	04/13/94
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/kg	04/13/94
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/kg	04/13/94
1,2-Dichloropropane	78-87-5	ND	5	ug/kg	04/13/94
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/kg	04/13/94
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/kg	04/13/94
Ethylbenzene	100-41-4	ND	5	ug/kg	04/13/94
2-Hexanone	591-78-6	ND	50	ug/kg	04/13/94
Methylene Chloride	75-09-2	ND	5	ug/kg	04/13/94
4-Methyl-2-pentanone	108-10-1	ND	50	ug/kg	04/13/94
Styrene	100-42-5	ND	5	ug/kg	04/13/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/kg	04/13/94
Tetrachloroethene	127-18-4	ND	5	ug/kg	04/13/94
Toluene	108-88-3	ND	5	ug/kg	04/13/94
1,1,1-Trichloroethane	71-55-6	ND	5	ug/kg	04/13/94
1,1,2-Trichloroethane	79-00-5	ND	5	ug/kg	04/13/94
Trichloroethene	79-01-6	ND	5	ug/kg	04/13/94
Vinyl Acetate	108-05-4	ND	50	ug/kg	04/13/94
Vinyl Chloride	75-01-4	ND	10	ug/kg	04/13/94

LEVINE-FRICKE

SAMPLE ID: SB-5-10.0  
AEN LAB NO: 9404058-30  
AEN WORK ORDER: 9404058  
CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
DATE RECEIVED: 04/06/94  
REPORT DATE: 04/18/94

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Xylenes Total	1330-20-7	ND	10	ug/kg	04/13/94

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Reporting limit elevated for gasoline due to martix interference.

ND = Not detected at or above the reporting limit  
\* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: SB-8-2.0,SB-8-4.0,SB-8-6.5  
 AEN LAB NO: 9404058-31  
 AEN WORK ORDER: 9404058  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Arsenic	EPA 7060	8500 *	1	mg/kg	04/15/94
#Digestion	EPA 3050	-		Prep Date	04/13/94

ND = Not detected at or above the reporting limit  
 \* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: SB-8-10.0  
 AEN LAB NO: 9404058-32  
 AEN WORK ORDER: 9404058  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Arsenic	EPA 7060	1900 *	1	mg/kg	04/15/94
#Digestion	EPA 3050	-		Prep Date	04/13/94

ND = Not detected at or above the reporting limit  
 \* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: SB-5-9.5  
AEN LAB NO: 9404058.34  
AEN WORK ORDER: 9404058  
CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
DATE RECEIVED: 04/06/94  
REPORT DATE: 04/18/94

---

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
Arsenic	EPA 7060	6 *	1	mg/kg	04/15/94
#Digestion	EPA 3050	-		Prep Date	04/13/94

---

ND = Not detected at or above the reporting limit  
\* = Value above reporting limit

AEN (CALIFORNIA)  
QUALITY CONTROL REPORT

AEN JOB NUMBER: 9404058

CLIENT PROJECT ID: 3042

Quality Control Summary

Samples SB-7-3.0, SB-7-11.0, SB-6-7.0, SB-6-10.0, SB-1-4.0, SB-8-7.0 and SB-8-9.5 (9404058-01,03,06,07,18,27,28) were analyzed dilute by EPA Method 8240 due to high levels of target and/or non-target compounds. Reporting limits have been adjusted accordingly. Methylene chloride by EPA Method 8240 was found in the 04/12,14/94 method blanks at 10 ug/kg and in the 04/13/94 method blank at 5 ug/kg.

All other laboratory quality control parameters were found to be within established limits.

Definitions

The following abbreviations are found throughout the QC report:

- ND = Not Detected at or above the reporting limit
- RPD = Relative Percent Difference
- < = Less Than

QUALITY CONTROL DATA

DATE EXTRACTED: 04/07/94  
 DATE ANALYZED: 04/08/94  
 CLIENT PROJ. ID: 3042

AEN JOB NO: 9404058  
 SAMPLE SPIKED: 9404058-29  
 INSTRUMENT: C

MATRIX SPIKE RECOVERY SUMMARY  
 TPH EXTRACTABLE SOIL  
 METHOD: EPA 3550 GCFID

ANALYTE	Spike Added (mg/kg)	Average Percent Recovery	RPD	QC Limits	
				Percent Recovery	RPD
Diesel	41.8	82	2	44-105	18

METHOD BLANK RESULT

Lab Id.	Extractable Hydrocarbons as Diesel (mg/kg)
040794-METHOD BLANK	ND
Reporting Limit	1



QUALITY CONTROL DATA

INSTRUMENT: H  
CLIENT PROJ. ID: 3042

AEN JOB NO: 9404058  
AEN LAB NO: 0408-BLANK  
DATE ANALYZED: 04/08/94

HYDROCARBONS  
METHOD: EPA 5030 GCFID  
(SOIL MATRIX)

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	CONCENTRATION (mg/kg)	REPORTING LIMIT (mg/kg)
<hr/>		
PURGEABLE HYDROCARBONS AS:		
Gasoline	ND	0.2

QUALITY CONTROL DATA

INSTRUMENT: H  
CLIENT PROJ. ID: 3042

AEN JOB NO: 9404058  
AEN LAB NO: 0409-BLANK  
DATE ANALYZED: 04/09/94

HYDROCARBONS  
METHOD: EPA 5030 GCFID  
(SOIL MATRIX)

---

	CONCENTRATION (mg/kg)	REPORTING LIMIT (mg/kg)
<hr/>		
PURGEABLE HYDROCARBONS AS:		
Gasoline	ND	0.2

QUALITY CONTROL DATA

INSTRUMENT: H  
CLIENT PROJ. ID: 3042

AEN JOB NO: 9404058  
AEN LAB NO: 0410-BLANK  
DATE ANALYZED: 04/10/94

HYDROCARBONS  
METHOD: EPA 5030 GCFID  
(SOIL MATRIX)

---

	CONCENTRATION (mg/kg)	REPORTING LIMIT (mg/kg)
<hr/>		
PURGEABLE HYDROCARBONS AS:		
Gasoline	ND	0.2

QUALITY CONTROL DATA

INSTRUMENT: H  
CLIENT PROJ. ID: 3042

AEN JOB NO: 9404058  
AEN LAB NO: 0411-BLANK  
DATE ANALYZED: 04/11/94

HYDROCARBONS  
METHOD: EPA 5030 GCFID  
(SOIL MATRIX)

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	CONCENTRATION (mg/kg)	REPORTING LIMIT (mg/kg)
<hr/>		
PURGEABLE HYDROCARBONS AS:		
Gasoline	ND	0.2

QUALITY CONTROL DATA

INSTRUMENT: H  
CLIENT PROJ. ID: 3042

AEN JOB NO: 9404058  
AEN LAB NO: 0412-BLANK  
DATE ANALYZED: 04/12/94

HYDROCARBONS  
METHOD: EPA 5030 GCFID  
(SOIL MATRIX)

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	CONCENTRATION (mg/kg)	REPORTING LIMIT (mg/kg)
<hr/>		
PURGEABLE HYDROCARBONS AS:		
Gasoline	ND	0.2

QUALITY CONTROL DATA

INSTRUMENT: H  
CLIENT PROJ. ID: 3042

AEN JOB NO: 9404058  
AEN LAB NO: 0413-BLANK  
DATE ANALYZED: 04/13/94

HYDROCARBONS  
METHOD: EPA 5030 GCFID  
(SOIL MATRIX)

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	CONCENTRATION (mg/kg)	REPORTING LIMIT (mg/kg)
<hr/>		
PURGEABLE HYDROCARBONS AS:		
Gasoline	ND	0.2

## QUALITY CONTROL DATA

CLIENT PROJ. ID: 3042

AEN JOB NO: 9404058

INSTRUMENT: H

SURROGATE STANDARD RECOVERY SUMMARY  
 METHOD: EPA 5030 GCFID  
 (SOIL MATRIX)

Date Analyzed	SAMPLE IDENTIFICATION		SURROGATE RECOVERY (PERCENT)
	Client Id.	Lab Id.	Fluorobenzene
04/10/94	SB-7-3.0	01	102
04/08/94	SB-7-11.0	03	103
04/08/94	SB-6-7.0	06	102
04/10/94	SB-6-10.0	07	101
04/08/94	SB-3-4.0	10	111
04/09/94	SB-3-10.0	11	110
04/09/94	SB-2-4.0	14	107
04/09/94	SB-2-11.5	15	103
04/11/94	SB-1-4.0	18	111
04/11/94	SB-1-11.5	19	101
04/10/94	SB-4-7.0	22	105
04/11/94	SB-4-12.5	23	103
04/13/94	SB-8-7.0	27	104
04/13/94	SB-8-9.5	28	103
04/11/94	SB-5-6.5	29	103
04/13/94	SB-5-10.0	30	99

## CURRENT QC LIMITS

<u>ANALYTE</u>	<u>PERCENT RECOVERY</u>
Fluorobenzene	(70-115)

QUALITY CONTROL DATA

DATE ANALYZED: 04/08/94  
SAMPLE SPIKED: 9404058-10  
CLIENT PROJ. ID: 3042

AEN JOB NO: 9404058  
INSTRUMENT: H

MATRIX SPIKE RECOVERY SUMMARY  
METHOD: EPA 5030 GCFID  
(SOIL MATRIX)

ANALYTE	Spike Added (ug/kg)	Average Percent Recovery	RPD
Hydrocarbons as Gasoline	1000	99	7

CURRENT QC LIMITS

<u>Analyte</u>	<u>Percent Recovery</u>	<u>RPD</u>
Gasoline	(66-116)	20



## QUALITY CONTROL DATA

INSTRUMENT: 12

AEN JOB NO: 9404058

CLIENT PROJ. ID: 3042

AEN LAB NO: 0412-BLANK

DATE ANALYZED: 04/12/94

EPA METHOD 8240 (SOIL MATRIX)  
VOLATILE ORGANIC COMPOUNDS

COMPOUND	CAS #	CONCENTRATION (ug/kg)	REPORTING LIMIT (ug/kg)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,2-Dichlorobenzene	95-50-1	ND	5
1,3-Dichlorobenzene	541-73-1	ND	5
1,4-Dichlorobenzene	106-46-7	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
cis-1,2-Dichloroethene	156-59-2	ND	5
trans-1,2-Dichloroethene	156-60-5	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	10	5
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, total	1330-20-7	ND	10

## QUALITY CONTROL DATA

INSTRUMENT: 12  
 CLIENT PROJ. ID: 3042

AEN JOB NO: 9404058  
 AEN LAB NO: 0413-BLANK  
 DATE ANALYZED: 04/13/94

EPA METHOD 8240 (SOIL MATRIX)  
 VOLATILE ORGANIC COMPOUNDS

COMPOUND	CAS #	CONCENTRATION (ug/kg)	REPORTING LIMIT (ug/kg)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,2-Dichlorobenzene	95-50-1	ND	5
1,3-Dichlorobenzene	541-73-1	ND	5
1,4-Dichlorobenzene	106-46-7	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
cis-1,2-Dichloroethene	156-59-2	ND	5
trans-1,2-Dichloroethene	156-60-5	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	5	5
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, total	1330-20-7	ND	10

## QUALITY CONTROL DATA

INSTRUMENT: 12

AEN JOB NO: 9404058

CLIENT PROJ. ID: 3042

AEN LAB NO: 0414-BLANK

DATE ANALYZED: 04/14/94

EPA METHOD 8240 (SOIL MATRIX)  
VOLATILE ORGANIC COMPOUNDS

COMPOUND	CAS #	CONCENTRATION (ug/kg)	REPORTING LIMIT (ug/kg)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,2-Dichlorobenzene	95-50-1	ND	5
1,3-Dichlorobenzene	541-73-1	ND	5
1,4-Dichlorobenzene	106-46-7	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
cis-1,2-Dichloroethene	156-59-2	ND	5
trans-1,2-Dichloroethene	156-60-5	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	10	5
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, total	1330-20-7	ND	10

## QUALITY CONTROL DATA

INSTRUMENT: 12

AEN JOB NO: 9404058

CLIENT PROJ. ID: 3042

SURROGATE STANDARD RECOVERY SUMMARY  
METHOD: EPA 8240  
(SOIL MATRIX)

SAMPLE IDENTIFICATION			SURROGATE RECOVERY (PERCENT)		
Date Analyzed	Sample Id.	Lab Id.	1,2-Dichloroethane-d <sub>4</sub>	Toluene-d <sub>8</sub>	p-Bromofluorobenzene
04/13/94	SB-7-3.0	01	100	97	103
04/12/94	SB-7-11.0	03	90	108	107
04/13/94	SB-6-7.0	06	89	106	107
04/14/94	SB-6-10.0	07	97	104	103
04/13/94	SB-3-4.0	10	116	118	92
04/12/94	SB-3-10.0	11	98	116	95
04/12/94	SB-2-4.0	14	91	109	95
04/12/94	SB-2-11.5	15	88	104	102
04/13/94	SB-1-4.0	18	96	112	85
04/13/94	SB-1-11.5	19	93	102	107
04/13/94	SB-4-7.0	22	98	106	97
04/14/94	SB-4-12.5	23	97	113	109
04/13/94	SB-8-7.0	27	98	100	108
04/13/94	SB-8-9.5	28	105	102	104
04/13/94	SB-5-6.5	29	105	109	102
04/13/94	SB-5-10.0	30	106	108	105

## CURRENT QC LIMITS

<u>ANALYTE</u>	<u>PERCENT RECOVERY</u>
1,2-Dichloroethane-d <sub>4</sub>	(68-141)
Toluene-d <sub>8</sub>	(89-119)
p-Bromofluorobenzene	(85-112)

QUALITY CONTROL DATA

DATE ANALYZED: 04/13/94  
 SAMPLE SPIKED: 9404058-22  
 CLIENT PROJ. ID: 3042

AEN JOB NO: 9404058  
 INSTRUMENT: 12

MATRIX SPIKE RECOVERY SUMMARY  
 METHOD: EPA 8240  
 (SOIL MATRIX)

ANALYTE	Spike Added (ug/kg)	Average Percent Recovery	RPD
1,1-Dichloroethene	50.0	115	3
Trichloroethene	50.0	101	4
Benzene	50.0	117	2
Toluene	50.0	111	2
Chlorobenzene	50.0	108	<1

CURRENT QC LIMITS

Analyte	Percent Recovery	RPD
1,1-Dichloroethene	(66-143)	15
Trichloroethene	(60-127)	12
Benzene	(88-117)	10
Toluene	(70-126)	14
Chlorobenzene	(89-111)	13

QUALITY CONTROL DATA

MATRIX: SOIL

AEN JOB NO: 9404058

CLIENT PROJ. ID: 3042

DATE DIGESTED: 04/13/94

MATRIX SPIKE RECOVERY SUMMARY

Compound	Inst./ Method	Sample Spiked	Sample Result (mg/kg)	Spike Added (mg/kg)	Average Percent Recovery	RPD	QC Limits	
							% Rec. Limit	RPD Limit
As, Arsenic	4000/7060	9404058-21	5.0	20	118	1	36-140	21

SAMPLE SPIKED: SAND

METHOD BLANK AND SPIKE RECOVERY SUMMARY

Compound	Inst./ Method	Blank Result (mg/kg)	Spike Added (mg/kg)	Average Percent Recovery	RPD	QC Limits	
						% Rec. Limit	RPD Limit
As, Arsenic	4000/7060	ND	20	117	6	79-122	10

\*\*\* END OF REPORT \*\*\*

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

Page 1 of 1  
9404058

Project No.: 3042      Field Logbook No.:      Date: 4-6-94      Serial No.:  
 Project Name: R. F. Kin      Project Location: Emeryville, Ca.      No. 12448

SAMPLERS					ANALYSES							SAMPLERS: KAG	REMARKS	
SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CONTAINERS	SAMPLE TYPE	EPA 601	EPA 624	EPA 8240	TPH(S)	TPH(Cl)	Arsenic			HOLD
SB-7-3.0	4-4-94	955	01A	1	Soil			X	X	X				
SB-7-7.0		1020	02A					X	X	X		X		
SB-7-11.0		1040	03A					X	X	X				
SB-7-2.5		1000	04A											
SB-7-3.5		1005	↓											
SB-7-11.0		1040	05A							X		X	RB	
SB-6-7.0		1145	06A					X	X	X				results to Kanton Bee
SB-6-10.0		1240	07A					X	X	X				
SB-6-7.5		1145	08A									X		
SB-6-8.5		1230	↓									X		
SB-6-9.5		1235	09A							X		X	RB	Samples off hold per Kanton GEE 4/6/94 RBjars
SB-3-4.0		1535	10A					X	X	X				
SB-3-10.0		1540	11A					X	X	X				
SB-3-3.5		1515	12A									X		
SB-3-7.0		1520	↓									X		
SB-3-9.5	✓	1545	13A	✓	✓					X		X	RB	

RELINQUISHED BY: (Signature) <i>[Signature]</i>	DATE 4/4/94	TIME 12:05	RECEIVED BY: (Signature) <i>[Signature]</i>	DATE 4/6/94	TIME 12:05
RELINQUISHED BY: (Signature) <i>[Signature]</i>	DATE 4/6/94	TIME 12:50	RECEIVED BY: (Signature) <i>[Signature]</i>	DATE 4-6-94	TIME 12:50
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME

METHOD OF SHIPMENT:      DATE      TIME      LAB COMMENTS:

Sample Collector: LEVINE-FRICKE  
 1900 Powell Street, 12th Floor  
 Emeryville, California 94608  
 (510) 652-4500

Analytical Laboratory: AEN

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

940 4058

Project No.: 3042      Field Logbook No.:      Date: 4-6-94      Serial No.:  
 Project Name: Rifkin      Project Location: Emeryville, Ca.      No. 12450

Sampler (Signature): *Kenton Gee*      ANALYSES      Samplers: KAG

Composite

Composite

SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CONTAINERS	SAMPLE TYPE	ANALYSES							REMARKS		
						EPA 601	EPA 624	EPA 824D	TPH (g)	TPH (d)	Arsenic	HOLD		RUSH	
SB-2-4.0	4-5-94	910	14A	1	Soil			X	X	X					
SB-2-11.5		920	15A					X	X	X					
SB-2-2.0		900	16A								X				
SB-2-3.5		905	↓								X				Results to: <i>Kenton Gee</i>
SB-2-6.5		915	↓								X				
SB-2-12.0		925	17A								X	X	RB		
SB-1-4.0		1010	18A					X	X	X					
SB-1-11.5		1025	19A					X	X	X					
SB-1-2.0		1000	20A								X				Samples off hold per Kenton Gee 4/6/94 RB/aw
SB-1-3.5		1005	↓								X				
SB-1-6.5		1015	↓								X				
SB-1-11.0		1020	21A								X	X	RB		
SB-4-7.0		1145	22A					X	X	X					
SB-4-12.5		1155	23A					X	X	X					
SB-4-12.0	↓	1150	24A	↓	↓						X	X	RB		

RELINQUISHED BY: (Signature) <i>[Signature]</i>	DATE 4/6/94	TIME 12:05	RECEIVED BY: (Signature) <i>Michael E Mc Miller</i>	DATE 4/6/94	TIME 12:05
RELINQUISHED BY: (Signature) <i>Michael E Mc Miller</i>	DATE 4/6/94	TIME 12:50	RECEIVED BY: (Signature) <i>Guia Gillespie</i>	DATE 4-6-94	TIME 1250
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
METHOD OF SHIPMENT:	DATE	TIME	LAB COMMENTS:		

Sample Collector: LEVINE-FRICKE  
 1900 Powell Street, 12th Floor  
 Emeryville, California 94608  
 (510) 652-4500

Analytical Laboratory: AEN



CHAIN OF CUSTODY / ANALYSES REQUEST FORM

9404058

Project No.: 3042      Field Logbook No.:      Date: 4-6-94      Serial No.:  
 Project Name: Rifkin      Project Location: Emeryville, Ca.      No. 12452

Sampler (Signature): *Kenton Bee*      ANALYSES      Samplers: KAG

SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CON-TAINERS	SAMPLE TYPE	ANALYSES										REMARKS	
						EPA 601	EPA 624	FOA 8240	PH 9	PH 8	Arsenic	HOLD	RUSH				
SB-4-2.0	4-5-94	1130	25A	1	soil												Arsenic
SB-4-4.0		1135	↓	1													
SB-4-6.5		1140	↓	1													
SB-8-3.5		1335	26A	1			X	X	X			X					Composite
SB-8-7.0		1340	27A	1			X	X	X							Results to:	
SB-8-9.5		1345	28A	1			X	X	X							Kenton Bee	
SB-5-6.5		1535	29A	1			X	X	X								Composite
SB-5-10.0		1545	30A	1			X	X	X								
SB-8-2.0		1330	31A	1								X				Samples off hold per	
SB-8-4.0		1337	↓	1								X				Kenton Bee 4-6-94 R. Bayans	
SB-8-6.5		1339	↓	1								X					
SB-8-10.0		1347	32A	1								X	X				
SB-5-4.0		1530	33A	1								X					
SB-5-7.0		1540	↓	1								X					
SB-5-9.5	✓	1550	34A	✓	✓							X	X				

RELINQUISHED BY: <i>[Signature]</i>	DATE: 4/4/94	TIME: 12:05	RECEIVED BY: <i>Michael E. McJannet</i>	DATE: 4/6/94	TIME: 12:00
RELINQUISHED BY: <i>Michael E. McJannet</i>	DATE: 4/6/94	TIME: 12:50	RECEIVED BY: <i>Amy Gillespie</i>	DATE: 4-6-94	TIME: 1250
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
METHOD OF SHIPMENT:	DATE	TIME	LAB COMMENTS:		

Sample Collector: LEVINE-FRICKE  
 1900 Powell Street, 12th Floor  
 Emeryville, California 94608  
 (510) 652-4500

Analytical Laboratory: AEN

# American Environmental Network

## Certificate of Analysis

DOHS Certification: 1172

AIHA Accreditation: 11134

PAGE 1

LEVINE-FRICKE  
1900 POWELL ST. 12TH FL.  
EMERYVILLE, CA 94608

REPORT DATE: 04/18/94

DATE(S) SAMPLED: 04/04/94-04/05/94

DATE RECEIVED: 04/06/94

AEN WORK ORDER: 9404064

ATTN: KENTON GEE  
CLIENT PROJ. ID: 3042  
CLIENT PROJ. NAME: RIFKIN  
C.O.C. NUMBER: 12447


### PROJECT SUMMARY:

On April 6, 1994, this laboratory received 8 water sample(s).

Client requested samples be analyzed for inorganic and organic parameters. Sample SB-2-GW was analyzed in duplicate, but insufficient sample was received for diesel analysis. Sample identification, methodologies, results and dates analyzed are summarized on the following pages.

Please see quality control report for a summary of QC data pertaining to this project.

If you have any questions, please contact Client Services at (510) 930-9090.

  
Larry Klein  
General Manager



COPY

## LEVINE-FRICKE

SAMPLE ID: SB-7-GW  
 AEN LAB NO: 9404064-01A  
 AEN WORK ORDER: 9404064  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/04/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
VOCs in Water by 8240	EPA 8240				
Acetone	67-64-1	5.000 *	500	ug/L	04/14/94
Benzene	71-43-2	ND	30	ug/L	04/14/94
Bromodichloromethane	75-27-4	ND	30	ug/L	04/14/94
Bromoform	75-25-2	ND	30	ug/L	04/14/94
Bromomethane	74-83-9	ND	50	ug/L	04/14/94
2-Butanone	78-93-3	620 *	500	ug/L	04/14/94
Carbon Disulfide	75-15-0	ND	50	ug/L	04/14/94
Carbon Tetrachloride	56-23-5	ND	30	ug/L	04/14/94
Chlorobenzene	108-90-7	ND	30	ug/L	04/14/94
Chloroethane	75-00-3	ND	50	ug/L	04/14/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	50	ug/L	04/14/94
Chloroform	67-66-3	ND	30	ug/L	04/14/94
Chloromethane	74-87-3	ND	50	ug/L	04/14/94
Dibromochloromethane	124-48-1	ND	30	ug/L	04/14/94
1,1-Dichloroethane	75-34-3	ND	30	ug/L	04/14/94
1,2-Dichloroethane	107-06-2	ND	30	ug/L	04/14/94
1,1-Dichloroethene	75-35-4	ND	30	ug/L	04/14/94
cis-1,2-Dichloroethene	156-59-2	ND	30	ug/L	04/14/94
trans-1,2-Dichloroethene	156-60-5	ND	30	ug/L	04/14/94
1,2-Dichloropropane	78-87-5	ND	30	ug/L	04/14/94
cis-1,3-Dichloropropene	10061-01-5	ND	30	ug/L	04/14/94
trans-1,3-Dichloropropene	10061-02-6	ND	30	ug/L	04/14/94
Ethylbenzene	100-41-4	68 *	30	ug/L	04/14/94
2-Hexanone	591-78-6	ND	300	ug/L	04/14/94
Methylene Chloride	75-09-2	ND	30	ug/L	04/14/94
4-Methyl-2-pentanone	108-10-1	940 *	300	ug/L	04/14/94
Styrene	100-42-5	ND	30	ug/L	04/14/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	30	ug/L	04/14/94
Tetrachloroethene	127-18-4	ND	30	ug/L	04/14/94
Toluene	108-88-3	280 *	30	ug/L	04/14/94
1,1,1-Trichloroethane	71-55-6	ND	30	ug/L	04/14/94
1,1,2-Trichloroethane	79-00-5	ND	30	ug/L	04/14/94
Trichloroethene	79-01-6	ND	30	ug/L	04/14/94
Vinyl Acetate	108-05-4	ND	300	ug/L	04/14/94
Vinyl Chloride	75-01-4	ND	50	ug/L	04/14/94
Xylenes, Total	1330-20-7	120 *	50	ug/L	04/14/94

ND = Not detected at or above the reporting limit  
 \* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: SB-7-GW  
AEN LAB NO: 9404064.01C  
AEN WORK ORDER: 9404064  
CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/04/94  
DATE RECEIVED: 04/06/94  
REPORT DATE: 04/18/94

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas	5030/GC-FID	ND	30	mg/L	04/08/94

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Reporting limit elevated for gasoline due to hydro-carbon interference in the diesel/kerosene range.

ND = Not detected at or above the reporting limit  
\* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: SB-7-GW  
 AEN LAB NO: 9404064-01E  
 AEN WORK ORDER: 9404064  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/04/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for Diesel/Oil	EPA 3510	-			Extrn Date 04/07/94
TPH as Diesel	GC-FID	51 *	0.05	mg/L	04/08/94

ND = Not detected at or above the reporting limit  
 \* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: SB-7-GW  
 AEN LAB NO: 9404064.01G  
 AEN WORK ORDER: 9404064  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/04/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	04/06/94
#Digestion, Metals by GFAA	EPA 3020	-		Prep Date	04/12/94
Arsenic	EPA 7060	0.18 *	0.002	mg/L	04/13/94

Sample fraction was filtered through a 0.45 um filter and preserved with nitric acid to a pH of <2 upon receipt.

ND = Not detected at or above the reporting limit  
 \* = Value above reporting limit

## LEVINE-FRICKE

SAMPLE ID: SB-6-GW  
 AEN LAB NO: 9404064.02A  
 AEN WORK ORDER: 9404064  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/04/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
VOCs in Water by 8240	EPA 8240				
Acetone	67-64-1	ND	100	ug/L	04/14/94
Benzene	71-43-2	22 *	5	ug/L	04/14/94
Bromodichloromethane	75-27-4	ND	5	ug/L	04/14/94
Bromoform	75-25-2	ND	5	ug/L	04/14/94
Bromomethane	74-83-9	ND	10	ug/L	04/14/94
2-Butanone	78-93-3	ND	100	ug/L	04/14/94
Carbon Disulfide	75-15-0	ND	10	ug/L	04/14/94
Carbon Tetrachloride	56-23-5	ND	5	ug/L	04/14/94
Chlorobenzene	108-90-7	ND	5	ug/L	04/14/94
Chloroethane	75-00-3	ND	10	ug/L	04/14/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/L	04/14/94
Chloroform	67-66-3	ND	5	ug/L	04/14/94
Chloromethane	74-87-3	ND	10	ug/L	04/14/94
Dibromochloromethane	124-48-1	ND	5	ug/L	04/14/94
1,1-Dichloroethane	75-34-3	ND	5	ug/L	04/14/94
1,2-Dichloroethane	107-06-2	ND	5	ug/L	04/14/94
1,1-Dichloroethene	75-35-4	ND	5	ug/L	04/14/94
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/L	04/14/94
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/L	04/14/94
1,2-Dichloropropane	78-87-5	ND	5	ug/L	04/14/94
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/L	04/14/94
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/L	04/14/94
Ethylbenzene	100-41-4	ND	5	ug/L	04/14/94
2-Hexanone	591-78-6	ND	50	ug/L	04/14/94
Methylene Chloride	75-09-2	ND	5	ug/L	04/14/94
4-Methyl-2-pentanone	108-10-1	50 *	50	ug/L	04/14/94
Styrene	100-42-5	ND	5	ug/L	04/14/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/L	04/14/94
Tetrachloroethene	127-18-4	ND	5	ug/L	04/14/94
Toluene	108-88-3	70 *	5	ug/L	04/14/94
1,1,1-Trichloroethane	71-55-6	ND	5	ug/L	04/14/94
1,1,2-Trichloroethane	79-00-5	ND	5	ug/L	04/14/94
Trichloroethene	79-01-6	ND	5	ug/L	04/14/94
Vinyl Acetate	108-05-4	ND	50	ug/L	04/14/94
Vinyl Chloride	75-01-4	ND	10	ug/L	04/14/94
Xylenes, Total	1330-20-7	13 *	10	ug/L	04/14/94

ND = Not detected at or above the reporting limit  
 \* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: SB-6-GW  
AEN LAB NO: 9404064-02C  
AEN WORK ORDER: 9404064  
CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/04/94  
DATE RECEIVED: 04/06/94  
REPORT DATE: 04/18/94

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas	5030/GC-FID	ND	2	mg/L	04/13/94

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Reporting limit elevated for gasoline due to hydrocarbon interference in the diesel/kerosene range.

ND = Not detected at or above the reporting limit  
\* = Value above reporting limit



LEVINE-FRICKE

SAMPLE ID: SB-6-GW  
AEN LAB NO: 9404064-02E  
AEN WORK ORDER: 9404064  
CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/04/94  
DATE RECEIVED: 04/06/94  
REPORT DATE: 04/18/94

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for Diesel/Oil	EPA 3510	-		Extrn Date	04/07/94
TPH as Diesel	GC-FID	28 *	0.05	mg/L	04/08/94

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ND = Not detected at or above the reporting limit  
\* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: SB-6-GW  
 AEN LAB NO: 9404064-02F  
 AEN WORK ORDER: 9404064  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/04/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	04/06/94
#Digestion, Metals by GFAA	EPA 3020	-		Prep Date	04/12/94
Arsenic	EPA 7060	0.030 *	0.002	mg/L	04/15/94

Sample fraction was filtered through a 0.45 um filter and preserved with nitric acid to a pH of <2 upon receipt.

ND = Not detected at or above the reporting limit  
 \* = Value above reporting limit

## LEVINE-FRICKE

SAMPLE ID: SB-8-GW  
 AEN LAB NO: 9404064-03A  
 AEN WORK ORDER: 9404064  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
VOCs in Water by 8240	EPA 8240				
Acetone	67-64-1	ND	200000	ug/L	04/14/94
Benzene	71-43-2	ND	10000	ug/L	04/14/94
Bromodichloromethane	75-27-4	ND	10000	ug/L	04/14/94
Bromoform	75-25-2	ND	10000	ug/L	04/14/94
Bromomethane	74-83-9	ND	20000	ug/L	04/14/94
2-Butanone	78-93-3	ND	200000	ug/L	04/14/94
Carbon Disulfide	75-15-0	ND	20000	ug/L	04/14/94
Carbon Tetrachloride	56-23-5	ND	10000	ug/L	04/14/94
Chlorobenzene	108-90-7	ND	10000	ug/L	04/14/94
Chloroethane	75-00-3	ND	20000	ug/L	04/14/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	20000	ug/L	04/14/94
Chloroform	67-66-3	ND	10000	ug/L	04/14/94
Chloromethane	74-87-3	ND	20000	ug/L	04/14/94
Dibromochloromethane	124-48-1	ND	10000	ug/L	04/14/94
1,1-Dichloroethane	75-34-3	ND	10000	ug/L	04/14/94
1,2-Dichloroethane	107-06-2	ND	10000	ug/L	04/14/94
1,1-Dichloroethene	75-35-4	ND	10000	ug/L	04/14/94
cis-1,2-Dichloroethene	156-59-2	ND	10000	ug/L	04/14/94
trans-1,2-Dichloroethene	156-60-5	ND	10000	ug/L	04/14/94
1,2-Dichloropropane	78-87-5	ND	10000	ug/L	04/14/94
cis-1,3-Dichloropropene	10061-01-5	ND	10000	ug/L	04/14/94
trans-1,3-Dichloropropene	10061-02-6	ND	10000	ug/L	04/14/94
Ethylbenzene	100-41-4	ND	10000	ug/L	04/14/94
2-Hexanone	591-78-6	ND	100000	ug/L	04/14/94
Methylene Chloride	75-09-2	ND	10000	ug/L	04/14/94
4-Methyl-2-pentanone	108-10-1	ND	100000	ug/L	04/14/94
Styrene	100-42-5	ND	10000	ug/L	04/14/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	10000	ug/L	04/14/94
Tetrachloroethene	127-18-4	ND	10000	ug/L	04/14/94
Toluene	108-88-3	210.000 *	10000	ug/L	04/14/94
1,1,1-Trichloroethane	71-55-6	ND	10000	ug/L	04/14/94
1,1,2-Trichloroethane	79-00-5	ND	10000	ug/L	04/14/94
Trichloroethene	79-01-6	ND	10000	ug/L	04/14/94
Vinyl Acetate	108-05-4	ND	100000	ug/L	04/14/94
Vinyl Chloride	75-01-4	ND	20000	ug/L	04/14/94
Xylenes, Total	1330-20-7	20.000 *	20000	ug/L	04/14/94

ND = Not detected at or above the reporting limit

\* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: SB-8-GW  
AEN LAB NO: 9404064-03C  
AEN WORK ORDER: 9404064  
CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
DATE RECEIVED: 04/06/94  
REPORT DATE: 04/18/94

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas	5030/GC-FID	280 *	0.05	mg/L	04/12/94

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ND = Not detected at or above the reporting limit  
\* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: SB-8-GW  
 AEN LAB NO: 9404064-03E  
 AEN WORK ORDER: 9404064  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for Diesel/Oil	EPA 3510	-			Extrn Date 04/07/94
TPH as Diesel	GC-FID	0.4 *	0.05	mg/L	04/08/94

ND = Not detected at or above the reporting limit  
 \* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: SB-8-GW  
 AEN LAB NO: 9404064-03G  
 AEN WORK ORDER: 9404064  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	04/06/94
#Digestion, Metals by GFAA	EPA 3020	-		Prep Date	04/12/94
Arsenic	EPA 7060	430 *	0.002	mg/L	04/15/94

Sample fraction was filtered through a 0.45 um filter and preserved with nitric acid to a pH of <2 upon receipt.

ND = Not detected at or above the reporting limit  
 \* = Value above reporting limit

## LEVINE-FRICKE

SAMPLE ID: SB-4-GW  
 AEN LAB NO: 9404064-04A  
 AEN WORK ORDER: 9404064  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
VOCs in Water by 8240	EPA 8240				
Acetone	67-64-1	ND	100	ug/L	04/14/94
Benzene	71-43-2	ND	5	ug/L	04/14/94
Bromodichloromethane	75-27-4	ND	5	ug/L	04/14/94
Bromoform	75-25-2	ND	5	ug/L	04/14/94
Bromomethane	74-83-9	ND	10	ug/L	04/14/94
2-Butanone	78-93-3	ND	100	ug/L	04/14/94
Carbon Disulfide	75-15-0	ND	10	ug/L	04/14/94
Carbon Tetrachloride	56-23-5	ND	5	ug/L	04/14/94
Chlorobenzene	108-90-7	ND	5	ug/L	04/14/94
Chloroethane	75-00-3	ND	10	ug/L	04/14/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/L	04/14/94
Chloroform	67-66-3	ND	5	ug/L	04/14/94
Chloromethane	74-87-3	ND	10	ug/L	04/14/94
Dibromochloromethane	124-48-1	ND	5	ug/L	04/14/94
1,1-Dichloroethane	75-34-3	ND	5	ug/L	04/14/94
1,2-Dichloroethane	107-06-2	ND	5	ug/L	04/14/94
1,1-Dichloroethene	75-35-4	ND	5	ug/L	04/14/94
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/L	04/14/94
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/L	04/14/94
1,2-Dichloropropane	78-87-5	ND	5	ug/L	04/14/94
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/L	04/14/94
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/L	04/14/94
Ethylbenzene	100-41-4	ND	5	ug/L	04/14/94
2-Hexanone	591-78-6	ND	50	ug/L	04/14/94
Methylene Chloride	75-09-2	ND	5	ug/L	04/14/94
4-Methyl-2-pentanone	108-10-1	ND	50	ug/L	04/14/94
Styrene	100-42-5	ND	5	ug/L	04/14/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/L	04/14/94
Tetrachloroethene	127-18-4	ND	5	ug/L	04/14/94
Toluene	108-88-3	ND	5	ug/L	04/14/94
1,1,1-Trichloroethane	71-55-6	ND	5	ug/L	04/14/94
1,1,2-Trichloroethane	79-00-5	ND	5	ug/L	04/14/94
Trichloroethene	79-01-6	ND	5	ug/L	04/14/94
Vinyl Acetate	108-05-4	ND	50	ug/L	04/14/94
Vinyl Chloride	75-01-4	ND	10	ug/L	04/14/94
Xylenes, Total	1330-20-7	ND	10	ug/L	04/14/94

ND = Not detected at or above the reporting limit  
 \* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: SB-4-GW  
AEN LAB NO: 9404064-04C  
AEN WORK ORDER: 9404064  
CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
DATE RECEIVED: 04/06/94  
REPORT DATE: 04/18/94

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
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TPH as Gas	5030/GC-FID	ND	5	mg/L	04/08/94
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Reporting limit elevated for gasoline due to hydro-carbon interference in the diesel/kerosene range.

ND = Not detected at or above the reporting limit  
\* = Value above reporting limit



LEVINE-FRICKE

SAMPLE ID: SB-4-GW  
AEN LAB NO: 9404064-04E  
AEN WORK ORDER: 9404064  
CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
DATE RECEIVED: 04/06/94  
REPORT DATE: 04/18/94

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for Diesel/Oil	EPA 3510	-		Extrn Date	04/07/94
TPH as Diesel	GC-FID	4.2 *	0.05	mg/L	04/07/94

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ND = Not detected at or above the reporting limit  
\* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: SB-4-GW  
 AEN LAB NO: 9404064-04F  
 AEN WORK ORDER: 9404064  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	04/06/94
#Digestion, Metals by GFAA	EPA 3020	-		Prep Date	04/12/94
Arsenic	EPA 7060	0.20 *	0.002	mg/L	04/15/94

Sample fraction was filtered through a 0.45 um filter and preserved with nitric acid to a pH of <2 upon receipt.

ND = Not detected at or above the reporting limit  
 \* = Value above reporting limit

## LEVINE-FRICKE

SAMPLE ID: SB-5-GW  
 AEN LAB NO: 9404064-05A  
 AEN WORK ORDER: 9404064  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
VOCs in Water by 8240	EPA 8240				
Acetone	67-64-1	ND	500	ug/L	04/14/94
Benzene	71-43-2	ND	30	ug/L	04/14/94
Bromodichloromethane	75-27-4	ND	30	ug/L	04/14/94
Bromoform	75-25-2	ND	30	ug/L	04/14/94
Bromomethane	74-83-9	ND	50	ug/L	04/14/94
2-Butanone	78-93-3	ND	500	ug/L	04/14/94
Carbon Disulfide	75-15-0	ND	50	ug/L	04/14/94
Carbon Tetrachloride	56-23-5	ND	30	ug/L	04/14/94
Chlorobenzene	108-90-7	ND	30	ug/L	04/14/94
Chloroethane	75-00-3	ND	50	ug/L	04/14/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	50	ug/L	04/14/94
Chloroform	67-66-3	ND	30	ug/L	04/14/94
Chloromethane	74-87-3	ND	50	ug/L	04/14/94
Dibromochloromethane	124-48-1	ND	30	ug/L	04/14/94
1,1-Dichloroethane	75-34-3	ND	30	ug/L	04/14/94
1,2-Dichloroethane	107-06-2	ND	30	ug/L	04/14/94
1,1-Dichloroethene	75-35-4	ND	30	ug/L	04/14/94
cis-1,2-Dichloroethene	156-59-2	ND	30	ug/L	04/14/94
trans-1,2-Dichloroethene	156-60-5	ND	30	ug/L	04/14/94
1,2-Dichloropropane	78-87-5	ND	30	ug/L	04/14/94
cis-1,3-Dichloropropene	10061-01-5	ND	30	ug/L	04/14/94
trans-1,3-Dichloropropene	10061-02-6	ND	30	ug/L	04/14/94
Ethylbenzene	100-41-4	ND	30	ug/L	04/14/94
2-Hexanone	591-78-6	ND	300	ug/L	04/14/94
Methylene Chloride	75-09-2	ND	30	ug/L	04/14/94
4-Methyl-2-pentanone	108-10-1	ND	300	ug/L	04/14/94
Styrene	100-42-5	ND	30	ug/L	04/14/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	30	ug/L	04/14/94
Tetrachloroethene	127-18-4	ND	30	ug/L	04/14/94
Toluene	108-88-3	240 *	30	ug/L	04/14/94
1,1,1-Trichloroethane	71-55-6	ND	30	ug/L	04/14/94
1,1,2-Trichloroethane	79-00-5	ND	30	ug/L	04/14/94
Trichloroethene	79-01-6	ND	30	ug/L	04/14/94
Vinyl Acetate	108-05-4	ND	300	ug/L	04/14/94
Vinyl Chloride	75-01-4	ND	50	ug/L	04/14/94
Xylenes, Total	1330-20-7	61 *	50	ug/L	04/14/94

ND = Not detected at or above the reporting limit

\* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: SB-5-GW  
AEN LAB NO: 9404064.05C  
AEN WORK ORDER: 9404064  
CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
DATE RECEIVED: 04/06/94  
REPORT DATE: 04/18/94

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas	5030/GC-FID	0.9 *	0.05	mg/L	04/08/94

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ND = Not detected at or above the reporting limit  
\* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: SB-5-GW  
AEN LAB NO: 9404064-05E  
AEN WORK ORDER: 9404064  
CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
DATE RECEIVED: 04/06/94  
REPORT DATE: 04/18/94

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for Diesel/Oil	EPA 3510	-		Extrn Date	04/07/94
TPH as Diesel	GC-FID	0.4 *	0.05	mg/L	04/07/94

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ND = Not detected at or above the reporting limit  
\* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: SB-5-GW  
AEN LAB NO: 9404064-05F  
AEN WORK ORDER: 9404064  
CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
DATE RECEIVED: 04/06/94  
REPORT DATE: 04/18/94

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	04/06/94
#Digestion, Metals by GFAA	EPA 3020	-		Prep Date	04/12/94
Arsenic	EPA 7060	0.052 *	0.002	mg/L	04/15/94

Sample fraction was filtered through a 0.45 um filter and preserved with nitric acid to a pH of <2 upon receipt.

ND = Not detected at or above the reporting limit  
\* = Value above reporting limit

## LEVINE-FRICKE

SAMPLE ID: SB-2-GW  
 AEN LAB NO: 9404064-06A  
 AEN WORK ORDER: 9404064  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
VOCs in Water by 8240	EPA 8240				
Acetone	67-64-1	ND	100	ug/L	04/14/94
Benzene	71-43-2	ND	5	ug/L	04/14/94
Bromodichloromethane	75-27-4	ND	5	ug/L	04/14/94
Bromoform	75-25-2	ND	5	ug/L	04/14/94
Bromomethane	74-83-9	ND	10	ug/L	04/14/94
2-Butanone	78-93-3	ND	100	ug/L	04/14/94
Carbon Disulfide	75-15-0	ND	10	ug/L	04/14/94
Carbon Tetrachloride	56-23-5	ND	5	ug/L	04/14/94
Chlorobenzene	108-90-7	ND	5	ug/L	04/14/94
Chloroethane	75-00-3	ND	10	ug/L	04/14/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/L	04/14/94
Chloroform	67-66-3	ND	5	ug/L	04/14/94
Chloromethane	74-87-3	ND	10	ug/L	04/14/94
Dibromochloromethane	124-48-1	ND	5	ug/L	04/14/94
1,1-Dichloroethane	75-34-3	ND	5	ug/L	04/14/94
1,2-Dichloroethane	107-06-2	ND	5	ug/L	04/14/94
1,1-Dichloroethene	75-35-4	ND	5	ug/L	04/14/94
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/L	04/14/94
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/L	04/14/94
1,2-Dichloropropane	78-87-5	ND	5	ug/L	04/14/94
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/L	04/14/94
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/L	04/14/94
Ethylbenzene	100-41-4	ND	5	ug/L	04/14/94
2-Hexanone	591-78-6	ND	50	ug/L	04/14/94
Methylene Chloride	75-09-2	ND	5	ug/L	04/14/94
4-Methyl-2-pentanone	108-10-1	ND	50	ug/L	04/14/94
Styrene	100-42-5	ND	5	ug/L	04/14/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/L	04/14/94
Tetrachloroethene	127-18-4	ND	5	ug/L	04/14/94
Toluene	108-88-3	ND	5	ug/L	04/14/94
1,1,1-Trichloroethane	71-55-6	ND	5	ug/L	04/14/94
1,1,2-Trichloroethane	79-00-5	ND	5	ug/L	04/14/94
Trichloroethene	79-01-6	ND	5	ug/L	04/14/94
Vinyl Acetate	108-05-4	ND	50	ug/L	04/14/94
Vinyl Chloride	75-01-4	ND	10	ug/L	04/14/94
Xylenes, Total	1330-20-7	ND	10	ug/L	04/14/94

ND = Not detected at or above the reporting limit

\* = Value above reporting limit

## LEVINE-FRICKE

SAMPLE ID: SB-2-GW (DUPLICATE)  
 AEN LAB NO: 9404064-06B  
 AEN WORK ORDER: 9404064  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
VOCs in Water by 8240	EPA 8240				
Acetone	67-64-1	ND	100	ug/L	04/14/94
Benzene	71-43-2	ND	5	ug/L	04/14/94
Bromodichloromethane	75-27-4	ND	5	ug/L	04/14/94
Bromoform	75-25-2	ND	5	ug/L	04/14/94
Bromomethane	74-83-9	ND	10	ug/L	04/14/94
2-Butanone	78-93-3	ND	100	ug/L	04/14/94
Carbon Disulfide	75-15-0	ND	10	ug/L	04/14/94
Carbon Tetrachloride	56-23-5	ND	5	ug/L	04/14/94
Chlorobenzene	108-90-7	ND	5	ug/L	04/14/94
Chloroethane	75-00-3	ND	10	ug/L	04/14/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/L	04/14/94
Chloroform	67-66-3	ND	5	ug/L	04/14/94
Chloromethane	74-87-3	ND	10	ug/L	04/14/94
Dibromochloromethane	124-48-1	ND	5	ug/L	04/14/94
1,1-Dichloroethane	75-34-3	ND	5	ug/L	04/14/94
1,2-Dichloroethane	107-06-2	ND	5	ug/L	04/14/94
1,1-Dichloroethene	75-35-4	ND	5	ug/L	04/14/94
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/L	04/14/94
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/L	04/14/94
1,2-Dichloropropane	78-87-5	ND	5	ug/L	04/14/94
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/L	04/14/94
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/L	04/14/94
Ethylbenzene	100-41-4	ND	5	ug/L	04/14/94
2-Hexanone	591-78-6	ND	50	ug/L	04/14/94
Methylene Chloride	75-09-2	ND	5	ug/L	04/14/94
4-Methyl-2-pentanone	108-10-1	ND	50	ug/L	04/14/94
Styrene	100-42-5	ND	5	ug/L	04/14/94
1,1,1,2-Tetrachloroethane	79-34-5	ND	5	ug/L	04/14/94
Tetrachloroethene	127-18-4	ND	5	ug/L	04/14/94
Toluene	108-88-3	ND	5	ug/L	04/14/94
1,1,1-Trichloroethane	71-55-6	ND	5	ug/L	04/14/94
1,1,2-Trichloroethane	79-00-5	ND	5	ug/L	04/14/94
Trichloroethene	79-01-6	ND	5	ug/L	04/14/94
Vinyl Acetate	108-05-4	ND	50	ug/L	04/14/94
Vinyl Chloride	75-01-4	ND	10	ug/L	04/14/94
Xylenes, Total	1330-20-7	ND	10	ug/L	04/14/94

ND = Not detected at or above the reporting limit

\* = Value above reporting limit



LEVINE-FRICKE

SAMPLE ID: SB-2-GW  
AEN LAB NO: 9404064-06C  
AEN WORK ORDER: 9404064  
CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
DATE RECEIVED: 04/06/94  
REPORT DATE: 04/18/94

---

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas	5030/GC-FID	ND	4	mg/L	04/12/94

---

Reporting limit elevated for gasoline due to hydrocarbon interference in the diesel/kerosene range.

ND = Not detected at or above the reporting limit  
\* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: SB-2-GW (DUPLICATE)  
AEN LAB NO: 9404064.06D  
AEN WORK ORDER: 9404064  
CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
DATE RECEIVED: 04/06/94  
REPORT DATE: 04/18/94

---

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas	5030/GC-FID	ND	4	mg/L	04/12/94

---

Reporting limit elevated for gasoline due to hydro-carbon interference in the diesel/kerosene range.

ND = Not detected at or above the reporting limit  
\* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: SB-2-GW  
 AEN LAB NO: 9404064.06E  
 AEN WORK ORDER: 9404064  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for Diesel/Oil	EPA 3510	-		Extrn Date	04/07/94
TPH as Diesel	GC-FID	21 *	0.05	mg/L	04/08/94

ND = Not detected at or above the reporting limit  
 \* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: SB-2-GW  
 AEN LAB NO: 9404064.06F  
 AEN WORK ORDER: 9404064  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	04/06/94
#Digestion, Metals by GFAA	EPA 3020	-		Prep Date	04/12/94
Arsenic	EPA 7060	0.11 *	0.002	mg/L	04/15/94

Sample fraction was filtered through a 0.45 um filter and preserved with nitric acid to a pH of <2 upon receipt.

ND = Not detected at or above the reporting limit  
 \* = Value above reporting limit

## LEVINE-FRICKE

SAMPLE ID: SB-2-GW (DUPLICATE)  
AEN LAB NO: 9404064-06G  
AEN WORK ORDER: 9404064  
CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
DATE RECEIVED: 04/06/94  
REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	04/06/94
#Digestion, Metals by GFAA	EPA 3020	-		Prep Date	04/12/94
Arsenic	EPA 7060	0.11 *	0.002	mg/L	04/15/94

Sample fraction was filtered through a 0.45 um filter and preserved with nitric acid to a pH of <2 upon receipt.

ND = Not detected at or above the reporting limit  
\* = Value above reporting limit

## LEVINE - FRICKE

SAMPLE ID: SB-1-GW  
 AEN LAB NO: 9404064-07A  
 AEN WORK ORDER: 9404064  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
VOCs in Water by 8240	EPA 8240				
Acetone	67-64-1	ND	100	ug/L	04/14/94
Benzene	71-43-2	ND	5	ug/L	04/14/94
Bromodichloromethane	75-27-4	ND	5	ug/L	04/14/94
Bromoform	75-25-2	ND	5	ug/L	04/14/94
Bromomethane	74-83-9	ND	10	ug/L	04/14/94
2-Butanone	78-93-3	ND	100	ug/L	04/14/94
Carbon Disulfide	75-15-0	ND	10	ug/L	04/14/94
Carbon Tetrachloride	56-23-5	ND	5	ug/L	04/14/94
Chlorobenzene	108-90-7	ND	5	ug/L	04/14/94
Chloroethane	75-00-3	ND	10	ug/L	04/14/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/L	04/14/94
Chloroform	67-66-3	ND	5	ug/L	04/14/94
Chloromethane	74-87-3	ND	10	ug/L	04/14/94
Dibromochloromethane	124-48-1	ND	5	ug/L	04/14/94
1,1-Dichloroethane	75-34-3	ND	5	ug/L	04/14/94
1,2-Dichloroethane	107-06-2	8 *	5	ug/L	04/14/94
1,1-Dichloroethene	75-35-4	ND	5	ug/L	04/14/94
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/L	04/14/94
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/L	04/14/94
1,2-Dichloropropane	78-87-5	ND	5	ug/L	04/14/94
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/L	04/14/94
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/L	04/14/94
Ethylbenzene	100-41-4	ND	5	ug/L	04/14/94
2-Hexanone	591-78-6	ND	50	ug/L	04/14/94
Methylene Chloride	75-09-2	ND	5	ug/L	04/14/94
4-Methyl-2-pentanone	108-10-1	ND	50	ug/L	04/14/94
Styrene	100-42-5	ND	5	ug/L	04/14/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/L	04/14/94
Tetrachloroethene	127-18-4	ND	5	ug/L	04/14/94
Toluene	108-88-3	ND	5	ug/L	04/14/94
1,1,1-Trichloroethane	71-55-6	ND	5	ug/L	04/14/94
1,1,2-Trichloroethane	79-00-5	ND	5	ug/L	04/14/94
Trichloroethene	79-01-6	7 *	5	ug/L	04/14/94
Vinyl Acetate	108-05-4	ND	50	ug/L	04/14/94
Vinyl Chloride	75-01-4	ND	10	ug/L	04/14/94
Xylenes, Total	1330-20-7	ND	10	ug/L	04/14/94

ND = Not detected at or above the reporting limit  
 \* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: SB-1-GW  
AEN LAB NO: 9404064-07C  
AEN WORK ORDER: 9404064  
CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
DATE RECEIVED: 04/06/94  
REPORT DATE: 04/18/94

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas	5030/GC-FID	ND	4	mg/L	04/11/94

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Reporting limit elevated for gasoline due to hydrocarbon interference in the diesel/kerosene range.

ND = Not detected at or above the reporting limit  
\* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: SB-1-GW  
 AEN LAB NO: 9404064-07E  
 AEN WORK ORDER: 9404064  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for Diesel/Oil	EPA 3510	-		Extrn Date	04/07/94
TPH as Diesel	GC-FID	5.3 *	0.05	mg/L	04/08/94

ND = Not detected at or above the reporting limit  
 \* = Value above reporting limit



LEVINE-FRICKE

SAMPLE ID: SB-1-GW  
 AEN LAB NO: 9404064-07F  
 AEN WORK ORDER: 9404064  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	04/06/94
#Digestion, Metals by GFAA	EPA 3020	-		Prep Date	04/12/94
Arsenic	EPA 7060	0.018 *	0.002	mg/L	04/15/94

Sample fraction was filtered through a 0.45 um filter and preserved with nitric acid to a pH of <2 upon receipt.

ND = Not detected at or above the reporting limit  
 \* = Value above reporting limit

## LEVINE-FRICKE

SAMPLE ID: SB-3-GW  
 AEN LAB NO: 9404064-08A  
 AEN WORK ORDER: 9404064  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
VOCs in Water by 8240	EPA 8240				
Acetone	67-64-1	ND	100	ug/L	04/14/94
Benzene	71-43-2	ND	5	ug/L	04/14/94
Bromodichloromethane	75-27-4	ND	5	ug/L	04/14/94
Bromoform	75-25-2	ND	5	ug/L	04/14/94
Bromomethane	74-83-9	ND	10	ug/L	04/14/94
2-Butanone	78-93-3	ND	100	ug/L	04/14/94
Carbon Disulfide	75-15-0	ND	10	ug/L	04/14/94
Carbon Tetrachloride	56-23-5	ND	5	ug/L	04/14/94
Chlorobenzene	108-90-7	ND	5	ug/L	04/14/94
Chloroethane	75-00-3	ND	10	ug/L	04/14/94
2-Chloroethyl Vinyl Ether	110-75-8	ND	10	ug/L	04/14/94
Chloroform	67-66-3	ND	5	ug/L	04/14/94
Chloromethane	74-87-3	ND	10	ug/L	04/14/94
Dibromochloromethane	124-48-1	ND	5	ug/L	04/14/94
1,1-Dichloroethane	75-34-3	ND	5	ug/L	04/14/94
1,2-Dichloroethane	107-06-2	ND	5	ug/L	04/14/94
1,1-Dichloroethene	75-35-4	ND	5	ug/L	04/14/94
cis-1,2-Dichloroethene	156-59-2	ND	5	ug/L	04/14/94
trans-1,2-Dichloroethene	156-60-5	ND	5	ug/L	04/14/94
1,2-Dichloropropane	78-87-5	ND	5	ug/L	04/14/94
cis-1,3-Dichloropropene	10061-01-5	ND	5	ug/L	04/14/94
trans-1,3-Dichloropropene	10061-02-6	ND	5	ug/L	04/14/94
Ethylbenzene	100-41-4	ND	5	ug/L	04/14/94
2-Hexanone	591-78-6	ND	50	ug/L	04/14/94
Methylene Chloride	75-09-2	ND	5	ug/L	04/14/94
4-Methyl-2-pentanone	108-10-1	ND	50	ug/L	04/14/94
Styrene	100-42-5	ND	5	ug/L	04/14/94
1,1,2,2-Tetrachloroethane	79-34-5	ND	5	ug/L	04/14/94
Tetrachloroethene	127-18-4	ND	5	ug/L	04/14/94
Toluene	108-88-3	ND	5	ug/L	04/14/94
1,1,1-Trichloroethane	71-55-6	ND	5	ug/L	04/14/94
1,1,2-Trichloroethane	79-00-5	ND	5	ug/L	04/14/94
Trichloroethene	79-01-6	ND	5	ug/L	04/14/94
Vinyl Acetate	108-05-4	ND	50	ug/L	04/14/94
Vinyl Chloride	75-01-4	ND	10	ug/L	04/14/94
Xylenes, Total	1330-20-7	ND	10	ug/L	04/14/94

ND = Not detected at or above the reporting limit  
 \* = Value above reporting limit

LEVINE-FRICKE

SAMPLE ID: SB-3-GW  
AEN LAB NO: 9404064-08C  
AEN WORK ORDER: 9404064  
CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
DATE RECEIVED: 04/06/94  
REPORT DATE: 04/18/94

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ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
TPH as Gas	5030/GC-FID	ND	0.4	mg/L	04/11/94

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Reporting limit elevated for gasoline due to hydro-carbon interference in the diesel/kerosene range.

ND = Not detected at or above the reporting limit  
\* = Value above reporting limit

## LEVINE-FRICKE

SAMPLE ID: SB-3-GW  
AEN LAB NO: 9404064-08E  
AEN WORK ORDER: 9404064  
CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
DATE RECEIVED: 04/06/94  
REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Extraction for Diesel/Oil	EPA 3510	-		Extrn Date	04/07/94
TPH as Diesel	GC-FID	0.6 *	0.05	mg/L	04/08/94

ND = Not detected at or above the reporting limit

\* = Value above reporting limit

LEVINE - FRICKE

SAMPLE ID: SB-3-GW  
 AEN LAB NO: 9404064-08F  
 AEN WORK ORDER: 9404064  
 CLIENT PROJ. ID: 3042

DATE SAMPLED: 04/05/94  
 DATE RECEIVED: 04/06/94  
 REPORT DATE: 04/18/94

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
#Sample Filtration	0.45 um	-		Filtr Date	04/06/94
#Digestion, Metals by GFAA	EPA 3020	-		Prep Date	04/12/94
Arsenic	EPA 7060	0.015 *	0.002	mg/L	04/15/94

Sample fraction was filtered through a 0.45 um filter and preserved with nitric acid to a p- of <2 upon receipt.

ND = Not detected at or above the reporting limit  
 \* = Value above reporting limit

AEN (CALIFORNIA)  
QUALITY CONTROL REPORT

AEN JOB NUMBER: 9404064

CLIENT PROJECT ID: 3042

Quality Control Summary

Methylene chloride by EPA Method 8240 was found in the method blank at 10 ug/L.

All other laboratory quality control parameters were found to be within established limits.

Definitions

The following abbreviations are found throughout the QC report:

ND = Not Detected at or above the reporting limit

RPD = Relative Percent Difference

< = Less Than

QUALITY CONTROL DATA

DATE EXTRACTED: 04/03/94  
DATE ANALYZED: 04/03/94  
CLIENT PROJ. ID: 3042

AEN JOB NO: 9404064  
SAMPLE SPIKED: DI WATER  
INSTRUMENT: C

METHOD SPIKE RECOVERY SUMMARY  
TPH EXTRACTABLE WATER  
METHOD: EPA 3510 GCFID

---

ANALYTE	Spike Added (mg/L)	Average Percent Recovery	RPD	QC Limits	
				Percent Recovery	RPD
Diesel	2.09	75	6	63-109	10

---

METHOD BLANK RESULT

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Lab Id.	Extractable Hydrocarbons as Diesel (mg/L)
040794-METHOD BLANK	ND
Reporting Limit	0.05

---

QUALITY CONTROL DATA

INSTRUMENT: F

AEN JOB NO: 9404064

CLIENT PROJ. ID: 3042

AEN LAB NO: 0408-BLANK

DATE ANALYZED: 04/08/94

HYDROCARBONS  
METHOD: EPA 5030 GCFID  
(WATER MATRIX)

	CONCENTRATION (mg/L)	REPORTING LIMIT (mg/L)
PURGEABLE HYDROCARBONS AS:		
Gasoline	ND	0.05



QUALITY CONTROL DATA

INSTRUMENT: F  
CLIENT PROJ. ID: 3042

AEN JOB NO: 9404064  
AEN LAB NO: 0411-BLANK  
DATE ANALYZED: 04/11/94

HYDROCARBONS  
METHOD: EPA 5030 GCFID  
(WATER MATRIX)

	CONCENTRATION (mg/L)	REPORTING LIMIT (mg/L)
PURGEABLE HYDROCARBONS AS:		
Gasoline	ND	0.05

QUALITY CONTROL DATA

INSTRUMENT: F

AEN JOB NO: 9404064

CLIENT PROJ. ID: 3042

AEN LAB NO: 0412-BLANK

DATE ANALYZED: 04/12/94

HYDROCARBONS  
METHOD: EPA 5030 GCFID  
(WATER MATRIX)

	CONCENTRATION (mg/L)	REPORTING LIMIT (mg/L)
PURGEABLE HYDROCARBONS AS:		
Gasoline	ND	0.05

QUALITY CONTROL DATA

INSTRUMENT: F

AEN JOB NO: 9404064

CLIENT PROJ. ID: 3042

AEN LAB NO: 0413-BLANK

DATE ANALYZED: 04/13/94

HYDROCARBONS  
METHOD: EPA 5030 GCFID  
(WATER MATRIX)

	CONCENTRATION (mg/L)	REPORTING LIMIT (mg/L)
PURGEABLE HYDROCARBONS AS:		
Gasoline	ND	0.05

QUALITY CONTROL DATA

CLIENT PROJ. ID: 3042

AEN JOB NO: 9404064

INSTRUMENT: F

SURROGATE STANDARD RECOVERY SUMMARY  
 METHOD: EPA 5030 GCFID  
 (WATER MATRIX)

Date Analyzed	SAMPLE IDENTIFICATION		SURROGATE RECOVERY (PERCENT)
	Client Id.	Lab Id.	Fluorobenzene
04/08/94	SB-7-GW	01	100
04/13/94	SB-6-GW	02	103
04/12/94	SB-8-GW	03	100
04/08/94	SB-4-GW	04	102
04/08/94	SB-5-GW	05	103
04/12/94	SB-2-GW	06	102
04/12/94	SB-2-GW(Duplicate)	06	101
04/11/94	SB-1-GW	07	103
04/11/94	SB-3-GW	08	102

CURRENT QC LIMITS

<u>ANALYTE</u>	<u>PERCENT RECOVERY</u>
Fluorobenzene	(70-115)

QUALITY CONTROL DATA

DATE ANALYZED: 04/08/94

AEN JOB NO: 9404064

CLIENT PROJ. ID: 3042

SAMPLE SPIKED: LCS

INSTRUMENT: F

LABORATORY CONTROL SAMPLE  
METHOD: EPA 5030 GCFID  
(WATER MATRIX)

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ANALYTE	Spike Added (ug/L)	Percent Recovery
Hydrocarbons as Gasoline	500	107

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CURRENT QC LIMITS

<u>Analyte</u>	<u>Percent Recovery</u>
Gasoline	(60-125)

## QUALITY CONTROL DATA

INSTRUMENT: 12

AEN JOB NO: 9404064

CLIENT PROJ. ID: 3042

AEN LAB NO: 0414-BLANK

DATE ANALYZED: 04/14/94

EPA METHOD 8240 (WATER MATRIX)  
VOLATILE ORGANIC COMPOUNDS

COMPOUND	CAS #	CONCENTRATION (ug/L)	REPORTING LIMIT (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon Disulfide	75-15-0	ND	10
Carbon Tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl Vinyl Ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,2-Dichlorobenzene	95-50-1	ND	5
1,3-Dichlorobenzene	541-73-1	ND	5
1,4-Dichlorobenzene	106-46-7	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
cis-1,2-Dichloroethene	156-59-2	ND	5
trans-1,2-Dichloroethene	156-60-5	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene Chloride	75-09-2	10	5
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl Acetate	108-05-4	ND	50
Vinyl Chloride	75-01-4	ND	10
Xylenes, total	1330-20-7	ND	10

## QUALITY CONTROL DATA

INSTRUMENT: 12

AEN JOB NO: 9404064

CLIENT PROJ. ID: 3042

SURROGATE STANDARD RECOVERY SUMMARY  
 METHOD: EPA 8240  
 (WATER MATRIX)

Date Analyzed	SAMPLE IDENTIFICATION		SURROGATE RECOVERY (PERCENT)		
	Sample Id.	Lab Id.	1,2-Dichloroethane-d <sub>4</sub>	Toluene-d <sub>8</sub>	p-Bromofluorobenzene
04/14/94	SB-7-GW	01	92	102	106
04/14/94	SB-6-GW	02	95	99	104
04/14/94	SB-8-GW	03	97	100	106
04/14/94	SB-4-GW	04	94	103	109
04/14/94	SB-5-GW	05	99	103	107
04/14/94	SB-2-GW	06	95	103	108
04/14/94	SB-2-GW(Duplicate)	06	101	103	105
04/14/94	SB-1-GW	07	102	104	104
04/14/94	SB-3-GW	08	96	99	104

## CURRENT QC LIMITS

<u>ANALYTE</u>	<u>PERCENT RECOVERY</u>
1,2-Dichloroethane-d <sub>4</sub>	(77-123)
Toluene-d <sub>8</sub>	(90-108)
p-Bromofluorobenzene	(89-109)

QUALITY CONTROL DATA

DATE ANALYZED: 04/08/94  
 SAMPLE SPIKED: 9404023-01  
 CLIENT PROJ. ID: 3042

AEN JOB NO: 9404064  
 INSTRUMENT: 12

MATRIX SPIKE RECOVERY SUMMARY  
 METHOD: EPA 8240  
 (WATER MATRIX)

ANALYTE	Spike Added (ug/L)	Average Percent Recovery	RPD
1,1-Dichloroethene	50.0	115	5
Trichloroethene	50.0	100	7
Benzene	50.0	113	1
Toluene	50.0	105	<1
Chlorobenzene	50.0	97	5

CURRENT QC LIMITS

Analyte	Percent Recovery	RPD
1,1-Dichloroethene	(81-123)	12
Trichloroethene	(87-112)	9
Benzene	(92-116)	12
Toluene	(91-116)	12
Chlorobenzene	(92-113)	10



QUALITY CONTROL DATA

MATRIX: WATER

AEN JOB NO: 9404064

CLIENT PROJ. ID: 3042

DATE DIGESTED: 04/13/94

METHOD SPIKE AND BLANK RECOVERY SUMMARY

Compound	Inst./ Method	Blank Result (mg/L)	Spike Added (mg/L)	Average Percent Recovery	RPD	QC Limits	
						% Rec. Limit	RPD Limit
As, Arsenic	4000/7060	ND	0.04	106	2	90-115	12

\*\*\* END OF REPORT \*\*\*

