

David Harnish, R.G.

Environmental Consultant

ENVIRONMENTAL
PROTECTION
95 OCT 16 PM 3: 22

October 11, 1996

Ms. Susan L. Hugo
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, CA 94502

**Re: Closure Report for Former Service Station
4301 San Pablo Avenue
Emeryville, California**

Dear Ms. Hugo:

I am pleased to forward this letter presenting information to support regulatory closure of a former service station located at 4301 San Pablo Avenue in Emeryville, California. This report is being submitted in behalf of the Kaiser Foundation Health Plan, Inc ("Kaiser"), who recently acquired a fifty percent interest in the property.

Investigations at the property indicate that the former tanks and piping are no longer present, that there is no significant petroleum source in soil, and that chemicals are not present in groundwater at concentrations exceeding Federal and State Maximum Contaminant Levels (MCLs) at the property boundary. The site appears to meet the criteria for "low risk soil cases" developed by the San Francisco Regional Water Quality Control Board (RWQCB *Supplemental Instructions to the State Water Board December 8, 1995 Interim Guidance on Required Cleanup at Low Risk Fuel Leak Sites*, January 12, 1996).

The remainder of this letter outlines the property's background, the scope of investigations, the investigation results, and the characteristics that qualify the site as a low risk soil case.

BACKGROUND

The location of the property is shown on Figure 1. A Kentucky Fried Chicken restaurant currently occupies the property (hereinafter referred to as "the KFC site"), which was built in approximately 1968. Atlantic Richfield Company (ARCO) owned the property prior to 1968 and historical aerial photographs and Sanborn maps indicate that a service station was present from approximately

1947 to 1968. ARCO has acknowledged their former ownership, but has indicated that they have no records of the service station (letter from Vivian Heger of ARCO to David Brandes of ENVIRON dated November 29, 1993).

The configuration of the former service station, based on historical Sanborn maps and aerial photographs, is shown on Figure 2. It is likely that ARCO operated one or more underground storage tanks (USTs). However, no documentation of USTs at the property was found by ENVIRON during file searches at the Emeryville Fire and Building Departments, Alameda County Department of Environmental Health (ACDEH), the RWQCB, and other sources. No records were available from the former owners.

A subsurface utility locator was retained to check the property for evidence of USTs or piping on July 15, 1994. A rectangular area was identified just north of the estimated location of the former maintenance garage; the area had an electro-magnetic signature consistent with a potential UST. We dug a test pit on July 15, 1996 to eight feet deep at this location and no UST was present; the magnetic anomaly was found to originate from a steel-reinforced concrete slab approximately six inches below the surface. It is likely that the subsurface piping and USTs were removed in 1968 when the property was developed into a restaurant.

SCOPE OF INVESTIGATIONS

On-site and off-site investigations have been conducted at the KFC site, and groundwater monitoring results are available on the downgradient property boundary over a two year period. The scope of these investigations is described below, and the results are summarized in the next section.

On-Site Soil and Groundwater Investigation

Before acquiring an interest in the property in 1995, Kaiser retained ENVIRON to collect soil and groundwater grab samples from five on-site borings, whose locations are shown on Figure 2 (borings B11-1 to 5). Samples were collected from the estimated locations of ARCO's former pump island (boring B11-1) and the former maintenance garage (boring B11-2). To screen the entire property, borings B11-3, B11-4 and B11-5 were drilled along the downgradient perimeter of the property (groundwater flow is generally toward the west). Samples were tested for Extractable Hydrocarbons (TEH) as diesel (TPHd), kerosene, and motor oil using EPA Method 8015M; TPH as gasoline (TPHg) and BTEX compounds using EPA Method 8015M, and halogenated volatile organic compounds (VOCs) using EPA Method 8010.

Adjacent Pepsi Investigation

The New Century Beverage Company (Pepsi) owns the property adjoining the KFC site on the west and has conducted extensive investigations to close their former canning facility at this

location. Groundwater levels measured during these investigations indicate that some of the wells and borings on Pepsi's property are downgradient and adjacent to the KFC site and therefore the results provide information about the KFC site. The relevant wells and borings are shown on Figure 2.

July 1996 Groundwater Monitoring

At the request of Susan Hugo of the Alameda County Department of Environmental Health (ACDEH), Pepsi wells MW-3 and MW-4 were resampled on July 10, 1996 to provide two years of monitoring data on the downgradient boundary of the KFC property. As discussed with Ms. Hugo in a meeting on May 23, 1996, the wells were tested for TPHg and BTEX, TPHd, and chlorobenzenes. No testing was conducted for methyl tert-butyl ether (MTBE) because it was not used as an additive at the time the station was active.

Supporting information and documentation from these investigations are included as attachments:

- Attachment A ENVIRON Investigation
- Attachment B Pepsi Property - Selected Investigation Results
- Attachment C July 1996 Groundwater Monitoring

INVESTIGATION RESULTS

Site Hydrogeology

During ENVIRON's investigation, the predominantly silty clay soil was first noted to be wet at depths of 10 to 12 feet, and this likely represents the top of the saturated zone (ENVIRON boring logs are presented in Attachment A). This observation is consistent with groundwater levels measured in nearby Pepsi wells MW-3 and MW-4 (see well logs in Attachment B). Free groundwater was not observed during on-site drilling until deeper, coarse-grained units were penetrated at depths of 15 to 18 feet. The groundwater level then rose quickly to approximately 8 feet below ground, indicating that the shallow zone beneath the site is confined.

Shallow groundwater flow in the area of the KFC property is toward the west, as indicated by repeated water level measurements at the adjacent Pepsi property. Water level maps from the Pepsi property are included in Attachment B.

Chemical Test Results

Chemical test results for soil and groundwater grab samples are presented in Table 1 and monitoring well test results are summarized in Table 2. The findings are described below.

Soil

As shown on Table 1, BTEX compounds were not detected in soil, except for toluene at 0.007 milligrams per kilogram (mg/kg) in one sample. Relatively low levels of weathered petroleum hydrocarbons were reported near the anticipated depth of the capillary fringe, approximately 11 feet deep. These hydrocarbons were reported as "unknown" because they did not match the laboratory's in-house standards. Halogenated VOCs were not detected in soil beneath the property.

Groundwater

Groundwater grab samples were initially collected to qualitatively evaluate the distribution of petroleum hydrocarbons in groundwater, and results of those samples are presented in Table 1. Figure 3 illustrates the extent of dissolved petroleum in groundwater, as indicated by the groundwater grab samples. As shown in Table 1, the highest concentrations of BTEX compounds were reported in the grab sample from boring B11-4.

Pepsi well MW-4 is located adjacent to boring B11-4 and appears to be located where concentrations were highest. Nevertheless, as shown in Table 2, MCLs have not been exceeded in wells MW-3 or MW-4. These wells have been monitored three times from March 1994 to July 1996, and results are quite consistent. No chemicals have been detected in well MW-3 and only traces of petroleum components have been detected in MW-4, consistently beneath MCLs.

DISCUSSION OF KFC SITE AS A LOW RISK SOILS CASE

The RWQCB have developed six criteria for low risk soil cases that, when met, allow a case to be closed with no further action (*Supplemental Instruction to State Water Board December 8, 1995 Interim Guidance on Required Cleanup at Low Risk Fuel Leak Sites*, January 12, 1996 letter). The RWQCB's six criteria are presented below in bold italic type, and the characteristics of the KFC site that are relevant to these criteria are presented for each as bullets.

1. ***The leak has been stopped and ongoing sources, including free product, removed or remediated.***
 - ARCO's former USTs apparently were removed when the property was redeveloped in 1968. We attempted to locate these former facilities using geophysical methods and trenching, and found no evidence that they remain.
 - No free product has been observed at the KFC site.

2. *The site has been adequately characterized.*

- The on-site and off-site soil borings, monitoring of Pepsi wells MW-3 and MW-4, and data from the Pepsi site provide a more than adequate database for this low-risk site. These data characterize on-site soil, the distribution of dissolved petroleum in groundwater, and local hydrogeology.
- The groundwater grab-sample results and water level monitoring at Pepsi verify that wells MW-3 and MW-4 are located immediately downgradient of the KFC site. Groundwater monitoring results from these wells covers a two year period and results are very consistent.

3. *Little or no groundwater impact currently exists and no contaminants are found at levels above established MCLs or other applicable water quality objectives.*

- No MCLs have been exceeded in Pepsi's monitoring wells MW-3 and MW-4, located on the KFC site downgradient property boundary.

4. *No water wells, deeper drinking water aquifers, surface water, or other sensitive receptors are likely to be impacted.*

- No water supply wells are located on-site, in the site vicinity, or directly downgradient of the site all the way to the San Francisco Bay (Alameda County East Bay Plain Wells data base, January 31, 1990). Shallow groundwater is not used for a water supply in the area because of the naturally low yields of the clayey soils and the general water quality degradation of the shallow zone in Emeryville. I understand that Kaiser has no plans to use groundwater on the site or on the downgradient Pepsi property (both properties are owned by Kaiser).
- Deeper groundwater is highly unlikely to be affected by this site since State and Federal MCLs are not exceeded in shallow groundwater at the property boundary.
- The nearest surface water bodies are San Francisco Bay, downgradient approximately 4,000 feet to the west, and Temescal Creek, which is cross-gradient approximately 1,500 feet to the north. These distances are sufficiently large that it is reasonable to conclude that the KFC site will not impact the Bay or Temescal Creek. Many properties with higher levels of contamination than the KFC site are located between the KFC site and these water bodies.

5. *The site presents no significant risk to human health.*

- All results for soil are lower than the USEPA Region IX Preliminary Remediation Goals ([PRGs] September 1, 1995) for residential use of the property
- As discussed previously, State and Federal MCLs are not exceeded in groundwater at the property boundary

6. *The site presents no significant risk to the environment.*

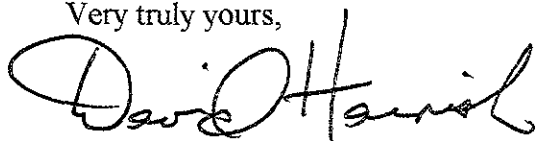
- Please see Item 4, above. Petroleum from the KFC site does not currently impact or appear likely to impact environmental receptors (receptors being aquatic biota and terrestrial surface biota).

CONCLUSION

The KFC site appears to be a low risk soil case that meets RWQCB criteria for closure with no further action. On behalf of Kaiser, I request that the ACDEH close this case without further monitoring or characterization.

Please feel free to call if you have any questions.

Very truly yours,

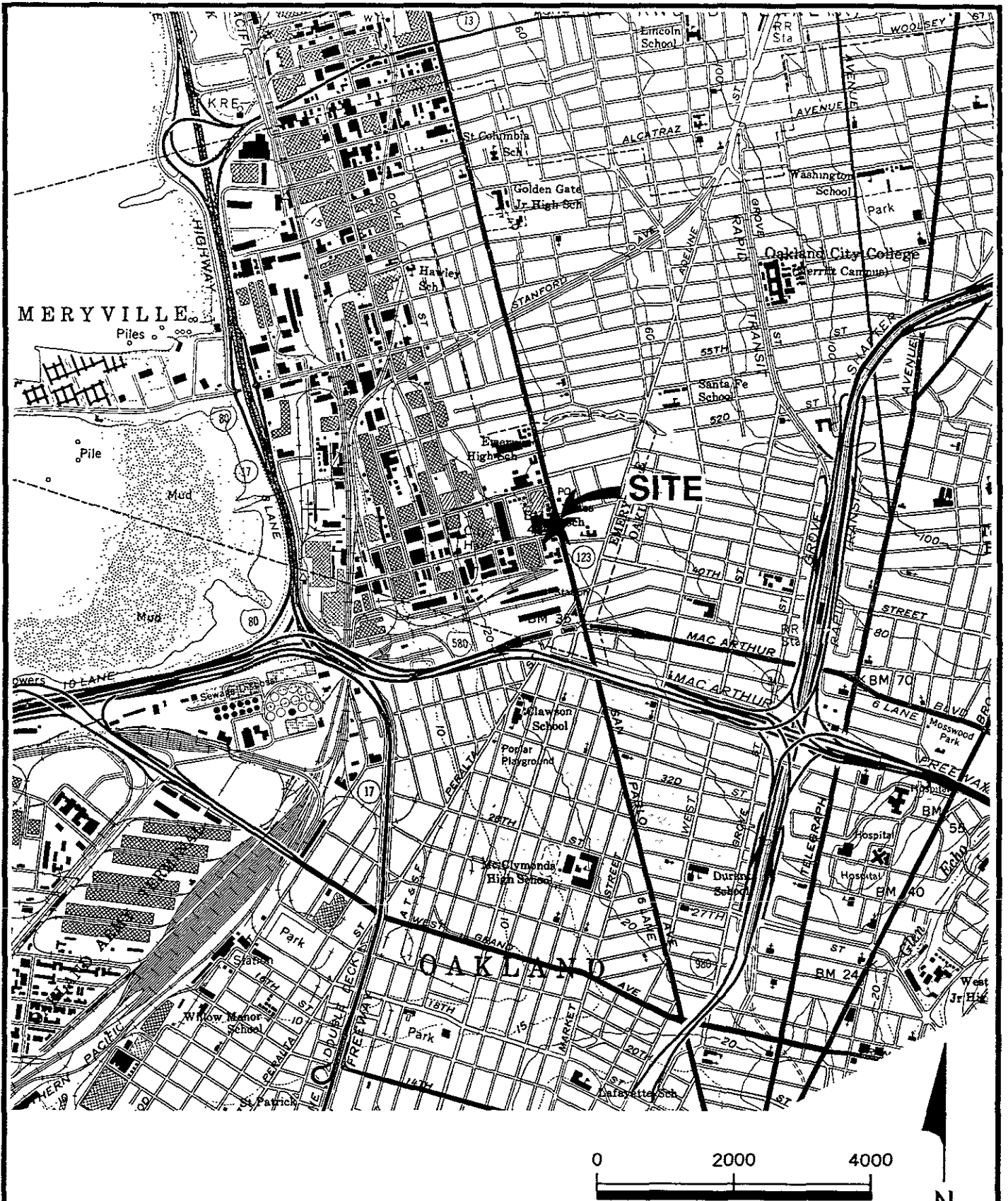


David Harnish, R.G.

Enclosures

Table 1	Soil and Groundwater Grab Sample Test Results
Table 2	Monitoring Well Test Results
Figure 1	Site Location
Figure 2	Site Plan
Figure 3	Extent of Trace Petroleum in Groundwater
Attachment A	ENVIRON Site Investigation
Attachment B	Pepsi Property - Selected Investigation Results
Attachment C	July 1996 Groundwater Monitoring

cc: Mark Zemelman, Kaiser Foundation Health Plan



Source: USGS map, Oakland West Quad, California

SCALE IN FEET

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Site Location
Kentucky Fried Chicken Property
Emeryville, California
Kaiser Foundation Health Plan, Inc.

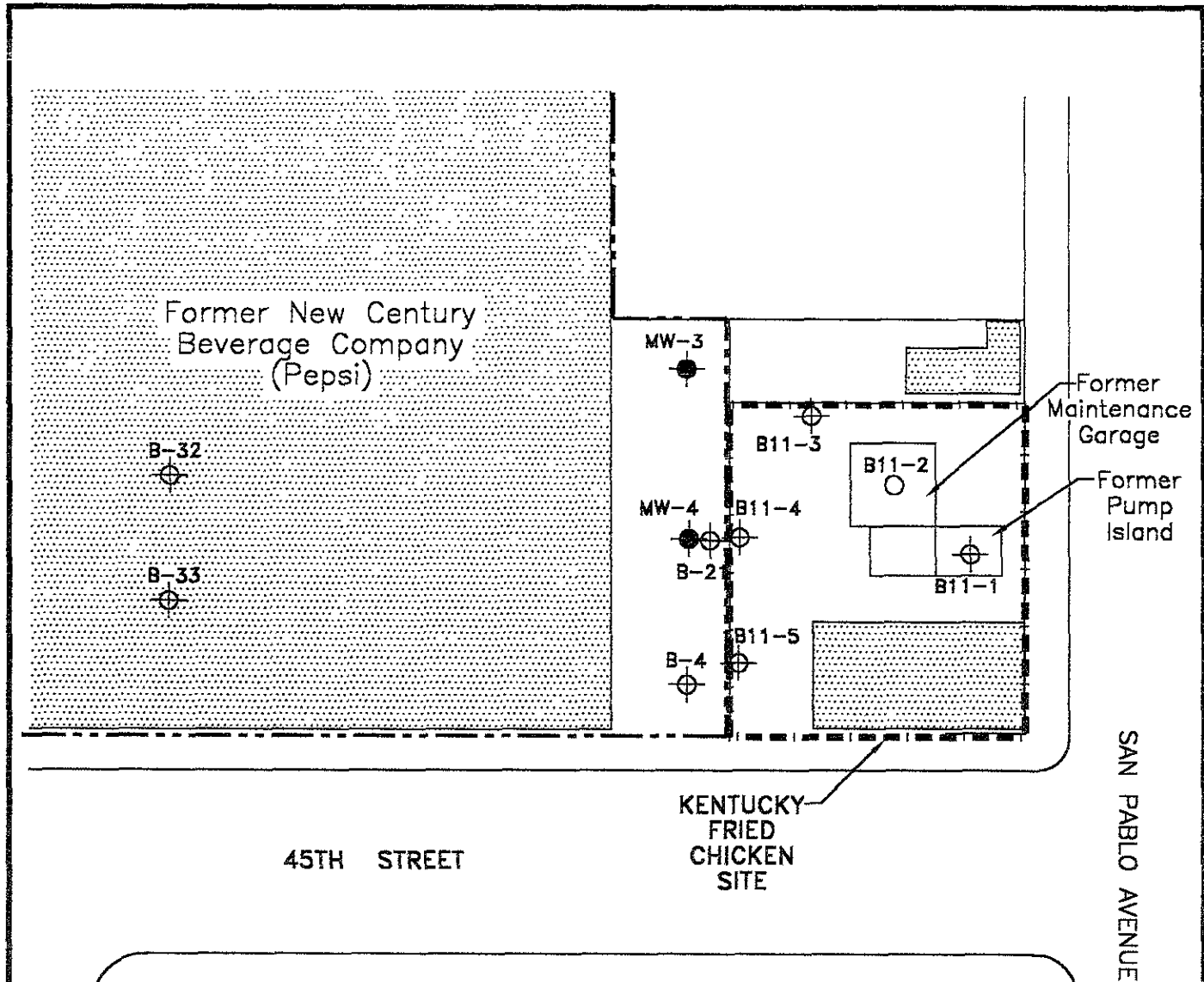
Figure

1


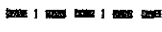

Drafter: RS

Date: 7/24/96

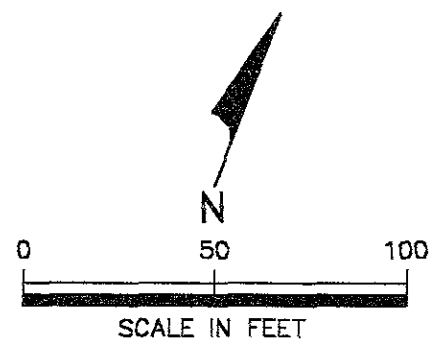
Contract Number:



EXPLANATION

-  Monitoring Well
-  Soil Boring
-  Soil Boring and Groundwater Grab Sample
-  Buildings
-  Site Boundary
-  Property Boundary

Sources:
 Kaiser Topographic Boundary Survey
 ENVIRON (see Attachment A)
 Weiss (see Attachment B)



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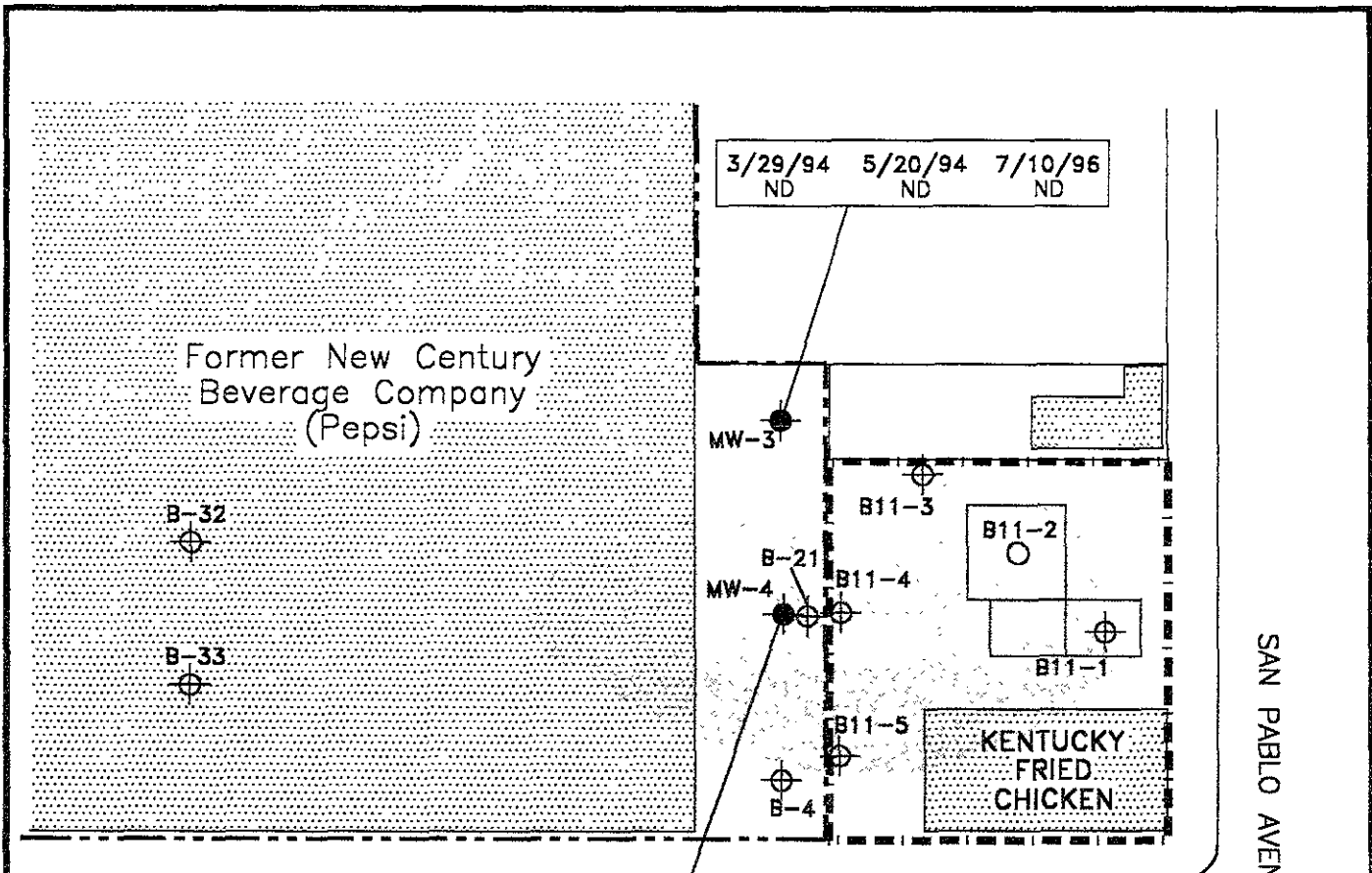
Site Plan
 Kentucky Fried Chicken Property
 Emeryville, California
 Kaiser Foundation Health Plan, Inc.

Figure
2

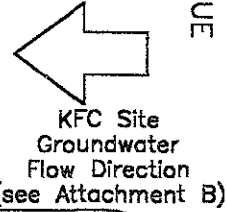
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Date: 7/24/96

Contract Number:



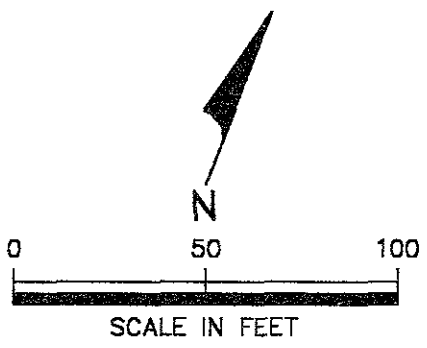
	3/29/94	5/20/94	7/10/96
B	<0.0005	0.0006	0.0006
T	<0.0005	0.0015	0.0009
E	<0.0005	0.0011	0.0017
X	<0.0005	0.0035	0.0042
CB	0.017	0.017	0.013
1,2-DCB	0.004	0.005	0.0035



EXPLANATION

- Monitoring Well
- Soil Boring
- Soil Boring and Groundwater Grab Sample
- Area with Trace Concentrations of Dissolved Petroleum (from groundwater grab samples and wells)
- Buildings
- Site Boundary
- Property Boundary

Sources:
 Kaiser Topographic Boundary Survey
 ENVIRON (see Attachment A)
 Weiss (see Attachment B)



Note:
 Concentrations are in milligrams per liter.

KENTUERLOWG

David Harnish, R.G. Environmental Consulting	Extent of Trace Petroleum in Groundwater Kentucky Fried Chicken Property Emeryville, California Kaiser Foundation Health Plan, Inc.	Figure 3
Drafter: RS	Date: 7/24/96	Contract Number:

TABLE 1: SOIL AND GROUNDWATER GRAB SAMPLE TEST RESULTS

Kentucky Fried Chicken
 Kaiser Foundation Health Plan
 Emeryville, California

Boring Number	Sample Depth (ft)	Extractable Hydrocarbons				Purgeable Hydrocarbons						Halogenated VOCs (1)
		Diesel	Kerosene	Motor Oil	Unknown	Benzene	Toluene	Ethylbenzene	Xylenes	Gasoline	Unknown	Chlorobenzene
Soil Samples (concentrations in mg/kg)												
B11-1	4	<1	<1	<10	ND	<0.005	<0.005	<0.005	<0.005	<1	ND	<0.005
	6	<1	<1	<10	ND	<0.005	<0.005	<0.005	<0.005	<1	ND	<0.005
	9	<1	<1	<10	ND	<0.005	<0.005	<0.005	<0.005	<1	ND	<0.005
B11-2	3.5	<1	<1	<10	ND	<0.005	<0.005	<0.005	<0.005	<1	ND	<0.005
	6.5	<1	<1	<10	ND	<0.005	<0.005	<0.005	<0.005	<1	ND	<0.005
	11	<1	<1	270	44	<0.005	<0.005	<0.005	<0.005	<1	14	<0.005
B11-3	3	<1	<1	<10	ND	<0.005	0.007	<0.005	<0.005	<1	ND	<0.005
	6	<1	<1	<10	ND	<0.005	<0.005	<0.005	<0.005	<1	ND	<0.005
	9	<1	<1	<10	ND	<0.005	<0.005	<0.005	<0.005	<1	ND	<0.005
B11-4	3	<1	<1	<10	ND	<0.005	<0.005	<0.005	<0.005	<1	ND	<0.005
	6.5	<1	<1	<10	ND	<0.005	<0.005	<0.005	<0.005	<1	ND	<0.005
	11.5	<1	<1	<10	19	<0.005	<0.005	<0.005	<0.005	<1	3.1	<0.005
B11-5	4.5	<1	<1	<10	ND	<0.005	<0.005	<0.005	<0.005	<1	ND	<0.005
	6	<1	<1	<10	ND	<0.005	<0.005	<0.005	<0.005	<1	ND	<0.005
	11	<1	<1	<10	5.2	<0.005	<0.005	<0.005	<0.005	<1	20	<0.005
Ground Water Grab Samples (concentrations in mg/L)												
B11-1	4 to 14 (2)	<0.050	<0.050	3.7	1.2	<0.0005	<0.0005	<0.0005	0.0062	<0.050	3.0	<0.0005
B11-3	10 to 20	<0.050	<0.050	<0.5	2.6	<0.0005	0.00054	<0.0005	<0.0005	<0.050	ND	<0.0005
B11-4	9.5 to 19.5	<0.050	<0.050	<0.5	2.7	0.020	0.0047	0.0084	<0.0005	<0.050	3.5	0.020
B11-5	8 to 18	<0.050	<0.050	1.7	1.3	0.0081	0.0022	<0.0005	0.012	<0.050	1.3	0.010
Trip Blank	--	NA	NA	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	<0.050	ND	<0.0005

ND = Not detected
 NA = Not analyzed
 <0.005 = Not detected above reporting limit
 (1) = Chlorobenzene was the only halogenated volatile organic compound (VOC) detected.
 (2) = Depth interval that temporary well screen was set.

TABLE 2: MONITORING WELL TEST RESULTS

Kentucky Fried Chicken
 Kaiser Foundation Health Plan
 Emeryville, California

Pepsi Well Number	Sample Date	Extractable Hydrocarbons				Purgeable Hydrocarbons						Halogenated VOCs*	
		Diesel	Kerosene	Motor Oil	Unknown	Benzene	Toluene	Ethylbenzene	Xylenes	TPHg	Unknown	CB	1,2-DCB
Groundwater Samples (concentrations in mg/L)													
MW-3	3/29/94	<1	<1	<20	ND	<0.0005	<0.0005	<0.0005	<0.0005	<.050	ND	<0.001	<0.001
	5/20/94	<0.050	<0.050	<1	ND	<0.0005	<0.0005	<0.0005	<0.0005	<.050	ND	<0.001	<0.001
	7/10/96	<0.050	<0.050	<0.5	ND	<0.0005	<0.0005	<0.0005	<0.0005	<.050	ND	<0.001	<0.001
MW-4	3/29/94	<1	<1	<20	ND	<0.0005	<0.0005	<0.0005	<0.0005	0.130	ND	0.017	0.004
	5/20/94	0.310	ND	<1	ND	0.0006	0.0015	0.0011	0.0035	0.220	ND	0.017	0.005
	7/10/96	<0.050	ND	<1	0.090	0.0006	0.0009	0.0017	0.0042	0.220	ND	0.013	0.0035
California DIIS Primary MCL		none	none	none	none	0.001	0.150	0.700	1.750	none	none	0.070	0.600
USEPA Primary MCL		none	none	none	none	0.005	1.000	0.700	10.000	none	none	0.100	0.600

ND = Not detected
 NA = Not analyzed
 <0.005 = Not detected above reporting limit
 * = Only detected compounds are shown.
 CB = chlorobenzene; 1,2-DCB = 1,2-dichlorobenzene

California and USEPA MCLs are from SWRCB compilation of Water Quality Objectives (downloaded from SWRCB web site on April 25, 1996).

ATTACHMENT A
ENVIRON SITE INVESTIGATION

ATTACHMENT A
ENVIRON SITE INVESTIGATION

The information in this appendix is from an investigation completed for Kaiser by ENVIRON International Corporation (ENVIRON) during 1994. ENVIRON completed five soil borings on the Kentucky Fried Chicken property using a hydraulically-driven sampling rig provided by Powercore Soil Sampling, Inc. of Antioch, California. For each boring, soil samples were collected continuously and screened for the potential presence of VOCs using an Organic Vapor Monitor (OVM). Soils were described according to the United Soil Classification System by an ENVIRON geologist and a boring log containing the field data for each location was maintained (soil description, OVM readings, sample depths, depth to groundwater, samples sent for chemical testing).

Prior to drilling each borehole, drilling equipment was decontaminated by steam cleaning; sampling equipment also was decontaminated between samples with a liquinox soap solution and deionized water. Three unsaturated soil samples from each boring were collected in brass tubes at selected intervals, capped with Teflon tape and plastic caps, and stored on ice until delivery to the analytical laboratory. Boring B11-2 was completed at a depth of 12 feet below ground surface and no groundwater was observed in this borehole. Borings B11-1, B11-3, B11-4 and B11-5 were each completed to depths ranging from 14 to 24 feet below ground surface. A temporary well constructed of a 10-foot section of 0.020-inch slotted PVC well screen was emplaced into each boring to collect groundwater grab samples. The PVC was pre-cleaned and only used once.

The soil at B11-1, B11-3, B11-4 and B11-5 readily yielded water and groundwater grab samples were collected at each location using either a stainless-steel or Teflon™ bailer and nylon rope. Blaine Tech Services of San Jose, California was retained to collect groundwater grab samples from B11-4 and B11-5. Groundwater grab samples from B11-1 and B11-3 were collected by ENVIRON. Strict chain-of-custody protocols were followed for all samples.

All borings were promptly backfilled using a cement-bentonite grout, and concrete and asphalt surfaces were repaired. Soil cuttings and rinse water were stored in two 55-gallon drums and one 5-gallon bucket and disposed off-site.

The following completes this Attachment:

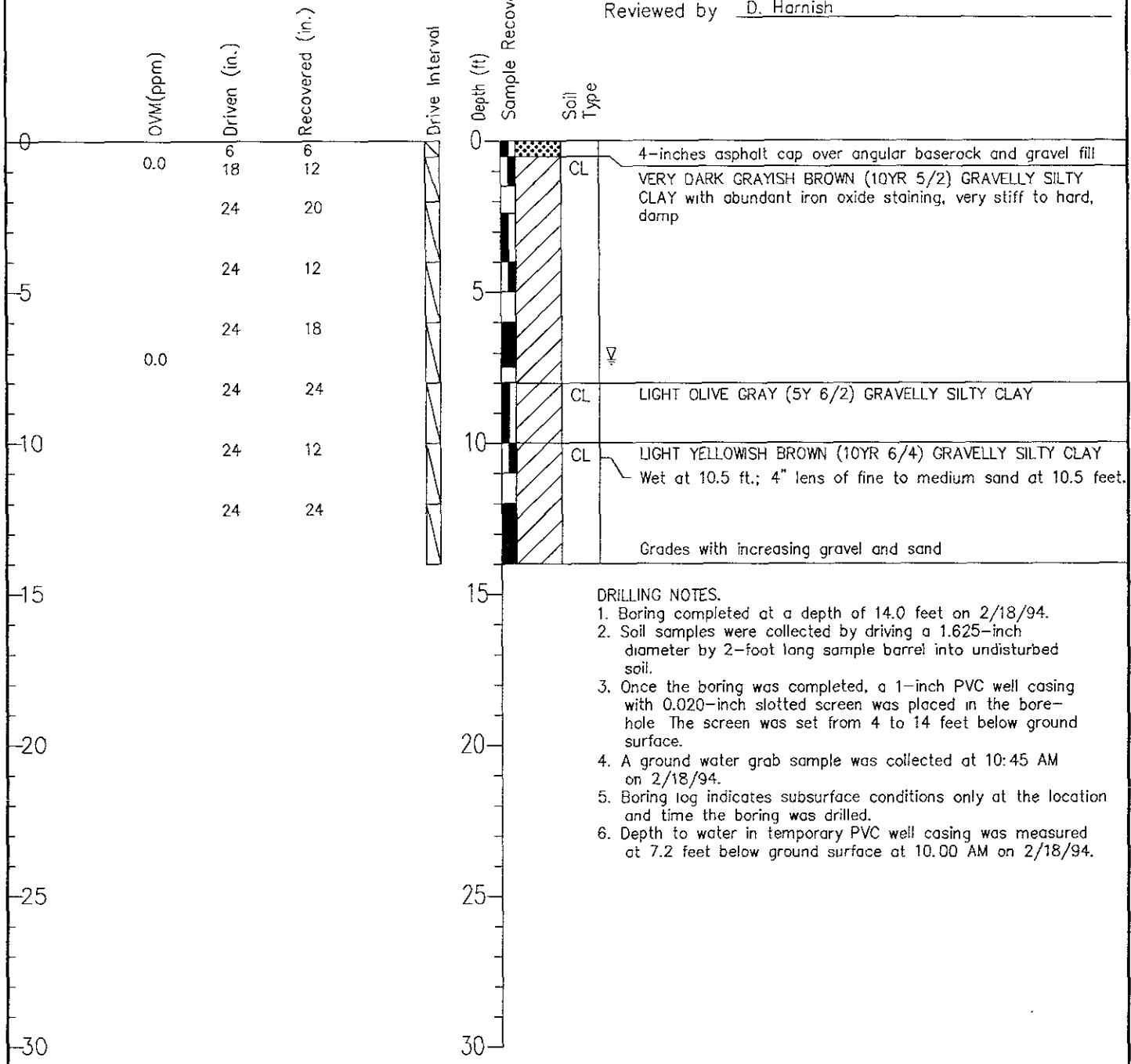
- Boring logs for B11-1 to B11-5
- Laboratory Reports

MAJOR DIVISIONS		GRAPHIC SYMBOL	SOIL CODE	DESCRIPTIONS			
COARSE-GRAINED SOILS More than half is coarser than #200 sieve	GRAVELS more than half coarse fraction is larger than no. 4 sieve	CLEAN GRAVELS WITH LITTLE OR NO FINES		GW	WELL GRADED GRAVELS, WITH OR WITHOUT SAND, LITTLE OR NO FINES		
				GP	POORLY GRADED GRAVELS, WITH OR WITHOUT SAND, LITTLE OR NO FINES		
		GRAVELS WITH OVER 12% FINES		GM	SILTY GRAVELS, SILTY GRAVELS WITH SAND		
				GC	CLAYEY GRAVELS, CLAYEY GRAVELS WITH SAND		
	SANDS more than half coarse fraction is smaller than no. 4 sieve	CLEAN SANDS WITH LITTLE OR NO FINES		SW	WELL GRADED SANDS, WITH OR WITHOUT GRAVEL, LITTLE OR NO FINES		
				SP	POORLY GRADED SANDS, WITH OR WITHOUT GRAVEL, LITTLE OR NO FINES		
		SANDS WITH OVER 12% FINES		SM	SILTY SANDS, WITH OR WITHOUT GRAVEL		
				SC	CLAYEY SANDS, WITH OR WITHOUT GRAVEL		
			FINE-GRAINED SOILS	SILTS AND CLAYS liquid limit 50 or less		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, CLAYEY SILTS OF LOW PLASTICITY
						CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, CLAYS WITH SANDS AND GRAVELS, LEAN CLAYS
	OL	ORGANIC SILTS OR CLAYS OF LOW PLASTICITY					
SILTS AND CLAYS liquid limit greater than 50			MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS, FINE SANDY OR SILTY SOILS, ELASTIC SILTS			
			CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS			
			OH	ORGANIC SILTS OR CLAYS OF MEDIUM TO HIGH PLASTICITY			
HIGHLY ORGANIC SOILS			PT	PEAT AND OTHER HIGHLY ORGANIC SOILS			

SOIL SAMPLE RECOVERY KEY

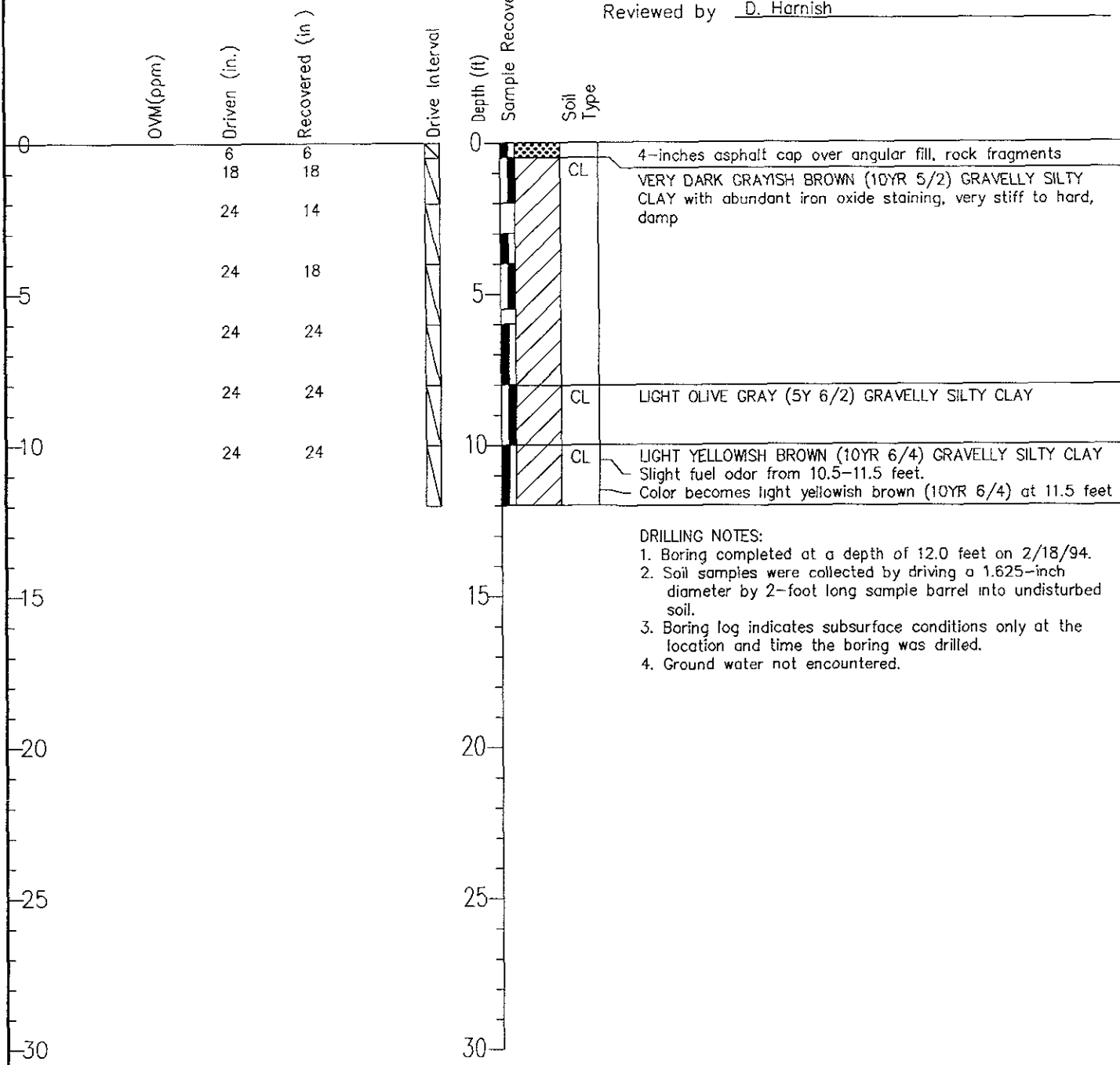
- Soil Sample (relatively undisturbed) Complete Recovery
- Soil Sample (disturbed) Partial Recovery
- Continuous Core Run Sample Recovery
- Continuous Core Run No Recovery

Drill Date: Start 2/18/94 Finish 2/18/94
 Drill Method Hydraulically-driven core barrel,
custom-designed drill rig.
 Driller Powercore Soil Sampling, Inc /Michael Nosewicz
 Logged by Ross Hartleb
 Reviewed by D. Harnish



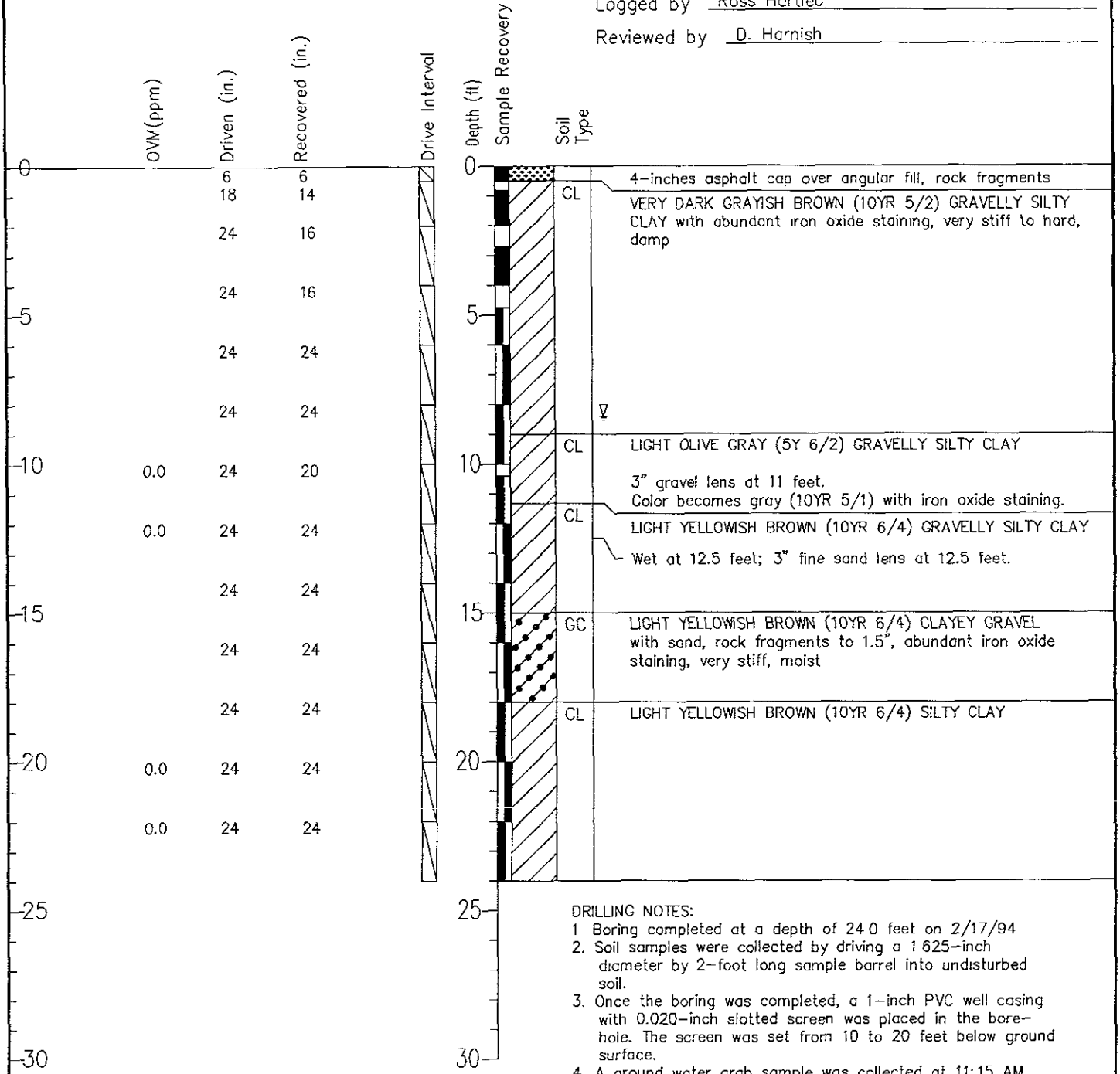
- DRILLING NOTES.**
- Boring completed at a depth of 14.0 feet on 2/18/94.
 - Soil samples were collected by driving a 1.625-inch diameter by 2-foot long sample barrel into undisturbed soil.
 - Once the boring was completed, a 1-inch PVC well casing with 0.020-inch slotted screen was placed in the bore-hole. The screen was set from 4 to 14 feet below ground surface.
 - A ground water grab sample was collected at 10:45 AM on 2/18/94.
 - Boring log indicates subsurface conditions only at the location and time the boring was drilled.
 - Depth to water in temporary PVC well casing was measured at 7.2 feet below ground surface at 10.00 AM on 2/18/94.

Drill Date: Start 2/18/94 Finish 2/18/94
 Drill Method Hydraulically-driven core barrel,
custom-designed drill rig
 Driller Powercore Soil Sampling, Inc / Michael Nosewicz
 Logged by Ross Hartleb
 Reviewed by D. Harnish



- DRILLING NOTES:
1. Boring completed at a depth of 12.0 feet on 2/18/94.
 2. Soil samples were collected by driving a 1.625-inch diameter by 2-foot long sample barrel into undisturbed soil.
 3. Boring log indicates subsurface conditions only at the location and time the boring was drilled.
 4. Ground water not encountered.

Drill Date: Start 2/17/94 Finish 2/17/94
 Drill Method Hydraulically-driven core barrel,
custom-designed drill rig.
 Driller Powercore Soil Sampling, Inc./Michael Nosewicz
 Logged by Ross Hartleb
 Reviewed by D. Harnish



DRILLING NOTES:

- Boring completed at a depth of 24.0 feet on 2/17/94
- Soil samples were collected by driving a 1 625-inch diameter by 2-foot long sample barrel into undisturbed soil.
- Once the boring was completed, a 1-inch PVC well casing with 0.020-inch slotted screen was placed in the bore-hole. The screen was set from 10 to 20 feet below ground surface.
- A ground water grab sample was collected at 11:15 AM on 2/18/94.
- Boring log indicates subsurface conditions only at the location and time the boring was drilled.
- Depth to water in temporary PVC well casing was measured at 8.35 feet below ground surface at 9:50 AM on 2/18/94.

ENVIRON

Counsel in Health and Environmental Science

Job No.03-3118D

Approved:

3/17/94

LOG OF BORING

Kentucky Fried Chicken (Property 11)
 Kaiser/Emeryville Site
 Emeryville, California

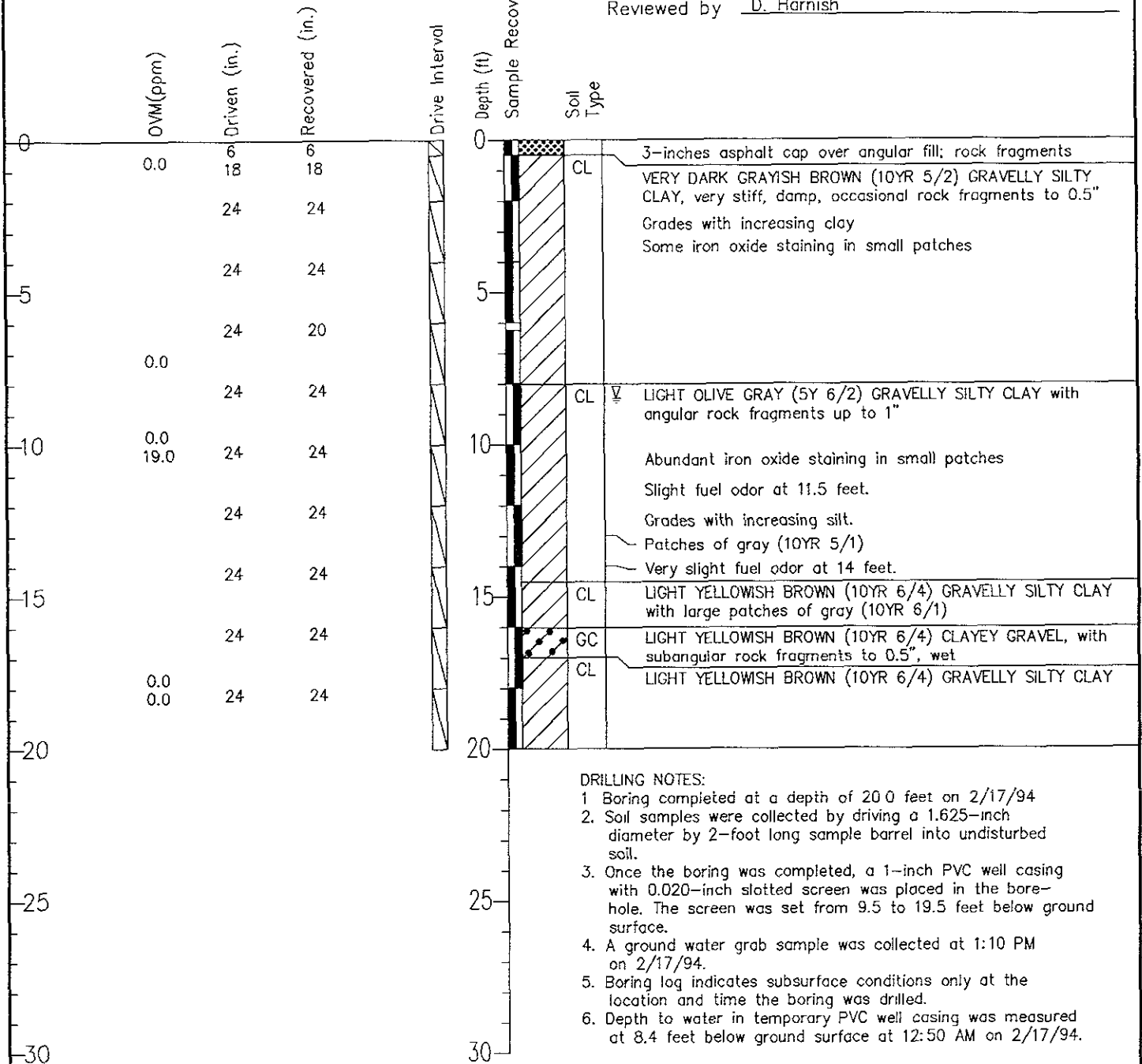
Page 1 of 1

FIGURE

B11-3

A-4

Drill Date: Start 2/17/94 Finish 2/17/94
 Drill Method Hydraulically-driven core barrel,
custom-designed drill rig
 Driller Powercore Soil Sampling, Inc./Michael Nosewicz
 Logged by Ross Hartleb
 Reviewed by D. Harnish



DRILLING NOTES:

- Boring completed at a depth of 20.0 feet on 2/17/94
- Soil samples were collected by driving a 1.625-inch diameter by 2-foot long sample barrel into undisturbed soil.
- Once the boring was completed, a 1-inch PVC well casing with 0.020-inch slotted screen was placed in the bore-hole. The screen was set from 9.5 to 19.5 feet below ground surface.
- A ground water grab sample was collected at 1:10 PM on 2/17/94.
- Boring log indicates subsurface conditions only at the location and time the boring was drilled.
- Depth to water in temporary PVC well casing was measured at 8.4 feet below ground surface at 12:50 AM on 2/17/94.

ENVIRON

Counsel in Health and Environmental Science

Job No 03-3118D

Approved:

3/21/94

LOG OF BORING

Kentucky Fried Chicken (Property 11)
 Kaiser/Emeryville Site
 Emeryville, California

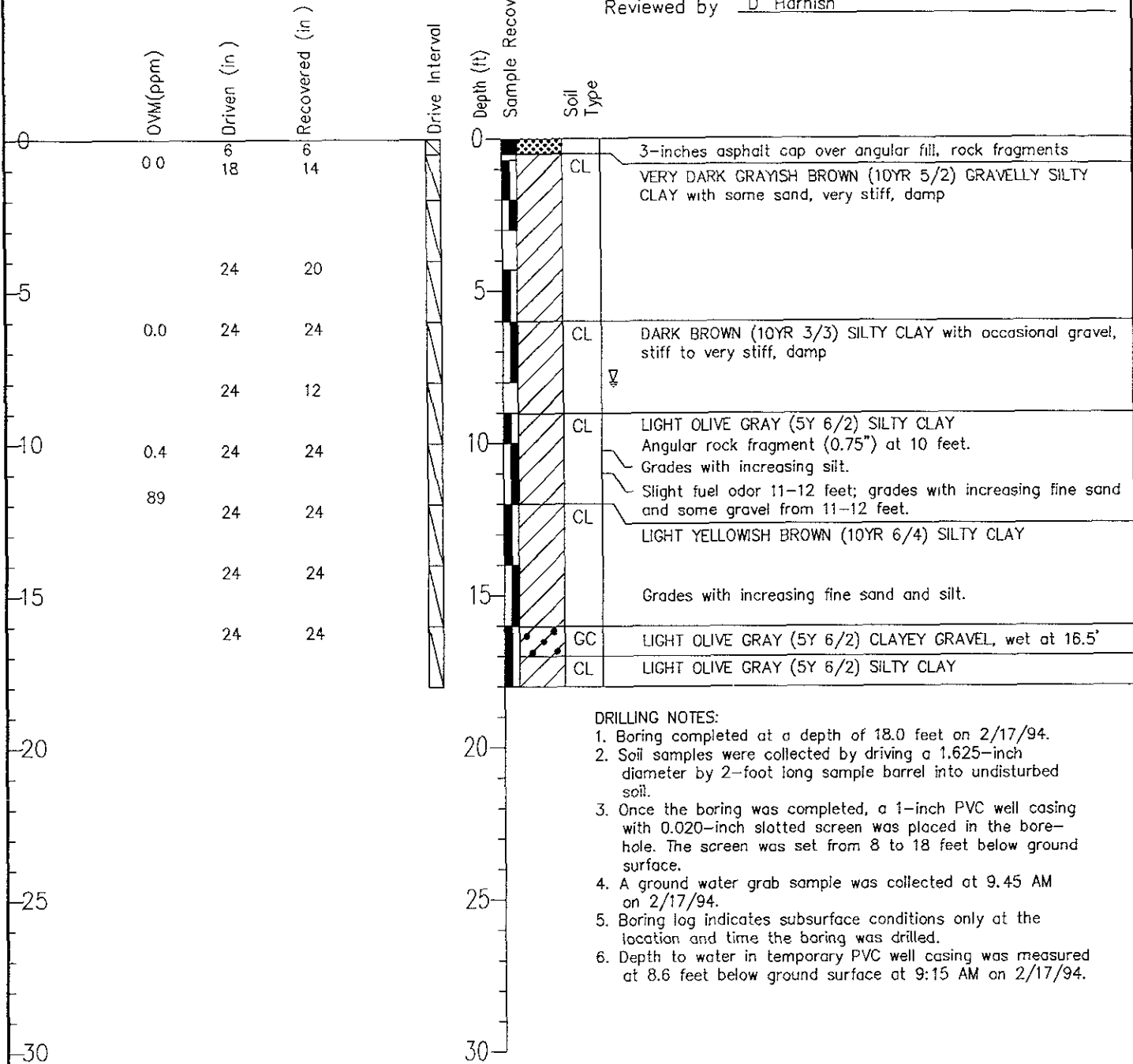
Page 1 of 1

FIGURE

B11-4

A-5

Drill Date: Start 2/17/94 Finish 2/17/94
 Drill Method Hydraulically-driven core barrel, custom-designed drill.
 Driller Powercore Soil Sampling, Inc./Michael Nosewicz
 Logged by Ross Hartleb
 Reviewed by D. Harnish



- DRILLING NOTES:**
- Boring completed at a depth of 18.0 feet on 2/17/94.
 - Soil samples were collected by driving a 1.625-inch diameter by 2-foot long sample barrel into undisturbed soil.
 - Once the boring was completed, a 1-inch PVC well casing with 0.020-inch slotted screen was placed in the borehole. The screen was set from 8 to 18 feet below ground surface.
 - A ground water grab sample was collected at 9.45 AM on 2/17/94.
 - Boring log indicates subsurface conditions only at the location and time the boring was drilled.
 - Depth to water in temporary PVC well casing was measured at 8.6 feet below ground surface at 9:15 AM on 2/17/94.

ETC/Mid-Pacific

625 B Clyde Avenue
Mountain View, CA 94043
(415) 964-0844
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Environ
5820 Shellmound St. Suite 700
Emeryville, CA 94608

March 7, 1994
MPELI Order#: 94-02-101
Date Received: 02/18/94

Attn: David Harnish

Subject: Analysis of 15 Soil Samples

Work ID: 03-3118D Kaiser KFC

P.O. #: 03-3118D

Pages in report: 51

Analysis of soil samples for purgeable halogenated organic compounds was performed according to USEPA Method 8010A (Test Methods for Evaluating Solid Waste -- SW846, 3rd Ed., Revision 1, 1992).

Analysis of soil samples for higher boiling petroleum hydrocarbons (diesel, kerosene, & oil) was performed according to guidelines established in the Regional Water Quality Control Board (RWQCB) Leaking Underground Fuel Tank (LUFT) manual. This is also known as the modified 8015 protocol based on USEPA Method 8015A (Test Methods for Evaluating Solid Waste -- SW846, 3rd Ed. Revision 1, 1992).

Analysis of soil samples for lower boiling petroleum hydrocarbons (benzene, toluene, ethylbenzene, xylenes, and gasoline) was performed according to guidelines established in the Regional Water Quality Control Board (RWQCB) Leaking Underground Fuel Tank (LUFT) manual. This is also known as the modified 8015 protocol based on USEPA Method 8015A (Test Methods for Evaluating Solid Waste -- SW846, 3rd Ed. Revision 1, 1992).

NOTES

Listed on the chain of custody are three samples all with the ID B11-3@. Sample containers were received as B11-3 @3, B11-3 @6, and B11-3 @9. All three were analyzed and reported under the ID as listed on the sample containers.

Method 8010:

The surrogate recovery for the matrix spike in QC group S150A was low, outside limits due to the high percent moisture of the sample.

TPH-EXTRACTABLES:

The surrogate spiking compound Pentacosane has been recently introduced for TPH-Extractable analysis. Insufficient data exists at this time to determine acceptable QC limits. Therefore that entry is left blank on each page where results are reported.

In the analysis of samples B11-2 @11, B11-4 @11.5, and B11-6 @11, a

chromatographic pattern was observed that did not match the pattern of any of our in-house standards for this method. This component was semi-quantitated by comparison with the diesel standard, and reported as "*Unknown Hydrocarbons".

The unknown hydrocarbon in sample B11-2 @11 has the same retention time as kerosene but a different chromatographic pattern.

TPH-PURGEABLES:

In the analysis of samples B11-2 @11, B11-4 @11.5, and B11-6 @11, a chromatographic pattern was observed that did not match the pattern of any of our in-house standards for this method. This component was semi-quantitated by comparison with the gasoline standard, and reported as "Unknown Hydrocarbons".

All analyses were conducted in batches of 20 samples or less. Each QC batch consisted of a method blank, a matrix spike, a matrix spike duplicate and a laboratory control sample. The QC information is in a separate QC report at the end of the regular report. To find the associated QC data, identify the batch number for the analysis of interest and look for that number in the QC report for that test. Occasionally a sample will be associated with a sub-batch, which will end in a letter other than "A". The main batch will include the original blank, MS, MSD, and LCS. The sub-batch will contain the additional blank associated with the sample and LCS.

All analytes reported above detection limits on gas chromatography analyses have been confirmed by a second dissimilar column.

Samples were diluted when one or both of the following situations exists:

- 1) one or more analytes is present at a level above the linear calibration range of the instrument; or
- 2) compounds are present at levels that could damage the instrument.

The following flags and abbreviations may be used in this report:

ND - Not detected above the detection limit stated.

** - See other analysis.

Freon 113 - 1,1,2-Trichloro-1,2,2-trifluoroethane. Not an 8010 compound.

MS(D) - Matrix spike (duplicate)

LCS(D) - Laboratory control sample (duplicate)

RPD - Relative percent difference

N/A - Not applicable

Q - surrogate recovery outside the QC limits

Lab ID	Sample ID	Analysis	Batch
9402101-01A	B11-1 @ 4	8010 Volatiles by GC /soil	S150A
9402101-02A	B11-1 @ 6	8010 Volatiles by GC /soil	S150A
9402101-03A	B11-1 @ 9	8010 Volatiles by GC /soil	S150A
9402101-04A	B11-2 @ 3.5	8010 Volatiles by GC /soil	S150A
9402101-05A	B11-2 @ 6.5	8010 Volatiles by GC /soil	S150A
9402101-06A	B11-2 @ 11	8010 Volatiles by GC /soil	S150A
9402101-07A	B11-3 @ 3	8010 Volatiles by GC /soil	S150A
9402101-08A	B11-3 @ 6	8010 Volatiles by GC /soil	S150A
9402101-09A	B11-3 @ 9	8010 Volatiles by GC /soil	S150A
9402101-10A	B11-4 @ 3	8010 Volatiles by GC /soil	S150A
9402101-11A	B11-4 @ 6.5	8010 Volatiles by GC /soil	S150A
9402101-12A	B11-4 @ 11.5	8010 Volatiles by GC /soil	S150A

9402101-13A	B11-5 @ 4.5	8010 Volatiles by GC /soil	S150A
9402101-14A	B11-5 @ 6	8010 Volatiles by GC /soil	S150A
9402101-15A	B11-6 @ 11	8010 Volatiles by GC /soil	S150A
9402101-01B	B11-1 @ 4	TPH as Diesel by GC /soil	0322A
9402101-02B	B11-1 @ 6	TPH as Diesel by GC /soil	0322A
9402101-03B	B11-1 @ 9	TPH as Diesel by GC /soil	0322A
9402101-04B	B11-2 @ 3.5	TPH as Diesel by GC /soil	0322A
9402101-05B	B11-2 @ 6.5	TPH as Diesel by GC /soil	0322A
9402101-06B	B11-2 @ 11	TPH as Diesel by GC /soil	0322A
9402101-07B	B11-3 @ 3	TPH as Diesel by GC /soil	0322A
9402101-08B	B11-3 @ 6	TPH as Diesel by GC /soil	0322A
9402101-09B	B11-3 @ 9	TPH as Diesel by GC /soil	0322A
9402101-10B	B11-4 @ 3	TPH as Diesel by GC /soil	0322A
9402101-11B	B11-4 @ 6.5	TPH as Diesel by GC /soil	0322A
9402101-12B	B11-4 @ 11.5	TPH as Diesel by GC /soil	0322A
9402101-13B	B11-5 @ 4.5	TPH as Diesel by GC /soil	0322A
9402101-14B	B11-5 @ 6	TPH as Diesel by GC /soil	0322A
9402101-15B	B11-6 @ 11	TPH as Diesel by GC /soil	0322A
9402101-01A	B11-1 @ 4	TPH as Gas,BTEX by GC/soil	S217A
9402101-02A	B11-1 @ 6	TPH as Gas,BTEX by GC/soil	S217A
9402101-03A	B11-1 @ 9	TPH as Gas,BTEX by GC/soil	S217A
9402101-04A	B11-2 @ 3.5	TPH as Gas,BTEX by GC/soil	S217A
9402101-05A	B11-2 @ 6.5	TPH as Gas,BTEX by GC/soil	S217A
9402101-06A	B11-2 @ 11	TPH as Gas,BTEX by GC/soil	S217A
9402101-07A	B11-3 @ 3	TPH as Gas,BTEX by GC/soil	S217A
9402101-08A	B11-3 @ 6	TPH as Gas,BTEX by GC/soil	S217A
9402101-09A	B11-3 @ 9	TPH as Gas,BTEX by GC/soil	S217A
9402101-10A	B11-4 @ 3	TPH as Gas,BTEX by GC/soil	S217A
9402101-11A	B11-4 @ 6.5	TPH as Gas,BTEX by GC/soil	S217A
9402101-12A	B11-4 @ 11.5	TPH as Gas,BTEX by GC/soil	S217A
9402101-13A	B11-5 @ 4.5	TPH as Gas,BTEX by GC/soil	S217A
9402101-14A	B11-5 @ 6	TPH as Gas,BTEX by GC/soil	S217A
9402101-15A	B11-6 @ 11	TPH as Gas,BTEX by GC/soil	S217A

If you should have any technical questions, please contact the undersigned at (415) 964-0844.

Approved by:


Client Services

These results were obtained by following standard laboratory procedures; the liability of Mid-Pacific Environmental Laboratory, Inc. shall not exceed the amount paid for this report. In no event shall Mid-Pacific be liable for special or consequential damages.

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B11-1 @ 4
 MPELI ID: 9402101-01A
 Matrix: SOIL
 QC Batch: S150A

Collected: 02/18/94
 Received: 02/18/94
 Analyzed: 03/02/94
 Dilution factor: 1.00

<u>Concentration, ug/kg</u>		
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	5.0
Chloromethane	ND	5.0
Vinyl Chloride	ND	5.0
Bromomethane	ND	5.0
Chloroethane	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
2-Chloroethylvinyl ether	ND	50
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	5.0
Bromoform	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
Freon 113	ND	5.0
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	73	66-126

Environ
Analytical Results - TPH as Diesel by GC /soil

Client ID: B11-1 @ 4 Collected: 02/18/94
MPELI ID: 9402101-01B Received: 02/18/94
Matrix: SOIL Extracted: 02/23/94
QC Batch: 0322A Analyzed: 03/01/94
Dilution factor: 1.00

<u>Concentration, mg/kg</u>		
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Diesel	ND	1.00
Kerosene	ND	1.00
Motor Oil	ND	10.0
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Pentacosane	96	-

Environ
Analytical Results - TPH as Gas, BTEX by GC/soil

Client ID: B11-1 @ 4
MPELI ID: 9402101-01A
Matrix: SOIL
QC Batch: S217A

Collected: 02/18/94
Received: 02/18/94
Analyzed: 02/28/94
Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	69	42-137

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B11-1 @ 6
 MPELI ID: 9402101-02A
 Matrix: SOIL
 QC Batch: S150A

Collected: 02/18/94
 Received: 02/18/94
 Analyzed: 03/01/94
 Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	5.0
Chloromethane	ND	5.0
Vinyl Chloride	ND	5.0
Bromomethane	ND	5.0
Chloroethane	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
2-Chloroethylvinyl ether	ND	50
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	5.0
Bromoform	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
Freon 113	ND	5.0
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	83	66-126

Environ

Analytical Results - TPH as Diesel by GC /soil

Client ID: B11-1 @ 6
 MPELI ID: 9402101-02B
 Matrix: SOIL
 QC Batch: 0322A

Collected: 02/18/94
 Received: 02/18/94
 Extracted: 02/23/94
 Analyzed: 02/25/94
 Dilution factor: 1.00

Concentration, mg/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Diesel	ND	1.00
Kerosene	ND	1.00
Motor Oil	ND	10.0

<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Pentacosane	168	-

Environ
Analytical Results - TPH as Gas, BTEX by GC/soil

Client ID: B11-1 @ 6
MPELI ID: 9402101-02A
Matrix: SOIL
QC Batch: S217A

Collected: 02/18/94
Received: 02/18/94
Analyzed: 02/28/94
Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	71	42-137

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B11-1 @ 9
 MPELI ID: 9402101-03A
 Matrix: SOIL
 QC Batch: S150A

Collected: 02/18/94
 Received: 02/18/94
 Analyzed: 03/01/94
 Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	5.0
Chloromethane	ND	5.0
Vinyl Chloride	ND	5.0
Bromomethane	ND	5.0
Chloroethane	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
2-Chloroethylvinyl ether	ND	50
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	5.0
Bromoform	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
Freon 113	ND	5.0
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	82	66-126

Environ
Analytical Results - TPH as Diesel by GC /soil

Client ID: B11-1 @ 9
MPELI ID: 9402101-03B
Matrix: SOIL
QC Batch: 0322A

Collected: 02/18/94
Received: 02/18/94
Extracted: 02/23/94
Analyzed: 02/25/94
Dilution factor: 1.00

Concentration, mg/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Diesel	ND	1.00
Kerosene	ND	1.00
Motor Oil	ND	10.0
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Pentacosane	164	-

Environ
Analytical Results - TPH as Gas, BTEX by GC/soil

Client ID: <u>B11-1 @ 9</u>	Collected: 02/18/94
MPELI ID: <u>9402101-03A</u>	Received: 02/18/94
Matrix: SOIL	Analyzed: 02/28/94
QC Batch: S217A	Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	71	42-137

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B11-2 @ 3.5

Collected: 02/18/94

MPELI ID: 9402101-04A

Received: 02/18/94

Matrix: SOIL

Analyzed: 03/01/94

QC Batch: S150A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	5.0
Chloromethane	ND	5.0
Vinyl Chloride	ND	5.0
Bromomethane	ND	5.0
Chloroethane	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
2-Chloroethylvinyl ether	ND	50
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	5.0
Bromoform	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
Freon 113	ND	5.0
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	71	66-126

Environ
Analytical Results - TPH as Diesel by GC /soil

Client ID: B11-2 @ 3.5
MPELI ID: 9402101-04B
Matrix: SOIL
QC Batch: 0322A

Collected: 02/18/94
Received: 02/18/94
Extracted: 02/23/94
Analyzed: 02/25/94
Dilution factor: 1.00

Concentration, mg/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Diesel	ND	1.00
Kerosene	ND	1.00
Motor Oil	ND	10.0
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Pentacosane	172	-

Environ
Analytical Results - TPH as Gas, BTEX by GC/soil

Client ID: B11-2 @ 3.5 Collected: 02/18/94
MPELI ID: 9402101-04A Received: 02/18/94
Matrix: SOIL Analyzed: 02/28/94
QC Batch: S217A Dilution factor: 1.00

	<u>Concentration, ug/kg</u>	
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	61	42-137

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B11-2 @ 6.5

Collected: 02/18/94

MPELI ID: 9402101-05A

Received: 02/18/94

Matrix: SOIL

Analyzed: 03/01/94

QC Batch: S150A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	5.0
Chloromethane	ND	5.0
Vinyl Chloride	ND	5.0
Bromomethane	ND	5.0
Chloroethane	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
2-Chloroethylvinyl ether	ND	50
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	5.0
Bromoform	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
Freon 113	ND	5.0
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	77	66-126

Environ
Analytical Results - TPH as Diesel by GC /soil

Client ID: B11-2 @ 6.5
MPELI ID: 9402101-05B
Matrix: SOIL
QC Batch: 0322A

Collected: 02/18/94
Received: 02/18/94
Extracted: 02/23/94
Analyzed: 03/01/94
Dilution factor: 1.00

Concentration, mg/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Diesel	ND	1.00
Kerosene	ND	1.00
Motor Oil	ND	10.0

<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Pentacosane	102	-

Environ
Analytical Results - TPH as Gas, BTEX by GC/soil

Client ID: B11-2 @ 6.5
MPELI ID: 9402101-05A
Matrix: SOIL
QC Batch: S217A

Collected: 02/18/94
Received: 02/18/94
Analyzed: 02/28/94
Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	73	42-137

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B11-2 @ 11
 MPELI ID: 9402101-06A
 Matrix: SOIL
 QC Batch: S150A

Collected: 02/18/94
 Received: 02/18/94
 Analyzed: 03/01/94
 Dilution factor: 1.00

<u>Concentration, ug/kg</u>		
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	5.0
Chloromethane	ND	5.0
Vinyl Chloride	ND	5.0
Bromomethane	ND	5.0
Chloroethane	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
2-Chloroethylvinyl ether	ND	50
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	5.0
Bromoform	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
Freon 113	ND	5.0
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	84	66-126

Environ
Analytical Results - TPH as Diesel by GC /soil

Client ID: B11-2 @ 11 Collected: 02/18/94
MPELI ID: 9402101-06B Received: 02/18/94
Matrix: SOIL Extracted: 02/23/94
QC Batch: 0322A Analyzed: 03/01/94
Dilution factor: 1.00

<u>Concentration, mg/kg</u>		
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Diesel	ND	1.00
Kerosene	ND	1.00
Motor Oil	270	10.0
*Unknown Hydrocarbons	44	1.00
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Pentacosane	81	-

Environ
Analytical Results - TPH as Gas, BTEX by GC/soil

Client ID: B11-2 @ 11
 MPELI ID: 9402101-06A
 Matrix: SOIL
 QC Batch: S217A

Collected: 02/18/94
 Received: 02/18/94
 Analyzed: 02/28/94
 Dilution factor: 1.00

<u>PARAMETER</u>	<u>CONCENTRATION, ug/kg</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene		ND	5.0
Toluene		ND	5.0
Ethylbenzene		ND	5.0
Total Xylenes		ND	5.0
Gasoline		ND	1000
*Unknown Hydrocarbons		14000	1000
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>	
Bromofluorobenzene	80	42-137	

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B11-3 @ 3
 MPELI ID: 9402101-07A
 Matrix: SOIL
 QC Batch: S150A

Collected: 02/17/94
 Received: 02/18/94
 Analyzed: 03/01/94
 Dilution factor: 1.00

<u>Concentration, ug/kg</u>		
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	5.0
Chloromethane	ND	5.0
Vinyl Chloride	ND	5.0
Bromomethane	ND	5.0
Chloroethane	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
2-Chloroethylvinyl ether	ND	50
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	5.0
Bromoform	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
Freon 113	ND	5.0
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	73	66-126

Environ
Analytical Results - TPH as Diesel by GC /soil

Client ID: B11-3 @ 3
MPELI ID: 9402101-07B
Matrix: SOIL
QC Batch: 0322A

Collected: 02/17/94
Received: 02/18/94
Extracted: 02/23/94
Analyzed: 03/01/94
Dilution factor: 1.00

Concentration, mg/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Diesel	ND	1.00
Kerosene	ND	1.00
Motor Oil	ND	10.0

<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Pentacosane	108	-

Environ
Analytical Results - TPH as Gas, BTEX by GC/soil

Client ID: B11-3 @ 3 Collected: 02/17/94
MPELI ID: 9402101-07A Received: 02/18/94
Matrix: SOIL Analyzed: 02/28/94
QC Batch: S217A Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	7.0	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000

<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	62	42-137

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B11-3 @ 6
 MPELI ID: 9402101-08A
 Matrix: SOIL
 QC Batch: S150A

Collected: 02/17/94
 Received: 02/18/94
 Analyzed: 03/01/94
 Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	5.0
Chloromethane	ND	5.0
Vinyl Chloride	ND	5.0
Bromomethane	ND	5.0
Chloroethane	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
2-Chloroethylvinyl ether	ND	50
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	5.0
Bromoform	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
Freon 113	ND	5.0
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	81	66-126

Environ
Analytical Results - TPH as Diesel by GC /soil

Client ID: B11-3 @ 6 Collected: 02/17/94
MPELI ID: 9402101-08B Received: 02/18/94
Matrix: SOIL Extracted: 02/23/94
QC Batch: 0322A Analyzed: 03/01/94
Dilution factor: 1.00

Concentration, mg/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Diesel	ND	1.00
Kerosene	ND	1.00
Motor Oil	ND	10.0

<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Pentacosane	101	-

Environ
Analytical Results - TPH as Gas, BTEX by GC/soil

Client ID: B11-3 @ 6 Collected: 02/17/94
MPELI ID: 9402101-08A Received: 02/18/94
Matrix: SOIL Analyzed: 02/28/94
QC Batch: S217A Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000

<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	72	42-137

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B11-3 @ 9
 MPELI ID: 9402101-09A
 Matrix: SOIL
 QC Batch: S150A

Collected: 02/17/94
 Received: 02/18/94
 Analyzed: 03/01/94
 Dilution factor: 1.00

<u>Concentration, ug/kg</u>		
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	5.0
Chloromethane	ND	5.0
Vinyl Chloride	ND	5.0
Bromomethane	ND	5.0
Chloroethane	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
2-Chloroethylvinyl ether	ND	50
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	5.0
Bromoform	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
Freon 113	ND	5.0
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	88	66-126

Environ
Analytical Results - TPH as Diesel by GC /soil

Client ID: B11-3 @ 9 Collected: 02/17/94
MPELI ID: 9402101-09B Received: 02/18/94
Matrix: SOIL Extracted: 02/23/94
QC Batch: 0322A Analyzed: 03/01/94
Dilution factor: 1.00

<u>Concentration, mg/kg</u>		
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Diesel	ND	1.00
Kerosene	ND	1.00
Motor Oil	ND	10.0
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Pentacosane	108	-

Environ
Analytical Results - TPH as Gas, BTEX by GC/soil

Client ID: B11-3 @ 9
MPELI ID: 9402101-09A
Matrix: SOIL
QC Batch: S217A

Collected: 02/17/94
Received: 02/18/94
Analyzed: 02/28/94
Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	72	42-137

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B11-4 @ 3
 MPELI ID: 9402101-10A
 Matrix: SOIL
 QC Batch: S150A

Collected: 02/17/94
 Received: 02/18/94
 Analyzed: 03/02/94
 Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	5.0
Chloromethane	ND	5.0
Vinyl Chloride	ND	5.0
Bromomethane	ND	5.0
Chloroethane	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
2-Chloroethylvinyl ether	ND	50
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	5.0
Bromoform	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
Freon 113	ND	5.0
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	71	66-126

Environ

Analytical Results - TPH as Diesel by GC /soil

Client ID: <u>B11-4 @ 3</u>	Collected: 02/17/94
MPELI ID: <u>9402101-10B</u>	Received: 02/18/94
Matrix: SOIL	Extracted: 02/23/94
QC Batch: 0322A	Analyzed: 03/01/94
	Dilution factor: 1.00

Concentration, mg/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Diesel	ND	1.00
Kerosene	ND	1.00
Motor Oil	ND	10.0
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Pentacosane	95	-

Environ
Analytical Results - TPH as Gas, BTEX by GC/soil

Client ID: B11-4 @ 3
MPELI ID: 9402101-10A
Matrix: SOIL
QC Batch: S217A

Collected: 02/17/94
Received: 02/18/94
Analyzed: 02/28/94
Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	54	42-137

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B11-4 @ 6.5

Collected: 02/17/94

MPELI ID: 9402101-11A

Received: 02/18/94

Matrix: SOIL

Analyzed: 03/01/94

QC Batch: S150A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	5.0
Chloromethane	ND	5.0
Vinyl Chloride	ND	5.0
Bromomethane	ND	5.0
Chloroethane	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
2-Chloroethylvinyl ether	ND	50
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	5.0
Bromoform	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
Freon 113	ND	5.0
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	73	66-126

Environ
Analytical Results - TPH as Diesel by GC /soil

Client ID: B11-4 @ 6.5
MPELI ID: 9402101-11B
Matrix: SOIL
QC Batch: 0322A

Collected: 02/17/94
Received: 02/18/94
Extracted: 02/23/94
Analyzed: 03/01/94
Dilution factor: 1.00

Concentration, mg/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Diesel	ND	1.00
Kerosene	ND	1.00
Motor Oil	ND	10.0

<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Pentacosane	112	-

Environ
Analytical Results - TPH as Gas, BTEX by GC/soil

Client ID: B11-4 @ 6.5

Collected: 02/17/94

MPELI ID: 9402101-11A

Received: 02/18/94

Matrix: SOIL

Analyzed: 02/28/94

QC Batch: S217A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000

<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	65	42-137

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B11-4 @ 11.5

Collected: 02/17/94

MPELI ID: 9402101-12A

Received: 02/18/94

Matrix: SOIL

Analyzed: 03/01/94

QC Batch: S150A

Dilution factor: 1.00

<u>Concentration, ug/kg</u>		
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	5.0
Chloromethane	ND	5.0
Vinyl Chloride	ND	5.0
Bromomethane	ND	5.0
Chloroethane	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
2-Chloroethylvinyl ether	ND	50
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	5.0
Bromoform	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
Freon 113	ND	5.0
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	71	66-126

Environ
Analytical Results - TPH as Diesel by GC /soil

Client ID: B11-4 @ 11.5 Collected: 02/17/94
MPELI ID: 9402101-12B Received: 02/18/94
Matrix: SOIL Extracted: 02/23/94
QC Batch: 0322A Analyzed: 03/01/94
Dilution factor: 1.00

Concentration, mg/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Diesel	ND	1.00
Kerosene	ND	1.00
Motor Oil	ND	10.0
*Unknown Hydrocarbons	19	1.00

<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Pentacosane	106	-

Environ
Analytical Results - TPH as Gas, BTEX by GC/soil

Client ID: B11-4 @ 11.5

Collected: 02/17/94

MPELI ID: 9402101-12A

Received: 02/18/94

Matrix: SOIL

Analyzed: 02/28/94

QC Batch: S217A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000
*Unknown Hydrocarbons	3100	1000
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	71	42-137

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B11-5 @ 4.5

Collected: 02/17/94

MPELI ID: 9402101-13A

Received: 02/18/94

Matrix: SOIL

Analyzed: 03/02/94

QC Batch: S150A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	5.0
Chloromethane	ND	5.0
Vinyl Chloride	ND	5.0
Bromomethane	ND	5.0
Chloroethane	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
2-Chloroethylvinyl ether	ND	50
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	5.0
Bromoform	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
Freon 113	ND	5.0
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	72	66-126

Environ
Analytical Results - TPH as Diesel by GC /soil

Client ID: B11-5 @ 4.5
MPELI ID: 9402101-13B
Matrix: SOIL
QC Batch: 0322A

Collected: 02/17/94
Received: 02/18/94
Extracted: 02/23/94
Analyzed: 03/01/94
Dilution factor: 1.00

Concentration, mg/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Diesel	ND	1.00
Kerosene	ND	1.00
Motor Oil	ND	10.0
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Pentacosane	88	-

Environ
Analytical Results - TPH as Gas, BTEX by GC/soilClient ID: B11-5 @ 4.5

Collected: 02/17/94

MPELI ID: 9402101-13A

Received: 02/18/94

Matrix: SOIL

Analyzed: 02/28/94

QC Batch: S217A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000

<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	61	42-137

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B11-5 @ 6
 MPELI ID: 9402101-14A
 Matrix: SOIL
 QC Batch: S150A

Collected: 02/17/94
 Received: 02/18/94
 Analyzed: 03/01/94
 Dilution factor: 1.00

<u>Concentration, ug/kg</u>		
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	5.0
Chloromethane	ND	5.0
Vinyl Chloride	ND	5.0
Bromomethane	ND	5.0
Chloroethane	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
2-Chloroethylvinyl ether	ND	50
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	5.0
Bromoform	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
Freon 113	ND	5.0
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	69	66-126

Environ
Analytical Results - TPH as Diesel by GC /soil

Client ID: B11-5 @ 6
MPELI ID: 9402101-14B
Matrix: SOIL
QC Batch: 0322A

Collected: 02/17/94
Received: 02/18/94
Extracted: 02/23/94
Analyzed: 03/01/94
Dilution factor: 1.00

Concentration, mg/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Diesel	ND	1.00
Kerosene	ND	1.00
Motor Oil	ND	10.0
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Pentacosane	98	-

Environ
Analytical Results - TPH as Gas, BTEX by GC/soil

Client ID: B11-5 @ 6 Collected: 02/17/94
MPELI ID: 9402101-14A Received: 02/18/94
Matrix: SOIL Analyzed: 02/28/94
QC Batch: S217A Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000

<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	69	42-137

Environ
Analytical Results - 8010 Volatiles by GC /soil

Client ID: B11-6 @ 11
 MPELI ID: 9402101-15A
 Matrix: SOIL
 QC Batch: S150A

Collected: 02/17/94
 Received: 02/18/94
 Analyzed: 03/02/94
 Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	5.0
Chloromethane	ND	5.0
Vinyl Chloride	ND	5.0
Bromomethane	ND	5.0
Chloroethane	ND	5.0
Trichlorofluoromethane	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
1,1-Dichloroethane	ND	5.0
cis-1,2-Dichloroethene	ND	5.0
Chloroform	ND	5.0
1,1,1-Trichloroethane	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
2-Chloroethylvinyl ether	ND	50
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0
Chlorobenzene	ND	5.0
Bromoform	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
Freon 113	ND	5.0
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	77	66-126

Environ
Analytical Results - TPH as Diesel by GC /soil

Client ID: B11-6 @ 11
MPELI ID: 9402101-15B
Matrix: SOIL
QC Batch: 0322A

Collected: 02/17/94
Received: 02/18/94
Extracted: 02/23/94
Analyzed: 03/01/94
Dilution factor: 1.00

Concentration, mg/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Diesel	ND	1.00
Kerosene	ND	1.00
Motor Oil	ND	10.0
*Unknown Hydrocarbons	5.2	1.00

<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Pentacosane	102	-

Environ

Analytical Results - TPH as Gas, BTEX by GC/soil

Client ID: B11-6 @ 11

Collected: 02/17/94

MPELI ID: 9402101-15A

Received: 02/18/94

Matrix: SOIL

Analyzed: 02/28/94

QC Batch: S217A

Dilution factor: 1.00

Concentration, ug/kg

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
Total Xylenes	ND	5.0
Gasoline	ND	1000
*Unknown Hydrocarbons	20000	1000
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	65	42-137

8010 Volatiles in Soil

Sample Spiked: B11-4 @ 3QC Batch#: S150A

Units: ug/kg

Prep Date: 03/01/94

Analysis Dates

Blank: 03/01/94

MS: 03/01/94

MSD: 03/01/94

LCS: 03/01/94

<u>Analytes</u>	Blank		Spike <u>level</u>	%Recovery		<u>LCS</u>	QC	
	<u>Result</u>	<u>Limit</u>		<u>MS</u>	<u>MSD</u>		<u>LIMITS</u>	<u>RPD</u>
Dichlorodifluoromethane	ND	5.0						
Chloromethane	ND	5.0						
Vinyl Chloride	ND	5.0						
Bromomethane	ND	5.0						
Chloroethane	ND	5.0						
Trichlorofluoromethane	ND	5.0						
1,1-Dichloroethene	ND	5.0	250	59	68	84	28-167	14
Methylene Chloride	ND	5.0						
trans-1,2-Dichloroethene	ND	5.0						
1,1-Dichloroethane	ND	5.0						
cis-1,2-Dichloroethene	ND	5.0						
Chloroform	ND	5.0	250	64	71	87	49-133	10
1,1,1-Trichloroethane	ND	5.0						
Carbon Tetrachloride	ND	5.0	250	62	73	91	43-143	16
1,2-Dichloroethane	ND	5.0	250	63	70	89	51-147	11
Trichloroethene	ND	5.0	250	62	69	85	35-146	11
1,2-Dichloropropane	ND	5.0						
Bromodichloromethane	ND	5.0						
2-Chloroethylvinyl ether	ND	5.0						
trans-1,3-Dichloropropene	ND	5.0						
1,1,2-Trichloroethane	ND	5.0						
Tetrachloroethene	ND	5.0	250	66	74	93	26-162	11
Dibromochloromethane	ND	5.0						
Chlorobenzene	ND	5.0	250	62	69	90	38-150	11
Bromoform	ND	5.0						
1,1,2,2-Tetrachloroethane	ND	5.0						
1,3-Dichlorobenzene	ND	5.0						
1,4-Dichlorobenzene	ND	5.0	250	59	66	89	42-143	11
1,2-Dichlorobenzene	ND	5.0						
Freon 113	ND	5.0						
Bromochloromethane (surr)	83%		20	62	66	91	66-126	

Tot. Pet. Hydrocarbon/soil

Sample Spiked: B11-3 @ 9

QC Batch#: 0322A
Units: mg/kg
Prep Date: 02/23/94

Analysis Dates
Blank: 02/25/94
MS: 02/25/94
MSD: 02/25/94
LCS: 02/25/94

<u>Analytes</u>	Blank		Spike <u>level</u>	%Recovery			QC	
	<u>Result</u>	<u>Limit</u>		<u>MS</u>	<u>MSD</u>	<u>LCS</u>	<u>LIMITS</u>	<u>RPD</u>
Diesel	ND	1	2000	114	111	111	53-119	2.7
Kerosene	ND	1						
Motor Oil	ND	10						
Pentacosane (sur.)	150%		1000	153	156	159		1.9

Gas BTEX in soil

Sample Spiked: B11-3 @ 3QC Batch#: S217A

Units: ug/kg

Prep Date: 02/25/94

Analysis Dates

Blank: 02/28/94

MS: 02/28/94

MSD: 02/28/94

LCS: 02/28/94

<u>Analytes</u>	Blank		Spike	%Recovery		QC		
	<u>Result</u>	<u>Limit</u>	<u>level</u>	<u>MS</u>	<u>MSD</u>	<u>LCS</u>	<u>LIMITS</u>	<u>RPD</u>
Benzene	ND	5	125	44	48	57	39-150	8.7
Toluene	ND	5	125	44	47	56	46-148	6.6
Ethylbenzene	ND	5	125	48	49	61	32-160	2.1
Total Xylenes	ND	5	125	51	52	65	32-160	1.9
Gasoline	ND	1000						
Bromofluorobenzene (surr)	86%		1250	63	66	82	42-137	

Environ
5820 Shellmound St. Suite 700
Emeryville, CA 94608

March 07, 1994
MPELI Order#: 94-02-100
Date Received: 02/18/94

Attn: David Harnish

Subject: Analysis of 6 Water Samples

Work ID: 03-3118D Kaiser KFC

P.O. #: 03-3118D

Pages in report: 20

Analysis of water samples for purgeable halogenated organic compounds was performed according to USEPA Method 8010 (Test Methods for Evaluating Solid Waste -- SW846, 3rd Ed.,1986).

Analysis of water samples for higher boiling petroleum hydrocarbons (diesel, kerosene, & oil) was performed according to guidelines established in the Regional Water Quality Control Board (RWQCB) Leaking Underground Fuel Tank (LUFT) manual. This is also known as the modified 8015 protocol based on USEPA Method 8015 (Test Methods for Evaluating Solid Waste -- SW846, 3rd Ed.,1986).

Analysis of water samples for lower boiling petroleum hydrocarbons (benzene, toluene, ethylbenzene, xylenes, and gasoline) was performed according to guidelines established in the Regional Water Quality Control Board (RWQCB) Leaking Underground Fuel Tank (LUFT) manual. This is also known as the modified 8015 protocol based on USEPA Method 8015 (Test Methods for Evaluating Solid Waste -- SW846, 3rd Ed.,1986).

NOTES

Sample B11-EB was received on hold status and not analyzed.

All analyses were conducted in batches of 20 samples or less. Each QC batch consisted of a method blank, a matrix spike, a matrix spike duplicate and a laboratory control sample. The QC information is in a separate QC report at the end of the regular report. To find the associated QC data, identify the batch number for the analysis of interest and look for that number in the QC report for that test. Occasionally a sample will be associated with a sub-batch, which will end in a letter other than "A". The main batch will include the original blank, MS, MSD, and LCS. The sub-batch will contain the additional blank associated with the sample and LCS.

All analytes reported above detection limits on gas chromatography analyses have been confirmed by a second dissimilar column.

Samples were diluted when one or both of the following situations exists:

- 1) one or more analytes is present at a level above the linear calibration range of the instrument; or
- 2) compounds are present at levels that could damage the instrument.

The following flags and abbreviations may be used in this report:

ND - Not detected above the detection limit stated.
 ** - See other analysis.
 Freon 113 - 1,1,2-Trichloro-1,2,2-trifluoroethane. Not an 8010 compound.
 MS(D) - Matrix spike (duplicate)
 LCS(D) - Laboratory control sample (duplicate)
 RPD - Relative percent difference
 N/A - Not applicable
 Q - surrogate recovery outside the QC limits

Lab ID	Sample ID	Analysis	Batch
9402100-02A	E11-3	8010 Volatiles by GC /H2O	K008A
9402100-06A	E11-TB	8010 Volatiles by GC /H2O	K008A
9402100-01A	E11-1	8010 Volatiles by GC /H2O	K008B
9402100-03A	E11-4	8010 Volatiles by GC /H2O	K008B
9402100-04A	E11-5	8010 Volatiles by GC /H2O	K008B
9402100-01C	E11-1	TPH as Diesel by GC /H2O	0300A
9402100-02C	E11-3	TPH as Diesel by GC /H2O	0300A
9402100-03C	E11-4	TPH as Diesel by GC /H2O	0300A
9402100-04C	E11-5	TPH as Diesel by GC /H2O	0300A
9402100-01B	E11-1	TPH as Gas,BTEX by GC /H2O	D345A
9402100-02B	E11-3	TPH as Gas,BTEX by GC /H2O	D345A
9402100-03B	E11-4	TPH as Gas,BTEX by GC /H2O	D345A
9402100-04B	E11-5	TPH as Gas,BTEX by GC /H2O	D345A
9402100-06B	E11-TB	TPH as Gas,BTEX by GC /H2O	D345A

If you should have any technical questions, please contact the undersigned at (415) 964-0844.

Approved by: _____
 Client Services

These results were obtained by following standard laboratory procedures; the liability of Mid-Pacific Environmental Laboratory, Inc. shall not exceed the amount paid for this report. In no event shall Mid-Pacific be liable for special or consequential damages.

Environ
Analytical Results - 8010 Volatiles by GC /H2O

Client ID: B11-1
 MPOLI ID: 9402100-01A
 Matrix: WATER
 QC Batch: K008B

Collected: 02/18/94
 Received: 02/18/94
 Analyzed: 02/23/94
 Dilution factor: 1.00

<u>Concentration, ug/L</u>		
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	0.50
Chloromethane	ND	0.50
Vinyl Chloride	ND	0.50
Bromomethane	ND	0.50
Chloroethane	ND	0.50
Trichlorofluoromethane	ND	0.50
1,1-Dichloroethene	ND	0.50
Methylene Chloride	ND	0.50
trans-1,2-Dichloroethene	ND	0.50
1,1-Dichloroethane	ND	0.50
cis-1,2-Dichloroethene	ND	0.50
Chloroform	ND	0.50
1,1,1-Trichloroethane	ND	0.50
Carbon Tetrachloride	ND	0.50
1,2-Dichloroethane	ND	0.50
Trichloroethene	ND	0.50
1,2-Dichloropropane	ND	0.50
Bromodichloromethane	ND	0.50
2-Chloroethylvinyl ether	ND	5.0
trans-1,3-Dichloropropene	ND	0.50
1,1,2-Trichloroethane	ND	0.50
Tetrachloroethene	ND	0.50
Dibromochloromethane	ND	0.50
Chlorobenzene	ND	0.50
Bromoform	ND	0.50
1,1,2,2-Tetrachloroethane	ND	0.50
1,3-Dichlorobenzene	ND	0.50
1,4-Dichlorobenzene	ND	0.50
1,2-Dichlorobenzene	ND	0.50
Freon 113	ND	0.50
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	74	66-126

Environ
Analytical Results - TPH as Diesel by GC /H2O

Client ID: B11-1
MPELI ID: 9402100-01C
Matrix: WATER
QC Batch: 0300A

Collected: 02/18/94
Received: 02/18/94
Extracted: 02/22/94
Analyzed: 02/25/94
Dilution factor: 1.00

Concentration, ug/L

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Diesel	ND	50
Kerosene	ND	50
Motor Oil	3700	500
*Unknown Hydrocarbons	1200	50

Environ
Analytical Results - TPH as Gas, BTEX by GC /H2O

Client ID: B11-1
MPELI ID: 9402100-01B
Matrix: WATER
QC Batch: D345A

Collected: 02/18/94
Received: 02/18/94
Analyzed: 02/25/94
Dilution factor: 1.00

	<u>Concentration, ug/L</u>	
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
Total Xylenes	6.2	0.50
Gasoline	ND	50
Unknown Hydrocarbon	3000	50
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	83	58-127

Environ
Analytical Results - 8010 Volatiles by GC /H2O

Client ID: B11-3
 MPOLI ID: 9402100-02A
 Matrix: WATER
 QC Batch: K008A

Collected: 02/18/94
 Received: 02/18/94
 Analyzed: 02/22/94
 Dilution factor: 1.00

<u>Concentration, ug/L</u>		
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	0.50
Chloromethane	ND	0.50
Vinyl Chloride	ND	0.50
Bromomethane	ND	0.50
Chloroethane	ND	0.50
Trichlorofluoromethane	ND	0.50
1,1-Dichloroethene	ND	0.50
Methylene Chloride	ND	0.50
trans-1,2-Dichloroethene	ND	0.50
1,1-Dichloroethane	ND	0.50
cis-1,2-Dichloroethene	ND	0.50
Chloroform	ND	0.50
1,1,1-Trichloroethane	ND	0.50
Carbon Tetrachloride	ND	0.50
1,2-Dichloroethane	ND	0.50
Trichloroethene	ND	0.50
1,2-Dichloropropane	ND	0.50
Bromodichloromethane	ND	0.50
2-Chloroethylvinyl ether	ND	5.0
trans-1,3-Dichloropropene	ND	0.50
1,1,2-Trichloroethane	ND	0.50
Tetrachloroethene	ND	0.50
Dibromochloromethane	ND	0.50
Chlorobenzene	ND	0.50
Bromoform	ND	0.50
1,1,2,2-Tetrachloroethane	ND	0.50
1,3-Dichlorobenzene	ND	0.50
1,4-Dichlorobenzene	ND	0.50
1,2-Dichlorobenzene	ND	0.50
Freon 113	ND	0.50
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	104	66-126

Environ
Analytical Results - TPH as Diesel by GC /H2O

Client ID: B11-3
MPOLI ID: 9402100-02C
Matrix: WATER
QC Batch: 0300A

Collected: 02/18/94
Received: 02/18/94
Extracted: 02/22/94
Analyzed: 02/24/94
Dilution factor: 1.00

<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Diesel	ND	50
Kerosene	ND	50
Motor Oil	ND	500
*Unknown Hydrocarbons	2600	50

Environ
Analytical Results - TPH as Gas, BTEX by GC /H2O

Client ID: B11-3
MPERI ID: 9402100-02B
Matrix: WATER
QC Batch: D345A

Collected: 02/18/94
Received: 02/18/94
Analyzed: 02/25/94
Dilution factor: 1.00

	<u>Concentration, ug/L</u>	
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	0.50
Toluene	0.54	0.50
Ethylbenzene	ND	0.50
Total Xylenes	ND	0.50
Gasoline	ND	50
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	95	58-127

EnviroN
Analytical Results - 8010 Volatiles by GC /H2O

Client ID: B11-4
 MPOLI ID: 9402100-03A
 Matrix: WATER
 QC Batch: K008B

Collected: 02/17/94
 Received: 02/18/94
 Analyzed: 02/23/94
 Dilution factor: 1.00

<u>PARAMETER</u>	<u>Concentration, ug/L</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane		ND	0.50
Chloromethane		ND	0.50
Vinyl Chloride		ND	0.50
Bromomethane		ND	0.50
Chloroethane		ND	0.50
Trichlorofluoromethane		ND	0.50
1,1-Dichloroethene		ND	0.50
Methylene Chloride		ND	0.50
trans-1,2-Dichloroethene		ND	0.50
1,1-Dichloroethane		ND	0.50
cis-1,2-Dichloroethene		ND	0.50
Chloroform		ND	0.50
1,1,1-Trichloroethane		ND	0.50
Carbon Tetrachloride		ND	0.50
1,2-Dichloroethane		ND	0.50
Trichloroethene		ND	0.50
1,2-Dichloropropane		ND	0.50
Bromodichloromethane		ND	0.50
2-Chloroethylvinyl ether		ND	5.0
trans-1,3-Dichloropropene		ND	0.50
1,1,2-Trichloroethane		ND	0.50
Tetrachloroethene		ND	0.50
Dibromochloromethane		ND	0.50
Chlorobenzene		20	0.50
Bromoform		ND	0.50
1,1,2,2-Tetrachloroethane		ND	0.50
1,3-Dichlorobenzene		ND	0.50
1,4-Dichlorobenzene		ND	0.50
1,2-Dichlorobenzene		ND	0.50
Freon 113		ND	0.50
<u>SURROGATE</u>		<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane		101	66-126

Environ
Analytical Results - TPH as Diesel by GC /H2O

Client ID: B11-4
MPELI ID: 9402100-03C
Matrix: WATER
QC Batch: 0300A

Collected: 02/17/94
Received: 02/18/94
Extracted: 02/22/94
Analyzed: 02/24/94
Dilution factor: 1.00

	<u>Concentration, ug/L</u>	
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Diesel	ND	50
Kerosene	ND	50
Motor Oil	ND	500
*Unknown Hydrocarbons	2700	50

Enviro
Analytical Results - TPH as Gas, BTEX by GC /H2O

Client ID: B11-4
MPOLI ID: 9402100-03E
Matrix: WATER
QC Batch: D345A

Collected: 02/17/94
Received: 02/18/94
Analyzed: 02/25/94
Dilution factor: 1.00

	<u>Concentration, ug/L</u>	
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	20	0.50
Toluene	4.7	0.50
Ethylbenzene	8.4	0.50
Total Xylenes	ND	0.50
Gasoline	ND	50
Unknown Hydrocarbon	3500	50
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	110	58-127

Environ
Analytical Results - 8010 Volatiles by GC /H2O

Client ID: B11-5
 MPOLI ID: 9402100-04A
 Matrix: WATER
 QC Batch: K008B

Collected: 02/17/94
 Received: 02/18/94
 Analyzed: 02/23/94
 Dilution factor: 1.00

<u>Concentration, ug/L</u>		
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	0.50
Chloromethane	ND	0.50
Vinyl Chloride	ND	0.50
Bromomethane	ND	0.50
Chloroethane	ND	0.50
Trichlorofluoromethane	ND	0.50
1,1-Dichloroethene	ND	0.50
Methylene Chloride	ND	0.50
trans-1,2-Dichloroethene	ND	0.50
1,1-Dichloroethane	ND	0.50
cis-1,2-Dichloroethene	ND	0.50
Chloroform	ND	0.50
1,1,1-Trichloroethane	ND	0.50
Carbon Tetrachloride	ND	0.50
1,2-Dichloroethane	ND	0.50
Trichloroethene	ND	0.50
1,2-Dichloropropane	ND	0.50
Bromodichloromethane	ND	0.50
2-Chloroethylvinyl ether	ND	5.0
trans-1,3-Dichloropropene	ND	0.50
1,1,2-Trichloroethane	ND	0.50
Tetrachloroethene	ND	0.50
Dibromochloromethane	ND	0.50
Chlorobenzene	10	0.50
Bromoform	ND	0.50
1,1,2,2-Tetrachloroethane	ND	0.50
1,3-Dichlorobenzene	ND	0.50
1,4-Dichlorobenzene	ND	0.50
1,2-Dichlorobenzene	ND	0.50
Freon 113	ND	0.50
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	92	66-126

Environ
Analytical Results - TPH as Diesel by GC /H2O

Client ID: B11-5
MPELI ID: 9402100-04C
Matrix: WATER
QC Batch: 0300A

Collected: 02/17/94
Received: 02/18/94
Extracted: 02/22/94
Analyzed: 02/25/94
Dilution factor: 1.00

	<u>Concentration, ug/L</u>	
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Diesel	ND	50
Kerosene	ND	50
Motor Oil	1700	500
*Unknown Hydrocarbons	1300	50

Environ
Analytical Results - TPH as Gas, BTEX by GC /H2O

Client ID: B11-5
MPELI ID: 9402100-04B
Matrix: WATER
QC Batch: D345A

Collected: 02/17/94
Received: 02/18/94
Analyzed: 02/25/94
Dilution factor: 1.00

	<u>Concentration, ug/L</u>	
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	8.1	0.50
Toluene	2.2	0.50
Ethylbenzene	ND	0.50
Total Xylenes	12	0.50
Gasoline	ND	50
Unknown Hydrocarbon	1300	50
<u>SURROGATE</u>	<u>ZRECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	95	58-127

Environ
Analytical Results - 8010 Volatiles by GC /H2O

Client ID: B11-TE
 MPELI ID: 9402100-05A
 Matrix: WATER
 QC Batch: K008A

Collected: 02/17/94
 Received: 02/18/94
 Analyzed: 02/22/94
 Dilution factor: 1.00

<u>Concentration, ug/L</u>		
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Dichlorodifluoromethane	ND	0.50
Chloromethane	ND	0.50
Vinyl Chloride	ND	0.50
Bromomethane	ND	0.50
Chloroethane	ND	0.50
Trichlorofluoromethane	ND	0.50
1,1-Dichloroethene	ND	0.50
Methylene Chloride	ND	0.50
trans-1,2-Dichloroethene	ND	0.50
1,1-Dichloroethane	ND	0.50
cis-1,2-Dichloroethene	ND	0.50
Chloroform	ND	0.50
1,1,1-Trichloroethane	ND	0.50
Carbon Tetrachloride	ND	0.50
1,2-Dichloroethane	ND	0.50
Trichloroethene	ND	0.50
1,2-Dichloropropane	ND	0.50
Bromodichloromethane	ND	0.50
2-Chloroethylvinyl ether	ND	5.0
trans-1,3-Dichloropropene	ND	0.50
1,1,2-Trichloroethane	ND	0.50
Tetrachloroethene	ND	0.50
Dibromochloromethane	ND	0.50
Chlorobenzene	ND	0.50
Bromoform	ND	0.50
1,1,2,2-Tetrachloroethane	ND	0.50
1,3-Dichlorobenzene	ND	0.50
1,4-Dichlorobenzene	ND	0.50
1,2-Dichlorobenzene	ND	0.50
Freon 113	ND	0.50
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromochloromethane	94	66-126

Environ
Analytical Results - TPH as Gas, BTEX by GC /H2O

Client ID: B11-TE
MPCLI ID: 9402100-06B
Matrix: WATER
QC Batch: D345A

Collected: 02/17/94
Received: 02/18/94
Analyzed: 02/25/94
Dilution factor: 1.00

	<u>Concentration, ug/L</u>	
<u>PARAMETER</u>	<u>RESULT</u>	<u>LIMIT</u>
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
Total Xylenes	ND	0.50
Gasoline	ND	50
<u>SURROGATE</u>	<u>%RECOVERY</u>	<u>LIMITS</u>
Bromofluorobenzene	87	58-127

8010 Volatiles in H2O

Sample Spiked: HP-940217-GW-EFF

QC Batch#: K008A
 Units: ug/L
 Prep Date: N/A

Analysis Dates
 Blank: 02/22/94
 MS: 02/22/94
 MSD: 02/23/94
 LCS: 02/22/94

Analytes	Blank		Spike level	%Recovery		LCS	QC	
	Result	Limit		MS	MSD		LIMITS	RPD
Dichlorodifluoromethane	ND	0.50						
Chloromethane	ND	0.50						
Vinyl Chloride	ND	0.50						
Bromomethane	ND	0.50						
Chloroethane	ND	0.50						
Trichlorofluoromethane	ND	0.50						
1,1-Dichloroethene	ND	0.50	10	92	112	99	28-167	20
Methylene Chloride	ND	0.50						
trans-1,2-Dichloroethene	ND	0.50						
1,1-Dichloroethane	ND	0.50						
cis-1,2-Dichloroethene	ND	0.50						
Chloroform	ND	0.50	10	103	100	101	49-133	3.0
1,1,1-Trichloroethane	ND	0.50						
Carbon Tetrachloride	ND	0.50	10	93	103	97	43-143	10
1,2-Dichloroethane	ND	0.50	10	100	110	113	51-177	9.5
Trichloroethene	ND	0.50	10	119	131	121	35-146	9.6
1,2-Dichloropropane	ND	0.50						
Bromodichloromethane	ND	0.50						
2-Chloroethylvinyl ether	ND	5.0						
trans-1,3-Dichloropropene	ND	0.50						
1,1,2-Trichloroethane	ND	0.50						
Tetrachloroethene	ND	0.50	10	100	108	108	26-162	7.7
Dibromochloromethane	ND	0.50						
Chlorobenzene	ND	0.50	10	97	102	99	38-150	5.0
Bromoform	ND	0.50						
1,1,2,2-Tetrachloroethane	ND	0.50						
1,3-Dichlorobenzene	ND	0.50						
1,4-Dichlorobenzene	ND	0.50	10	102	101	97	42-143	0.9
1,2-Dichlorobenzene	ND	0.50						
Freon 113	ND	0.50						
Bromochloromethane (surr)	85%		10	98	98	96	66-126	

8010 Volatiles in H2O

QC Batch#: **K008B**
 Units: ug/L
 Prep Date: N/A

Analysis Dates
 Blank: 02/23/94
 LCS: 02/23/94

Analytes	Blank		Spike level	%Recovery		QC LIMITS
	Result	Limit		LCS		
Dichlorodifluoromethane	ND	0.50				
Chloromethane	ND	0.50				
Vinyl Chloride	ND	0.50				
Bromomethane	ND	0.50				
Chloroethane	ND	0.50				
Trichlorofluoromethane	ND	0.50				
1,1-Dichloroethene	ND	0.50	10	93		28-167
Methylene Chloride	ND	0.50				
trans-1,2-Dichloroethene	ND	0.50				
1,1-Dichloroethane	ND	0.50				
cis-1,2-Dichloroethene	ND	0.50				
Chloroform	ND	0.50	10	86		49-133
1,1,1-Trichloroethane	ND	0.50				
Carbon Tetrachloride	ND	0.50	10	89		43-143
1,2-Dichloroethane	ND	0.50	10	89		51-177
Trichloroethene	ND	0.50	10	110		35-146
1,2-Dichloropropane	ND	0.50				
Bromodichloromethane	ND	0.50				
2-Chloroethylvinyl ether	ND	5.0				
trans-1,3-Dichloropropene	ND	0.50				
1,1,2-Trichloroethane	ND	0.50				
Tetrachloroethene	ND	0.50	10	103		26-162
Dibromochloromethane	ND	0.50				
Chlorobenzene	ND	0.50	10	104		38-150
Bromoform	ND	0.50				
1,1,2,2-Tetrachloroethane	ND	0.50				
1,3-Dichlorobenzene	ND	0.50				
1,4-Dichlorobenzene	ND	0.50	10	89		42-143
1,2-Dichlorobenzene	ND	0.50				
Freon 113	ND	0.50				
Bromochloromethane (surr)	96%		10	76		66-126

Environ

Tot. Pet. Hydrocarbon/H2O

QC Batch#: 0300A
 Units: ug/L
 Prep Date: 02/22/94

Analysis Dates
 Blank: 02/24/94
 LCS: 02/24/94
 LCSD: 02/24/94

<u>Analytes</u>	Blank		Spike <u>level</u>	%Recovery		QC	
	<u>Result</u>	<u>Limit</u>		LCS	LCSD	<u>LIMITS</u>	<u>RPD</u>
Diesel	ND	50	2000	109	111	60-126	1.8
Kerosene	ND	50					
Motor Oil	ND	500					
Pentacosane (sur.)	83%		1000	95	101		6.1

Gas BTEX in Water

Sample Spiked: B11-5

QC Batch#: D345A

Units: ug/L

Prep Date: N/A

Analysis Dates

Blank: 02/25/94

MS: 02/25/94

MSD: 02/25/94

LCS: 02/25/94

<u>Analytes</u>	Blank		Spike	%Recovery		QC		
	<u>Result</u>	<u>Limit</u>	<u>Level</u>	<u>MS</u>	<u>MSD</u>	<u>LCS</u>	<u>LIMITS</u>	<u>RPD</u>
Benzene	ND	.5	10	101	96	88	39-150	5.1
Toluene	ND	.5	10	99	102	86	46-148	3.0
Ethylbenzene	ND	.5	10	105	107	88	32-160	1.9
Total Xylenes	ND	.5	20	85	88	88	32-160	3.5
Gasoline	ND	50						
Bromofluorobenzene (surr)	93%			100	105	89	58-127	

ATTACHMENT B

**PEPSI PROPERTY
SELECTED INVESTIGATION FINDINGS**

ATTACHMENT B

PEPSI PROPERTY SELECTED INVESTIGATION RESULTS

This Attachment presents data that are relevant to the KFC site excerpted from investigation reports for the Pepsi property. The contents and their source reports are listed below.

Shallow Groundwater Elevation Contours and Estimated Flow Directions

- September 21, 1995 Map from *Third Quarter 1995 Status Report, 1150 Park Avenue, Emeryville, CA*, Weiss Associates, November 28, 1995.
- December 20, 1995 Map from *Fourth Quarter 1995 Status Report, 1150 Park Avenue, Emeryville, CA*, Weiss Associates, January 19, 1996
- March 27, 1996 Map from *First Quarter 1996 Status Report, 1150 Park Avenue, Emeryville, CA*, Weiss Associates, May 29, 1996.

Boring Logs and Well Construction Diagrams

Boring logs and well construction diagrams are attached from *Subsurface Investigation at the New Century Beverage Company Facility, 1150 Park Avenue, Emeryville, California*, (Weiss Associates, July 28, 1994).

- Pepsi wells MW-3 and MW-4, and borings B-4, B-21, B-32 and B-33.

Chemical Test Results Table

Attached is a chemical test results table from *Subsurface Investigation Report* (Weiss Associates, July 28, 1994), which summarizes soil chemical test results for the above and other borings.

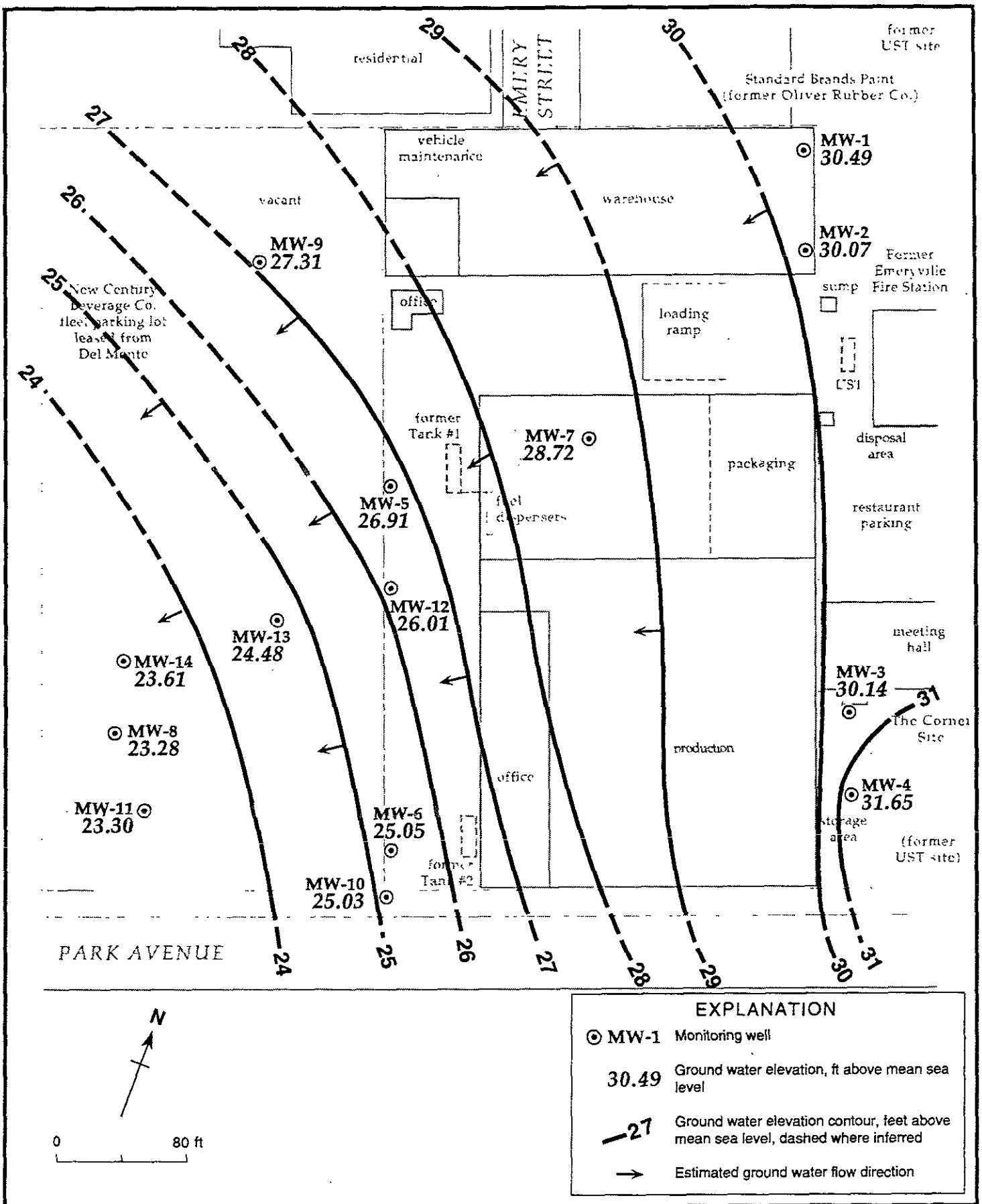


Figure 2. Ground Water Elevation Contours and Estimated Flow Direction - September 21, 1995 - New Century Beverage Company, 1150 Park Avenue, Emeryville, California

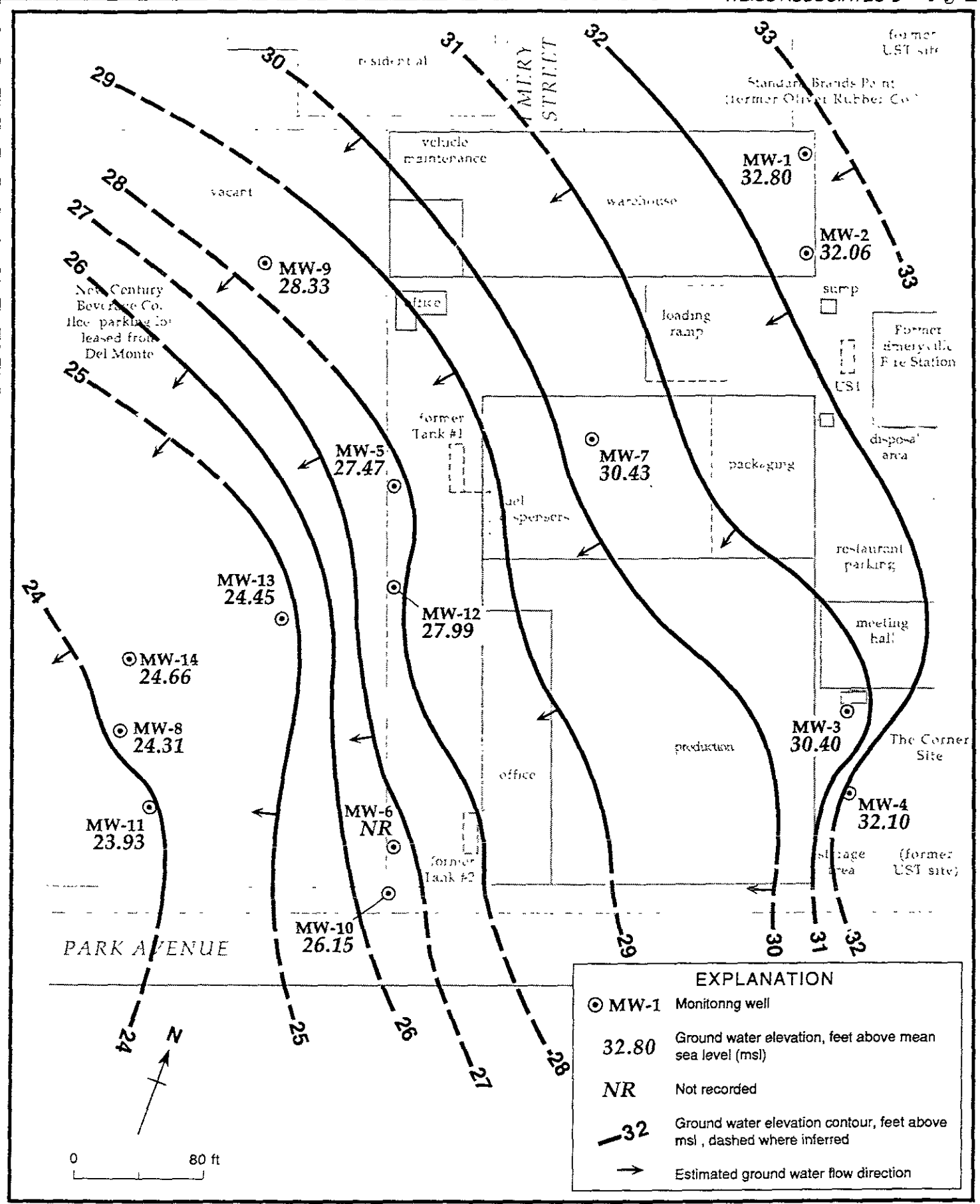


Figure 2. Ground Water Elevation Contours and Estimated Flow Direction - December 20, 1995 - New Century Beverage Company, 1150 Park Avenue, Emeryville, California

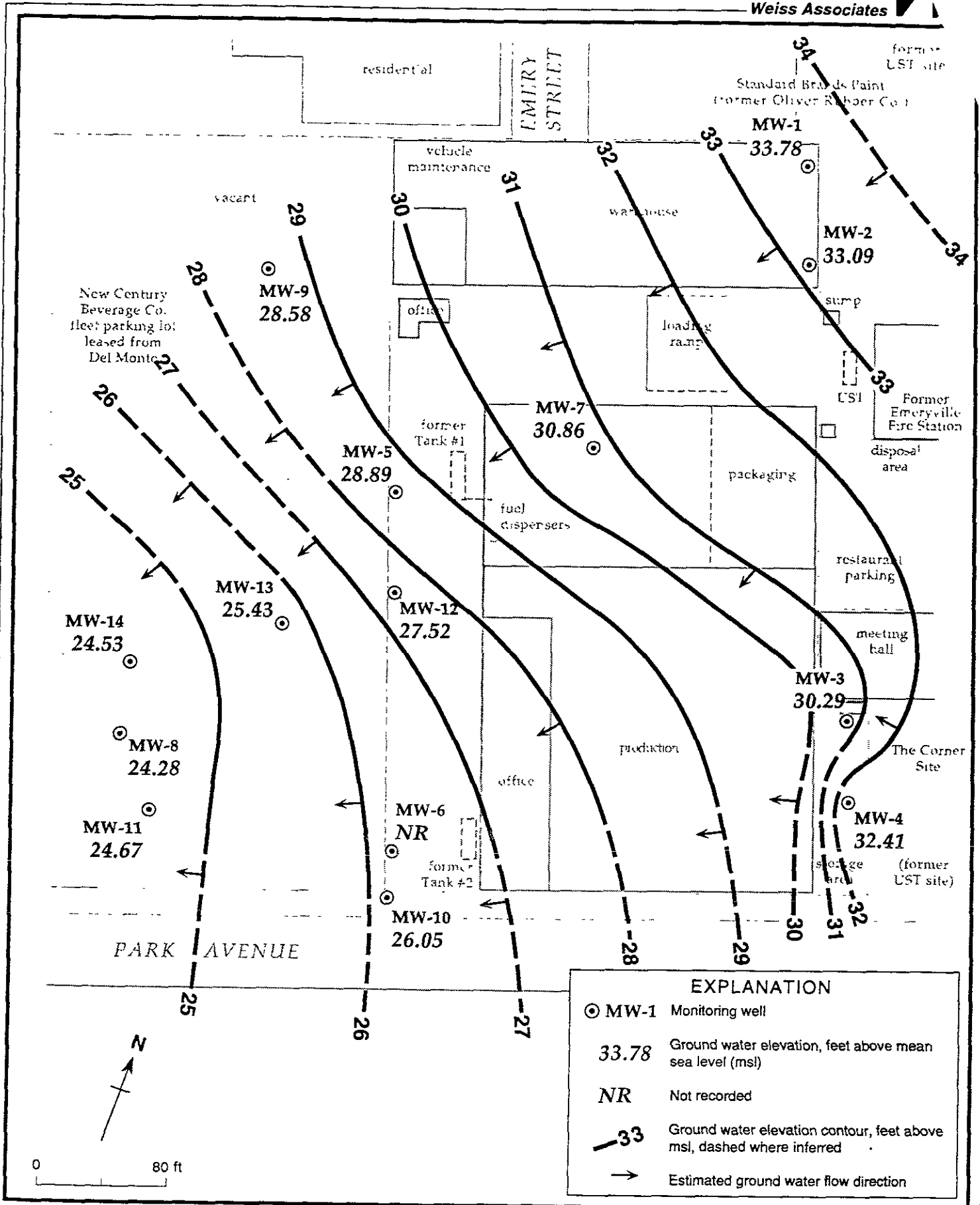
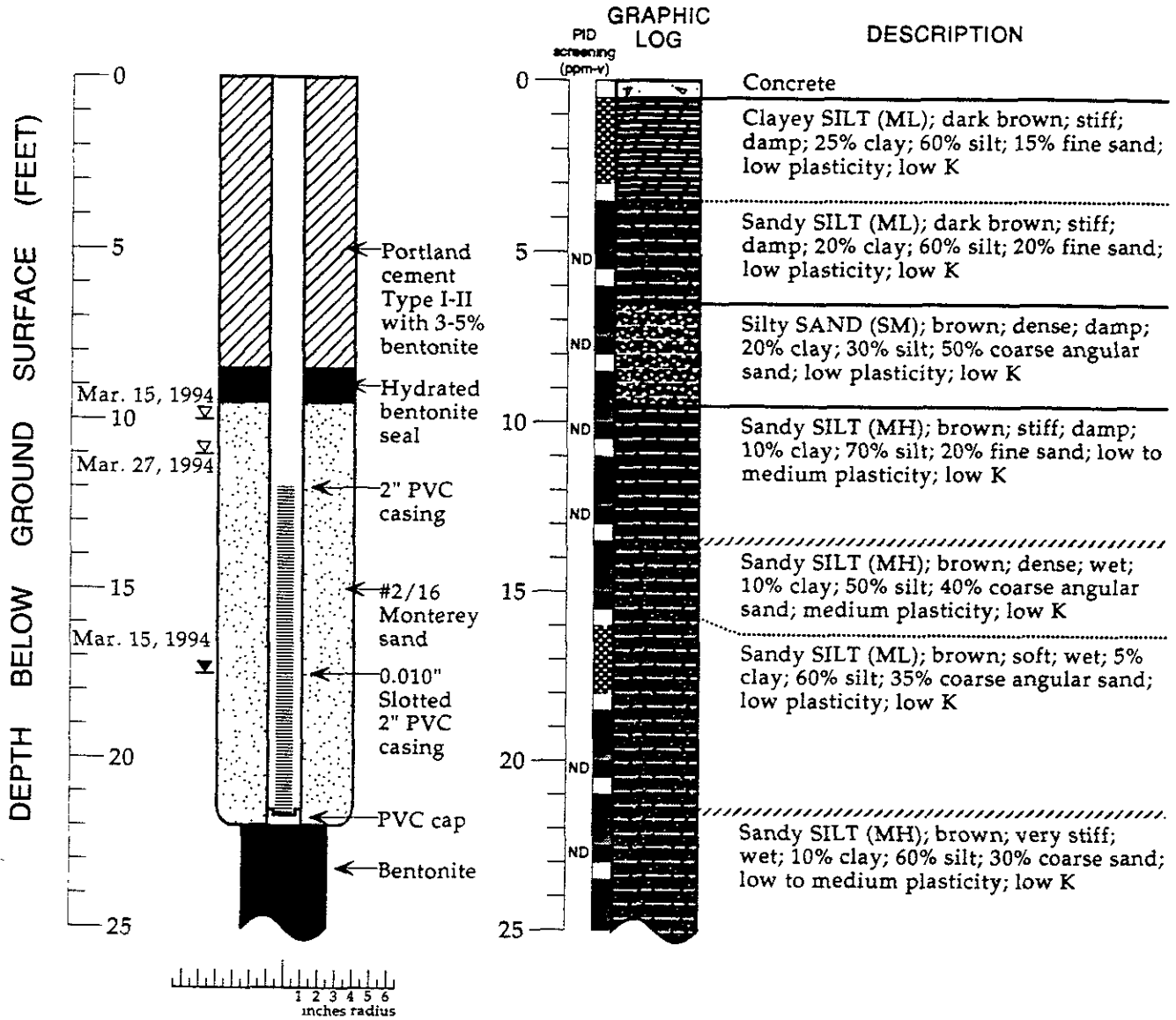


Figure 2. Ground Water Elevation Contours and Estimated Flow Direction - March 27, 1996 - New Century Beverage Company, 1150 Park Avenue, Emeryville, California

WELL MW-3 (B-3)



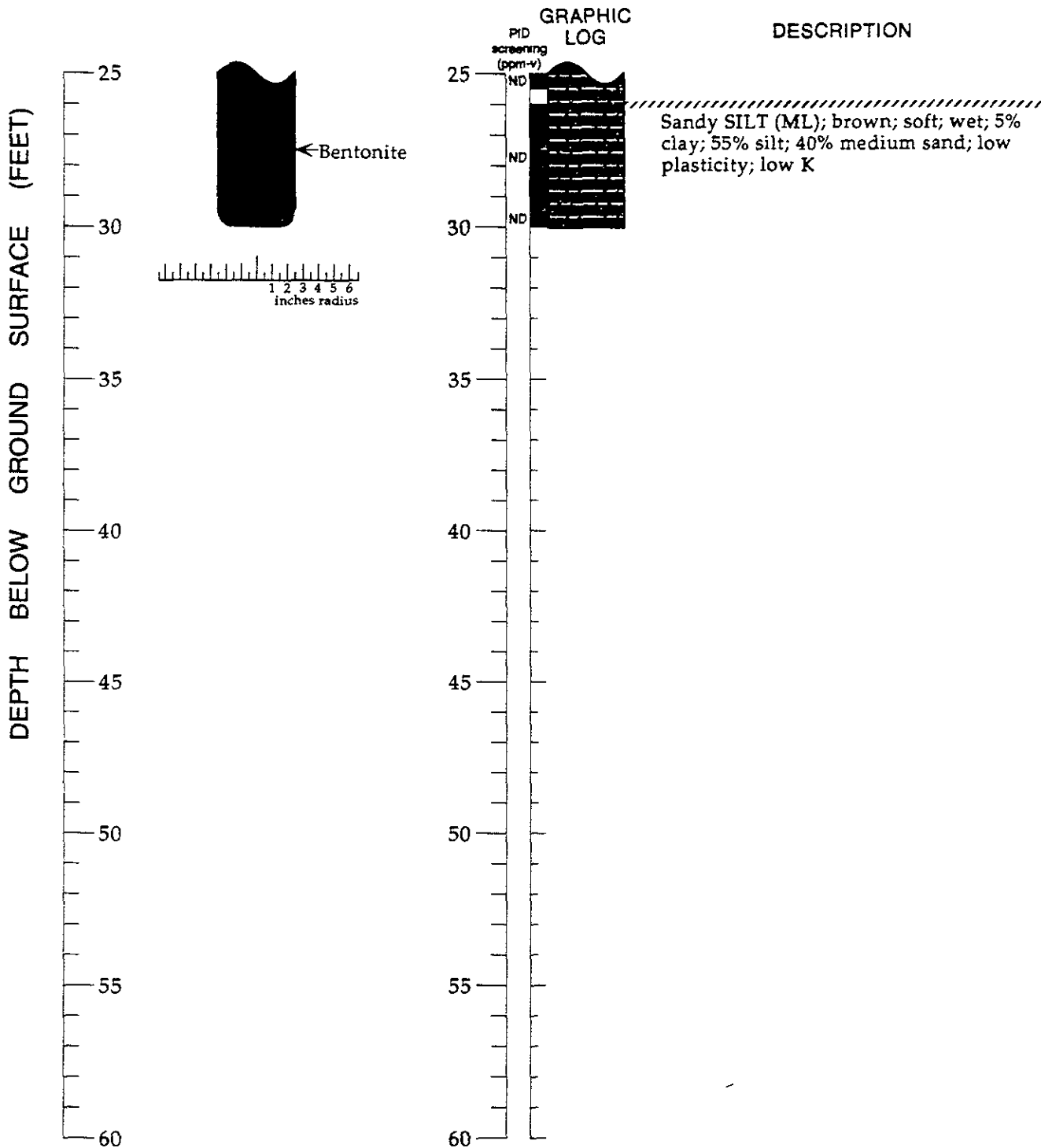
EXPLANATION

- ▽ Water level during drilling (date)
- ∇ Water level (date)
- Contact (dotted where approximate)
- ?-?-? Uncertain contact
- //// Gradational contact
- Location of recovered drive sample
- Location of drive sample sealed for possible chemical analysis
- Cuttings sample
- K = Estimated hydraulic conductivity
- ND = Not detected

Logged By: Alison Watts
 Supervisor: Mary Stallard; CEG 1704
 Drilling Company: Gregg Drilling, Pacheco, CA
 License Number: C57-485165
 Driller: Ted Hogan
 Drilling Method: Hollow-stem auger
 Date Drilled: March 15, 1994
 Well Head Completion: Water tight traffic rated vault at grade
 Type of Sampler: Split barrel (2.0" ID)
 Ground Surface Elevation: 41.19 feet above mean sea level
 PID: Results of field screening with photoionization detector for VOCs in parts per million by volume

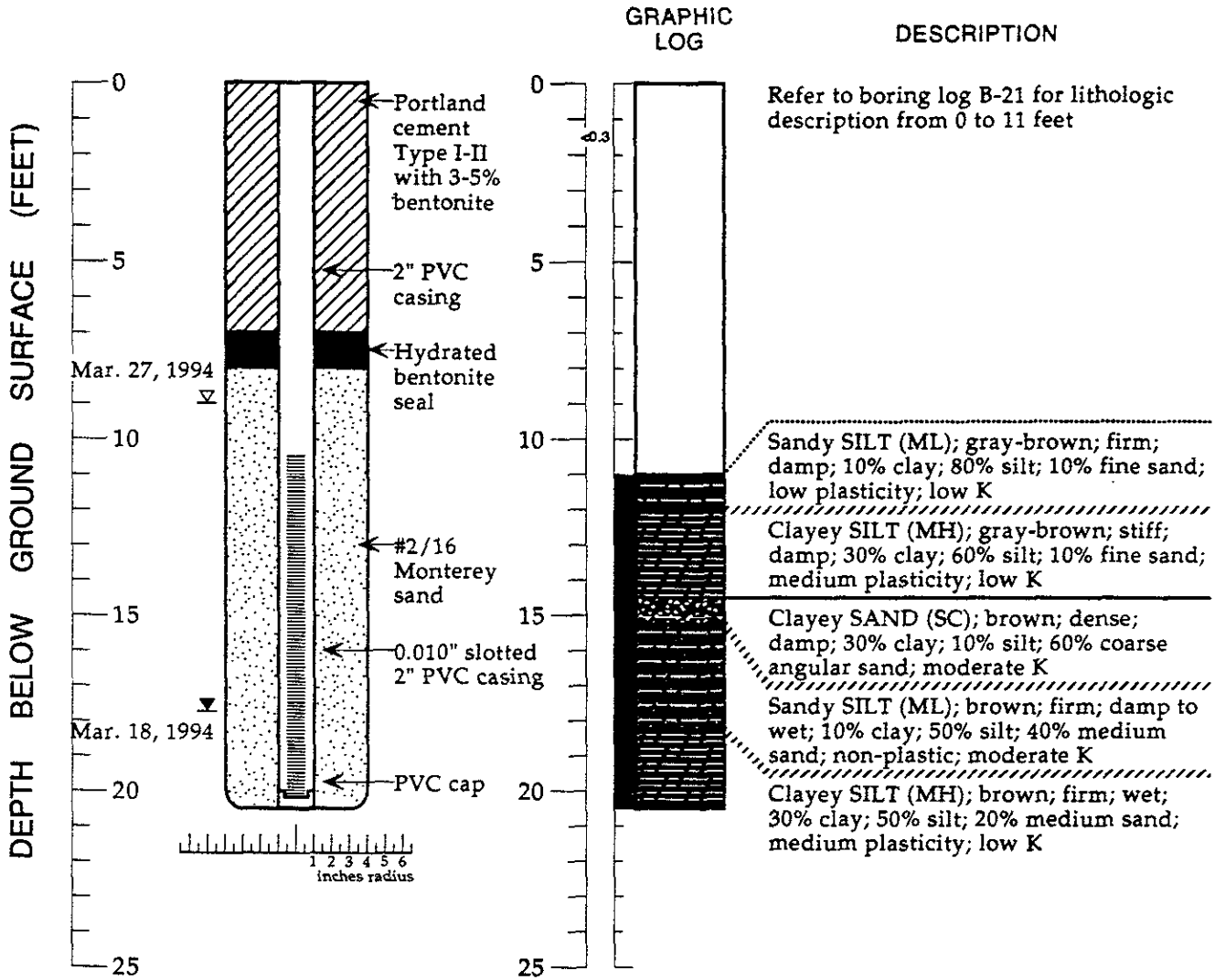
Boring Log and Well Construction Details - Well MW-3 (Boring B-3) - New Century Beverage Company, 1150 Park Avenue, Emeryville, California

WELL MW-3 (B-3) (cont.)



Boring Log and Well Construction Details - Well MW-3 (Boring B-3) - New Century Beverage Company, 1150 Park Avenue, Emeryville, California

WELL MW-4



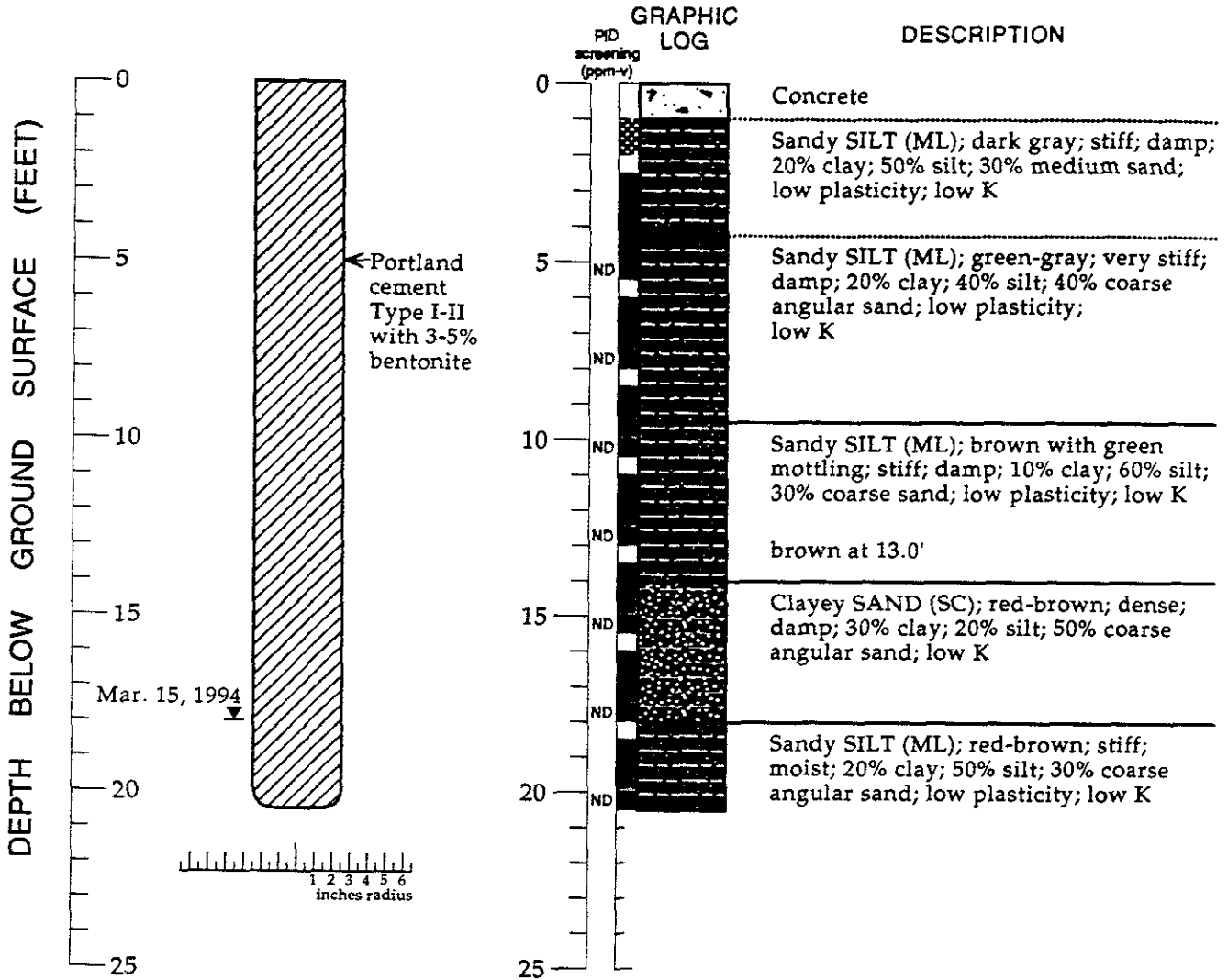
EXPLANATION

- ▼ Water level during drilling (date)
- ▽ Water level (date)
- Contact (dotted where approximate)
- ?-?-? Uncertain contact
- //// Gradational contact
- Location of recovered drive sample
- Location of drive sample sealed for possible chemical analysis
- Cutting sample
- K = Estimated hydraulic conductivity

Logged By: Allison Watts
 Supervisor: Mary Stallard; CEG 1704
 Drilling Company: Gregg Drilling, Pacheco, CA
 License Number: C57-485165
 Driller: Ted Hogan
 Drilling Method: Hollow-stem auger
 Date Drilled: March 18, 1994
 Well Head Completion: Water tight traffic rated vault at grade
 Type of Sampler: Split barrel (2.0" ID)
 Ground Surface Elevation: 40.64 feet above mean sea level

Boring Log and Well Construction Details - Well MW-4 - New Century Beverage Company, 1150 Park Avenue, Emeryville, California

BORING B-4



EXPLANATION

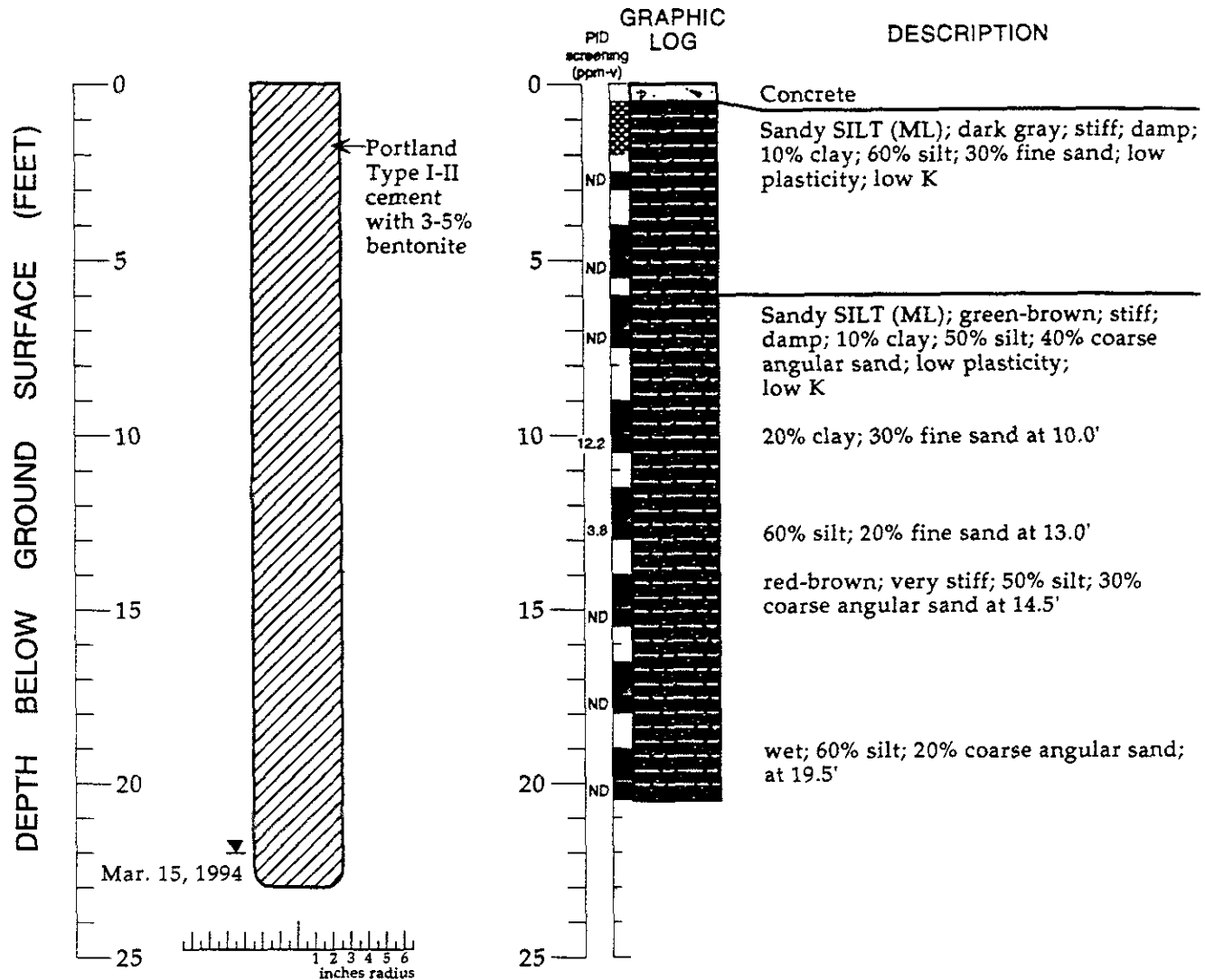
- ▼ Water level during drilling (date)
- ⋈ Water level (date)
- Contact (dotted where approximate)
- ?-?- Uncertain contact
- //// Gradational contact
- Location of recovered drive sample
- Location of drive sample sealed for possible chemical analysis
- Cuttings sample
- K = Estimated hydraulic conductivity
- ND = Not detected

Logged By: Allison Watts
 Supervisor: Mary Stallard; CEG 1704
 Drilling Company: Gregg Drilling, Pacheco, CA
 License Number: C57-485165
 Driller: Ted Hogan
 Drilling Method: Hollow-stem auger
 Date Drilled: March 15, 1994
 Type of Sampler: Split barrel (2.0" ID)

PID: Results of field screening with photoionization detector for VOCs in parts per million by volume

Boring Log - Boring B-4 - New Century Beverage Company, 1150 Park Avenue, Emeryville, California

BORING B-21



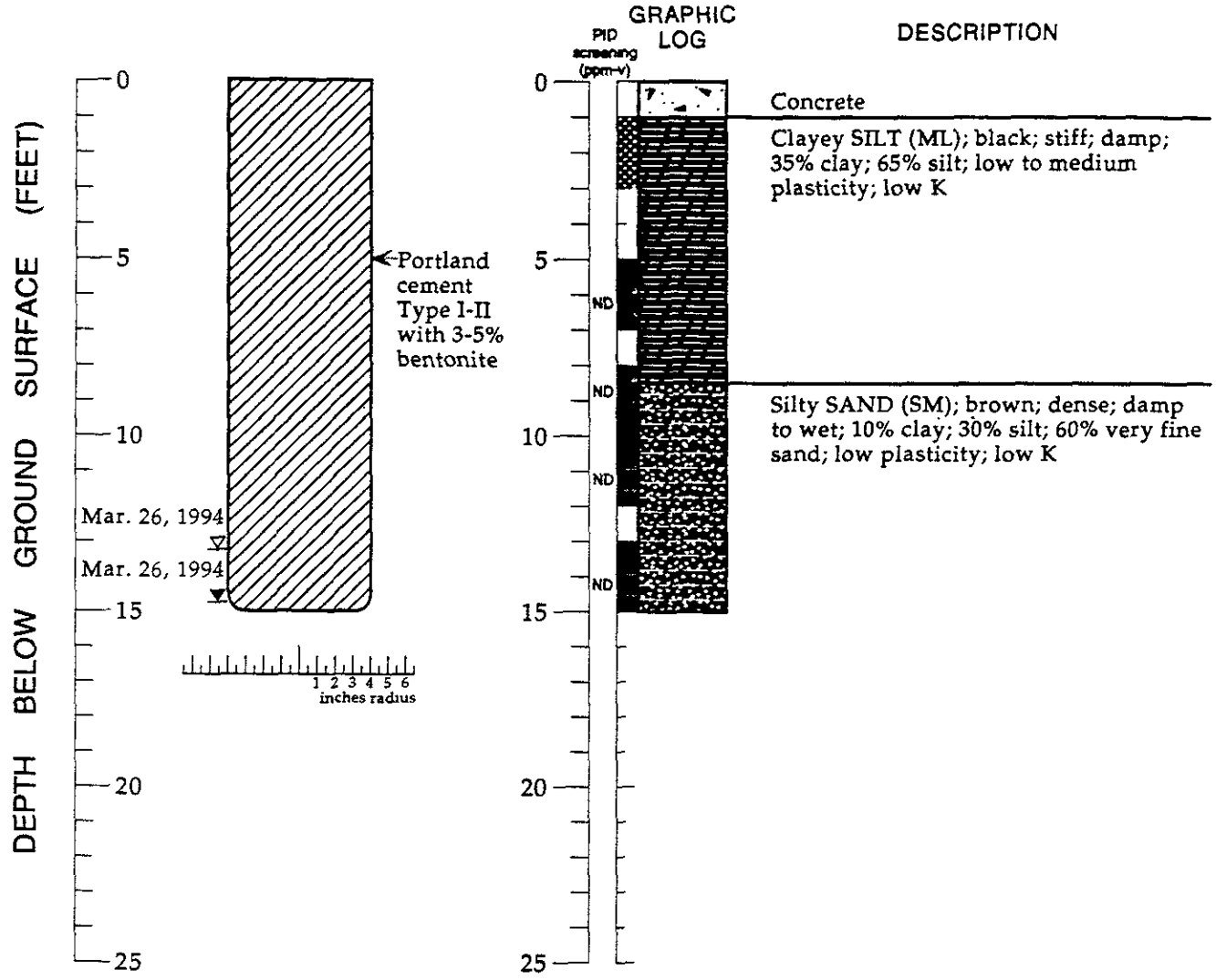
EXPLANATION

- ▼ Water level during drilling (date)
- ▽ Water level (date)
- Contact (dotted where approximate)
- ?-?-? Uncertain contact
- //// Gradational contact
- Location of recovered drive sample
- Location of drive sample sealed for possible chemical analysis
- Cuttings sample
- K = Estimated hydraulic conductivity
- ND = Not detected

Logged By: Allison Watts
 Supervisor: Mary Stallard; CEG 1704
 Drilling Company: Gregg Drilling, Pacheco, CA
 License Number: C57-485165
 Driller: Ted Hogan
 Drilling Method: Hollow-stem auger
 Date Drilled: March 15, 1994
 Type of Sampler: Split barrel (2.0" ID)
 PID: Results of field screening with photoionization detector for VOCs in parts per million by volume

Boring Log - Boring B-21 - New Century Beverage Company, 1150 Park Avenue, Emeryville, California

BORING B-32



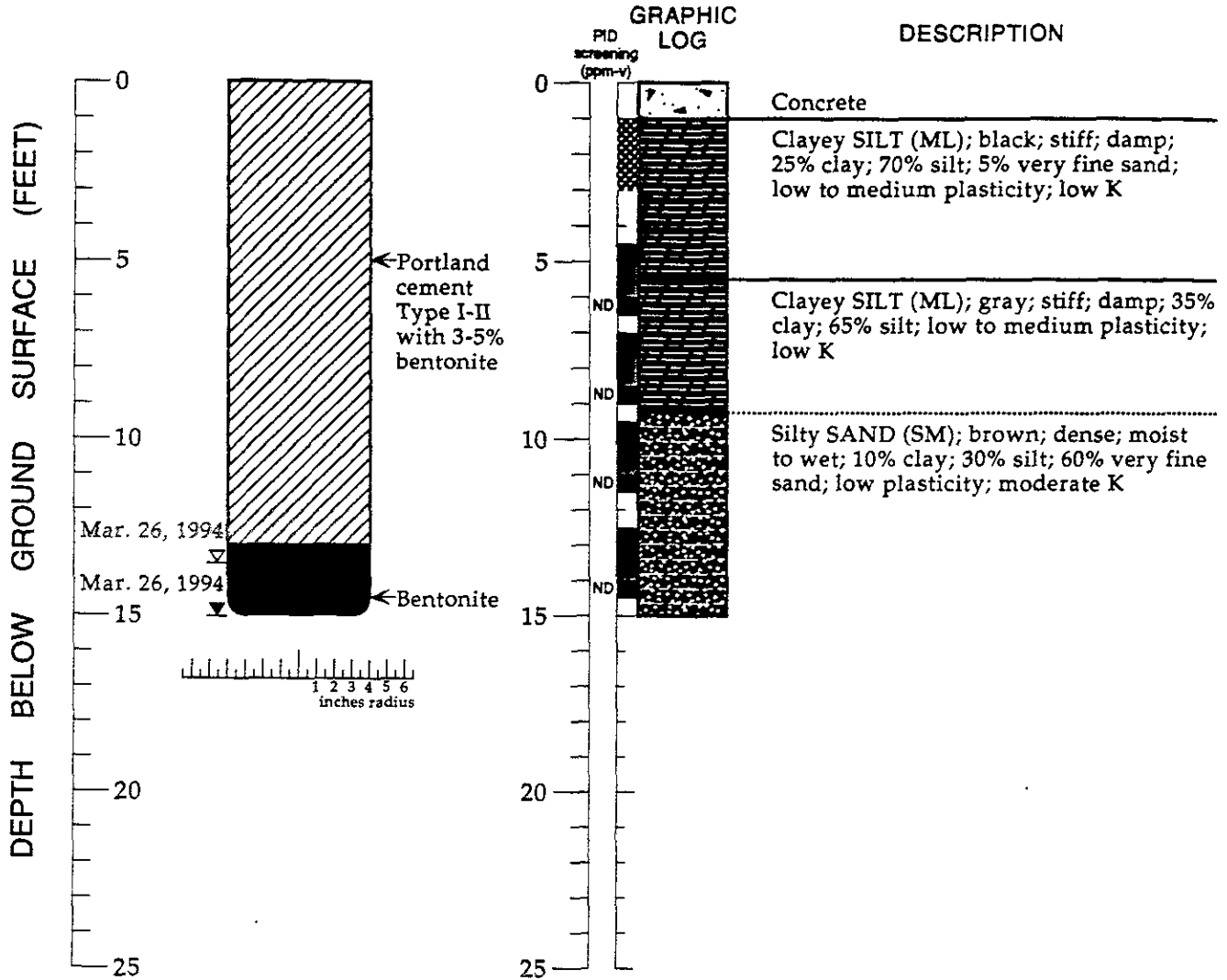
EXPLANATION

- ▼ Water level during drilling (date)
- ▽ Water level (date)
- Contact (dotted where approximate)
- ?-?-? Uncertain contact
- //// Gradational contact
- Location of recovered drive sample
- Location of drive sample sealed for possible chemical analysis
- Cutting sample
- K = Estimated hydraulic conductivity
- ND = Not detected

Logged By: Joyce Adams
 Supervisor: Mary Stallard; CEG 1704
 Drilling Company: West Hazmat; Newark, CA
 License Number: C57-554979
 Driller: George DeJesus
 Drilling Method: Hollow-stem auger
 Date Drilled: March 26, 1994
 Type of Sampler: Split barrel (2.0" ID)
 PID: Results of field screening with photoionization detector for VOCs in parts per million by volume

Boring Log - Boring B-32 - New Century Beverage Company, 1150 Park Avenue, Emeryville, California

BORING B-33



EXPLANATION

- ▼ Water level during drilling (date)
- ▽ Water level (date)
- Contact (dotted where approximate)
- ?-?-? Uncertain contact
- //// Gradational contact
- Location of recovered drive sample
- Location of drive sample sealed for possible chemical analysis
- Cutting sample
- K = Estimated hydraulic conductivity
- ND = Not detected

Logged By: Joyce Adams
 Supervisor: Mary Stallard; CEG 1704
 Drilling Company: West Hazmat; Newark, CA
 License Number: C57-554979
 Driller: George DeJesus
 Drilling Method: Hollow-stem auger
 Date Drilled: March 26, 1994
 Type of Sampler: Split barrel (2.0" ID)

PID: Results of field screening with photoionization detector for VOCs in parts per million by volume

Boring Log - Boring B-33 - New Century Beverage Company, 1150 Park Avenue, Emeryville, California

Table 1. Analytic Results for Soil and Open-borehole Water Samples - New Century Beverage Co., 1150 Park Avenue, Emeryville, California

Boring ID	Depth	Date Sampled	Sat/ Unsat	Parts per million									Other HVOCs
				TVH-G	TEH	Benzene	Toluene	Ethylbenzene	Xylenes	1,2-DCA	PCE		
B-1	6.4	3/15/94	Sat	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	8.9	3/15/94	Sat	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Water	3/15/94		0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND
B-2	6.0	3/16/94	Unsat	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	8.5	3/16/94	Sat	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Water	3/16/94		ND	ND	ND	0.0005	0.0005	ND	ND	ND	ND	ND
B-3	2.5	3/15/94	Unsat	ND	ND	ND	ND	ND	ND	ND(0.03)	0.28	ND(0.03-0.1)	ND
	7.5	3/15/94	Unsat	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	10.0	3/15/94	Unsat	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Water	3/15/94		0.52	ND	0.001	0.019	0.0084	0.046	ND	ND	ND	ND
B-4	5.0	3/15/94	Unsat	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	10.0	3/15/94	Sat	ND	49 (K)	ND	ND	ND	ND	ND	ND	ND	ND
	Water	3/15/94		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
B-5	5.0	3/14/94	Unsat	ND	50 (D) 2,200 (MO)	ND	ND	ND	ND	ND	ND	ND	ND
	7.5	3/14/94	Unsat	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	12.5	3/14/94	Sat	ND	ND	0.015	ND	ND	0.012	ND	ND	ND	ND
	Water	3/14/94		0.95	15 (K)	0.18	ND(1)	ND(1)	0.088	ND	ND	ND	ND
B-6	5.0	3/14/94	Unsat	ND	4 (D) 37 (MO)	ND	ND	ND	ND	ND	ND	ND	ND
	7.5	3/14/94	Unsat	10	230 (D) 1,200 (MO)	ND(0.03)	ND(0.03)	0.017	ND(0.03)	ND(0.03)	ND(0.03)	ND(0.03-0.1)	ND
	Water	3/14/94		4.0	79 (D) 730 (MO)	<5	<5	7	<5	ND	ND	0.001 cl, 2-DCE	ND
B-7	8.5	3/16/94	Sat	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	13.5	3/16/94	Sat	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Water	3/16/94		0.06	ND	ND	0.002	ND	ND	ND	ND	ND	ND

-- Table 1 continues next page --

Table 1. Analytic Results for Soil and Open-borehole Water Samples - New Century Beverage Co., 1150 Park Avenue, Emeryville, California (continued)

Boring ID	Depth	Date Sampled	Sat/ Unsat	TVH-G	TEH	Benzene	Toluene	Ethyl-benzene	Xylenes	1,2-DCA	PCE	Other HVOCs
B-8	5.0	3/16/94	Unsat	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Water	3/16/94		ND	ND	ND	ND	ND	ND	ND	ND	ND
B-9	5.0	3/17/94	Unsat	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Water	3/17/94		ND	ND	ND	ND	ND	ND	ND	ND	ND
B-10	5.9	3/14/94	Unsat	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Water	3/14/94		15	3 (K)	0.34	0.031	0.64	1.9	ND(0.01)	ND(0.01)	ND(0.01-0.2)
B-11	2.5	3/16/94	Unsat	ND	ND	ND	ND	ND	ND	ND	ND	ND
	7.5	3/16/94	Unsat?	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Water	3/16/94		0.06	ND	ND	0.0008	ND	ND	ND	ND	ND
B-12	7.5	3/17/94	Unsat	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Water	3/17/94		ND	ND	ND	ND	ND	ND	ND	ND	ND
B-13	2.5	3/16/94	Unsat	ND	2 (D)	ND	ND	ND	0.008	ND	0.005	0.05 MC 0.009 1,1-DCA 0.05 TCE
	7.5	3/16/94	Unsat	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Water	3/16/94		ND	ND	ND	ND	ND	ND	ND	ND	ND
B-14	2.5	3/16/94	Unsat	ND	ND	ND	ND	ND	ND	ND	ND	ND
	7.5	3/16/94	Unsat	ND	ND	ND	ND	ND	0.007	ND	ND	ND
	Water	3/16/94		ND	ND	ND	ND	ND	ND	ND	ND	ND
B-15	2.5	3/17/94	Unsat	ND	ND	ND	ND	ND	ND	ND	ND	ND
	7.5	3/17/94	Unsat	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Water	3/17/94		0.07	1 (K)	0.0097	ND	0.0011	0.0076	ND	ND	ND
B-16	5.0	3/18/94	Unsat	ND	ND	ND	ND	ND	ND	ND	ND	ND
	7.5	3/18/94	Unsat	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Water	3/18/94		38	15 (K)	0.57	0.28	1.5	5.4	ND	ND	ND

-- Table 1 continues next page --

Table 1. Analytic Results for Soil and Open-borehole Water Samples - New Century Beverage Co., 1150 Park Avenue, Emeryville, California (continued)

Boring ID	Depth	Date Sampled	Sat/Unsat	TVH-G	TEH	Benzene	Toluene	Ethylbenzene	Xylenes	1,2-DCA	PCE	Other HVOCs
B-17	2.5	3/17/94	Unsat	1	2 (D) 50 (MO)	ND	ND	0.005	0.055	ND	ND	ND
	7.5	3/17/94	Unsat	130	190 (K)	ND(0.08)	0.19	1.2	1.4	ND(0.03)	ND(0.03)	ND(0.03-0.1)
	<i>Water</i>	<i>3/17/94</i>		32	6 (K)	1.8	0.78	1.1	2.4	ND	ND	0.001 CB
B-18	8.4	3/14/94	Unsat	1	ND	ND	ND	ND	ND	ND	ND	ND
	13.4	3/14/94	Sat	1	ND	ND	ND	ND	ND	ND	ND	ND
	<i>Water</i>	<i>3/14/94</i>		0.65	ND	0.032	0.0006	0.0048	0.0038	0.003	ND	ND
B-19	7.5	3/14/94	Unsat	23 ^a	150 (D)	ND(0.01)	ND(0.01)	0.061	0.019	ND(0.1)	ND(0.1)	ND(0.1-0.5)
	12.5	3/14/94	Sat	ND	ND	ND	ND	ND	ND	ND	ND	ND
	<i>Water</i>	<i>3/14/94</i>		ND	110 (D)	ND	ND	ND	ND	ND	ND	ND
B-20	7.5	3/14/94	Unsat	ND	ND	ND	ND	ND	ND	ND	ND	ND
	12.5	3/14/94	Sat	ND	ND	ND	ND	ND	ND	ND	ND	ND
	<i>Water</i>	<i>3/14/94</i>		ND	ND	ND	ND	ND	ND	ND	ND	ND
B-21	5.0	3/15/94	Unsat	ND	ND	ND	ND	ND	ND	ND	ND	ND
	10.0	3/15/94	Sat	11	ND	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)	ND	ND	ND
	<i>Water</i>	<i>3/15/94</i>		0.14	ND	ND	ND	ND	0.0006	ND	ND	0.018 CB 0.004 1,2-DCB
B-22	5.0	3/18/94	Unsat	ND	ND	ND	ND	ND	ND	ND	ND	ND
	7.5	3/18/94	Sat	130	340 (D)	0.07	0.98	0.07	0.25	ND(0.03)	ND(0.03)	ND(0.03-0.1)
	<i>Water</i>	<i>3/18/94</i>		6.0	220 (D)	0.06	0.02	0.03	0.06	ND	ND	ND
B-23	10.0	3/30/94	Unsat	ND	ND	ND	ND	ND	ND	ND	ND	ND
	12.5	3/30/94	Sat?	ND	ND	ND	ND	ND	ND	ND	ND	ND
	<i>Water</i>	<i>3/30/94</i>		ND	ND	ND	ND	ND	ND	ND	ND	TCE 0.004 c-1,2-DCE 0.006 VC 0.004
B-24	9.0	3/18/94	Sat?	4	20 (K)	0.13	ND	0.045	0.19	ND(0.03)	ND(0.03)	ND(0.03-0.1)
	<i>Water</i>	<i>3/18/94</i>		22	2 (K)	1.8	0.03	0.52	1.9	0.004	ND	ND

-- Table 1 continues next page --

Weiss Associates



Table 1. Analytic Results for Soil and Open-borehole Water Samples - New Century Beverage Co., 1150 Park Avenue, Emeryville, California (continued)

Boring ID	Depth	Date Sampled	Sat/Unsat	TVH-G	TEH	Benzene	Toluene	Ethylbenzene	Xylenes	1,2-DCA	PCE	Other HVOCs
B-25	10.0	3/18/94	Sat?	ND	ND	ND	ND	ND	ND	ND	ND	ND
	12.5	3/18/94	Sat	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Water	3/18/94		ND	ND	ND	ND	ND	ND	ND	ND	ND
B-26	6.0	3/27/94	Unsat	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Water	3/27/94		0.18	ND	0.0012	ND	ND	ND	ND	ND	ND
B-27	Water	3/26/94		ND	ND	ND	ND	ND	ND	ND	ND	ND
B-28	8.5	3/26/94	Sat?	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Water	3/26/94		0.06	ND	ND	ND	ND	ND	ND	ND	ND
B-29	6.0	3/27/94	Unsat	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Water	3/27/94		20	2 (K)	0.13	0.041	0.77	0.36	ND	ND	ND
B-30	6.0	3/27/94	Unsat	ND	ND	ND	ND	ND	ND	ND	ND	ND
	8.5	3/27/94	Sat?	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Water	3/27/94		ND	ND	ND	ND	ND	ND	ND	ND	ND
B-31	6.0	3/27/94	Unsat	ND	ND	ND	ND	ND	ND	ND	ND	ND
	8.5	3/27/94	Sat?	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Water	3/27/94		ND	ND	ND	ND	ND	ND	ND	ND	ND
B-32	8.5	3/26/94	Unsat?	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Water	3/26/94		ND	ND	ND	ND	ND	ND	ND	ND	0.001 c1,2-DCE
B-33	8.5	3/26/94	Unsat?	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11.5	3/26/94	Sat	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Water	3/26/94		ND	ND	ND	ND	ND	ND	ND	0.003	0.005 TCE 0.004 c1,2-DCE
B-34	10.0	3/30/94	Sat?	ND	ND	ND	ND	ND	ND	ND	ND	ND
	12.5	3/30/94	Sat	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Water	3/30/94		0.15	ND	0.001	0.01	0.003	0.019	ND	ND	ND

-- Table 1 continues next page --

Table 1. Analytic Results for Soil and Open-borehole Water Samples - New Century Beverage Co., 1150 Park Avenue, Emeryville, California (continued)

Boring ID	Depth	Date Sampled	Sat/ Unsat	TVH-G	TEH	Benzene	Toluene	Ethyl-benzene	Xylenes	1,2-DCA	PCE	Other HVOCs
B-35	10.0	3/30/94	Sat?	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Water	3/30/94		ND	ND	ND	ND	ND	ND	ND	ND	TCE 0.002
B-36	7.5	3/30/94	Unsat	ND	ND	ND	ND	ND	0.007	ND	ND	ND
	10.0	3/30/94	Sat	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Water	3/30/94		ND	ND	ND	ND	ND	0.0005	ND	ND	ND
B-37	8.5	3/27/94	Unsat?	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Water	3/27/94		ND	ND	ND	ND	ND	ND	ND	ND	0.002 1,1-DCE
B-38	5.0	3/31/94	Unsat	ND	ND	ND	ND	ND	ND	ND	ND	ND
	7.5	3/31/94	Unsat	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Water	3/31/94		ND	ND	ND	ND	ND	ND	ND	ND	ND
	Water ^b	3/31/94		ND(0.01)	ND(0.01)	ND(0.0003)	ND(0.0003)	ND(0.0003)	ND	ND	ND	ND
B-39	7.5	3/31/94	Unsat	ND	ND	ND	ND	ND	ND	ND	ND	ND
	10.0	3/31/94	Sat?	ND	ND	ND	ND	ND	0.01	ND	ND	ND
	Water	3/31/94		ND	ND	ND	ND	ND	ND	ND	ND	ND
	Water ^b	3/31/94		ND(0.01)	ND(0.01)	ND(0.0003)	ND(0.0003)	ND(0.0003)	ND	ND	ND	ND
Travel	Water	3/27/94		ND	---	ND	ND	ND	ND	ND	ND	ND
Blank	Water	3/31/94		---	---	ND	ND	ND	ND	ND	ND	ND
	Water	3/31/94		---	---	ND	ND	ND	ND	ND	ND	0.002 MC ^c
Standard detection limit	Soil			1	1 (K,D)	0.005	0.005	0.005	0.005	0.005	0.005	0.005-0.02
	Water			0.05	1 (K,D)	0.0005	0.0005	0.0005	0.0005	0.001	0.001	0.001-0.02
MCL						0.001	0.1 ^d	0.68	1.75	0.0005	0.005	0.03 CB 0.005 1,1-DCA 0.13 1,2-DCB ^d 0.006 1,1-DCE 0.006 c1,2-DCE 0.005 MC 0.005 TCE 0.0005 VC

-- Table 1 continues next page --



Table 1. Analytic Results for Soil and Open-borehole Water Samples - New Century Beverage Co., 1150 Park Avenue, Emeryville, California (continued)

Abbreviations:

Sat/Unsat = indicates whether soil sample was saturated with ground water

TVH-G = Total volatile hydrocarbons as gasoline detected by EPA Method 8015, modified per California Department of Health Services (DHS)
note: mineral spirits were also screened with this method, however, all detected TVH were characterized as gasoline

TEH = Total extractable hydrocarbons [kerosene (K), diesel (D), and motor oil (MO) range] detected by EPA Method 8015, modified by DHS
notes: hydraulic oil was also screened with this method, however, no hydraulic oil was reported in any samples

Kerosene-range compounds, where reported, are characterized by the laboratory as a fraction of gasoline hydrocarbons

HVOCs = Halogenated volatile organic compounds detected by EPA Method 8010

ND = Not detected at standard detection limit (indicated on the last row of the table)

ND(n) = Not detected at detection limit of n ppm, due to dilution of sample prior to analysis

--- = Not analyzed

MCL = Maximum Contaminant Level for Drinking Water established by the California Department of Toxic Substances Control

Notes:

Analyses performed by Curtis & Tompkins, Ltd. of Berkeley, CA except as noted (CA DHS certification # 1459)

^aReported concentration falls in volatile range but does not match gasoline or mineral spirits fingerprint

^bSplit duplicate analysis performed by GTEL Environmental Laboratories, Inc. of Concord, CA (CA DHS certification # E1075)

^cMethylene chloride was also reported in the method blank at 0.0007 ppm - no methylene chloride was detected in the site ground water samples
(methylene chloride is used during some laboratory procedures and is a common laboratory contaminant)

^dDTSC Recommended Action Level - no MCL established

ATTACHMENT C

JULY 1996 GROUNDWATER MONITORING

ATTACHMENT C
JULY 1996 GROUNDWATER MONITORING

Pepsi wells MW-3 and MW-4 were sampled on July 10, 1996. Water level measurements were also measured in neighboring wells to verify that the groundwater gradient was consistent with past monitoring by Pepsi. Wells MW-3 and MW-4 were purged and sampled using pre-cleaned disposable polyethylene bailers. Greater than three casing volumes were purged from each well. During purging, the general water quality parameters pH, temperature and conductivity were monitored as indicators that the standing water had been removed. Samples were placed into pre-cleaned vials for analysis by the laboratory, labeled, and placed in an iced cooler. The samples were picked up by Chromalab of Pleasanton, CA under chain of custody protocols. For quality control, a laboratory-supplied trip blank was kept with the bottle sets at all times and submitted for analysis.

The following documents comprise the remainder of this attachment.

- Field sampling forms
- Analytical laboratory report
- Chain of custody form

David Harnish, R.G.

Environmental Consulting

WATER PURGING AND SAMPLING LOG

PROJECT NAME

Kaiser: Kentucky Fried Chicken

CONTRACT NUMBER

WELL NO.

MW-3, Pepsi

SAMPLING DATE

July 10, 1996

P.M./SAMPLER(S)

David Harnish

EQUIPMENT MODEL/TYPE	SERIAL NO.	DATE CALIBRATED	TEMP (°C)	STANDARD/ACTUAL
Hydac pH, Temp, Conductivity	000747	7/10/96		pH 4.0/3.99
Turbidimeter				7.0/6.99
Conductivity		7/9/96		10.0/10.0
Turbidimeter - HF Scientific		7/10/96		1/1
				0.02/0.02

PURGING/SAMPLING METHOD

Bailer

EQUIPMENT CLEANING METHOD(S)

Dedicated disposable bailer, clean w.l. probe w/

PURGE WATER DISPOSAL METHOD

Drummed

WELL NUMBER OR SAMPLING LOCATION

MW-3

WELL CASING RADIUS (CR) (in)

1"

TOTAL DEPTH (TD) OF WELL (ft)

20.8 ft

DEPTH TO WATER (DTW) (ft)

10.81 ft

CASING VOLUME (gal) = (TD-DTW) (CR)² (.163) =

~~1.8 gal x 3 = 5.3 gal.~~

1.6 gal x 3 = 4.9 → 5 gal

Liquinox and Distilled Water.

PURGING DATA

PURGING START TIME

~ 11:00

PURGING RATE (gpm)

NA

TIME/GALLONS SINCE START	TEMP (C°)	pH	CONDUCTIVITY (µmhos/cm) (microsiemens)	TURBIDITY (NTU)	OTHER
0.75	79.8°F	7.16	0.56		
2.5	79.5°F	6.90	0.56	15.5	
4.5	77.3°F	6.95	0.56		
5.5	76.0°F	6.98	0.56		
6.5	76.2°F	6.94	0.56		

PURGING STOP TIME

11:45

GALLONS PURGED

7.0 gal.

CASING VOLUMES PURGED

4.4

OBSERVATIONS/COMMENTS

Water clear

Sample collected for TEH - 2 1 liter jars - 6 VOAs for

Conductivity and temperature data not valid.

(8015) TVH and AVOCs

LABORATORY NAME

Chromalab

SAMPLE ID.

MW3

(8010)

David Harnish, R.G.

Environmental Consulting

WATER PURGING AND SAMPLING LOG

WELL NO. MW-4, Pepsi

PROJECT NAME Kaiser: Kentucky Fried

SAMPLING DATE July 10, 1996

CONTRACT NUMBER Chelan

P.M./SAMPLER(S) David Harnish

EQUIPMENT MODEL/TYPE	SERIAL NO.	DATE CALIBRATED	TEMP (°C)	STANDARD/ACTUAL
<u>see MW-3 sheet</u>				

PURGING/SAMPLING METHOD Disposable Bailin

EQUIPMENT CLEANING METHOD(S) Solinst cleaned w/ Liquinox & distilled water.

PURGE WATER DISPOSAL METHOD Drum pending disposal

WELL NUMBER OR SAMPLING LOCATION MW-4

WELL CASING RADIUS (CR) (in) 1"

TOTAL DEPTH (TD) OF WELL (ft) 19.82

DEPTH TO WATER (DTW) (ft) 8.86

CASING VOLUME (gal) = (TD-DTW) (CR)² (.163) = 1.8 gal

5.85 gallons to be purged.
4

PURGING DATA

PURGING START TIME ~ 12:45 PM PURGING RATE (gpm) NA

TIME/GALLONS SINCE START	TEMP (°C)	pH	CONDUCTIVITY (µmhos/cm)	TURBIDITY (NTU)	OTHER
<u>2.0</u>	<u>73.4°F</u>	<u>7.20</u>	<u>320 µs</u>		
<u>3.5</u>	<u>72.4°F</u>	<u>7.30</u>	<u>318 µs</u>		
<u>4.5</u>	<u>73.5°F</u>	<u>7.35</u>	<u>330 µs</u>		
<u>5.5</u>	<u>71.6°F</u>	<u>7.35</u>	<u>322 µs</u>		
<u>6.5</u>	<u>75.2°F</u>	<u>7.45</u>	<u>340 µs</u>		
<u>8.0</u>	<u>74.2°F</u>	<u>7.38</u>	<u>315 µs</u>	<u>12.5</u>	

PURGING STOP TIME 1:17 PM

GALLONS PURGED 8.0 CASING VOLUMES PURGED 4.4

OBSERVATIONS/COMMENTS Water clear, slight petroleum odor at beginning.
Sample collected for TET, TPH₂+BTEX, HVOCS.

LABORATORY NAME Chromalab

SAMPLE ID. MW-4

CHROMALAB, INC.

Environmental Services (SDB)

July 18, 1996

Submission #: 9607631

Atten: David Harnish, Environmental C

Project: KAISER: KFC
Received: July 11, 1996

Project#: KAISER 96-2

re: One sample for Volatile Halogenated Organics analysis.
Method: SW846 METHOD 8010A JULY, 1992

Client Sample ID: MW-4

Spl#: 91588

Matrix: WATER

Sampled: July 10, 1996

Run#: 2233

Analyzed: July 15, 1996

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
VINYL CHLORIDE	N.D.	0.50	N.D.	--	1
CHLOROETHANE	N.D.	0.50	N.D.	--	1
TRICHLOROFLUOROMETHANE	N.D.	0.50	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	0.50	N.D.	109	1
METHYLENE CHLORIDE	N.D.	3.0	N.D.	--	1
TRANS-1,2-DICHLOROETHENE	N.D.	0.50	N.D.	--	1
CIS-1,2-DICHLOROETHENE	N.D.	0.50	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	0.50	N.D.	--	1
CHLOROFORM	N.D.	0.50	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	0.50	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	0.50	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	0.50	N.D.	--	1
TRICHLOROETHENE	N.D.	0.50	N.D.	110	1
1,2-DICHLOROPROPANE	N.D.	0.50	N.D.	--	1
BROMODICHLOROMETHANE	N.D.	0.50	N.D.	--	1
2-CHLOROETHYL VINYL ETHER	N.D.	0.50	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	0.50	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	0.50	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	0.50	N.D.	--	1
TETRACHLOROETHENE	N.D.	0.50	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	0.50	N.D.	--	1
CHLOROBENZENE	13	0.50	N.D.	101	1
BROMOFORM	N.D.	0.50	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	0.50	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	0.50	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	0.50	N.D.	--	1
1,2-DICHLOROBENZENE	3.5	0.50	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	0.50	N.D.	--	1

Oleg Nemtsov

Oleg Nemtsov
Chemist

Chip Poalinelli

Chip Poalinelli
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

July 18, 1996

Submission #: 9607631

Atten: David Harnish, Environmental C

Project: KAISER: KFC
Received: July 11, 1996

Project#: KAISER 96-2

re: One sample for Volatile Halogenated Organics analysis.
Method: SW846 METHOD 8010A JULY, 1992

Client Sample ID: MW-3
Spl#: 91587
Sampled: July 10, 1996

Matrix: WATER
Run#: 2233

Analyzed: July 15, 1996

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
VINYL CHLORIDE	N.D.	0.50	N.D.	--	1
CHLOROETHANE	N.D.	0.50	N.D.	--	1
TRICHLOROFLUOROMETHANE	N.D.	0.50	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	0.50	N.D.	109	1
METHYLENE CHLORIDE	N.D.	3.0	N.D.	--	1
TRANS-1,2-DICHLOROETHENE	N.D.	0.50	N.D.	--	1
CIS-1,2-DICHLOROETHENE	N.D.	0.50	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	0.50	N.D.	--	1
CHLOROFORM	N.D.	0.50	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	0.50	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	0.50	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	0.50	N.D.	--	1
TRICHLOROETHENE	N.D.	0.50	N.D.	110	1
1,2-DICHLOROPROPANE	N.D.	0.50	N.D.	--	1
BROMODICHLOROMETHANE	N.D.	0.50	N.D.	--	1
2-CHLOROETHYL VINYL ETHER	N.D.	0.50	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	0.50	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	0.50	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	0.50	N.D.	--	1
TETRACHLOROETHENE	N.D.	0.50	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	0.50	N.D.	--	1
CHLOROBENZENE	N.D.	0.50	N.D.	101	1
BROMOFORM	N.D.	0.50	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	0.50	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	0.50	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	0.50	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	0.50	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	0.50	N.D.	--	1

Oleg Nemtsov

Oleg Nemtsov
Chemist

Chip Poalinelli
Chip Poalinelli
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

July 18, 1996

Submission #: 9607631

Atten: David Harnish, Environmental C

Project: KAISER: KFC
Received: July 11, 1996

Project#: KAISER 96-2

re: One sample for Volatile Halogenated Organics analysis.
Method: SW846 METHOD 8010A JULY, 1992

Client Sample ID: TB

Spl#: 91589

Matrix: WATER

Sampled: July 10, 1996

Run#: 2233

Analyzed: July 15, 1996

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
VINYL CHLORIDE	N.D.	0.50	N.D.	--	1
CHLOROETHANE	N.D.	0.50	N.D.	--	1
TRICHLOROFLUOROMETHANE	N.D.	0.50	N.D.	--	1
1,1-DICHLOROETHENE	N.D.	0.50	N.D.	109	1
METHYLENE CHLORIDE	N.D.	3.0	N.D.	--	1
TRANS-1,2-DICHLOROETHENE	N.D.	0.50	N.D.	--	1
CIS-1,2-DICHLOROETHENE	N.D.	0.50	N.D.	--	1
1,1-DICHLOROETHANE	N.D.	0.50	N.D.	--	1
CHLOROFORM	N.D.	0.50	N.D.	--	1
1,1,1-TRICHLOROETHANE	N.D.	0.50	N.D.	--	1
CARBON TETRACHLORIDE	N.D.	0.50	N.D.	--	1
1,2-DICHLOROETHANE	N.D.	0.50	N.D.	--	1
TRICHLOROETHENE	N.D.	0.50	N.D.	110	1
1,2-DICHLOROPROPANE	N.D.	0.50	N.D.	--	1
BROMODICHLOROMETHANE	N.D.	0.50	N.D.	--	1
2-CHLOROETHYL VINYL ETHER	N.D.	0.50	N.D.	--	1
TRANS-1,3-DICHLOROPROPENE	N.D.	0.50	N.D.	--	1
CIS-1,3-DICHLOROPROPENE	N.D.	0.50	N.D.	--	1
1,1,2-TRICHLOROETHANE	N.D.	0.50	N.D.	--	1
TETRACHLOROETHENE	N.D.	0.50	N.D.	--	1
DIBROMOCHLOROMETHANE	N.D.	0.50	N.D.	--	1
CHLOROBENZENE	N.D.	0.50	N.D.	101	1
BROMOFORM	N.D.	0.50	N.D.	--	1
1,1,2,2-TETRACHLOROETHANE	N.D.	0.50	N.D.	--	1
1,3-DICHLOROBENZENE	N.D.	0.50	N.D.	--	1
1,4-DICHLOROBENZENE	N.D.	0.50	N.D.	--	1
1,2-DICHLOROBENZENE	N.D.	0.50	N.D.	--	1
TRICHLOROTRIFLUOROETHANE	N.D.	0.50	N.D.	--	1



Oleg Nemtsov
Chemist


Chip Poalinelli
Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

July 23, 1996

Submission #: 9607631

Atten: David Harnish, Environmental C

Project: KAISER: KFC
Received: July 11, 1996

Project#: KAISER 96-2

re: **Matrix spike** report for Volatile Halogenated Organics analysis.

Method: SW846 METHOD 8010A JULY, 1992

Matrix: WATER

Lab Run#: 2238

Instrument: 8010

Analyzed: July 15, 1996

Analyte	Sample Amount (ug/L)	Spiked		Amt Found		Spike Recov		Control Limits	% RPD	% Lim
		MS	MSD	MS	MSD	MS	MSD			
1,1-DICHLOROETHENE	ND	20.0	20.0	20.2	22.2	101	111	60-154	9.43	35
TRICHLOROETHENE	ND	20.0	20.0	20.6	21.6	103	108	59-133	4.74	35
CHLOROBENZENE	ND	20.0	20.0	18.8	20.4	94.0	102	60-137	8.16	35

Sample Spiked: 91810

Submission #: 9607649

Client Sample ID: RINSEATE

CHROMALAB, INC.

Environmental Services (SDB)

July 23, 1996

Submission #: 9607631

Atten: David Harnish, Environmental C

Project: KAISER: KFC
Received: July 11, 1996

Project#: KAISER 96-2

re: **Surrogate** report for 3 samples for Volatile Halogenated Organics
Method: SW846 METHOD 8010A JULY, 1992
Lab Run#: 2233
Matrix: WATER
Analyzed: July 15, 1996

<u>Sample#</u>	<u>Client Sample ID</u>	<u>Surrogate</u>	<u>% Recovered</u>	<u>Recovery Limits</u>
91587-1	MW-3	1,4-DICHLOROBUTANE	92.0	70-130
91588-1	MW-4	1,4-DICHLOROBUTANE	99.0	70-130
91589-1	TB	1,4-DICHLOROBUTANE	76.0	70-130

<u>Sample#</u>	<u>QC Sample Type</u>	<u>Surrogate</u>	<u>% Recovered</u>	<u>Recovery Limits</u>
92508-1	Reagent blank (MDB)	1,4-DICHLOROBUTANE	91	70-130
92507-1	Spiked blank (BSP)	1,4-DICHLOROBUTANE	94	70-130

CHROMALAB, INC.

Environmental Services (SDB)

July 18, 1996

Submission #: 9607631

Atten: David Harnish, Environmental C


Project: KAISER: KFC
Received: July 11, 1996

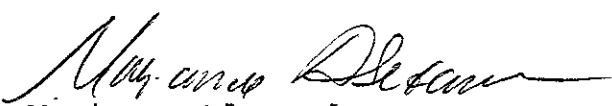
Project#: KAISER 96-2

re: 2 samples for Gasoline and BTEX compounds analysis.
Method: EPA 5030/8015M/8020

Matrix: WATER
Sampled: July 10, 1996 Run#: 2183 Analyzed: July 17, 1996

Spl#	CLIENT SPL ID	Gasoline (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylenes (ug/L)
91587	MW-3	N.D.	N.D.	N.D.	N.D.	N.D.
91588	MW-4	220	0.62	0.93	1.7	4.2
Reporting Limits		50	0.50	0.50	0.50	0.50
Blank Result		N.D.	N.D.	N.D.	N.D.	N.D.
Blank Spike Result (%)		97.8	123	116	121	115


June Zhao
Chemist


Marianne Alexander
Gas/BTEX Supervisor

CHROMALAB, INC.

Environmental Services (SDB)

July 23, 1996

Submission #: 9607631

Atten: David Harnish, Environmental C

Project: KAISER: KFC
Received: July 11, 1996

Project#: KAISER 96-2

re: **Blank spike and duplicate** report for Gasoline and BTEX compounds analysis

Method: EPA 5030/8015M/8020

Matrix: WATER
Lab Run#: 2183

Analyzed: July 17, 1996

Analyte	Spike Amount		Spike Amount Found		Spike Recov		Control Limits	% RPD	% Lim
	BSP (ug/L)	Dup	BSP (ug/L)	Dup	BSP (%)	Dup (%)			
GASOLINE	500	500	489	493	97.8	98.6	75-125	0.81	35
BENZENE	20.0	20.0	24.6	19.1	123	95.5	75-125	25.2	35
TOLUENE	20.0	20.0	23.2	17.9	116	89.3	75-125	26.0	35
ETHYL BENZENE	20.0	20.0	24.2	18.7	121	93.4	75-125	25.7	35
XYLENES	60.0	60.0	69.0	53.1	115	88.5	75-125	26.0	35

CHROMALAB, INC.

Environmental Services (SDB)

July 23, 1996

Submission #: 9607631

Atten: David Harnish, Environmental C

Project: KAISER: KFC
Received: July 11, 1996

Project#: KAISER 96-2

re: **Surrogate** report for 2 samples for Gasoline and BTEX compounds
Method: EPA 5030/8015M/8020
Lab Run#: 2183
Matrix: WATER

Analyzed: July 17, 1996

Sample#	Client Sample ID	Surrogate	% Recovered	Recovery Limits
91587-1	MW-3	TRIFLUOROTOLUENE	88.9	65-135
91588-1	MW-4	TRIFLUOROTOLUENE	91.8	65-135

Sample#	QC Sample Type	Surrogate	% Recovered	Recovery Limits
92095-1	Reagent blank (MDB)	TRIFLUOROTOLUENE	117	65-135
92096-1	Spiked blank (BSP)	TRIFLUOROTOLUENE	96	65-135
92097-1	Spiked blank duplicate (BSD)	TRIFLUOROTOLUENE	75	65-135
92098-1	Matrix spike (MS)	TRIFLUOROTOLUENE	90	65-135
92099-1	Matrix spike duplicate (MSD)	TRIFLUOROTOLUENE	88	65-135

CHROMALAB, INC.

Environmental Services (SDB)

July 18, 1996

Submission #: 9607631

Atten: David Harnish, Environmental C

Project: KAISER: KFC
Received: July 11, 1996

Project#: KAISER 96-2

re: 2 samples for TEPH analysis.
Method: EPA 3550/8015M

Sampled: July 10, 1996


Matrix: WATER
Run#: 2234

Extracted: July 16, 1996
Analyzed: July 17, 1996

Spl#	CLIENT SPL ID	Kerosene (ug/L)	Diesel (ug/L)	Motor Oil (ug/L)
91587	MW-3	N.D.	N.D.	N.D.
91588	MW-4	90	N.D.	N.D.

Note: Hydrocarbon reported does not match the pattern of our Kerosene standard.

Reporting Limits	50	50	500
Blank Result	N.D.	N.D.	N.D.
Blank Spike Result (%)	--	70.5	--


Bruce Havlik
Chemist


Alex Tam
Semivolatiles Supervisor

CHROMALAB, INC.

Environmental Services (SDB)

July 23, 1996

Submission #: 9607631

Atten: David Harnish, Environmental C

Project: KAISER: KFC
Received: July 11, 1996

Project#: KAISER 96-2

re: **Blank spike and duplicate** report for TEPH analysis.

Method: EPA 3550/8015M

Matrix: WATER
Lab Run#: 2234

Analyzed: July 17, 1996

Analyte	Spike Amount		Spike Amount Found		Spike Recov		Control % Limits RPD	% RPD Lim
	BSP (ug/L)	Dup	BSP (ug/L)	Dup	BSP (%)	Dup (%)		
DIESEL	200	200	141	133	70.5	66.5	60-130 5.84	35

* Due to limited sample volume MS/MSD not analyzed.

CHROMALAB, INC.

Environmental Services (SDB)

July 23, 1996

Submission #: 9607631

Atten: David Harnish, Environmental C

Project: KAISER: KFC
Received: July 11, 1996

Project#: KAISER 96-2

re: **Surrogate** report for 2 samples for TEPH analysis.
Method: EPA 3550/8015M
Lab Run#: 2234
Matrix: WATER

Analyzed: July 17, 1996

Sample#	Client Sample ID	Surrogate	% Recovered	Recovery Limits
91587-1	MW-3	O-TERPHENYL	83.6	60-130
91588-1	MW-4	O-TERPHENYL	82.7	60-130

Sample#	QC Sample Type	Surrogate	% Recovered	Recovery Limits
92509-1	Reagent blank (MDB)	O-TERPHENYL	101	60-130
92510-1	Spiked blank (BSP)	O-TERPHENYL	85	60-130
92511-1	Spiked blank duplicate (BSD)	O-TERPHENYL	83	60-130

631/91587-91509

28713

CHROMALAB, INC.

SUBM #: 9607631 REP: GC
CLIENT: NOACCOUNT
DUE: 07/18/96
REF #: 28713

Chain of Custody

Environmental Services (SDB) (DOHS 1094)

DATE 7/10/96 PAGE 1 OF 1

PROJ MGR David Harnish
 COMPANY Environmental Consultant
 ADDRESS 1625 Portland Ave.
Berkeley, CA. 94707

SAMPLERS (SIGNATURE) David Harnish (PHONE NO.) 510-524-6741
 (FAX NO.) 510-524-3100

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	ANALYSIS REPORT														NUMBER OF CONTAINERS			
					TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel, TEPH (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	LUFT METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)		TOTAL LEAD	EXTRACTION (TCLP, STLC)	
MW-3	7/10/96	11:45	Water	yes	✓	✓	✓															8
MW-4	7/10/96	1:17	Water	yes	✓	✓	✓															8
TB	7/10/96	NA	Water	yes			✓															4

PROJECT INFORMATION

PROJECT NAME: Kaiser: KFC
 PROJECT NUMBER: Kaiser 96-2
 P.O. # _____
 TAT: STANDARD 5-DAY 24 48 72 OTHER

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS _____
 HEAD SPACE _____
 REC'D GOOD CONDITION/COLD _____
 CONFORMS TO RECORD _____

SPECIAL INSTRUCTIONS/COMMENTS:
Report TEPH as diesel, motor oil, and kerosene, or "unknown". Run silica gel cleanup on TEPH samples

RELINQUISHED BY 1 <u>David Harnish</u> 11:55 (SIGNATURE) (TIME) <u>David Harnish</u> 7/10/96 (PRINTED NAME) (DATE) <u>Environmental Consultant</u> (COMPANY)	RELINQUISHED BY 2 _____ (SIGNATURE) (TIME) _____ (PRINTED NAME) (DATE) _____ (COMPANY)	RELINQUISHED BY 3 <u>Chromalab</u> 1745 (SIGNATURE) (TIME) <u>Chromalab</u> 7/11/96 (PRINTED NAME) (DATE) <u>Chromalab</u> (COMPANY)
RECEIVED BY 1 <u>Chromalab</u> 11:56 (SIGNATURE) (TIME) <u>Chromalab</u> 7/11/96 (PRINTED NAME) (DATE) <u>Chromalab</u> (COMPANY)	RECEIVED BY 2 _____ (SIGNATURE) (TIME) _____ (PRINTED NAME) (DATE) _____ (COMPANY)	RECEIVED BY (LABORATORY) 3 <u>Mimie Park</u> 1745 (SIGNATURE) (TIME) <u>Mimie Park</u> 7/11/96 (PRINTED NAME) (DATE) <u>Chromalab</u> (LAB)