ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

December 10, 2002

Mr. Nick Nickerson
Unocal Corporation
8788 Elk Grove Bldg 3,Suite 15
Elk Grove, CA 95624

G.W.Leitao Trust, Federighi MH
1051 Mac Arthur Blvd
San Leandro, CA 94577

Dear Mr. Nickerson:

Subject: Fuel Leak Site Case Closure,Former Unocal, 1300 Davis St., San Leandro, CA
Case No.RO0000300;Underground Storage Tank Cleanup Fund No.

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with Chapter 6.75 (Article 4, Section 25299.37[h]). The State Water Resources Control Board adopted this letter on February 20, 1997. As of March 1, 1997, the Alameda County Environmental Health (ACEH) is required to use this case closure letter for all UST leak sites. We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site. The subject fuel leak case is closed.

SITE INVESTIGATION AND CLEANUP SUMMARY

Please be advised that the following conditions exist at the site:

- Dissolved PCE beneath the subject site is from an upgradient source
- Residual soil and groundwater pollution remains in place at this site.
- An RMP was developed to address the potential exposure to residual contamination
- Risk Assessment evaluated exposures to soil only.

If you have any questions, please call Amir K. Gholami at (510) 567-6876. Thank you.

Sincerely,

Donna L. Drogos, P.E.
Supervising Hazardous Materials Specialist
Underground Storage Tank Local Oversight Program

Enclosures
1. Case Closure Letter
2 Case Closure Summary

cc: Mr. Roger Breweer (w/enc)
Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612

Mr. Toro Okamoto (w/enc)
Division of Clean Water Programs
Underground Storage Tank Cleanup Fund
State Water Resources Control Board
P.O. Box 944212
Sacramento, CA 94244-2120

Mr. Mike Bakaldin,
Environmental Services Division
835 E 14th Street, San Leandro, CA 94577

(Amir Gholami) (w/orig enc), R. Garcia (w/enc)

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San Leandro, CA 94577

Dear Mr. Nickerson:

Subject: Fuel Leak Site Case Closure,Former Unocal, 1300 Davis St., San Leandro, CA
Case No.RO0000300;Underground Storage Tank Cleanup Fund No.

This letter confirms the completion of a site investigation and remedial action for the underground storage tank(s) formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tank(s) are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, this agency finds that the site investigation and corrective action carried out at your underground storage tank(s) site is in compliance with the requirements of subdivisions (a) and (b) of Section 25299.37 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.77 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required.

This notice is issued pursuant to subdivision (h) of Section 25299.37 of the Health and Safety Code.

Please contact our office if you have any questions regarding this matter.

Sincerely,

Mee Ling Tung
Director
Alameda County Environmental Health

FR AMIR K. GHOLAMI

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
NOV 22 2002
RDB

CASE CLOSURE SUMMARY
UNDERGROUND FUEL STORAGE TANK LOCAL OVERSIGHT PROGRAM

Date: 11/20/2002

I. AGENCY INFORMATION

Agency Name: Alameda County Environmental Health	Address: 1131 Harbor Bay Parkway
City/State/Zip: Alameda, CA 94502	Phone: (510) 567-6876
Responsible Staff Person: Amir K.Gholami	Title: Hazardous Materials Specialist

Alameda County

DEC 10 2002

Environmental Health

II. CASE INFORMATION

Site Facility Name: Former Unocal		
Site Facility Address: 1300 Davis Street, San Leandro		
RB LUSTIS Case No.: ---	Local Case No.: 2480	LOP Case No.: RO0000300
URF Filing Date: 3/18/1989	SWEEPS No.: ---	APN: 077A-0661-021-02

Responsible Parties	Addresses	Phone Number
Nick Nickerson	Unocal Corporation, 8788 Elk Grove Bldg 3, Suite15, Elk Grove, CA 95624	(916)-714-3205
G.W. Leitao Trust, Federighi M H	1051 Mac Arthur Blvd, San Leandro, CA 94577	

Tank I.D. No	Size in Gallons	Contents	Closed In Place/Removed?	Date
A	10,000	Regular unleaded gasoline	Removed	7/28\1992
B	10,000	Super unleaded gasoline	Removed	7/28/1992
C	280	Waste oil	Removed	7/28/1992
Piping			Removed	7/28/1992

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and Type of Release: holes found in waste oil tank		
Site characterization complete? Yes	Date Approved By Oversight Agency: ---	
Monitoring wells installed? Yes	Number 9	Proper screened interval? Yes
Highest GW Depth Below Ground Surface 10.41'	Lowest Depth: 18.75'	Flow Direction: W to SW and NE
Most Sensitive Current Use: Potential Drinking Water Source		

Summary of Production Wells in Vicinity:
There are two wells identified within ¼ mile of the site.

- 1052 Davis street, industrial supply well, about 1000 feet to the east, upgradient of the site.
- 1309 Kelly Ave, an irrigation well , 1000 feet Southwest, down-cross gradient of the site.

These wells do not appear to be receptors due to their location (up & cross-gradient) and distance from site.

Are drinking water wells affected? No	Aquifer Name: East Bay Plain
Is surface water affected? No	Nearest SW Name: San Leandro Creek about ½ mile north
Off-Site Beneficial Use Impacts (Addresses/Locations): none identified	
Reports on file? Yes	Where are reports filed? Alameda County Environmental Health & San Leandro Fire Department

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL

Material	Amount (Include Units)	Action (Treatment or Disposal w/Destination)	Date
Tank	2 @ 10,000 gallons and 1 @ 280 gallons	unkonwn	7/28/1992
Piping	Not reported	Not reported assumed disposed with UST	7/28/1992
Free Product	unknown	-----	---
Soil	250 Cubic yards 1,044 cubic yards	Not Reported BFI, Fremont, CA	6/1989 3/1989
Groundwater	4,200 Gallons	Removed by H&H Services, Disposal location not reported	---

MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONSCBEFORE AND AFTER CLEANUP
(Please see Attachments for additional information on contaminant locations and concentrations)

	Soil (ppm)		Water (ppb)			Soil (ppm)		Water (ppb)	
Contaminant	1 Before	2 After	3 Before	4 After	Contaminant	1 Before	2 After	3 Before	4 After
TPH (Gas)	270	73	1,300,000	ND	Benzene	0.72	0.12	5,100	ND
TPH (Diesel)	210	160	2,400,000	ND	Toluene	3.3	0.040	66,000	ND
Oil & Grease	7,800	850	880,000	ND	Ethyl Benzene	1.8	0.062	20,000	ND
Heavy Metals	---	---	0.22 *	0.22	Xylene	12	0.045	160,000	ND
Other (8010/8270)	ND	ND	250 **	<2	MTBE (if not analyzed, explain below)	---	---	---	135

1 Investigation on 3/89
2 Investigation on 10/96
3 Investigation on 5/92
4 Investigation on 1/18/2000
* Chromium 0.14ppb, Lead 0.064ppb, Nickel 0.18ppb, Zinc 0.22ppb
** 250ppb PCE, 0.63 TCE source of solvents appears from a former dry cleaner immediately up gradient of the site.

Site History and Description of Corrective Actions:

This site is a vacant lot located in mostly commercial area of the City of San Leandro. However, it was formerly a Unocal Service Station that operated from 1946 to 1992. In 1966, several USTs were removed and two new 10,000 gallon fuel USTs and a 280 gallon waste oil tank were installed. The following is a brief chronology of events, which took place at this facility:

Jan 1989- Per lease contract purposes, 6 exploratory borings (EB1 through EB6) were advanced at the site up to 26.5 to 30 bgs. Soil and grab groundwater samples were collected from each borehole. Laboratory analytical results indicated that soil and groundwater contamination mostly occurred in the vicinity of EB6. up 73ppm of TPHg, up to 0.12ppm of Benzene were detected. Soil samples around EB6 contained up to 160ppm TPHd, and up to 7,800ppm O&G.

May 1989, approximately 250 cubic yards of hydrocarbon-impacted soil was excavated from the vicinity of EB6. Confirmation soil samples (SWA through SWD) collected from the sidewalls at approximately 16.5 feet bgs contained TOG ranging from 170 to 850ppm.

April-Aug 1989- Six groundwater monitoring wells (MW-1 through MW-6) were installed to define the contaminant plume. Three had free products.

Feb 1992- MW-7 was installed and analytical results of the soil samples indicated non-detectable levels of TPHg, TPHd, and BTEX.

July 1992- two gasoline tanks and one waste oil tank removed. Soil samples were collected from the tank excavation (A1, A2, B1, B2) beneath the tank at 14 feet and WO1 and WO1[15] were collected beneath the waste oil tank at 10 and 15 ft bgs respectively. Six soil samples, P1 through P6 were collected beneath the product piping trenches and dispenser at 3.5 ft bgs, up to 150ppm TPHg, 210ppm TPHd, 3,000 O&G, 0.61 ppm Benzene, 3.3 ppm Toluene, 12ppm Xylene, and 1.8 ppm Ethylbenzen were detected. Tetrachloroethene (PCE) was detected in the shallow groundwater beneath the site. The PCE appears to be from off-site sources (a dry cleaner at 1355 Davis Street.

March 1993- four exploratory borings (EB7 through EB10) were drilled within the former service building, up to 2,600 ppm TPHg, 480ppm TPHd, 5.1ppm Toluene, 8.3ppm Ethylbenzene, and 8.8ppm Xylenes were detected. Based on the analytical results from previous investigations, overexcavation was performed in three locations. Approximately 1,300 cubic yards of soil were excavated and removed from the site. Groundwater was encountered and collected from the excavation pit by the former 2nd generation waste oil tank (Water 1), by former boring EB6 (Water 2), and by the former dispenser island near sample point P6 (Water 3). Confirmation soil samples were collected from the sidewalls of each pit where up to 460 ppm TOG at 15.5, and up to 6.7ppm TPHd at 16.75 feet was detected.

October 1993- Additional over-excavation of soil was performed around former fuel and waste oil tanks. Soil samples taken from bottom and sidewall indicated up to 270ppm TPHg, 0.71ppm Benzene, .0063ppm Toluene, 0.013ppm Ethylbenzene, and 0.0095ppm Xylenes.

November 1993- Additional soil excavation (up to depth of 17 feet in the pump island area) was performed and sidewall soil samples(SWBB, SWCC, SWDD) were taken at 15.5 feet after the final excavation and revealed non-detect levels of petroleum hydrocarbon.

1994- A risk assessment to address residual TPHg, TPHd, and BTEX in surface/subsurface soil was performed. The result of the risk assessment indicates that the residual soil concentrations at the site are health-protective under hypothetical exposure scenarios. A risk evaluation for groundwater exposure was not performed.

1995- MW-8 and MW-9 installed. Free product continued to be observed in well MW-3 until October 1995. Monitoring wells MW-1, MW-2, MW-4 through MW-6 were destroyed, to prepare for the development of the property.

2000- Dissolved concentrations of all fuel constituents have decreased to non-detectable concentration in all remaining wells, including MW-DC, an offsite well at the adjacent property (former dry cleaners)

2001- A RMP was submitted to address construction worker exposure as well as proper disposal of any excavated soil and a plan to address exposure to residual contamination

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? Yes No		
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? Yes No		
Does corrective action protect public health for current land use? Alameda County Environmental Health staff does not make specific determinations concerning public health risk. However, it does not appear that the release would present a risk to human health.		
Site Management Requirements: An RMP was prepared to address exposure to residual contamination.		
Should corrective action be reviewed if land use changes? Yes		
Monitoring Wells Decommissioned: Yes	Number Decommissioned: 9	Number Retained: None
List Enforcement Actions Taken: None		
List Enforcement Actions Rescinded: None		

V. ADDITIONAL COMMENTS, DATA, ETC.

Considerations and/or Variances:

- Dissolved PCE beneath the subject site is from an upgradient source
- Residual soil and groundwater pollution remains in place at this site.
- An RMP was developed to address the potential exposure to residual contamination
- Risk Assessment evaluated exposures to soil only.

Conclusion:

Alameda County Environmental Health staff believe that the levels of residual contamination do not pose a significant threat to water resources, public health and safety, and the environment under the any land uses based upon the information available in our files to date. Residual soil and groundwater contamination in vicinity of the former USTs appears localized and attenuating. An RMP, for encountering soil and groundwater during construction activities was prepared for the site.

VI. LOCAL AGENCY REPRESENTATIVE DATA

Prepared by: Amir K.Gholami	Title: Hazardous Materials Specialist
Signature: Amir K Gholami	Date: 11/22/02
Approved by: Donna L. Drogos, P.E.	Title: Supervising Hazardous Materials Specialist
Signature	Date

This closure approval is based upon the available information and with the provision that the information provided to this agency was accurate and representative of site conditions

VII. REGIONAL BOARD NOTIFICATION

Regional Board Staff Name: Roger Brewer	Title: Associate Engineering Geologist
RB Response: Concur, based solely upon information contained in this case closure summary.	Date Submitted to RB:
Signature: Roger Brewer	Date: 11/27/02

Attachments:

1 Site vicinity map, 1 page
2 Site map, 1 page
3 Extended site map, 1 page
4 Soil analysis results, 8 pages
5 Groundwater analytical results, 19 pages
6 Boring logs, 11 pages
7 Risk management plan, 7 pages

This document and the related CASE CLOSURE LETTER, shall be retained by the lead agency as part of the official site file.


25
FOR CONTINUATION SEE MAP 15
A
B
C
D
E
OAKLAND
SAN LEANDRO
ELMHURST
SHEFFIELD VILLAGE
MACARTHUR
MAC ARTHUR FWY
FOOTHILL
DURANT
E 14TH
BANCROFT
DAVIS
HAYS
ESTUDILLO
JOAQUIN
JUANA
MAUD
ELSIE
SYBIL
WARREN AV
THORNTON
WILLIAMS
CASTRO
WASHINGTON
PACIFIC AV
ORCHARD
SAN LEANDRO BLVD
DOLORES
SAN JOSE AVE
SAN RAFAEL
MORGAN
GRAND AV
LAKE CHABOT RD
DOWLING BLVD
DUTTON AV
BEGIER AVE
OAKES
MAPLE BLVD
WEST BROADMOOR BLVD
BROADMOOR
WARWICK
VICTORIA
CAMBRIDGE
BREED AV
BEVERLY
WOODLAND
LEE AV
ARBOR DR
PERALTA AV
HASS
SAN LEANDRO
FOOTHILL BLVD
MACARTHUR BLVD
OAKLAND ZOO
EBRPD HEADQUARTERS
HELLMAN REC AREA
HELLMAN DUNSMUIR ESTATE
SHEFFIELD REC CTR
CHABOT PARK
SAN LEANDRO HS
SAN LEANDRO HOSP
FOR CONTINUATION SEE MAP 26
FOR CONTINUATION SEE MAP 27
1,515,
1,518,
1,527.
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458,
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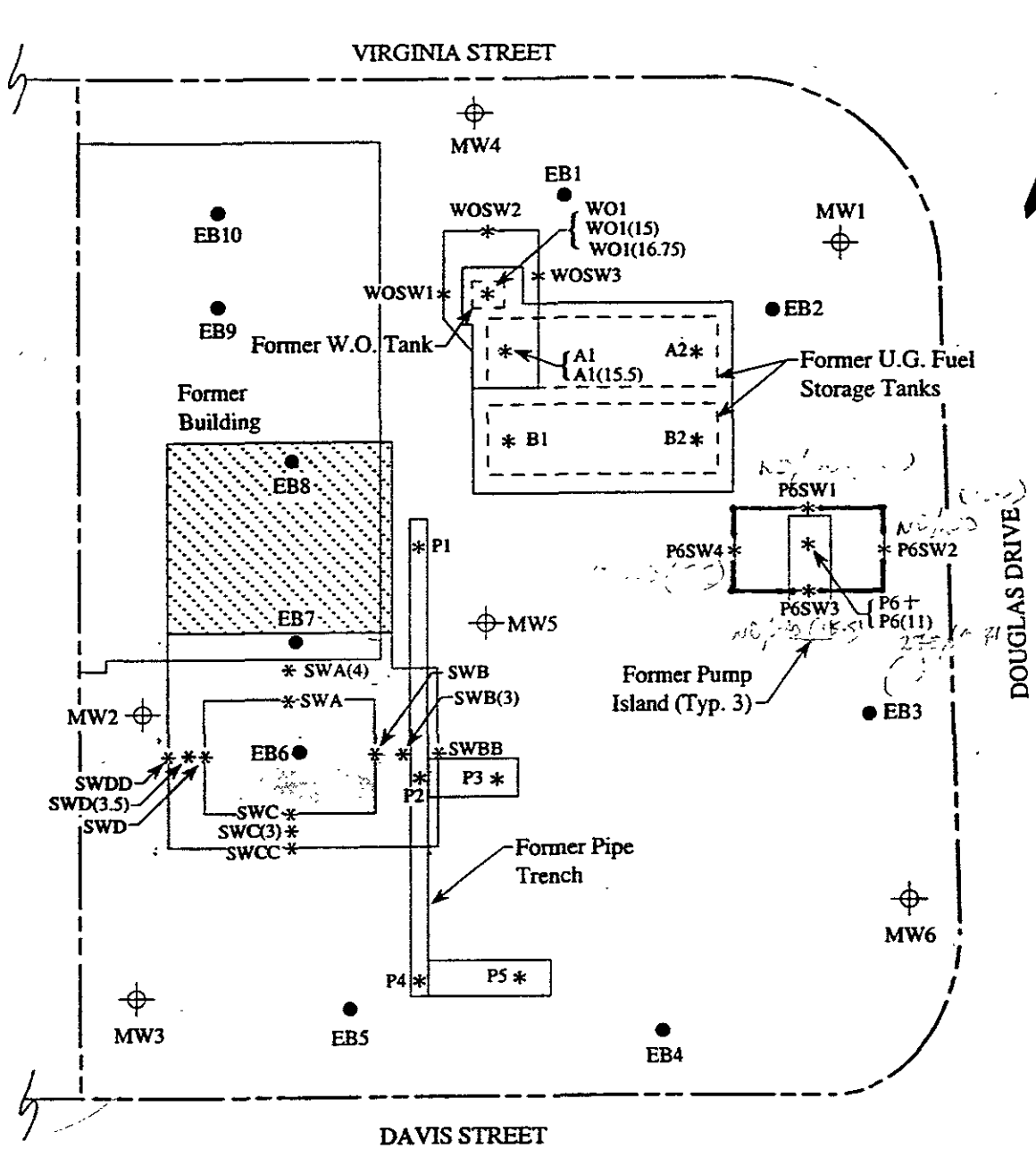
448
446
COPYRIGHT, © 1993 BY Thomas Bros Maps®
ATTACHMENT 1
DETAIL



LEGEND

- Monitoring well
- Former exploratory boring
- * Sample point location
- Area excavated to a depth of about 17 feet below grade.
- Area excavated to a depth of about 7 feet below grade.
- Area of previous excavation (May 11, 1989)

0 20 40

Approx. scale feet

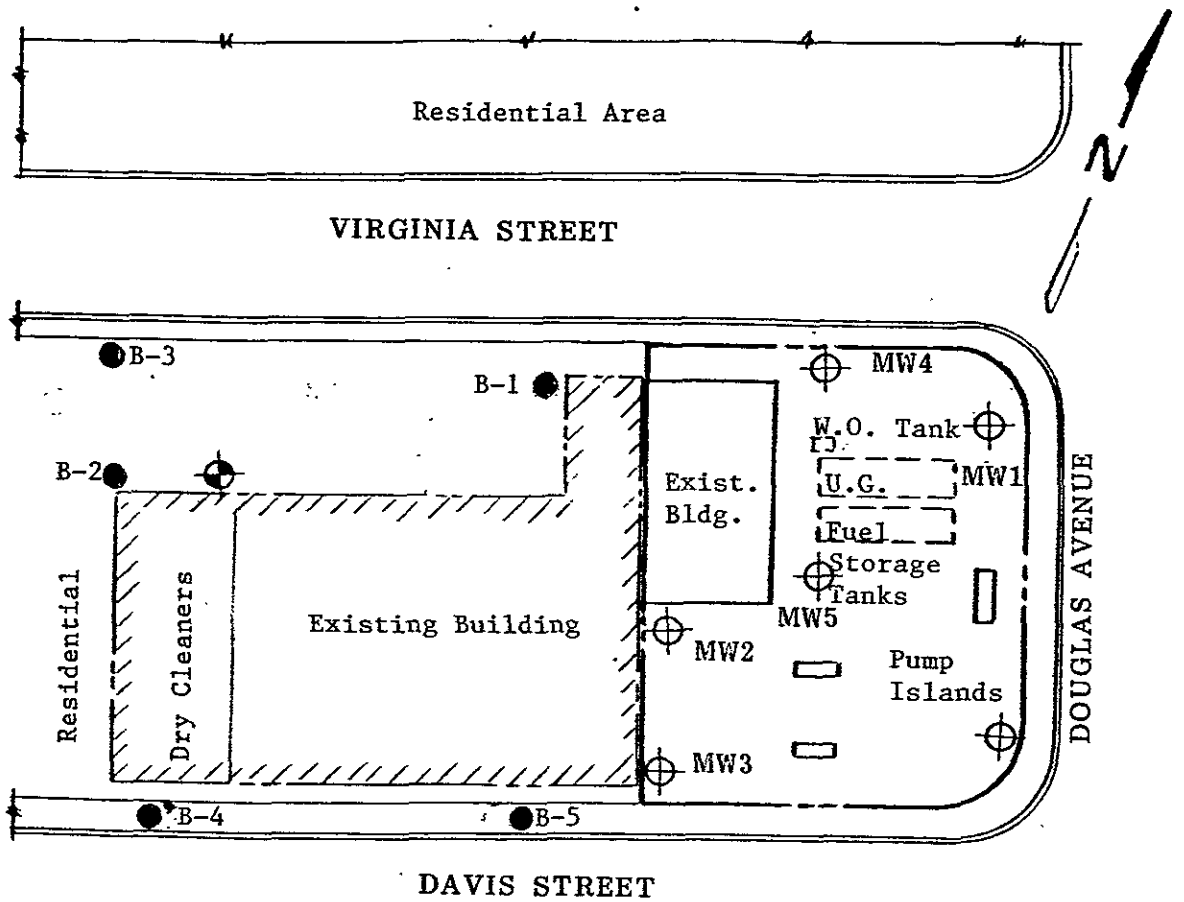
MONITORING WELL, BORING LOG, AND SAMPLE POINT LOCATION MAP

KARREMAN ENGINEERING

UNOCAL SERVICE STATION #2
1300 DAVIS STREET
SAN LEANDRO, CALIFORNIA

ATTACHMENT 2

KAPREALIAN ENGINEERING, INC.
Consulting Engineers
P.O. BOX 996 • BENICIA, CA 94510
(707) 746-6915 • (707) 746-6916 • FAX: (707) 746-5581



SITE VICINITY MAP
Figure 3

LEGEND

- Existing Monitoring Well (by KEI)
- Existing Monitoring Well (by others)
- Approximate location of existing off-site Soil Borings (by AGS)

0 50 100
Approx. scale feet

Unocal S/S #2512
1300 Davis Street
San Leandro, CA

KEI-P88-1204.R14
January 10, 1996

TABLE 4

SUMMARY OF LABORATORY ANALYSES
SOIL

Sample Number	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	TOG
(Collected on April 17, 1989)							
MW1(5)	ND	4.0	ND	ND	ND	ND	ND
MW1(10)	ND	ND	ND	ND	ND	ND	ND
MW1(15)	ND	ND	ND	ND	ND	ND	ND
MW1(17)	ND	ND	ND	ND	ND	ND	31
MW2(5)*	ND	ND	ND	ND	ND	ND	31
MW2(10)*	ND	1.1	ND	ND	ND	ND	60
MW2(15)*	ND	ND	ND	ND	ND	ND	71
MW3(5)	ND	ND	ND	ND	ND	ND	ND
MW3(10)	ND	1.1	ND	ND	ND	ND	ND
MW3(15)	ND	1.2	ND	ND	ND	ND	32
MW3(17)	ND	6.2	ND	0.21	ND	0.42	180
(Collected on August 16, 1989)							
MW4(5)	--	3.3	ND	ND	ND	0.11	ND
MW4(10)	--	ND	ND	ND	ND	ND	ND
MW4(15)	--	ND	ND	ND	ND	ND	ND
MW4(19)	--	ND	ND	ND	ND	ND	ND
MW5(5)	--	ND	MD	ND	ND	ND	ND
MW5(10)	--	ND	ND	ND	ND	ND	ND
MW5(15)	--	ND	ND	ND	ND	ND	ND
MW5(20)	--	20	ND	ND	ND	ND	ND
MW5(22)	--	ND	ND	ND	ND	ND	ND
MW6(5)	--	ND	ND	ND	ND	ND	ND
MW6(10)	--	ND	ND	ND	ND	ND	ND
MW6(15)	--	ND	ND	ND	ND	ND	ND
MW6(20)	--	ND	ND	ND	ND	ND	ND

KEI-P88-1204.R14
January 10, 1996

TABLE 4 (Continued)

SUMMARY OF LABORATORY ANALYSES
SOIL

Sample Number	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	TOG
(Collected on February 11, 1992)							
MW7(5)	ND	ND	ND	ND	ND	ND	--
MW7(9.5)	ND	ND	ND	ND	ND	ND	--
MW7(15)	ND	ND	ND	ND	ND	ND	--
MW7(16.5)	ND	ND	ND	ND	ND	ND	--

-- Indicates analysis not performed.

ND = Non-detectable.

* EPA method 8010 constituents were non-detectable.

Results are in milligrams per kilogram (mg/kg), unless otherwise indicated.

KEI-P88-1204.R14
January 10, 1996

TABLE 5

SUMMARY OF LABORATORY ANALYSES
SOIL

Sample Number	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes	TOG
			(Collected on January 3, 1989)				
EB1(5)*	5.0	--	ND	0.05	ND	ND	ND
EB1(10)*	1.0	--	ND	ND	ND	ND	ND
EB1(15)*	1.0	--	ND	ND	ND	ND	ND
EB1(25)*	2.0	--	--	--	--	--	ND
EB2(10)	--	ND	ND	ND	ND	ND	--
EB2(15)	--	ND	ND	ND	ND	ND	--
EB2(20)	--	ND	ND	ND	ND	ND	--
EB2(25)	--	1.9	ND	ND	ND	ND	--
EB3(5)	--	ND	ND	ND	ND	ND	--
EB3(10)	--	ND	ND	ND	ND	ND	--
EB3(15)	--	2.7	ND	ND	ND	ND	--
EB3(20)	--	2.2	ND	ND	ND	ND	--
EB3(25)	--	ND	ND	ND	ND	ND	--
EB4(5)	--	ND	ND	ND	ND	ND	--
EB4(10)	--	ND	ND	ND	ND	ND	--
EB4(15)	--	ND	ND	ND	ND	ND	--
EB4(20)	--	ND	ND	ND	ND	ND	--
EB4(25)	--	ND	ND	ND	ND	ND	--
EB5(5)	--	ND	ND	ND	ND	ND	--
EB5(10)	--	ND	ND	ND	ND	ND	--
EB5(15)	--	2.0	ND	ND	ND	ND	--
EB5(20)	--	17	0.12	0.15	0.25	1.4	--
EB5(25)	--	3.9	ND	ND	ND	0.17	--
EB6(5)	10	1.8	ND	ND	ND	ND	7,800
EB6(10)	160	73	ND	ND	ND	ND	1,200
EB6(15)	40	17	0.065	ND	ND	0.21	900
EB6(25)	3.0	ND	ND	ND	ND	ND	130

KEI-P88-1204.R14
January 10, 1996

TABLE 5 (Continued)

SUMMARY OF LABORATORY ANALYSES
SOIL

Sample Number	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes	TOG
(Collected on March 22 and 23, 1993)							
EB7(5)*	ND	ND	0.018	ND	ND	ND	ND
EB7(10)*	1.3♦	3.2♦♦	ND	ND	ND	ND	140
EB7(15)*	6.4♦	17♦♦	ND	0.011	0.0090	0.025	340
EB7(19.5)*	3.5♦	4.4♦♦	ND	ND	ND	ND	80
EB7(23.5)*	ND	ND	ND	ND	ND	ND	60
EB8(5)*+	12♦	50♦♦	0.020	0.040	0.062	0.045	1,700
EB8(10)*+	1.2	ND	ND	ND	ND	ND	ND
EB8(15)*+	7.6	5.0♦♦	ND	ND	0.015	0.0070	ND
EB8(20)*+	ND	ND	ND	ND	ND	ND	ND
EB8(23)*+	ND	ND	ND	ND	ND	ND	ND
EB9(5)*+	ND	ND	ND	ND	ND	ND	ND
EB9(10)*+	ND	2.0	ND	ND	ND	ND	ND
EB9(14.5)*+	ND	ND	ND	ND	ND	ND	ND
EB10(5)*	ND	ND	ND	ND	ND	ND	ND
EB10(9.5)*	ND	1.6	ND	ND	ND	ND	ND
EB10(15)*	ND	ND	ND	ND	ND	ND	ND
EB10(20)*	ND	ND	ND	ND	ND	ND	ND
EB10(23)*	ND	ND	ND	ND	ND	ND	ND

NOTE: The soil samples were collected at the depths (below grade) indicated in the ( ) of the respective sample number.

* All EPA method 8010 constituents were non-detectable.
\+ TPH as Hydraulic Fluid was non-detectable, except in sample EB8(5), where it was detected at a concentration of 470 mg/kg.
♦ Sequoia Analytical Laboratory reported that the hydrocarbons detected appeared to be a diesel and non-diesel mixture.
♦♦ Sequoia Analytical Laboratory reported that the hydrocarbons detected appeared to be a gasoline and non-gasoline mixture.
ND = Non-detectable.
-- Indicates analysis was not performed.
Results are in milligrams per kilogram (mg/kg), unless otherwise indicated.

KEI-P88-1204.R14
January 10, 1996

TABLE 11

SUMMARY OF LABORATORY ANALYSES
SOIL

Sample Number	Depth (feet)	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes	TOG
			(Collected on May 11, 1989)					
SWA	16.5	21	--	--	--	--	--	850
SWB	16.5	18	--	--	--	--	--	580
SWC	16.5	26	--	--	--	--	--	680
SWD	16.5	16	--	--	--	--	--	170

-- Indicates analysis was not performed.

Results are in milligrams per kilogram (mg/kg), unless otherwise indicated.

KEI-P88-1204.R14
January 10, 1996

TABLE 10

SUMMARY OF LABORATORY ANALYSES
SOIL

Date	Sample	Depth (feet)	TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	TOG
7/28/92	A1	14.0	23	0.078	0.093	0.061	0.16	--
	A2	14.0	ND	ND	ND	ND	ND	--
	B1	14.0	3.2	0.0056	ND	ND	0.023	--
	B2	14.0	8.4	0.0086	0.019	0.069	0.054	--
	P1	3.5	ND	0.013	ND	ND	0.0060	--
	P2	3.5	5.8	0.042	0.022	0.024	0.11	--
	P3	3.5	ND	ND	0.012	ND	0.025	--
	P4	3.5	ND	ND	ND	ND	0.0067	--
	P5	3.5	6.8	ND	ND	0.21	1.7	--
	P6	3.5	91	0.72	0.32	0.34	1.4	--
	WO1*	10.0	150	0.61	3.3	1.8	12	3,00
	WO1(15)	15.0	--	--	--	--	--	210

-- Indicates analysis was not performed.

ND = Non-detectable.

* EPA method 8010 constituents were all non-detectable, except for 1-1-Dichloroethane at 120 µg/kg, tetrachloroethene at 86 µg/kg, and 1,1,1-trichloroethane at 260 µg/kg. Cadmium, chromium, lead, nickel, and zinc were detected at concentrations of 0.95 mg/kg, 45 mg/kg, 5.8 mg/kg, 42 mg/kg, and 40 mg/kg, respectively. TPH as diesel was detected at a concentration of 210 mg/kg.

Results are in milligrams per kilogram (mg/kg), unless otherwise indicated.

KEI-P88-1204.R14
January 10, 1996

TABLE 7

SUMMARY OF LABORATORY ANALYSES
SOIL

Date	Sample	Depth (feet)	TOG	TPH as Diesel	EPA Method 8010 Constituents*	EPA Method 8270 Constituents*
10/27/93	A1(15.5)	15.5	200	13♦	ND	ND
	WO1(16.75)	16.75	ND	6.7♦	ND	ND
	WOSW1	15.0	ND	ND	ND	ND
	WOSW2	15.0	ND	ND	ND	ND
	WOSW3	15.0	ND	ND	ND	ND
	SWA(4)	15.5	ND	--	--	--
	SWB(3)	15.0	450	--	--	--
	SWC(3)	15.5	240	--	--	--
	SWD(3.5)	15.5	460	--	--	--
11/15/93	SWBB	15.5	ND	--	--	--
	SWCC	15.5	ND	--	--	--
	SWDD	15.5	ND	--	--	--

♦ Sequoia Analytical Laboratory reported that the hydrocarbons detected appeared to be a diesel and non-diesel mixture.

* Results are in micrograms per kilogram (mg/kg), unless otherwise indicated.

ND = Non-detectable.

-- Indicates analysis was not performed.

Results are in milligrams per kilogram (mg/kg), unless otherwise indicated.

KEI-P88-1204.R14
January 10, 1996

TABLE 8

SUMMARY OF LABORATORY ANALYSES
SOIL

Date	Sample	Depth (feet)	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
10/27/93	A1(15.5)	15.5	17*	ND	0.017	0.040	0.088
	P6(11)	11.0	270	0.71	12	6.3	38
	WO1(16.75)	16.75	2.6	0.0059	0.0063	0.013	0.0095
	WOSW1	15.0	ND	ND	ND	ND	ND
	WOSW2	15.0	ND	ND	ND	ND	ND
	WOSW3	15.0	ND	ND	ND	ND	ND
11/15/93	P6SW1	15.5	ND	ND	ND	ND	ND
	P6SW2	15.5	ND	ND	ND	ND	ND
	P6SW3	15.5	ND	ND	ND	ND	0.078
	P6SW4	15.5	ND	ND	ND	ND	ND

* Sequoia Analytical Laboratory reported that the hydrocarbons detected did not appear to be gasoline.

ND = Non-detectable.

Results are in milligrams per kilogram (mg/kg), unless otherwise indicated.

Table 1

Groundwater Monitoring Data and Analytical Results

Former Unocal Service Station #2512

1300 Davis Street

San Leandro, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(D) (ppb)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	TOG (ppm)
MW-1	04/25/89	--	--	--	100	ND	0.31	ND	ND	ND	--	--
	08/10/89	--	--	--	ND	ND	ND	ND	ND	ND	--	ND
	11/21/89	--	--	--	ND	ND	ND	ND	ND	ND	--	8.9
	02/23/90	--	--	--	ND	ND	ND	ND	ND	ND	--	ND
	05/10/90	--	--	--	ND	ND	ND	ND	ND	ND	--	ND
	08/09/90	--	--	--	ND	ND	ND	ND	ND	ND	--	ND
	11/06/90	--	--	--	ND	ND	ND	ND	ND	ND	--	ND
	02/04/91	--	--	--	ND	ND	ND	0.31	ND	0.62	--	ND
	05/24/91	--	--	--	--	ND	ND	ND	ND	ND	--	ND
	08/15/91	--	--	--	--	--	--	--	--	--	--	--
100.00	09/18/91	17.88	82.12	0.00	--	--	--	--	--	--	--	--
	10/15/91	18 17	81.83	0.00	--	--	--	--	--	--	--	--
	11/19/91	17.48	82.52	0.00	--	--	--	--	--	--	--	--
32 69	02/27/92	15 36	17.33	0.00	--	--	--	--	--	--	--	--
	03/27/92	15 53	17.16	0.00	--	--	--	--	--	--	--	--
	04/27/92	15 68	17.01	0.00	--	--	--	--	--	--	--	--
	05/26/92	15 90	16.79	0.00	--	--	--	--	--	--	--	--
	06/23/92	16 25	16.44	0.00	--	--	--	--	--	--	--	--
	07/24/92	16.54	16.15	0.00	--	--	--	--	--	--	--	--
	10/30/92	16.58	16.11	0.00	--	--	--	--	--	--	--	--
	06/09/94	15.22	--	0.00	--	580[1]	ND	ND	ND	ND	--	--
	09/08/94	15.81	--	0.00		160[2]	ND	1.6	ND	3.1	--	--
	01/25/95	DESTROYED	--	--	--	--	--	--	--	--	--	--
MW-2	04/25/89	--	--	--	ND	32	0.35	ND	ND	ND	--	--
	08/10/89	--	--	--	ND	ND	ND	0.39	ND	ND	--	ND
	11/21/89	--	--	--	ND	48	ND	0.51	ND	ND	--	1.6
	02/23/90	--	--	--	ND	44	ND	ND	ND	ND	--	ND
	05/10/90	--	--	--	ND	43	ND	1	ND	ND	--	ND
	08/09/90	--	--	--	ND	ND	ND	ND	ND	ND	--	ND
	11/06/90	--	--	--	ND	ND	ND	0.42	ND	1.4	--	ND
	02/04/91	--	--	--	ND	ND	ND	0.38	ND	0.87	--	ND
	05/24/91	--	--	--	--	ND	1.5	ND	ND	ND	--	ND
	08/15/91	--	--	--	--	ND	ND	ND	ND	ND	--	ND
100 32	09/18/91	18 48	81.84	0.00	--	--	--	--	--	--	--	--

ATTACHMENT 5

Table 1

Groundwater Monitoring Data and Analytical Results

Former Unocal Service Station #2512

1300 Davis Street

San Leandro, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(D) (ppb)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	TOG (ppm)
MW-2	10/15/91	18 75	81.57	0.00	--	--	--	--	--	--	--	--
(cont)	11/19/91	18 01	82.31	0.00	--	220	2.5	8.4	2.4	14	--	--
33.04	02/27/92	15.40	17.64	0.00	--	330	12	12	10	93	--	--
	03/27/92	15.61	17.43	0.00	--	--	--	--	--	--	--	--
	04/27/92	15.96	17.08	0.00	--	--	--	--	--	--	--	--
	05/26/92	16.30	16.74	0.00	--	2,900	8.8	9.3	54	36	--	--
	06/23/92	16.76	16.28	0.00	--	--	--	--	--	--	--	--
	07/24/92	16 66	--[12]	0.00	--	--	--	--	--	--	--	--
	10/30/92	17.38	--[12]	0.00	--	1,200[1]	ND	ND	ND	ND	--	--
	06/09/94	15 48	--	0.00	--	1,900[2]	6.7	ND	66	ND	--	--
	09/08/94	16 22	--	0.00	--	3,000[1]	ND	ND	ND	17	--	--
	01/25/95	DESTROYED	--	--	--	--	--	--	--	--	--	--
MW-3	04/25/89	--	--	--	5,700	56	ND	ND	0.31	0.49	--	--
	08/10/89	--	--	--	860	3,200	73	140	35	240	--	ND
	11/21/89	--	--	--	110	1,900	ND	ND	ND	ND	--	3.8
	02/23/90	--	--	--	350	ND	0.32	ND	ND	ND	--	1.3
	05/10/90	--	--	--	850	6,200	94	460	160	540	--	2.8
	08/09/90	--	--	--	500	1,900	56	140	140	31	--	ND
	11/06/90	--	--	--	940	16,000	820	1,500	2,200	770	--	ND
	02/04/91	--	--	--	NOT SAMPLED DUE TO A TRACE OF FREE PRODUCT					--	--	--
	05/24/91	--	--	--	2,000	23,000	940	3,400	590	2,600	--	ND
	08/15/91	--	--	--	NOT SAMPLED DUE TO A TRACE OF FREE PRODUCT					--	--	--
100 03	09/04/91	17 97	82.08***	0.03	--	--	--	--	--	--	--	--
	09/18/91	18 38	81.73***	0.10	--	--	--	--	--	--	--	--
	10/02/91	18.50	81.65***	0.16	--	--	--	--	--	--	--	--
	10/15/91	18.59	81.62***	0.24	--	--	--	--	--	--	--	--
	11/05/91	17.75	82.49***	0.27	--	--	--	--	--	--	--	--
	11/19/91	17.87	82.36***	0.26	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--	--
32 73	02/27/92	14.98	17.82**	0.09	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--	--
	03/12/92	14.94	17.79	0.00	--	--	--	--	--	--	--	--
	03/27/92	15.12	17.61	0.00	--	--	--	--	--	--	--	--
	04/13/92	15.17	17.56	0.00	--	--	--	--	--	--	--	--
	04/27/92	15.58	17.17**	0.02	--	--	--	--	--	--	--	--
	05/11/92	15.84	16.92**	0.04	--	--	--	--	--	--	--	--

Table 1

Groundwater Monitoring Data and Analytical Results

Former Unocal Service Station #2512

1300 Davis Street

San Leandro, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(D) (ppb)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	TOG (ppm)
MW-3	05/26/92	16 06	16.76**	0.12	2,400,000	1,300,000	5,100	66,000	20,000	160,000	--	880
(cont)	06/09/92	16.29	16.46**	0.03	--	--	--	--	--	--	--	--
	06/23/92	16.52	16.26**	0.06	--	--	--	--	--	--	--	--
	07/06/92	16.60	16.24**	0.14	--	--	--	--	--	--	--	--
	07/24/92	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--
	10/30/92	17.08	--[12]	0.07	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--	--
	06/09/94	14 74	--	0.00	17,000[3]	69,000	1,300	7,100	1,900	11,000	--	--
	09/08/94	15.54	--	Sheen	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--	--
32 02	10/05/95	14 86	17.16	0.00	--	--	--	--	--	--	--	--
	10/21/95	14 98	17.04	0.00	5,900[3]	50,000	250	4,200	1,700	18,000	--[5]	--
	01/24/96	13 15	18.87	0.00	5,300[3]	100,000	950	3,300	2,500	16,000	--[6]	--
	04/23/96	13.11	18.91	0.00	4,900[3]	50,000	430	1,700	1,600	7,600	ND	--
	07/25/96	14.40	17.62	0.00	2,400[4]	17,000	170	ND	650	3,300	240	--
	10/25/96	15.33	16.69	0.00	3,700[4]	26,000	420	1,100	1,800	6,400	340	--
	01/28/97	11.55	20.47	0.00	3,900[3]	32,000	230	1,000	1,000	4,500	ND	--
	04/16/97	12 05	19.97	0.00	3,100[3]	12,000	76	ND	330	1,600	ND	--
	07/21/97	15.17	16.85	0.00	2,400[3]	10,000	82	28	430	1,400	76	--
	10/20/97	15.41	16.61	Sheen	2,900[4]	12,000	200	540	1,400	4,600	210	--
	01/21/98[10]	11 59	20.43	0.00	3,700[7]	25,000	170	640	1,200	4,800	ND[8]	--
	04/17/98[10]	12 46	19.56	0.00	3,400	25,000	980	1,400	5,800	ND[8]	ND[8]	--
	07/14/98[10]	13.43	18.59	0.00	1,100[11]	6,200	76	ND[8]	550	810	ND[8]	--
	10/12/98[10]	14 60	17.42	0.00	420[13]	1,600	28	ND[8]	28	81	ND[8]	--
	01/19/99[10]	12.97	19.05	0.00	870[15]	27,000[14]	18	ND[8]	48	69	ND[8]	--
	04/07/99	12.36	19.66	0.00	ND	1,700	10	ND[8]	28	72	[8]ND/4.7[16]	ND
	07/12/99	14.41	17.61	0.00	160[17]	78	0.68	ND	ND	2.4	ND	--
	10/25/99	14.53	17.49	0.00	95[18]	220	0.82	ND	0.77	6.8	3.9	--
	01/18/00	**13.05**	**18.97**	**0.00**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**135**	**--**
MW-4	08/29/89	--	--	--	120	ND	ND	ND	ND	ND	--	ND
	11/21/89	--	--	--	ND	ND	ND	ND	ND	ND	--	ND
	02/23/90	--	--	--	ND	ND	ND	ND	ND	ND	--	ND
	05/10/90	--	--	--	88	54	ND	2	ND	0.37	--	ND
	08/09/90	--	--	--	ND	ND	ND	ND	ND	ND	--	ND
	11/06/90	--	--	--	ND	ND	ND	0.36	ND	0.98	--	ND
	02/04/91	--	--	--	ND	ND	ND	0.72	ND	1.1	--	ND

Table 1

Groundwater Monitoring Data and Analytical Results

Former Unocal Service Station #2512

1300 Davis Street

San Leandro, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(D) (ppb)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	TOG (ppm)
MW-4	05/24/91	--	--	--	ND	ND	0.64	ND	ND	ND	--	ND
(cont)	08/15/91	--	--	--	ND	ND	ND	ND	ND	ND	--	ND
99.66	09/18/91	17.67	81.99	0.00	--	--	--	--	--	--	--	--
	10/15/91	17.95	81.71	0.00	--	--	--	--	--	--	--	--
	11/19/91	17.25	82.41	0.00	ND	ND	ND	ND	ND	ND	--	--
32.38	02/27/92	14.96	17.42	0.00	ND	43	ND	1	0.37	2.5	--	--
	03/27/92	15.01	17.37	0.00	--	--	--	--	--	--	--	--
	04/27/92	15.37	17.01	0.00	--	--	--	--	--	--	--	--
	05/26/92	15.62	16.76	0.00	ND	120	0.59	0.82	ND	1.9	--	--
	06/23/92	16.02	16.36	0.00	--	--	--	--	--	--	--	--
	07/24/92	16 10	--[12]	0.00	--	--	--	--	--	--	--	--
	10/30/92	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--
	06/09/94	15 08	--	0.00	ND	780[1]	ND	ND	ND	ND	--	--
	09/08/94	15.72	--	0.00	ND	300[1]	ND	ND	ND	ND	--	--
	01/25/95	DESTROYED	--	--	--	--	--	--	--	--	--	--
MW-5	08/29/89	--	--	--	100	ND	ND	0.94	0.3	ND	--	ND
	11/21/89	--	--	--	70	ND	ND	ND	ND	ND	--	ND
	02/23/90	--	--	--	ND	ND	ND	ND	ND	ND	--	ND
	05/10/90	--	--	--	83	ND	ND	ND	ND	0.31	--	ND
	08/09/90	--	--	--	ND	ND	ND	ND	ND	ND	--	ND
	11/06/90	--	--	--	ND	ND	ND	ND	ND	ND	--	ND
	02/04/91	--	--	--	ND	ND	ND	0.35	ND	ND	--	ND
	05/24/91	--	--	--	ND	ND	ND	ND	ND	ND	--	ND
100 32	09/18/91	18.30	82.02	0.00	--	--	--	--	--	--	--	--
	10/15/91	18.59	81.73	0.00	--	--	--	--	--	--	--	--
	11/19/91	17 87	82.45	0.00	--	--	--	--	--	--	--	--
33 02	02/27/92	15.50	17.52	0.00	--	--	--	--	--	--	--	--
	03/27/92	15 68	17.34	0.00	--	--	--	--	--	--	--	--
	04/27/92	15.96	17.06	0.00	--	--	--	--	--	--	--	--
	05/26/92	16.22	16.80	0.00	--	--	--	--	--	--	--	--
	06/23/92	16 63	16.39	0.00	--	--	--	--	--	--	--	--
	07/24/92	16 73	--[12]	0.00	--	--	--	--	--	--	--	--
	10/30/92	INACCESSIBLE	--	0.00	--	--	--	--	--	--	--	--

Table 1

Groundwater Monitoring Data and Analytical Results

Former Unocal Service Station #2512

1300 Davis Street

San Leandro, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(D) (ppb)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	TOG (ppm)
MW-5	06/09/94	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--
(cont)	09/08/94	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--
	01/25/95	DESTROYED	--	--	--	--	--	--	--	--	--	--
MW-6	08/29/89	--	--	--	ND	ND	ND	ND	ND	ND	--	ND
	11/21/89	--	--	--	ND	ND	ND	ND	ND	ND	--	ND
	02/23/90	--	--	--	ND	ND	ND	ND	ND	ND	--	ND
	05/10/90	--	--	--	ND	ND	ND	1.2	ND	ND	--	ND
	08/09/90	--	--	--	ND	ND	ND	ND	ND	ND	--	ND
	11/06/90	--	--	--	ND	ND	1.6	0.35	ND	ND	--	ND
	02/04/91	--	--	--	ND	ND	ND	ND	ND	ND	--	ND
	05/24/91	--	--	--	--	ND	ND	ND	ND	ND	--	ND
	08/15/91	--	--	--	--	ND	ND	ND	ND	ND	--	ND
100 50	09/18/91	18.34	82.16	0.00	--	--	--	--	--	--	--	--
	10/15/91	18 65	81.85	0.00	--	--	--	--	--	--	--	--
	11/19/91	17 94	82.56	0.00	--	ND	ND	ND	ND	ND	--	--
33.19	02/27/92	15 70	17.49	0.00	--	ND	3.2	ND	ND	3.8	--	--
	03/27/92	15.56	17.63	0.00	--	--	--	--	--	--	--	--
	04/27/92	16 07	17.12	0.00	--	--	--	--	--	--	--	--
	05/26/92	16.34	16.85	0.00	--	ND	ND	ND	ND	0.65	--	--
	06/23/92	16 70	16.49	0.00	--	--	--	--	--	--	--	--
	07/24/92	17.00	16.19	0.00	--	--	--	--	--	--	--	--
	10/30/92	17 07	16.12	0.00	--	ND	ND	ND	ND	ND	--	--
	06/09/94	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--
	09/08/94	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--
	01/25/95	DESTROYED	--	--	--	--	--	--	--	--	--	--
MW-7												
32.09	02/27/92	15 12	16.97	0.00	--	38	ND	0.97	0.69	4	--	--
	03/27/92	14.26	17.83	0.00	--	--	--	--	--	--	--	--
	04/27/92	14 86	17.23	0.00	--	--	--	--	--	--	--	--
	05/26/92	15 30	16.79	0.00	--	ND	ND	ND	ND	0.6	--	--
	06/23/92	15 80	16.29	0.00	--	--	--	--	--	--	--	--
	07/24/92	16.26	15.83	0.00	--	--	--	--	--	--	--	--

Table 1

Groundwater Monitoring Data and Analytical Results

Former Unocal Service Station #2512

1300 Davis Street

San Leandro, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(D) (ppb)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	TOG (ppm)
MW-7	10/30/92	16.31	15.78	0.00	--	ND	ND	ND	ND	ND	--	--
(cont)	06/09/94	14.43	--	0.00	--	610[1]	ND	ND	ND	ND	--	--
	09/08/94	15 32	--	0.00	--	ND	ND	1.3	ND	1.6	--	--
31 71	10/21/95	14.74	16.97	0.00	--	ND	ND	ND	ND	ND	--	--
	01/24/96	12.50	19.21	0.00	--	ND	ND	ND	ND	ND	--	--
	04/23/96	12 48	19.23	0.00	--	220	ND	0.62	0.88	5.4	ND	--
	07/25/96	14.30	17.41	0.00	--	ND	ND	ND	ND	ND	ND	--
	10/25/96	15.13	16.58	0.00	--	ND	ND	ND	ND	ND	ND	--
	01/28/97	10 41	21.30	0.00	--	ND	ND	ND	ND	ND	ND	--
	04/16/97	12.12	19.59	0.00	--	ND	ND	ND	ND	ND	ND	--
	07/21/97	15 01	16.70	0.00	--	ND	ND	ND	ND	ND	ND	--
	10/20/97	15.18	16.53	0.00	--	ND	ND	ND	ND	ND	ND	--
	01/21/98	10 46	21.25	0.00	--	ND	ND	ND	ND	ND	ND	--
	04/17/98	11.57	20.14	0.00	--	ND	ND	ND	ND	ND	ND	--
	07/14/98	13 10	18.61	0.00	--	ND	ND	ND	ND	ND	ND	--
	10'12/98	14.22	17.49	0.00	--	ND	ND	ND	ND	ND	ND	--
	01/19/99	12 12	19.59	0.00	--	ND	ND	ND	ND	ND	ND	--
	04/07/99	11 47	20.24	0.00	--	ND	ND	ND	ND	ND	ND/ND[16]	--
	07/12/99	14 17	17.54	0.00	--	ND	ND	ND	ND	ND	ND	--
	10/25/99	14 22	17.49	0.00	--	ND	ND	ND	ND	ND	ND	--
	01/18/00	**12.38**	**19.33**	**0.00**	**--**	**ND**	**ND**	**ND**	**ND**	**ND**	**6.10**	**--**
MW-8												
32.73	10/05/95	15.56	17.17	0.00	--	--	--	--	--	--	--	--
	10/21/95	15 65	17.08	0.00	--	ND	ND	ND	ND	ND	--	--
	01/24/96	14 51	18.22	0.00	--	ND	ND	ND	ND	ND	--	--
	04/23/96	15.70	17.03	0.00	--	ND	ND	ND	ND	ND	ND	--
	07/25/96	15 10	17.63	0.00	--	ND	ND	ND	ND	ND	ND	--
	10/25/96	15 96	16.77	0.00	--	ND	ND	ND	ND	ND	ND	--
	01/28/97	13.86	18.87	0.00	--	ND	ND	ND	ND	ND	ND	--
	04/16/97	12 74	19.99	0.00	--	ND	ND	ND	ND	ND	ND	--
	07/21/97	15.71	17.02	0.00	--	ND	ND	ND	ND	ND	ND	--
	10/20/97	15 98	16.75	0.00	--	ND	ND	ND	ND	ND	ND	--
	01/21/98	14.20	18.53	0.00	--	ND	ND	ND	ND	ND	ND	--
	04/17/98	14 40	18.33	0.00	--	ND	ND	ND	ND	ND	ND	--

Table 1

Groundwater Monitoring Data and Analytical Results

Former Unocal Service Station #2512

1300 Davis Street

San Leandro, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(D) (ppb)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	TOG (ppm)
MW-8	07/14/98	14 85	17.88	0.00	--	ND	ND	ND	ND	ND	ND	--
(cont)	10/12/98	15 86	16.87	0.00	--	ND	ND	ND	ND	ND	ND	--
	01/19/99	14.69	18.04	0.00	--	ND	ND	ND	ND	ND	ND	--
	04/07/99	13.88	18.85	0.00	--	ND	ND	ND	ND	ND	ND/ND[16]	--
	07/12/99	15 21	17.52	0.00	--	ND	ND	ND	ND	ND	ND	--
	10/25/99	15 30	17.43	0.00	--	ND	ND	ND	ND	ND	ND	--
	01/18/00	**14.67**	**18.06**	**0.00**	**--**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**--**
MW-9												
32.33	10/05/95	15.27	17.06	0.00	--	--	--	--	--	--	--	--
	10/21/95	15 59	16.74	0.00	--	ND	ND	ND	ND	ND	--[5]	--
	01/24/96	14.28	18.05	0.00	--	ND	ND	ND	ND	ND	--[6]	--
	04/23/96	14.60	17.73	0.00	--	ND	ND	ND	ND	ND	ND	--
	07/25/96	15 05	17.28	0.00	--	ND	ND	ND	ND	ND	ND	--
	10/25/96	15.66	16.67	0.00	--	ND	ND	ND	ND	ND	180	--
	01/28/97	13 76	18.57	0.00	--	ND	ND	ND	ND	ND	75	--
	04/16/97	12 66	19.67	0.00	--	ND	ND	ND	ND	ND	ND	--
	07/21/97	15 44	16.89	0.00	--	ND	ND	ND	ND	ND	ND	--
	10/20/97	15 67	16.66	0.00	--	ND	ND	ND	ND	ND	100	--
	01/21/98	13.97	18.36	0.00	--	ND	ND	ND	ND	ND	140	--
	04/17/98	14.38	17.95	0.00	--	56[9]	ND	ND	ND	ND	18	--
	07/14/98	14 87	17.46	0.00	--	ND	ND	ND	ND	ND	6.6	--
	10/12/98	15 19	17.14	0.00	--	ND	ND	ND	ND	ND	16	--
	01/19/99	14.54	17.79	0.00	--	ND	ND	ND	ND	ND	30	--
	04/07/99	13 62	18.71	0.00	--	ND	ND	ND	ND	ND	6.9/6.4[16]	--
	07/12/99	15 03	17.30	0.00	--	ND	ND	ND	ND	ND	3.8	--
	10/25/99	**14.25**	**18.08**	**0.00**	**--**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**--**
Trip Blank												
TB-LB	01/21/98	--	--	--	--	ND	ND	ND	ND	ND	ND	--
	04/17/98	--	--	--	--	ND	ND	ND	ND	ND	ND	--
	07/14/98	--	--	--	--	ND	ND	ND	ND	ND	ND	--
	10/12/98	--	--	--	--	ND	ND	ND	ND	ND	ND	--

Table 1

Groundwater Monitoring Data and Analytical Results

Former Unocal Service Station #2512

1300 Davis Street

San Leandro, California

Well ID/ TOC*	Date	DTW *(ft.)*	GWE *(msl)*	Product Thickness *(ft.)*	TPH(D) *(ppb)*	TPH(G) *(ppb)*	B *(ppb)*	T *(ppb)*	E *(ppb)*	X *(ppb)*	MTBE *(ppb)*	TOG *(ppm)*
TB-LB	01/19/99	--	--	--	--	ND	ND	ND	ND	ND	ND	--
(cont)	04/07/99	--	--	--	--	ND	ND	ND	ND	ND	ND	--
	07/12/99	--	--	--	--	ND	ND	ND	ND	ND	ND	--
	10/25/99	--	--	--	--	ND	ND	ND	ND	ND	ND	--
	01/18/00	--	--	--	--	ND	ND	ND	ND	ND	ND	--

Table 1

Groundwater Monitoring Data and Analytical Results

Former Unocal Service Station #2512

1300 Davis Street

San Leandro, California

EXPLANATIONS:

Groundwater monitoring data and laboratory results prior to January 21, 1998, were compiled from reports prepared by MPDS Services, Inc.

TOC = Top of Casing elevation
DTW = Depth to Water
(ft) = Feet
GWE = Groundwater Elevation
msl = Relative to mean sea level
TPH(D) = Total Petroleum Hydrocarbons as Diesel
TPH(G) = Total Petroleum Hydrocarbons as Gasoline
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
TOG = Total Oil & Grease
MTBE = Methyl tertiary butyl ether
ppb = Parts per billion
ppm = Parts per million
ND = Not Detected
-- = Not Measured/Not Analyzed

* TOC elevations are relative to msl, per East Bay MUD Benchmark DAVIS FREE #2 - San Leandro 1952 (Elevation = 32.02 feet msl). Prior to October 5, 1993, the DTW measurements were taken from top of well covers. Prior to February 27, 1992, the DTW measurements were surveyed assuming well cover MW-1 100 feet as datum.

** Groundwater elevation corrected due to presence of free product; correction factor [(TOC-DTW)+(Product Thickness x 0.75)].

*** Groundwater elevation corrected due to presence of free product; correction factor [(TOC-DTW)+(Product Thickness x 0.77)].

[1] Laboratory report indicates the hydrocarbons detected did not appear to be gasoline.

[2] Laboratory report indicates the hydrocarbons detected appeared to be a gasoline and non-gasoline mixture.

[3] Laboratory report indicates the hydrocarbons detected appeared to be a diesel and non-diesel mixture.

[4] Laboratory report indicates the hydrocarbons detected did not appear to be diesel.

[5] Laboratory has potentially identified the presence of MTBE at reportable levels in the sample collected from this well.

[6] Laboratory has identified the presence of MTBE at a level above or equal to the taste and odor threshold of 40 ppb in the sample collected from this well. Free product was detected in well MW-3; however, a water sample was collected and analyzed to determine if the product was predominantly hydrocarbon based.

[7] Laboratory report indicates unidentified hydrocarbons C9-C24.

[8] Detection limit raised. Refer to analytical reports.

[9] Laboratory report indicates unidentified hydrocarbons C6-C12.

[10] Purged additional 100 gallons from well after sampling.

[11] Laboratory report indicates unidentified hydrocarbons <C14.

[12] Christy box for this well was damaged during tank removal and soil excavation at the site; therefore, GWE could not be accurately determined.

[13] Laboratory report indicates a non diesel mix <C17.

[14] Laboratory report indicates gasoline and unidentified hydrocarbons C6-C12.

[15] Laboratory report indicates unidentified hydrocarbons <C20.

[16] MTBE by EPA Method 8260.

[17] Laboratory report indicates discrete peaks.

[18] Laboratory report indicates unidentified hydrocarbons <C16.

Table 2

Groundwater Analytical Results

Former Unocal Service Station #2512

1300 Davis Street

San Leandro, California

Well ID	Date	PCE (ppb)	1,1-DCA (ppb)	1,1,1-TCA (ppb)	Chloro-methane (ppb)	1,1-DCE (ppb)	1,2-DCB (ppb)	TCE (ppb)
MW-1	04/25/89	3.3	ND	ND	ND	ND	ND	0.55
	11/06/90	4.8	ND	ND	ND	ND	ND	ND
	05/24/91	4.6	ND	ND	ND	ND	ND	ND
	06/09/94	1.0	ND	ND	ND	ND	ND	ND
	09/08/94	1.2	ND	ND	ND	ND	ND	ND
	01/25/95	DESTROYED	--	--	--	--	--	--
MW-2	04/25/89	0.68	ND	ND	ND	ND	ND	ND
	11/06/90	ND	ND	ND	ND	ND	ND	ND
	05/24/91	ND	ND	ND	ND	ND	ND	ND
	08/15/91	ND	ND	ND	ND	ND	ND	ND
	11/19/91	ND	ND	ND	ND	ND	ND	ND
	02/27/92	ND	ND	ND	ND	ND	ND	ND
	05/26/92	ND	ND	ND	ND	ND	ND	ND
	10/30/92	ND	ND	ND	ND	ND	ND	ND
	06/09/94	ND	ND	ND	ND	ND	ND	ND
	09/08/94	ND	ND	ND	ND	ND	ND	ND
	01/25/95	DESTROYED	--	--	--	--	--	--
MW-3	04/25/89	1.0	ND	ND	ND	ND	ND	ND
	11/06/90	ND	ND	ND	ND	ND	ND	ND
	05/24/91	ND	ND	ND	ND	ND	ND	ND
	08/15/91	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				--	--	--
	11/19/91	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				--	--	--
	02/27/92	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				--	--	--
	05/26/92	ND	ND	ND	ND	ND	ND	ND
	10/30/92	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				--	--	--
	06/09/94	ND	ND	ND	ND	ND	ND	ND
	09/08/94	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				--	--	--
	10/21/95	ND	ND	ND	ND	ND	ND	ND
	01/24/96	ND	ND	ND	ND	ND	ND	ND
	04/23/96	ND	ND	ND	ND	ND	ND	ND
	07/25/96	ND	ND	ND	ND	ND	ND	ND

Table 2

Groundwater Analytical Results

Former Unocal Service Station #2512
1300 Davis Street
San Leandro, California

Well ID	Date	PCE (ppb)	1,1-DCA (ppb)	1,1,1-TCA (ppb)	Chloro-methane (ppb)	1,1-DCE (ppb)	1,2-DCB (ppb)	TCE (ppb)
MW-3	10/25/96	ND	ND	ND	ND	ND	ND	ND
(cont)	01/28/97	ND	ND	ND	ND	ND	ND	ND
	04/16/97	ND	ND	ND	ND	ND	ND	ND
	07/21/97	ND	ND	ND	ND	ND	ND	ND
	10/20/97	ND	ND	ND	ND	ND	ND	ND
	01/21/98	ND	ND	ND	ND	ND	ND	ND
	04/17/98	ND	ND	ND	ND	ND	ND	ND
	07/14/98	0.55	ND	ND	ND	ND	ND	ND
	10/12/98	0.51	ND	ND	ND	ND	ND	ND
	01/19/99	ND	ND	ND	ND	ND	ND	ND
	04/07/99	0.54	ND	ND	ND	ND	ND	ND
	07/12/99	ND	ND	ND	ND	ND	ND	ND
	10/25/99[5]	ND	ND	ND	ND	ND	ND	ND
	01/18/00[10]	**ND[14]**	**ND[14]**	**ND[14]**	**ND[14]**	**ND[14]**	**ND[14]**	**ND[14]**
MW-4	11/06/90	2.9	ND	ND	ND	ND	ND	ND
	05/24/91	4.1	2.5	3.9	ND	ND	ND	ND
	08/15/91	3.6	ND	ND	ND	ND	ND	ND
	11/19/91	3.4	ND	ND	ND	ND	ND	ND
	02/27/92	3.5	6	ND	ND	ND	ND	ND
	05/26/92	2.4	13	3.5	ND	0.83	ND	ND
	10/30/92	INACCESSIBLE	--	--	--	--	--	--
	06/09/94	2.8	8.8	0.83	ND	0.51	ND	0.70
	09/08/94[1]	1.8	ND	ND	ND	ND	ND	0.60
	01/25/95	DESTROYED	--	--	--	--	--	--
MW-5	11/06/90	0.7	ND	ND	ND	ND	ND	ND
	05/24/91	0.89	ND	ND	ND	ND	ND	ND
	06/09/94	INACCESSIBLE	--	--	--	--	--	--
	09/08/94	INACCESSIBLE	--	--	--	--	--	--
	01/25/95	DESTROYED	--	--	--	--	--	--

Table 2

Groundwater Analytical Results

Former Unocal Service Station #2512

1300 Davis Street

San Leandro, California

Well ID	Date	PCE (ppb)	1,1-DCA (ppb)	1,1,1-TCA (ppb)	Chloro-methane (ppb)	1,1-DCE (ppb)	1,2-DCB (ppb)	TCE (ppb)
MW-6	11/06/90	1.2	ND	ND	ND	ND	ND	ND
	05/24/91	0.88	ND	ND	5.6	ND	ND	ND
	08/15/91	1.2	ND	ND	ND	ND	ND	ND
	11/19/91	1.3	ND	ND	ND	ND	ND	ND
	02/27/92	1.5	ND	ND	ND	ND	1.6	ND
	05/26/92	1.1	ND	ND	ND	ND	1.7	ND
	10/30/92	1.2	ND	ND	ND	ND	ND	ND
	06/09/94	INACCESSIBLE	--	--	--	--	--	--
	09/08/94	INACCESSIBLE	--	--	--	--	--	--
	01/25/95	DESTROYED	--	--	--	--	--	--
MW-7	02/27/92	2.4	ND	ND	ND	ND	ND	ND
	05/26/92	2.2	ND	ND	ND	ND	ND	ND
	10/30/92	2.2	ND	ND	ND	ND	ND	ND
	06/09/94	0.67	ND	ND	ND	ND	ND	ND
	09/08/94	0.76	ND	ND	ND	ND	ND	ND
	10/21/95	ND	ND	ND	ND	ND	ND	ND
	01/24/96	1.2	ND	ND	ND	ND	ND	ND
	04/23/96	0.84	ND	ND	ND	ND	ND	ND
	07/25/96	1.7	ND	ND	ND	ND	ND	ND
	10/25/96[2]	1.2	ND	ND	ND	ND	ND	ND
	01/28/97	1.4	ND	ND	ND	ND	ND	ND
	04/19/97	0.75	ND	ND	ND	ND	ND	ND
	07/21/97	1.5	ND	ND	ND	ND	ND	ND
	10/20/97	1.5	ND	ND	ND	ND	ND	ND
	01/21/98	1.2	ND	ND	ND	ND	ND	ND
	04/17/98	0.76	ND	ND	ND	ND	ND	ND
	07/14/98	1.4	ND	ND	ND	ND	ND	ND
	10/12/98	1.4	ND	ND	ND	ND	ND	ND
	01/19/99	1.3	ND	ND	ND	ND	ND	ND
	04/07/99[3]	1.6	ND	ND	ND	ND	ND	ND

Table 2

Groundwater Analytical Results

Former Unocal Service Station #2512

1300 Davis Street

San Leandro, California

Well ID	Date	PCE (ppb)	1,1-DCA (ppb)	1,1,1-TCA (ppb)	Chloro-methane (ppb)	1,1-DCE (ppb)	1,2-DCB (ppb)	TCE (ppb)
MW-7	07/12/99	1.1	ND	ND	ND	ND	ND	ND
(cont)	10/25/99	3.1[6]	ND	ND	ND	ND	ND	ND
	01/18/00[11]	**ND[14]**	**ND[14]**	**ND[14]**	**ND[14]**	**ND[14]**	**ND[14]**	**ND[14]**
MW-8	10/21/95	ND	ND	ND	ND	ND	ND	ND
	01/24/96	0.74	ND	ND	ND	ND	ND	ND
	04/23/96	1.1	ND	ND	ND	ND	ND	ND
	07/25/96	1.1	ND	ND	ND	ND	ND	ND
	10/25/96	0.90	ND	ND	ND	ND	ND	ND
	01/28/97	0.96	ND	ND	ND	ND	ND	ND
	04/16/97	0.51	ND	ND	ND	ND	ND	ND
	07/21/97	ND	ND	ND	ND	ND	ND	ND
	10/20/97	1.1	ND	ND	ND	ND	ND	ND
	01/21/98	0.77	ND	ND	ND	ND	ND	ND
	04/17/98	ND	ND	ND	ND	ND	ND	ND
	07/14/98	1.3	ND	ND	ND	ND	ND	ND
	10/12/98	1.5	ND	ND	ND	ND	ND	ND
	01/19/99	0.71	ND	ND	ND	ND	ND	ND
	04/07/99[4]	1.0	ND	ND	ND	ND	ND	ND
	07/12/99	0.66	ND	ND	ND	ND	ND	ND
	10/25/99[7]	1.5[6]	ND	ND	ND	ND	ND	ND
	01/18/00[12]	**ND[14]**	**ND[14]**	**ND[14]**	**ND[14]**	**ND[14]**	**ND[14]**	**ND[14]**
MW-9	10/21/95	17	1.0	ND	ND	ND	ND	ND
	01/24/96	17	2.2	ND	ND	ND	ND	0.64
	04/23/96	71	ND	ND	ND	ND	ND	ND
	07/25/96	1.0	ND	ND	ND	ND	ND	ND
	10/25/96	80	ND	ND	ND	ND	ND	ND
	01/28/97	39	ND	ND	ND	ND	ND	ND
	04/16/97	0.51	ND	ND	ND	ND	ND	ND
	07/21/97	7.5	ND	ND	ND	ND	ND	ND
	10/20/97	47	ND	ND	ND	ND	ND	ND

Table 2

Groundwater Analytical Results

Former Unocal Service Station #2512

1300 Davis Street

San Leandro, California

Well ID	Date	PCE (ppb)	1,1-DCA (ppb)	1,1,1-TCA (ppb)	Chloro-methane (ppb)	1,1-DCE (ppb)	1,2-DCB (ppb)	TCE (ppb)
MW-9	01/21/98	22	0.73	ND	ND	ND	ND	0.50
(cont)	04/17/98	120	ND	ND	ND	ND	ND	ND
	07/14/98	110	ND	ND	ND	ND	ND	0.72
	10/12/98	46	ND	ND	ND	ND	ND	ND
	01/19/99	38	0.72	ND	ND	ND	ND	0.54
	04/07/99	41	ND	ND	ND	ND	ND	0.64
	07/12/99	26	ND	ND	ND	ND	ND	ND
	10/25/99[8]	23[6]	ND	ND	ND	ND	ND	ND
	01/18/00[13]	ND[14]	ND[14]	ND[14]	ND[14]	ND[14]	ND[14]	ND[14]

Table 2

Groundwater Analytical Results

Former Unocal Service Station #2512
1300 Davis Street
San Leandro, California

EXPLANATIONS:

Groundwater analytical results prior to January 21, 1998, were compiled from reports prepared by MPDS Services, Inc.

PCE = Tetrachloroethene
1,1-DCA = 1,1-Dichloroethane
1,1,1-TCA = 1,1,1-Trichlorethane
1,1-DCE = 1,1-Dichloroethene
1,2-DCB = 1,2-Dichlorobenzene

TCE = Trichloroethene
ppb = Parts per billion
-- = Not Analyzed
ND = Not Detected

1 1,2-Dichlorothane (1,2-DCA) was detected at a concentration of 4.8 ppb.
2 Chloroform was detected at a concentration of 1.7 ppb.
3 Chloroform was detected at a concentration of 0.68 ppb.
4 Chloroform was detected at a concentration of 0.53 ppb.
5 Laboratory report indicates Methylene chloride, which is a suspected laboratory contaminant, was detected at a concentration of 9.6 ppb.
6 Laboratory report indicates reanalysis by an alternate column or method has confirmed the identification and/or concentration of this result.
7 Laboratory report indicates Methylene chloride, which is a suspected laboratory contaminant, was detected at a concentration of 8.2 ppb.
8 Laboratory report indicates Methylene chloride, which is a suspected laboratory contaminant, was detected at a concentration of 7.8 ppb.
10 Bromodichloromethane was detected at a concentration of 3.79 ppb and Chloroform at 40.3 ppb.
11 Bromodichloromethane was detected at a concentration of 4.78 ppb and Chloroform at 52.8 ppb.
12 Chloroform was detected at a concentration of 52.9 ppb.
13 Chloroform was detected at a concentration of 51.9 ppb.
14 Detection limit raised. Refer to analytical reports.

All EPA Method 8010 constituents were ND, except as indicated.

Table 3

Groundwater Analytical Results - Oxygenate Compounds

Former Unocal Service Station #2512
1300 Davis Street
San Leandro, California

Well ID	Date	Ethanol (ppb)	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	EDB (ppb)	1,2-DCA (ppb)
MW-3	04/07/99	ND	ND	4.7	ND	ND	ND	ND	ND
MW-7	04/07/99	ND	ND	ND	ND	ND	ND	ND	ND
MW-8	04/07/99	ND	ND	ND	ND	ND	ND	ND	ND
MW-9	04/07/99	ND	ND	6.4	ND	ND	ND	ND	ND

EXPLANATIONS:

TBA = Tertiary Butyl Alcohol
MTBE = Methyl Tertiary Butyl Ether
DIPE = Di-isopropyl Ether
ETBE = Ethyl Tertiary Butyl Ether
TAME = Tertiary Amyl Methyl Ether
EDB = 1,2-Dibromoethane
1,2-DCA = 1,2-Dichloroethane
ppb = Parts per billion
ND = Not Detected

ANALYTICAL METHOD:

EPA Method 8260 for Oxygenate Compounds

KEI-P88-1204.R14
January 10, 1996

TABLE 6

SUMMARY OF LABORATORY ANALYSES
WATER

Sample Number	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes	TOG (mg/L)
			(Collected on January 3, 1989)				
EB1	ND	--	ND	3.5	ND	ND	--
EB2	--	ND	8.2	7.4	0.67	3.3	--
EB3	--	ND	ND	ND	ND	ND	--
EB4	--	ND	ND	ND	0.73	ND	--
EB5	--	340	ND	ND	0.63	ND	--
EB6	--	1,500	1.5	1.4	8.1	12	--
			(Collected on March 22 and 23, 1993)				
EB7*	320++	1,000♦	19	ND	6.8	ND	ND
EB8*+	120++	510♦♦	ND	ND	ND	ND	ND
EB9*+	480++	2,600	ND	5.1	8.3	8.8	ND
EB10	*ND	180♦♦	ND	ND	ND	ND	ND

* All EPA method 8010 constituents were non-detectable, except for tetrachloroethene, which was detected in samples EB9 and EB10 at concentrations of 12 µg/L and 250 µg/L, respectively. Trichloroethene was also detected in sample EB9 at a concentration of 0.63 µg/L.

\+ TPH as hydraulic fluid was non-detectable.

++ Sequoia Analytical Laboratory reported that the hydrocarbons detected appeared to be a diesel and non-diesel mixture.

♦ Sequoia Analytical Laboratory reported that the hydrocarbons detected appeared to be a gasoline and non-gasoline mixture.

♦♦ Sequoia Analytical Laboratory reported that the hydrocarbons detected did not appear to be gasoline.

ND = Non-detectable.

-- Indicates analysis was not performed.

Results are in micrograms per liter (µg/L), unless otherwise indicated.

KEI-P88-1204.R14
January 10, 1996

TABLE 9

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Sample	Depth to Water (feet)	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes	TOG (mg/L)
11/10/93	Water 1	16.5	410♦	1,500	67	10	33	45	7.4
11/19/93	Water 2	16.0	3,200♦	2,500	68	370	87	560	6.3
	Water 3	16.0	--	11,000	120	19	870	2,700	--

Sample	Cadmium*	Chromium*	Lead*	Nickel*	Zinc*	EPA Method 8270 Constituents	EPA Method 8010 Constituents
Water 1	ND	0.14	0.064	0.18	0.22	ND*	ND***
Water 2	ND	ND	ND	ND	0.035	ND**	ND

-- Indicates analysis was not performed.

ND = Non-detectable.

♦ Sequoia Analytical Laboratory reported that the hydrocarbons detected appeared to be a diesel and non-diesel mixture.

* EPA method 8270 constituents were all non-detectable, except for 2-methylnaphthalene and naphthalene, which were detected at concentrations of 16 µg/L and 22 µg/L, respectively.

** EPA Method 8270 constituents were all non-detectable, except for 2,4-dimethylphenol and naphthalene, which were detected at concentrations of 110 µg/L and 2.2 µg/L, respectively.

TABLE 9 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

*** All EPA method 8010 constituents were non-detectable, except for 1,3-dichlorobenzene, 1,4-dichlorobenzene, 1,2-dichlorobenzene, 1,1-dichloroethane, 1,1-dichloroethene, tetrachloroethene, and 1,1,1-trichloroethane, which were detected at concentrations of 1.8 µg/L, 1.2 µg/L, 1.9 ppb, 24 µg/L 9.3 µg/L, 4.1 µg/L, and 24 µg/L, respectively.

★ Results in milligrams per liter (mg/L), unless otherwise indicated.

Results are in micrograms per liter (µg/L), unless otherwise indicated.

BORING LOG

Project No. KEI-P88-1204	Boring & Casing Diameter 9" 2"	Logged By Doug Lee
Project Name Unocal Davis St./San Leandro	Well Head Elevation N/A	Date Drilled 4/17/89
Boring No. MW3	Drilling Method Hollow-stem Auger	Drilling Company EGI

Penetration blows/6"	G. W. level	Depth (ft) Samples	Stratigraphy USCS	Description
		0		Clayey sand, gravel: fill
5/8/11		5	CH	Clay, high plasticity, very dark grayish brown, firm, moist, with root holes, dark grayish brown below 8.5'.
6/7/9		10	MH	Clayey silt, some fine sand, high plasticity, dark grayish brown, firm, moist, with root holes.
9/17/14		15		Silty clay, trace fine sand, high plasticity, dark grayish brown, stiff, moist, with cemented root holes.
14/18/24	▼	20		Clay, grayish brown & gray, mottled, very stiff, moist, high plasticity.
			CH	
		25		Clay, 15% silt, high plasticity, dark yellowish brown and dark grayish brown, mottled, very stiff, slightly moist.
		30		Color change at 31' to black.
				TOTAL DEPTH 33'

ATTACHMENT 2

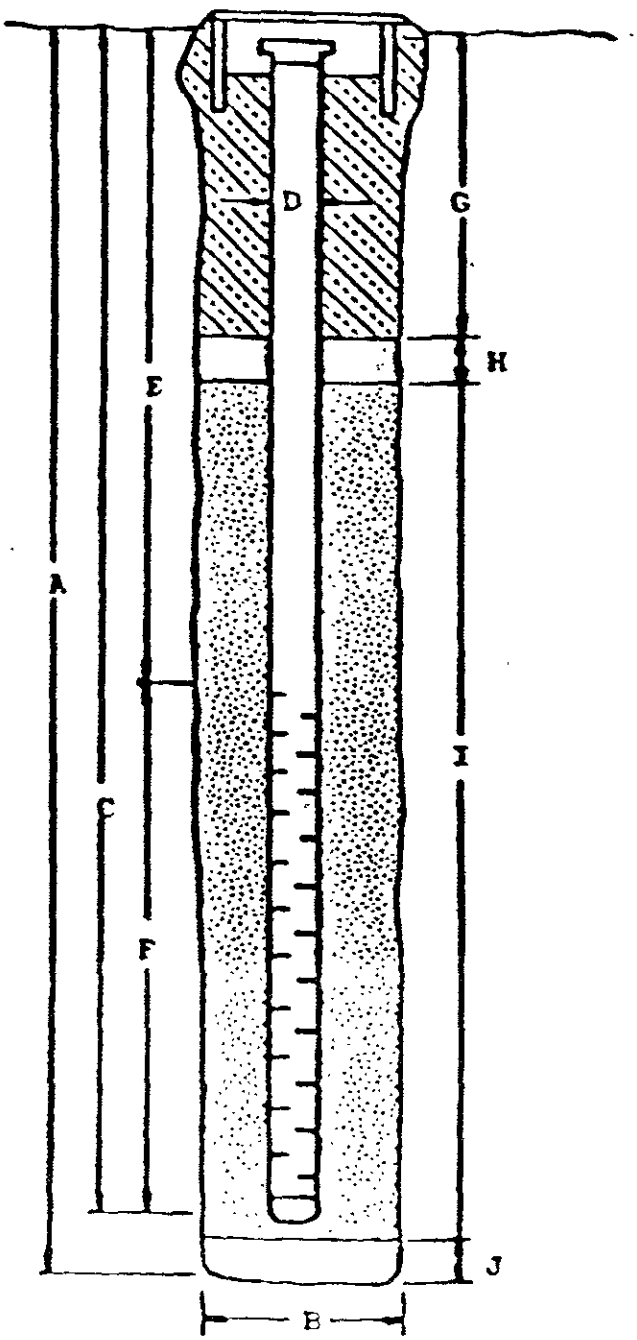
WELL COMPLETION DIAGRAM

PROJECT NAME: Unocal - Davis St. - San Leandro BORING/WELL NO. MW3

PROJECT NUMBER: KEI-P88-1204

WELL PERMIT NO.:

Flush-mounted Well Cover



A. Total Depth: 33'

B. Boring Diameter*: 9"

Drilling Method: Hollow Stem Auger

C. Casing Length: 33'

Material: Schedule 40 PVC

D. Casing Diameter: OD = 2.375" ID = 2.067"

E. Depth to Perforations: 13'

F. Perforated Length: 20'

Perforation Type: Machined Slot

Perforation Size: 0.010"

G. Surface Seal: 9'

Seal Material: Concrete

H. Seal: 2'

Seal Material: Bentonite

I. Gravel Pack: 22'

Pack Material: RMC Lonestar Sand

Size: #3

J. Bottom Seal: None

Seal Material: N

*Boring diameter can vary from 8-1/4" to 9" depending on bit wear.

BORING LOG

Project No.	Boring & Casing Diameter	Logged By
KEI-P88-1204	8-1/4" 2"	D.L.
Project Name Unocal San Leandro, 1300 Davis Street	**Well Cover Elevation** 32.09' MSL	**Date Drilled** 2/11/92
Boring No. MW7	**Drilling Method** Hollow-stem Auger	**Drilling Company** EGI

Penetration blows/6"	G. W. level	Depth (feet) Samples	Strati-graphy USCS	Description
		0		Asphalt and concrete slab
				Silty clay with approximately 5-10% gravel, stiff, moist, very dark grayish brown; fill.
			CH	
5/7/11		5		Clay, estimated at 5 to 10% silt and sand, stiff to very stiff, moist, very dark gray to black.
			ML	Sandy silt, estimated at 5 to 10% clay, sand is fine- to medium-grained, stiff, moist, olive brown.
4/5/10		10		Clay with silt, trace sand, very stiff, moist, very dark grayish brown with root holes, trace organic matter.
			CH	
				Clayey sand, estimated at 15 to 30% variable clay content, sand is fine- to coarse-grained, medium dense, moist, olive brown , with iron oxide staining.
4/6/9			SC	
		15		Silty clay, trace to an estimated 10% variable sand content, stiff to very stiff, moist to wet, olive brown, with root holes, trace organic matter.
4/4/7	▽		CL	
		20		Silty clay, trace sand, stiff, moist, wet in voids, dark grayish brown, with root holes, fibrous cemented nodules common below 20 feet.
6/6/8				

BORING LOG

Project No. KEI-P88=1204	**Boring & Casing Diameter** 8-1/4" 2"	**Logged By** D.L.
Project Name San Leandro, Davis	**Well Cover Elevation** 32.09' MSL	**Date Drilled** 2/11/92
Boring No. MW7	**Drilling Method** Hollow-stem Auger	**Drilling Company** EGI

Penetration blows/6"	G. W. level	Depth (feet) Samples	Strati-graphy USCS	Description
11/13/9		25	CL	Silty clay, estimated at 30 to 45% variable silt content, stiff to very stiff, moist, wet in voids, olive brown with iron oxide staining.
7/8/10		30		TOTAL DEPTH: 30'
		35		
		40		

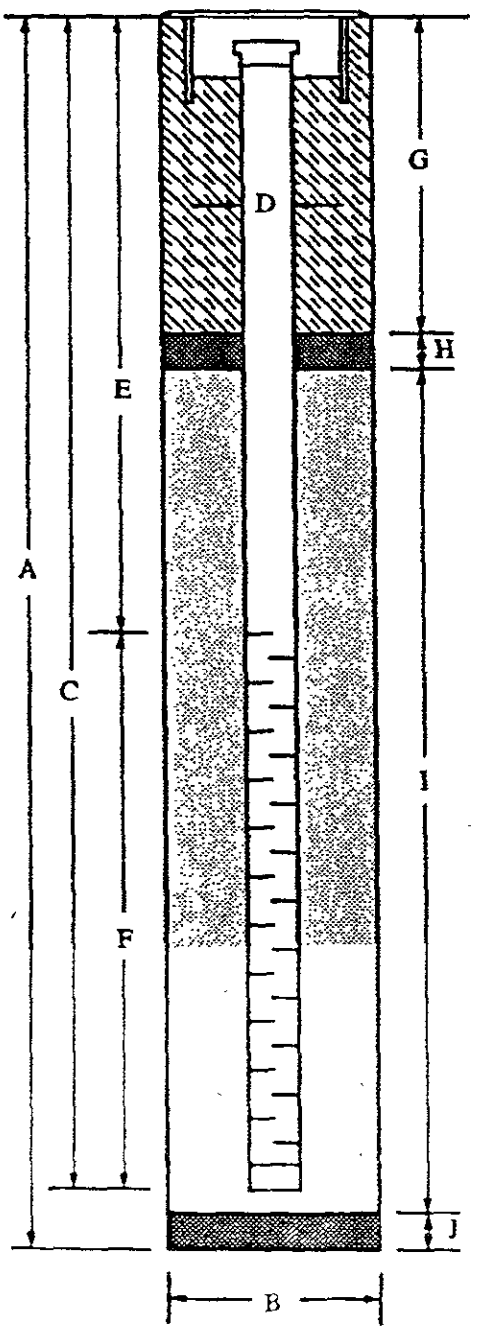
WELL COMPLETION DIAGRAM

PROJECT NAME: Unocal - San Leandro, Davis Street WELL NO. MW7

PROJECT NUMBER: KEI-P88-1204

WELL PERMIT NO.: ACFD&WCD #91476

Flush-mounted Well Cover



A. Total Depth : 30'

B. Boring Diameter: 8-1/4"

Drilling Method: Hollow Stem Auger

C. Casing Length: 30'

Material: Schedule 40 PVC

D. Casing Diameter: OD = 2.375"

ID = 2.067"

E. Depth to Perforations: 10'

F. Perforated Length: 20'

Perforation Type: Machined Slot

Perforation Size: 0.010"

G. Surface Seal: 6'

Seal Material: Cement/sand slurry

H. Seal: 2'

Seal Material: Bentonite

I. Filter Pack: 22'

Pack Material: RMC Lonestar Sand

Size: #2/12

J. Bottom Seal: none

Seal Material: N/A

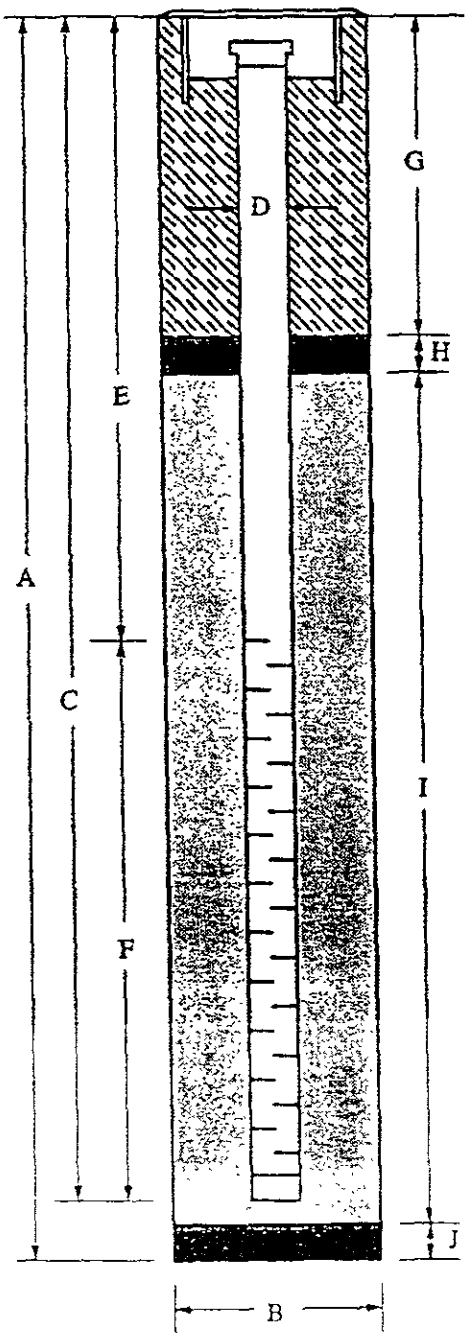
WELL CONSTRUCTION DIAGRAM

PROJECT NAME: Unocal S/S #2512, 1300 Davis Street, San Leandro **WELL NO.:** MW8

PROJECT NUMBER: KEI-P88-1204.P10

WELL PERMIT NO.: ACFC & WCD #95591

Flush-mounted Well Cover



A. Total Depth : 30'

B. Boring Diameter: 8.5"

Drilling Method: Hollow Stem Auger

C. Casing Length: 30'

Material: Schedule 40 PVC

D. Casing Diameter: OD = 2.375"

ID = 2.067"

E. Depth to Perforations: 10'

F. Perforated Length: 20'

Perforation Type: Machine Slotted

Perforation Size: 0.010"

G. Surface Seal: 6'

Seal Material: Neat Cement

H. Seal: 2'

Seal Material: Bentonite

I. Filter Pack: 22'

Pack Material: RMC Lonestar Sand

Size: #2/12

J Bottom Seal: None

Seal Material: N/A

BORING LOG

Project No. KEI-P 88-1204.P10	**Boring Diameter** 8.5"	**Logged By** JGG
	Casing Diameter 2"	**D.L.** EG/633
Project Name Unocal S/S #2512	**Well Cover Elevation**	**Date Drilled**
1300 Davis Street, San Leandro	N/A	9/26/95
Boring No. MW8	**Drilling Method** Hollow-stem Auger	**Drilling Company** Woodward drilling

Pene-tration blows/6"	G.W level	O.V.M. (P.P.M.)	Depth (feet) Samples	Stratigraphy USCS	Description
			0		Concrete slab over sand and gravel base.
				MH	Clayey silt, estimated at 35-45% clay, stiff, moist, dark gray to very dark gray, with iron oxide staining.
5/6/9			5	CH	Silty clay, moderate to high plasticity, very stiff, moist, very dark gray.
				ML	Silt, estimated at 10-15% clay, trace fine-grained sand, stiff, moist, olive brown.
6/7/11			10	CH	Silty clay, stiff to very stiff, moist, very dark grayish brown and black, mottled, with occasional caliche nodules.
				MH	Clayey silt, estimated at 30-35% clay, trace fine-grained sand, stiff, moist to very moist, olive brown and olive, mottled.
6/7/12			15	CH	Clay, high plasticity, trace silt, very stiff, moist, olive and olive brown, mottled.
				ML	Clayey silt, estimated at 5-10% fine to coarse-grained sand, trace gravel to 3/16 inch in diameter, stiff, moist, wet in voids, olive brown.
5/7/8	▽		20	CH	Clay, high plasticity, stiff, moist, olive brown and dark yellowish brown, mottled.

BORING LOG

Project No. KEI-P 88-1204.P10	**Boring Diameter** 8.5"	**Logged By** JGC
	Casing Diameter 2"	**D.L.** GEC 1633
Project Name Unocal S/S #2512	**Well Cover Elevation**	**Date Drilled**
1300 Davis Street, San Leandro	N/A	9/26/95
Boring No. MW8	**Drilling Method** Hollow-stem Auger	**Drilling Company** Woodward drilling

Pene-tration blows/6"	G.W. level	O.V.M. (P.P.M.)	Depth (feet) Samples	Stratigraphy USCS	Description
				CH	Clay, high plasticity, stiff, moist, olive brown and dark yellowish brown, mottled.
					Clayey silt, estimated at 30% clay, and 5-10% fine to medium-grained sand, stiff, very moist, olive brown.
5/6/8			25	ML	Silt, estimated at 15-30% clay, and 10-15% sand, trace gravel to 1/2 inch in diameter, stiff, very moist to wet, olive brown.
4/6/8			30		Clayey silt, estimated at 30-40% clay, stiff, moist, olive brown.
					TOTAL DEPTH: 30'
			35		
			40		

BORING LOG

Project No. KEI-P 88-1204.P10	**Boring Diameter** 8.5"	**Logged By** JG6
	Casing Diameter 2"	D.L. CE6 1633
Project Name Unocal S/S #2512	**Well Cover Elevation**	**Date Drilled**
1300 Davis Street, San Leandro	N/A	9/26/95
Boring No. MW9	**Drilling Method** Hollow-stem Auger	**Drilling Company** Woodward drilling

Pene-tration blows/6"	G.W level	O.V.M. (P.P.M.)	Depth (feet) Samples	Stratigraphy USCS	Description
			0		Concrete slab over sand and gravel base.
				MH	Clayey silt, stiff, moist, very dark grayish brown, disturbed.
4/6/8			5	CH	Silty clay, high plasticity, stiff, moist, very dark grayish brown and black, mottled, with root holes.
5/8/11			10		Silty clay, as above.
5/7/10			15	CH/ MH	Clay estimated at 15-25% silt, stiff to vary stiff, moist, olive and olive brown, mottled, lensed with clayey silt, stiff, moist, olive brown.
5/8/12					
5/8/11	▽		20	CL	Silty clay, estimated at 35-45% silt, trace sand, stiff to vary stiff, moist, wet in voids, olive and olive brown, mottled, with iron oxide staining.

BORING LOG

Project No. KEI-P 88-1204.P10	**Boring Diameter** 8.5"	**Logged By** JGG
	Casing Diameter 2"	**D.L.** GEO 1633
Project Name Unocal S/S #2512 1300 Davis Street, San Leandro	**Well Cover Elevation** N/A	**Date Drilled** 9/26/95
Boring No. MW9	**Drilling Method** Hollow-stem Auger	**Drilling Company** Woodward drilling

Pene-tration blows/6"	G.W. level	O.V.M. (P.P.M.)	Depth (feet) Samples	Stratigraphy USCS	Description
				CH	Silty clay, estimated at 35-45% silt, trace sand, stiff to vary stiff, moist, wet in voids, olive and olive brown, mottled, with iron oxide staining.
				MH	Clayey silt, trace fine to coarse-grained sand, stiff, very moist, olive brown.
4/5/7			25		
				CH	Clay, high plasticity, estimated at 10-15% silt, stiff, moist, olive and olive brown, mottled.
6/10/14			30		Silty clay, stiff to very stiff, moist, olive brown, with iron oxide staining.
					TOTAL DEPTH: 30'
			35		
			40		

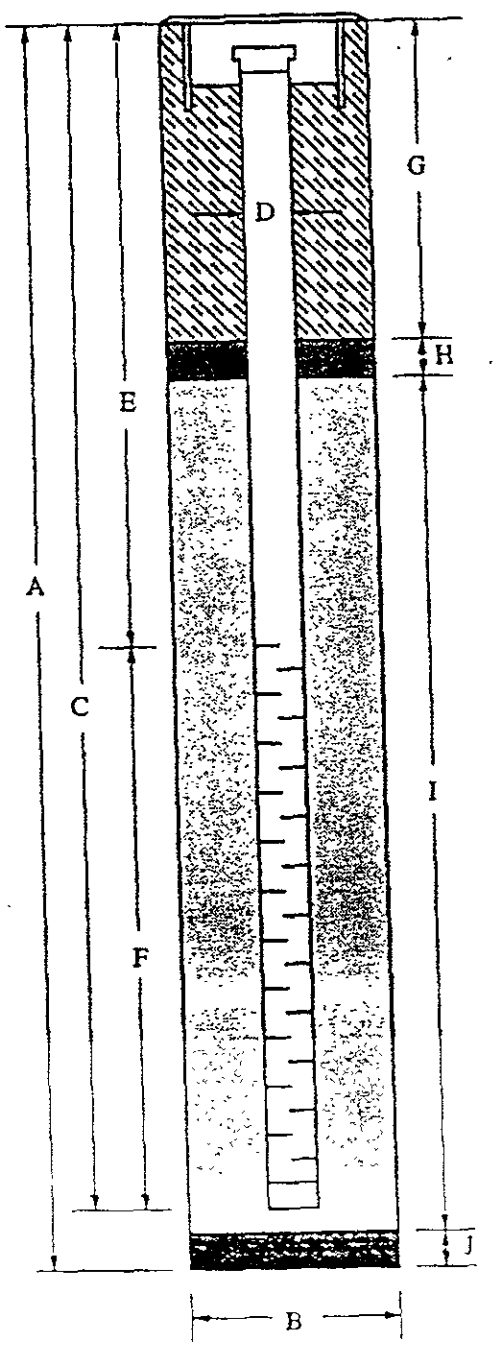
WELL CONSTRUCTION DIAGRAM

PROJECT NAME: Unocal S/S #2512, 1300 Davis Street, San Leandro **WELL NO.:** MW9

PROJECT NUMBER: KEI-P88-1204.P10

WELL PERMIT NO.: ACFC & WCD #95591

Flush-mounted Well Cover



A. Total Depth : 30'

B. Boring Diameter: 8.5"

Drilling Method: Hollow Stem Auger

C. Casing Length: 30'

Material: Schedule 40 PVC

D. Casing Diameter: OD = 2.375"

ID = 2.067"

E. Depth to Perforations: 10'

F. Perforated Length: 20'

Perforation Type: Machine Slotted

Perforation Size: 0.010"

G. Surface Seal: 6'

Seal Material: Neat Cement

H. Seal: 2'

Seal Material: Bentonite

I. Filter Pack: 22'

Pack Material: RMC Lonestar Sand

Size: #2/12

J Bottom Seal: None

Seal Material: N/A

GETTLER-RYAN INC.

RISK MANAGEMENT PLAN

Former Unocal Service Station #2512
1300 Davis Street
San Leandro, California

GR Report No. 240004.02-1

Prepared for:

Mr. Nick Nickerson
Unocal Corporation
8788 Elk Grove Boulevard, Building 3, Suite 15
Elk Grove, California 95624

Prepared by:

Gettler-Ryan Inc.
3140 Gold Camp Drive, Suite 170
Rancho Cordova, California 95670

Stephen J. Carter
Senior Geologist
R.G. 5577

Greg A. Gurss
Sr. Project Manager

June 28, 2001

ATTACHMENT 7

TABLE OF CONTENTS

APPENDIXES

1.0 INTRODUCTION

Gettler-Ryan Inc. prepared this Risk Management Plan (RMP) at the request of Unocal Corporation. The subject site was formerly operated as Unocal Service Station #2512, located at 1300 Davis Street, San Leandro, California. An environmental investigation identified petroleum hydrocarbons in the soil and groundwater beneath the site, which were successfully remediated to acceptable levels. With the submittal of this RMP, the environmental investigation at this site will be closed by Alameda County Health Care Services Agency.

As part of the environmental investigation, Unocal requested a corrective action evaluation be performed for the site. The evaluation was completed by Geraghty & Miller (G&M), and concluded that maximum detected soil concentrations at the site are health-protective, and that future remediaton or control measures were not necessary. The exposure scenarios considered in this risk assessment included both adult and child residents and excavation workers. These conclusions are presented in a document titled *Site-Specific Health Risk Assessment for Former Unocal Service Station Facility #2512, San Leandro, California* (dated October 18, 1994). A copy of this document is included in Appendix A.

There is always some level of uncertainty in subsurface environmental investigations. Although highly unlikely, it is possible that the environmental investigation failed to identify some areas of impacted soil, and that future development of the site might encounter this impact. This document provides a Risk Management Plan (RMP) for the site **in the event soil or groundwater are encountered during construction activities that exhibit obvious evidence of petroleum hydrocarbons, such as strong gasoline or oil odors, or obvious staining of the soil.** In Section 2, the compounds of concern (COCs), risk, and sources of risk are summarized. In Section 3, risk management measures are developed. The RBCA evaluation that serves as a basis for this work is given in Appendix A, and figures showing the site location and relevant site features are provided in Appendix B.

2.0 RISK SUMMARY

2.1 Data

All aboveground and underground facilities have been removed. Delineation of soil and groundwater impact is complete. Impacted soil was excavated and removed. Dissolved fuel hydrocarbon concentrations have decreased to non-detectable levels. Fuel hydrocarbon impact at the site appears to pose very little risk to human health or the environment. Based on this lack of risk, the fuel hydrocarbon case at this site has been closed by ACHCSA.

A summary of the previous environmental investigations at this site was summarized by G&M in their *Site-Specific Health Risk Assessment*. Tables containing chemical analytical data from soil and grab groundwater samples collected during these investigations, copies of the most recent groundwater sampling events and the Site Closure Summary, and figures showing the hydrocarbon-affected areas are provided in Appendix B. Observations regarding the data are listed below.

- The highest hydrocarbon concentrations detected in soil samples were 270 parts per million (ppm) of Total Petroleum Hydrocarbons as gasoline (TPHg), 210 ppm of TPH as diesel (TPHd), 7,200 ppm of Oil and Grease (TOG), and 0.72 ppm of benzene. These samples

were collected in the vicinity of the former underground storage tanks (USTs) and dispenser islands, which have been removed.

- The vertical and lateral extent of hydrocarbons in unsaturated soil has been well defined by soil samples collected at the furthest extent of the excavations, and by the soil borings drilled around the former UST pit and across the site. Therefore, hydrocarbon impact to soil has been adequately delineated.

- Groundwater fluctuates from approximately 10 to 19 feet below ground surface (bgs). Impacted soil remains in the soil outside the zone of groundwater fluctuation (0 to 10 feet bgs), but only at very low concentrations. TPHg concentrations up to 6.8 ppm, benzene concentrations up to 0.013 ppm, and TPHd concentrations up to 5.0 ppm have been detected in soil samples collected at approximately 5 or 10 feet bgs. While natural processes have undoubtedly reduced these concentrations, some level of hydrocarbons likely remain in these areas.

- Groundwater was gauged and analyzed quarterly from November 1993 to January 2000. Groundwater has been observed to flow toward the west-southwest and toward the northeast. TPHg, TPHd, benzene, methyl tert butyl ether (MtBE), and tetrachloroethene (PCE) have been detected in site wells in steadily decreasing concentrations over this time, indicating a stable and decreasing plume. During the most recent monitoring and sampling event conducted January 18, 2000, TPHg, TPHd, benzene, or PCE were not detected in the groundwater beneath the site. MtBE was detected at a concentration of 135 parts per billion by EPA Method 8020 (not confirmed by EPA Method 8260).

- In June 1996, Pacific Environmental Group conducted a survey of water wells immediately southwest of the site. A total of five wells were identified within ¼ mile of the site. The nearest well northeast of the site is an industrial supply well at 1052 Davis Street, approximately 600 feet from the site. The nearest water supply well to the west-southwest is an irrigation well located at 1309 Kelly Avenue, approximately 500 feet west-southwest of the site.

- During the most recent sampling event, monitoring wells MW-8 and MW-9, situated on the eastern boundary of the Unocal site, do not contain detectable concentrations of petroleum hydrocarbons. Monitoring wells MW-3 (southwest corner of the site) and MW-7 (65 feet southwest of the site) did not contain TPHg, TPHd or benzene during the most recent sampling event. These wells contained 135 ppb and 6.10 ppb of MtBE, respectively, by EPA Method 8020. The presence of MtBE in these wells was not confirmed by EPA Method 8260.

- Groundwater beneath the site and in the site vicinity have been impacted by solvents leaking from dry cleaners and manufacturing facilities in the area. Groundwater samples collected

from monitoring wells at the former Unocal site have contained the chlorinated solvents PCE, trichlorethene, 1,1-dicholorethane, 1,1,1-trichloroethane, 1,1-dichloroethene, and 1,2-dichlorobenzene. Chlorinated solvents were not detected in groundwater samples during the most recent monitoring and sampling event.

- During a special sampling event conducted May 31, 2001, a well at a former dry cleaning facility situated approximately 110 feet west-southwest of the former Unocal site (well MW-DC) did not contain any detectable concentrations of petroleum hydrocarbons.

2.2 Risk Summary

Risks at the site were evaluated by G&M in their *Site-Specific Health Risk Assessment* (Appendix A). Per agreement with ACHCSA, this risk assessment considered only impacted soil. Groundwater beneath the site was also impacted. While the concentrations of dissolved fuel hydrocarbons in the groundwater has decreased to non-detectable concentrations, groundwater in the vicinity of the site remains impacted by chlorinated hydrocarbon solvents emanating from off-site sources unrelated to the former Unocal station. Risks identified by G&H's evaluation include:

- The *Risk Assessment* performed by G&M indicates that TPHg, TPHd and BTEX compounds in soil beneath the site do not pose a significant risk to occupants of an on-site building. This *Risk Assessment* is based on a conservative residential use scenario. Per agreement between Unocal and Alameda County Health Care Services Agency (ACHCSA), risks associated with impacted groundwater beneath the site were not included in G&M*'s Risk Assessment.*

- Complete exposure pathways identified by the *Risk Assessment* include: vapor intrusion into indoor air; incidental ingestion, dermal contact, and inhalation of contaminant-laden dust; and exposure of excavation workers to incidental ingestion, dermal contact, and inhalation of contaminant-laden dust.

- G&M's *Risk Assessment* concluded that "...detected soil concentrations at the site are health-protective assuming exposure under hypothetical exposure scenarios. Therefore, future remediation or control measures are not necessary to protect human health."

- G&M's *Risk Assessment* concluded that "Exposure of environmental receptors to site-related constituents is not likely to occur for several reasons."

As discussed above, the maximum soil concentrations identified at the site are protective of human health, both for future residents of the property and workers engaged in construction activities at the property. And as mentioned above, it is possible (although unlikely) that construction activities might encounter pockets of soil impacted at concentrations above the health-based goals calculated in G&H's *Risk Assessment.*

Possible scenarios where previously unidentified hydrocarbon might be encountered at concentrations above the health-based goals are discussed below.

- Construction workers engaged in subsurface piping or foundation excavation at the site could be exposed to hydrocarbon-impacted soil if excavating in unexplored portions of the site.

- Construction workers engaged in subsurface piping or foundation excavation could be exposed to impacted groundwater. Chlorinated hydrocarbon solvents are known to be present in groundwater in the site vicinity.

- Construction dewatering could take place at or near the site. Untreated groundwater could be inadvertently discharged to the street or storm drain.

- A groundwater extraction well could be installed for the purpose of providing an irrigation supply. Residents at the site could be exposed to untreated groundwater, or the irrigation well could act as a conduit to a deeper groundwater supplies;

- Impacted soil excavated from the site as a result of construction activities could be used as fill for landscaping;

- If previously unidentified pockets of highly impacted soil are intersected by excavations, atmospheric conditions, such as pressure and temperature, could create a situation where vapor phase hydrocarbons accumulate at the bottom of a trench or excavation. Workers might then be exposed to vapor phase hydrocarbons, or the mixture of air and vapor phase hydrocarbons could reach the lower explosive limit, and an ignition source could cause a fire or explosion.

3.0 RISK MANAGEMENT

It appears highly unlikely exposure risks identified in Section 2 above will be realized at this site. It is unlikely that petroleum hydrocarbons will be encountered during construction activities at concentrations exceeding the identified health-based goals. All areas of known petroleum usage (USTs, lifts, piping) were investigated and remediated. Soil borings drilled outside these areas did not encounter any hydrocarbon impact. The risk of either resident or construction worker being exposed to hydrocarbon concentrations that exceed the health-based goals identified in G&H's *Risk Assessment* appears very low.

In the unlikely event that construction activities encounter soil is encountered that exhibits a strong odor of gasoline or other petroleum product, has free-flowing oil or other petroleum-like substance, or is obviously stained or discolored relative to surrounding soil, work on that portion of the project should be halted immediately. Unocal should be contacted immediately (916.714.3204). Unocal will dispatch appropriately trained personnel to evaluate the situation and collect samples as appropriate. Unocal will also notify the

appropriate regulatory agency. If petroleum hydrocarbons are present at concentrations that exceed the established health-based goals, Unocal will arrange for appropriate remedial measures to be implemented.

Historical monitoring data indicate that groundwater is not likely to be encountered during routine residential construction activities (foundation trenching, utility trenching). Construction dewatering will probably not be required. Water service is available from a public utility, so a well for either domestic supply or irrigation is not necessary. Because of these facts the risk of resident or construction worker to impacted groundwater appears very low. However, if it becomes necessary to pump groundwater at this site (construction dewatering, for example), Unocal should be contacted prior to initiating any pumping activities. Unocal will contact the appropriate regulatory agency, will assist in obtaining the necessary permits, and will provide assistance with any required remedial equipment or personnel required.

4.0 LIMITATIONS

Evaluations of the subsurface conditions at the site that serve as a basis for this RMP are inherently limited due to the limited number of observation points. There may be variations in subsurface conditions in areas away from the sample points. There are no representations, warranties, or guarantees that the points selected for sampling are representative of the entire site. The recommendations provided herein reflect the sample conditions at specific locations at a specific point in time. No other interpretations, representations, warranties, guarantees, express or implied, are included or intended in this RMP. Additional work, including further subsurface investigation, might reduce the inherent uncertainties associated with this RMP.

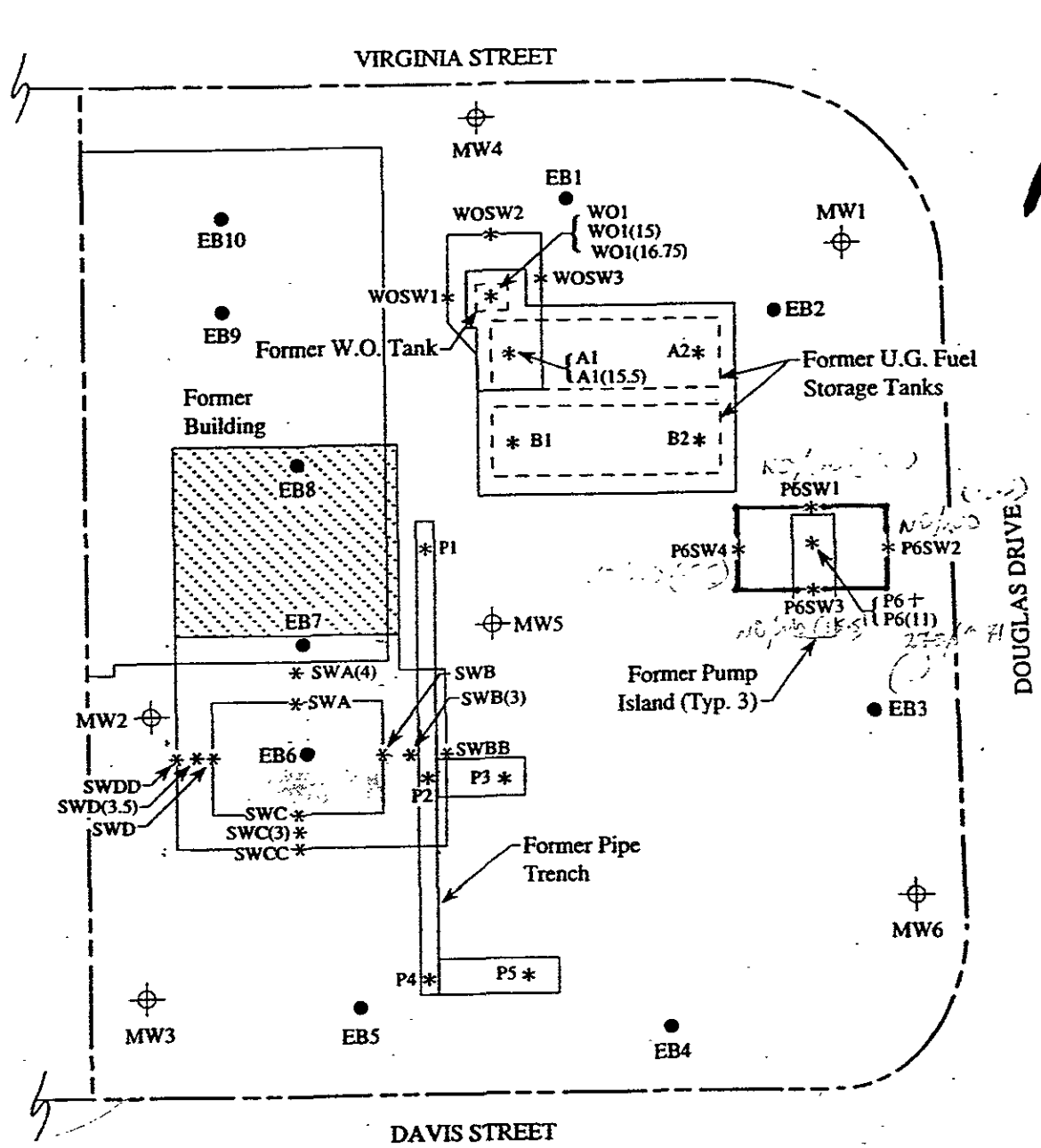
ALAMEDA CO

Alameda County

DETAIL

DEC 1 (92

ATTACHMENT 1



LEGEND

- Monitoring well
- Former exploratory boring
- * Sample point location
- Area excavated to a depth of about 17 feet below grade.
- Area excavated to a depth of about 7 feet below grade.
- Area of previous excavation (May 11, 1989)

0 20 40

Approx. scale feet

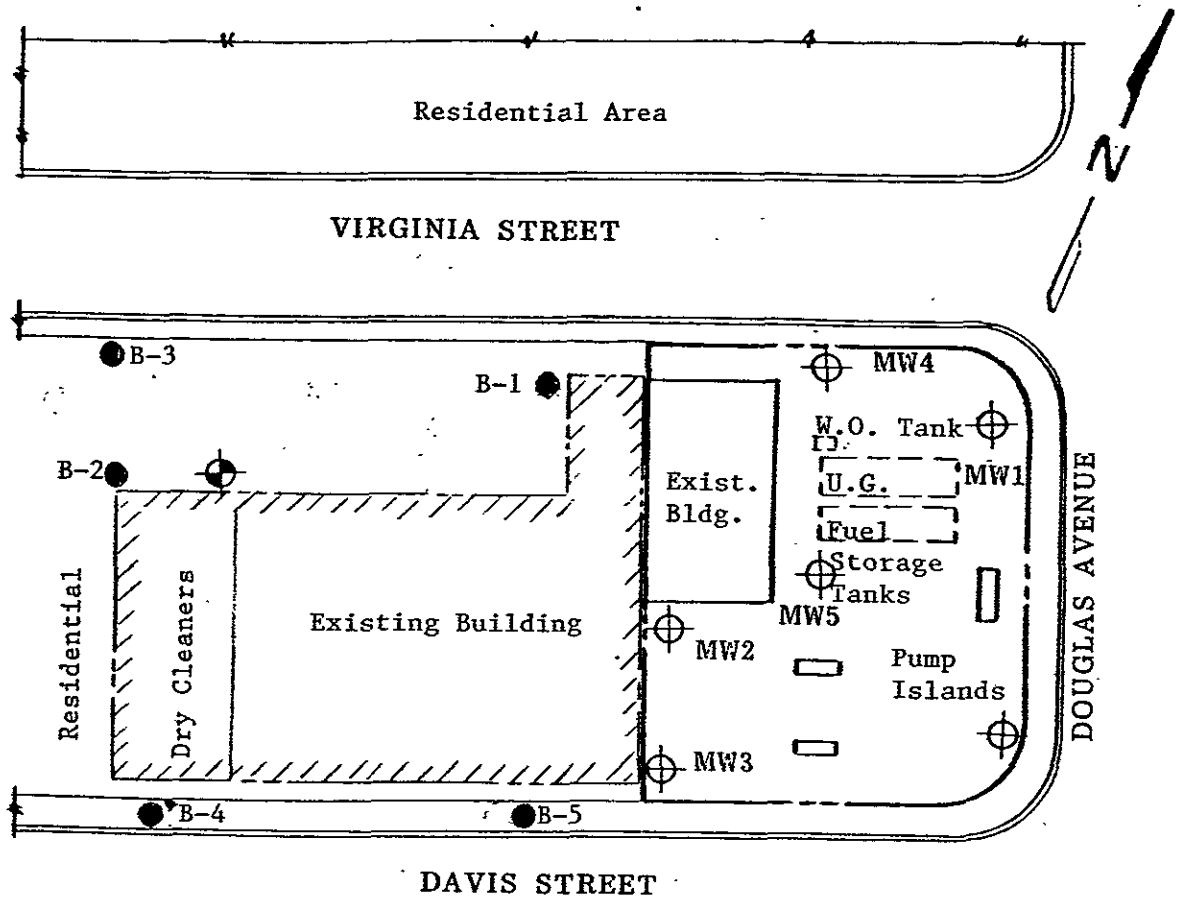
MONITORING WELL, BORING LOG, AND SAMPLE POINT LOCATION MAP

KARPELIAN ENGINEERING

UNOCAL SERVICE STATION #2
1300 DAVIS STREET
SAN LEANDRO, CALIFORNIA

ATTACHMENT 2

KAPREALIAN ENGINEERING, INC.
Consulting Engineers
P.O. BOX 996 • BENICIA, CA 94510
(707) 746-6915 • (707) 746-6916 • FAX: (707) 746-5581



SITE VICINITY MAP
Figure 3

LEGEND

- Existing Monitoring Well (by KEI)
- Existing Monitoring Well (by others)
- Approximate location of existing off-site Soil Borings (by AGS)

0 50 100
Approx. scale feet

Unocal S/S #2512
1300 Davis Street
San Leandro, CA

KEI-P88-1204.R14
January 10, 1996

TABLE 4

SUMMARY OF LABORATORY ANALYSES
SOIL

Sample Number	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	TOG
(Collected on April 17, 1989)							
MW1(5)	ND	4.0	ND	ND	ND	ND	ND
MW1(10)	ND	ND	ND	ND	ND	ND	ND
MW1(15)	ND	ND	ND	ND	ND	ND	ND
MW1(17)	ND	ND	ND	ND	ND	ND	31
MW2(5)*	ND	ND	ND	ND	ND	ND	31
MW2(10)*	ND	1.1	ND	ND	ND	ND	60
MW2(15)*	ND	ND	ND	ND	ND	ND	71
MW3(5)	ND	ND	ND	ND	ND	ND	ND
MW3(10)	ND	1.1	ND	ND	ND	ND	ND
MW3(15)	ND	1.2	ND	ND	ND	ND	32
MW3(17)	ND	6.2	ND	0.21	ND	0.42	180
(Collected on August 16, 1989)							
MW4(5)	--	3.3	ND	ND	ND	0.11	ND
MW4(10)	--	ND	ND	ND	ND	ND	ND
MW4(15)	--	ND	ND	ND	ND	ND	ND
MW4(19)	--	ND	ND	ND	ND	ND	ND
MW5(5)	--	ND	MD	ND	ND	ND	ND
MW5(10)	--	ND	ND	ND	ND	ND	ND
MW5(15)	--	ND	ND	ND	ND	ND	ND
MW5(20)	--	20	ND	ND	ND	ND	ND
MW5(22)	--	ND	ND	ND	ND	ND	ND
MW6(5)	--	ND	ND	ND	ND	ND	ND
MW6(10)	--	ND	ND	ND	ND	ND	ND
MW6(15)	--	ND	ND	ND	ND	ND	ND
MW6(20)	--	ND	ND	ND	ND	ND	ND

TABLE 4 (Continued)

SUMMARY OF LABORATORY ANALYSES
SOIL

Sample Number	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	TOG
(Collected on February 11, 1992)							
MW7(5)	ND	ND	ND	ND	ND	ND	--
MW7(9.5)	ND	ND	ND	ND	ND	ND	--
MW7(15)	ND	ND	ND	ND	ND	ND	--
MW7(16.5)	ND	ND	ND	ND	ND	ND	--

-- Indicates analysis not performed.

ND = Non-detectable.

* EPA method 8010 constituents were non-detectable.

Results are in milligrams per kilogram (mg/kg), unless otherwise indicated.

KEI-P88-1204.R14
January 10, 1996

TABLE 5

SUMMARY OF LABORATORY ANALYSES
SOIL

Sample Number	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes	TOG
(Collected on January 3, 1989)							
EB1(5)*	5.0	--	ND	0.05	ND	ND	ND
EB1(10)*	1.0	--	ND	ND	ND	ND	ND
EB1(15)*	1.0	--	ND	ND	ND	ND	ND
EB1(25)*	2.0	--	--	--	--	--	ND
EB2(10)	--	ND	ND	ND	ND	ND	--
EB2(15)	--	ND	ND	ND	ND	ND	--
EB2(20)	--	ND	ND	ND	ND	ND	--
EB2(25)	--	1.9	ND	ND	ND	ND	--
EB3(5)	--	ND	ND	ND	ND	ND	--
EB3(10)	--	ND	ND	ND	ND	ND	--
EB3(15)	--	2.7	ND	ND	ND	ND	--
EB3(20)	--	2.2	ND	ND	ND	ND	--
EB3(25)	--	ND	ND	ND	ND	ND	--
EB4(5)	--	ND	ND	ND	ND	ND	--
EB4(10)	--	ND	ND	ND	ND	ND	--
EB4(15)	--	ND	ND	ND	ND	ND	--
EB4(20)	--	ND	ND	ND	ND	ND	--
EB4(25)	--	ND	ND	ND	ND	ND	--
EB5(5)	--	ND	ND	ND	ND	ND	--
EB5(10)	--	ND	ND	ND	ND	ND	--
EB5(15)	--	2.0	ND	ND	ND	ND	--
EB5(20)	--	17	0.12	0.15	0.25	1.4	--
EB5(25)	--	3.9	ND	ND	ND	0.17	--
EB6(5)	10	1.8	ND	ND	ND	ND	7,800
EB6(10)	160	73	ND	ND	ND	ND	1,200
EB6(15)	40	17	0.065	ND	ND	0.21	900
EB6(25)	3.0	ND	ND	ND	ND	ND	130

TABLE 5 (Continued)

SUMMARY OF LABORATORY ANALYSES
SOIL

Sample Number	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes	TOG
(Collected on March 22 and 23, 1993)							
EB7(5)*	ND	ND	0.018	ND	ND	ND	ND
EB7(10)*	1.3♦	3.2♦♦	ND	ND	ND	ND	140
EB7(15)*	6.4♦	17♦♦	ND	0.011	0.0090	0.025	340
EB7(19.5)*	3.5♦	4.4♦♦	ND	ND	ND	ND	80
EB7(23.5)*	ND	ND	ND	ND	ND	ND	60
EB8(5)*+	12♦	50♦♦	0.020	0.040	0.062	0.045	1,700
EB8(10)*+	1.2	ND	ND	ND	ND	ND	ND
EB8(15)*+	7.6	5.0♦♦	ND	ND	0.015	0.0070	ND
EB8(20)*+	ND	ND	ND	ND	ND	ND	ND
EB8(23)*+	ND	ND	ND	ND	ND	ND	ND
EB9(5)*+	ND	ND	ND	ND	ND	ND	ND
EB9(10)*+	ND	2.0	ND	ND	ND	ND	ND
EB9(14.5)*+	ND	ND	ND	ND	ND	ND	ND
EB10(5)*	ND	ND	ND	ND	ND	ND	ND
EB10(9.5)*	ND	1.6	ND	ND	ND	ND	ND
EB10(15)*	ND	ND	ND	ND	ND	ND	ND
EB10(20)*	ND	ND	ND	ND	ND	ND	ND
EB10(23)*	ND	ND	ND	ND	ND	ND	ND

NOTE: The soil samples were collected at the depths (below grade) indicated in the ( ) of the respective sample number.

* All EPA method 8010 constituents were non-detectable.
\+ TPH as Hydraulic Fluid was non-detectable, except in sample EB8(5), where it was detected at a concentration of 470 mg/kg.
♦ Sequoia Analytical Laboratory reported that the hydrocarbons detected appeared to be a diesel and non-diesel mixture.
♦♦ Sequoia Analytical Laboratory reported that the hydrocarbons detected appeared to be a gasoline and non-gasoline mixture.
ND = Non-detectable.
-- Indicates analysis was not performed.
Results are in milligrams per kilogram (mg/kg), unless otherwise indicated.

KEI-P88-1204.R14
January 10, 1996

TABLE 11

SUMMARY OF LABORATORY ANALYSES
SOIL

Sample Number	Depth (feet)	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes	TOG
			(Collected on May 11, 1989)					
SWA	16.5	21	--	--	--	--	--	850
SWB	16.5	18	--	--	--	--	--	580
SWC	16.5	26	--	--	--	--	--	680
SWD	16.5	16	--	--	--	--	--	170

-- Indicates analysis was not performed.

Results are in milligrams per kilogram (mg/kg), unless otherwise indicated.

KEI-P88-1204.R14
January 10, 1996

TABLE 10

SUMMARY OF LABORATORY ANALYSES
SOIL

Date	Sample	Depth (feet)	TPH as Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	TOG
7/28/92	A1	14.0	23	0.078	0.093	0.061	0.16	--
	A2	14.0	ND	ND	ND	ND	ND	--
	B1	14.0	3.2	0.0056	ND	ND	0.023	--
	B2	14.0	8.4	0.0086	0.019	0.069	0.054	--
	P1	3.5	ND	0.013	ND	ND	0.0060	--
	P2	3.5	5.8	0.042	0.022	0.024	0.11	--
	P3	3.5	ND	ND	0.012	ND	0.025	--
	P4	3.5	ND	ND	ND	ND	0.0067	--
	P5	3.5	6.8	ND	ND	0.21	1.7	--
	P6	3.5	91	0.72	0.32	0.34	1.4	--
	WO1*	10.0	150	0.61	3.3	1.8	12	3,00
	WO1(15)	15.0	--	--	--	--	--	210

-- Indicates analysis was not performed.

ND = Non-detectable.

* EPA method 8010 constituents were all non-detectable, except for 1-1-Dichloroethane at 120 µg/kg, tetrachloroethene at 86 µg/kg, and 1,1,1-trichloroethane at 260 µg/kg. Cadmium, chromium, lead, nickel, and zinc were detected at concentrations of 0.95 mg/kg, 45 mg/kg, 5.8 mg/kg, 42 mg/kg, and 40 mg/kg, respectively. TPH as diesel was detected at a concentration of 210 mg/kg.

Results are in milligrams per kilogram (mg/kg), unless otherwise indicated.

KEI-P88-1204.R14
January 10, 1996

TABLE 7

SUMMARY OF LABORATORY ANALYSES
SOIL

Date	Sample	Depth (feet)	TOG	TPH as Diesel	EPA Method 8010 Constituents*	EPA Method 8270 Constituents*
10/27/93	A1(15.5)	15.5	200	13♦	ND	ND
	WO1(16.75)	16.75	ND	6.7♦	ND	ND
	WOSW1	15.0	ND	ND	ND	ND
	WOSW2	15.0	ND	ND	ND	ND
	WOSW3	15.0	ND	ND	ND	ND
	SWA(4)	15.5	ND	--	--	--
	SWB(3)	15.0	450	--	--	--
	SWC(3)	15.5	240	--	--	--
	SWD(3.5)	15.5	460	--	--	--
11/15/93	SWBB	15.5	ND	--	--	--
	SWCC	15.5	ND	--	--	--
	SWDD	15.5	ND	--	--	--

♦ Sequoia Analytical Laboratory reported that the hydrocarbons detected appeared to be a diesel and non-diesel mixture.

* Results are in micrograms per kilogram (mg/kg), unless otherwise indicated.

ND = Non-detectable.

-- Indicates analysis was not performed.

Results are in milligrams per kilogram (mg/kg), unless otherwise indicated.

KEI-P88-1204.R14
January 10, 1996

TABLE 8

SUMMARY OF LABORATORY ANALYSES
SOIL

Date	Sample	Depth (feet)	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes
10/27/93	A1(15.5)	15.5	17*	ND	0.017	0.040	0.088
	P6(11)	11.0	270	0.71	12	6.3	38
	WO1(16.75)	16.75	2.6	0.0059	0.0063	0.013	0.0095
	WOSW1	15.0	ND	ND	ND	ND	ND
	WOSW2	15.0	ND	ND	ND	ND	ND
	WOSW3	15.0	ND	ND	ND	ND	ND
11/15/93	P6SW1	15.5	ND	ND	ND	ND	ND
	P6SW2	15.5	ND	ND	ND	ND	ND
	P6SW3	15.5	ND	ND	ND	ND	0.078
	P6SW4	15.5	ND	ND	ND	ND	ND

* Sequoia Analytical Laboratory reported that the hydrocarbons detected did not appear to be gasoline.

ND = Non-detectable.

Results are in milligrams per kilogram (mg/kg), unless otherwise indicated.

Table 1

Groundwater Monitoring Data and Analytical Results

Former Unocal Service Station #2512

1300 Davis Street

San Leandro, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(D) (ppb)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	TOG (ppm)
MW-1	04/25/89	--	--	--	100	ND	0.31	ND	ND	ND	--	--
	08/10/89	--	--	--	ND	ND	ND	ND	ND	ND	--	ND
	11/21/89	--	--	--	ND	ND	ND	ND	ND	ND	--	8.9
	02/23/90	--	--	--	ND	ND	ND	ND	ND	ND	--	ND
	05/10/90	--	--	--	ND	ND	ND	ND	ND	ND	--	ND
	08/09/90	--	--	--	ND	ND	ND	ND	ND	ND	--	ND
	11/06/90	--	--	--	ND	ND	ND	ND	ND	ND	--	ND
	02/04/91	--	--	--	ND	ND	ND	0.31	ND	0.62	--	ND
	05/24/91	--	--	--	--	ND	ND	ND	ND	ND	--	ND
	08/15/91	--	--	--	--	--	--	--	--	--	--	--
100.00	09/18/91	17.88	82.12	0.00	--	--	--	--	--	--	--	--
	10/15/91	18.17	81.83	0.00	--	--	--	--	--	--	--	--
	11/19/91	17.48	82.52	0.00	--	--	--	--	--	--	--	--
32.69	02/27/92	15.36	17.33	0.00	--	--	--	--	--	--	--	--
	03/27/92	15.53	17.16	0.00	--	--	--	--	--	--	--	--
	04/27/92	15.68	17.01	0.00	--	--	--	--	--	--	--	--
	05/26/92	15.90	16.79	0.00	--	--	--	--	--	--	--	--
	06/23/92	16.25	16.44	0.00	--	--	--	--	--	--	--	--
	07/24/92	16.54	16.15	0.00	--	--	--	--	--	--	--	--
	10/30/92	16.58	16.11	0.00	--	--	--	--	--	--	--	--
	06/09/94	15.22	--	0.00	--	580[1]	ND	ND	ND	ND	--	--
	09/08/94	15.81	--	0.00		160[2]	ND	1.6	ND	3.1	--	--
	01/25/95	DESTROYED	--	--	--	--	--	--	--	--	--	--
MW-2	04/25/89	--	--	--	ND	32	0.35	ND	ND	ND	--	--
	08/10/89	--	--	--	ND	ND	ND	0.39	ND	ND	--	ND
	11/21/89	--	--	--	ND	48	ND	0.51	ND	ND	--	1.6
	02/23/90	--	--	--	ND	44	ND	ND	ND	ND	--	ND
	05/10/90	--	--	--	ND	43	ND	1	ND	ND	--	ND
	08/09/90	--	--	--	ND	ND	ND	ND	ND	ND	--	ND
	11/06/90	--	--	--	ND	ND	ND	0.42	ND	1.4	--	ND
	02/04/91	--	--	--	ND	ND	ND	0.38	ND	0.87	--	ND
	05/24/91	--	--	--	--	ND	1.5	ND	ND	ND	--	ND
	08/15/91	--	--	--	--	ND	ND	ND	ND	ND	--	ND
100.32	09/18/91	18.48	81.84	0.00	--	--	--	--	--	--	--	--

ATTACHMENT 5

Table 1

Groundwater Monitoring Data and Analytical Results

Former Unocal Service Station #2512

1300 Davis Street

San Leandro, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(D) (ppb)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	TOG (ppm)
MW-2	10/15/91	18.75	81.57	0.00	--	--	--	--	--	--	--	--
(cont)	11/19/91	18.01	82.31	0.00	--	220	2.5	8.4	2.4	14	--	--
33.04	02/27/92	15.40	17.64	0.00	--	330	12	12	10	93	--	--
	03/27/92	15.61	17.43	0.00	--	--	--	--	--	--	--	--
	04/27/92	15.96	17.08	0.00	--	--	--	--	--	--	--	--
	05/26/92	16.30	16.74	0.00	--	2,900	8.8	9.3	54	36	--	--
	06/23/92	16.76	16.28	0.00	--	--	--	--	--	--	--	--
	07/24/92	16.66	--[12]	0.00	--	--	--	--	--	--	--	--
	10/30/92	17.38	--[12]	0.00	--	1,200[1]	ND	ND	ND	ND	--	--
	06/09/94	15.48	--	0.00	--	1,900[2]	6.7	ND	66	ND	--	--
	09/08/94	16.22	--	0.00	--	3,000[1]	ND	ND	ND	17	--	--
	01/25/95	DESTROYED	--	--	--	--	--	--	--	--	--	--
MW-3	04/25/89	--	--	--	5,700	56	ND	ND	0.31	0.49	--	--
	08/10/89	--	--	--	860	3,200	73	140	35	240	--	ND
	11/21/89	--	--	--	110	1,900	ND	ND	ND	ND	--	3.8
	02/23/90	--	--	--	350	ND	0.32	ND	ND	ND	--	1.3
	05/10/90	--	--	--	850	6,200	94	460	160	540	--	2.8
	08/09/90	--	--	--	500	1,900	56	140	140	31	--	ND
	11/06/90	--	--	--	940	16,000	820	1,500	2,200	770	--	ND
	02/04/91	--	--	--	NOT SAMPLED DUE TO A TRACE OF FREE PRODUCT					--	--	--
	05/24/91	--	--	--	2,000	23,000	940	3,400	590	2,600	--	ND
	08/15/91	--	--	--	NOT SAMPLED DUE TO A TRACE OF FREE PRODUCT					--	--	--
100.03	09/04/91	17.97	82.08***	0.03	--	--	--	--	--	--	--	--
	09/18/91	18.38	81.73***	0.10	--	--	--	--	--	--	--	--
	10/02/91	18.50	81.65***	0.16	--	--	--	--	--	--	--	--
	10/15/91	18.59	81.62***	0.24	--	--	--	--	--	--	--	--
	11/05/91	17.75	82.49***	0.27	--	--	--	--	--	--	--	--
	11/19/91	17.87	82.36***	0.26	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--	--
32.73	02/27/92	14.98	17.82**	0.09	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--	--
	03/12/92	14.94	17.79	0.00	--	--	--	--	--	--	--	--
	03/27/92	15.12	17.61	0.00	--	--	--	--	--	--	--	--
	04/13/92	15.17	17.56	0.00	--	--	--	--	--	--	--	--
	04/27/92	15.58	17.17**	0.02	--	--	--	--	--	--	--	--
	05/11/92	15.84	16.92**	0.04	--	--	--	--	--	--	--	--

Table 1

Groundwater Monitoring Data and Analytical Results

Former Unocal Service Station #2512

1300 Davis Street

San Leandro, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(D) (ppb)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	TOG (ppm)
MW-3	05/26/92	16.06	16.76**	0.12	2,400,000	1,300,000	5,100	66,000	20,000	160,000	--	880
(cont)	06/09/92	16.29	16.46**	0.03	--	--	--	--	--	--	--	--
	06/23/92	16.52	16.26**	0.06	--	--	--	--	--	--	--	--
	07/06/92	16.60	16.24**	0.14	--	--	--	--	--	--	--	--
	07/24/92	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--
	10/30/92	17.08	--[12]	0.07	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--	--
	06/09/94	14.74	--	0.00	17,000[3]	69,000	1,300	7,100	1,900	11,000	--	--
	09/08/94	15.54	--	Sheen	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT						--	--
32.02	10/05/95	14.86	17.16	0.00	--	--	--	--	--	--	--	--
	10/21/95	14.98	17.04	0.00	5,900[3]	50,000	250	4,200	1,700	18,000	--[5]	--
	01/24/96	13.15	18.87	0.00	5,300[3]	100,000	950	3,300	2,500	16,000	--[6]	--
	04/23/96	13.11	18.91	0.00	4,900[3]	50,000	430	1,700	1,600	7,600	ND	--
	07/25/96	14.40	17.62	0.00	2,400[4]	17,000	170	ND	650	3,300	240	--
	10/25/96	15.33	16.69	0.00	3,700[4]	26,000	420	1,100	1,800	6,400	340	--
	01/28/97	11.55	20.47	0.00	3,900[3]	32,000	230	1,000	1,000	4,500	ND	--
	04/16/97	12.05	19.97	0.00	3,100[3]	12,000	76	ND	330	1,600	ND	--
	07/21/97	15.17	16.85	0.00	2,400[3]	10,000	82	28	430	1,400	76	--
	10/20/97	15.41	16.61	Sheen	2,900[4]	12,000	200	540	1,400	4,600	210	--
	01/21/98[10]	11.59	20.43	0.00	3,700[7]	25,000	170	640	1,200	4,800	ND[8]	--
	04/17/98[10]	12.46	19.56	0.00	3,400	25,000	980	1,400	5,800	ND[8]	ND[8]	--
	07/14/98[10]	13.43	18.59	0.00	1,100[11]	6,200	76	ND[8]	550	810	ND[8]	--
	10/12/98[10]	14.60	17.42	0.00	420[13]	1,600	28	ND[8]	28	81	ND[8]	--
	01/19/99[10]	12.97	19.05	0.00	870[15]	27,000[14]	18	ND[8]	48	69	ND[8]	--
	04/07/99	12.36	19.66	0.00	ND	1,700	10	ND[8]	28	72	[8]ND/4.7[16]	ND
	07/12/99	14.41	17.61	0.00	160[17]	78	0.68	ND	ND	2.4	ND	--
	10/25/99	14.53	17.49	0.00	95[18]	220	0.82	ND	0.77	6.8	3.9	--
	01/18/00	**13.05**	**18.97**	**0.00**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**135**	**--**
MW-4	08/29/89	--	--	--	120	ND	ND	ND	ND	ND	--	ND
	11/21/89	--	--	--	ND	ND	ND	ND	ND	ND	--	ND
	02/23/90	--	--	--	ND	ND	ND	ND	ND	ND	--	ND
	05/10/90	--	--	--	88	54	ND	2	ND	0.37	--	ND
	08/09/90	--	--	--	ND	ND	ND	ND	ND	ND	--	ND
	11/06/90	--	--	--	ND	ND	ND	0.36	ND	0.98	--	ND
	02/04/91	--	--	--	ND	ND	ND	0.72	ND	1.1	--	ND

Table 1

Groundwater Monitoring Data and Analytical Results

Former Unocal Service Station #2512

1300 Davis Street

San Leandro, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(D) (ppb)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	TOG (ppm)
MW-4	05/24/91	--	--	--	ND	ND	0.64	ND	ND	ND	--	ND
(cont)	08/15/91	--	--	--	ND	ND	ND	ND	ND	ND	--	ND
99.66	09/18/91	17.67	81.99	0.00	--	--	--	--	--	--	--	--
	10/15/91	17.95	81.71	0.00	--	--	--	--	--	--	--	--
	11/19/91	17.25	82.41	0.00	ND	ND	ND	ND	ND	ND	--	--
32.38	02/27/92	14.96	17.42	0.00	ND	43	ND	1	0.37	2.5	--	--
	03/27/92	15.01	17.37	0.00	--	--	--	--	--	--	--	--
	04/27/92	15.37	17.01	0.00	--	--	--	--	--	--	--	--
	05/26/92	15.62	16.76	0.00	ND	120	0.59	0.82	ND	1.9	--	--
	06/23/92	16.02	16.36	0.00	--	--	--	--	--	--	--	--
	07/24/92	16.10	--[12]	0.00	--	--	--	--	--	--	--	--
	10/30/92	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--
	06/09/94	15.08	--	0.00	ND	780[1]	ND	ND	ND	ND	--	--
	09/08/94	15.72	--	0.00	ND	300[1]	ND	ND	ND	ND	--	--
	01/25/95	DESTROYED	--	--	--	--	--	--	--	--	--	--
MW-5	08/29/89	--	--	--	100	ND	ND	0.94	0.3	ND	--	ND
	11/21/89	--	--	--	70	ND	ND	ND	ND	ND	--	ND
	02/23/90	--	--	--	ND	ND	ND	ND	ND	ND	--	ND
	05/10/90	--	--	--	83	ND	ND	ND	ND	0.31	--	ND
	08/09/90	--	--	--	ND	ND	ND	ND	ND	ND	--	ND
	11/06/90	--	--	--	ND	ND	ND	ND	ND	ND	--	ND
	02/04/91	--	--	--	ND	ND	ND	0.35	ND	ND	--	ND
	05/24/91	--	--	--	ND	ND	ND	ND	ND	ND	--	ND
100.32	09/18/91	18.30	82.02	0.00	--	--	--	--	--	--	--	--
	10/15/91	18.59	81.73	0.00	--	--	--	--	--	--	--	--
	11/19/91	17.87	82.45	0.00	--	--	--	--	--	--	--	--
33.02	02/27/92	15.50	17.52	0.00	--	--	--	--	--	--	--	--
	03/27/92	15.68	17.34	0.00	--	--	--	--	--	--	--	--
	04/27/92	15.96	17.06	0.00	--	--	--	--	--	--	--	--
	05/26/92	16.22	16.80	0.00	--	--	--	--	--	--	--	--
	06/23/92	16.63	16.39	0.00	--	--	--	--	--	--	--	--
	07/24/92	16.73	--[12]	0.00	--	--	--	--	--	--	--	--
	10/30/92	INACCESSIBLE	--	0.00	--	--	--	--	--	--	--	--

Table 1

Groundwater Monitoring Data and Analytical Results

Former Unocal Service Station #2512

1300 Davis Street

San Leandro, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(D) (ppb)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	TOG (ppm)
MW-5	06/09/94	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--
(cont)	09/08/94	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--
	01/25/95	DESTROYED	--	--	--	--	--	--	--	--	--	--
MW-6	08/29/89	--	--	--	ND	ND	ND	ND	ND	ND	--	ND
	11/21/89	--	--	--	ND	ND	ND	ND	ND	ND	--	ND
	02/23/90	--	--	--	ND	ND	ND	ND	ND	ND	--	ND
	05/10/90	--	--	--	ND	ND	ND	1.2	ND	ND	--	ND
	08/09/90	--	--	--	ND	ND	ND	ND	ND	ND	--	ND
	11/06/90	--	--	--	ND	ND	1.6	0.35	ND	ND	--	ND
	02/04/91	--	--	--	ND	ND	ND	ND	ND	ND	--	ND
	05/24/91	--	--	--	--	ND	ND	ND	ND	ND	--	ND
	08/15/91	--	--	--	--	ND	ND	ND	ND	ND	--	ND
100.50	09/18/91	18.34	82.16	0.00	--	--	--	--	--	--	--	--
	10/15/91	18.65	81.85	0.00	--	--	--	--	--	--	--	--
	11/19/91	17.94	82.56	0.00	--	ND	ND	ND	ND	ND	--	--
33 19	02/27/92	15.70	17.49	0.00	--	ND	3.2	ND	ND	3.8	--	--
	03/27/92	15.56	17.63	0.00	--	--	--	--	--	--	--	--
	04/27/92	16.07	17.12	0.00	--	--	--	--	--	--	--	--
	05/26/92	16.34	16.85	0.00	--	ND	ND	ND	ND	0.65	--	--
	06/23/92	16.70	16.49	0.00	--	--	--	--	--	--	--	--
	07/24/92	17.00	16.19	0.00	--	--	--	--	--	--	--	--
	10/30/92	17.07	16.12	0.00	--	ND	ND	ND	ND	ND	--	--
	06/09/94	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--
	09/08/94	INACCESSIBLE	--	--	--	--	--	--	--	--	--	--
	01/25/95	DESTROYED	--	--	--	--	--	--	--	--	--	--
MW-7												
32 09	02/27/92	15.12	16.97	0.00	--	38	ND	0.97	0.69	4	--	--
	03/27/92	14.26	17.83	0.00	--	--	--	--	--	--	--	--
	04/27/92	14.86	17.23	0.00	--	--	--	--	--	--	--	--
	05/26/92	15.30	16.79	0.00	--	ND	ND	ND	ND	0.6	--	--
	06/23/92	15.80	16.29	0.00	--	--	--	--	--	--	--	--
	07/24/92	16.26	15.83	0.00	--	--	--	--	--	--	--	--

Table 1
Groundwater Monitoring Data and Analytical Results
Former Unocal Service Station #2512
1300 Davis Street
San Leandro, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(D) (ppb)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	TOG (ppm)
MW-7	10/30/92	16.31	15.78	0.00	--	ND	ND	ND	ND	ND	--	--
(cont)	06/09/94	14.43	--	0.00	--	610[1]	ND	ND	ND	ND	--	--
	09/08/94	15.32	--	0.00	--	ND	ND	1.3	ND	1.6	--	--
31.71	10/21/95	14.74	16.97	0.00	--	ND	ND	ND	ND	ND	--	--
	01/24/96	12.50	19.21	0.00	--	ND	ND	ND	ND	ND	--	--
	04/23/96	12.48	19.23	0.00	--	220	ND	0.62	0.88	5.4	ND	--
	07/25/96	14.30	17.41	0.00	--	ND	ND	ND	ND	ND	ND	--
	10/25/96	15.13	16.58	0.00	--	ND	ND	ND	ND	ND	ND	--
	01/28/97	10.41	21.30	0.00	--	ND	ND	ND	ND	ND	ND	--
	04/16/97	12.12	19.59	0.00	--	ND	ND	ND	ND	ND	ND	--
	07/21/97	15.01	16.70	0.00	--	ND	ND	ND	ND	ND	ND	--
	10/20/97	15.18	16.53	0.00	--	ND	ND	ND	ND	ND	ND	--
	01/21/98	10.46	21.25	0.00	--	ND	ND	ND	ND	ND	ND	--
	04/17/98	11.57	20.14	0.00	--	ND	ND	ND	ND	ND	ND	--
	07/14/98	13.10	18.61	0.00	--	ND	ND	ND	ND	ND	ND	--
	10/12/98	14.22	17.49	0.00	--	ND	ND	ND	ND	ND	ND	--
	01/19/99	12.12	19.59	0.00	--	ND	ND	ND	ND	ND	ND	--
	04/07/99	11.47	20.24	0.00	--	ND	ND	ND	ND	ND	ND/ND[16]	--
	07/12/99	14.17	17.54	0.00	--	ND	ND	ND	ND	ND	ND	--
	10/25/99	14.22	17.49	0.00	--	ND	ND	ND	ND	ND	ND	--
	01/18/00	**12.38**	**19.33**	**0.00**	**--**	**ND**	**ND**	**ND**	**ND**	**ND**	**6.10**	**--**
MW-8												
32.73	10/05/95	15.56	17.17	0.00	--	--	--	--	--	--	--	--
	10/21/95	15.65	17.08	0.00	--	ND	ND	ND	ND	ND	--	--
	01/24/96	14.51	18.22	0.00	--	ND	ND	ND	ND	ND	--	--
	04/23/96	15.70	17.03	0.00	--	ND	ND	ND	ND	ND	ND	--
	07/25/96	15.10	17.63	0.00	--	ND	ND	ND	ND	ND	ND	--
	10/25/96	15.96	16.77	0.00	--	ND	ND	ND	ND	ND	ND	--
	01/28/97	13.86	18.87	0.00	--	ND	ND	ND	ND	ND	ND	--
	04/16/97	12.74	19.99	0.00	--	ND	ND	ND	ND	ND	ND	--
	07/21/97	15.71	17.02	0.00	--	ND	ND	ND	ND	ND	ND	--
	10/20/97	15.98	16.75	0.00	--	ND	ND	ND	ND	ND	ND	--
	01/21/98	14.20	18.53	0.00	--	ND	ND	ND	ND	ND	ND	--
	04/17/98	14.40	18.33	0.00	--	ND	ND	ND	ND	ND	ND	--

Table 1
Groundwater Monitoring Data and Analytical Results
Former Unocal Service Station #2512
1300 Davis Street
San Leandro, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(D) (ppb)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	TOG (ppm)
MW-8	07/14/98	14.85	17.88	0.00	--	ND	ND	ND	ND	ND	ND	--
(cont)	10/12/98	15.86	16.87	0.00	--	ND	ND	ND	ND	ND	ND	--
	01/19/99	14.69	18.04	0.00	--	ND	ND	ND	ND	ND	ND	--
	04/07/99	13.88	18.85	0.00	--	ND	ND	ND	ND	ND	ND/ND[16]	--
	07/12/99	15.21	17.52	0.00	--	ND	ND	ND	ND	ND	ND	--
	10/25/99	15.30	17.43	0.00	--	ND	ND	ND	ND	ND	ND	--
	01/18/00	**14.67**	**18.06**	**0.00**	**--**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**--**
MW-9												
32.33	10/05/95	15.27	17.06	0.00	--	--	--	--	--	--	--	--
	10/21/95	15.59	16.74	0.00	--	ND	ND	ND	ND	ND	--[5]	--
	01/24/96	14.28	18.05	0.00	--	ND	ND	ND	ND	ND	--[6]	--
	04/23/96	14.60	17.73	0.00	--	ND	ND	ND	ND	ND	ND	--
	07/25/96	15.05	17.28	0.00	--	ND	ND	ND	ND	ND	ND	--
	10/25/96	15.66	16.67	0.00	--	ND	ND	ND	ND	ND	180	--
	01/28/97	13.76	18.57	0.00	--	ND	ND	ND	ND	ND	75	--
	04/16/97	12.66	19.67	0.00	--	ND	ND	ND	ND	ND	ND	--
	07/21/97	15.44	16.89	0.00	--	ND	ND	ND	ND	ND	ND	--
	10/20/97	15.67	16.66	0.00	--	ND	ND	ND	ND	ND	100	--
	01/21/98	13.97	18.36	0.00	--	ND	ND	ND	ND	ND	140	--
	04/17/98	14.38	17.95	0.00	--	56[9]	ND	ND	ND	ND	18	--
	07/14/98	14.87	17.46	0.00	--	ND	ND	ND	ND	ND	6.6	--
	10/12/98	15.19	17.14	0.00	--	ND	ND	ND	ND	ND	16	--
	01/19/99	14.54	17.79	0.00	--	ND	ND	ND	ND	ND	30	--
	04/07/99	13.62	18.71	0.00	--	ND	ND	ND	ND	ND	6.9/6.4[16]	--
	07/12/99	15.03	17.30	0.00	--	ND	ND	ND	ND	ND	3.8	--
	10/25/99	**14.25**	**18.08**	**0.00**	**--**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**--**
Trip Blank												
TB-LB	01/21/98	--	--	--	--	ND	ND	ND	ND	ND	ND	--
	04/17/98	--	--	--	--	ND	ND	ND	ND	ND	ND	--
	07/14/98	--	--	--	--	ND	ND	ND	ND	ND	ND	--
	10/12/98	--	--	--	--	ND	ND	ND	ND	ND	ND	--

Table 1

Groundwater Monitoring Data and Analytical Results

Former Unocal Service Station #2512

1300 Davis Street

San Leandro, California

Well ID/ TOC*	Date	DTW (ft.)	GWE (msl)	Product Thickness (ft.)	TPH(D) (ppb)	TPH(G) (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	TOG (ppm)
TB-LB	01/19/99	--	--	--	--	ND	ND	ND	ND	ND	ND	--
(cont)	04/07/99	--	--	--	--	ND	ND	ND	ND	ND	ND	--
	07/12/99	--	--	--	--	ND	ND	ND	ND	ND	ND	--
	10/25/99	--	--	--	--	ND	ND	ND	ND	ND	ND	--
	01/18/00	--	--	--	--	ND	ND	ND	ND	ND	ND	--

Table 1

Groundwater Monitoring Data and Analytical Results

Former Unocal Service Station #2512

1300 Davis Street

San Leandro, California

EXPLANATIONS:

Groundwater monitoring data and laboratory results prior to January 21, 1998, were compiled from reports prepared by MPDS Services, Inc.

TOC = Top of Casing elevation
DTW = Depth to Water
(ft.) = Feet
GWE = Groundwater Elevation
msl = Relative to mean sea level
TPH(D) = Total Petroleum Hydrocarbons as Diesel
TPH(G) = Total Petroleum Hydrocarbons as Gasoline
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
TOG = Total Oil & Grease
MTBE = Methyl tertiary butyl ether
ppb = Parts per billion
ppm = Parts per million
ND = Not Detected
-- = Not Measured/Not Analyzed

* TOC elevations are relative to msl, per East Bay MUD Benchmark DAVIS FREE #2 - San Leandro 1952 (Elevation = 32.02 feet msl). Prior to October 5, 1993, the DTW measurements were taken from top of well covers. Prior to February 27, 1992, the DTW measurements were surveyed assuming well cover MW-1 100 feet as datum.

** Groundwater elevation corrected due to presence of free product; correction factor [(TOC-DTW)+(Product Thickness x 0.75)].

*** Groundwater elevation corrected due to presence of free product; correction factor [(TOC-DTW)+(Product Thickness x 0.77)].

[1] Laboratory report indicates the hydrocarbons detected did not appear to be gasoline.

[2] Laboratory report indicates the hydrocarbons detected appeared to be a gasoline and non-gasoline mixture.

[3] Laboratory report indicates the hydrocarbons detected appeared to be a diesel and non-diesel mixture.

[4] Laboratory report indicates the hydrocarbons detected did not appear to be diesel.

[5] Laboratory has potentially identified the presence of MTBE at reportable levels in the sample collected from this well.

[6] Laboratory has identified the presence of MTBE at a level above or equal to the taste and odor threshold of 40 ppb in the sample collected from this well. Free product was detected in well MW-3; however, a water sample was collected and analyzed to determine if the product was predominantly hydrocarbon based.

[7] Laboratory report indicates unidentified hydrocarbons C9-C24.

[8] Detection limit raised. Refer to analytical reports.

[9] Laboratory report indicates unidentified hydrocarbons C6-C12.

[10] Purged additional 100 gallons from well after sampling.

[11] Laboratory report indicates unidentified hydrocarbons < C14.

[12] Christy box for this well was damaged during tank removal and soil excavation at the site; therefore, GWE could not be accurately determined.

[13] Laboratory report indicates a non diesel mix < C17.

[14] Laboratory report indicates gasoline and unidentified hydrocarbons C6-C12.

[15] Laboratory report indicates unidentified hydrocarbons < C20.

[16] MTBE by EPA Method 8260.

[17] Laboratory report indicates discrete peaks.

[18] Laboratory report indicates unidentified hydrocarbons < C16.

Table 2

Groundwater Analytical Results

Former Unocal Service Station #2512

1300 Davis Street

San Leandro, California

Well ID	Date	PCE (ppb)	1,1-DCA (ppb)	1,1,1-TCA (ppb)	Chloro-methane (ppb)	1,1-DCE (ppb)	1,2-DCB (ppb)	TCE (ppb)
MW-1	04/25/89	3.3	ND	ND	ND	ND	ND	0.55
	11/06/90	4.8	ND	ND	ND	ND	ND	ND
	05/24/91	4.6	ND	ND	ND	ND	ND	ND
	06/09/94	1.0	ND	ND	ND	ND	ND	ND
	09/08/94	1.2	ND	ND	ND	ND	ND	ND
	01/25/95	DESTROYED	--	--	--	--	--	--
MW-2	04/25/89	0.68	ND	ND	ND	ND	ND	ND
	11/06/90	ND	ND	ND	ND	ND	ND	ND
	05/24/91	ND	ND	ND	ND	ND	ND	ND
	08/15/91	ND	ND	ND	ND	ND	ND	ND
	11/19/91	ND	ND	ND	ND	ND	ND	ND
	02/27/92	ND	ND	ND	ND	ND	ND	ND
	05/26/92	ND	ND	ND	ND	ND	ND	ND
	10/30/92	ND	ND	ND	ND	ND	ND	ND
	06/09/94	ND	ND	ND	ND	ND	ND	ND
	09/08/94	ND	ND	ND	ND	ND	ND	ND
	01/25/95	DESTROYED	--	--	--	--	--	--
MW-3	04/25/89	1.0	ND	ND	ND	ND	ND	ND
	11/06/90	ND	ND	ND	ND	ND	ND	ND
	05/24/91	ND	ND	ND	ND	ND	ND	ND
	08/15/91	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				--	--	--
	11/19/91	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				--	--	--
	02/27/92	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				--	--	--
	05/26/92	ND	ND	ND	ND	ND	ND	ND
	10/30/92	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				--	--	--
	06/09/94	ND	ND	ND	ND	ND	ND	ND
	09/08/94	NOT SAMPLED DUE TO THE PRESENCE OF FREE PRODUCT				--	--	--
	10/21/95	ND	ND	ND	ND	ND	ND	ND
	01/24/96	ND	ND	ND	ND	ND	ND	ND
	04/23/96	ND	ND	ND	ND	ND	ND	ND
	07/25/96	ND	ND	ND	ND	ND	ND	ND

Table 2

Groundwater Analytical Results

Former Unocal Service Station #2512

1300 Davis Street

San Leandro, California

Well ID	Date	PCE (ppb)	1,1-DCA (ppb)	1,1,1-TCA (ppb)	Chloro-methane (ppb)	1,1-DCE (ppb)	1,2-DCB (ppb)	TCE (ppb)
MW-3	10/25/96	ND	ND	ND	ND	ND	ND	ND
(cont)	01/28/97	ND	ND	ND	ND	ND	ND	ND
	04/16/97	ND	ND	ND	ND	ND	ND	ND
	07/21/97	ND	ND	ND	ND	ND	ND	ND
	10/20/97	ND	ND	ND	ND	ND	ND	ND
	01/21/98	ND	ND	ND	ND	ND	ND	ND
	04/17/98	ND	ND	ND	ND	ND	ND	ND
	07/14/98	0.55	ND	ND	ND	ND	ND	ND
	10/12/98	0.51	ND	ND	ND	ND	ND	ND
	01/19/99	ND	ND	ND	ND	ND	ND	ND
	04/07/99	0.54	ND	ND	ND	ND	ND	ND
	07/12/99	ND	ND	ND	ND	ND	ND	ND
	10/25/99[5]	ND	ND	ND	ND	ND	ND	ND
	01/18/00[10]	**ND[14]**	**ND[14]**	**ND[14]**	**ND[14]**	**ND[14]**	**ND[14]**	**ND[14]**
MW-4	11/06/90	2.9	ND	ND	ND	ND	ND	ND
	05/24/91	4.1	2.5	3.9	ND	ND	ND	ND
	08/15/91	3.6	ND	ND	ND	ND	ND	ND
	11/19/91	3.4	ND	ND	ND	ND	ND	ND
	02/27/92	3.5	6	ND	ND	ND	ND	ND
	05/26/92	2.4	13	3.5	ND	0.83	ND	ND
	10/30/92	INACCESSIBLE	--	--	--	--	--	--
	06/09/94	2.8	8.8	0.83	ND	0.51	ND	0.70
	09/08/94[1]	1.8	ND	ND	ND	ND	ND	0.60
	01/25/95	DESTROYED	--	--	--	--	--	--
MW-5	11/06/90	0.7	ND	ND	ND	ND	ND	ND
	05/24/91	0.89	ND	ND	ND	ND	ND	ND
	06/09/94	INACCESSIBLE	--	--	--	--	--	--
	09/08/94	INACCESSIBLE	--	--	--	--	--	--
	01/25/95	DESTROYED	--	--	--	--	--	--

Table 2

Groundwater Analytical Results

Former Unocal Service Station #2512

1300 Davis Street

San Leandro, California

Well ID	Date	PCE (ppb)	1,1-DCA (ppb)	1,1,1-TCA (ppb)	Chloro-methane (ppb)	1,1-DCE (ppb)	1,2-DCB (ppb)	TCE (ppb)
MW-6	11/06/90	1.2	ND	ND	ND	ND	ND	ND
	05/24/91	0.88	ND	ND	5.6	ND	ND	ND
	08/15/91	1.2	ND	ND	ND	ND	ND	ND
	11/19/91	1.3	ND	ND	ND	ND	ND	ND
	02/27/92	1.5	ND	ND	ND	ND	1.6	ND
	05/26/92	1.1	ND	ND	ND	ND	1.7	ND
	10/30/92	1.2	ND	ND	ND	ND	ND	ND
	06/09/94	INACCESSIBLE	--	--	--	--	--	--
	09/08/94	INACCESSIBLE	--	--	--	--	--	--
	01/25/95	DESTROYED	--	--	--	--	--	--
MW-7	02/27/92	2.4	ND	ND	ND	ND	ND	ND
	05/26/92	2.2	ND	ND	ND	ND	ND	ND
	10/30/92	2.2	ND	ND	ND	ND	ND	ND
	06/09/94	0.67	ND	ND	ND	ND	ND	ND
	09/08/94	0.76	ND	ND	ND	ND	ND	ND
	10/21/95	ND	ND	ND	ND	ND	ND	ND
	01/24/96	1.2	ND	ND	ND	ND	ND	ND
	04/23/96	0.84	ND	ND	ND	ND	ND	ND
	07/25/96	1.7	ND	ND	ND	ND	ND	ND
	10/25/96[2]	1.2	ND	ND	ND	ND	ND	ND
	01/28/97	1.4	ND	ND	ND	ND	ND	ND
	04/19/97	0.75	ND	ND	ND	ND	ND	ND
	07/21/97	1.5	ND	ND	ND	ND	ND	ND
	10/20/97	1.5	ND	ND	ND	ND	ND	ND
	01/21/98	1.2	ND	ND	ND	ND	ND	ND
	04/17/98	0.76	ND	ND	ND	ND	ND	ND
	07/14/98	1.4	ND	ND	ND	ND	ND	ND
	10/12/98	1.4	ND	ND	ND	ND	ND	ND
	01/19/99	1.3	ND	ND	ND	ND	ND	ND
	04/07/99[3]	1.6	ND	ND	ND	ND	ND	ND

Table 2

Groundwater Analytical Results

Former Unocal Service Station #2512

1300 Davis Street

San Leandro, California

Well ID	Date	PCE (ppb)	1,1-DCA (ppb)	1,1,1-TCA (ppb)	Chloro-methane (ppb)	1,1-DCE (ppb)	1,2-DCB (ppb)	TCE (ppb)
MW-7	07/12/99	1.1	ND	ND	ND	ND	ND	ND
(cont)	10/25/99	3.1[6]	ND	ND	ND	ND	ND	ND
	01/18/00[11]	ND[14]	ND[14]	ND[14]	ND[14]	ND[14]	ND[14]	ND[14]
MW-8	10/21/95	ND	ND	ND	ND	ND	ND	ND
	01/24/96	0.74	ND	ND	ND	ND	ND	ND
	04/23/96	1.1	ND	ND	ND	ND	ND	ND
	07/25/96	1.1	ND	ND	ND	ND	ND	ND
	10/25/96	0.90	ND	ND	ND	ND	ND	ND
	01/28/97	0.96	ND	ND	ND	ND	ND	ND
	04/16/97	0.51	ND	ND	ND	ND	ND	ND
	07/21/97	ND	ND	ND	ND	ND	ND	ND
	10/20/97	1.1	ND	ND	ND	ND	ND	ND
	01/21/98	0.77	ND	ND	ND	ND	ND	ND
	04/17/98	ND	ND	ND	ND	ND	ND	ND
	07/14/98	1.3	ND	ND	ND	ND	ND	ND
	10/12/98	1.5	ND	ND	ND	ND	ND	ND
	01/19/99	0.71	ND	ND	ND	ND	ND	ND
	04/07/99[4]	1.0	ND	ND	ND	ND	ND	ND
	07/12/99	0.66	ND	ND	ND	ND	ND	ND
	10/25/99[7]	1.5[6]	ND	ND	ND	ND	ND	ND
	01/18/00[12]	ND[14]	ND[14]	ND[14]	ND[14]	ND[14]	ND[14]	ND[14]
MW-9	10/21/95	17	1.0	ND	ND	ND	ND	ND
	01/24/96	17	2.2	ND	ND	ND	ND	0.64
	04/23/96	71	ND	ND	ND	ND	ND	ND
	07/25/96	1.0	ND	ND	ND	ND	ND	ND
	10/25/96	80	ND	ND	ND	ND	ND	ND
	01/28/97	39	ND	ND	ND	ND	ND	ND
	04/16/97	0.51	ND	ND	ND	ND	ND	ND
	07/21/97	7.5	ND	ND	ND	ND	ND	ND
	10/20/97	47	ND	ND	ND	ND	ND	ND

Table 2

Groundwater Analytical Results

Former Unocal Service Station #2512

1300 Davis Street

San Leandro, California

Well ID	Date	PCE (ppb)	1,1-DCA (ppb)	1,1,1-TCA (ppb)	Chloro-methane (ppb)	1,1-DCE (ppb)	1,2-DCB (ppb)	TCE (ppb)
MW-9	01/21/98	22	0.73	ND	ND	ND	ND	0.50
(cont)	04/17/98	120	ND	ND	ND	ND	ND	ND
	07/14/98	110	ND	ND	ND	ND	ND	0.72
	10/12/98	46	ND	ND	ND	ND	ND	ND
	01/19/99	38	0.72	ND	ND	ND	ND	0.54
	04/07/99	41	ND	ND	ND	ND	ND	0.64
	07/12/99	26	ND	ND	ND	ND	ND	ND
	10/25/99[8]	23[6]	ND	ND	ND	ND	ND	ND
	01/18/00[13]	ND[14]	ND[14]	ND[14]	ND[14]	ND[14]	ND[14]	ND[14]

Table 2

Groundwater Analytical Results

Former Unocal Service Station #2512
1300 Davis Street
San Leandro, California

EXPLANATIONS:

Groundwater analytical results prior to January 21, 1998, were compiled from reports prepared by MPDS Services, Inc.

PCE = Tetrachloroethene
1,1-DCA = 1,1-Dichloroethane
1,1,1-TCA = 1,1,1-Trichlorethane
1,1-DCE = 1,1-Dichloroethene
1,2-DCB = 1,2-Dichlorobenzene

TCE = Trichloroethene
ppb = Parts per billion
-- = Not Analyzed
ND = Not Detected

[1] 1,2-Dichlorothane (1,2-DCA) was detected at a concentration of 4.8 ppb.
[2] Chloroform was detected at a concentration of 1.7 ppb.
[3] Chloroform was detected at a concentration of 0.68 ppb.
[4] Chloroform was detected at a concentration of 0.53 ppb.
[5] Laboratory report indicates Methylene chloride, which is a suspected laboratory contaminant, was detected at a concentration of 9.6 ppb.
[6] Laboratory report indicates reanalysis by an alternate column or method has confirmed the identification and/or concentration of this result.
[7] Laboratory report indicates Methylene chloride, which is a suspected laboratory contaminant, was detected at a concentration of 8.2 ppb.
[8] Laboratory report indicates Methylene chloride, which is a suspected laboratory contaminant, was detected at a concentration of 7.8 ppb.
[10] Bromodichloromethane was detected at a concentration of 3.79 ppb and Chloroform at 40.3 ppb.
[11] Bromodichloromethane was detected at a concentration of 4.78 ppb and Chloroform at 52.8 ppb.
[12] Chloroform was detected at a concentration of 52.9 ppb.
[13] Chloroform was detected at a concentration of 51.9 ppb.
[14] Detection limit raised. Refer to analytical reports.

All EPA Method 8010 constituents were ND, except as indicated.

Table 3

Groundwater Analytical Results - Oxygenate Compounds

Former Unocal Service Station #2512
1300 Davis Street
San Leandro, California

Well ID	Date	Ethanol (ppb)	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	EDB (ppb)	1,2-DCA (ppb)
MW-3	04/07/99	ND	ND	4.7	ND	ND	ND	ND	ND
MW-7	04/07/99	ND	ND	ND	ND	ND	ND	ND	ND
MW-8	04/07/99	ND	ND	ND	ND	ND	ND	ND	ND
MW-9	04/07/99	ND	ND	6.4	ND	ND	ND	ND	ND

EXPLANATIONS:

TBA = Tertiary Butyl Alcohol
MTBE = Methyl Tertiary Butyl Ether
DIPE = Di-isopropyl Ether
ETBE = Ethyl Tertiary Butyl Ether
TAME = Tertiary Amyl Methyl Ether
EDB = 1,2-Dibromoethane
1,2-DCA = 1,2-Dichloroethane
ppb = Parts per billion
ND = Not Detected

ANALYTICAL METHOD:

EPA Method 8260 for Oxygenate Compounds

KEI-P88-1204.R14
January 10, 1996

TABLE 6

SUMMARY OF LABORATORY ANALYSES
WATER

Sample Number	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes	TOG (mg/L)
			(Collected on January 3, 1989)				
EB1	ND	--	ND	3.5	ND	ND	--
EB2	--	ND	8.2	7.4	0.67	3.3	--
EB3	--	ND	ND	ND	ND	ND	--
EB4	--	ND	ND	ND	0.73	ND	--
EB5	--	340	ND	ND	0.63	ND	--
EB6	--	1,500	1.5	1.4	8.1	12	--
			(Collected on March 22 and 23, 1993)				
EB7*	320++	1,000♦	19	ND	6.8	ND	ND
EB8*+	120++	510♦♦	ND	ND	ND	ND	ND
EB9*+	480++	2,600	ND	5.1	8.3	8.8	ND
EB10	*ND	180♦♦	ND	ND	ND	ND	ND

* All EPA method 8010 constituents were non-detectable, except for tetrachloroethene, which was detected in samples EB9 and EB10 at concentrations of 12 µg/L and 250 µg/L, respectively. Trichloroethene was also detected in sample EB9 at a concentration of 0.63 µg/L.

\+ TPH as hydraulic fluid was non-detectable.

++ Sequoia Analytical Laboratory reported that the hydrocarbons detected appeared to be a diesel and non-diesel mixture.

♦ Sequoia Analytical Laboratory reported that the hydrocarbons detected appeared to be a gasoline and non-gasoline mixture.

♦♦ Sequoia Analytical Laboratory reported that the hydrocarbons detected did not appear to be gasoline.

ND = Non-detectable.

-- Indicates analysis was not performed.

Results are in micrograms per liter (µg/L), unless otherwise indicated.

KEI-P88-1204.R14
January 10, 1996

TABLE 9

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Sample	Depth to Water (feet)	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes	TOG (mg/L)
11/10/93	Water 1	16.5	410♦	1,500	67	10	33	45	7.4
11/19/93	Water 2	16.0	3,200♦	2,500	68	370	87	560	6.3
	Water 3	16.0	--	11,000	120	19	870	2,700	--

Sample	Cadmium*	Chromium*	Lead*	Nickel*	Zinc*	EPA Method 8270 Constituents	EPA Method 8010 Constituents
Water 1	ND	0.14	0.064	0.18	0.22	ND*	ND***
Water 2	ND	ND	ND	ND	0.035	ND**	ND

-- Indicates analysis was not performed.

ND = Non-detectable.

♦ Sequoia Analytical Laboratory reported that the hydrocarbons detected appeared to be a diesel and non-diesel mixture.

* EPA method 8270 constituents were all non-detectable, except for 2-methylnaphthalene and naphthalene, which were detected at concentrations of 16 µg/L and 22 µg/L, respectively.

** EPA Method 8270 constituents were all non-detectable, except for 2,4-dimethylphenol and naphthalene, which were detected at concentrations of 110 µg/L and 2.2 µg/L, respectively.

TABLE 9 (Continued)

SUMMARY OF LABORATORY ANALYSES
WATER

*** All EPA method 8010 constituents were non-detectable, except for 1,3-dichlorobenzene, 1,4-dichlorobenzene, 1,2-dichlorobenzene, 1,1-dichloroethane, 1,1-dichloroethene, tetrachloroethene, and 1,1,1-trichloroethane, which were detected at concentrations of 1.8 µg/L, 1.2 µg/L, 1.9 ppb, 24 µg/L 9.3 µg/L, 4.1 µg/L, and 24 µg/L, respectively.

* Results in milligrams per liter (mg/L), unless otherwise indicated.

Results are in micrograms per liter (µg/L), unless otherwise indicated.

BORING LOG

Project No. KEI-P88-1204	Boring & Casing Diameter 9" 2"	Logged By Doug Lee
Project Name Unocal Davis St./San Leandro	Well Head Elevation N/A	Date Drilled 4/17/89
Boring No. MW3	Drilling Method Hollow-stem Auger	Drilling Company EGI

Penetration blows/6"	G. W. level	Depth (ft) Samples	Stratigraphy USCS	Description
		0		Clayey sand, gravel: fill
5/8/11		5	CH	Clay, high plasticity, very dark grayish brown, firm, moist, with root holes, dark grayish brown below 8.5'.
6/7/9		10	MH	Clayey silt, some fine sand, high plasticity, dark grayish brown, firm, moist, with root holes.
9/17/14				
14/18/24	▼	15		Silty clay, trace fine sand, high plasticity, dark grayish brown, stiff, moist, with cemented root holes.
		20		Clay, grayish brown & gray, mottled, very stiff, moist, high plasticity.
			CH	
		25		Clay, 15% silt, high plasticity, dark yellowish brown and dark grayish brown, mottled, very stiff, slightly moist.
		30		Color change at 31' to black.
				TOTAL DEPTH 33'

ATTACH...

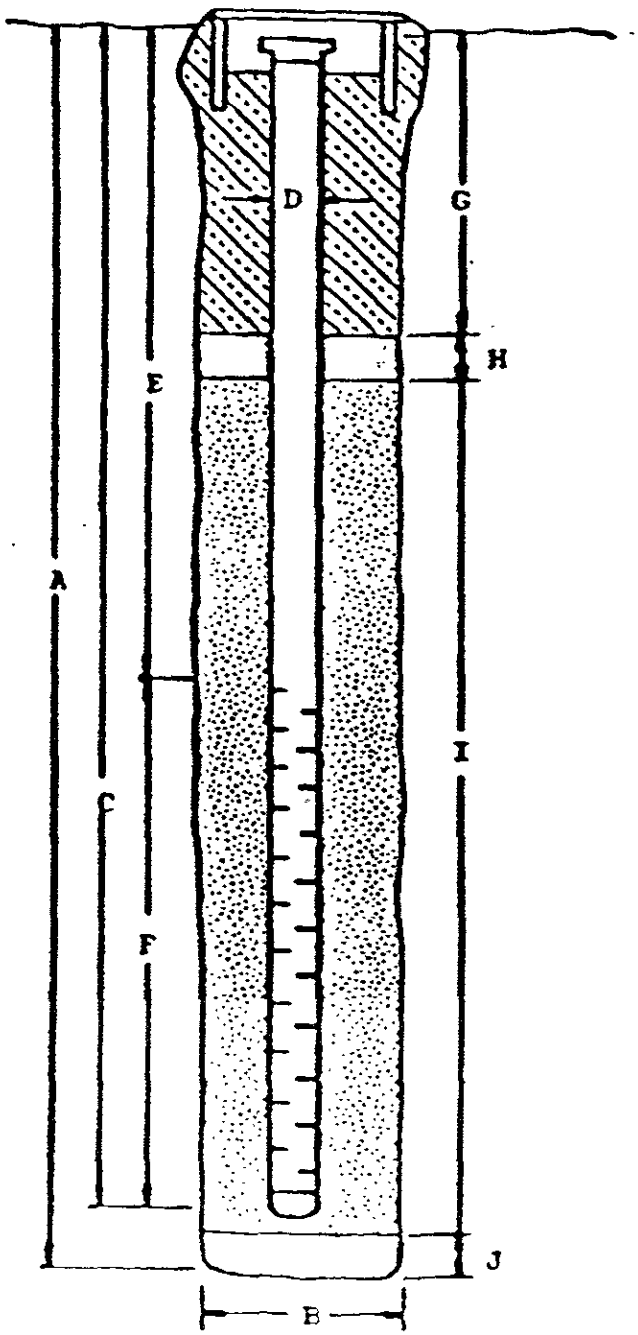
WELL COMPLETION DIAGRAM

PROJECT NAME: Unocal - Davis St. - San Leandro BORING/WELL NO. MW3

PROJECT NUMBER: KEI-P88-1204

WELL PERMIT NO.:

Flush-mounted Well Cover



A. Total Depth: 33'

B. Boring Diameter*: 9"

Drilling Method: Hollow Stem Auger

C. Casing Length: 33'

Material: Schedule 40 PVC

D. Casing Diameter: OD = 2.375"

ID = 2.067"

E. Depth to Perforations: 13'

F. Perforated Length: 20'

Perforation Type: Machined Slot

Perforation Size: 0.010"

G. Surface Seal: 9'

Seal Material: Concrete

H. Seal: 2'

Seal Material: Bentonite

I. Gravel Pack: 22'

Pack Material: RMC Lonestar Sand

Size: #3

J. Bottom Seal: None

Seal Material: N

*Boring diameter can vary from 8-1/4" to 9" depending on bit wear.

BORING LOG

Project No.	Boring & Casing Diameter	Logged By
KEI-P88-1204	8-1/4" 2"	D.L.
Project Name Unocal San Leandro, 1300 Davis Street	**Well Cover Elevation** 32.09' MSL	**Date Drilled** 2/11/92
Boring No. MW7	**Drilling Method** Hollow-stem Auger	**Drilling Company** EGI

Penetration blows/6"	G. W. level	Depth (feet) Samples	Strati-graphy USCS	Description
		0		Asphalt and concrete slab
				Silty clay with approximately 5-10% gravel, stiff, moist, very dark grayish brown; fill.
			CH	
5/7/11		5		Clay, estimated at 5 to 10% silt and sand, stiff to very stiff, moist, very dark gray to black.
			ML	Sandy silt, estimated at 5 to 10% clay, sand is fine- to medium-grained, stiff, moist, olive brown.
4/5/10		10	CH	Clay with silt, trace sand, very stiff, moist, very dark grayish brown with root holes, trace organic matter.
			SC	Clayey sand, estimated at 15 to 30% variable clay content, sand is fine- to coarse-grained, medium dense, moist, olive brown , with iron oxide staining.
4/6/9		15		
				Silty clay, trace to an estimated 10% variable sand content, stiff to very stiff, moist to wet, olive brown, with root holes, trace organic matter.
4/4/7	▽		CL	
		20		Silty clay, trace sand, stiff, moist, wet in voids, dark grayish brown, with root holes, fibrous cemented nodules common below 20 feet.
6/6/8				

BORING LOG

Project No. KEI-P88=1204	**Boring & Casing Diameter** 8-1/4" 2"	**Logged By** D.L.
Project Name San Leandro, Davis	**Well Cover Elevation** 32.09' MSL	**Date Drilled** 2/11/92
Boring No. MW7	**Drilling Method** Hollow-stem Auger	**Drilling Company** EGI

Penetration blows/6"	G. W. level	Depth (feet) Samples	Strati-graphy USCS	Description
11/13/9		25	CL	Silty clay, estimated at 30 to 45% variable silt content, stiff to very stiff, moist, wet in voids, olive brown with iron oxide staining.
7/8/10		30		
				TOTAL DEPTH: 30'
		35		
		40		

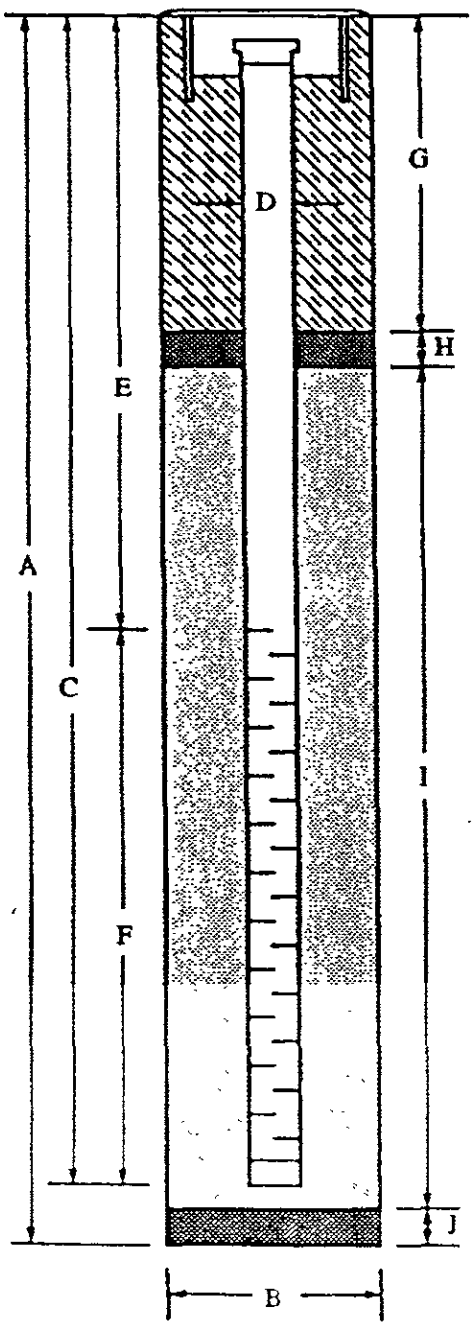
WELL COMPLETION DIAGRAM

PROJECT NAME: Unocal - San Leandro, Davis Street WELL NO. MW7

PROJECT NUMBER: KEI-P88-1204

WELL PERMIT NO.: ACFD&WCD #91476

Flush-mounted Well Cover



A. Total Depth : 30'

B. Boring Diameter: 8-1/4"

Drilling Method: Hollow Stem Auger

C. Casing Length: 30'

Material: Schedule 40 PVC

D. Casing Diameter: OD = 2.375"

ID = 2.067"

E. Depth to Perforations: 10'

F. Perforated Length: 20'

Perforation Type: Machined Slot

Perforation Size: 0.010"

G. Surface Seal: 6'

Seal Material: Cement/sand slurry

H. Seal: 2'

Seal Material: Bentonite

I. Filter Pack: 22'

Pack Material: RMC Lonestar Sand

Size: #2/12

J Bottom Seal: none

Seal Material: N/A

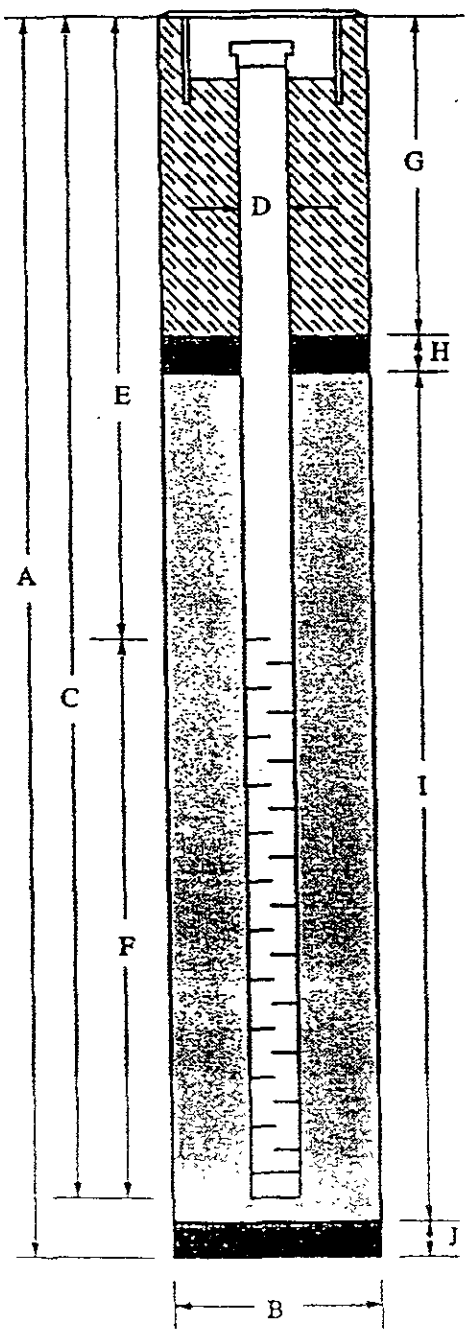
WELL CONSTRUCTION DIAGRAM

PROJECT NAME: Unocal S/S #2512, 1300 Davis Street, San Leandro **WELL NO.:** MW8

PROJECT NUMBER: KEI-P88-1204.P10

WELL PERMIT NO.: ACFC & WCD #95591

Flush-mounted Well Cover



A. Total Depth : 30'

B. Boring Diameter: 8.5"

Drilling Method: Hollow Stem Auger

C. Casing Length: 30'

Material: Schedule 40 PVC

D. Casing Diameter: OD = 2.375"

ID = 2.067"

E. Depth to Perforations: 10'

F. Perforated Length: 20'

Perforation Type: Machine Slotted

Perforation Size: 0.010"

G. Surface Seal: 6'

Seal Material: Neat Cement

H. Seal: 2'

Seal Material: Bentonite

I. Filter Pack: 22'

Pack Material: RMC Lonestar Sand

Size: #2/12

J. Bottom Seal: None

Seal Material: N/A

BORING LOG

Project No. KEI-P 88-1204.P10	**Boring Diameter** 8.5"	**Logged By** JGG
	Casing Diameter 2"	**D.L.** EG 1633
Project Name Unocal S/S #2512	**Well Cover Elevation**	**Date Drilled**
1300 Davis Street, San Leandro	N/A	9/26/95
Boring No. MW8	**Drilling Method** Hollow-stem Auger	**Drilling Company** Woodward drilling

Pene-tration blows/6"	G.W level	O.V.M. (P.P.M.)	Depth (feet) Samples	Stratigraphy USCS	Description
			0		Concrete slab over sand and gravel base.
				MH	Clayey silt, estimated at 35-45% clay, stiff, moist, dark gray to very dark gray, with iron oxide staining.
5/6/9			5	CH	Silty clay, moderate to high plasticity, very stiff, moist, very dark gray.
				ML	Silt, estimated at 10-15% clay, trace fine-grained sand, stiff, moist, olive brown.
6/7/11			10	CH	Silty clay, stiff to very stiff, moist, very dark grayish brown and black, mottled, with occasional caliche nodules.
				MH	Clayey silt, estimated at 30-35% clay, trace fine-grained sand, stiff, moist to very moist, olive brown and olive, mottled.
6/7/12			15	CH	Clay, high plasticity, trace silt, very stiff, moist, olive and olive brown, mottled.
				ML	Clayey silt, estimated at 5-10% fine to coarse-grained sand, trace gravel to 3/16 inch in diameter, stiff, moist, wet in voids, olive brown.
5/7/8	▽		20	CH	Clay, high plasticity, stiff, moist, olive brown and dark yellowish brown, mottled.

BORING LOG

Project No. KEI-P 88-1204.P10	**Boring Diameter** 8.5"	**Logged By** JGC
	Casing Diameter 2"	**D.L.** EC 1633
Project Name Unocal S/S #2512	**Well Cover Elevation**	**Date Drilled**
1300 Davis Street, San Leandro	N/A	9/26/95
Boring No. MW8	**Drilling Method** Hollow-stem Auger	**Drilling Company** Woodward drilling

Pene-tration blows/6"	G.W. level	O.V.M. (P.P.M.)	Depth (feet) Samples	Stratigraphy USCS	Description
				CH	Clay, high plasticity, stiff, moist, olive brown and dark yellowish brown, mottled.
					Clayey silt, estimated at 30% clay, and 5-10% fine to medium-grained sand, stiff, very moist, olive brown.
5/6/8			25	ML	Silt, estimated at 15-30% clay, and 10-15% sand, trace gravel to 1/2 inch in diameter, stiff, very moist to wet, olive brown.
4/6/8			30		Clayey silt, estimated at 30-40% clay, stiff, moist, olive brown.
					TOTAL DEPTH: 30'
			35		
			40		

BORING LOG

Project No. KEI-P 88-1204.P10	**Boring Diameter** 8.5"	**Logged By** JG6 D.L. LEG 1633
	Casing Diameter 2"	
Project Name Unocal S/S #2512 1300 Davis Street, San Leandro	**Well Cover Elevation** N/A	**Date Drilled** 9/26/95
Boring No. MW9	**Drilling Method** Hollow-stem Auger	**Drilling Company** Woodward drilling

Pene-tration blows/6"	G.W level	O.V.M. (P.P.M.)	Depth (feet) Samples	Stratigraphy USCS	Description
			0		Concrete slab over sand and gravel base.
				MH	Clayey silt, stiff, moist, very dark grayish brown, disturbed.
4/6/8			5	CH	Silty clay, high plasticity, stiff, moist, very dark grayish brown and black, mottled, with root holes.
5/8/11			10		Silty clay, as above.
5/7/10			15	CH/ MH	Clay estimated at 15-25% silt, stiff to vary stiff, moist, olive and olive brown, mottled, lensed with clayey silt, stiff, moist, olive brown.
5/8/12					
5/8/11	▽		20	CL	Silty clay, estimated at 35-45% silt, trace sand, stiff to vary stiff, moist, wet in voids, olive and olive brown, mottled, with iron oxide staining.

BORING LOG

Project No. KEI-P 88-1204.P10	**Boring Diameter** 8.5"	**Logged By** TGG
	Casing Diameter 2"	D.L. CEG 1633
Project Name Unocal S/S #2512 1300 Davis Street, San Leandro	**Well Cover Elevation** N/A	**Date Drilled** 9/26/95
Boring No. MW9	**Drilling Method** Hollow-stem Auger	**Drilling Company** Woodward drilling

Penetration blows/6"	G.W. level	O.V.M. (P.P.M.)	Depth (feet) Samples	Stratigraphy USCS	Description
				CH	Silty clay, estimated at 35-45% silt, trace sand, stiff to vary stiff, moist, wet in voids, olive and olive brown, mottled, with iron oxide staining.
				MH	Clayey silt, trace fine to coarse-grained sand, stiff, very moist, olive brown.
4/5/7			25		
				CH	Clay, high plasticity, estimated at 10-15% silt, stiff, moist, olive and olive brown, mottled.
6/10/14			30		Silty clay, stiff to very stiff, moist, olive brown, with iron oxide staining.
					TOTAL DEPTH: 30'
			35		
			40		

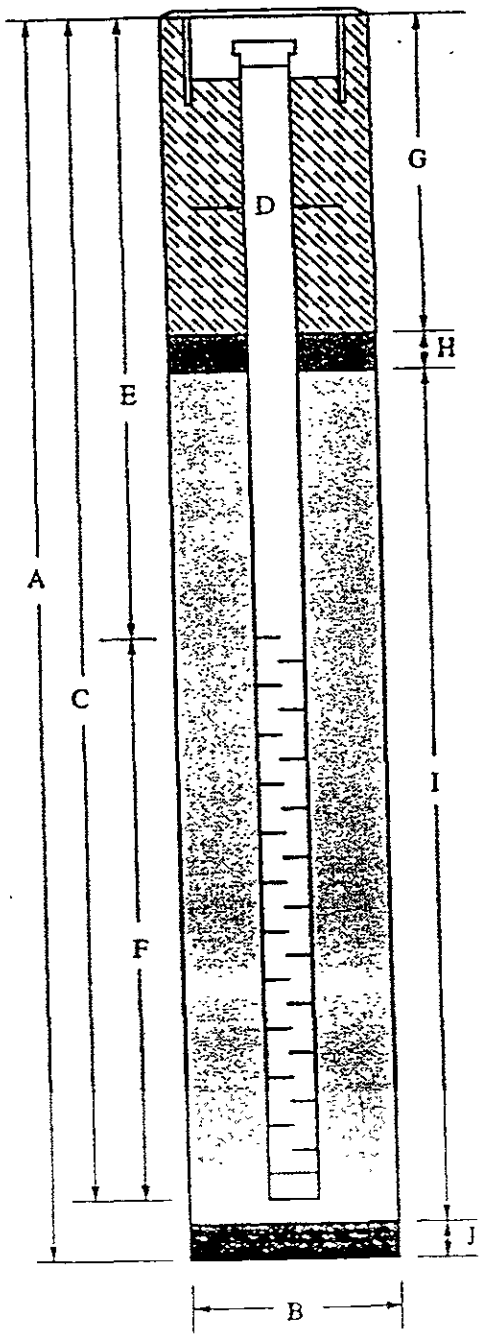
WELL CONSTRUCTION DIAGRAM

PROJECT NAME: Unocal S/S #2512, 1300 Davis Street, San Leandro **WELL NO.:** MW9

PROJECT NUMBER: KEI-P88-1204.P10

WELL PERMIT NO.: ACFC & WCD #95591

Flush-mounted Well Cover



A. Total Depth : 30'

B. Boring Diameter: 8.5"

Drilling Method: Hollow Stem Auger

C. Casing Length: 30'

Material: Schedule 40 PVC

D. Casing Diameter: OD = 2.375"

ID = 2.067"

E. Depth to Perforations: 10'

F. Perforated Length: 20'

Perforation Type: Machine Slotted

Perforation Size: 0.010"

G. Surface Seal: 6'

Seal Material: Neat Cement

H. Seal: 2'

Seal Material: Bentonite

I. Filter Pack: 22'

Pack Material: RMC Lonestar Sand

Size: #2/12

J. Bottom Seal: None

Seal Material: N/A

GETTLER-RYAN INC.

RISK MANAGEMENT PLAN

Former Unocal Service Station #2512
1300 Davis Street
San Leandro, California

GR Report No. 240004.02-1

Prepared for:

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Unocal Corporation
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Prepared by:

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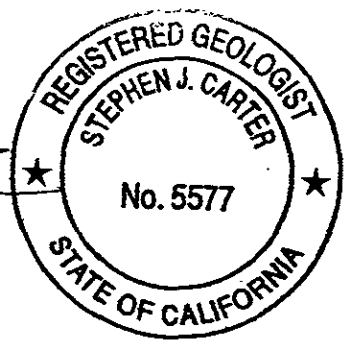

Stephen J. Carter
Senior Geologist
R.G. 5577

Greg A. Gurss
Sr. Project Manager

June 28, 2001

ATTACHMENT 7

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APPENDIXES

1.0 INTRODUCTION

Gettler-Ryan Inc. prepared this Risk Management Plan (RMP) at the request of Unocal Corporation. The subject site was formerly operated as Unocal Service Station #2512, located at 1300 Davis Street, San Leandro, California. An environmental investigation identified petroleum hydrocarbons in the soil and groundwater beneath the site, which were successfully remediated to acceptable levels. With the submittal of this RMP, the environmental investigation at this site will be closed by Alameda County Health Care Services Agency.

As part of the environmental investigation, Unocal requested a corrective action evaluation be performed for the site. The evaluation was completed by Geraghty & Miller (G&M), and concluded that maximum detected soil concentrations at the site are health-protective, and that future remediaton or control measures were not necessary. The exposure scenarios considered in this risk assessment included both adult and child residents and excavation workers. These conclusions are presented in a document titled *Site-Specific Health Risk Assessment for Former Unocal Service Station Facility #2512, San Leandro, California* (dated October 18, 1994). A copy of this document is included in Appendix A.

There is always some level of uncertainty in subsurface environmental investigations. Although highly unlikely, it is possible that the environmental investigation failed to identify some areas of impacted soil, and that future development of the site might encounter this impact. This document provides a Risk Management Plan (RMP) for the site **in the event soil or groundwater are encountered during construction activities that exhibit obvious evidence of petroleum hydrocarbons, such as strong gasoline or oil odors, or obvious staining of the soil.** In Section 2, the compounds of concern (COCs), risk, and sources of risk are summarized. In Section 3, risk management measures are developed. The RBCA evaluation that serves as a basis for this work is given in Appendix A, and figures showing the site location and relevant site features are provided in Appendix B.

2.0 RISK SUMMARY

2.1 Data

All aboveground and underground facilities have been removed. Delineation of soil and groundwater impact is complete. Impacted soil was excavated and removed. Dissolved fuel hydrocarbon concentrations have decreased to non-detectable levels. Fuel hydrocarbon impact at the site appears to pose very little risk to human health or the environment. Based on this lack of risk, the fuel hydrocarbon case at this site has been closed by ACHCSA.

A summary of the previous environmental investigations at this site was summarized by G&M in their *Site-Specific Health Risk Assessment*. Tables containing chemical analytical data from soil and grab groundwater samples collected during these investigations, copies of the most recent groundwater sampling events and the Site Closure Summary, and figures showing the hydrocarbon-affected areas are provided in Appendix B. Observations regarding the data are listed below.

- The highest hydrocarbon concentrations detected in soil samples were 270 parts per million (ppm) of Total Petroleum Hydrocarbons as gasoline (TPHg), 210 ppm of TPH as diesel (TPHd), 7,200 ppm of Oil and Grease (TOG), and 0.72 ppm of benzene. These samples

were collected in the vicinity of the former underground storage tanks (USTs) and dispenser islands, which have been removed.

- The vertical and lateral extent of hydrocarbons in unsaturated soil has been well defined by soil samples collected at the furthest extent of the excavations, and by the soil borings drilled around the former UST pit and across the site. Therefore, hydrocarbon impact to soil has been adequately delineated.

- Groundwater fluctuates from approximately 10 to 19 feet below ground surface (bgs). Impacted soil remains in the soil outside the zone of groundwater fluctuation (0 to 10 feet bgs), but only at very low concentrations. TPHg concentrations up to 6.8 ppm, benzene concentrations up to 0.013 ppm, and TPHd concentrations up to 5.0 ppm have been detected in soil samples collected at approximately 5 or 10 feet bgs. While natural processes have undoubtedly reduced these concentrations, some level of hydrocarbons likely remain in these areas.

- Groundwater was gauged and analyzed quarterly from November 1993 to January 2000. Groundwater has been observed to flow toward the west-southwest and toward the northeast. TPHg, TPHd, benzene, methyl tert butyl ether (MtBE), and tetrachloroethene (PCE) have been detected in site wells in steadily decreasing concentrations over this time, indicating a stable and decreasing plume. During the most recent monitoring and sampling event conducted January 18, 2000, TPHg, TPHd, benzene, or PCE were not detected in the groundwater beneath the site. MtBE was detected at a concentration of 135 parts per billion by EPA Method 8020 (not confirmed by EPA Method 8260).

- In June 1996, Pacific Environmental Group conducted a survey of water wells immediately southwest of the site. A total of five wells were identified within ¼ mile of the site. The nearest well northeast of the site is an industrial supply well at 1052 Davis Street, approximately 600 feet from the site. The nearest water supply well to the west-southwest is an irrigation well located at 1309 Kelly Avenue, approximately 500 feet west-southwest of the site.

- During the most recent sampling event, monitoring wells MW-8 and MW-9, situated on the eastern boundary of the Unocal site, do not contain detectable concentrations of petroleum hydrocarbons. Monitoring wells MW-3 (southwest corner of the site) and MW-7 (65 feet southwest of the site) did not contain TPHg, TPHd or benzene during the most recent sampling event. These wells contained 135 ppb and 6.10 ppb of MtBE, respectively, by EPA Method 8020. The presence of MtBE in these wells was not confirmed by EPA Method 8260.

- Groundwater beneath the site and in the site vicinity have been impacted by solvents leaking from dry cleaners and manufacturing facilities in the area. Groundwater samples collected

from monitoring wells at the former Unocal site have contained the chlorinated solvents PCE, trichlorethene, 1,1-dicholorethane, 1,1,1-trichloroethane, 1,1-dichloroethene, and 1,2-dichlorobenzene. Chlorinated solvents were not detected in groundwater samples during the most recent monitoring and sampling event.

- During a special sampling event conducted May 31, 2001, a well at a former dry cleaning facility situated approximately 110 feet west-southwest of the former Unocal site (well MW-DC) did not contain any detectable concentrations of petroleum hydrocarbons.

2.2 Risk Summary

Risks at the site were evaluated by G&M in their *Site-Specific Health Risk Assessment* (Appendix A). Per agreement with ACHCSA, this risk assessment considered only impacted soil. Groundwater beneath the site was also impacted. While the concentrations of dissolved fuel hydrocarbons in the groundwater has decreased to non-detectable concentrations, groundwater in the vicinity of the site remains impacted by chlorinated hydrocarbon solvents emanating from off-site sources unrelated to the former Unocal station. Risks identified by G&H's evaluation include:

- The *Risk Assessment* performed by G&M indicates that TPHg, TPHd and BTEX compounds in soil beneath the site do not pose a significant risk to occupants of an on-site building. This *Risk Assessment* is based on a conservative residential use scenario. Per agreement between Unocal and Alameda County Health Care Services Agency (ACHCSA), risks associated with impacted groundwater beneath the site were not included in G&M*'s Risk Assessment*.

- Complete exposure pathways identified by the *Risk Assessment* include: vapor intrusion into indoor air; incidental ingestion, dermal contact, and inhalation of contaminant-laden dust; and exposure of excavation workers to incidental ingestion, dermal contact, and inhalation of contaminant-laden dust.

- G&M's *Risk Assessment* concluded that "...detected soil concentrations at the site are health-protective assuming exposure under hypothetical exposure scenarios. Therefore, future remediation or control measures are not necessary to protect human health."

- G&M's *Risk Assessment* concluded that "Exposure of environmental receptors to site-related constituents is not likely to occur for several reasons."

As discussed above, the maximum soil concentrations identified at the site are protective of human health, both for future residents of the property and workers engaged in construction activities at the property. And as mentioned above, it is possible (although unlikely) that construction activities might encounter pockets of soil impacted at concentrations above the health-based goals calculated in G&H's *Risk Assessment*.

Possible scenarios where previously unidentified hydrocarbon might be encountered at concentrations above the health-based goals are discussed below.

- Construction workers engaged in subsurface piping or foundation excavation at the site could be exposed to hydrocarbon-impacted soil if excavating in unexplored portions of the site.

- Construction workers engaged in subsurface piping or foundation excavation could be exposed to impacted groundwater. Chlorinated hydrocarbon solvents are known to be present in groundwater in the site vicinity.

- Construction dewatering could take place at or near the site. Untreated groundwater could be inadvertently discharged to the street or storm drain.

- A groundwater extraction well could be installed for the purpose of providing an irrigation supply. Residents at the site could be exposed to untreated groundwater, or the irrigation well could act as a conduit to a deeper groundwater supplies;

- Impacted soil excavated from the site as a result of construction activities could be used as fill for landscaping;

- If previously unidentified pockets of highly impacted soil are intersected by excavations, atmospheric conditions, such as pressure and temperature, could create a situation where vapor phase hydrocarbons accumulate at the bottom of a trench or excavation. Workers might then be exposed to vapor phase hydrocarbons, or the mixture of air and vapor phase hydrocarbons could reach the lower explosive limit, and an ignition source could cause a fire or explosion.

3.0 RISK MANAGEMENT

It appears highly unlikely exposure risks identified in Section 2 above will be realized at this site. It is unlikely that petroleum hydrocarbons will be encountered during construction activities at concentrations exceeding the identified health-based goals. All areas of known petroleum usage (USTs, lifts, piping) were investigated and remediated. Soil borings drilled outside these areas did not encounter any hydrocarbon impact. The risk of either resident or construction worker being exposed to hydrocarbon concentrations that exceed the health-based goals identified in G&H's *Risk Assessment* appears very low.

In the unlikely event that construction activities encounter soil is encountered that exhibits a strong odor of gasoline or other petroleum product, has free-flowing oil or other petroleum-like substance, or is obviously stained or discolored relative to surrounding soil, work on that portion of the project should be halted immediately. Unocal should be contacted immediately (916.714.3204). Unocal will dispatch appropriately trained personnel to evaluate the situation and collect samples as appropriate. Unocal will also notify the

appropriate regulatory agency. If petroleum hydrocarbons are present at concentrations that exceed the established health-based goals, Unocal will arrange for appropriate remedial measures to be implemented.

Historical monitoring data indicate that groundwater is not likely to be encountered during routine residential construction activities (foundation trenching, utility trenching). Construction dewatering will probably not be required. Water service is available from a public utility, so a well for either domestic supply or irrigation is not necessary. Because of these facts the risk of resident or construction worker to impacted groundwater appears very low. However, if it becomes necessary to pump groundwater at this site (construction dewatering, for example), Unocal should be contacted prior to initiating any pumping activities. Unocal will contact the appropriate regulatory agency, will assist in obtaining the necessary permits, and will provide assistance with any required remedial equipment or personnel required.

4.0 LIMITATIONS

Evaluations of the subsurface conditions at the site that serve as a basis for this RMP are inherently limited due to the limited number of observation points. There may be variations in subsurface conditions in areas away from the sample points. There are no representations, warranties, or guarantees that the points selected for sampling are representative of the entire site. The recommendations provided herein reflect the sample conditions at specific locations at a specific point in time. No other interpretations, representations, warranties, guarantees, express or implied, are included or intended in this RMP. Additional work, including further subsurface investigation, might reduce the inherent uncertainties associated with this RMP.