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

June 28, 2007

Shelby Lathrop
ConocoPhillips
76 Broadway
Sacramento, CA 95818

Keith Marks
Suncor Holdings COP II LLC
11601 Wilshire Blvd. #700
Los Angeles, CA 90025

Asghar Kholdi
1319 Winding Stream Drive
Livermore, CA 94551-8935

Subject: Fuel Leak Case No. RO0000258 and Geotracker Global ID T0600101477, Unocal #6034, 4700 First Street, Livermore, CA 94550

Dear Ms. Lathrop, Mr. Kholdi, and Mr. Marks:

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:

- Residual total petroleum hydrocarbons as gasoline remain in soil at concentrations up to 790 ppm.
- Total petroleum hydrocarbons as gasoline remain in shallow groundwater at concentrations up to 140 ppb.

If you have any questions, please call Jerry Wickham at (510) 567-6791. Thank you.

Sincerely,

Donna L. Drogos, P.E.
LOP and Toxics Program Manager

Enclosures:
1. Remedial Action Completion Certificate
2. Case Closure Summary

cc:

Ms. Cherie McCaulou (w/enc)
SF- Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

Mr. Toru Okamoto (w/enc)
State Water Resources Control Board
UST Cleanup Fund
P.O. Box 944212
Sacramento, CA 94244-2120

Ms. Danielle Stefani (w/enc)
Livermore-Pleasanton Fire Department
3560 Nevada Street
Pleasanton, CA 94566

Ms. Colleen Winey, QIC 80201 (w/enc)
Zone 7 Water Agency
100 North Canyons Parkway
Livermore, CA 94551

City of Livermore Planning Department (w/enc)
1052 South Livermore Avenue
Livermore, CA 94550

Mr. Dennis Detloff (w/enc)
Delta Environmental Consultants, Inc.
3164 Gold Camp Drive, Suite 200
Rancho Cordova, CA 95670

Jerry Wickham (w/orig enc), D. Drogos (w/enc), File (w/enc)

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REMEDIAL ACTION COMPLETION CERTIFICATE

Dear Ms. Lathrop, Mr. Kholdi, and Mr. Marks:

Subject: Fuel Leak Case No. RO0000258 and Geotracker Global ID T0600101477, Unocal #6034, 4700 First Street, Livermore, CA 94550

This letter confirms the completion of a site investigation and remedial action for the underground storage tanks 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,

William W. Ritchen
Ariu Levi
Director
Alameda County Environmental Health

CASE CLOSURE SUMMARY
LEAKING UNDERGROUND FUEL STORAGE TANK - LOCAL OVERSIGHT PROGRAM

I. AGENCY INFORMATION

Date: October 18, 2006

Agency Name: Alameda County Environmental Health	Address: 1131 Harbor Bay Parkway
City/State/Zip: Alameda, CA 94502-6577	Phone: (510) 567-6791
Responsible Staff Person: Jerry Wickham	Title: Hazardous Materials Specialist

II. CASE INFORMATION

Site Facility Name: Unocal #6034		
Site Facility Address: 4700 First Street, Livermore, CA 94550		
RB Case No.: 01-1602	Local Case No.:	LOP Case No.: RO0000258
URF Filing Date: 8/28/1989	Geotracker ID: T0600101477	APN: 99-21-11-3

Responsible Parties	Addresses	Phone Numbers
Shelby Lathrop, ConocoPhillips	78 Broadway, Sacramento, CA 95818	916-558-7609
Asghar Kholdi		
Suncor		

Tank I.D. No	Size in Gallons	Contents	Closed In Place/Removed?	Date
1	12,000 gallons	Gasoline	Removed	08/02/1989
2	12,000 gallons	Gasoline	Removed	08/02/1989
3	550 gallons	Waste Oil	Removed	08/02/1989
Piping			Removed	08/07/1989

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and Type of Release: Unknown. No holes, cracks, or other signs of failure were observed in the tanks during removal.	
Site characterization complete? Yes	Date Approved By Oversight Agency: -----

Monitoring wells installed? Yes	Number: 7	Proper screened interval? Yes
Highest GW Depth Below Ground Surface: 12.75 feet bgs	Lowest Depth: 17.5 feet bgs	Flow Direction: Northwest
Most Sensitive Current Use: Drinking water source.		

Summary of Production Wells in Vicinity: The nearest well is a PG&E well located approximately 1,688 feet (upgradient) east of the site and is not a receptor due its upgradient location. Three domestic water supply wells are located approximately 1,875 to 2,000 west of the site. Total depth of the wells ranges from 192 to 335 feet. These water supply wells extract water from lower water–bearing zones than the zone of shallow groundwater contamination at the site and do not appear to be receptors for the site. Based on review of subsurface information from the three wells and the site, the potential for downward migration of fuel hydrocarbons from the site to the lower water-bearing zones appears to be low.

Are drinking water wells affected? No	Aquifer Name: Northwest boundary of Mocho I Subbasin of Livermore-Amador Groundwater Basin
Is surface water affected? No	Nearest SW Name: Drainage channel for Arroyo Seco is approximately 50 feet west of the site
Off-Site Beneficial Use Impacts (Addresses/Locations): None	
Reports on file? Yes	Where are reports filed? Alameda County Environmental Health and Livermore Pleasanton Fire Department

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL

Material	Amount (Include Units)	Action (Treatment or Disposal w/Destination)	Date
Tank	1 – 12,000 gallon tank 1 – 550-gallon tank	Levin Metals, 600 South 4th Street, Richmond, CA	08/02/1989
Piping	Not reported	Levin Metals, 600 South 4th Street, Richmond, CA	08/02/1989
Free Product	None	--	--
Soil	350 cubic yards	Soil reported as disposed at a Class III landfill (landfill not identified).	08/1989
Groundwater	1,000 gallons	Not reported	08/07/1989

MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS BEFORE AND AFTER CLEANUP
(Please see Attachments 1 through 6 for additional information on contaminant locations and concentrations)

Contaminant	Soil (ppm)		Water (ppb)	
	Before	After	Before	After
TPH (Gas)	790	790	53,000(1)	140(1)
TPH (Diesel)	NA	NA	400	400
Oil and Grease	350	<30	<5	<5
Benzene	1.7	0.14	540(1)	<0.5(1)
Toluene	45	0.23	1,100(2)	<0.5(2)
Ethylbenzene	16	2.7	3,000(2)	2.1(2)
Xylenes	86	10	22,000(1)	4.5(1)
Lead	7.1(3)	7.1(3)	210(3)	210(3)
MTBE	<0.064(4)	<0.064(4)	9,600(5)	<0.5(5)
Other (8240/8270)	<0.25(6)	<0.25(6)	0.55(7)	<0.55(7)

(1) Analytical results before cleanup are from groundwater samples collected in 1989; analytical results after cleanup are from groundwater samples collected on July 19, 2006.
(2) Analytical results before cleanup are from groundwater samples collected in 1992; analytical results after cleanup are from groundwater samples collected on July 19, 2006.
(3) Lead only; no other metals analyses performed.
(4) MTBE = 0.064 ppm; TBA = 0.027 ppm; ETBE, TAME, EDB, and EDC <0.005 ppm; ethanol <0.1 ppm in soil.
(5) Analytical results for MTBE before cleanup are from a groundwater sample collected on 10/16/1996; analytical results for MTBE after cleanup are from groundwater samples collected on July 19, 2006; DIPE = 2.2 ppb; TBA <10 ppb; ETBE, TAME, EDB, and EDC <2 ppb; ethanol <250 ppb in groundwater.
(6) VOCs and SVOCs not detected in soil.
(7) Trichloroethene was detected at a concentration of 0.55 ppb in a groundwater sample collected on November 18, 1989 from well MW-1. No other VOCs or SVOCs were detected.

Site History and Description of Corrective Actions:

The site is currently an active service station. Surrounding land use in the area is commercial. Two 12,000-gallon unleaded gasoline USTs and one 550-gallon waste oil UST were removed from the site on August 2, 1989. No apparent holes or cracks were observed in the tanks during removal. Fuel hydrocarbons were detected in soil samples collected from the tank pits. Soil in the waste oil tank pit was overexcavated to a depth of 15 feet bgs. Soil in the fuel tank pit was overexcavated to a depth of approximately 17.5 feet bgs. A total of approximately 350 cubic yards of soil was reported disposed off-site.

Four monitoring wells were installed at the site on October 25 and 26, 1989. The wells were completed to a total depth of approximately 26 to 28.5 feet bgs. Three additional monitoring wells (MW-5 through MW-7) were installed on April 2, 1991. The monitoring wells have been sampled quarterly subsequent to well installation; however, well MW-6, which is downgradient from the UST tank pit has frequently had obstructions or been dry. The highest concentrations of dissolved fuel constituents have historically been detected in well MW-2, which is located immediately adjacent to the UST tank pit. Fuel hydrocarbons have also been detected historically in well MW-4, which is located near the southeastern corner of the property in an upgradient location. A Chevron service station (leaking fuel case RO477) is upgradient from the site and is the likely source of the dissolved fuel hydrocarbons detected in well MW-4. During the most recent groundwater sampling event on July 19, 2006, TPHg was detected only in wells MW-2 and MW-5 at concentrations of 60 and 140 ppb, respectively. MTBE and benzene were not detected in any wells during the July 19, 2006 sampling event.

In order to assess the downgradient extent of fuel hydrocarbons from the UST tank pit and the vertical extent of contamination, a cone penetrometer boring was advanced to a depth of 63 feet bgs at a location approximately 35 feet northwest of the tank pit (SB-6). Soil samples were collected and analyzed from depths of 5 to 56 feet bgs. Gravelly subsurface units at depths of 18 and 62 feet bgs were identified for depth-discrete groundwater sampling. The groundwater sample collected at a depth of 18 feet bgs contained 77 ppb of TPHg; benzene, MTBE, and other fuel oxygenates were not detected, and toluene, ethylbenzene, and xylenes were detected at concentrations less than 2.5 ppb. The groundwater sample collected at 62 feet bgs did not contain detectable concentrations of TPHg, BTEX, MTBE, or fuel oxygenates.

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? ---		
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? ---		
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, based upon the information available in our files to date, it does not appear that the release would present a risk to human health based upon current land use and conditions.		
Site Management Requirements: None		
Should corrective action be reviewed if land use changes? Yes		
Was a deed restriction or deed notification filed? No		Date Recorded: --
Monitoring Wells Decommissioned: No	Number Decommissioned: 0	Number Retained: 7
List Enforcement Actions Taken: None		
List Enforcement Actions Rescinded: --		

V. ADDITIONAL COMMENTS, DATA, ETC.

Considerations and/or Variances:

The soil sample collected beneath the waste oil tank in August 1989 was analyzed for total oil and grease, TPH as diesel, BTEX, VOCs, and SVOCs but was not analyzed for metals. TPH as diesel was the only analyte detected in the soil sample at a concentration of 1.4 ppm. Since the analytical results indicate low to not detectable levels of residual contamination beneath the waste oil tank, the lack of metals analyses is an acceptable variance.

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 based upon the information available in our files to date. No further investigation or cleanup is necessary. ACEH staff recommend case closure for this site.

VI. LOCAL AGENCY REPRESENTATIVE DATA

Prepared by: Jerry Wickham	Title: Hazardous Materials Specialist
Signature: Jerry Wickham	Date: 10/18/06
Approved by: Donna L. Drogos, P.E.	Title: Supervising Hazardous Materials Specialist
Signature:	Date: 10/18/06

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: Cherie McCaulou	Title: Engineering Geologist
RB Response: Concur, based solely upon information contained in this case closure summary.	Date Submitted to RB:
Signature: Cherie McCaulou	Date: 10/25/06

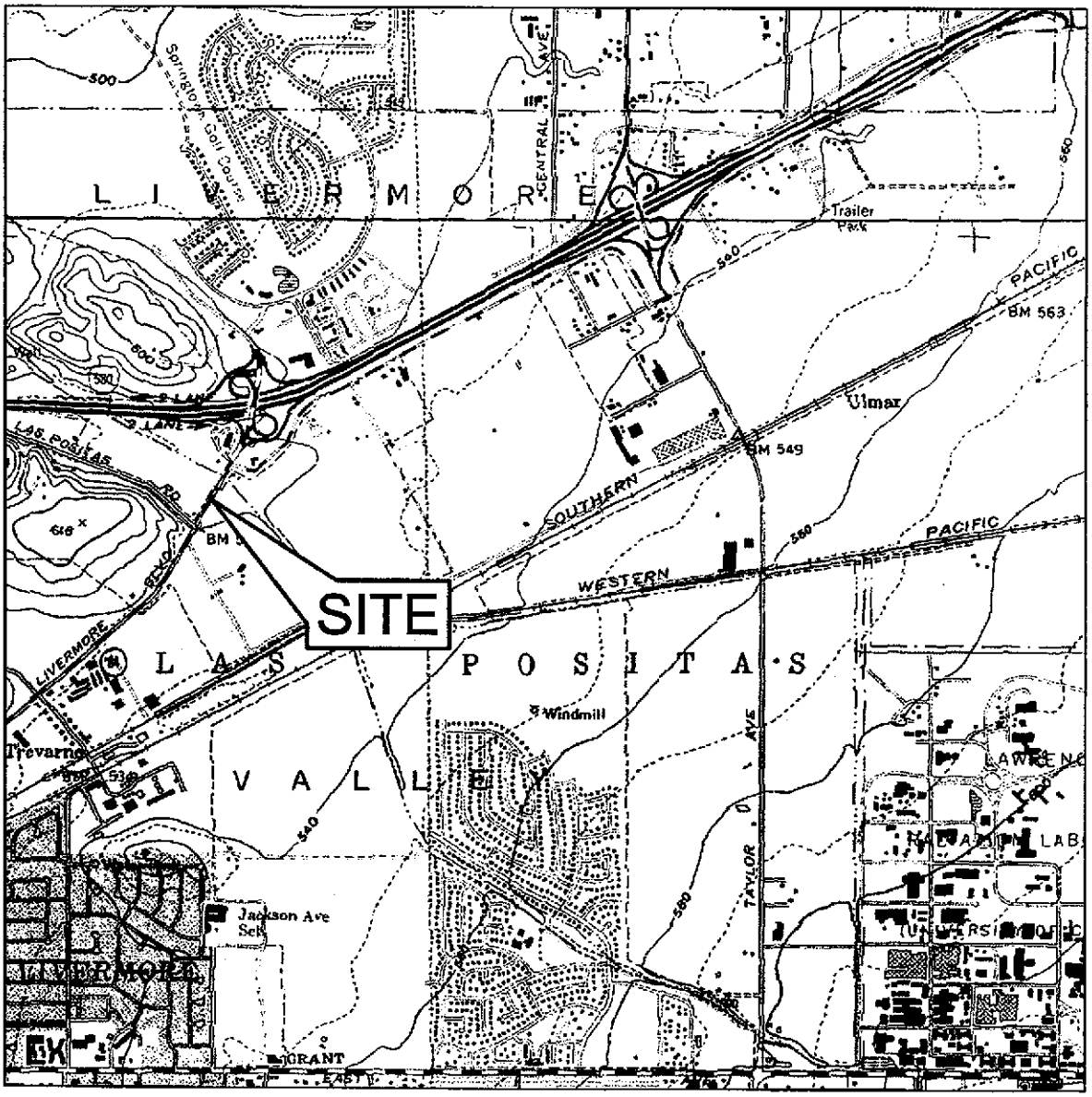
VIII. MONITORING WELL DECOMMISSIONING

Date Requested by ACEH: 03/13/07	Date of Well Decommissioning Report: 06/15/07	
All Monitoring Wells Decommissioned: ~~No~~ Yes	Number Decommissioned: 7	Number Retained: 0
Reason Wells Retained: NA		
Additional requirements for submittal of groundwater data from retained wells: None		
ACEH Concurrence - Signature: Jerry Wickham		Date: 06/28/07

Attachments:

1. Site Vicinity Map and Site Plan (3 pages)
2. Groundwater Elevation Contour Map (October 24, 2005) and Groundwater Elevations vs. Time (3 pages)
3. Dissolved Phase TPPH Concentration Map (October 24, 2005); Dissolved Phase Benzene Concentration Map (October 24, 2005); Dissolved Phase MTBE Concentration Map (October 24, 2005); and Benzene Concentration vs. Time (4 pages)
4. Soil Analytical Data (5 pages)
5. Groundwater Analytical Data (21 pages)
6. Boring Logs (30 pages)

This document and the related CASE CLOSURE LETTER & REMEDIAL ACTION COMPLETION CERTIFICATE shall be retained by the lead agency as part of the official site file.



0 1000 FT 2000 FT

SCALE: 1 : 24,000

North

FIGURE 1

SITE LOCATION MAP

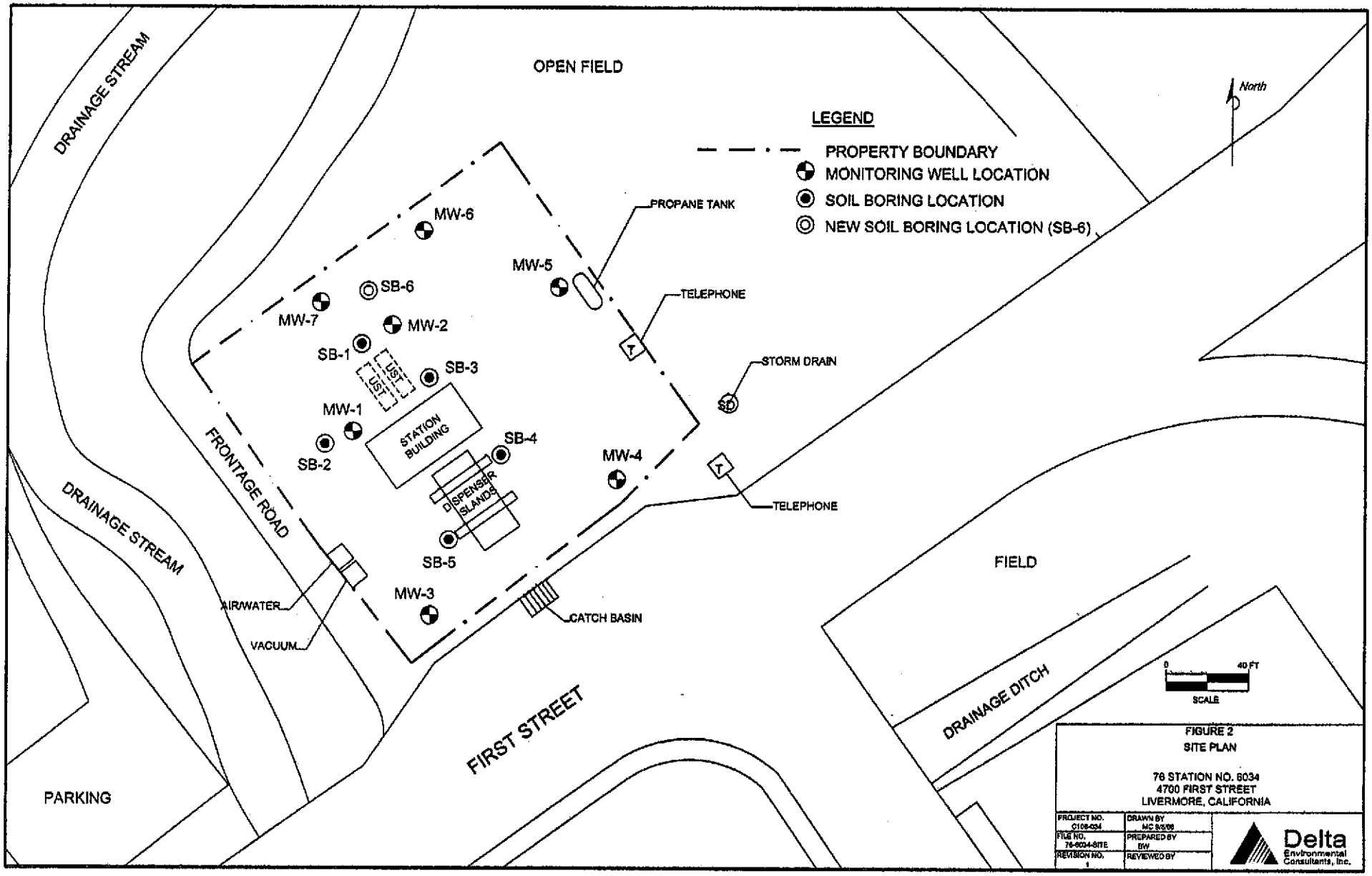
76 STATION NO. 6034
4700 FIRST STREET
LIVERMORE, CALIFORNIA

PROJECT NO. C106-034	DRAWN BY MC 3/16/06
FILE NO. Site Locator 4844	PREPARED BY MC
REVISION NO. 1	REVIEWED BY

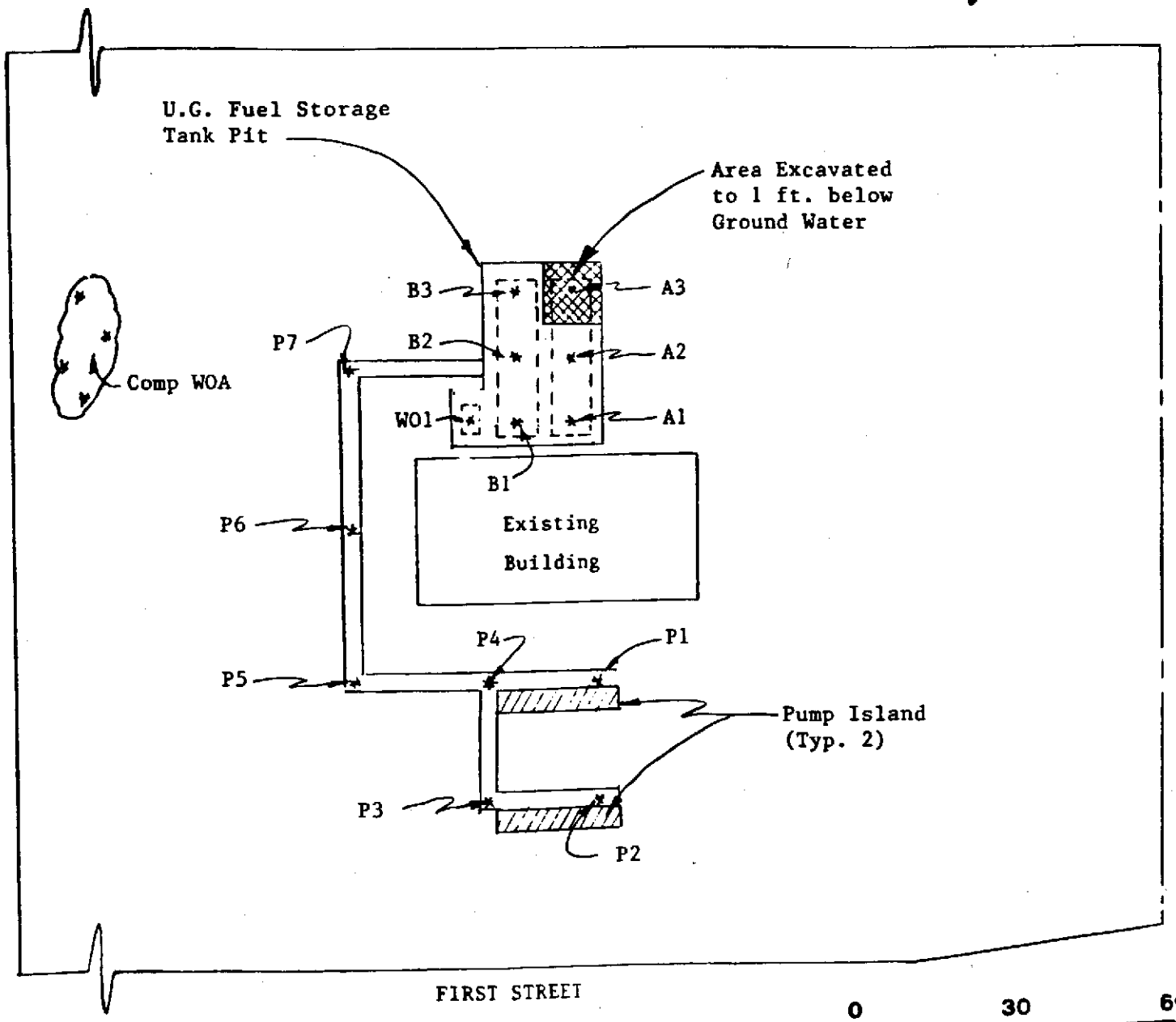
Delta Environmental Consultants, Inc.

SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC MAP, ALTAMONT QUADRANGLE, 1995

ATTACHMENT 1


OPEN FIELD
DRAINAGE STREAM
North
LEGEND
PROPERTY BOUNDARY
MONITORING WELL LOCATION
SOIL BORING LOCATION
NEW SOIL BORING LOCATION (SB-6)
MW-6
MW-5
SB-6
MW-7
MW-2
SB-1
SB-3
UST
UST
MW-1
SB-2
STATION BUILDING
SB-4
DISPENSER ISLANDS
SB-5
MW-4
MW-3
PROPANE TANK
TELEPHONE
STORM DRAIN
TELEPHONE
FRONTAGE ROAD
AIR/WATER
VACUUM
CATCH BASIN
DRAINAGE STREAM
FIELD
DRAINAGE DITCH
FIRST STREET
PARKING
0
40 FT
SCALE
FIGURE 2
SITE PLAN
76 STATION NO. 6034
4700 FIRST STREET
LIVERMORE, CALIFORNIA
PROJECT NO. C108-034
DRAWN BY MC 9/5/06
FILE NO. 76-6034-SITE
PREPARED BY BW
REVISION NO. 1
REVIEWED BY
Delta Environmental Consultants, Inc.

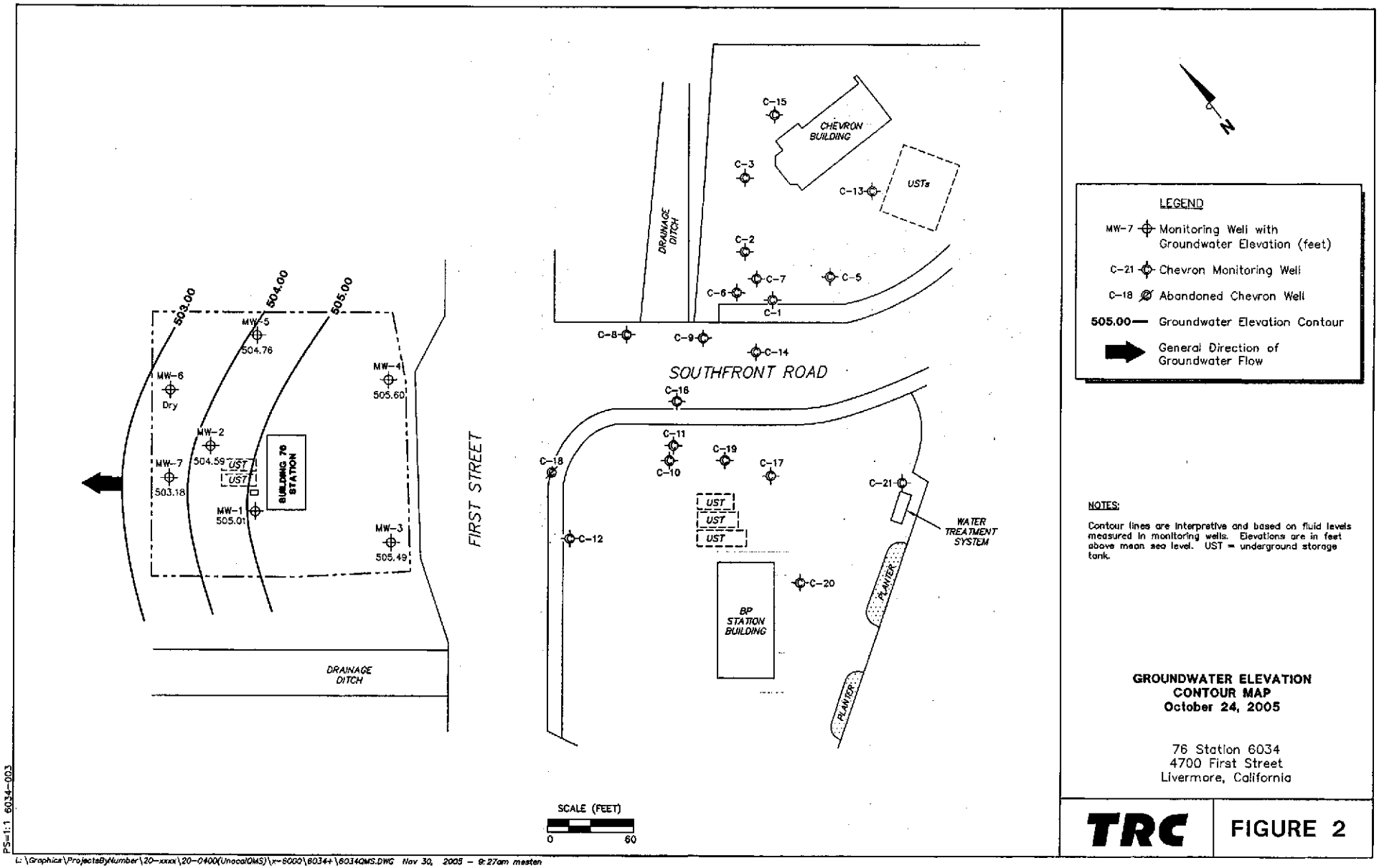
KAPREALIAN ENGINEERING, INC.
Consulting Engineers
P. O BOX 913
BENICIA CA 94510
(707) 746-6915



SITE PLAN

* Sample Point Location

Unocal Service Station #6034
4700 First Street
Livermore, California



GROUNDWATER ELEVATION CONTOUR MAP
October 24, 2005

76 Station 6034
4700 First Street
Livermore, California

TRC | FIGURE 2

PS=1:1 6034-003

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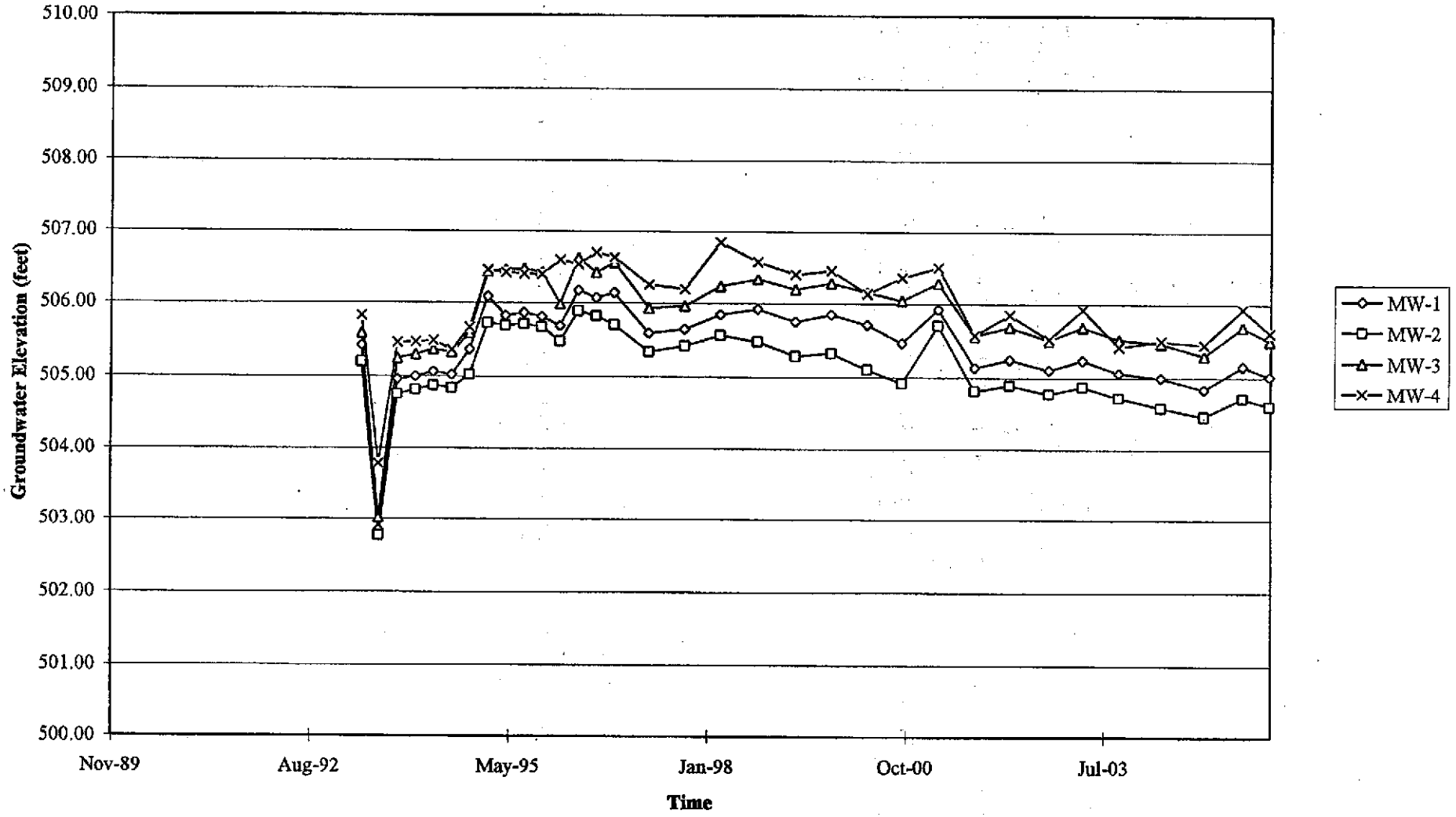
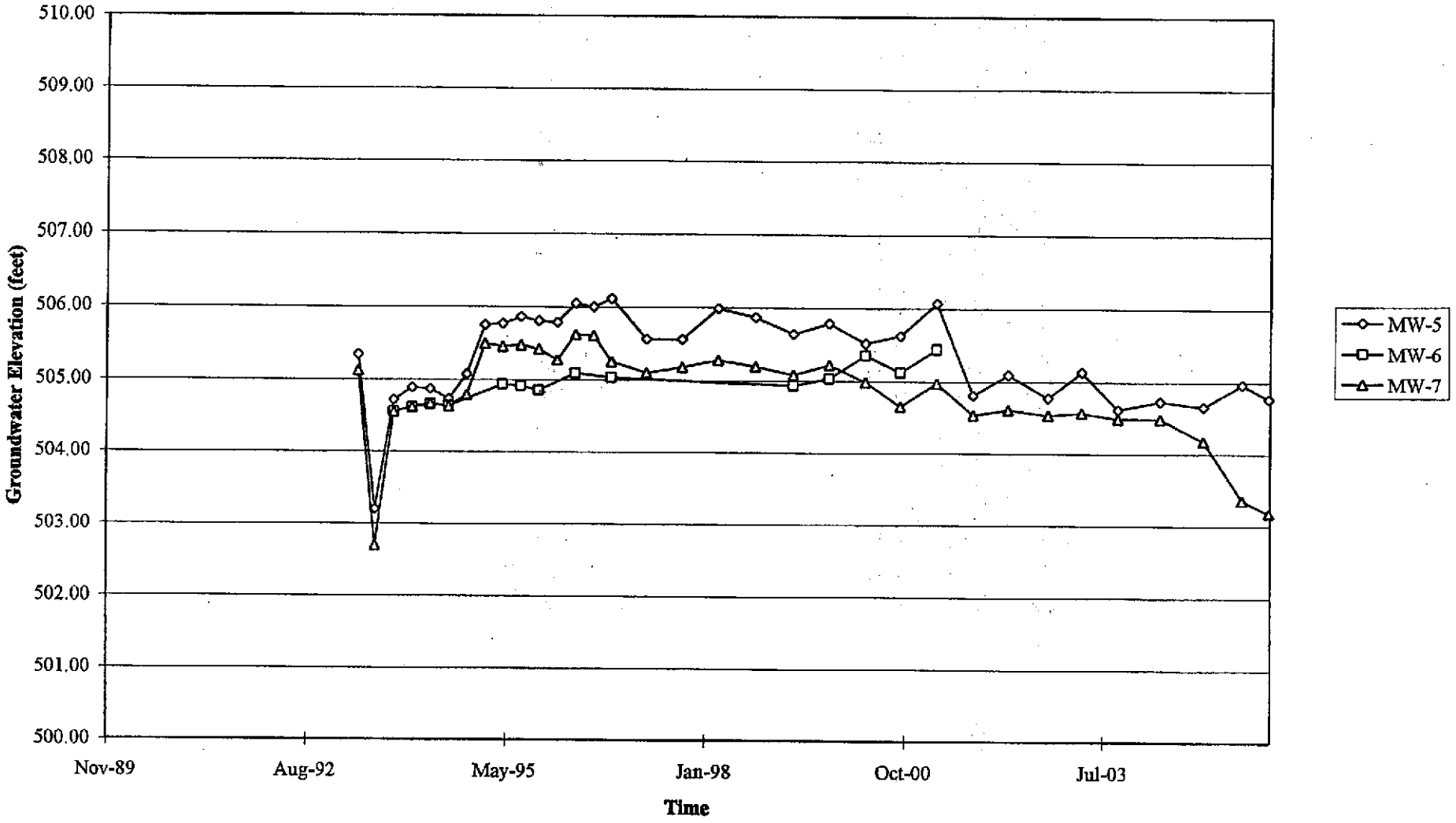
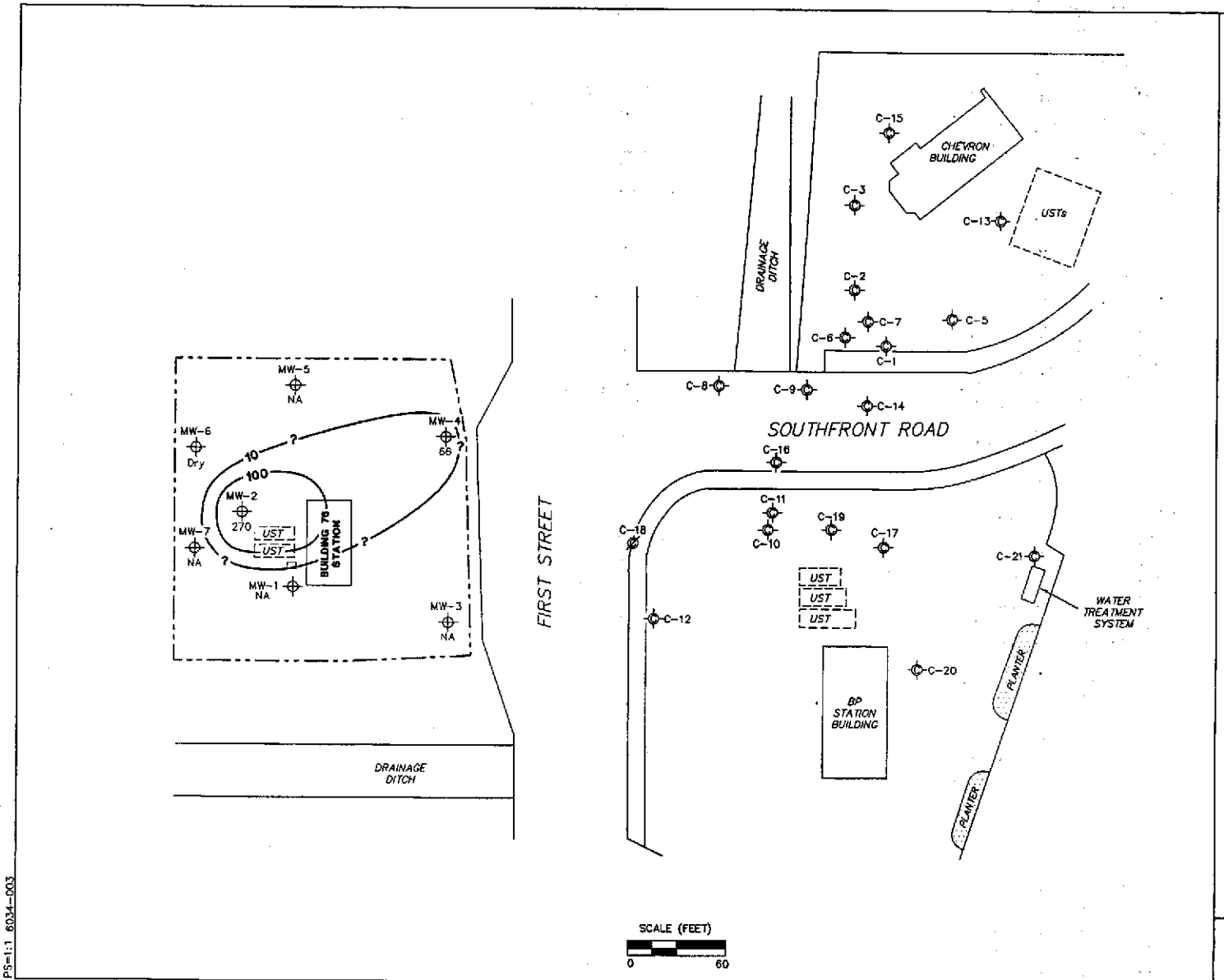
ATTACHMENT 2

Groundwater Elevations vs. Time
76 Station 6034



Groundwater Elevations vs. Time
76 Station 6034





N

LEGEND

MW-7 ⊕ Monitoring Well with Dissolved-Phase TPPH Concentration (µg/l)

C-21 ⊕ Chevron Monitoring Well

C-18 ⊘ Abandoned Chevron Well

100 Dissolved-Phase TPPH Contour (µg/l)

NOTES:

Contour lines are interpretive and based on laboratory analysis results of groundwater samples. TPPH = total purgeable petroleum hydrocarbons. µg/l = micrograms per liter. NA = not analyzed, measured, or collected. UST = underground storage tank. Results obtained using EPA Method 8260B.

DISSOLVED-PHASE TPPH CONCENTRATION MAP
October 24, 2005

76 Station 6034
4700 First Street
Livermore, California

TRC

FIGURE 3

PS=1:1 6034-003

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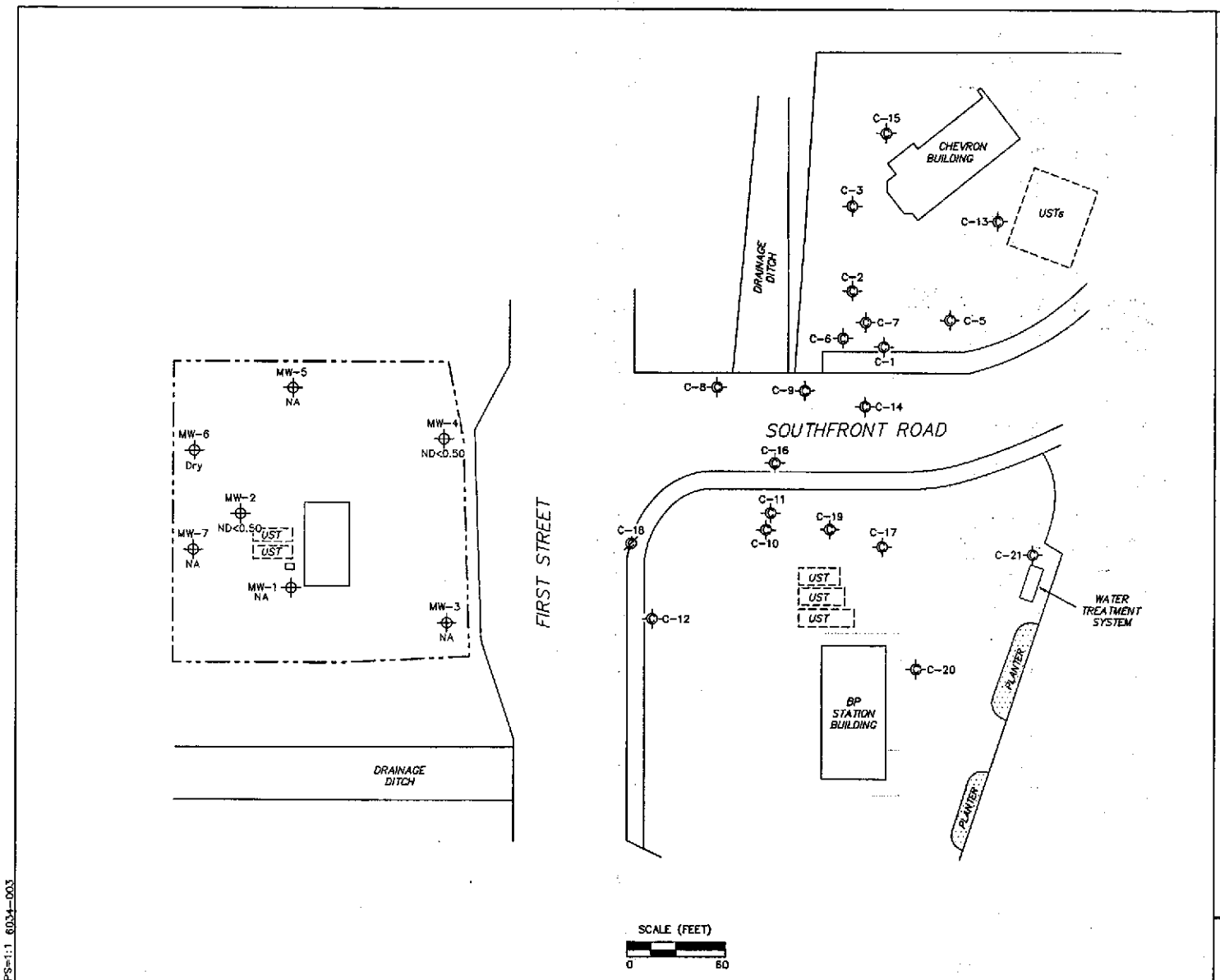
ATTACHMENT 3



LEGEND

MW-7 ⊕ Monitoring Well with Dissolved-Phase Benzene Concentration (µg/l)

C-21 ⊕ Chevron Monitoring Well

C-18 ⊘ Abandoned Chevron Well

NOTES:

µg/l = micrograms per liter. ND = not detected at limit indicated on official laboratory report.
NA = not analyzed, measured, or collected.
UST = underground storage tank.

DISSOLVED-PHASE BENZENE CONCENTRATION MAP
October 24, 2005

76 Station 6034
4700 First Street
Livermore, California

TRC

FIGURE 4

PS=1:1 6034-003

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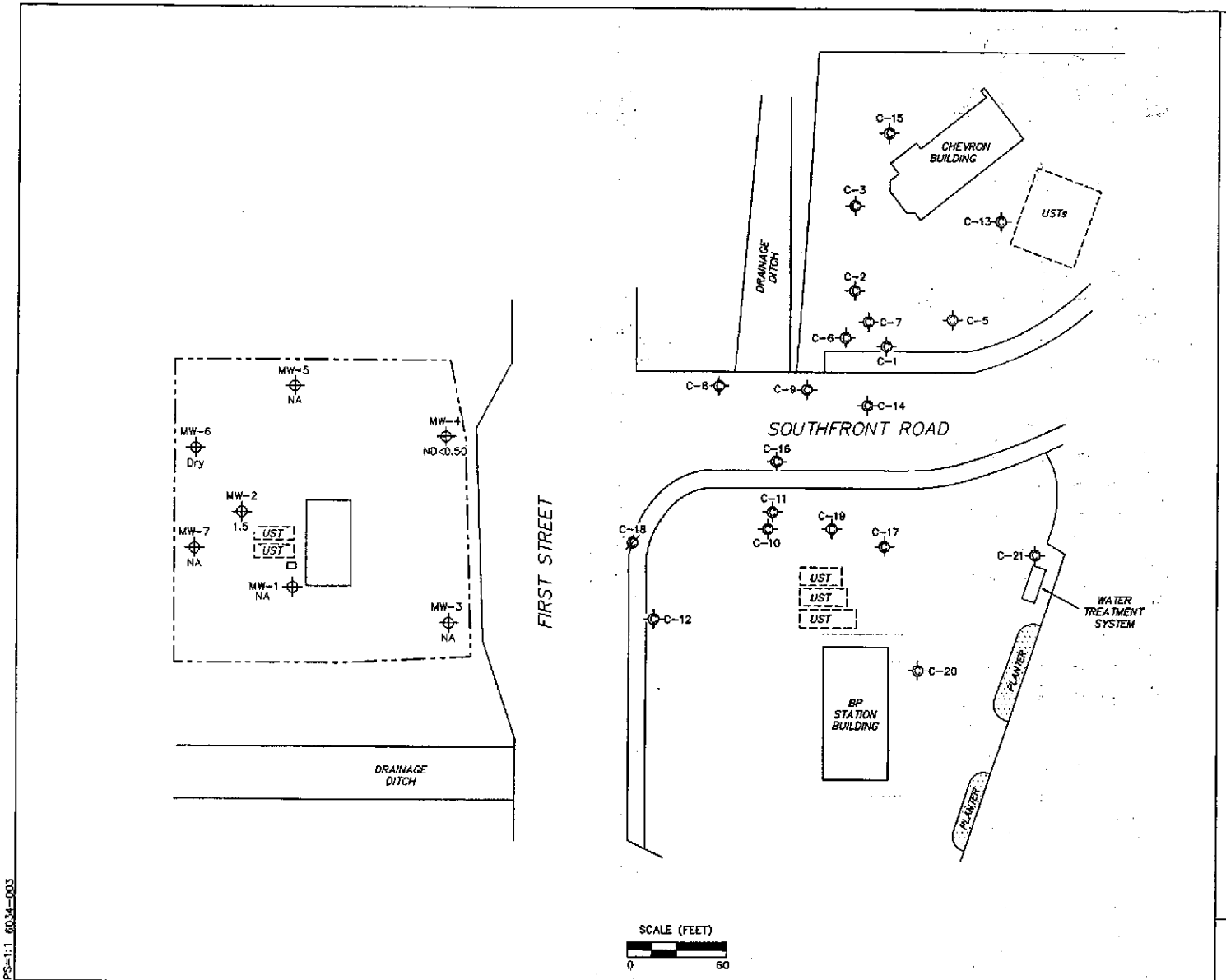

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LEGEND

MW-7 ⊕ Monitoring Well with Dissolved-Phase MTBE Concentration (µg/l)

C-21 ⊕ Chevron Monitoring Well

C-18 ⊘ Abandoned Chevron Well

NOTES:

MTBE = methyl tertiary butyl ether. µg/l = micrograms per liter. ND = not detected at limit indicated on official laboratory report. NA = not analyzed, measured, or collected. UST = underground storage tank. Results obtained using EPA Method 8260B.

DISSOLVED-PHASE MTBE CONCENTRATION MAP
October 24, 2005

76 Station 6034
4700 First Street
Livermore, California

TRC

FIGURE 5

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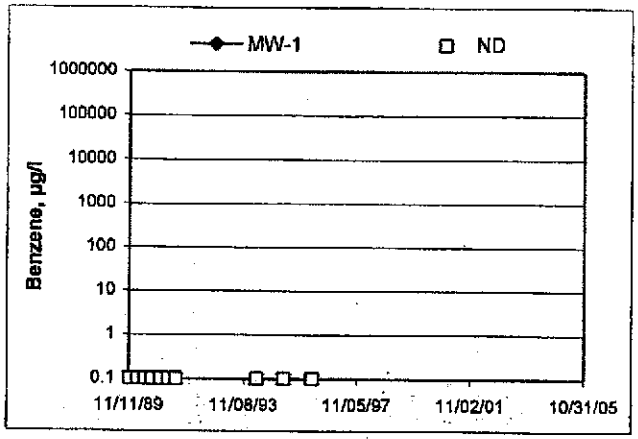
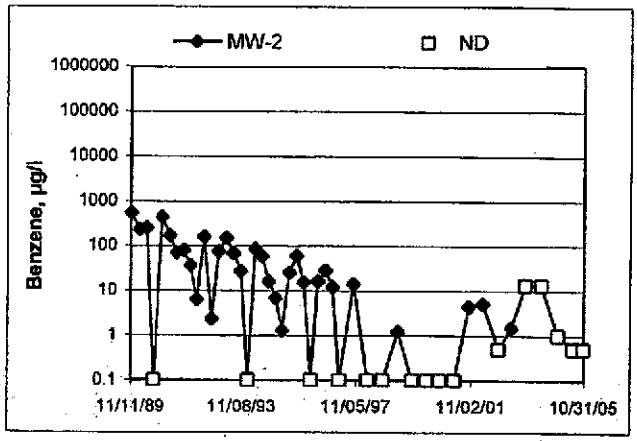
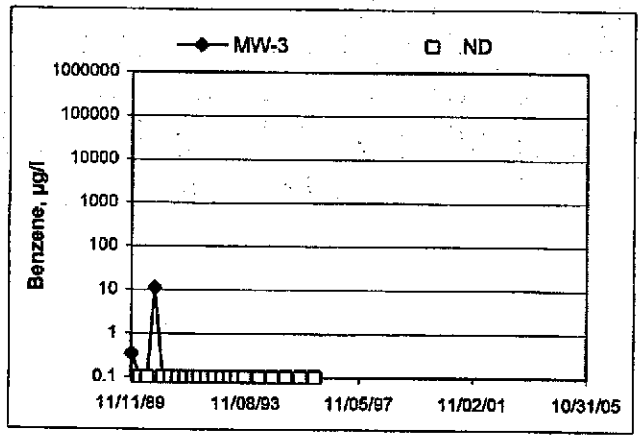
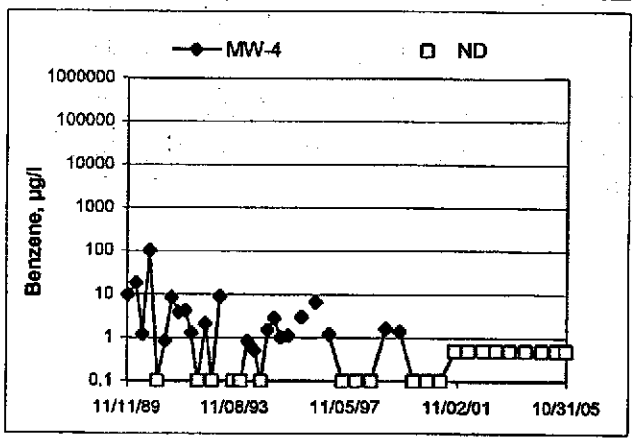
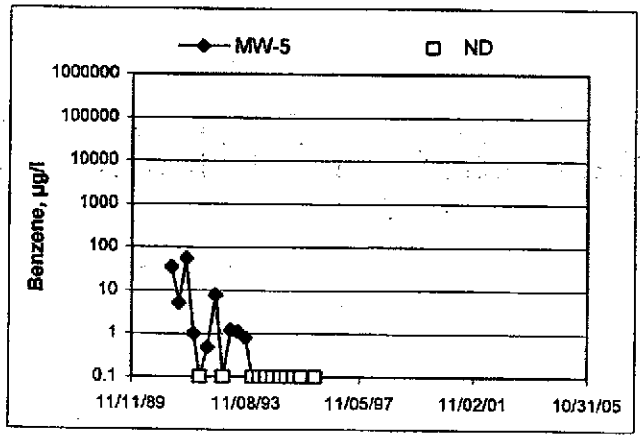
Benzene Concentrations vs Time
76 Station 6034

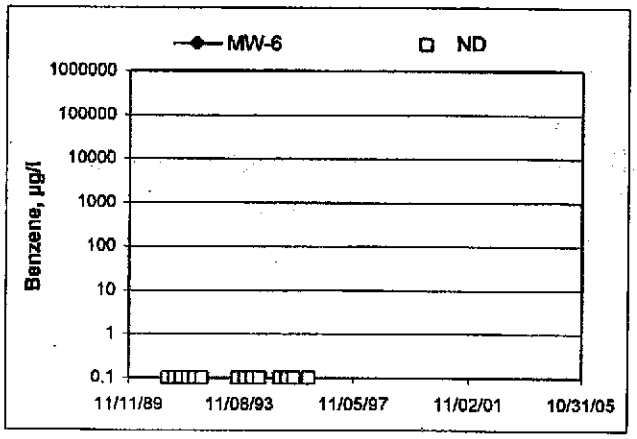












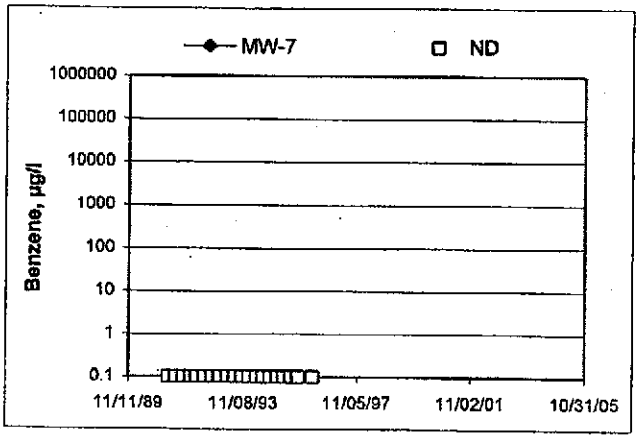


Table 1

SOIL ANALYTICAL RESULTS
ConocoPhillips Station No. 6034
4700 First Street, Livermore California

Sample ID	Date	Depth (feet)	TPPH (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl-benzene (mg/Kg)	Total Xylenes (mg/Kg)	MTBE (mg/Kg)	TBA (mg/Kg)	ETBE (mg/Kg)	TAME (mg/Kg)	DIPE (mg/Kg)	Ethanol (mg/Kg)	Lead (mg/Kg)
Soil														
SB-6@5'	7/21/2006	5	---	---	---	---	---	---	---	---	---	---	---	7.1
SB-6@15'	7/21/2006	15	ND<0.50	ND<0.012	ND<0.012	ND<0.012	ND<0.025	ND<0.012	ND<0.50	ND<0.0025	ND<0.0025	ND<0.012	ND<2.5	---
SB-6@25'	7/21/2006	25	ND<10	ND<0.25	ND<0.25	ND<0.25	ND<0.50	ND<0.25	ND<10	ND<0.050	ND<0.050	ND<0.25	ND<50	---
SB-6@30'	7/21/2006	30	ND<10	ND<0.25	ND<0.25	ND<0.25	ND<0.50	ND<0.25	ND<10	ND<0.050	ND<0.050	ND<0.25	ND<50	---
SB-6@56'	7/21/2006	56	ND<10	ND<0.25	ND<0.25	ND<0.25	ND<0.50	ND<0.25	ND<10	ND<0.050	ND<0.050	ND<0.25	ND<50	---

TPPH = total purgeable petroleum hydrocarbons by EPA Method 8260B
BTEX = benzene, toluene, ethylbenzene, total xylenes by EPA Method 8260B
MTBE = methyl tertiary butyl ether by EPA Method 8260B
TBA = tertiary butyl alcohol by EPA Method 8260B
ETBE = ethyl tertiary butyl ether by EPA Method 8260B
DIPE = di-isopropyl ether by EPA Method 8260B
TAME = tertiary amyl methyl ether by EPA Method 8260B

Ethanol was analyzed by EPA Method 8260B
Lead was analyzed by EPA Method 6010
mg/Kg = milligrams per kilogram
--- = not analyzed
ND = not detected above the laboratory detection limit
Bold = detected compound concentration
EPA = US Environmental Protection Agency

ATTACHMENT 4

Table 1

RESULTS OF LABORATORY ANALYSIS OF SOIL SAMPLES
76 Station 6034

Sample Number	Sample Date	Depth (fbg)	TPPH (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	TBA (mg/kg)	MTBE (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	TAME (mg/kg)	1, 2-DCA (mg/kg)	EDB (mg/kg)	Ethanol (mg/kg)	Lead (mg/kg)	Oil & Grease (mg/kg)
			EPA 8260B	EPA Method 8260B												Method 6010B	Method 1664
SB-1@15'	10/30/2003	15.0	ND<1	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.01	ND<0.005	ND<0.01	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.1	--	--
SB-2@15'	10/30/2003	10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	4.4	ND<50
SB-3@5'	10/30/2003	5.0	ND<1	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.01	ND<0.005	ND<0.01	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.1	--	--
SB-4@5'	10/30/2003	5.0	ND<1	ND<0.005	ND<0.005	ND<0.005	ND<0.005	0.027	0.064	ND<0.01	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.1	--	--
SB-5@5'	10/30/2003	5.0	ND<1	ND<0.005	ND<0.005	ND<0.005	ND<0.005	0.016	0.042	ND<0.01	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.1	--	--
PRG				1.3	520	20	420		160								
ESL			100	0.044	2.9	3.3	1.5	0.073	0.023							750	

Notes: [1] Detection limit is above the respective PRG or ESL.

TPPH	=	total purgeable petroleum hydrocarbons	TBA	=	t-butyl alcohol
O&G	=	oil and grease (petroleum)	mg/kg	=	milligrams per kilogram
MTBE	=	methyl tertiary butyl ether	ug/kg	=	micrograms per kilogram
DIPE	=	di-isopropyl ether	ND	=	non detect above the Method Detection Limit
ETBE	=	ethyl t-butyl ether	fbg	=	feet below grade
TAME	=	t-amyl methyl ether	--	=	not analyzed, measured, or collected
1,2 DCA	=	1,2 dichloroethane	PRG	=	Preliminary Remedial Goals, Industrial Soil (EPA, 2002)
EDB	=	ethylene dibromide	ESL	=	Tier 1 Environmental Screening Levels for shallow impacted industrial soils above groundwater that is a current or potential source of drinking water (SFRWQCB, 2003)

*The soils data in this table were provided by the analytical laboratory in units of ug/kg, and have been converted to mg/kg for presentation. The level of precision shown may differ from that intended by the laboratory.

KEI-J89-0801.R4
December 18, 1989

TABLE 2

SUMMARY OF LABORATORY ANALYSES
SOIL

(Collected on October 25 & 26, 1989)

Sample Number	Depth (feet)	TPH as Gasoline	Benzene	Toluene	Xylenes	Ethyl-benzene
MW1(5)*	5	ND	ND	ND	ND	ND
MW1(7)*	7	ND	ND	ND	ND	ND
MW1(10)*	10	ND	ND	ND	ND	ND
MW1(12.5)*	12.5	ND	ND	ND	ND	ND
MW1(15)*	15	ND	ND	ND	ND	ND
MW1(17)*	17	ND	ND	ND	ND	ND
MW2(5)	5	23	ND	ND	ND	ND
MW2(10)	10	ND	ND	ND	ND	ND
MW2(12.5)	12.5	ND	ND	ND	ND	ND
MW2(15)	15	3.0	ND	ND	ND	ND
MW2(17)	17	790	0.14	0.23	10	2.7
MW3(5)	5	1.1	ND	ND	ND	ND
MW3(10)	10	ND	ND	ND	ND	ND
MW3(11.5)	11.5	ND	ND	ND	ND	ND
MW3(14)	14	ND	ND	ND	ND	ND
MW4(5)	5	1.9	ND	ND	ND	ND
MW4(9.5	9.5	ND	ND	ND	ND	ND
MW4(12)	12	ND	ND	ND	ND	ND
MW4(15)	15	56	0.10	0.11	1.5	1.5
Detection Limits		1.0	0.05	0.1	0.1	0.1

* TPH as diesel and EPA method 8010 constituents were non-detectable. TOG was <50 ppm.

ND = Non-detectable.

All results in ppm.

KEI-P89-0801.R5
May 10, 1991

TABLE 3

SUMMARY OF LABORATORY ANALYSES
SOIL

Date	Sample Number	Depth (feet)	TPH as Gasoline	Benzene	Toluene	Xylenes	Ethyl-benzene
4/02/91	MW5(5)	5	ND	ND	0.0056	ND	ND
	MW5(10)	10	ND	ND	ND	ND	ND
	MW5(15.5)	15.5	ND	ND	ND	0.0060	ND
	MW6(5)	5	ND	ND	0.010	0.0086	ND
	MW6(10)	10	ND	ND	ND	0.017	ND
	MW6(15.5)	15.5	ND	ND	ND	0.058	ND
	MW7(5.5)	5.5	ND	ND	ND	ND	ND
	MW7(10)	10	ND	ND	0.0086	0.030	ND
	MW7(15)	15	ND	ND	0.0098	0.010	ND
Detection Limits			1.0	0.0050	0.0050	0.0050	0.0050

ND = Non-detectable.

Results in parts per million (ppm), unless otherwise indicated.

KEI-P89-0801.R5
May 10, 1991

TABLE 5

SUMMARY OF LABORATORY ANALYSES
SOIL

Date	Sample	Depth (feet)	TPH as Diesel	TPH as Gasoline	Benzene	Toluene	Xylenes	Ethyl-benzene
8/02/89 & 8/07/89	A1	15	--	2.1	ND	ND	0.21	ND
	A2	15	--	1.6	ND	ND	ND	ND
	A3	16	--	390	1.7	45	86	16
	B1	15	--	ND	ND	ND	0.10	ND
	B2	15	--	ND	ND	ND	ND	ND
	B3	15	--	2.3	ND	ND	0.30	0.12
	P1	3.5	--	9.6	ND	ND	0.94	0.16
	P2	3.5	--	ND	ND	ND	ND	ND
	P3	3.5	--	ND	ND	ND	ND	ND
	P4	3.5	--	ND	ND	ND	ND	ND
	P5	2.5	--	ND	ND	ND	ND	ND
	P6	2.5	--	ND	ND	ND	ND	ND
	P7	2.5	--	1.5	ND	ND	ND	ND
	WO1*	8.5	1.4	ND	ND	ND	ND	ND
Detection Limits			1.0	1.0	0.05	0.1	0.1	0.1

* TOG, all EPA method 8010 and 8270 constituents were non-detectable.

-- Indicates analysis not performed.

ND = Non-detectable.

Results in parts per million (ppm), unless otherwise indicated.

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Kaprealian Engineering, Inc.	Client Project ID:	Unocal, Livermore, 1st St/Hwy 580	Sampled:	Aug 2, 1989
P.O. Box 913	Sample Descript:	Soil, WO1	Received:	Aug 3, 1989
Benicia, CA 94510	Analysis Method:	EPA 5030/8010	Analyzed:	Aug 4, 1989
Attention: Mardo Kaprealian, P.E.	Lab Number:	908-0176	Reported:	Aug 4, 1989

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	5.0	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	25.0	N.D.
2-Chloroethylvinyl ether	5.0	N.D.
Chloroform	5.0	N.D.
Chloromethane	5.0	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	10.0	N.D.
1,3-Dichlorobenzene	10.0	N.D.
1,4-Dichlorobenzene	10.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
Total 1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	10.0	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Arthur G. Burton
Laboratory Director

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Kaprealian Engineering, Inc.	Client Project ID:	Unocal, Livermore, 1st St/Hwy 580	Sampled:	Aug 2, 1989
P.O. Box 913	Sample Descript:	Soil, WO1	Received:	Aug 3, 1989
Benicia, CA 94510	Analysis Method:	EPA 8270	Extracted:	Aug 3, 1989
Attention: Mardo Kaprealian, P.E.	Lab Number:	908-0176	Analyzed:	Aug 4, 1989
			Reported:	Aug 4, 1989

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene	100.0	N.D.
Acenaphthylene	100.0	N.D.
Aniline	100.0	N.D.
Anthracene	100.0	N.D.
Benzidine	2,500.0	N.D.
Benzoic Acid	500.0	N.D.
Benzo(a)anthracene	100.0	N.D.
Benzo(b)fluoranthene	100.0	N.D.
Benzo(k)fluoranthene	100.0	N.D.
Benzo(g,h,i)perylene	100.0	N.D.
Benzo(a)pyrene	100.0	N.D.
Benzyl alcohol	100.0	N.D.
Bis(2-chloroethyoxy)methane	100.0	N.D.
Bis(2-chloroethyl)ether	100.0	N.D.
Bis(2-chloroisopropyl)ether	100.0	N.D.
Bis(2-ethylhexyl)phthalate	500.0	N.D.
4-Bromophenyl ether	100.0	N.D.
Butyl benzyl phthalate	100.0	N.D.
4-Chloroaniline	100.0	N.D.
2-Chloronaphthalene	100.0	N.D.
4-Chloro-3-methylphenol	100.0	N.D.
2-Chlorophenol	100.0	N.D.
4-Chlorophenyl phenyl ether	100.0	N.D.
Chrysene	100.0	N.D.
Dibenz(a,h)anthracene	100.0	N.D.
Dibenzofuran	100.0	N.D.
Di-N-butyl phthalate	500.0	N.D.
1,3-Dichlorobenzene	100.0	N.D.
1,4-Dichlorobenzene	100.0	N.D.
1,2-Dichlorobenzene	100.0	N.D.
3,3-Dichlorobenzidine	500.0	N.D.
2,4-Dichlorophenol	100.0	N.D.
Diethyl phthalate	100.0	N.D.
2,4-Dimethylphenol	100.0	N.D.
Dimethyl phthalate	100.0	N.D.
4,6-Dinitro-2-methylphenol	500.0	N.D.
2,4-Dinitrophenol	500.0	N.D.

SEQUOIA ANALYTICAL

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Kaprealian Engineering, Inc.	Client Project ID:	Unocal, Livermore, 1st St/Hwy 580	Sampled:	Aug 2, 1989
P.O. Box 913	Sample Descript:	Soil, WO1	Received:	Aug 3, 1989
Benicia, CA 94510	Analysis Method:	EPA 8270	Extracted:	Aug 3, 1989
Attention: Mardo Kaprealian, P.E.	Lab Number:	908-0176	Analyzed:	Aug 4, 1989
			Reported:	Aug 4, 1989

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
2,4-Dinitrotoluene	100.0	N.D.
2,6-Dinitrotoluene	100.0	N.D.
Di-N-octyl phthalate	100.0	N.D.
Fluoranthene	100.0	N.D.
Fluorene	100.0	N.D.
Hexachlorobenzene	100.0	N.D.
Hexachlorobutadiene	100.0	N.D.
Hexachlorocyclopentadiene	100.0	N.D.
Hexachloroethane	100.0	N.D.
Indeno(1,2,3-cd)pyrene	100.0	N.D.
Isophorone	100.0	N.D.
2-Methylnaphthalene	100.0	N.D.
2-Methylphenol	100.0	N.D.
4-Methylphenol	100.0	N.D.
Naphthalene	100.0	N.D.
2-Nitroaniline	100.0	N.D.
3-Nitroaniline	100.0	N.D.
4-Nitroaniline	100.0	N.D.
Nitrobenzene	100.0	N.D.
2-Nitrophenol	100.0	N.D.
4-Nitrophenol	500.0	N.D.
N-Nitrosodiphenylamine	100.0	N.D.
N-Nitroso-di-N-propylamine	100.0	N.D.
Pentachlorophenol	500.0	N.D.
Phenathrene	100.0	N.D.
Phenol	100.0	N.D.
Pyrene	100.0	N.D.
1,2,4-Trichlorobenzene	100.0	N.D.
2,4,5-Trichlorophenol	100.0	N.D.
2,4,6-Trichlorophenol	100.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Arthur G. Burton
Laboratory Director

Table 2

GROUNDWATER ANALYTICAL RESULTS
ConocoPhillips Station No. 6034
4700 First Street, Livermore California

Sample ID	Date	Depth (feet)	TPPH (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	ETBE (µg/L)	TAME (µg/L)	DIPE (µg/L)	Ethanol (µg/L)
Groundwater													
SB-6@18'	7/21/2006	18	**77**	ND<0.50	**1.2**	**0.76**	**2.5**	ND<0.50	ND<10	ND<0.50	ND<0.50	ND<0.50	ND<250
SB-6@62'	7/21/2006	62	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<10	ND<0.50	ND<0.50	ND<0.50	ND<250

TPPH = total purgeable petroleum hydrocarbons by EPA Method 8260B
BTEX = benzene, toluene, ethyibenzene, total xylenes by EPA Method 8260B
MTBE = methyl tertiary butyl ether by EPA Method 8260B
TBA = tertiary butyl alcohol by EPA Method 8260B
ETBE = ethyl tertiary butyl ether by EPA Method 8260B
DIPE = di-isopropyl ether by EPA Method 8260B
TAME = tertiary amyl methyl ether by EPA Method 8260B

Ethanol was analyzed by EPA Method 8260B

µg/L = micrograms per liter
--- = not analyzed
ND = not detected above the laboratory detection limit
Bold = detected compound concentration
EPA = US Environmental Protection Agency

ATTACHMENT 5

Table 2

RESULTS OF LABORATORY ANALYSIS OF GROUNDWATER SAMPLES [1]
76 Station 6034

Sample Number	Sample Date	Depth (fbg)	TPPH (ug/L) EPA 8260B	Benzene (ug/L)	Toluene (ug/L)	Ethyl-benzene (ug/L)	Total Xylenes (ug/L)	TBA (ug/L)	MTBE (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	1, 2-DCA (ug/L)	EDB (ug/L)	Ethanol (ug/L)	Lead (mg/L) Method 6010B	Oil & Grease (mg/L) Method 1664
SB-1	10/30/2003	na	ND<50	ND<0.50	1.4	0.93	3.1	ND<100	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<500	--	--
SB-2	10/30/2003	na	--	--	--	--	--	--	--	--	--	--	--	--	--	0.21	ND<1.0
SB-3	10/30/2003	na	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<100	13.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<500	--	--
SB-4	10/30/2003	na	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<100	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<500	--	--
SB-5	10/30/2003	na	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<100	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<500	--	--
MW-1	11/4/2003	na	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<100	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<500	0.067	ND<1.0
MW-2	11/4/2003	na	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<100	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<500	--	--
MW-3	11/4/2003	na	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<100	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<500	--	--
MW-4	11/4/2003	na	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<100	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<500	--	--
MW-5	11/4/2003	na	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<100	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<500	--	--
MCL				1	150	300	1,750		13							0.015	
ESL			100	1	40	30	13	12	5							0.0025	

Notes:

[1] Monitoring wells MW-6 and MW-7 were not sampled.

Table 1

CURRENT FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

July 19, 2006

76 Station 6034

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground-water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	
MW-1		**(Screen Interval in feet: 11.0-28.5)**												
07/19/06	520.64	15.48	0.00	505.16	0.01	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
MW-2		**(Screen Interval in feet: 11.0-25.0)**												
07/19/06	519.82	15.12	0.00	504.70	0.01	62	--	ND<0.50	ND<0.50	2.1	4.5	--	ND<0.50	
MW-3		**(Screen Interval in feet: 11.0-25.0)**												
07/19/06	519.66	13.96	0.00	505.70	0.02	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
MW-4		**(Screen Interval in feet: 11.0-25.0)**												
07/19/06	519.61	13.62	0.00	505.99	0.06	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
MW-5		**(Screen Interval in feet: 10.0-24.0)**												
07/19/06	520.27	15.31	0.00	504.96	-0.02	140	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
MW-7		**(Screen Interval in feet: 10.0-24.0)**												
07/19/06	518.83	14.46	0.00	504.37	0.03	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	

Table 2

HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

November 1989 Through July 2006

76 Station 6034

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
MW-1	**(Screen Interval in feet: 11.0-28.5)**													
11/18/89	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
03/08/90	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
06/05/90	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
09/07/90	--	--	--	--	--	ND	--	ND	1.2	ND	ND	--	--	
12/24/90	--	--	--	--	--	ND	--	ND	ND	ND	0.4	--	--	
04/10/91	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
07/10/91	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
04/22/93	520.88	15.47	0.00	505.41	--	--	--	--	--	--	--	--	--	
07/20/93	520.88	18.04	0.00	502.84	-2.57	--	--	--	--	--	--	--	--	
10/20/93	520.64	15.69	0.00	504.95	2.11	--	--	--	--	--	--	--	--	
01/20/94	520.64	15.65	0.00	504.99	0.04	--	--	--	--	--	--	--	--	
04/21/94	520.64	15.58	0.00	505.06	0.07	ND	--	ND	ND	ND	ND	--	--	
07/21/94	520.64	15.62	0.00	505.02	-0.04	--	--	--	--	--	--	--	--	Sampled Annually
10/19/94	520.64	15.28	0.00	505.36	0.34	--	--	--	--	--	--	--	--	
01/18/95	520.64	14.56	0.00	506.08	0.72	--	--	--	--	--	--	--	--	
04/17/95	520.64	14.82	0.00	505.82	-0.26	ND	--	ND	ND	ND	ND	--	--	
07/18/95	520.64	14.78	0.00	505.86	0.04	--	--	--	--	--	--	--	--	
10/17/95	520.64	14.83	0.00	505.81	-0.05	--	--	--	--	--	--	--	--	
01/17/96	520.64	14.96	0.00	505.68	-0.13	--	--	--	--	--	--	--	--	
04/17/96	520.64	14.47	0.00	506.17	0.49	ND	--	ND	ND	ND	ND	ND	--	
07/16/96	520.64	14.57	0.00	506.07	-0.10	--	--	--	--	--	--	--	--	
10/16/96	520.64	14.50	0.00	506.14	0.07	--	--	--	--	--	--	--	--	
04/08/97	520.64	15.05	0.00	505.59	-0.55	--	--	--	--	--	--	--	--	Sampling Discontinued

Table 2

HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

November 1989 Through July 2006

76 Station 6034

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
MW-1 continued														
10/06/97	520.64	15.00	0.00	505.64	0.05	--	--	--	--	--	--	--	--	
04/02/98	520.64	14.80	0.00	505.84	0.20	--	--	--	--	--	--	--	--	
10/07/98	520.64	14.72	0.00	505.92	0.08	--	--	--	--	--	--	--	--	
04/14/99	520.64	14.89	0.00	505.75	-0.17	--	--	--	--	--	--	--	--	
10/12/99	520.64	14.79	0.00	505.85	0.10	--	--	--	--	--	--	--	--	
04/10/00	520.64	14.93	0.00	505.71	-0.14	--	--	--	--	--	--	--	--	
10/02/00	520.64	15.18	0.00	505.46	-0.25	--	--	--	--	--	--	--	--	
04/02/01	520.64	14.72	0.00	505.92	0.46	--	--	--	--	--	--	--	--	
10/05/01	520.64	15.51	0.00	505.13	-0.79	--	--	--	--	--	--	--	--	
04/01/02	520.64	15.40	0.00	505.24	0.11	--	--	--	--	--	--	--	--	
10/16/02	520.64	15.54	0.00	505.10	-0.14	--	--	--	--	--	--	--	--	
04/03/03	520.64	15.41	0.00	505.23	0.13	--	--	--	--	--	--	--	--	
10/02/03	520.64	15.58	0.00	505.06	-0.17	--	--	--	--	--	--	--	--	Monitored Only
04/30/04	520.64	15.65	0.00	504.99	-0.07	--	--	--	--	--	--	--	--	Monitored only
12/01/04	520.64	15.81	0.00	504.83	-0.16	--	--	--	--	--	--	--	--	Sampled Semi-Annually
06/13/05	520.64	15.49	0.00	505.15	0.32	--	--	--	--	--	--	--	--	Monitored Only
10/24/05	520.64	15.63	0.00	505.01	-0.14	--	--	--	--	--	--	--	--	Monitored Only
06/23/06	520.64	15.49	0.00	505.15	0.14	--	--	--	--	--	--	--	--	Monitored Only
07/19/06	520.64	15.48	0.00	505.16	0.01	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
MW-2	**(Screen Interval in feet: 11.0-25.0)**													
11/18/89	--	--	--	--	--	53000	--	540	500	130	22000	--	--	
03/08/90	--	--	--	--	--	26000	--	230	410	1300	2100	--	--	
06/05/90	--	--	--	--	--	31000	--	250	460	950	9200	--	--	
09/07/90	--	--	--	--	--	ND	--	ND	1.5	ND	ND	--	--	

Table 2

HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

November 1989 Through July 2006

76 Station 6034

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground-water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	
MW-2 continued														
12/24/90	--	--	--	--	--	32000	--	440	340	460	13000	--	--	
04/10/91	--	--	--	--	--	22000	--	170	190	490	6200	--	--	
07/10/91	--	--	--	--	--	14000	--	70	160	570	5400	--	--	
10/14/91	--	--	--	--	--	11000	--	79	130	660	4700	--	--	
01/14/92	--	--	--	--	--	5600	--	36	120	450	2600	--	--	
04/06/92	--	--	--	--	--	760	--	6.3	2.1	ND	130	--	--	
07/07/92	--	--	--	--	--	44000	--	160	1100	1000	17000	--	--	
10/16/92	--	--	--	--	--	290	--	2.3	ND	5.1	15	--	--	
01/14/93	--	--	--	--	--	19000	--	75	430	900	8400	--	--	
04/22/93	520.17	14.98	0.00	505.19	--	49000	--	150	1000	3000	18000	--	--	
07/20/93	520.17	17.41	0.00	502.76	-2.43	25000	--	68	94	1000	6200	--	--	
10/20/93	519.82	15.08	0.00	504.74	1.98	12000	--	27	10	100	3000	--	--	
01/20/94	519.82	15.02	0.00	504.80	0.06	20000	--	ND	ND	270	3300	--	--	
04/21/94	519.82	14.96	0.00	504.86	0.06	27000	--	85	65	880	5300	--	--	
07/21/94	519.82	14.99	0.00	504.83	-0.03	31000	--	58	29	940	6200	--	--	
10/19/94	519.82	14.80	0.00	505.02	0.19	4100	--	16	3.5	8.6	1100	--	--	
01/18/95	519.82	14.10	0.00	505.72	0.70	5100	--	6.8	7.3	100	1500	--	--	
04/17/95	519.82	14.13	0.00	505.69	-0.03	320	--	1.3	0.67	6.6	74	--	--	
07/18/95	519.82	14.11	0.00	505.71	0.02	12000	--	25	24	550	3700	--	--	
10/17/95	519.82	14.15	0.00	505.67	-0.04	77000	--	60	58	760	8300	220	--	
01/17/96	519.82	14.35	0.00	505.47	-0.20	7000	--	15	ND	150	1600	370	--	
04/17/96	519.82	13.93	0.00	505.89	0.42	19000	--	ND	ND	600	4900	6100	--	
07/16/96	519.82	14.00	0.00	505.82	-0.07	23000	--	16	22	900	4500	410	--	
10/16/96	519.82	14.12	0.00	505.70	-0.12	14000	--	28	31	1600	6900	9600	--	

Table 2

HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

November 1989 Through July 2006

76 Station 6034

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
MW-2 continued														
01/13/97	519.82	--	--	--	--	4300	--	12	5.0	28	890	1300	--	
04/08/97	519.82	14.49	0.00	505.33	--	4700	--	ND	6.5	170	830	290	--	
10/06/97	519.82	14.41	0.00	505.41	0.08	5800	--	14	ND	19	860	570	--	
04/02/98	519.82	14.26	0.00	505.56	0.15	24000	--	ND	ND	980	5200	6800	--	
10/07/98	519.82	14.35	0.00	505.47	-0.09	41000	--	ND	ND	2100	7800	3700	2700	
04/14/99	519.82	14.54	0.00	505.28	-0.19	720	--	1.2	ND	29	260	95	57	
10/12/99	519.82	14.50	0.00	505.32	0.04	2200	--	ND	ND	78	480	52	11	
04/10/00	519.82	14.72	0.00	505.10	-0.22	ND	--	ND	ND	0.815	2.99	28.5	40.1	
10/02/00	519.82	14.91	0.00	504.91	-0.19	ND	--	ND	ND	0.71	1.0	9.2	11	
04/02/01	519.82	14.12	0.00	505.70	0.79	ND	--	ND	ND	ND	ND	ND	ND	
10/05/01	519.82	15.02	0.00	504.80	-0.90	1300	--	4.4	ND<2.5	29	79	ND<25	12	
04/01/02	519.82	14.94	0.00	504.88	0.08	3500	--	5.1	ND<5.0	120	460	ND<50	14	
10/16/02	519.82	15.06	0.00	504.76	-0.12	240	--	ND<0.50	ND<0.50	8.2	15	--	ND<2.0	
04/03/03	519.82	14.96	0.00	504.86	0.10	1300	--	1.5	1.8	23	160	--	6.6	
10/02/03	519.82	15.11	0.00	504.71	-0.15	--	15000	ND<13	ND<13	290	1400	--	ND<50	
04/30/04	519.82	15.25	0.00	504.57	-0.14	--	8000	ND<13	ND<13	140	550	--	ND<13	
12/01/04	519.82	15.37	0.00	504.45	-0.12	--	4700	ND<1.0	ND<1.0	81	240	--	5.9	
06/13/05	519.82	15.12	0.00	504.70	0.25	--	3300	ND<0.50	ND<0.50	47	200	--	2.5	
10/24/05	519.82	15.23	0.00	504.59	-0.11	--	270	ND<0.50	ND<0.50	4.6	10	--	1.5	
06/23/06	519.82	15.13	0.00	504.69	0.10	--	160	ND<0.50	ND<0.50	3.1	8.1	--	1.1	
07/19/06	519.82	15.12	0.00	504.70	0.01	62	--	ND<0.50	ND<0.50	2.1	4.5	--	ND<0.50	
MW-3	**(Screen Interval in feet: 11.0-25.0)**													
11/18/89	--	--	--	--	--	ND	--	0.35	ND	ND	ND	--	--	
03/08/90	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	

Table 2

HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

November 1989 Through July 2006

76 Station 6034

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground-water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	
MW-3 continued														
06/05/90	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
09/07/90	--	--	--	--	--	1100	--	11	ND	6.6	16	--	--	
12/24/90	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
04/10/91	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
07/10/91	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
10/14/91	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
01/14/92	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
04/06/92	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
07/07/92	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
10/16/92	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
01/14/93	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
04/22/93	519.91	14.33	0.00	505.58	--	ND	--	ND	ND	ND	ND	--	--	
07/20/93	519.91	16.90	0.00	503.01	-2.57	ND	--	ND	ND	ND	ND	--	--	
10/20/93	519.66	14.42	0.00	505.24	2.23	ND	--	ND	ND	ND	ND	--	--	
01/20/94	519.66	14.37	0.00	505.29	0.05	--	--	--	--	--	--	--	--	Sampled Annually
04/21/94	519.66	14.30	0.00	505.36	0.07	ND	--	ND	ND	ND	ND	--	--	
07/21/94	519.66	14.34	0.00	505.32	-0.04	--	--	--	--	--	--	--	--	Sampled Semi-Annually
10/19/94	519.66	14.08	0.00	505.58	0.26	ND	--	ND	0.61	ND	0.51	--	--	
01/18/95	519.66	13.23	0.00	506.43	0.85	--	--	--	--	--	--	--	--	
04/17/95	519.66	13.20	0.00	506.46	0.03	ND	--	ND	ND	ND	ND	--	--	
07/18/95	519.66	13.19	0.00	506.47	0.01	--	--	--	--	--	--	--	--	
10/17/95	519.66	13.24	0.00	506.42	-0.05	ND	--	ND	ND	ND	ND	ND	--	Sampled Annually
01/17/96	519.66	13.68	0.00	505.98	-0.44	--	--	--	--	--	--	--	--	
04/17/96	519.66	13.04	0.00	506.62	0.64	ND	--	ND	ND	ND	ND	ND	--	

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
November 1989 Through July 2006
76 Station 6034

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
MW-3 continued														
07/16/96	519.66	13.24	0.00	506.42	-0.20	--	--	--	--	--	--	--	--	
10/16/96	519.66	13.10	0.00	506.56	0.14	--	--	--	--	--	--	--	--	
04/08/97	519.66	13.73	0.00	505.93	-0.63	--	--	--	--	--	--	--	--	Sampling Discontinued
10/06/97	519.66	13.70	0.00	505.96	0.03	--	--	--	--	--	--	--	--	
04/02/98	519.66	13.43	0.00	506.23	0.27	--	--	--	--	--	--	--	--	
10/07/98	519.66	13.33	0.00	506.33	0.10	--	--	--	--	--	--	--	--	
04/14/99	519.66	13.47	0.00	506.19	-0.14	--	--	--	--	--	--	--	--	
10/12/99	519.66	13.38	0.00	506.28	0.09	--	--	--	--	--	--	--	--	
04/10/00	519.66	13.51	0.00	506.15	-0.13	--	--	--	--	--	--	--	--	
10/02/00	519.66	13.62	0.00	506.04	-0.11	--	--	--	--	--	--	--	--	
04/02/01	519.66	13.38	0.00	506.28	0.24	--	--	--	--	--	--	--	--	
10/05/01	519.66	14.10	0.00	505.56	-0.72	--	--	--	--	--	--	--	--	
04/01/02	519.66	13.98	0.00	505.68	0.12	--	--	--	--	--	--	--	--	
10/16/02	519.66	14.16	0.00	505.50	-0.18	--	--	--	--	--	--	--	--	
04/03/03	519.66	13.98	0.00	505.68	0.18	--	--	--	--	--	--	--	--	
10/02/03	519.66	14.15	0.00	505.51	-0.17	--	--	--	--	--	--	--	--	Monitored Only
04/30/04	519.66	14.20	0.00	505.46	-0.05	--	--	--	--	--	--	--	--	Monitored only
12/01/04	519.66	14.37	0.00	505.29	-0.17	--	--	--	--	--	--	--	--	Sampled Semi-Annually
06/13/05	519.66	13.98	0.00	505.68	0.39	--	--	--	--	--	--	--	--	Monitored Only
10/24/05	519.66	14.17	0.00	505.49	-0.19	--	--	--	--	--	--	--	--	Monitored Only
06/23/06	519.66	13.98	0.00	505.68	0.19	--	--	--	--	--	--	--	--	Monitored Only
07/19/06	519.66	13.96	0.00	505.70	0.02	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
MW-4	**(Screen Interval in feet: 11.0-25.0)**													
11/18/89	--	--	--	--	--	990	--	9.8	10	7.1	4.7	--	--	

Table 2

HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

November 1989 Through July 2006

76 Station 6034

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
MW-4 continued														
03/08/90	--	--	--	--	--	1200	--	18	8.4	37	28	--	--	
06/05/90	--	--	--	--	--	1400	--	1.2	4.7	24	12	--	--	
09/07/90	--	--	--	--	--	15000	--	100	140	210	4600	--	--	
12/24/90	--	--	--	--	--	1400	--	ND	8.7	15	10	--	--	
04/10/91	--	--	--	--	--	950	--	0.84	4.3	9.6	5.0	--	--	
07/10/91	--	--	--	--	--	830	--	8.4	19	7.7	7.2	--	--	
10/14/91	--	--	--	--	--	880	--	3.8	2.2	8.6	5.8	--	--	
01/14/92	--	--	--	--	--	1500	--	4.2	7.1	18	9.2	--	--	
04/06/92	--	--	--	--	--	660	--	1.3	3.8	2.9	4.1	--	--	
07/07/92	--	--	--	--	--	340	--	ND	2.2	2.4	2.4	--	--	
10/16/92	--	--	--	--	--	300	--	2.1	ND	4.8	13	--	--	
01/14/93	--	--	--	--	--	920	--	ND	6.3	12	3.9	--	--	
04/22/93	520.12	14.30	0.00	505.82	--	1100	--	8.8	1.0	7.2	6.0	--	--	
07/20/93	520.12	16.35	0.00	503.77	-2.05	--	--	--	--	--	--	--	--	Not sampled - Sampling access denied
10/20/93	519.61	14.16	0.00	505.45	1.68	640	--	ND	2.5	2.3	1.9	--	--	
01/20/94	519.61	14.15	0.00	505.46	0.01	1200	--	ND	2.6	4.7	7.4	--	--	
04/21/94	519.61	14.13	0.00	505.48	0.02	380	--	0.83	1.2	1.2	1.7	--	--	
07/21/94	519.61	14.26	0.00	505.35	-0.13	320	--	0.51	1.4	1.0	1.6	--	--	
10/19/94	519.61	13.95	0.00	505.66	0.31	750	--	ND	3.6	4.2	3.4	--	--	
01/18/95	519.61	13.16	0.00	506.45	0.79	790	--	1.5	3.3	1.2	2.6	--	--	
04/17/95	519.61	13.19	0.00	506.42	-0.03	570	--	2.8	ND	3.3	3.9	--	--	
07/18/95	519.61	13.21	0.00	506.40	-0.02	340	--	1.0	1.9	2.8	2.7	--	--	
10/17/95	519.61	13.22	0.00	506.39	-0.01	260	--	1.1	0.57	0.69	1.6	2.0	--	

Table 2

HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

November 1989 Through July 2006

76 Station 6034

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
MW-4 continued														
01/17/96	519.61	13.02	0.00	506.59	0.20	--	--	--	--	--	--	--	--	Sampled Semi-Annually
04/17/96	519.61	13.08	0.00	506.53	-0.06	720	--	3.0	2.6	6.1	6.9	ND	--	
07/16/96	519.61	12.91	0.00	506.70	0.17	--	--	--	--	--	--	--	--	
10/16/96	519.61	12.98	0.00	506.63	-0.07	1100	--	6.6	23	24	85	15	--	
01/13/97	519.61	--	0.00	--	--	--	--	--	--	--	--	--	--	
04/08/97	519.61	13.36	0.00	506.25	--	470	--	1.2	1.9	1.2	6.9	ND	--	
10/06/97	519.61	13.42	0.00	506.19	-0.06	240	--	ND	0.85	0.83	2.3	ND	--	
04/02/98	519.61	12.76	0.00	506.85	0.66	270	--	ND	1.2	ND	4.5	10	--	
10/07/98	519.61	13.04	0.00	506.57	-0.28	350	--	ND	ND	ND	4.8	ND	--	
04/14/99	519.61	13.21	0.00	506.40	-0.17	250	--	1.6	ND	3.1	5.6	ND	16	
10/12/99	519.61	13.16	0.00	506.45	0.05	200	--	1.4	ND	2.3	3.9	ND	--	
04/10/00	519.61	13.48	0.00	506.13	-0.32	52.8	--	ND	ND	ND	ND	ND	--	
10/02/00	519.61	13.25	0.00	506.36	0.23	57	--	ND	ND	0.50	0.90	30	--	
04/02/01	519.61	13.11	0.00	506.50	0.14	ND	--	ND	ND	ND	ND	ND	--	
10/05/01	519.61	14.04	0.00	505.57	-0.93	150	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	
04/01/02	519.61	13.76	0.00	505.85	0.28	130	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	
10/16/02	519.61	14.10	0.00	505.51	-0.34	130	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	3.8	
04/03/03	519.61	13.69	0.00	505.92	0.41	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	3.6	
10/02/03	519.61	14.20	0.00	505.41	-0.51	--	81	ND<0.50	0.86	4.1	9.4	--	ND<2.0	
04/30/04	519.61	14.12	0.00	505.49	0.08	--	51	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	1.5	
12/01/04	519.61	14.17	0.00	505.44	-0.05	--	130	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	1.6	
06/13/05	519.61	13.68	0.00	505.93	0.49	--	69	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	0.60	
10/24/05	519.61	14.01	0.00	505.60	-0.33	--	66	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
06/23/06	519.61	13.68	0.00	505.93	0.33	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	

Table 2

HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

November 1989 Through July 2006

76 Station 6034

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
MW-4 continued														
07/19/06	519.61	13.62	0.00	505.99	0.06	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
MW-5	**(Screen Interval in feet: 10.0-24.0)**													
04/10/91	--	--	--	--	--	630	--	35	14	47	30	--	--	
07/10/91	--	--	--	--	--	220	--	5.1	8.7	9.1	9.7	--	--	
10/14/91	--	--	--	--	--	660	--	55	4.4	50	66	--	--	
01/14/92	--	--	--	--	--	99	--	1.0	1.2	ND	0.32	1.2	--	
04/06/92	--	--	--	--	--	240	--	ND	ND	0.35	ND	--	--	
07/07/92	--	--	--	--	--	76	--	0.48	1.1	0.32	1.3	1.5	--	
10/16/92	--	--	--	--	--	180	--	7.8	1.1	17	6.4	2.0	--	
01/14/93	--	--	--	--	--	91	--	ND	0.53	1.2	11	--	--	
04/22/93	520.58	15.24	0.00	505.34	--	94	--	1.2	ND	ND	1.3	0.82	--	
07/20/93	520.58	17.38	0.00	503.20	-2.14	89	--	1.1	0.51	ND	1.8	2.2	--	
10/20/93	520.27	15.56	0.00	504.71	1.51	110	--	0.8	ND	ND	ND	--	--	
01/20/94	520.27	15.39	0.00	504.88	0.17	ND	--	ND	ND	ND	ND	--	--	
04/21/94	520.27	15.41	0.00	504.86	-0.02	ND	--	ND	ND	ND	ND	--	--	
07/21/94	520.27	15.55	0.00	504.72	-0.14	ND	--	ND	ND	ND	ND	--	--	
10/19/94	520.27	15.20	0.00	505.07	0.35	ND	--	ND	0.71	ND	0.57	--	--	
01/18/95	520.27	14.52	0.00	505.75	0.68	ND	--	ND	ND	ND	ND	--	--	
04/17/95	520.27	14.50	0.00	505.77	0.02	ND	--	ND	ND	ND	ND	--	--	
07/18/95	520.27	14.41	0.00	505.86	0.09	ND	--	ND	ND	ND	1.1	--	--	
10/17/95	520.27	14.46	0.00	505.81	-0.05	ND	--	ND	ND	ND	ND	ND	--	
01/17/96	520.27	14.48	0.00	505.79	-0.02	--	--	--	--	--	--	--	--	Sampled Annually
04/17/96	520.27	14.22	0.00	506.05	0.26	ND	--	ND	ND	ND	ND	ND	--	
07/16/96	520.27	14.27	0.00	506.00	-0.05	--	--	--	--	--	--	--	--	

Table 2

HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

November 1989 Through July 2006

76 Station 6034

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
MW-5 continued														
10/16/96	520.27	14.15	0.00	506.12	0.12	--	--	--	--	--	--	--	--	
04/08/97	520.27	14.71	0.00	505.56	-0.56	--	--	--	--	--	--	--	--	Sampling Discontinued
10/06/97	520.27	14.71	0.00	505.56	0.00	--	--	--	--	--	--	--	--	
04/02/98	520.27	14.28	0.00	505.99	0.43	--	--	--	--	--	--	--	--	
10/07/98	520.27	14.40	0.00	505.87	-0.12	--	--	--	--	--	--	--	--	
04/14/99	520.27	14.63	0.00	505.64	-0.23	--	--	--	--	--	--	--	--	
10/12/99	520.27	14.48	0.00	505.79	0.15	--	--	--	--	--	--	--	--	
04/10/00	520.27	14.76	0.00	505.51	-0.28	--	--	--	--	--	--	--	--	
10/02/00	520.27	14.65	0.00	505.62	0.11	--	--	--	--	--	--	--	--	
04/02/01	520.27	14.20	0.00	506.07	0.45	--	--	--	--	--	--	--	--	
10/05/01	520.27	15.47	0.00	504.80	-1.27	--	--	--	--	--	--	--	--	
04/01/02	520.27	15.18	0.00	505.09	0.29	--	--	--	--	--	--	--	--	
10/16/02	520.27	15.50	0.00	504.77	-0.32	--	--	--	--	--	--	--	--	
04/03/03	520.27	15.14	0.00	505.13	0.36	--	--	--	--	--	--	--	--	
10/02/03	520.27	15.66	0.00	504.61	-0.52	--	--	--	--	--	--	--	--	Monitored Only
04/30/04	520.27	15.55	0.00	504.72	0.11	--	--	--	--	--	--	--	--	Monitored only
12/01/04	520.27	15.62	0.00	504.65	-0.07	--	--	--	--	--	--	--	--	Sampled Semi-Anually
06/13/05	520.27	15.31	0.00	504.96	0.31	--	--	--	--	--	--	--	--	Monitored Only
10/24/05	520.27	15.51	0.00	504.76	-0.20	--	--	--	--	--	--	--	--	Monitored Only
06/23/06	520.27	15.29	0.00	504.98	0.22	--	--	--	--	--	--	--	--	Monitored Only
07/19/06	520.27	15.31	0.00	504.96	-0.02	140	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
MW-6	**(Screen Interval in feet: 10.0-24.0)**													
04/10/91	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
07/10/91	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	

Table 2

HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

November 1989 Through July 2006

76 Station 6034

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
MW-6 continued														
10/14/91	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
01/14/92	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
04/06/92	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
07/07/92	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
10/16/92	--	--	--	--	--	--	--	--	--	--	--	--	--	Obstructed
01/14/93	--	--	--	--	--	--	--	--	--	--	--	--	--	Obstructed
04/22/93	519.34	--	0.00	--	--	--	--	--	--	--	--	--	--	Obstructed
07/20/93	519.34	--	0.00	--	--	--	--	--	--	--	--	--	--	Obstructed
10/20/93	518.75	14.20	0.00	504.55	--	ND	--	ND	ND	ND	ND	--	--	
01/20/94	518.75	14.14	0.00	504.61	0.06	ND	--	ND	ND	ND	ND	--	--	
04/21/94	518.75	14.10	0.00	504.65	0.04	ND	--	ND	ND	ND	ND	--	--	
07/21/94	518.75	14.12	0.00	504.63	-0.02	ND	--	ND	ND	ND	ND	--	--	
10/19/94	518.75	--	--	--	--	--	--	--	--	--	--	--	--	Obstructed by roots
01/18/95	518.75	--	--	--	--	--	--	--	--	--	--	--	--	Obstructed by roots
04/17/95	518.75	13.82	0.00	504.93	--	ND	--	ND	ND	ND	ND	--	--	
07/18/95	518.75	13.84	0.00	504.91	-0.02	ND	--	ND	ND	ND	ND	--	--	
10/17/95	518.75	13.90	0.00	504.85	-0.06	ND	--	ND	ND	ND	ND	2.2	--	
01/17/96	518.75	--	--	--	--	--	--	--	--	--	--	--	--	Sampled Annually - Obstructed by roots
04/17/96	518.75	13.66	0.00	505.09	--	ND	--	ND	ND	ND	ND	ND	--	
07/16/96	518.75	--	--	--	--	--	--	--	--	--	--	--	--	Obstructed by roots
10/16/96	518.75	13.72	0.00	505.03	--	--	--	--	--	--	--	--	--	
04/08/97	518.75	--	--	--	--	--	--	--	--	--	--	--	--	Obstructed by roots
10/06/97	518.75	--	--	--	--	--	--	--	--	--	--	--	--	Obstructed by roots

Table 2

HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

November 1989 Through July 2006

76 Station 6034

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
MW-6 continued														
04/02/98	518.75	--	--	--	--	--	--	--	--	--	--	--	--	Obstructed by roots
10/07/98	518.75	--	--	--	--	--	--	--	--	--	--	--	--	Obstructed by roots
04/14/99	518.75	13.82	0.00	504.93	--	--	--	--	--	--	--	--	--	
10/12/99	518.75	13.72	0.00	505.03	0.10	--	--	--	--	--	--	--	--	
04/10/00	518.75	13.40	0.00	505.35	0.32	--	--	--	--	--	--	--	--	
10/02/00	518.75	13.63	0.00	505.12	-0.23	--	--	--	--	--	--	--	--	
04/02/01	518.75	13.31	0.00	505.44	0.32	--	--	--	--	--	--	--	--	
10/05/01	518.75	--	--	--	--	--	--	--	--	--	--	--	--	Obstruction in Well
04/01/02	518.75	--	--	--	--	--	--	--	--	--	--	--	--	Obstruction in Well
10/16/02	518.75	--	--	--	--	--	--	--	--	--	--	--	--	Dry
04/03/03	518.75	--	--	--	--	--	--	--	--	--	--	--	--	Dry
10/02/03	518.75	--	--	--	--	--	--	--	--	--	--	--	--	Inaccessible
04/30/04	518.75	--	--	--	--	--	--	--	--	--	--	--	--	Unable to locate
12/01/04	518.75	--	--	--	--	--	--	--	--	--	--	--	--	Dry well
06/13/05	518.75	--	--	--	--	--	--	--	--	--	--	--	--	Dry well
10/24/05	518.75	--	--	--	--	--	--	--	--	--	--	--	--	Dry well
06/23/06	518.75	--	--	--	--	--	--	--	--	--	--	--	--	Dry well
MW-7	**(Screen Interval in feet: 10.0-24.0)**													
04/10/91	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
07/10/91	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
10/14/91	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
01/14/92	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
04/06/92	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
07/07/92	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	

Table 2

HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

November 1989 Through July 2006

76 Station 6034

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
MW-7 continued														
10/16/92	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
01/14/93	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
04/22/93	519.37	14.25	0.00	505.12	--	ND	--	ND	ND	ND	ND	--	--	
07/20/93	519.37	16.68	0.00	502.69	-2.43	ND	--	ND	ND	ND	ND	--	--	
10/20/93	518.83	14.29	0.00	504.54	1.85	ND	--	ND	ND	ND	ND	--	--	
01/20/94	518.83	14.22	0.00	504.61	0.07	ND	--	ND	ND	ND	ND	--	--	
04/21/94	518.83	14.17	0.00	504.66	0.05	ND	--	ND	ND	ND	ND	--	--	
07/21/94	518.83	14.21	0.00	504.62	-0.04	ND	--	ND	ND	ND	ND	--	--	
10/19/94	518.83	14.05	0.00	504.78	0.16	ND	--	ND	0.87	ND	0.61	--	--	
01/18/95	518.83	13.34	0.00	505.49	0.71	ND	--	ND	ND	ND	ND	--	--	
04/17/95	518.83	13.38	0.00	505.45	-0.04	ND	--	ND	ND	ND	ND	--	--	
07/18/95	518.83	13.36	0.00	505.47	0.02	ND	--	ND	ND	ND	ND	--	--	
10/17/95	518.83	13.41	0.00	505.42	-0.05	ND	--	ND	ND	ND	ND	3.5	--	
01/17/96	518.83	13.56	0.00	505.27	-0.15	--	--	--	--	--	--	--	--	Sampled Annually
04/17/96	518.83	13.21	0.00	505.62	0.35	ND	--	ND	ND	ND	ND	ND	--	
07/16/96	518.83	13.22	0.00	505.61	-0.01	--	--	--	--	--	--	--	--	
10/16/96	518.83	13.58	0.00	505.25	-0.36	--	--	--	--	--	--	--	--	
04/08/97	518.83	13.73	0.00	505.10	-0.15	--	--	--	--	--	--	--	--	Sampling Discontinued
10/06/97	518.83	13.65	0.00	505.18	0.08	--	--	--	--	--	--	--	--	
04/02/98	518.83	13.55	0.00	505.28	0.10	--	--	--	--	--	--	--	--	
10/07/98	518.83	13.64	0.00	505.19	-0.09	--	--	--	--	--	--	--	--	
04/14/99	518.83	13.75	0.00	505.08	-0.11	--	--	--	--	--	--	--	--	
10/12/99	518.83	13.61	0.00	505.22	0.14	--	--	--	--	--	--	--	--	
04/10/00	518.83	13.85	0.00	504.98	-0.24	--	--	--	--	--	--	--	--	

Table 2

HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

November 1989 Through July 2006

76 Station 6034

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
MW-7 continued														
10/02/00	518.83	14.19	0.00	504.64	-0.34	--	--	--	--	--	--	--	--	
04/02/01	518.83	13.86	0.00	504.97	0.33	--	--	--	--	--	--	--	--	Sampling Discontinued
10/05/01	518.83	14.30	0.00	504.53	-0.44	--	--	--	--	--	--	--	--	
04/01/02	518.83	14.23	0.00	504.60	0.07	--	--	--	--	--	--	--	--	
10/16/02	518.83	14.30	0.00	504.53	-0.07	--	--	--	--	--	--	--	--	
04/03/03	518.83	14.27	0.00	504.56	0.03	--	--	--	--	--	--	--	--	
10/02/03	518.83	14.35	0.00	504.48	-0.08	--	--	--	--	--	--	--	--	Monitored Only
04/30/04	518.83	14.35	0.00	504.48	0.00	--	--	--	--	--	--	--	--	Monitored only
12/01/04	518.83	14.66	0.00	504.17	-0.31	--	--	--	--	--	--	--	--	Sampled Semi-Annually
06/13/05	518.83	15.47	0.00	503.36	-0.81	--	--	--	--	--	--	--	--	Monitored Only
10/24/05	518.83	15.65	0.00	503.18	-0.18	--	--	--	--	--	--	--	--	Monitored Only
06/23/06	518.83	14.49	0.00	504.34	1.16	--	--	--	--	--	--	--	--	Monitored Only
07/19/06	518.83	14.46	0.00	504.37	0.03	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	

Table 2 a

ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 6034

Date Sampled	TBA	Ethanol (8260B)	Ethylene-dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME	Total Oil and Grease	Chloroform	Trichloro-ethene (TCE)	Post-purge Dissolved Oxygen	Pre-purge Dissolved Oxygen
	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(mg/l)	(µg/l)	(µg/l)	(mg/l)	(mg/l)
MW-1												
03/08/90	--	--	--	--	--	--	--	4.7	ND	ND	--	--
06/05/90	--	--	--	--	--	--	--	ND	ND	ND	--	--
09/07/90	--	--	--	--	--	--	--	ND	ND	ND	--	--
12/24/90	--	--	--	--	--	--	--	ND	ND	ND	--	--
04/10/91	--	--	--	--	--	--	--	ND	ND	ND	--	--
07/10/91	--	--	--	--	--	--	--	ND	ND	ND	--	--
04/21/94	--	--	--	--	--	--	--	ND	ND	ND	--	--
04/17/95	--	--	--	--	--	--	--	ND	0.69	ND	--	--
04/17/96	--	--	--	--	--	--	--	ND	ND	ND	--	--
07/16/96	--	--	--	--	--	--	--	--	--	--	4.28	4.24
07/19/06	ND<10	ND<250	--	--	ND<0.50	--	ND<0.50	--	--	--	--	--
MW-2												
07/18/95	--	--	--	--	--	--	--	--	--	--	4.22	--
10/17/95	--	--	--	--	--	--	--	--	--	--	3.96	--
01/17/96	--	--	--	--	--	--	--	--	--	--	5.25	--
04/17/96	--	--	--	--	--	--	--	--	--	--	2.59	--
07/16/96	--	--	--	--	--	--	--	--	--	--	4.35	4.46
10/16/96	--	--	--	--	--	--	--	--	--	--	2.92	3.87
01/13/97	--	--	--	--	--	--	--	--	--	--	--	4.76
04/08/97	--	--	--	--	--	--	--	--	--	--	3.42	3.76
10/06/97	--	--	--	--	--	--	--	--	--	--	3.59	4.13
04/02/98	--	--	--	--	--	--	--	--	--	--	3.16	6.32
10/07/98	--	--	--	--	--	--	--	--	--	--	--	3.85
04/14/99	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	3.14
10/12/99	ND	ND	--	--	ND	ND	ND	--	--	--	--	2.96
04/10/00	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	3.47

Table 2 a

ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 6034

Date Sampled	TBA (µg/l)	Ethanol (8260B) (µg/l)	Ethylene-dibromide (EDB) (µg/l)	1,2-DCA (EDC) (µg/l)	DIPE (µg/l)	ETBE (µg/l)	TAME (µg/l)	Total Oil and Grease (mg/l)	Chloroform (µg/l)	Trichloro-ethene (TCE) (µg/l)	Post-purge Dissolved Oxygen (mg/l)	Pre-purge Dissolved Oxygen (mg/l)
MW-2 continued												
10/02/00	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	3.77
04/02/01	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	3.95
10/05/01	ND<100	ND<1000	ND<2	ND<2	ND<2	ND<2	ND<2	--	--	--	--	2.89
04/01/02	ND<100	ND<500	ND<2	ND<2	ND<2	ND<2	ND<2	--	--	--	--	3.15
10/16/02	ND<100	ND<500	ND<2	ND<2	ND<2	ND<2	ND<2	--	--	--	--	3.08
04/03/03	ND<100	ND<500	ND<2	ND<2	ND<2	ND<2	ND<2	--	--	--	--	2.60
10/02/03	ND<2500	ND<13000	ND<50	ND<50	ND<50	ND<50	ND<50	--	--	--	--	3.53
04/30/04	ND<130	ND<1300	ND<13	ND<13	ND<25	ND<13	ND<13	--	--	--	--	1.78
12/01/04	32	ND<100	ND<1.0	ND<1.0	ND<2.0	ND<1.0	ND<1.0	--	--	--	5.66	5.42
06/13/05	9.6	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	4.79	5.76
10/24/05	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	2.16	2.29
06/23/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	4.53
07/19/06	ND<10	ND<250	--	--	ND<0.50	--	ND<0.50	--	--	--	--	--
MW-3												
07/16/96	--	--	--	--	--	--	--	--	--	--	4.20	4.19
07/19/06	ND<10	ND<250	--	--	ND<0.50	--	ND<0.50	--	--	--	--	--
MW-4												
07/16/96	--	--	--	--	--	--	--	--	--	--	4.30	4.25
01/13/97	--	--	--	--	--	--	--	--	--	--	--	4.97
04/14/99	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--
10/02/03	--	ND<500	--	--	--	--	--	--	--	--	--	--
04/30/04	--	ND<50	--	--	--	--	--	--	--	--	--	--
12/01/04	--	ND<50	--	--	--	--	--	--	--	--	--	--
06/13/05	--	ND<50	--	--	--	--	--	--	--	--	--	--
10/24/05	--	ND<250	--	--	--	--	--	--	--	--	--	--
06/23/06	--	ND<250	--	--	--	--	--	--	--	--	--	--

Table 2 a

ADDITIONAL HISTORIC ANALYTICAL RESULTS

76 Station 6034

Date Sampled	TBA	Ethanol (8260B)	Ethylene-dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME	Total Oil and Grease	Chloroform	Trichloro-ethene (TCE)	Post-purge Dissolved Oxygen	Pre-purge Dissolved Oxygen
	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(mg/l)	(µg/l)	(µg/l)	(mg/l)	(mg/l)
MW-4 continued												
07/19/06	ND<10	ND<250	--	--	2.2	--	ND<0.50	--	--	--	--	--
MW-5												
07/16/96	--	--	--	--	--	--	--	--	--	--	4.21	4.18
07/19/06	ND<10	ND<250	--	--	ND<0.50	--	ND<0.50	--	--	--	--	--
MW-7												
07/16/96	--	--	--	--	--	--	--	--	--	--	4.19	4.20
07/19/06	ND<10	ND<250	--	--	ND<0.50	--	ND<0.50	--	--	--	--	--

KEI-P89-0801.R5
May 10, 1991

TABLE 6

SUMMARY OF LABORATORY ANALYSES
WATER

Date	Sample	TPH as Gasoline	Benzene	Toluene	Xylenes	Ethylbenzene
8/07/89	W1	47,000	260	840	9,400	830
Detection Limits		30	0.3	0.3	0.3	0.3

Results in parts per billion (ppb), unless otherwise indicated.

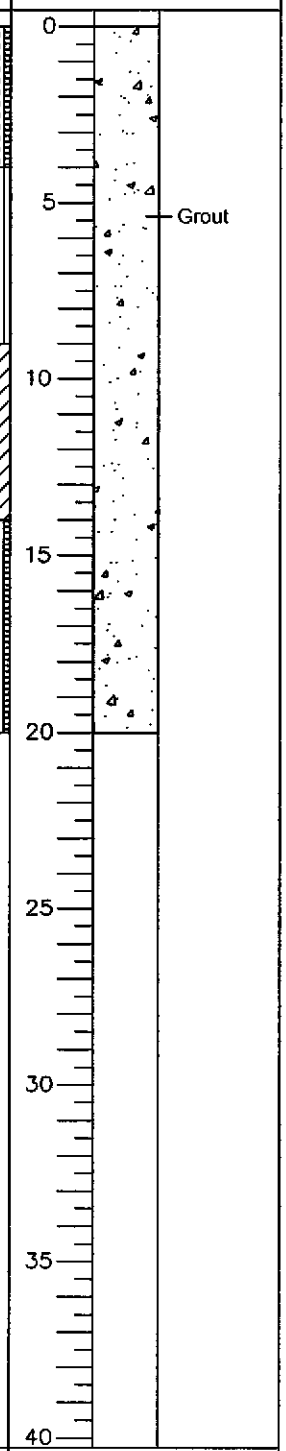
PROJECT NO.: 41-0103-01
CLIENT: ConocoPhillips
LOCATION: 76 Service Station #6034
4700 First Street, Livermore, California

DATE DRILLED: 10/30/03
LOGGED BY: M. Trevor
APPROVED BY: B.A. Moed, RG
DRILLING CO.: Fisch

DRILLING METHOD: 1.5-inch Geoprobe
SAMPLER TYPE: Continuous-Core Barrel
TOTAL DEPTH: 20.0 feet
DEPTH TO WATER: 15.1 feet

PID/FID (ppm)	BLOWS PER 6 INCHES	RECOVERY	SAMPLE	DEPTH (feet below grade)	DESCRIPTION	USCS	LITHOLOGY
				0	Hand augered to 5'. SILTY GRAVEL WITH SAND (GM): Brown (10YR 4/3), 30 % slightly plastic fines, 20% fine to medium sand, 50% medium subangular gravel, loose, moist.	GM	
0		2/2		5	SILT (ML): Dark greenish gray (GLEY2 4/1) with orange mottles, 90% slightly plastic fines, 10% fine to medium sand, medium stiff, moist.	ML	
0		2/2		10	CLAY (CL): Dark greenish gray (GLEY2 4/1), 90 % plastic fines, 10% fine sand, medium stiff, moist.	CL	
0.1		2/2		15	SILTY GRAVEL WITH SAND (GM): Dark grayish brown (2.5Y 4/2), 20% slightly plastic fines, 30% fine to medium sand, 50 % fine to medium subangular gravel, loose, wet.	GM	
0		2/2		20			
				25			
				30			
				35			
				40			

BORING BACKFILL DETAIL



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LOG OF EXPLORATORY BORING

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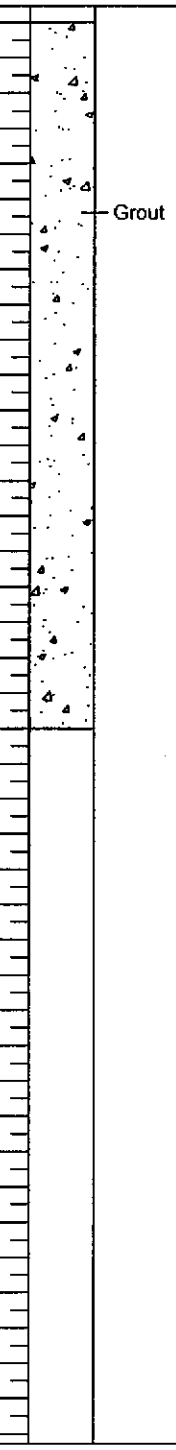
ATTACHMENT 6

PROJECT NO.: 41-0103-01	DATE DRILLED: 10/30/03
CLIENT: ConocoPhillips	LOGGED BY: M. Trevor
LOCATION: 76 Service Station #6034	APPROVED BY: B.A. Moed, RG
4700 First Street, Livermore, California	DRILLING CO.: Fisch

DRILLING METHOD: 1.5-inch Geoprobe
SAMPLER TYPE: Continuous-Core Barrel
TOTAL DEPTH: 20.0 feet
DEPTH TO WATER: 15.6 feet

PID/FID (ppm)	BLOWS PER 6 INCHES	RECOVERY	SAMPLE	DEPTH (feet below grade)	DESCRIPTION	USCS	LITHOLOGY
				0	Hand augered to 5'. SILTY GRAVEL WITH SAND (GM): Brown (10YR 4/3), 30 % slightly plastic fines, 20% fine to medium sand, 50 % medium subangular gravel, loose, moist.	GM	
0		2/2		5	SILT (ML): Dark greenish gray (GLEY2 4/1) with orange mottles, 90% slightly plastic fines, 10% fine to medium sand, medium stiff, moist.	ML	
0.2		2/2		10	CLAY (CL): Dark greenish gray (GLEY2 4/1), 90 % plastic fines, 10% fine sand, medium stiff, moist.	CL	
0.1		2/2		15	SILTY GRAVEL WITH SAND (GM): Dark grayish brown (2.5Y 4/2), 20% slightly plastic fines, 30% fine to medium sand, 50 % fine to medium subangular gravel, loose, wet.	GM	
				20			
				25			
				30			
				35			
				40			

BORING BACKFILL DETAIL



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LOG OF EXPLORATORY BORING

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PAGE 1 OF 1

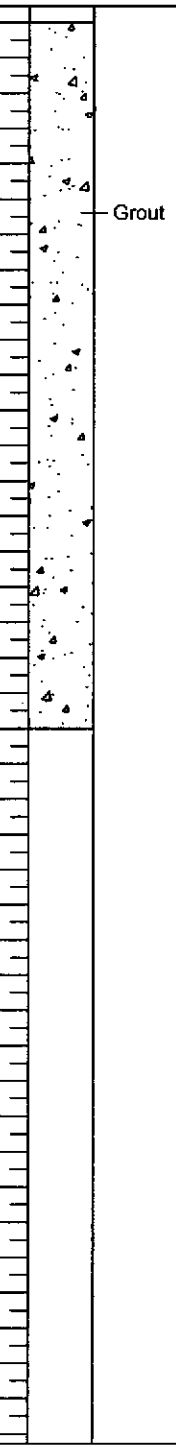
PROJECT NO.: 41-0103-01
CLIENT: ConocoPhillips
LOCATION: 76 Service Station #6034
4700 First Street, Livermore, California

DATE DRILLED: 10/30/03
LOGGED BY: M. Trevor
APPROVED BY: B.A. Moed, RG
DRILLING CO.: Fisch

DRILLING METHOD: 1.5-inch Geoprobe
SAMPLER TYPE: Continuous-Core Barrel
TOTAL DEPTH: 20.0 feet
DEPTH TO WATER: 15.4 feet

PID/FID (ppm)	BLOWS PER 6 INCHES	RECOVERY	SAMPLE	DEPTH (feet below grade)	DESCRIPTION	USCS	LITHOLOGY
				0	Hand augered to 5'. SILTY GRAVEL WITH SAND (GM): Brown (10YR 4/3), 30 % slightly plastic fines, 20 % fine to medium sand, 50 % medium subangular gravel, loose, moist.	GM	
0		2/2		5	SILT (ML): Dark greenish gray (GLEY2 4/1) with orange mottles, 90% slightly plastic fines, 10 % fine to medium sand, medium stiff, moist.	ML	
0.6		2/2		10	CLAY (CL): Dark greenish gray (GLEY2 4/1), 90 % plastic fines, 10% fine sand, medium stiff, moist.	CL	
0.2		1.5/2		15	SILTY SAND (SM): Greenish gray (GLEY2 5/1), 30 % nonplastic fines, 70 % fine to medium sand, loose, moist.	SM	
					SILTY GRAVEL WITH SAND (GM): Dark grayish brown (2.5Y 4/2), 20% slightly plastic fines, 30 % fine to medium sand, 50 % fine to medium subangular gravel, loose, wet.	GM	
				20			
				25			
				30			
				35			
				40			

BORING BACKFILL DETAIL



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LOG OF EXPLORATORY BORING

SB-3
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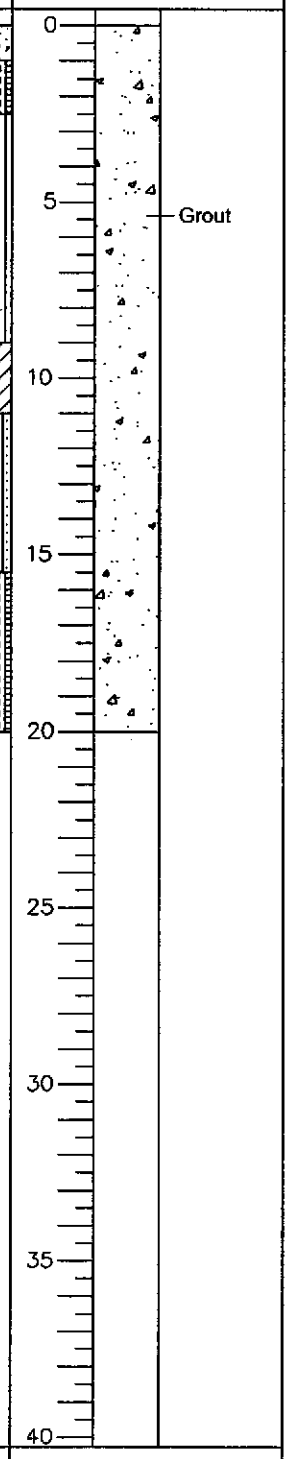
PROJECT NO.: 41-0103-01	DATE DRILLED: 10/30/03
CLIENT: ConocoPhillips	LOGGED BY: M. Trevor
LOCATION: 76 Service Station #6034	APPROVED BY: B.A. Moed, RG
4700 First Street, Livermore, California	DRILLING CO.: Fisch

DRILLING METHOD: 1.5-inch Geoprobe
SAMPLER TYPE: Continuous-Core Barrel
TOTAL DEPTH: 20.0 feet
DEPTH TO WATER: 15.4 feet

PID/FID (ppm)	BLOWS PER 6 INCHES	RECOVERY	SAMPLE	DEPTH (feet below grade)	DESCRIPTION	USCS	LITHOLOGY
				0	Hand augered to 5'. Concrete.	Con-crete	
					SILTY GRAVEL WITH SAND (GM): Brown (10YR 4/3), 30 % slightly plastic fines, 20 % fine to medium sand, 50 % medium subangular gravel, loose, moist.	GM	
>100		1.5/2		5	SILT (ML): Dark greenish gray (GLEY2 4/1) with orange mottles, 90% slightly plastic fines, 10 % fine to medium sand, medium stiff, moist.	ML	
16		2/2		10	CLAY (CL): Dark greenish gray (GLEY2 4/1), 90 % plastic fines, 10% fine sand, medium stiff, moist.	CL	
					SILTY SAND (SM): Greenish gray (GLEY2 5/1), 30 % nonplastic fines, 70 % fine to medium sand, loose, moist.	SM	
3		2/2		15	SILTY GRAVEL WITH SAND (GM): Dark grayish brown (2.5Y 4/2), 20% slightly plastic fines, 30 % fine to medium sand, 50 % fine to medium subangular gravel, loose, wet.	GM	
				20			
				25			
				30			
				35			
				40			

BORING BACKFILL DETAIL



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LOG OF EXPLORATORY BORING

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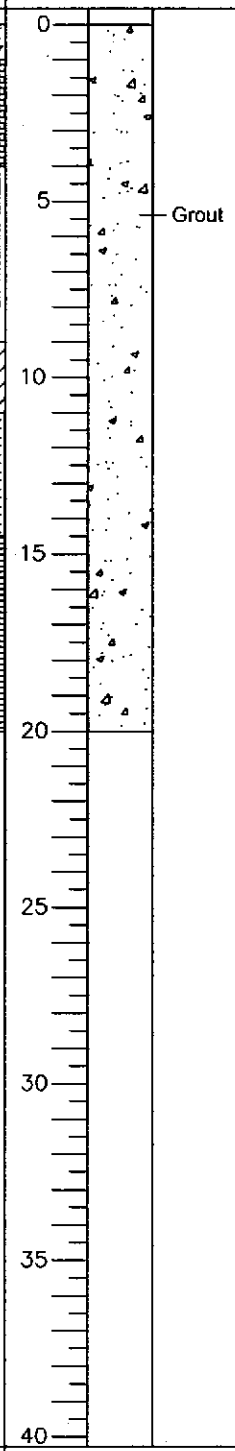
PROJECT NO.: 41-0103-01
CLIENT: ConocoPhillips
LOCATION: 76 Service Station #6034
4700 First Street, Livermore, California

DATE DRILLED: 10/30/03
LOGGED BY: M. Trevor
APPROVED BY: B.A. Moed, RG
DRILLING CO.: Fisch

DRILLING METHOD: 1.5-inch Geoprobe
SAMPLER TYPE: Continuous-Core Barrel
TOTAL DEPTH: 20.0 feet
DEPTH TO WATER: 14.3 feet

PID/FID (ppm)	BLOWS PER 6 INCHES	RECOVERY	SAMPLE	DEPTH (feet below grade)	DESCRIPTION	USCS	LITHOLOGY
				0	Hand augered to 5'. Concrete.	Con-crete	
					SILTY GRAVEL WITH SAND (GM): Brown (10YR 4/3), 30 % slightly plastic fines, 20% fine to medium sand, 50% medium subangular gravel, loose, moist.	GM	
26		2/2		5	SILT (ML): Dark greenish gray (GLEY2 4/1) with orange mottles, 90% slightly plastic fines, 10% fine to medium sand, medium stiff, moist.	ML	
7		2/2		10	CLAY (CL): Dark greenish gray (GLEY2 4/1), 90 % plastic fines, 10% fine sand, medium stiff, moist.	CL	
					SILTY SAND (SM): Greenish gray (GLEY2 5/1), 30 % nonplastic fines, 70% fine to medium sand, loose, moist.	SM	
0.1		2/2		15	SILTY GRAVEL WITH SAND (GM): Dark grayish brown (2.5Y 4/2), 20% slightly plastic fines, 30% fine to medium sand, 50 % fine to medium subangular gravel, loose, wet.	GM	
				20			
				25			
				30			
				35			
				40			

BORING BACKFILL DETAIL



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LOG OF EXPLORATORY BORING

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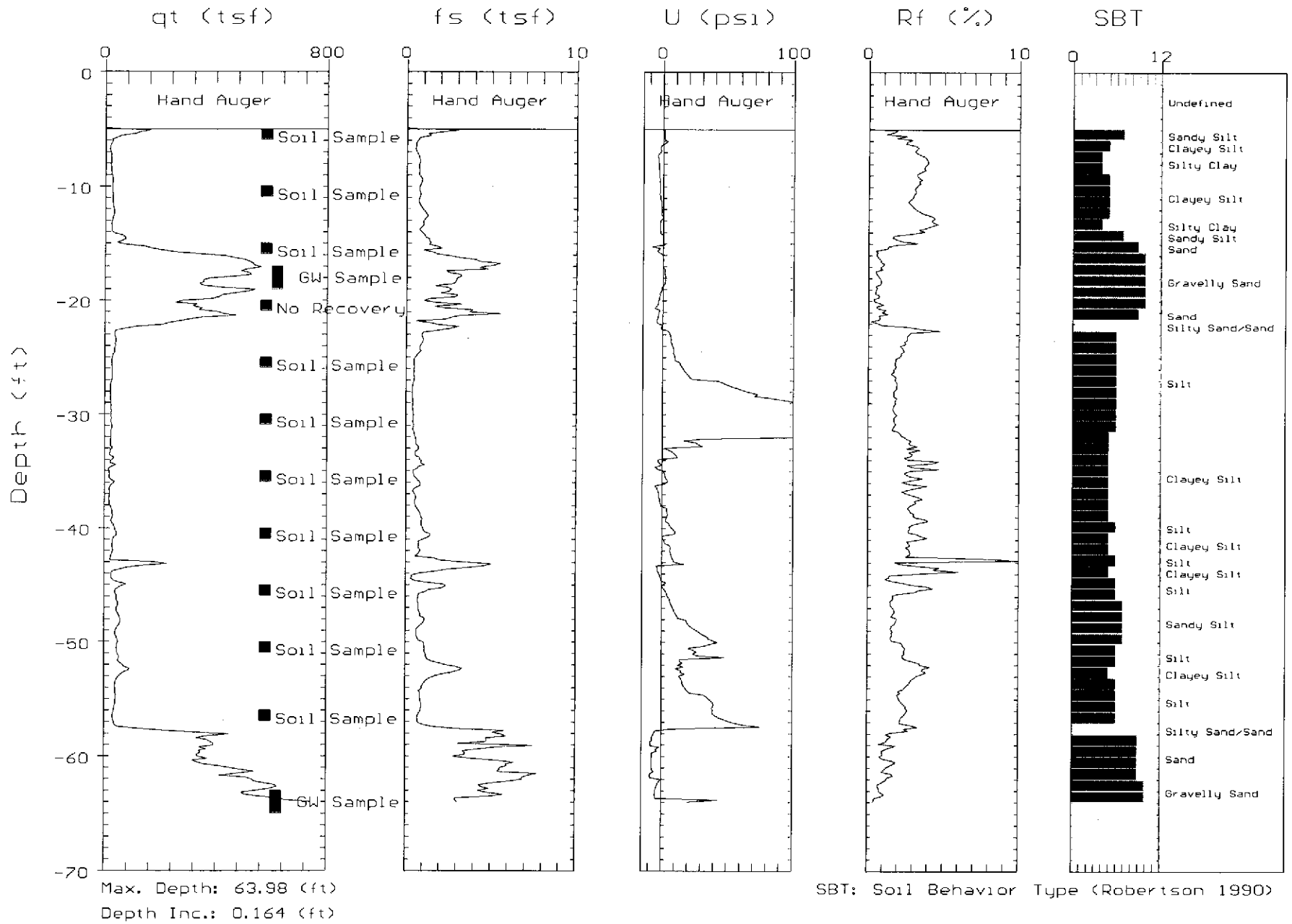
GREGG

DELTA ENV.

Site:76 STATION #6034
Location:CPT-06

Engineer:B.WRIGHT
Date:07:21:06 08:31



Max. Depth: 63.98 (ft)
Depth Inc.: 0.164 (ft)

SBT: Soil Behavior Type (Robertson 1990)

Delta
Environmental Consultants, Inc.

Project No: C106034041	Client: ConocoPhillips	SB-6
Logged By: Ben Wright	Location: 4700 First Street, Livermore, California	Page 1 of 3
Driller: Gregg Drilling and Testing	Date Drilled: 7/21/06	Location Map
Drilling Method: Cone Penetration Testing	Hole Diameter: 1.75"	See Site Map
Sampling Method:Piston Sampler/Hydropunch	Hole Depth: 63'	
Casing Type: NA	Well Diameter: NA	
Slot Size: NA	Well Depth: NA	
Gravel Pack: NA	Casing Stickup: NA	
Elevation	Northing	Easting

Well Completion (Backfill / Casing)	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
									Asphalt
Neat Cement		Moist		Air Knife	1–4			GM	**Silty GRAVEL with sand;** brown; medium dense; medium to coarse sand; subangular to rounded gravel and sand; no odor. (70,15,15)
		Dry to Moist	0		5–9			ML	**SILT with Sand;** yellowish brown; non plastic; low toughness; dry to moist; no odor; (10,25,65)
		Moist	56.1		10–14			CL	**CLAY;** greenish brown; medium plasticity; some sand medium toughness, moist, no odor (0,10,90)
		Sat	130		15–17			GM	**Silty GRAVEL with sand;** grayish brown; medium dense; medium to coarse sand; no odor (60,20,20)
					18		X		Groundwater sampled @ 18'
		Sat	24		19–22			GM	Small Recovery; As above; greenish brown; more gravel

Delta
Environmental Consultants, Inc.

Project No: C106034041	Client: ConocoPhillips	SB-6	
Logged By: Ben Wright	Location: 4700 First Street, Livermore, California	Page 2 of 3	
Driller: Gregg Drilling and Testing	Date Drilled: 7/21/06	Location Map	
Drilling Method: Cone Penetration Testing	Hole Diameter: 1.75"	See Site Map	
Sampling Method:Piston Sampler/Hydropunch	Hole Depth: 63'		
Casing Type: NA	Well Diameter: NA		
Slot Size: NA	Well Depth: NA		
Gravel Pack: NA	Casing Stickup: NA		
Elevation	Northing	Easting	

Well Completion (Backfill / Casing)	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
Neat Cement					23				
					24				
		Sat	68		25			ML	SILT; grayish to light brown; non plasticity;
					26				low toughness; saturated; odor; (0,0,100)
					27				
					28				
					29				
		Sat	37		30			ML	As above; light brown
					31				
					32				
					33				
					34				
		Sat	4.8		35			SP	Poorly graded SAND with silt; light brown;
					36			SM	poorly graded; fine grained; low toughness/soft;
									saturated; slight odor, (0,90,10)
					37				
					38				
					39				
		Wet	30		40			CL	CLAY; grayish brown; medium plasticity;
					41				low toughness; wet; no odor; (0,0,100)
					42				
					43				
					44				

Delta
Environmental Consultants, Inc.

Project No: C106034041	Client: ConocoPhillips	SB-6
Logged By: Ben Wright	Location: 4700 First Street, Livermore, California	Page 3 of 3
Driller: Gregg Drilling and Testing	Date Drilled: 7/21/06	Location Map
Drilling Method: Cone Penetration Testing	Hole Diameter: 1.75"	See Site Map
Sampling Method:Piston Sampler/Hydropunch	Hole Depth: 63'	
Casing Type: NA	Well Diameter: NA	
Slot Size: NA	Well Depth: NA	
Gravel Pack: NA	Casing Stickup: NA	
Elevation	Northing	Easting

Well Completion (Backfill / Casing)	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
Neat Cement		Wet	2		45			CL	As above
					46				
					47				
					48				
					49				
		Sat/ Wet	8		50			SM	Silty SAND; greenish/grayish brown; fine to coarse; well graded; medium dense; saturated; no odor; (0,80,20)
					51			CL	CLAY; light brown; medium plasticity; medium toughness; saturated/wet; no odor; (0,0,100)
					52				
					53				
					54				
					55				
		Wet	3		56			CL	As above
					57				
					58				
					59				
					60				
					61				
					62		X		Groundwater sampled @ 62'
					63				Total Depth = 63'
					64				
					65				
					66				

BORING LOG

Project No. KEI-P89-0801	Boring & Casing Diameter 9" 2"	Logged By D.L. DLB
Project Name Unocal Livermore - First St.	Well Head Elevation N/A	Date Drilled 10-26-89
Boring No. MW1	Drilling Method Hollow-stem Auger	Drilling Company EGI

Penetration blows/6"	G. W. level	Depth (ft) Samples	Stratigraphy USCS	Description
		0	GW/GC	A.C. Pavement Well graded gravel with clay and sand, trace-5% silt, dense, moist, dark brown, gravel to 8", gravel is sandstone, angular; fill.
12/18/22		5		
13/9/7				No sample recovery at 6 feet.
4/6/7			CH	Clay, high plasticity, trace silt and sand, stiff, moist, black.
6/8/10		10		Clay, as above, 10% gravel to 1/4" with weak cementation. Clay, high plasticity, 10-15% silt and sand, stiff to very stiff, moist, w/weak cementation, dark olive gray.
7/9/18			GC	Clayey gravel, 5-15% sand, dense, slightly moist, greenish gray.
4/5/8		15	CL/CH	Sandy clay, 10% silt, stiff to firm, moist, olive gray.
5/8/12	▽		ML	Fine sandy silt, 5-15% clay, very stiff, moist, dark greenish gray.
12/30/35		20	GW	Well graded gravel with sand, trace - 10% fines, very dense, wet, olive brown, gravel to 2", angular to rounded.

BORING LOG

Project No.	Boring & Casing Diameter	Logged By
KEI-P89-0801	9" 2"	D.L.
Project Name Unocal Livermore - First St.	**Well Head Elevation** N/A	**Date Drilled** 10-26-89
Boring No. MW1	**Drilling Method** Hollow-stem Auger	**Drilling Company** EGI

Penetration blows/6"	G. W. level	Depth (ft) Samples	Stratigraphy USCS	Description
			GW	Well graded gravel, as above, very dense.
				Silty clay, 5-10% fine sand, very stiff, moist, light olive brown and pale olive w/weak cementation.
8/12/17		25	CL/ CH	Poorly graded sand, fine, very dense, very moist, olive.
9/14/22			SP	Poorly graded gravel, dense to very dense, wet, dark brown.
			GP	
8/16/20			CH	Clay with sand, 5-10% silt, very stiff to hard, slightly moist, olive.
		30		
		35		
		40		TOTAL DEPTH 28.5'

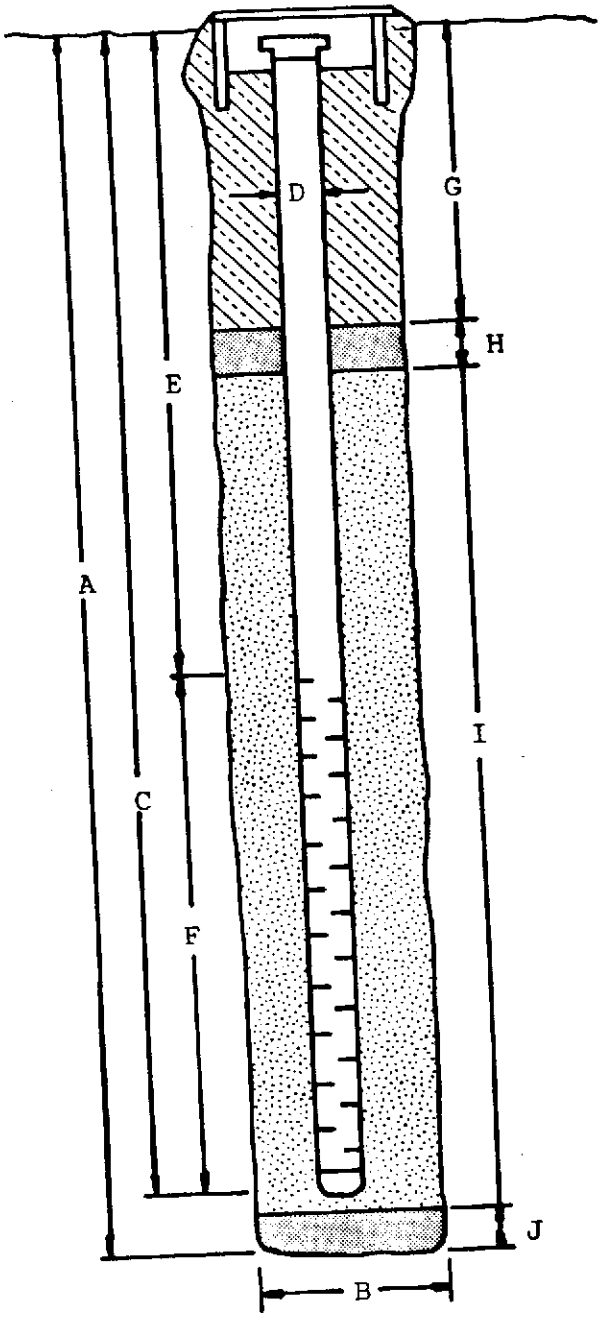
WELL COMPLETION DIAGRAM

PROJECT NAME: Unocal - Livermore - 4700 First St. BORING/WELL NO. MW1

PROJECT NUMBER: KEI-P89-0801

WELL PERMIT NO.:

Flush-mounted Well Cover



A. Total Depth: 28.5'

B. Boring Diameter*: 9"

Drilling Method: Hollow Stem Auger

C. Casing Length: 28.5'

Material: Schedule 40 PVC

D. Casing Diameter: OD = 2.375"

ID = 2.067"

E. Depth to Perforations: 11'

F. Perforated Length: 17.5'

Perforation Type: Machined Slot

Perforation Size: 0.020"

G. Surface Seal: 7'

Seal Material: Concrete

H. Seal: 2'

Seal Material: Bentonite

I. Gravel Pack: 18.5'

Pack Material: RMC Lonestar Sand

Size: #3

J. Bottom Seal: None

Seal Material: N/A

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

BORING LOG

Project No.	Boring & Casing Diameter	Logged By
KEI-P89-0801	9" 2"	D.L.
Project Name Unocal Livermore - First St.	**Well Head Elevation** N/A	**Date Drilled** 10-25-89
Boring No. MW2	**Drilling Method** Hollow-stem Auger	**Drilling Company** EGI

Penetration blows/6"	G. W. level	Depth (ft) Samples	Stratigraphy USCS	Description
		0	GW/GM	A.C. Pavement Well graded gravel with silt and sand, medium dense, moist, olive brown: fill.
9/12/14		5		
			CH	Clay, high plasticity, 10-15% sand and gravel, gravel to 3/8" stiff, moist, black.
5/8/11		10	CL/CH	Clay, moderate plasticity, stiff, moist, dark gray w/mod. cementation, blocky, dark greenish gray below 11 feet.
6/8/10			ML	Silt with clay, 10-15% fine sand from 12.5-13.5 feet, stiff, moist, dark greenish gray.
3/4/6		15		Grading stiff to very stiff Poor sample recovery at 16 feet.
10/22/32	▽		GW	Well graded gravel with sand, 5-10% fines, very dense, wet, dark gray.
40/50-5"		20		Well graded gravel with sand, lensed with well graded gravel

BORING LOG

Project No. KEI-P89-0801	Boring & Casing Diameter 9" 2"	Logged By D.L.
Project Name Unocal Livermore - First St.	Well Head Elevation N/A	Date Drilled 10-25-89
Boring No. MW2	Drilling Method Hollow-stem Auger	Drilling Company EGI

Penetration blows/6"	G. W. level	Depth (ft) Samples	Stratigraphy USCS	Description
			GW	with silt and sand, trace clay, very dense, wet, dark gray, discolored, some gravel is weathered.
8/11/20		25	CL/ CH	Clay, moderate plasticity, trace to 10% silt and sand, very stiff, cemented, slightly moist, light olive brown to pale olive, mottled, gravelly from 25.5' to 26', sandy below 26.75'.
8/11/18				
		30		
		35		
		40		TOTAL DEPTH 27'

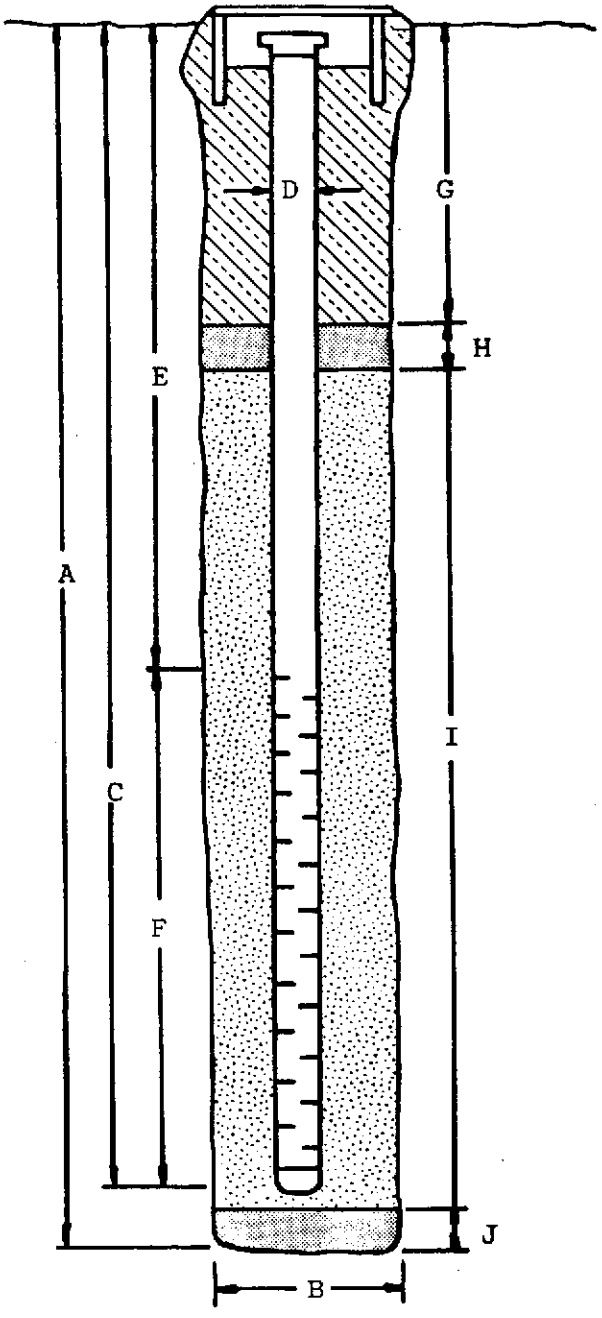
WELL COMPLETION DIAGRAM

PROJECT NAME: Unocal - Livermore - 4700 First St. BORING/WELL NO. MW2

PROJECT NUMBER: KEI-P89-0801

WELL PERMIT NO.:

Flush-mounted Well Cover



A. Total Depth: 26'

B. Boring Diameter*: 9"

Drilling Method: Hollow Stem Auger

C. Casing Length: 26'

Material: Schedule 40 PVC

D. Casing Diameter: OD = 2.375"

ID = 2.067"

E. Depth to Perforations: 11'

F. Perforated Length: 15'

Perforation Type: Machined Slot

Perforation Size: 0.020"

G. Surface Seal: 7'

Seal Material: Concrete

H. Seal: 2'

Seal Material: Bentonite

I. Gravel Pack: 17'

Pack Material: RMC Lonestar Sand

Size: #3

J. Bottom Seal: 1'(Sampler hole)

Seal Material: Bentonite

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

BORING LOG

Project No. KEI-P89-0801	Boring & Casing Diameter 9" 2"	Logged By D.L.
Project Name Unocal Livermore - First St.	Well Head Elevation N/A	Date Drilled 10-25-89
Boring No. MW3	Drilling Method Hollow-stem Auger	Drilling Company EGI

Penetration blows/6"	G. W. level	Depth (ft) Samples	Stratigraphy USCS	Description
		0	GW/GC	A.C. Pavement Well graded gravel with clay and sand, dense, moist, olive brown fill, gravel to 4" diameter.
			GC	Clayey gravel w/sand, 10% silt, dense, moist, dark grayish green, olive brown below 4 feet gravel to 4", gravel is sandstone, angular: fill.
4/3/4		5	CH	Silty clay, high plasticity, firm, moist, black, silt content decreases w/depth, trace sand below 7 feet.
3/6/6				
9/11/12		10		Color change to olive, very stiff, moderately cemented.
8/9/10			GC	Sandy gravel w/clay, 15-25% clay, 20-35% sand, med. dense, moist, olive to olive brown.
3/11/26	▽	15	GP	Poorly graded gravel w/sand, medium dense, very moist to wet, olive gray.
6/22/27			GW	Well graded gravel with sand, gravel to 2", lensed w/well graded sand with gravel, very dense, wet, olive brown to dark grayish brown; dark gray discolored at 15-16 feet, 6" thick sand lense.
		20		

BORING LOG

Project No. KEI-P89-0801	Boring & Casing Diameter 9" 2"	Logged By D.L. DRB
Project Name Unocal Livermore - First St.	Well Head Elevation N/A	Date Drilled 10-25-89
Boring No. MW3	Drilling Method Hollow-stem Auger	Drilling Company EGI

Penetration blows/6"	G. W. level	Depth (ft) Samples	Stratigraphy USCS	Description
11/17/35			GW	Well graded gravel, as above, 5-10% fines, below 21.5 feet.
3/7/9		25	CL/CH	Clay, stiff to very stiff, cemented, blocky, moist to wet, pale olive with white, locally cemented.
		30		
		35		
		40		TOTAL DEPTH 26'

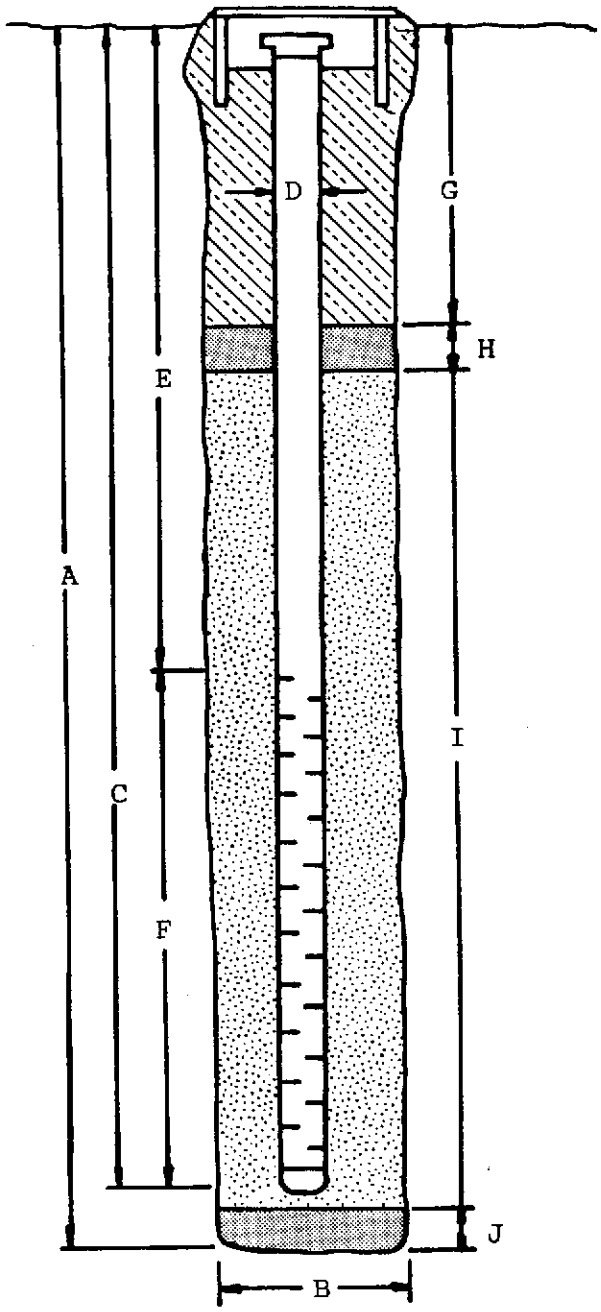
WELL COMPLETION DIAGRAM

PROJECT NAME: Unocal - Livermore - 4700 First St. BORING/WELL NO. MW3

PROJECT NUMBER: KEI-P89-0801

WELL PERMIT NO.:

Flush-mounted Well Cover



A. Total Depth: 26'

B. Boring Diameter*: 9"

Drilling Method: Hollow Stem Auger

C. Casing Length: 26'

Material: Schedule 40 PVC

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

E. Depth to Perforations: 11'

F. Perforated Length: 15'

Perforation Type: Machined Slot

Perforation Size: 0.020"

G. Surface Seal: 7'

Seal Material: Concrete

H. Seal: 2'

Seal Material: Bentonite

I. Gravel Pack: 17'

Pack Material: RMC Lonestar Sand

Size: #3

J. Bottom Seal: None

Seal Material: N/A

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

BORING LOG

Project No. KEI-P89-0801	**Boring & Casing Diameter** 9" 2"	**Logged By** D.L.
Project Name Unocal Livermore - First St.	**Well Head Elevation** N/A	**Date Drilled** 10-25-89
Boring No. MW4	**Drilling Method** Hollow-stem Auger	**Drilling Company** EGI

Penetration blows/6"	G. W. level	Depth (ft) Samples	Stratigraphy USCS	Description
		0		A.C. Pavement
			GW/ GC	Well graded gravel w/clay and and sand, loose to medium dense moist, olive brown, gravel to 6" diameter: fill.
4/5/6		5		
5/6/11			CH	Gravelly clay, high plasticity, 10-15% sand and silt, firm, moist, black. Clay, high plasticity, 10-15% silt, 5-10% coarse sand, stiff to very stiff, moist, black.
9/7/6		10	SM	Silty sand w/gravel and clay, med. dense, moist, light olive brown.
2/3/8			CL/ CH	Sandy clay, moderate plasticity, 10-15% gravel to 1/2", firm, moist, very dark grayish brown. Clay, mod. plasticity, 5-10% silt and sand, stiff, slightly moist, olive brown and dark olive gray, mottled.
3/3/3	▽	15		Clay, mod. to high plasticity, firm, very moist, light olive gray and white, weakly cemented
4/8/15				Clay, 5-10% silt and sand, very stiff, blocky, moist, pale olive and white, cemented.
5/8/12		20		

BORING LOG

Project No. KEI-P89-0801	Boring & Casing Diameter 9" 2"	Logged By D.L. DLB
Project Name Unocal Livermore - First St.	Well Head Elevation N/A	Date Drilled 10-25-89
Boring No. MW4	Drilling Method Hollow-stem Auger	Drilling Company EGI

Penetration blows/6"	G. W. level	Depth (ft) Samples	Stratigraphy USCS	Description
5/8/11		25	CL/CH	Clay, mod. to high plasticity, 5-10% sand and silt, stiff to very stiff, blocky, moist to wet, light olive brown and white, cementation stratified in clay instead of throughout as above 20 feet, layers of cementation are wet.
		30		
		35		
		40		TOTAL DEPTH 26'

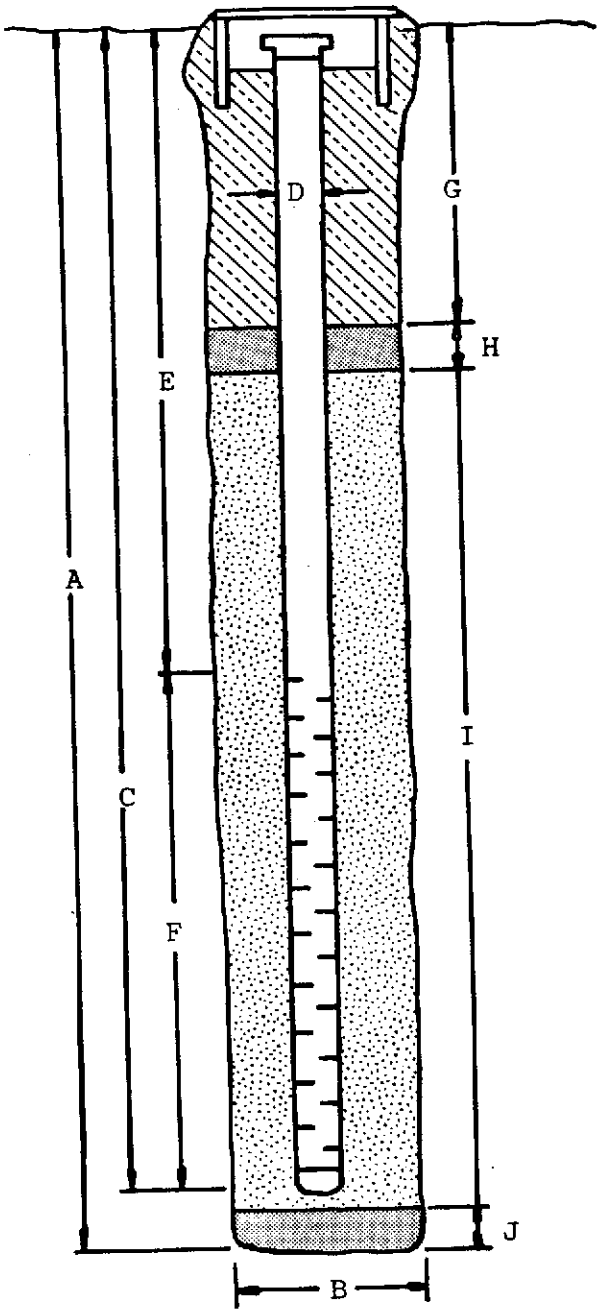
WELL COMPLETION DIAGRAM

PROJECT NAME: Unocal - Livermore - 4700 First St. BORING/WELL NO. MW4

PROJECT NUMBER: KEI-P89-0801

WELL PERMIT NO.:

Flush-mounted Well Cover



A. Total Depth: 26'

B. Boring Diameter*: 9"

Drilling Method: Hollow Stem Auger

C. Casing Length: 26'

Material: Schedule 40 PVC

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

E. Depth to Perforations: 11'

F. Perforated Length: 15'

Perforation Type: Machined Slot

Perforation Size: 0.020"

G. Surface Seal: 7'

Seal Material: Concrete

H. Seal: 2'

Seal Material: Bentonite

I. Gravel Pack: 17'

Pack Material: RMC Lonestar Sand

Size: #3

J. Bottom Seal: None

Seal Material: N/A

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

B O R I N G L O G

Project No. KEI-P89-0801	**Boring & Casing Diameter** 9" 2"	**Logged By** W.W.
Project Name Unocal 4700 First St. Liverm	**Well Cover Elevation**	**Date Drilled** 4/2/91
Boring No. MW5	**Drilling Method** Hollow-stem Auger	**Drilling Company** EGI

Penetration blows/6"	G. W. level	Depth (feet) Samples	Strati-graphy USCS	Description
		0		Asphalt pavement over sand and gravel.
14/28/12		5	ML to GM	Very gravelly clayey silt to silty gravel with clay, gravel composed of sandstone up to 6" diameter, trace fine-grained sand, moist, dense, dark grayish brown.
			CH	Clay, with silt, trace coarse-grained sand, root holes common, trace highly weathered siltstone gravel to 3/4" diameter, moist, very stiff, very dark gray.
10/10/11		10	ML/ MH	Clayey silt, trace fine-grained sand, several highly consolidated fine-grained silt or caliche (?) nodules to 1½" diameter (pale yellow), moist, very stiff, mottled with light yellowish brown, light yellowish brown, light olive brown and dark gray.
13/15/20	▽	15	SM	Silt, with sand, trace clay, moist to very moist, very stiff, yellowish brown and light brownish gray mottled. 2" thick lens of subrounded gravel to 1/2" diameter at 15.4', underlain by sand, with silt, trace clay, sand is fine-grained, saturated, dense, yellowish brown.
3/4/6		20	CL/ CH	Sandy clay, trace silt, trace caliche, sand is fine-grained, moist to very moist, stiff, light olive gray.

BORING LOG

Project No. KEI-P89-0801	**Boring & Casing Diameter** 9" 2"	**Logged By** W.W.
Project Name Unocal 4700 First St. Liverm	**Well Cover Elevation**	**Date Drilled** 4/2/91
Boring No. MW5	**Drilling Method** Hollow-stem Auger	**Drilling Company** EGI

Penetration blows/6"	G. W. level	Depth (feet) Samples	Strati-graphy USCS	Description
			CL/ CH	Clay, trace sand, trace silt, trace gravel to 3/8" diameter, caliche common up to 1½" diameter.
2/2/3			SC	Clayey sand, light olive gray.
			CL	Clay, trace fine-grained sand, moist, firm, light olive gray.
		25		
		30		
		35		
		40		TOTAL DEPTH: 24'

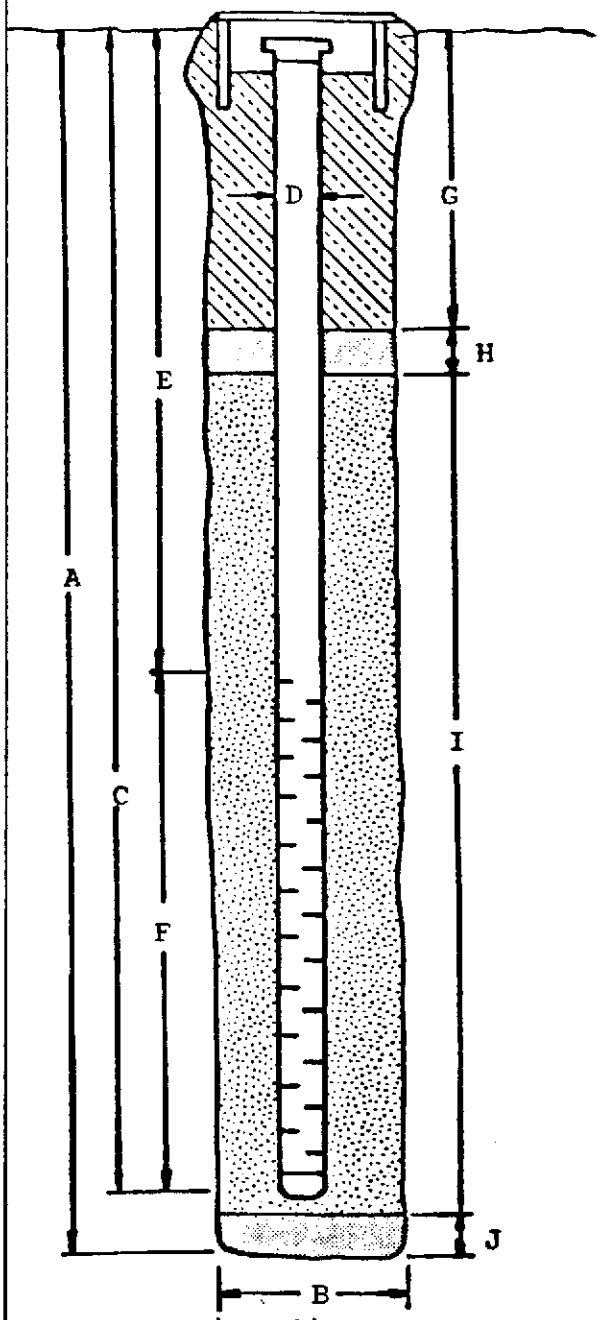
WELL COMPLETION DIAGRAM

PROJECT NAME: Unocal 4700 First St. Livermore BORING/WELL NO. MW5

PROJECT NUMBER: KEI-P89-0801

WELL PERMIT NO.: 91107

Flush-mounted Well Cover



A. Total Depth: 24'

B. Boring Diameter*: 9"

Drilling Method: Hollow Stem Auger

C. Casing Length: 24'

Material: Schedule 40 PVC

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

E. Depth to Perforations: 10'

F. Perforated Length: 14'

Screen Length: 10-24' depth

Perforation Type: Machined Slot

Perforation Size: 0.020"

G. Surface Seal: 6'

Seal Material: Neat Cement

H. Seal: 2'

Seal Material: Bentonite

I. Gravel Pack: 16'

Pack Material: RMC Lonestar Sand

Size: #3

J. Bottom Seal: None

Seal Material: N/A

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

BORING LOG

Project No.	Boring & Casing Diameter	Logged By
KEI-P89-0801	9" 2"	W.W.
Project Name Unocal 4700 First St. Liverm	**Well Cover Elevation**	**Date Drilled** 4/2/91
Boring No. MW6	**Drilling Method** Hollow-stem Auger	**Drilling Company** EGI

Penetration blows/6"	G. W. level	Depth (feet) Samples	Strati-graphy USCS	Description
		0	ML	Lawn. Clayey silt with gravel to 3" diameter, trace sand, rootlets common, moist, stiff, dark grayish brown.
5/4/6		5	CL/CH	Clay, with silt, rootlets common, porous, moist, stiff, very dark grayish brown.
6/9/11		10		Clay, with coarse-grained sand, trace fine-grained sand and silt, trace highly weathered siltstone gravel to 3/4" diameter, trace caliche nodules to 1" diameter, moist, very stiff, light brownish gray and dark gray mottled.
			GC	Clayey gravel with sand and silt, trace rootlets, gravel to 3/4" diameter, moist, dense, grayish brown and greenish gray.
16/20/20	▽	15	GM	Silty gravel with sand, trace clay, subrounded gravel to 3/4" diameter, very moist, dense, greenish gray.
			ML	Silt, with clay, saturated, hard greenish gray.
9/12/14		20	GW	Sandy gravel, trace silt, well graded, subrounded gravel to 3/4" diameter, saturated, medium dense, dark gray.

B O R I N G L O G

Project No. KEI-P89-0801	**Boring & Casing Diameter** 9" 2"	**Logged By** W.W.
Project Name Unocal 4700 First St. Liverm	**Well Cover Elevation**	**Date Drilled** 4/2/91
Boring No. MW6	**Drilling Method** Hollow-stem Auger	**Drilling Company** EGI

Penetration blows/6"	G. W. level	Depth (feet) Samples	Strati-graphy USCS	Description
			GW	Sandy gravel, as above.
			CL/CH	Sandy clay, predominantly coarse-grained, very moist to saturated, stiff, light yellowish brown.
4/6/7				Clay, with very fine-grained sand, very moist, stiff, light yellowish brown.
		25		
		30		
		35		
		40		TOTAL DEPTH: 24'

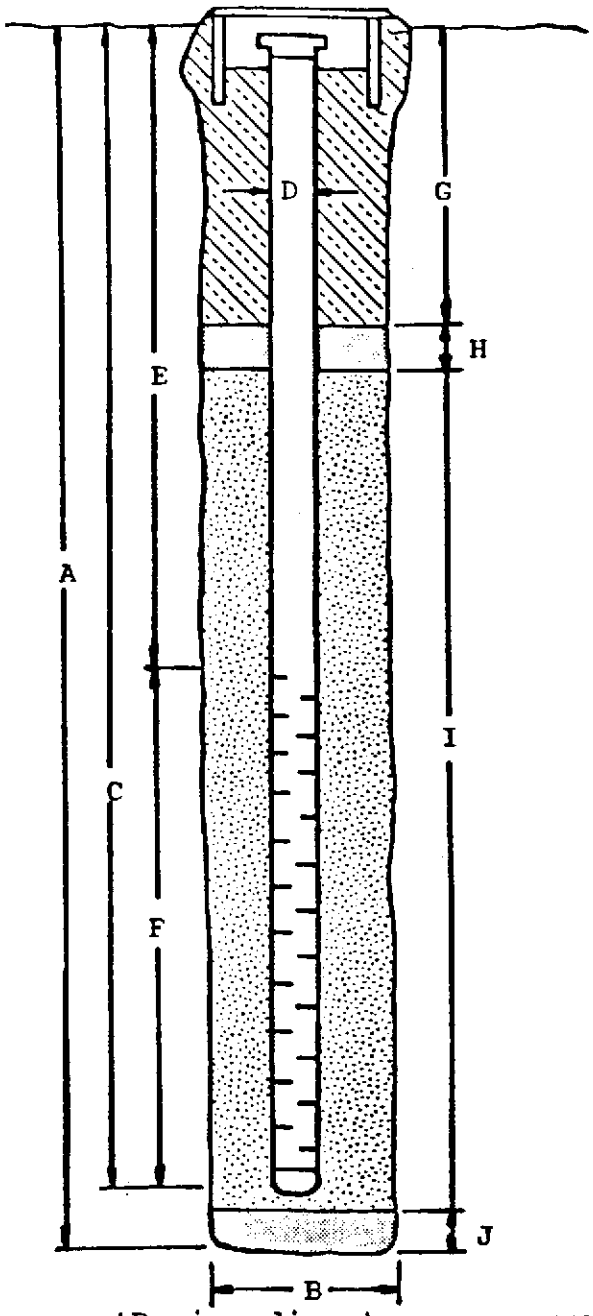
WELL COMPLETION DIAGRAM

PROJECT NAME: Unocal 4700 First St. Livermore BORING/WELL NO. MW6

PROJECT NUMBER: KEI-P89-0801

WELL PERMIT NO.: 91107

Flush-mounted Well Cover



A. Total Depth: 24'

B. Boring Diameter*: 9"

Drilling Method: Hollow Stem Auger

C. Casing Length: 24'

Material: Schedule 40 PVC

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

E. Depth to Perforations: 10'

F. Perforated Length: 14'

Perforation Type: Machined Slot

Perforation Size: 0.020"

G. Surface Seal: 6'

Seal Material: Neat Cement

H. Seal: 2'

Seal Material: Bentonite

I. Gravel Pack: 16'

Pack Material: RMC Lonestar Sand

Size: #3

J. Bottom Seal: None

Seal Material: N/A

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

BORING LOG

Project No. KEI-P89-0801	**Boring & Casing Diameter** 9" 2"	**Logged By** W.W.
Project Name Unocal 4700 First St. Liverm	**Well Cover Elevation**	**Date Drilled** 4/2/91
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	ML	Lawn - top soil. Silt, trace clay, with sand and gravel to 2" in diameter, moist, firm, dark grayish brown.
12/4/5		5		Sandy silt, trace clay, trace gravel to 3/4" diameter, moist to very moist, very stiff, dark grayish brown.
			CL/ CH	Clay, with silt, rootlets common, moist, stiff, gray and very dark gray mottled.
				Clay, trace very fine-grained sand, moist, stiff, very dark grayish brown.
6/7/8		10		Clay, trace silt and sand, caliche common with nodules to 3/4" diameter, trace root holes, moist, stiff, light gray and olive gray mottled.
				Clay, with silt, trace sand, very moist, hard, light olive gray.
16/21/30	▽	15	GW	Sandy gravel, trace clay, trace silt, sand and gravel well graded to 1½" diameter, gravel is subangular, saturated below 15.4', dense to very dense, grayish brown.
				Well graded sand and gravel to 1¼" diameter, gravel is subangular to subrounded, trace clay and silt, saturated, dense, grayish brown.
7/25/		20		

B O R I N G L O G

Project No. KEI-P89-0801	**Boring & Casing Diameter** 9" 2"	**Logged By** W.W.
Project Name Unocal 4700 First St. Liverm	**Well Cover Elevation**	**Date Drilled** 4/2/91
Boring No. MW7	**Drilling Method** Hollow-stem Auger	**Drilling Company** EGI

Penetration blows/6"	G. W. level	Depth (feet) Samples	Strati-graphy USCS	Description
/19			GW	Gravel, as above.
3/6/8			CL	Clay, with fine-grained and coarse-grained sand, common caliche nodules to 1/2" diameter, moist, stiff, pale yellow and light yellowish brown.
		25		
		30		
		35		
		40		TOTAL DEPTH: 24'

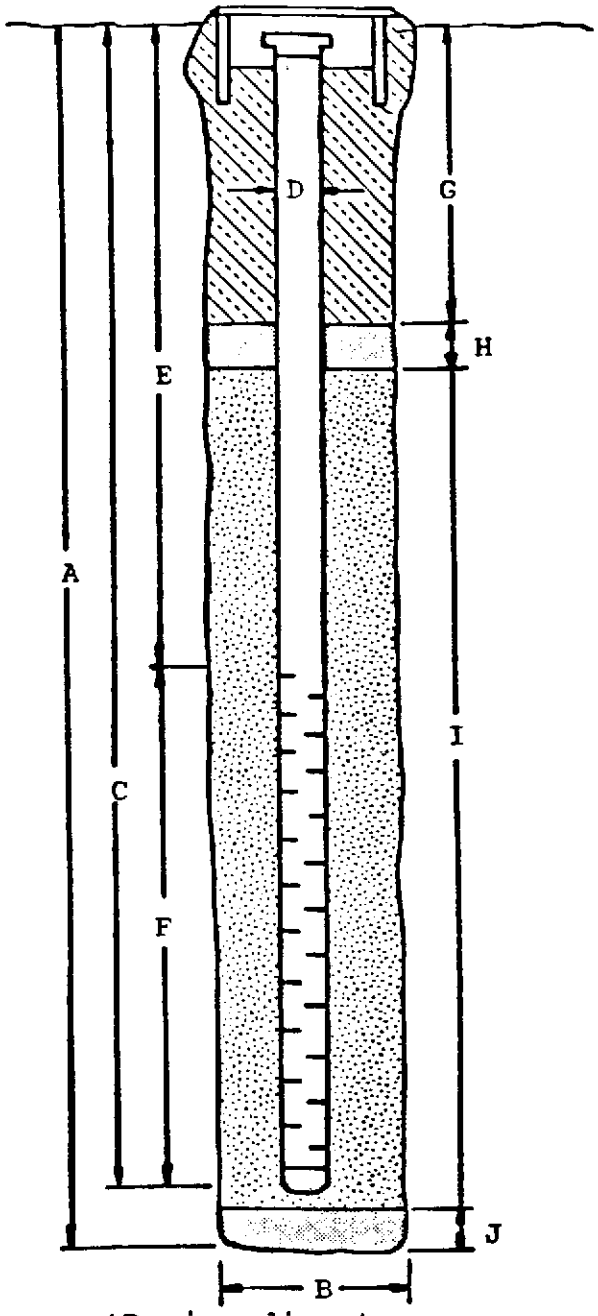
WELL COMPLETION DIAGRAM

PROJECT NAME: Unocal 4700 First St. Livermore BORING/WELL NO. MW7

PROJECT NUMBER: KEI-P89-0801

WELL PERMIT NO.: 91107

Flush-mounted Well Cover



A. Total Depth: 24.5'

B. Boring Diameter*: 9"

Drilling Method: Hollow Stem Auger

C. Casing Length: 24'

Material: Schedule 40 PVC

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

E. Depth to Perforations: 10'

F. Perforated Length: 14'

Perforation Type: Machined Slot

Perforation Size: 0.020"

G. Surface Seal: 6'

Seal Material: Neat Cement

H. Seal: 2'

Seal Material: Bentonite

I. Gravel Pack: 16.5'

Pack Material: RMC Lonestar Sand

Size: #3

J. Bottom Seal: None

Seal Material: N/A

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