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ConocoPhillips
76 Broadway
Sacramento, California 95818

December 7, 2005

Mr. Don Hwang
Alameda County Health Agency
1131 Harbor Bay Parkway
Alameda, California 94502

Re: **Report Transmittal**
No Further Action/Request for Closure
76 Service Station #5781
3535 Pierson Street
Oakland, CA

Dear Mr. Hwang:

I declare under penalty of perjury that to the best of my knowledge the information and/or recommendations contained in the attached report is/are true and correct.

If you have any questions or need additional information, please contact

Shelby S. Lathrop (Contractor)
ConocoPhillips
Risk Management & Remediation
76 Broadway
Sacramento, CA 95818
Phone: 916-558-7609
Fax: 916-558-7639

Sincerely,

Thomas Kosel
Risk Management & Remediation

Attachment

TRC

Customer-Focused Solutions

December 7, 2005

Mr. Don Hwang
Hazardous Materials Specialist
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

RE: **No Further Action Required Report - Request For Closure**
76 Service Station #5781, 3535 Pierson Street, Oakland, California
Alameda County

Dear Mr. Hwang:

On behalf of ConocoPhillips Company (ConocoPhillips), TRC has prepared this no further action required report – request for closure for the above-referenced site. As stated in the Fourth Quarter 2004 Status Report, TRC would prepare a site closure request if dissolved-phase hydrocarbons (including MTBE) remained low during the First Quarter 2005 monitoring event. Based on the low historical groundwater concentrations, and the non-detect results during the First Quarter 2005, ConocoPhillips is recommending the site be referred for closure based on information and data presented in Attachments A through D.

I attest, under penalty of perjury, in accordance with Water Code section 13267, the attached documents constitute the complete list of documents pertaining to waste discharged, hydrogeology, and other information directly relevant to the characterization and cleanup of the waste discharged at the subject site.

Thank you for your consideration of this matter. If you have any questions, please call me at (925) 688-2488.

Sincerely,
TRC

Keith Woodburne, P.G.
Senior Project Geologist

1590 Solano Way, Suite A • Concord, California 94520
Telephone 925-688-1200 • Fax 925-688-0388

Attachments:

A Case Closure Summary

B Tables

- Table 1 – Summary of Laboratory Analysis of Soil Samples
- Table 2 – Historic Fluid Levels and Selected Analytical Results
- Table 3 – Additional Analytical Results
- Table 4 – Summary of Laboratory Analysis of Groundwater Grab Samples

C Figures

- Figure 1 – Vicinity Map
- Figure 2 – Hydrocarbon Concentrations in Soil – 1989-90
- Figure 3 – Hydrocarbon Concentrations in Soil – 2003
- Figure 4 – Dissolved-Phase Hydrocarbon Concentrations in Soil – 1990
- Figure 5 – Dissolved-Phase Hydrocarbon Concentrations in Soil – 2003

D – Geologic Logs and Well Construction Details

cc: Shelby Lathrop, ConocoPhillips (electronic copy only)

ATTACHMENT A

CASE CLOSURE SUMMARY

CASE CLOSURE SUMMARY

Leaking Underground Fuel Storage Tank Program

I. Agency Information

Agency Name: Alameda County Environmental Health	**Address:** 1131 Harbor Bay Parkway
City/State/Zip: Alameda, CA 94502-6577	**Phone:** (510) 567-6746
Responsible Staff person: Don Hwang	**Title:** Hazardous Materials Specialist

II. Case Information

Site Facility Name: 76 Service Station No. 5781		**RWQCB Case No. (NA)**
Site Facility Address: 3535 Pierson Street, Oakland, Alameda County		
Responsible Parties	**Address**	**Phone Number**
ConocoPhillips Company	76 Broadway, Sacramento, CA 95818	(916) 558-7609
Property Owner		
ConocoPhillips Company	76 Broadway, Sacramento, CA 95818	(916) 558-7609

III. Tank Information

Tank #	Size in Gallons	Contents	Closed in Place/Removed	Date
1	10,000	Gasoline	Removed	Dec-89
2	10,000	Gasoline	Removed	Dec-89
3	280	Waste Oil	Removed	Dec-89
4	12,000	Gasoline	Active	Mar-05
5	12,000	Gasoline	Active	Mar-05
6	520	Waste Oil	Active	Mar-05

IV. Release and Site Characterization Information

Cause and Type of Release: Waste oil tank failure released petroleum hydrocarbons		
Site Characterization Complete? Yes	**Date Approved by Oversight Agency:**	
Monitoring Wells Installed? Yes	**Number:** 1	**Proper Screened Interval?** No, screen is submerged
Highest GW Depth Below Ground Surface: 11.24	**Lowest:** 19.88	**Flow Direction:** NA
Most Sensitive Current GW Use: 4 active wells owned by East Bay Regional Park District located 2,193 feet northeast.		
Are Drinking Water Wells Affected? No	**Aquifer Name:**	
Is Surface Water Affected? No	**Nearest affected SW name:** NA	
Off-site Beneficial Use Impacts (addresses/locations): None		

CASE CLOSURE SUMMARY
Leaking Underground Storage Tank Program

V. Treatment/Disposal Methods (Attach any additional information)

Material	Amount (Include Units)	Action (Treatment or Disposal Method)	Date
Tanks	10,000 gal. UST	Removed	Dec 1989
	10,000 gal. UST	Removed	Dec 1989
	280 gal. Waste Oil Tank	Removed	Dec 1989
Piping	Product Piping	Removed during service upgrades	Dec 1989
	Waste Oil Piping	Removed during waste oil tank replacement	Dec 1989
Free Product	NA	No Free Product Encountered	
Soil	450 yards^3	Disposed at approved landfill	Jan 1990
	50 yards^3	Disposed at approved landfill	Mar 1990
Ground Water	NA		

Maximum Documented Contaminant Concentrations--Before and After Cleanup

Contaminant	Soil (mg/kg)		Water (µg/L)		Contaminant	Soil (mg/kg)		Water (µg/L)	
	Before	After	Before	After		Before	After	Before	After
TPH (Gas)	670	220	ND	ND	1,2-DCA	NA	NA	NA	NA
TPH (Diesel)	8,300	1,400	131	93	Oil & Grease	48,000	17,000	7,000	5,900
Benzene	5.4	2.3	0.61	ND	Lead	NA	NA	NA	NA
Toluene	15	2.1	1.5	ND	MTBE	NA	NA	ND	ND
Ethylbenzene	2.3	7.3	ND	ND	Other				
Xylenes	17	23	2.1	ND					

Comments:

VI. Closure

Does completed corrective action protect existing beneficial uses per the Basin Plan? Yes

Does completed corrective action protect potential beneficial uses per the Basin Plan? Yes

Does corrective action protect public health for current land use? Yes

Site Management Requirements:

Should corrective action be reviewed if land use changes? Yes

Monitoring Wells Destroyed?	Number Destroyed:	Number Retained:

CASE CLOSURE SUMMARY
Leaking Underground Storage Tank Program

List Enforcement Actions Taken: None
List Enforcement Actions Rescinded: None

VII. Local Agency Representative Data

Agency Name: Alameda County Environmental Health	**Address:** 1131 Harbor Bay Parkway
City/State/Zip: Alameda, CA 94502-6577	**Phone:** (510) 567-6746
Responsible Staff person: Don Hwang	**Title:** Hazardous Materials Specialist

VIII. Additional Comments

Technical reports, correspondence etc. in chronological order:

TITLE/ SUBJECT	DATE
Kaprealian Engineering, Inc. / Work Plan/Proposal	1/10/1990
Kaprealian Engineering, Inc. / Stockpiled Soil Sampling	1/19/1990
Kaprealian Engineering, Inc. / Soil Sampling Report	2/9/1990
Kaprealian Engineering, Inc. / Follow-up Soil Sampling Report	3/30/1990
Kaprealian Engineering, Inc. / Waste Oil Stockpiled Soil Sampling Report	4/18/1990
Kaprealian Engineering, Inc. / Stockpiled Soil Sampling Report	4/18/1990
Kaprealian Engineering, Inc. / Work Plan/Proposal	5/21/1990
Kaprealian Engineering, Inc. / Preliminary Subsurface Investigation	5/21/1990
Kaprealian Engineering, Inc. / Work Plan/Proposal	8/23/1990
Kaprealian Engineering, Inc. / Supplementary Subsurface Investigation	8/23/1990
Kaprealian Engineering, Inc. / Preliminary Soil and Groundwater Investigation	1/21/1991
Kaprealian Engineering, Inc. / First Quarter 1991 Quarterly Report	6/6/1991
Kaprealian Engineering, Inc. / Second Quarter 1991 Quarterly Report	9/11/1991
Kaprealian Engineering, Inc. / Third Quarter 1991 Quarterly Report	12/5/1991
Kaprealian Engineering, Inc. / Fourth Quarter 1991 Quarterly Summary Report	2/3/1992
Kaprealian Engineering, Inc. / First Quarter 1992 Quarterly Summary Report	1st Quarter 1992
Geo-Strategies, Inc. / Third Quarter 1992 Quarterly Summary Report	3rd Quarter 1992
Kaprealian Engineering, Inc. / Fourth Quarter 1991 Quarterly Report	3/4/1992
Kaprealian Engineering, Inc. / Semi Annual Report	9/2/1992
Kaprealian Engineering, Inc. / Semi Annual Report	3/30/1993
Kaprealian Engineering, Inc. / Site Report	4/12/1993
MPDS Services, Inc. / Site Report	3/14/1994

CASE CLOSURE SUMMARY

Leaking Underground Storage Tank Program

MPDS Services, Inc. / Site Report	6/29/1994
MPDS Services, Inc. / Site Report	4/6/1995
Kaprealian Engineering, Inc. / Site assessment \Site Investigation	3/8/1996
MPDS Services, Inc. / Data Report	3/18/1996
MPDS Services, Inc. / Data Report	3/20/1997
Gettler-Ryan, Inc. / First Quarter 1998 Quarterly Summary Report	1st Quarter 1998
Gettler-Ryan, Inc. / Annual Event 1998	4/30/1998
Gettler-Ryan, Inc. / Third Quarter 1998 Quarterly Summary Report	3rd Quarter 1998
Gettler-Ryan, Inc. / Fourth Quarter 1998 Quarterly Summary Report	4th Quarter 1998
Gettler-Ryan, Inc. / First Quarter 1999 Quarterly Summary Report	1st Quarter 1999
Gettler-Ryan, Inc. / Second Quarter 1999 Quarterly Summary Report	2nd Quarter 1999
Gettler-Ryan, Inc. / Third Quarter 1999 Quarterly Summary Report	3rd Quarter 1999
Gettler-Ryan, Inc. / Fourth Quarter 1999 Quarterly Summary Report	4th Quarter 1999
Gettler-Ryan, Inc. / First Quarter 2000 Quarterly Summary Report	1st Quarter 2000
Gettler-Ryan, Inc. / Second Quarter 2000 Quarterly Summary Report	2nd Quarter 2000
Gettler-Ryan, Inc. / Third Quarter 2000 Quarterly Summary Report	3rd Quarter 2000
Gettler-Ryan, Inc. / Fourth Quarter 2000 Quarterly Summary Report	4th Quarter 2000
Gettler-Ryan, Inc. / Groundwater Monitoring and Sampling Report Annual – Event 2000	4/4/2000
Gettler-Ryan, Inc. / First Quarter 2001 Quarterly Summary Report	1st Quarter 2001
Gettler-Ryan, Inc. / Second Quarter 2001 Quarterly Summary Report	2nd Quarter 2001
Gettler-Ryan, Inc. / Third Quarter 2001 Quarterly Summary Report	3rd Quarter 2001
Gettler-Ryan, Inc. / Groundwater Monitoring and Sampling Report Annual – Event 2001	4/19/2001
Gettler-Ryan, Inc. / Uniform Hazardous Waste Manifest	7/25/2001
Gettler-Ryan, Inc. / Uniform Hazardous Waste Manifest	9/10/2001
Gettler-Ryan, Inc. / Annual Monitoring and Sampling Report 2002	4/7/2002
Gettler-Ryan, Inc. / Uniform Hazardous Waste Manifest	4/17/2002
Gettler-Ryan, Inc. / Uniform Hazardous Waste Manifest	5/1/2002
Gettler-Ryan, Inc. / Request for Closure	7/14/2003
TRC / Baseline Site Assessment Report	12/3/2003
TRC / Annual Monitoring Report March 2003 Through March 2004	4/29/2004
TRC / Status Report Fourth Quarter 2003	7/2/2004
TRC / Status Report First Quarter 2004	7/2/2004
TRC / Quarterly Status Report Third Quarter 2004	10/29/2004
TRC / Quarterly Monitoring Report First Quarter 2005	3/24/2005
TRC / Quarterly Status Report First Quarter 2005 and Request for Closure	3/30/2005

IX. Regional Board Certification

Signature of Executive Officer	Date:

X. Additional Information (to be attached to this report)

1. Listing of Reports

Please include a list of all investigative reports, including reports prepared for financial institutions such as Phase I Environmental Assessments, all monitoring data, corrective action alternatives analyses, and other consultant reports. If a report on the list has not been previously submitted to the Regional Board, please submit the report with this form.

On or attached to the list must be the following statement, with the dated signature of the responsible party or his agent:

> "I attest, under penalty of perjury, in accordance with Water Code section 13267, the following documents constitute the complete list of documents pertaining to waste discharged, hydrogeology and other information directly relevant to the characterization and cleanup of the waste discharged at the subject site."

The following items are optional as applicable to the review of the site for closure:

2. Extent of Soil Contamination

a) Maps showing the extent of soil degradation by chemicals of concern in excess of guidelines, before and after remediation.

b) Geologic log of the most highly degraded soil boring or monitoring well showing sample points with a list of contaminant concentrations.

c) Summary table of all historic soil sampling results.

3. Extent of Ground Water Contamination

a) Maps showing the extent of ground water degradation in excess of detection limits for chemicals of concern, before and after remediation.

b) Geologic logs, including construction, for all wells.

c) Representative geologic log identifying all aquifers.

d) Two intersecting cross-sections of the site.

e) Summary table of all historic ground water analyses and water levels.

ATTACHMENT B

TABLES

Table 1

SUMMARY OF LABORATORY ANALYSIS OF SOIL SAMPLES
76 Service Station #5781
3535 Pierson Street
Oakland, California

Sample Number	Date	Depth (ft)	TOG (mg/kg)	TPH-D (mg/kg)	TPH-G (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Xylenes (mg/kg)	Ethyl-benzene (mg/kg)
A1	12/14/1989 - 1/17/1990	12.5	--	--	**3.5**	<0.05	<0.1	<0.1	<0.1
B1	12/14/1989 - 1/17/1990	12.5	--	--	<1.0	<0.05	<0.1	<0.1	<0.1
A2/B2	12/14/1989 - 1/17/1990	12.5	--	--	**5.8**	**0.10**	<0.1	<0.1	<0.1
SW1	12/14/1989 - 1/17/1990	10.5	--	--	**15**	<0.05	<0.1	<0.1	<0.1
SW2	12/14/1989 - 1/17/1990	10.5	--	--	**46**	**0.65**	<0.1	<0.1	<0.1
P1	12/14/1989 - 1/17/1990	5.5	--	--	<1.0	<0.05	<0.1	<0.1	<0.1
P2	12/14/1989 - 1/17/1990	6.0	--	--	<1.0	<0.05	<0.1	<0.1	<0.1
W01[0]	2/22/1990	6.0	**48,000**	**8,300**	**670**	**5.4**	**15**	**17**	**2.3**
W01[1]	2/22/1990	16.0	**910**	**74**	**15**	**0.06**	<0.1	**2**	**0.1**
SWA[2]	2/22/1990	9.0	**17,000**	**1,400**	**220**	**2.3**	**2.1**	**23**	**7.3**
SWB[1]	2/22/1990	10.0	<50	<1.0	**2.0**	<0.05	<0.1	<0.1	<0.1
SWC[3]	2/22/1990	10.0	**4,100**	**460**	**63**	**0.31**	**0.33**	**2.2**	**1.3**
SWD[4]	2/22/1990	10.0	**6,400**	**360**	**40**	**0.32**	<0.1	**4.0**	**0.49**
MW1[4]	4/9-10/1990	5	--	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
MW1[5]	4/9-10/1990	9.5	--	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
MW1[3]	4/9-10/1990	15	--	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
MW1[6]	4/9-10/1990	20	--	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
MW1[5]	4/9-10/1990	25	--	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
MW1[3]	4/9-10/1990	30	--	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
MW1[5]	4/9-10/1990	35	--	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
MW1[4]	4/9-10/1990	40	--	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
MW1[4]	4/9-10/1990	45	--	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
MW1[5]	4/9-10/1990	50	--	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050

Table 1

SUMMARY OF LABORATORY ANALYSIS OF SOIL SAMPLES
76 Service Station #5781
3535 Pierson Street
Oakland, California

Sample Number	Date	Depth (ft)	TOG (mg/kg)	TPH-D (mg/kg)	TPH-G (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Xylenes (mg/kg)	Ethyl-benzene (mg/kg)
MW2	4/9-10/1990	5	--	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
MW2	4/9-10/1990	9.5	--	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
MW2	4/9-10/1990	12	--	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
MW2	4/9-10/1990	15	--	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
MW2	4/9-10/1990	20	--	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
MW2	4/9-10/1990	25	--	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
MW2	4/9-10/1990	30	--	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
MW2	4/9-10/1990	35	--	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
MW2	4/9-10/1990	39.5	--	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
MW3	4/9-10/1990	5	--	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
MW3	4/9-10/1990	10	--	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
MW3	4/9-10/1990	15	--	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
MW3	4/9-10/1990	20	--	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
MW3	4/9-10/1990	25	--	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
MW3	4/9-10/1990	30	--	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
MW3	4/9-10/1990	35	--	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
MW3	4/9-10/1990	40	--	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
EB1[6]	7/5-6/1990	8.5	--	<1.0	<1.0	<0.0050	**0.014**	**0.0056**	<0.0050
EB1[6]	7/5-6/1990	13.5	--	<1.0	<1.0	<0.0050	**0.015**	<0.0050	<0.0050
EB1[6]	7/5-6/1990	18.5	--	<1.0	<1.0	<0.0050	**0.017**	**0.024**	**0.011**
EB1[6]	7/5-6/1990	23.5	--	<1.0	<1.0	<0.0050	**0.011**	<0.0050	<0.0050
EB1[6]	7/5-6/1990	28.5	--	<1.0	<1.0	<0.0050	**0.012**	<0.0050	<0.0050

Table 1

SUMMARY OF LABORATORY ANALYSIS OF SOIL SAMPLES
76 Service Station #5781
3535 Pierson Street
Oakland, California

Sample Number	Date	Depth (ft)	TOG (mg/kg)	TPH-D (mg/kg)	TPH-G (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Xylenes (mg/kg)	Ethyl-benzene (mg/kg)
EB2[6]	7/5-6/1990	9.5	--	<1.0	**1.2**	<0.0050	**0.038**	**0.016**	**0.012**
EB2[6]	7/5-6/1990	12.5	--	<1.0	<1.0	**0.009**	**0.025**	**0.006**	<0.0050
EB2[6]	7/5-6/1990	16.5	--	<1.0	<1.0	<0.0050	**0.021**	**0.005**	<0.0050
EB2[6]	7/5-6/1990	22	--	<1.0	<1.0	<0.0050	**0.02**	<0.0050	<0.0050
EB2[6]	7/5-6/1990	26.5	--	<1.0	<1.0	<0.0050	**0.017**	<0.0050	<0.0050
EB2	7/5-6/1990	32	--	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050

Sample Number	Date	Depth (ft)	TOG (mg/kg)	TPPH (EPA 8260B) (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Xylenes (mg/kg)	Ethyl-benzene (mg/kg)
SB-1	10/30/2003	35	--	<1.0	<0.005	<0.005	<0.005	<0.005
SB-2	10/30/2003	15	--	<1.0	<0.005	<0.005	<0.005	<0.005
SB-2	10/30/2003	50	--	<1.0	<0.005	<0.005	<0.005	<0.005
SB-3	10/31/2003	15	--	**1,100**	<2.5	<2.5	**50**	**16**
SB-3	10/31/2003	45	--	<1.0	<0.005	<0.005	<0.005	<0.005
SB-4	10/31/2003	15	--	<1.0	<0.005	<0.005	<0.005	<0.005
SB-5	10/31/2003	20	--	--	--	--	--	--

Notes:

TPH-G = total petroleum hydrocarbons for gasoline
TPH-D = total petroleum hydrocarbons for diesel
TPPH = total purgeable petroleum hydrocarbons
TOG = total oil and grease
na = not applicable
mg/kg = milligrams per kilogram
ND = non detect above the Method Detection Limit
fbg = feet below grade
-- = not analyzed, measured, or collected

Table 1

SUMMARY OF LABORATORY ANALYSIS OF SOIL SAMPLES
76 Service Station #5781
3535 Pierson Street
Oakland, California

0. All EPA method 8010 compounds were non-detectable, except 1,2 dichlorobenzene at 10 ppb, tetrachloroethene at 77 ppb, & 1,1,1-trichloroethane at 15ppb. Metals concentration were as follows: cadmium non-detectable, chromium 8.3 ppm, lead 340 ppm, & zinc 70 ppm.
1. All EPA method 8010 compounds were non-detectable.
2. All EPA method 8010 compounds were non-detectable, except tetrachloroethene at 160 ppb.
3. All EPA method 8010 compounds were non-detectable, except tetrachloroethene at 56 ppb.
4. All EPA method 8010 compounds were non-detectable, except tetrachloroethene at 40 ppb and 1,1,1-trichloroethane at 5.8 ppb.
5. TOG and all EPA method 8010 compounds were non-detectable.
6. All EPA method 8010 compounds were non-detectable, except 1,1,1-trichloroethane at 6.2 ppb in EB1(28.5')

Table 2

HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

December 1990 Through February 2005

76 Station 5781

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (µg/l)	TPH 8260B (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-A														
12/18/90	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
05/03/91	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
08/07/91	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
11/08/91	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
02/06/92	151.80	19.88	0.00	131.92	--	ND	--	ND	ND	ND	ND	--	--	
08/04/92	151.80	18.95	0.00	132.85	0.93	ND	--	ND	ND	ND	0.51	--	--	
02/10/93	151.80	17.71	0.00	134.09	1.24	ND	--	ND	ND	ND	ND	--	--	
02/10/94	151.80	15.25	0.00	136.55	2.46	ND	--	ND	0.52	ND	0.92	--	--	
02/09/95	151.80	15.68	0.00	136.12	-0.43	ND	--	ND	ND	ND	ND	--	--	
02/06/96	151.80	12.52	0.00	139.28	3.16	ND	--	ND	ND	ND	2.1	--	--	
02/05/97	151.80	13.01	0.00	138.79	-0.49	ND	--	ND	ND	ND	ND	--	ND	
02/02/98	151.80	11.91	0.00	139.89	1.10	ND	--	ND	ND	ND	ND	--	ND	
02/22/99	151.80	11.24	0.00	140.56	0.67	ND	--	ND	ND	ND	ND	--	ND	
02/26/00	151.80	12.16	0.00	139.64	-0.92	ND	--	ND	1.01	ND	ND	--	ND	
03/07/01	151.80	11.91	0.00	139.89	0.25	ND	--	ND	ND	ND	ND	ND	ND	
02/22/02	151.80	14.08	0.00	137.72	-2.17	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<5.0	
02/22/03	151.80	14.41	0.00	137.39	-0.33	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.0	ND<2.0	
02/03/04	151.80	14.32	0.00	137.48	0.09	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	ND<2.0	
02/18/05	151.80	14.21	0.00	137.59	0.11	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	ND<0.50	

Table 3
ADDITIONAL ANALYTICAL RESULTS
76 Station 5781

Date Sampled	EPH-D (µg/l)	TRPH (mg/l)	cis-1,3-dichloro-propene (µg/l)	trans-1,3-Dichloro-propene (µg/l)	1,4-Dichloro-benzene (µg/l)	EDC (µg/l)	Chloro-benzene (µg/l)	2-Chloroethyl vinyl (µg/l)	Dibromo-chloro-methane (µg/l)	PCE (µg/l)	cis-1,2-Dichloro-ethene (µg/l)	trans-1,2-Dichloro-ethene (µg/l)	1,3-Dichloro-benzene (µg/l)	Carbon tetra-chloride (µg/l)	Chloro-form (µg/l)
MW-A															
12/18/90	73	--	--	--	--	--	--	--	--	--	--	--	--	--	--
05/03/91	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/07/91	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--
11/08/91	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--
02/06/92	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/04/92	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--
02/10/93	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--
02/10/94	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--
02/09/95	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--
02/06/96	120	--	--	--	--	--	--	--	--	--	--	--	--	--	--
02/05/97	61	--	--	--	--	--	--	--	--	--	--	--	--	--	--
02/02/98	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--
02/22/99	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--
02/26/00	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/07/01	131	--	--	--	--	ND	--	--	--	--	--	--	--	--	--
02/22/02	ND<50	--	--	--	--	--	--	--	--	--	--	--	--	--	--
02/22/03	93	--	--	--	--	ND<2.0	--	--	--	--	--	--	--	--	--
02/03/04	60	ND<1.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
02/18/05	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50

Table 3 b
ADDITIONAL ANALYTICAL RESULTS
76 Station 5781

Date Sampled	1,1,1-Trichloroethane (µg/l)	Bromomethane (µg/l)	Chloromethane (µg/l)	Chloroethane (µg/l)	Vinyl chloride (µg/l)	Methylene chloride (µg/l)	Bromoform (µg/l)	Bromodichloromethane (µg/l)	1,1-Dichloroethane (µg/l)	1,1-Dichloroethene (µg/l)	Trichlorofluoromethane (µg/l)	Trichlorotrifluoroethane (µg/l)	1,2-Dichloropropane (µg/l)	1,1,2-Trichloroethane (µg/l)	TCE (µg/l)
MW-A															
02/03/04	ND<0.50	ND<1.0	ND<2.0	ND<1.0	ND<0.50	ND<5.0	ND<2.0	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50
02/18/05	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<0.50	ND<5.0	ND<2.0	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50

Table 3 c

ADDITIONAL ANALYTICAL RESULTS

76 Station 5781

Date Sampled	1,1,2,2-Tetrachloroethane (µg/l)	1,2-Dichlorobenzene (µg/l)	Dichlorodifluoromethene (µg/l)	EDB (µg/l)	TAME 8260B (µg/l)	TBA 8260B (µg/l)	DIPE 8260B (µg/l)	ETBE 8260B (µg/l)	Ethanol 8260B (µg/l)	TOC (mg/l)
MW-A										
03/07/01	--	--	--	ND	ND	ND	ND	ND	ND	--
02/22/03	--	--	--	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500	--
02/03/04	ND<0.50	ND<0.50	ND<1.0	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500	--
02/18/05	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50	ND<5.0	ND<0.50	ND<0.50	ND<50	ND<2.0

Table 4

SUMMARY OF LABORATORY ANALYSIS OF GROUNDWATER GRAB SAMPLES

76 Service Station #5781
3535 Piorson St.
Oakland, California

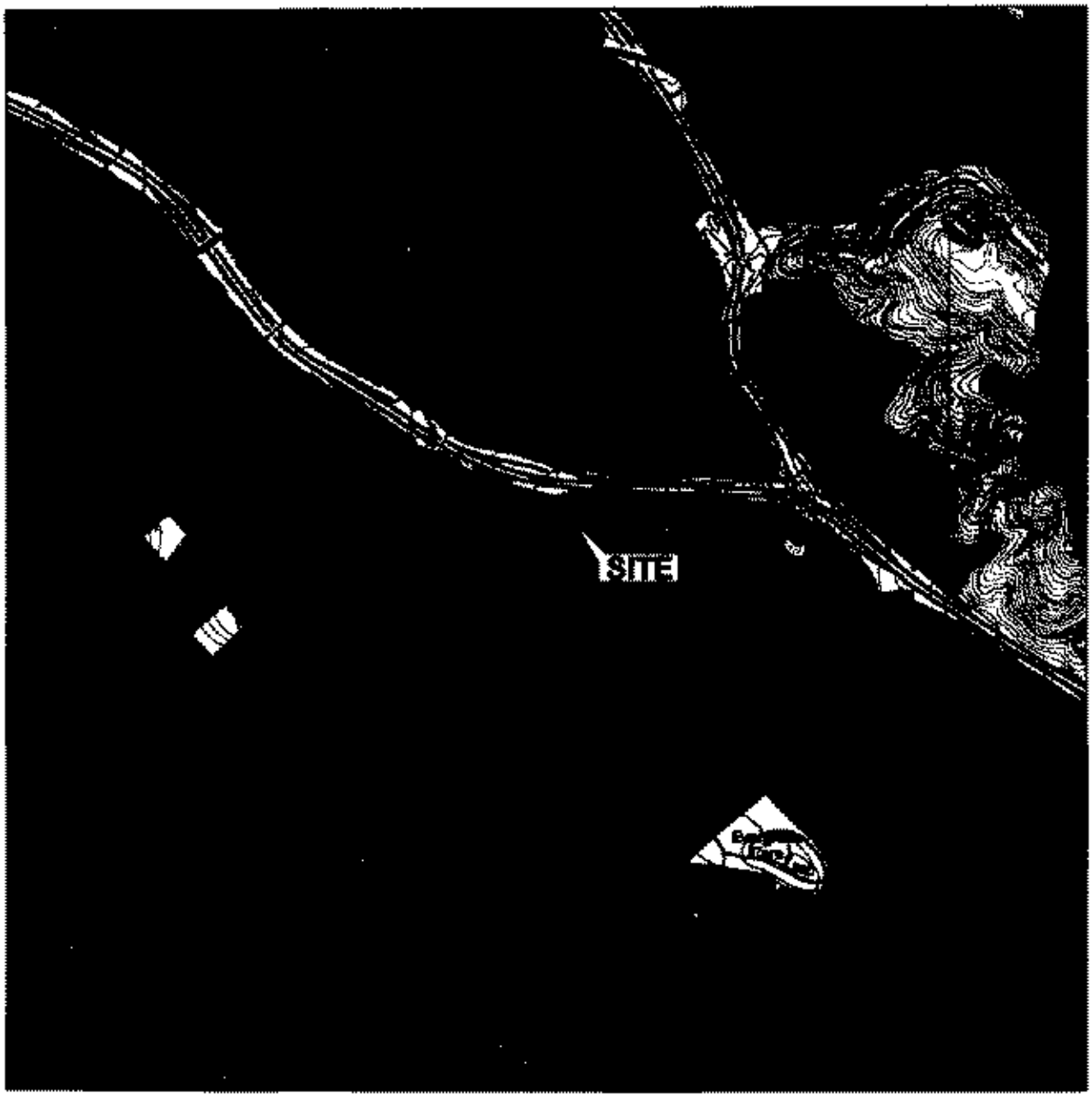
Sample Number	Sample Date	TPPH (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	TBA (µg/L)	MTBE (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1, 2-DCA (µg/L)	EDB (µg/L)	Ethanol (µg/L)	Lead (mg/L)	TOG (mg/L)
		EPA 8260B						EPA Method 8260B							Method 6010B	Method 1664
SB-1	10/30/2003	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<100[1]	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<500	--	--
SB-9	10/31/2003	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<100[1]	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<500	--	--
SB-5	10/31/2003	--	--	--	--	--	--	--	--	--	--	--	--	--	0.18	ND<1.0
MCL			1	150	300	1,750		13							0.015	
ESL		100	1	40	30	13	12	5							0.0025	

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

TPH-G	= total petroleum hydrocarbons as gasoline	TBA	= tertiary butyl alcohol
TPPH	= total purgeable petroleum hydrocarbons	mg/L	= milligrams per liter
TOG	= total oil and grease (petroleum)	µg/L	= micrograms per liter
MTBE	= methyl tertiary butyl ether	ND	= not detected above the Laboratory Reporting Limit
DIPE	= di-isopropyl ether	--	= not analyzed, measured, or collected
ETBE	= ethyl tertiary butyl ether	MCL	= Maximum Contaminant Levels in Drinking Water (CCR, Title 22, Chapter 15, 2003)
TAME	= tertiary amyl methyl ether	ESL	= Tier 1 Environmental Screening Level for groundwater that is a current or potential source of drinking water beneath shallow impacted soil (SFRWQCB, 2003)
1,2 DCA	= 1,2 dichloroethane		
EDB	= ethylene dibromide		

ATTACHMENT C

FIGURES



1 MILE 3/4 1/2 1/4 0 1 MILE

SCALE 1 : 24,000

N

SOURCE:

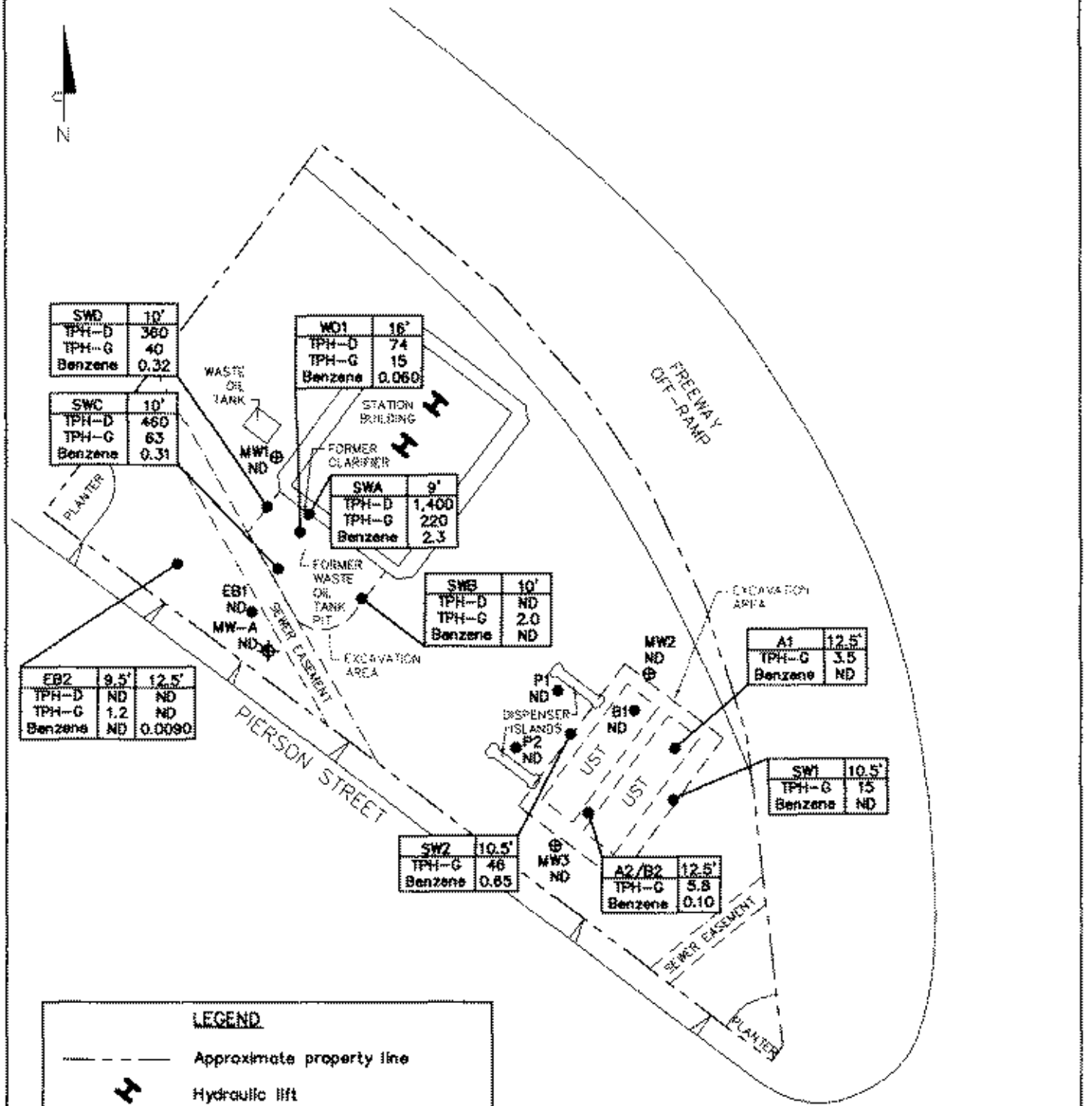
United States Geological Survey
7.5 Minute Topographic Maps:
Oakland East Quadrangle
California

VICINITY MAP

76 Service Station #5781
3535 Pierson Street
Oakland, California

TRC

FIGURE 1



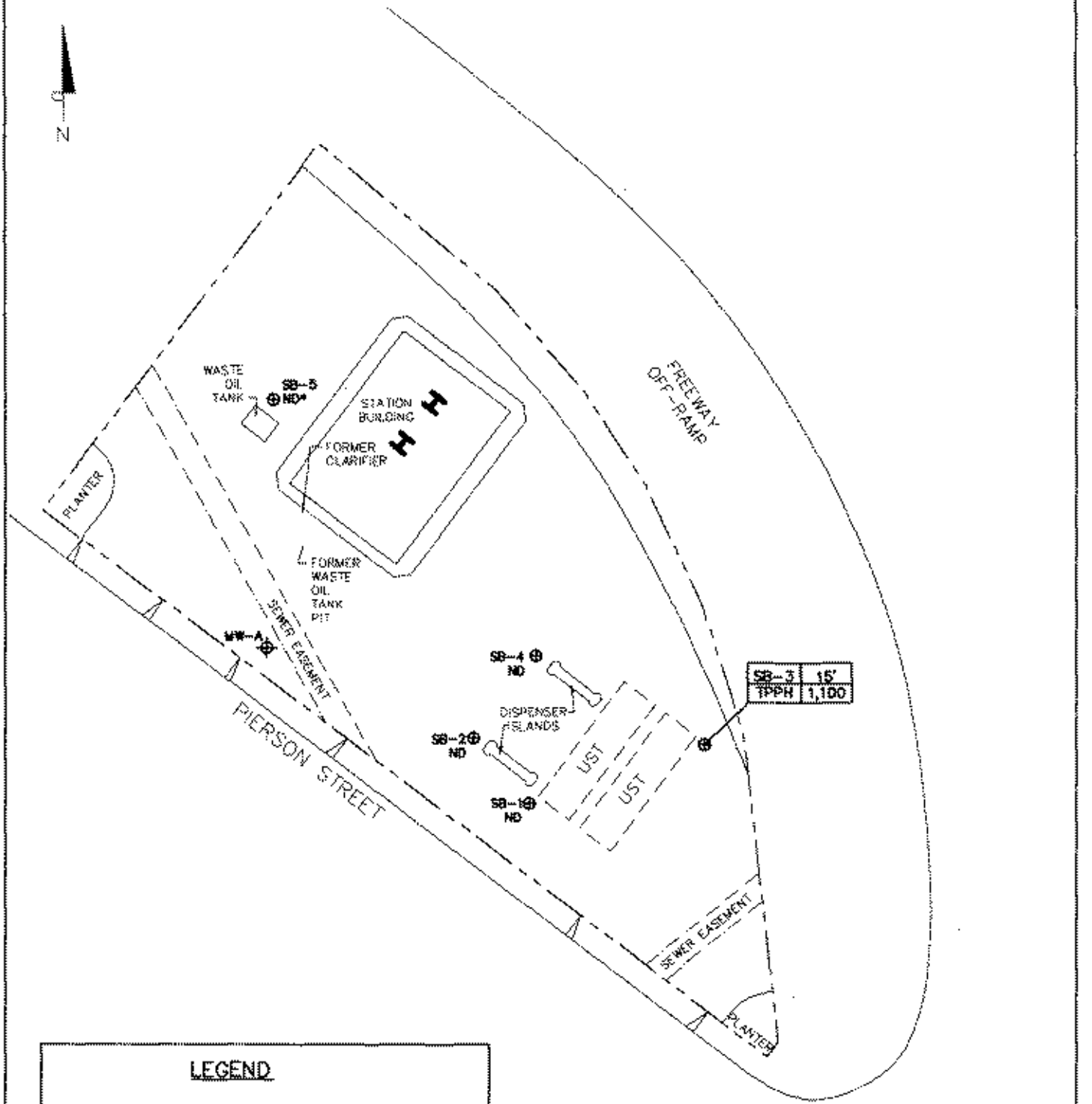
SOURCE: Site plan by Getter-Ryan, April 2001.

HYDROCARBON CONCENTRATIONS IN SOIL 1989-90

76 Service Station #5781
3535 Pierson Street
Oakland, California

TRC

FIGURE 2



LEGEND

- Approximate property line
- Hydraulic lift
- MW-A ⊕ Monitoring well
- SB-5 ⊕ Soil boring by TRC – October 30-31, 2003
- SB-3 | 15' / TPPH | 1,100 — Hydrocarbon concentrations in soil (mg/kg), 2003

NOTE:
* = SB-5 sampled for lead and oil and grease only.

APPROXIMATE SCALE (FEET)

0 30 60

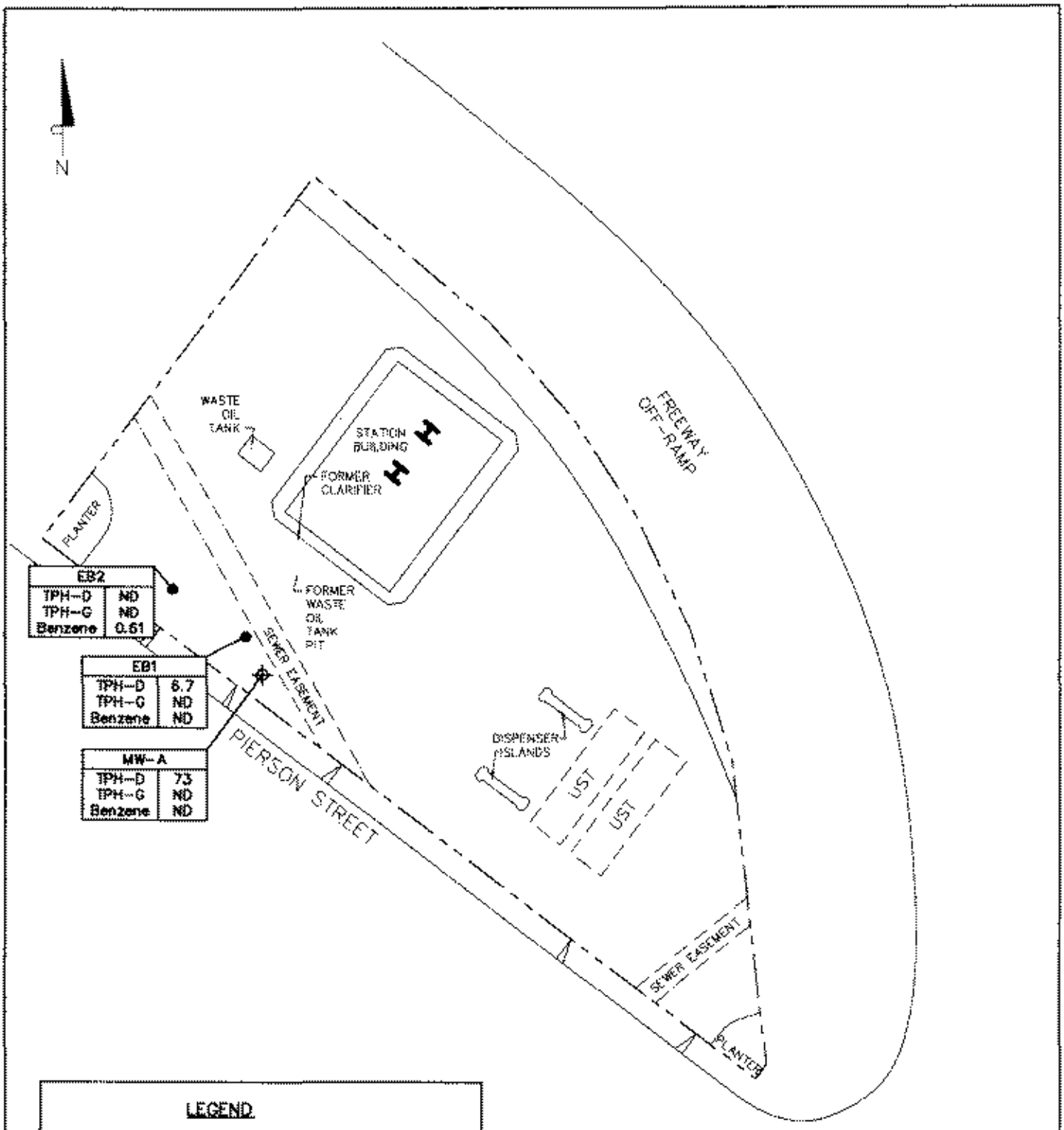
SOURCE: Site plan by Getler-Ryan, April 2001

HYDROCARBON CONCENTRATIONS IN SOIL 2003

76 Service Station #5781
3535 Pierson Street
Oakland, California

TRC

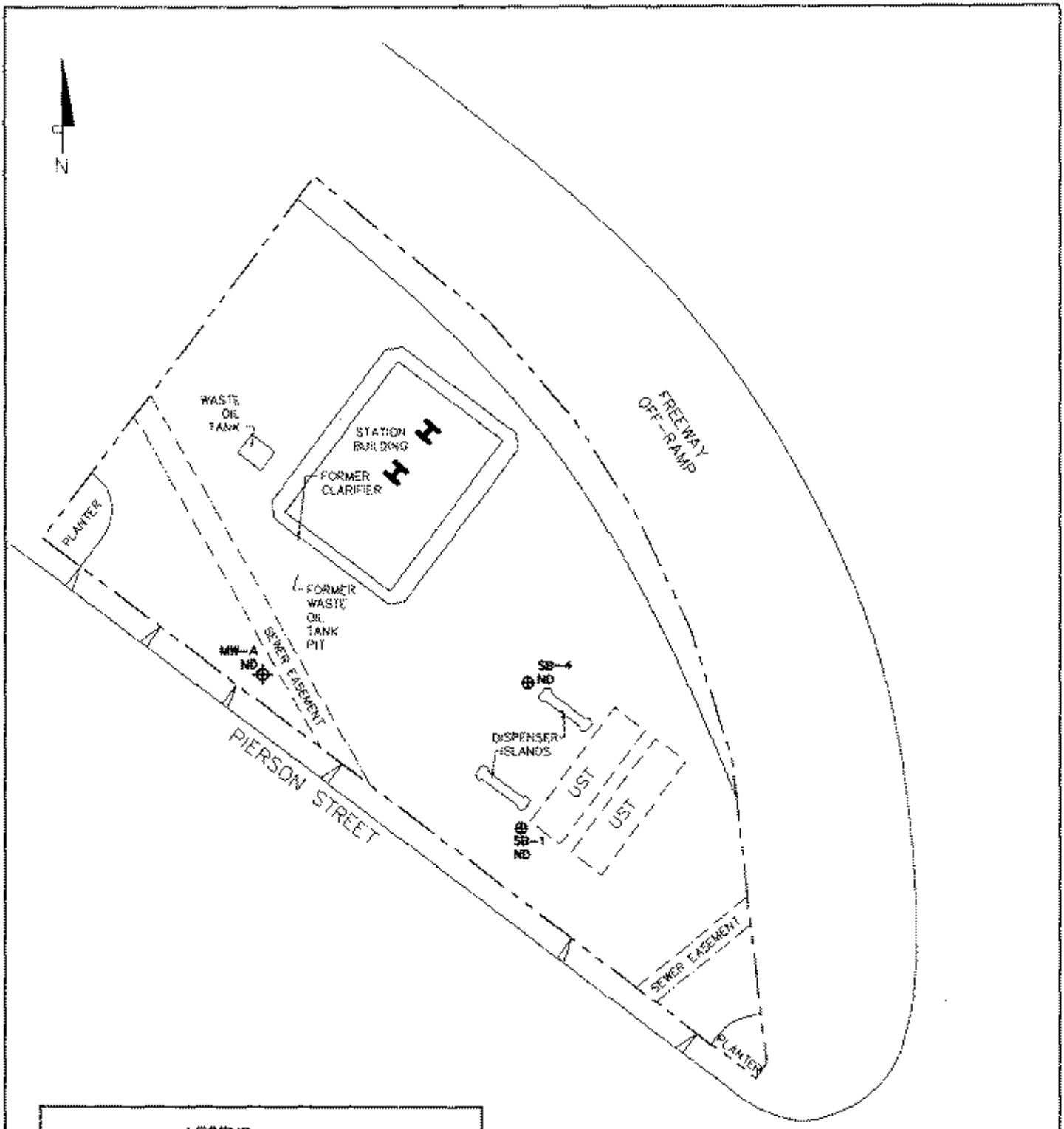
FIGURE 3



SOURCE: Site plan by Getler-Ryan, April 2001

DISSOLVED-PHASE HYDROCARBON CONCENTRATIONS
1990
76 Service Station #5781
3535 Pierson Street
Oakland, California

TRC | **FIGURE 4**



LEGEND

- Approximate property line
- Hydraulic lift
- MW-A — Monitoring well
- Soil boring by TRC, October 30–November4, 2003
- ND — Dissolved-phase hydrocarbon concentrations (ppb), 2003

APPROXIMATE SCALE (FEET)

0 30 60

DISSOLVED-PHASE HYDROCARBON CONCENTRATIONS
2003
76 Service Station #5781
3535 Pierson Street
Oakland, California

SOURCE: Site plan by Gettler-Ryan, April 2001

TRC | **FIGURE 5**

ATTACHMENT D

GEOLOGIC LOGS AND WELL COMPLETION DETAILS

BORING LOG

Project No. KEI-P89-1204	**Boring & Casing Diameter** 9" 2"	**Logged By** D.L.
Project Name Unocal Oakland - Pierson	**Well Head Elevation** N/A	**Date Drilled** 4/9/90
Boring No. MW1	**Drilling Method** Hollow-stem Auger	**Drilling Company** EGI

Penetration blows/6"	G. W. level	Depth (feet) Samples	Strati-graphy USCS	Description
		0		A. C. Pavement. Sand and Gravel
			CL/ CH	Clay with silt, 5-10% sand, soft, moist, olive brown.
2/2/3	NOT ENCOUNTERED DURING DRILLING	5	ML/ MH	Clayey silt, 30% clay, 5-10% coarse-grained sand, soft to firm, moist, very dark grayish brown.
5/7/8		10	CL/ CH	Clay, 5-10% sand, trace silt, stiff, moist, dark brown.
				Clay, as above, except with gravel to 1/2" diameter, 10-15% sand.
12/16/21				Clay, 5-10% sand, very stiff, slightly moist, dark brown, minor organic material
8/16/20		15		
				Clay, as above, trace to 5% silt, dark yellowish brown.
10/17/22				
7/14/22		20		

BORING LOG

Project No. KEI-P89-1204	Boring & Casing Diameter 9" 2"	Logged By D.L.
Project Name Unocal Oakland - Pierson	Well Head Elevation N/A	Date Drilled 4/9/90
Boring No. MW1	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 silt, dark yellowish brown.
10/16/21			GC	Clayey gravel, 5-10% sand, gravel to 3/8" diameter, dense, moist, dark yellowish brown.
9/12/18		25	CL/CH	Clay, trace silt and sand, stiff, moist, olive brown, trace organic matter.
9/12/19				
12/16/21		30		Clay, as above, trace to 5% sand, trace silt, olive brown to dark brown
7/11/18				Clay with silt, 15-20% silt, 5% sand, stiff, moist, dark yellowish brown.
7/14/16		35		
9/12/17				Silty clay, 5-10% sand, stiff to very stiff, slightly moist, dark yellowish brown.
9/15/23		40		

BORING LOG

Project No. KEI-P89-1204	Boring & Casing Diameter 9" 2"	Logged By D.L.
Project Name Unocal Oakland - Pierson	Well Head Elevation N/A	Date Drilled 4/9/90
Boring No. MW1	Drilling Method Hollow-stem Auger	Drilling Company EGI

Penetration blows/6"	G. W. level	Depth (feet) Samples	Strati-graphy USCS	Description
			CL/CH	Silty clay, as above.
9/16/26				Sandy clay, 10-15% silt, 30% sand, sand is coarse to fine grained, very stiff, slightly moist, dark yellowish brown.
8/11/16		45		
				Clay, with silt, trace sand, very stiff, slightly moist, dark brown, stiffness increasing with depth.
12/16/18				
11/18/32		50		
		55		
		60		TOTAL DEPTH: 50'

BORING LOG

Project No. KEI-P89-1204	**Boring & Casing Diameter** 9" 2"	**Logged By** D.L.
Project Name Unocal Oakland - Pierson	**Well Head Elevation** N/A	**Date Drilled** 4/10/90
Boring No. MW2	**Drilling Method** Hollow-stem Auger	**Drilling Company** EGI

Penetration blows/6"	G. W. level	Depth (feet) Samples	Strati-graphy USCS	Description
		0		A. C. Pavement and base rock.
			SC	Clayey sand, 20-30% clay, 10-20% silt, sand is coarse-to fine-grained, medium dense, moist, yellowish brown to dark yellowish brown.
2/2/4	NOT ENCOUNTERED DURING DRILLING	5	CL/ CH	Sandy clay, 5-10% silt, firm, moist, strong brown, pocketed with clayey sand and other soil, possible fill.
			GC	Clayey gravel with sand, gravel 1 1/2" to 4" diameter, gap graded, 10-15% sand, medium dense, moist, dark yellowish brown.
5/2/2		10	GM	Silty gravel with sand, trace clay, 15% silt, loose, moist, dark yellowish brown, voids in sample. base of fill?
2/2/5			MH	Clayey silt, 10-15% coarse sand, firm, moist, black.
3/4/9		15	CL/ CH	Sandy clay, 5-10% gravel to 1/2" diameter, stiff, moist, dark olive gray, very dark grayish brown below 15.5 feet.
			GW-GM	Well graded gravel with silt and sand, trace to 5% clay, medium dense, moist, dakr yellowish brown.
5/7/10		20	GP	Poorly graded gravel below 19.5 feet. Clay below 20.3 feet - See page 2.

BORING LOG

Project No. KEI-P89-1204	Boring & Casing Diameter 9" 2"	Logged By D.L.
Project Name Unocal Oakland - Pierson	Well Head Elevation N/A	Date Drilled 4/10/90
Boring No. MW2	Drilling Method Hollow-stem Auger	Drilling Company EGI

Penetration blows/6"	G. W. level	Depth (feet) Samples	Strati-graphy USCS	Description
			CL/CH	Silty clay to clay with silt, 5-15% sand, very stiff, moist, dark yellowish brown to olive brown.
7/10/18		25		Clay, trace silt and sand, very stiff, moist, olive brown, trace organic matter.
9/16/23		30		Sandy clay, 5-10% gravel to 1/2" diameter, hard, moist, dark yellowish brown.
			CL/CH	
9/13/19		35		Sandy clay, trace gravel, less sand than above, moist, dark yellowish brown.
8/12/14		40		TOTAL DEPTH: 40'

BORING LOG

Project No. KEI-P89-1204	Boring & Casing Diameter 9" 2"	Logged By W.W.
Project Name Unocal Oakland - Pierson	Well Head Elevation N/A	Date Drilled 4/10/90
Boring No. MW3	Drilling Method Hollow-stem Auger	Drilling Company EGI

Penetration blows/6"	G. W. level	Depth (feet) Samples	Strati-graphy USCS	Description
	NOT ENCOUNTERED DURING DRILLING	0		A. C. Pavement Clay, sand and gravel fill.
			SC	Clayey sand, yellowish brown to olive brown, loose to very loose, moist.
2/2/3		5	CL/CH	Silty clay, soft to firm, moist, yellowish brown.
			MH	Clayey silt, 5-10% sand, trace to 5% gravel, soft to firm, moist, black.
2/2/2		10		
			SC	Clayey sand, trace gravel to 1/4" diameter, medium dense, moist, dark yellowish brown.
4/8/13		15	CL/CH	Sandy clay, 30-35% sand, very stiff, moist, dark yellowish brown.
				Trace of gravel to 5/8" diameter at 19 feet. Clay, trace sand and silt, stiff, moist, olive brown.
		20		

BORING LOG

Project No. KEI-P89-1204	Boring & Casing Diameter 9" 2"	Logged By W.W.
Project Name Unocal Oakland - Pierson	Well Head Elevation N/A	Date Drilled 4/10/90
Boring No. MW3	Drilling Method Hollow-stem Auger	Drilling Company EGI

Penetration blows/6"	G. W. level	Depth (feet) Samples	Strati-graphy USCS	Description
4/7/12		25	CL/ CH	Clay and silty clay, dark yellowish brown, very stiff, moist.
8/10/12		30		Clay, trace silt, very stiff, moist, olive brown, homogeneous.
9/12/17		35		Clay, trace of fine well rounded gravel and trace of silt, moist, olive brown, very stiff.
10/17/23		40		Sandy clay, trace to 5% fine gravel, trace to 5% sand, hard, moist, olive brown. TOTAL DEPTH: 40'

BORING LOG

Project No.	Boring Diameter	Logged By
KEI-P89-1204	9"	W.W.
Project Name Unocal Oakland - 3535 Pierson	**Well Head Elevation** N/A	**Date Drilled** 7/5/90
Boring No. EB1	**Drilling Method** Hollow-stem Auger	**Drilling Company** EGI

Penetration blows/6"	G. W. level	Depth (feet) Samples	Strati-graphy USCS	Description
		0		A.C. Pavement over sand and gravel base.
			CL/CH	Clay with silt, 5-10% sand, 10% fine gravel to 3/8" dia., firm, moist, olive brown.
			ML/MH	Clayey silt, 30% clay, 10% coarse-grained sand, trace to 5% fine gravel to 3/8" dia., moist, olive gray.
3/5/6		5		Clayey silt, trace fine gravel, 5% sand, moist, brown.
				Clay, trace silt and sand, trace organic matter, moist, stiff, orang-ish brown.
5/6/8			CL/CH	Clay, 10-15% sand, trace silt, trace to 5% gravel to 1/2" dia., moist, stiff, dark brown.
		10		
				Clay, minor organic material, slightly moist, very stiff, dark yellowish brown.
8/13/18		15		
				Clay, as above, with light gray mot-tling.
9/12/17		20		

BORING LOG

Project No.	Boring Diameter	Logged By
KEI-P89-1204	9"	W.W.
Project Name Unocal Oakland - 3535 Pierson	**Well Head Elevation** N/A	**Date Drilled** 7/5/90
Boring No. EB1	**Drilling Method** Hollow-stem Auger	**Drilling Company** EGI

Penetration blows/6"	G. W. level	Depth (feet) Samples	Strati-graphy USCS	Description
7/13/18		25	CL/ CH	Clay, minor organic material, trace fine-grained sand, trace silt, slightly moist, very stiff to hard, light orangish brown with light gray, mottling.
8/15/21		30		
9/18/36	▼	35		Clay with silt, 15-20% silt, 5-15% sand, trace organic matter, hard, very moist to wet, dark yellowish brown.
		40		TOTAL DEPTH: 34.5'

B O R I N G L O G

Project No. KEI-P89-1204	Boring Diameter 9"	Logged By W.W.
Project Name Unocal Oakland - 3535 Pierson	Well Head Elevation N/A	Date Drilled 7/6/90
Boring No. EB2	Drilling Method Hollow-stem Auger	Drilling Company EGI

Penetration blows/6"	G. W. level	Depth (feet) Samples	Strati-graphy USCS	Description
		0		A.C. Pavement over sand and gravel.
			GC	Clayey gravel 15% silt, 10% sand, gravel to 1/2" dia., moist, medium dense, olive brown.
4/4/5		5	CL	Sandy clay with gravel, 15% sand, gravel to 1/4" dia., trace organic matter, moist to wet, firm, dark yellowish brown.
				Clay, 10% silt, 10% coarse-grained sand, trace fine gravel to 1/4" dia., moist, firm to stiff, olive brown.
4/5/8		10	CL/ CH	Clay, trace rootlets, stiff, slightly moist, dark yellowish brown with trace light gray mottling.
7/14/18				Clay, as above, trace to 5% silt, hard, slightly moist, dark yellowish brown with light gray mottling.
		15		
8/15/19				Clay, as above, trace to 15% silt, moist, hard, yellowish brown with light gray mottling.
		20		

BORING LOG

Project No.	Boring Diameter	Logged By
KEI-P89-1204	9"	W.W.
Project Name Unocal Oakland - 3535 Pierson	**Well Head Elevation** N/A	**Date Drilled** 7/6/90
Boring No. EB2	**Drilling Method** Hollow-stem Auger	**Drilling Company** EGI

Penetration blows/6"	G. W. level	Depth (feet) Samples	Strati-graphy USCS	Description
8/12/22			CL/ CH	Clay, trace organic matter, trace silt hard, moist, dark yellowish brown with light gray mottling, slight orangish brown, mottling.
7/8/12		25		Clay with silt, trace to 5% organic matter, moist, very stiff, beige with light gray mottling.
8/14/20		30	ML/ MH	Clayey silt with fine-grained sand, up to 20% sand, hard, moist, light olive brown, trace light gray mottling.
13/15/28	▼	35	SC	Clayey sand with silt, silt to 15%, very moist to wet, dense, light olive brown to beige.
		40		TOTAL DEPTH: 38'

BORING LOG

Project No.	Boring & Casing Diameter	Logged By
KEI-P89-1204	9" 2"	W.W.
Project Name Unocal 3535 Pierson St. Oakl	**Well Head Elevation** N/A	**Date Drilled** 12/11/90
Boring No. MWA	**Drilling Method** Hollow-stem Auger	**Drilling Company** Woodward Drilling Co.

Penetration blows/6"	G. W. level	Depth (feet) Samples	Strati-graphy USCS	Description
		0		Asphalt pavement over sand and gravel.
			CL/CH	Clay with gravel, gravel to 2-1/2" diameter, 5% sand, moist, yellowish brown. Base of fill.
			ML/MH	Clayey silt, trace sand, trace fine gravel to 3/8" diameter, moist, firm to stiff, olive brown to olive gray.
		5		
4/4/6			CL/CH	Clay, with silt, fine- to medium-grained sand, moist, stiff, brown.
		10		
4/9/15				Clay, trace subangular gravel to 3/8" diameter, trace sand, moist, very stiff, olive brown.
		15		
7/13/21				Silty clay, trace organic matter, moist, hard, dark yellowish brown.
			CL/CH to ML/MH	Silty clay to clayey silt, trace organic matter, moist, hard, light yellowish brown.
9/15		20		

BORING LOG

Project No.	Boring & Casing Diameter	Logged By
KEI-P89-1204	9" 2"	W.W.
Project Name Unocal 3535 Pierson St. Oakl	**Well Head Elevation** N/A	**Date Drilled** 12/11/90
Boring No. MWA	**Drilling Method** Hollow-stem Auger	**Drilling Company** Woodward Drilling Co.

Penetration blows/6"	G. W. level	Depth (feet) Samples	Strati-graphy USCS	Description
/27			CL/CH to ML/MH	Silty clay to clayey silt, trace organic matter, moist, hard, light yellowish brown.
			ML/MH	
		25		
11/18/29				Silt, with clay, trace organic matter, very moist, hard, light yellowish brown.
		30		
6/12/20				Silt with clay, trace organic matter, moist, very stiff to hard, light olive brown mottled with light yellowish brown.
11/24/28	▼			Free water encountered at 33'.
		35		
15/25/38				Silt, with clay, trace organic matter, trace fine- to medium-grained sand, moist to very moist, hard, light yellowish brown mottled with yellowish brown.
9/		40		

BORING LOG

Project No. KEI-P89-1204	Boring & Casing Diameter 9" 2"	Logged By W.W.
Project Name Unocal 3535 Pierson St. Oakl	Well Head Elevation N/A	Date Drilled 12/11/90
Boring No. MWA	Drilling Method Hollow-stem Auger	Drilling Company Woodward Drilling Co.

Penetration blows/6"	G. W. level	Depth (feet) Samples	Stratigraphy USCS	Description
18/26			ML	Silt with clay, as above.
			SW	Sand, well graded, trace silt, saturated, dense, yellowish brown.
15/24/30		45	ML/MH	Silt with clay, trace organic matter, moist, hard, brown mottled with light yellowish brown.
		50		
		55		
		60		TOTAL DEPTH: 45'

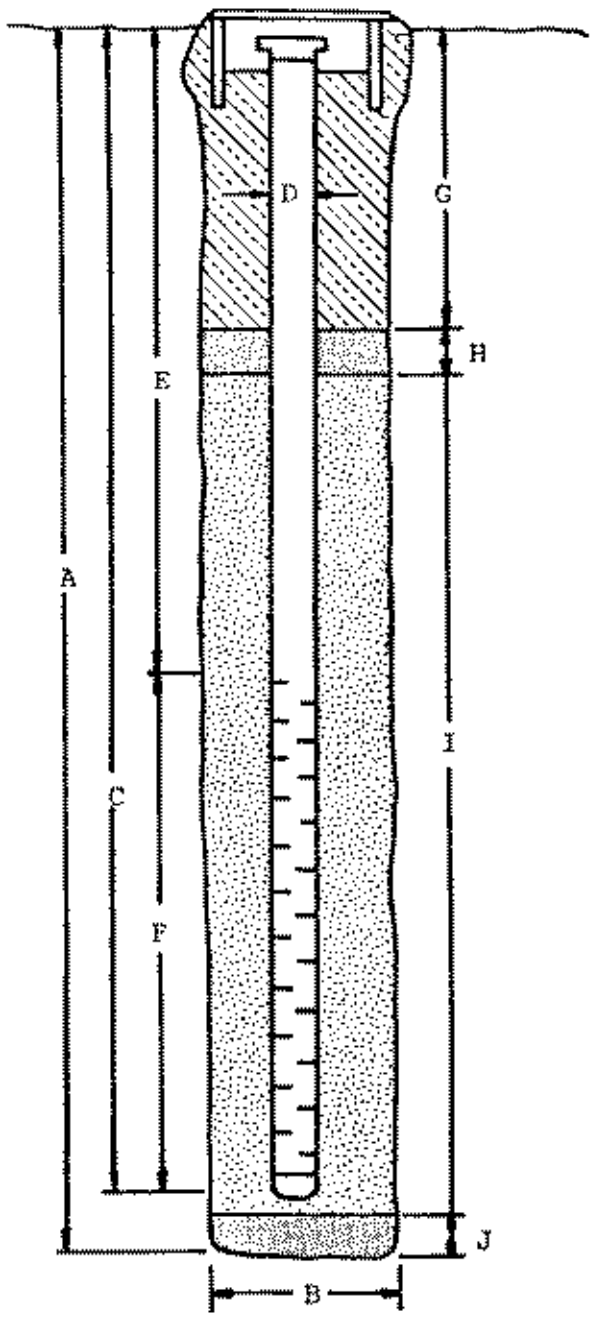
WELL COMPLETION DIAGRAM

PROJECT NAME: Unocal 3535 Pierson St. Oakland BORING/WELL NO. MWA

PROJECT NUMBER: KEI-P89-1204

WELL PERMIT NO.:

Flush-mounted Well Cover



A. Total Depth: 45'

B. Boring Diameter*: 9"

Drilling Method: Hollow Stem Auger

C. Casing Length: 45'

Material: Schedule 40 PVC

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

E. Depth to Perforations: 25'

F. Perforated Length: 20'

Perforation Type: Machined Slot

Perforation Size: 0.010"

G. Surface Seal: 21'

Seal Material: Concrete

H. Seal: 2'

Seal Material: Bentonite

I. Gravel Pack: 22'

Pack Material: RMC Lonestar Sand

Size: #2/16

J. Bottom Seal: None

Seal Material: N/A

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

PROJECT NO.: 42-0102-01
CLIENT: ConocoPhillips
LOCATION: 76 Service Station #5781
3535 Pierson Street, Oakland, California

DATE DRILLED: 10/30/03
LOGGED BY: P. Kelleher
APPROVED BY: B.A. Moed, RG
DRILLING CO.: Cascade Drilling

DRILLING METHOD: 8-inch Hollow-Stem Auger
SAMPLER TYPE: 2-inch Split Spoon
TOTAL DEPTH: 44.0 feet
DEPTH TO WATER: 39.0 feet

PID/FID (ppm)	BLOWS PER 6 INCHES	RECOVERY	SAMPLE	DEPTH (feet below grade)	DESCRIPTION	USCS	LITHOLOGY
				0	Hand augered to 5'.		
0	7 7 13	1.0/ 1.5		5	CLAY (CL): Very dark gray (10YR 3/1), 90 % clay, 10% gravel, soft, damp.		
0	17 20 22	1.5/ 1.5		10			
0	20 22 27	1.5/ 1.5		15	- @ 14': color change to brownish yellow (10YR 5/8), 90 % clay, 10% sand, trace gravel, soft, damp.		
0	21 23 28	1.5/ 1.5		20	- @ 20': no sand.	CL	
0	21 23 28	1.0/ 1.5		25			
0	24 25 27	1.5/ 1.5		30			
0	23 26 24	1.5/ 1.5		35	- @ 34': increased sand.		
0	20 18 22	1.0/ 1.5		40	SILTY SAND (SM): Yellowish brown (10YR 6/8), 10 % silt, 10 % clay, 80% sand, dense, wet.	SM	

BORING BACKFILL DETAIL

0
5 — Grout
10
15
20
25
30
35
40

TRC

LOG OF EXPLORATORY BORING

SB-1

PROJECT NO.: 42-0102-01
CLIENT: ConocoPhillips
LOCATION: 76 Service Station #5781
3535 Pierson Street, Oakland, California

DATE DRILLED: 10/30/03
LOGGED BY: P. Kelleher
APPROVED BY: B.A. Moed, RG
DRILLING CO.: Cascade Drilling

DRILLING METHOD: 8-inch Hollow-Stem Auger
SAMPLER TYPE: 2-inch Split Spoon
TOTAL DEPTH: 44.0 feet
DEPTH TO WATER: 39.0 feet

PID/FID (ppm)	BLOWS PER 6 INCHES	RECOVERY	SAMPLE	DEPTH (feet below grade)	DESCRIPTION	USCS	LITHOLOGY	BORING BACKFILL DETAIL
				40	SAND (SM) (continued).	SM		Grout
				45				
				50				
				55				
				60				
				65				
				70				
				75				
				80				

TRC

LOG OF EXPLORATORY BORING

SB-1

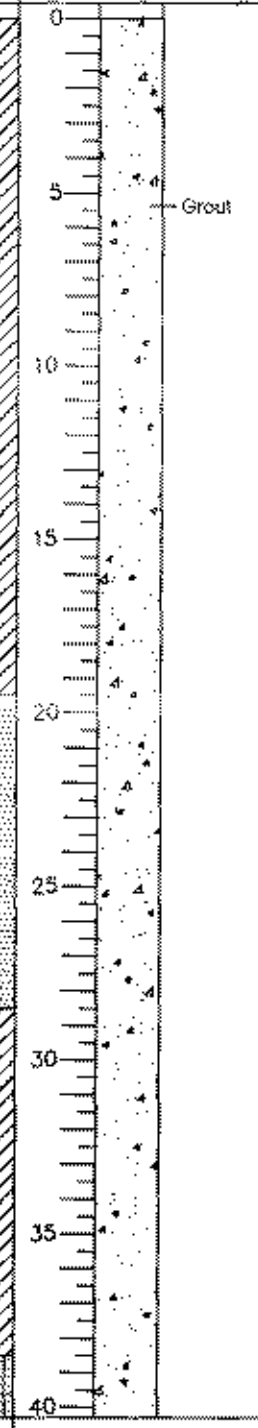
PROJECT NO.: 42-0102-01
CLIENT: ConocoPhillips
LOCATION: 76 Service Station #5781
3535 Pierson Street, Oakland, California

DATE DRILLED: 10/30/03
LOGGED BY: P. Kelleher
APPROVED BY: B.A. Moed, RG
DRILLING CO.: Cascade Drilling

DRILLING METHOD: 8-inch Hollow-Stem Auger
SAMPLER TYPE: 2-inch Split Spoon
TOTAL DEPTH: 54.0 feet
DEPTH TO WATER: Not applicable

PID/FID (ppm)	BLOWS PER 6 INCHES	RECOVERY	SAMPLE	DEPTH (feet below grade)	DESCRIPTION	USCS	LITHOLOGY
				0	Hand augered to 5'.		
0	8 11 13	1.5/ 1.5		5	CLAY (CL): Brownish yellow (10YR 5/4) with black mottles, 95% clay, 5% gravel, soft, damp.	CL	
0	12 12 18	1.5/ 1.5		10	- @ 9': color change to black (10YR 2/1), 95 % clay, 5% sand, very soft.		
0	15 17 23	1.5/ 1.5		15			
0	14 14 19	1.5/ 1.5		20	GRAVELLY SAND (SW): Brownish yellow (10YR 5/6), 10 % clay, 60% sand, 30% gravel, soft, damp.	SW	
0	21 20 26	1.5/ 1.5		25			
0	22 24 26	1.5/ 1.5		30	CLAY WITH SAND (CL): Yellowish brown (10YR 4/4), 80 % clay, 15% sand, 5% gravel, soft, damp.	CL	
0	21 21 28	1.0/ 1.5		35			
0	23 27 22	0.5/ 1.5		40	SILTY SAND (SM): Yellowish brown (10YR 6/3), 20 % silt, 10% clay, 70% sand, hard, damp.	SM	

BORING BACKFILL DETAIL



TRC

LOG OF EXPLORATORY BORING

SB-2
PAGE 1 OF 2

PROJECT NO.: 42-0102-01
CLIENT: ConocoPhillips
LOCATION: 76 Service Station #5781
3535 Pierson Street, Oakland, California

DATE DRILLED: 10/30/03
LOGGED BY: P. Kelleher
APPROVED BY: B.A. Moed, RG
DRILLING CO.: Cascade Drilling

DRILLING METHOD: 8-inch Hollow-Stem Auger
SAMPLER TYPE: 2-inch Split Spoon
TOTAL DEPTH: 54.0 feet
DEPTH TO WATER: Not applicable

PID/FID (ppm)	BLOWS PER 6 INCHES	RECOVERY	SAMPLE	DEPTH (feet below grade)	DESCRIPTION	USCS	LITHOLOGY	BORING BACKFILL DETAIL
				40	SAND (SM) (continued).	SM		40 Grout
0	25 32 27	1.5/ 1.5		45				45
0	39 23 27	1.0/ 1.5		50	SILTY SAND WITH GRAVEL (SM): Yellowish brown (10YR 5/6), 20% silt, 5% clay, 60% sand, 15% gravel, hard, damp.			50
				55				55
				60				60
				65				65
				70				70
				75				75
				80				80

TRC

LOG OF EXPLORATORY BORING

SB-2
PAGE 2 OF 2

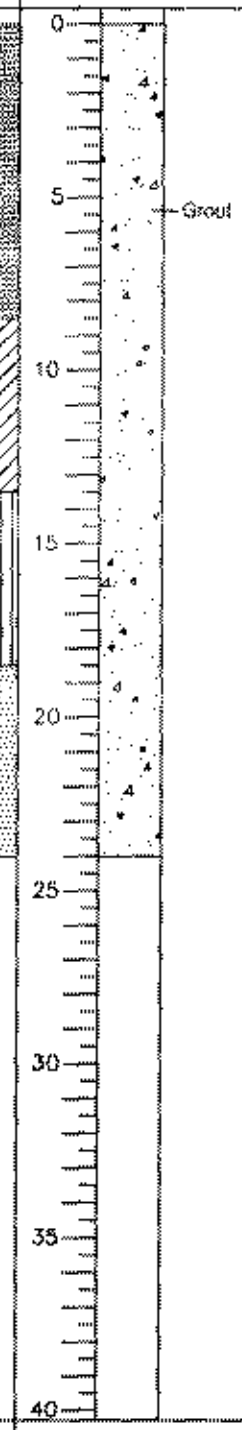
PROJECT NO.: 42-0102-01
CLIENT: ConocoPhillips
LOCATION: 76 Service Station #5781
3535 Pierson Street, Oakland, California

DATE DRILLED: 10/31/03
LOGGED BY: P. Kelleher
APPROVED BY: B.A. Moed, RG
DRILLING CO.: Cascade Drilling

DRILLING METHOD: 8-inch Hollow-Stem Auger
SAMPLER TYPE: 2-inch Split Spoon
TOTAL DEPTH: 24.0 feet
DEPTH TO WATER: 19.5 feet

PID/FID (ppm)	BLOWS PER 6 INCHES	RECOVERY	SAMPLE	DEPTH (feet below grade)	DESCRIPTION	USCS	LITHOLOGY
				0	Hand augered to 5'.		
0	12 12 15	1.0/ 1.5		5	SAND (SP): Yellowish brown (10YR 5/6), 90 % sand, 10% gravel, soft, damp.	SP	
0	5 4 9	1.0/ 1.5		10	CLAY (CL): Black (10YR 2/1), 90 % clay, 10% sand, soft, moist.	CL	
0	14 16 19	1.5/ 1.5		15	SILT WITH CLAY (ML): Yellowish brown (10YR 4/3), 70 % silt, 20% clay, 10% gravel, soft, moist.	ML	
0	14 16 21	1.0/ 1.5		20	SAND WITH GRAVEL (SW): Yellowish brown (10YR 4/4), 10% silt, 50% sand, 40% gravel, soft, moist.	SW	
				25			
				30			
				35			
				40			

BORING BACKFILL DETAIL



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LOG OF EXPLORATORY BORING

SB-4
PAGE 1 OF 1

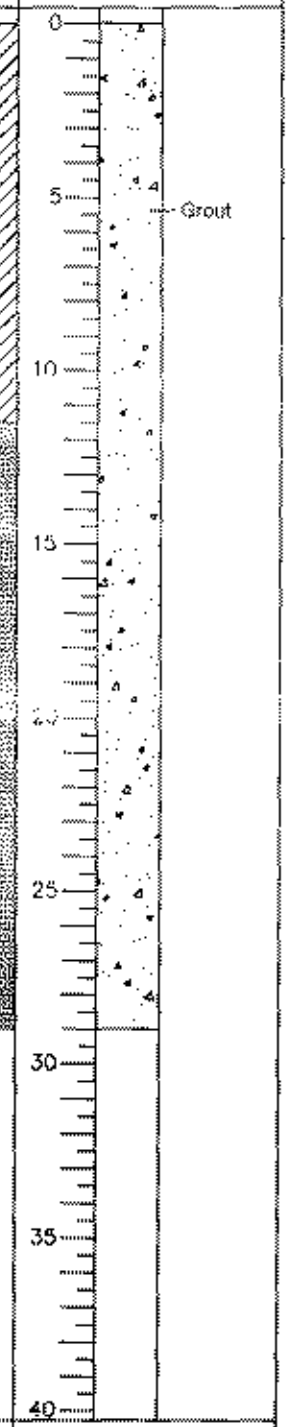
PROJECT NO.: 42-0102-01
CLIENT: ConocoPhillips
LOCATION: 76 Service Station #5781
3535 Pierson Street, Oakland, California

DATE DRILLED: 10/31/03
LOGGED BY: P. Kelleher
APPROVED BY: B.A. Moed, RG
DRILLING CO.: Cascade Drilling

DRILLING METHOD: 8-inch Hollow-Stem Auger
SAMPLER TYPE: 2-inch Split Spoon
TOTAL DEPTH: 29.0 feet
DEPTH TO WATER: 24.6 feet

PID/FID (ppm)	BLOWS PER 6 INCHES	RECOVERY	SAMPLE	DEPTH (feet below grade)	DESCRIPTION	USCS	LITHOLOGY
				0	Hand augered to 5'. CLAY (CL): Very dark gray (10YR 2/1), 90 % clay, 10% gravel, soft, damp.		
0	11 8 13	1.5/ 1.5		5		CL	
0	13 14 17	1.5/ 1.5		10	- @ 9': color change to dark gray (10YR 4/1), 95 % clay, 5% gravel.		
0	12 16 17	1.5/ 1.5		15	SAND (SP): Yellowish brown (10YR 5/6), 10 % silt, 90% sand, soft, moist.		
0	15 18 19	1.5/ 1.5		20		SP	
0	14 16 19	0.5/ 1.5		25			
				30			
				35			
				40			

BORING BACKFILL DETAIL



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LOG OF EXPLORATORY BORING

SB-5
PAGE 1 OF 1