

BLYMYER & SONS engineers, inc.

August 11, 1986
BSE Job No. 8527

Mr. T. M. Gerow
ALAMEDA COUNTY
DIVISION OF ENVIRONMENTAL HEALTH
470-27th Street #324
Oakland, CA. 94612

RECEIVED
AUG 13 1986
ENVIRONMENTAL HEALTH
ADMINISTRATION

SUBJECT: P.I.E./NATIONWIDE
EMERYVILLE, CALIFORNIA
TANK REMOVAL

Dear Mr. Gerow:

Enclosed are soils analyses of the samples taken during the underground tank removal at the above-referenced facility. Blymyer & Sons Engineers is currently taking additional soil samples to define possible contamination levels. We will report the results of the additional sampling and present any possible remedial actions once these results have been received.

If you have any questions, please call.

Cordially yours,

BLYMYER & SONS ENGINEERS, INC.



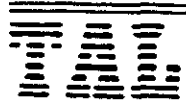
Chris Falbo

CF/ds

Attachments

cc: Mr. Joe Ware -P.I.E./NATIONWIDE, JACKSONVILLE, FL.
Mr. Alan McKay -McKAY & ASSOCIATES
Mr. Dale Boyer -REGIONAL WATER QUALITY CONTROL BOARD
Mr. Doug Krause-DEPARTMENT OF HEALTH SERVICES

(17)



DATE: 7/30/86

LOG NO.: 3878 and 3884

CUSTOMER: R. S. Eagan and Company
REQUESTER: Bob Eagan
PROJECT: PIE

<u>Sample Type</u>	<u>Sample</u>	<u>Volatile Hydrocarbons</u>	<u>Extractable Hydrocarbons</u>	<u>Oil and Grease</u>
<u>Soil</u>		<u>mg/kg</u>	<u>mg/kg</u>	<u>mg/kg</u>
	#1-TR-5 Waste Oil			47,000
	#2-TR-5 Waste Oil Pile			2,000
	#3-TR-4 Motor Oil			1,300
	#4-TR-3 Gasoline Tank <i>10,000 gal</i>	3.3		
	#5-TR-2 Diesel <i>10,000 gal</i>		0.063	
	#6-TR-1 Diesel <i>10,000 gal</i>		6,600	
	#7-TR-3 Gasoline Backfill,	1,200	570	
	#8-TR-9, TR-10, TR-11, waste Oil and Grease			11,000
	#9-4 ft. below tanks, TR-9, TR-10, TR-11			3,800

S. C. Furman
for S. C. Furman, Ph.D.
Laboratory Director

SF:mln

RECEIVED
JUL 31 1986

EAGAN & COMPANY



LOG NO: E86-08-225

Received: 11 AUG 86

Reported: 15 AUG 86

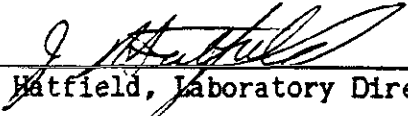
Ms. Dawn Rinaldi
 Peter Kaldveer and Associates
 425 Roland Way
 Oakland, CA 94621

Project: K405-35

REPORT OF ANALYTICAL RESULTS

Page 6

LOG NO	SAMPLE DESCRIPTION , GROUND WATER SAMPLES	DATE SAMPLED	
08-225-26	EB-6		
08-225-27	EB-7		
PARAMETER		08-225-26	08-225-27
Benzene, Toluene, Xylene Isomers			
Benzene, mg/L		3.3	0.1
Toluene, mg/L		0.9	<0.1
Total Xylene Isomers, mg/L		0.6	<0.2
Total Fuel Hydrocarbons, mg/L		300	<2.0


 James Hatfield, Laboratory Director

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
 SAN FRANCISCO BAY REGION

SUBJECT: P.I.E. NATIONWIDE, Emeryville Site
 -diesel and heavy metal soil pollution

BY: LF DATE: 2/23/87

INFO FROM attached repprb of soil pollution

1. Attached report reveals diesel pollution of soil at PIE site. Report also reveals some soil polluted with heavy metals.
2. Based upon the results, there is a possibility of ground water contamination at the site. A GW monitoring well is appropriate here.
3. If we hear that they are proceeding in the absence of our staff requests or guidance we should ask for GW to be monitored for diesel, metals AND SOLVENTS so as to review possible GW pollution.
4. Surface water concerns also exist with the heavy metals at the site, should they migrate via surface runoff to the bay system.
5. The ~~tox~~ Toxics Division will assume lead role for the case due to the metals, possible solvents; and the diesel. The case is a "B" case and will be placed on hold as unassigned.

Groundwater monitoring wells are in place, the case is currently an A III per fuel leak prioritization process. We will transfer all file material to LF. PWJ 2/23/87

	INIT.
	PK
	DMH
	GJG
	RHW**
	SRR*
	EST
④	LF*
	PWJ
	MHK
	DCB
	FE
②	DDD**
	MJA*
	RMB
	PCM
	RHC
	HJS**
	WKB*
	BHW
	LWT
	AGL*
	GRF
	KJT
	MDD*
	TEM
	JEC
	LAH
	TS
	TCW**
	RJC*
	RL
	SAH
	ETH
	TGR
	GW
	KWB
	DAM*
	WT
	SRL
	SIM**
	FEJ*
	JLH
	DLH
	BAA
	RKM*
	JYL
	RWM
	FXG
	TJB
	SDI
	HT
	DF
	VJW**
	TMH
	EJ
	AJ
	OT
	DTT
	CDC



LOG NO: E86-08-225

Received: 11 AUG 86

Reported: 15 AUG 86

TABLE 1

Ms. Dawn Rinaldi
 Peter Kaldveer and Associates
 425 Roland Way
 Oakland, CA 94621

Project: K405-35

REPORT OF ANALYTICAL RESULTS

Page 1

LOG NO	SAMPLE DESCRIPTION , SOIL SAMPLES	DATE SAMPLED				
08-225-1	EB-1-6'					
08-225-2	EB-1-7.5'					
08-225-3	EB-1-9'					
08-225-4	EB-2-8'					
08-225-5	EB-2-12'					
PARAMETER		08-225-1	08-225-2	08-225-3	08-225-4	08-225-5
Benzene, Toluene, Xylene Isomers						
Benzene, mg/kg		2.3	3.3	5.2	15	24
Toluene, mg/kg		<0.5	18	20	11	5.0
Total Xylene Isomers, mg/kg		1.2	6.2	<1.0	14	14
Total Fuel Hydrocarbons, mg/kg		160	310	290	1200	1100
08-225-6	EB-3-8.5'					
08-225-7	EB-3-10'					
08-225-8	EB-3-12'					
08-225-9	EB-4-5.5'					
08-225-10	EB-4-7.5'					
PARAMETER		08-225-6	08-225-7	08-225-8	08-225-9	08-225-10
Benzene, Toluene, Xylene Isomers						
Benzene, mg/kg		140	2.0	<0.5	18	<0.5
Toluene, mg/kg		97	0.8	<0.5	7.5	<0.5
Total Xylene Isomers, mg/kg		99	1.9	1.3	41	<1.0
Total Fuel Hydrocarbons, mg/kg		25000	1900	1700	4600	1.8



LOG NO: E86-08-225

Received: 11 AUG 86

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TABLE 1

Ms. Dawn Rinaldi
 Peter Kaldveer and Associates
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Project: K405-35

REPORT OF ANALYTICAL RESULTS

Page 5

LOG NO	SAMPLE DESCRIPTION , GROUND WATER SAMPLES	DATE SAMPLED				
08-225-21	EB-1					
08-225-22	EB-2					
08-225-23	EB-3					
08-225-24	EB-4					
08-225-25	EB-5					
PARAMETER		08-225-21	08-225-22	08-225-23	08-225-24	08-225-25
Benzene,Toluene,Xylene Isomers						
Benzene, mg/L		2.0	3.1	0.2	2.4	0.6
Toluene, mg/L		1.3	0.4	<0.1	0.1	<0.1
Total Xylene Isomers, mg/L		<0.2	<0.2	<0.2	0.4	<0.2
Total Fuel Hydrocarbons, mg/L		8.3	6.9	4.6	7.8	41
08-225-26	EB-6					
08-225-27	EB-7					
PARAMETER		08-225-26	08-225-27			
Benzene,Toluene,Xylene Isomers						
Benzene, mg/L		3.3	0.1			
Toluene, mg/L		0.9	<0.1			
Total Xylene Isomers, mg/L		0.6	<0.2			
Total Fuel Hydrocarbons, mg/L		300	<2.0			

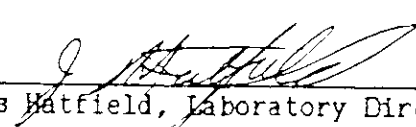

 James Hatfield, Laboratory Director

TABLE 2
SOIL ANALYSES RESULTS

SOIL BORING	SAMPLE NUMBER	DEPTH (ft.)	TOTAL FUEL HYDROCARBON (ppm)
1	1	5.5 - 6.0	11,000 - 11,000 TOG ^(ppm)
1	2	10.0-10.5	2,500 2,500 TOG
2	1	5.5 - 6.0	26 26 TOG
2	2	10.5-11.0	16,000 16,000 TOG
2	3	18.0-18.5	30 - TOG
3	1	5.5 - 6.0	930 - TOG
4	1	5.5 - 6.0	ND (100)
4	2	10.5-11.0	680 - TPH Diesel
4	3	15.5-16.0	ND (100) - TPH d
5	1	5.5 - 6.0	110 - TPH d
5	2	10.5-11.0	ND (100) - TPH d
6	1	5.5 - 6.0	6,800 - TPH d
6	2	10.5-11.0	ND - (100) TPH d
6	3	15.5-16.0	ND - (100) TPH d
7	1	5.5 - 6.0	110 - TPH d
7	2	10.5-11.0	1,400 - TPH d
7	3	15.5-16.0	ND (100)
8	1	7.5 - 8.0	3,800 - TPH d

ND = None Detected at 100 ppm.

TABLE 3
WATER ANALYSES RESULTS

SOIL BORING	BENZENE (ppb)	TOLUENE (ppb)	TOTAL XYLENE (ppb)	TOTAL FUEL HYDROCARBON (ppm)
1	2,500	44	490	3,200
2	260	<2	8	16
3	870	4	34	20
4	<2	7	<2	4
5	42	<2	<2	<1
6	<2	<2	5	<1
7	480	40	330	13
8	77,000	56	400	600
Pit TR 1	320	<2	20	2,000
Pit TR 3	33	<2	200	NA

NA = Not Analyzed

The fill material and bay mud are thicker in the west and gradually thin eastward. Please refer to the geologic cross sections in Figures 3, 4, and 5 for graphical representations of the subsurface stratigraphy.

A strong diesel odor was detected in the samples and a sheen of free product was present on the sampler during the drilling of Borings B-7 (MW-3), B-8 (MW-4), B-11 (MW-7), and B-19 (MW-15).

Analyses of Soil Samples

Representative soil samples were analyzed for total petroleum hydrocarbons with distinction between the gasoline and diesel ranges using Modified EPA Method 8015. The results of the laboratory analyses are presented in Table 1. The Official Laboratory Reports and Chain of Custody Records are included in Appendix B. Please refer to Figure 6 for the estimated extent of the adsorbed-phase plume.

TABLE 1. Laboratory Results of Soil Samples Analyzed for Total Petroleum Hydrocarbons Using Modified EPA Method 8015. *TABLE 4*

<u>Boring</u>	<u>Depth (feet)</u>	<u>Total Petroleum Hydrocarbon (ppm)</u>	<u>Hydrocarbon Range</u>
B-5 (MW-1)	5.5	30	Diesel
B-6 (MW-2)	---	-----	----
B-7 (MW-3)	8.0	33,000	Diesel
B-8 (MW-4)	8.5	5,400	Diesel
B-9 (MW-5)	5.0	10	Diesel
B-10 (MW-6)	5.5	ND<10	----
B-11 (MW-7)	7.0	10,000	Diesel
B-12 (MW-8)	5.5	ND<10	----
B-13 (MW-9)	5.5	20	Diesel
B-14 (MW-10)	5.5	ND<10	----
B-15 (MW-11)	4.5	ND<10	----
B-16 (MW-12)	5.5	90	Diesel
B-17 (MW-13)	5.5	800	Diesel
B-18 (MW-14)	7.5	14,000	Diesel
B-19 (MW-15)	7.0	2,100	Diesel
B-20 (MW-16)	5.5	15	Diesel
B-21 (MW-17)	9.5	240	Diesel
B-22 (MW-18)	5.5	10	Diesel

ND = Not Detected, ppm = Parts Per Million

xylenes, and ethylbenzene (BTXE) using EPA Method 602. The Official Laboratory Report and Chain of Custody Record are included in Appendix D. Tables 2 and 3 present the results of the laboratory analyses of the ground water samples. Please refer to Figure 8 for the estimated extent of the dissolved-phase plume.

The water sample collected from Monitoring Well MW-9 (B-13) was also analyzed for specific conductance. A value of 1260 umhos/cm was determined using EPA Method 120.1. The total dissolved solids (TDS) in a water sample can be estimated by multiplying the specific conductance value by 0.65. This indicates that the sample from Monitoring Well MW-9 (B-13) contained 819 parts per million (ppm) TDS.

TABLE 2. Results of Laboratory Analyses of Ground Water Samples Using Modified EPA Method 8015.

TABLE 5

<u>Well Number</u>	<u>Diesel-Range TPHC (ppm)</u>
MW-1 (B-5)	ND<1
MW-2 (B-6)	0.05
MW-3 (B-7)	0.15
MW-4 (B-8)	1.2
MW-5 (B-9)	ND<1
MW-6 (B-10)	ND<0.05
MW-7 (B-11)	-----
MW-8 (B-12)	ND<0.05
MW-9 (B-13)	ND<1
MW-10 (B-14)	ND<1
MW-11 (B-15)	-----
MW-12 (B-16)	0.05
MW-13 (B-17)	1.7
MW-14 (B-18)	ND<1
MW-15 (B-19)	1.8
MW-16 (B-20)	ND<0.05
MW-17 (B-21)	ND<0.05
MW-18 (B-22)	ND<0.05

Notes: ppm = Parts Per Million, TPHC = Total Petroleum Hydrocarbons, ND = Not Detected, ----- = Not Analyzed.

TABLE 6
Results of Chemical Analyses of Groundwater Samples
Powell Street Plaza and Shellmound III Sites
Emeryville, California

Well Number	Date Sampled	EPA Test Method	(concentrations expressed in parts per million)							Comments
			TPH as Gasoline	TPH as Diesel	TPH as Motor Oil	Benzene	Toluene	Ethylbenzene	Total Xylenes	
MW-1	3/14/88	8015	NT	<1	NT	NT	NT	NT	NT	
	3/25/91	8015/8020	<0.050	<0.050	NT	<0.0003	<0.0003	<0.0003	<0.0003	
	11/10/93	8260	<0.050	<0.050	NT	0.0013	0.0018	<0.0005	0.0020	
	2/23/94	8260	<0.050	<0.050	NT	<0.0005	<0.0005	<0.0005	<0.0005	
	6/2/94	8260	<0.050	<0.050	NT	<0.0005	<0.0005	<0.0005	<0.0005	
	11/29/94	8015/8020	<0.05	0.3	0.2	<0.0005	<0.0005	<0.0005	<0.002	
	3/3/95	8015/8020	<0.05	0.69	<0.2	<0.0005	<0.0005	<0.0005	<0.002	
	5/25/95	8015/8020	<0.05	0.4	0.3	<0.0005	<0.0005	<0.0005	<0.002	
	8/23/95	8015/8020	<0.05	0.5	0.6	<0.0005	<0.0005	<0.0005	<0.002	
	11/29/95	8015/8020	<0.05	0.2	<0.2	<0.0005	<0.0005	<0.0005	<0.002	
	6/28/96	8015/8020	<0.05	0.9	<0.2	<0.0005	<0.0005	<0.0005	<0.002	
	11/25/96	8015/8020	<0.05	0.85	<0.2	<0.0005	<0.0005	<0.0005	<0.002	
	5/2/97	8015/8020	<0.05	0.69	<0.2	<0.0005	<0.0005	<0.0005	<0.002	
MW-2	3/14/88	8015	NT	0.05	NT	NT	NT	NT	NT	
	3/25/91	8015/8020	0.053	<0.050	NT	0.0006	<0.0003	<0.0003	<0.0003	
	11/10/93	8260	<0.050	<0.050	NT	<0.0005	<0.0005	<0.0005	<0.0005	
	2/23/94	8260	<0.050	<0.050	NT	<0.0005	<0.0005	<0.0005	<0.0005	
	6/2/94	8260	<0.050	<0.050	NT	<0.0005	<0.0005	<0.0005	<0.0005	
	8/30/94	8260	<0.050	0.200	NT	0.0006	<0.0005	<0.0005	<0.0005	
	11/29/94	8015/8020	0.07	3.9	0.9	0.0009	<0.0005	<0.0005	<0.002	
	3/3/95	8015/8020	0.08	3.9	0.2	0.0007	<0.0005	<0.0005	<0.002	
	5/25/95	8015/8020	0.05	2.4	0.2	0.0007	<0.0005	<0.0005	<0.002	
	8/23/95	8015/8020	0.06	4.1	0.8	0.0007	<0.0005	<0.0005	<0.002	
	11/29/95	8015/8020	0.1	4.5	0.4	0.001	<0.0005	<0.0005	<0.002	
	6/28/96	8015/8020	0.12	5.6	<0.2	0.015	<0.0005	<0.0005	<0.002	
	11/25/96	8015/8020	<0.05	5.6	0.4	0.0017	<0.0005	<0.0005	<0.002	
5/2/97	8015/8020	0.08	7.40	0.5	0.001	<0.0005	<0.0005	<0.002		
MW-3	3/14/88	8015	NT	0.15	NT	NT	NT	NT	NT	
	3/25/91	NS	NS	NS	NT	NS	NS	NS	NS	Free product
	11/10/93	NS	NS	NS	NT	NS	NS	NS	NS	Free product (0.23 ft)
	2/23/94	8260	<0.050	11.000	NT	0.0007	<0.0005	<0.0005	<0.0005	
	6/2/94	8260	NS	NS	NS	NS	NS	NS	NS	Well cover jammed
	8/30/94	8260	<0.050	1.300	NT	0.0013	<0.0005	<0.0005	0.0006	
	11/29/94	NS	NS	NS	NS	NS	NS	NS	NS	
	3/3/95	NS	NS	NS	NS	NS	NS	NS	NS	
	5/25/95	NS	NS	NS	NS	NS	NS	NS	NS	
	8/23/95	NS	NS	NS	NS	NS	NS	NS	NS	Free product (trace) <0.01 ft
	11/29/95	NS	NS	NS	NS	NS	NS	NS	NS	
	6/28/96	NS	NS	NS	NS	NS	NS	NS	NS	
	11/25/96	NS	NS	NS	NS	NS	NS	NS	NS	
5/2/97	NS	NS	NS	NS	NS	NS	NS	NS		

TABLE 6
Results of Chemical Analyses of Groundwater Samples
Powell Street Plaza and Shellmound III Sites
Emeryville, California

Well Number	Date Sampled	EPA Test Method	(concentrations expressed in parts per million)							Comments	
			TPH as Gasoline	TPH as Diesel	TPH as Motor Oil	Benzene	Toluene	Ethyl-benzene	Total Xylenes		
MW-4	3/14/88	8015	NT	1.2	NT	NT	NT	NT	NT	NT	
	3/25/91	8015/8020	1.300	2.500	NT	0.7100	0.0030	0.0020	0.0060		
	11/10/93	8260	0.800	34.000	NT	0.4400	0.0030	<0.0020	<0.0020	Free product (0.02 ft)	
	2/23/94	8260	0.560	18.000	NT	0.4500	0.0025	<0.0005	0.0020		
	6/2/94	8260	<0.500	13.000	NT	0.760	<0.005	<0.005	<0.005		
	8/30/94	8260	1.400	<0.050	NT	0.470	<0.0005	<0.0005	<0.0005		
	11/29/94	8015/8020	3.5	14	1.5	0.500	0.004	0.0007	0.003		
	3/3/95	8015/8020	3.1	11	0.7	0.610	0.004	0.001	0.004		
	5/25/95	NS	NS	NS	NS	NS	NS	NS	NS	Well buried under soil stockpile	
	8/23/95	NS	NS	NS	NS	NS	NS	NS	NS	Well abandoned	
MW-5	3/14/88	8015	NT	<1	NT	NT	NT	NT	NT		
	11/10/93	8260	<0.050	6.800	NT	<0.0005	<0.0005	<0.0005	<0.0005		
	2/23/94	8260	<0.050	7.100	NT	<0.0005	<0.0005	<0.0005	<0.0005		
	6/2/94	8260	<0.500	8.100	NT	<0.005	<0.005	<0.005	<0.005		
	8/30/94	8260	<0.050	1.400	NT	<0.0005	<0.0005	<0.0005	<0.0005	0.0005 - 1,2-DCA	
	11/29/94	8015/8020	2.1	4.3	1.1	0.0006	0.0006	<0.0005	<0.002		
	3/3/95	8015/8020	0.6	5.3	0.2	<0.0005	<0.0005	<0.0005	<0.002		
	5/25/95	8015/8020	0.06	5.2	0.8	<0.0005	<0.0005	<0.0005	<0.002		
8/23/95	NS	NS	NS	NS	NS	NS	NS	NS	Well abandoned		
MW-6	3/14/88	8015	NT	<0.05	NT	NT	NT	NT	NT		
	11/10/93	8260	<0.050	<0.050	NT	<0.0005	<0.0005	<0.0005	<0.0005		
	2/23/94	8260	<0.050	<0.050	NT	<0.0005	<0.0005	<0.0005	<0.0005		
	6/2/94	8260	<0.050	<0.050	NT	<0.0005	<0.0005	<0.0005	<0.0005		
	11/29/94	NS	NS	NS	NS	NS	NS	NS	NS		
	3/3/95	NS	NS	NS	NS	NS	NS	NS	NS		
	5/25/95	NS	NS	NS	NS	NS	NS	NS	NS		
	8/23/95	NS	NS	NS	NS	NS	NS	NS	NS		
	11/29/95	NS	NS	NS	NS	NS	NS	NS	NS		
	6/28/96	NS	NS	NS	NS	NS	NS	NS	NS		
	11/25/96	NS	NS	NS	NS	NS	NS	NS	NS		
5/2/97	NS	NS	NS	NS	NS	NS	NS	NS			
MW-7	3/10/88	NS	NS	NS	NS	NS	NS	NS	NS	Free product (1.32 ft)	
	11/10/93	NS	NS	NS	NS	NS	NS	NS	NS	Free product (0.22 ft)	
	2/23/94	NS	NS	NS	NS	NS	NS	NS	NS	Free product (0.02 ft)	
	6/2/94	NS	NS	NS	NS	NS	NS	NS	NS	Free product (0.01 ft)	
	11/29/94	NS	NS	NS	NS	NS	NS	NS	NS	Free product (Trace: <0.01 ft)	
	3/3/95	NS	NS	NS	NS	NS	NS	NS	NS	Free product (Trace: <0.01 ft)	
	5/25/95	NS	NS	NS	NS	NS	NS	NS	NS	Well not accessible	
	8/23/95	NS	NS	NS	NS	NS	NS	NS	NS	Well abandoned	

TABLE 4
Results of Chemical Analyses of Groundwater Samples
Powell Street Plaza and Shellmound III Sites
Emeryville, California

Well Number	Date Sampled	EPA Test Method	(concentrations expressed in parts per million)							Comments	
			TPH as Gasoline	TPH as Diesel	TPH as Motor Oil	Benzene	Toluene	Ethyl-benzene	Total Xylenes		
MW-8	3/14/88	8015	NT	<0.05	NT	NT	NT	NT	NT	NT	Free product (Trace: <0.01 ft)
	11/10/93	8260	<0.050	<0.050	NT	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
	2/23/94	8260	<0.050	<0.050	NT	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
	6/2/94	8260	<0.050	0.190	NT	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
	9/6/94	8260	<0.050	<0.050	NT	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
	11/29/94	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/3/95	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	5/25/95	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	8/23/95	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	11/29/95	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/28/96	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	11/25/96	NS	NS	NS	NS	NS	NS	NS	NS	NS	
5/2/97	NS	NS	NS	NS	NS	NS	NS	NS	NS		
MW-9	3/14/88	8015	NT	<1	NT	NT	NT	NT	NT	NT	Free product (Trace: <0.01 ft)
	11/10/93	8260	<0.050	<0.050	NT	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
	2/23/94	8260	<0.050	<0.050	NT	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
	6/2/94	8260	<0.050	<0.050	NT	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
	11/29/94	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/3/95	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	5/25/95	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	8/23/95	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	11/29/95	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/28/96	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	11/25/96	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	5/2/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-10	3/14/88	8015	NT	<1.0	NT	NT	NT	NT	NT	NT	
	11/10/93	8260	<0.050	<0.050	NT	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
	2/23/94	8260	<0.050	<0.050	NT	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
	6/2/94	8260	<0.050	<0.050	NT	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
	11/29/94	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/3/95	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	5/25/95	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	8/23/95	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	11/29/95	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	6/28/96	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	11/25/96	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	5/2/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MW-11	3/14/88	NS	NS	NS	NS	NS	NS	NS	NS	NS	Well was dry
	11/10/93	8260	<0.050	<0.050	NT	0.0008	<0.0005	<0.0005	<0.0005	<0.0005	
	2/23/94	8260	<0.050	<0.050	NT	0.0008	<0.0005	<0.0005	<0.0005	<0.0005	
	6/2/94	8260	<0.050	<0.050	NT	0.0021	<0.0005	<0.0005	<0.0005	<0.0005	
	8/30/94	8260	<0.050	<0.050	NT	0.0028	<0.0005	<0.0005	<0.0005	<0.0005	
	11/29/94	8015/8020	0.07	2.0	0.8	0.002	<0.0005	<0.0005	<0.002	<0.002	

TABLE 6
Results of Chemical Analyses of Groundwater Samples
Powell Street Plaza and Shellmound III Sites
Emeryville, California

Well Number	Date Sampled	EPA Test Method	(concentrations expressed in parts per million)							Comments
			TPH as Gasoline	TPH as Diesel	TPH as Motor Oil	Benzene	Toluene	Ethylbenzene	Total Xylenes	
MW-11 (cont)	3/3/95	8015/8020	0.06	3.7	0.2	0.005	<0.0005	<0.0005	<0.002	
	5/25/95	8015/8020	0.09	2.5	0.8	0.011	<0.0005	<0.0005	<0.002	
	8/23/95	8015/8020	<0.05	3.3	0.5	0.001	<0.0005	<0.0005	<0.002	
	11/29/95	8015/8020	<0.05	2.8	0.4	<0.0005	<0.0005	<0.0005	<0.002	
	6/28/96	8015/8020	<0.05	1.8	<0.2	<0.0005	<0.0005	<0.0005	<0.002	
	11/25/96	8015/8020	<0.05	3.5	0.4	<0.0005	<0.0005	<0.0005	<0.002	
	5/2/97	8015/8020	<0.05	0.64	0.6	<0.0005	<0.0005	<0.0005	<0.002	
MW-12	3/14/88	8015	NT	0.05	NT	NT	NT	NT	NT	
	11/10/93	8260	<0.050	<0.050	NT	<0.0005	<0.0005	<0.0005	<0.0005	
	2/23/94	8260	<0.050	<0.050	NT	<0.0005	<0.0005	<0.0005	<0.0005	
	6/2/94	8260	<0.050	<0.050	NT	<0.0005	<0.0005	<0.0005	<0.0005	
	9/6/94	8260	<0.050	<0.050	NT	<0.0005	<0.0005	<0.0005	<0.0005	
	11/29/94	8015/8020	<0.05	0.3	<0.2	<0.0005	<0.0005	<0.0005	<0.002	
	3/3/95	8015/8020	<0.05	0.3	<0.2	<0.0005	<0.0005	<0.0005	<0.002	
	5/25/95	8015/8020	<0.05	0.66	0.4	<0.0005	<0.0005	<0.0005	<0.002	
	8/23/95	8015/8020	<0.05	0.6	0.2	<0.0005	<0.0005	<0.0005	<0.002	
	11/29/95	8015/8020	<0.05	0.4	<0.2	<0.0005	<0.0005	<0.0005	<0.002	
	6/28/96	8015/8020	<0.05	0.48	<0.2	<0.0005	<0.0005	<0.0005	<0.002	
	11/25/96	8015/8020	<0.05	0.57	0.21	<0.0005	<0.0005	<0.0005	<0.002	
	5/2/97	8015/8020	<0.05	0.30	<0.2	<0.0005	<0.0005	<0.0005	<0.002	
MW-13	3/14/88	8015/8020	NT	1.7	NT	<0.0005	<0.0005	<0.0005	<0.0005	
	11/10/93	NS	NS	NS	NS	NS	NS	NS	NS	Free product (1.06 ft)
	2/23/94	NS	NS	NS	NS	NS	NS	NS	NS	Free product (Trace: <0.01 ft)
	6/2/94	NS	NS	NS	NS	NS	NS	NS	NS	Free product (Trace: <0.01 ft)
	11/29/94	NS	NS	NS	NS	NS	NS	NS	NS	Free product (Trace: <0.01 ft)
	3/3/95	NS	NS	NS	NS	NS	NS	NS	NS	
	5/25/95	NS	NS	NS	NS	NS	NS	NS	NS	Free product (0.01 ft)
	8/23/95	NS	NS	NS	NS	NS	NS	NS	NS	Free product (0.27 ft)
	11/29/95	NS	NS	NS	NS	NS	NS	NS	NS	Free product (0.61 ft)
	6/28/96	NS	NS	NS	NS	NS	NS	NS	NS	Free product (0.02 ft)
	11/25/96	NS	NS	NS	NS	NS	NS	NS	NS	Free product (0.28 ft)
5/2/97	NS	NS	NS	NS	NS	NS	NS	NS	Free product (0.06 ft)	
MW-14	3/14/88	8015	NT	<1	NT	NT	NT	NT	NT	
	11/10/93	NS	NS	NS	NS	NS	NS	NS	NS	Free product (0.27 ft)
	2/23/94	NS	NS	NS	NS	NS	NS	NS	NS	Free product (Trace: <0.01 ft)
	6/2/94	NS	NS	NS	NS	NS	NS	NS	NS	Free product (Trace: <0.01 ft)
	11/29/94	NS	NS	NS	NS	NS	NS	NS	NS	Free product (Trace: <0.01 ft)
	3/3/95	NS	NS	NS	NS	NS	NS	NS	NS	Free product (Trace: <0.01 ft)
	5/25/95	NS	NS	NS	NS	NS	NS	NS	NS	
	8/23/95	NS	NS	NS	NS	NS	NS	NS	NS	
	11/29/95	NS	NS	NS	NS	NS	NS	NS	NS	Free product (0.18 ft)
	6/28/96	NS	NS	NS	NS	NS	NS	NS	NS	Free product (Trace: <0.01 ft)

TABLE 6
Results of Chemical Analyses of Groundwater Samples
Powell Street Plaza and Shellmound III Sites
Emeryville, California

Well Number	Date Sampled	EPA Test Method	(concentrations expressed in parts per million)							Comments
			TPH as Gasoline	TPH as Diesel	TPH as Motor Oil	Benzene	Toluene	Ethyl-benzene	Total Xylenes	
MW-14 (cont)	11/25/96	NS	NS	NS	NS	NS	NS	NS	NS	Free product (0.35 ft)
	5/2/97	NS	NS	NS	NS	NS	NS	NS	NS	
MW-15	3/14/88	8015/8020	NT	1.8	NT	<0.0005	<0.0005	<0.0005	<0.0005	Free product (0.15 ft) Free product (Trace: <0.01 ft) Free product (Trace: <0.01 ft) Free product (Trace: <0.01 ft) Free product (Trace: <0.01 ft) Well not accessible Well abandoned
	11/10/93	NS	NS	NS	NS	NS	NS	NS	NS	
	2/23/94	NS	NS	NS	NS	NS	NS	NS	NS	
	6/2/94	NS	NS	NS	NS	NS	NS	NS	NS	
	11/29/94	NS	NS	NS	NS	NS	NS	NS	NS	
	3/3/95	NS	NS	NS	NS	NS	NS	NS	NS	
	5/25/95	NS	NS	NS	NS	NS	NS	NS	NS	
	8/23/95	NS	NS	NS	NS	NS	NS	NS	NS	
MW-16	3/14/88	8015	NT	<0.05	NT	NT	NT	NT	NT	Non-standard diesel pattern
	4/21/89	8015	NT	<1.0	NT	0.0009	0.0026	0.0004	0.0041	
	3/25/91	8015/8020	<0.050	<0.050	NT	<0.0003	<0.0003	<0.0003	0.0003	
	5/20/92	8015/8020	<0.050	0.140	NT	<0.0003	<0.0003	<0.0003	<0.0003	
	11/10/93	8260	<0.050	<0.050	NT	<0.0005	<0.0005	<0.0005	<0.0005	
	2/23/94	8260	<0.050	<0.050	NT	<0.0005	<0.0005	<0.0005	<0.0005	
	6/2/94	8260	<0.050	<0.050	NT	<0.0005	<0.0005	<0.0005	<0.0005	
	11/29/94	NS	NS	NS	NS	NS	NS	NS	NS	
	3/3/95	8015/8020	<0.05	0.5	<0.2	<0.0005	<0.0005	<0.0005	<0.002	
	5/25/95	NS	NS	NS	NS	NS	NS	NS	NS	
8/23/95	NS	NS	NS	NS	NS	NS	NS	NS		
MW-18	3/14/88	8015	NT	<0.05	NT	NT	NT	NT	NT	Well area flooded Well area flooded, almost under water Well area flooded Well buried under soil stockpile
	5/20/92	8015/8020	<0.050	<0.050	NT	<0.0003	<0.0003	<0.0003	<0.0003	
	11/10/93	8260	<0.050	<0.050	NT	<0.0005	<0.0005	<0.0005	<0.0005	
	2/23/94	NS	NS	NS	NS	NS	NS	NS	NS	
	6/2/94	8260	<0.050	<0.050	NT	<0.0005	<0.0005	<0.0005	<0.0005	
	11/29/94	NS	NS	NS	NS	NS	NS	NS	NS	
	3/3/95	NS	NS	NS	NS	NS	NS	NS	NS	
	5/25/95	NS	NS	NS	NS	NS	NS	NS	NS	
	8/23/95	NS	NS	NS	NS	NS	NS	NS	NS	
	11/29/95	NS	NS	NS	NS	NS	NS	NS	NS	
	6/28/96	NS	NS	NS	NS	NS	NS	NS	NS	
	11/25/96	NS	NS	NS	NS	NS	NS	NS	NS	
	5/2/97	NS	NS	NS	NS	NS	NS	NS	NS	
MW-19	10/8/94	8015/8020	<0.05	<0.05	0.4	<0.0005	<0.0005	<0.0005	<0.002	
	10/31/94	8015/8020	<0.05	0.2	<0.2	<0.0005	<0.0005	<0.0005	<0.002	
	11/29/94	8015/8020	0.07	<0.05	0.5	0.002	0.005	0.0009	0.005	
	3/3/95	8015/8020	<0.05	0.3	<0.2	<0.0005	<0.0005	<0.0005	<0.002	
	5/25/95	8015/8020	<0.05	0.4	0.4	<0.0005	<0.0005	<0.0005	<0.002	
	8/23/95	8015/8020	<0.05	<0.05	0.5	<0.0005	<0.0005	<0.0005	<0.002	
11/29/95	8015/8020	<0.05	0.2	<0.2	<0.0005	<0.0005	<0.0005	<0.002		

TABLE 2
Results of Chemical Analyses of Groundwater Samples
Powell Street Plaza and Shellmound III Sites
Emeryville, California

Well Number	Date Sampled	EPA Test Method	(concentrations expressed in parts per million)							Comments
			TPH as Gasoline	TPH as Diesel	TPH as Motor Oil	Benzene	Toluene	Ethylbenzene	Total Xylenes	
MW-19 (cont)	6/28/96	NS	NS	NS	NS	NS	NS	NS	NS	Well inaccessible
	11/25/96	NS	NS	NS	NS	NS	NS	NS	NS	
	5/2/97	NS	NS	NS	NS	NS	NS	NS	NS	
MG-1	4/21/89	NS	NS	NS	NS	NS	NS	NS	NS	Free product
	3/25/91	NS	NS	NS	NS	NS	NS	NS	NS	Free product
	5/21/92	NS	NS	NS	NS	NS	NS	NS	NS	Free product (0.03 ft)
	11/10/93	NS	NS	NS	NS	NS	NS	NS	NS	Free product (0.38 ft)
	2/23/94	NS	NS	NS	NS	NS	NS	NS	NS	Free product (Trace: <0.01 ft)
	6/2/94	NS	NS	NS	NS	NS	NS	NS	NS	Free product (0.09 ft)
	11/29/94	NS	NS	NS	NS	NS	NS	NS	NS	Free product (Trace: <0.01 ft)
	3/3/95	NS	NS	NS	NS	NS	NS	NS	NS	Free product (Trace: <0.01 ft)
	5/25/95	NS	NS	NS	NS	NS	NS	NS	NS	Well buried under soil stockpile
	8/23/95	NS	NS	NS	NS	NS	NS	NS	NS	Free product (0.49 ft)
	11/29/95	NS	NS	NS	NS	NS	NS	NS	NS	
	6/28/96	NS	NS	NS	NS	NS	NS	NS	NS	
	11/25/96	NS	NS	NS	NS	NS	NS	NS	NS	
	5/2/97	NS	NS	NS	NS	NS	NS	NS	NS	
MG-2	4/21/89	8015	NT	<1.0	NT	0.09	0.0027	<0.0003	0.0017	
	3/25/91	8015/8020	<0.050	<0.050	NT	0.0010	<0.0003	<0.0003	<0.0003	
	5/21/92	8015	0.210	1.400	NT	0.0820	0.0018	0.0006	0.0014	
	11/10/93	8260	0.050	0.540	NT	0.0160	0.0009	<0.0005	<0.0005	
	2/23/94	8260	<0.050	3.300	NT	0.0033	<0.0005	<0.0005	<0.0005	
	6/2/94	8260	0.490	<0.050	NT	0.016	0.0009	<0.0005	<0.0005	
	8/30/94	8260	<0.050	0.875	NT	0.0078	0.0006	<0.0005	0.0006	
	11/29/94	8015/8020	0.3	3.2	0.9	0.015	0.001	<0.0005	<0.002	
	3/3/95	8015/8020	0.8	3.1	0.7	0.002	<0.0005	<0.0005	<0.002	
	5/25/95	8015/8020	0.8	3.9	0.4	0.098	0.003	<0.0005	<0.002	
	8/23/95	NS	NS	NS	NS	NS	NS	NS	NS	Well covered by equipment
	11/29/95	NS	NS	NS	NS	NS	NS	NS	NS	
	6/28/96	NS	NS	NS	NS	NS	NS	NS	NS	
	11/25/96	NS	NS	NS	NS	NS	NS	NS	NS	
5/23/97	NS	NS	NS	NS	NS	NS	NS	NS		
MG-3	4/21/89	8015	NT	<1.0	NT	0.1	0.0023	<0.0003	0.0089	
	3/25/91	8015/8020	0.610	2.600	NT	0.0750	0.0008	0.0004	0.0020	
	5/21/92	NS	NS	NS	NS	NS	NS	NS	NS	Free product (0.85 ft)
	11/10/93	NS	NS	NS	NS	NS	NS	NS	NS	Free product (0.47 ft)
	2/23/94	8260	NS	NS	NS	NS	NS	NS	NS	Free product (0.02 ft)
	6/2/94	8260	NS	NS	NS	NS	NS	NS	NS	Free product (0.08 ft)
	11/29/94	NS	NS	NS	NS	NS	NS	NS	NS	Free product (Trace: <0.01 ft)
	3/3/95	NS	NS	NS	NS	NS	NS	NS	NS	Free product (Trace: <0.01 ft)
	5/25/95	8015/8020	12	130	<10	0.014	0.0007	0.001	0.003	
	8/23/95	NS	NS	NS	NS	NS	NS	NS	NS	
11/29/95	NS	NS	NS	NS	NS	NS	NS	NS		

TABLE 6
Results of Chemical Analyses of Groundwater Samples
Powell Street Plaza and Shellmound III Sites
Emeryville, California

Well Number	Date Sampled	EPA Test Method	(concentrations expressed in parts per million)							Comments	
			TPH as Gasoline	TPH as Diesel	TPH as Motor Oil	Benzene	Toluene	Ethyl-benzene	Total Xylenes		
MG-3 (cont)	6/28/96	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	11/25/96	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	5/2/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	
MG-4	4/21/89	8015	NT	<1.0	NT	0.0003	<0.0003	<0.0003	0.0013		
	3/25/91	8015/8020	<0.050	<0.050	NT	0.0004	<0.0003	<0.0003	0.0005		
	5/20/92	8015/8020	<0.050	<0.050	NT	<0.0003	<0.0003	<0.0003	<0.0003		
	11/10/93	8260	<0.050	<0.050	NT	<0.0005	<0.0005	<0.0005	<0.0005		
	2/23/94	8260	<0.050	<0.050	NT	<0.0005	<0.0005	<0.0005	<0.0005		
	6/2/94	8260	<0.050	<0.050	NT	<0.0005	<0.0005	<0.0005	<0.0005		
	9/6/94	8260	<0.050	<0.050	NT	<0.0005	<0.0005	<0.0005	<0.0005		
	11/29/94	8015/8020	<0.05	4.8	0.6	<0.0005	<0.0005	<0.0005	<0.002		0.0007 - 1,2-DCA
	3/3/95	8015/8020	0.05	9.9	0.9	<0.0005	<0.0005	<0.0005	<0.002		
	5/25/95	8015/8020	<0.05	10	1	0.0007	<0.0005	<0.0005	<0.002		
	8/23/95	NS	NS	NS	NS	NS	NS	NS	NS		Well buried under soil stockpile
	11/29/95	NS	NS	NS	NS	NS	NS	NS	NS		
	6/28/96	NS	NS	NS	NS	NS	NS	NS	NS		
	11/25/96	NS	NS	NS	NS	NS	NS	NS	NS		
5/2/97	NS	NS	NS	NS	NS	NS	NS	NS			
MG-7	3/25/91	8015/8020	<0.050	<0.050	NT	0.0005	<0.0003	<0.0003	<0.0003		
	5/20/92	8015/8020	<0.050	0.060	NT	<0.0003	<0.0003	<0.0003	<0.0003		Non-standard diesel pattern
	11/10/93	8260	<0.050	<0.050	NT	<0.0005	<0.0005	<0.0005	<0.0005		
	2/23/94	8260	<0.050	<0.050	NT	<0.0005	<0.0005	<0.0005	<0.0005		
	6/2/94	8260	<0.050	<0.050	NT	<0.0005	<0.0005	<0.0005	<0.0005		
	8/30/94	8260	<0.050	<0.050	NT	<0.0005	<0.0005	<0.0005	<0.0005		0.0007 - 1,2-DCA
	11/29/94	8015/8020	<0.05	2.6	0.4	<0.0005	<0.0005	<0.0005	<0.002		
	3/3/95	NS	NS	NS	NS	NS	NS	NS	NS		Well buried under soil stockpile
	5/25/95	8015/8020	<0.05	1.7	0.4	0.0007	<0.0005	<0.0005	<0.002		
	8/23/95	8015/8020	0.1	2.8	<0.2	0.0008	<0.0005	<0.0005	<0.002		
	11/29/95	8015/8020	<0.05	0.97	<0.2	<0.0005	<0.0005	<0.0005	<0.002		New casing
6/28/96	8015/8020	<0.05	1.7	<0.2	0.0007	<0.0005	<0.0005	<0.002			
11/25/96	8015/8020	<0.05	2.6	0.52	0.0008	<0.0005	<0.0005	<0.002			
5/2/97	8015/8020	<0.05	2.20	0.4	<0.0005	<0.0005	<0.0005	<0.002			
PZ-1	3/25/91	8015/8020	0.320	0.340	NT	0.0004	<0.0003	<0.0003	0.0010		
	5/21/92	8015/8020	0.120	0.600	NT	0.0018	0.0003	0.0003	0.0012		
	11/10/93	8260	<0.050	<0.050	NT	0.0015	<0.0005	<0.0005	<0.0005		0.450 - TPH as light petroleum distillate
	2/23/94	8260	<0.050	<0.050	NT	0.0009	<0.0005	<0.0005	<0.0005		0.200 - TPH as stoddard solvent
	6/2/94	8260	<0.050	<0.050	NT	0.0016	<0.0005	<0.0005	<0.0005		2.400 - TPH as light petroleum distillate
	11/29/94	8015/8020	0.2	1.4	1.7	0.0007	<0.0005	<0.0005	<0.002		
	3/3/95	8015/8020	2.0	3.7	0.8	0.0008	<0.0005	<0.0005	<0.002		
	5/25/95	8015/8020	0.6	3.7	0.6	0.002	<0.0005	<0.0005	<0.002		
	8/23/95	8015/8020	0.2	5.4	1.5	0.0007	<0.0005	<0.0005	<0.002		
11/29/95	NS	NS	NS	NS	NS	NS	NS	NS			

TABLE 6
 Results of Chemical Analyses of Groundwater Samples
 Powell Street Plaza and Shellmound III Sites
 Emeryville, California

Well Number	Date Sampled	EPA Test Method	(concentrations expressed in parts per million)							Comments	
			TPH as Gasoline	TPH as Diesel	TPH as Motor Oil	Benzene	Toluene	Ethyl-benzene	Total Xylenes		
PZ-1 (cont)	6/28/96	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	11/25/96	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	5/23/97	NS	NS	NS	NS	NS	NS	NS	NS	NS	

Notes:

NT = Not tested for indicated test parameter
 NS = Not sampled for indicated test parameter
 TPH = Total petroleum hydrocarbons
 1,2-DCA = 1,2-Dichloroethane

TABLE 7
Groundwater Elevations and Product Thickness Measurements
May 23, 1997
Powell Street Plaza and Shellmound III Sites
Emeryville, California

Well Number	Top of Casing Elevation* (feet MSL)	5/23/97 Depth to Product (feet)	5/23/97 Depth to Water (feet)	5/23/97 Product Thickness (feet)	3/5/97 Product Thickness (feet)	Change in Product Thickness (feet)	5/23/97 Groundwater Elevation (feet MSL)	5/23/97 Corrected GW Elevation (feet MSL)	3/5/97 Groundwater Elevation (feet MSL)	Change in Elevation 3/5/97 - 5/23/97 (feet MSL)
MW-1	8.72	NP	5.55				3.17		3.55	-0.38
MW-2	9.83	NP	6.85				2.98		NM	NM
MW-3	10.86	NP	8.15				2.71		NM	NM
MW-4 ⁽¹⁾	----	----	----				----		----	
MW-5 ⁽¹⁾	----	----	----				----		----	
MW-6	11.42	NP	7.98				3.44		3.50	-0.06
MW-7 ⁽¹⁾	----	----	----				----		----	
MW-8	7.48	NP	NM				NM		NM	NM
MW-9	7.50	NP	NM				NM		NM	NM
MW-10	7.38	NM	NM				NM		NM	NM
MW-11	11.89	NP	11.33				0.56		-0.07	0.63
MW-12	9.42	NP	6.68				2.74		2.55	0.19
MW-13	10.83	6.07	6.13	0.06	0.10	-0.04	4.70	4.75	4.75	0.00
MW-14	11.74	NP	7.08				4.66		4.90	-0.24
MW-15 ⁽¹⁾	----	----	----				----		----	
MW-16 ⁽¹⁾	----	----	----				----		----	
MW-18	6.21	NM	NM				NM		NM	NM
MW-19	9.94	NM	NM				NM		NM	NM
MG-1	11.82	NM	NM				NM		NM	NM
MG-2	10.83	NM	NM				NM		NM	NM
MG-3	9.76	NM	NM				NM		NM	NM
MG-4	7.38	NM	NM				NM		NM	NM
MG-7	13.10	NP	11.92				1.18		1.10	0.08
PZ-1	7.99	NM	NM				NM		NM	NM

Notes:

* = Top of casing elevations based on December 27, 1994 and January 4, 1995 Kier & Wright surveys.

NP = No free product observed

NM = Not measured

Groundwater Elevations were calculated as follows:

$$\text{Water-Level Elevation} = \text{Top of Casing} - \text{Depth to Water} + (0.85 \times \text{Product Thickness})$$

GW = Groundwater

(1) = Well has been abandoned.

TABLE 8
Summary of Wells Sampled
May 23, 1997
Powell Street Plaza and Shellmound III Sites
Emeryville, California

Well ID	Semi-Annual Sampling Required	Sample Number	Status of Wells Not Sampled
MW-1	X	97210001	Eliminated from sampling schedule. Abandoned by permit. Abandoned by permit. Eliminated from sampling schedule. Abandoned by permit. Eliminated from sampling schedule. Eliminated from sampling schedule. Eliminated from sampling schedule. Eliminated from sampling schedule. Free product present. Eliminated from sampling schedule. Abandoned by permit. Abandoned by permit. Eliminated from sampling schedule. Inaccessible. Inaccessible. Inaccessible. Inaccessible. Inaccessible.
MW-2	X	97210002	
MW-3		NS	
MW-4		NS	
MW-5		NS	
MW-6		NS	
MW-7		NS	
MW-8		NS	
MW-9		NS	
MW-10		NS	
MW-11	X	97210011	
MW-12	X	97210012	
MW-13		NS	
MW-14		NS	
MW-15		NS	
MW-16		NS	
MW-18		NS	
MW-19	X	NS	
MG-1		NS	
MG-2	X	NS	
MG-3		NS	
MG-4	X	NS	
MG-7	X	97210107	
PZ-1	X	NS	
Trip Blank		97210000	

Note:

NS = Not sampled

Table ~~B-1~~ 9
 Summary of Well Completion Details
 Powell Street Plaza
 Emeryville, California

Well	Casing Diameter (inches)	Screen Slot (inches)	Screened Interval (feet bgs)	Sand Pack Interval (feet bgs)	Sand Pack Material	Well Depth (feet bgs)	Boring Depth (feet bgs)
MW-1	4	0.02	2.5 - 14.5	2.5 - 14.5	Monterey #2	14.0	15.0
MW-2	4	0.02	3.0 - 14.0	3.0 - 14.0	Monterey #2	14.0	14.5
MW-3	4	0.02	3.5 - 13.0	3.5 - 13.0	Monterey #2	13.0	13.0
MW-4	4	0.02	4.5 - 13.5	4.5 - 13.5	Monterey #2	13.5	14.5
MW-5	2	0.02	5.0 - 15.0	5.0 - 15.0	Monterey #2	15.0	16.5
MW-6	2	0.02	3.0 - 15.0	3.0 - 15.0	Monterey #2	15.0	16.0
MW-7	4	0.02	2.0 - 12.0	2.0 - 12.0	Monterey #2	12.0	16.5
MW-8	2	0.02	2.0 - 12.0	2.0 - 12.0	Monterey #2	12.0	13.5
MW-9	2	0.02	2.0 - 12.0	2.0 - 12.0	Monterey #2	12.0	13.0
MW-10	2	0.02	2.0 - 11.0	2.0 - 11.0	Monterey #2	11.0	12.5
MW-11	2	0.02	2.0 - 12.9	2.0 - 12.9	Monterey #2	12.9	15.0
MW-12	2	0.02	2.0 - 11.0	2.0 - 11.0	Monterey #2	11.0	12.0
MW-13	2	0.02	2.0 - 11.0	2.0 - 11.0	Monterey #2	11.0	11.5
MW-14	2	0.02	2.0 - 11.0	2.0 - 11.0	Monterey #2	11.0	12.5
MW-15	4	0.02	2.0 - 12.0	2.0 - 12.0	Monterey #2	12.0	14.0
MW-16	2	0.02	2.0 - 13.0	2.0 - 13.0	Monterey #2	13.0	15.0
MW-17	2	0.02	2.0 - 12.0	2.0 - 12.0	Monterey #2	12.0	14.0
MW-18	2	0.02	2.0 - 12.0	2.0 - 12.0	Monterey #2	12.0	14.0
MG-1	2	0.02	6.0 - 16.5	5.0 - 17.5	2 x 16	16.5	17.5
MG-2	2	0.02	5.0 - 15.0	4.0 - 16.5	2 x 16	15.0	16.5
MG-3	2	0.02	4.0 - 14.5	3.0 - 15.0	2 x 16	14.5	15.0
MG-4	2	0.02	2.0 - 12.0	1.5 - 13.0	2 x 16	12.0	13.0
MG-7	2	0.02	4.0 - 17.0	3.0 - 18.5	Monterey #3	17.0	18.5
PZ-1	2	0.02	3.0 - 15.0	2.0 - 15.0	Monterey #3	15.0	15.0

Note:

bgs: Below ground surface